



# Request for Bids

To: Prospective Bidder Date: September 23, 2024  
From: Joshua Elliott, PE Project No.: M0785.16.003  
Re: Request for Bids, Remediation Construction Services  
Pacific Carbide Sediment Remediation  
Portland, Oregon

Maul Foster & Alongi, Inc. (MFA) is currently performing environmental services for the Oregon Department of Environmental Quality (DEQ). MFA intends to subcontract one company (Subcontractor) to provide remediation construction services at the Pacific Carbide & Alloy Co. (Pacific Carbide) site (the Site). Project details are discussed below. A Bid Request Form for the requested services is attached. All information requested on the Bid Request Form is required for a submitted bid to be considered responsive. This project may be subject to the Oregon Prevailing Wage Rate (PWR) Law (Oregon Revised Statute [ORS] 279C.800 to 279C.870), as discussed in the Prevailing Wage Rates section below.

## SCHEDULE

Item/Event	Time and Date
Request for Bids distributed to bidders	By 5:00 PM September 23, 2024
Voluntary Pre-Bid Site Walk	1:00 PM October 1, 2024
Bid questions due to MFA	By 4:00 PM October 8, 2024
Addendum with answers to bid questions issued	By 4:00 PM October 16, 2024
Bid due date	By 4:00 PM October 23, 2024
Subcontractor selection (Notice of Intent to Award)	By 4:00 PM October 28, 2024
MFA & Oregon DEQ Contract Administration	November 1, 2024 through December 13, 2024
Anticipated subcontract execution	The week of December 16, 2024
Subcontractor's Health & Safety Plan due date	Prior to January 15, 2025
Subcontractor performs Phase 1 Erosion BMPs, Tree Removal, and Vegetation Clearing	Between January 15, 2025 and February 15, 2025
Subcontractor draft work plans due date	February 9, 2025
MFA issues 100% design plans following Phase I Erosion Control Installation, Tree Removal and	Approximately April 30, 2025

Item/Event	Time and Date
Vegetation clearing by Subcontractor and topographic survey (by others)	
Subcontractor work plan revisions (incorporating final topographic survey) due	May 16, 2025
Subcontractor performs Phase 2 Sediment Cap Placement and Riverbank Excavation	Between June 15, 2025 and September 15, 2025

## CONTACT INFORMATION

Please submit bids and any questions concerning this request for bids and its requirements to:

Joshua Elliott, PE  
Maul Foster & Alongi, Inc.  
3140 NE Broadway  
Portland, OR 97232  
Phone: 503-501-5236  
jelliott@maulfoster.com

## SUBMITTAL INFORMATION

No compensation will be made by MFA for any costs incurred in the development or submission of a bid. Furthermore, this request for bids does not commit MFA to procure or subcontract for any of the services described herein. The following materials have been provided with this request for bids and are incorporated as contract documents:

- Bid Request Form
- Exhibit A—Figure—Site Location
- Exhibit B—Contract Drawings dated September 23, 2024 (19 Sheets)
- Exhibit C—Technical Specifications
- Exhibit D—Permit and Regulatory Approvals
- Exhibit E—MFA Master Subcontractor Agreement (MSA) which includes Additional Provisions from DEQ Price Agreement and DEQ Environmental Cleanup Program (Attachment A of the MSA); Scope of Services; Compensation; Other Requirements for Task Order Contracts (Exhibit A of the MSA) including insurance requirements and required waivers of subrogation
- Exhibit F—State of Oregon General Conditions for Public Improvement Contracts, January 1, 2012 Edition (GCs)
- Exhibit G—Supplemental General Conditions dated September 11, 2024 (SGCs)

The term “Subcontractor” is used throughout this document to refer to the selected qualified company/bidder.

## PROJECT DESCRIPTION

The objective of this project is to; remove trees, clear vegetation, and excavate soil from the riverbank for offsite disposal (to maintain a cut fill balance within the Columbia Slough); and place a cap over impacted sediments in the Columbia Slough. The work extends across several tax lots along the

Columbia Slough, but the primary Site address is 9901 and 9903 N Hurst Ave., Portland, Oregon 97203 (see Exhibit A).

Work will be performed in two phases. Phase 1 consists of mobilization and installation of the site erosion control best management practices (BMPs), initial tree removal (felling of 41 trees to grade), vegetation clearing across 0.54 acres of the site, and soil stabilization to be performed during January - February 2025. Phase 2 consists of sediment cap placement and riverbank soil excavation, temporary stockpiling, loading, transport, and disposal during June - September 2025.

During Phase 1, the Subcontractor shall: prepare and submit work plans, install erosion and sediment controls and tree protection; cut trees, shrubs, and other vegetation flush with the ground surface as shown on the Contract Drawings; stockpile all large (12 inches or greater in diameter) tree trunks and 10 tree trunks selected by MFA between 6 inches and 12 inches in diameter in a designated laydown area on site; clear existing vegetation (flush with the ground surface) as shown on the Contract Drawings and dispose of cleared material off site; and apply hydromulch to exposed ground surface. Erosion and sediment control materials will remain on site after completion of this Phase 1 work and are to be monitored and maintained by the Subcontractor until commencement of Phase 2 work.

During Phase 2, the Subcontractor shall place a sediment cap across 2.78 acres of impacted Columbia Slough sediments. The Subcontractor is to select one of two options for the sediment cap.

Alternative 1—Reactive Core Mat:

- Place reactive core mat across 2.41 acres of impacted Columbia Slough sediments; place a three-inch-thick layer of river gravel followed by a one-inch-thick layer of clean sand over the reactive core mat; place enhanced residuals cover across 0.37 acres of impacted Columbia Slough sediments;

Alternative 2—AquaGate+PAC and Non-woven Filter Fabric in selected area:

- Place a blend of AquaGate+PAC and river gravel to a thickness of 4 inches across 2.78 acres of impacted Columbia Slough sediments followed by a one-inch thick layer of clean sand over the AquaGate+PAC and river gravel blend. A non-woven filter fabric is to be placed under 1.1 acres of the AquaGate+PAC and river gravel cap as indicated on the Contract Drawings.

Note that Subcontractor is to only provide a bid for one of the two sediment cap alternatives (either bid items 15 - 20 or bid items 21 - 25).

Regardless of the sediment cap alternative selected, Subcontractor is to also excavate approximately 3,175 cubic yards of soil from the adjacent 0.29 acres of the Columbia Slough riverbank at the Site as required to maintain the cut-fill balance.

## **BACKGROUND SITE INFORMATION**

The Site consist of three properties adjacent to the Columbia Slough owned by Portland Parks and Recreation (PP&R), Pacific Carbide & Alloy Co. (Pacific Carbide), and Portland @ St Paul (aka McCuddy Property). The Pacific Carbide property is located upland of the PP&R property and currently operates as a transloading facility. Trucking and temporary storage of material for this project will take place on the Pacific Carbide upland property. The McCuddy property borders PP&R and Pacific Carbide properties to the East. West of the site is a BNSF railroad.

The Site was developed in the 1940s and operated as a calcium carbide manufacturing plant until

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1987. Pacific Carbide manufactured calcium carbide on site by combining quicklime (calcium oxide) and coke (a solid carbon source with high concentrations of polycyclic aromatic hydrocarbons [PAHs]) under high temperatures. Emissions generated by this process were controlled by a wet scrubber, which produced a slurry of lime and PAHs that was discharged to settling ponds and ultimately to the Slough. Additionally, polychlorinated biphenyls associated with the site operations were detected in the on-site sediment in concentrations above cleanup levels.

## GENERAL REQUIREMENTS

The Subcontractor must be licensed and bonded in the State of Oregon. The Subcontractor shall provide equipment that is in good working order, clean and free from oil, hydraulic, or other fluid leaks. The equipment shall be free of any contamination (soil, mud, etc.) from previous work. The Subcontractor shall use equipment having at least the minimum capabilities necessary to complete the work described herein.

## SCOPE OF WORK

The Subcontractor scope of work will generally consist of the following items as shown on the Contract Drawings (Exhibit B) and as described in further detail in the Technical Specifications (Exhibit C):

- Tree removal, vegetation clearing, and bank soil stabilization (Phase 1 mobilization).
- Installation of a sediment cap (Phase 2 mobilization).
- Excavation, temporary stockpiling, loading, transport, and offsite disposal of bank soils (Phase 2 Mobilization).

A detailed breakdown of the scope of work items is provided in Section 01 22 00 MEASUREMENT AND PAYMENT (Exhibit C—Technical Specifications).

Permits and regulatory approvals obtained to date for the project are provided in Exhibit D—Permits and Regulatory Approvals.

Access to the work area will be provided under an existing access agreement between DEQ and the property owners through the Pacific Carbide property from N. Hurst Avenue and Columbia Boulevard. The property entrance is gated and is to be secured by Subcontractor during working hours and locked during nonwork hours. The trucking route to access the riverbank and the McCuddy property during tree removal will be located on the existing gravel-surfaced storage area as shown on Sheet C2.1 of the Contract Drawings. Tree removal and access to City of Portland property is allowed under an approved non-park use permit (NPUP), a copy of which will be on-site for reference as needed throughout the project.

The work will be overseen by a biologist under a separate contract. If wildlife is observed within the work area that does not volitionally leave the work area, work will temporarily stop, and the wildlife will be relocated by this biologist under the wildlife scientific taking permit. The area of work shall be inspected by Subcontractor for signs of dens or trails. If determined by the biologist to be necessary, work shall be halted or relocated to another portion of the Site to further facilitate removal of wildlife.

This work will also be overseen by an archaeological monitor, as required by the Section 404 permit from the U.S. Army Corps of Engineers (see Exhibit D). If cultural resources are discovered during any construction activities, all activities that may damage said cultural resources will be suspended



pending further direction from MFA. Subcontractor is to relocate to work outside the vicinity of the discovered cultural resources.

## HEALTH AND SAFETY

The Subcontractor shall be responsible for all matters relating to the health and safety of its personnel and equipment in performance of the work. Therefore, Subcontractor shall prepare its own site-specific Health and Safety Plan prior to conducting the work. This includes recognition of the potential health and safety hazards associated with the work and includes compliance with the minimum requirements of the Health and Safety Plan in force for the work.

The Subcontractor shall warrant that all its employees that are permitted to engage in hazardous waste operations which could expose them to hazardous substances, safety, or health hazards have obtained the necessary health and safety training and medical monitoring as specified in 29 Code of Federal Regulations 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER) and all applicable state and local laws, regulations and ordinances regarding health and safety.

## PREVAILING WAGE RATES

The Subcontractor shall comply with the Oregon Revised Statute (ORS) 279C.800 through 279C.870 (as outlined in Sections C.1, C.2, and G.2.3 of the General Conditions) and related Bureau of Labor & Industries (BOLI) administrative rules in Oregon Administrative Rule (OAR) 839-025 concerning the payment of either (whichever are higher) Oregon Prevailing Wage Rates as of July 5, 2024, or federal prevailing wage rates pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) and the Related Acts that are last published prior to the Bid Due date set forth in this RFB. Bidders are advised that federal Davis-Bacon rates may be amended at any time prior to the Bid Due date and that Subcontractor (and its tier II subcontractors, if any) remain responsible for meeting federal Davis-Bacon Act requirements and State of Oregon prevailing wage requirements.

Oregon prevailing wage rate regulations require every contractor or subcontractor employing workers on a public works project to pay to such workers no less than the applicable prevailing rate of wage for each trade or occupation, as determined by the commissioner, in which the workers are employed (OAR 839-025-0035). This project will be completed in Portland, Oregon (Multnomah County), which falls in BOLI Region 2.

The BOLI wage rates and requirements are set forth in the applicable BOLI Wage Rate Book and any listed amendments to that Book, found on the BOLI website ([https://www.oregon.gov/boli/WHD/PWR/Pages/pwr\\_state.aspx](https://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx)), and the federal prevailing wage rates and requirements are set forth in the Wage Determinations Portal, found on the Wage and Hour Division website (<https://www.dol.gov/whd/govcontracts/dbra.htm>), which are incorporated herein by reference, and apply to the Subcontractor's work and any tier II subcontractors' work authorized under this Subcontract and any Subcontract Amendments through the duration of the Work.

This project also incorporates by reference the State of Oregon General Conditions for Public Improvement Contracts (January 1, 2012 Edition) ("GCs"), available at <https://www.oregon.gov/das/Procurement/Guiddoc/GenCon4PI.pdf>, (also provided as Exhibit F), and the Supplemental General Conditions ("SGCs") dated September 11, 2024 (provided as Exhibit G).

The Subcontractor and all tier II subcontractors shall file with the Construction Contractors Board a \$30,000 public works bond with a corporate surety authorized to do business in this state (ORS 279C.836), unless exempt under ORS 279C.836(4), (7), (8) or (9). The bond must provide that the Subcontractor or tier II subcontractor will pay claims ordered by BOLI to workers performing labor upon public works projects. It must be filed before starting work on a contract or subcontract for the project and must be maintained throughout the project.

Form WH-38 may be used by subcontractors for reporting their weekly certified payroll as required by ORS 279C.845 on public works projects subject to the Prevailing Wage Rate Law. Certified payroll documentation must be provided to MFA within four (4) business days following the end of the month.

The Subcontractor and all tier II subcontractors shall post applicable rates for employees (and other associated health/welfare and pension plan information, as applicable) in an accessible and conspicuous location on the project site.

No bid shall be received or considered unless the Bid contains a statement by the Bidder, as part of their bid, that the provisions of ORS 279C.840 and Oregon Prevailing Wage Rates will be complied with. The required statement has been included in the attached bid form.

## LIQUIDATED DAMAGES

Bidders are required to present the duration of the proposed work on the Bid Request Form with a total number of on-site working days to complete the work. Failure to complete the work by the specified number of on-site days indicated on the Bid Request Form will result in damage to MFA. Since actual damage will be difficult to determine, it is agreed that the Subcontractor shall pay to MFA, not as a penalty but as liquidated damages, as follows.

Failure to complete the field work within the number of on-site working days entered on the Bid Request Form shall result in liquidated damages of \$1,400 per additional on-site working day, or \$700 per half day. A half-day is defined as up to 6 hours on any single day. Liquidated damages will not be assessed for schedule adjustments resulting from conditions beyond the control of the Subcontractor or for extensions granted by MFA.

Liquidated damages are cumulative and not mutually exclusive. MFA may, at its option, deduct amounts due MFA as liquidated damages from any money payable to the Subcontractor, or may bill the Subcontractor as a separate item. Liquidated damages under this Section shall be in addition to, and not in lieu of, any other damages, liquidated or otherwise, that may be assessed or payable under this agreement.

## SUBMITTAL REQUIREMENTS AND QUESTIONS

To be considered responsive, bidders must submit their bids to MFA at the email address listed above, under the "Contact Information" section by the bid due date and time presented in the "Schedule" section. Email submission is the only method that will be accepted. Only bids from invited bidders will be considered.

All questions regarding the requested services and the terms and conditions specified within this document must be submitted to MFA by email by the bid questions due date and time presented in the "Schedule" section. Only questions answered by formal written response to bid questions will be binding.

## CONTRACTING

The successful bidder will be required to enter into an MSA (see Exhibit E) with MFA. The MSA includes the Subcontractor's contract and insurance requirements. Upon award, the selected Subcontractor will be required to provide MFA with insurance certificates that meet the insurance requirements contained within the MSA. The Subcontractor shall include all endorsements and have waivers of subrogation in place prior to the issuance of the Work Order. A standard project-specific Work Order Authorization will be issued to the Subcontractor by MFA, identifying the specific scope of work to be performed and codifying this request for bids, all attachments to this request for bids, and any addenda as the collective Contract Documents. Bidders should not make their bid contingent on MFA's acceptance of contract terms that conflict with those of the MSA.

## MINIMUM REQUIREMENTS

Bidders must meet the following minimum requirements to be considered responsible and be eligible for award of the subcontract:

- Bidder shall hold or obtain such licenses and bonds as required by State and local statutes (including CCB license and Public Works Bond) prior to submitting their bid and maintain these licenses through completion of the Work.
- Bidders shall indicate any tier II subcontractors to be used.
- Bidders must be able to complete the work by the date presented in the Bid Request Form (unless an extension is requested and approved by MFA).
- Bidders must be able to meet the necessary insurance requirements set forth in the MSA.
- Bidders must be able to present current and up-to-date HAZWOPER certifications for site workers conducting soil excavation, stockpiling, and loading activities.

## PROPOSED EXCEPTIONS, CHANGES, OR MODIFICATIONS

Proposed exceptions, changes or modifications to the Bid Documents must be provided by email by the bid questions due date and time presented in the "Schedule" section for consideration. MFA will respond to all bidders regarding suggested changes at least two (2) business days before bids are due. Failure to request changes by the specified date shall be deemed as an unconditional acceptance of the terms and conditions in the MSA. Changes to the mandatory DEQ Flow-Down Provisions (Attachment A of the MSA) will not be considered.

If, after bid closing due date and time, the successful bidder notifies MFA that they are unable to comply with the terms of MFA's MSA, MFA reserves the right, at its sole discretion, to pursue an MSA and Work Order Authorization with the bidder who bids the next lowest adjusted total estimated cost.

## IRREGULARITIES

MFA reserves the right to reject any and all bids or waive any non-material irregularities or information in the bidder's proposal.

## CONFIDENTIALITY OF INFORMATION

All information and data furnished to the bidder by MFA and all other documents to which the bidder's employees have access related to this project shall be treated as confidential. Any oral or written disclosure to unauthorized individuals is strictly prohibited.

## ADDENDA

MFA may modify this request for bids at any time prior to the bid due date by issuance of an addendum to all bidders who are participating in the process at the time the addendum is issued. Addenda will be numbered consecutively.

## CLARIFICATION

MFA reserves the right to seek clarification of any part of each bid submitted.

## VALIDITY

Bids shall be firm, binding, and irrevocable offers for a period of 120 days following the bid due date.

## SELECTION CRITERIA

The information required in the bid submittal is listed on the attached Bid Request Form. Bids will be evaluated based on the following criteria:

- Lowest Adjusted Total Estimated Cost (100 points)

Proposed costs will be evaluated based on the adjusted total cost as identified on the attached Bid Request Form and must meet minimum requirements to be considered responsive and responsible. Consistent with Oregon State Administrative Rule (OAR) 125-247-0470, in the event of discrepancy between the unit cost provided on the Bid Request Form and the extended cost/price, the unit rate shall prevail. Bidder shall include the estimated on-site work days on the line for MFA Construction Oversight and multiply this by the daily rate to obtain an estimated cost for MFA Construction Oversight. This cost shall be added to the Total Base Bid above to provide a Total Estimated Cost.

MFA reserves the right to reject any bid should it be evaluated as non-conforming or non-responsive to the requirements in this request for bids and to postpone award.

Following receipt of bids and determination of the lowest cost responsive bid from a responsible bidder (as determined by MFA), that bidder's bid will be submitted as part of MFA's budgetary assumptions and pricing documents to DEQ for review. Preparation and execution of the public improvement contract between MFA and DEQ for MFA to implement the sediment remediation work (with assistance from its subcontractors) is expected to take up to 6 weeks. Once that contract is in place, MFA will attempt to execute the MSA and work order with the lowest cost responsive and responsible Bidder.

## PAYMENT

Payment to the Subcontractor will be made based on the quantities of work as measured in accordance with the specified methods of measurement and the unit or lump sum prices stipulated in the contract (which will include the Bid Request Form); will constitute complete compensation for furnishing all supervision, labor, equipment, overhead, profit, material, taxes, report preparation, and services; and will be paid after accomplishing and completing all required work specified under each item, notwithstanding that minor tasks may not be mentioned herein. Unless explicitly identified elsewhere, all lump sum items shall be considered 100 percent complete when approved by MFA.

## Attachments:

- Table—Bid Request Form
- Exhibit A—Figure—Site Location
- Exhibit B—Contract Drawings dated September 23, 2024 (19 Sheets)
- Exhibit C—Technical Specifications
- Exhibit D—Permits and Regulatory Approvals
- Exhibit E—Master Subcontractor Agreement
- Exhibit F—State of Oregon General Conditions for Public Improvement Contracts, January 2012 edition
- Exhibit G—Supplemental General Conditions (dated September 6, 2024)

# Table – Bid Request Form

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**Table**  
**Pacific Carbide Sediment Remediation - Remediation Construction Services**  
**MFA Project No. M0785.16.003**  
**Bid Request Form**

Bid Item	Work Scope Item <sup>1</sup>	Unit	Amount <sup>2</sup>	Unit Cost	Extended Cost
<b>General Construction Costs</b>					
1	Work Plans	Lump Sum	1		
2	Mobilization	Lump Sum	1		
3	Temporary Facilities and Controls	Lump Sum	1		
4	Temporary Contractor Access Improvements	Lump Sum	1		
5	Temporary Erosion and Sediment Control	Lump Sum	1		
6	Tree Protection Measures	Lump Sum	1		
7	Tree Removal and Salvage	Lump Sum	1		
8	Vegetation Clearing	Lump Sum	1		
9	Bonded Fiber Matrix Hydromulch	Lump Sum	1		
10	Removal of In-Water Structures and Debris	Lump Sum	1		
11	Bank Soil Excavation and Handling	Cubic Yard	3,175		
12	Transportation and Disposal	Ton	4,760		
13	"No Mooring" Signs	Each	3		
14	Diver Crew	Daily Rate	10		
<b>General Construction Subtotal</b>					
<b>Sediment Cap Alternative 1 - Reactive Core Mat</b>					
15	Reactive Core Mat	Square Yard	11,680		
16	Rounded Armor Stone	Square Yard	11,680		
17	Sand Habitat Layer	Square Yard	11,680		
18	Furnishing and Mixing of Enhanced Residuals Cover Sand Material	Square Yard	1,790		
19	Granular Activated Carbon	Ton	13		
20	Placement of Enhanced Residuals Cover	Square Yard	1,790		
<b>Alternative 1 Subtotal</b>					
<b>Sediment Cap Alternative 2 - AquaGate+PAC</b>					
21	AquaGate+PAC	Square Yard	13,470		
22	Rounded Armor Stone	Square Yard	13,470		
23	Placement of AquaGate+PAC and Rounded Armor Stone Sediment Cap	Square Yard	13,470		
24	Non-woven Filter Fabric	Square Yard	5,330		
25	Sand Habitat Layer	Square Yard	13,470		
<b>Alternative 2 Subtotal</b>					
<b>Total Base Bid <sup>2</sup>:</b>					
<b>MFA Oversight Costs</b>		Enter Days	on-site days	\$1,400/day	
<b>Total Estimated Cost:</b>					

**Table**  
**Pacific Carbide Sediment Remediation - Remediation Construction Services**  
**MFA Project No. M0785.16.003**  
**Bid Request Form**

<b>ADDITIONAL INFORMATION</b>	
<b>Item</b>	<b>Response</b>
Oregon Construction Contractors Board license number and expiration date.	
License number(s) for any/all license(s) required by state and local statutes and expiration date.	
Indicate that ORS 279C.840 and PWR laws will be complied with.	
Indicate subcontractors to be used (if applicable).	
Included project schedule?	
Available to complete Phase 1 Tree Removal and Vegetation Clearing between January 15, 2025 and February 15, 2025?	
Available to complete Phase 2 Sediment Cap Placement, and Riverbank Excavation between June 15, 2025 and September 15, 2025?	
Able to meet the necessary insurance requirements set forth in the Master Subcontractor/Subconsultant Agreement?	
Oregon minority/women business enterprise (M/WBE) and disadvantaged business enterprise (DBE) status.	
<b>Signature<sup>3</sup>:</b>	
<b>Name:</b>	
<b>Company:</b>	

**Notes**

<sup>1</sup>Scope of work is described in the request for bids.

<sup>2</sup>The Total Estimated Subcontractor Cost must include all General Construction Costs plus either Alternative 1 or Alternative 2 costs. Subcontractor is to select either Sediment Cap Alternative 1 - Reactive Core Mat (and provide unit and extended costs for Bid Items 15 - 20) or Sediment Cap Alternative 2 - AquaGate+PAC (and provide unit and extended costs for Bid Items 21 - 25).

<sup>3</sup>The rates shall include all costs associated with completing the work, including but not limited to labor, overhead, profit, equipment, taxes, report preparation, materials, supplies, and outside services. Payment for these items will be based on the unit price given and the actual quantity required to complete the scope of work as described.

<sup>4</sup>By signature, bidder understands and indicates acceptance of the requirements in this Bid Request including the requirement to be bound and comply with ORS 279C.800 - 279C.870 and the related BOLI administrative rules pertaining to public works and prevailing wage rate requirements.

# Exhibit A

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## Figure—Site Location

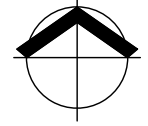
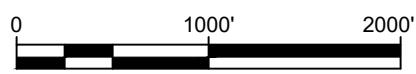


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This figure prepared as supplemental visual information only and should not be used for construction purposes. Only plan sheets approved, stamped and signed by a registered professional engineer in the state of governing jurisdiction shall be used for construction. Additionally, only plans approved by the applicable governing jurisdiction(s) shall be used for final construction unless otherwise expressly noted in writing by the engineer of record.



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

# Figure 1-1 Site Location

Pacific Carbide Sediment Remediation  
Portland, Oregon



# Exhibit B

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**Contract Drawings (dated September 23, 2024)**



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# PACIFIC CARBIDE SEDIMENT REMEDIATION

PREPARED FOR:

## OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

LOCATED IN SEC. 5, T. 1 N., R. 1 E., W.M., MULTNOMAH COUNTY, PORTLAND, OREGON

MAUL FOSTER & LONGI  
3140 NE BROADWAY STREET  
PORTLAND, OR 97232  
PHONE: 971.544.2139  
www.maulfooster.com



### PROJECT CONTACTS

<b>CLIENT</b> OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY 700 NE MULTNOMAH ST, SUITE #600 PORTLAND, OREGON 97232 P: 503-229-5040 SARAH MILLER SARAH.MILLER@STATE.OR.US	<b>ENVIRONMENTAL ENGINEER</b> MAUL, FOSTER & LONGI, INC. 3140 NE BROADWAY STREET PORTLAND, OREGON 97232 P: 503-501-5236 JOSHUA ELLIOTT, PE JELLIOTT@MAULFOSTER.COM
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VICINITY MAP

NOT TO SCALE

### SHEET INDEX

C0.0	COVER SHEET
C0.1	MASTER LEGEND
C1.0	EXISTING CONDITIONS PLAN
C2.0	TREE REMOVAL, VEGETATION CLEARING, & TREE PROTECTION PLAN
C2.1	UPLAND SITE OVERVIEW & TRUCK ROUTE
C2.2	EROSION & SEDIMENT CONTROL PLAN
C2.3	EROSION & SEDIMENT CONTROL NOTES
C2.4	EROSION & SEDIMENT CONTROL DETAILS 1
C2.5	EROSION & SEDIMENT CONTROL DETAILS 2
C3.0	BANK EXCAVATION PLAN
C3.1	BANK EXCAVATION CROSS SECTIONS 1
C3.2	BANK EXCAVATION CROSS SECTIONS 2
C4.0A	CAP PLACEMENT & BANK FILL PLAN - RCM ALTERNATIVE
C4.0B	CAP PLACEMENT & BANK FILL PLAN - AQUAGATE ALTERNATIVE
C4.1A	REMEDY TYPICAL CROSS SECTIONS - RCM ALTERNATIVE
C4.1B	REMEDY TYPICAL CROSS SECTIONS - AQUAGATE ALTERNATIVE
C4.2A	REMEDY TYPICAL DETAILS 1A - RCM ALTERNATIVE
C4.2B	REMEDY TYPICAL DETAILS 1B - AQUAGATE ALTERNATIVE
C4.3	REMEDY TYPICAL DETAILS 2

### PROJECT SUMMARY

**SITE ADDRESS:**  
9901 N HURST AVE.  
MULTNOMAH COUNTY  
PORTLAND, OR 97203

**WORK DESCRIPTION:**  
THE REMEDIAL ACTION DESCRIBED IN THIS PLAN SET INVOLVES THE PLACEMENT OF A SEDIMENT CAP CONSISTING OF A REACTIVE CORE MAT OR AQUAGATE+PAC, ROCK, AND SAND. IF CONTRACTOR SELECTS A REACTIVE CORE MAT, A PORTION OF THE CAP WILL BE SAND AMENDED WITH GRANULAR ACTIVATED CARBON. ADDITIONAL WORK INCLUDED IN THIS PLAN SET TO SUPPORT THE CAP CONSTRUCTION INCLUDES TREE REMOVAL, WHICH WILL BE PERFORMED DURING JANUARY 2025, AND COMPENSATORY SOIL EXCAVATION OF THE BANK ADJACENT TO THE CAP AREA WHICH WILL BE PERFORMED AT THE TIME OF IN-WATER WORK. THIS PLAN SET IS A 90% DESIGN AND IS NOT INTENDED FOR CONSTRUCTION.

### GENERAL NOTES

- TOPOGRAPHIC SURVEY PERFORMED BY NORTHSTAR SURVEYING IN 2019. BATHYMETRIC SURVEY PERFORMED BY APEX IN 2019.
- HORIZONTAL DATUM: OREGON STATE PLANE COORDINATE SYSTEM NORTH ZONE, NAD 83/91. ELEVATION DATUM: NAVD 88
- CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION. A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 (UTILITY NOTIFICATION CENTER) FOR LOCATION MARK-UP OF EXISTING UTILITIES.
- ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF PORTLAND AND THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" PREPARED BY ODOT/APWA.
- IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- ANY CHANGES TO THE DESIGN AND/OR CONSTRUCTION SHALL BE APPROVED BY THE OWNER OR ENGINEER.
- APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION NOT SPECIFICALLY SHOWN ON THE PLANS.
- A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- THE OWNER AND CONTRACTOR/ENGINEER HAVE OBTAINED SEVERAL PERMITS AND AGREEMENTS FOR THE WORK AS DESCRIBED IN THE SPECIFICATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY ADDITIONAL CONSTRUCTION EASEMENTS AND PERMITS NECESSARY TO PERFORM THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
- PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.
- ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL HAVE AN APPROVED PUBLIC RIGHT-OF-WAY WORK PERMIT PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.
- ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF PORTLAND STANDARDS AND PRACTICES.
- ANY DISTURBANCE TO THE UPLAND CAP AREA WILL BE MANAGED AND REPAIRED IN ACCORDANCE WITH THE EASEMENT AND EQUITABLE SERVITUDES RECORDED FOR THE UPLAND PROPERTY IN 2015.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SANITARY SEWER, STORMWATER, POWER, TELEPHONE, CABLE TV, GAS, IRRIGATION, AND STREET LIGHTING. THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 72 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT.
- ALL LAWN AND VEGETATED AREAS DISTURBED OUTSIDE OF BANK EXCAVATION AREAS WILL BE RESTORED TO ORIGINAL CONDITION. ANY DISTURBANCE OR DAMAGE TO OTHER PROPERTY ON ADJACENT PARCELS OR IN THE PUBLIC RIGHT OF WAY SHALL ALSO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION.

PACIFIC CARBIDE SEDIMENT  
REMEDICATION  
OREGON DEQ  
PORTLAND, OREGON

ISSUE	DATE	DESCRIPTION

PROJECT: 0785.16.01
DESIGNED: E. LUNDEEN
DRAWN: E. LUNDEEN
CHECKED: J. ELLIOTT
SCALE

SHEET TITLE
COVER
SHEET
C0.0

BID DOCUMENT: NOT FOR CONSTRUCTION



# ABBREVIATIONS

AC	ACRE, ASPHALT CONCRETE PAVEMENT	LB	POUND(-S)
ACOE	ARMY CORPS OF ENGINEERS	LF	LINEAR FEET
AD	AREA DRAIN	LONG.	LONGITUDINAL
AGG	AGGREGATE	LT	LEFT
AIR	AIR RELIEF	MAX	MAXIMUM
AMSL	ABOVE MEAN SEA LEVEL	MFA	MAUL FOSTER & ALONGI, INC.
AP	ANGLE POINT	MFR	MANUFACTURER
APN	APPARENT PARCEL NUMBER	MH	MANHOLE
APPD	APPROVED	MIC	MONUMENT (IN CASE)
APPROX. ±	APPROXIMATE(-E, -LY)	MIN	MINIMUM; MINUTE
ASPH	ASPHALT	MISC	MISCELLANEOUS
ASSY	ASSEMBLY	MJ	MECHANICAL JOINT
		MON	MONUMENT (SURFACE)
		MW	MONITORING WELL
BCR	BEGIN CURB RETURN	N	NORTH
BF	BUTTERFLY	N/A	NOT APPLICABLE
BGS	BELOW GROUND SURFACE	NAT G, NG	NATURAL GAS
BLDG	BUILDING	NE	NORTHEAST
BLVD	BOULEVARD	NO	NUMBER
BM	BENCHMARK	NTS	NOT TO SCALE
BMP	BEST MANAGEMENT PRACTICE	NW	NORTHWEST
BO	BLOW-OFF	OC	ON CENTER
BOC	BACK OF CURB	OD	OUTSIDE DIAMETER
BOT, BTM	BOTTOM	OHP	OVERHEAD POWER
B.O.W.	BOTTOM OF WALL	OT	OWNERSHIP TIE
BVC	BEGIN VERTICAL CURVE		
		P	PIPE
CB	CATCH BASIN	P TRAN	PAD MOUNTED TRANSFORMER
CDF	CONTROLLED DENSITY FILL	PC	POINT OF CURVATURE
CEM	CEMENT	PCC	PORTLAND CEMENT CONCRETE
CF	CUBIC FEET	PEN.	PENETRATION
CFS	CUBIC FEET PER SECOND	PERF	PERFORATE(-E, -ED, -ES, -ION)
CIP	CAST IRON PIPE	P.L., PL	PROPERTY LINE, PLACE
CIR	CIRCLE	POW V	POWER VAULT
CK	CHECK	PP	PROPOSED
CL, CL	CENTERLINE	PROP.	PROPOSED
CMP	CORRUGATED METAL PIPE	PS	PUMP STATION
CO	CLEANOUT	PSF	POUNDS PER SQUARE FOOT
COMP	COMPACTION	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PT	POINT OF TANGENT
CPE	CORRUGATED POLYETHYLENE	PV	PLUG VALVE
CPL	COUPLING	PVI	POINT OF VERTICAL INTERSECTION
CTL	COURT	PVC	POLYVINYL CHLORIDE
CTR	CENTER	PVMT	PAVEMENT
CULV	CULVERT		
CY	CUBIC YARD	R, RAD	RADIUS
		RC	REINFORCED CONCRETE
D	DEPTH	RCP	REINFORCED CONCRETE PIPE
DEG	DEGREE(-S)	RD	ROOF DRAIN
DI	DUCTILE IRON	RED	REDUCER
DIA	DIAMETER	REQD	REQUIRED
DIM.	DIMENSION(-S)	REQT	REQUIREMENT
DIP, D.I.P.	DUCTILE IRON PIPE	REV	REVISION
DOT	DEPARTMENT OF TRANSPORTATION	R/W, ROW	RIGHT OF WAY
		RT	RIGHT
DR	DIMENSION RATIO		
DTL	DETAIL	S	SOUTH, SLOPE
DWG(S)	DRAWING(-S)	SB	SOIL BORING
		SCH	SCHEDULE
E	EAST	SD	STORM DRAIN
EA	EACH	SDR	STANDARD DIMENSION RATIO
ECR	END CURB RETURN	SE	SOUTHEAST
EG	EXISTING GROUND	SF	SQUARE FEET
EL, ELEV	ELEVATION	SHT	SHEET
ELB, ELL	ELBOW	SL	SLOPE
ELEC	ELECTRIC(-AL)	SPEC	SPECIFICATIONS
ENGR	ENGINEER	SQ	SQUARE
ENTR	ENTRANCE	SQ IN	SQUARE INCHES
EQ, EOP	EDGE OF PAVEMENT	SRF	SURFACE
EQ	EQUAL(-LY)	ST	STREET
ESC	EROSION CONTROL	STA	STATION
ESMT	EASEMENT	STD	STANDARD
EST	ESTIMATE(-D)	STL	STEEL
EVC	END VERTICAL CURVE	STRM	STORM
EXC	EXCAVATE	STRUCT	STRUCTURE(-E, -AL)
EX, EXTG.	EXISTING	SSWR	SANITARY SEWER
EW	EACH WAY	SW, SW	SIDEWALK, SOUTHWEST
		TB	THRUST BLOCK
FF	FINISH FLOOR	TBM	TEMPORARY BENCHMARK
FG	FINISH GRADE	TC	TOP OF CURB
FH	FIRE HYDRANT	TEL, TELE	TELEPHONE
FL	FLOW LINE	TEMP	TEMPORARY
FLG	FLANGE	TP	TOP OF PAVEMENT, TEL POLE, TURNING POINT
FM	FORCE MAIN	TW	TOP OF WALL
FT	FEET, FOOT	TYP	TYPICAL
		UG	UNDERGROUND
GAL	GALLON(-S)	UGE	UNDERGROUND ELECTRIC
GM	GAS METER	UTIL	UTILITY
GND	GROUND	VC	VERTICAL CURVE
GP	GUARD POST	VERT	VERTICAL
GPM	GALLONS PER MINUTE	VOL	VOLUME
GRD	GRADE		
GV	GAS VALVE, GATE VALVE	W	WIDTH, WIDE, WEST
		W/	WITH
HDPE	HIGH DENSITY POLYETHYLENE	WATR	WATER
HCT, HT	HEIGHT	WM	WATER METER
HP	HORSEPOWER	W/O	WITHOUT
HORZ	HORIZONTAL	WSE	WATER SURFACE ELEVATION
HYD	HYDRANT	WV	GATE/GENERAL WATER VALVE
		YD	YARD
ID	INSIDE DIAMETER	YR	YEAR
IE	INVERT ELEVATION		
IN	INCH(-ES)		
INTX	INTERSECTION		
INV	INVERT		
IP	IRON PIPE		
L	LENGTH		
LAT	LATERAL		

# GENERAL LEGEND

## GAS/POWER/TELEPHONE SYMBOLS

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	GAS METER
[Symbol]	[Symbol]	[Symbol]	GAS VALVE
[Symbol]	[Symbol]	[Symbol]	PAD MOUNTED TRANSFORMER
[Symbol]	[Symbol]	[Symbol]	POWER VAULT
[Symbol]	[Symbol]	[Symbol]	TRANSMISSION TOWER
[Symbol]	[Symbol]	[Symbol]	UTILITY POLE
[Symbol]	[Symbol]	[Symbol]	UTILITY POLE ANCHOR
[Symbol]	[Symbol]	[Symbol]	TELEPHONE RISER
[Symbol]	[Symbol]	[Symbol]	TELEPHONE VAULT
[Symbol]	[Symbol]	[Symbol]	LIGHT POLE

## SURVEY SYMBOLS

SYMBOL	THEOR./EXIST.	FOUND/PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	ANGLE POINT
[Symbol]	[Symbol]	[Symbol]	BENCH MARK
[Symbol]	[Symbol]	[Symbol]	BLOCK CORNER
[Symbol]	[Symbol]	[Symbol]	IRON PIPE
[Symbol]	[Symbol]	[Symbol]	MONUMENT
[Symbol]	[Symbol]	[Symbol]	OWNERSHIP TIE
[Symbol]	[Symbol]	[Symbol]	SECTION DATA:
[Symbol]	[Symbol]	[Symbol]	SECTION CENTER
[Symbol]	[Symbol]	[Symbol]	SECTION CORNER
[Symbol]	[Symbol]	[Symbol]	QUARTER CORNER
[Symbol]	[Symbol]	[Symbol]	SIXTEENTH CORNER
[Symbol]	[Symbol]	[Symbol]	CLOSING CORNER
[Symbol]	[Symbol]	[Symbol]	MEANDER CORNER
[Symbol]	[Symbol]	[Symbol]	WITNESS CORNER
[Symbol]	[Symbol]	[Symbol]	SOIL BORING
[Symbol]	[Symbol]	[Symbol]	SPOT ELEVATION

[Symbol]	EXISTING GRADE MAJOR CONTOUR
[Symbol]	EXISTING GRADE MINOR CONTOUR
[Symbol]	EXISTING STORM DRAIN PIPE
[Symbol]	EXISTING WATER PIPE
[Symbol]	EXISTING SANITARY SEWER PIPE
[Symbol]	EXISTING AC PAVEMENT
[Symbol]	EXISTING CONCRETE SURFACING
[Symbol]	EXISTING GRAVEL SURFACING
[Symbol]	EXISTING BUILDING
[Symbol]	EXISTING FENCE LINE
[Symbol]	EXISTING RAILROAD LINE
[Symbol]	EXISTING ROAD CENTERLINE
[Symbol]	EXISTING RIGHT-OF-WAY

## WATER SYMBOLS

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	CAP/PLUG
[Symbol]	[Symbol]	[Symbol]	COUPLING
[Symbol]	[Symbol]	[Symbol]	GUARD POST / BOLLARD
[Symbol]	[Symbol]	[Symbol]	REDUCER
[Symbol]	[Symbol]	[Symbol]	THRUST BLOCK
[Symbol]	[Symbol]	[Symbol]	WATER METER
[Symbol]	[Symbol]	[Symbol]	DOUBLE CHECK VALVE ASSEMBLY
[Symbol]	[Symbol]	[Symbol]	FIRE HYDRANT
[Symbol]	[Symbol]	[Symbol]	AIR RELIEF
[Symbol]	[Symbol]	[Symbol]	BLOW-OFF VALVE
[Symbol]	[Symbol]	[Symbol]	CHECK VALVE
[Symbol]	[Symbol]	[Symbol]	GATE VALVE

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	BENDS:
[Symbol]	[Symbol]	[Symbol]	90 DEGREE BEND
[Symbol]	[Symbol]	[Symbol]	45 DEGREE BEND
[Symbol]	[Symbol]	[Symbol]	22.5 DEGREE BEND
[Symbol]	[Symbol]	[Symbol]	11.25 DEGREE BEND
[Symbol]	[Symbol]	[Symbol]	VERTICAL BEND
[Symbol]	[Symbol]	[Symbol]	TEE
[Symbol]	[Symbol]	[Symbol]	CROSS

## SANITARY/STORM SEWER SYMBOLS

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	SAN. SEWER CLEAN OUT
[Symbol]	[Symbol]	[Symbol]	SAN. SEWER MANHOLE
[Symbol]	[Symbol]	[Symbol]	STORM DRAIN CATCH BASIN
[Symbol]	[Symbol]	[Symbol]	STORM DRAIN CULVERT
[Symbol]	[Symbol]	[Symbol]	STORM DRAIN MANHOLE
[Symbol]	[Symbol]	[Symbol]	DRY WELL
[Symbol]	[Symbol]	[Symbol]	AREA DRAIN

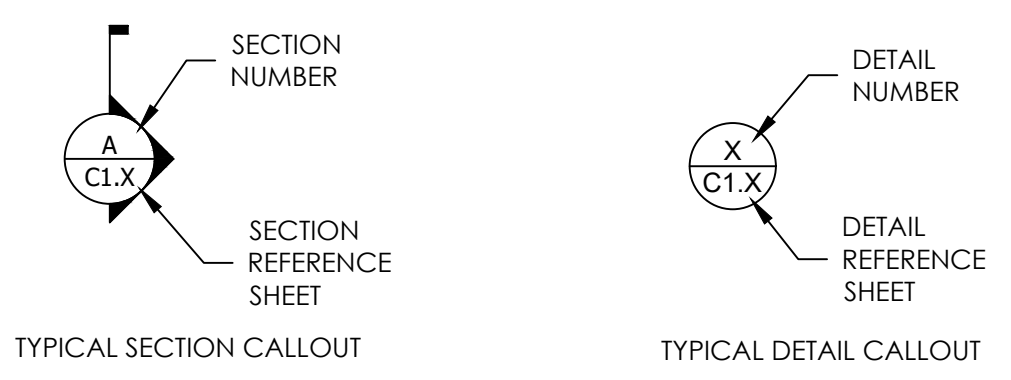
[Symbol]	PROPOSED GRADE MAJOR CONTOUR (5.0' INTERVAL)
[Symbol]	PROPOSED GRADE MINOR CONTOUR (1.0' INTERVAL)
[Symbol]	PROPOSED STORM DRAIN PIPE
[Symbol]	PROPOSED WATER PIPE
[Symbol]	PROPOSED SANITARY SEWER PIPE
[Symbol]	PROPOSED AC PAVEMENT
[Symbol]	PROPOSED CONCRETE SURFACING
[Symbol]	PROPOSED GRAVEL SURFACING
[Symbol]	PROPOSED BUILDING
[Symbol]	PROPOSED FENCE LINE
[Symbol]	PROPOSED ROAD CENTERLINE
[Symbol]	PROPOSED RIGHT-OF-WAY
[Symbol]	PROPOSED PROPERTY LINE

## CHANNELIZATION SYMBOLS

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	BIKE PATH
[Symbol]	[Symbol]	[Symbol]	HANDICAP SYMBOL
[Symbol]	[Symbol]	[Symbol]	STOP
[Symbol]	[Symbol]	[Symbol]	RAISED MARKERS: LANE MARKERS TYPE I
[Symbol]	[Symbol]	[Symbol]	LANE MARKERS TYPE II
[Symbol]	[Symbol]	[Symbol]	SIGN

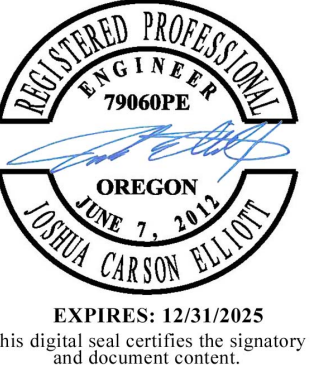
## MISCELLANEOUS SYMBOLS

SYMBOL	EXIST.	PROP.	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	MONITORING WELL
[Symbol]	[Symbol]	[Symbol]	INLET PROTECTION PILLOW
[Symbol]	[Symbol]	[Symbol]	CONSTRUCTION ENTRANCE
[Symbol]	[Symbol]	[Symbol]	PROPOSED SPOT SHOT



[Symbol]	PROPOSED SEDIMENT FENCE
[Symbol]	PROPOSED FLOW DIRECTION
[Symbol]	PROPOSED GRADE BREAK
[Symbol]	PROPOSED DITCH FLOW LINE
[Symbol]	PROPOSED COMPOST SOCK
[Symbol]	PROPOSED PAINT STRIPE
[Symbol]	PROPOSED TRUNCATED DOMES
[Symbol]	EXISTING FLOW DIRECTION
[Symbol]	EXISTING OVERHEAD POWER
[Symbol]	EXISTING UNDERGROUND POWER
[Symbol]	EXISTING UNDERGROUND TELEPHONE
[Symbol]	EXISTING UNDERGROUND GAS

MAUL FOSTER & ALONGI  
3140 NE BROADWAY STREET  
PORTLAND, OR 97232  
PHONE: 503.544.2139  
www.maulfooster.com



PACIFIC CARBIDE SEDIMENT  
REMEDICATION  
OREGON DEQ  
PORTLAND, OREGON

ISSUE	DATE	DESCRIPTION

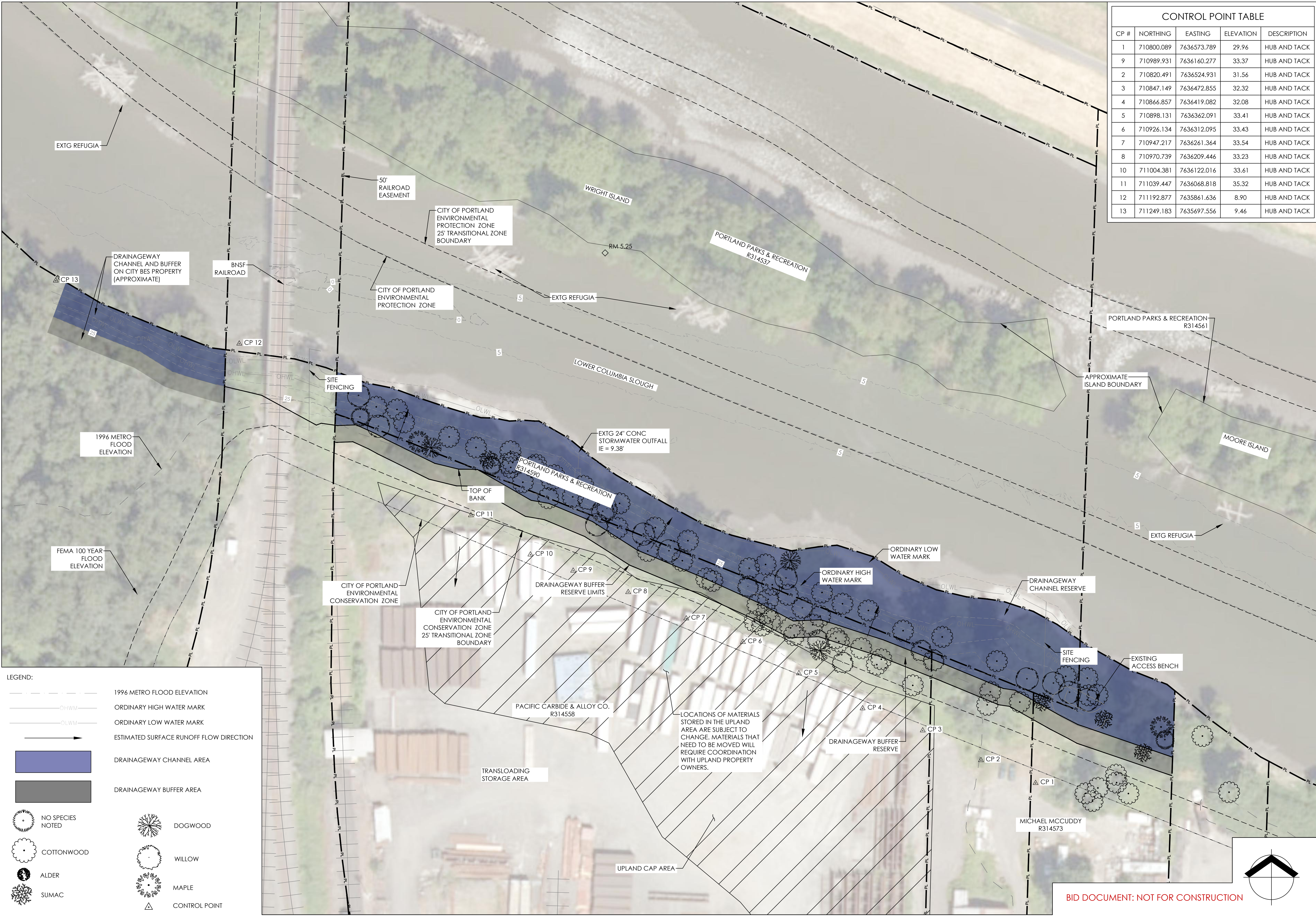
PROJECT: 0785.16.01  
DESIGNED: E. LUNDEEN  
DRAWN: E. LUNDEEN  
CHECKED: J. ELLIOTT  
SCALE

SHEET TITLE  
MASTER LEGEND

SHEET  
C0.1



PLOTTED ON: 2024/09/20 4:47 PM  
 PLOTTED BY: ashlibert  
 FILENAME: G:\V06\_MIA Civil 20\00\_PROJECTS\0618\_8502 - Pacific Carbide\01\_Remedial Design\Development\PLANS\DRAWING CONDITIONS PLAN.dwg



CONTROL POINT TABLE				
CP #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	710800.089	7636573.789	29.96	HUB AND TACK
9	710989.931	7636160.277	33.37	HUB AND TACK
2	710820.491	7636524.931	31.56	HUB AND TACK
3	710847.149	7636472.855	32.32	HUB AND TACK
4	710866.857	7636419.082	32.08	HUB AND TACK
5	710898.131	7636362.091	33.41	HUB AND TACK
6	710926.134	7636312.095	33.43	HUB AND TACK
7	710947.217	7636261.364	33.54	HUB AND TACK
8	710970.739	7636209.446	33.23	HUB AND TACK
10	711004.381	7636122.016	33.61	HUB AND TACK
11	711039.447	7636068.818	35.32	HUB AND TACK
12	711192.877	7635861.636	8.90	HUB AND TACK
13	711249.183	7635697.556	9.46	HUB AND TACK

**LEGEND:**

- 1996 METRO FLOOD ELEVATION
- ORDINARY HIGH WATER MARK
- ORDINARY LOW WATER MARK
- ESTIMATED SURFACE RUNOFF FLOW DIRECTION
- DRAINAGEWAY CHANNEL AREA
- DRAINAGEWAY BUFFER AREA
- NO SPECIES NOTED
- COTTONWOOD
- ALDER
- SUMAC
- DOGWOOD
- WILLOW
- MAPLE
- CONTROL POINT

MAUL FOSTER A LONGI  
 3140 NE BROADWAY STREET  
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 www.maulfofoster.com



**PACIFIC CARBIDE SEDIMENT  
 REMEDIATION**  
 OREGON DEQ  
 PORTLAND, OREGON

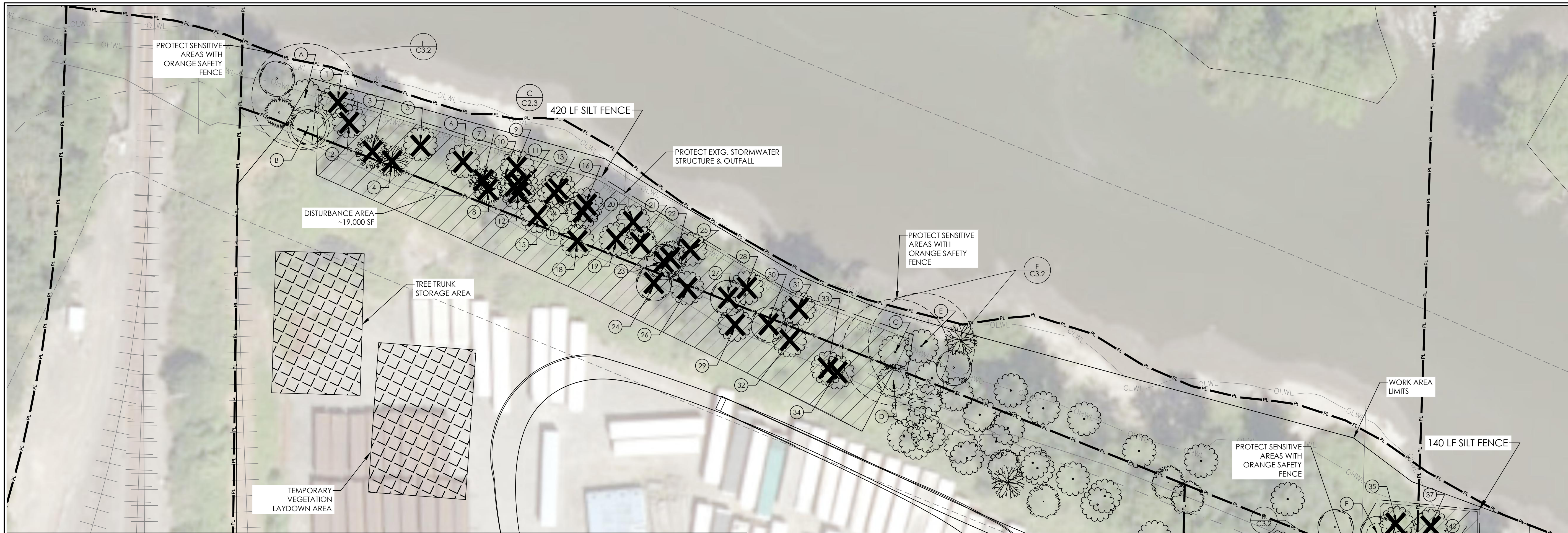
ISSUE	DATE	DESCRIPTION

PROJECT: 0785.16.01  
 DESIGNED: E. LUNDEEN  
 DRAWN: E. LUNDEEN  
 CHECKED: J. ELLIOTT  
 SCALE: 1" = 40'  
 NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

**EXISTING  
 CONDITIONS PLAN**  
 SHEET  
 C1.0

BID DOCUMENT: NOT FOR CONSTRUCTION





TREE REMOVAL TABLE - PORTLAND PARKS AND RECREATION - PROPERTY ID: R314590

TREE NUMBER	TREE COORDINATES	APPROXIMATE TREE DIAMETER (INCHES)	TREE SPECIES
1	N: 711134.06', E: 7636002.73'	6-12"	BLACK COTTONWOOD
2	N: 711122.51', E: 7636009.03'	24-30"	BLACK COTTONWOOD
3	N: 711105.30', E: 7636022.20'	3-6"	NORWAY MAPLE
4	N: 711099.81', E: 7636033.30'	6-12"	PACIFIC DOGWOOD
5	N: 711109.52', E: 7636049.40'	24-30"	BLACK COTTONWOOD
6	N: 711100.02', E: 7636073.37'	24-30"	BLACK COTTONWOOD
7	N: 711089.11', E: 7636084.89'	6-12"	PLUM
8	N: 711083.93', E: 7636087.30'	6-12"	BLACK LOCUST
9	N: 711096.73', E: 7636104.17'	24-30"	BLACK COTTONWOOD
10	N: 711085.92', E: 7636102.47'	6-12"	BLACK COTTONWOOD
11	N: 711086.65', E: 7636106.25'	3-6"	BLACK COTTONWOOD
12	N: 711082.26', E: 7636104.47'	<3"	BLACK COTTONWOOD
13	N: 711084.64', E: 7636127.22'	6-12"	BLACK COTTONWOOD
14	N: 711082.81', E: 7636124.97'	3-6"	BLACK COTTONWOOD
15	N: 711069.02', E: 7636115.27'	6-12"	BLACK COTTONWOOD
16	N: 711075.33', E: 7636143.16'	18-24"	BLACK COTTONWOOD
17	N: 711071.38', E: 7636140.96'	6-12"	BLACK COTTONWOOD
19	N: 711055.91', E: 7636159.90'	6-12"	BLACK COTTONWOOD
20	N: 711065.66', E: 7636169.40'	18-24"	BLACK COTTONWOOD
21	N: 711053.72', E: 7636173.42'	3-6"	SCOULERS WILLOW
22	N: 711045.46', E: 7636190.40'	3-6"	SCOULERS WILLOW
23	N: 711043.11', E: 7636186.65'	6-12"	ALDER SP

25	N: 711050.10', E: 7636201.74'	6-12"	BLACK COTTONWOOD
27	N: 711022.82', E: 7636223.06'	3-6"	ALDER SP
28	N: 711028.46', E: 7636233.65'	6-12"	BLACK COTTONWOOD
31	N: 711016.78', E: 7636262.90'	18-24"	BLACK COTTONWOOD

TREE REMOVAL TABLE - PACIFIC CARBIDE - PROPERTY ID: R314558

TREE NUMBER	TREE COORDINATES	APPROXIMATE TREE DIAMETER (INCHES)	TREE SPECIES
18	N: 711054.77', E: 7636137.93'	6-12"	BLACK COTTONWOOD
24	N: 711031.12', E: 7636181.07'	6-12"	ALDER SP
26	N: 711028.21', E: 7636199.99'	6-12"	BLACK COTTONWOOD
29	N: 711007.62', E: 7636226.96'	3-6"	BLACK COTTONWOOD
30	N: 711007.85', E: 7636245.92'	<3"	ALDER SP
32	N: 710998.86', E: 7636257.89'	6-12"	BLACK COTTONWOOD
33	N: 710983.06', E: 7636279.42'	24-30"	BLACK COTTONWOOD
34	N: 710980.76', E: 7636284.77'	24-30"	BLACK COTTONWOOD

TREE REMOVAL TABLE - MCCUDDY - PROPERTY ID: R314573

TREE NUMBER	TREE COORDINATES	APPROXIMATE TREE DIAMETER (INCHES)	TREE SPECIES
35	N: 710895.54', E: 7636600.70'	24-30"	BLACK COTTONWOOD
36	N: 710881.37', E: 7636604.18'	3-6"	ALDER SP
37	N: 710893.95', E: 7636620.10'	6-12"	BLACK COTTONWOOD
38	N: 710874.57', E: 7636619.92'	<3"	ALDER SP
39	N: 710878.62', E: 7636621.29'	6-12"	BLACK COTTONWOOD
40	N: 710878.94', E: 7636629.18'	6-12"	BLACK COTTONWOOD
41	N: 710857.15', E: 7636634.89'	6-12"	PLUM


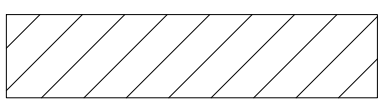


TREE PROTECTION DATA TABLE

TREE NUMBER	TREE COORDINATES	ROOT PROTECTION ZONE (RADIUS IN FT)	TREE SPECIES
A	N: 711136.41', E: 7635984.21'	30'	BLACK COTTONWOOD
B	N: 711119.23', E: 7635986.05'	12'	ALDER SP
C	N: 710992.11', E: 7636317.61'	30'	BLACK COTTONWOOD
D	N: 710975.94', E: 7636316.55'	6'	SCOULERS WILLOW
E	N: 710995.50', E: 7636332.34'	30'	BLACK COTTONWOOD
F	N: 710889.58', E: 7636589.80'	6'	ALDER SP
G	N: 710872.66', E: 7636579.85'	12'	PLUM

NOTES:

- THE EXISTING VEGETATION IS PREDOMINANTLY BLACK COTTONWOOD WITH A MIXED UNDERSTORY OF VARIOUS TREES AND SHRUBS. SPECIES PRESENT INCLUDE: ALDER, SCOULERS WILLOW, BLACK LOCUST, PLUM, PACIFIC DOGWOOD, NORWAY MAPLE, AND CHINESE SUMAC. AREAS WITHOUT TREE CANOPY ARE ALMOST ENTIRELY COVERED IN HIMALAYAN BLACKBERRY.
- A TOTAL OF 41 EXISTING TREES WILL BE REMOVED. APPROXIMATELY 23,400 SQUARE FEET OF AREA WILL BE CLEARED OF VEGETATION.
- ROOT PROTECTION ZONES WILL BE MARKED IN THE FIELD WITH ORANGE SAFETY FENCE AND STAKING BY CONTRACTOR.
- NO HEAVY EQUIPMENT WILL BE ALLOWED WITHIN THE DESIGNATED ROOT PROTECTION ZONES. ENCROACHMENTS INTO THE ROOT PROTECTION ZONE ARE ALLOWED PROVIDED: THE AREA OF ALL ENCROACHMENTS IS LESS THAN 25 PERCENT OF THE TOTAL ROOT PROTECTION ZONE AREA; AND NO ENCROACHMENT IS CLOSER THAN 1/2 THE REQUIRED RADIUS DISTANCE.
- NO GROUND-DISTURBING ACTIVITY IS PLANNED FOR THIS PHASE OF THE WORK. A REPLANTING WAIVER WILL BE OBTAINED BY OWNER TO DELAY REVEGETATION REQUIREMENTS UNTIL AFTER THE FULL REMEDIAL ACTION IS IMPLEMENTED.
- PRIOR TO THE START OF WORK ACTIVITIES, THE WORK AREA SHALL BE INSPECTED FOR MAMMAL DENS. ANY IDENTIFIED MAMMALS SHALL BE CAPTURED AND RELOCATED BY A QUALIFIED WILDLIFE BIOLOGIST PRIOR TO THE START OF WORK.

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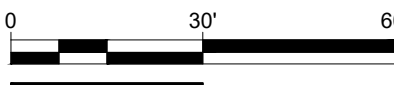
-  REMOVE TREE
-  CLEAR VEGETATION (TRIM AT GROUND SURFACE) AND STABILIZE WITH HYDROMULCH
-  PROPOSED ROOT PROTECTION ZONE
-  WORK AREA LIMITS

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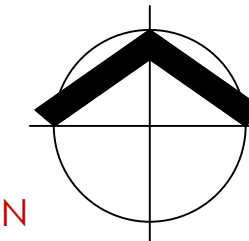


PACIFIC CARBIDE SEDIMENT  
 REMEDIATION  
 OREGON DEQ  
 PORTLAND, OREGON

ISSUE	DATE	DESCRIPTION

PROJECT: 0785.16.01  
 DESIGNED: E. LUNDEEN  
 DRAWN: E. LUNDEEN  
 CHECKED: J. ELLIOTT  
 SCALE  
  
 NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.  
 SHEET TITLE  
**TREE REMOVAL, VEGETATION CLEARING & TREE PROTECTION PLAN**  
 SHEET  
 C2.0

BID DOCUMENT: NOT FOR CONSTRUCTION





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**LEGEND:**

	SILT FENCING
	TURBIDITY CURTAIN
	STOCKPILE AREA
	BANK EXCAVATION AREA

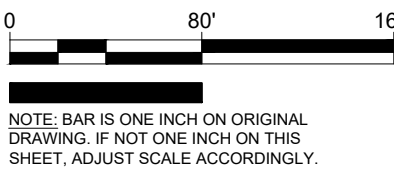
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**PACIFIC CARBIDE SEDIMENT  
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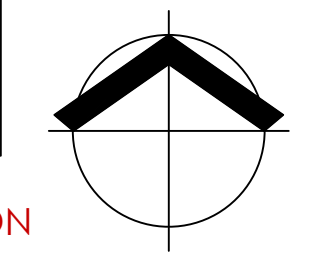
PROJECT: 0785.16.01  
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SHEET TITLE  
**UPLAND SITE  
 OVERVIEW &  
 TRUCK ROUTE**

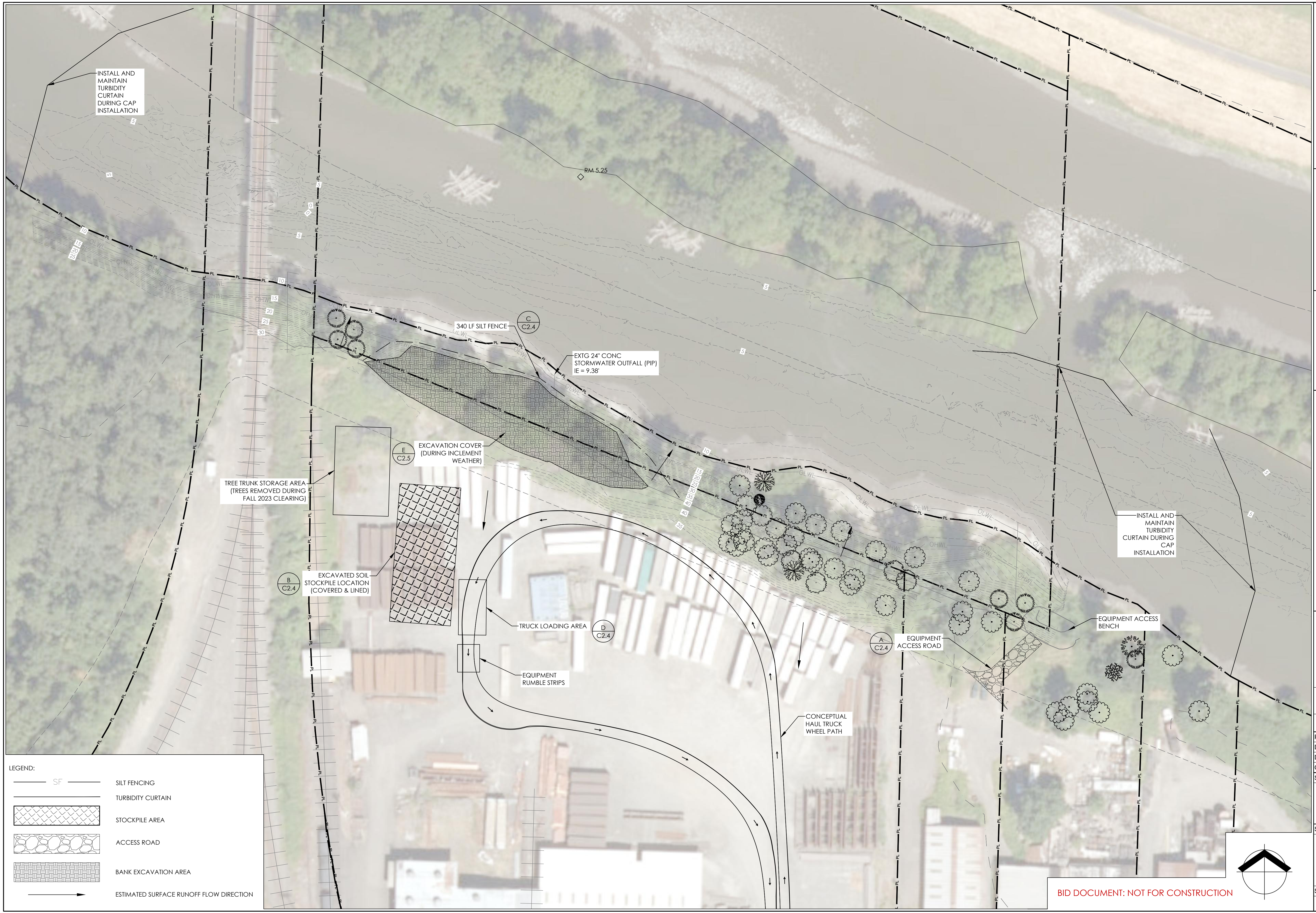
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**LEGEND:**

- SF SILT FENCING
- TURBIDITY CURTAIN
- STOCKPILE AREA
- ACCESS ROAD
- BANK EXCAVATION AREA
- ESTIMATED SURFACE RUNOFF FLOW DIRECTION

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**REGISTERED PROFESSIONAL ENGINEER**  
 79606PE  
 OREGON  
 JOSHUA CARSON ELLIOTT  
 EXPIRES: 12/31/2025  
 This digital seal certifies the signatory and document content.

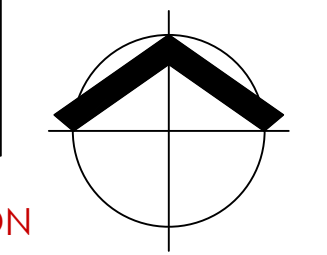
**PACIFIC CARBIDE SEDIMENT REMEDIATION**  
 OREGON DEQ  
 PORTLAND, OREGON

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**EROSION & SEDIMENT CONTROL PLAN**  
 SHEET  
 C2.2

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# CONSTRUCTION NOTES

## EROSION AND SEDIMENT CONTROL (CITY OF PORTLAND)

- A. APPROVAL OF THIS EROSION, SEDIMENT AND POLLUTION CONTROL PLAN (ESPCP) DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES).
- B. THE IMPLEMENTATION OF THIS ESPCP AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- C. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- D. THE ESPCP FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM OR ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- E. THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- F. THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- G. THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
- H. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

## STANDARD NOTES FOR SEDIMENT FENCES

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2 INCH X 2 INCH POSTS AND ATTACH AS SHOWN ON DETAIL SHEET 4-2A.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
3. THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM FILTER FABRIC FENCE INSTALLATION SHALL BE BACKFILLED AND COMPACTED ALONG THE ENTIRE DISTURBED AREA.
4. STANDARD OR HEAVY DUTY FILTER FABRIC FENCE SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2 INCH X 2 INCH POST INSTALLATION. STITCHED LOOPS SHALL BE INSTALLED ON THE UPHILL SIDE OF THE SLOPED AREA.
5. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
6. FILTER FABRIC FENCES SHALL BE INSPECTED BY APPLICANT/CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

## EROSION AND SEDIMENT CONTROL (DEQ)

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (SCHEDULE A.8.C.I.(3))
2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SCHEDULE A.12.B AND SCHEDULE B.1)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SCHEDULE B.1.C AND B.2)
4. RETAIN A COPY OF THE ESPC AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (SCHEDULE B.2.C)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESPC. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESPC IS A VIOLATION OF THE PERMIT. (SCHEDULE A.8.A)
6. THE ESPC MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SCHEDULE A.12.C.I)
7. SUBMISSION OF ALL ESPC REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESPC REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SCHEDULE A.12.C.IV. AND V)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SCHEDULE A.7.A.III)
9. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SCHEDULE A.8.C.I.(1) AND (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND REVEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SCHEDULE A.7.A.V)
11. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER 50 FEET FROM THE EDGE WATERS OF THE STATE. (SCHEDULE A.7.B.I AND (2)(A)(B))

12. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SCHEDULE A.8.C.I.(5))
13. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SCHEDULE A.7.C)
14. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SCHEDULE A.7.D.I)
15. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
16. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
17. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND DISTURBING ACTIVITIES. (SCHEDULE A.7.D.II AND A.8.C.I.(4))
18. WHEN TRUCKING SATURATED SOILS FROM THE SITE, USE EITHER WATERTIGHT TRUCKS OR DRAIN LOADS ON SITE (SCHEDULE A.7.D.II.(5)). ALL TRUCKS SHOULD BE INSPECTED AND ANY LOOSE SOIL REMOVED BEFORE LEAVING THE PROPERTY.
19. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SCHEDULE A.6)
20. USE BMPS TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS: VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
21. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SCHEDULE A.7.E.III.)
22. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.A.IV)
23. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SCHEDULE A.9.B.III)
24. IF AN ACTIVE TREATMENT SYSTEM (ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SCHEDULE A.9.D)
25. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SCHEDULE A.7.B)
26. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SCHEDULE A.7.E.II.(2))
27. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (SCHEDULE A.7.A.I)
28. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVEGROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SCHEDULE A.9.C.I)
29. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SCHEDULE A.9.C.I)
30. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
31. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEANUP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIMEFRAME. (SCHEDULE A.9.B.I)
32. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEAN UP RELEASED SEDIMENTS. (SCHEDULE A.9.B.II)
33. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
34. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
35. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (SCHEDULE A.8.C.III(1) AND D.3.C.II AND III)

EROSION AND SEDIMENT CONTROLS BMP IMPLEMENTATION SCHEDULE		
PROJECT PHASE	ESTIMATED DATE	BMPS
PHASE 1 - TREE REMOVAL AND VEGETATION CLEARING	FALL 2023	PROTECTIVE FENCING AND SILT FENCE
PHASE 1 - POST TREE REMOVAL AND VEGETATION CLEARING	FALL 2023- SUMMER 2024	HYDROMULCH
PHASE 2 - BANK EXCAVATION	SUMMER 2024	PROTECTIVE FENCING, DUST CONTROL, STOCKPILE MANAGEMENT, SILT FENCE AND CONSTRUCTION ENTRANCE
PHASE 2 - SEDIMENT CAP INSTALLATION	SUMMER 2024	PROTECTIVE FENCING, SILT FENCE, CONSTRUCTION ENTRANCE, AND TURBIDITY CURTAINS
PHASE 3 - BANK RESTORATION (BY OTHERS)	FALL 2024	PLANTING
PLANTING MAINTENANCE (BY OTHERS)	SUMMER 2025	REMOVE EROSION CONTROLS FOLLOWING PLANT ESTABLISHMENT

## SITE GRADING

1. ALL PORTIONS OF THE SITE WITHIN THE LIMITS OF THE WORK SHALL BE MOWED AND STRIPPED TO REMOVE ALL GRASS, ROOTS, ORGANIC SOIL, AND CONSTRUCTION FILL DEBRIS PRIOR TO THE BEGINNING OF ANY GRADING OPERATIONS.
2. AS TECHNICALLY FEASIBLE NO DISTURBANCES SHALL BE MADE TO THE UPLAND CAP AREA, IF THE CAP IS DISTURBED IT SHALL BE REPAIRED FOLLOWING THE REQUIREMENTS OF THE EASEMENT AND EQUITABLE SERVITUDES AT NO COST TO THE OWNER.
3. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
4. ALL GRADING OPERATIONS AND DISTURBED SURFACE STABILIZATION SHALL BE IN ACCORDANCE WITH THE PROJECT EROSION CONTROL PLAN.

## TRANSPORTATION

1. THE MOST CURRENT EDITIONS OF THE OREGON DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS AND STANDARD DETAILS AND THE MOST CURRENT EDITIONS OF THE CITY OF PORTLAND DESIGN STANDARDS SHALL BE UTILIZED IN THE CONSTRUCTION OF TRANSPORTATION ELEMENTS OF THESE PLANS.
2. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
3. CONTRACTOR SHALL REPORT ALL DAMAGES IMMEDIATELY TO THE CITY'S PUBLIC WORKS DEPARTMENT OR CONTACT THE INSPECTOR ON THE JOB.
4. PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED WITH A VACUUM SWEEPER.

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 REMEDIATION  
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NO.	DATE	ISSUE	DESCRIPTION

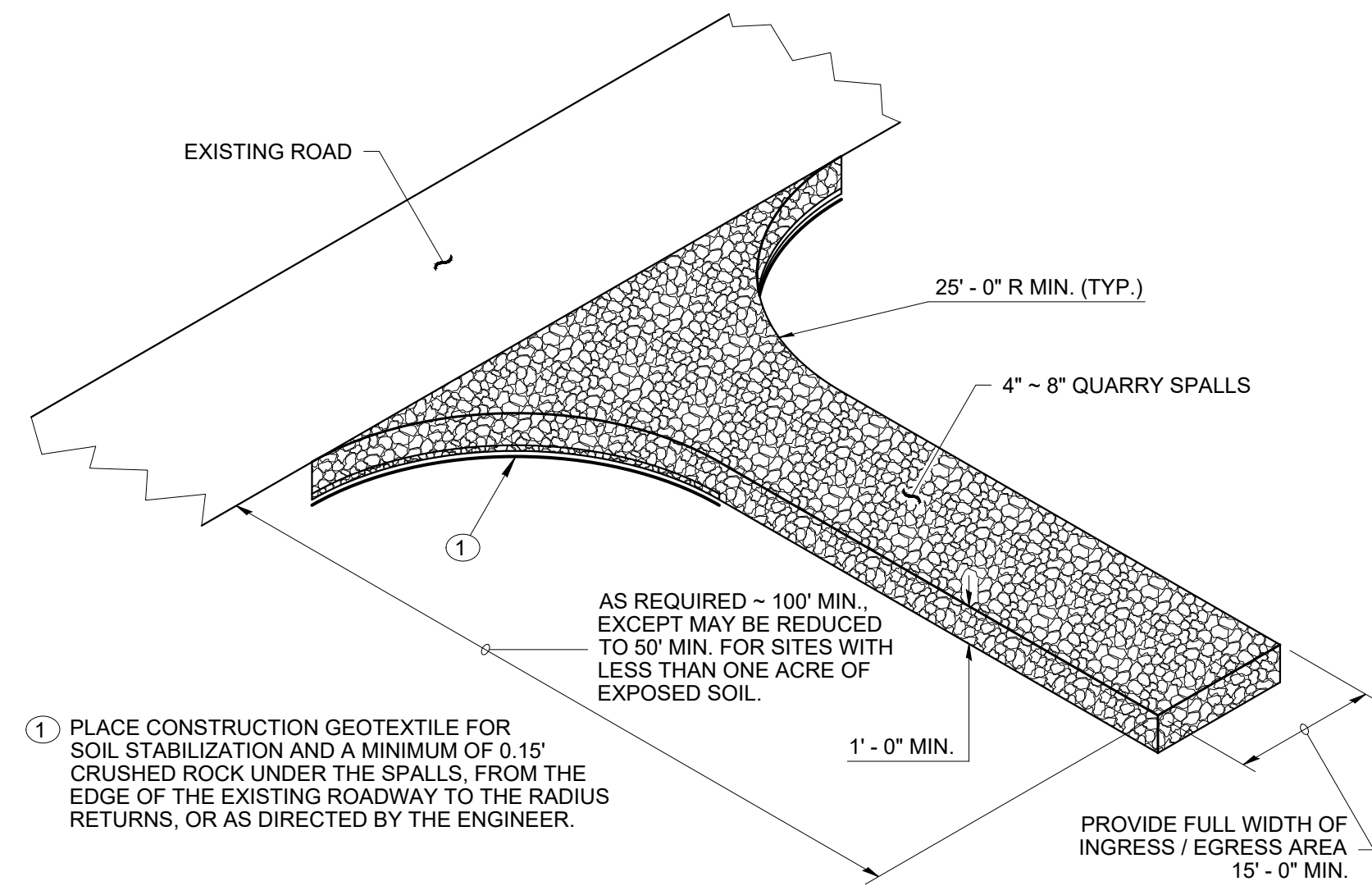
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SHEET TITLE  
 EROSION &  
 SEDIMENT  
 CONTROL NOTES

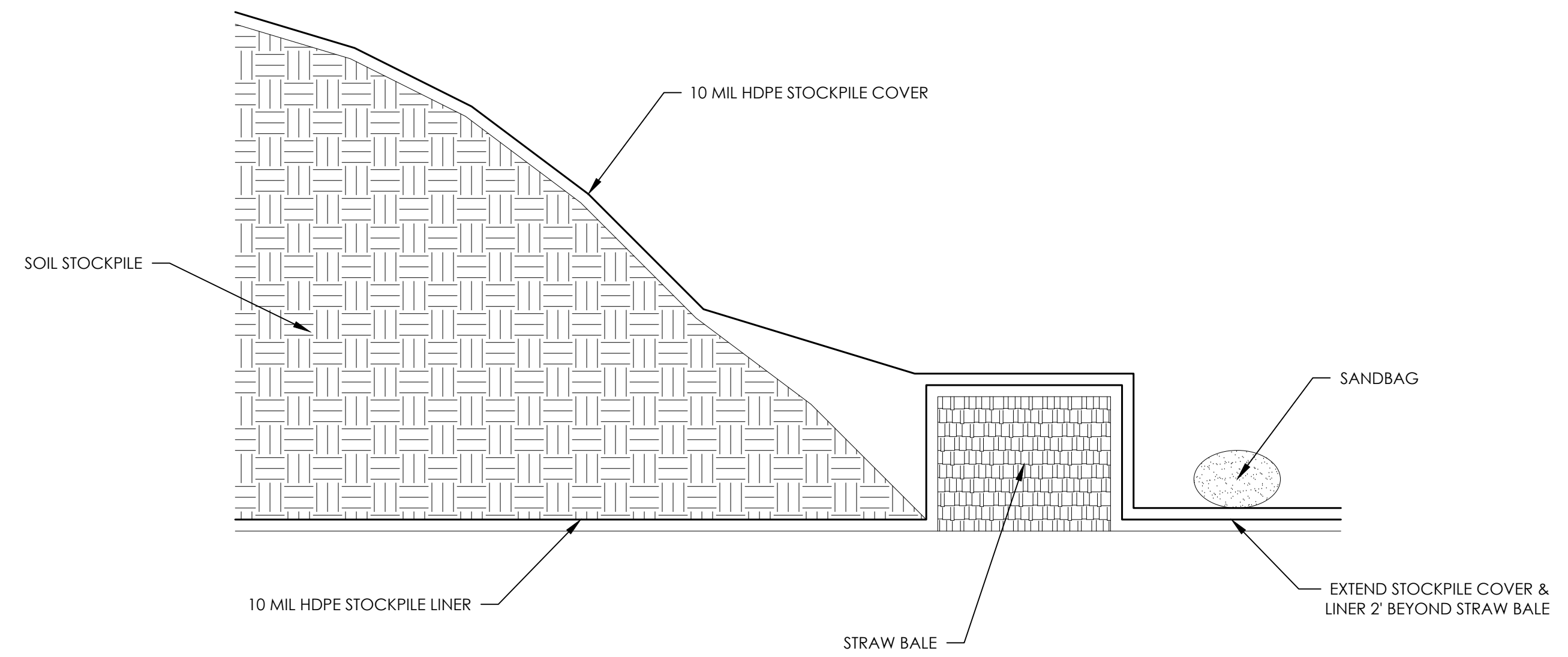
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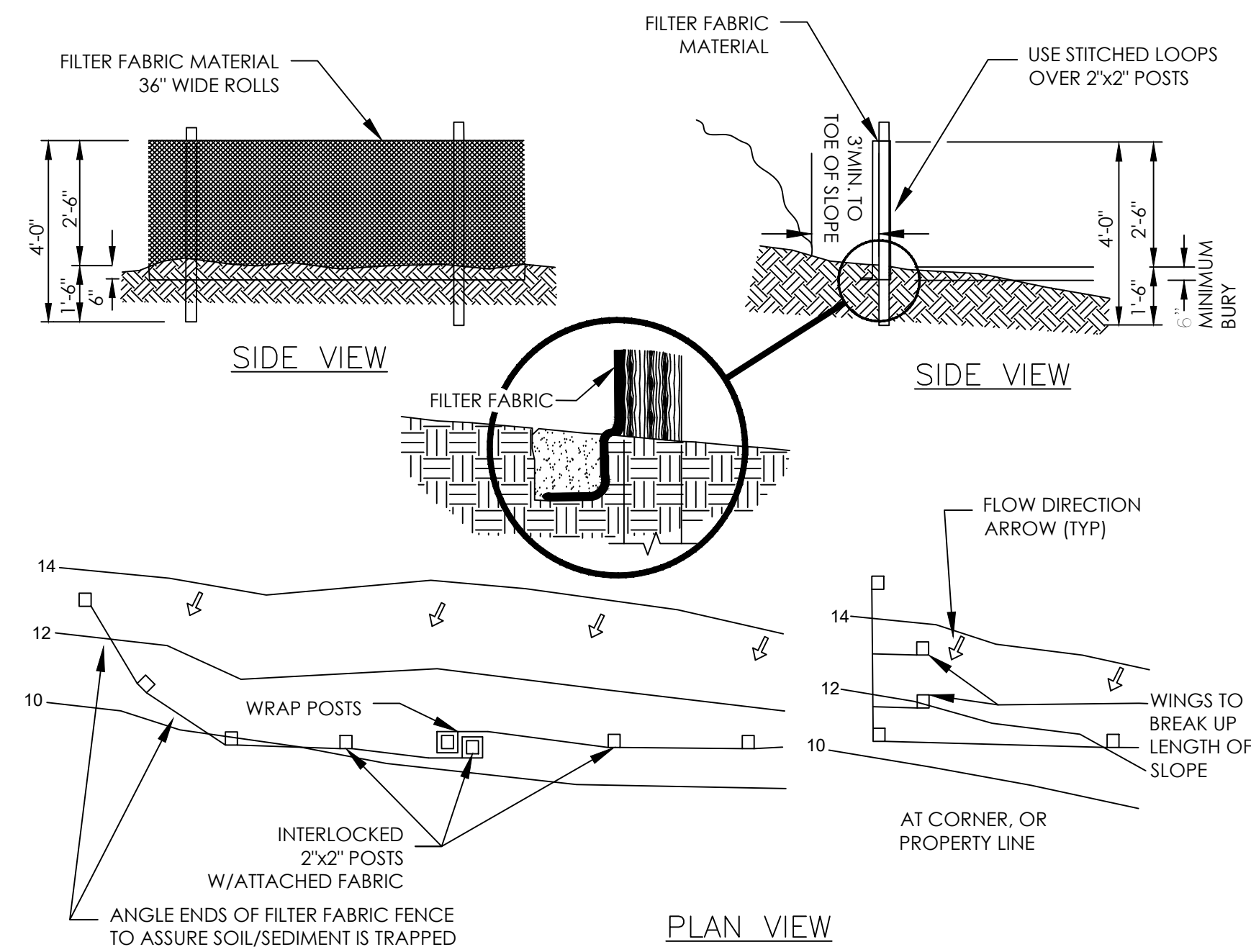




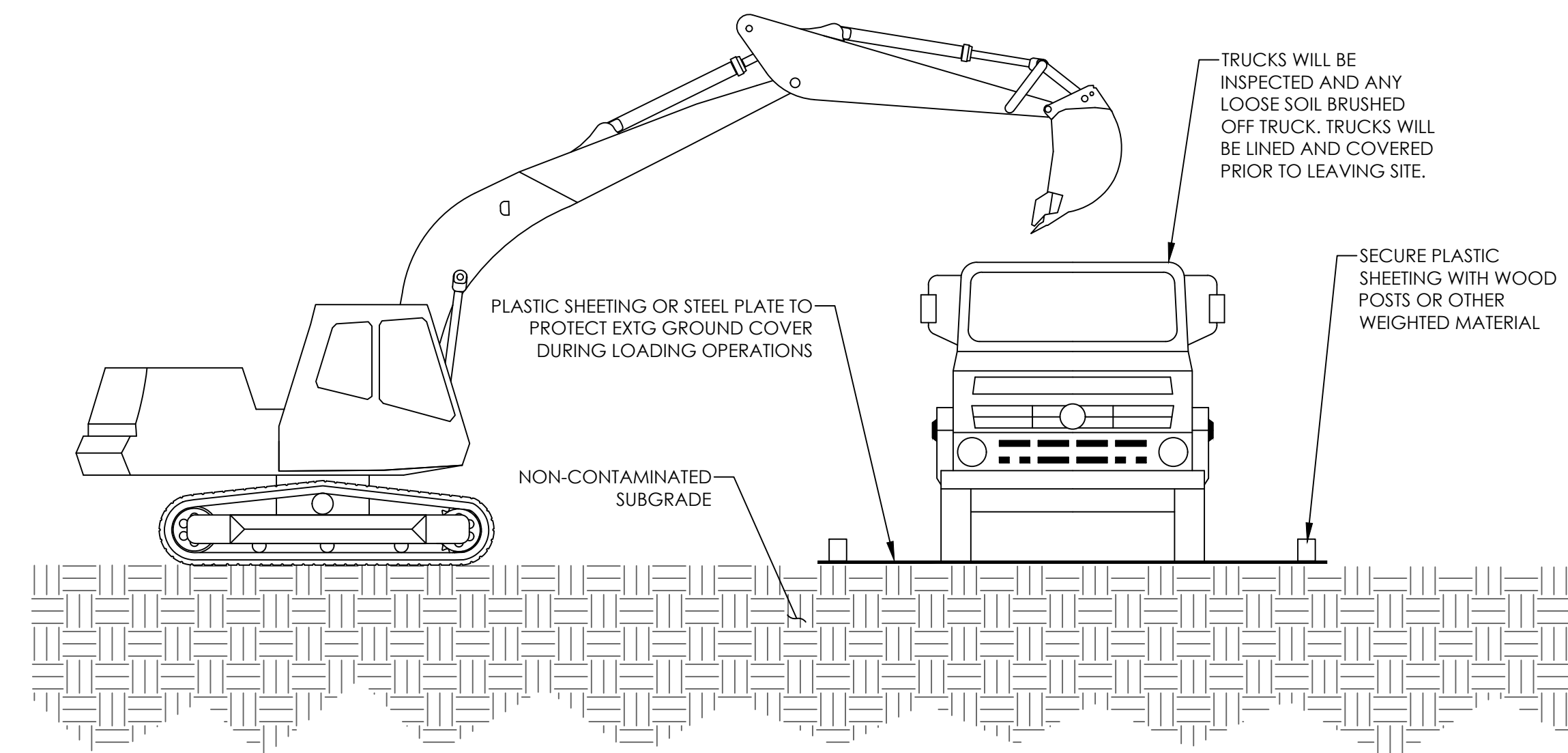
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NTS



**B**  
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**STOCKPILE COVER AND LINER DETAIL:**  
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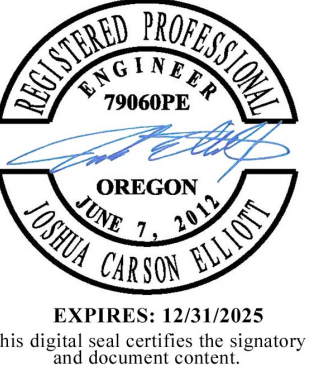
**C**  
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**D**  
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**MAUL FOSTER ALONGI**  
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PHONE: 971.544.2139  
www.maulfooster.com



**PACIFIC CARBIDE SEDIMENT  
REMEDIATION**  
OREGON DEQ  
PORTLAND, OREGON

ISSUE	DATE	DESCRIPTION

PROJECT: 0785.16.01  
DESIGNED: E. LUNDEEN  
DRAWN: E. LUNDEEN  
CHECKED: J. ELLIOTT  
SCALE

DRAWING NOT TO SCALE

SHEET TITLE

**EROSION &  
SEDIMENT  
CONTROL DETAILS 1**

SHEET  
C2.4

BID DOCUMENT: NOT FOR CONSTRUCTION



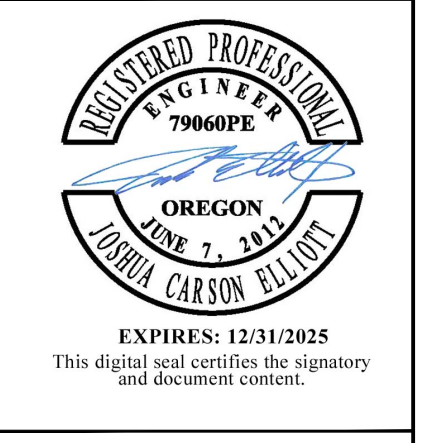




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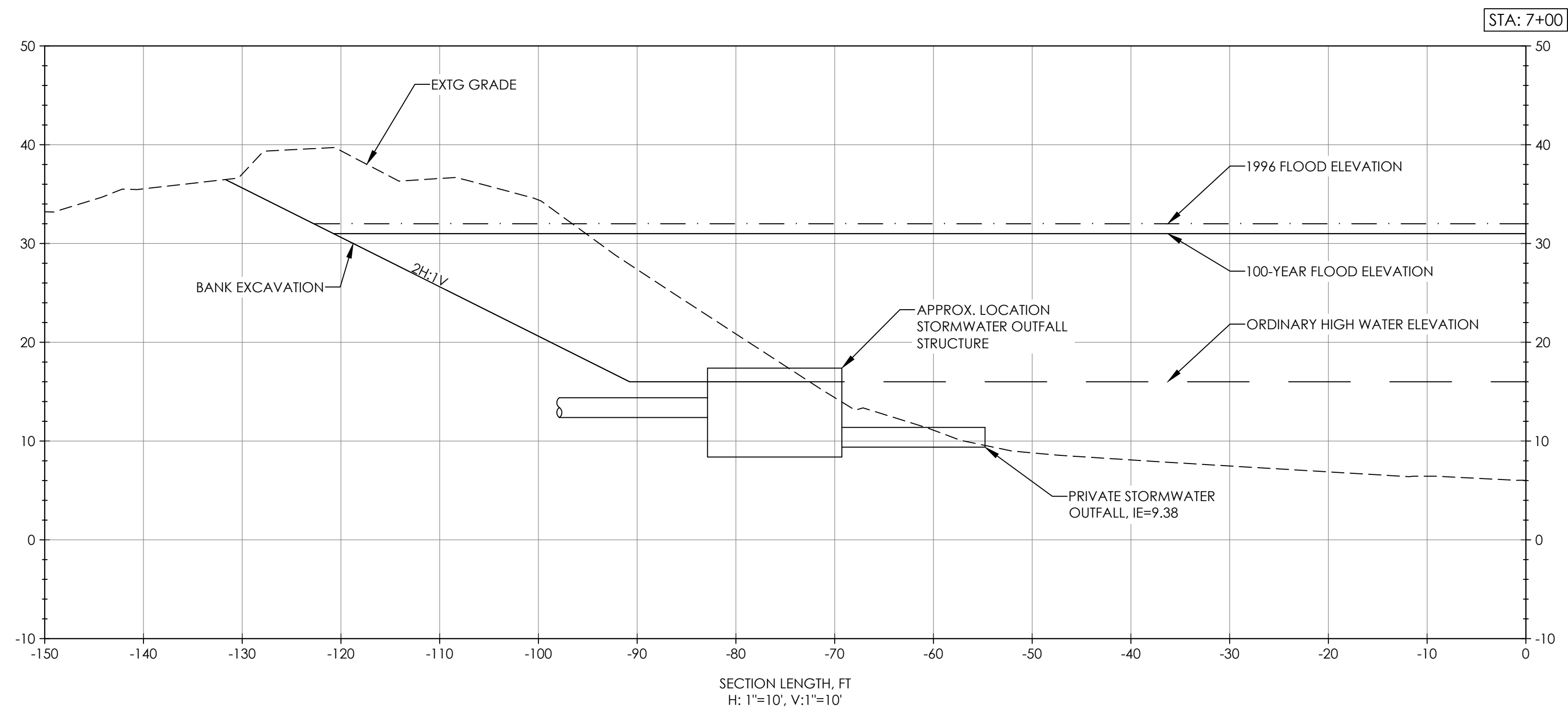
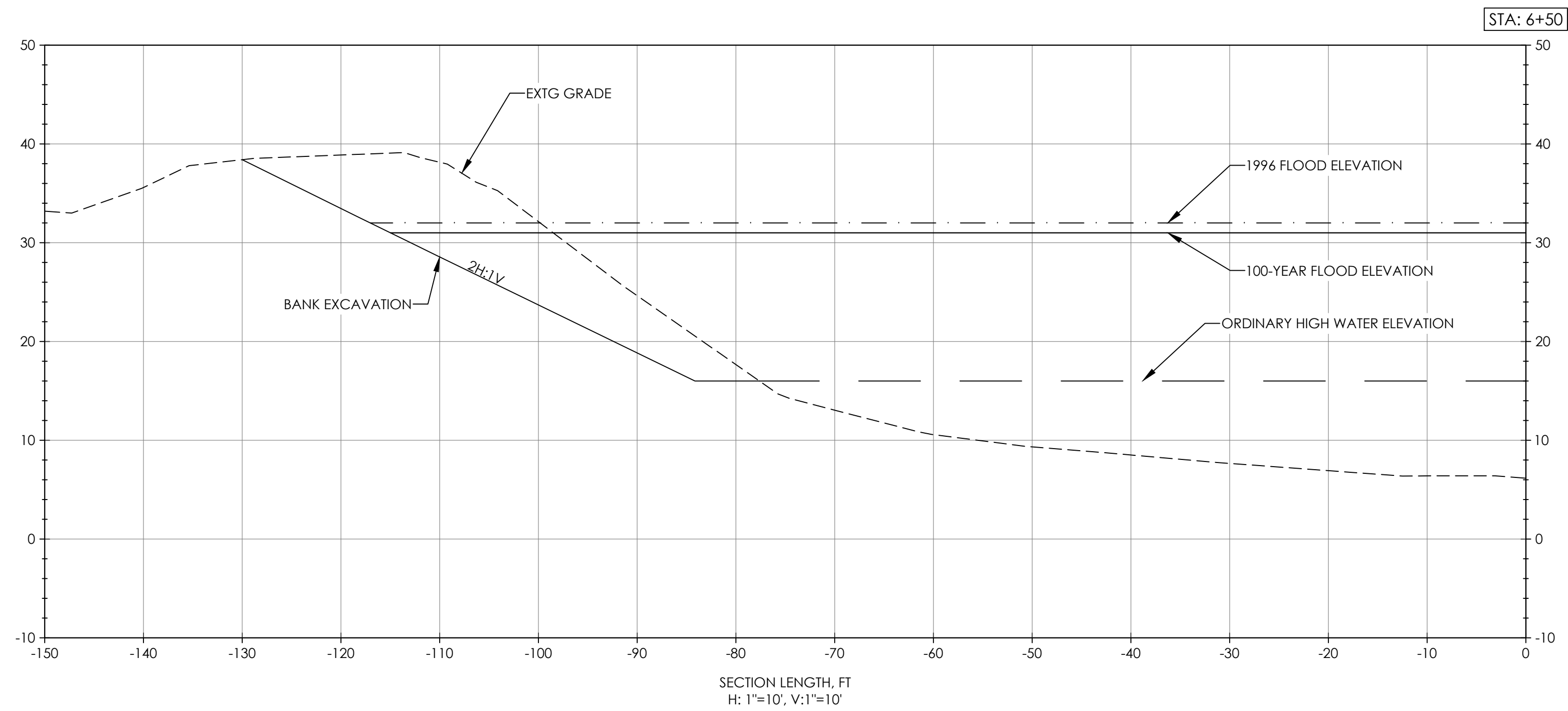

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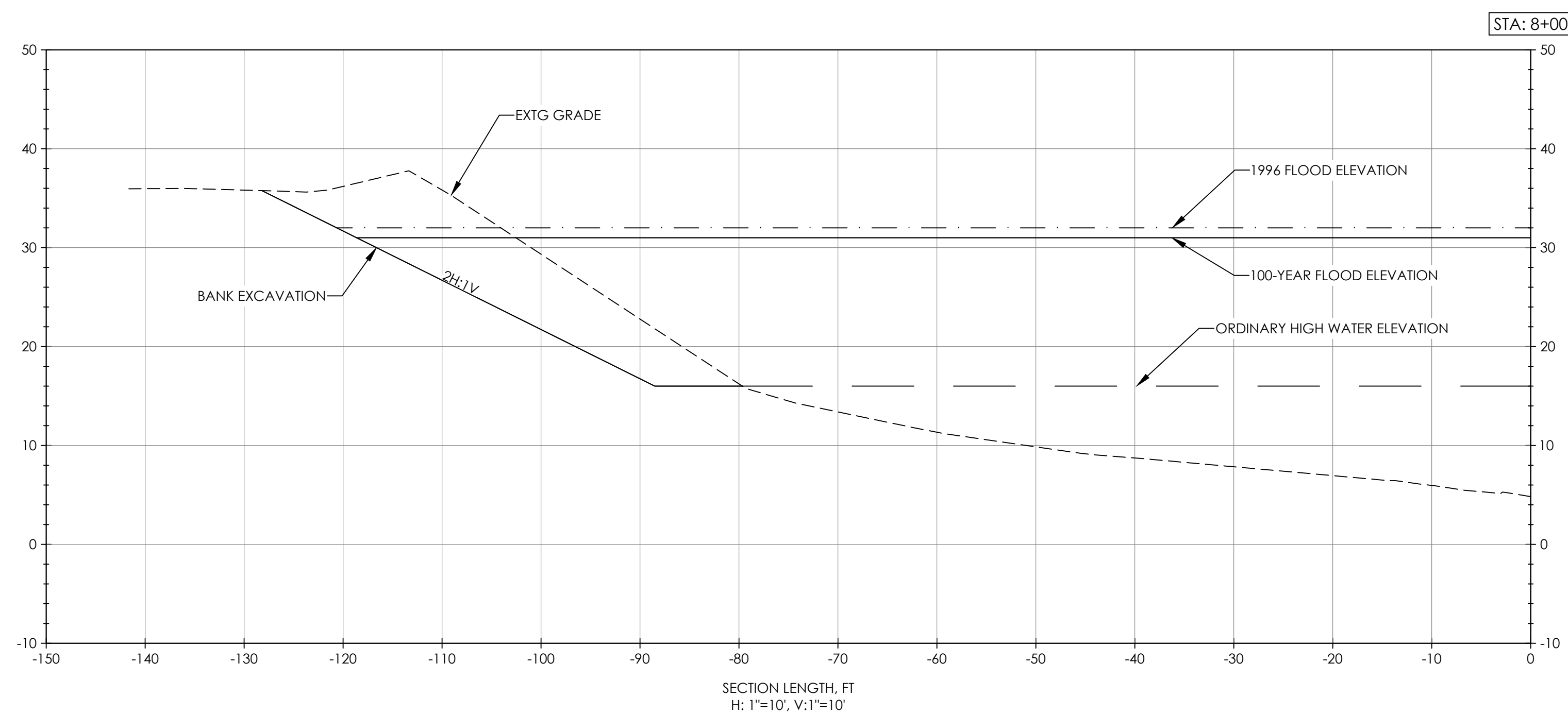
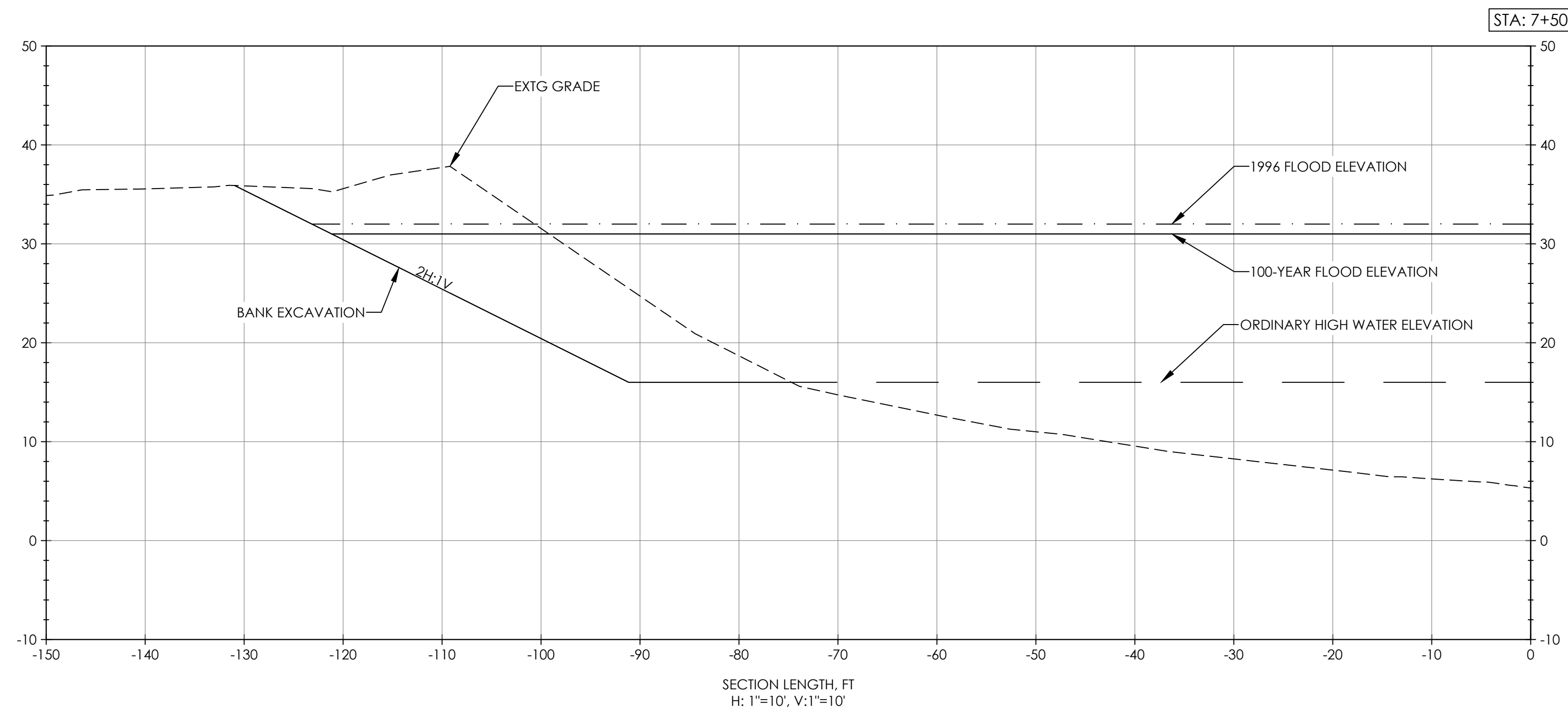
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**BANK EXCAVATION  
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C3.1

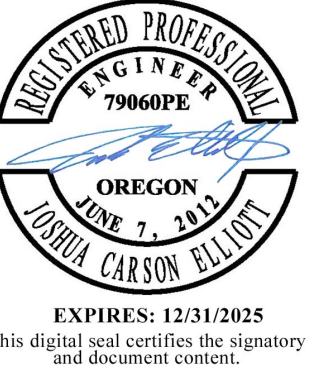
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CROSS SECTIONS 2**

SHEET  
C3.2



PLOTTED BY: ash/bibb REVISION: 05/08/2024 09:20:44 AM PROJECT: 0785.16.01 - Pacific Carbide Sediment Remediation - CAP Placement & Bank Fill Plan



**NOTES:**  
 1. CAP EXTENTS ARE CONSIDERED APPROXIMATE AND DO NOT EXTEND ONTO ADJACENT PROPERTIES. EXTENTS SHALL BE UPDATED AFTER A SURVEY IS COMPLETED DELINEATING PROPERTY BOUNDARIES.

**LEGEND:**

	ENHANCED RESIDUALS COVER
	REACTIVE CORE MAT CAP WITH ROCK ARMORING
	ACCESS ROAD

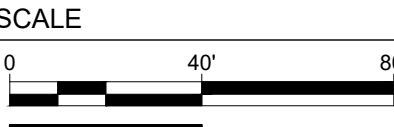
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 CAP PLACEMENT &  
 BANK FILL PLAN -  
 RCM ALTERNATIVE

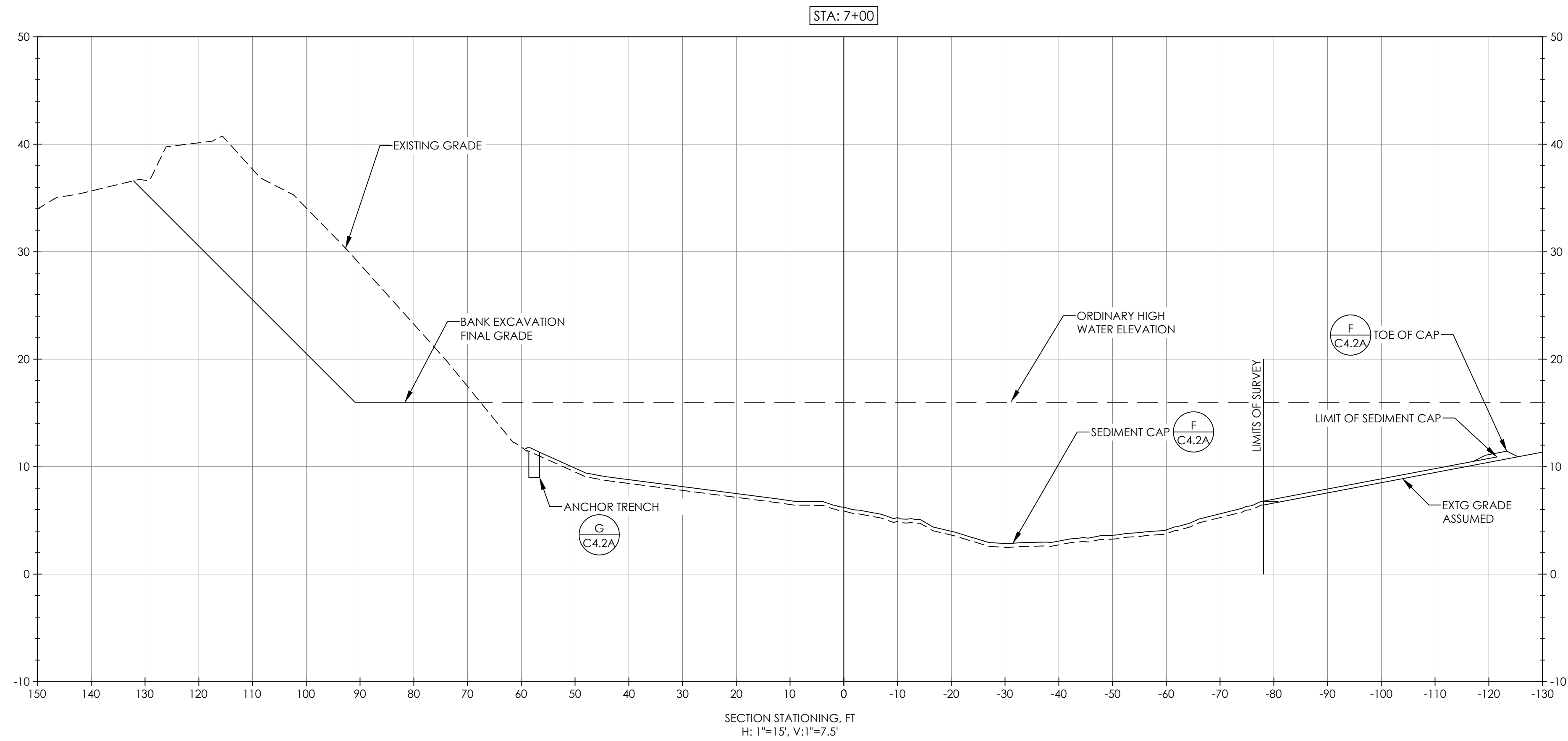
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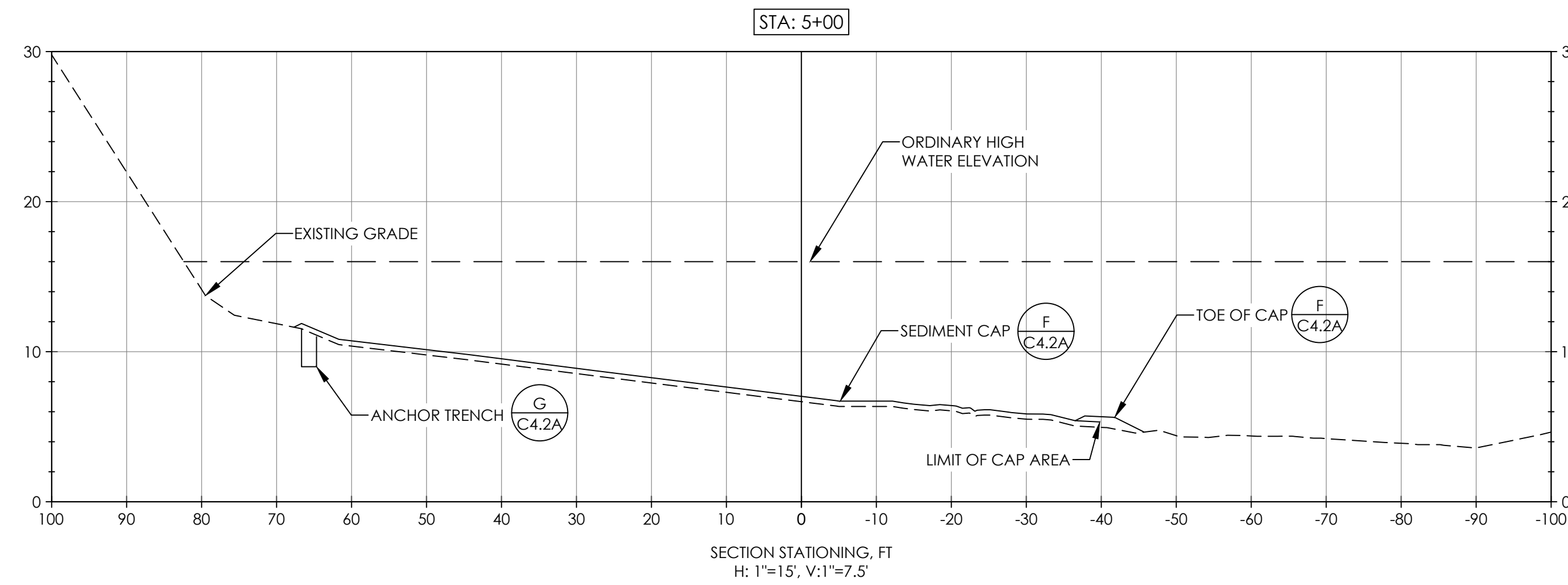








**D** TYPICAL CROSS SECTION OF BANK EXCAVATION AND SEDIMENT CAP  
SEE NOTES



**E** TYPICAL CROSS SECTION OF SEDIMENT CAP  
SEE NOTES

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PACIFIC CARBIDE SEDIMENT  
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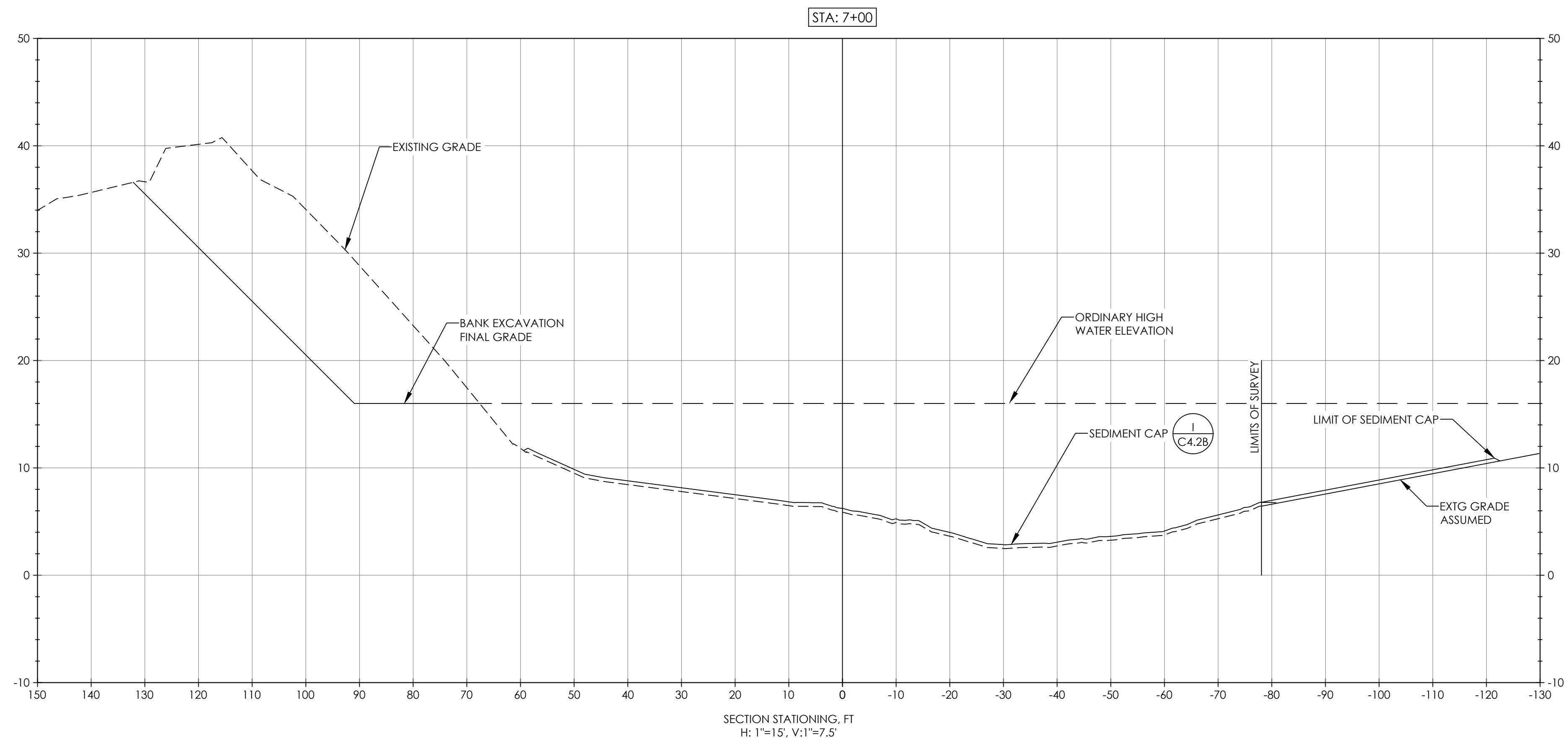
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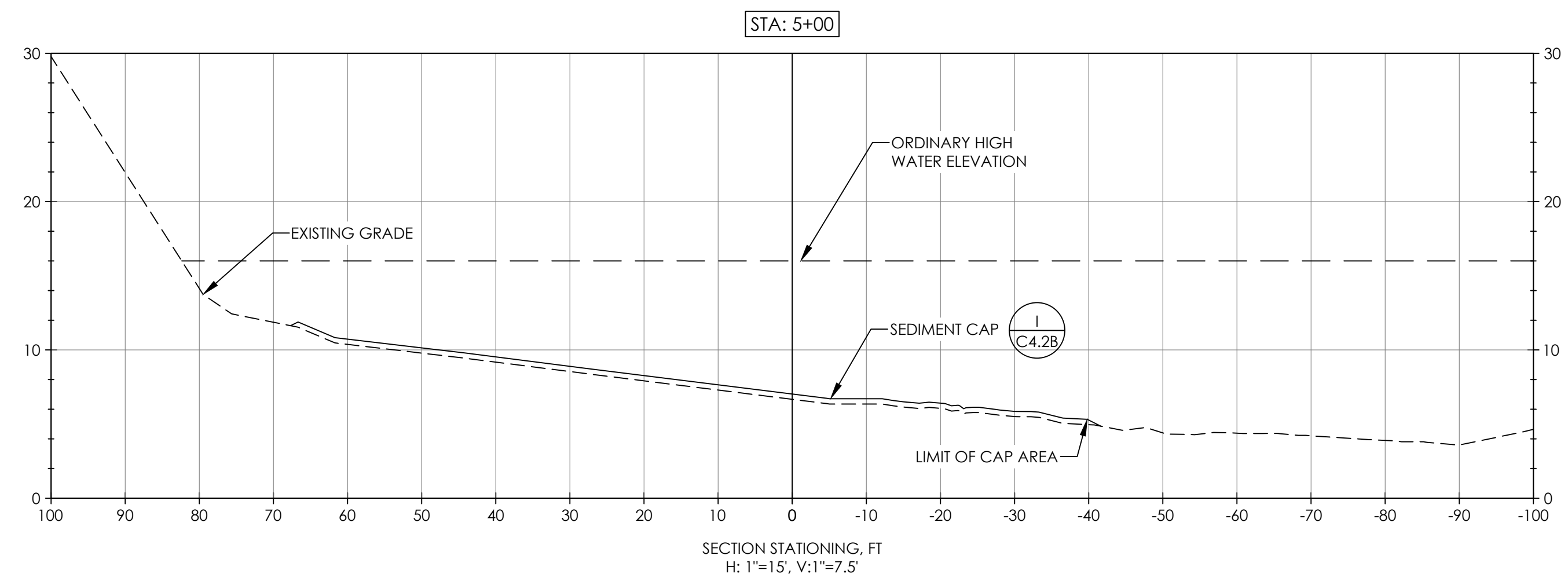
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BID DOCUMENT: NOT FOR CONSTRUCTION



**D** TYPICAL CROSS SECTION OF BANK EXCAVATION AND SEDIMENT CAP  
SEE NOTES



**E** TYPICAL CROSS SECTION OF SEDIMENT CAP  
SEE NOTES

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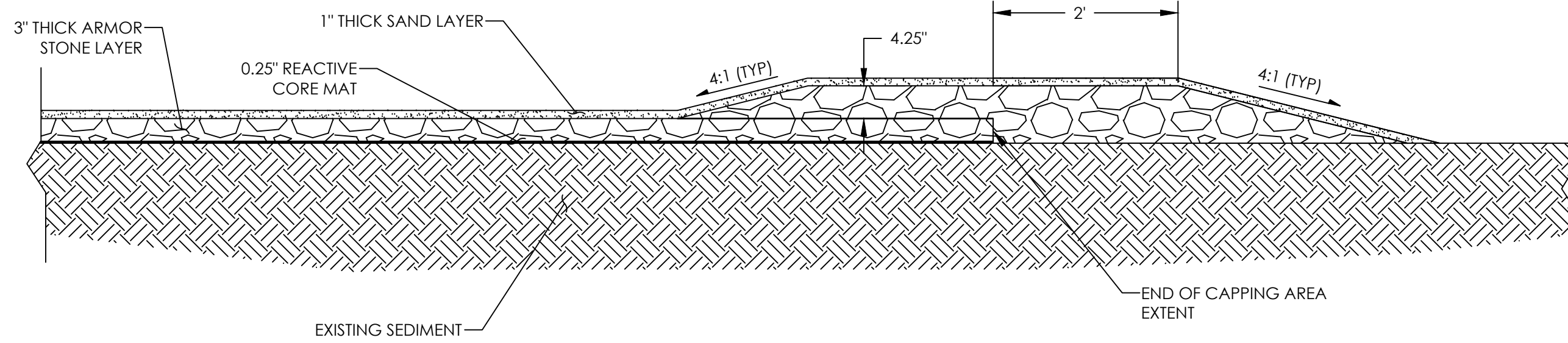
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AQUAGATE  
ALTERNATIVE

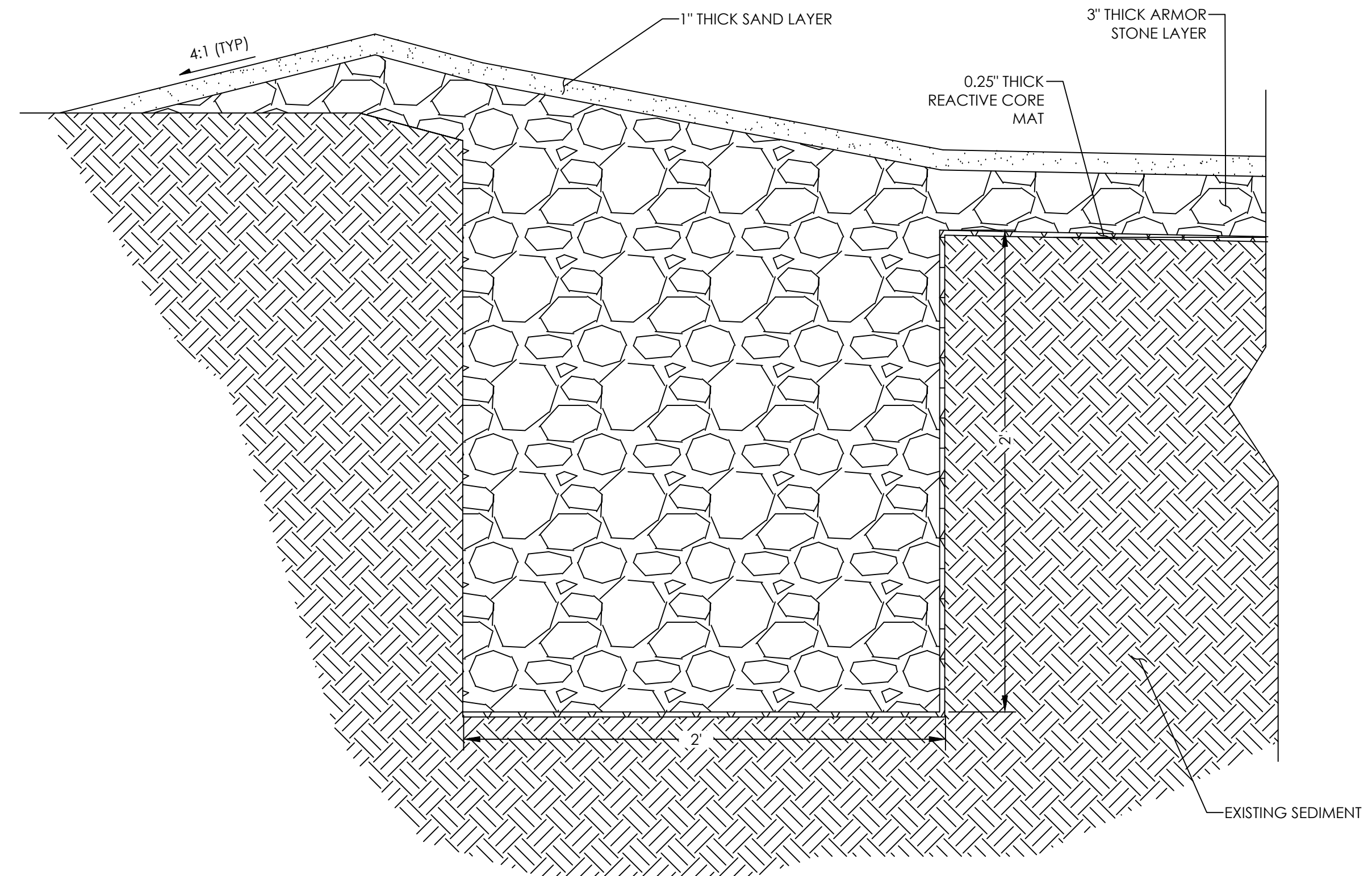
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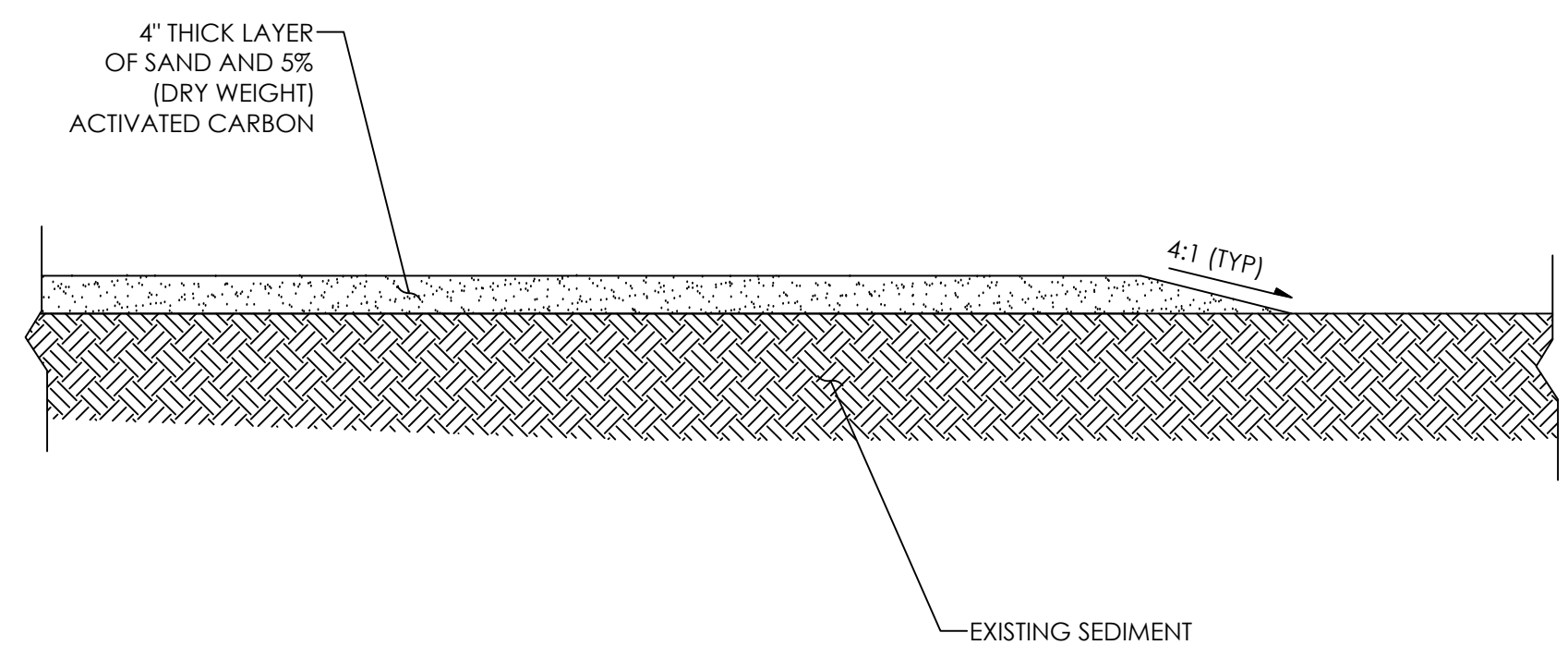
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**REACTIVE CORE MAT CAP AND EDGE PROTECTION DETAIL:**  
NTS



**REACTIVE CORE MAT ANCHOR TRENCH DETAIL:**  
NTS



**ENHANCED RESIDUALS COVER DETAIL:**  
NTS

PLOTTED BY: josh.bibb@maul-foster.com FILENAME: G:\00\_0785\_16\_01\_PROJECTS\0785\_16\_01\_DEQ - Pacific Carbide\01\_Remedial Design Development\PLANS\REMEDY TYPICAL DETAILS 1A - RCM ALTERNATIVE.dwg PLOTTED ON: 2024-09-20 4:50 PM

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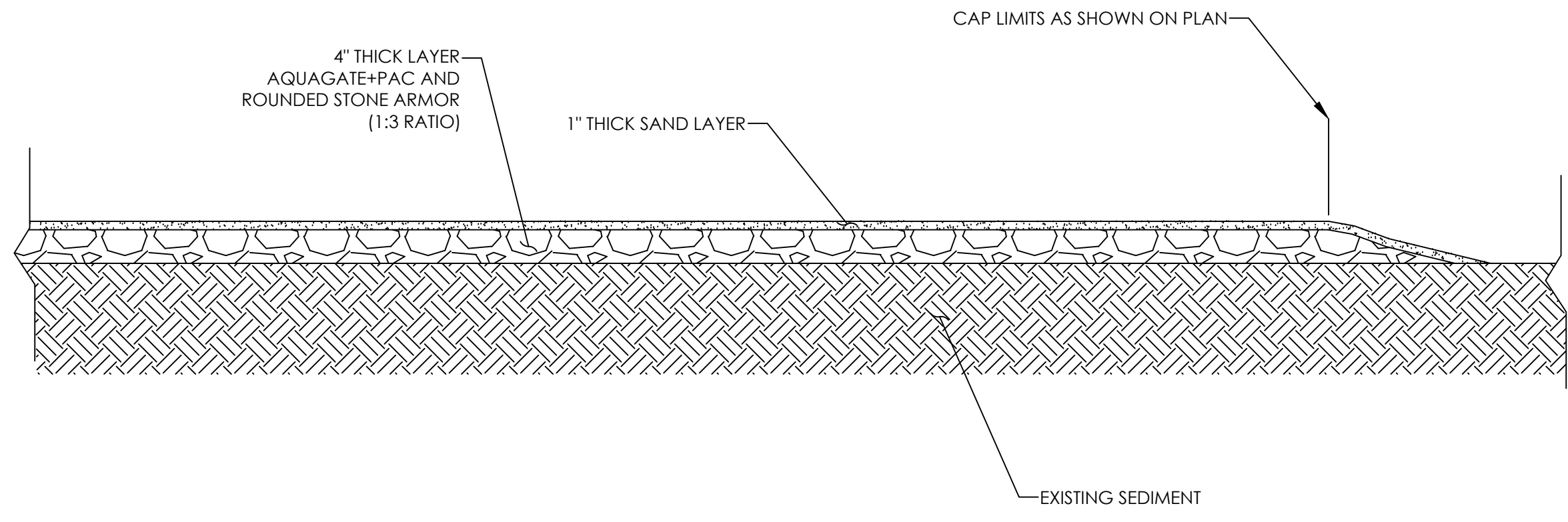
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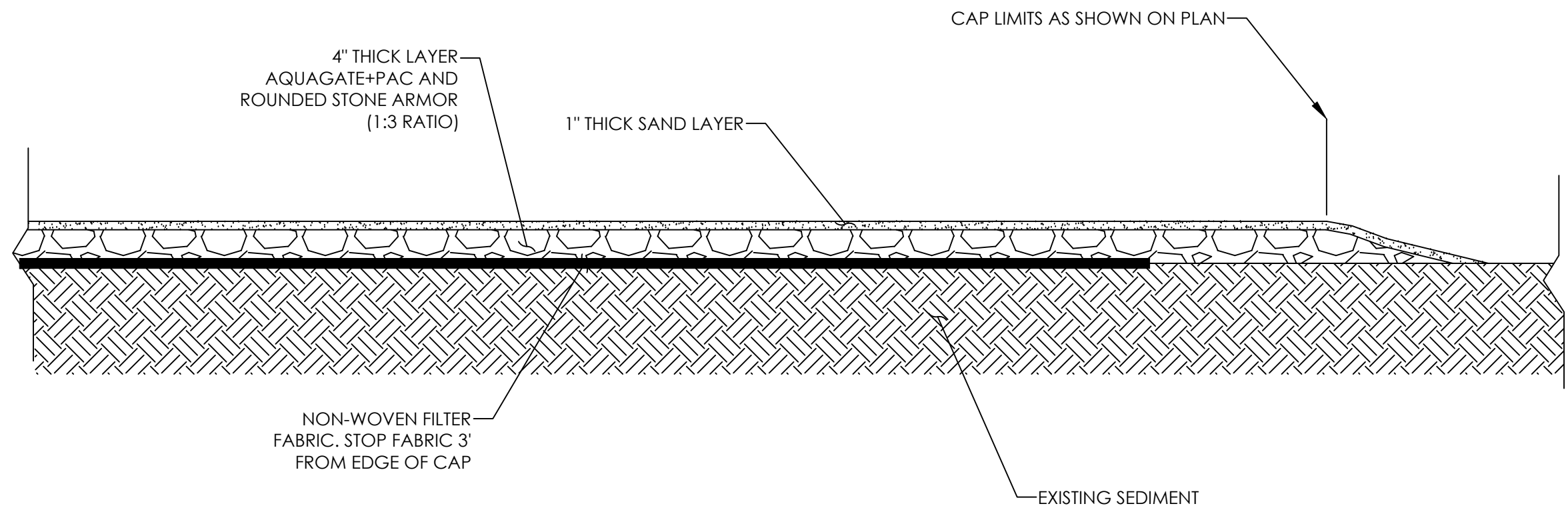
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**AQUAGATE ALTERNATIVE SEDIMENT CAP DETAIL:**  
NTS



**AQUAGATE ALTERNATIVE SEDIMENT CAP W/  
NON-WOVEN FILTER FABRIC DETAIL:**  
NTS

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SHEET TITLE  
**REMEDY TYPICAL  
DETAILS 1B -  
AQUAGATE  
ALTERNATIVE**

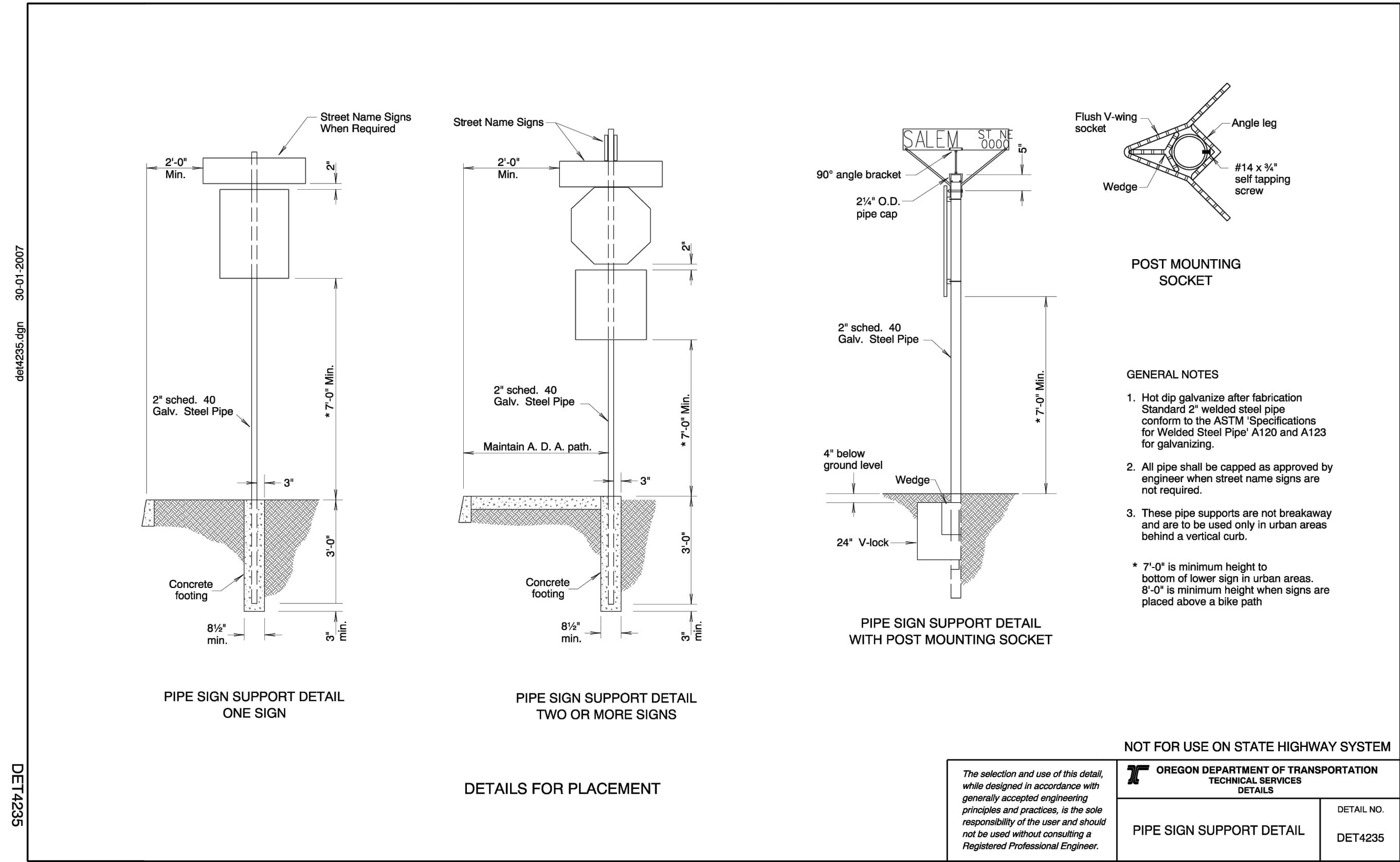
SHEET  
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BID DOCUMENT: NOT FOR CONSTRUCTION



SIGN MATERIALS SHALL BE ALUMINUM AND CONFORM TO THE REQUIREMENTS OF OREGON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 00940.41.

**"NO MOORING" SIGN**  
NTS



**SIGN POST DETAIL:**  
NTS

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SHEET TITLE  
**REMEDY TYPICAL  
DETAILS 2**

SHEET  
C4.3

BID DOCUMENT: NOT FOR CONSTRUCTION

# Exhibit C

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## Technical Specifications



MAUL  
FOSTER  
ALONGI



**TABLE OF CONTENTS**

**DIVISION 00 - PROCUREMENT AND CONTRACTING  
REQUIREMENTS**

00 01 10 TABLE OF CONTENTS

**DIVISION 01 - GENERAL REQUIREMENTS**

01 10 00 PROJECT SUMMARY  
01 11 00 SUMMARY OF WORK  
01 22 00 MEASUREMENT AND PAYMENT  
01 30 00 ADMINISTRATIVE REQUIREMENTS  
01 33 00 SUBMITTAL PROCEDURES  
01 35 29 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES  
01 50 00 TEMPORARY FACILITIES AND CONTROLS  
01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL  
01 57 19 ENVIRONMENTAL PROTECTION  
01 78 00 CLOSEOUT SUBMITTALS

**DIVISION 02 - EXISTING CONDITIONS**

02 00 00 MOBILIZATION AND SITE PREPARATION  
02 21 13 SURVEYING

**DIVISION 31 - EARTHWORK**

31 00 00 EXCAVATION  
31 05 19 GEOSYNTHETICS  
31 23 23 FILL

SECTION 01 10 00

PROJECT SUMMARY

PART 1 GENERAL

1.1 PROJECT

- A. Project Name: Pacific Carbide Sediment Remediation.
- B. UPLAND PROPERTY OWNERS: Pacific Carbide & Alloys Co., Portland Parks & Recreation, and Portland at St. Paul, LLC.
- C. IN-WATER PROPERTY OWNER: Oregon Department of State Lands
- D. OWNER: Oregon Department of Environmental Quality, Cleanup Program as defined in ORS 340.122.
- E. DEQ: Oregon Department of Environmental Quality encompassing all regulatory authority.
- F. CONTRACTOR/ENGINEER: Maul Foster & Alongi, Inc.
- G. SUBCONTRACTOR: Selected general subcontractor and all Tier II subcontractors operating under the direction of the selected general subcontractor.
- H. The project consists of tree and vegetation removal; installation of a thin-layer sediment cap; and excavation and offsite disposal of bank soils. The SUBCONTRACTOR must select a proposed thin-layer sediment cap technology: reactive core mat or AquaGate+PAC.

1.2 CONTRACT DESCRIPTION

- A. Contract Type: A single subcontract based on a Stipulated Price as described in the request for bid.

1.3 WORK BY OWNER

- A. [NOT USED]

1.4 COORDINATED CONSTRUCTION

- A. [NOT USED]

1.5 OWNER OCCUPANCY

- A. UPLAND PROPERTY OWNERS will continue to occupy upland areas adjacent to portions of the work areas during the entire construction period.
- B. SUBCONTRACTOR shall cooperate with UPLAND PROPERTY OWNERS to minimize conflict and to facilitate UPLAND PROPERTY OWNERS' operations.
- C. SUBCONTRACTOR shall use designated truck/haul and equipment routes shown in Contract Drawings.
- D. SUBCONTRACTOR shall Schedule the Work with advanced notice to accommodate UPLAND PROPERTY OWNERS occupancy and site activities. UPLAND PROPERTY OWNERS may need to move items typically stored within proposed work areas.

1.6 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Contract Drawings.
- B. SUBCONTRACTOR shall arrange use of Site and premises to allow:
  - 1. UPLAND PROPERTY OWNERS occupancy and access to property adjacent to work area.
  - 2. Work by UPLAND PROPERTY OWNERS.
- C. SUBCONTRACTOR shall provide access to and from Site as required by law and by UPLAND PROPERTY OWNERS:
  - 1. Emergency Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- D. Existing building spaces may not be used for storage.
- E. Time Restrictions:
  - 1. Limit conduct of work to the hours of 7:00 AM to 6:00 PM, Monday through Friday, or obtain variance from CONTRACTOR/ENGINEER.
  - 2. Work hour variance may be granted upon request to the CONTRACTOR/ENGINEER and, if required, the City of Portland.

1.7 WORK SEQUENCE

- A. SUBCONTRACTOR shall coordinate construction schedule and operations with CONTRACTOR/ENGINEER

PART 2 PRODUCTS

- A. [NOT USED]

PART 3 EXECUTION

- A. [NOT USED]

-- End of Section --



SECTION 01 11 00

SUMMARY OF WORK

PART 1 GENERAL

1.1 SUMMARY

- A. This section describes project location, Site background, and scope of work; however, it does not describe the technical details.

1.2 RELATED SECTIONS

- A. [NOT USED]

1.3 SITE LOCATION AND DESCRIPTION

- A. The Site is in Section 5, Township 1 North, Range 1 East of the Willamette Meridian. The sediment cleanup portion of the Site is adjacent to upland properties owned by Pacific Carbide and Portland at St. Paul, LLC and extends downstream of the Burlington Northern Santa Fe (BNSF) railroad crossing (approximately river mile 5.3). The aquatic lands associated with the Slough are owned by the Oregon Department of State Lands (DSL). A portion of the streambank between the upland properties and the DSL aquatic lands is owned by Portland Parks and Recreation (PP&R).
- B. The Site is bordered to the east by industrial property; to the west by a BNSF rail spur; to the south by Columbia Boulevard; and to the north by City of Portland property and the lower Columbia Slough.
- C. The upland portion of the Site is generally flat, with elevations generally greater than 33 feet relative to North American Vertical Datum of 1988 (NAVD). The topography of the Site has been modified by historical fill placement and urban development. The upland portion of the Site is separated from the Slough by a berm that ranges in elevation from 35 feet to 41 feet NAVD.
- D. The Portland Metro 100-year flood elevation is approximately 32 feet NAVD. The elevation of the OHW line is 16 feet and the elevation of the OLW line is 11 feet NAVD.
- E. The bathymetry of the in-water portion of the Site is gently sloping from nearshore to the center of the river channel and fairly consistent throughout the reach of the project. The elevation of the bottom channel ranges from approximately -1 to 11 feet NAVD. Nearshore sediments comprising of the "beach" consist of highly variable fill consisting of silt, sand, and gravel within the upper 15 to 20 feet. Site sediments tend to be firm due to lime content from historic site operations.
- F. For the purpose of these specification, in-water structures are considered to be those structures that are located within the footprint of the sediment cap area as shown on the Contract Drawings. Known in-water structures included several woody habitat refugia installed by PP&R. A concrete stormwater outfall is present on the bank adjacent to the capping area.

1.4 SITE BACKGROUND

- A. The upland area was developed in the 1940s and operated as a calcium carbide manufacturing plant until 1987. Pacific Carbide manufactured calcium carbide at the Site by combining quicklime (calcium oxide) and coke (a solid carbon source with high concentrations of polycyclic aromatic hydrocarbons [PAHs]) under high temperatures. Emissions generated by this process were controlled by a wet scrubber, which produced a slurry of lime and PAHs that was discharged to settling ponds and ultimately the Slough. Additionally, polychlorinated biphenyls associated with the Site operations were detected in sediment in concentrations above cleanup levels.
- B. Remediation of the upland portion of the Site was completed in 2014. The remedy consisted of excavation and off-site disposal of by-product lime, Site grading, placement of boulders to fill the deeper areas of former settling ponds, placement of sand fill across the Site, and installation of a minimum 12-inch-thick gravel cap. The cap was graded to increase the usable areas of the upland portion of the Site and to provide drainage to the on-site stormwater treatment system.
- C. Upland portions of the Site currently operate as a transloading facility.

1.5 SCOPE OF WORK

- A. The scope of work for this project includes:
  - 1. Tree and vegetation removal.
  - 2. Installation of a thin-layer sediment cap.
  - 3. Excavation, temporary stockpiling, and offsite disposal of bank soils.
- B. All cap materials shall be placed to the areas and thicknesses shown in the Contract Drawings.
- C. The SUBCONTRACTOR shall provide and implement erosion control measures regarding bank construction operations.
- D. The SUBCONTRACTOR shall provide measures to control turbidity associated with in-water construction.
- E. The SUBCONTRACTOR shall visually monitor the in-water work and shoreline activities to ensure work activities are consistent with Section 401 Water Quality Certification and do not cause an exceedance of the criteria provided therein. CONTRACTOR/ENGINEER will provide quantitative water quality monitoring at compliance points during construction.
- F. The SUBCONTRACTOR shall be responsible for the construction of onsite gravel haul roads for the purposes of minimizing dust generation.
- G. The SUBCONTRACTOR shall protect the environment and existing utilities in accordance with this Contract.

PACIFIC CARBIDE SEDIMENT REMEDIATION

PART 2 PRODUCTS

2.1 [NOT USED]

PART 3 EXECUTION

3.1 [NOT USED]

-- End of Section --

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 SUMMARY

- A. This section provides the basis of payment for the contract. Part I provides various payment explanations (e.g., payment for stored materials, substantiating data, measurement standards, and unit of measure) while Part II describes the individual pay items and includes a copy of the Bid Request Form.

1.2 RELATED SECTIONS

- A. [NOT USED]

1.3 REFERENCES

- A. [NOT USED]

1.4 UNIT PRICES

- A. Any unit prices listed, including the prices for lump sum items, on the Bid Request Form are complete including labor, equipment, any materials, incidental charges, and include allowance for overhead and profit.

1.5 ESTIMATED QUANTITIES

- A. Quantities shown on the bid schedule are estimates, provided only as the basis for the comparison of bids, and CONTRACTOR/ENGINEER does not warrant, expressly or by implication, that the actual amount of work will correspond therewith. The right to increase or decrease the amount of any amount of work, or to make changes in the work required, as may be deemed necessary, is reserved by CONTRACTOR/ENGINEER. All quantities shall be verified by the SUBCONTRACTOR prior to bid. Any discrepancies shall be noted in the bid submitted by the SUBCONTRACTOR. The basis of payment will be the actual unit bid items of work performed and measured in accordance with the contract.
- B. If the adjusted (measured) final quantity of any item does not vary from the quantity shown on the Bid Request Forms by more than 25% (overrun or underrun), then the SUBCONTRACTOR will perform all work under that item at the original contract unit price.
- C. Bids may be rejected if it is determined by the CONTRACTOR/ENGINEER that the unit prices listed on the bid forms are unbalanced to the potential detriment of the CONTRACTOR/ENGINEER.

1.6 MEASUREMENT STANDARDS

- A. Measurement and payment descriptions for each item listed on the Bid Request Form are as set forth throughout the applicable sections of the technical specifications as noted herein.



## PACIFIC CARBIDE SEDIMENT REMEDIATION

1. All bid items of work acceptable completed under the contract will be measured as described in these specifications according to United States standard measure.
2. Measurements will be made hereinafter as provided.
3. The method of measurement and computations to be used in determination of quantities of material furnished or work performed under the contract will be those methods generally recognized as conforming to accepted engineering practice.
4. Items of work for which payment is made by lump sum will be measured as a complete unit. Partial payment, if considered, will be made according to the completed percentage of the various components of the lump sum item and will be determined by CONTRACTOR/ENGINEER.

### 1.7 MEASUREMENT OF QUANTITIES

- A. Unless otherwise specified, measurements will be made horizontally or vertically. In determining the area for items bid on the basis of a material quantity (e.g., by the lineal foot, square foot, ton, or cubic yard basis), the measurements will be on the neat dimension indicated on the Contract Drawings or as altered by CONTRACTOR/ENGINEER. No deduction in area will be made for individual fixtures having an area of 9 square feet or less.
- B. All items that are measured by the linear foot will be measured parallel to the base or foundation upon which such structures are placed, unless otherwise noted on the Contract Drawings or otherwise specified.
- C. Trucks used to haul material being measured by weight will be weighed empty at least daily or such times as CONTRACTOR/ENGINEER directs, and each truck will bear a plainly legible identification.
- D. Weights will be measured using state certified scales.
- E. No payment will be made for work performed or materials placed outside of lines indicated on the Contract Drawings or established by CONTRACTOR/ENGINEER; materials waste, used, or disposed of in a manner not called for under the contract; material rejected after it has been placed by reason of failure of the SUBCONTRACTOR to conform to the provisions of the contract; hauling and disposing of rejected materials; material remaining on hand after completion of the work; or other work or material payment that is contrary to the provisions of the contract.

### 1.8 UNITS OF MEASUREMENT

- A. Lump Sum: Lump sum items will be measured as a job and do not indicate a quantity value.
- B. Linear Feet: All items measured by:
  1. Volumes: All items measured by the cubic yard, such as fill placements, will be measured by computing the volume between the surface shown by survey of pre work conditions and the surface shown by survey of post work conditions, after accounting for settlement.

2. Weight: The term "ton" means the short ton consisting of 2,000 pounds. Quantity shall be determined based on either weighing trucks full and empty on a state certified scale or by draft measurement of barges. Draft measurement will be done by procedure submitted by SUBCONTRACTOR and approved by CONTRACTOR/ENGINEER.
- C. The methods and precision of all measurements for use in payment and conformance with the specifications shall be as determined by the CONTRACTOR/ENGINEER.

## PART 2 MEASUREMENT AND PAYMENT FOR CONTRACT BID ITEMS

### 2.1 BID ITEM 1: WORK PLANS

- A. Measurement by lump sum [LS].
- B. Payment of the fixed price includes all costs to develop, prepare, and deliver work plans as required per each specification section during the preconstruction submittal process.
- C. Payment will be made upon delivery and CONTRACTOR/ENGINEER approval and final acceptance of all work plans. Work to revise or resubmit any plan or part of a plan shall be incidental to this pay item.

### 2.2 BID ITEM 2: MOBILIZATION

- A. Measurement by lump sum [LS].
- B. Payment includes all costs for mobilizing and demobilizing equipment; insurance; living expenses; set-up and maintenance of field offices; and all other administrative costs to complete the Work. Includes all work that is not part of another pay item.
- C. Based on the lump sum contract price (by schedule) for "Mobilization", partial payments will be made as follows:
  1. When 5% of the original contract amount (by schedule) is earned from other contract bid items, excluding amounts paid for materials on hand, 50% of the amount bid for Mobilization (by schedule) or 5% of the total original contract amount (by schedule), whichever is less, will be paid.
  2. When 10% of the total original contract amount (by schedule) is earned from other contract items, excluding amounts paid for material on hand, 100% of the amount bid for Mobilization (by schedule), or 10% of the total contract amount (by schedule) whichever is less, will be paid.
  3. When the Substantial Completion Date has been established for the project, payment of any amount bid for Mobilization (by schedule) in excess of 10% of the total contract amount (by schedule) will be paid.

### 2.3 BID ITEM 3: TEMPORARY FACILITIES AND CONTROLS

- A. Measurement by lump sum [LS].
- B. Payment will be made for all costs to furnish, install, construct, and maintain temporary facilities and controls, prior to and during construction, in accordance with the Contract Drawings and Section 01 50 00 TEMPORARY FACILITIES AND CONTROLS.

2.4 BID ITEM 4: TEMPORARY CONTRACTOR ACCESS IMPROVEMENTS

- A. Measurement by lump sum [LS].
- B. Payment will be made for all costs to furnish, install, construct, and maintain temporary access improvements to the existing equipment bench located on the McCuddy Property as shown on the Contract Drawings, prior to and during construction. Payment will also be made for removal of temporary access improvements and restoration of impacted areas following construction.

2.5 BID ITEM 5: TEMPORARY EROSION AND SEDIMENT CONTROL

- A. Measurement by lump sum [LS].
- B. Payment will be made for all costs to furnish, install, construct, and maintain erosion and sediment controls (ESC) including silt fence, turbidity curtains, vehicle rumble strips, and plastic sheeting. ESC measures shall conform with the City of Portland Erosion and Sediment Control manual and Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL.

2.6 BID ITEM 6: TREE PROTECTION MEASURES

- A. Measurement by lump sum [LS].
- B. Payment will be made for all costs to furnish, install, construct, and maintain protective (safety) fencing, prior to and during vegetation clearing and hydromulching, in accordance with the Contract Drawings.

2.7 BID ITEM 7: TREE REMOVAL AND SALVAGE

- A. Measurement by lump sum [LS].
- B. Payment will be made for costs associated with the clearing of trees within the limits of work, stockpiling of trees with trunks 12 inches or greater in diameter as well as up to 10 tree trunks selected by CONTRACTOR/ENGINEER between 6 inches and 12 inches in diameter in the designated storage area for future reuse, and disposing of smaller trees and tree debris in accordance with the Plans

2.8 BID ITEM 8: VEGETATION CLEARING

- A. Measurement by lump sum [LS].
- B. Payment will be made for costs associated with clearing, temporarily stockpiling, and disposing of brush, shrubs, and other ground vegetation within the limits of work in accordance with the Plans.

2.9 BID ITEM 9: BONDED FIBER MATRIX HYDROMULCH

- A. Measurement by lump sum [LS].
- B. Payment will be made for all costs associated with the supply and placement of bonded fiber matrix hydromulch (following the Phase 1 tree removal and vegetation clearing) in accordance with the Contract Drawings and Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL.

2.10 BID ITEM 10: REMOVAL OF IN WATER STRUCTURES AND DEBRIS

- A. Measurement by lump sum [LS].

- B. Payment will be made for all costs associated with removal and disposal/recycle of items on the riverbank and shoreline. Known items include two lead-acid batteries and one approximately 8-foot-long segment of potentially asbestos-containing pipe.

2.11 BID ITEM 11: BANK SOIL EXCAVATION AND HANDLING

- A. Measurement by cubic yard [CY].
- B. Payment will be made for all cost to excavate, handle, and stockpile soils from the bank as shown on the Contract Drawings.
- C. Payment will be made for neatline excavation quantities as shown on the Contract Drawings. Over excavation for equipment access shall be incidental to this pay item.

2.12 BID ITEM 12: TRANSPORTATION AND DISPOSAL

- A. Measurement by ton [TON].
- B. Measurement will be based on weight of soil and debris disposed of in the approved Subtitle D landfill facility, as stated on disposal tickets.
- C. Payment will be made for all costs associated with the loading, transport, and disposal of excavated soil and debris from the Site to an approved Subtitle D landfill facility.

2.13 BID ITEM 13: "NO MOORING" SIGNS

- A. Measurement by each [EA].
- B. This pay item includes all labor, materials, and equipment necessary to install the "No Mooring" signs where indicated and as described on the Contract Drawings.

2.14 BID ITEM 14: DIVER CREW

- A. Measurement by daily rate.
- B. Payment will be made for all costs associated with the dive inspection team including all labor, materials, and equipment necessary to complete the work (as described in the SUBCONTRACTOR'S Project Work Plan).

**Sediment Cap Alternative 1 - Reactive Core Mat (includes bid items 15 through 20). If this Alternative is selected, do not include costs for Bid Items 21 through 25.**

2.15 BID ITEM 15: REACTIVE CORE MAT

- A. Payment by square yard [SY].
- B. Payment under this item will include all costs associated with furnishing, installing, and anchoring the reactive core mat as shown on the Contract Drawings and the sediment cap installation plan prepared by SUBCONTRACTOR and approved by the CONTRACTOR/ENGINEER.
- C. RCM placement limits will be confirmed by the CONTRACTOR/ENGINEER AND SUBCONTRACTOR.

2.16 BID ITEM 16: ROUNDED ARMOR STONE

- A. Measurement by square yard [SY].
- B. Payment will be made for neatline quantities and include all costs associated with furnishing and installing rounded armor stone as shown in the Contract Drawings and detailed in Section 31 23 23 FILL.
- C. Rounded armor stone depths and placement limits will be confirmed by the CONTRACTOR/ENGINEER AND SUBCONTRACTOR.

2.17 BID ITEM 17: SAND HABITAT LAYER

- A. Measurement by square yard [SY].
- B. Payment will be made for neatline quantities and include all costs associated with furnishing and installing sand habitat layer as shown in the Contract Drawings and detailed in Section 31 23 23 FILL.
- C. Sand habitat layer depths and placement limits will be confirmed by the CONTRACTOR/ENGINEER AND SUBCONTRACTOR.

2.18 BID ITEM 18: FURNISHING AND MIXING OF ENHANCED RESIDUALS COVER SAND MATERIAL

- A. Measurement by square yard [SY].
- B. Payment will be made for neatline quantities and include all costs all costs to furnish sand for the enhanced residuals cover and blend to project specifications as described in Section 31 23 23: FILL.
- C. This pay item includes all labor, materials, and equipment necessary to complete the work.

2.19 BID ITEM 19: GRANULAR ACTIVATED CARBON

- A. Measurement by ton [TON].
- B. Payment will be made for all costs to furnish granular activated carbon for the enhanced residuals cover as described in Section 31 23 23: FILL.

2.20 BID ITEM 20: PLACEMENT OF ENHANCED RESIDUALS COVER

- A. Measurement by square yard [SY].
- B. Payment will be made for neatline quantities and includes all costs for labor and equipment necessary to place amended sand enhanced residuals cover as described in Section 31 23 23: FILL.
- C. Amended sand enhanced residuals cover depths and placement limits will be confirmed by the CONTRACTOR/ENGINEER and SUBCONTRACTOR.

**Sediment Cap Alternative 2 - AquaGate+PAC (includes bid items 21 through 25).**  
**If this Alternative is selected, do not include cost for Bid Items 15 through 20.**

2.21 BID ITEM 21: AQUAGATE+PAC

- A. Measurement by square yard [SY].



PACIFIC CARBIDE SEDIMENT REMEDIATION

B. Payment will be made for neatline quantities and includes all costs to furnish AquaGate+PAC for the AquaGate+PAC and rounded armor stone sediment cap as described in Section 31 23 23: FILL.

C. This pay item includes all labor, materials, and equipment necessary to complete the work.

2.22 BID ITEM 22: ROUNDED ARMOR STONE

A. Measurement square yard [SY]

B. Payment will be made for neatline quantities and includes all costs to furnish rounded armor stone for the AquaGate+PAC and rounded armor stone sediment cap and blend to project specifications as described in Section 31 23 23 FILL.

C. This pay item includes all labor, materials, and equipment necessary to complete the work.

2.23 BID ITEM 23: PLACEMENT OF AQUAGATE+PAC AND ROUNDED ARMOR STONE SEDIMENT CAP

A. Measurement by square yard [SY].

B. Payment will be made for neatline quantities and includes all costs for labor and equipment to place the AquaGate+PAC and rounded armor stone sediment cap as shown on the Contract Drawings, as described in Section 31 23 23: FILL, and as described in the sediment cap installation plan prepared by SUBCONTRACTOR and approved by the CONTRACTOR/ENGINEER.

C. Sediment cap cover depth and placement limits will be confirmed by the CONTRACTOR/ENGINEER and SUBCONTRACTOR.

2.24 BID ITEM 24: NON-WOVEN FILTER FABRIC

A. Measurement by square yard [SY].

B. Payment under this item will include all costs associated with furnishing, and installing the non-woven filter fabric under a portion of the AquaGate+PAC and rounded armor stone sediment cap as shown on the Contract Drawings and the sediment cap installation plan prepared by SUBCONTRACTOR and approved by the CONTRACTOR/ENGINEER.

C. Non-woven filter fabric placement limits will be confirmed by the CONTRACTOR/ENGINEER and SUBCONTRACTOR.

2.25 BID ITEM 25: SAND HABITAT LAYER

A. Measurement by square yard [SY].

B. Payment will be made for neatline quantities and include all costs associated with furnishing and installing sand habitat layer as shown in the Contract Drawings and detailed in Section 31 23 23 FILL.

C. Sand habitat layer depths and placement limits will be confirmed by the CONTRACTOR/ENGINEER AND SUBCONTRACTOR.

PART 3 EXECUTION

A. [NOT USED]

-- End of Section --

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

A. This section describes the basic processes and procedures to be followed concerning the following administrative requirements outlined herein:

1. Electronic document submittal service.
2. Preconstruction meeting.
3. Site mobilization meeting.
4. Progress meetings.
5. Problem or deficiency meeting.
6. Construction progress schedule.
7. Progress photographs.
8. Contractor record drawings.
9. Number of copies of submittals.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES
- B. Section 01 78 00: CLOSEOUT SUBMITTALS
- C. Section 01 57 13: TEMPORARY EROSION AND SEDIMENT CONTROL

1.3 REFERENCES

- A. [NOT USED]

1.4 SUBMITTALS

- A. SD-00 Bid Submittals
1. Project work plan outline.
- B. SD-01 Preconstruction Submittals
1. Project work plan.
- C. SD-02 Construction Submittals
1. Progress and completion photographs.
- D. SD-03 Post Construction Submittals
1. Record Drawings.
  2. Import/export tickets

1.5 PROJECT WORK PLAN

A. SUBCONTRACTOR shall prepare a project work plan and submit a digital copy to the CONTRACTOR/ENGINEER at least 30 days prior to the start of construction.

B. The Project Work Plan includes various sub-plans as follows

1. Project Management Plan.
2. Project Schedule.
3. Execution of Work.
4. Contingency Plan.
5. Site Layout Drawing.
6. Marine Equipment, Material, and Traffic Control Plan.
7. Transportation and Disposal Plan.
8. Environmental Protection Plan.
9. Sediment Cap Installation Plan.
10. Riverbank Excavation Plan.
11. Erosion and Sediment Control Plan (For submittal requirements, see Section 01 57 13 EROSION AND SEDIMENT CONTROL).
12. Spill Prevention and Response Plan.
13. Dive Operations Plan.
14. Health and Safety Plan (For submittal requirements, see Section 01 35 29 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES).
- 15.

1.5.1 PROJECT MANAGEMENT PLAN

A. The Project Management Plan shall include the following, at a minimum:

1. SUBCONTRACTOR's project organization chart showing SUBCONTRACTOR's personnel, SUBCONTRACTOR's supervisory personnel, CONTRACTOR/ENGINEER, and OWNER.
2. Designated SUBCONTRACTOR Safety Officer and major Tier II subcontractor safety officers.
3. Designated SUBCONTRACTOR representative authorized to negotiate Change Orders.
4. Description of SUBCONTRACTOR/Tier II subcontractor integration and communications to allow the timely completion of the project.

1.5.2 PROJECT SCHEDULE

A. The Project Schedule shall be a resource-loaded critical path schedule for all major activities showing planned calendar dates during which work on each task will be performed and task precedence. The tasks on the project schedule will, at a minimum, correspond to the items listed on the bid form and the project areas and features as indicated on the Contract Drawings, and will be

numbered the same for clarity. The schedule shall identify SUBCONTRACTOR and Tier II Subcontractors involved with each major activity.

#### 1.5.3 EXECUTION OF WORK

A. The SUBCONTRACTOR shall develop a narrative description of the general execution of all elements of the project and SUBCONTRACTOR team responsibilities, including but not limited to: tree removal and vegetation clearing, bank excavation, soil management, soil transport, soil disposal, sediment cap placement, erosion control, and turbidity control. Emphasis shall be placed on identification of critical path items to achieve desired schedule and preventing the spread of contamination offsite or downstream.

#### 1.5.4 CONTINGENCY PLAN

A. SUBCONTRACTOR shall prepare a contingency plan for emergencies including releases to the environment of asbestos or chemical contaminants, fire accident, power failure, or any other event that may require modification or abridgement of any work area. The plan shall include specific procedures for mitigation, maintenance, or repair. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. The contingency plan shall also describe sediment cap placement techniques that may be implemented if there are exceedances of the standards defined within the Section 401 Water Quality Certification.

#### 1.5.5 SITE LAYOUT DRAWING

A. SUBCONTRACTOR shall prepare a detailed project Site layout drawing(s) showing how SUBCONTRACTOR and Tier II Subcontractors will use the Site during the course of the work. At a minimum, the Site layout drawing shall show material laydown and stockpile areas, project office location, the route for any temporary utility connections, Site entry and exit points for vehicles, SUBCONTRACTOR vehicle and equipment parking, employee parking, decontamination facilities, fire extinguishers, and haul roads within the Site. An additional drawing shall identify Site access, supply routes, and temporary support dock locations for all over water activities.

#### 1.5.6 MARINE EQUIPMENT, MATERIAL, AND TRAFFIC CONTROL PLAN

A. SUBCONTRACTOR shall prepare a Marine Equipment, Material, and Traffic Control Plan to minimize the conflicts between marine equipment and normal river traffic in the vicinity of the Site. The plan shall identify work areas for each major piece of marine equipment, material sources and delivery logistics, on-land support facilities, and the hours of the day during which marine activities will occur. The plan shall also identify the SUBCONTRACTOR's plan for management of the work area to ensure safe passage of normal river traffic.

#### 1.5.7 TRANSPORTATION AND DISPOSAL PLAN

A. SUBCONTRACTOR shall prepare a Transportation and Disposal Plan to minimize the conflicts between disposal trucks and normal vehicle traffic in the vicinity of the Site. Haul vehicles entering and exiting the Site will use the entrance and haul path shown on the Contract Drawings. The Transportation and Disposal Plan shall identify the estimated total number of trucks, the maximum frequency of trucks on the busiest haul day, the calendar days when the trucking will occur, and the hours of the day during which trucking will occur.

## PACIFIC CARBIDE SEDIMENT REMEDIATION

### 1.5.8 ENVIRONMENTAL PROTECTION PLAN

A. The SUBCONTRACTOR shall prepare an Environmental Protection Plan that meets the requirements identified in Section 01 57 19 ENVIRONMENTAL PROTECTION.

### 1.5.9 SEDIMENT CAP INSTALLATION PLAN

A. The SUBCONTRACTOR shall prepare a Sediment Cap Installation Plan meeting the requirements identified in Section 31 05 19 GEOSYNTHETICS. The plan shall identify proposed construction methods for the installation of the thin layer sediment cap. If SUBCONTRACTOR selects Alternative 1 - Reactive Core Mat, the plan shall also include a detailed figure identifying the proposed layout of RCM panels and direction of installation.

### 1.5.10 RIVERBANK EXCAVATION PLAN

A. The SUBCONTRACTOR shall prepare a Riverbank Excavation Plan. The plan shall identify proposed construction methods for the excavation, stockpiling, transport, and disposal of bank soils.

### 1.5.11 EROSION AND SEDIMENT CONTROL PLAN

A. The SUBCONTRACTOR shall prepare an Erosion and Sediment Control Plan that meets the requirements identified in Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL. The plan should describe the schedule and type of measures to be deployed for managing erosion and sediment at the Site and reference the Section 401 Water Quality Certification Requirements.

### 1.5.12 SPILL PREVENTION AND RESPONSE PLAN

A. The SUBCONTRACTOR shall prepare a Spill Prevention and Response Plan that will be implemented during Site activities. This plan should include measures to govern where SUBCONTRACTOR will fuel vehicles, store vehicles, the procedure for fueling marine equipment, what to do if a fuel or hydraulic leak is observed, response if there is a spill to the Willamette River, notifications in the event of a spill, etc. The plan shall also specify the materials to be maintained onsite for responding to a spill and describe their storage location.

### 1.5.13 DIVE OPERATIONS PLAN

A. The SUBCONTRACTOR shall prepare and submit to the CONTRACTOR/ENGINEER a diver operations and safety plan indicating emergency equipment, diving equipment, methods, location of dive platform, schedules, diving modes, maximum single dive bottom times, means of communication between dive site and control, and emergency protocol.

### 1.5.14 HEALTH AND SAFETY PLAN

A. The SUBCONTRACTOR shall prepare a Health and Safety Plan per Section 01 35 29 HEALTH, SAFETY, and EMERGENCY RESPONSE PROCEDURES.

## 1.6 PROJECT COORDINATION

A. SUBCONTRACTOR shall cooperate with the OWNER and CONTRACTOR/ENGINEER in allocation of mobilization areas of Site and for placement of field facilities and sheds, for Site access, traffic, and parking facilities.



PART 2 PRODUCTS

A. [NOT USED]

PART 3 EXECUTION

3.1 PRECONSTRUCTION MEETING

A. CONTRACTOR/ENGINEER will schedule a meeting after Notice of Award.

B. Attendance Required:

1. OWNER.
2. CONTRACTOR/ENGINEER.
3. SUBCONTRACTOR.
4. Tier II Subcontractors as appropriate.

C. Agenda:

1. Designation of personnel representing the parties to Contract, SUBCONTRACTOR, and CONTRACTOR/ENGINEER.
2. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
3. Scheduling.

D. SUBCONTRACTOR shall record minutes and distribute copies in PDF format to CONTRACTOR/ENGINEER, meeting participants, and those affected by decisions made no later than two (2) working days after the meeting.

3.2 SITE MOBILIZATION MEETING

A. CONTRACTOR/ENGINEER will schedule a meeting at the Project Site prior to SUBCONTRACTOR occupancy.

B. Attendance Required:

1. SUBCONTRACTOR.
2. OWNER.
3. CONTRACTOR/ENGINEER.
4. SUBCONTRACTOR's Superintendent.
5. Major Tier II Subcontractors.

C. Agenda:

1. Use of premises by UPLAND PROPERTY OWNERS and SUBCONTRACTOR.
2. Survey layout.
3. Security and housekeeping procedures.
4. Schedules.
5. CONTRACTOR/ENGINEER oversight.
6. Procedures for testing.
7. Procedures for project monitoring and response actions.
8. Procedures for interaction with the press and members of the public.

9. Procedures for maintaining record documents.

D. SUBCONTRACTOR shall record minutes and distribute copies in PDF format to CONTRACTOR/ENGINEER, meeting participants, and those affected by decisions made no later than two (2) working days after the meeting.

### 3.3 PROGRESS MEETINGS

A. Schedule and administer routine meetings throughout progress of the Work at a minimum of once per week.

B. SUBCONTRACTOR shall make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.

C. Attendance Required as appropriate to agenda topics for each meeting:

1. SUBCONTRACTOR's Job Superintendent.
2. Major Tier II Subcontractors.
3. OWNER.
4. CONTRACTOR/ENGINEER.

D. Agenda:

1. Review of minutes of previous meetings including any outstanding action items.
2. Review of work progress to date, including estimates of material quantities managed.
3. Field observations, problems, and decisions.
4. Review of public and agency interactions and communications.
5. Identification of problems that impede, or will impede, planned progress.
6. Review of submittal log, submittal schedule, and status of submittals.
7. Review of two-week look-ahead detail schedule.
8. Maintenance of progress schedule.
9. Corrective measures to regain project schedules.
10. Planned progress during succeeding work period.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

E. The OWNER, CONTRACTOR/ENGINEER, and SUBCONTRACTOR shall jointly review the progress schedule at each progress meeting. If it appears that activities on the longest path(s), which are currently driving the calculated completion date (driving activities), are not progressing satisfactorily and, therefore, could jeopardize timely project completion, corrective action shall be taken immediately. Corrective action includes but is not limited to: increasing the number of work crews, increasing the number of work shifts, and increasing the number of hours worked per shift.

F. For daily or weekly meetings, meeting minutes and action items will be reviewed and tracked at each meeting. SUBCONTRACTOR shall prepare and provide

meeting minutes in PDF format to the CONTRACTOR/ENGINEER, meeting participants, and those affected by decisions made no later than two (2) working days after the meeting.

#### 3.4 PROBLEM OR WORK DEFICIENCY MEETING

A. In the event a problem or deficiency is identified or likely to occur, a meeting will be held to resolve the problem.

B. Attendance is required by: SUBCONTRACTOR, CONTRACTOR/ENGINEER, and all applicable Tier II Subcontractors. The OWNER may attend at the request of the CONTRACTOR/ENGINEER.

C. Minimum Agenda:

1. Defining and discussing the problem or deficiency
2. Reviewing alternative solutions
3. Implementation of a plan to resolve the problem or deficiency

#### 3.5 FINAL INSPECTION AND CLOSEOUT MEETING

A. The CONTRACTOR/ENGINEER will inspect the Work at a time close to the completion of on-site work and will submit a project closeout punch list to the SUBCONTRACTOR. This shall serve as notice of substantial completion.

B. A date and time for the Final Inspection and Closeout Meeting shall be scheduled at the final regularly scheduled progress meeting following submittal of the project closeout punch list. The SUBCONTRACTOR shall have completed all punch list and cleanup items by the time of the Final Inspection and Closeout Meeting.

C. Attendance is required by: SUBCONTRACTOR, CONTRACTOR/ENGINEER, and others as necessary. The OWNER may attend at the request of the CONTRACTOR/ENGINEER.

D. Minimum Agenda:

1. Site walk inspection.
2. Punchlist review.
3. Review of SUBCONTRACTOR closeout submittals.

#### 3.6 CONSTRUCTION PROGRESS SCHEDULE

A. The project progress schedule shall identify all major work activities, estimated start and end dates, and work dependencies. The SUBCONTRACTOR shall prepare and maintain the schedule as necessary to adequately describe the work activities.

B. A minimum of 30 days before the start of construction, SUBCONTRACTOR shall submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.

C. If preliminary schedule requires revision after review, SUBCONTRACTOR shall submit revised schedule within 10 days.

D. Within 20 days after review of preliminary schedule, SUBCONTRACTOR shall submit draft of proposed complete schedule for review.

E. SUBCONTRACTOR shall Include written certification that Major Tier II Subcontractors have reviewed and accepted proposed schedule.

## PACIFIC CARBIDE SEDIMENT REMEDIATION

F. Within 10 days after joint review, SUBCONTRACTOR shall submit complete schedule.

G. SUBCONTRACTOR shall Submit updated schedule with each Application for Payment.

### 3.7 MATERIAL TRACKING

A. SUBCONTRACTOR shall be responsible for tracking quantities of import and export material during construction. This includes providing CONTRACTOR/ENGINEER with a daily number of trucks loaded or unloaded and volume of stockpiled materials.

B. SUBCONTRACTOR shall provide trucking tickets and disposal documentation to CONTRACTOR/ENGINEER upon submitting payment requests and as a part of construction completion submittal.

### 3.8 RECORD DRAWINGS

A. Upon completion of the project the SUBCONTRACTOR shall provide a set of record drawings with all deviations from the original contract drawings clearly marked.

B. Record drawings shall be provided in a pdf format to the CONTRACTOR/ENGINEER for approval.

### 3.9 PROGRESS PHOTOGRAPHS

A. Maintain one set of all photographs at project Site for reference; same copies as submitted, identified as such.

B. Photography Type: Digital; electronic files.

C. Digital Photographs: 24-bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.

1. Delivery Medium: Via email, FTP, or submittal service.

2. File Naming/Metadata: Include project identification, date and time of view, and caption identifying work activity.

-- End of Section --

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. This section describes the basic process and procedures to be followed concerning the submittals outlined herein by the SUBCONTRACTOR to the CONTRACTOR/ENGINEER.

1.2 RELATED SECTIONS

- A. Section 01 30 00: ADMINISTRATIVE REQUIREMENTS

1.3 REFERENCES

- A. [NOT USED]

1.4 SUBMITTAL DESCRIPTIONS

- A. Submittal requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:
  - 1. SD-00 Bid Submittals
    - a. Submit bid submittals with SUBCONTRACTOR's bid package.
    - b. Bid submittals will be reviewed as part of the contract bid documents and are not required to meet the submittal procedures outlined in this section except where explicitly noted.
  - 2. SD-01 Preconstruction Submittals
    - a. Submit preconstruction submittals a minimum of 28 days prior to the start of Work.
  - 3. SD-02 Construction Submittals
  - 4. SD-03 Post-Construction Submittals

1.5 APPROVING AUTHORITY

- A. The CONTRACTOR/ENGINEER shall be the approving authority for all submittals.

1.6 SUBMITTALS

- A. (SD-00) Project Schedule
- B. (SD-00) List of Tier II Subcontractors
- C. (SD-01) Project Work Plan
- D. (SD-01) Product Data
- E. (SD-01) Certificates
- F. (SD-01) Manufacturer's Instructions

## 1.7 PREPARATION

### A. Identification

1. Project submittals shall have a cover letter describing the contents of the submittal package. The cover letter shall identify any deviations or substitutions from the specifications. The cover letter shall allow sufficient space for a 3-inch by 5-inch review stamp to be applied by CONTRACTOR/ENGINEER.
2. The SUBCONTRACTOR shall submit each submittal to the CONTRACTOR/ENGINEER by e-mail or through an electronic submittal register. The submittal shall be in a PDF format containing only a single submittal. Multiple submittals MAY NOT be combined into a single PDF file.
3. The SUBCONTRACTOR shall identify each project submittal with the submittal number obtained from the submittal register.
4. Revisions shall include the original submittal register number and a sequential alphabetic suffix.
5. The SUBCONTRACTOR shall update the Submittal Register with the submittals satisfied by the submittal package.

### B. Submittal Contents

1. All manufacturer data sheets containing the applicable material properties shall be included in the submittal package.
2. If the manufacturer data sheets contain properties for additional products not applicable to the project, the appropriate product shall be highlighted or clearly marked to indicate the focus of the submittal.
3. It is the duty of the SUBCONTRACTOR to check, and coordinate with the work of all Tier II Subcontractors, all drawings, data, schedules, and samples prepared by or for them before submitting them to the ENGINEER for review.

## 1.8 NUMBER OF COPIES OF SUBMITTALS

- A. Documents: Submit one electronic copy in PDF format; an electronically marked up file will be returned by CONTRACTOR/ENGINEER. Create PDFs at native size and right-side up; illegible files will be rejected by CONTRACTOR/ENGINEER.
- B. Samples: Submit the number specified in the individual specification sections; one of which will be retained by CONTRACTOR/ENGINEER.
  1. After review by CONTRACTOR/ENGINEER.
  2. Retained samples will not be returned to SUBCONTRACTOR unless specifically agreed to by CONTRACTOR/ENGINEER.

## 1.9 REVIEW OF SUBMITTALS

- A. Submittal shall be provided to the CONTRACTOR/ENGINEER.
- B. The CONTRACTOR/ENGINEER will review and designate each submittal as follows:
  1. REVIEWED - NO EXCEPTIONS - The submittal conforms with the intent of the project specifications in full as submitted by



the SUBCONTRACTOR. No further action is required, and the contents of the submittal may be used for construction.

2. REVIEWED EXCEPTIONS NOTED - The submittal is partially acceptable to the CONTRACTOR/ENGINEER as submitted but is only approved for construction with additional notation provided by the CONTRACTOR/ENGINEER. No resubmittal shall be required for construction.
  3. REVISE AND RESUBMIT - The submittal is unacceptable as submitted and shall be revised and resubmitted by SUBCONTRACTOR to the CONTRACTOR/ENGINEER. The CONTRACTOR/ENGINEER will provide comments to the SUBCONTRACTOR describing why the submittal is unacceptable.
  4. RECORD COPY - The CONTRACTOR/ENGINEER acknowledges receipt of the submittal from the SUBCONTRACTOR. This designation shall be used for submittals which are required from the SUBCONTRACTOR, but the CONTRACTOR/ENGINEER does not approve or disapprove.
- C. Only materials described by submittals that are accepted for construction by the CONTRACTOR/ENGINEER shall be installed or completed on Site. Materials installed prior to acceptance by the CONTRACTOR/ENGINEER shall be the responsibility of the SUBCONTRACTOR to remove, repair, or replace at the preference of the CONTRACTOR/ENGINEER.
- D. When revised for resubmission, identify all changes made since previous submission.
- E. The review does not relieve the SUBCONTRACTOR from responsibility for 1) errors or omissions in designs produced by the SUBCONTRACTOR, 2) compliance with all requirements of the Contract Documents, or 3) the safe and successful construction of the work. This review does not consider the means, methods, techniques, sequence, construction operations, or safety, which are the sole responsibility of the SUBCONTRACTOR.

#### 1.10 VARIATIONS/SUBSTITUTION REQUESTS

- A. SUBCONTRACTOR shall identify variations from Contract Documents and Product or system limitations that may be detrimental to the successful performance of the completed Work.
- B. Variations from contract requirements require CONTRACTOR/ENGINEER review and will be considered where advantageous to CONTRACTOR/ENGINEER.
- C. Considering Variations
1. The SUBCONTRACTOR shall coordinate with the CONTRACTOR/ENGINEER regarding the need for a variation to the Contract Specifications before submitting a Request for Substitution.
  2. The CONTRACTOR/ENGINEER will review and propose substitutions to variations and coordinate with the OWNER as necessary.
- D. Proposing Variations
1. The SUBCONTRACTOR shall submit a written Request for Substitution to the CONTRACTOR/ENGINEER using the electronic submittal management system. The submittal shall be identified with the appropriate submittal register item number. The

submittal shall describe the proposed variation from the Contract Specifications.

2. The Request shall include a table showing properties of the proposed variation and the original Specification in parallel columns. A narrative shall also be included that clearly demonstrates that the proposed variation meets or exceeds the original Contract Specifications and why the variation is required or proposed.

E. Warranting that Variations are Compatible

1. When delivering a variation for approval, SUBCONTRACTOR warrants that this Contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work. SUBCONTRACTOR warrants that the substitution is of equal quality, function, and durability.

F. Rejection of Variations

1. The CONTRACTOR/ENGINEER has the right to reject proposed variations for any reason.

1.11 SUBMITTAL SCHEDULING

- A. SUBCONTRACTOR shall submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. The CONTRACTOR/ENGINEER will not review submittals for which dependent project details have not been provided. No delay damages or time extensions will be allowed for time lost in late submittals.
- B. SUBCONTRACTOR shall coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.
- C. Submittals called for by the contract documents will be listed on the submittal register. If a submittal is called for but does not pertain to the contract work, the SUBCONTRACTOR is to include the submittal in the submittal register using the next unallocated submittal register number with a brief explanation. Approval by the CONTRACTOR/ENGINEER does not relieve the SUBCONTRACTOR of supplying submittals required by the contract documents, but which have been omitted from the submittal register or marked "N/A".

1.12 SUBCONTRACTOR WORKPLANS

- A. The SUBCONTRACTOR shall submit work plans as required in Section 01 30 00 ADMINISTRATIVE REQUIREMENTS. SUBCONTRACTOR shall submit outlines of these work plans as Bid Submittals.

1.13 PRODUCT DATA

- A. SUBCONTRACTOR shall mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information specific to this Project.
- B. SUBCONTRACTOR shall indicate product delivery and storage requirements including dimensions of product as delivered to the Site.

1.14 SAMPLES

A. Samples for Review:

1. SUBCONTRACTOR shall submit to CONTRACTOR/ENGINEER for review for the limited purpose of checking for conformance with information provided and the design concept expressed in the Contract Documents.
2. SUBCONTRACTOR shall provide copies and distribute in accordance with the SUBMITTAL PROCEDURES article above.

B. Samples for Information:

1. SUBCONTRACTOR shall submit samples for CONTRACTOR/ENGINEER and OWNER's knowledge.

C. SUBCONTRACTOR shall submit samples to illustrate functional and aesthetic characteristics of the Product if determined to be necessary by the CONTRACTOR/ENGINEER. SUBCONTRACTOR shall coordinate sample submittals for interfacing work.

D. SUBCONTRACTOR shall identify each sample with full Project information.

E. SUBCONTRACTOR shall submit samples in duplicate or in the number of samples specified in the individual Specification sections, to be retained by CONTRACTOR/ENGINEER.

F. Samples will not be used for testing purposes unless specifically stated in the Specification section.

1.15 CERTIFICATES

A. SUBCONTRACTOR shall certify that material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

B. Certificates may be recent or previous test results on material or product endorsed by Manufacturer but must also be acceptable to CONTRACTOR/ENGINEER.

1.16 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual Specification sections, SUBCONTRACTOR shall submit printed instructions for delivery, storage, assembly, installation, to CONTRACTOR/ENGINEER in quantities for Product Data.

B. Instructions shall indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

PART 2 PRODUCTS

A. [NOT USED]

PART 3 EXECUTION

A. [NOT USED]

-- End of Section --

SECTION 01 35 29

HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes requirements for health and safety provisions necessary for all work at the Site.
- B. The Project is located in areas that contain sediment and soils with concentrations of polychlorinated biphenyls, metals, and polycyclic aromatic hydrocarbons above ecological risk-based concentrations but below human health risk-based concentrations.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES

1.3 REFERENCES

- A. Maul Foster Alongi (MFA). 2022. Health and Safety Plan. Prepared for Oregon Department of Environmental Quality. Maul Foster & Alongi, Inc., Portland, Oregon.

1.4 SUBMITTALS

- 1. SD-01 (Preconstruction Submittals)
  - a. Health and Safety Program documentation
    - 1. Corporate written health and safety policy and/or site-specific health and safety plan.
    - 2. Documentation of worker training including HAZWOPER certifications.

1.5 HEALTH AND SAFETY PLAN

- A. Prior to the start of any work at the Site, the SUBCONTRACTOR shall provide to the CONTRACTOR/ENGINEER evidence of a written company safety policy or a site-specific Health and Safety Plan which complies with 29 CRF Parts 1910 and 1926, and meets all requirements of local, state, and federal laws, rules, and regulations pertaining to worker and public health and safety. The company's written policy should address reasonably anticipated conditions for which Site workers may be commonly exposed to during their work.
- B. The program should include:
  - 1. Summary description of work to be performed and anticipated physical/biological/chemical hazards associated with the work.
  - 2. Work in and near flowing waters.
  - 3. Personal protective equipment and clothing including, but not limited to head, foot, hand, skin, eye, ear, personal floatation, and respiratory protection as necessary.
  - 4. Site housekeeping procedures and personal hygiene practices.

5. Name and qualification of person preparing the Health and Safety Policy/Plan and person designated to implement and enforce the plan for this project.
- C. The SUBCONTRACTOR can submit the Health and Safety Plan documents as one comprehensive document or as separate documents.
- D. The CONTRACTOR/ENGINEER's review of the SUBCONTRACTOR's Health and Safety Plan and the SUBCONTRACTOR's work performance does not constitute approval of the adequacy of the program. These Specifications indicate the desire to conduct work safely as the end result and do not dictate methods used to reach those results. The safety methods used to perform the work is the sole responsibility of the SUBCONTRACTOR.
- E. The SUBCONTRACTOR may reference, or otherwise use as a resource, the CONTRACTOR/ENGINEER's Health and Safety Plan (MFA 2022) which describes work areas and management of contaminated media. In doing so, the SUBCONTRACTOR retains full responsibility for conformance with these Specifications and all health and safety regulations as they apply to SUBCONTRACTOR and SUBCONTRACTOR's subcontracted personnel. SUBCONTRACTOR shall make no claim against the CONTRACTOR/ENGINEER for any damages or injuries resulting from the SUBCONTRACTOR's use, as described below, of the CONTRACTOR/ENGINEER's Health and Safety Plan, Specifications, or Contract Drawings.

## PART 2 PRODUCTS

### 2.1 PRODUCTS SPECIFIED FOR HEALTH AND SAFETY

- A. The SUBCONTRACTOR shall provide the equipment and supplies necessary to support the Work as described in the Health and Safety Plan.
- B. Safety equipment may include:
  1. Temporary fencing and barriers,
  2. Fire extinguishers,
  3. Personal protective equipment including but not limited to, hard hats, foot gear, hand, skin, eye, ear, and respiratory protection,
  4. Personal floatation devices,
  5. First aid equipment, and
  6. Temporary sanitation facilities.

## PART 3 EXECUTION

### 3.1 SPECIFIC SAFETY PROVISIONS

- A. The SUBCONTRACTOR and CONTRACTOR/ENGINEER shall conduct a tailgate meeting at the start of work to review Site conditions and anticipated work hazards at the start of Site operations.
- B. Additional tailgate meetings should be held as necessary to communicate site-specific conditions as they are discovered or as needed to reinforce the requirement to work safely.
- C. The SUBCONTRACTOR shall comply with local, state, and federal health and safety rules, but is not limited to: protective devices,

equipment and clothing, guards, restraints, locks, latches, switches, and other safety provisions that may be required by state and federal safety regulations. The SUBCONTRACTOR shall determine the site-specific requirements for safety provisions and shall coordinate inspections with safety authorities and obtain reports from each inspection to ensure compliance with respective regulations.

- D. Accidents causing death, injuries, or damage must be reported immediately to the CONTRACTOR/ENGINEER and OWNER in person or by telephone or messenger, and to regulatory agencies as required by law. Accidents that result in serious injury, death, or significant property damage shall be secured until such time as a complete accident investigation is completed by the SUBCONTRACTOR and CONTRACTOR/ENGINEER. In addition, promptly report in writing to the CONTRACTOR/ENGINEER and OWNER all accidents whatsoever arising out of, or in connection with, the performance of the work whether on Site, or off Site, giving full details and statements of witnesses. If a claim is made by anyone against the SUBCONTRACTOR or any subcontractor on account of any accident, the SUBCONTRACTOR shall promptly report the facts in writing within 24 hours after occurrence to the CONTRACTOR/ENGINEER giving full details of the claim.
- E. If the CONTRACTOR/ENGINEER notifies the SUBCONTRACTOR that practices are in violation of permits, pertinent and applicable regulations, or that Site conditions threaten the property, human health, or the environment, all work activity in the affected area(s) will cease until corrective actions have been taken. Any cost resulting from such a stop work order issued by CONTRACTOR/ENGINEER shall be borne by the SUBCONTRACTOR and will not be considered as a basis for an increase in the contract amount.

### 3.2 SITE SAFETY AND HEALTH OFFICER

- A. The SUBCONTRACTOR shall provide a person designated as the Site Safety Officer, who is thoroughly trained in first aid and the use of all necessary safety equipment as well as other required Site training requirements and knowledgeable in the contractor's work processes. The person, or his/her authorized designee, must be present at all times while work is being performed and conduct testing, as necessary. The Site Safety Officer may perform other duties while onsite.
- B. The Site Safety Officer shall be empowered with the delegated authority to order any SUBCONTRACTOR or SUBCONTRACTOR's subcontracted personnel on the project Site to follow the safety rules. Failure to observe these rules is sufficient cause for removal of the person or worker(s) from this project.
- C. The Site Safety Officer is responsible for determining the extent to which any safety equipment must be utilized, depending on conditions encountered at the Site.

-- End of Section --



SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. This Section describes the temporary facilities and controls for the work.

1.2 RELATED SECTIONS

- A. Section 02 00 00 MOBILIZATION AND SITE PREPARATION

1.3 REFERENCES

- A. [NOT USED]

1.4 ELECTRICAL POWER

- A. SUBCONTRACTOR shall provide and maintain power service as required for SUBCONTRACTOR facilities.

1.5 TELECOMMUNICATIONS SERVICES

- A. SUBCONTRACTOR shall provide, maintain, and pay for (wireless) telecommunications services for site superintendent at a minimum.

1.6 CONSTRUCTION UTILITIES

- A. The OWNER and UPLAND PROPERTY OWNERS will not provide power, communications, potable water, or sanitation facilities. SUBCONTRACTOR shall furnish the temporary power, potable water, piping, wiring, sanitation facilities, and services necessary to conduct work and meet applicable code requirements.

1.7 TEMPORARY SANITARY FACILITIES

- A. SUBCONTRACTOR shall provide and maintain required facilities and enclosures. Temporary sanitary facilities shall be set up at time of project mobilization and maintained through the entire construction timeframe.
- B. SUBCONTRACTOR shall maintain the temporary sanitary facilities daily in clean and sanitary condition.

1.8 VEHICULAR ACCESS AND PARKING

- A. UPLAND PROPERTY OWNERS have agreed to make available a storage and laydown area in the upland portion of the site. The SUBCONTRACTOR shall not store or maintain equipment in any other location during this project without prior approval from the OWNER and UPLAND PROPERTY OWNERS.
- B. SUBCONTRACTOR shall make all arrangements for delivery of equipment to the Site. SUBCONTRACTOR is to determine the conditions and availability of public roads, access, rights-of-way, and of restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress from the Site. SUBCONTRACTOR is

PACIFIC CARBIDE SEDIMENT REMEDIATION

to prevent dust nuisance, impassable conditions, and dirt accumulation on public streets used for access.

- C. SUBCONTRACTOR is responsible for securing the Site and safeguard the work area(s) as necessary. SUBCONTRACTOR vehicle parking to be arranged by SUBCONTRACTOR on the Site.
- D. SUBCONTRACTOR shall maintain access to the upland property and associated entrances/exits for UPLAND PROPERTY OWNERS.
- E. Construction material or other items shall not be stored within 20 feet of fire hydrants. SUBCONTRACTOR shall maintain viable access to fire hydrants.

1.9 WASTE REMOVAL

- A. SUBCONTRACTOR shall maintain work areas free of waste materials, debris, and rubbish, except for designated storage areas. SUBCONTRACTOR shall maintain the work areas in a clean and orderly condition and shall clean and remove miscellaneous trash at least weekly. Waste disposal shall be conducted in accordance with applicable state and federal regulations.

1.10 FIELD OFFICES

- A. The SUBCONTRACTOR shall establish a field office on Site for use by the SUBCONTRACTOR during the project. The Contract Drawings identify an available location acceptable to the OWNER and UPLAND PROPERTIES OWNER and SUBCONTRACTOR.

1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. SUBCONTRACTOR shall remove temporary utilities, equipment, facilities, and materials within 14 days following the Substantial Completion inspection.
- B. SUBCONTRACTOR shall clean and repair damage caused by installation or use of temporary work.
- C. SUBCONTRACTOR shall restore existing facilities used during construction to original condition, including roads.

PART 2 PRODUCTS

- A. [NOT USED]

PART 3 EXECUTION

- A. [NOT USED]

-- End of Section --

SECTION 01 57 13

TEMPORARY EROSION AND SEDIMENT CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. The work shall consist of SUBCONTRACTOR furnishing and installing erosion control materials within project limits and in areas outside the project limits where the soil surface is disturbed from work under this contract. This work shall include all necessary materials, labor, supervision, and equipment for installation of a complete system. This work shall: prevent erosion due to construction activities; prevent tracking of soil, sediment, or other material onto all roadways; and provide for the restoration of areas affected by SUBCONTRACTOR's failure to prevent the conditions described above. The work shall also include removing and disposing of BMPs at the end of the Project.

1.2 RELATED SECTIONS

- A. Section 01 33 00 SUBMITTAL PROCEDURES
- B. Section 01 57 19 ENVIRONMENTAL PROTECTION
- C. Section 31 05 19 GEOSYNTHETICS

1.3 REFERENCES

- A. City of Portland. 2022. Erosion and Sediment Control Manual. City of Portland. Pending.

1.4 SUBMITTALS

- A. SD-01 Product Data
  - 1. Manufacturer's catalog cuts and material specifications for plastic sheeting or other erosion and sediment control products proposed by the SUBCONTRACTOR.
  - 2. Manufacturer's literature including physical characteristics, application, and installation instructions.

1.5 PERFORMANCE REQUIREMENTS

- A. SUBCONTRACTOR shall comply with all requirements of the 2022 City of Portland Erosion and Sediment Control Manual.
- B. SUBCONTRACTOR shall perform routine site inspections and prepare inspection reports in accordance with the ESC Plan (see Section 01 57 19 - ENVIRONMENTAL PROTECTION) and Subsection 3.1.B below.
- C. Timing: Put preventative measures in place as soon as practicable after disturbance of surface cover.
- D. Erosion On Site: SUBCONTRACTOR shall minimize wind, water, and vehicular erosion of soil on the Site due to construction activities for this project.

## PACIFIC CARBIDE SEDIMENT REMEDIATION

1. Control movement of sediment and soil from temporary stockpiles.
  2. Prevent development of ruts on unpaved surfaces due to equipment and vehicular traffic.
  3. Use temporary equipment rumble strips to remove mud and prevent tracking onto public roads.
  4. If erosion occurs due to non-compliance with these requirements, SUBCONTRACTOR shall restore eroded areas at no additional expense to CONTRACTOR/ENGINEER.
- E. Erosion Off Site: SUBCONTRACTOR shall prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project Site due to construction activities for this project.
1. Prevent windblown soil from leaving the project Site.
  2. Prevent tracking of mud onto public roads outside the Site. Provide daily street sweeping as required by CONTRACTOR/ENGINEER to address visible tracking of mud away from the Site on public roads.
  3. Prevent mud and sediment from flowing onto sidewalks and pavements.
  4. If erosion occurs due to non-compliance with these requirements, SUBCONTRACTOR shall restore eroded areas at no additional expense to CONTRACTOR/ENGINEER.
- F. Sedimentation of Waterways On Site: SUBCONTRACTOR shall prevent sedimentation of waterways, including the Columbia Slough, open drainageways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, SUBCONTRACTOR shall install or correct preventative measures immediately at no additional expense to CONTRACTOR/ENGINEER; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- G. Sedimentation of Waterways Off Site: SUBCONTRACTOR shall prevent sedimentation of waterways off the project Site, including rivers, streams, lakes, ponds, open drainageways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, SUBCONTRACTOR shall install or correct preventative measures immediately at no additional expense to CONTRACTOR/ENGINEER; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- H. Maintenance: SUBCONTRACTOR shall maintain temporary preventative measures until permanent measures have been established and removal is approved by CONTRACTOR/ENGINEER.

### 1.6 ADMINISTRATIVE REQUIREMENTS

- A. The provisions of this section shall apply to SUBCONTRACTOR, subcontractors, suppliers, and all others who may have access to the work site by way of SUBCONTRACTOR activities.
- B. The SUBCONTRACTOR shall be solely responsible for any damages, fines, levies, or judgments incurred as a result of SUBCONTRACTOR, Tier II Subcontractor, or supplier failure to properly implement the erosion

and sediment control measures or negligence in complying with the requirements of this section.

- C. Any damages, fines, levies, or judgments incurred by CONTRACTOR/ENGINEER or OWNER as a result of SUBCONTRACTOR, Tier II Subcontractor, or supplier negligence in complying with the requirements of this section will be deducted from payment due to SUBCONTRACTOR for the Work.
- D. The SUBCONTRACTOR shall be solely responsible for any schedule impacts from damages, fines, levies, judgments, or stop work orders incurred as a result of SUBCONTRACTOR, Tier II subcontractor, or supplier negligence in complying with the requirements of this section. The project schedule will not be changed to accommodate the time lost.

#### 1.7 AUTHORITY OF CONTRACTOR/ENGINEER

- A. The CONTRACTOR/ENGINEER has the authority to direct the SUBCONTRACTOR to provide additional immediate permanent or temporary erosion and sediment control measures to minimize erosion and movement off-site of sediment and turbid stormwater runoff.

### PART 2 PRODUCTS

#### 2.1 GEOTEXTILE SILT FENCE

- A. Silt fence material shall meet the minimum requirements listed in Section 31 05 19 GEOSYNTHETICS.

#### 2.2 PLASTIC SHEETING

- A. Plastic sheeting for stockpile liners and covers shall have the minimum requirements listed in Section 31 05 19 GEOSYNTHETICS.

#### 2.3 VEHICLE PATH RUMBLE STRIPS

- A. Rumble strip shall be FODS track out mats or CONTRACTOR/ENGINEER approved equivalent.

#### 2.4 OTHER MATERIALS

- A. SUBCONTRACTOR shall have a standard spill response kit available on site at all times.

### PART 3 EXECUTION

#### 3.1 GENERAL

- A. Plastic sheeting shall be placed and used as directed by Contract Documents and the CONTRACTOR/ENGINEER.
- B. In the event of a conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.
- C. BMP Maintenance:
  - 1. BMPs shall be maintained for the life of the project or until removed by SUBCONTRACTOR as directed by CONTRACTOR/ENGINEER.

## PACIFIC CARBIDE SEDIMENT REMEDIATION

2. BMPs shall be maintained during all suspensions of work and all non-work periods.
3. BMPs shall be maintained and repaired as needed to assure continued performance of their intended function.
4. Sediment removed during BMP maintenance shall be placed away from natural and constructed stormwater conveyances and be disposed of by SUBCONTRACTOR with contaminated soil or as approved by CONTRACTOR/ENGINEER.

### D. BMP Inspection:

1. Erosion and sediment control measures shall be inspected and maintained daily and within 24 hours after any storm event greater than 0.5 inches of rain per 24-hour period.
2. Any required repairs or adjustments shall be made immediately.

### E. Record Keeping:

1. Reports summarizing the scope of inspections, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the effectiveness of the ESCP, and actions taken as a result of these inspections shall be prepared and retained by the SUBCONTRACTOR.
2. All the inspection reports shall be kept on-site during the life of the project and available for review upon request of CONTRACTOR/ENGINEER.

### F. BMP Removal

1. Before project closeout, all sediment shall be removed from temporary and permanent drainage conveyances, ditches, culverts, and channels to maintain operation.
2. Sediment removed shall be placed away from drainage conveyances.

### G. Emergency Response

1. The SUBCONTRACTOR shall control and respond to turbid water discharges, sediment movement, and fugitive dust. At a minimum, the SUBCONTRACTOR's employee responsible for, or first noticing, the discharges shall take appropriate immediate action to protect the work area, private property, and the environment (e.g. diking to prevent pollution of state waters). Appropriate action on the part of SUBCONTRACTOR includes but is not limited to the following:
  - a. Hazard Assessment: assess the source, extent, and quantity of the discharge.
  - b. Security: if the discharge cannot be effectively controlled, then immediately notify the CONTRACTOR/ENGINEER. If the discharge can be safely and effectively controlled, proceed immediately with action to protect the work area, property, and the environment.
  - c. Containment and Elimination of Source: contain the discharge with straw wattles, sandbags, or other means downslope from the affected area. Eliminate the source of the discharge by pumping turbid water to a controlled

area, building berms, piping clean water away from the area or other means necessary.

d. Cleanup: when containment is complete, treat turbid water to remove sediment and stabilize on site, or other methods to prevent future discharge.

e. Notification: report all turbid discharges immediately to the CONTRACTOR/ENGINEER.

### 3.2 MAINTENANCE STANDARDS

A. If a BMP is observed to have degraded or become ineffective prior to the end of the project and the CONTRACTOR/ENGINEER determines the BMP is still necessary, the SUBCONTRACTOR shall replace the BMP promptly.

### 3.3 GEOTEXTILE SILT FENCE

A. Geotextile silt fence, installed by SUBCONTRACTOR, shall be maintained at the locations shown on the Contract Drawings.

### 3.4 VEHICLE PATH RUMBLE STRIPS

A. SUBCONTRACTOR shall construct a temporary rumble strip within the drive path near the soil loading area as shown in the Contract Drawings.

B. The strip shall be long enough to effectively prevent track out of mud from the soil loading and stockpile area.

### 3.5 EXCAVATION SURFACE

A. SUBCONTRACTOR shall cover exposed excavation slopes with impermeable covers (e.g., plastic sheeting, taping) if inclement weather is forecasted within 24-hours. Plastic covers will be secured by sandbags.

### 3.6 STOCKPILE LINER AND COVER

A. Stockpiles of armor rock or other materials shall be constructed on paved areas or on 10 mil polyethylene sheeting.

B. Stockpiles of erodible materials shall be covered with impermeable stockpile covers (e.g., plastic sheeting, tarping) as required by the City of Portland Erosion and Sediment Control Manual and/or if inclement weather is forecasted within 24-hours. Plastic covers will be secured by sandbags.

### 3.7 FUGITIVE DUST CONTROL

A. SUBCONTRACTOR shall maintain a water source onsite during activities that have potential for dust generation (i.e. excavation, temporary stockpiling, etc.). If use of water from the Columbia Slough is proposed, SUBCONTRACTOR shall be responsible for obtaining all applicable permits.

B. No visual dust generation will be permitted. If dust is observed SUBCONTRACTOR shall wet source materials.

-- End of Section --



SECTION 01 57 19

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. This section covers the means and methods the SUBCONTRACTOR shall employ in protecting the environment in and around the Site during construction.
- B. The SUBCONTRACTOR shall strictly adhere to the measures specified herein, and take additional measures, as may be required by federal, state, and local regulations, to minimize any adverse impacts to the environment during the performance of work. Any delays that result from failure to comply with environmental laws and regulations shall be the responsibility of the SUBCONTRACTOR.
- C. The SUBCONTRACTOR's activities shall be limited to the boundaries of the work areas as shown on the Contract Drawings and public rights-of-way.
- D. The requirements herein are in addition to requirements in other sections of the Specifications.

1.2 RELATED SECTIONS

- A. Section 01 30 00 ADMINISTRATIVE REQUIREMENTS
- B. Section 01 33 00 SUBMITTAL PROCEDURES
- C. Section 01 50 00 TEMPORARY FACILITIES AND CONTROLS
- D. Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL
- E. Section 35 23 23 FILL

1.3 REFERENCES

- A. [NOT USED]

1.4 SUBMITTALS

- A. (SD-01) Environmental Protection Plan (EPP). The purpose of the EPP is to present a comprehensive overview of known or potential environmental issues which the SUBCONTRACTOR must address during construction.
- B. (SD-01) Inspection schedule and checklist for each environmental protection measure.

1.5 PERMITS/SITE-SPECIFIC REGULATORY AND AGENCY FINDINGS

- A. The SUBCONTRACTOR shall obtain necessary permits to ensure compliance with all applicable Federal, State, and local regulations unless specified as being obtained by the OWNER or the CONTRACTOR/ENGINEER. Permits shall include, but not be limited to, permits for transporting hazardous materials and other trade permits.
- B. The SUBCONTRACTOR is responsible for keeping current copies of all permits and licenses at the Site at all times.

C. OWNER provided permits include:

1. City of Portland Exempt Review.
2. DEQ 401 Water Quality Certification.
3. Army Corps of Engineers Section 404 Permit
4. Upland property access agreements
5. Oregon Department of State Lands Access Agreement (pending)
6. City of Portland Non-parks use permit

1.6 TIER II SUBCONTRACTORS

- A. The SUBCONTRACTOR shall ensure that all Tier II subcontractors comply with the requirements of this Section.

1.7 ENVIRONMENTAL PROTECTION PLAN

- A. Prior to commencing construction activities or delivery of materials to the Site, the SUBCONTRACTOR shall submit and EPP for review and approval by the CONTRACTOR/ENGINEER. The purpose of the EPP is to present a comprehensive overview of known or potential environmental issues which the SUBCONTRACTOR must address during construction. Issues of concern shall be defined within the EPP as outlined in this Section. The SUBCONTRACTOR shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this Section, but which the SUBCONTRACTOR considers necessary, shall be identified, and discussed after those items formally identified in this Section. Prior to submittal of the EPP, the SUBCONTRACTOR shall meet with the CONTRACTOR/ENGINEER for the purpose of discussing the preparation of the initial EPP; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the SUBCONTRACTOR's EPPs. The EPP shall be current and maintained onsite by the SUBCONTRACTOR. This plan shall be current and maintained on Site by the SUBCONTRACTOR. This plan shall govern Site activities relating to pollution prevention and minimization, spill control and reporting, stormwater management, noise and dust control, and compliance with state and federal water, wastewater, air, and soil waste regulations.
- B. No requirement in this Section shall be construed as relieving the SUBCONTRACTOR of any applicable federal, state, and local environmental protection laws and regulations. During construction, the SUBCONTRACTOR shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the EPP.
- C. The EPP shall include, but shall not be limited to, the following:
1. Name(s) of the person(s) within the SUBCONTRACTOR's organization who is (are) responsible for ensuring adherence to the EPP.
  2. Name(s) and qualifications of person(s) responsible for training the SUBCONTRACTOR's environmental protection personnel.
  3. Description of the SUBCONTRACTOR's environmental protection personnel training program.

4. A list of federal, state, and local laws, regulations, and permits concerning environmental protection, pollution control, and abatement that are applicable to the SUBCONTRACTOR's proposed operations and the requirements imposed by those laws, regulations, and permits.
5. And Erosion and Sediment Control (ESC) Plan which identifies the type and location of the erosion and sediment controls to be provided. The ECS Plan shall include inspection, monitoring, recordkeeping, and reporting requirements to ensure that the control measures are in compliance with the erosion and sediment control plan, federal, state, and local laws and regulations. The ESC Plan shall include the following, at a minimum:
  - a. Name and qualifications of SUBCONTRACTOR's Representative to be in charge of erosion and sediment control,
  - b. Schedules for accomplishment of temporary and permanent erosion control work, as are applicable for clearing and grubbing,
  - c. Proposed deviations from or additions to the ESC Plans provided in the Contract Drawings,
  - d. Estimated installation date of all temporary BMPs,
  - e. Estimated date of final Site stabilization, and
  - f. Forms and schedules for inspection of ESC requirements during the following construction.
6. Construction Drawings showing locations of material storage areas and sanitary facilities including methods to control runoff and contain materials on the Site.
7. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or non-use. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized areas.
8. A spill prevention, control, and countermeasure (SPCC) plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CRF 302, 40 CFR 355, and/or regulated under state or local laws and regulations. In addition, the SPCC shall include equipment fueling, storage, and housekeeping procedures. The plan shall include, at a minimum:
  - a. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the CONTRACTOR/ENGINEER and OWNER in addition to the legally required federal, state, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers,

- b. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup,
  - c. Training requirements for SUBCONTRACTOR's personnel and methods of accomplishing the training,
  - d. A list of materials and equipment to be immediately available at the Site, tailored to cleanup work of the potential hazard(s) identified,
  - e. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency, and
  - f. The methods and procedures to be used for expeditious contaminant cleanup.
9. A waste management plan identifying methods and locations for solid waste disposal including small debris and cleared vegetation. The SUBCONTRACTOR shall identify any Tier II subcontractors responsible for the transportation and disposal of solid waste.
10. Topics or issues which are not identified in this Section, but which the SUBCONTRACTOR considers necessary, shall be incorporated into the EPP.
11. The contents of the EPP listed above and any other information the SUBCONTRACTOR deems appropriate should be addressed in a single document, minimizing duplication.

## PART 2 PRODUCTS

### 2.1 MATERIALS AND EQUIPMENT

- A. SUBCONTRACTOR shall provide suitable products to construct and maintain the erosion and sediment controls described in Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL.

## PART 3 EXECUTION

### 3.1 PROTECTION OF WATER QUALITY

- A. It is imperative that watercourses do not become contaminated or further contaminated with soil or other contaminants.
- B. SUBCONTRACTOR shall have sorbent material at the ready to remove and isolate any product seepage or sheens resulting from construction activity.
- C. Except for intentional waste disposal, the SUBCONTRACTOR shall be responsible for preventing the off-site movement of all waste materials, spills, etc., resulting from the construction process, and shall be responsible for any consequences of any such off-site movement of the material and associated costs.
- D. The SUBCONTRACTOR shall observe the rules and regulations of the State of Oregon and agencies of the U.S. government by prohibiting pollution of any stream, river, or wetland by dumping refuse, wastewater, rubbish, or debris therein.

PACIFIC CARBIDE SEDIMENT REMEDIATION

E. The SUBCONTRACTOR shall be fully responsible for any and all damages to life, property, habitat, and animal life that occur as a result of its negligence. Care shall be taken to prevent sediment or debris from being deposited on the adjacent bank areas. Damages resulting from negligence of the SUBCONTRACTOR which result in polluting upland areas and/or watercourses shall be repaired, restored, or compensated for by the SUBCONTRACTOR at no cost to the CONTRACTOR/ENGINEER .

1. Immediately report any dead or dying fish that are found in the work area to the CONTRACTOR/ENGINEER. Provide details of the discovery including location and any observations of unusual conditions.

F. The work must conform to the requirements of the 401 Water Quality Certification (WQC). The water quality criteria for turbidity, established in the WQC, are incorporated below. The SUBCONTRACTOR shall be required to perform work in a manner that meets the water quality criteria, measured at the compliance points, at all times.

1. As measured by the CONTRACTOR/ENGINEER at the compliance points, controls must be set so that there is no more than a ten percent (10%) increase in natural stream turbidity in background turbidity levels. Turbidity exceedances of more than 10% above background levels are allowed for limited times depending on the increase, if all available controls are in place.

2. The CONTRACTOR/ENGINEER will perform water quality monitoring and analysis during construction and will create a log that includes daily monitoring of turbidity levels during work below ordinary high water. The CONTRACTOR/ENGINEER will compare background levels to turbidity from authorization actions and implement controls to minimize turbidity caused by the project.

a. The CONTRACTOR/ENGINEER will identify two monitoring locations, including the background location and the compliance location.

b. When work begins, the turbidity at the background compliance locations must be measured and recorded in the daily log. The daily log must include the date, time, location, tidal state (if tidally influenced), and turbidity. The log must include controls and calibration documentation from the start of work.

c. Turbidity must be measured at both locations following the table below.

Monitoring With A Turbidimeter	
Allowable Exceedance Turbidity Level	Action Required
0 to 4 NTU above background	Continue to monitor every 2 hours
5 to 29 NTU above background	Work may continue for a maximum of 4 hours. If turbidity remains 5-29 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background
30 to 49 NTU above	Work may continue for a maximum of

Background	2 hours. If turbidity remains 30-49 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background
50 NTU or more above Background	Stop work immediately and CONTRACTOR/ENGINEER will inform DEQ.

- d. Turbidity must be measured during work.
- e. Additional controls must be implemented if turbidity caused by project is greater than background. Both locations must be monitored again.
- f. Work must immediately be stopped for the rest of the 24-hours if:
  - 1. A turbidity plume that is visible, goes beyond the compliance distance.
  - 2. Turbidity at the compliance points are measured as 50 NTU or more over background at any time; 30 NTU over background for 2 hours; or 5-29 NTU over background for 4 hours.
- G. All construction materials and equipment shall be removed from the shoreline in the event of river flooding or high-water conditions that may occur during the construction period.
- H. Provide erosion control BMPs for bank work areas as needed to prevent sediment laden water generated in work areas being released to the waterway and/or off-site.
- I. Any equipment used on the bank shall be checked for oil leaks and other potential environmental hazards on a daily basis. No equipment posing environmental hazards shall be operated on the bank.

3.2 PROTECTION OF AIR QUALITY

- A. Air quality objectives are:
  - 1. Compliance with state and federal ambient air quality standards for all parameters throughout the community surrounding the work areas as applicable.
  - 2. Use of all practical methods for the suppression of fugitive dust as normal practice.
- B. SUBCONTRACTOR shall minimize potential for air pollution by wetting down bare and disturbed soils; minimizing free fall of soil and eliminating excessive drop heights during material transfer; coving unused soil stockpiles; properly operating combustion emission control devices on all construction vehicles and equipment; and shutting down motorized equipment when not in use.
- C. Burning of any kind is prohibited.

3.3 BIOLOGICAL MONITORING AND ANIMAL RELOCATION

- A. A qualified biologist, provided by CONTRACTOR/ENGINEER, will observe construction activities to identify and relocate small mammals, reptiles, and amphibians that may be present within the work area.

- B. If animals are observed within the work area, SUBCONTRACTOR shall immediately cease activities until the animals are relocated outside of the work area.

#### 3.4 VEGETATION PROTECTION

- A. SUBCONTRACTOR shall avoid causing damage to vegetation outside of the vegetation clearing areas shown on the CONTRACT Drawings. Costs to reestablish damaged vegetation outside of the designated areas shall be completed at no cost to the CONTRACTOR/ENGINEER .

#### 3.5 USE OF CHEMICALS

- A. Chemicals used, whether herbicide, pesticide, odor suppressant, or other classification, must be approved by either DEQ, the Oregon Department of Fish and Wildlife, the EPA or any other applicable regulatory agency and be used in a manner recommended by the manufacturer.
- B. The use of such chemicals and the disposal of residues shall be in conformance with manufacturers' instructions.
- C. The use of chemicals must be approved in advance by the CONTRACTOR/ENGINEER.
- D. Chemicals shall be stored in accordance with the SPCC plan developed under subpart 1.7.

#### 3.6 NOISE CONTROL

- A. At all times, including within the hours of equipment operation listed below, SUBCONTRACTOR SHALL conduct operations to minimize the potential for annoyance to residents in the vicinity of the Work, and comply with applicable local ordinances.
- B. Equip compressors and other apparatus with such mechanical devices as may be necessary to minimize noise and dust. Equip compressors with silencers on intake lines.
- C. Equip gasoline-, diesel-, or oil-operated equipment with silencers or mufflers on intake and exhaust lines.
- D. Comply with federal, state, and local noise regulations as applicable.
- E. Limit hours of equipment operation to 7:00 a.m. to 6:00 p.m. unless a variance is obtained from the CONTRACTOR/ENGINEER.

#### 3.7 SPILL PREVENTION AND CONTROL

- A. All fueling of equipment shall be performed at a designated area at least 100 feet from stormwater structures and slough bank.
- B. The refueling area shall have measures in place to collect drips beneath nozzles.
- C. Fuel storage tanks shall have double containment.
- D. Spill control materials shall be readily available both at the refueling area and adjacent to the site of active work.
- E. Check equipment for leaks prior to starting construction activities.
- F. Post emergency phone numbers in a highly visible location.



- G. Report any petroleum spill or release that produces sheen on the Columbia Slough to the National Response Center at 1-800-424-8802. A spill of any regulated hazardous substance in any quantity to the waters of the state must be reported.

### 3.8 CONSTRUCTION EQUIPMENT

- A. The SUBCONTRACTOR shall decontaminate all equipment prior to delivery to the Site.
- B. The SUBCONTRACTOR's equipment that is left at the Site shall only be stored in the designated storage and laydown area. Equipment shall be maintained in such a manner as to prevent leaks and spills of oil, gasoline, lubricants, and other materials used for maintenance work.
- C. The SUBCONTRACTOR shall be responsible for cleanup and proper disposal of any materials spilled onto a work area or surrounding areas.

### 3.9 MANAGEMENT OF DEBRIS AND WASTE MATERIALS

- A. The SUBCONTRACTOR shall be responsible for preventing off-site movement of all waste materials, spills, etc., resulting from construction processes and shall be responsible for any consequences of such off-site movement of the material.
- B. Vegetation waste shall be brought to a permitted composting facility.
- C. Debris and waste materials shall be salvaged or disposed of at a DEQ-approved permitted sanitary landfill (RCRA Subtitle D), as appropriate.
- D. Comply with all federal, state, and local laws and regulations concerning waste movement, transport, and disposal.

### 3.10 CONTAMINATED MEDIA

- A. SUBCONTRACTOR Shall immediately stop work and immediately notify the CONTRACTOR/ENGINEER of any area in which suspected contamination not discussed in the Contract Documents is observed during the progress of work. The SUBCONTRACTOR shall immediately vacate that area and continue work on other portions of the Site, as directed by the CONTRACTOR/ENGINEER. The CONTRACTOR/ENGINEER will assess the material before directing the SUBCONTRACTOR to continue work in the area.

### 3.11 ARCHAEOLOGICAL AND CULTURAL RESOURCES

- A. SUBCONTRACTOR shall conform to the requirements of the inadvertent discovery plan provided by CONTRACTOR/ENGINEER.
- B. An archaeological monitor, provided by others, is required to be present at the Site during earthmoving disturbances. SUBCONTRACTOR shall provide access to the work for the archaeological monitor and shall stop earthmoving work when so directed by the archaeological monitor.
- C. If cultural resources are discovered during any construction activities, the SUBCONTRACTOR shall notify the CONTRACTOR/ENGINEER immediately and all activities that may damage said cultural resources shall be temporarily suspended. The SUBCONTRACTOR shall resume work in the area of concern upon notification by the CONTRACTOR/ENGINEER.

PACIFIC CARBIDE SEDIMENT REMEDIATION

D. SUBCONTRACTOR shall make its best efforts, in accordance with state law, to ensure that its personnel and subcontractors keep the discovery of any found or suspected human remains, other cultural items, and potential historic properties confidential. All SUBCONTRACTOR personnel are prohibited from contacting the media or any third party or otherwise sharing of information regarding the discovery with any member of the public, and to immediately notify the CONTRACTOR/ENGINEER and OWNER and direct any inquiry from the media or public to OWNER.

-- End of Section --

SECTION 01 78 00

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes the procedures the SUBCONTRACTOR shall employ for final project closeout regarding record documents.

1.2 RELATED SECTIONS

- A. Section 01 30 00 ADMINISTRATIVE REQUIREMENTS
- B. Section 01 33 00 SUBMITTAL PROCEDURES

1.3 REFERENCES

- A. [NOT USED]

1.4 SUBMITTALS

- A. (SD-03) Project Record Documents: Submit documents to CONTRACTOR/ENGINEER with claim for final Application for Payment.

PART 2 PRODUCTS

- A. [NOT USED]

PART 3 EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. SUBCONTRACTOR shall maintain on site one set of the following record documents to be used to record actual revisions to the Work:
  - 1. Drawings,
  - 2. Addenda,
  - 3. Change orders, field directives, and other modifications to the Contract,
  - 4. Reviewed shop drawings, product data, and samples,
  - 5. Disposal tickets and manifests,
  - 6. Records on emergency response actions/spill incidents,
  - 7. Records of all site work,
  - 8. BMP inspection reports, and
  - 9. Construction photos.
- B. SUBCONTRACTOR shall ensure entries are complete and accurate, enabling future reference by CONTRACTOR/ENGINEER.
- C. Store record documents separate from documents used for construction.
- D. SUBCONTRACTOR shall records information concurrent with construction progress.
- E. Record Drawings and Shop Drawings: SUBCONTRACTOR SHALL legibly mark each item to record actual construction including:

PACIFIC CARBIDE SEDIMENT REMEDIATION

1. Field changes of location, dimension, and detail

2. Details not on original Contract Drawings

-- End of Section --

SECTION 02 00 00

MOBILIZATION AND SITE PREPARATION

PART 1 GENERAL

1.1 SUMMARY

- A. The SUBCONTRACTOR shall provide all labor, materials, and equipment to ready the site for the timely start and efficient completion of work. The SUBCONTRACTOR shall perform all site visits as necessary to obtain the information to secure all necessary permits and to mobilize and demobilize all personnel and equipment in an efficient manner. The SUBCONTRACTOR shall be an informed participant in the pre-construction meeting.

1.2 RELATED SECTIONS

- A. Section 01 30 00 ADMINISTRATIVE REQUIREMENTS
- B. Section 01 50 00 TEMPORARY FACILITIES AND CONTROLS
- C. Section 01 57 19 ENVIRONMENTAL PROTECTION
- D. Section 01 78 00 CLOSEOUT SUBMITTALS

1.3 REFERENCES

1.4 SUBMITTALS

- A. (SD-01) Site Plan Layout:
  - 1. SUBCONTRACTOR shall submit a detailed site layout plan in accordance with the requirements provided in Section 01 30 00 ADMINISTRATIVE REQUIREMENTS.

1.5 PERMITS, LICENSE AND FEES

- A. The SUBCONTRACTOR shall obtain necessary permits to ensure compliance with all applicable federal, state, and local regulations unless specified as being obtained by the OWNER or the CONTRACTOR/ENGINEER. Permits shall include, but not be limited to, permits for transporting hazardous materials or other trade permits.
- B. The SUBCONTRACTOR is responsible for keeping current copies of all permits and licenses on the job site at all times.
- C. The SUBCONTRACTOR is responsible for all trade permits required for temporary facilities.

1.6 COORDINATION

- A. The SUBCONTRACTOR shall coordinate with the CONTRACTOR/ENGINEER for inspections by the regulatory agencies as described in the applicable permit conditions and for periodic progress inspections by OWNER and permitting agencies.
- B. Coordinate completion and cleanup of work in preparation for CONTRACTOR/ENGINEER pre-final and final inspection per Section 01 30 00 ADMINISTRATIVE REQUIREMENTS.

- C. Coordinate work with other Tier II Subcontractors and utility companies.

1.7 DEMOBILIZATION

- A. SUBCONTRACTOR shall not demobilize major equipment without approval from the CONTRACTOR/ENGINEER.
- B. Once the project reaches substantial completion as determined by the CONTRACTOR/ENGINEER, the SUBCONTRACTOR must remove all remaining temporary facilities, fencing, and equipment within 14 calendar days.

PART 2 PRODUCTS

- A. [NOT USED]

PART 3 EXECUTION

3.1 EQUIPMENT DECONTAMINATION

- A. All equipment that contacts contaminated soils or sediments must be decontaminated prior to leaving the work area. All loose soils and sediments should be brushed from equipment over plastic sheeting to contain falling materials. Loose soils and sediments removed from equipment shall be included with other soils for offsite disposal.

-- End of Section --

SECTION 02 21 13

SURVEYING

PART 1 GENERAL

1.1 SUMMARY

- A. Pre- and post-construction bathymetry will be provided by the CONTRACTOR/ENGINEER. The SUBCONTRACTOR is responsible for construction-phase surveying and staking as well as surveys of sediment cap extents.
- B. Topographic surveying methods may be required to generate bathymetric survey data in shallow water areas, to tie in the bathymetric survey to the upland work, and to provide verification of bathymetric survey data.
- C. The CONTRACTOR/ENGINEER shall perform bathymetric surveys by a licensed surveyor prior to capping activities and at the completion of the work.
- D. The SUBCONTRACTOR shall perform interim surveys for approval of sediment cap placement extent and riverbank soil excavation using the survey methods specified herein.
- E. The SUBCONTRACTOR shall perform periodic surveys to determine compliance with plan grades.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES
- B. Section 31 00 00: EXCAVATION
- C. Section 31 23 23: FILL

1.3 REFERENCES

- A. United States Army Corps of Engineers (USACE), Engineering and Design: Hydrographic Surveying, Engineering Manual (EM) 1110-2-1003, 2013.
- B. Oregon Administrative Rule (OAR), Chapter 820, Division 20: Rules of Professional Conduct
- C. OAR, Chapter 829 Division 30: The Practice of Land Surveying
- D. Oregon Revised Statutes, Chapter 672, Professional Engineers; Land Surveyors; Geologists

1.4 SUBMITTALS

- A. The SUBCONTRACTOR shall submit the following to the CONTRACTOR/ENGINEER per Section 01 33 00 SUBMITTAL PROCEDURES:
  - 1. SD-01 (Preconstruction Submittals)
    - a. A copy of the State of Oregon Professional Surveyor current license and experience record.



- b. Experience record(s) of all personnel who will be performing and supervising the surveying and/or bathymetric work.
- c. A description of the survey equipment, a schedule, and a drawing showing the track-lines to be used to perform the survey work.
- d. The means and frequency to verify the progress of the placement of the sediment cap.

2. SD-02 (Construction Submittals)

- B. Submit progress record drawings in the formats concurrent with subpart 1.4.A.3.

3. SD-03 (Postconstruction Submittals).

- C. Submit survey to CONTRACTOR/ENGINEER in a Portable Document Format (PDF) version of the signed and stamped survey.
- D. Submit the full documentation including a copy of the field notebook, reduced survey notes, and calculations within 21 calendar days after the work has been performed. During construction, the field notebook and all survey notes shall be made available at the CONTRACTOR/ENGINEER's request.
- E. Submit a drawing (.dwg) file of the survey, compatible with AutoCAD Civil 3D 2021, that utilizes layer naming conventions, line types, and line weights such that each identifiable item is on a unique layer; AIA National CAD standard layer naming convention is utilized by the CONTRACTOR/ENGINEER and is preferred for all files. Prior to submittal, the drawing shall be purged to remove all unused blocks, layers, fonts, etc.
- F. Submit a triangulated irregular network (TIN) surface depicting existing site topography. If generated using AutoCAD Land Development Desktop (LDD), provide the .tin file and a comma delimited PNEZD file containing the existing grade surface information. For AutoCAD Civil 3D-generated surfaces, provide the existing grade surface within the survey drawing, or as an attached LandXML file.

1.5 ACCURACY

- A. Surveys shall be accurate to complete the Work to the lines and tolerances specified herein and as shown on the Drawings. The final survey shall document the as-built Work as specified in this Section and related Sections.
- B. Traverse surveys shall be completed to FGCS Third Order, Class One Standards and have an unadjusted closure of 1 in 10,000 after azimuth adjustment. Unadjusted azimuth closure shall not exceed 3.0 seconds per station.
- C. Vertical control surveys shall have an unadjusted closure of 0.017 feet multiplied by the square root of the control traverse distance in miles. This is consistent with FGCS First Order requirements.
- D. Horizontal Accuracy: All points for construction layout and record surveys shall be horizontally accurate to the nearest 0.2 foot relative positioning from established control points.

- E. Vertical Accuracy: All points for construction layout and record surveys shall be accurate to within +/- 0.2 feet vertically for topography and other physical features.

#### 1.6 QUALITY CONTROL

- A. Bathymetric survey procedures (positioning modes, system calibration, data reduction, adjustment, processing, and plotting) shall conform to recognized industry standards and the standards given in USACE Engineering Manual 1110-2-1003.
- B. The SUBCONTRACTOR shall implement quality control (QC) procedures prescribed for all survey instrumentation and data collection techniques used for this project in order to minimize systematic and random errors in individual data points. The CONTRACTOR shall follow and document QC procedures recommended by the equipment manufacturers' operating manuals and as contained in EM 1110-2-1003.
- C. The SUBCONTRACTOR shall perform quality assurance (QA) tests, e.g., lead-line soundings, to verify that the survey data meets the specified accuracy standards. If QA tests indicate that data does not meet the accuracy standards, additional or more stringent QC procedures may be necessary.

#### PART 2 PRODUCTS

- A. [NOT USED]

#### PART 3 EXECUTION

##### 3.1 BATHYMETRY

- A. Bathymetric surveying shall be conducted using a real-time kinematic (RTK) differential GPS (DGPS). The RTK-DGPS shall be able to provide horizontal positioning accuracy to within 0.2 feet and vertical positioning accuracy to within 0.3 feet.
- B. The vertical accuracy of the pre- and post-construction bathymetric survey shall be within 0.2 feet. The vertical accuracy of the construction verification surveys shall be within 0.2 feet or 1% of the water depth, whichever is greater.
- C. Horizontal location observations shall compensate for errors, geodetic corrections, and atmospheric variations. Water surface observations obtained by RTK GPS shall be checked against established staff gauges.
- D. At least five leadline soundings shall be conducted during each survey to confirm that the soundings meet the water depth accuracy requirements established for this project.
- E. The sounding equipment that shall be utilized is as specified below and shall be capable of producing high-resolution, permanent records accurately depicting bottom profiles.
- F. A single-beam, dual frequency echosounder system shall be used to obtain pre-construction and post-construction soundings in water depths ranging from 1 to 8 feet.
- G. A multi-beam, single frequency echosounder system shall be used to obtain soundings in water depths greater than 8 feet.

H. Depending on the location of the Work, the SUBCONTRACTOR may use topographic or bathymetric survey methods to conduct construction verification surveys.

### 3.2 SURVEY

- A. All work performed shall be in conformance with the lines, grades, slopes, cross sections, profiles, and dimensions as shown on the Drawings and in a manner consistent with accepted practices.
- B. The SUBCONTRACTOR shall lay out work from the established control points, benchmarks, and baselines indicated on the Contract Drawings and make all related measurements. The SUBCONTRACTOR shall furnish all stakes, templates, platforms, equipment, tools, materials, and labor as may be required in laying out the Work from the established control points, benchmarks, and baselines.
- C. The SUBCONTRACTOR shall not deviate from the approved Contract Drawings, unless approved in writing by the CONTRACTOR/ENGINEER.
- D. All construction staking shall be inspected by the CONTRACTOR/ENGINEER prior to construction.
- E. The minimum staking of the bank treatment shall be as follows:
- F. Stake at a minimum every 50 feet along armor stone placement areas indicating required cuts or fills to achieve finish elevations as shown on Contract Drawings, and at all other locations requested by the CONTRACTOR/ENGINEER. Record coordinates and ground surface elevations at each layout point.
- G. Install offset stakes, as necessary.
- H. Surveys in shallow water shall use a survey transect line spacing of 25 feet with data points collected every 5 feet along each transect line at a minimum.
- I. The survey grid shall extend a minimum of 100 feet beyond the work area boundary, as applicable.
- J. Subsequent surveys shall not deviate more than 20% to the left or right from the initial survey transect lines.
- K. For each survey transect line, indicate in the field notes each line's location, date and time, tidal information, and river stage.

-- End of Section --

SECTION 31 00 00

EXCAVATION

PART 1 GENERAL

1.1 SUMMARY

- A. This work includes the excavation and handling, onsite stockpiling, and off-site disposal of riverbank soils and site sediment. Excavation activities will support the regrading of the riverbank, removal of sediment accumulated at the discharge point of the stormwater outfall, and, if SUBCONTRACTOR selects Alternative 1, construction of an anchor trench to secure the reactive-core mat.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES
- B. Section 01 35 29: HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES
- C. Section 01 57 19: ENVIRONMENTAL PROTECTION

1.3 REFERENCES

- A. United States Environmental Protection Agency (USEPA). 2004. Method 9095B: Paint Filter Liquids Test, part of Test Methods for Evaluating Solid Waste, Physical/Chemical.

1.4 SUBMITTALS

- A. The SUBCONTRACTOR shall submit the following to the CONTRACTOR/ENGINEER per the requirements of Section 01 33 00: SUBMITTAL PROCEDURES:
  - 1. SD-01 (Preconstruction Submittals)
    - a. Copies of licenses and certifications as required by all applicable jurisdictions to complete the specified work including all appropriate hazardous waste operations and emergency response certifications.
  - 2. SD-03 (Postconstruction Submittals)
    - a. Disposal receipts for all materials disposed of off-site.
    - b. Receipts for any materials recycled at an off-site facility.

1.5 HEALTH AND SAFETY

1.5.1 QUALIFIED PERSONNEL

- A. All on-site soil and sediment handling activities in which workers may come in contact with site soils/sediments must be conducted by qualified personnel.
- B. Qualified personnel shall be certified with an Occupational Safety and Health Administration (OSHA) 40-hour approved HAZWOPER training course before commencing work and have at least three days of field experience under a HAZWOPER-trained, experienced supervisor.

PACIFIC CARBIDE SEDIMENT REMEDIATION

1.5.2 PERSONAL PROTECTIVE EQUIPMENT (PPE) AND PERSONAL HYGIENE MEASURES

- A. Workers shall be equipped with PPE as described in Section 01 35 29 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES.
- B. The SUBCONTRACTOR shall provide personal hygiene measures as required for work in contact with site soil/sediment.

1.6 LINES, GRADES, AND CROSS SECTIONS

- A. All excavation work shall conform to the lines, grades, and cross sections established in the Contract Drawings.

1.7 EXISTING STRUCTURES, EXISTING UPLAND SITE CAP, AND UTILITIES

- A. No excavation or grading shall be performed until site utilities have been field located by the SUBCONTRACTOR.
- B. Portions of the upland site has been capped with coarse sand and gravel leaving contaminated soils on the Site. A demarcation layer is not present. SUBCONTRACTOR shall treat all excavated soils as potentially contaminated.

PART 2 PRODUCTS

- A. [NOT USED]

PART 3 EXECUTION

3.1 PREPARATION

- A. Prior to any excavation, grading, or other earthwork activities SUBCONTRACTOR shall provide construction staking and grade control. SUBCONTRACTOR shall establish lines, grade, contours, and datum.

3.2 REMOVAL OF SEDIMENT ACCUMULATION FROM OUTFALL PIPE

- A. SUBCONTRACTOR shall remove sediment accumulation, if present, from the end of the stormwater outfall pipe shown on the Contract Drawings. Sediment shall be handled with the material removed for the RCM anchor trench and disposed of offsite.

3.3 EXCAVATION OF RCM ANCHOR TRENCH

- A. Material excavated from proposed anchor trench may have a high-water content due to its proximity to the ordinary low water line. Prior to loading for offsite disposal, SUBCONTRACTOR shall ensure excavated material passes the paint filter test (USEPA 2004) and is suitable for disposal at a Subtitle D landfill.
- B. If excavated material does not pass the paint filter test, SUBCONTRACTOR shall construct a dewatering cell in the stockpile area for processing the material until it does pass the paint filter test. No additional amendments shall be added to excavated material without CONTRACTOR/ENGINEER approval.

3.4 EXCAVATION OF BANK SOIL

- A. Excavation shall be performed in a manner that will control dust generation, limit spills, prevent contaminated material from contacting uncontaminated material across the site, and protect the



existing stormwater pipe and outfall structure identified on the Plans.

- B. Excavation tolerance is between +/- 0.2 ft to depth indicated on the Contract Drawings.
- C. Excavated material shall be stockpiled in the designated temporary stockpile area shown on the Contract Drawings.
- D. SUBCONTRACTOR shall cover exposed excavation slopes with impermeable covers (e.g., plastic sheeting, taping) if inclement weather is forecast within 24-hours. Plastic covers shall be secured by sandbags.

### 3.5 STOCKPILE MANAGEMENT

- A. The SUBCONTRACTOR shall notify the CONTRACTOR/ENGINEER when soil for offsite disposal has been stockpiled in the designated area so that the CONTRACTOR/ENGINEER may obtain samples.
- B. Stockpiles shall be covered in accordance with Section 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL.

### 3.6 SOLID WASTE MANAGEMENT AND HANDLING

- A. Excavated materials shall be transported off site in lined and tarped trucks.
- B. Materials should be disposed of at a licensed Subtitle D landfill or CONTRACTOR/ENGINEER approved alternate. CONTRACTOR/ENGINEER reserves the right to reject the proposed disposal facility if it does not meet the appropriate criteria to comply with state and federal solid waste regulations.
- C. All material taken offsite must be void of free liquids as determined by USEPA Test Method 9095B.

-- End of Section --

SECTION 31 05 19

GEOSYNTHETICS

PART 1 GENERAL

1.1 SUMMARY

- A. This section covers the technical requirements for the furnishing and installation of the geosynthetic materials as required in these Specifications and the Contract Drawings.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES
- B. Section 01 57 13: TEMPORARY EROSION AND SEDIMENT CONTROL
- C. Section 01 57 19: ENVIRONMENTAL PROTECTION
- D. Section 31 00 00: EXCAVATION
- E. Section 31 23 23: FILL

1.3 REFERENCES

- A. CETCO, Reactive Capping Material Specification Guidelines: *ORGANOCLAY FILLED REACTIVE CORE MAT®*
- B. ASTM STANDARDS:
  - 1. D4491 Standard Test Methods for Water Permeability of Geotextiles by Permittivity
  - 2. D4632 Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
  - 3. D4833 Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products.
  - 4. D5261 Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products.
  - 5. D5993 Standard Test Method for Measuring Mass Per Unit of Geosynthetic Clay Liners

1.4 SUBMITTALS

- A. The SUBCONTRACTOR shall submit the following to the CONTRACTOR/ENGINEER per Section 01 33 00 SUBMITTAL PROCEDURES:
  - 1. SD-01 (Preconstruction Submittals)
    - a. Product samples, data sheets, and complete description of products meeting or exceeding the specifications in this Section.
    - b. Manufacturer's instructions for storage, installation, and repair.
    - c. Product sample and data sheets.
    - d. A conceptual description of the proposed plan for placement of the RCM panels over the area of installation.

2. SD-02 (Construction Submittals)

- a. Upon shipment, the SUBCONTRACTOR shall furnish the RCM manufacturer's Quality Assurance/Quality Control (QA/QC) certifications to verify that the materials supplied for the project are in accordance with the requirements of this specification.

1.5 FIELD MEASUREMENTS

1.6 COORDINATION

- A. The SUBCONTRACTOR shall notify the CONTRACTOR/ENGINEER of all shipment deliveries prior to arrival to the Site.
- B. The SUBCONTRACTOR shall inform the CONTRACTOR/ENGINEER prior to installation so that CONTRACTOR/ENGINEER may be present to observe installation.

1.7 WARRANTY

- A. One-year non-prorata manufacturer warranty for geotextile material.

PART 2 PRODUCTS

2.1 SILT FENCE GEOTEXTILE

- A. Silt fence shall meet the following MINIMUM material properties:
  - 1. Material: Woven Filter Fabric,
  - 2. Grab Tensile Strength: 90 lb,
  - 3. Apparent Opening Size: No. 30 Sieve,
  - 4. Permittivity:  $.05 s^{-1}$ , and
  - 5. UV Resistance: 70% after 500 hours.

2.2 POLYETHYLENE SHEETING

- A. Stockpiles constructed on unpaved areas shall be placed on and covered with polyethylene sheeting with the following MINIMUM material properties:
  - 1. Material: Polyethylene Sheeting (ASTM D 4397) with U.V. protection,
  - 2. Thickness: 10 mil,
  - 3. Elongation: 200% in any direction,
  - 4. Water Vapor Transmission: 0.23 grams/100 sq/in., and
  - 5. Puncture Resistance: 260 g (Grams by dart drop).

2.3 TURBIDITY CURTAIN

- A. Barriers shall be a bright color (yellow or "international" orange are recommended) that will attract the attention of nearby boaters.
- B. Seams in the fabric shall be either vulcanized welded or sewn, and shall develop the full strength of the fabric.



- C. Flootation devices shall be flexible, buoyant units contained in an individual flotation sleeve or collar attached to the curtain. Buoyance provided by the flotation units shall be sufficient to support the weight of the curtain and maintain a freeboard of at least 3 inches above the water surface level.
- D. Turbidity curtain shall have the following MINIMUM material properties:
  - 1. Thickness: 45 mils,
  - 2. Weight: 18 oz. per sq. yd., and
  - 3. Grab Tensile Strength: 300 lbs.
- E. OWNER has a turbidity curtain that SUBCONTRACTOR may use during the construction period. SUBCONTRACTOR will be responsible for inspection of curtain. If SUBCONTRACTOR elects to use OWNER's turbidity curtain, SUBCONTRACTOR will be responsible for the transportation of the curtain from OWNER's facility to the Site and furnishing additional turbidity curtain if OWNER-provided curtain is not sufficient to cover distance shown on Contract Drawings.

#### 2.4 REACTIVE CORE MAT

- A. The RCM shall consist of a layer of Organoclay between geotextiles.
- B. Acceptable RCM products are organoclay Reactive Core Mat, as manufactured by CETCO, 2870 Forbs Avenue, Hoffman Estates, IL USA (800-527-9948), or a CONTRACTOR/ENGINEER-approved equivalent.
- C. RCM shall have the following MINIMUM properties:
  - 1. Organoclay:
    - a. Bulk Density Range: 44-56 lbs/ft<sup>3</sup> (ASTM D 7481),
    - b. Oil Adsorption Capacity: 0.5 lb of oil per lb of organoclay, and
    - c. Quaternary Amine Content: 25-33% quaternary amine loading (ASTM D 7626).
  - 2. Finished RCM Product
    - a. Organoclay mass per area: 0.8 lb/ft<sup>2</sup>,
    - b. Mat grab strength: 90 lbs. MARV (ASTM D4632), and
    - c. Hydraulic Conductivity: 1 x 10<sup>-3</sup> cm/sec (ASTM D4491).
  - 3. MINIMUM Properties for Non-Woven (Top Layer) Geotextile Used to Manufacture RCM:
    - a. Mass per Area: 6.0 oz/yd<sup>2</sup> (ASTM D5261)
    - b. Grab Strength: 45 lbs MARV (ASTM D4632)
  - 4. MINIMUM Properties for Woven (Bottom Layer) Geotextile Used to Manufacture RCM:
    - a. Mass per Area: 3.2 oz/ yd<sup>2</sup> (ASTM D5261)
    - b. Grab Strength: 135 lbs MARV (ASTM D4632)
    - c. Puncture: 70 lbs (ASTM D4632)

- D. Standard roll dimensions of full-size RCM panels are 100 feet in length and 15 feet in width.
- E. SUBCONTRACTOR shall order panels with a preference to avoid mid-slope seaming/overlapping to the extent practical.

**2.5 NON-WOVEN FILTER FABRIC**

- A. The CONTRACTOR shall provide filter fabric (US 160NW-HVO non-woven geotextile or ENGINEER approved equal) having the following MINIMUM properties:

Property	Test Method	Minimum Average Roll Value
Weight	ASTM D5261	6 oz/sy
Apparent Opening Size	ASTM D4751	0.212 mm
California Bearing Ration Puncture Resistance	ASTM D6241	410 lbs

- B. Filter fabric shall be installed per Part 3.6 of this Section.

**PART 3 EXECUTION**

**3.1 SILT FENCE GEOTEXTILE**

- A. Silt fence shall be installed in conjunction with Section 01 57 13: TEMPORARY EROSION AND SEDIMENT CONTROL

**3.2 TEMPORARY STOCKPILE COVER**

- A. The temporary stockpile cover shall be installed in conjunction with Section 01 57 13: TEMPORARY EROSION AND SEDIMENT CONTROL

**3.3 POLYETHYLENE SHEETING**

- A. Polyethylene sheeting shall be installed in conjunction with Section 01 57 13: TEMPORARY EROSION AND SEDIMENT CONTROL

**3.4 TURBIDITY CURTAIN**

- A. Turbidity curtain shall be installed in conjunction Section 01 57 19: ENVIRONMENTAL PROTECTION.

**3.5 REACTIVE CORE MAT**

**3.5.1 PREPARATION**

- A. Prior to the underwater work, the SUBCONTRACTOR shall ensure that in-water protections described in Section 01 57 19: ENVIRONMENTAL PROTECTION are in place and properly maintained.
- B. SUBCONTRACTOR shall Remove materials (such as piling stumps, rocks, debris, etc.) causing protrusions larger than 4-inches should be removed for a relatively smooth uniform surface.
- C. Immediately prior to RCM deployment. The SUBCONTRACTOR shall have the surface specified in the Contract Drawings for RCM placement inspected by a diver with video feed for review and approval by the CONTRACTOR/ENGINEER.

- D. It shall be the installer's responsibility thereafter to indicate to the CONTRACTOR/ENGINEER any change in the conditions of the surface that could cause it to be out of compliance with any of the requirements listed in this Section.

### 3.5.2 PLACEMENT

- A. SUBCONTRACTOR shall place the RCM in accordance with the Manufacturer's recommendations, or where amended by these specifications.
- B. Any surface upon which the RCM is installed shall be prepared in accordance with these specifications and Contract Drawings.
- C. RCM rolls should be delivered to the working area of the site in their original packaging. Immediately prior to deployment, the packaging should be carefully removed without damaging the RCM. The RCM rolls may be soaked in water for up to 24-hours prior to placement.
- D. The RCM should be oriented on the slope with the non-woven geotextile facing up and the woven geotextile facing down.
- E. RCM rolls may be suspended and maneuvered over the surface utilizing a steel pipe placed through the core of the roll and suspended from a clamshell bucket or other suitable equipment utilizing a spreader bar to prevent chaffing on the edge of the roll.
- F. Care must be taken to minimize the extent to which the RCM is dragged across the surface in order to avoid damage to the RCM or resuspension of the contaminated sediments.
- G. In sloped areas, the RCM panels shall be placed parallel to the direction of the slope.
- H. All RCM panels should lie flat on the underlying surface, with no wrinkles or folds, especially at the exposed edges of the panels.
- I. Only as much RCM shall be deployed in a day as can be covered with armoring at the end of that working day.
- J. RCM shall be constructed so that the upstream panel is on top of (overlaps) the downstream panel and the higher elevation panel is on top of (overlaps) the panel beneath it.

### 3.5.3 ANCHORAGE

- A. As directed by the Contract Drawings and these specifications, the southern terminus of the RCM cap shall be anchored in a trench intended to resist pull out forces encountered during deployment and to resist downslope movement during the life of the cap.
- B. Panels shall be temporarily anchored during construction using heavy-duty staples, pins with washers, or other methods determined by the SUBCONTRACTOR and approved by the CONTRACTOR/ENGINEER.

### 3.5.4 SEAMING

- A. The RCM seams are constructed by overlapping their adjacent edges. Seams at the ends of the panels should be constructed such that they are in the direction of the grade/slope.



- B. The minimum dimension of the longitudinal overlap should be 12 inches. End-of-roll overlapped seams should be constructed with a minimum overlap of 24 inches.
- C. RCM panels may be sewn together using geotextile sewing equipment prior to deployment to facilitate material deployment if required for SUBCONTRACTOR's deployment method. Sewing of adjacent panels is not required for the design.

#### 3.5.5 DETAIL WORK

- A. Cutting the RCM should be performed using sharp shears. RCM shall be sewn together immediately inside the intended cut line prior to cutting to minimize spilling the reactive media after the RCM has been cut.

#### 3.5.6 DAMAGE REPAIR

- A. If the RCM is damaged (torn, punctured, perforated, etc.) during installation, it may be possible to repair it by cutting a patch to fit over the damaged area. The patch shall be obtained from a new RCM roll and shall be cut to size such that a minimum overlap of 12 inches is achieved around all of the damaged area. The patch shall be sewn over the damaged area and temporarily held in place using anchors or sandbags directly on top of the patch to prevent displacement of the patch during placement of the cover material.

#### 3.5.7 COVER PLACEMENT

- A. Cover for RCM shall consist of armor rock and sand specified in the Contract Drawings and in Section 31 23 23: FILL.
- B. Cover shall be placed over the RCM using construction methods that minimize stresses including those from impact forces on the RCM as approved by the CONTRACTOR/ENGINEER, including:
  - 1. Limiting material fall height to no more than 2 feet as technically feasible.
  - 2. Placement methods proposed by the SUBCONTRACTOR shall be considered by the CONTRACTOR/ENGINEER.
- C. Cover materials should be placed in a manner that prevents the material from going underneath RCM through seams in the RCM overlap zones.
- D. Cover material shall not be pushed over the RCM to minimize tensile and shear forces on the RCM.

#### 3.6 FILTER FABRIC

- A. SUBCONTRACTOR shall install filter fabric directly on top of existing sediment where indicated on the Contract Drawings.
- B. Material shall be laid flat and smooth so it is in direct contact with the sediment surface with a 6-inch minimum overlap. The sediment surface shall be free of sharp materials that may puncture or tear the geotextile.
- C. Filter fabric shall not be left exposed to sunlight or other open environmental factors for greater than 48 hours.

- D. Filter fabric shall be weighed down, staked, or stapled to prevent movement of filter fabric during soil or rock placement and damage or removal of material by wind prior to soil or rock placement.
- E. Cover shall be placed over the filter fabric using construction methods that minimize stresses including those from impact forces on the filter fabric as approved by the CONTRACTOR/ENGINEER, including:
  - 1. Limiting material fall height to no more than 2 feet as technically feasible.
  - 2. Placement methods proposed by the SUBCONTRACTOR shall be considered by the CONTRACTOR/ENGINEER.
- F. Cover materials should be placed in a manner that prevents the material from going underneath filter fabric through seams in the filter fabric overlap zones.
- G. Cover material shall not be pushed over the filter fabric to minimize tensile and shear forces on the filter fabric.

### 3.7 PROTECTION

- A. Protect geosynthetics during installation from clogging, tears, and other damage.
- B. Damaged geosynthetics shall be repaired or replaced.
- C. Adequate ballast (e.g. sandbags, staples, or other as appropriate to the material being secured) shall be used to prevent uplift by wind or river current.

### 3.8 REPAIRS

- A. Repair all torn or damaged geosynthetics in accordance with manufacturer recommendations.
- B. Geotextile rolls which cannot be repaired shall be removed and replaced.
- C. Damage repair resultant of installation or other construction activities shall be performed at no additional cost to the ENGINEER/CONTRACTOR.

-- End of Section --

SECTION 31 23 23

FILL

PART 1 GENERAL

1.1 SUMMARY

- A. This section specifies the technical requirements for fill to be placed as shown on the Contract Drawings. Project elements discussed under this section include placement of armor stone and sand habitat layer over RCM, material for the amended sand enhanced residuals layer, and mixing and placement of the amended sand enhanced residuals layer. Fill placement shall proceed consistent with the alignments, grades, and cross sections shown on the Contract Drawings and detailed in these Specifications.

1.2 RELATED SECTIONS

- A. Section 01 33 00: SUBMITTAL PROCEDURES
- B. Section 01 57 19: ENVIRONMENTAL PROTECTION

1.3 REFERENCES

- A. ASTM Standards:
  - 1. D5519: Standard Test Methods for Particle Size Analysis of Natural and Man-Made Riprap Materials.

1.4 SUBMITTALS

- A. (SD-01) A portion of the required SUBCONTRACTOR's Work Plan shall outline materials, equipment, and methods to be used to place fill materials as shown on the Contract Drawings and described in these specifications. Descriptions shall include:
  - 1. Equipment and procedures to be used to place materials and demonstrate that they are appropriate to described scope of work.
  - 2. Equipment and temporary facility requirements and procedures to be used to stage, store, and transport materials prior to placement.
  - 3. Proposed methods to systematically execute the material placement in required lift thicknesses (e.g., swing pattern, bucket size, etc.).
- B. (SD-01) Samples and gradation analyses of rounded armor stone, sand, AquaGate+PAC, and granular activated carbon intended for use to the CONTRACTOR/ENGINEER for approval twenty-eight (28) calendar days prior to placement of material.
- C. (SD-01) The SUBCONTRACTOR shall submit all fill material source information including a contact name, address, and phone number for each product and/or source to the CONTRACTOR/ENGINEER for approval.

1.5 QUALITY ASSURANCE

- A. Rounded Armor Stone



## PACIFIC CARBIDE SEDIMENT REMEDIATION

1. The CONTRACTOR/ENGINEER will visually inspect the rounded armor stone at the source(s). The CONTRACTOR/ENGINEER will inspect for size gradation, hardness, durability, shape, porosity, and the presence of deleterious material. The material shall not be delivered to the Site until the CONTRACTOR/ENGINEER has approved it.
2. The SUBCONTRACTOR will provide a 5-ton sample of rounded armor stone meeting the specification at a location approved by the CONTRACTOR/ENGINEER. The CONTRACTOR/ENGINEER shall obtain, remove, and test material from this sample for conformance with the specification. This sample pile of rounded armor stone will be maintained as a visual reference for evaluating the gradation of the incoming rounded armor stone supplied to the project. SUBCONTRACTOR may install the sample pile as armor stone under this contract at the end of armor installation, upon approval by the CONTRACTOR/ENGINEER
3. It is the intent of the CONTRACTOR/ENGINEER to perform visual inspection of rounded armor stone in lieu of gradation testing unless significant deviations are observed. Any difference of opinion between the CONTRACTOR/ENGINEER and the SUBCONTRACTOR regarding the gradation of rounded armor stone shall be resolved by reverting to the gradation testing specified in ASTM D5519 Method A.

### B. Sand

1. The SUBCONTRACTOR shall provide a 5-gallon sample of the sand to be used for the habitat restoration layer and amended sand enhanced residuals layer to the CONTRACTOR/ENGINEER.
2. SUBCONTRACTOR shall provide analytical results confirming that the sand meets DEQ clean fill criteria and DEQ Columbia Slough source control criteria provided by CONTRACTOR/ENGINEER.

### C. Granular Activated Carbon

1. The SUBCONTRACTOR shall provide a 5-gallon sample of the granular activated carbon to be used for the amended sand enhanced residuals layer to the CONTRACTOR/ENGINEER.

### D. AquaGate+PAC

1. The SUBCONTRACTOR shall provide a 1 pound sample of the AquaGATE+PAC to be used for the sediment cap to the CONTRACTOR/ENGINEER.

## 1.6 EQUIPMENT

- A. SUBCONTRACTOR shall provide clean equipment for the placement and transport of all materials.
- B. CONTRACTOR/ENGINEER shall approve all proposed equipment for placement of fill material prior to the start of cap construction.

## PART 2 PRODUCTS

### 2.1 ROUNDED ARMOR STONE

- A. Rounded armor stone shall consist of well graded, washed, subrounded to rounded alluvial gravel with mean grain size or D50 equal to or

PACIFIC CARBIDE SEDIMENT REMEDIATION

greater than 1.5 inches. Rounded armor stone should have a maximum diameter of 2.5 inches.

- B. The rounded armor stone shall be clean, without contamination, and free from foreign matter. Any foreign material adhering to or combined with the armoring as a result of stockpiling shall be removed prior to placement.
- C. Storage of armoring materials subsequent to shipment from the quarry and prior to permanent placement in the required work shall be subject to approval of the CONTRACTOR/ENGINEER.

2.2 SAND

A. Material to be used for the sand habitat layer of the RCM cap and the amended sand enhanced residuals layer shall be an imported, clean, granular material free of roots, large organic material, contaminants, and all other deleterious and objectionable material.

B. Sand shall meet the following characteristics:

1. Grain Size:

<u>. % Passing</u>	<u>. U.S. Sieve</u>
. 100	. ½ inch
. 80-100	. No. 10
. <5	. NO. 200

2. Physical characteristics: well-graded, subangular to subrounded sand.

3. Sand shall be free from chemical contaminants including but not limited to contaminants listed in the construction quality assurance plan included in the Contract Documents.

C. Sand shall be stockpiled onsite in accordance with the requirements listed in SECTION 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL.

**Sediment Cap Alternative 1 - Reactive Core Mat (includes subsection 2.3)**

2.3 GRANULAR ACTIVATED CARBON

A. Activated carbon for use in the amended sand enhanced residuals layer will meet the following physical requirements:

- 1. Granular activated carbon with virgin material of coconut shell, bituminous coal base, or CONTRACTOR/ENGINEER approved alternate.
- 2. An effective size of 0.55 to 0.75 millimeters.
- 3. Mesh size, U.S. sieve 12x40.

B. Material shall be stored in accordance with the manufacturer's requirements.

C. The activated carbon application rate to sand is 5 percent by weight.

**Sediment Cap Alternative 2 - AquaGate+PAC and Rounded Armor Stone Sediment Cap (includes subsection 2.4)**

2.4 AQUAGATE+PAC

- A. SUBCONTRACTOR shall use AquaGate+PAC by AquaBlok or CONTRACTOR/ENGINEER approved equivalent to blend with rounded armor stone as an alternative to RCM and amended sand residuals layer.
- B. The expected powdered activated carbon dosing rate in the AquaGate+PAC product is 10 percent by weight.

PART 3 EXECUTION

3.1 GENERAL

- A. Prior to import to the site, SUBCONTRACTOR shall verify the character, quantity, and quality of all material to be placed. If the material does not satisfy the quality and performance requirements specified herein as determined by the CONTRACTOR/ENGINEER, the SUBCONTRACTOR shall obtain material that does meet the requirements at the SUBCONTRACTOR's expense.
- B. The SUBCONTRACTOR shall identify and verify with the Contract Drawings, the required lines, levels, contours, and datum locations. Any discrepancies shall be immediately reported to the CONTRACTOR/ENGINEER.
- C. If Alternative 1 - RCM Sediment Cap is selected, the armoring placement shall follow RCM material placement as quickly as possible to minimize the potential for erosive forces to act on the capping material.
- D. The CONTRACTOR/ENGINEER reserves the right to require the SUBCONTRACTOR to remove material placed above or outside the designated lines, grades, and tolerances at the SUBCONTRACTOR's expense, unless the work was directed by the CONTRACTOR/ENGINEER.

3.2 PREPARATION

- A. No rock armor, sand, RCM, or AquaGate+PAC and rounded armor stone sediment cap shall be placed until the subgrade is inspected and approved by the CONTRACTOR/ENGINEER.

**Sediment Cap Alternative 1 - Reactive Core Mat (includes subsections 3.3 through 3.5)**

3.3 PLACEMENT OF ROUNDED ARMOR STONE

- A. The SUBCONTRACTOR shall utilize the most appropriate methods, equipment, and placement rates for placement of armoring in each area identified on the Contract Drawings.
- B. The armoring shall be placed in a manner that will not cause segregation of the stone sizes and will minimize voids.
- C. Placement of armoring shall be accomplished such that the deposited material does not disrupt or penetrate the other cap components. The SUBCONTRACTOR shall avoid using equipment and placement rates that result in the displacement of and/or excessive mixing with the RCM material or adjacent sediments.



- D. The armoring layer shall not exceed 150% of the thickness specified thickness on the Drawings. Armor placed in excess of 150% of the specified thickness may be required to be removed from the Site by the SUBCONTRACTOR and will not be reimbursed.
- E. SUBCONTRACTOR shall use a diver to verify thickness of armor stone layer. A minimum of one measurement shall be collected for every 1000 square feet of capping area. SUBCONTRACTOR may use diver-implemented temporary excavation of armor material (careful removal of material over the RCM, measurement of the cap thickness, and replacement of that armor material) or diver inspection of armor thickness on graduated grade stakes (placed prior to armor placement) as approved by CONTRACTOR/ENGINEER.
- F. The armoring layer shall not be less than the thickness specified on the Contract Drawings.

#### 3.4 MIXING OF AMENDED SAND ENHANCED RESIDUALS LAYER

- A. Amended sand enhanced residuals layer shall be mixed to a ratio of at least 5% (+1%) by dry weight and verified with field testing. The mixing can occur onsite or offsite.
- B. The activated carbon amendment shall be blended with sand to an even consistency before application. Water shall be applied during mixing to provide initial hydration of the activated carbon and minimize generation of dust.

#### 3.5 PLACEMENT OF AMENDED SAND ENHANCED RESIDUALS LAYER

- A. When placing clean cap material directly on top of contaminated sediment, the SUBCONTRACTOR shall regulate placement activities in order to minimize the potential for mixing of contaminated sediment with sand residuals cover material.
- B. The SUBCONTRACTOR shall utilize the most appropriate methods, equipment, and placement rates for placement of amended sand in each area identified on the Contract Drawings.
- C. The SUBCONTRACTOR shall estimate the volume or tonnage of sand, activated carbon, and polymer required to be placed in each grid area and shall monitor the delivered quantity of material.
- D. The material shall be placed evenly and methodically in order to achieve the prescribed sand thickness.
- E. The amended sand enhanced residuals layer shall not exceed +150 percent of the design thickness as shown in the Contract Drawings.
- F. Sudden discharges of large volumes of sand that result in a cap thickness that exceeds the allowable tolerances shall be avoided.
- G. SUBCONTRACTOR shall use a diver to verify thickness of amended sand enhanced residuals layer. A minimum of one measurement shall be collected for every 400 square feet of capping area.
- H. SUBCONTRACTOR shall provide advance notice to the CONTRACTOR/ENGINEER of any cap verification activities and allow the CONTRACTOR/ENGINEER's personnel to observe the activities, if so requested.

**Sediment Cap Alternative 2 - AquaGate+PAC and Rounded Armor Stone Sediment Cap (includes subsections 3.6 through 3.7)**

3.6 MIXING OF AQUAGATE+PAC AND ROUNDED ARMOR STONE

- A. The AquaGate+PAC and rounded armor stone shall be mixed to a ratio of 1 part AquaGate+PAC to 3 parts rounded armor stone by volume in accordance with the AquaGate+PAC manufacturer's recommendations and be verified with field testing. The mixing can occur onsite or offsite.
- B. The AquaGate+PAC and rounded armor stone shall be blended to an even consistency before application, again in accordance with the AquaGate+PAC manufacturer's recommendations.

3.7 PLACEMENT OF AQUAGATE+PAC AND ROUNDED ARMOR STONE SEDIMENT CAP

- A. The SUBCONTRACTOR shall utilize the most appropriate methods, equipment, and placement rates for placement of AquaGate+PAC and rounded armor stone sediment cap in each area identified on the Contract Drawings.
- B. The AquaGate+PAC and rounded armor stone sediment cap shall be placed in a manner that will not cause segregation of the stone sizes and will minimize voids.
- C. Placement of AquaGate+PAC and rounded armor stone sediment cap shall be accomplished such that the deposited material does not disrupt or penetrate the existing sediment surface and the non-woven filter fabric (where required as shown on the Contract Drawings). The SUBCONTRACTOR shall avoid using equipment and placement rates that result in the displacement of and/or excessive mixing with underlying and adjacent sediments.
- D. The AquaGate+PAC and rounded armor stone sediment cap layer shall not exceed 150% of the thickness specified thickness on the Drawings. AquaGate+PAC and rounded armor stone sediment cap placed in excess of 150% of the specified thickness may be required to be removed from the Site by the SUBCONTRACTOR and will not be reimbursed.
- E. SUBCONTRACTOR shall use a diver to verify thickness of the AquaGate+PAC and rounded armor stone sediment cap. A minimum of one measurement shall be collected for every 1000 square feet of capping area. SUBCONTRACTOR may use diver-implemented temporary excavation of armor material (careful removal of AquaGate+PAC and rounded armor stone sediment cap, measurement of the cap thickness, and replacement of that AquaGate+PAC and rounded armor stone sediment cap) or diver inspection of AquaGate+PAC and rounded armor stone sediment cap thickness on graduated grade stakes (placed prior to cap placement) as approved by CONTRACTOR/ENGINEER.
- F. The AquaGate+PAC and rounded armor stone sediment cap shall not be less than the thickness specified on the Contract Drawings.

3.8 PLACEMENT OF SAND HABITAT LAYER

- A. The SUBCONTRACTOR shall utilize the most appropriate methods, equipment, and placement rates for placement of sand in each area identified on the Contract Drawings.
- B. The SUBCONTRACTOR shall estimate the volume or tonnage of sand material required to be placed in each grid area and shall monitor the delivered quantity of material.

## PACIFIC CARBIDE SEDIMENT REMEDIATION

- C. The material shall be placed evenly and methodically in order to achieve the prescribed sand thickness.
- D. Sand habitat layer shall not exceed 200% percent of the design thickness as shown in the Contract Drawings.
- E. Sudden discharges of large volumes of sand that result in a cap thickness that exceeds the allowable tolerances shall be avoided.
- F. SUBCONTRACTOR shall provide advance notice to the CONTRACTOR/ENGINEER of any cap verification activities and allow the CONTRACTOR/ENGINEER's personnel to observe the activities, if so requested.

### 3.9 QUALITY CONTROLS

- A. The SUBCONTRACTOR shall confirm that the sediment cap and sand habitat layers have been placed to the specified thickness, grades, and locations specified in the Contract Drawings by monitoring the placement of the materials. Monitoring may be accomplished by diver inspection and performing topographic or bathymetric surveys prior to, during, and after placement, as appropriate.
- B. SUBCONTRACTOR shall provide the CONTRACTOR/ENGINEER with a daily capping progress report that includes:
  - 1. A drawing showing material placement.
  - 2. The type of material that was placed.
  - 3. The dimensional area over which the material was placed.
  - 4. The tonnage of the material that was placed.
- C. SUBCONTRACTOR will perform final verification of cap thickness.

### 3.10 WATER QUALITY MONITORING

- A. In addition to any measures required to prevent dispersion of fines into the water column, the SUBCONTRACTOR shall protect the environment as described in Section 01 57 19 ENVIRONMENTAL PROTECTION.

-- End of Section --



# Exhibit D

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## Permits and Regulatory Approvals



MAUL  
FOSTER  
ALONGI

Department of State Lands  
775 Summer Street, Suite 100  
Salem, OR 97301-1279  
☎ 503-986-5200

DSL File No.	<u>64322-PW</u>
Type:	<u>Permit Waiver</u>
Waterway:	<u>Columbia Slough</u>
County:	<u>Multnomah</u>
Expiration Date:	<u>October 13, 2024</u>

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**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY**

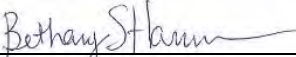
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**IS AUTHORIZED IN ACCORDANCE WITH OAR 141-085-0595(1) and ORS 465.315(3) TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE NOTICE, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:**

1. This Permit Waiver does not authorize trespass on the lands of others. The Permit Waiver holder must obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. All work done under this Permit Waiver must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
3. Violations of the terms and conditions of this Permit Waiver are subject to administrative and/or legal action, which may result in revocation of the Permit Waiver or damages. The Permit Waiver holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this Permit Waiver.
4. Employees of the Department of State Lands and all duly authorized representatives of the Director must be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this Permit Waiver.
5. In issuing this Permit Waiver, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the Permit Waiver notice, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390, and related administrative rules.
6. Permit Waiver holder must defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.
7. Authorization from the U.S. Army Corps of Engineers may also be required.

NOTICE: If removal is from state-owned submerged and submersible land, the Waiver holder must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 to 274.940 if you want a transfer of title; public rights to such filled lands are not extinguished by issuance of this Permit Waiver. This Permit Waiver does not relieve the waiver holder of an obligation to secure appropriate leases from DSL, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact Department of State Lands, 503-986-5200.

Bethany Harrington,, Northern Operations Manager  
Aquatic Resource Management  
Oregon Department of State Lands

  
**Authorized Signature**

October 13, 2023  
**Date**

## ATTACHMENT A

**Permit Waiver Holder: Oregon Department of Environmental Quality**

**Project Name: Pacific Carbide Sediment Remediation**

**Substantive Requirement for DSL File No. 64322-PERMIT WAIVER**

### **READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT WAIVER**

**The project site may be inspected by the Department of State Lands (DSL) as part of our monitoring program. A copy of this Permit Waiver must be available at the work site whenever authorized operations are being conducted.**

1. **Responsible Party:** By signature on the notice, Sarah Miller is acting as the representative of Oregon Department of Environmental Quality. By proceeding under this waiver, Oregon Department of Environmental Quality agrees to comply with and fulfill all terms and conditions of this waiver, unless the waiver is officially transferred to another party as approved by DSL.
2. **Authorization to Conduct Removal and/or Fill:** This permit authorizes 0 acres of wetland and 1,200 linear feet of waterway impacts with associated removal and fill of material in the locations bulleted below, in Multnomah County, as referenced in the application, map and drawings (See Attachment B for project location, dated September 11, 2023).
  - a. 1N 1E 5C Tax Lot 800
  - b. 1N 1E 5DB Tax Lot 400
  - c. 1N 1E 5DC Tax Lot 500
  - d. 1N 1E 5DC Tax Lot 300, 400
  - e. 1N 1E 5DC Tax Lot 200
  - f. 1N 1E 5DB Tax Lot 300
  - g. 1N 1E 5DB Tax Lot n/a (railroad crossing)
  - h. 1N 1E 5 - Tax Lot n/a (railroad crossing)
3. **Work Period in Jurisdictional Areas:** Fill or removal activities below the ordinary high water elevation of Columbia Slough must be conducted between June 15 and September 15, unless otherwise coordinated with Oregon Department of Fish and Wildlife and approved in writing by DSL. If fish eggs are observed within the project area, work must cease and DSL contacted immediately.
4. **Changes to the Project or Inconsistent Requirements from Other Permits:** It is the Department of Environmental Quality's responsibility to ensure that all state, federal and local permits are consistent and compatible with the final approved project plans and the project as executed. Any changes made in project design, implementation and/or operating conditions to comply with conditions imposed by other permits resulting in removal/fill activity must be reviewed by DSL prior to implementation.

### **Pre-Construction**

5. **DSL Proprietary Authorization Required Before Beginning Work:** Prior to the start of work within state-owned submerged and submersible lands, the Waiver holder must obtain the following proprietary authorization(s): Short Term Access Agreement.



6. **Pre-construction Resource Area Fencing or Flagging:** Prior to any site grading, the boundaries of the avoided wetlands, waterways, and riparian areas adjacent to the project site must be surrounded by noticeable construction fencing or flagging. The marked areas must be maintained during construction of the project and be removed immediately upon project completion.
7. **Wildlife Protection Silt Fencing:** Install solid silt fence around the perimeter of the project work area on the upland bank area to prevent wildlife from moving into the active work area during the duration of the project.

### General Construction Conditions

8. **Erosion Control Methods:** The following erosion control measures (and others as appropriate) shall be installed prior to construction and maintained during and after construction as appropriate, to prevent erosion and minimize movement of soil into waters of this state.
  - a. All exposed soils shall be stabilized during and after construction in order to prevent erosion and sedimentation.
  - b. Filter bags, sediment fences, sediment traps or catch basins, leave strips or berms, or other measures shall be used to prevent movement of soil into waterways and wetlands.
  - c. To prevent erosion, use of compost berms, impervious materials or other equally effective methods, shall be used to protect soil stockpiled during rain events or when the stockpile site is not moved or reshaped for more than 48 hours.
  - d. Unless part of the authorized permanent fill, all construction access points through, and staging areas in, riparian and wetland areas shall use removable pads or mats to prevent soil compaction. However, in some wetland areas under dry summer conditions, this requirement may be waived upon approval by DSL. At project completion, disturbed areas with soil exposed by construction activities shall be stabilized by mulching and native vegetative plantings/seeding. Sterile grass may be used instead of native vegetation for temporary sediment control. If soils are to remain exposed more than seven days after completion of the work, they shall be covered with erosion control pads, mats or similar erosion control devices until vegetative stabilization is installed.
  - e. Where vegetation is used for erosion control on slopes steeper than 2:1, a tackified seed mulch shall be used so the seed does not wash away before germination and rooting.
  - f. Dredged or other excavated material shall be placed on upland areas having stable slopes and shall be prevented from eroding back into waterways and wetlands.
  - g. Erosion control measures shall be inspected and maintained as necessary to ensure their continued effectiveness until soils become stabilized.
  - h. All erosion control structures shall be removed when the project is complete and soils are stabilized and vegetated.
9. **Hazardous, Toxic, and Waste Material Handling:** Petroleum products, chemicals, fresh cement, sandblasted material and chipped paint, material treated with leachable preservatives or other deleterious waste materials shall not be allowed to enter waters of this state. Machinery refueling is to occur at least 150 feet from waters of this state and confined in a designated area to prevent spillage into waters of this state. Barges shall have containment system to effectively prevent petroleum products or other deleterious material from entering waters of this state. Project-related

spills into waters of this state or onto land with a potential to enter waters of this state shall be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.

10. **Archaeological Resources:** If any archaeological resources, artifacts or human remains are encountered during construction, all construction activity must immediately cease. The State Historic Preservation Office must be contacted at 503-986-0674. You may be contacted by a Tribal representative if it is determined by an affected Tribe that the project could affect Tribal cultural or archeological resources.
11. **Construction Corridor:** There must be no removal of vegetation or heavy equipment operating or traversing outside the designated construction corridor or footprint (Figure Titled Remedial Action Work Area, and Drawing C0.1 through C5.2).
12. **Hazards to Recreation, Navigation or Fishing:** The activity must be timed so as not to unreasonably interfere with or create a hazard to recreational or commercial navigation or fishing.
13. **Operation of Equipment in the Water:** Heavy equipment may be positioned below ordinary high water or highest measured tide if the area is isolated from the waterway and aquatic organism salvage is completed. All machinery operated below ordinary high water (OHW) or highest measured tide (HMT) elevation must use vegetable-based hydraulic fluids, be steam cleaned and inspected for leaks prior to each use, and be diapered to prevent leakage of fuels, oils, or other fluids below OHW or HMT elevation. Any equipment found to be leaking fluids must be immediately removed from and kept out of OHW or HMT until repaired. Equipment staging, cleaning, maintenance, refueling, and fuel storage must be at least 150 feet from OHW or HMT and wetlands to prevent contaminates from entering waters of the state.
14. **Work Area Isolation:** The work area must be isolated from the water during construction by using a coffer dam or similar structure. All structures and materials used to isolate the work area must be removed immediately following construction and water flow returned to pre-construction conditions.
15. **Fish Salvage Required:** Fish must be salvaged from the isolation area. Permits from NOAA Fisheries and Oregon Department of Fish and Wildlife, Fish Research are required to salvage fish. Fish salvage permit information may be obtained by contacting ODFW Fish Research at 503-947-6254 or Fish.Research@state.or.us.
16. **ODFW Wildlife Capture, Holding, Transport, and Relocation Permit:** An ODFW Wildlife Capture, Holding, Transport, and Relocation permit is required prior to starting work.
17. **Turtle Search:** During project implementation and immediately prior to laydown of the reactive core mat and sand cover layer, use a tool to gently probe sediment/substrate suitable for providing turtle hiding cover to encourage any turtles present to move away, avoiding/minimizing risk of being buried by the core mat or sand layer.
18. **Raising or Redirecting Water:** The project must not cause water to rise or be redirected and result in damage to structures or property on the project site as well as adjacent, nearby, upstream, and downstream of the project site.

19. **Temporary Ground Disturbances:** All temporarily disturbed areas must be returned to original ground contours at project completion.
20. **Site Revegetation Required:** Site rectification for temporary impacts to the riparian area must be conducted according to the rehabilitation plan in the application, Figures C5.0, C5.1, and C5.2. Failure to rectify the site may result in compensatory mitigation.
21. **Woody Vegetation Planting Required:** Planting of native woody vegetation must be completed before the next growing season after re-establishment of the pre-construction contours.

### **Monitoring and Reporting Requirements**

22. **Post-Construction Report Required:** A post-construction report demonstrating as-built conditions and discussing any variation from the approved application must be provided to DSL within 90 days of revegetation. The post-construction report must include:
- a. Complete Monitoring Report Cover Sheet, which includes permit number, permit holder name, monitoring date, and a statement of whether the project was constructed as authorized.
  - a. A scaled drawing, accurate to 1-foot elevation, clearly showing the following:
    1. Finished contours of the site, using the same datum as used in the application.
    2. Current tax lot and right-of-way boundaries, north arrow, scale bar.
    3. Photo point locations.
    4. Permanently and temporarily impacted wetland and waterway boundaries identified separately, with square foot listed.
    5. The area seeded, with the square foot area listed.
    6. The area planted with trees and shrubs, with the square foot area listed.
  - b. Planting table summarizing the quantity and density of each species installed. Include both common name and Latin name. Separate different planting areas into separate tables.
  - c. Describe any deviation from the approved application and authorization with explanations why there were deviations and if DSL approved these authorizations (include date and staff name). If DSL did not approve the deviations, discuss why approval was not obtained prior to performing that work. DSL will review to determine if any further action is required.
23. **Annual Monitoring Reports Required:** Monitoring is required until DSL has officially released the site from further monitoring. The waiver holder must monitor the site to determine whether the site is meeting performance standards for a minimum period of 3 growing seasons after completion of all the initial plantings. Annual monitoring reports are required and are due by November 1. Failure to submit the required monitoring report by the due date may result in an extension of the monitoring period, forfeiture of the financial security and/or enforcement action.
24. **Extension of the Monitoring Period:** The monitoring period may be extended, at the discretion of DSL, for failure of the site to meet performance standards for the final two consecutive years without corrective or remedial actions (such as irrigation, significant weed/invasive plants treatment or replanting) or when needed to evaluate corrective or remedial actions.



**25. Contents of the Annual Monitoring Report:** The annual monitoring report must include the following information:

- a. Completed Monitoring Report Cover Sheet, which includes waiver number, waiver holder name, monitoring date, report year, performance standards, and a determination of whether the site is meeting performance standards.
- b. Site location map(s) that clearly shows the impact boundaries.
- c. Site Plan that clearly shows at least the following.
  1. The area seeded, with the square foot area listed.
  2. The area planted, with the square foot area listed.
  3. Current tax lot boundaries, finished contours, north arrow, and scale bar.
  4. Permanent monitoring plot locations that correspond to the data collected.
  5. Permanent photo-points that correspond to the photo numbers provided in the report.
  6. Waterways and riparian areas clearly identified separately and the area (square foot or acreage) of each noted.
- d. A brief narrative that describes maintenance activities and recommendations to meet success criteria. This includes when irrigation occurred and when the above ground portion of the irrigation system was or will be removed from the site.
- e. Data collected to support the conclusions related to the status of the site relative to the performance standards listed in this waiver (include summary/analysis in the report and raw data in the appendix). Data should be submitted using the DSL Mitigation Monitoring Vegetation Spreadsheet or presented in a similar format as described in DSL's Routine Monitoring Guidance for Vegetation. Data should be separated by different planting areas.
- f. Photos from fixed photo points (include in the appendix).
- g. Describe any deviation from the approved application and authorization with explanations why there were deviations and if DSL approved these authorizations (include date and staff name). If DSL did not approve the deviations, discuss why approval was not obtained prior to performing that work. DSL will review to determine if any further action is required.
- h. Other information necessary or required to document compliance with the performance standards listed in this waiver.

**26. Corrective Action May Be Required:** DSL retains the authority require corrective action in the event the performance standards are not accomplished at any time within the monitoring period.

### **Performance Standards**

**To be deemed successful, the project site areas must meet the following performance standards, as determined by DSL:**

**27. Establishment of Permanent Monitoring Locations Required:** Permanent plot locations must be established during the first annual monitoring in sufficient number and locations to be representative of the site. The permanent plot locations must be clearly marked on the ground.

### ***Upland Buffers and Riparian Areas***

**28. Herbaceous Species Cover:** The cover in the herbaceous stratum is at least 60%.

**29. Woody Vegetation:** The density of woody vegetation is at least 1,600 live native plants (shrubs) and/or stems (trees) per acre OR the cover of native woody vegetation on the site is at least

50%. Native species volunteering on the site may be included, dead plants do not count, and the standard must be achieved for 2 years without irrigation.

# ATTACHMENT B

Permit Waiver Holder: Oregon Department of State Lands

Project Name: Pacific Carbide Sediment Remediation

Maps and Drawings for Removal/Fill Permit Waiver No. 64322-PW

## PACIFIC CARBIDE SEDIMENT REMEDIATION (90% DESIGN)

PREPARED FOR:  
**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY**  
LOCATED IN SEC. 5, T. 1 N., R. 1 E., W.M., MULTNOMAH COUNTY, PORTLAND, OREGON




PORTLAND OREGON  
OREGON DEQ  
PACIFIC CARBIDE 90% DESIGN

NO. 1	TITLE SHEET	DATE	REV.	BY	CHKD.	APP'D.	DESC.

COVER  
11-1  
000

### PROJECT CONTACTS

<b>CLIENT</b> ENVIRONMENTAL ENGINEER 3300 N. COMMERCIAL STREET PORTLAND, OREGON 97208 503.281.1500 WWW.ENVIRONMENTAL-ENGINEER.COM	<b>PREPARED FOR:</b> OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY 300 NE Oregon Street Portland, Oregon 97232 503.281.1500 WWW.OREGON.GOV/DEQ
<b>LEADS ARCHITECT</b> 3300 N. COMMERCIAL STREET PORTLAND, OREGON 97208 503.281.1500 WWW.ENVIRONMENTAL-ENGINEER.COM	<b>PROJECT NO.</b> 64322-PW



VICINITY MAP  
NOT TO SCALE

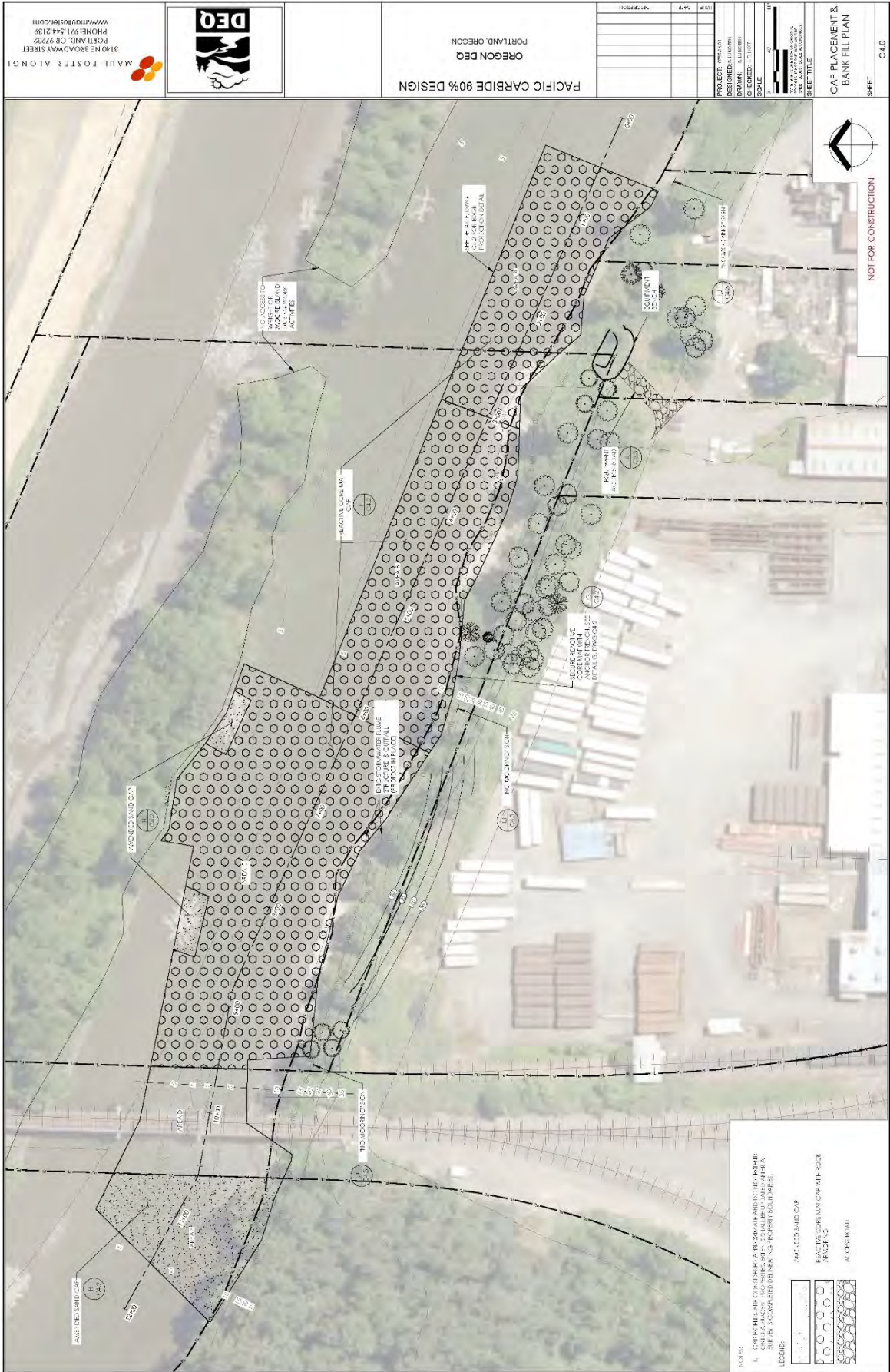
### GENERAL NOTES

1. APPROVED PERMITS AND CONDITIONS OF PERMITS SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONDITIONS OF PERMITS FROM THE APPLICABLE AGENCIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONDITIONS OF PERMITS FROM THE APPLICABLE AGENCIES.
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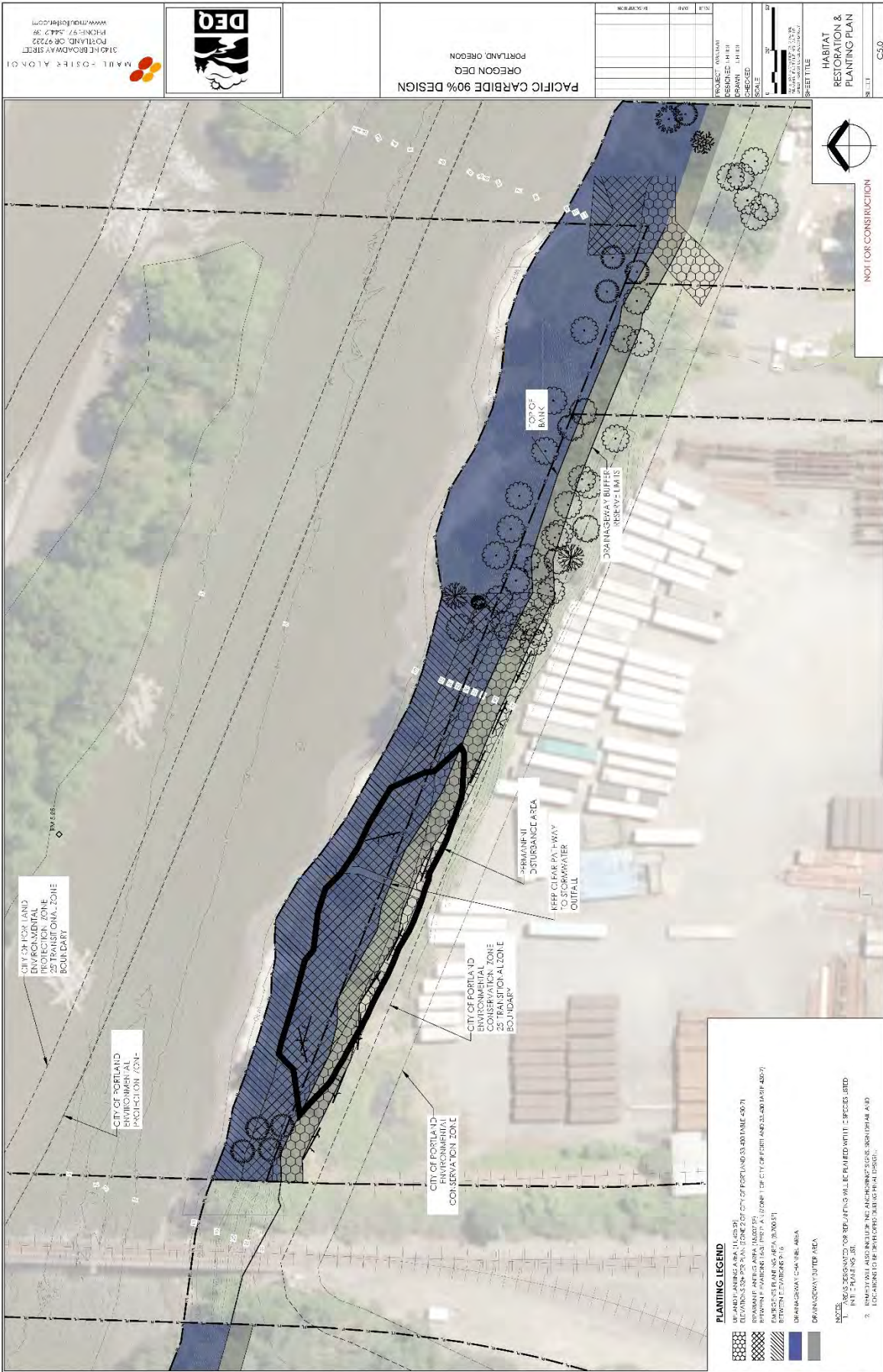
### SHEET INDEX

NO.	TITLE	DATE	REV.	BY	CHKD.	APP'D.	DESC.









MAINT. FOR FIRE ALONG OI  
 5100 N. BROADWAY, SUITE 200  
 PORTLAND, OR 97232  
 PHONE: 503.544.7399  
 WWW.MTDISTOR.COM

PACIFIC CARRIAGE 90% DESIGN  
 OREGON DEQ  
 PORTLAND, OREGON

PROJECT: 00000000  
 PERIOD: 10/10/10  
 DATE: 10/10/10  
 SCALE: 1" = 100'  
 SHEET TITLE: HABITAT RESTORATION & PLANTING PLAN  
 SHEET NO.: CS-10

NOT FOR CONSTRUCTION



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT  
P.O. BOX 2946  
PORTLAND, OR 97208-2946

February 25, 2022

Regulatory Branch  
Corps No. NWP-2020-439-1

Ms. Sarah Miller  
Oregon Department of Environmental Quality  
700 NE Multnomah Street  
Suite #600  
Portland, OR 97232  
Sarah.miller@deq.state.or.us

Dear Ms. Miller:

The U.S. Army Corps of Engineers (Corps) received your request for Department of the Army authorization to conduct the Pacific Carbide Sediment Remediation project. The work will place up to 2,000 cubic yards (cy) of fill material to cap the Pacific Carbide site and place up to 8 cubic yards of riprap to construct a pad for an existing outfall structure. The project is proposed in the Columbia Slough (Slough) located at 9901 North Hurst Avenue in Portland, Multnomah County, Oregon at Latitude/Longitude: 45.5958°, -122.7106°. This letter verifies your project as depicted on the enclosed drawings (Enclosure 1) is authorized by Nationwide Permit (NWP) No. 38, Cleanup of Hazardous and Toxic Waste (Federal Register, December 27, 2021, Vol. 86, No. 245) and NWP No. 43, Stormwater Management Facilities (Federal Register, January 13, 2021, Vol. 86, No. 8)

The work will cap contaminated sediment within the Slough. Up to 2,000 cy of fill will be placed over 14,000 square yards below the ordinary high water mark (OHWM) for the construction of a sediment cap over contaminated soils. The project includes: placement of an organoclay amended reactive-core mat (RCM) sediment cap with a 3-inch-thick rounded river rock (sized <2.5-inch diameter) layer and 1-inch-thick sand layer across three areas (Areas A, B, and C); placement of a 4-inch-thick sand cap amended with 5 percent activated carbon in areas inaccessible to RCM placement (below existing refugia structures) or with lower sediment contaminant concentrations (Area E). The rounded river rock layer is intended to provide erosion protection to the underlying RCM, prevent the disruption of the RCM, and impede benthic organism burrowing into the underlying RCM and underlying contaminated sediment.

The proposed project is split into several capping areas labeled A through E. Area D, under the railroad bridge, is not shown and will not be capped at this time.

Temporary fill will occur in the form of anchors to secure the turbidity curtain during construction of the in-water cap. Work will occur from shore or from a barge using divers and crane to place materials at the site.

A riprap drainage pad will be constructed under an existing outfall pipe. Up to 8 cy of riprap will be placed over 100 square feet of clean cap sediment and reactive core mat below the OHWM.

Upland work includes excavation of riverbank soil above the OHWM, and the planting of native trees, shrubs, and groundcovers within the area of riverbank excavation. Approximately 150 cy of sediment will be removed from the Slough shoreline for installation of anchor trench for the RCM. An estimated 24,400 square feet (2,711 square yards) of the upland bank will be disturbed, and 3,175 cy of soil removed from the bank (all above OHWM). A total of 41 trees of various sizes will be removed from the riverbank to accommodate the excavation. The project includes planting of approximately 0.56 acres (2,711 square yards) of dense native vegetation, within the excavation and access areas.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed Nationwide Permit 38 Terms and Conditions (Enclosure 2); Nationwide Permit 43 Terms and Conditions (Enclosure 3); the Oregon Department of Environmental Quality (DEQ) 401 Water Quality Certification Conditions (Enclosure 4); and the following special conditions:

- a. Permittee shall have a Qualified Professional Archeologist meeting the requirements of 36 Code of Federal Regulations Part 61 Appendix A present to monitor for archeological objects during all portions of the project-related earthmoving disturbances.
- b. If human remains or cultural resources are discovered during the performance of the authorized work the permittee shall implement the Inadvertent Discovery Plan procedures (Enclosure 5) and immediately notify the U.S. Army Corps of Engineers, Portland District, Regulatory Branch.
- c. Within 90 days of completing earthmoving disturbances, the permittee shall submit a brief monitoring report prepared by the professional archeologist that performed the monitoring to the address on the permit letterhead or by email to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) that describes the monitoring activities. The monitoring report shall include the following components: the permit number; name(s) and qualification(s) of archeologist(s) that did the monitoring; topographic and aerial map showing area monitored; dates of monitoring;

description of activities monitored to include depth; description of cultural material identified or lack thereof; and photos of the monitoring activities.

- d. This Corps permit does not authorize you to take an endangered species in particular those species identified in Enclosure 6. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a biological opinion under ESA Section 7, with “incidental take” provisions with which you must comply). The National Marine Fisheries Service (NMFS) Stormwater, Transportation and Utilities programmatic biological opinion dated March 14, 2014 (NMFS Reference Number NWR-2013-10411), contains the mandatory terms and conditions to implement the reasonable and prudent measures that are provided in the “incidental take” statement associated with the opinion. Your authorization under this Corps permit is conditional upon your compliance with all of the applicable mandatory terms and conditions associated with the incidental take statement. Failure to comply with the applicable terms and conditions associated with incidental take of this opinion, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute noncompliance with your Corps permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its opinion and with the ESA.
- e. Permittee shall fully implement all applicable Project Design Criteria (PDC) of the *SLOPES V Stormwater, Transportation and Utilities* programmatic biological opinion. A detailed list of the PDCs are enclosed (Enclosure 6). The applicable PDCs for the project include numbers: 13, 14, 18, 23, 25-27, and 34.
- f. Permittee shall complete and submit an *Action Completion Report* form, which is provided in Enclosure 6, within 60 days of completing all work below ordinary high water. Submit the form by email to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) and include the Corps project number and county in the email subject line.
- g. Permittee shall complete and submit a *Salvage Reporting Form*, which is provided in Enclosure 6, within 60 days of completing a capture and release of ESA-listed fish. Submit the form by email to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) and include the Corps project number in the email subject line.
- h. All in-water work shall be performed during the in-water work period of June 15 to September 15 to minimize impacts to aquatic species. Exceptions to this time period requires specific approval from the Corps and the National Marine Fisheries Service.



- i. Permittee shall isolate and confine the worksite from the active channel to minimize turbidity and prevent pollutants from entering the waterbody.
- j. Permittee shall submit an as built report to the Corps by December 31 of the year grading and fill placement is complete. The report shall contain photographs of the site and the initial grading survey of the bank. A map identifying the locations and directions of the photographs shall be included in the as-built report. The as-built report shall be provided by e-mail to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) and the email subject line shall include: NWP-2020-439-1, County. If you are submitting files larger than 20 MB, contact your county Regulatory Project Manager for instructions.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act and the National Historic Preservation Act. The requirements of the Endangered Species Act were met through a programmatic biological opinion as listed in the special condition above. The complete text of the biological opinion is available for your review on our website (<https://www.nwp.usace.army.mil/environment/>). We have determined the project complies with the requirements of these laws provided you comply with all of the permit general and special conditions.

The DEQ has issued a 401 Water Quality Certification for this project. No further coordination with DEQ is required provided the work is performed in accordance with all of the enclosed conditions.

Please note, Portland District NWP Regional General Condition 3, *Cultural Resources and Human Burials-Inadvertent Discovery Plan*, describes procedures should an inadvertent discovery occur. You must ensure that you comply with this condition during the construction of your project.

The Columbia Slough is a water of the U.S. If you believe this is inaccurate, you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

The verification of this NWP is valid until March 14, 2026, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2026, you will have until March 14, 2027, to complete the activity under the enclosed terms and conditions of this NWP. If the work cannot be completed by March 14, 2027, you will need to obtain a new NWP verification or authorization by another type of Department of the Army permit.

Our verification of this NWP is based on the project description and construction methods provided in your permit application. If you propose changes to the project, you must submit revised plans to this office and receive our approval of the revisions prior to performing the work. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, state, and other federal permits that apply to this project.

Upon completing the authorized work, you must fill out and return the enclosed *Compliance Certification* form (Enclosure 7). We would like to hear about your experience working with the Portland District, Regulatory Branch. Please complete a customer service survey form available on our website (<https://regulatory.ops.usace.army.mil/customer-service-survey/>).

If you have any questions regarding this NWP verification, please contact Ms. Melody White by telephone at (503) 808-4385 or by email at [melody.j.white@usace.army.mil](mailto:melody.j.white@usace.army.mil).

FOR THE COMMANDER, MICHAEL D. HELTON, PMP, COLONEL, CORPS OF ENGINEERS, DISTRICT COMMANDER:

*Katharine A. Mott*

For: William D. Abadie  
Chief, Regulatory Branch

Enclosures

cc:

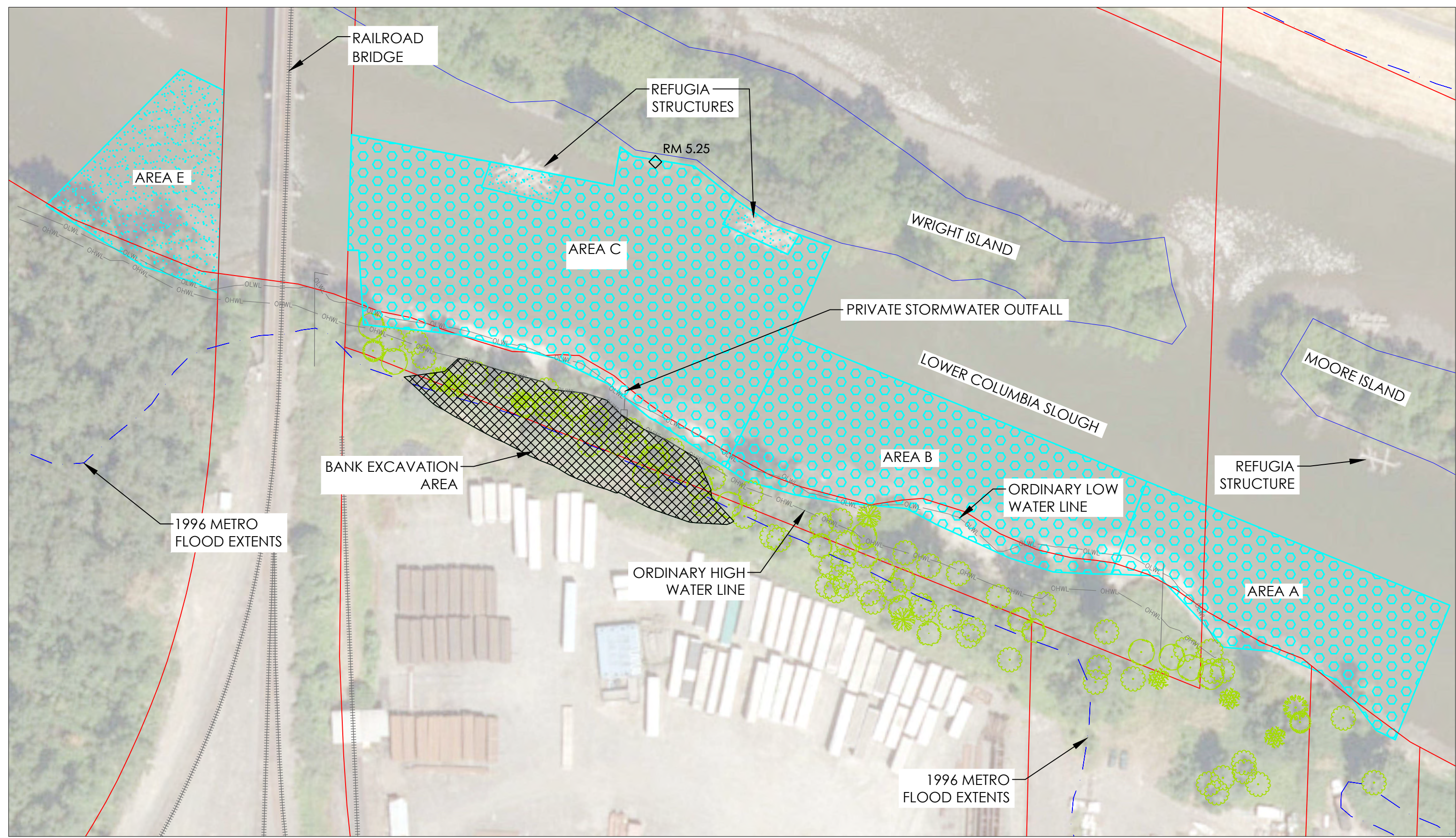
Maul Foster & Alongi, Inc. (Joshua Elliott, [jelliott@maulfoster.com](mailto:jelliott@maulfoster.com))

Oregon Department of State Lands (Melinda Butterfield,  
[Melinda.butterfield@dsl.state.or.us](mailto:Melinda.butterfield@dsl.state.or.us))

Oregon Department of Environmental Quality (Haley Teach,  
[haley.teach@deq.state.or.us](mailto:haley.teach@deq.state.or.us))



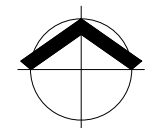
FILENAME: G:\00\_MFA\_Civil\_3D\00\_PROJECTS\0785.16 DEQ - Pacific Carbide\01\_Remedial Design Development\FIGURES\Fig\_Remedial Action Work Areas.dwg  
PLOTTED BY: Evelyn Lundeen  
PLOTTED ON: 2021-08-25 4:53 PM



**MAUL FOSTER ALONGI**  
971.544.2139 | www.maufoster.com  
THIS FIGURE PREPARED AS SUPPLEMENTAL VISUAL INFORMATION ONLY AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES. ONLY PLAN SHEETS APPROVED, STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF GOVERNING JURISDICTION SHALL BE USED FOR CONSTRUCTION. ADDITIONALLY, ONLY PLANS APPROVED BY THE APPLICABLE GOVERNING JURISDICTION(S) SHALL BE USED FOR FINAL CONSTRUCTION UNLESS OTHERWISE EXPRESSLY NOTED IN WRITING BY THE ENGINEER OF RECORD.

**LEGEND:**  
[Cyan Dots] AMENDED SAND CAP  
[Cyan Circles] REACTIVE CORE MAT  
[Cyan Squares] CAP WITH ROCK ARMORING

0 100' 200'  
**NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.**



**Figure**  
**Remedial Action Work Areas**  
Pacific Carbide Sediment Remediation  
Portland, Oregon



# DRAWINGS





# SITE VICINITY MAP



### SHEET INDEX:

- C1 - SITE VICINITY MAP
- C2 - PROJECT OVERVIEW MAP
- C3 - EXISTING CONDITIONS PLAN - WEST
- C4 - EXISTING CONDITIONS PLAN - EAST
- C5 - PROPOSED SEDIMENT CAP OVERALL PLAN
- C6 - PROPOSED SEDIMENT CAP & BANK EXCAVATION PLAN - WEST
- C7 - PROPOSED SEDIMENT CAP & BANK EXCAVATION PLAN - EAST
- C8 - PROPOSED RIVERBANK & SEDIMENT CAP TYPICAL SECTION 1
- C9 - PROPOSED RIVERBANK & SEDIMENT CAP TYPICAL SECTION 2
- C10 - PROPOSED SEDIMENT CAP DETAILS 1
- C11 - PROPOSED SEDIMENT CAP DETAILS 2
- C12 - EROSION AND SEDIMENT CONTROL DETAILS 1
- C13 - EROSION AND SEDIMENT CONTROL DETAILS 2
- C14 - PLANTING PLAN
- C15 - PLANTING DETAILS 1
- C16 - PLANTING DETAILS 2
- C17 - PLANTING MATERIAL SCHEDULE

### ADJACENT PROPERTY OWNERS:

1. CITY OF PORTLAND PARKS & RECREATION.
2. MICHAEL McCUDDY.
3. CITY OF PORTLAND BUREAU OF ENVIRONMENTAL SERVICES.

HORIZONTAL DATUM: NAD83, OREGON STATE PLANE NORTH,  
INTERNATIONAL FEET

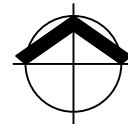
VERTICAL DATUM: NAVD 88

TOWNSHIP 1 N, RANGE 1 E, SECTION 5, W.M.

LATITUDE: 45.5958° N

LONGITUDE: 122.7106° W

MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
<b>MAUL FOSTER ALONGI</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA SLOUGH
		SHEET # OF #:	1 OF 17
		ISSUE	DESCRIPTION
		1.0	JPA DRAWING SET

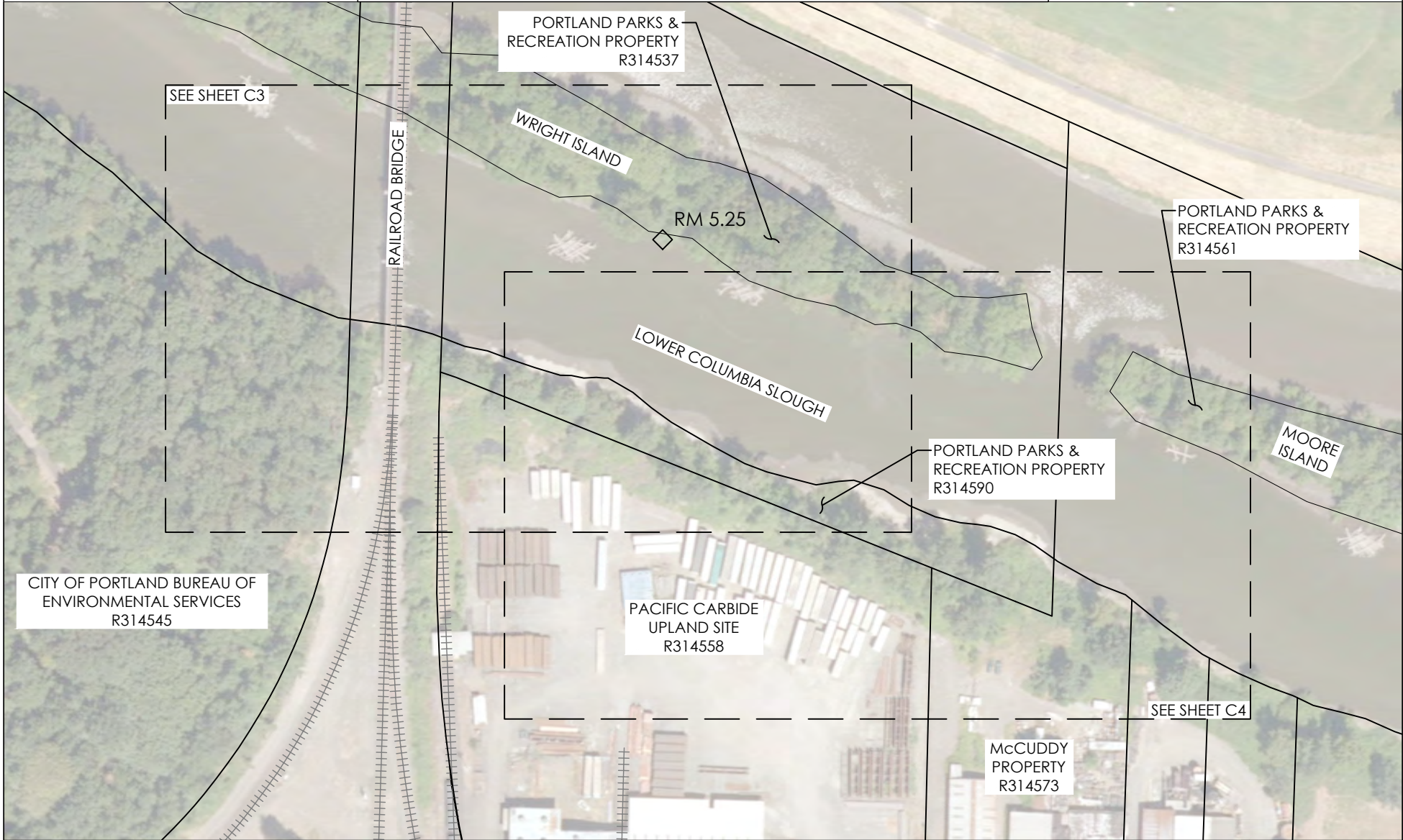


DRAWING NOT TO  
SCALE


SHEET  
C1



# PROJECT OVERVIEW MAP

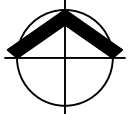
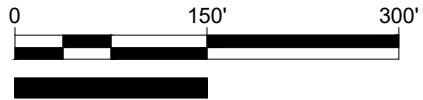


MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021



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 www.maulfoster.com

REFERENCE #:	NWP-2020-439
APPLICANT NAME:	OREGON DEQ
PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
WATERWAY: [IF ANY]	COLUMBIA SLOUGH
SHEET # OF #:	2 OF 17
ISSUE	DESCRIPTION
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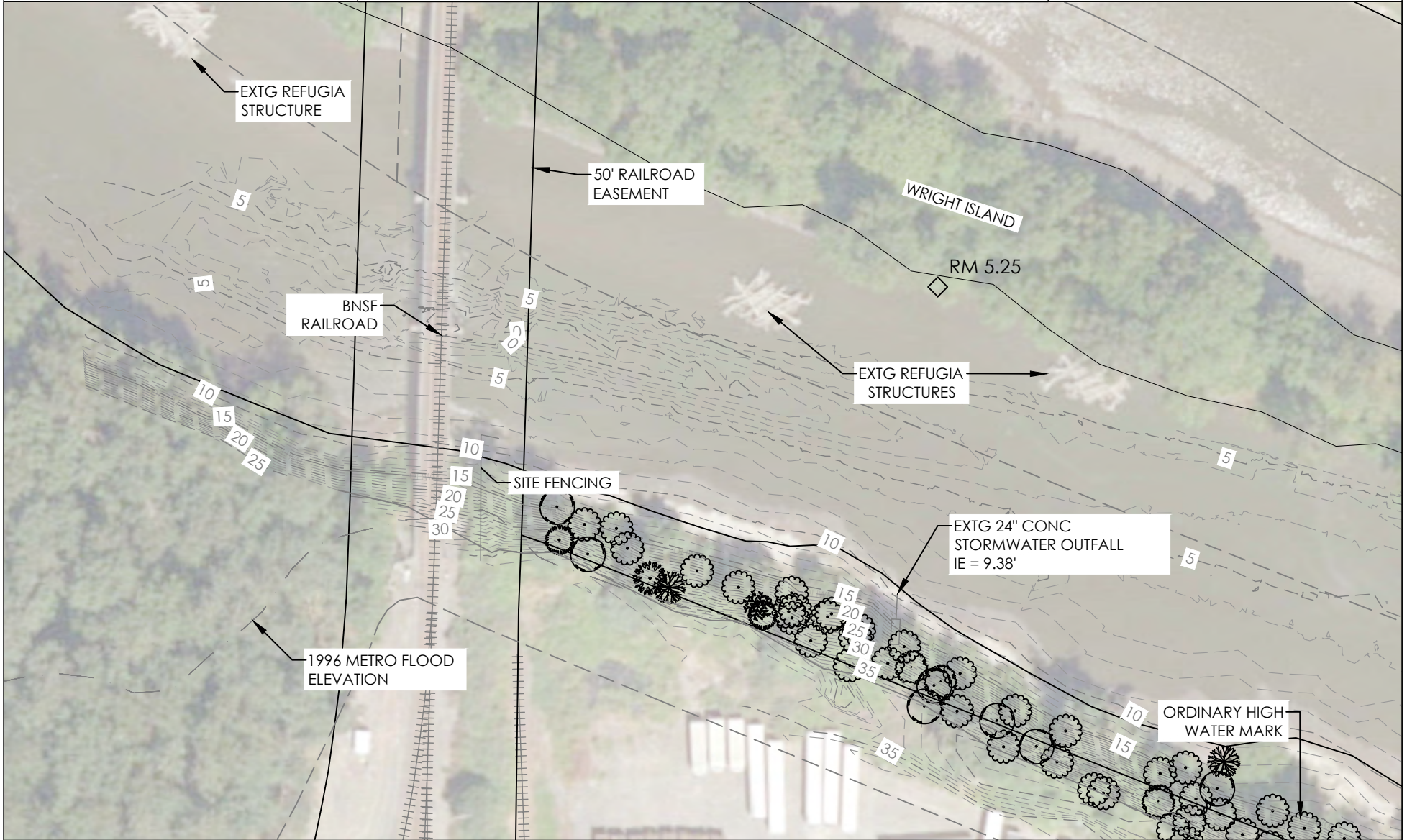



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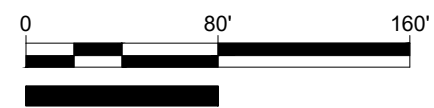
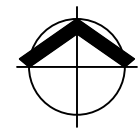
SHEET  
C2



# EXISTING CONDITIONS PLAN - WEST



MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
		WATERWAY: [IF ANY]	COLUMBIA SLOUGH
		SHEET # OF #:	3 OF 17
		ISSUE	DESCRIPTION
		1.0	JPA DRAWING SET



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

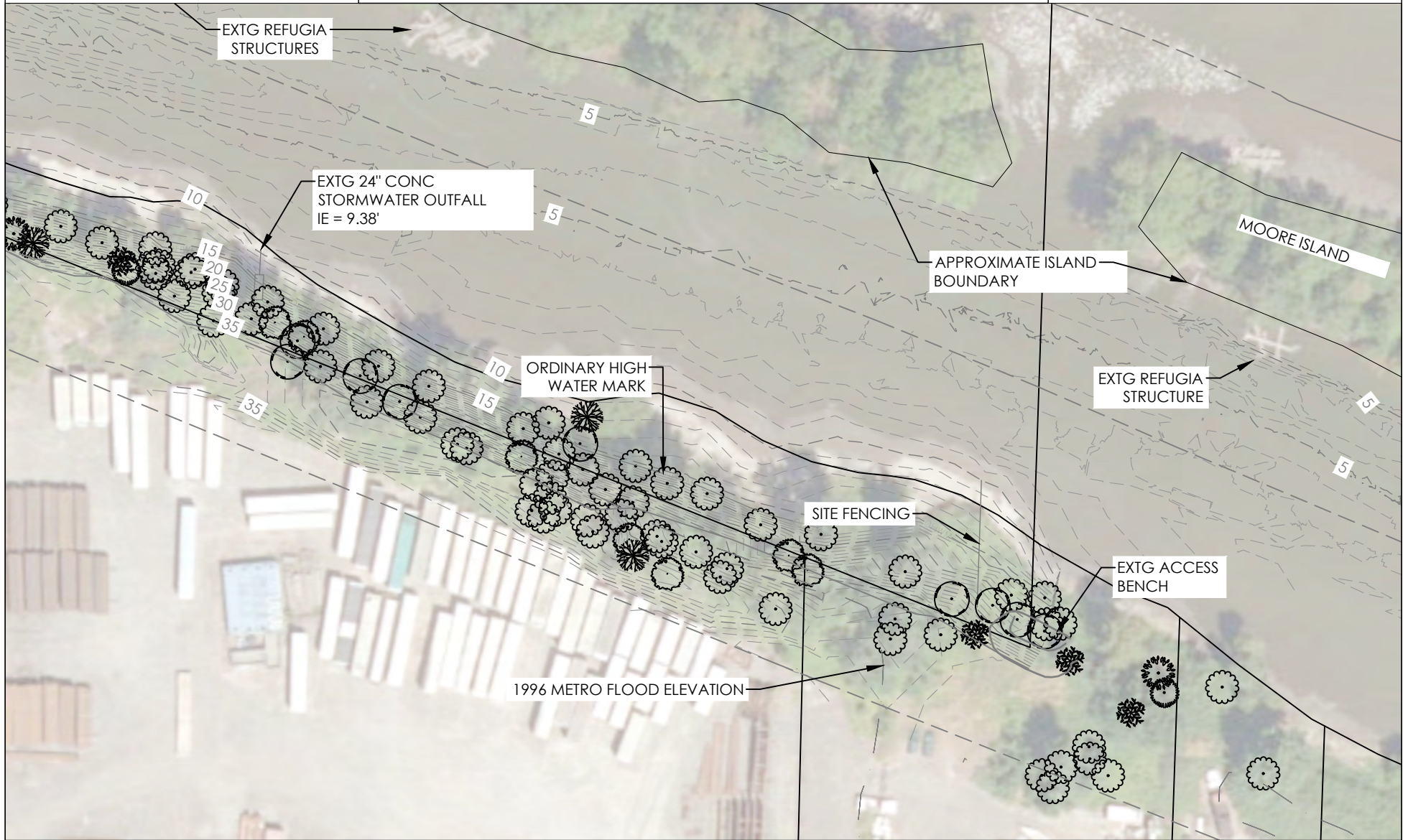
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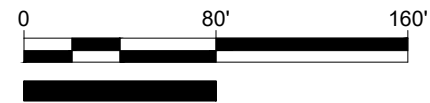
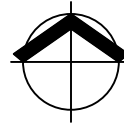
**MAUL FOSTER ALONGI**  
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 Portland, OR 97232  
 971.544.2139 (p) 971.544.2140 (f)  
 www.maulfoster.com



# EXISTING CONDITIONS PLAN - EAST



MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
 <b>MAUL FOSTER ALONGI</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com	WATERWAY: [IF ANY]	COLUMBIA SLOUGH	
	SHEET # OF #:	4 OF 17	
ISSUE	DESCRIPTION		
1.0	JPA DRAWING SET		

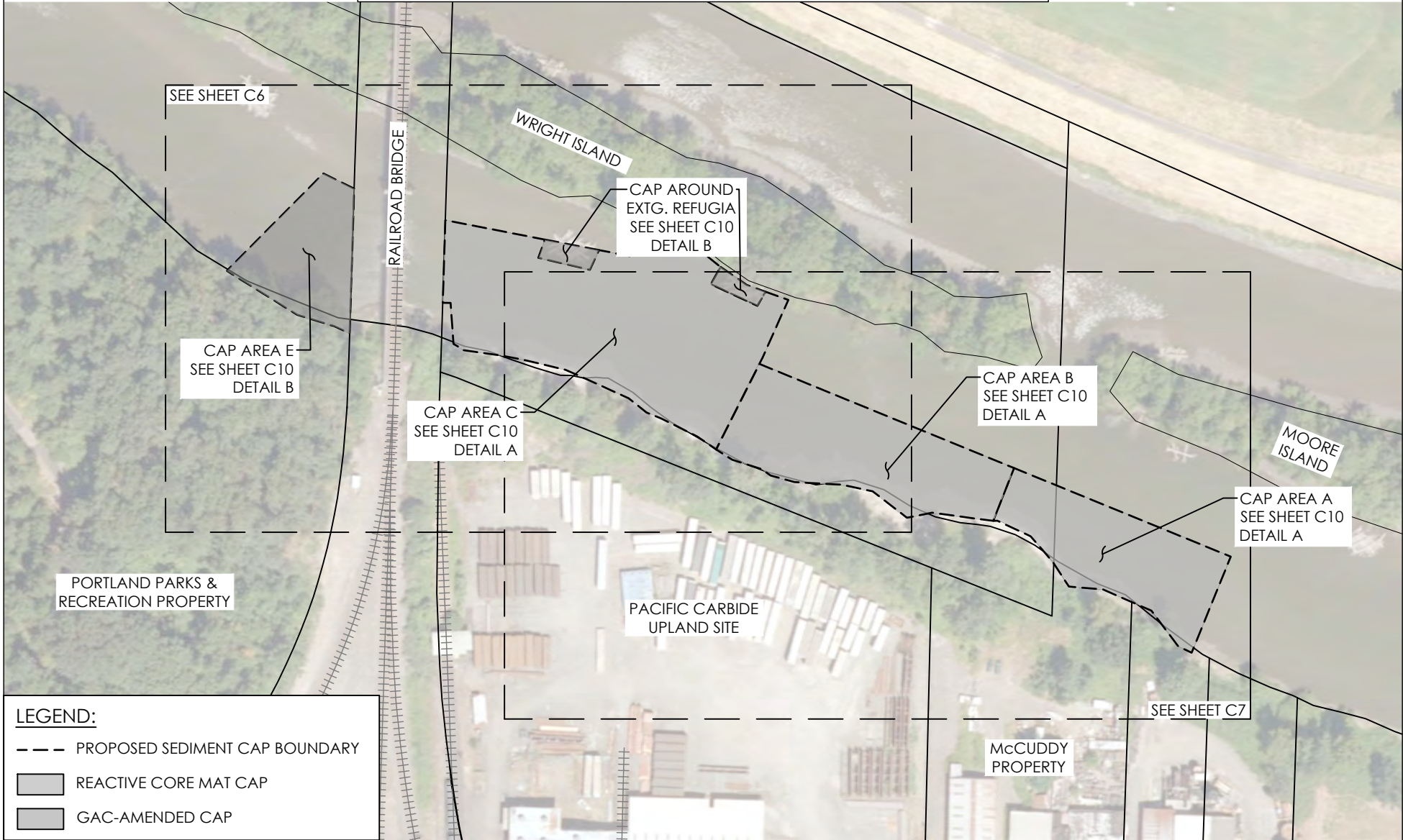


NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET  
C4



# PROPOSED SEDIMENT CAP OVERALL PLAN



## LEGEND:

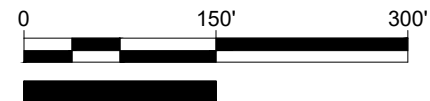
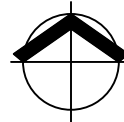
- PROPOSED SEDIMENT CAP BOUNDARY
- REACTIVE CORE MAT CAP
- GAC-AMENDED CAP

MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021

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REFERENCE #: NWP-2020-439  
 APPLICANT NAME: OREGON DEQ  
 PROPOSED PROJECT: PACIFIC CARBIDE SEDIMENT REMEDIATION  
 PROJECT ADDRESS: 9901 HURST AVE  
 PORTLAND, OREGON  
 WATERWAY: [IF ANY] COLUMBIA SLOUGH  
 SHEET # OF #: 5 OF 17

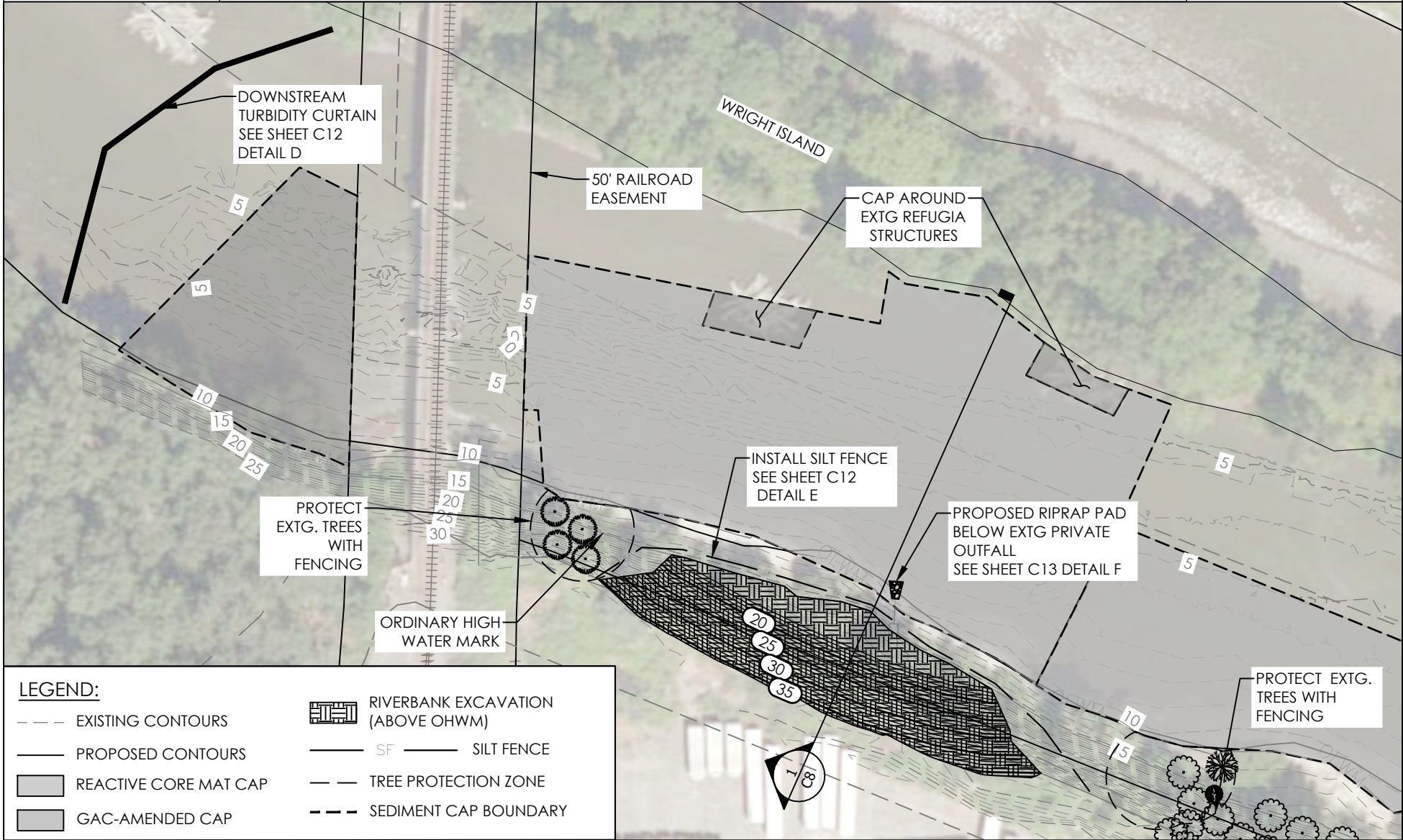
ISSUE	DESCRIPTION
1.0	JPA DRAWING SET




NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET  
C5

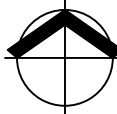
# PROPOSED SEDIMENT CAP & BANK EXCAVATION PLAN - WEST

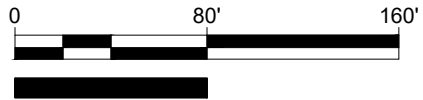


MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021


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REFERENCE #:	NWP-2020-439
APPLICANT NAME:	OREGON DEQ
PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
WATERWAY: [IF ANY]	COLUMBIA SLOUGH
SHEET # OF #:	6 OF 17
ISSUE	DESCRIPTION
1.0	JPA DRAWING SET



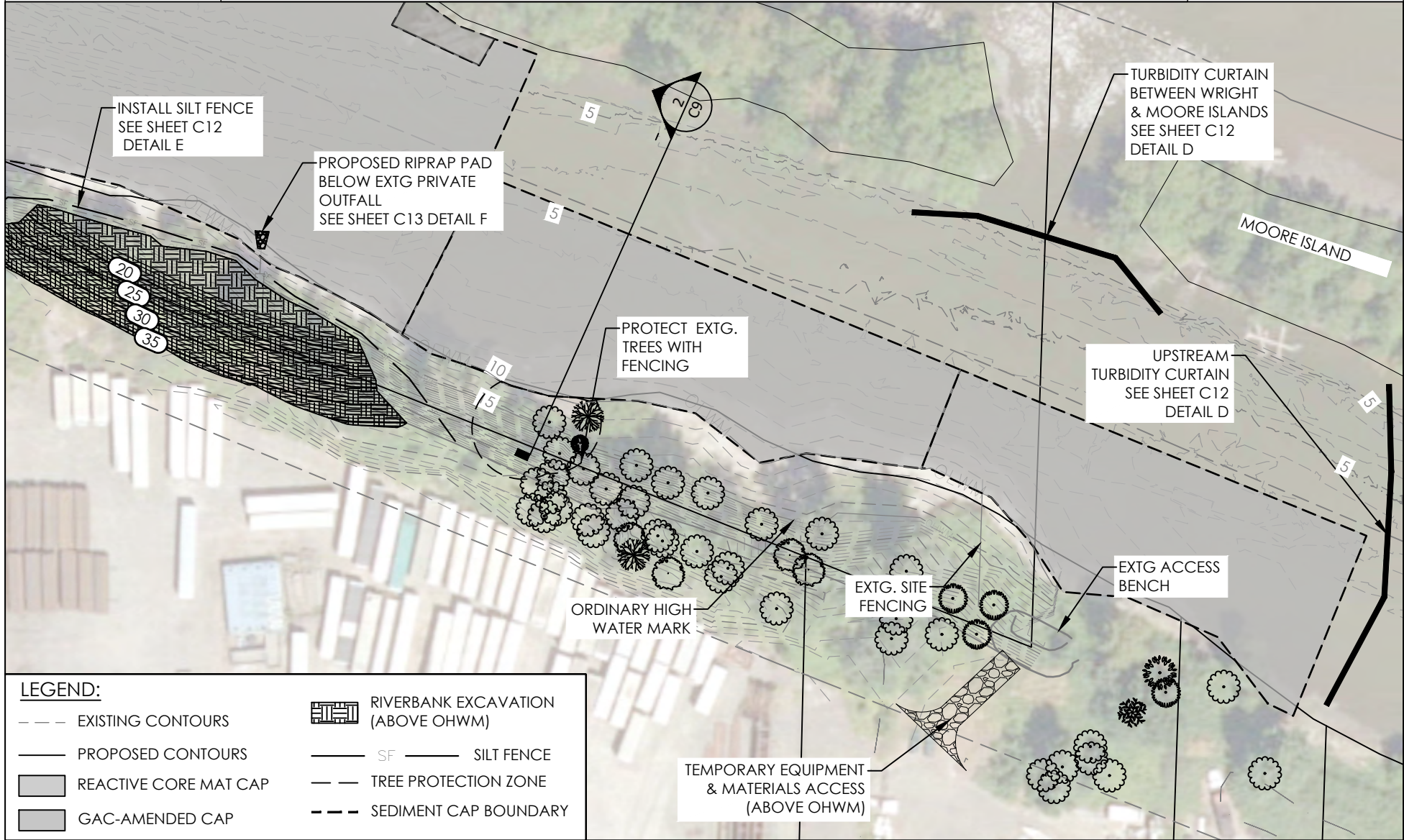


NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET  
C6



# PROPOSED SEDIMENT CAP & BANK EXCAVATION PLAN - EAST



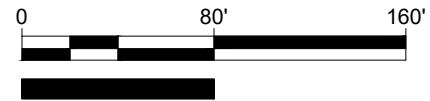
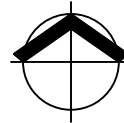
**LEGEND:**

- EXISTING CONTOURS
- PROPOSED CONTOURS
- █ REACTIVE CORE MAT CAP
- █ GAC-AMENDED CAP
- █ RIVERBANK EXCAVATION (ABOVE OHWM)
- SF — SILT FENCE
- TREE PROTECTION ZONE
- SEDIMENT CAP BOUNDARY

MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021

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 Portland, OR 97232  
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REFERENCE #:	NWP-2020-439
APPLICANT NAME:	OREGON DEQ
PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
WATERWAY: [IF ANY]	COLUMBIA SLOUGH
SHEET # OF #:	7 OF 17
ISSUE	DESCRIPTION
1.0	JPA DRAWING SET

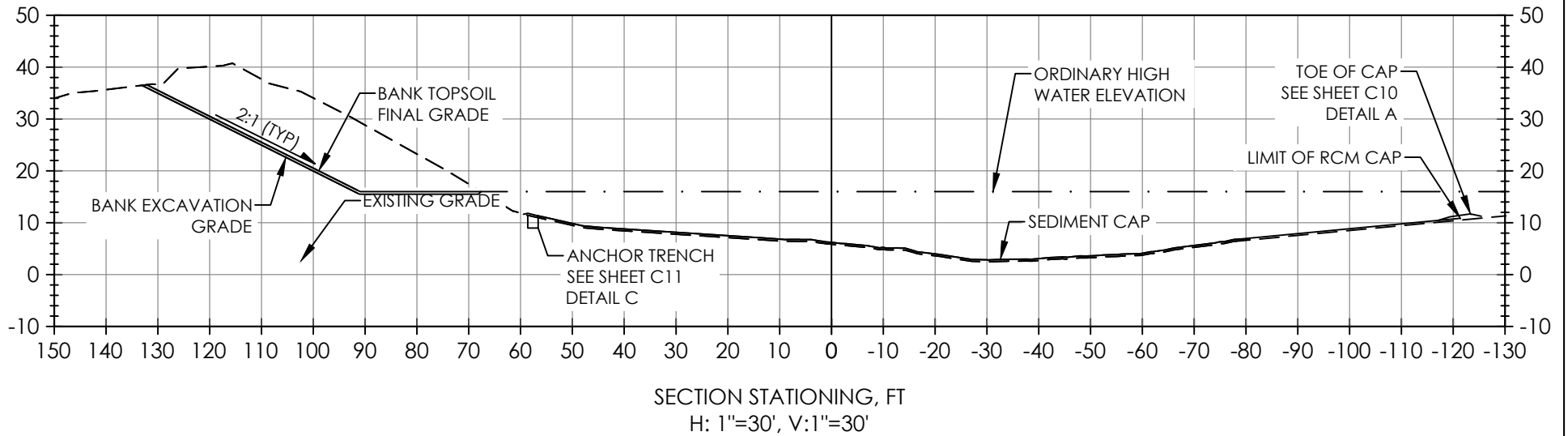


NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET  
C7



# PROPOSED RIVERBANK & SEDIMENT CAP TYPICAL SECTION 1



MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021

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 Portland, OR 97232  
 971.544.2139 (p) 971.544.2140 (f)  
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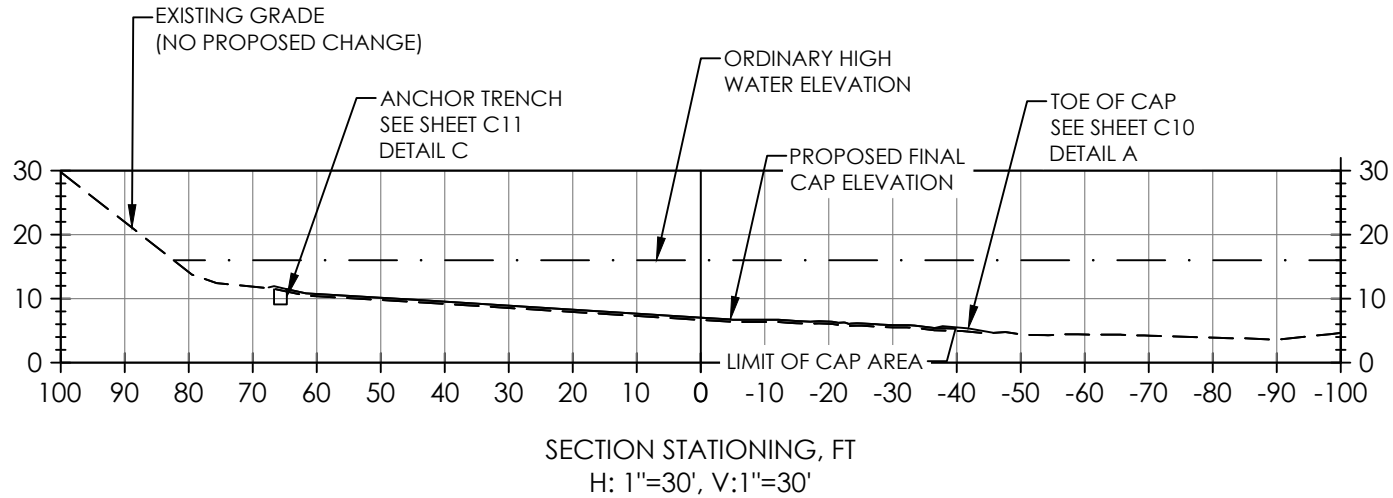
REFERENCE #:	NWP-2020-439
APPLICANT NAME:	OREGON DEQ
PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
WATERWAY: [IF ANY]	COLUMBIA SLOUGH
SHEET # OF #:	8 OF 17
ISSUE	DESCRIPTION
1.0	JPA DRAWING SET

**SCALE AS NOTED**

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

**SHEET  
C8**

# PROPOSED RIVERBANK & SEDIMENT CAP TYPICAL SECTION 2



MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
<b>MAUL FOSTER ALONGI</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA SLOUGH
		SHEET # OF #:	9 OF 17
		ISSUE	DESCRIPTION
	1.0	JPA DRAWING SET	

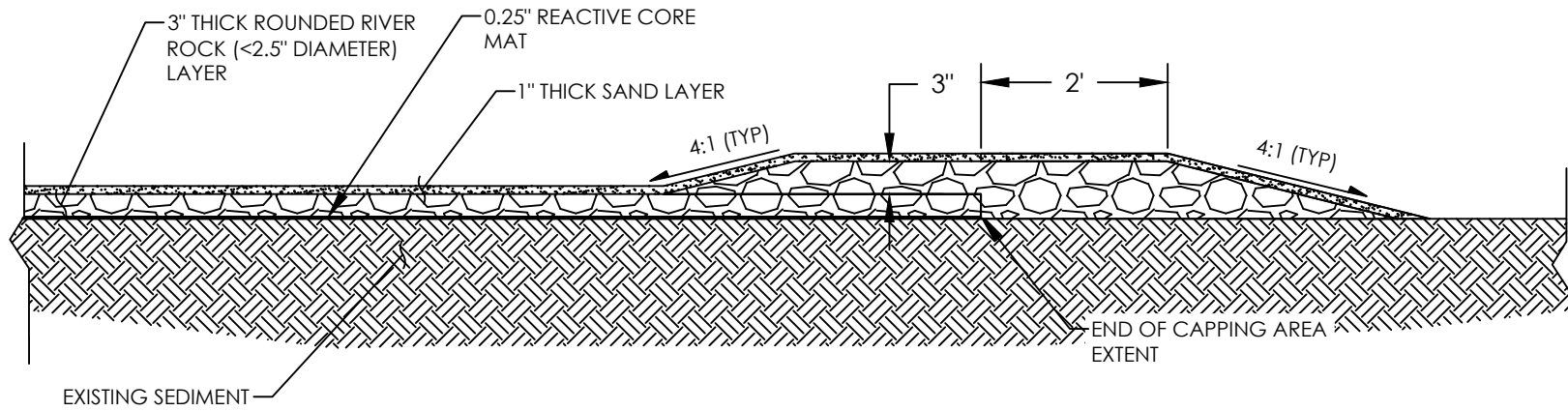
MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
<b>MAUL FOSTER ALONGI</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		WATERWAY: [IF ANY]	COLUMBIA SLOUGH
		SHEET # OF #:	9 OF 17
		ISSUE	DESCRIPTION
	1.0	JPA DRAWING SET	

SCALE AS NOTED

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

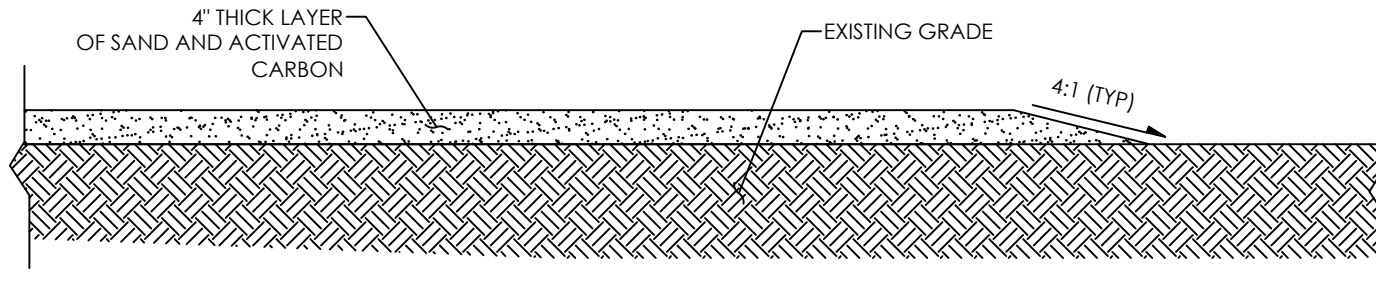
SHEET  
C9

# PROPOSED SEDIMENT CAP DETAILS 1




## A REACTIVE CORE MAT CAP AND EDGE PROTECTION DETAIL

NTS



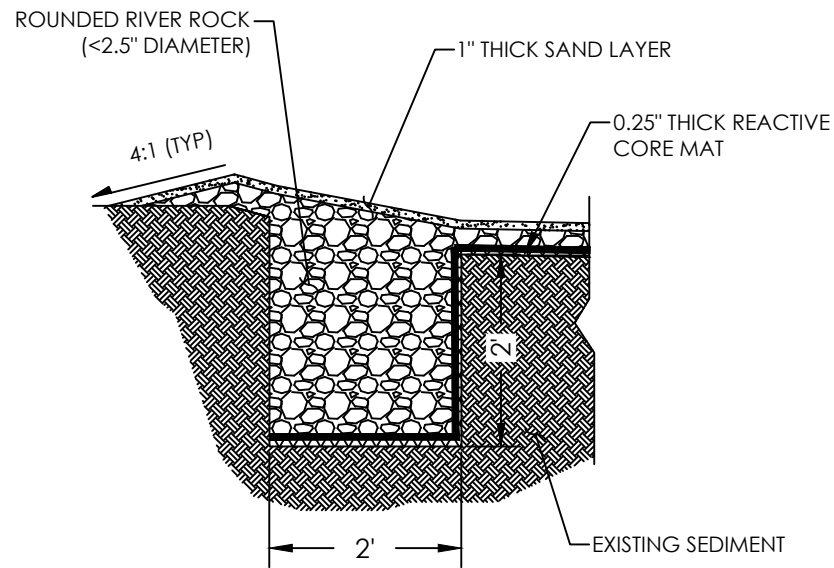
## B GAC-AMENDED SAND CAP PROFILE

NTS

MFA JOB #: 0785.16.01	REFERENCE #: NWP-2020-439	SHEET C10
CHECKED: J. ELLIOTT	APPLICANT NAME: OREGON DEQ	
DRAWN: E. LUNDEEN	PROPOSED PROJECT: PACIFIC CARBIDE SEDIMENT REMEDIATION	
DATE: 11/17/2021	PROJECT ADDRESS: 9901 HURST AVE PORTLAND, OREGON	
 MAUL FOSTER ALONGI 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com	WATERWAY: [IF ANY] COLUMBIA SLOUGH	
	SHEET # OF #: 10 OF 17	
	ISSUE DESCRIPTION	
1.0	JPA DRAWING SET	




# PROPOSED SEDIMENT CAP DETAILS 2

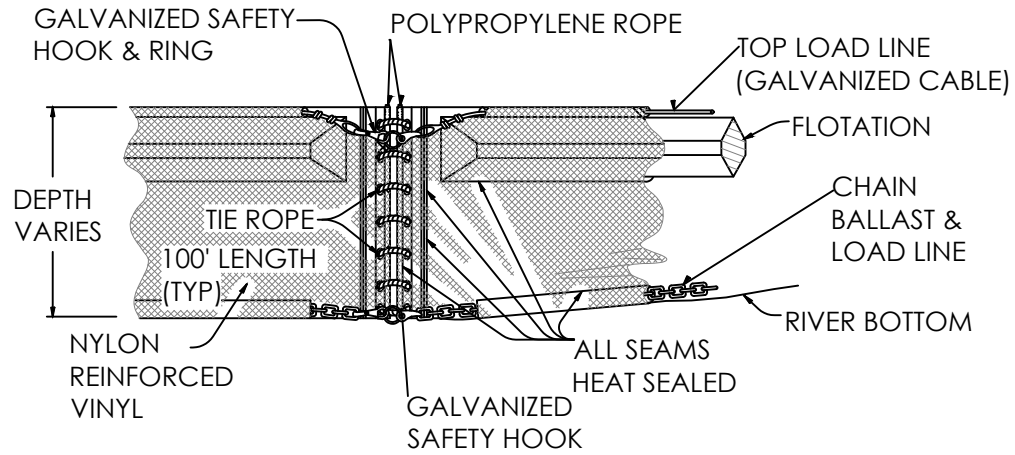


## REACTIVE CORE MAT ANCHOR TRENCH DETAIL

NTS

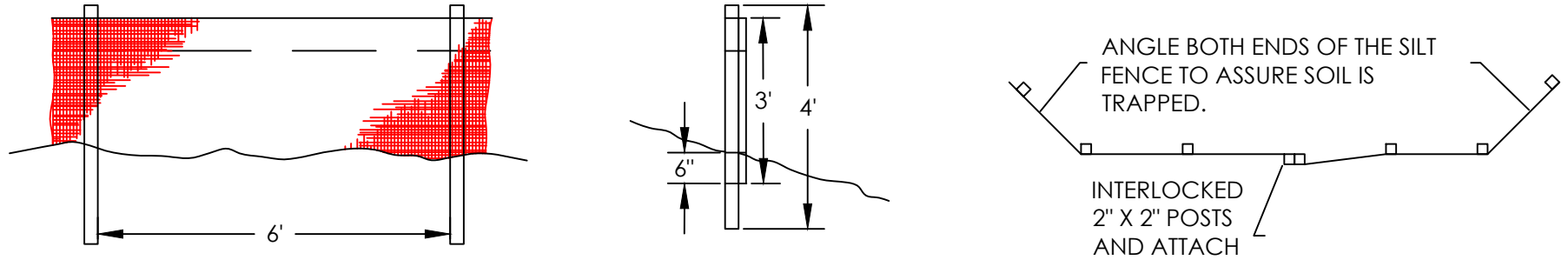
MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439	SHEET C11
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ	
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION	
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON	
 <b>MAUL FOSTER ALONG I</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfooster.com	WATERWAY: [IF ANY]	COLUMBIA SLOUGH		
	SHEET # OF #:	11 OF 17		
	ISSUE	DESCRIPTION		
	1.0	JPA DRAWING SET		

# PROPOSED SEDIMENT CAP DETAILS 1




## D TURBIDITY CURTAIN DETAIL

NTS

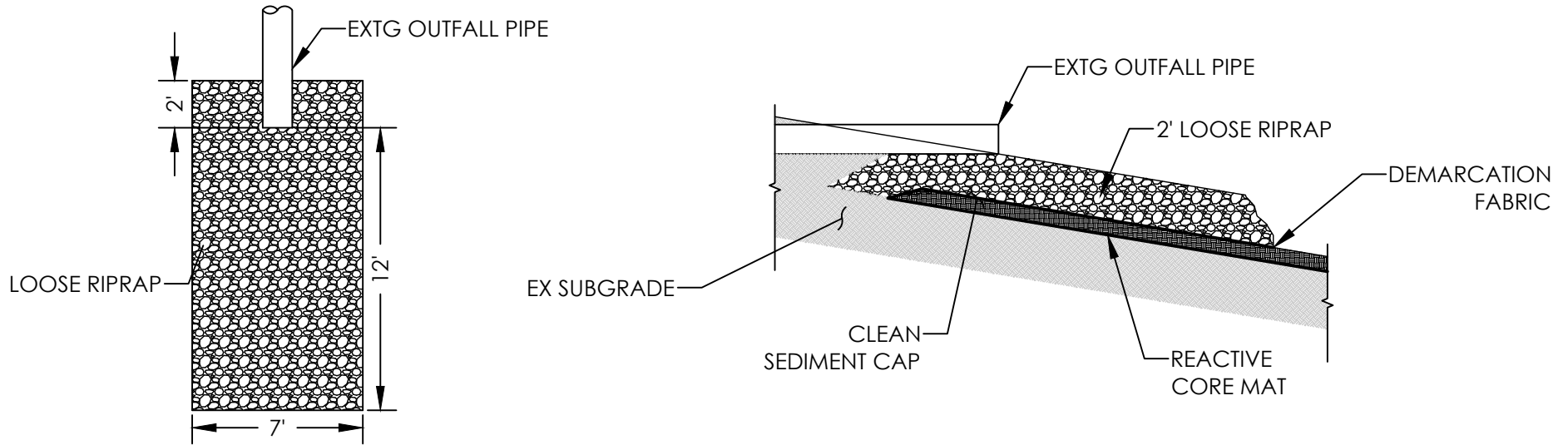


## E SILT FENCE DETAIL

NTS

MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439	SHEET C12
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ	
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION	
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON	
 <b>MAUL FOSTER ALONG</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfofoster.com	WATERWAY: [IF ANY]	COLUMBIA SLOUGH		
	SHEET # OF #:	12 OF 17		
	ISSUE	DESCRIPTION		
	1.0	JPA DRAWING SET		

# EROSION AND SEDIMENT CONTROLS DETAILS 2

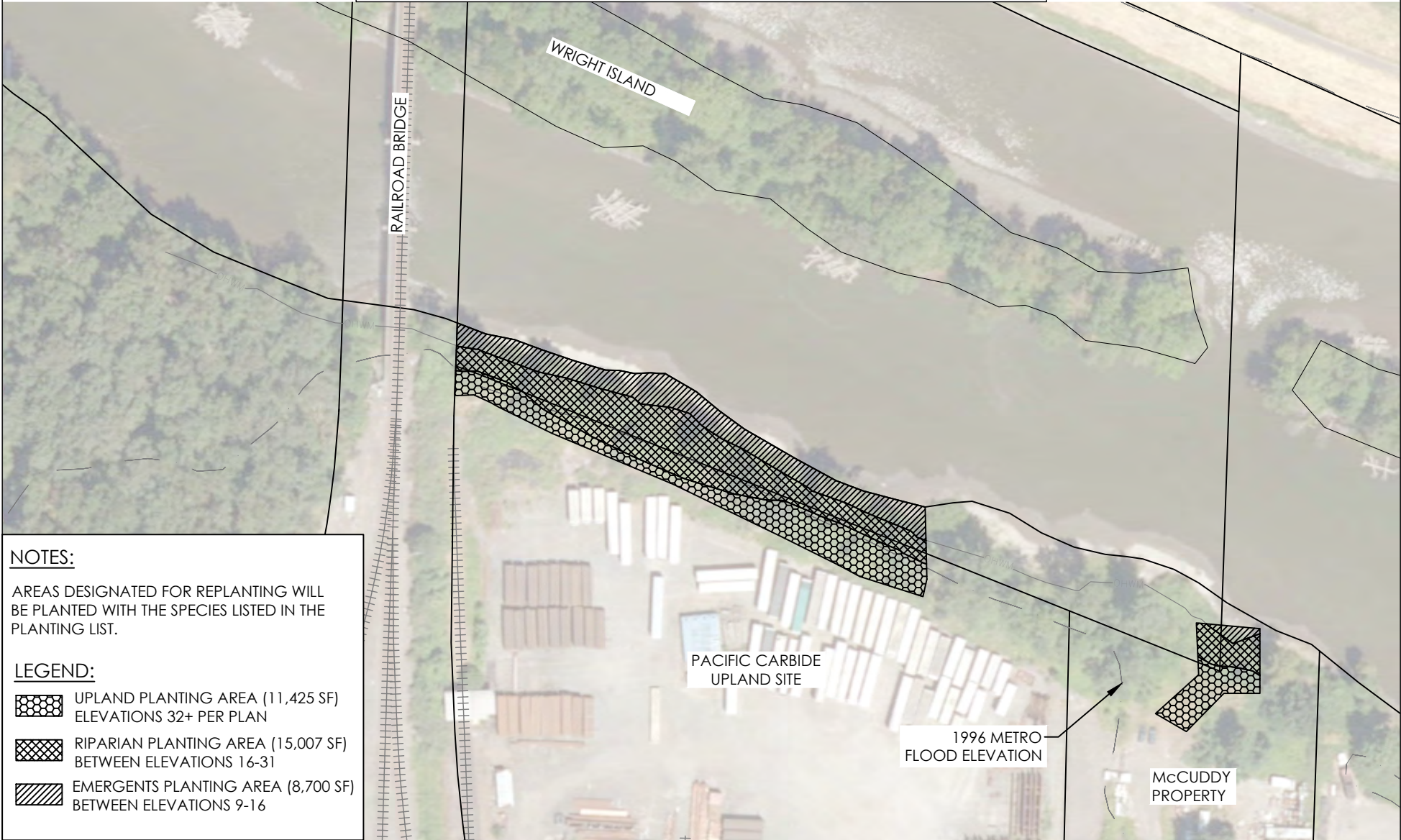


**F** RIRRAP DRAINAGE PAD DETAIL  
NTS

MFA JOB #: 0785.16.01 CHECKED: J. ELLIOTT DRAWN: E. LUNDEEN DATE: 11/17/2021	REFERENCE #: NWP-2020-439 APPLICANT NAME: OREGON DEQ PROPOSED PROJECT: PACIFIC CARBIDE SEDIMENT REMEDIATION PROJECT ADDRESS: 9901 HURST AVE PORTLAND, OREGON WATERWAY: [IF ANY] COLUMBIA SLOUGH SHEET # OF #: 13 OF 17		SHEET <b>C13</b>					
MAUL FOSTER ALONGI 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">ISSUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.0</td> <td>JPA DRAWING SET</td> </tr> </tbody> </table>	ISSUE	DESCRIPTION	1.0	JPA DRAWING SET		
ISSUE	DESCRIPTION							
1.0	JPA DRAWING SET							






# PLANTING PLAN



**NOTES:**

AREAS DESIGNATED FOR REPLANTING WILL BE PLANTED WITH THE SPECIES LISTED IN THE PLANTING LIST.

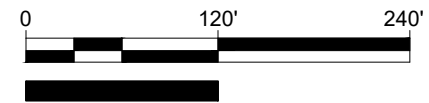
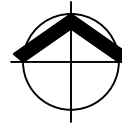
**LEGEND:**

-  UPLAND PLANTING AREA (11,425 SF)  
ELEVATIONS 32+ PER PLAN
-  RIPARIAN PLANTING AREA (15,007 SF)  
BETWEEN ELEVATIONS 16-31
-  EMERGENTS PLANTING AREA (8,700 SF)  
BETWEEN ELEVATIONS 9-16

MFA JOB #: 0785.16.01  
 CHECKED: J. ELLIOTT  
 DRAWN: E. LUNDEEN  
 DATE: 11/17/2021

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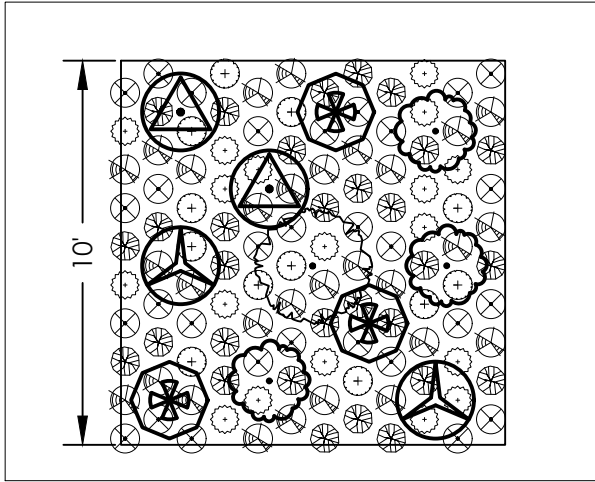
REFERENCE #:	NWP-2020-439
APPLICANT NAME:	OREGON DEQ
PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
WATERWAY: [IF ANY]	COLUMBIA SLOUGH
SHEET # OF #:	14 OF 17
ISSUE	DESCRIPTION
1.0	JPA DRAWING SET



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET  
C14

# PLANTING DETAILS 1



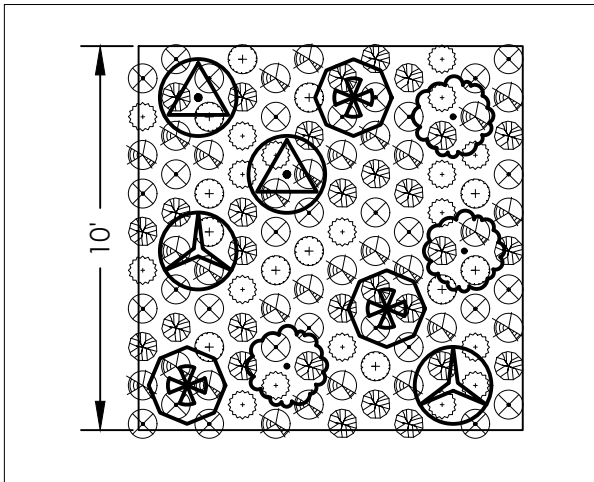
**1 ENLARGED PLANTING PLAN: UPLAND**  
SCALE: 1" = 5'

### PLANT LEGEND

- OREGON ASH, BIGLEAF MAPLE, OR DOUGLAS FIR
- RED TWIG DOGWOOD
- DOUGLAS' SPIREA
- TALL OREGON GRAPE
- SNOWBERRY
- SWORDFERN
- PACIFIC WATERLEAF
- PACIFIC BLEEDING HEART
- LICORICE FERN
- HOOKER'S FAIRYBELL

### NOTES:

1. THE ABOVE PLAN IS A TYPICAL PLATING DESIGN FOR RIPARIAN PLANTING AREAS.
2. PLANTING DENSITY SHOWN IS 120 PLUGS, 10 SHRUBS, AND 1 TREE PER 100 SQUARE FEET.
3. AREA WILL BE SEEDED WITH NATIVE GRASS AND FORB SEED MIX AT MINIMUM 30 LBS PER ACRE.



**2 ENLARGED PLANTING PLAN: RIPARIAN**  
SCALE: 1" = 5'

### PLANT LEGEND

- RED TWIG DOGWOOD
- DOUGLAS' SPIREA
- TALL OREGON GRAPE
- SNOWBERRY
- SWORDFERN
- PACIFIC WATERLEAF
- GOLDENROD
- FRINGECUP
- LARGELEAF AVENS

### NOTES:

1. THE ABOVE PLAN IS A TYPICAL PLATING DESIGN FOR RIPARIAN PLANTING AREAS.
2. PLANTING DENSITY SHOWN IS 120 PLUGS AND 10 SHRUBS PER 100 SQUARE FEET.
3. AREA WILL BE SEEDED WITH NATIVE GRASS AND FORB SEED MIX AT MINIMUM 30 LBS PER ACRE.

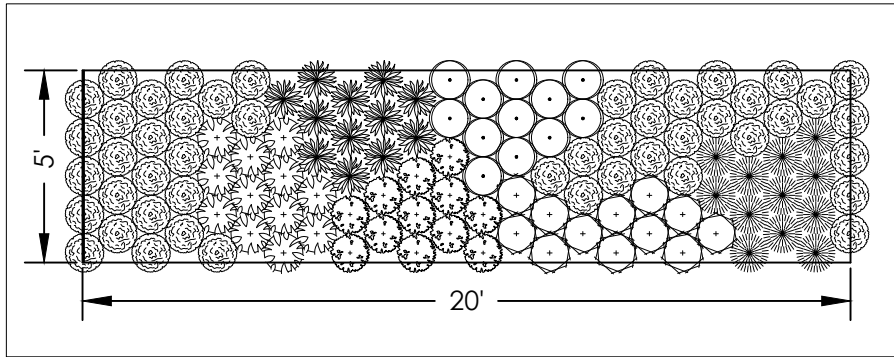
MFA JOB #:	0785.16.01	REFERENCE #:	NWP-2020-439
CHECKED:	J. ELLIOTT	APPLICANT NAME:	OREGON DEQ
DRAWN:	E. LUNDEEN	PROPOSED PROJECT:	PACIFIC CARBIDE SEDIMENT REMEDIATION
DATE:	11/17/2021	PROJECT ADDRESS:	9901 HURST AVE PORTLAND, OREGON
<p><b>MAUL FOSTER ALONG I</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com</p>		WATERWAY: [IF ANY]	COLUMBIA SLOUGH
		SHEET # OF #:	15 OF 17
		ISSUE	DESCRIPTION
	1.0	JPA DRAWING SET	

**SCALE AS NOTED**

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

**SHEET  
C15**

## PLANTING DETAILS 2



### PLANT LEGEND

- COMMON RUSH
- SAWBEAK SEDGE
- SLOUGH SEDGE
- SMALL-FRUITED BULRUSH
- HARDSTEM BULRUSH
- COMMON SPIKERUSH
- TUFTED HAIRGRASS

### NOTES:

1. THE ABOVE PLAN IS A TYPICAL PLANTING DESIGN FOR TRANSITIONAL AND EMERGENT PLANTING AREAS.
2. PLANTING DENSITY SHOWN IS 120 PLUGS PER 100 SQUARE FEET.

**3 ENLARGED PLANTING PLAN: TRANSITIONAL/EMERGENTS**  
SCALE: 1" = 5'

### NOTES:

1. THE REQUIRED NUMBER OF MITIGATION TREES IS 104 TREES. THE TOTAL NUMBER OF TREES TO BE PLANTED IS 114.
2. THE PROPOSED UPLAND PLANTING AREA IS 11,425 SQUARE FEET. THE UPLAND PLANTINGS CONSIST OF THE TREES, SHRUBS, AND PLUGS PER DETAIL #1 ON SHEET C15 AND THE RIPARIAN/UPLAND SEED MIX ON THIS SHEET.
2. THE PROPOSED RIPARIAN PLANTING AREA IS 15,007 SQUARE FEET. THE RIPARIAN PLANTINGS CONSIST OF THE TREES AND SHRUBS PER DETAIL #2 ON SHEET C15 AND THE RIPARIAN/UPLAND SEED MIX ON THIS SHEET.
3. THE PROPOSED EMERGENT PLANTING AREA IS 8,700 SQUARE FEET. THE EMERGENT PLANTINGS CONSIST OF THE PLANTS PER DETAIL #3 ON THIS SHEET.

## SEED MIXES

### RIPARIAN/UPLAND SEED MIX

RATE: 30 LB. PER ACRE

(APPROX. ELEVATIONS 16 AND UP) REQUIRED AMOUNT OF SEED: 18.2 LBS.

<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>% BY WT</u>
BLUE WILD RYE	ELYMUS GLAUCUS	45%
CALIFORNIA BROME	BROMUS CARINATUS	25%
WESTERN YARROW	ACHILLEA MILLEFOLIUM	15%
STREAMBANK LUPINE	LUPINUS RIVULARIS	10%
FRINGE CUP	TELLIMA GRANDIFLORA	5%

MFA JOB #: 0785.16.01 CHECKED: J. ELLIOTT DRAWN: E. LUNDEEN DATE: 11/17/2021	REFERENCE #: NWP-2020-439 APPLICANT NAME: OREGON DEQ PROPOSED PROJECT: PACIFIC CARBIDE SEDIMENT REMEDIATION PROJECT ADDRESS: 9901 HURST AVE PORTLAND, OREGON WATERWAY: [IF ANY] COLUMBIA SLOUGH SHEET # OF #: 16 OF 17	<h3>SCALE AS NOTED</h3> <div style="background-color: black; width: 50px; height: 10px; margin: 5px auto;"></div> <p style="font-size: small;">NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.</p>	<h2>SHEET C16</h2>
<b>MAUL FOSTER ALONG I</b> 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com			



# PLANTING MATERIAL SCHEDULE

## PLANT MATERIAL SCHEDULE

### TREES



<u>QTY</u>	<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>SIZE</u>	<u>SPACING</u>
24	DOUGLAS FIR	PSEUDOTSUGA MENZIESII	4' HT	PER PLAN
50	OREGON ASH	FRAXINUS LATIFOLIA	1/2" CAL	PER PLAN
40	BIG LEAF MAPLE	ACER MACROPHYLLUM	1/2" CAL	PER PLAN

### SHRUBS & HERBACEOUS PLANTS

<u>QTY</u>	<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>SIZE</u>	<u>SPACING</u>
793	RED TWIG DOGWOOD	CORNUS SERICEA	3' HT, BR	PER PLAN
529	DOUGLAS' SPIREA	SPIRAEA DOUGLASII	2' HT, BR	PER PLAN
529	TALL OREGON GRAPE	MAHONIA AQUIFOLIUM	1 GAL	PER PLAN
793	SNOWBERRY	SYMPHORICARPOS ALBUS	1 GAL	PER PLAN
7,930	WORDFERN	POLYSTICHUM MUNITUM	10 CI PLUG	1'-0", O.C., TRI.
7,930	PACIFIC WATERLEAF	HYDROPHYLLUM TENUIPES	10 CI PLUG	1'-0", O.C., TRI.
7,930	GOLDENROD	SOLIDAGO CANADENSIS	10 CI PLUG	1'-0", O.C., TRI.
3,172	FRINGECUP	TELLIMA GRANDIFLORA	10 CI PLUG	1'-0", O.C., TRI.
4,758	LARGELEAF AVENS	GEUM MACROPHYLLUM	10 CI PLUG	1'-0", O.C., TRI.

### TRANSITIONAL/EMERGENTS

<u>QTY</u>	<u>COMMON NAME</u>	<u>BOTANICAL NAME</u>	<u>SIZE</u>	<u>SPACING</u>
1,044	COMMON RUSH	JUNCUS EFFUSUS 'PACIFICA'	10 CI PLUG	1'-0", O.C., TRI.
1,044	SAWBEAK SEDGE	CAREX STIPATA	10 CI PLUG	1'-0", O.C., TRI.
4,176	SLOUGH SEDGE	CAREX OBNUPTA	10 CI PLUG	1'-0", O.C., TRI.
1,044	SMALL-FRUITED BULRUSH	SCIRPUS MICROCARPUS	10 CI PLUG	1'-0", O.C., TRI.
1,044	HARDSTEM BULRUSH	SCIRPUS ACUTUS	10 CI PLUG	1'-0", O.C., TRI.
1,044	COMMON SPIKERUSH	ELEOCHARIS PALUSTRIS	10 CI PLUG	1'-0", O.C., TRI.
1,044	TUFTED HAIRGRASS	DESCHAMPSIA CESPITOSA	10 CI PLUG	1'-0", O.C., TRI.

MFA JOB #: 0785.16.01 CHECKED: J. ELLIOTT DRAWN: E. LUNDEEN DATE: 11/17/2021	REFERENCE #: NWP-2020-439 APPLICANT NAME: OREGON DEQ PROPOSED PROJECT: PACIFIC CARBIDE SEDIMENT REMEDIATION PROJECT ADDRESS: 9901 HURST AVE PORTLAND, OREGON WATERWAY: [IF ANY] COLUMBIA SLOUGH SHEET # OF #: 17 OF 17		<h1 style="font-size: 2em; margin: 0;">SHEET C17</h1>				
 MAUL FOSTER ALONGI 3140 NE BROADWAY STREET Portland, OR 97232 971.544.2139 (p) 971.544.2140 (f) www.maulfoster.com		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">ISSUE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1.0</td> <td>JPA DRAWING SET</td> </tr> </tbody> </table>		ISSUE	DESCRIPTION	1.0	JPA DRAWING SET
ISSUE	DESCRIPTION						
1.0	JPA DRAWING SET						



# Nationwide Permit 38

## Terms and Conditions

Effective Date: February 25, 2022

- 
- A. Description of Activities Authorized by Nationwide Permit 38
  - B. Nationwide Permit General Conditions
  - C. District Engineer's Decision
  - D. Further Information
  - E. Portland District Regional General Conditions
- 

In addition to any special conditions that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit authorization to be valid in Oregon.

### **A. Description of Activities Authorized by Nationwide Permit (NWP) 38**

**38. *Cleanup of Hazardous and Toxic Waste.*** Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

**Note:** Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

### **B. Nationwide Permit General Conditions**

**Note:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1

through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. *Navigation.* (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. *Migratory Bird Breeding Areas.* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).



7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. *Adverse Effects from Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. *Management of Water Flows.* To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. *Fills Within 100-Year Floodplains.* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. *Equipment.* Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. *Removal of Temporary Structures and Fills.* Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. *Single and Complete Project.* The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. *Wild and Scenic Rivers.* (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA Section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA Section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA Section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional

ESA Section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under Section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA Section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA Section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects

that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA Section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA Section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA Section 7 consultation conducted for the ESA Section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA Section 7 consultation for the ESA Section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA Section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA Section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA Section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. *Migratory Birds and Bald and Golden Eagles.* The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. *Historic Properties.* (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under Section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with Section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for



listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of Section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA Section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. If NHPA Section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that Section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation

specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. *Discovery of Previously Unknown Remains and Artifacts.* Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. *Designated Critical Resource Waters.* Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. *Mitigation.* The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation,

the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP



authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. *Safety of Impoundment Structures.* To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. *Water Quality.* (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA Section 401, a CWA Section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA Section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

*26. Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

*27. Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA Section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

*28. Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under

NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

30. *Compliance Certification.* Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. *Activities Affecting Structures or Works Built by the United States.* If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the Section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. *Pre-Construction Notification.* (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).



(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the

Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for Section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing

the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **C. District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net



adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### **D. Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

#### **E. Portland District Regional Conditions**

1. *Notification:* For permittees that received written NWP approval, upon starting the authorized activities, you shall notify the U.S. Army Corps of Engineers, Portland District, Regulatory Branch that the work has started. Notification shall be provided by e-mail to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) and the email subject line shall include: Corps project number and the project location by county.

2. *Aquatic Resources of Special Concern:* Pre-construction notification to the District Engineer is required for all activities proposed in waters of the U.S. within, or directly affecting, an aquatic resource of special concern. Aquatic resources of special concern are resources that are difficult to replace, unique, and/or have high ecological function. For the purpose of this regional condition, aquatic resources of special concern are native eel grass (*Zostera marina*) beds, mature forested wetlands, bogs, fens, vernal pools, alkali wetlands, wetlands in dunal systems along the Oregon coast, estuarine wetlands, Willamette Valley wet prairie wetlands, marine gardens, marine reserves, kelp beds, and rocky substrate in tidal waters.

In addition to the content requirements of NWP General Condition (GC) 32, the pre-construction notification must include a statement explaining why the effects of the proposed activity are no more than minimal. Written approval from the District Engineer must be obtained prior to commencing work.

Note: If the District Engineer determines that the adverse effects of the proposed activity are more than minimal, then the District Engineer will notify the applicant that either:

- a. the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;
- b. the activity is authorized under the NWP subject to submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or
- c. the activity is authorized under the NWP with specific modifications or conditions.

3. *Cultural Resources and Human Burials-Inadvertent Discovery Plan:* In addition to the requirements in NWP GCs 20 and 21, the permittee shall immediately notify the District Engineer if, at any time during the course of the work authorized, human burials, cultural items, or historic properties, as defined by the National Historic Preservation Act and Native American Graves Protection and Repatriation Act, are discovered. The permittee shall

implement the following procedures as outlined on the Inadvertent Discovery Plan posted on the Portland District Regulatory website at <https://www.nwp.usace.army.mil/Missions/Regulatory/Nationwide.aspx>

Notify the Portland District Engineer as soon as possible following discovery but in no case later than 24 hours. Notification shall be sent electronically ([cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil)) and shall identify the Corps project number and clearly specify the purpose is to report a cultural resource discovery. The permittee shall also notify the Corps representative (by email and telephone) identified in the verification letter.

4. *Essential Fish Habitat*: Activities which may adversely affect essential fish habitat, as defined under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), are not authorized by NWP until essential fish habitat requirements have been met by the applicant and the Corps. Non-federal permittees must submit a pre-construction notification to the District Engineer if essential fish habitat may be affected by, or is in the vicinity of, a proposed activity and shall not begin work until notified by the District Engineer that the requirements of the essential fish habitat provisions of the MSA have been satisfied and the activity is authorized. The notification must identify the type(s) of essential fish habitat (e.g., Pacific coast salmon, Pacific coast groundfish, and/or Coastal-pelagic species) managed by a Fishery Management Plan that may be affected. Information about essential fish habitat is available at NOAA's website: <http://www.westcoast.fisheries.noaa.gov>

5. *Bank Stabilization*: Permittee shall include the use of bioengineering techniques and natural materials in the project design to the maximum extent practicable and shall minimize the use of rock. Bioengineering bank stabilization techniques are those that increase the strength and structure of soils with a combination of biological and mechanical elements (e.g., vegetation, root wads and woody debris, rock structures). Riparian plantings shall be included in all project designs unless the permittee can demonstrate that such plantings are not practicable.

6. *Work Area Isolation and Dewatering*: Appropriate best management practices shall be implemented to prevent erosion and to prevent sediments from entering waters of the U.S.

a. All in-water work shall be isolated from the active channel or conducted during low seasonal stream flows to the maximum extent practicable.

b. Cofferdams shall be constructed of non-erosive material, such as concrete jersey barriers, sand and gravel bag dams, or water bladders. Constructing a cofferdam by pushing material from the streambed or sloughing material from the streambanks is not authorized.

c. Sand and gravel bag dams shall be lined with a plastic liner or geotextile fabric to reduce permeability and prevent sediments and/or construction materials from entering

waters of the U.S.

d. Upstream and downstream flows shall be maintained by routing flows around the construction site.

e. When dewatering is necessary for construction, a sediment basin, or other applicable method, shall be used to settle sediments prior to releasing the water back into the waterbody. Settled water shall be returned to the waterbody in such a manner as to avoid erosion. Sediment basins shall be placed in uplands.

f. Fish and other aquatic species must be salvaged (i.e., safely captured and relocated away from the project or development site) prior to dewatering. Contact ODFW for additional information regarding fish salvage.

7. *Dredging*: For NWP-authorized activities that involve removal of sediment from waters of the U.S., the permittee shall ensure that any necessary sediment characterization regarding size, composition, and potential contaminants is conducted and reviewed prior to dredging. Sediment characterization must be conducted per the Sediment Evaluation Framework for the Pacific Northwest (available at: <http://www.nwp.usace.army.mil/Missions/Environmental-Stewardship/DMM.aspx>).

Note: The return water from a contained disposal area is defined as a discharge of dredged material by 33 CFR part 323.2(d) and requires separate authorization from the District Engineer (e.g., by NWP 16).

8. *Mechanized Equipment*: In addition to the requirements in NWP GC 11, permittee shall implement the following practices to prevent or minimize impacts to the aquatic environment from mechanized equipment:

a. Operate equipment from the top of a streambank and conduct work outside of the active stream channel, unless specifically authorized by the District Engineer.

b. Spill prevention and containment materials shall be maintained and be readily accessible at vehicle staging areas. The amount of spill response materials (such as straw matting/bales, geotextiles, booms, diapers, and other absorbent materials, shovels, brooms, and containment bags) maintained on-site must be appropriate for the size of the authorized activity.

Note: See Regional Condition 10 regarding timeframes for temporary fills.

9. *Erosion Control*: During construction and until the site is stabilized, the permittee shall ensure all practicable measures are implemented and maintained to prevent erosion and runoff. Temporary stockpiles of excavated or dredged material shall be stabilized to prevent erosion. Once soils or slopes have been stabilized, permittee shall completely remove and properly dispose of or re-use all non-biodegradable components of installed control measures.



10. *Temporary Fills and Impacts:* To ensure no more than minimal adverse environmental effects from temporary fills and impacts to waters of the U.S:

a. Temporary fills and/or impacts to waters of the U.S. shall not exceed six months unless otherwise approved by the District Engineer.

b. No more than one-half ( $\frac{1}{2}$ ) acre of waters of the U.S. may be temporarily filled or impacted unless otherwise approved by the District Engineer (temporary fills and impacts do not affect specified limits for loss of waters associated with specific nationwide permits).

c. Native soils and/or sediments removed from waters of the U.S. for project construction shall be stockpiled and used for site restoration to the maximum extent practicable.

d. Site restoration of temporarily filled or impacted areas shall include returning the area to pre-project ground surface contours. The permittee shall appropriately revegetate temporarily filled or impacted areas with native, noninvasive herbs, shrubs, and/or tree species sufficient in number, spacing, and diversity to replace affected aquatic functions.

Note: The Corps will determine compensatory mitigation requirements for temporary fills and impacts on a case-by-case basis depending on the duration and nature of the temporary fill or impact and the type of aquatic resource affected.

11. *Contractor Notification of Permit Requirements:* The permittee must provide a copy of the Nationwide Permit verification letter, conditions, and permit drawings to all contractors and any other parties performing the authorized work, prior to the commencement of any work in waters of the U.S.

12. *Inspection of the Project Site:* The permittee shall allow representatives of the District Engineer to inspect the authorized activity to confirm compliance with nationwide permit terms and conditions. A request for access to the site will normally be made sufficiently in advance to allow a property owner or representative the option to be on site during the inspection.



# Nationwide Permit 43

## Terms and Conditions

Effective Date: March 15, 2021

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- A. Description of Activities Authorized by Nationwide Permit 43
  - B. Nationwide Permit General Conditions
  - C. District Engineer's Decision
  - D. Further Information
  - E. Portland District Regional General Conditions
  - F. Portland District Nationwide Permit Specific Regional Condition
- 

In addition to any special conditions that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit authorization to be valid in Oregon.

### **A. Description of Activities Authorized by Nationwide Permit (NWP) 43**

**43. Stormwater Management Facilities.** Discharges of dredged or fill material into non-tidal waters of the United States for the construction of stormwater management facilities, including stormwater detention basins and retention basins and other stormwater management facilities; the construction of water control structures, outfall structures and emergency spillways; the construction of low impact development integrated management features such as bioretention facilities (e.g., rain gardens), vegetated filter strips, grassed swales, and infiltration trenches; and the construction of pollutant reduction green infrastructure features designed to reduce inputs of sediments, nutrients, and other pollutants into waters, such as features needed to meet reduction targets established under Total Maximum Daily Loads set under the Clean Water Act.

This NWP authorizes, to the extent that a Section 404 permit is required, discharges of dredged or fill material into non-tidal waters of the United States for the maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features. The maintenance of stormwater management facilities, low impact development integrated management features, and pollutant reduction green infrastructure features that are not waters of the United States does not require a Section 404 permit.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

**Notification:** For discharges of dredged or fill material into non-tidal waters of the United States for the construction of new stormwater management facilities or pollutant reduction green infrastructure features, or the expansion of existing stormwater

management facilities or pollutant reduction green infrastructure features, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) Maintenance activities do not require pre-construction notification if they are limited to restoring the original design capacities of the stormwater management facility or pollutant reduction green infrastructure feature. (Authority: Section 404)

## **B. Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. *Navigation.* (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life Movements.* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. *Spawning Areas.* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. *Migratory Bird Breeding Areas.* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. *Shellfish Beds.* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
6. *Suitable Material.* No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
7. *Water Supply Intakes.* No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. *Adverse Effects from Impoundments.* If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
9. *Management of Water Flows.* To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
10. *Fills Within 100-Year Floodplains.* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
11. *Equipment.* Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
12. *Soil Erosion and Sediment Controls.* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date.



Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. *Removal of Temporary Structures and Fills.* Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. *Proper Maintenance.* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. *Single and Complete Project.* The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. *Wild and Scenic Rivers.* (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. *Tribal Rights.* No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. *Endangered Species.* (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal

Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA Section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA Section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA Section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA Section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under Section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA Section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA Section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA Section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA Section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA Section 7 consultation conducted for the ESA Section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA Section 7 consultation for the ESA Section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA Section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA Section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA Section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. *Migratory Birds and Bald and Golden Eagles.* The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. *Historic Properties.* (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under Section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with Section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of Section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district



engineer either that the activity has no potential to cause effects to historic properties or that NHPA Section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. If NHPA Section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that Section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. *Discovery of Previously Unknown Remains and Artifacts.* Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. *Designated Critical Resource Waters.* Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. *Mitigation.* The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the

permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.



24. *Safety of Impoundment Structures.* To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. *Water Quality.* (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA Section 401, a CWA Section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA Section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. *Coastal Zone Management.* In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. *Regional and Case-By-Case Conditions.* The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA Section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. *Use of Multiple Nationwide Permits.* The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. *Transfer of Nationwide Permit Verifications.* If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

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(Transferee)

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(Date)

30. *Compliance Certification.* Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. *Activities Affecting Structures or Works Built by the United States.* If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the Section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. *Pre-Construction Notification.* (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or

division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including



those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide

documentation demonstrating compliance with Section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for Section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity’s compliance with the terms

and conditions of the NWP, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **C. District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources

that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so



that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### **D. Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

#### **E. Portland District Regional Conditions**

1. *Notification:* For permittees that received written NWP approval, upon starting the authorized activities, you shall notify the U.S. Army Corps of Engineers, Portland District, Regulatory Branch that the work has started. Notification shall be provided by e-mail to [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) and the email subject line shall include: Corps project number and the project location by county.

2. *Aquatic Resources of Special Concern:* Pre-construction notification to the District Engineer is required for all activities proposed in waters of the U.S. within, or directly affecting, an aquatic resource of special concern. Aquatic resources of special concern are resources that are difficult to replace, unique, and/or have high ecological function. For the purpose of this regional condition, aquatic resources of special concern are native eel grass (*Zostera marina*) beds, mature forested wetlands, bogs, fens, vernal pools, alkali wetlands, wetlands in dunal systems along the Oregon coast, estuarine wetlands, Willamette Valley wet prairie wetlands, marine gardens, marine reserves, kelp beds, and rocky substrate in tidal waters.

In addition to the content requirements of NWP General Condition (GC) 32, the pre-construction notification must include a statement explaining why the effects of the proposed activity are no more than minimal. Written approval from the District Engineer must be obtained prior to commencing work.

Note: If the District Engineer determines that the adverse effects of the proposed activity are more than minimal, then the District Engineer will notify the applicant that either:

- a. the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;
- b. the activity is authorized under the NWP subject to submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or
- c. the activity is authorized under the NWP with specific modifications or conditions.

3. *Cultural Resources and Human Burials-Inadvertent Discovery Plan:* In addition to the requirements in NWP GCs 20 and 21, the permittee shall immediately notify the District Engineer if, at any time during the course of the work authorized, human burials, cultural items, or historic properties, as defined by the National Historic Preservation Act and Native American Graves Protection and Repatriation Act, are discovered. The permittee shall implement the following procedures as outlined on the Inadvertent Discovery Plan posted on the Portland District Regulatory website at <https://www.nwp.usace.army.mil/Missions/Regulatory/Nationwide.aspx>

Notify the Portland District Engineer as soon as possible following discovery but in no case later than 24 hours. Notification shall be sent electronically (cenwp.notify@usace.army.mil) and shall identify the Corps project number and clearly specify the purpose is to report a cultural resource discovery. The permittee shall also notify the Corps representative (by email and telephone) identified in the verification letter.

4. *Essential Fish Habitat:* Activities which may adversely affect essential fish habitat, as defined under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), are not authorized by NWP until essential fish habitat requirements have been met by the applicant and the Corps. Non-federal permittees must submit a pre-construction notification to the District Engineer if essential fish habitat may be affected by, or is in the vicinity of, a proposed activity and shall not begin work until notified by the District Engineer that the requirements of the essential fish habitat provisions of the MSA have been satisfied and the activity is authorized. The notification must identify the type(s) of essential fish habitat (e.g., Pacific coast salmon, Pacific coast groundfish, and/or Coastal-pelagic species) managed by a Fishery Management Plan that may be affected. Information about essential fish habitat is available at NOAA's website: <http://www.westcoast.fisheries.noaa.gov>

5. *Bank Stabilization:* Permittee shall include the use of bioengineering techniques and natural materials in the project design to the maximum extent practicable and shall minimize the use of rock. Bioengineering bank stabilization techniques are those that increase the strength and structure of soils with a combination of biological and mechanical elements (e.g., vegetation, root wads and woody debris, rock structures).

Riparian plantings shall be included in all project designs unless the permittee can demonstrate that such plantings are not practicable.

6. *Work Area Isolation and Dewatering:* Appropriate best management practices shall be implemented to prevent erosion and to prevent sediments from entering waters of the U.S.

a. All in-water work shall be isolated from the active channel or conducted during low seasonal stream flows to the maximum extent practicable.

b. Cofferdams shall be constructed of non-erosive material, such as concrete jersey barriers, sand and gravel bag dams, or water bladders. Constructing a cofferdam by pushing material from the streambed or sloughing material from the streambanks is not authorized.

c. Sand and gravel bag dams shall be lined with a plastic liner or geotextile fabric to reduce permeability and prevent sediments and/or construction materials from entering waters of the U.S.

d. Upstream and downstream flows shall be maintained by routing flows around the construction site.

e. When dewatering is necessary for construction, a sediment basin, or other applicable method, shall be used to settle sediments prior to releasing the water back into the waterbody. Settled water shall be returned to the waterbody in such a manner as to avoid erosion. Sediment basins shall be placed in uplands.

f. Fish and other aquatic species must be salvaged (i.e., safely captured and relocated away from the project or development site) prior to dewatering. Contact ODFW for additional information regarding fish salvage.

7. *Dredging:* For NWP-authorized activities that involve removal of sediment from waters of the U.S., the permittee shall ensure that any necessary sediment characterization regarding size, composition, and potential contaminants is conducted and reviewed prior to dredging. Sediment characterization must be conducted per the Sediment Evaluation Framework for the Pacific Northwest (available at: <http://www.nwp.usace.army.mil/Missions/Environmental-Stewardship/DMM.aspx>).

Note: The return water from a contained disposal area is defined as a discharge of dredged material by 33 CFR part 323.2(d) and requires separate authorization from the District Engineer (e.g., by NWP 16).

8. *Mechanized Equipment:* In addition to the requirements in NWP GC 11, permittee shall implement the following practices to prevent or minimize impacts to the aquatic environment from mechanized equipment:

a. Operate equipment from the top of a streambank and conduct work outside of the active stream channel, unless specifically authorized by the District Engineer.

b. Spill prevention and containment materials shall be maintained and be readily accessible at vehicle staging areas. The amount of spill response materials (such as straw matting/bales, geotextiles, booms, diapers, and other absorbent materials, shovels, brooms, and containment bags) maintained on-site must be appropriate for the size of the authorized activity.

Note: See Regional Condition 10 regarding timeframes for temporary fills.

9. *Erosion Control*: During construction and until the site is stabilized, the permittee shall ensure all practicable measures are implemented and maintained to prevent erosion and runoff. Temporary stockpiles of excavated or dredged material shall be stabilized to prevent erosion. Once soils or slopes have been stabilized, permittee shall completely remove and properly dispose of or re-use all non-biodegradable components of installed control measures.

10. *Temporary Fills and Impacts*: To ensure no more than minimal adverse environmental effects from temporary fills and impacts to waters of the U.S.:

a. Temporary fills and/or impacts to waters of the U.S. shall not exceed six months unless otherwise approved by the District Engineer.

b. No more than one-half ( $\frac{1}{2}$ ) acre of waters of the U.S. may be temporarily filled or impacted unless otherwise approved by the District Engineer (temporary fills and impacts do not affect specified limits for loss of waters associated with specific nationwide permits).

c. Native soils and/or sediments removed from waters of the U.S. for project construction shall be stockpiled and used for site restoration to the maximum extent practicable.

d. Site restoration of temporarily filled or impacted areas shall include returning the area to pre-project ground surface contours. The permittee shall appropriately revegetate temporarily filled or impacted areas with native, noninvasive herbs, shrubs, and/or tree species sufficient in number, spacing, and diversity to replace affected aquatic functions.

Note: The Corps will determine compensatory mitigation requirements for temporary fills and impacts on a case-by-case basis depending on the duration and nature of the temporary fill or impact and the type of aquatic resource affected.

11. *Contractor Notification of Permit Requirements*: The permittee must provide a copy of the Nationwide Permit verification letter, conditions, and permit drawings to all contractors and any other parties performing the authorized work, prior to the commencement of any work in waters of the U.S.



*12. Inspection of the Project Site:* The permittee shall allow representatives of the District Engineer to inspect the authorized activity to confirm compliance with nationwide permit terms and conditions. A request for access to the site will normally be made sufficiently in advance to allow a property owner or representative the option to be on site during the inspection.

**F. Portland District Nationwide Permit 43 Specific Regional Condition**

NWP 43: This NWP does not authorize the retention of water in excess of that required to meet stormwater management requirements. Unauthorized purposes include recreational lakes, reflecting pools, irrigation, etc.



# Oregon

Kate Brown, Governor

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February 17, 2022

Sarah Miller  
Oregon Department of Environmental Quality  
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Portland, OR 97232

RE: 401 Water Quality Certification Approval for 2020-439, Pacific Carbide Sediment Remediation

The US Army Corps of Engineers (USACE) has determined that your project will be authorized under Nationwide Permit (NWP) category #38. As described in the application package received and reviewed by the Oregon Department of Environmental Quality (DEQ), the project qualifies for the expedited 401 Water Quality Certification (WQC), subject to the conditions outlined below. If you cannot meet all conditions of this 401 WQC, you may apply for a standard individual certification. A standard individual certification will require additional information, a public notice, and a higher review fee.

**Certification Decision:** Based on information provided by the USACE and the Applicant, DEQ has determined that implementation eligible activities under the proposed NWP will be consistent with water quality requirements including applicable provisions of Sections 301, 302, 303, 306, and 307 of the federal Clean Water Act, state water quality standards set forth in Oregon Administrative Rules Chapter 340 Division 41, and other appropriate requirements of state law, provided the following conditions are incorporated into the federal permit and strictly adhered to by the Applicant.

**Duration of Certificate:** This 401 WQC for impacts to waters, including dredge and fill activities, is valid for the duration of the USACE Section 404 permit. A new 401 WQC must be requested with any modification of the USACE 404 permit.

**In addition to all USACE national and regional permit conditions, the following 401 WQC conditions apply to all NWP categories that qualify for the Nationwide 401 WQC.**

## 401 GENERAL CERTIFICATION CONDITIONS

- 1) **Responsible parties:** This 401 WQC applies to the Applicant. The Applicant is responsible for the work of its contractors and sub-contractors, as well as any other entity that performs work related to this WQC.  
*Rule: 40 CFR 121, OAR 340-048-0015*  
*Justification: DEQ must be aware of responsible parties to ensure compliance.*

- 2) **Work Authorized:** Work authorized by this 401 WQC is limited to the work described in the Permit Application and additional application materials (hereafter “the permit application materials”), unless otherwise authorized by DEQ. If the project is operated in a manner not consistent with the project description contained in the permit application materials, the Applicant is not in compliance with this 401 WQC and may be subject to enforcement.  
*Rule:* OAR 340-048-0015  
*Justification:* To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.
- 3) **401 WQC on Site:** A copy of this 401 WQC must be kept on the job site and readily available for reference by the Applicant and its contractors and subcontractors, as well as by DEQ, USACE, National Marine Fisheries Service (NMFS), Oregon Department of Fish and Wildlife (ODFW), and other state and local government inspectors.  
*Rule:* OAR 340-012  
*Justification:* All parties must be aware of and comply with the 401 WQC, including on-site contractors.
- 4) **Project Changes:** DEQ may modify or revoke this 401 WQC, in accordance with OAR 340-048-0050, if the project changes or project activities are having an adverse impact on state water quality or beneficial uses, or if the Applicant is otherwise in violation of the conditions of this certification.  
*Rule:* OAR 340-048-0050  
*Justification:* To ensure the project will comply with water quality standards, DEQ must understand all work involved in the construction and operation of the project.
- 5) **Land Use Compatibility Statement:** In accordance with OAR 340-048-0020(2) (i), each Applicant must submit findings prepared by the local land use jurisdiction that demonstrates the activity’s compliance with the local comprehensive plan. Such findings can be submitted using Section 11 of the Joint Permit Application, signed by the appropriate local official and indicating:
  - a. “This project is consistent with the comprehensive plan and land use regulations;” or,
  - b. “This project will be consistent with the comprehensive plan and land use regulations when the following local approvals are obtained,” accompanied by the obtained local approvals.
  - c. Rarely, such as for federal projects on federal land, “this project is not regulated by the comprehensive plan” will be acceptable.

In lieu of submitting the appropriate section of the USACE & Department of State Lands (DSL) Joint Permit Application, the Applicant may use DEQ’s Land Use Compatibility Statement form found at: <http://www.oregon.gov/deq/FilterDocs/lucs.pdf>

*Rule:* OAR 340-048-0020(2) (i), OAR 340-018

*Justification:* DEQ must ensure compliance with water quality land use laws at the local level.

- 6) **Access:** The Applicant and its contractors must allow DEQ access to the project site with or without prior notice, including staging areas, and mitigation sites to monitor compliance with these 401 WQC conditions, including:
  - a. Access to any records, logs, and reports that must be kept under the conditions of this 401 WQC;

- b. To inspect best management practices (BMPs), monitoring or equipment or methods; and
- c. To collect samples or monitor any discharge of pollutants.

**Rule:** OAR 340-012

**Justification:** DEQ must inspect facilities for compliance with all state rules and laws.

- 7) Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

**Rule:** OAR 340-012

**Justification:** If the project is not being constructed or operated as proposed, it may not be consistent with water quality requirements.

### FOR PROJECTS THAT PROPOSE CONSTRUCTION, THE FOLLOWING GENERAL CONDITIONS APPLY

- 8) **Erosion and Sediment Control:** During construction, erosion control measures must be implemented to prevent or control movement of soil into waters of the state. The Applicant is required to develop and implement an effective erosion and sediment control plan. **Any project that disturbs more than one acre is required to obtain a National Pollutant Discharge Elimination System (NPDES) 1200-C construction stormwater permit from DEQ.** Contact DEQ for more information. Contact information can be found at:

<https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Construction.aspx>

In addition, the Applicant (or responsible party) must:

- a. Maintain an adequate supply of materials necessary to control erosion at the project construction site.
- b. Prohibit erosion of stockpiles. Deploy compost berms, impervious materials, or other effective methods during rain events or when stockpiles are not moved or reshaped for more than 48 hours.
- c. Inspect erosion control measures daily and maintain erosion control measures as often necessary to ensure the continued effectiveness of measures. Erosion control measures must remain in place until all exposed soil is stabilized;
  - i. If monitoring or inspection shows that the erosion and sediment controls are ineffective, Applicant must mobilize immediately to make repairs, install replacements, or install additional controls as necessary.
  - ii. If sediment has reached 1/3 of the exposed height of a sediment or erosion control, Applicant must remove the sediment to its original contour.
- d. Use removable pads or mats to prevent soil compaction at all construction access points through, and staging areas in, riparian or wetland areas to prevent soil compaction, unless otherwise authorized by DEQ.
- e. Flag or fence off wetlands not specifically authorized to be impacted to protect from disturbance and/or erosion.



- f. Place dredged or other excavated material on upland areas with stable slopes to prevent materials from eroding back into waterways or wetlands.
- g. Place clean aggregate at all construction entrances, and utilize other BMPs, including, but not limited to as truck or wheel washes, when earth moving equipment is leaving the site and traveling on paved surfaces. The tracking of sediment off site by vehicles is prohibited.

**Rule:** OAR 340-041-0007(8), ORS 468B.050, CWA Section 402, OAR 340-045

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 9) **Deleterious Waste Materials:** The Applicant is prohibited from placing biologically harmful materials and construction debris where they could enter waters of the state, including wetlands (wetlands are waters of the state). This includes, but is not limited to: petroleum products; chemicals; cement cured less than 24 hours; welding slag and grindings; concrete saw cutting by-products; sandblasted materials; chipped paint; tires; wire; steel posts; asphalt; and waste concrete.

The following specific requirements apply:

- a. Cure concrete, cement, or grout for at least 24 hours before any contact with flowing waters;
- b. Use only clean fill, free of waste and polluted substances;
- c. Employ all practicable controls to prevent discharges of spills of harmful materials to surface or groundwater;
- d. Maintain at the project construction site, and deploy as necessary, an adequate supply of materials needed to contain deleterious materials during a weather event;
- e. Remove all foreign materials, refuse, and waste from the project area

**Rule:** OAR 340-041-0007(8), ORS 468B.050, CWA Section 402

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 10) **Spill Prevention:** The Applicant must fuel, operate, maintain and store vehicles, and must store construction materials, in areas that will not disturb habitat directly or result in potential discharges.

**Rule:** ORS 468B.025(1)(a)

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 11) **Spill & Incident Reporting:**

- a. In the event that deleterious materials are discharged into state waters, or onto land with a potential to enter state waters, the discharge must be promptly reported to the Oregon Emergency Response Service (OERS, 1-800-452-0311). Containment and cleanup must begin immediately and be completed as soon as possible.
- b. If the project operations cause a water quality problem that results in distressed or dying fish, the operator must immediately: cease operations; take appropriate corrective measures to prevent further environmental damage; collect fish specimens and water samples; and notify DEQ, ODFW, NMFS, and US Fish and Wildlife Service (USFW).

**Rule:** ORS 466.645(1); OAR 340-142-0030(1)(b)(B), OAR 340-041

**Justification:** DEQ must ensure that pollution does not enter waterways and must be protective of beneficial uses, including fish.

12) **Vegetation Protection and Site Restoration:**

- a. The Applicant must protect riparian, wetland, and shoreline vegetation in the authorized project area from disturbance through one or more of the following:
  - i. Minimization of project and impact footprint;
  - ii. Designation of staging areas and access points in open, upland areas;
  - iii. Fencing and other barriers demarking construction areas; and
  - iv. Use of alternative equipment (e.g., spider hoe or crane).
- b. If authorized work results in vegetative disturbance and the disturbance has not been accounted for in planned mitigation actions, the Applicant must successfully reestablish vegetation to a degree of function equivalent or better than before the disturbance.
- c. Pesticides (including herbicides) and fertilizers must be applied per manufacturer's instructions by a professionally licensed applicator. If chemical treatment is necessary, the Applicant is responsible for ensuring that pesticide application laws, including with the NPDES System 2300-A general permit, are met. Please review the information on the following website for more information:  
<https://www.oregon.gov/deq/wq/wqpermits/Pages/Pesticide.aspx>
  - i. For pesticide application within stormwater treatment facilities or within 150 feet of waters of the state, the Applicant must adopt an Integrated Pest Management (IPM) plan that describes pest prevention, monitoring and control techniques with a focus on prevention of inputs to waters of the state, or coverage under an NPDES permit, if required.
  - ii. Pesticide application should be applied during the dry season and avoid direct water application;
  - iii. Unless otherwise approved in writing by DEQ, applying surface fertilizer within stormwater treatment facilities or within 50 feet of any stream channel is prohibited.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-041-0033

**Justification:** Riparian, wetland, and shoreline vegetation help ensure excess sediment does not enter a waterway, and helps offset potential temperature impacts. DEQ must ensure that pollution does not enter waterways.

- 13) **Buffers:** The Applicant shall avoid and protect from harm, all wetlands and provide a 50 foot buffer to waters of the state, unless proposed, necessary, and approved as part of the project. If a local jurisdiction has a more stringent buffer requirement, that requirement will take the place of this certification requirement.

**Rule:** OAR 340-041, OAR 340-012

**Justification:** Riparian, wetland, and shoreline buffers help ensure excess sediment does not enter a waterway, and helps offset potential temperature impacts. DEQ must ensure that pollution does not enter waterways.

- 14) **Previously Contaminated Soil and Groundwater:** If any contaminated soil or groundwater is encountered, it must be handled and disposed of in accordance with the soil and groundwater management plan for the site, as well as local, state and federal regulations. The Applicant must notify the Environmental Cleanup Section of DEQ at 1-800-452-4011 Ex.6258.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-122, OAR 340-040

**Justification:** DEQ must ensure that pollution does not enter waterways. As sediments are disturbed, pollutants could become redistributed.

### FOR PROJECTS THAT PROPOSE IN-STREAM WORK IN JURISDICTIONAL WATERS

- 15) **Fish protection/ Oregon Department of Fish and Wildlife timing:** The Applicant must perform in-water work only within the ODFW preferred time window as specified in the *Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources*, or as authorized otherwise under a USACE permit and/or DSL removal/fill permit. Exceptions to the timing window must be recommended by ODFW, NMFS and/or the USFW as appropriate, and approved by DSL when applicable.  
**Rule:** OAR 340-041-0011  
**Justification:** DEQ must be protective of all water quality standards, including beneficial uses such as fish.
- 16) **Aquatic life movements:** Any activity that may disrupt the movement of aquatic life living in the water body, including those species that normally migrate through the area, is prohibited. The Applicant must provide unobstructed fish passage at all times during any authorized activity, unless otherwise approved in the approved application.  
**Rule:** OAR 340-041-0016; OAR 340-041-0028  
**Justification:** DEQ must be protective of all water quality standards, including beneficial uses such as fish.
- 17) **Isolation of in-water work areas:** The Applicant must isolate in-water work areas from the active flowing stream, unless otherwise authorized as part of the approved application, or authorized by DEQ.  
**Rule:** OAR 340-041, OAR 340-012, OAR 340-045  
**Justification:** DEQ must ensure that pollution does not enter waterways.
- 18) **Cessation of Work:** The Applicant must cease project operations under high-flow conditions that will result in inundation of the project area. Only efforts to avoid or minimize turbidity or other resource damage as a result of inundation of the exposed project area are allowed during high-flow conditions.  
**Rule:** OAR 340-041, OAR 340-012  
**Justification:** DEQ must ensure that pollution does not enter waterways.
- 19) **Turbidity:** The Applicant must implement BMPs to minimize turbidity during in-water work. Any activity that causes turbidity to exceed 10% above natural stream turbidities is prohibited except as specifically provided below:
  - a. **Monitoring:** Turbidity monitoring must be conducted and recorded as described below. Monitoring must occur at two-hour intervals each day when in-water work is being conducted. A properly calibrated turbidimeter is required **unless another monitoring method is proposed and authorized by DEQ.**
  - i. **Representative Background Point:** The Applicant must take and record a turbidity measurement every two hours during in-water work at an undisturbed area. A background location shall be established at a representative location approximately 100 feet up-current of the in water activity unless otherwise authorized by DEQ. The background turbidity, location, date, tidal stage (if applicable) and time must be recorded immediately prior to monitoring down-current at the compliance point described below.

- ii. **Compliance Point:** The Applicant must monitor every two hours. A compliance location shall be established at a representative location approximately 100 feet down-current from the disturbance at approximately mid-depth of the waterbody and within any visible plume. The turbidity, location, date, tidal stage (if applicable) and time must be recorded for each measurement.
- b. **Compliance:** The Applicant must compare turbidity monitoring results from the compliance points to the representative background levels taken during each two – hour monitoring interval. Pursuant to OAR 340-041-0036, short term exceedances are allowed as followed:

<b>MONITORING WITH A TURBIDIMETER EVERY 2 HOURS</b>	
<b>TURBIDITY LEVEL</b>	<b>Restrictions to Duration of Activity</b>
0 to 4 NTU above background	No Restrictions
5 to 29 NTU above background	Work may continue maximum of 4 hours. If turbidity remains 5-29 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
30 to 49 NTU above background	Work may continue maximum of 2 hours. If turbidity remains 30-49 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
50 NTU or more above background	Stop work immediately and inform DEQ

c. **Reporting:**

- i. Record all turbidity monitoring required by subsections (a) and (b) above in daily logs which must include: calibration documentation; background NTUs; compliance point NTUs; comparison of the points in NTUs; and location; date; time; and tidal stage (if applicable) for each reading.
- ii. A narrative must be prepared discussing all exceedances with subsequent monitoring, actions taken, and the effectiveness of the actions. Applicant must make available copies of daily logs for turbidity monitoring to regulatory agencies including DEQ, USACE, NMFS, USFWS, and ODFW upon request.
- iii. Keep records on file for the duration of the permit cycle.

d. **BMPs to Minimize In-stream Turbidity:** The Applicant must implement the following BMPs, unless accepted in writing by DEQ:

- i. Sequence/Phasing of work – The Applicant must schedule work activities so as to minimize in-water disturbance and duration of in-water disturbances.
- ii. Bucket control - All in-stream digging passes by excavation machinery and placement of fill in-stream using a bucket must be completed so as to minimize turbidity. All practicable techniques such as employing an experienced equipment operator, not dumping partial or full buckets of



material back into the wetted stream, adjusting the volume, speed, or both of the load, or using a closed-lipped environmental bucket must be implemented;

- iii. The Applicant must limit the number and location of stream-crossing events. Establish temporary crossing sites as necessary at the least sensitive areas and amend these crossing sites with clean gravel or other temporary methods as appropriate;
- iv. Machinery may not be driven into the flowing channel, unless authorized in writing by DEQ; and
- v. Excavated material must be placed so that it is isolated from the water edge or wetlands, and not placed where it could re-enter waters of the state uncontrolled.
- vi. Containment measures such as silt curtains, geotextile fabric, and silt fences must be in place and properly maintained in order to minimize in-stream sediment suspension and resulting turbidity.

**Rule:** OAR 340-041-0036, OAR 340-041

**Justification:** DEQ must ensure that pollution does not enter waterways.

#### **SPECIFIC CONDITIONS FOR POST-CONSTRUCTION STORMWATER MANAGEMENT**

- 20) **Post Construction Stormwater Management:** For projects which propose new impervious surfaces or the redevelopment of existing surfaces, the Applicant must submit a post-construction stormwater management plan to DEQ. The plan must be reviewed and approved prior to construction to ensure compliance with water quality standards. The Applicant must implement BMPs as proposed in the stormwater management plan, including operation and maintenance. If proposed stormwater facilities change due to site conditions, the Applicant must notify DEQ in writing.

In lieu of a complete stormwater management plan, the Applicant may submit documentation of acceptance of the stormwater into a DEQ permitted NPDES Phase I Municipal Separate Storm Sewer System (MS4).

**Rule:** ORS 468B.050, OAR 340-045, OAR 340-041

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 21) **Stormwater Management & System Maintenance:** The Applicant is required to implement effective operation and maintenance practices for the lifetime of the proposed facility. Long-term operation and maintenance of stormwater treatment facilities will be the responsibility of the applicant or the entity listed in the approved post-construction stormwater management plan.

Maintenance of stormwater treatment facilities subject to an MS4 permit is regulated by the permit.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-045

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 22) **Corrective Action May Be Required:** DEQ retains the authority to require corrective action in the event the stormwater management facilities are not built or performing as described in the plan.

**Rule:** OAR 340-041, OAR 340-012

**Justification:** DEQ must ensure that pollution does not enter waterways.

### CATEGORY SPECIFIC CONDITIONS

In addition to all national and regional conditions of the USACE permit and the 401 Water Quality Certification general conditions above, the following conditions apply to the noted specific categories of authorized activities.

#### NWP 42 – Recreational Facilities:

- 42.1) For facilities that include turf maintenance actions, the permittee must develop and implement an Integrated Pest Management Plan (IPM) that describes pest prevention, monitoring and control techniques with a focus on prevention of chemical and nutrient inputs to waters of the state, including maintenance of adequate buffers for pesticide application near salmonid streams, or coverage under an NPDES permit, if required (information is available at: <http://www.oregon.gov/deq/wq/wqpermits/Pages/Pesticide.aspx>).

**Rule:** OAR 340-041-0033, OAR 340-041

**Justification:** DEQ must ensure that pollution does not enter waterways, including excess pesticides and fertilizers.

#### NWP 43 – Stormwater Management Facilities:

- 43.1) Projects that propose the following elements are denied expedited certification:
- In-stream stormwater facilities;
  - Discharge outfalls not subject to an MS4 NPDES permit; and,
  - Proposals that do not demonstrate pollutant removal to meet water quality standards prior to discharge to waters of the state.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-048

**Justification:** DEQ must ensure that pollution does not enter waterways; stormwater is considered a pollutant.

- 43.2) To apply for certification for a project with in-stream stormwater facilities, without an NPDES permit, or without submittal of an approvable stormwater management plan per DEQ's Guidelines (at: <http://www.oregon.gov/deq/FilterDocs/401wqcertPostCon.pdf>), the Applicant must submit complete project information and water quality impacts analysis directly to DEQ in order to undergo individual 401 WQC evaluation and fulfill public participation requirements.

**Rule:** OAR 340-041-0059

**Justification:** DEQ must ensure that pollution does not enter waterways; stormwater is considered a pollutant.

#### NWP 44 – Mining Activities:

- 44.1) Projects that do not obtain an NPDES 700-PM or Individual permit are denied expedited certification.

**Rule:** OAR 340-045-0033, OAR 340-041

**Justification:** DEQ must ensure that pollution does not enter waterways. Excess turbidity can be considered pollution.

- 44.2) To apply for certification for a project without an NPDES permit, the Applicant must submit complete project information and water quality impacts analysis directly to DEQ in order to undergo individual 401 WQC evaluation and fulfill public participation requirements.

**Rule:** OAR 340-041-0059

**Justification:** DEQ must ensure that pollution does not enter waterways.

- 44.3) The State of Oregon requires an In-Water Blasting Permit be obtained per OAR, 635-425-0000. Permittee is advised to contact the nearest ODFW office for further information at:

<https://www.dfw.state.or.us/lands/inwater/>

**Rule:** OAR 340-041-0011

**Justification:** DEQ must be protective of all water quality standards, including beneficial uses such as fish.

### **NWP 51 – Land-Based Renewable Energy Generation Facilities:**

- 51.1) For associated utility lines with directionally-bored stream or wetland crossings proposed, condition D.1 must be applied.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-048

**Justification:** DEQ must ensure that pollution does not enter waterways.

### **NWP 58 – Utility Lines:**

- 58.1) For proposals that include directionally-bored stream or wetland crossings:

- a. All drilling equipment, drill recovery and recycling pits, and any waste or spoil produced, must be completely isolated, recovered, then recycled or disposed of to prevent entry into waters of the state. Recycling using a tank instead of drill recovery/recycling pits is preferable;
- b. In the event that drilling fluids enter a water of the state, the equipment operator must stop work, immediately initiate containment measures and report the spill to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
- c. An adequate supply of materials needed to control erosion and to contain drilling fluids must be maintained at the project construction site and deployed as necessary.
- d. The Applicant must have a contingency plan in place prior to construction for the inadvertent return of drilling lubricant.

**Rule:** OAR 340-142-0030, OAR 340-142-0040(1)

**Justification:** Drilling equipment and fluids that enter a waterbody would likely cause contamination of that waterbody.

- 58.2) For proposals that include utility lines through wetlands, include anti-seep collars or equivalent technology to prevent draining the wetlands.

**Rule:** OAR 340-041, OAR 340-012, OAR 340-048

**Justification:** DEQ must ensure that pollution does not enter waterways.

If the Applicant is dissatisfied with the conditions contained in this certification, a hearing may be requested. Such request must be made in writing to DEQ's Office of Compliance and Enforcement at 700 NE Multnomah St, Suite 600, Portland Oregon 97232, within 20 days of the mailing of this certification.

**Project Name:** Pacific Carbide Sediment Remediation  
**Project Number:** 2020-439

The DEQ hereby certifies that this project complies with the Clean Water Act and state rules, with the above conditions. If you have any questions, please contact Haley Teach at 503-229-5051, by email at [Haley.Teach@deq.oregon.gov](mailto:Haley.Teach@deq.oregon.gov), or at the address on this letterhead.

Sincerely,

A handwritten signature in blue ink, appearing to read 'S Mrazik', is positioned below the word 'Sincerely,'.

Steve Mrazik,  
Water Quality Manager  
Northwest Region

ec: Melody White, USACE  
Melinda Butterfield, DSL  
Joshua Elliot, Maul, Foster, & Alongi, Inc.





# 401 Water Quality Certification Turbidity Monitoring Report

Project Name:	USACE Project #
	DSL Project #

Name of Inspector(s):	Turbidimeter Model:	Calibration Standard Type (Circle One) <b>Formazin Solution or Gelex</b>	Calibration Standard Expiration Date:
Sampling Date:  Calibration Values: _____ NTU (Standard) = _____ NTU (Reading) _____ NTU (Standard) = _____ NTU (Reading) _____ NTU (Standard) = _____ NTU (Reading)	*Upstream (Background) Point Location: Latitude: _____ Longitude: _____	*Downstream (Compliance) Point Location: Latitude: _____ Longitude: _____	

In-Water Work Start Time:	In-Water Work End Time:	Description of In-Water Work:
---------------------------	-------------------------	-------------------------------

Upstream Sample	Time	Turbidity (NTU)	Downstream Sample		Change in Turbidity (NTU)	Observation of waterbody		NOTES (Describe any modifications made to BMPs)
			Time	Turbidity (NTU)		Tidal Stage	Note any plume, sheen, floatables, color	

\* Include a figure with the turbidity sampling forms showing the sampling locations.

**Turbidity:** The Applicant must implement appropriate Best Management Practices (BMPs) to minimize turbidity during in-water work. Any activity that causes turbidity to exceed 10% above natural stream turbidity is prohibited except as specifically provided below:

**Monitoring:** Turbidity monitoring must be conducted and recorded as described below. Monitoring must occur at two hour intervals each day during daylight hours when in-water work is being conducted, including while dewatering or work area isolation measures are in place. A properly calibrated turbidimeter is required unless another monitoring method is proposed and authorized by DEQ.

**Representative Background Point:** The Applicant must take and record a turbidity measurement every two hours during in-water work at an undisturbed area. A background location shall be established at a representative location approximately 100 feet upcurrent of the in water activity unless otherwise authorized by DEQ. The background turbidity, location, date, tidal stage (if applicable) and time must be recorded immediately prior to monitoring downcurrent at the compliance point described below.

**Compliance Point:** The must monitor every two hours. A compliance location shall be established at a representative location approximately 100 feet downcurrent from the disturbance at approximately mid-depth of the waterbody and within any visible plume. The turbidity, location, date, tidal stage (if applicable) and time must be recorded for each measurement.

**Compliance:** The Applicant must compare turbidity monitoring results from the compliance points to the representative background levels taken during each two – hour monitoring interval. Pursuant to OAR 340-041-0036, short term exceedances of the turbidity water quality standard are allowed as shown in the monitoring table shown here.

**Reporting:** The Applicant must record all turbidity monitoring required by subsections (a) and (b) above in daily logs, kept on file for the duration of the permit cycle. The daily logs must include calibration documentation; background NTUs; compliance point NTUs; comparison of the points in NTUs; location; date; time; and tidal stage (if applicable) for each reading. Additionally, a narrative must be prepared discussing all exceedances with subsequent monitoring, actions taken, and the effectiveness of the actions. Applicant must make available copies of daily logs for turbidity monitoring to DEQ, USACE, NMFS, USFWS, and ODFW upon request.

**BMPs to Minimize In-stream Turbidity:** The Applicant must implement the following BMPs, unless otherwise accepted by DEQ:

- i. Sequence/Phasing of Work – The Applicant must schedule work activities so as to minimize in-water disturbance and duration of in-water disturbances;
- ii. Bucket control - All in-stream digging passes by excavation machinery and placement of fill in-stream using a bucket must be completed so as to minimize turbidity. All practicable techniques such as employing an experienced equipment operator, not dumping partial or full buckets of material back into the wetted stream, adjusting the volume, speed, or both of the load, or using a closed-lipped environmental bucket must be implemented;
- iii. The Applicant must limit the number and location of stream-crossing events. Establish temporary crossing sites as necessary in the least sensitive areas and amend these crossing sites with clean gravel or other temporary methods as appropriate;
- iv. Machinery may not be driven into the flowing channel, unless authorized by DEQ; and
- v. Excavated material must be placed so that it is isolated from the water edge or wetlands, and not placed where it could re-enter waters of the state uncontrolled.

MONITORING WITH A TURBIDIMETER EVERY 2 HOURS	
TURBIDITY LEVEL	Restrictions to Duration of Activity
0 to 4 NTU above background	No Restrictions
5 to 29 NTU above background	Work may continue maximum of 4 hours. If turbidity remains 5-29 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
30 to 49 NTU above background	Work may continue maximum of 2 hours. If turbidity remains 30-49 NTU above background, stop work and modify BMPs. Work may resume when NTU is 0-4 above background.
50 NTU or more above background	Stop work immediately and inform DEQ


# 20220217\_WQC\_401Cert\_PacificCarbide\_ColumbiaSlough\_CleanUp\_2020-439


Final Audit Report


2022-02-17


Created:	2022-02-17
By:	Chamille Hartman (chamille.hartman@deq.state.or.us)
Status:	Signed
Transaction ID:	CBJCHBCAABAAm4-BFfCcHZXtNsn58qliUitiU7rVdESo


## "20220217\_WQC\_401Cert\_PacificCarbide\_ColumbiaSlough\_CleanUp\_2020-439" History

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# Inadvertent Discovery Plan

August 22, 2018

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## 1. Introduction

The U.S. Army Corps of Engineers (Corps) completes the requirements of Section 106 of the National Historic Preservation Act (NHPA), as applicable, for projects authorized by a Department of the Army permit. However, cultural resources or historic properties may unexpectedly be encountered during project construction based on the project location or type of work. These unforeseen finds are called an inadvertent discovery. This plan describes requirements should an inadvertent discovery occur.

In accordance with Section 106 of the NHPA, Federal agencies, such as the Corps, are required to take into account the effects of any permitted action to historic properties. The Corps completes these requirements in cooperation with States, local governments, Native American Tribes, and private organizations and individuals. There are numerous federal and state laws and regulations that apply to historic preservation that include, but are not limited to:

National Historic Preservation Act – [54 USC 306108] [36 CFR 60]

Native American Graves Protection and Repatriation Act – [25 USC 3001] [43 CFR 10]

Procedures for the Protection of Historic Properties – [33 CFR 325 – Appendix C]

Consultation and Coordination with Indian Tribal Governments – [Executive Order 13175]

Rights and Duties Relating to Cemeteries, Human Bodies and Anatomical Gifts – [ORS 97.740- 97.760]

Oregon Historical and Heritage Agencies, Programs and Tax Provisions; Museums; Local Symphonies and Bands; Archaeological Objects and Sites – [ORS 358.905 – 358.955]

Permits and Conditions for Excavation or Removal of Archaeological or Historical Material; Rules; Criminal Penalty – [ORS 390.235]

## 2. Background

For thousands of years, Native American Tribes have lived on the lands that now comprise the state of Oregon. Although these lands are under various ownerships, Native Americans still retain a strong connection to their ancestral lands. Tribal archeological and burial sites are not simply artifacts of the Tribe's cultural past, but are considered sacred and represent a continuing connection with their ancestors. Native American cultural resources, ancestral remains, funerary objects, sacred objects, and objects of cultural patrimony are protected under federal and state laws. Examples of Tribal cultural resources include, but are not limited to: lithic flakes, stone tools, Native American human remains, remnants of structures (e.g. house pits), fish weirs, and/or shell middens.

In addition to potential Tribal-related sites, non-Tribal cultural and historical resources are also protected under federal and state laws. Examples of material that may be found at a historic-period site include, but are not limited to: glass bottles, cans, structural



foundations, machinery or parts, nails and many other items. If material such as this is uncovered during the course of a project, the procedures outlined below are applicable.

**3. Inadvertent Discovery** – The permittee shall implement the following procedures:

**a. Projects that do not require monitoring by a professional archeologist** (see permit special conditions):

1) In the event evidence of human burials, human skeletal remains, cultural items, suspected cultural items, or historic properties, as defined by the NHPA, are discovered and/or may be affected during the course of the authorized work, the permittee shall **Immediately Cease All Ground Disturbing Activities** that may cause further disturbance to those remains or resources. The area of the find shall be secured and protected from further disturbance, including an appropriate buffer around the discovery (i.e. 100 feet) using flagging or other visible marker. Sensitive resources, such as human skeletal remains, may not include visual markers in order to avoid attracting attention. The find may be temporarily protected through stabilization or non-destructive covering. Reasonable steps shall be taken to ensure confidentiality of the discovery and restrict access. The permittee or permittee's representative shall immediately notify the Corps and other appropriate agencies as identified in part 3(a)(2) of this plan, below.

2) Notification Procedures:

- Notification to the Corps, Portland District, Regulatory Branch Archeologist shall be made by email to [brian.s.heil@usace.army.mil](mailto:brian.s.heil@usace.army.mil) or phone at 503-808-4382 as soon as possible following discovery, but in no case later than 24 hours. The email or call shall clearly specify the purpose is to report a cultural resource discovery, provide the permittee's name, and Corps permit number.
- The permittee shall also notify the Corps representative (by email or telephone) as identified in the permit letter.
- If the inadvertent discovery is identified as human skeletal remains on non-federal or non-tribal public and private lands, the permittee shall report the discovery to the Oregon State Police at (503) 731-4717 and the county medical examiner/coroner in the most expeditious manner possible. The remains shall not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Oregon State Historic Preservation Office (SHPO) who will then take jurisdiction over the remains.
- In all inadvertent discovery situations, the permittee is also responsible for contacting the SHPO at (503) 986-0690.

3) Failure to stop work immediately and continue such stoppage could result in a violation of federal and state laws. Violators may be subject to civil and criminal penalties. Work shall remain suspended until notified by the Corps that work may proceed.

4) The permittee shall not resume construction in the area surrounding the discovery until the Corps Regulatory Branch re-authorizes project construction, pursuant to 36 CFR Part 800.13.

**b. Projects that require monitoring by a professional archeologist** (see permit special conditions):

1) The Corps-required archeological monitor has the authority to temporarily stop all ground disturbing activities in the event evidence of human burials, human skeletal remains, cultural items, suspected cultural items, or historic properties, as defined by the NHPA, are discovered and/or may be affected during the course of the authorized work. Upon positive identification of human burials, human skeletal remains, cultural items, suspected cultural items, or historic properties, as defined by the NHPA, the archeological monitor shall notify the permittee of the inadvertent discovery and the permittee shall **Immediately Cease All Ground Disturbing Activities**. The archeological monitor will take actions necessary to secure the discovery location. The permittee or permittee's representative shall immediately notify the Corps and other appropriate agencies as necessary as described in the Notification Procedures above. Work shall remain suspended until notified by the Corps that work may proceed.

2) Before work can proceed, first, the nature of the discovery must be evaluated. If it is determined the discovery contains human remains, then section 4 below shall be initiated. If the discovery contains less than 10 artifacts, then paragraph 3) below shall be followed. If the discovery contains more than 10 artifacts and does not contain human skeletal remains, then the Corps, in consultation with the SHPO and tribes as appropriate, will determine whether the site may be eligible for listing in the National Register of Historic Places (NRHP). If deemed insignificant the Corps will allow work to continue. If deemed significant, the Corps, in consultation with the SHPO, will evaluate whether the continuation of work would constitute an adverse effect. If the Corps determines the effect will not be adverse, or the area can be avoided, then work will be allowed to continue. If the inadvertent discovery location cannot be avoided, and continuing work would have an adverse effect on the site, the Corps, in consultation with the permittee, SHPO, and tribes as appropriate, will need to draft and finalize a Memorandum of Agreement for the treatment of the historic site before work can proceed.

3) If an isolated artifact (defined as fewer than 10 artifacts by the SHPO) is identified, the archeological monitor shall determine: a) whether there is potential for other artifacts to be present in the vicinity of the initial discovery by acquiring a

state-issued archaeological testing permit (pursuant to state law) to conduct additional survey, soil screening, subsurface testing, or other method deemed appropriate, and b) whether the identified artifacts alone are significant. These two considerations will be used to determine if sufficient evidence is present to define a historic site (i.e. potentially eligible for listing in the NRHP). If upon closer examination the materials discovered are not consistent with human burials, human remains, cultural items, suspected cultural items, or historic properties, as defined by the NHPA, the monitoring archeologist shall notify the Corps (via by phone or email message), and can then allow work to proceed but with caution and at a slower rate until the monitor is confident no sites are represented. The isolated finds shall be reported in the archeological monitor's post-construction monitoring report.

#### 4. Human Remains

**a. Plan of Action:** If human burials and/or human skeletal remains are discovered, the archeological monitor shall ensure all unauthorized personnel have vacated the site location in a safe manner, make reasonable efforts to secure the location, and stabilize the remains if necessary (e.g. prevent remains from falling out of a trench wall). Every reasonable effort will be made by the monitor to ensure the remains are not physically handled or examined by unauthorized personnel until the proper notifications have been made. Reference is made to the Tribal Position Paper on Human Remains found on SHPO's website at:

[http://www.oregon.gov/OPRD/HCD/ARCH/docs/Tribal\\_position\\_paper\\_on\\_Human\\_Remains.pdf](http://www.oregon.gov/OPRD/HCD/ARCH/docs/Tribal_position_paper_on_Human_Remains.pdf).

**b. Treatment Plan:** The permittee shall develop a Treatment Plan (TP) in consultation with the Corps, SHPO, and tribe(s), as needed, to ensure the proper handling, protection, or temporary storage of human remains and/or cultural items until the proper tribe or other entity, as appropriate, can be identified and those resources can be repatriated. The TP will define the items found; develop a strategy for handling/moving human remains and/or cultural items, if applicable; develop a strategy for determining whether additional human remains and/or cultural items are endangered; determine if additional testing is necessary to identify site boundaries; and determine the disposition of the human remains and/or cultural items. The TP will be agreed upon by all parties involved before any future ground disturbance activities resume.

**Endangered Species Act – Section 7 Programmatic  
Consultation  
Conference and Biological  
Opinion and  
Magnuson-Stevens Fishery Conservation  
and  
Management Act  
Essential Fish Habitat  
Consultation  
For**

Revised Standard Local Operating Procedures for Endangered Species to Administer  
Maintenance or Improvement of Stormwater, Transportation, and Utility Actions  
Authorized or Carried Out by the U.S. Army Corps of Engineers in Oregon  
(SLOPES for Stormwater, Transportation or Utilities)

NMFS Consultation No.                      NWR-2013-10411

Action Agency:                                U.S. Army Corps of Engineers  
    Portland District, Operations and Regulatory Branches

Affected Species and Determinations:

ESA-Listed Species	ESA Status	Is the action likely to adversely affect this species or its critical habitat?	Is the action likely to jeopardize this species?	Is the action likely to destroy or adversely modify critical habitat for this species?
Lower Columbia River Chinook salmon	T	Yes	No	No
Upper Willamette River Chinook salmon	T	Yes	No	No
Upper Columbia River spring-run Chinook salmon	E	Yes	No	No
Snake River spring/summer run Chinook salmon	T	Yes	No	No
Snake River fall-run Chinook salmon	T	Yes	No	No
Columbia River chum salmon	T	Yes	No	No
Lower Columbia River Coho salmon	T	Yes	No	No*
Oregon Coast Coho salmon	T	Yes	No	No
Southern Oregon/Northern California coasts Coho	T	Yes	No	No
Snake River sockeye salmon	E	Yes	No	No
Lower Columbia River steelhead	T	Yes	No	No
Upper Willamette River steelhead	T	Yes	No	No
Middle Columbia River steelhead	T	Yes	No	No
Upper Columbia River steelhead	T	Yes	No	No
Snake River Basin steelhead	T	Yes	No	No
Southern green sturgeon	T	Yes	No	No
Eulachon	T	Yes	No	No
Southern resident killer whale	T	No	No	N/A



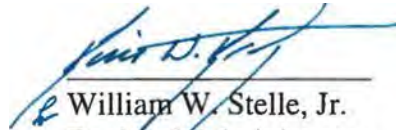
\*Critical habitat has been proposed for LCR Coho salmon.

Fishery Management Plan that Describes	Would the action adversely affect	Are EFH conservation recommendations
Coastal Pelagic Species	Yes	Yes
Pacific Coast Groundfish	Yes	Yes
Pacific Coast Salmon	Yes	Yes

Consultation

Conducted By:

National Marine Fisheries Service  
West Coast Region



Issued by:

William W. Stelle, Jr.  
Regional Administrator

Date Issued:

March 14, 2014

## **Excerpt from SLOPES for Stormwater, Transportation, or Utilities General Construction March 14, 2014**

**Natural hazard response** to complete an unplanned, immediate, or short-term repair of a stormwater facility, road, culvert, bridge, or utility line without federal assistance. These include in-water repairs that must be made before the next in-water work period to resolve critical conditions that, unless corrected, are likely to cause loss of human life, unacceptable loss of property, or natural resources. Natural hazards may include, but are not limited to, a flood that causes scour erosion and significantly weakens the foundation of a road or bridge; culvert failure due to blockage by fluvial debris, overtopping, or crushing; and ground saturation that causes a debris slide, earth flow, or rock fall to cover a road. This category of actions is only included to the extent that they require Corps permits or are undertaken by the Corps, but otherwise do not require federal authorization, funding, or federal agency involvement.. The response will include an assessment of its effects to listed species and critical habitats and a plan to bring the response into conformance with all other applicable PDC in this opinion, including compensatory mitigation based on the baseline conditions prior to the natural hazard.

**Streambank and channel stabilization** to ensure that roads, culverts, bridges and utility lines do not become hazardous due to the long-term effects of toe erosion, scour, subsurface entrainment, or mass failure. This action includes installation and maintenance of scour protection, such as at a footing, facing, or headwall, to prevent scouring or down-cutting of an existing culvert, road foundation, or bridge support. It does not include scour protection for bridge approach fills. Proposed streambank stabilization methods include alluvium placement, vegetated riprap with large wood (LW), log or roughened rock toe, woody plantings, herbaceous cover, deformable soil reinforcement, coir logs, bank reshaping and slope grading, floodplain flow spreaders, floodplain roughness, and engineered log jams (ELJs), alone or in combination. Any action that requires additional excavation or structural changes to a road, culvert, or bridge foundation is covered under road, culvert and bridge maintenance, rehabilitation, and replacement.

**Road surface, culvert and bridge maintenance, rehabilitation and replacement.** Maintenance, rehabilitation, and replacement to ensure that roads, culverts and bridges remain safe and reliable for their intended use without impairing fish passage, to extend their service life, and to withdraw temporary access roads from service in a way that promotes watershed restoration when their usefulness has ended. This includes actions necessary to complete geotechnical surveys, such as access road construction, drill pad preparation, mobilization and set up, drilling and sampling operations, demobilization, boring abandonment, and access road and drill pad reclamation. It also includes, excavation, grading, and filling necessary to maintain, rehabilitate, or replace existing roads, culverts, and bridges. This type of action does not include significant channel realignment, installation of fish passage (e.g., fish ladders, juvenile fish bypasses, culvert baffles, roughened chutes, step weirs), tidegate maintenance or replacements other than full removal, construction of new permanent roads within the riparian zone that are not a bridge approach, or construction of a new bridge where a culvert or other road stream crossing did not previously exist, or any project which will result in or contribute to other land use changes that trigger effects, including indirect effects not considered in this opinion.

**Stormwater facilities and utility line stream crossings** to install, maintain, rehabilitate, or replace stormwater facilities, or pipes or pipelines used to transport gas or liquids, including new or upgraded stormwater outfalls, and cables, or lines or wires used to transmit electricity or communication. Construction, maintenance or improvement of stormwater facilities include surveys, access road construction, excavation, grading, and filling necessary to maintain, rehabilitate, or replace existing stormwater treatment or flow control best management practices (BMPs). Utility line actions involve excavation, temporary side casting of excavated material, backfilling of the trench, and restoration of the work site to preconstruction contours and vegetation. This type of action does not include construction or enlargement of gas, sewer, or water lines to support a new or expanded service area for which effects, including indirect effects from interrelated or interdependent activities, have not been analyzed in this opinion. This opinion also does not include construction of any line that transits the bed of an estuary or saltwater area at depths less than -10.0 feet (mean lower low water).

### **1.3.1.2 Project Design Criteria - General Construction Measures**

#### **13. Project Design**

- a. Use the best available scientific information regarding the likely impacts of climate change on resources in the project area to design the project so that it will be resilient to those impacts, including projections of local stream flow, water temperature, and extreme events.
- b. Assess whether the project area is contaminated by chemical substances that may cause harm if released by the project. The assessment will be commensurate with site history and may include the following:
  - i. Review available records, *e.g.*, the history of existing structures and contamination events.
  - ii. If the project area was used for industrial processes, inspect to determine the environmental condition of the property.
  - iii. Interview people who are knowledgeable about the site, *e.g.*, site owners, operators, and occupants, neighbors, or local government officials.
  - iv. If contamination is found or suspected, consult with a suitably qualified and experienced contamination professional and NMFS before carrying out ground disturbing activities.
- c. Obtain all applicable regulatory permits and authorizations before starting construction.
- d. Minimize the extent and duration of earthwork, *e.g.*, compacting, dredging, drilling, excavation, and filling.

#### **14. In-Water Work Timing**

- a. Unless the in-water work is part of a natural hazard response, complete all work within the wetted channel during dates listed in the most recent version of Oregon In-water Work Guidelines (ODFW 2008), except that that in-water work in the Willamette River below Willamette Falls is not approved between December 1 and January 31.
- b. Hydraulic and topographic measurements and placement of LW or gravel may be completed anytime, provided the affected area is not occupied by adult fish congregating for spawning, or redds containing eggs or pre-emergent alevins.

**15. Pile Installation.** Pile may be concrete, or steel round pile 24 inches in diameter or smaller, steel H-pile designated as HP24 or smaller, or wood that has not been treated with preservatives or pesticides. Any proposal to use treated wood pilings is not covered by this consultation and will require individual consultation.

- a. NMFS will review and approve pile installation plans.
- b. When practical, use a vibratory hammer for in-water pile installation. In the lower Columbia River only a vibratory hammer may be used in October.
- c. Jetting may be used to install pile in areas with coarse, uncontaminated sediments that meet criteria for unconfined in-water disposal (USACE Northwest Division 2009).
- d. When using an impact hammer to drive or proof a steel pile, one of the following sound attenuation methods will be used:
  - i. Completely isolate the pile from flowing water by dewatering the area around the pile.
  - ii. If water velocity is 1.6 feet per second or less, surround the pile being driven by a confined or unconfined bubble curtain that will distribute small air bubbles around 100% of the pile perimeter for the full depth of the water column. See, *e.g.*, NMFS and USFWS (2006), Wursig *et al.* (2000), and Longmuir and Lively (2001).
  - iii. If water velocity is greater than 1.6 feet per second, surround the pile being driven with a confined bubble curtain (*e.g.*, surrounded by a fabric or non-metallic sleeve) that will distribute air bubbles around 100% of the pile perimeter for the full depth of the water column.
  - iv. Provide NMFS information regarding the timing of in-water work, the number of impact hammer strikes per pile and the estimated time required to drive piles, hours per day pile driving will occur, depth of water, and type of substrate, hydroacoustic assumptions, and the pile type, diameter, and spacing of the piles.

**16. Pile Removal.** The following steps will be used to minimize creosote release, sediment disturbance and total suspended solids:

- a. Install a floating surface boom to capture floating surface debris.
- b. Keep all equipment (*e.g.*, bucket, steel cable, vibratory hammer) out of the water, grip piles above the waterline, and complete all work during low water and low current conditions.
- c. Dislodge the pile with a vibratory hammer, when possible; never intentionally break a pile by twisting or bending.
- d. Slowly lift the pile from the sediment and through the water column.
- e. Place the pile in a containment basin on a barge deck, pier, or shoreline without attempting to clean or remove any adhering sediment. A containment basin for the removed piles and any adhering sediment may be constructed of durable plastic sheeting with sidewalls supported by hay bales or another support structure to contain all sediment and return flow which may otherwise be directed back to the waterway.
- f. Fill the hole left by each pile with clean, native sediments immediately after removal.
- g. Dispose of all removed piles, floating surface debris, any sediment spilled on work surfaces, and all containment supplies at a permitted upland disposal site.

**17. Broken or Intractable Pile.** If a pile breaks above the surface of uncontaminated sediment, or less than 2 feet below the surface, make every attempt short of excavation to remove it entirely. If the pile cannot be removed without excavation, drive the pile deeper if possible.

- a. If a pile in contaminated sediment is intractable or breaks above the surface, cut the pile or stump off at the sediment line.
- b. If a pile breaks within contaminated sediment, make no further effort to remove it and cover the hole with a cap of clean substrate appropriate for the site.
- c. If dredging is likely where broken piles are buried, use a global positioning system (GPS) device to note the location of all broken piles for future use in site debris characterization.

**18. Fish Capture and Release**

- a. If practicable, allow listed fish species to migrate out of the work area or remove fish before dewatering; otherwise remove fish from an exclusion area as it is slowly dewatered with methods such as hand or dip-nets, seining, or trapping with minnow traps (or gee-minnow traps).
- b. Fish capture will be supervised by a qualified fisheries biologist, with experience in work area isolation and competent to ensure the safe handling of all fish.
- c. Conduct fish capture activities during periods of the day with the coolest air and water temperatures possible, normally early in the morning to minimize stress and injury of species present.
- d. Monitor the nets frequently enough to ensure they stay secured to the banks and free of organic accumulation.
- e. Electrofishing will be used during the coolest time of day, only after other means of fish capture are determined to be not feasible or ineffective.
  - i. Do not electrofish when the water appears turbid, e.g., when objects are not visible at depth of 12 inches.
  - ii. Do not intentionally contact fish with the anode.
  - iii. Follow NMFS (2000) electrofishing guidelines, including use of only direct current (DC) or pulsed direct current within the following ranges:<sup>11</sup>
    1. If conductivity is less than 100  $\mu$ s, use 900 to 1100 volts.
    2. If conductivity is between 100 and 300  $\mu$ s, use 500 to 800 volts.
    3. If conductivity greater than 300  $\mu$ s, use less than 400 volts.
  - iv. Begin electrofishing with a minimum pulse width and recommended voltage, then gradually increase to the point where fish are immobilized.
  - v. Immediately discontinue electrofishing if fish are killed or injured, i.e., dark bands visible on the body, spinal deformations, significant de-scaling, torpid or inability to maintain upright attitude after sufficient recovery time. Recheck machine settings, water temperature and conductivity, and adjust or postpone procedures as necessary to reduce injuries.

<sup>11</sup> National Marine Fisheries Service. 2000. Guidelines for electrofishing waters containing Salmonid listed under the Endangered Species Act. Portland, Oregon and Santa Rose, California  
[http://swr.nmfs.noaa.gov/sr/Electrofishing\\_Guidelines.pdf](http://swr.nmfs.noaa.gov/sr/Electrofishing_Guidelines.pdf)



- f. If buckets are used to transport fish:
  - i. Minimize the time fish are in a transport bucket.
  - ii. Keep buckets in shaded areas or, if no shade is available, covered by a canopy.
  - iii. Limit the number of fish within a bucket; fish will be of relatively comparable size to minimize predation.
  - iv. Use aerators or replace the water in the buckets at least every 15 minutes with cold clear water.
  - v. Release fish in an area upstream with adequate cover and flow refuge; downstream is acceptable provided the release site is below the influence of construction.
  - vi. Be careful to avoid mortality counting errors.
- g. Monitor and record fish presence, handling, and injury during all phases of fish capture and submit a fish salvage report (Appendix A, Part 1 with Part 3 completed) to the Corps and the SLOPES mailbox (slopes.nwr@noaa.gov) within 60 days.

## 19. Fish Passage

- a. Provide fish passage for any adult or juvenile ESA-listed fish likely to be present in the action area during construction, unless passage did not exist before construction or the stream is naturally impassable at the time of construction.
- b. After construction, provide fish passage for any adult or juvenile ESA-listed fish that meets NMFS's fish passage criteria (NMFS 2011a) for the life of the action.

## 20. Fish Screens

- a. Submit to NMFS for review and approval fish screen designs for surface water diverted by gravity or by pumping at a rate that exceeds 3 cubic feet per second (cfs).
- b. All other diversions will have a fish screen that meets the following specifications:
  - i. An automated cleaning device with a minimum effective surface area of 2.5 square feet per cubic foot per second, and a nominal maximum approach velocity of 0.4 feet per second, or no automated cleaning device, a minimum effective surface area of 1 square foot per cubic foot per second, and a nominal maximum approach rate of 0.2 foot per second; and
  - ii. A round or square screen mesh that is no larger than 2.38 millimeters (mm) (0.094") in the narrow dimension, or any other shape that is no larger than 1.75 mm (0.069") in the narrow dimension.
- c. Each fish screen will be installed, operated, and maintained according to NMFS's fish screen criteria.

## 21. Surface Water Withdrawal

- a. Surface water may be diverted to meet construction needs, including dust abatement, only if water from developed sources (e.g., municipal supplies, small ponds, reservoirs, or tank trucks) are unavailable or inadequate; and
- b. Diversions may not exceed 10% of the available flow and will have a juvenile fish exclusion device that is consistent with NMFS's criteria (NMFS 2011a).<sup>12</sup>

<sup>12</sup> National Marine Fisheries Service 2011. Anadromous Salmonid passage facility design. Northwest Region. <http://www.nwr.noaa.gov/publications/hydropower/ferc/fish-passage-design.pdf>

**22. Construction Discharge Water.** Treat all discharge water using best management practices to remove debris, sediment, petroleum products, and any other pollutants likely to be present (e.g., green concrete, contaminated water, silt, welding slag, sandblasting abrasive, grout cured less than 24 hours, drilling fluids), to avoid or minimize pollutants discharged to any perennial or intermittent water body. Pump seepage water from the de-watered work area to a temporary storage and treatment site or into upland areas and allow water to filter through vegetation prior to reentering the stream channel. Treat water used to cure concrete until pH stabilizes to background levels.

**23. Temporary Access Roads and Paths**

- a. Whenever reasonable, use existing access roads and paths preferentially.
- b. Minimize the number and length of temporary access roads and paths through riparian areas and floodplains.
- c. Minimize removal of riparian vegetation.
- d. When it is necessary to remove vegetation, cut at ground level (no grubbing).
- e. Do not build temporary access roads or paths where grade, soil, or other features suggest slope instability.
- f. Any road on a slope steeper than 30% will be designed by a civil engineer with experience in steep road design.
- g. After construction is complete, obliterate all temporary access roads and paths, stabilize the soil, and revegetate the area.
- h. Temporary roads and paths in wet areas or areas prone to flooding will be obliterated by the end of the in-water work window. Decompact road surfaces and drainage areas, pull fill material onto the running surface, and reshape to match the original contours.

**24. Temporary Stream Crossings**

- a. No stream crossing may occur at active spawning sites, when holding adult listed fish are present, or when eggs or alevins are in the gravel.
- b. Do not place temporary crossings in areas that may increase the risk of channel re-routing or avulsion, or in potential spawning habitat, e.g., pools and pool tailouts.
- c. Minimize the number of temporary stream crossings; use existing stream crossings whenever reasonable.
- d. Install temporary bridges and culverts to allow for equipment and vehicle crossing over perennial streams during construction.
- e. Wherever possible, vehicles and machinery will cross streams at right angles to the main channel.
- f. Equipment and vehicles may cross the stream in the wet only where the streambed is bedrock, or where mats or off-site logs are placed in the stream and used as a crossing.
- g. Obliterate all temporary stream crossings as soon as they are no longer needed, and restore any damage to affected stream banks or channel.

## 25. Equipment, Vehicles and Power Tools

- a. Select, operate and maintain all heavy equipment, vehicles, and power tools to minimize adverse effects on the environment, *e.g.*, low pressure tires, minimal hard-turn paths for track vehicles, use of temporary mats or plates to protect wet soils.
- b. Before entering wetlands or working within 150 feet of a water body:
  - i. Power wash all heavy equipment, vehicles and power tools, allow them to fully dry, and inspect them for fluid leaks, and to make certain no plants, soil, or other organic material are adhering to the surface.
  - ii. Replace petroleum-based hydraulic fluids with biodegradable products<sup>13</sup> in hydraulic equipment, vehicles, and power tools.
- c. Repeat cleaning as often as necessary during operation to keep all equipment, vehicles, and power tools free of external fluids and grease, and to prevent a leak or spill from entering the water.
- d. Avoid use of heavy equipment, vehicles or power tools below ordinary high water (OHW) unless project specialists determine such work is necessary, or would result in less risk of sedimentation or other ecological damage than work above that elevation.
- e. Before entering the water, inspect any watercraft, waders, boots, or other gear to be used in or near water and remove any plants, soil, or other organic material adhering to the surface.
- f. Ensure that any generator, crane or other stationary heavy equipment that is operated, maintained, or stored within 150 feet of any water body is also protected as necessary to prevent any leak or spill from entering the water.

## 26. Site Layout and Flagging

- a. Before any significant ground disturbance or entry of mechanized equipment or vehicles into the construction area, clearly mark with flagging or survey marking paint the following areas:
  - i. Sensitive areas, *e.g.*, wetlands, water bodies, OHW, spawning areas.
  - ii. Equipment entry and exit points.
  - iii. Road and stream crossing alignments.
  - iv. Staging, storage, and stockpile areas.
- b. Before the use of herbicides, clearly flag no-application buffer zones.

## 27. Staging, Storage, and Stockpile Areas

- a. Designate and use staging areas to store hazardous materials, or to store, fuel, or service heavy equipment, vehicles and other power equipment with tanks larger than 5 gallons, that are at least 150 feet from any natural water body or wetland, or on an established paved area, such that sediment and other contaminants from the staging area cannot be deposited in the floodplain or stream.
- b. Natural materials that are displaced by construction and reserved for restoration, *e.g.*, LW, gravel, and boulders, may be stockpiled within the 100-year floodplain.
- c. Dispose of any material not used in restoration and not native to the floodplain outside of the functional floodplain.

<sup>13</sup> For additional information and suppliers of biodegradable hydraulic fluids, motor oil, lubricant, or grease, see, Environmentally Acceptable Lubricants by the U.S. EPA (2011a); *e.g.*, mineral oil, polyglycol, vegetable oil, synthetic ester; Mobil® biodegradable hydraulic oils, Total® hydraulic fluid, Terresolve Technologies Ltd.® bio-based biodegradable lubricants, Cougar Lubrication® 2XT Bio engine oil, Series 4300 Synthetic Bio-degradable Hydraulic Oil, 8060-2 Synthetic Bio-Degradable Grease No. 2, *etc.* The use of trade, firm, or corporation names in this opinion is for the information and convenience of the action agency and applicants and does not constitute an official endorsement or approval by the U.S. Department of Commerce or NMFS of any product or service to the exclusion of others that may be suitable.

d. After construction is complete, obliterate all staging, storage, or stockpile areas, stabilize the soil, and revegetate the area.<sup>14</sup>

## 28. Drilling and Boring

- a. If drilling or boring are used, isolate drilling operations in wetted stream channels using a steel casing or other appropriate isolation method to prevent drilling fluids from contacting water.
- b. If drilling through a bridge deck is necessary, use containment measures to prevent drilling debris from entering the channel.
- c. Sampling and directional drill recovery/recycling pits, and any associated waste or spoils will be completely isolated from surface waters, off-channel habitats and wetlands.
- d. All waste or spoils will be covered if precipitation is falling or imminent.
- e. All drilling fluids and waste will be recovered and recycled or disposed to prevent entry into flowing water.
- f. If a drill boring case breaks and drilling fluid or waste is visible in water or a wetland, make all possible efforts to contain the waste and contact NMFS within 48 hours.
- g. Waste containment
  - i. All drilling equipment, drill recovery and recycling pits, and any waste or spoil produced, will be contained and then completely recovered and recycled or disposed of as necessary to prevent entry into any waterway. Use a tank to recycle drilling fluids.
  - ii. When drilling is completed, remove as much of the remaining drilling fluid as possible from the casing (e.g., by pumping) to reduce turbidity when the casing is removed.

## 29. Pesticide and Preservative-Treated Wood<sup>15</sup>

- a. Treated wood may not be used in a structure that will be in or over water or permanently or seasonally flooded wetlands, except to maintain or repair an existing wood bridge. The following criteria in b, c, and d below apply to the use of treated wood for maintenance or repair of existing wood bridges.
- b. No part of the treated wood may be exposed to leaching by precipitation, overtopping waves, or submersion (e.g., no treated wood piles (per PDC#10, and stringers or decking of a timber bridge can be made from treated wood only if they will be covered by a non-treated wood wearing surface that covers the entire roadway width), and all elements of the structure using the treated wood are designed to avoid or minimize impacts or abrasion that could create treated wood debris or dust.
- c. Installation of treated wood
  - i. Treated wood shipped to the project area will be stored out of contact with standing water and wet soil, and protected from precipitation.
  - ii. Each load and piece of treated wood will be visually inspected and rejected for use in or above aquatic environments if visible residue, bleeding of preservative, preservative-saturated sawdust, contaminated soil, or other matter is present.

<sup>14</sup> Road and path obliteration refers to the most comprehensive degree of decommissioning and involves decompacting the surface and ditch, pulling the fill material onto the running surface, and reshaping to match the original contour.

<sup>15</sup> Treated woods may contain chromated copper arsenate (CCA), ammoniacal copper zinc arsenate (ACZA), alkaline copper quat (ACQ-B and ACQ-D), ammoniacal copper citrate (CC), copper azole (CBA-A), copper dimethyldithiocarbamate (CDDC), borate preservatives, and oil-type wood preservatives, such as creosote, pentachlorophenol, and copper naphthenate.

- iii. Prefabrication will be used whenever possible to minimize cutting, drilling and field preservative treatment.
- iv. When field fabrication is necessary, all cutting, drilling, and field preservative treatment of exposed treated wood will be done above OHW to minimize discharge of sawdust, drill shavings, excess preservative and other debris.
- v. Tarps, plastic tubs or similar devices will be used to contain the bulk of any fabrication debris, and any excess field preservative will be removed from the treated wood by wiping and proper disposal.
- d. Removal of treated wood
  - i. Evaluate all wood construction debris removed during a project, including pile, to ensure proper disposal of treated wood.
  - ii. Ensure that no treated wood debris falls into the water or, if debris does fall into the water, remove it immediately.
  - iii. After removal, place treated wood debris in an appropriate dry storage site until it can be removed from the project area.
  - iv. Do not leave any treated wood debris in the water or stacked on the streambank at or below OHW.

### **30. Erosion Control**

- a. Use site planning and site erosion control measures commensurate with the scope of the project to prevent erosion and sediment discharge from the project site.
- b. Before significant earthwork begins, install appropriate, temporary erosion controls downslope to prevent sediment deposition in the riparian area, wetlands, or water body.
- c. During construction,
  - i. Complete earthwork in wetlands, riparian areas, and stream channels as quickly as possible.
  - ii. Cease project operations when high flows may inundate the project area, except for efforts to avoid or minimize resource damage.
  - iii. If eroded sediment appears likely to be deposited in the stream during construction, install additional sediment barriers as necessary.
  - iv. Temporary erosion control measures may include fiber wattles, silt fences, jute matting, wood fiber mulch and soil binder, or geotextiles and geosynthetic fabric.
  - v. Soil stabilization using wood fiber mulch and tackifier (hydro-applied) may be used to reduce erosion of bare soil, if the materials are free of noxious weeds and nontoxic to aquatic and terrestrial animals, soil microorganisms, and vegetation.
  - vi. Remove sediment from erosion controls if it reaches 1/3 of the exposed height of the control.
  - vii. Whenever surface water is present, maintain a supply of sediment control materials and an oil-absorbing floating boom at the project site.
  - viii. Stabilize all disturbed soils following any break in work unless construction will resume within four days.
- d. Remove temporary erosion controls after construction is complete and the site is fully stabilized.



### 31. Hazardous Material Safety

- a. At the project site:
  - i. Post written procedures for notifying environmental response agencies, including an inventory and description of all hazardous materials present, and the storage and handling procedures for their use.
  - ii. Maintain a spill containment kit, with supplies and instructions for cleanup and disposal, adequate for the types and quantity of hazardous materials present.
  - iii. Train workers in spill containment procedures, including the location and use of the spill containment kits.
  - iv. Temporarily contain any waste liquids generated under an impervious cover, such as a tarpaulin, in the staging area until the wastes can be properly transported to, and disposed of, at an approved receiving facility.

### 32. Barge Use. Any barge used as a work platform to support construction will be:

- a. Large enough to remain stable under foreseeable loads and adverse conditions.
- b. Inspected before arrival to ensure vessel and ballast are free of invasive species.
- c. Secured, stabilized and maintained as necessary to ensure no loss of balance, stability, anchorage, or other condition that can result in the release of contaminants or construction debris.

### 33. Dust Abatement

- a. Use dust abatement measures commensurate with soil type, equipment use, wind conditions, and the effects of other erosion control measures.
- b. Sequence and schedule work to reduce the exposure of bare soil to wind erosion.
- c. Maintain spill containment supplies on-site whenever dust abatement chemicals are applied.
- d. Do not use petroleum-based products.
- e. Do not apply dust-abatement chemicals, *e.g.*, magnesium chloride, calcium chloride salts, lignin sulfonate, within 25 feet of a water body, or in other areas where they may runoff into a wetland or water body.
- f. Do not apply lignin sulfonate at rates exceeding 0.5 gallons per square yard of road surface, assuming a 50:50 solution of lignin sulfonate to water.

### 34. Work Area Isolation

- a. Isolate any work area within the wetted channel from the active stream whenever ESA-listed fish are reasonably certain to be present, or if the work area is less than 300 feet upstream from known spawning habitats.
- b. Engineering design plans for work area isolation will include all isolation elements and fish release areas.
- c. Dewater the shortest linear extent of work area practicable, unless wetted in-stream work is deemed to be minimally harmful to fish, and is beneficial to other aquatic species.<sup>16</sup>

<sup>16</sup> For instructions on how to dewater areas occupied by lamprey, see *Best management practices to minimize adverse effects to Pacific lamprey (Entosphenus tridentatus)* (USFWS 2010).

- i. Use a coffer dam and a by-pass culvert or pipe, or a lined, non-erodible diversion ditch to divert flow around the dewatered area. Dissipate flow energy to prevent damage to riparian vegetation or stream channel and provide for safe downstream reentry of fish, preferably into pool habitat with cover.
  - ii. Where gravity feed is not possible, pump water from the work site to avoid rewatering. Maintain a fish screen on the pump intake to avoid juvenile fish entrainment.
  - iii. Pump seepage water to a temporary storage and treatment site, or into upland areas, to allow water to percolate through soil or to filter through vegetation before reentering the stream channel with a treatment system comprised of either a hay bale basin or other sediment control device.
  - iv. Monitor below the construction site to prevent stranding of aquatic organisms.
  - v. When construction is complete, re-water the construction site slowly to prevent loss of surface flow downstream, and to prevent a sudden increase in stream turbidity.
- d. Whenever a pump is used to dewater the isolation area and ESA-listed fish may be present, a fish screen will be used that meets the most current version of NMFS's fish screen criteria (NMFS 2011a). NMFS approval is required for pumping at a rate that exceeds 3 cfs.

### 35. Invasive and Non-Native Plant Control

- a. **Non-herbicide methods.** Limit vegetation removal and soil disturbance within the riparian zone by limiting the number of workers there to the minimum necessary to complete manual, mechanical, or hydro-mechanical plant control (e.g., hand pulling, bending<sup>17</sup>, clipping, stabbing, digging, brush-cutting, mulching, radiant heat, portable flame burner, super-heated steam, pressurized hot water, or hot foam (Arsenault *et al.* 2008; Donohoe *et al.* 2010))<sup>18</sup>. Do not allow cut, mowed, or pulled vegetation to enter waterways.
- b. **Herbicide Label.** Herbicide applicators will comply with all label instructions
- c. **Power equipment.** Refuel gas-powered equipment with tanks larger than 5 gallons in a vehicle staging area placed 150 feet or more from any natural water body, or in an isolated hazard zone such as a paved parking lot.
- d. **Maximum herbicide treatment area.** Do not exceed treating 1.0% of the acres of riparian habitat within a 6<sup>th</sup>-field HUC with herbicides per year.
- e. **Herbicide applicator qualifications.** Herbicides may only be applied by an appropriately licensed applicator using an herbicide specifically targeted for a particular plant species that will cause the least impact. The applicator will be responsible for preparing and carrying out the herbicide transportation and safety plan, as follows.
- f. **Herbicide transportation and safety plan.** The applicator will prepare and carry out an herbicide safety/spill response plan to reduce the likelihood of spills or misapplication, to take remedial actions in the event of spills, and to fully report the event.

<sup>17</sup> Knotweed treatment pre-treatment; See Nickelson (2013).

<sup>18</sup> See <http://ahmct.ucdavis.edu/limtask/equipmentdetails.html>

g. **Herbicides.** The only herbicides proposed for use under this opinion are (some common trade names are shown in parentheses):<sup>19</sup>

- i. aquatic imazapyr (e.g., Habitat)
- ii. aquatic glyphosate (e.g., AquaMaster, AquaPro, Rodeo)
- iii. aquatic triclopyr-TEA (e.g., Renovate 3)
- iv. chlorsulfuron (e.g., Telar, Glean, Corsair)
- v. clopyralid (e.g., Transline)
- vi. imazapic (e.g., Plateau)
- vii. imazapyr (e.g., Arsenal, Chopper)
- viii. metsulfuron-methyl (e.g., Escort)
- ix. picloram (e.g., Tordon)
- x. sethoxydim (e.g., Poast, Vantage)
- xi. sulfometuron-methyl (e.g., Oust, Oust XP)

h. **Herbicide adjuvants.** When recommended by the label, an approved aquatic surfactant or drift retardant can be used to improve herbicidal activity or application characteristics. Adjuvants that contain alky amine ethoxylates, *i.e.*, polyethoxylated tallow amine (POEA), alkylphenol ethoxylates (including alkyl phenol ethoxylate phosphate esters), or herbicides that contain these compounds are **not** covered by this opinion. The following product names are covered by this opinion:

- |                       |                  |
|-----------------------|------------------|
| i. Agri-Dex           | ii. AquaSurf     |
| iii. Bond             | iv. Bronc Max    |
| v. Bronc Plus Dry-EDT | vi. Class Act NG |
| vii. Competitor       | viii. Cut Rate   |
| ix. Cygnet Plus       | x. Destiny HC    |
| xi. Exciter           | xii. Fraction    |
| xiii. InterLock       | xiv. Kinetic     |
| xv. Level 7           | xvi. Liberate    |
| xvii. Magnify         | xviii. One-AP XL |
| xix. Pro AMS Plus     | xx. Spray-Rite   |
| xxi. Superb HC        | xxii. Tactic     |
| xxiii. Tronic         |                  |

i. **Herbicide carriers.** Herbicide carriers (solvents) are limited to water or specifically labeled vegetable oil. Use of diesel oil as an herbicide carrier is not covered by this opinion.

j. **Dyes.** Use a non-hazardous indicator dye (e.g., Hi-Light or Dynamark™) with herbicides within 100 feet of water. The presence of dye makes it easier to see where the herbicide has been applied and where or whether it has dripped, spilled, or leaked. Dye also makes it easier to detect missed spots, avoid spraying a plant or area more than once, and minimize over-spraying (SERA 1997).

k. **Herbicide mixing.** Mix herbicides and adjuvants, carriers, and/or dyes more than 150 feet from any perennial or intermittent water body to minimize the risk of an accidental discharge.

<sup>19</sup> The use of trade, firm, or corporation names in this opinion is for the information and convenience of the action agency and applicants and does not constitute an official endorsement or approval by the U.S. Department of Commerce or NMFS of any product or service to the exclusion of others that may be suitable.

- i. **Tank Mixtures.** The potential interactive relationships that exist among most active ingredient combinations have not been defined and are uncertain. Therefore, combinations of herbicides in a tank mix are not covered by this opinion.
- m. **Spill Cleanup Kit.** Provide a spill cleanup kit whenever herbicides are used, transported, or stored. At a minimum, cleanup kits will include material safety data sheets, the herbicide label, emergency phone numbers, and absorbent material such as cat litter to contain spills.
- n. **Herbicide application rates.** Apply herbicides at the lowest effective label rates.
- o. **Herbicide application methods.** Apply liquid or granular forms of herbicides as follows:
  - i. Broadcast spraying – hand held nozzles attached to back pack tanks or vehicles, or by using vehicle mounted booms.
  - ii. Spot spraying – hand held nozzles attached to back pack tanks or vehicles, hand-pumped spray, or squirt bottles to spray herbicide directly onto small patches or individual plants.
  - iii. Hand/selective – wicking and wiping, basal bark, fill (“hack and squirt”), stem injection, cut-stump.
  - iv. Triclopyr – will not be applied by broadcast spraying.
  - v. Keep the spray nozzle within four feet of the ground when applying herbicide. If spot or patch spraying tall vegetation more than 15 feet away from the high water mark (HWM), keep the spray nozzle within 6 feet of the ground.
  - vi. Apply spray in swaths parallel towards the project area, away from the creek and desirable vegetation, *i.e.*, the person applying the spray will generally have their back to the creek or other sensitive resource.
  - vii. Avoid unnecessary run off during cut surface, basal bark, and hack-squirt/injection applications.
- p. **Washing spray tanks.** Wash spray tanks 300 feet or more away from any surface water.
- q. **Minimization of herbicide drift and leaching.** Minimize herbicide drift and leaching as follows:
  - i. Do not spray when wind speeds exceed 10 miles per hour, or are less than 2 miles per hour.
  - ii. Be aware of wind directions and potential for herbicides to affect aquatic habitat area downwind.
  - iii. Keep boom or spray as low as possible to reduce wind effects.
  - iv. Increase spray droplet size whenever possible by decreasing spray pressure, using high flow rate nozzles, using water diluents instead of oil, and adding thickening agents.
  - v. Do not apply herbicides during temperature inversions, or when air temperature exceeds 80 degrees Fahrenheit.
  - vi. Wind and other weather data will be monitored and reported for all broadcast applications.

r. **Rain.** Do not apply herbicides when the soil is saturated or when a precipitation event likely to produce direct runoff to salmon bearing waters from the treated area is forecasted by the NOAA National Weather Service or other similar forecasting service within 48 hours following application. Soil-activated herbicides may follow label instructions. Do not conduct hack-squirt/injection applications during periods of heavy rainfall.

s. **Herbicide buffer distances.** Observe the following no-application buffer-widths, measured in feet, as map distance perpendicular to the bankfull elevation for streams, the upland boundary for wetlands, or the upper bank for roadside ditches. Widths are based on herbicide formula, stream type, and application method, during herbicide applications (Table 3). Before herbicide application begins, flag or mark the upland boundary of each applicable herbicide buffer to ensure that all buffers are in place and functional during treatment.

**Table 3.** Herbicide buffer distances by herbicide formula, stream type, and application method.

Herbicide	No Application Buffer Width (feet)					
	Streams and Roadside Ditches with flowing or standing water present and Wetlands			Dry Streams, Roadside Ditches, and Wetlands		
	Broadcast Spraying	Spot Spraying	Hand Selective	Broadcast Spraying	Spot Spraying	Hand Selective
Labeled for Aquatic Use						
Aquatic Glyphosate	100	waterline	waterline	50	None	none
Aquatic Imazapyr	100	15	waterline	50	None	none
Aquatic Triclopyr-TEA	<b>Not Allowed</b>	15	waterline	<b>Not Allowed</b>	None	none
Low Risk to Aquatic Organisms						
Imazapic	100	15	bankfull elevation	50	None	none
Clopyralid	100	15	bankfull elevation	50	None	none
Metsulfuron-methyl	100	15	bankfull elevation	50	None	none
Moderate Risk to Aquatic Organisms						
Imazapyr	100	50	bankfull elevation	50	15	bankfull elevation
Sulfometuron-methyl	100	50	5	50	15	bankfull elevation
Chlorsulfuron	100	50	bankfull elevation	50	15	bankfull elevation
High Risk to Aquatic Organisms						
Picloram	100	50	50	100	50	50
Sethoxydim	100	50	50	100	50	50



### 36. Actions Requiring Stormwater Management<sup>20</sup>

- a. Provide stormwater management for any project that will:
  - i. Increase the contributing impervious area within the project area
  - ii. Construct new pavement that increases capacity or widens the road prism.
  - iii. Reconstructs pavement down to subgrade.
  - iv. Rehabilitate or restore a bridge to repair structural or functional deficiencies that are too complicated to be corrected through normal maintenance, except for seismic retrofits that make a bridge more resistant to earthquake damage (e.g., external post-tensioning, supplementary dampening) but do not affect the bridge deck or drainage.
  - v. Replace a stream crossing
  - vi. Change stormwater conveyance
- b. Stormwater management is not required for the following pavement actions: minor repairs, patching, chip seal, grind/inlay, overlay or resurfacing (i.e., nonstructural pavement preservation, a single lift or inlay).
- c. Stormwater management plans will consist of:
  - i. Low impact development.
  - ii. Water quality (pollution reduction) treatment for post-construction stormwater runoff from all contributing impervious area.
  - iii. Water quantity treatment (retention or detention facilities), unless the outfall discharges directly into a major water body (e.g., mainstem Columbia River, Willamette River (downstream of Eugene), large lakes, reservoir, ocean, or estuary). Retention or detention facilities must limit discharge to match pre-developed discharge rates (i.e., the discharge rate of the site based on its natural groundcover and grade before any development occurred) using a continuous simulation for flows between 50% of the 2-year event and the 10-year flow event (annual series).
- d. Stormwater management plans will:
  - i. Explain how runoff from all contributing impervious area that is within or contiguous with the project area will be managed using site sketches, drawings, specifications, calculations, or other information commensurate with the scope of the action.
  - ii. Identify the pollutants of concern.
  - iii. Identify all contributing and non-contributing impervious areas that are within and contiguous with the project area.
  - iv. Describe the BMPs that will be used to treat the identified pollutants of concern, and the proposed maintenance activities and schedule for the treatment facilities.

<sup>20</sup> The most efficient way for an applicant or the Corps to prepare and submit a stormwater management plan for NMFS' review is to attach a completed *Checklist for Submission of a Stormwater Management Plan* (the *Checklist*, ODEQ updated 2012, or the most recent version) with the electronic notification when it is sent to the SLOPES mailbox. However, stormwater conveyance to a DEQ permitted Municipal Separate Storm Sewer System (MS4) or consistency with any other program acknowledged by DEQ as adequate for stormwater management will not meet the requirements of this opinion unless NMFS determines that the facility accepting the stormwater will provide a level of treatment that is equivalent to that called for in this opinion. The *Checklist* and guidelines for its use are available from NMFS or the ODEQ in Portland Oregon. The latest version of the *Checklist* is also available online in a portable document format (pdf) through the ODEQ Water Quality Section 401 certification webpage (ODEQ 2014) at <http://www.deq.state.or.us/wq/sec401cert/process.htm#add> (see "Post Construction Stormwater Management Plan").

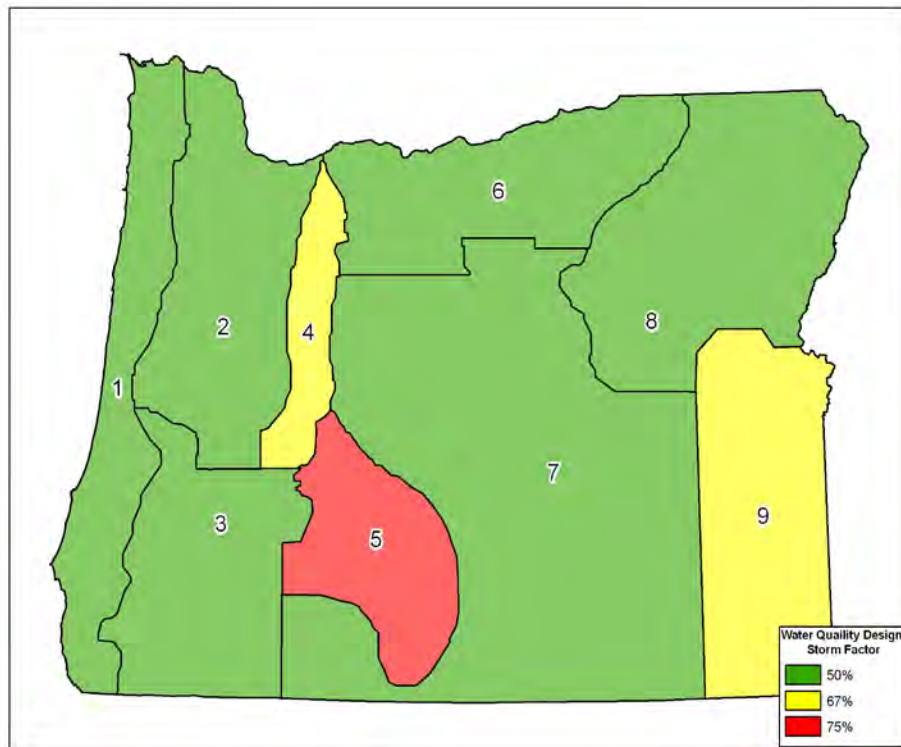
v. Provide a justification for the capacity of the facilities provided based on the expected runoff volume, including, e.g., the design storm, BMP geometry, analyses of residence time, as appropriate.

vi. Include the name, email address, and telephone number of the person responsible for designing the stormwater management facilities that NMFS may contact if additional information is necessary to complete the effects analysis.

vii. The proposed action will include a maintenance, repair, and component replacement plan that details what needs to be done, when, and by whom for each facility.

e. All stormwater quality treatment practices and facilities will be designed to accept and fully treat the volume of water equal to 50% of the cumulative rainfall from the 2-year, 24-hour storm for that site, except as follows: climate zone 4 – 67%; climate zone 5 – 75%; and climate zone 9 – 67% (Figure 1). (ESA-listed species considered in this opinion are unlikely to occur in Zones 5 or 9.) A continuous rainfall/runoff model may be used instead of runoff depths to calculate water quality treatment depth.

**Figure 1.** Water Quality Design Storm Factor – Oregon Climate Regions (Oregon Department of Transportation 2008)



f. Use low impact development practices to infiltrate or evaporate runoff to the maximum extent feasible. For runoff that cannot be infiltrated or evaporated and therefore will discharge into surface or subsurface waters, apply one or more of the following specific primary treatment practices, supplemented with appropriate soil amendments:

- i. Bioretention cell
- ii. Bioslope, also known as an “ecology embankment”
- iii. Bioswale
- iv. Constructed wetlands
- v. Infiltration pond
- vi. Media filter devices with demonstrated effectiveness. Proprietary devices should be on a list of “Approved Proprietary Stormwater Treatment Technologies” *i.e.*, City of Portland (2008) Stormwater Management Manual. Bureau of Environmental Services.
- vii. Porous pavement, with no soil amendments and appropriate maintenance
- viii. All stormwater flow control treatment practices and facilities will be designed to maintain the frequency and duration of instream flows generated by storms within the following end-points:

1. Lower discharge endpoint, by U.S. Geological Survey (USGS) flood frequency zone:

- a. Western Region = 42% of 2-year event
- b. Eastern Region
  - i. Southeast, Northeast, North Central = 48% of 2-year event
  - ii. Eastern Cascade = 56% of 2-year event

2. Upper discharge endpoint

- a. Entrenchment ratio  $<2.2$  = 10-year event, 24-hour storm

- b. Entrenchment ratio  $>2.2$  = bank overtopping event

g. When conveyance is necessary to discharge treated stormwater directly into surface water or a wetland, the following requirements apply:

- i. Maintain natural drainage patterns.
- ii. To the maximum extent feasible, ensure that water quality treatment for contributing impervious area runoff is completed before commingling with offsite runoff for conveyance.
- iii. Prevent erosion of the flow path from the project to the receiving water and, if necessary, provide a discharge facility made entirely of manufactured elements (*e.g.*, pipes, ditches, discharge facility protection) that extends at least to OHW.

h. **NMFS review and approval.** NMFS will review proposed stormwater treatment and new or upgraded stormwater outfalls plans.

### 37. Site Restoration

- a. Restore any significant disturbance of riparian vegetation, soils, stream banks or stream channel.
- b. Remove all project related waste; *e.g.*, pick up trash, sweep roadways in the project area to avoid runoff-containing sediment, *etc.*
- c. Obliterate all temporary access roads, crossings, and staging areas.
- d. Loosen compacted areas of soil when necessary for revegetation or infiltration.
- e. Although no single criterion is sufficient to measure restoration success, the intent is that the following features should be present in the upland parts of the project area, within reasonable limits of natural and management variation:
  - i. Human and livestock disturbance, if any, are confined to small areas necessary for access or other special management situations.
  - ii. Areas with signs of significant past erosion are completely stabilized and healed, bare soil spaces are small and well-dispersed.
  - iii. Soil movement, such as active rills and soil deposition around plants or in small basins, is absent or slight and local.
  - iv. Native woody and herbaceous vegetation, and germination microsites, are present and well distributed across the site; invasive plants are absent.
  - v. Plants have normal, vigorous growth form, and a high probability of remaining vigorous, healthy and dominant over undesired competing vegetation.
  - vi. Plant litter is well distributed and effective in protecting the soil with little or no litter accumulated against vegetation as a result of active sheet erosion ("litter dams").
  - vii. A continuous corridor of shrubs and trees appropriate to the site are present to provide shade and other habitat functions for the entire streambank.

### 38. Revegetation

- a. Plant and seed disturbed areas before or at the beginning of the first growing season after construction.
- b. Use a diverse assemblage of vegetation species native to the action area or region, including trees, shrubs, and herbaceous species. Vegetation, such as willow, sedge and rush mats, may be gathered from abandoned floodplains, stream channels, *etc.* When feasible, use vegetation salvaged from local areas scheduled for clearing due to development.
- c. Use species native to the project area or region that will achieve shade and erosion control objectives, including forb, grass, shrub, or tree species that are appropriate for the site.
- d. Short-term stabilization measures may include use of non-native sterile seed mix if native seeds are not available, weed-free certified straw, jute matting, and similar methods.
- e. Do not apply surface fertilizer within 50 feet of any wetland or water body.
- f. Install fencing as necessary to prevent access to revegetated sites by livestock or unauthorized persons.
- g. Do not use invasive or non-native species for site restoration.
- h. Conduct post-construction monitoring and treatment to remove or control invasive plants until native plant species are well-established.

### 39. Actions That Require Compensatory Mitigation

- a. The Corps will rely on 33 CFR 332.3 when considering appropriate mitigation. The first option for an applicant is to purchase credits from an appropriate mitigation bank. The second option is to purchase credits from an approved in-lieu-fee sponsor. The third option is Permittee-responsible mitigation. The fourth option is a combination of some or all of the above options that collectively satisfies the mitigation requirements.
- b. NMFS will review and approve compensatory mitigation plans.
- c. The following actions require compensatory mitigation:
  - i. Any stormwater management facility that requires a new or enlarged structure within the riparian zone; or that has insufficient capacity to infiltrate and retain the volume of stormwater called for by this opinion.
  - ii. Any riprap revetment that extends rock above the streambank toe extends the use of riprap laterally into an area that was not previously revetted, or revetment that does not include adequate vegetation and LW.
  - iii. Any bridge rehabilitation or replacement that does not span the functional floodplain, or causes a net increase in fill within the functional floodplain.
- d. The electronic notification (Appendix A, Part 1 with Part 4 completed) for an action that requires compensatory mitigation will explain how the Corps or applicant will complete the mitigation, including site sketches, drawings, specifications, calculations, or other information commensurate with the scope of the action.
- e. Include the name, address, and telephone number of a person responsible for designing this part of the action that NMFS may contact if additional information is necessary to complete the effects analysis.
- f. Describe practices that will be used to ensure:
  - i. No net loss of habitat function
  - ii. Completion before, or concurrent with, construction whenever possible
  - iii. Achieve a mitigation ratio that is greater than one-to-one and larger (e.g., 1.5 to 1.0 when necessary to compensate for time lags between the loss of conservation value in the project area and replacement of conservation value in the mitigation area, uncertainty of conservation value replacement in the mitigation area, or when the affected area has demonstrably higher conservation value than the mitigation area.<sup>21</sup>
  - iv. When practicable and environmentally sound, mitigation should be near the project impact site, or within the same local watershed and area occupied by the affected population(s) and age classes. Mitigation should be completed prior to or concurrent with the adverse impacts, or have an increased ratio as noted above.

<sup>21</sup> For additional information on compensatory mitigation, see Compensatory Mitigation for Losses of Aquatic Resources (33CFR332) at [www.poa.usace.army.mil/Portals/34/docs/regulatory/33cfr332.pdf](http://www.poa.usace.army.mil/Portals/34/docs/regulatory/33cfr332.pdf). More information is available from the U.S. Army Corps of Engineers, Portland District, Portland, Oregon. See: <http://www.nwp.usace.army.mil/Missions/Regulatory/Mitigation.aspx>



- v. To minimize delays and objections during the review process, applicants are encouraged to seek the advice of NMFS during the planning and design of mitigation plans. For complex mitigation projects, such consultation may improve the likelihood of mitigation success and reduce permit-processing time.
- g. For stormwater management:
  - i. The primary habitat functions of concern are related to the physical and biological features essential to the long-term conservation of listed species, *i.e.*, water quality, water quantity, channel substrate, floodplain connectivity, forage, natural cover (such as submerged and overhanging LW, aquatic vegetation, large rocks and boulders, side channels and undercut banks), space, and free passage.
  - ii. Acceptable mitigation for riparian habitat displaced by a stormwater treatment facility is restoration of shallow-water or off-channel habitat
  - iii. Acceptable mitigation for inadequate stormwater treatment includes providing adequate stormwater treatment where it did not exist before, and retrofitting an existing but substandard stormwater facility to provide capacity necessary to infiltrate and retain the proper volume of stormwater. Such mitigation can be measured in terms of deficit stormwater treatment capacity.
- h. For riprap:
  - i. The primary habitat functions of concern are related to floodplain connectivity, forage, natural cover, and free passage.
  - ii. Acceptable mitigation for those losses include removal of existing riprap; retrofit existing riprap with vegetated riprap and LW, or one or more other streambank stabilization methods described in this opinion, and restoration of shallow water or off-channel habitats.
- i. For a bridge replacement:
  - i. The primary habitat functions of concern are floodplain connectivity, forage, natural cover, and free passage.
  - ii. Acceptable mitigation is removing fill from elsewhere in the floodplain – native channel material, soil and vegetation may not be counted as fill.
- j. Mitigation actions will meet general construction criteria and other appropriate minimization measures (dependent on the type of proposed mitigation).

### 1.3.1.3 Project Design Criteria - Types of Actions

#### 40. Natural Hazard Response

a. A manager of a state, regional, county, or municipal stormwater facility, public transportation feature, or utility must initiate a natural hazard response by notifying the Corps.<sup>22</sup> The Corps will encourage the applicant to:

- i. Act as necessary to resolve the initial natural hazard.
- ii. Without endangering human life or contributing to further loss of property or natural resources, apply all proposed design criteria from this opinion which are applicable to the response to the maximum extent possible.

b. The Corps will also contact NMFS as part of the natural hazard response.

i. As soon as possible after the onset of the natural hazard, the Corps will require the applicant to contact the Corps and NMFS to describe the nature and location of the natural hazard, review design criteria from this opinion that are applicable to the situation, and determine whether additional steps may be taken to further minimize the effects of the initial response action on listed species or their critical habitat.

ii. For the Oregon Coast contact Ken Phippen (541-957-3385), for the Willamette Basin contact Marc Liverman (503-231-2336), and Lower Columbia River up to and including Oregon tributaries contact Jeff Fisher (360-534-9342), and for eastern Oregon contact Dale Bambrick (509-962-8911x221).

#### 41. Streambank and Channel Stabilization

a. The following streambank stabilization methods may be used individually or in combination:

- i. Alluvium placement
- ii. Large wood placement
- iii. Vegetated riprap with large wood
- iv. Roughened toe
- v. Woody plantings
- vi. Herbaceous cover, in areas where the native vegetation does not include trees or shrubs.
- vii. Bank reshaping and slope grading
- viii. Coir logs
- ix. Deformable soil reinforcement
- x. Engineered log jams (ELJ)
- xi. Floodplain flow spreaders
- xii. Floodplain roughness

<sup>22</sup> Natural hazard response actions do not include federal assistance following a gubernatorial, county or local declaration of emergency or disaster with a request for federal assistance; a federal declaration of emergency or disaster; or any response to an emergency or disaster that takes place on federal property or to a federal asset because those actions are subject to emergency consultation provisions of 50 CFR 402.05

b. For more information on the above methods see Federal Emergency Management Agency (2009)<sup>23</sup> or Cramer *et al.* (2003).<sup>24</sup> Other than those methods relying solely upon woody and herbaceous plantings, streambank stabilization projects should be designed by a qualified engineer that is appropriately registered in the state where the work is performed.

c. Stream barbs and full-spanning weirs are not allowed for stream bank stabilization under this opinion.

d. Alluvium Placement can be used as a method for providing bank stabilization using imported gravel/cobble/boulder-sized material of the same composition and size as that in the channel bed and banks, to halt or attenuate streambank erosion, and stabilize riffles. This method is predominantly for use in small to moderately sized channels and is not appropriate for application in mainstem systems. These structures are designed to provide roughness, redirect flow, and provide stability to adjacent streambed and banks or downstream reaches, while providing valuable fish and wildlife habitat.

i. **NMFS fish passage review and approval.** NMFS will review alluvium placement projects that would occupy more than 25% of the channel bed or more than 25% of the bankfull cross sectional area.

ii. This design method is only approved in those areas where the natural sediment supply has been eliminated, significantly reduced through anthropogenic disruptions, or used to initiate or simulate sediment accumulations in conjunction with other structures, such as LW placements and ELJs.

iii. Material used to construct the toe should be placed in a manner that mimics attached longitudinal bars or point bars.

iv. Size distribution of toe material will be diverse and predominately comprised of  $D_{84}$  to  $D_{max}$  size class material.

v. Spawning gravels will constitute at least one-third of the total alluvial material used in the design.

vi. Spawning gravels are to be placed at or below an elevation consistent with the water surface elevation of a bankfull event.

vii. Spawning size gravel can be used to fill the voids within toe and bank material and placed directly onto stream banks in a manner that mimics natural debris flows and erosion.

viii. All material will be clean alluvium with similar angularity as the natural bed material. When possible use material of the same lithology as found in the watershed. Reference *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings* (USDA-Forest Service 2008) to determine gravel sizes appropriate for the stream.

ix. Material can be mined from the floodplain at elevations above bankfull, but not in a manner that will cause stranding during future flood events.

x. Crushed rock is not permitted.

xi. After placement in areas accessible to higher stream flow, allow the stream to naturally sort and distribute the material.

<sup>23</sup> [http://www.fema.gov/pdf/about/regions/regionx/Engineering\\_With\\_Nature\\_Web.pdf](http://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf)

<sup>24</sup> <http://wdfw.wa.gov/publications/00046/wdfw00046.pdf>

xii. Do not place material directly on bars and riffles that are known spawning areas, which may cause fish to spawn on the unsorted and unstable gravel, thus potentially resulting in redd destruction.

xiii. Imported material will be free of invasive species and non-native seeds. If necessary, wash prior to placement.

e. **Large Wood Placements** are defined as structures composed of LW that do not use mechanical methods as the means of providing structure stability (*i.e.*, large rock, rebar, rope, cable, *etc.*). The use of native soil, alluvium with similar angularity as the natural bed material, large wood, or buttressing with adjacent trees as methods for providing structure stability are authorized. This method is predominantly for use in small to moderately sized channels and is not appropriate for application in mainstem systems. These structures are designed to provide roughness, redirect flow, and provide stability to adjacent streambed and banks or downstream reaches, while providing valuable fish and wildlife habitat.

i. **NMFS fish passage review and approval.** NMFS will review LW placement projects that would occupy greater than 25% of the bankfull cross section area.

ii. Structure shall simulate disturbance events to the greatest degree possible and include, but not be limited to, log jams, debris flows, wind-throw, and tree breakage.

iii. Structures may partially or completely span stream channels or be positioned along stream banks.

iv. Where structures partially or completely span the stream channel LW should be comprised of whole conifer and hardwood trees, logs, and rootwads. LW size (diameter and length) should account for bankfull width and stream discharge rates.

v. Structures will incorporate a diverse size (diameter and length) distribution of rootwad or non-rootwad, trimmed or untrimmed, whole trees, logs, snags, slash, *etc.*

vi. For individual logs that are completely exposed, or embedded less than half their length, logs with rootwads should be a minimum of 1.5 times bankfull channel width, while logs without rootwads should be a minimum of 2.0 times bankfull width.

vi. Consider orienting key pieces such that the hydraulic forces upon the LW increase stability.

f. Vegetated riprap with large wood (LW)

i. NMFS will review and approve bank stabilization projects that use vegetated riprap with LW.

ii. When this method is necessary, limit installation to the areas identified as most highly erodible, with highest shear stress, or at greatest risk of mass-failure, and provide compensatory mitigation. The greatest risk of mass-failure will usually be at the toe of the slope and will not extend above OHW elevation except in incised streams.

iii. Do not use invasive or non-native species for site restoration.

iv. Remove or control invasive plants until native plant species are well-established.

v. Do not apply surface fertilizer within 50-feet of any stream channel.

- vi. Install fencing as necessary to prevent access to revegetated sites by livestock or unauthorized persons.
- vii. Vegetated riprap with LW will be installed as follows:
  1. When present, use natural hard points, such as large, stable trees or rock outcrops, to begin or end the toe of the revetment.
  2. Develop rock size gradations for elevation zones on the bank, especially if the rock will extend above OHW – the largest rock should be placed at the toe of the slope, while small rock can be used higher in the bank where the shear stress is generally lower. Most upper bank areas will not require the use of any rock but can depend on the vegetation for erosion protection.
  3. For bank areas above OHW where rock is still deemed necessary, mix rock with soil to provide a better growing medium for plants.
  4. Minimum amount of wood incorporated into the treated area, for mitigation of riprap, is equal to the number of whole trees whose cumulative summation of rootwad diameters is equal to 80% of linear-feet of treated streambank or 20% of the treated area (square feet) of streambank, whichever is greater.
  5. Where whole trees are not used (*i.e.*, snags, logs, and partial trees) designers are required to estimate the dimensions of parent material based on rootwad diameter, and calculating a cumulative equivalency of whole trees.
  6. LW should be distributed throughout the structure (not just concentrated at the toe) to engage flows up to the bankfull flow. LW placed above the toe may be in the form of rootwad or non-rootwad, trimmed or untrimmed, whole trees, logs, snags, slash, *etc.* Maximize the exposure of wood to water by placing and orienting wood to project into the water column up to the bankfull elevation.
  7. Develop an irregular toe and bank line to increase roughness and habitat value.
  8. Use LW and irregular rock to create large interstitial spaces and small alcoves to create planting spaces and habitat to mitigate for flood-refuge impacts – do not use geotextile fabrics as filter behind the riprap whenever possible, if a filter is necessary to prevent sapping, use a graduated gravel filter.
  9. Structure toe will incorporate LW with intact rootwads. Minimum spacing between rootwads placed at the toe will be no greater than an average rootwad diameter.
  10. Minimum rootwad diameter for LW placed at the toe of the structure shall be 1.0 times the bankfull depth, unless LW availability constrains the project to a smaller rootwad size. Where rootwad size is constrained due to availability, the largest diameter rootwads available should be used.
  11. LW placed at the toe will be sturdy material, intact, hard, and undecayed and should be sized or embedded sufficiently to withstand the design flood.
  12. Space between root wads may be filled with large boulders, trimmed or untrimmed, whole trees, logs, snags, slash, *etc.*



When used, diameter of boulders placed between toe logs with rootwads should be 1.5 to 2.0 times log diameter at breast height (dbh) of adjacent toe logs. A reasonable maximum rock size is 5-6 feet in diameter.

13. Plant woody vegetation in the joints between the rocks to enhance streambank vegetation.

14. Where possible, use terracing, or other bank shaping, to increase habitat diversity.

15. When possible, create or enhance a vegetated riparian buffer.

viii. Monitor vegetated riprap each year following installation by visual inspection during low flows to examine transitions between undisturbed and treated banks to ensure that native soils above and behind the riprap are not collapsing, sinking, or showing other evidence of piping loss or movement of rock materials; and the overall integrity of the riprap treatment, including:

1. Loss of rock materials
2. Survival rate of vegetation
3. Anchoring success of LW placed in the treatment.
4. Any channel changes since construction.

g. Roughened toe

i. Where designs use any of the approved streambank stabilization methods outlined in this section, in lieu of lining the bank with riprap above the toe, the design of any rock-filled toe will adhere to project criteria outlined in (f) Vegetated riprap with large wood (7-15, from above).

ii. Minimum amount of wood incorporated into the treated area, for mitigation of riprap, is equal to the number of whole trees whose cumulative summation of rootwad diameters is equal to 80% of linear-feet of treated streambank.

h. **Engineered log jams (ELJ).** ELJs are structures composed of LW with at least three key members and incorporating the use of any mechanical anchoring system (*i.e.*, rebar, rope, angular or large rock, *etc.*). Native soil, simulated streambed and bank materials, wood, or buttressing with adjacent trees, are not mechanical anchoring systems. ELJs are designed to redirect flow, provide roughness, and provide stability to adjacent streambed and banks or downstream reaches, while providing valuable fish and wildlife habitat.

i. **NMFS fish passage review and approval.** NMFS will review proposed ELJ projects.

ii. ELJs will be patterned, to the greatest degree possible, after stable natural log jams.

iii. Stabilizing or key pieces of LW will be intact and solid (little decay). If possible, acquire LW with untrimmed rootwads to provide functional refugia habitat for fish.

i. If LW mechanical anchoring is required, a variety of methods may be used. These include large angular rock, buttressing the wood between adjacent trees, the use of manila, sisal or other biodegradable ropes for lashing connections. If hydraulic conditions warrant use of structural connections, rebar pinning or bolted connections, may be used. Use of cable is not covered by this opinion.

j. When a hole in the channel bed caused by local scour will be filled with rock to prevent damage to a culvert, road, or bridge foundation, the amount of rock will be limited to the minimum necessary to protect the integrity of the structure.

k. When a footing, facing, head wall, or other protection will be constructed with rock to prevent scouring or down-cutting of, or fill slope erosion or failure at, an existing culvert or bridge, the amount of rock used will be limited to the minimum necessary to protect the integrity of the structure. Whenever feasible, include soil and woody vegetation as a covering and throughout the structure.

## 42. Road Maintenance, Rehabilitation and Replacement

a. All maintenance and rehabilitation actions shall observe applicable criteria detailed in the most recent version of NMFS fish passage criteria

i. Projects affecting fish passage shall adhere to industry design standards found in the most recent version of any of the following:

1. *Water Crossings Design Guidelines* (Barnard *et al.* 2013)<sup>25</sup>
2. *Part XII, Fish Passage Design and Implementation, Salmonid Stream Habitat Restoration Manual* (California Department of Fish and Game 2009)<sup>26</sup>
3. *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream* (USDA-Forest Service 2008)<sup>27</sup>
4. Or other design references approved by NMFS.

ii. Routine road surface, culvert and bridge maintenance activity will be completed in accordance with the *ODOT Routine Road Maintenance: Water Quality and Habitat Guide Best Management Practices* (ODOT 2009) or the most recent version approved by NMFS, unless maintenance activities and practices in that manual conflict with PDC in this opinion.

1. Any conflict between ODOT (2009) and this opinion (e.g., stormwater management for maintenance yards, erosion repair related to use of riprap, dust abatement, and use of pesticides) will be resolved in favor of PDC in this opinion.

b. Grade stabilization

i. Grade control materials may include both rock and LW. Material shall not in any part consist of gabion baskets, sheet piles, concrete, articulated concrete blocks, or cable anchors.

ii. Grade control shall be provided using morphologically-appropriate constructed riffles for riffle-pool morphologies, rough constructed riffles/ramps for plane bed morphologies, wood/debris jams, rock bands, and boulder weirs for step-pool morphologies, and roughened channels for cascade morphologies.

iii. LW placements and ELJs may be used to control grade individually or together with other grade control methods by simulating natural log jams and debris accumulation that traps sediment and creates forced, riffle-pool, step-pool, or cascade-pool morphologies.

<sup>25</sup> <http://wdfw.wa.gov/publications/01501/>

<sup>26</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=12512>

<sup>27</sup> [http://stream.fs.fed.us/fishxing/aop\\_pdfs.html](http://stream.fs.fed.us/fishxing/aop_pdfs.html)

- iv. Stream banks and bed shall be designed to be immobile at the design event to reduce undermining and flanking.
  - v. The crest of channel spanning structures will be slightly sloped on either side, with the low point in the center, to direct flows to the middle of channel and away from streambanks. Install these structures low in relation to channel dimensions so that they are completely overtopped during channel-forming flow events (approximately a 1.0- to 1.5-year flow event).
  - vi. Construct boulder weir structures in a 'V' or 'U' shape, oriented with the apex upstream.
  - vii. Key all structures into the streambed at a depth which minimizes structure undermining due to scour, at least 2.5 times their exposure height, or the Lower Vertical Adjustment Potential (LVAP) line with an offset of 2 times  $D_{90}$ , whichever is deeper.
    - 1. LVAP, and 2 times  $D_{90}$  offset, as calculated in *Stream Simulation: An ecological approach to providing passage for aquatic organisms at road crossings* (USDA-Forest Service 2008).
  - viii. Structures should be keyed into both banks—if feasible greater than 8 feet.
  - ix. If several drop structures will be used in series, space them at the appropriate distances to promote fish passage of target species and life histories. Incorporate NMFS (2011a) fish passage criteria (jump height, pool depth, etc.) in the design of drop structures.
  - x. Recommended spacing for boulder weirs should be no closer than the net drop divided by the channel slope (for example, a one-foot high step structure designed with a project slope of two-percent gradient will have a minimum spacing of 50-feet [ $1/0.02$ ]). Maximum project slope for boulder weir designs is 5%.
  - xi. A series of short steep rough ramps/chutes, cascades, or roughened channel type structures, broken up by energy dissipating pools, are required where project slope is greater than 5%.
- c. Rock Structures
- i. Rock structures will be constructed out of a mix of well-graded boulder, cobble, and gravel, including the appropriate level of fines, to allow for compaction and sealing to ensure minimal loss of surface flow through the newly placed material.
  - ii. Rock sizing depends on the size of the stream, maximum depth of flow, plan form, entrenchment, and ice and debris loading.
  - iii. The project designer or an inspector experienced in these structures should be present during installation.
  - iv. To ensure that the structure is adequately sealed, no sub-surface flow will be present before equipment leaves the site.
  - v. Rock shall be durable and of suitable quality to assure long-term stability in the climate in which it is to be used.
    - i. Where feasible, channel spanning structures should be coupled with LW to improve habitat complexity of riparian areas.
- d. Structure Stabilization

- i. When a footing, facing, head wall, or other protection will be constructed with rock to prevent scouring or down-cutting of, or fill slope erosion or failure at, an existing culvert or bridge, the amount of rock used is limited to the minimum necessary to protect the integrity of the structure. Include soil, vegetation, and wood throughout the structure to the level possible.
- e. Road-stream crossing replacement or retrofit
  - i. Projects shall adhere to industry design standards found in the most recent version any of the following:
    1. *Water Crossings Design Guidelines* (Barnard *et al.* 2013)<sup>28</sup>
    2. *Part XII, Fish Passage Design and Implementation, Salmonid Stream Habitat Restoration Manual* (California Department of Fish and Game 2009)<sup>29</sup>
    3. *Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream* (USDA-Forest Service 2008)<sup>30</sup>
    4. Or other design references approved by NMFS.
  - i. General road-stream crossing criteria
    1. Span
      - a. Span is determined by the crossing width at the proposed streambed grade.
      - b. Single span structures will maintain a clear, unobstructed opening above the general scour elevation that is at least as wide as 1.5 times the active channel width.<sup>31</sup>
      - c. Multi-span structures will maintain clear, unobstructed openings above the general scour elevation (except for piers or interior bents) that are at least as wide as 2.2 times the active channel width.
      - d. Entrenched streams: If a stream is entrenched (entrenchment ratio of less than 1.4), the crossing width will accommodate the flood prone width. Flood prone width is the channel width measured at twice the maximum bankfull depth (Rosgen 1996).
      - e. Minimum structure span is 6 feet.
    2. Bed Material
      - a. Install clean alluvium with similar angularity as the natural bed material, no crushed rock.
      - b. Bed material shall be designed based on the native particle size distribution of the adjacent channel or reference reach, as quantified by a pebble count.
      - c. Rock band designs as detailed in *Water Crossings Design Guidelines* (Barnard *et al.* 2013) are authorized.
      - d. Bed material in systems where stream gradient exceeds 3% may be conservatively sized to resist movement.

<sup>28</sup> <http://wdfw.wa.gov/publications/01501/>

<sup>29</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=12512>

<sup>30</sup> [http://stream.fs.fed.us/fishxing/aop\\_pdfs.html](http://stream.fs.fed.us/fishxing/aop_pdfs.html)

<sup>31</sup> Active channel width means the stream width measured perpendicular to stream flow between the OHW lines, or at the channel bankfull elevation if the OHW lines are indeterminate. This width includes the cumulative active channel width of all individual side- and off-channel components of channels with braided and meandering forms, and measure outside the area influence of any existing stream crossing, e.g., five to seven channel widths upstream and downstream.

### 3. Scour Prism

a. Designs shall maintain the general scour prism, as a clear, unobstructed opening (*i.e.*, free of any fill, embankment, scour countermeasure, or structural material to include abutments, footings, and culvert inverts). No scour or stream stability countermeasure may be applied above the general scour elevation.<sup>32</sup>

a. The lateral delineation of the scour prism is defined by the criteria span.

b. The vertical delineation of the scour prism is defined by the Lower Vertical Adjustment Potential (LVAP) with an additional offset of 2 times  $D_{90}$ , as calculated in *Stream Simulation: An ecological approach to providing passage for aquatic organisms at road crossings* (USDA-Forest Service 2008).

b. When bridge abutments or culvert footings are set back beyond the applicable criteria span they are outside the scour prism.

### 4. Embedment

a. All abutments, footings, and inverts shall be placed below the thalweg a depth of 3 feet, or the LVAP line with an offset of 2 times  $D_{90}$ , whichever is deeper.

i. AP, and 2 times  $D_{90}$  offset, as calculated in *Stream Simulation: An ecological approach to providing passage for aquatic organisms at road crossings* (USDA-Forest Service 2008).

b. In addition to embedment depth, embedment of closed bottom culverts shall be between 30% and 50% of the culvert rise.

### 5. Bridges

a. Primary bridge structural elements will be concrete, metal, fiberglass, or untreated timber. The use of treated wood for bridge construction or replacement is not part of this proposed action. The use of treated wood for maintenance and repair of existing wooden bridges is part of the proposed action if in conformance with project design criterion 29.

b. All concrete will be poured in the dry, or within confined waters not connected to surface waters, and will be allowed to cure a minimum of 7 days before contact with surface water as recommended by Washington State Department of Transportation (2010).

c. Riprap may only be placed below bankfull height of the stream when necessary for protection of abutments and pilings. The amount and placement of riprap will not constrict the bankfull flow.

d. Temporary work bridges will also meet the latest version of NMFS (2011a) criteria.

<sup>32</sup> For guidance on how to complete bridge scour and stream stability analysis, see Lagasse *et al.* (2012) (HEC-20), Lagasse *et al.* (2001) (HEC-23), Richardson and Davis (2001) (HEC-18), ODOT (2011), and AASHTO (2013).



- iii. The electronic notification for each permanent stream crossing replacement will contain the following:
  - 1. Site sketches, drawings, aerial photographs, or other supporting specifications, calculations, or information that is commensurate with the scope of the action, that show the active channel, the 100-year floodplain, the functional floodplain, any artificial fill within the project area, the existing crossing to be replaced, and the proposed crossing.
  - 2. A completed scour and stream stability analysis for any crossing that includes scour or stream stability countermeasures within the crossing opening that shows the general scour elevation and the local scour elevation for any pier or interior bent.
  - 3. The name, address, and telephone number of a person responsible for designing this part of the action that NMFS may contact if additional information is necessary to complete the effects analysis.
- f. **NMFS fish passage review and approval.** The Corps will not issue a permit to install, replace, or improve a road-stream crossing, step structure, fish ladder, or projects containing grade control, stream stability, or headcut countermeasures, until the action has been reviewed and approved by NMFS for consistency with NMFS's fish passage criteria (NMFS 2011a).

#### 43. Utility Line Stream Crossings

- a. Design utility line stream crossings in the following priority:
  - i. Aerial lines, including lines hung from existing bridges.
  - ii. Directional drilling, boring and jacking that spans the channel migration zone and any associated wetland.
  - iii. Trenching – this method is restricted to intermittent streams and may only be used when the stream is naturally dry, all trenches will be backfilled below the OHW line with native material and capped with clean gravel suitable for fish use in the project area.
- b. Align each crossing as perpendicular to the watercourse as possible. Ensure that the drilled, bored or jacked crossings are below the total scour prism.
- c. Any large wood displaced by trenching or plowing will be returned as nearly as possible to its original position, or otherwise arranged to restore habitat functions.
- d. Any action involving a stormwater outfall will meet the stormwater management criteria.<sup>33</sup>
- e. NMFS will review new or upgraded stormwater outfalls.

<sup>33</sup> The most efficient way for an applicant or the Corps to prepare and submit a stormwater management plan for NMFS' review is to attach a completed *Checklist for Submission of a Stormwater Management Plan* (the *Checklist*, ODEQ updated 2012, or the most recent version) with the electronic notification when it is sent to the SLOPES mailbox. However, stormwater conveyance to a DEQ permitted Municipal Separate Storm Sewer System (MS4) or consistency with any other program acknowledged by DEQ as adequate for stormwater management will not meet the requirements of this opinion unless NMFS determines that the facility accepting the stormwater will provide a level of treatment that is equivalent to that called for in this opinion. The *Checklist* and guidelines for its use are available from NMFS or the ODEQ in Portland Oregon. The latest version of the *Checklist* is also available online in a portable document format (pdf) through the ODEQ Water Quality Section 401 certification webpage (ODEQ 2014) at <http://www.deq.state.or.us/wq/sec401/cert/process.htm#add> (see "Post Construction Stormwater Management Plan").

# SLOPES STORMWATER TRANSPORTATION AND UTILITIES

## 1. ACTION COMPLETION REPORT

Within 60 days, or 30 days if a Natural Hazard Response, of completing all work below ordinary high water (OHW) as part of an action completed under the SLOPES Stormwater Transportation and Utilities programmatic opinion, the permittee must submit a completed action completion form with the following information to the U.S. Army Corps of Engineers, Regulatory Branch at: cenwp.notify@usace.army.mil

<b>Actual Start and End Dates for the Completion of In-water Work:</b>	<i>Start:</i>	<i>End:</i>
<b>Actual Linear-feet of Riparian and/or Channel Modification within 150 feet of OHW</b>		
<b>Actual Acreage of Herbicide Treatment</b>		
<b>Turbidity Monitoring/Sampling Completed</b>	<input type="checkbox"/> Yes (include details below)	<input type="checkbox"/> No

**Please include the following:**

1. Attach as-built drawings for any action involving a riprap revetment, stormwater management facility, or a bridge rehabilitation or replacement.
2. Attach photos of habitat conditions before, during, and after action completion.
3. Describe compliance with fish screen criteria, as defined below, for any pump used.
4. Summarize results of pollution and erosion control inspections, including any erosion control failure, contaminant release, and correction effort.
5. Describe number, type and diameter of any pilings removed or broken during removal.
6. Describe any riparian area cleared within 150 feet of OHW.
7. Describe turbidity monitoring (visual or by turbidimeter) including dates, times and location of monitoring and any exceedances and steps taken to reduce turbidity observed.
8. Describe site restoration.

**If the project was a Natural Hazard Response, ALSO include the following:**

1. Name of the natural hazard event.
2. Type of natural hazard.
3. Name of the public transportation district manager that declared the response necessary.
4. NMFS staff contacted, with date and time of contact.
5. Description of the amount and type of riprap or other material used to repair a culvert, road, or bridge.
6. Assess the effects of the initial response to listed species and critical habitats.
7. Summary of the design criteria followed and not followed.
8. Remedial actions necessary to bring the initial response into compliance with design criteria in this opinion.

# SLOPES STORMWATER TRANSPORTATION AND UTILITIES

## 2. FISH SALVAGE REPORT

**If Applicable:** Within 60 days of completing a capture and release as part of an action completed under the SLOPES Stormwater Transportation and Utilities programmatic opinion, the permittee must submit a fish salvage report form with the following information to the U.S. Army Corps of Engineers, Regulatory Branch at: [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil)

**Date(s) of Fish Salvage  
Operation(s):**

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**Supervisory Fish Biologist:**

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**Address**

---

**Telephone Number**

---

Describe methods that were used to isolate the work area and remove fish

**Fish Salvage Data**

Water Temperature:

Air Temperature:

Time of Day:

ESA-Listed Species	Number Handled		Number Injured		Number Killed	
	Juvenile	Adult	Juvenile	Adult	Juvenile	Adult
Lower Columbia River Chinook						
Upper Willamette River Chinook						
Upper Columbia River spring-run Chinook						
Snake River spring/summer run Chinook						
Snake River fall-run Chinook						
Chinook, unspecified						
Columbia River chum						
Lower Columbia River Coho						
Oregon Coast Coho						
Southern Oregon/Northern California Coasts Coho						
Snake River sockeye						
Lower Columbia River steelhead						
Upper Willamette River steelhead						
Middle Columbia River steelhead						
Upper Columbia River steelhead						
Snake River Basin steelhead						
Steelhead, unspecified						
Southern green sturgeon						
Eulachon						

# SLOPES STORMWATER TRANSPORTATION AND UTILITIES

## 3. SITE RESTORATION/ COMPENSATORY MITIGATION

By December 31 of any year in which the Corps approves that the site restoration or compensatory mitigation is complete, submit a completed Site Restoration/ Compensatory Mitigation Reporting Form, or its equivalent, with the following information to the Corps at [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil).

Describe location of mitigation or restoration work.

Summarize the results of mitigation or restoration work completed.





US Army Corps  
of Engineers  
Portland District

# Compliance Certification

1. **Permit Number:** NWP-
2. **Permittee Name:**
3. **County Location:**

Upon completing the activity authorized by the permit, please complete the sections below, sign and date this certification, and return it to the U.S. Army Corps of Engineers, Portland District, Regulatory Branch. The certification can be submitted by email at [cenwp.notify@usace.army.mil](mailto:cenwp.notify@usace.army.mil) or by regular mail at the following address:

U.S. Army Corps of Engineers  
CENWP-OD-GL  
P.O. Box 2946  
Portland, OR 97208-2946

4. **Corps-required Compensatory Mitigation (see permit special conditions):**
  - a. Mitigation Bank / In-lieu Fee Credit Transaction Documents:  
 Not Applicable       Submitted       Enclosed
  - b. Permittee-responsible mitigation (e.g., construction and plantings) has been constructed (not including future monitoring). As-built report:  
 Not Applicable       Submitted       Enclosed
5. **Endangered Species Act – Standard Local Operating Procedures (SLOPES)**  
(see permit special conditions):
  - a. SLOPES Action Completion Report:  
 Not Applicable       Submitted       Enclosed
  - b. SLOPES Fish Salvage Report:  
 Not Applicable       Submitted       Enclosed
  - c. SLOPES Site Restoration / Compensatory Mitigation Report:  
 Not Applicable       Submitted       Enclosed

I hereby certify the work authorized by the above-referenced permit has been completed in accordance with all of the permit terms and conditions.

---

**Signature of Permittee**

**Date**

NWP-

Enclosure



**City of Portland, Oregon**  
**Bureau of Development Services**  
**Land Use Services**  
**FROM CONCEPT TO CONSTRUCTION**

Dan Ryan, Commissioner  
Rebecca Esau, Director  
Phone: (503) 823-7300  
Fax: (503) 823-5630  
TTY: (503) 823-6868  
[www.portland.gov/bds](http://www.portland.gov/bds)

**DATE:** December 16, 2021

**TO:** Sarah Miller, Oregon Department of Environmental Quality  
700 NE Multnomah Street, Suite #660  
Portland, OR 97232

**FROM:** Morgan Steele, BDS Land Use Services  
503.865.6437 | [morgan.steele@portlandoregon.gov](mailto:morgan.steele@portlandoregon.gov)

**RE:** **PR 21-092813 ERC** | Letter of Determination for Pacific Carbide Sediment Remediation Exempt Review

Staff members from Portland's Bureau of Development Services and Bureau of Environmental Services have evaluated the proposed remedial action measures for compliance with the substantive requirements of applicable Portland City Code, as described below.

State law (ORS 465.315(3)) exempts the "on-site" portion of any hazardous substance removal or remedial action from any state or local permits, licenses or other authorizations or procedural requirements "without affecting the substantive requirements."

#### **Summary of Project**

The proposed removal action for the Site includes the installation of a sediment cap consisting of an organoclay-amended reactive core mat (RCM) with a habitat-friendly rounded gravel protection layer overlain by a sand habitat layer cover over Areas A, B, and C, as shown in the December 2021 submittal package. Area E and portions of Areas A, B, and C are incompatible with RCM capping because of in-water obstructions (namely large wood habitat structures); these areas will be capped with a thin layer amended sand cap (a 4-inch-thick layer of sand amended with approximately 5 percent granular activated carbon [GAC]). Removal of 41 trees, invasive, and native vegetation, and excavation of the bank soil along the south side of the Slough is required to comply with the City's cut-and-fill balancing requirements (PCC 24.50) in the 100-year floodplain. It should be noted that the removal action area also falls within the 1996 Flood Inundation Area, which will be regarded as the compliance boundary. Following implementation of the removal action, the impacted areas will be restored and mitigated by installing native plantings and large wood habitat features along the bank throughout the project area.

#### **Applicable City Codes**

The applicable portions of the City Code cited by the reviewers are:

- Title 10 – Erosion and Sediment Control
- Title 17 – Public Improvements
- Chapter 24.50 – Flood Hazard Areas
- Chapter 24.70 – Clearing, Grading, and Erosion Control
- Title 33 – Portland Zoning Code

#### **Evaluation**

Environmental Services: Abigail Cermak, BES Systems Development, 503-823-7577

Based on the submitted materials, the applicant has successfully demonstrated the proposed remedial action project meets applicable BES substantive requirements as outlined below. Therefore, BES is supportive of a Final Determination Letter stating BES Title 17 substantive requirements have been met.

Site Development: Kevin Wells, Site Development, 503-823-5618

The proposed remediation project work meets the substantive requirements of the applicable sections of Title 10 and Title 24. As such, Site Development has no objection to the project as currently proposed.

Land Use: Morgan Steele, Land Use Services, 503-865-6437

The applicant has demonstrated the proposed remedial action activities and related mitigation and planting plan will not have detrimental impacts on resources and functional values at the subject site, but rather will provide reduced levels of contaminants in the Slough and its associated inhabitants. Therefore, this project meets the substantive requirements of the Title 33 Portland Zoning Code.

**Determination**

The Bureau of Development Services has reviewed your submittals with regard to the requirements of Titles 10, 24, and 33, and the Bureau of Environmental Services has reviewed your submittals for consistency with the requirements of Title 17.

As shown, the proposed remedial action will meet the City's substantive code requirements.

After the work is completed, please send us the completion report and as-built drawings, or equivalent documents.

If you have any questions, please contact me at [Morgan.Steele@portlandoregon.gov](mailto:Morgan.Steele@portlandoregon.gov) or 503-865-6437.

attachments:    Land Use Services response  
                      Site Development response  
                      Environmental Services response



**City of Portland, Oregon**  
**Bureau of Development Services**  
**Land Use Services**  
**FROM CONCEPT TO CONSTRUCTION**

Dan Ryan, Commissioner  
Rebecca Esau, Director  
Phone: (503) 823-7300  
Fax: (503) 823-5630  
TTY: (503) 823-6868  
[www.portland.gov/bds](http://www.portland.gov/bds)

**DATE:** December 16, 2021

**TO:** Sarah Miller, Oregon Department of Environmental Quality

**FROM:** Morgan Steele, BDS Land Use Services  
503.865.6437 | [morgan.steele@portlandoregon.gov](mailto:morgan.steele@portlandoregon.gov)

**RE:** **PR 21-092813 ERC** | Title 33 Compliance Memo for Pacific Carbide Sediment Remediation

The Oregon Department of Environmental Quality (DEQ) is asking for City review and approval for sediment remediation actions that are required at the Pacific Carbide site and within the adjacent Lower Columbia Slough. State law (ORS 465.315(3)) exempts the “onsite” portion of any hazardous substance removal or remedial action from any state or local permits, licenses or other authorizations or procedural requirements “without affecting the substantive requirements.” Staff members from Portland’s Bureau of Development Services Land Use Services Section has evaluated the proposed remedial action for compliance with the substantive requirements of Portland’s Title 33/Portland Zoning Code, as described below.

Maul Foster Alongi on behalf of DEQ has prepared the *Pacific Carbide Sediment Remediation Exempt Review* (December 2021), describing the proposal for implementation of a sediment remedial action in the lower Columbia Slough (the Slough), offshore of property owned by Pacific Carbide and Alloys, Inc. (Pacific Carbide). The property is located at 9901 N Hurst Avenue, Portland, Oregon 97203 and is listed in the DEQ’s Environmental Cleanup Site Information Database as Site ID No. 268. The rationale for the source control remedial action is described in the 2014 Consent Decree (Case No. 131115335) prepared by the DEQ. Details of the proposed remedial action are summarized below.

**Project Purpose:** The purpose of this project is to address elevated concentrations of polychlorinated biphenyls (PCBs), calcium, and other collocated contaminants in sediment at the site, including polycyclic aromatic hydrocarbons (PAHs) and metals. The cleanup selected for the site uses a sediment cap to address sediment with the highest concentrations of PCBs and calcium. Remediation is expected to reduce average surface PCB sediment concentrations consistent with baseline levels for the Slough and to eliminate benthic toxicity associated with lime (calcium) deposits in the areas most impacted. Risk pathways of concern are direct exposure of benthic organisms and fish to sediment and, for PCBs, exposure to humans and ecological receptors through consumption of PCB-contaminated fish. In 2019, the Oregon Health Authority (OHA) revised their 1994 Health Advisory for consumption of fish in the Columbia Slough due to elevated PCBs and mercury in fish tissue.

**Project Objective:** In its 2018 draft removal action proposal, the DEQ identified the following remedial action objectives (RAOs) for the Slough and associated side channels:

- Reduce sediment concentrations in the Slough and side channels to protective risk-based levels.
- Remediate sediment with the highest concentrations of calcium (and associated PAHs and metals) and PCBs, to the extent that natural recovery processes can reduce residual concentrations to below risk-based levels within a reasonable time frame.

**Project Area:** The Site was developed in the 1940s and operated as a calcium carbide manufacturing plant until 1987. Pacific Carbide manufactured calcium carbide on site by combining quicklime (calcium oxide) and coke (a solid carbon source with high concentrations of polycyclic aromatic hydrocarbons [PAHs]) under high temperatures. Emissions generated by this process were controlled by a wet scrubber, which produced a slurry of

lime and PAHs that was discharged to settling ponds and ultimately to the Slough. Additionally, polychlorinated biphenyls (PCBs) associated with the site operations were detected in the on-site sediment in concentrations above cleanup levels.

In April 2007, the DEQ issued a Record of Decision (ROD) for both upland and in-water contamination associated with the Site. Pacific Carbide entered a Consent Judgment with the DEQ under which Pacific Carbide agreed to complete remedial actions in the upland portion of the Site and pay a settlement to obtain a release from liability for contamination in the Columbia Slough. In 2014, Pacific Carbide completed the remediation of the upland portion of the Site. The proposed project addresses the Pacific Carbide ROD and the Columbia Slough ROD1 by addressing the risk to human health and ecological receptors resulting from sediment (in-water) contamination adjacent to the upland property.

**Project Description:** The proposed removal action for the Site includes the installation of a sediment cap consisting of an organoclay-amended reactive core mat (RCM) with a habitat-friendly rounded gravel protection layer overlain by a sand habitat layer cover over Areas A, B, and C, as shown on the December 2021 submittal package. Area E and portions of Areas A, B, and C are incompatible with RCM capping because of in-water obstructions (namely large wood habitat structures); these areas will be capped with a thin layer amended sand cap (a 4-inch-thick layer of sand amended with approximately 5 percent granular activated carbon [GAC]). Removal of 41 trees, invasive, and native vegetation, and excavation of the bank soil along the south side of the Slough is required to comply with the City's cut-and-fill balancing requirements (PCC 24.50) in the 100-year floodplain. It should be noted that the removal action area also falls within the 1996 Flood Inundation Area, which will be regarded as the compliance boundary. Following implementation of the removal action, the impacted areas will be restored and mitigated by installing native plantings and large wood habitat features along the bank throughout the project area.

The proposal is subject to the substantive requirements of the following sections of Title 33 Portland Zoning Code:

### **33.430, Environmental Overlay Zones**

The project site for the exempt review is subject to requirements of Chapter 33.430, Environmental Overlay Zones which lists criteria for approval. The applicant provided a complete set of site plans and technical reports, including specific findings for Zoning Code approval criteria. The application describes how the details of the project will specifically meet the Title 33 Environmental regulations in their December 2021 Pacific Carbide Sediment Remediation Exempt Review document.

The applicant has demonstrated the proposed remedial action activities and related mitigation and planting plan will not have detrimental impacts on resources and functional values at the subject site, but rather will provide reduced levels of contaminants in the Slough and its associated inhabitants. Therefore, this project meets the substantive requirements of the Title 33 Portland Zoning Code.

If you have any questions, please contact me at [morgan.steele@portlandoregon.gov](mailto:morgan.steele@portlandoregon.gov) or 503.865.6437.





**City of Portland, Oregon**  
**Bureau of Development Services**  
**Site Development**  
**FROM CONCEPT TO CONSTRUCTION**

Dan Ryan, Commissioner  
Rebecca Esau, Director  
Phone: (503) 823-6892  
Fax: (503) 823-5433  
TTY: (503) 823-6868  
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**Exempt Review Compliance Memorandum**  
Site Development Section, BDS

To: Morgan Steele, LUR Division  
From: Kevin Wells, Site Development (503-823-5618)

Location/Legal: TL 200 0.83 ACRES, SECTION 05 1N 1E; TL 700 2.51 ACRES, SECTION 05 1N 1E; TL 500 12.92 ACRES, SECTION 05 1N 1E; TL 100 0.85 ACRES, SECTION 05 1N 1E; TL 300 1.27 ACRES, SECTION 05 1N 1E; TL 400 1.04 ACRES, SECTION 05 1N 1E; TL 400 1.35 ACRES, SECTION 05 1N 1E

Land Use Review: PR 21-092813

Proposal: The proposed removal action for the Site includes the installation of a sediment cap consisting of an organoclay-amended reactive core mat (RCM) with a habitat-friendly rounded gravel protection layer overlain by a sand habitat layer cover over Areas A, B, and C, as shown on Figure 1-3 in the 60% design report (see the appendix). Area E and portions of Areas A, B, and C are incompatible with RCM capping because of in-water obstructions; these areas will be capped with a thin layer amended sand cap (a 4-inch-thick layer of sand amended with approximately 5 percent granular activated carbon [GAC]). Removal of 41 trees, invasive, and native vegetation, and excavation of the bank soil along the south side of the Slough is required to comply with the City's cut-and-fill balancing requirements (PCC 24.50) in the 100-year floodplain. It should be noted that the removal action area also falls within the 1996 Flood Inundation Area, which will be regarded as the compliance boundary. Following implementation of the removal action, a 15-foot-wide drainage way reserve will be added to the deed for each of the properties, with the exception of City of Portland parcel, R314545, which already has an established drainage way reserve.

Quarter Sec. Map: 1925, 2024, 2025, 2026

Date: November 18, 2021

Site Development of the Bureau of Development Services (BDS) reviewed the project for substantive compliance with Portland City Codes (PCC) [Title 10 Erosion and Sediment Control Regulations](#) and [Title 24 Building Regulations](#), specifically chapters 24.50 Flood Hazard Areas and 24.70 Clearing, Grading, and Retaining Walls.

### Floodplain

Portions of the site are within the FEMA Special Flood Hazard Area (Zone AE) as shown on Flood Insurance Rate Map Panel 410183 0080F, dated October 19, 2004. Sites located within the Special Flood Hazard Area are subject to the applicable portions of PCC Title 24.50. The FEMA base flood elevation (BFE) is 31.0 feet North American Vertical Datum 1988 (NAVD 1988), or 28.9 feet City of Portland Datum (COP Datum).

The site is also within the 1996 Metro Flood Inundation Area. The 1996 flood was measured to be 1 foot above the FEMA base flood elevation along the Columbia River. Therefore, the adjusted base flood elevation accommodating the 1996 flood stage is  $31.0 + 1.0 = 32.0$  feet NAVD 1988, or 29.9 feet COP Datum. Earthwork within the 1996 Metro Flood Inundation Area is subject to the balanced cut-and-fill requirements PCC Title 24.50.060.F.8. These provisions require that fill placed at or below the adjusted base flood elevation be balanced with at least an equal amount of soil material removal in the same flood hazard area. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions. Non-storm winter conditions are typically demarcated above ordinary high water (OHW).

The submitted documents show that grading will result in no net fill within the flood hazard area and cut/fill slopes will be 2H:1V (horizontal: vertical) or flatter. The documents submitted for review are in substantive compliance with PCC 24.50 Flood Hazard Area requirements and Title 24.70 grading requirements.

### **Erosion Control**

Erosion prevention and sediment control requirements found in PCC [Title 10](#) apply to both site preparation work and development. Full compliance with the erosion control requirements of Title 10, as well as maintenance of the erosion control elements, such as silt fences on private property, storm drain inlet protection and bio bags in the public right-of-way, is the responsibility of the property owner, the developer, and the builders.

Site Development finds that the project is in substantive compliance with PCC Title 10 requirements.

### **Conclusions**

The proposed remediation project work meets the substantive requirements of the applicable sections of Title 10 and Title 24. As such, Site Development has no objection to the project as currently proposed.



# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Suite 613, Portland, Oregon 97204 ■ Mingus Mapps, Commissioner ■ Michael Jordan, Director

## BES Exempt Review Title 17 Compliance Memo

**Date:** December 16, 2021

**To:** Morgan Steele, BDS Land Use Services  
503-865-6437, Morgan.Steele@portlandoregon.gov

**From:** Abigail Cermak, BES Systems Development  
503-823-7577, Abigail.Cermak@portlandoregon.gov  
Julie Matney, BES Surface Water Management  
503-823-2774, Julie.Matney@portlandoregon.gov

**Subject:** Remedial Action Exempt Review – Phase II Columbia Slough/Pacific Carbide  
ECSI# 268, ECSI #1440

**Case File:** 21-092813-PR

**Location:** 9901 N HURST AVE

**R#:** R314553, R314554, R314558, R314562, R314571, R314573, R314590

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This memo is being provided in response to a request for an “exempt” review per Oregon Revised Statute 465.315.

The Oregon Department of Environmental Quality (DEQ) is requesting a review of the Phase II sediment removal action within the Columbia Slough adjacent to the Pacific Carbide site to demonstrate the project meets the City’s substantive requirements of an environmental land use review and site development permit. The Bureau of Environmental Services (BES) provided a Request for Additional Information memo to the applicant on October 21, 2021 and requested additional information via email on November 17, 2021. The applicant submitted a response and updated site plans on December 6, 2021.

The Bureau of Environmental Services (BES) reviewed the proposed project for substantive compliance with the [2020 BES Stormwater Management Manual](#) (SWMM), the [2020 BES Source Control Manual](#) (SCM) and other relevant Portland City Code (PCC) [Title 17 Public Improvements](#) requirements, specifically the following: Chapter 17.32 Public Sewer and Drainage System Permits, Connections and Maintenance; Chapter 17.34 Sanitary Discharges; Chapter 17.38 Drainage and Water Quality; and Chapter 17.39 Storm System Discharges.

### A. RECOMMENDATION

Based on the submitted materials, the applicant has successfully demonstrated the proposed remedial action project meets applicable BES substantive requirements as outlined below. Therefore, BES is supportive of a Final Determination Letter stating BES Title 17 substantive requirements have been met.

### B. APPLICABLE TITLE 17 SUBSTANTIVE REQUIREMENTS

1. *Site Dewatering (SCM Chapter 9)*: BES reviewed the Exempt Project Review narrative from Maul Foster & Along (MFA) dated November 9, 2021 and the updated site plans from Maul Foster & Along submitted December 6, 2021. Based on the submittal, no dewatering activities will occur as part of this project. Therefore, no additional information is needed to demonstrate this requirement has been met.
2. *Contaminated Soil Stockpiles (SCM Section 8.2.1)*: Sheet C2.1 of the submitted site plans shows the location of a covered and lined soil stockpile area. Sheet C2.3 provides a detail of the covered soil stockpile with a 10 mil HDPE liner beneath, as well as the use of straw bales for containment. This information demonstrates the BES substantive requirement for soil stockpiles has been met.
3. *Drainageway Protection (SWMM Chapter 5)*: A drainageway, the Columbia Slough, is located on the project site. Drainageways must be protected by means of drainage reserves except when the drainageway is adequately protected by an Environmental Protection overlay zone, another overlay

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zone that provides equivalent or better protection as determined by BES, or a tract (such as an Environmental Resource Tract) that equally or better meets the purpose of the drainage reserve, as determined by BES. In this location, the Columbia Slough is under-protected with the Environmental Conservation overlay and a drainage reserve is required.

- a. *Drainage Reserve and Documentation:* On this site, due to the width of the drainageway (the Columbia Slough), BES has determined that a drainage reserve must be delineated 15 feet from top of bank. The drainageway and associated drainage reserve are shown on the submitted site plans (sheets C0.0 and C5.0). The applicant has shown a drainage reserve placed on the following properties: the Portland Parks and Recreation property adjacent to the Slough channel (R314590); the Pacific Carbide property (R314558); and the McCuddy property (R314571 and R314573). The existing drainage reserve on the BES property west of the railroad tracks (R314545) has also been shown on the plans.
- b. *Drainageway Encroachment:* Based on the submitted plans, it appears that the proposed remedial action will include temporary encroachments into both the drainage reserve buffer and drainage reserve channel. BES staff reviewed the DEQ response narrative (dated November 10, 2021). Based on the submitted information, BES has determined that the proposed encroachment adequately ensures that the flow rate, timing, and pattern of drainage will continue to be adequately conveyed and that water quality will be protected. Adequate mitigation has been shown on the submitted plans (sheets C5.0 and C5.1) meeting the requirements described in Section 5.6 of the SWMM.
- c. *Drainage Reserve Notice:* To help ensure long-term protection of drainage reserve areas, when the project is complete, a notice about the drainage reserve must be recorded against the property deeds through the applicable County recorder's office via a Notice of Drainage Reserve Form or an Operations and Maintenance (O&M) Plan and Form. The type of form required will depend on the impact to the drainage reserve; see Section 5.10 of the SWMM for more information.

### C. ADDITIONAL PROJECT FEEDBACK

The following relates to planting recommendations provided by BES Watershed Revegetation Program and BES Surface Management staff. In addition to planting trees (douglas fir, cottonwood) to the "riparian" planting area, BES suggests the following for the mitigation areas (sheet C5.1 – Planting Details):

- Trees
  - Substitute Douglas fir (*Pseudotsuga Menziesii*) for Cedar. Douglas fir will do better in the face of climate change.
  - Substitute cottonwood (*Populus trichocarpa*) for Oregon ash.
- Shrubs and Herbaceous Plants
  - Substitute blue elderberry (*Sambucus cerulea*) and/or thimbleberry (*Rubus parviflora*) for snowberry. Native people have asked Portland's urban ecologists to reduce snowberry numbers in new plantings; there are plants with more cultural significance that could be used in its place.
  - Swordfern would have better survival rates as 4" or 1-gallon pots.
  - Substitute either goldenrod (*Solidago canadensis*) and/or *Aster subspicatus* for bleeding heart. Bleeding heart does well in established forests, but will struggle in an open, newly planted area.
  - Substitute fringecup (*Tellima grandiflora*) or fireweed (*Epilobium angustifolium*) for licorice fern. Licorice fern only grows on tree branches or rocks.
  - Substitute *Geum macrophyllum* for Hooker's fairy bells. Hooker's fairy bells is great in older douglas fir forests, but would struggle in an open, newly planted area.
- Transitional/Emergents
  - Substitute slough sedge for burr reed. Burr reed is found in stagnant ponds.
  - Substitute slough sedge for slender hairgrass. Slender hairgrass is an upland species.

# Exhibit E

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## Master Subcontractor Agreement



MAUL  
FOSTER  
ALONGI





## MASTER SUBCONTRACTOR AGREEMENT—ENVIRONMENTAL—OREGON DEQ

This Agreement is first effective \_\_\_\_\_, and is by and between Maul Foster & Alongi, Inc. (“MFA”), a Washington corporation, and its subcontractor \_\_\_\_\_ (“Subcontractor”). MFA and Subcontractor are collectively referred to as the “Parties”.

The term of this Agreement shall extend indefinitely until either party provides 60-days’ written notice of cancellation of the Agreement to the other party; provided, however, that Subcontractor cannot cancel this Agreement during the performance of its Work on any project(s) governed by a Work Order Authorization. Cancellation of this Agreement shall not have any effect on any post-completion obligations on any project(s) governed by a Work Order Authorization (including but not limited to any warranty periods and all applicable statutes of limitation or repose).

### 1. THE WORK

During the term of this Agreement, and subject to the conditions of this Agreement, MFA may engage Subcontractor to perform specific Work. In each instance, the parties will enter into a separate document called a “Work Order Authorization” that is subject to the terms and conditions of this Agreement. The Work Order Authorization will describe, at minimum, (1) the scope of Work to be performed, (2) the schedule for Subcontractor’s performance, and (3) the contract price for Subcontractor’s performance. Pursuant to the terms of this Agreement, Subcontractor agrees to furnish and pay for all supervision, contract administration, services, labor, materials, equipment, tools, and other costs necessary and incidental to perform all requirements of the Contract Documents as well as any extra or additional Work directed in writing by MFA (collectively, the “Work”).

### 2. CONTRACT DOCUMENTS

The Contract Documents shall consist of the following, as applicable, which are all incorporated into this Agreement by reference:

- a. This Agreement;
- b. All submittals required to be submitted to MFA;
- c. The applicable Work Order Authorization; and
- d. Those sections of the Prime Contract between MFA and the Oregon Department of Environmental Quality (hereinafter “Client”) shown in the attached Additional Provisions from DEQ Price Agreement.

Conflicts or discrepancies among the Contract Documents shall be resolved in the following order of priority:

- a. Change Orders, with change orders of a later date taking precedence over those of an earlier date;

- b. This Agreement, with amendments to this Agreement of a later date taking precedence over those of an earlier date;
- c. Supplemental general conditions or special conditions;
- d. The applicable Work Order Authorization;
- e. The general conditions;
- f. Drawings and specifications; and
- g. The Prime Contract.

### **3. SUBCONTRACTOR'S REPRESENTATIONS**

Subcontractor represents that it is currently a registered/licensed contractor and/or professional in good standing in any jurisdiction as required to perform the Work. By undertaking the Work, Subcontractor warrants that:

- a. It is qualified to perform all of the Work;
- b. It shall remain a registered/licensed contractor and/or professional at all times it is performing the Work in all categories required by law;
- c. It will obtain and maintain all registrations, licenses, or permits required by any public authority to conduct its business activities in the city, county, and state where the Work is located;
- d. It is solely responsible for the means and the methods used in performing the Work;
- e. It is an independent contractor and is not an employee, partner, agent, or joint venture with MFA;
- f. It is and will remain responsible for any federal, state, and local taxes and fees applicable to payments hereunder, including taxes or contributions payable on its employees; and
- g. It shall comply with all record keeping, reporting and other such requirements of any law applicable to its status as an employer or its performance of the Work.

### **4. PAYMENTS TO SUBCONTRACTOR**

- 4.1. The amount and manner of payment for the Work shall be set forth in the Work Order Authorization.
- 4.2. If the Work is performed on a Lump Sum basis, Subcontractor agrees to accept as full compensation for its performance, including all taxes, fees, assessments, and premiums relating to the Work, and for all risks of every description in any way connected with the Work, payment of the Lump Sum price shown in the Work Order Authorization.

- 4.3. If the Work is performed on a cost-plus and/or unit price basis with a Guaranteed Maximum Price (“GMP”), Subcontractor shall be paid according to the costs and/or unit prices agreed upon in the Work Order Authorization up to the GMP.
- 4.4. Unless otherwise specified in a Work Order Authorization, Subcontractor shall submit invoices by the 25th day of each month. Subcontractor may submit invoices not more frequently than once a month for completed Work. Subcontractor shall submit invoices electronically to MFA at [accounting@maulfoster.com](mailto:accounting@maulfoster.com). MFA will pay each invoice (less retainage provided below) properly submitted by and due Subcontractor within fifteen (15) days of the date of payment by MFA’s Client to MFA for Work covered by Subcontractor’s invoice; provided, however, that payment by Client to MFA is a condition precedent to MFA’s payment to Subcontractor.
- 4.5. Payment of any invoice by MFA shall not imply inspection, approval, or acceptance of the Work by MFA or Client. All payments shall be subject to correction at any time.
- 4.6. Subcontractor shall, as a condition precedent to any partial or final payment, furnish MFA with any documents reasonably requested including drawings (including copies in electronic or digital format if requested), cost documentation, warranties, and/or a partial or final waiver, release, and discharge, as appropriate and in a form acceptable to MFA, of and from any and all claims, liens, and demands arising out of or relating to the Work.
- 4.7. No money shall be deemed as earned or owing until Subcontractor has paid all obligations incurred for labor, materials, equipment, supplies, and any other obligation (including taxes, premiums, fees, and other assessments) incurred in connection with its Work which might be asserted as a claim against Client, MFA or MFA’s surety, or a lien against the property or improvement.
- 4.8. Subcontractor must defend and hold MFA and Client harmless from any lien or claim arising out of nonpayment by Subcontractor of obligations incurred in connection with the Work covered by this Subcontract. Subcontractor further agrees that if any lien(s), claim(s), or statutory withholding notice(s) shall be filed for Work done or materials furnished by or for Subcontractor, Subcontractor shall, within five (5) days thereafter, at its own cost and expense, cause such lien(s), claim(s), or withholding notice(s) to be discharged, and Subcontractor’s failure to do so shall be an event of default under this Agreement.
- 4.9. MFA shall be entitled to withhold five percent from any payment other than final payment as retainage. If the Work is performed in Oregon and the contract price exceeds \$500,000, MFA will place amounts deducted as retainage into an interest-bearing escrow account.
- 4.10. MFA may withhold payment on account of (1) defective or nonconforming Work not remedied; (2) damages caused to MFA or to any other party; (3) failure to achieve or adhere to the schedule for the Work or any material portion or milestone of the schedule; or (4) failure to comply with any applicable industry standards or any term or provision of this Agreement.
- 4.11. MFA reserves the right to make payment directly to creditors of Subcontractor that may have a claim or lien. MFA reserves the right, prior to making any progress payment or final payment, to secure from Subcontractor a certification under oath,

together with such other evidence as MFA may require, that all obligations incurred by or on behalf of Subcontractor in connection with performance of its obligations have been paid to date and listing any other amounts due or to become due. MFA shall have the right to pay Subcontractor by joint check or pay directly any of Subcontractor's sub-subcontractors or material providers or laborers if MFA has reason to believe that Subcontractor has not or may not pay such persons when payment is due. This provision expressly does not create third-party beneficiary status in any such persons.

- 4.12. Acceptance by Subcontractor of final payment hereunder shall constitute a waiver by Subcontractor and its surety of any and all claims against MFA, its surety, Client, or the premises arising out of or relating to this Agreement. To the fullest extent permitted by law, Subcontractor hereby waives any claim for interest on sums alleged to be due it hereunder except to the extent that interest is recovered from Client.

## **5. STANDARD OF CARE/WARRANTY**

- 5.1. Subcontractor warrants that the Work shall be performed in a manner consistent with that level of care and skill ordinarily exercised by members of the same industry, trade, and/or profession currently practicing under similar conditions.
- 5.2. Subcontractor warrants for one year following the date of substantial completion of the Work, that the services, materials and/or equipment furnished under this Agreement shall be free of defects and will conform to all requirements of the Contract Documents and industry standards.
- 5.3. If within one year of the date of substantial completion of the Work, MFA finds any Work that was not performed in compliance with all Contract Documents and warranties, MFA shall have the right to have the Work corrected and recover the costs of correction and MFA's reasonable overhead, markup, and expenses (including but not limited to attorney fees) from Subcontractor. This remedy is in addition to, and not in lieu of, all other remedies MFA may have under this Agreement or at law.

## **6. ACCESS, COORDINATION OF WORK AND PERMITS**

- 6.1. It is understood that the Work to be performed by Subcontractor will require complete integration and coordination with Work to be performed by MFA, other subcontractors, and/or suppliers. Subcontractor agrees to cooperate fully with MFA and any other contractor, subcontractor, or supplier in such integration and coordination, and to not interfere with any of their operations.
- 6.2. Subcontractor acknowledges that it may be necessary for its Work to be commenced and prosecuted prior to or in conjunction with other Work to be performed and that it is vital and necessary that Subcontractor perform its Work diligently and expeditiously so that MFA and others will not be delayed in the performance of their Work, and Subcontractor binds itself accordingly to so perform its Work.
- 6.3. Subcontractor agrees that MFA will not be liable for delays, disruptions, or interference caused by others, including but not limited to the Client and other subcontractors or subconsultants. Subcontractor shall continue diligently in such

performance and shall fully complete all the Work to the satisfaction of MFA and Client.

- 6.4. Subcontractor represents that it is fully qualified to perform the Work and acknowledges that, prior to execution of a Work Order Authorization, it has conducted whatever investigation it deemed necessary. Any failure by Subcontractor to independently investigate and become fully informed will not relieve Subcontractor from its responsibilities related to the Work.
- 6.5. Subcontractor shall notify MFA in writing, prior to commencement of the Work, of any defect, deficiency, or incompatibility of any Work performed by others in connection with the project, which defect, deficiency, or incompatibility would in any manner affect the performance or quality of Subcontractor's Work or otherwise pose a risk to, or adversely affect, the project.

The failure to so notify MFA shall preclude Subcontractor from any claim, which otherwise may have been available under this Agreement, for additional compensation, damages, or an extension of time relating to affected Work.

- 6.6. Unless otherwise specified in the Work Order Authorization, MFA shall not be responsible for any site specific or job-specific permits and approvals necessary for Subcontractor to perform the Work.
- 6.7. Unless otherwise specified in writing in the Work Order Authorization, Subcontractor is responsible for locating and taking all appropriate precautions against any utility, communication, and power lines (whether buried or otherwise) prior to commencing the Work. Subcontractor shall further provide, erect, and maintain proper warning signals, signs, lights, barricades, and fences on and along the line of said Work and shall take all other necessary precautions for the protection of the Work and safety of workers and the public.
- 6.8. Subcontractor shall perform its Work in such manner that the premises shall be at all times clean, orderly, and free from debris. If Subcontractor fails to maintain a clean Work area and dispose of its refuse to MFA's satisfaction, MFA may clean up the area and back charge Subcontractor. Upon completion of the Work hereunder, Subcontractor shall remove all plant, equipment, and excess materials from the site, clean up any and all refuse and debris and in general leave the site of the Work clean, orderly, and in good condition.

## **7. COMMUNICATIONS WITH CLIENT**

All written or oral communications with or to Client or with or to federal, state, or local agencies relative to the Work under this Agreement must be through or approved by MFA.

## **8. INSURANCE**

Text in this section (Section 11 – Insurance) has been replaced with the insurance requirements specified in:

- 8.1. Attachment A – Additional Provisions from DEQ Price Agreement.



- 8.2. Exhibit A – DEQ Environmental Cleanup Program; Scope of Services; Compensation; Other Requirements for Task Order Contracts, Section V.9 – Contractor Insurance.
- 8.3. In case any Work is sublet, Subcontractor will require (unless MFA in writing excuses or modifies the requirement) its lower-tier subcontractors to provide all of the types and coverages of insurance (with the same limits) required by Subcontractor, or the limits required in the Prime Contract, whichever requirement is greater, and ensure those subcontractors name Subcontractor, MFA, and Client as additional insureds and provide acceptable evidence of coverage.
- 8.4. Prior to commencing the Work, Subcontractor will provide copies of insurance certificates for all the policies required under this section to MFA. At MFA's request complete copies of all insurance policies required under this section must be provided to MFA. The aforementioned insurance shall state that it is primary coverage for MFA and Client.
- 8.5. Prior to commencing the Work, Subcontractor shall provide to MFA copies of the actual endorsements to its Comprehensive Business Automobile Liability policy, Commercial General Liability policy, and Umbrella policy evidencing that MFA and Client have been provided additional insured status on such policies of Subcontractor and sub-subcontractors. Additional Insured endorsement forms to be used should be CG 20 10 04 13 and CG 20 37 04 13, or equivalent.
- 8.6. Subcontractor must provide thirty (30) days prior written notice to MFA of any cancellation, alteration, or non-renewal of such policies.
- 8.7. Subcontractor waives subrogation against Client and MFA, their officers, affiliates, employees, agents, and subcontractors, and shall obtain similar waivers from any lower-tier subcontractors as to the lower-tier subcontractor's policies.

## **9. INDEMNIFICATION**

- 9.1. To the maximum extent permitted by law, Subcontractor shall indemnify, reimburse, hold harmless and defend (with counsel of MFA's selection) MFA, Client, and all of their owners, shareholders, partners, officers, directors, subcontractors, affiliated corporations, and employees from all damages, claims, losses, liabilities, and costs including, without limitation, litigation expenses, attorney's fees, consultant costs, economic loss or consequential damages (collectively, "Damages") arising out of, or resulting from, or alleged to have resulted from, the failure of Subcontractor to strictly comply with any term or provision of this Agreement, any of the Contract Documents, the negligent performance of its Work, the failure to comply with any law, regulation or industry standard, or any other cause that is the responsibility of Subcontractor. This shall include, without limitation, the costs to defend any administrative action or pay any administrative penalties associated with an alleged violation of any law, regulation, or industry standard.
- 9.2. The duty to defend, indemnify, reimburse, and hold harmless under this paragraph shall also include any Damages arising out of an act or omission of any lower-tier subcontractor, agent, or vendor for which Subcontractor may be liable.

**10. PATENTS**

Subcontractor shall defend indemnify, reimburse, and hold harmless MFA and Client from Damages arising out of, or resulting from, or alleged to have resulted from, the use of any patented or unpatented invention, article, appliance, or process furnished or used in or in connection with the performance of the Work.

**11. DELAYS; EXTENSION OF TIME; CHANGES**

11.1. Time and strict performance are of the essence of the Agreement, and Subcontractor agrees to perform said Work within the time and in the manner specified in the Contract Documents, or within such extended time as may be granted by Client.

11.2. Any claims for an extension of time shall be made no later than three days prior to the date MFA must request an extension of time from Client. If Subcontractor is delayed in the performance of Subcontractor’s Work for any reason beyond the Subcontractor’s control, and without the Subcontractor’s fault of negligence, including delays caused in whole or in part by MFA or the Client, or if the Subcontractor’s Work is delayed by order of MFA, then Subcontractor is entitled to a reasonable extension of the time. Such extension of time shall be in writing and signed by MFA. Subcontractor shall also not be allowed an extension of time unless allowed or obtained from Client.

11.3. Subcontractors shall comply with instructions given by MFA, including any instruction to delay, suspend, or terminate the prosecution or completion of the Work provided for herein.

11.4. Subcontractor shall be liable for any damages suffered by MFA due to failure of Subcontractor to so perform, including but not limited to any liquidated damages which may be imposed by Client upon MFA and any damages or additional expense, including, but not limited to overhead expense and attorney fees, that MFA may suffer as a result of defective Work or delays by Subcontractor.

11.5. All changes, change orders, and modifications of the Contract Documents, this Agreement, and/or any Work Order Authorization shall be in writing, signed by MFA, and shall state with detail the changes and any additional charges, credits, or deductions. Subcontractor must obtain written authorization from MFA prior to commencing any changes to its Work.

11.6. Subcontractor shall be bound by any changes, alterations, or extra Work directed by Client under the Prime Contract, including changes in sequence or scheduling or the amount or character of the Work, or any part thereof, to the same extent MFA is bound thereby.

11.7. Subcontractor shall be notified of any changes, alterations, or extra Work requested by Client with respect to Subcontract Work and will be consulted with respect to the proposed terms, but Subcontractor authorizes MFA to negotiate with Client on its

behalf and Subcontractor shall be bound by and proceed in accordance with the terms of any change order or modification negotiated in good faith by MFA with Client.

- 11.8. If Client requests pricing or duration of performance information for changes, alterations, or extra Work which may involve Subcontractor, Subcontractor shall provide MFA with its price and time requirements, together with any necessary supporting documentation, within ten (10) days of the date requested by MFA, or such shorter time as may be required so that MFA can timely comply with Client's request.
- 11.9. Subcontractor shall give to MFA prompt written notice of any asserted change, changed conditions, extra, or additional Work, claimed damages or disputes as a result of any such Work required or caused by Client, so that MFA may timely comply with any notice requirements of the Prime Contract.
- 11.10. Subcontractor waives any claim against MFA for compensation, damages, or otherwise for such claims, including delay damages, except to the extent that the same is recovered by MFA from Client. It is expressly understood that payment by Client to MFA for the compensation, damage, or claim at issue is a condition precedent to MFA's payment to Subcontractor.
- 11.11. Subcontractor shall cooperate with MFA in presenting to Client any claims or requests for additional compensation or additional time.
- 11.12. As to any claims Subcontractor may have against MFA for delays, extensions of time, changes, changed conditions, extra or additional Work, or increased compensation, Subcontractor as a condition to any recovery shall give MFA written notice of any such claim within ten (10) days of the date of the occurrence of the event causing the claim. Subcontractor's failure to give such notice, for any reason, shall constitute a waiver of such claim.

## **12. COMPLIANCE WITH LAWS, REGULATIONS, STANDARDS, AND ORDINANCES**

Subcontractor will comply with and will cause all its employees and all subcontractors participating in the Work to comply with all applicable state, federal, and local laws, standards, and regulations and requirements of the Project Site's Owner. Subcontractor acknowledges that any safety policies or practices of MFA, or those of the Project Site owner are to be considered minimum requirements and that Subcontractor's full compliance therewith will not limit to any extent Subcontractor's sole responsibility for safety at the Project Site and adjoining areas. Subcontractor solely will be responsible for, and will adopt and enforce, sound and accepted safety practices in compliance with all applicable federal and state regulations and take all necessary and reasonable precautions to assure the health, safety and security of persons and property, including that of all workers participating in the Work.

## **13. TERMINATION**

MFA may terminate this Agreement for convenience or otherwise at any time upon seven days prior written notice to Subcontractor. In the event this Agreement is terminated, Subcontractor will be compensated for Work actually performed under this Agreement up to

the date of termination, subject to (1) the provisions of the Agreement relating to payments to MFA by Client and (2) MFA's right of offset for any Damages caused by, or which are the responsibility of, Subcontractor. In no event shall Subcontractor be entitled to lost profits or markup on any unperformed Work. Regardless of the cause of termination, Subcontractor shall deliver legible copies of all completed or partially completed Work products and instruments of Work including, but not limited to, laboratory, field, or other notes, log book pages, technical data, computations, and designs. The rights and remedies of MFA provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by this Agreement, by law, or in equity.

## 14. DEFAULT

- 14.1. If Subcontractor fails to commence the Work within the specified time, or to prosecute the Work continuously with sufficient effort to ensure its completion within the time specified for completion, or to perform the Work according to the provisions of this Agreement, or if Subcontractor shall breach any term of this Agreement, or shall be dissolved, have entered against it in order for relief in an involuntary case under the Federal Bankruptcy Laws or commence a voluntary case thereunder, make an assignment for benefit of creditors or petition to take advantage of any state or federal insolvency statute, or fail to pay its obligations as they become due, or shall by any other act or omission give MFA or Client reasonable cause to doubt Subcontractor's ability to timely, fully, and properly execute its obligations hereunder, or if for any other cause or reason whatsoever Subcontractor shall fail to fully perform its obligations hereunder, such act or omission shall constitute a default hereunder.
- 14.2. MFA may give notice in writing of such default, specifying such default, and if Subcontractor, within a period of 72 hours after such notice, shall not remedy such default, then MFA shall have full power and authority, subject to any rights of a trustee in bankruptcy under the Federal Bankruptcy Act, without process of law and without terminating or violating this Agreement, to take the prosecution of all or any portion of the Work out of the hands of Subcontractor and complete it with its own forces or otherwise, or use such other measures as in MFA's opinion are necessary for its completion. In such an event, Subcontractor agrees and understands that it will be liable for any additional costs incurred by MFA, including MFA's reasonable overhead, profit, and attorneys' fees. Subcontractor also agrees and understands that MFA shall first pay any subcontractor or party who finished all or a portion of the Work or corrected Subcontractor's deficiencies, and then pay the Subcontractor the balance, if any, remaining on the contract price.
- 14.3. Neither by the taking over of the Work, or any portion of the Work, nor by the completion of the Work in accordance with the terms of this provision shall MFA forfeit its right to recover damages from Subcontractor for failure to complete or for delay in such completion.
- 14.4. MFA's decision to take over the Work shall not constitute MFA's sole remedy or an election of remedies; rather, MFA reserves all other remedies available under this Agreement, at law, or in equity.
- 14.5. Subcontractor hereby assigns to MFA its rights in any sub-subcontracts which Subcontractor enters into in connection with its Work hereunder; provided, however,

that such assignment shall be operative only in the event of a default hereunder by Subcontractor and its failure to promptly remedy such default after notice from MFA as herein provided and only if MFA, in its sole discretion, elects in writing to exercise such right to the assignment after such default.

- 14.6. Subcontractor agrees it will incorporate this provision for takeover of the Work and assignment of such agreements in any agreements it executes in connection with its performance under this Subcontract, but MFA's rights hereunder shall not be impaired by Subcontractor's failure to do so.

**15. FORCE MAJEURE**

Subcontractor shall not be liable for delays in performing the Work contemplated by this Agreement or for the direct or indirect cost resulting from such delays that may result from labor strikes, riots, war, or any other cause beyond the Subcontractor's control, responsibility, or assumed risk, so long as Subcontractor has provided written notice to MFA within five (5) business days of the beginning of any such cause which would affect its timely performance of Work.

**16. NOTICE**

Any notices required to be given under this Agreement shall be deemed conclusively given if transmitted to the other party at the following address or telecopy number or at other address or telecopy number as may be given hereunder:

**Maul Foster & Alongi, Inc.**  
109 East 13th Street  
Vancouver, Washington 98660  
(360) 906-1958 (telecopy)

**Subcontractor:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**17. CONFIDENTIALITY AND CYBER SECURITY**

This Agreement, and any correspondence, documents, materials, information, and reports collected or generated in connection with the Work, are confidential and privileged, and Subcontractor agrees to maintain and protect their confidentiality. Subcontractor will keep and maintain all confidential information in strict confidence, using such degree of care as is appropriate to avoid unauthorized access, use, or disclosure. Subcontractor agrees to protect all confidential information to the same standard and consistent with the same requirements as MFA is obligated to Client, including but not limited to, adhering to all confidentiality and data security provisions in the Contract Documents and complying with FERPA, COPPA, PPRA, SUPER, HIPAA, and any other applicable federal or state privacy statutes.



Subcontractor shall reimburse MFA for actual costs incurred by MFA in responding to, and mitigating damages caused by, any security breach, including all costs of notice and/or remediation.

## **18. ARBITRATION; FORUM**

- 18.1. Any dispute between Subcontractor and MFA arising out of or related to this Agreement shall, at MFA's sole option, be subject to arbitration and the decisions and awards of the arbitrator shall be final and binding. The arbitration shall be conducted pursuant to the then effective rules of Arbitration Services of Portland, Inc. and any award may be enforced by any court with jurisdiction.
- 18.2. Subcontractor shall be bound by any disputes or arbitration provisions in the Prime Contract in the same manner and method as MFA is bound to Client. At MFA's sole option, any arbitration or litigation with Subcontractor may be consolidated with that involving Client or others. If MFA requests such consolidation, Subcontractor shall participate in any arbitration proceeding regardless of the location of the arbitration proceeding. Otherwise, any arbitration, suit, or action arising out of, or related to this Agreement shall be conducted in Clark County, Washington.
- 18.3. In the event of any dispute between MFA or Subcontractor arising out of or relating to this Agreement, the prevailing party will be entitled, whether or not a suit or action is instituted, to all costs incurred in connection with the dispute, including without limitation reasonable attorney and expert witness fees, whether during arbitration, at trial, on appeal, on petition for review, or in connection with enforcement or collection of any judgment.

## **19. MISCELLANEOUS PROVISIONS**

- 19.1. This Agreement shall be governed by the laws of the State of Washington.
- 19.2. No waiver by either party of any provision of this Agreement shall be construed or deemed to be a waiver of (a) any other provision of this Agreement or (b) a subsequent breach of the same provision, unless such waiver be so expressed in writing and signed by the party to be bound.
- 19.3. No oral communication, promise, understanding, or agreement before, contemporaneous with, or after the execution of this Agreement shall affect or modify any of its terms or obligations, and this Agreement shall be conclusively considered to contain and express all the terms and conditions agreed upon by the parties, notwithstanding any prior or contemporaneous written communication, promise, understanding, or agreement. Except as set out in paragraph 1, this Agreement shall be modified only by a subsequent writing signed by both parties.
- 19.4. Subcontractor shall not assign this Agreement without MFA's prior written approval. The covenants, conditions, and terms of this Agreement shall extend to, and be binding upon and inure to, the benefit of the heirs, personal representatives, successors, and assigns of the parties hereto.
- 19.5. Review of submittals by MFA shall be to determine only general conformance with the Contract Documents. The approval of any submittals by MFA, or any other

inspection, observation, or oversight by MFA of any kind, will not relieve Subcontractor of its sole responsibility for means and methods of the services provided or any other obligations, nor shall they give rise to any cause of action in favor of Subcontractor or third persons against MFA or Client.

- 19.6. Subcontractor, at its own expense, specifically agrees to comply with all applicable safety standards, regulations, and laws, including, without limitation, Hazard Communication, Crane Operator Certification Regulations and Hazardous Waste Operations and Emergency Response Standards. Subcontractor agrees to hold weekly safety meetings for their entire crew with written minutes of each meeting to be kept on file. Subcontractor shall provide copies of all required certifications, training documentation, and written compliance programs to MFA upon request. Subcontractor will immediately notify MFA of any accident on the jobsite.
- 19.7. Subcontractor shall expressly incorporate into its subcontracts all the terms and conditions of this Agreement and expressly bind its subcontractors to all the terms and conditions of this Agreement. Subcontractor shall indemnify, defend, reimburse, and hold MFA harmless against any claims for fees or costs and against any damages resulting from the failure to do so.
- 19.8. Should any provision or portion thereof of this Agreement at any time be in conflict with any law, ruling, or regulation, then such provision shall continue in effect only to the extent that it remains valid. In the event any provision or portion thereof of this Agreement becomes inoperative, the remaining portion, and all other provisions shall remain in full force and effect. The subcontract section headings are for organizational purposes only and are not to be construed as a part of this Agreement.
- 19.9. The remedies herein provided are cumulative and not exclusive, and MFA shall be entitled to pursue any other or additional remedies provided at law or in equity. A waiver by MFA of any breach of any provision of this Subcontract shall not constitute a waiver of any further or additional breach of such provision or of any other provision hereof.
- 19.10. Subcontractor shall perform its Work in such manner that the premises shall be at all times, clean, orderly, and free from debris. If Subcontractor fails to maintain a clean Work area and dispose of its refuse to MFA's satisfaction, MFA may clean up the area and back charge Subcontractor.
- 19.11. Upon completion of the Work hereunder, Subcontractor shall remove all plant, equipment, and excess materials from the site, clean up any all refuse and debris and in general leave the site of the Work clean, orderly, and in good condition.
- 19.12. Until final acceptance of the Work by Client, Subcontractor will be responsible for any loss or damage to the Work, materials, equipment, or supplies, due to any cause whatsoever, except when, by the terms of the Prime Contract, Client bears the risk, or, by the terms of this Agreement, MFA bears the risk.
- 19.13. Unless otherwise specified in writing in the Work Order Authorization, Subcontractor is responsible for locating and taking all appropriate precautions against any utility, communication, and power lines (whether buried or otherwise) prior to commencing the Work.

19.14. Subcontractor shall provide adequate supervision for the Work and shall employ a competent superintendent, foreman and/or other designated representative at the jobsite with authority to act for Subcontractor. In the event Subcontractor's jobsite representative is not satisfactory to MFA, he/she will be replaced at MFA's request.

Subcontractor	<b>Maul Foster &amp; Alongi, Inc.</b>
Signature: _____	Signature _____
Print Name: _____	Print Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

# ATTACHMENT A

ADDITIONAL PROVISIONS FROM DEQ PRICE  
AGREEMENT



## ADDITIONAL PROVISIONS FROM DEQ PRICE AGREEMENT

The following additional provisions apply to Subcontracts for work associated with the Price Agreement (PA) 067-23 between Maul Foster & Alongi, Inc. (MFA) and the Oregon Department of Environmental Quality (DEQ).

Except as provided in Exhibit A, Subcontractor shall not enter into any lower-tier subcontracts for any of the Work required by this Master Subcontractor Agreement (MSA), or assign, delegate or transfer any of its rights or obligations under this MSA, without MFA's prior written consent. In addition to any other provisions MFA may require, Subcontractor shall include in any permitted lower-tier subcontract under this MSA a requirement that the Lower-Tier Subcontractor be bound to the following sections of the PA (as modified for this MSA): 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 20, 21, 23, 27, 28, 29, 30, 31 as reflected in this Additional Provisions from DEQ PA, and Exhibit A. Subcontractor shall perform services at MFA's direction in support of MFA's services to DEQ as reflected in Exhibit A.

MFA's consent to any subcontract does not relieve Subcontractor of any of its duties or obligations under this MSA. The provisions of this MSA are binding upon and inure to the benefit of the Parties, and their respective successors and permitted assigns, if any.

**1. Effective Date and Duration.** This MSA is effective when signed by all parties listed (the "Effective Date"). Unless terminated or extended, this MSA expires three years from the Effective Date. MFA and Subcontractor may renew this MSA for up to two additional one year periods or one additional two year period by mutual written agreement. MFA's right to enforce this MSA with respect to any breach of a Subcontractor warranty or any default or defect in Subcontractor performance that has not been cured is not extinguished or prejudiced by termination or expiration of this MSA or by termination or expiration of any Work Order Authorization entered into by the Parties during the term of the MSA. To be effective, each Work Order Authorization approved and entered into by MFA and Subcontractor under this MSA must have an effective date ("Issue Date") and completion date ("Ending Date"). Subcontractor shall be liable for all expenses related to any Subcontractor performance prior to the Issue Date or after the Ending Date of the approved Work Order Authorization, unless otherwise agreed upon in writing.

### **5. Independent Contractor; Responsibility for Taxes and Withholding**

a. Subcontractor, by its signature on the MSA and any Work Order Authorization, certifies that it is an independent Contractor as defined in ORS 670.600 and as described in IRS Publication 1779, which is available at the following link: <http://www.irs.gov/pub/irspdf/p1779.pdf>. Subcontractor shall perform all Work as an independent contractor. Although MFA reserves the right (i) to determine (and modify) the delivery schedule for the Work and (ii) to evaluate the quality of the Subcontractor's performance, MFA shall not control the means, methods or manner of Subcontractor's performance. Subcontractor is responsible for determining the appropriate means, methods and manner of performing the Work.



b. If Subcontractor is currently performing services or work for the State of Oregon or the federal government, Subcontractor by signature to this MSA represents and warrants that: Subcontractor's Work to be performed under this MSA creates no potential or actual conflict of interest as defined by ORS 244 or ORS 279A, 2798 or 279C, and no statutes, rules or regulations of the State of Oregon or the federal government for which the Subcontractor currently performs work otherwise prohibit Subcontractor's Work under this MSA. Subcontractor is not an "officer", "employee", or "agent" of MFA, as those terms are used in ORS 30.265.

c. Subcontractor is responsible for all federal, state and local taxes applicable to compensation or payments paid to Subcontractor under this MSA. If Subcontractor is subject to withholding, MFA may withhold from such compensation or payments any amount(s) to cover Subcontractor's federal, state or local tax obligations. Subcontractor is not eligible for any social security, unemployment insurance or workers' compensation benefits from compensation or payments paid to Subcontractor under this MSA, except as a self-employed individual (if applicable).

**7. No Third Party Beneficiaries.** MFA and Subcontractor are the only parties to this MSA and are the only parties entitled to enforce its terms. Nothing in this MSA gives or is intended to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this MSA.

#### **8. Funds Available and Authorized; Payments**

a. Subcontractor is not entitled to be paid for Work performed under this MSA by any entity other than MFA. By signing a Work Order Authorization, MFA represents that DEQ has confirmed it has sufficient funds currently available and is authorized for expenditure to finance the costs of the signed Work Order Authorization within DEQ's current appropriation or limitation. DEQ's obligation to pay for Work performed after the last day of the current biennium or other budgetary time period is contingent on DEQ receiving appropriations, limitations, or other expenditure authority sufficient to allow DEQ, in the exercise of its reasonable administrative discretion, to continue to make payments under the PA between MFA and DEQ.

b. MFA is only required to pay for Work that is accepted by MFA.

#### **9. Representations and Warranties.**

a. Subcontractor's Representations and Warranties.

(1) Subcontractor represents that it has the power and authority to enter into and perform this MSA, and warrants that this MSA, when executed and delivered, is a valid and binding obligation of Subcontractor enforceable in accordance with its terms;

(2) Subcontractor represents that it has the skill and knowledge possessed by well-informed members of its industry, trade or profession and warrants that it will apply that skill and knowledge with care and diligence to perform the Work in a professional and workmanlike manner and in accordance with the highest standards prevalent in Subcontractor's industry, trade or profession;

(3) Subcontractor represents and warrants that, at all times during the term of this MSA, if any portion of the Work that is required under particular Work Authorizations must be performed/provided by a registered professional engineer (as that term is defined under ORS 279C.100), other design professionals, construction contractors licensed under ORS Chapter 701, or asbestos abatement contractors licensed under ORS 468A.710, the Subcontractor will perform or provide that Work with qualified, professionally competent, and duly licensed/registered Subcontractor personnel or through licensed/registered subcontractors, as required by law;

(4) Subcontractor represents that all software used by Subcontractor for Work under this MSA is properly licensed; and

(5) Subcontractor represents that, Subcontractor (to the best of Subcontractor's knowledge, after due inquiry), for a period of no fewer than six calendar years preceding the Effective Date of this MSA, faithfully has complied with the following:

(i) All tax laws of the State of Oregon, including but not limited to ORS 305.620 and ORS chapters 316,317, and 318;

(ii) Any tax provisions imposed by a political subdivision of the State of Oregon that applied to Subcontractor, to Subcontractor's property, operations, receipts, or income, or to Subcontractor's performance of or compensation for any Work performed by Subcontractor;

(iii) Any tax provisions imposed by a political subdivision of the State of Oregon that applied to Subcontractor, or to goods, services, or property, whether tangible or intangible, provided by Subcontractor; and

(iv) Any rules, regulations, charter provisions, or ordinances that implemented or enforced any of the foregoing tax laws or provisions.

b. Warranties cumulative. The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided.

**10. Ownership of Work Product.** All Work product of Subcontractor that results from this MSA, whether in draft or final form (the "Work Product") is the sole and exclusive property of DEQ. MFA and Subcontractor intend that such Work Product be deemed "Work made for hire" of which DEQ is deemed the author. Subcontractor hereby irrevocably assigns to MFA all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark, trade secret, or any other state or federal intellectual property law or doctrine. Subcontractor shall execute such further documents and instruments as may be necessary or MFA may reasonably request in order to fully vest such rights in DEQ: Subcontractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC §106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications.

All of Subcontractor's preexisting proprietary information, documents, materials, computer programs,

or software developed by Subcontractor outside of this MSA remain the property of Subcontractor.

To the extent such Work Product incorporates Subcontractor's preexisting proprietary information, documents, materials, computer programs, or software developed by Subcontractor outside of this MSA, or assignment of such Work Product is prohibited by law, Subcontractor hereby grants MFA a nonexclusive and irrevocable license to use, reproduce, distribute, publicly perform or display, or modify, such Work Product as MFA deems appropriate. Subcontractor shall execute such further documents and instruments as may be necessary or as MFA may reasonably request in order to fully vest such license rights in DEQ.

**11. Indemnity, Hold Harmless and Defense Provisions.** Subcontractor shall indemnify, hold harmless and defend the State of Oregon, DEQ and MFA pursuant to the provisions set forth in Exhibit A.

**12. Insurance.** Subcontractor shall provide insurance as indicated in Exhibit A. Adjustments in coverage or insurance limits for certain Subcontractors may be available upon a showing of good cause to MFA and DEQ, and with written approval by DEQ, consistent with Section V.9 of Exhibit A to the MSA. DEQ may request that MFA increase its minimum coverage limits under this MSA, and if so MFA may request that Subcontractor increase its minimum coverage limits accordingly.

### **13. Termination**

a. Parties' Right to Terminate By Mutual Agreement. This MSA may be terminated at any time by mutual written agreement of the parties.

b. MFA's Right To Terminate For Convenience. MFA may, at its sole discretion, terminate this MSA, or any Work Order Authorization issued pursuant to this MSA, upon 30 days' notice to Subcontractor.

c. MFA's Right to Terminate For Cause. MFA may terminate this MSA, or any Work Order Authorization issued pursuant to this MSA, immediately upon notice to Subcontractor, or at such later date as MFA may establish in such notice, upon the occurrence of any of the following events:

- (i) MFA fails to receive funding from DEQ at levels sufficient to pay for the Work;
- (ii) Federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the Work under this MSA is prohibited or MFA is prohibited from paying for such Work from the planned funding source;
- (iii) Subcontractor no longer holds any license or certificate that is required to perform the Work; or
- (iv) Subcontractor commits any material breach or default of any covenant, warranty, obligation or agreement under this MSA, fails to perform the Work under this MSA within the time specified herein or any extension thereof, or so fails to pursue the Work as to endanger Subcontractor's performance under this MSA in accordance with its terms, and such breach, default or failure is not cured within 10 business days after delivery of MFA's notice, or such longer period of cure as MFA may specify in such notice.

d. Subcontractor's Right to Terminate for Cause. Subcontractor may terminate this MSA or any Work

Order Authorization issued pursuant to this MSA upon 30 days' notice to MFA if MFA fails to pay Subcontractor pursuant to the terms of this MSA and MFA fails to cure within 30 business days after receipt of Subcontractor's notice, or such longer period of cure as Subcontractor may specify in such notice.

e. Remedies

(i) In the event of termination pursuant to Sections 13.a, 13.b, 13.c(i), 13.c(ii) or 13.d, Subcontractor's sole remedy is a claim for reasonable costs incurred on specific Work Order Authorizations through the date of termination, plus Work completed and accepted by MFA, less previous amounts paid and any claim(s) which State has against Subcontractor. If previous amounts paid to Subcontractor exceed the amount due to Subcontractor under this subsection, Subcontractor shall pay any excess to MFA upon demand.

(ii) In the event of termination pursuant to Section 13.c(iii) or 13.c(iv), MFA may pursue any remedy available to it in law or equity. If it is determined for any reason that Subcontractor was not in default under Section 13.c(iii) or 13.c(iv), the rights and obligations of the parties are the same as if this MSA was terminated pursuant to Section 13.b.

f. Subcontractor's Tender Upon Termination. Upon termination of this MSA or a Work Order Authorization, Subcontractor shall deliver to MFA all documents, information, works-in-progress and other property that are or would be deliverables had the Work Order Authorization been completed. Upon MFA's request, Subcontractor shall surrender to anyone MFA designates, all documents, research or objects or other tangible things needed to complete the Work.

g. Immediate Cessation of Activities. Upon receiving a notice of termination of this MSA or a Work Order Authorization, Subcontractor shall immediately cease all activities under the MSA or the Work Order Authorization, as applicable, unless MFA expressly directs otherwise in such notice of termination.

**15. Records Maintenance; Access.** Subcontractor shall maintain all records relating to this MSA in accordance with Exhibit A.

**16. Compliance with Law Generally.** Subcontractor shall comply and cause all lower-tier subcontractors to comply with all federal, state and local laws, regulations, executive orders and ordinances applicable to this MSA, any Work Order Authorizations and the performance of the Work. Without limiting the generality of the foregoing, Subcontractor expressly agrees to comply with the following laws, regulations and executive orders to the extent they are applicable to the MSA and any Work Order Authorizations:

(i) Titles VI and VII of the Civil Rights Act of 1964, as amended;

(ii) Title V and Sections 503 and 504 of the Rehabilitation Act of 1973, as amended;

(iii) the Americans with Disabilities Act of 1990 and ORS 659A.142, as amended;

(iv) Executive Order 11246, as amended; (v) the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health ("HITECH") Act portion of the American Recovery and Reinvestment

Act of 2009 ("ARRA"), including the Privacy and Security Rules found at 45 CFR Parts 160 and 164, as the law and its implementing regulations may be updated from time to time; (vi) the Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, as amended; (vii) the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended; (viii) Section 188 of the Workforce Investment Act ("WIA") of 1998, as amended;

(ix) ORS Chapter 659, as amended; (x) all applicable federal laws; (xi) all regulations and administrative rules established pursuant to the foregoing laws; and (xii) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. These laws, regulations and executive orders are incorporated by reference herein to the extent that they are applicable to the MSA and the Work Order Authorizations and are required by law to be so incorporated. MFA's performance under the MSA and any Work Order Authorizations is conditioned upon Subcontractor's compliance with the provisions of ORS 279B.220, 279B.225, 279B.230, 279B.235 and 279B.270 which are incorporated by reference herein. Subcontractor shall, to the maximum extent economically feasible in the performance of this MSA and any Work Order Authorizations entered into by the Parties, use recycled paper (as defined in ORS 279A.010(1)(gg)), recycled PETE products (as defined in ORS 279A.010(1)(hh)), and other recycled products (as "recycled product" is defined in ORS 279A.010(1)(ii)).

Work Order Authorizations issued pursuant to this MSA may involve Work that will constitute a "public works" and therefore be subject to the prevailing wage rate requirements set forth in ORS 279C.800 through 279C.870, OAR 839-025 and as otherwise mandated by the Oregon Bureau of Labor and Industries, or pursuant to the Davis-Bacon Act, 42 USC §3142(a) and Related Acts, and as otherwise mandated by the U.S. Department of Labor. Furthermore, certain Work to be performed by the Subcontractor under Work Order Authorizations may constitute "public improvement" construction services/work, as well as a "public works", and be subject to the requirements of ORS 279C.300 through 279C.870. In the event Work Order Authorization Work is subject to these requirements, Subcontractor agrees to comply with all applicable statutes, administrative rules, regulations and other laws pertaining to the "public works" and "public improvement" Work, and agrees to perform any such Work pursuant to the plans and specifications for the project, the State of Oregon General Conditions for Public Improvement Contracts, Supplemental General Conditions, as modified by any project-specific requirements, and any other project-specific requirements. These will be attached to each Work Order Authorization, as applicable.

## **17. Compliance with Oregon Tax Laws.**

a. Subcontractor shall, throughout the duration of this MSA and any Work Order Authorizations, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. For the purposes of this section, "tax laws" includes the tax laws described in Sections 9.a.(5)(i) through 9.a.(5)(iv).

b. Any violation of Section 17.a. constitutes a material breach of this MSA and any related Work Order Authorizations. Further, any violation of Subcontractor's representation and warranty in



Section 9.a.(5) of this MSA, that Subcontractor has complied with the tax laws of this state and the applicable tax laws of any political subdivision of this state, also constitutes a material breach of this MSA. Any violation entitles MFA to terminate this MSA and any related Work Order Authorizations, to pursue and recover any and all damages that arise from the breach and the termination of this MSA and any Work Order Authorizations, and to pursue any or all of the remedies available under this MSA and any Work Order Authorizations, at law, or in equity, including but not limited to:

- (i) Termination of this MSA and any Work Order Authorizations, in whole or in part;
- (ii) Exercise of the right of setoff, and withholding of amounts otherwise due and owing to Subcontractor without penalty; and
- (iii) Initiation of an action or proceeding for damages, specific performance, declaratory or injunctive relief. MFA is entitled to recover any and all damages suffered as the result of Subcontractor's breach of this MSA and any Work Order Authorizations, including but not limited to direct, indirect, incidental and consequential damages, costs of cure, and costs incurred in securing replacement Services.

c. These remedies are cumulative to the extent the remedies are not inconsistent, and MFA may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

**20. Survival.** All rights and obligations cease upon termination or expiration of this MSA, except for the rights and obligations set forth in Sections 1, 5.c., 7, 8, 9, 10, 11, 12, 13, 15, 20, 21, 23, 27, 28, 29, 30, 31 and in Exhibit A to the MSA.

**21. Time is of the Essence.** Subcontractor agrees that time is of the essence under this MSA and any Work Order Authorizations issued under this MSA.

**23. Severability.** The parties agree that if any term or provision of this MSA is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions are not to be affected, and the rights and obligations of the parties are to be construed and enforced as if this MSA did not contain the particular term or provision held to be invalid.

**27. Governing Law; Venue; Consent to Jurisdiction.** This MSA and all Work Order Authorizations entered into by the Parties under this MSA shall be governed by, construed and enforced in accordance with, the laws of the State of Oregon, without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively, "Claim") between the MFA and Subcontractor that arises from or relates to this MSA and any Work Order Authorizations shall be brought and conducted solely and exclusively within the Circuit Court of Multnomah County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this Section be construed as a waiver by MFA of any form or defense or immunity. SUBCONTRACTOR, BY EXECUTION OF THE MSA, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS.

**28. Merger Clause; Waiver.** This MSA and each Work Order Authorization, including everything incorporated by reference into each Work Order Authorization, constitutes the entire agreement between the Parties on the subject matter of this MSA and each Work Order Authorization. There

are no understandings, agreements, or representations, oral or written, not specified herein and in each Work Order Authorization, regarding each Work Order Authorization. No waiver, consent, modification or change of terms of this MSA or any Work Order Authorization shall bind either Party, unless such waiver, consent, modification or change of terms is in writing and signed by the Parties. Such a waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. Either Party's failure to enforce any provision of this MSA and any Work Order Authorization shall not constitute a waiver by that Party of that or any other provision. The characterization of provisions of the MSA or a Work Order Authorization as material provisions or the failure to comply with certain provisions as a material breach of the MSA or the Work Order Authorization shall in no way be construed to mean that any other provisions of the MSA or the Work Order Authorization are not material or that failure to comply with any other provisions is not a material breach of the MSA or the Work Order Authorization.

**29. Certified Firms.** Respecting certification as a disadvantaged business enterprise, minority-owned business, woman-owned business, business that a service-disabled veteran owns or an emerging small business under ORS 200.055 ("Certified Business Firm" or "Certified Firm"), as and when applicable, the Subcontractor shall maintain the certifications, and require in its subcontracts that lower-tier subcontractors maintain the certifications required by ORS 279A.107 as a material condition of the MSA. If the Subcontractor or lower-tier subcontractors was awarded the MSA, Work Order Authorization or subcontract, as applicable, in the course of MFA's client DEQ carrying out an affirmative action goal, policy or program under ORS 279A.100, and fails to maintain the required certification, MFA may terminate the Work Order Authorization or MSA, require the Subcontractor to terminate the lower-tier subcontractors, or exercise any of the remedies reserved for a breach of the MSA or Work Order Authorization.

**30. Oregon False Claims Act Requirements.**

a. Subcontractor understands and acknowledges it is subject to the Oregon False Claims Act (ORS 180.750 to 180.785) and to any liabilities or penalties associated with the making of a false claim under that Act. By its execution of the MSA and any Work Order Authorization, Subcontractor certifies the truthfulness, completeness, and accuracy of any statement or claim it has made, it makes, it may make, or cause to be made that pertains to the MSA and any Work Order Authorization or the project for which the Work is being performed, including but not limited to Subcontractor's statement of proposal, price proposal and any invoices, reports, or other deliverables.

b. Subcontractor shall immediately disclose (in writing) to MFA whenever, in connection with the award, performance or closeout of the MSA or any Work Order Authorization, or any subcontract thereunder, Subcontractor has credible evidence that a principal, employee, agent, or lower-tier subcontractor of Subcontractor has committed-

- (i) A violation of the Oregon False Claims Act; or
- (ii) A violation of State or Federal criminal or civil law involving fraud, conflict of interest, bribery, gratuity or similar misconduct.

c. Subcontractor must include subsections (a) and (b) of this section in each subcontract Subcontractor may award in connection with the performance of the MSA or any Work Order Authorization. In doing so, Subcontractor may not modify the terms of those subsections, except to identify the lower-tier subcontractors that will be subject to those provisions.

**EXHIBIT A – DEQ ENVIRONMENTAL CLEANUP PROGRAM; SCOPE OF SERVICES;  
COMPENSATION; OTHER REQUIREMENTS FOR TASK ORDER CONTRACTS**

**PERSONAL/PROFESSIONAL SERVICES PA FOR ON-CALL ENVIRONMENTAL SERVICES**

**PA No. 067-23**

**I.**

**PURPOSE OF PA**

The purpose of this PA is to obtain assistance from Contractor in the performance of the full range of environmental services required by DEQ, including but not limited to those defined in ORS 459, 465 and 466 and the administrative rules promulgated thereunder. This authority encompasses a wide range of activities including, but not limited to, conducting or contracting for technical data gathering, environmental investigations and analyses, and removal or remediation of hazardous substances, hazardous wastes and petroleum products where there has been or is a potential for release of those substances, wastes and petroleum products which could pose a threat to public health, safety, welfare or the environment.

Agency is also authorized to participate with the EPA in certain federal programs, including the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (“CERCLA”), as amended by the Superfund Amendments and Reauthorization Act of 1986 (“SARA”).

**II.**

**SCOPE OF SERVICES**

**Project Phases**

The project phases of Environmental Services that may be performed by Contractor through Task Order Contracts issued under this PA include, but are not limited to, those briefly described below. Task Order Contracts that are issued within the context of these project phases will necessarily have more detail related to specific sites and projects.

## **1. Preliminary Assessment, Expanded Preliminary Assessment, Site Specific Assessment, Site Investigation:**

These assessments or investigations are processes for collecting and evaluating information about a release or threat of a release of hazardous substances or petroleum products. These efforts may include a preliminary health and environmental assessment of the site and other activities under CERCLA/SARA or Oregon statutes, rules, and guidance. The information gathered is used to confirm whether a release has occurred or has the potential to occur, and provides Agency with information to determine if further investigation or a removal or remedial action is necessary.

Typical assessment or investigation activities that Contractor may be requested to perform include, but are not limited to, the review of files and reports provided by the Agency and other readily available public information, interviews of past or current owners/operators, and on-site reconnaissance inspections. These activities are used to determine: a) past and present industrial practices; b) facility history; c) past and present storage, handling, disposal practices; d) available hydrologic and hydrogeologic data; e) chemical data; f) land use data; g) potential pathways of contaminant migration; and h) identification of potential human and ecological receptors. The assessment or investigation may also include: preparing work plans, collecting samples and coordination with the laboratory for analysis to identify substances present at the site, site mapping, human health or ecological risk screening assessments, groundwater beneficial use surveys, land use surveys, underground storage tank or above ground storage tank decommissioning, developing conceptual site models, performing land use evaluations or surveys, preparation of health and safety plans, analyzing and interpreting data, preparation of draft and final reports, and conducting searches for persons who are “potentially responsible parties” for a release of hazardous substances or petroleum products.

## **2. Remedial Investigation:**

A “remedial investigation” is a field data collection and site characterization study that defines the nature and extent of contamination in environmental media, including soils, groundwater, surface water, sediments or air at a hazardous substance or a Leaking

Underground Storage Tank (“LUST”) site. Remedial investigation data serve as a basis for conducting the risk assessment, feasibility study, and assessment of priorities for remedial or removal actions. Typical remedial investigation activities that Contractor may be requested to perform may include the following: developing a project work plan, a health and safety plan, a sampling and analysis plan, a field sampling plan, a quality assurance project plan, a data management plan, a community relations plan or a combination of those plans; characterizing the climatology, demography, ecology, geology, hydrogeology and surface water hydrology of the site; characterizing the hazardous substances present; assessing contaminant fate and transport; conducting groundwater modeling; assessing current and future land and beneficial water uses; providing a detailed site description and history; identifying data gaps; analyzing and interpreting data; and preparing draft and final remedial investigation reports. The data collected during the remedial investigation are used to characterize the nature and extent of contamination in soil, sediments, groundwater, surface water and air.

### **3. Risk Assessment:**

A risk assessment characterizes the potential risks to human health or ecological receptors from exposure or potential exposure to hazardous substances or petroleum products. These assessments may also be used to evaluate the short-term and long-term effects of remedial alternatives identified in the feasibility study, and to support enforcement actions under state and federal laws.

The risk assessment also includes evaluation of data and information on the release of hazardous substances or petroleum products to the environment in order to: 1) Assess any current or future effects or potential effects on public health and the environment; 2) Assist with development of health advisories or other health recommendations; and 3) Identify studies or actions needed to evaluate and prevent adverse human health and environmental effects. This effort usually will include an estimate of baseline risks at the site to be used in setting investigation priority and potential removal action priority.



Typical risk assessment activities that Contractor may be requested to perform include the following: development of a conceptual site model depicting contaminant sources, pathways and receptors, collecting and evaluating information concerning potential routes of exposure, screening and organizing site sampling data, using Geographic Information System (“GIS”) techniques to manage and display data, using statistical methods to determine exposure point concentrations for contaminants of concern, characterizing toxic effects, characterizing bioaccumulation potential, and quantitatively or qualitatively assessing the baseline risks to human health or ecological receptors from exposure or potential exposure to hazardous substances or petroleum products.

#### **4. Feasibility Study, Corrective Action Plan, or Analysis of Brownfield Cleanup Alternatives (“ABCA”):**

The feasibility study, corrective action plan, or ABCA develops and evaluates remedial action options and analyzes in detail the effectiveness, long term reliability, implementability, implementation risk and cost reasonableness of the remedial action options.

Typical activities that Contractor may be requested to perform include the following: develop a feasibility study work plan; identify hot spots of contamination in site media; propose remedial action objectives or corrective actions; identify a range of remedial response action options; identify and screen preliminary remedial technologies; develop a limited number of remedial action alternatives that meet the remedial action objectives; evaluate alternatives for protection of public health and the environment, effectiveness, long-term reliability, implementability, implementation risk and cost reasonableness; identify applicable or relevant and appropriate requirements of the alternatives; and prepare draft and final feasibility study, corrective action plan, or ABCA reports.

#### **5. Removal Assessment:**

The removal assessment determines the nature and extent of contaminants of concern, delineates contaminant source areas (including hot spots) to be targeted for removal activities, establishes removal goals and action levels, and evaluates costs, logistics, and

feasibility of implementing removal options. Typical removal assessment activities include the following: work plan development; an investigation focused toward removal actions; recommendations for immediate actions, time critical actions, development of cost estimates, and actions and associated timelines to control, stabilize, remove, treat, or monitor source areas.

## **6. Removal:**

The removal consists of short-term or interim measures designed to prevent, minimize, or mitigate immediate or imminent risks to human health or the environment posed by a site.

Typical removal activities that Contractor may be requested to perform include the following: removing hazardous substances or petroleum products from a site to an approved treatment, storage or disposal facility; containing or securing the hazardous substance or petroleum products safely on-site; destroying or treating the hazardous substance or petroleum products on-site using appropriate technologies (e.g. biodegradation, chemical oxidation, chemical fixation, low temperature thermal desorption, air stripping). Contractor may be tasked to prepare engineering plans, engineer's estimates and construction bid documents which may include specifying materials and construction methods, evaluating the qualifications of construction contractors and providing construction management during the removal Work. Removal actions may also include, but are not limited to, underground storage tank or above ground storage tank decommissioning, building demolition, asbestos abatement, security fencing/signage or other measures to limit access, provision of alternative drinking and household water supplies (such as well-head filtration or city water hook ups), temporary evacuation and housing of threatened individuals and other action taken under ORS 465.210.

DEQ may procure a separate construction contractor to perform removal actions and construction-related actions necessary to accomplish removal, or request that the Contractor provide the needed removal and construction-related actions through a qualified subcontractor or subcontractors.

## **7. Remedial Design:**

Remedial design is an engineering phase where technical drawings and specifications are developed by the Contractor for a subsequent remedial action. The remedial design phase typically follows the "Record of Decision" in which the remedial action alternative is selected by Agency.

Typical remedial design activities that Contractor may be requested to perform may include the following: conduct site surveys; prepare detailed construction plans and technical specifications (50% design completion; 90% design completion; 100% final design); conduct pilot and bench scale treatability studies; prepare construction cost estimates; perform value engineering; conduct constructability/operability reviews of design; prepare an initial operations and maintenance plan; and assist in obtaining project permits.

## **8. Remedial Action:**

Remedial action is the actual construction or implementation of the remedial measures stipulated in the Record of Decision and is designed to respond to the release of a hazardous substance or petroleum product contamination, or threat thereof, at a site. Remedial actions may include areas identified for removals, as well as any monitoring reasonably required to assure that such actions protect the public health, safety, welfare, and the environment.

In some cases, the Agency will separately procure a construction contractor to perform remedial action activities and construction-related actions necessary to accomplish the remedial action. Where the Agency contracts with a separate construction contractor, the Contractor may be asked to perform construction management and oversight of the remedial action Work being performed by the construction contractor. In other cases, the Agency will have the Contractor provide the remedial action Work through a qualified subcontractor or subcontractors. The types of tasks could include, but are not limited to, the following: preparing construction bidding documents; evaluating the qualifications of potential subcontractors; assisting Agency with evaluation of potential construction contractors being procured by Agency; managing or overseeing the day-to-day activities of

an independent remedial action contractor; reviewing change orders; documenting construction activities; providing quality assurance and quality control services; providing post-construction certification/documentation reports; preparing record drawings or as-built drawings; assisting with remedy startup; conducting long-term maintenance and monitoring activities to assure proper operation of remedial systems; preparing operation and maintenance manuals.

#### **9. Community Relations and Risk Communication Assistance:**

Typical community relations tasks that Contractor may be requested to perform include the following: preparing information, graphics, and fact sheets; assisting in organizing trainings, public workshops, or community meetings; participating in presentations to the public, Native American Tribes, and governmental officials; establishing and maintaining repositories for information; and providing technical assistance in risk communication and community education.

#### **10. Additional Services:**

Contractor may also be requested to provide related technical and administrative support needed by the Agency, including review of technical reports submitted to Agency by other agencies or parties regarding hazardous substance or petroleum product facility investigation and cleanup; technical policy and procedures development assistance; research on technical issues; assistance with insurance archeology; groundwater computer modeling; geographical information system use, coordination, or development; comprehensive geotechnical services; groundwater supply evaluation and design services; water-well abandonment services; water rights evaluation services; and oversight of investigations, removal or remedial actions performed by responsible parties or other entities. Contractor may also be requested to provide enforcement support, such as documentation of facts and information about a site, and provide expert testimony during enforcement proceedings.

Contractor may also be asked to conduct remedial action performance evaluations following implementation of selected site remedies. These evaluations may include

assessing the following: the effectiveness of the remedy; reductions in toxicity, mobility, and volume of hazardous substances resulting from implementation of the remedy; the magnitude of residual risks; preparation of record drawings or as-built drawings; and long-term management and operation and maintenance of a treatment system. A performance evaluation may also include preparing or implementing work plans for verification sampling, and identifying and recommending changes or improvements to treatment systems or the need for modification or replacement of remedies.

### **III. COMPENSATION**

Agency will make payment for the Work performed by the Contractor under this PA on the basis specified in each Task Order Contract issued by Agency and signed by the Parties. Types of payment bases include, but are not limited to, fixed price, and cost reimbursement plus fixed fee ("CPFF"). A CPFF approach is expected to be used in most cases. See **Exhibit E** for key definitions and principles set forth in 2 CFR Part 200, which are incorporated by reference into this PA.

#### **1. Fixed Price Basis Task Order Contracts.**

Agency will identify the scope of Work and the deliverables for the Task Order Contract. Agency and Contractor will negotiate and agree on the final Statement of Work for the Task Order Contract, the schedule for the Contractor's Work and deliverables and a maximum fixed price for the Work described. Agency shall pay for Work performed and deliverables upon Agency's acceptance of the Work, unless otherwise arranged and documented in writing with Agency.

#### **2. Cost Reimbursement Plus Fixed Fee Basis Task Order Contracts.**

Agency will identify the scope of Work and the deliverables for the Task Order Contract. Agency and Contractor will negotiate and agree on the final Statement of Work for the Task Order Contract, the schedule for the Contractor's Work and deliverables and a maximum CPFF price for the Work described. Agency shall reimburse Contractor for its allowable, allocable, and reasonable costs in performance of a CPFF basis Task Order Contract,



including direct labor costs, indirect costs (which include salary and general overheads), and other direct expenses, plus a fixed fee, as specified in each Task Order Contract. The costs and fixed fee are defined as follows:

**A. Direct Labor Cost.**

“Direct labor cost” is defined as the total number of hours worked by Contractor’s employees directly on a Task Order Contract multiplied by the employees’ actual hourly rates as specified in Contractor’s Cost Proposal submitted in response to Agency’s RFP (which rates are incorporated by reference into this PA through **Exhibit D**, as if fully set forth herein) or as periodically approved in writing for use by Contract Officer and confirmed by the Contractor (email documentation of adjusted hourly rates is acceptable).

Contractor may propose reasonable changes to direct labor rates at least annually. Any such proposed change is not applicable to Task Order Contracts issued under this PA until the Contract Officer approves the change in writing (email is acceptable). The Contract Officer shall not unreasonably withhold approval. Direct labor rates that exceed the annually-updated federal maximum direct labor rate for the Portland-Vancouver-Salem OR-WA location (<https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2022/salhr1.pdf>), regardless of the physical location of the cleanup project site or Contractor’s staff worksite, are not allowable by DEQ.

Allowable costs cannot include any overtime premiums except when paid for Work:

- (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, or unavoidable breakdowns of equipment.
- (2) In the performance of tests, industrial processes, laboratory procedures, loading or unloading of transportation media, and operations in flight or afloat, which are continuous in nature and cannot reasonably be interrupted or otherwise completed; or
- (3) Which will result in lower overall cost to the Agency.

Determination of whether a cost falls within subsections III.2.A.a – c is solely within the Agency’s discretion, upon receipt of a detailed request from the Contractor explaining the circumstances in detail and requesting review and approval of the use of overtime premiums prior to the performance of any Work for which the overtime premiums would be

charged. Agency is not liable for any such overtime premium unless it is approved in advance by the Contract Officer.

### **B. Indirect Costs.**

Indirect costs are allowable as permitted under the cost principles of 2 CFR Part 200. They are comprised of those costs not readily identified with a specific project, but rather incurred for the joint benefit of several objectives. Indirect costs represent fixed costs and variable costs which cannot be easily measured or identified with a specific end product or service. Indirect costs are reimbursed in accordance with section III.4 below. The initial indirect rate to be used on Task Order Contracts is the rate identified in Contractor's Cost Proposal submitted in response to Agency's RFP, as further negotiated by the Parties (which rate is incorporated by reference into this PA, through **Exhibit D**, as if fully set forth herein). Contractor may propose reasonable changes to the indirect rate at least annually. Any such proposed change is not applicable to Task Order Contracts issued under this PA until the Contract Officer approves the change in writing (email is acceptable). The Contract Officer shall not unreasonably withhold approval.

### **C. Other Direct Costs ("ODC").**

"Other direct costs" are defined to be all other allowable, allocable, and reasonable costs which are identifiable expenses of Contractor incurred directly in performance of Work under a specific Task Order Contract. "Other direct costs" may include the following:

(1) Services directly applicable to a Task Order Contract, such as computer rental and related services, commercial printing and binding, word processing equipment services, and temporary facilities rental;

(2) Reproduction costs, such as photocopying reports and specifications if charged on a per copy basis;

(3) Communication expenses, such as telephone, facsimile, express charges, and postage other than that used for general correspondence;

(4) Transportation costs, including air and ground travel. For Contractor vehicles, mileage will be charged at the State of Oregon's current rate per mile, unless otherwise approved by the Contract Officer;

(5) Meals/lodging and other travel expenses of Contractor's employees away from their home office to perform a Task Order Contract, subject to State of Oregon travel rules and policies applicable to contractors, unless otherwise approved by the Contract Officer. The State of Oregon per diem rates applicable for meals apply to all Contractor and subcontractor personnel meal costs. Receipts are required for all non-meal travel expenses over \$10.00. All requests for travel reimbursements must be accompanied by documentation verifying compliance with State of Oregon travel rules and policies applicable to contractors, unless otherwise approved by the Contract Officer. On extended stays beyond one month, Agency may elect to negotiate a different per diem rate;

(6) Laboratory tests and analytical costs, as defined in each Task Order Contract and on an as-needed basis;

(7) Daily or hourly rates for personal protective equipment and actual rates for rental safety equipment necessary to comply with OSHA requirements and the health and safety plan specific to a Task Order Contract;

(8) Subcontracted Services. "Subcontracted services" are defined as necessary technical or professional subcontracted services, as well as construction or remedial services. Payment for subcontracted services may be on a fixed-price, time and materials (with a maximum, not-to-exceed total price for the Work), or cost reimbursement basis. Team Subcontractor rates to be used on Task Order Contracts are the rates specified in Contractor's Cost Proposal submitted in response to Agency's RFP, if any, as further negotiated by the Parties (which rates are incorporated by reference into this PA, through **Exhibit D**, as if fully set forth herein). Contractor may propose reasonable changes to Team Subcontractor rates, if any, at least annually. Any such proposed change is not applicable to Task Order Contracts issued under this PA until the Contract Officer approves the change in writing (email is acceptable). The Contract Officer shall not unreasonably withhold approval. When technical or professional services outside of the approved team members are required, prior written approval of the subcontractor and the associated costs or rates and fee must be obtained from Agency;

(9) Equipment (Contractor-Owned / Team Subcontractor-Owned / Purchased / Rented). It may be necessary for Contractor to provide Contractor-owned equipment or purchase or rent equipment, or for Team Subcontractors, if any, to provide Team

Subcontractor-owned equipment or purchase or rent equipment for use in performing the Work required under a Task Order Contract. Contractor-owned and Team Subcontractor-owned equipment rates to be used on Task Order Contracts are the rates specified in Contractor's Cost Proposal submitted in response to Agency's RFP, if any, as further negotiated by the Parties (which rates are incorporated by reference into this PA, through **Exhibit D**, as if fully set forth herein). Contractor may propose reasonable changes to the Contractor-owned or Team Subcontractor-owned equipment rates at least annually. Any such proposed change is not applicable to Task Order Contracts issued under this PA until the Contract Officer approves the change in writing (email is acceptable). The Contract Officer shall not unreasonably withhold approval. Contractor shall include the estimated costs of such equipment (whether Contractor-owned or Team Subcontractor-owned or purchased or rented) in the "other direct cost" section of the Task Order Contract budget; and

**(10) Other Costs.** Agency may reimburse any other costs or expenses not listed in subsections III.2.A-C, with written approval from the Contract Officer prior to expenditure.

**D. Fixed Fee.**

Unless otherwise specified in a Task Order Contract, the fixed fee percentage for each Task Order Contract is identified in **Exhibit D**.

**3. Double Billing.**

Contractor shall not double bill. For example, no item or cost submitted for reimbursement by Contractor may be listed or billed as both an indirect expense and a direct expense.

**4. Provisional Rates and Price Reductions under CPFF Basis Task Order Contracts.**

**A. Provisional Rates**

**(1)** The allowable indirect rates of Contractor (and subcontractors, if applicable), paid under cost reimbursement plus fixed fee basis Task Order Contracts, are provisional indirect rates negotiated to appropriate bases. The provisional indirect rates are projected rates based upon accounting information available at the time of their establishment. Pending establishment of final indirect rates for any period, Agency will reimburse indirect costs for each Task Order Contract on the basis of the provisional

indirect rates approved in writing by Agency's Contract Officer. The period or periods for which such provisional indirect rates are established must correspond to Contractor's (and subcontractors') fiscal years unless otherwise approved by the Contract Officer. The Parties may revise provisional indirect rates by mutual written agreement at the request of either Party to prevent substantial over-payment or under-payment.

(2) Final indirect rates corresponding to Contractor's (and subcontractors') fiscal years shall not be established later than the earlier of five years following the end of the fiscal year to which those rates correspond, or five years following the end of the fiscal year in which the PA terminates or expires. Final indirect rates must be based on audit information in a form and from an audit source acceptable to Agency, unless otherwise approved by the Contract Officer.

(3) Following establishment of final indirect rates, for each Task Order Contract for which Contractor has been underpaid by an amount that exceeds one hundred dollars (\$100.00), Agency will pay the balance due to Contractor; provided, however, that the balance due payable by Agency for each Task Order Contract shall not exceed ten percent of the direct labor costs of the Task Order Contract. Also following establishment of final indirect rates, for each task order for which Contractor has been overpaid by an amount that exceeds one hundred dollars (\$100.00), Contractor shall refund to Agency, within 30 days of Agency's request for reimbursement, the overpayment for that Task Order Contract.

(4) Upon mutual agreement, Contractor and Agency may establish a cap ("Rate Cap") on the provisional indirect rates established in accordance with paragraph A.1, above, whereby the Agency reimburses indirect costs provisionally at the Rate Cap. The terms of the Rate Cap must be in writing and may be renegotiated from time to time upon mutual written agreement. Final indirect rates must still be computed and reconciled as detailed above in this Paragraph 4.A.; however, such final indirect rates shall not result in Agency reimbursing Contractor or subcontractors at a rate greater than the Rate Cap.

#### **B. Price Reductions.**

Contractor represents and warrants that the cost and pricing data submitted for evaluation with respect to negotiation of Task Order Contracts, amendments and subcontracts is



based on current, accurate and complete data supported by Contractor and Contractor's subcontractors' books and records. If Agency or EPA determines that any price, cost, or profit negotiated in connection with this PA or any amendment or Task Order Contract issued pursuant to this PA was increased by any significant sum because the data provided was incomplete, inaccurate, or not current at the time of submission, Agency may reduce such price, cost or profit accordingly. Agency may also reduce payment on any Task Order Contract relying on such price, cost, or profit accordingly. If the Task Order Contract has ended, any reduction or adjustment shall be made as approved in writing by the Agency Contract Officer. If Contractor disagrees with a reduction, such disagreement is subject to the dispute resolution provisions detailed in Article VIII.

#### **5. Changes/Amendments.**

No notice, communication, or representation in any form from any person other than the LQDA, Contract Officer or any other Agency personnel to whom the LQDA has delegated authority in accordance with Article VII of this PA, can affect the estimated cost, fixed fee, or price of any Task Order Contract. In the absence of the specified notice from the LQDA or other Agency personnel to whom the LQDA has delegated authority in accordance with Article VII of this PA, Agency is not obligated to pay Contractor for any costs in excess of the Total Estimated Costs set forth in the Task Order Contract, whether those excess costs were incurred during the course of the Task Order Contract or as a result of termination. Agency is also not obligated to pay any costs Contractor incurs before the specified notice that are in excess of the Total Estimated Costs set forth in the Task Order Contract. The percentage allowed for the Contractor's fee, incident to any additional costs due to Task Order Contract amendments, cannot exceed the percentage used to calculate the fee allowed in the original Task Order Contract.

#### **6. Payment for Work under CPFF Basis Task Order Contracts.**

Agency will make payment for Work under a CPFF Basis Task Order Contract according to the following process:

**A. Request for Payment.**

Each month, unless otherwise approved by Agency, and within 30 days following the end of Contractor's billing period, Contractor shall submit to Agency one original invoice and one copy per Task Order Contract, including the following:

- (1) Detailed documentation, in a format approved by Agency, of actual costs incurred during the prior month, including those incurred by subcontractors;
- (2) A statement of the fixed fee amount that correlates to the direct labor cost for the performance period;
- (3) Backup documentation satisfactory to Agency to substantiate subcontractor costs and ODC's, such as receipts, travel reports, and other documents; and,
- (4) A monthly progress report of the Work, correlating to the same period of performance in a format provided by Agency.

**B. Payment to Contractor.**

Within 45 days after Agency receives a request for payment pursuant to subsection III.6.A, Agency shall:

- (1) Reimburse Contractor for the allowable, allocable, and reasonable costs incurred during the specified invoice period; and
- (2) Pay Contractor for the proportional fixed fee amount that correlates to the direct labor cost for the performance period, up to the maximum fixed fee amount specified in the Task Order Contract.

**C. Retainage.**

Agency may retain a portion of the total estimated cost plus fee amount on any Task Order Contract, including any amendments to the Task Order Contract, as security for Contractor's satisfactory performance. If Agency requires retainage on a Task Order Contract, Agency will establish the amount and terms following discussion with Contractor.

**D. Request for Final Payment.**

Contractor shall submit for each Task Order Contract a request for final payment, including retainage, within sixty (60) days of the end date defined for each Task Order Contract,

unless instructed otherwise by Agency. Upon unsatisfactory completion of the Work performed, or for termination for any other reason under Section 13 of this PA (“Termination”), Contractor shall execute and deliver to Agency a release of all claims for additional payment against Agency arising under, or by virtue of the Task Order Contract, except claims specifically exempted by Contractor to be set forth therein. Final payment under this PA or any Task Order Contract is not a waiver of any claims by Agency against Contractor for any liability, loss, expense, or damage resulting from acts or omissions of Contractor.

#### **E. Final Payment.**

Agency shall make the final payment, including retainage, if any, to Contractor when all activities in the applicable Task Order Contract have been completed and are approved in writing by the Contract Officer, pursuant to the terms and conditions of this PA.

#### **F. Interest.**

If Agency fails to make timely payments to Contractor, Agency shall pay interest on amounts past due in accordance with ORS 293.462, if Contractor submits proper invoices as described in subsection III.6.A above. Agency will not pay interest on retainage.

#### **7. Payment for Work under non-CPFF Basis Task Order Contracts.**

If Agency will pay for Work under a non-CPFF basis Task Order Contract, Agency shall make payment only according to written, mutually agreed-upon terms and conditions negotiated by both Parties.

#### **8. Records Maintenance; Access.**

Contractor shall maintain and cause any subcontractors to maintain complete program, project, engineering, field inspection, permits and financial records relating to all activities financed in part or in whole by this PA. Such records must clearly indicate total receipts and expenditures by Task Order Contract. Upon Agency’s request, Contractor shall make all records, including those held by any subcontractor, available to Agency for such reasonable use as Agency sees fit.

Upon reasonable request by Agency, Contractor shall make and cause any subcontractors to make all program records, data records, financial records, books, documents or papers prepared or held by Contractor and subcontractors which are directly pertinent to this PA open for audit at reasonable times by Agency, the Oregon Secretary of State or the federal government, and any duly authorized representative during the period of this PA and for a period of ten (10) years after the final payment, settlement of any dispute, or adjustment to provisional indirect rates under this PA, whichever is later. In the event any such audits determine discrepancies in the financial records, Contractor shall provide financial adjustments or clarification, if Agency so requests.

### **9. Final Audit and Refunds**

All payments to Contractor are subject to final audit by Agency. Contractor shall immediately refund any unauthorized expenditures to Agency.

## **IV. TASK ORDER CONTRACTS**

### **1. Task Order Contracts.**

A Task Order Contract is a written contract between the Parties that describes the detailed circumstances under which the Contractor will perform Work for Agency. All new Task Order Contracts will designate the initial Total Estimated Costs which may not be exceeded except by written approval of both Parties. Any revisions to the initial Total Estimated Costs will be made in accordance with the process described in Section IV.2, below. Concurrent with or following full execution of each Task Order Contract and after obtaining any required State of Oregon approvals, the Agency will issue a conditional Notice-to-Proceed (“NTP”) to the Contractor authorizing the Contractor to begin performance of Work under the Task Order Contract. Upon return of a signed copy of the Task Order Contract to the Agency, the NTP is effective. Each Task Order Contract is subject to the terms and conditions of this PA. Agency issues individual Task Order Contracts by sequentially assigning them on a rotating basis among contractors who have entered into Environmental Services PAs with Agency. This entails assigning new Task Order Contracts to the contractors by following an A, B, C, A, B, C process. However, Agency, in its sole discretion, reserves the right to

vary from the rotation. Reasons for varying from the rotational assignments include, but are not limited to the following:

- A.** Actual or potential conflicts of interest;
- B.** Continuation of Work under a new Task Order Contract related to Work performed at the same site, or on the same project, under a previous Task Order Contract;
- C.** Geographic proximity to Work being performed under another active Task Order Contract by the same Contractor;
- D.** Specific expertise offered by a Contractor;
- E.** Availability of staff resources and workload issues;
- F.** Organizational changes made by the Contractor affecting its ability to continue to meet the RFP selection criteria;
- G.** Unresolved performance issues on current Task Order Contracts;
- H.** The unique character of the Work needed for a particular project. In this event, DEQ will request qualifications from all Contractors who do not, to DEQ's knowledge, have a conflict of interest, DEQ will review the information received to determine the most qualified contractor to perform the Work and DEQ will enter into Task Order Contract negotiations with that Contractor. Agency's decision is within its sole discretion, but Agency will notify all contractors who submitted qualifications of the Agency's decision; and
- I.** Agency reserves the right to create a "class of Task Order Contracts" for projects with similar scopes and assign those Task Order Contracts to one Contractor. All contractors will be advised in the event Agency chooses to vary for this reason. An example of a potential class of Task Order Contracts is dry cleaner investigations.

The decision of the Contract Officer concerning which contractor receives any Task Order Contract is final and conclusive.

Contractor may decline a Task Order Contract by responding to the Contract Officer in writing within the time period specified in the Task Order Contract transmittal. The written response must include the reason for declining the Task Order Contract.

## **2. Task Order Contract Budget and Assumptions.**

As described in Section IV.1, above, Contractor Work must be initiated by the execution of a Task Order Contract signed by both Parties, and an effective NTP. Agency is not obligated to reimburse Contractor for any Work performed prior, or not performed pursuant, to a duly executed Task Order Contract. For some initial Task Order Contracts, and for all Task Order Contract Amendments (unless allowed by the Contract Officer), Contractor shall submit to Agency a budget and the assumptions on which the budget is prepared within a mutually agreed upon schedule. Unless otherwise authorized in writing by Agency, each budget and assumption proposal (“BAP”) must be based on a format provided by Agency, and must include a detailed budget for each major task and subtask within the SOW for the Task Order Contract, which must include estimates of the following:

- A. Key staff personnel by name and assignment;
- B. Direct labor (hours per person, rate, and classification);
- C. Indirect costs and how calculated;
- D. Fee and how calculated;
- E. Detailed travel expenses;
- F. Detailed material/supplies expenses;
- G. Special testing required (unit costs or hourly rates);
- H. Equipment expenses and how calculated (If Contractor proposes that either Agency or Contractor purchase or rent equipment for use by Contractor, estimated costs shall be included. If requested by Agency, a cost/benefit analysis shall also be included);
- I. Subcontracts (define the type of subcontract proposed and provide sufficient detail of proposed Work and costs for each to be reviewed by Agency);
- J. A plan for meeting Task Order Contract Minority Business Enterprise (“MBE”) and Women's Business Enterprise (“WBE”) objectives pursuant to 2 CFR Part 200 or a plan for meeting Task Order Contract Certified Firm requirements of ORS 279A.105 and ORS Chapter 200, as applicable;
- K. Other anticipated expenses as appropriate for the Task Order Contract;
- L. A summary table of Work tasks and budgeted costs;
- M. Any assumptions; and



N. A schedule for completing the Work.

### **3. Review and Approval of Task Order Contract or Task Order Contract Amendment Budget and Assumptions.**

The Agency will review Contractor's proposed budget and assumptions and may ask Contractor to revise portions or all of it. If agreement cannot be reached, either Party may reject the proposed budget and assumptions, and any further negotiations related to the Task Order Contract will be terminated in the Agency's sole discretion. If Agency terminates negotiations for a Task Order Contract or Task Order Contract Amendment due to proposed budget rejection, Agency will reimburse the Contractor only for reasonable costs associated with the Contractor's preparation of that BAP.

Contractor agrees and understands that Agency's approval of any Task Order Contract or Task Order Contract Amendment and its associated budget and assumptions is based largely upon the costs, personnel, and materials presented by Contractor in its proposal. Should Contractor be unable to deliver any costs, personnel, or materials originally specified, Contractor shall provide an appropriate substitute at least equal in quality at no additional cost to Agency. Agency may, in its sole discretion, reject any offered substitute and terminate the Task Order Contract.

Following agreement by the Agency and Contractor on a Task Order Contract or Task Order Contract Amendment BAP, Agency and Contractor shall sign the Task Order Contract or Task Order Contract Amendment, as applicable. The accompanying conditional NTP to the Contractor, authorizing the Contractor to begin or continue Work under the Task Order Contract or Task Order Contract Amendment, as applicable, will be effective when a copy of the fully executed Task Order Contract or Task Order Contract Amendment is returned to DEQ.

### **4. Revision of Task Order Contracts.**

**A.** The Agency may revise specific Task Order Contracts through issuance of Task Order Contract Amendments. Such Task Order Contract Amendments must specify

the reason for the revision and, as appropriate, include any modified budgets, schedules, deliverables, or other changes. To be effective, such Task Order Contract Amendments must be agreed upon in writing by Agency personnel authorized to sign on behalf of the Agency and Contractor personnel authorized to sign on behalf of the Contractor, and the Contractor cannot proceed with any additional Work covered by a Task Order Contract Amendment until the Task Order Contract Amendment has been fully signed, and all required State of Oregon approvals have been obtained.

**B.** The Agency Contract Officer or other Agency personnel with authority delegated from the LQDA in accordance with Article VII of this PA may approve amendments to Task Order Contracts through written email authorizations in response to written requests from Contractor, but only in circumstances when the requested Work is not estimated to exceed \$10,000.00 and when the project conditions require expedited performance of Work and budget exists to accommodate the amendment. Within one week following email approval by Agency under this process, Contractor shall submit a conventional BAP for the amendment in writing to Agency, unless other arrangements have been made with the Contract Officer. Agency shall only pay for Work approved in this manner after a subsequent conventional written Task Order Contract Amendment has been signed by Agency and Contractor, following Contractor's submittal and Agency's approval of the BAP as described in section IV.3.

## **5. Reports.**

Agency will provide requirements for reports and work plans requested as deliverables to a Task Order Contract in the Task Order Contract or Task Order Contract Amendment SOW. Contractor shall prepare all reports in clear, concise, and accurate fashion, and provide an appropriate level of detail documenting the Work proposed or performed. All reports and other documents produced by registered geologists or registered professional engineers shall be signed and stamped as required by Oregon law, including ORS 672.605 and 672.020. Unless otherwise specified in the Task Order Contract or Task Order Contract Amendment, all reports and work plans must be dated and include a table of contents, an introduction, a list of figures and a list of tables. Pages must be numbered, figures and

tables must be labeled, and appendices must be clearly identified. Whenever practicable, all hard copy letters, reports, and other Task Order deliverables submitted to Agency must be duplex printed on recycled paper. In addition, Agency requires that an electronic copy of each draft report be submitted in Microsoft Word (text), Microsoft Excel (tables), and Adobe PDF (figures) formats. Draft and Final BAPs must be submitted in digital form only.

The final versions of letter, reports and other Task Order Contract documents will be submitted in Microsoft Word (text), Microsoft Excel (tables) and a complete copy of the document in Adobe PDF format. All final Adobe PDF documents will be prepared as follows:

**A.** The spaces within file names will be denoted with dashes and include the ECSI or LUST number and document date (e.g., “4339-Site-Investigation-Rpt-03-21-2021”) to facilitate uploading to DEQ’s publicly-shared directory.

**B.** All PDF files will be saved as “reduced size PDF” compatible with the most current Adobe version (i.e., Adobe 10.0 and later) to facilitate distribution to others and uploading.

**C.** For electronic files larger than 20 MB, Contractor shall divide electronic file into parts less than 20 MB in size. In these cases, the file name should be the same with the addition of -part1, -part2, etc.

**D.** All supporting data and photographs must be submitted in both hardcopy and electronic formats (on a CD or DVD disk or through ftp or other electronic client access platform). Agency may also require the Contractor to submit graphics and figures to Agency as Microsoft PowerPoint files.

## **6. Changed Conditions.**

Contractor shall report promptly any conditions which Contractor considers to constitute actual or potential changed conditions related to Task Order Contracts issued under this PA. Contractor shall discuss the condition with Agency Project Manager and Contract Officer, should any of the following types of conditions become known: problems, delays, or adverse conditions which materially affect the ability to meet Task Order Contract objectives, time schedules or budget. Contractor shall follow the report with written notification to the Agency Project Manager and Contract Officer no more than five (5) calendar days from the date Contractor identifies the changed condition(s) and shall include in the notification the following information:

A. The date, nature, circumstance, cause of the changed condition, and identification of any documents or tasks affected by the change;

B. A statement of any action taken or contemplated as a result of the changed condition, provided that payment for any action taken prior to approvals issued pursuant to section IV.4 is subject to Agency's sole judgment;

C. The name, function, and activity of each Agency and Contractor official or employee or other individual, involved in or knowledgeable of such changed condition; and

D. The particular elements of project performance for which Contractor may seek an equitable adjustment including, but not limited to, the following:

(1) Those portions of the Task Order Contract which Contractor believes will be affected by the changed condition; and

(2) The estimated adjustment to the Task Order Contract with respect to estimated cost or fee, delivery or performance schedule, and other provisions affected by the changed condition.

Contractor shall not proceed with further actions or revisions as identified in the notification required above pending Agency's response.

## **7. Agency's Response to Contractor's Notice of Changed Conditions.**

The Agency's Contract Officer will respond in writing within ten (10) calendar days to Contractor's notification to Agency required by section IV.6, above. Such response will either:

**A.** Confirm that the condition of which Contractor gave notice constitutes a changed condition, and, when necessary, direct the mode of further performance either by providing written authorization to proceed, if doing so would not cause Contractor to exceed the Task Order Contract total authorized budget, followed by a revision to the Task Order Contract to reflect the changed conditions, schedule, budget, or other provisions; or through revision of the affected Task Order Contract pursuant to section IV.4; or

**B.** Countermand any communication from Agency regarded by Contractor as a changed condition; or

- C.** Deny that the condition of which Contractor gave notice constitutes a changed condition, and, when necessary, direct the mode of further performance; or
- D.** Advise Contractor what additional information is required and establish the date by which such additional information is to be furnished, in the event Contractor's notice information is deemed inadequate to enable a response as set forth above.

## V.

### RESPONSIBILITIES OF CONTRACTOR

#### 1. Quality of Work.

Contractor shall use its best efforts to perform the Work specified in each Task Order Contract within the estimated cost and the approved schedule. Given the nature of the Work under this PA and any Task Order Contract, the Agency emphasizes the following: **Time is of the essence in the Contractor's performance of Work under this PA and any Task Order Contracts.**

Contractor is responsible for the professional quality, technical accuracy, timely completion and coordination of all designs, drawings, specifications, work plans, reports, and other Work Product furnished by Contractor under this PA. Contractor shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in all the designs, drawings, specifications, work plans, reports, and other Work Product submitted to Agency as necessary to meet standards appropriate for the Work for which the submittal was prepared.

The Agency's approval of drawings, designs, specifications, work plans, reports, other Work Product and any incidental Work or materials furnished hereunder does not in any way relieve Contractor of responsibility for the adequacy of the Work provided. The Agency's review, approval, acceptance, or payment for any Work is not a waiver of any rights under this PA or any Task Order Contract entered into by the Parties or of any cause for action arising out of the performance of this PA and any Task Order Contracts entered into by the Parties.

Contractor's Work will be performed in accordance with the standard of care and skill ordinarily exercised by other professional contractors under similar circumstances (the "Standard of Care"). In the event that, in Agency's sole judgment, Contractor fails to perform in accordance with the Standard of Care, Contractor shall, upon notification from Agency, correct the Work at no additional cost to Agency within a mutually acceptable reasonable period of time. If Contractor disagrees with the assertion of failure to meet the Standard of Care, Contractor shall notify Agency's Contract Officer and, if applicable, the Agency's Project Manager for the subject Task Order Contract, in writing within five (5) business days. In the event that Contractor fails or refuses to correct the Work as provided in this section, Agency is entitled to recover any damages caused by such failure to correct.

Contractor warrants that all data collected will be accurately recorded, stored, processed, and reported, and that Contractor project files will be sufficiently detailed to provide a complete and accurate history of the Contractor's data gathering, transmission, manipulation, analysis, and conclusions.

Nothing in this PA prevents Agency from fully and completely recovering from Contractor any damages caused by the negligent, intentional, willful, or reckless conduct of Contractor.

## **2. Data Management.**

**A.** Agency may request that Contractor manage data generated during various tasks both in manual and electronic files. Contractor must ensure that all data submitted to Agency is in consistent formats and units to be specified by Agency. Unless otherwise specified in writing, Contractor shall observe the following:

- (1)** Contractor shall maintain sufficiently detailed records to provide a complete and accurate history of each Task Order Contract.
- (2)** Contractor shall verify all data prior to placement in manual or electronic files.
- (3)** Contractor shall systematically file all data generated or received for easy reference and retrieval.



- (4)** Data sets stored using electronic files must have easily defined data structures suitable for a large number of records. Contractor shall review and validate electronic data prior to data use and shall manage the data using Agency approved commercially available computer programs, unless otherwise approved in writing by Agency.
- (5)** Contractor shall submit all laboratory data to Agency in the Federal EPA Contract Laboratory Program format, using EPA qualifiers;
- (6)** Contractor shall clearly indicate the location (lat./long or Township/Range/Section) of all non-laboratory collected or analyzed data such as hydrogeologic site characterization data, site data, well construction and development data, potentiometric surface data, geophysical survey data, etc., and shall submit the data with units for each field clearly specified. Agency may specify other units in individual Task Order Contracts;
- (7)** All technical memoranda must summarize the data and collection techniques and include an evaluation of the data and supporting laboratory data sheets as appropriate; and
- (8)** Contractor shall submit maps and plans in the form of blueprints or photocopies as specified by individual Task Order Contracts, or as otherwise approved in writing by Agency.

**B.** Contractor shall maintain all files for a period of ten (10) years following final payment, settlement of any dispute, or adjustment to provisional indirect rates under this PA, whichever is later, unless otherwise specified by the Contract Officer. Contractor shall not destroy Task Order Contracts and Task Order Contract files without Agency approval from the Contract Officer. Upon Agency request, Contractor shall provide electronic copies of Contractor project files at the completion of a Task Order Contract, as part of the Task Order Contract Work. If Agency requests that the Contractor provide electronic copies of any remaining Contractor project files upon the expiration or termination of this PA, Contractor shall provide those copies at no further cost to the Agency.

### **3. Responsibility Relating to Subcontracts.**

Contractor is authorized to perform the Work described in this PA, including each approved Task Order Contract, by way of subcontracts using the funds made available under a Task Order Contract and pursuant to subsection III.2.C.h. Contractor may enter into subcontracts for professional services without a competitive selection process only if the selected subcontractors have previously been identified on Contractor's team, or with the written permission of Agency.

Agency may require Contractor to follow competitive bid/proposal processes for subcontracts for technical or non-professional services, such as well drilling, excavation, or other construction-related services.

If Agency requires competitive bid/proposal processes, Contractor shall provide proposed bid slates and draft requests for bids or proposals to Agency for Agency review and concurrence prior to issuance to proposed bidders or proposers. Contractor shall further submit copies of all bids, bid summaries, award recommendations, or sole source or single source justifications, and complete description of Work to be subcontracted, to Agency for written concurrence prior to award. Agency may request information about any successful subcontractor's organization and capabilities. Unless otherwise instructed by Agency, Contractor shall submit to Agency copies of all signed contracts awarded to subcontractors engaged to perform any Work resulting from Task Order Contracts issued under this PA.

Contractor shall perform cost or price analysis for all subcontract procurement actions that is satisfactory to Agency and complies with federal regulations, if applicable. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation.

Contractor assumes full responsibility and control for all Work performed or provided by subcontractors, and for the coordination of all Task Order Contracts issued under this PA. The Contractor is the Agency's sole point of contact with regard to the Work, including but

not limited to subcontract matters, including payment of any and all charges resulting from Task Order Contracts.

#### **4. Permits.**

Contractor shall secure the necessary permits required by authorities having jurisdiction over the Work and provide copies of the permits to Agency in advance of beginning any Work. Unless otherwise specified by Agency, Contractor shall secure in writing the necessary permission to enter on private property, if required for the performance of Work under this PA.

#### **5. Contractor Personnel Cooperation with Agency.**

Contractor shall ensure that all Contractor personnel assigned to any Task Order Contract under this PA, and all subcontractor personnel, if any, cooperate in a reasonable manner with Agency's personnel. In the event any of Contractor's personnel or any subcontractor personnel fail to so cooperate, Contractor shall relieve such personnel of their duties on the Work.

The Parties specifically understand and agree that the Agency selected Contractor and its Team Subcontractors (identified in **Exhibit D**, if any) for performance under this PA largely based upon the qualifications and availability of the personnel identified in Contractor's technical proposal and any other submissions. Agency may cancel any Task Order Contract if, in Agency's discretion, Contractor and Team Subcontractors fail to provide the same key personnel or personnel with similar qualifications and training as those identified in Contractor's proposal and submissions.

For non-Team Subcontractors selected as described in section V.3, Agency may cancel any associated Task Order Contract, if any facts or representations in the submissions required pursuant to section V.3 and relied upon by Agency in making its selection are, in Agency's discretion, materially false.

Task Order Contracts may be funded in whole or in part with funds from the EPA. Neither the United States nor any of its departments, agencies or employees is, or will be, a party to this PA (including but not limited to Task Order Contracts or any subcontract). Task Order Contracts funded in whole or in part by EPA are subject to regulations contained in 2 CFR Part 200 and applicable sections of 40 CFR Part 35 in effect on the date of the assistance award funding a Task Order Contract.

#### **6. Project Personnel Confidentiality Agreement.**

Unless compelled by action of law or court order, Contractor shall not disclose either in whole or in part to any entity or person external to Agency or Contractor any technical data provided by Agency or generated by Contractor, any site-specific cost information, or any enforcement strategy without first obtaining the written permission of the Contract Officer. Agency will not unreasonably withhold such permission. In the event Contractor is compelled by action of law or court order to disclose any information as described in this paragraph, Contractor shall give Agency notice of any such law or order prior to disclosure and in sufficient time to enable Agency to take appropriate action to prevent disclosure should Agency so choose. All inquiries concerning confidentiality must be directed to Agency Contract Officer or Project Manager.

If requested by Agency, Contractor shall obtain confidentiality agreements from all Contractor personnel and subcontractor personnel who are scheduled to perform Work under this PA and any Task Order Contracts. The final form of such confidentiality agreements is subject to Agency approval. If Agency determines that any individual, after signing such an agreement, does in fact violate its terms, he or she and the employing company may be debarred from future involvement in Agency contracts and recommended for debarment from federal contracts.

#### **7. Conflict of Interest.**

Agency may terminate this PA and any individual Task Order Contracts involved, in the event that Agency determines that a conflict of interest cannot otherwise be avoided. The term "conflict of interest" means that a relationship exists whereby Contractor (including,

but not limited to chief executives, directors, project personnel, subcontractors, and proposed subcontractors) has interests which (1) may diminish Contractor's capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased Work Product, or (2) may result in an unfair competitive advantage. Such conflicts may include status as, or financial interest in, a potential responsible party; past, present, or proposed contractual arrangements with a potentially responsible party to be studied; past, present, or proposed contractual agreements with a firm that manufactures or sells any substance or item to be studied; past, present, or proposed manufacturer or seller of any substance or item in competition with a substance or item to be studied. Determination of a conflict of interest will be made by the Agency on a fact-specific basis.

During the course of carrying out the Work, Contractor shall identify and advise Agency of any potential conflict of interest, including that of any subcontractor. For each firm being proposed as a subcontractor under any Task Order Contract, Contractor shall obtain and maintain a statement disclosing the subcontractor's status, and the status of its parent companies, subsidiaries, and affiliates as potentially responsible parties at the project site, if the Task Order Contract is site-specific.

Within five (5) calendar days of Task Order Contract issuance or as otherwise specified in the Task Order Contract, Contractor shall certify that, to the best of its knowledge and belief, it has disclosed all pertinent information concerning Contractor's status as, or relationship to, a potentially responsible party, and that it shall immediately disclose any such information related thereto which is discovered after execution of the Task Order Contract.

If Contractor was aware of an actual or potential conflict of interest prior to acceptance of a Task Order Contract, or discovered an actual or potential conflict after acceptance and did not disclose, or otherwise misrepresented relevant information to Contract Officer, Agency may terminate this PA and any involved Task Order Contracts for default, may debar Contractor from further contracting with Agency and may recommend debarment to the federal government, or pursue such other remedies as may be permitted by law. Contractor

must insert into any subcontract hereunder provisions which conform substantially to the language of this clause, including this paragraph.

Should any actions of Contractor or subcontractor be determined to be a conflict of interest by the EPA, such that a funding source for Work under this PA is jeopardized, then Agency may terminate the PA and any involved Task Order Contracts, and invoke other remedies authorized by law.

### **8. Health and Safety.**

The nature of portions of the Work to be performed under Task Order Contracts is acknowledged to be inherently hazardous. In performance of Work under Task Order Contracts, Contractor shall satisfy all federal, state, and local statutes, regulations, ordinances, etc., regarding health and safety, including but not limited to 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response). Contractor shall not directly charge the costs and expenses for training required by these standards to Task Order Contracts.

Contractor shall submit one copy of its company health and safety plan, and one copy of the boilerplate language for site specific health and safety plans, to the Contract Officer prior to issuance of the first Task Order Contract under this PA.

### **9. Contractor Insurance.**

Contractor shall not commence Work until it has obtained all the insurance required under this Section and its insurance certification has been provided to Agency pursuant to subsection V.9.L and as otherwise specified. Contractor shall not allow any subcontractor to commence Work on a subcontract until Contractor has confirmed that the subcontractor's insurance is commensurate with the type of Work being provided by the subcontractor, and as may be required by Agency under subsection V.9.E. Receipt of Contractor's insurance certification by Agency does not relieve or decrease the liability of Contractor hereunder. If Contractor does not, for any reason, obtain and maintain any insurance required under this Section or confirm that any subcontractor obtain and



maintain any insurance required under this Section, and Agency has not waived the insurance requirement, Agency may cancel any Task Order Contract awarded under this PA, regardless of whether Contractor or any subcontractor has commenced Work under the Task Order Contract.

Contractor shall obtain at Contractor's expense the insurance specified in this Section prior to performing Work under this PA and any Task Order Contracts, and shall maintain the insurance in full force and at its own expense throughout the duration of this this PA and any Task Order Contracts, as required by any extended reporting period or continuous claims made coverage requirements, and all warranty periods that apply. Contractor shall obtain the following insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in the State of Oregon and that are acceptable to Agency. Coverage shall be primary and non-contributory with any other insurance and self-insurance, with the exception of Professional Liability and Workers' Compensation. Contractor shall pay for all deductibles, self-insured retention, and self-insurance, if any.

Agency reserves the right to require additional insurance coverages and increased coverage limits based on the Agency's assessment of risk, on a Task Order Contract by Task Order Contract basis.

For purposes of this Section 9, Contractor Insurance, a Task Order Contract is "predominantly" for construction work if more than 50% of the Contractor's compensation for the Work under the Task Order Contract is compensation for construction work.

#### **A. WORKERS' COMPENSATION & EMPLOYERS' LIABILITY**

All employers, including Contractor, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and provide workers' compensation insurance coverage for those workers, unless they meet the requirement for an exemption under ORS 656.126(2). Contractor shall require and confirm that each of its subcontractors complies with these requirements. If Contractor is a subject employer, as defined in ORS 656.023,

Contractor shall also obtain employers' liability insurance coverage with limits not less than \$500,000 each accident for Task Order Contracts that are not predominately for construction work, and with limits not less than \$1,000,000 each accident for Task Order Contracts that are predominately for construction work. .

If Contractor is an employer subject to any other state's workers' compensation law, Contactor shall provide workers' compensation insurance coverage for its employees as required by applicable workers' compensation laws including employers' liability insurance coverage with limits not less than \$500,000 for Task Order Contracts that are not predominately for construction work, and with limits not less than \$1,000,000 for Task Order Contracts that are predominately for construction work, and shall require and confirm that each of its out-of-state subcontractors complies with these requirements.

As applicable, in addition to workers' compensation insurance coverage that satisfies ORS 656.017, Contractor shall obtain and keep in effect at its own expense, throughout this PA and any resulting Task Order Contracts, insurance coverages adequate to satisfy and discharge all responsibilities and liabilities, including, but not limited to, liabilities that are subject to, and coverages required by the Merchant Marine Act (Jones Act), 46 USC § 50101, the Longshore and Harbor Workers Compensation Act, 33 USC §§ 901 to 950, 20 CFR Parts 701 to 704 and ORS 654.305 to 654.336, with limits of no less than \$5,000,000 each accident.

**B. COMMERCIAL GENERAL LIABILITY:**

Commercial General Liability Insurance covering bodily injury and property damage written on an ISO CG 00 01 10 01 (or equivalent). This insurance shall include personal and advertising injury liability, products and completed operations, contractual liability coverage for the indemnity provided under this PA and any resulting Task Order Contracts, and have no limitation of coverage to designated premises, projects, or operations that apply to any Work that is to be provided by the Contractor under this PA and any resulting Task Order Contracts. Coverage shall be written on an occurrence basis in an amount of not less than \$2,000,000 per occurrence. Annual aggregate limit shall not be less than \$4,000,000.

**C. AUTOMOBILE LIABILITY INSURANCE:**

Automobile Liability Insurance covering Contractor's business use including coverage for all owned, non-owned, or hired vehicles with a combined single limit of not less than \$2,000,000 for bodily injury and property damage. This coverage may be written in combination with the Commercial General Liability Insurance (with separate limits for Commercial General Liability and Automobile Liability).

**(1) Automobile Liability Broadened Pollution Liability Coverage****Endorsement**

**Required**       **Not required**

If the Contractor is transporting any type of hazardous materials under the contract, then endorsements CA 99 48 or equivalent and MSC-90 (if the Contractor is a regulated motor carrier) are required on the Automobile Liability insurance coverage.

**(2) [RESERVED].****D. CONTRACTOR'S PROFESSIONAL LIABILITY:**

Contractor's Professional Liability insurance covering any damages caused by an error, omission or any negligent acts related to the Work to be provided under this Price Agreement and any Task Order Contracts by the Contractor and Contractor's subcontractors, agents, officers, or employees in an amount not less than \$2,000,000 per occurrence. Annual aggregate limit shall not be less than \$4,000,000. If coverage is on a claims-made basis, the retroactive date of the policy must be prior to the inception of the Work with an extended reporting period equal to the statute of ultimate repose shall be included in the Contractor's Professional Liability insurance coverage.

**E. CONTRACTOR'S POLLUTION LIABILITY:**

Contractor's Pollution Liability insurance covering Contractor's and appropriate subcontractor's liability for bodily injury, property damage, loss of use of property, loss of value of property, government ordered cleanup costs, natural resource damage, environmental damage, and environmental or natural resource damage resulting from

sudden, accidental and gradual pollution and related cleanup costs incurred by Contractor, and any subcontractor if coverage is obtained by the subcontractor, all arising out of the Work performed or provided (including endorsements for transportation risk and non-owned disposal sites) under this PA and any Task Order Contracts. Combined single limit per occurrence shall not be less than \$2,000,000. Annual aggregate limit shall not be less than \$4,000,000.

### **(1) Asbestos Liability Endorsement**

The Contractor, or the Subcontractor(s), as applicable, if the coverage is obtained by the Subcontractor(s), shall provide an Asbestos Liability endorsement to the pollution liability coverage. If an endorsement cannot be obtained, the Contractor or Subcontractor(s) shall provide separate Asbestos Liability Insurance at the same combined single limit per occurrence and annual aggregate limit as the Pollution Liability Insurance with the policy endorsed to state that the annual aggregate limit of liability shall apply separately to this PA and any Task Order Contracts.

### **(2) Lead Liability Endorsement**

The Contractor, or the Subcontractor(s), as applicable, if the coverage is obtained by the Subcontractor(s), shall provide a Lead Liability endorsement to the pollution liability coverage. If an endorsement cannot be obtained, the Contractor or Subcontractor(s) shall provide separate Lead Liability Insurance at the same combined single limit per occurrence and annual aggregate limit as the Pollution Liability Insurance with the separate policy endorsed to state that the annual aggregate limit of liability shall apply separately to this PA and any Task Order Contracts.

Contractor shall also confirm that any subcontractors performing Work under Task Order Contracts issued under this PA obtain and keep in effect, during the term of the Task Order Contract, Contractor's Pollution Liability Insurance meeting the requirements of this Section V.9.E and covering subcontractors' liability (including transportation risk and non-owned disposal sites), at a level commensurate with the scope of Work undertaken by the subcontractor, for bodily injury, property damage, loss of use of property, government

ordered cleanup costs, natural resource damage, environmental damage, asbestos environmental or natural resource damage resulting from sudden, accidental and gradual pollution and related cleanup costs incurred by subcontractor, all arising out of the Work performed (including transportation risk and non-owned disposal site). Agency may specify in any designated Task Order Contract, or in writing by the Contract Officer, specific minimum limits for any such subcontractor insurance as it deems appropriate.

**F. MARINE PROTECTION AND INDEMNITY COVERAGE**

If applicable to Work under a Task Order Contract issued under this PA, Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Task Order Contract, Marine Protection and Indemnity Coverage as applicable to the Work. When the work to be performed entails the use of watercraft such as barges, tug boats, work boats, supply boats, etc. then additional Marine-related coverage will apply. Coverage shall be not less than \$2,000,0000 combined single limit per occurrence and annual aggregate limit shall not be less than \$4,000,000.

**G. DRONE LIABILITY COVERAGE:**

If applicable to Work under a Task Order Contract issued under this PA, Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Task Order Contract, Drone Liability Coverage, as applicable to the Work. The Drone Liability Insurance shall cover bodily injury, property damage, and personal and advertising injury caused by owned and non-owned drones including the drone's payload, dispensable loads or both payload and dispensable loads in a form and with limits that are satisfactory to the Agency. This insurance shall include premises liability, products and completed operations, contractual liability coverage for the indemnity provided under this PA and any Task Order Contracts, and have no limitation of coverage to designated premises, project, operation or territory of operation. Coverage shall be written on an occurrence basis in a combined single limit amount of not less than \$1,000,000 per occurrence.

#### H. **EXCESS/UMBRELLA INSURANCE:**

A combination of primary and excess/umbrella insurance may be used to meet the required limits of insurance under this PA.

In the alternative, if required by the Agency, Contractor shall provide Excess/Umbrella insurance coverage, in an amount to be determined by the Agency based on the Agency's risk assessment of individual TOs and will apply over all liability policies, without exception, including but not limited to Commercial General Liability, Automobile Liability, and Employers' Liability coverage. The coverage and limits requirements for the insurance required under this PA and any Task Order Contracts, including this Excess/Umbrella insurance requirement, may be met by the Contractor's obtaining coverage for the limits specified under each type of required insurance or by any combination of underlying, excess and umbrella limits, so long as the total amount of insurance is not less than the limits specified for each type of required insurance added to the limits for this excess/umbrella insurance requirement.

#### I. **WAIVER OF SUBROGATION (TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS):**

Contractor agrees to waive rights of subrogation that may be required by the Contractor's insurers, by virtue of the payment of any loss, regarding the workers compensation insurance and any excess/umbrella insurance policies specific to this PA and any Task Order Contracts issued under this PA. The workers' compensation insurance and excess/umbrella insurance policies used to meet the requirements under this PA and any Task Order Contracts issued under this PA shall be endorsed with a waiver of subrogation endorsement specifying the State of Oregon, the Department of Environmental Quality and the officers, employees and agents of the State and the Department of Environmental Quality. **PROVIDED, HOWEVER:** This provision shall not require a waiver of subrogation for any "construction agreement" when such a waiver of subrogation is prohibited under the provisions of ORS 30.145.



**J. ADDITIONAL INSURED:**

The insurance required under this Price Agreement and any Task Order Contracts, except for Workers' Compensation insurance and Contractor's Professional Liability Insurance, must include an additional insured endorsement specifying the State of Oregon, the Department of Environmental Quality and the officers, employees and agents of the State of Oregon and the Department of Environmental Quality as Additional Insureds, including additional insured status with respect to liability arising out of ongoing operations and completed operations, but only with respect to Contractor's activities to be performed under this Price Agreement and any Task Order Contracts. Coverage shall be primary and non-contributory with any other insurance and self-insurance. For Commercial General Liability, the Additional Insured endorsement with respect to liability arising out of Contractor's ongoing operations must be on ISO Form CG 20 10 07 04 or equivalent and the Additional Insured endorsement with respect to completed operations must be on ISO form CG 20 37 04 13 or equivalent.

**K. CONTINUOUS CLAIMS MADE COVERAGE:**

If any of the required insurance is on a claims-made basis and does not include an extended reporting period of at least 24 months, then Contractor shall maintain continuous claims made liability coverage, provided the effective date of the continuous claims made coverage is on or before the Effective Date of this PA, for a minimum of 24 months following the later of (i) Contractor's completion and Agency's acceptance of all Work required under this Price Agreement and any Task Order Contracts, or, (ii) Agency or Contractor termination of this Price Agreement, any Task Order Contract, or both, or, (iii) The expiration of all warranty periods provided under this Price Agreement and any Task Order Contracts.

**L. CERTIFICATE(S) AND PROOF OF INSURANCE:**

Contractor shall provide to Agency Certificate(s) of Insurance for all required insurance before performing or providing any Work required under this Price Agreement and any Task Order Contracts. The Certificate(s) of Insurance shall list the State of Oregon, the Department of Environmental Quality and the officers, employees and agents of the State of Oregon and the Department of Environmental Quality as a Certificate of Insurance holder

and as an endorsed Additional Insured and include copies of all required additional insured endorsements (or equivalents). If a Contractor Pollution Liability coverage requirement includes an Asbestos Liability endorsement, Lead Liability endorsement or both an Asbestos Liability endorsement and a Lead Liability endorsement, copies of the endorsement(s) must be provided with the Certificate. If the Contractor is transporting any hazardous material under this PA and any Task Order Contracts, copies of endorsements CA 99 48 or equivalent and MCS-90 (if applicable) must be included. If Excess/Umbrella insurance is used to meet the minimum insurance requirement, the Certificate of Insurance must include a list of all policies that fall under the Excess/Umbrella insurance. As proof of insurance, Agency has the right to request copies of insurance policies and endorsements relating to the insurance requirements in this Contract.

**M. NOTICE OF CHANGE OR CANCELLATION:**

The Contractor or its insurer must provide at least 30 days' written notice to Agency before cancellation of, material change to, potential exhaustion of aggregate limits of, or non-renewal of the required insurance coverage(s).

**N. INSURANCE REQUIREMENT REVIEW:**

Contractor agrees to periodic review of insurance requirements by Agency under this Price Agreement and any Task Order Contracts and to provide updated requirements as mutually agreed upon by Contractor and Agency.

**O. STATE ACCEPTANCE:**

All insurance providers are subject to Agency acceptance. If requested by Agency, Contractor shall provide complete copies of insurance policies, endorsements, self-insurance documents and related insurance documents to Agency's representatives responsible for verification of the insurance coverages required under this Section 9.O and Section 9.L above.

**10. BONDS:**

Contractor shall provide Agency with performance and payment bonds in the amount and

form as Agency determines to be necessary, given the nature of the Work. Agency shall reimburse Contractor for the costs of any bonds it requires.

## VI.

### INDEMNIFICATION

#### **1. CLAIMS FOR OTHER THAN PROFESSIONAL LIABILITY.**

**Contractor shall indemnify, defend, save, and hold harmless the State of Oregon, Agency, and their officers, agents, and employees from and against all claims, suits, actions, losses, damages, liabilities, costs, and expenses of whatsoever nature resulting from or arising out of the acts or omissions of Contractor or its sub-consultants, subcontractors, agents, or employees under this Price Agreement and any Task Order Contracts.**

#### **2. CLAIMS FOR PROFESSIONAL LIABILITY.**

**Contractor shall indemnify, defend, save, and hold harmless the State of Oregon, Agency and their officers, agents, and employees, from and against all claims, suits, actions, losses, damages, liabilities, costs, and expenses of whatsoever nature arising out of the professionally negligent acts, errors or omissions of Contractor or its sub-consultants, subcontractors, agents, or employees in the performance of professional services under this Price Agreement and any Task Order Contracts.**

### **3. AGENCY DEFENSE REQUIREMENTS.**

**Notwithstanding the obligations under Sections 1 and 2 immediately above, neither Contractor nor any attorney engaged by Contractor shall defend any claim in the name of the State of Oregon or any agency of the State of Oregon, nor purport to act as the legal representative of the State of Oregon or any of its agencies, without the prior written consent of the Oregon Attorney General and unless the Contractor and its legal representative fully comply with any written requirements of the Oregon Attorney General.. Agency may, at any time and at its election, assume its own defense and settlement of any claims in the event that: it determines that Contractor is prohibited from defending the State of Oregon; Contractor is not adequately defending the State of Oregon's interests; an important governmental principle is at issue; or it is in the best interests of the State of Oregon to do so. The State of Oregon reserves all rights to pursue any claims it may have against Contractor if the State of Oregon elects to assume its own defense.**

### **4. STATE OF OREGON ACTIONS.**

**This Section VI does not include indemnification by the Contractor of the State of Oregon, the Oregon Environmental Quality Commission and its members, the Oregon Department of Environmental Quality and its officers agents and employees, for the acts or omissions of the State of Oregon, the Oregon Environmental Quality Commission and its members, the Oregon Department of Environmental Quality and its officers agents and employees, whether within the scope of the Price Agreement and any Task Order Contracts or otherwise. .**

## **VII.**

### **AGENCY PA PERSONNEL**

The extent and character of the Work to be performed by Contractor is subject to the general review and approval of the LQDA, to whom Contractor shall report and is responsible. The LQDA is authorized to issue Task Order Contracts, approve budgets and assumptions and work plans, amend Task Order Contracts, confirm changed conditions alleged to exist, identify conflicts of interest, approve invoices and reports submitted, release retained funds, demand bonds be provided, approve subcontractor selection and assignment, approve terms of payment, request changes in completed Work, suspend Work, resolve disputes, and any other activities necessary to ensure timely and acceptable performance. The LQDA may delegate in writing specific duties and authority of the LQDA to other personnel employed by Agency, including, but not limited to, the Contract Officer and Agency's Project Managers. No delegation is effective unless in writing and any personnel so delegated shall provide proof of delegation to Contractor upon Contractor's reasonable demand. The Project Manager and the Contract Officer will be identified in each written Task Order Contract.

The LQDA hereby authorizes the Contract Officer to approve budgets and assumptions and work plans, confirm changed conditions alleged to exist, identify conflicts of interest, approve invoices and reports submitted, release retained funds, approve revisions to Contractor employees' hourly rates, demand bonds be provided, approve subcontractor selection and assignment, approve terms of payment, request changes in completed Work, suspend Work, resolve disputes, and any other activities necessary to ensure timely and acceptable performance. Unless otherwise approved in writing by the LQDA or set forth in this PA, the Contract Officer is not authorized to issue Task Order Contracts or amend Task Order Contracts.

## **VIII.**

### **DISPUTE RESOLUTION**

Except as otherwise provided in this PA, Agency's Director shall decide any dispute arising under this PA and any Task Order Contracts which is not disposed of by agreement

between the Parties. Agency's Director shall reduce his or her decision to writing and furnish a signed copy to Contractor. The decision of Agency's Director is the final and conclusive decision of Agency.

Pending final resolution of a dispute, Contractor shall proceed diligently with the performance of Work and, following the decision of the Agency's Director, Contractor shall proceed with performance of the Work in accordance with Agency's final decision.

## **IX.**

### **SUSPENSION OF WORK**

Agency may at any time suspend Work under any Task Order Contract. Any suspension must be directed by Agency by written notice given at least ten (10) calendar days in advance of the suspension, unless emergency conditions dictate that Contractor be directed to suspend Work immediately. Any notice suspending Work must specify the period during which Work is suspended. Agency shall pay Contractor for Work completed prior to the date the suspension begins, plus any reasonable costs of demobilization. Contractor shall resume Work upon the date specified in the notice, or upon such other date as Agency may thereafter specify in writing. Agency shall make an equitable adjustment in the delivery schedule, and in other terms of the Task Order Contract(s) that may be affected. Suspension of Work under this section does not give rise to any claim against Agency.

## **X.**

### **MISCELLANEOUS PROVISIONS**

#### **1. Assistance in Legal Action.**

If Agency requests, Contractor's personnel shall provide assistance to Agency as participants in legal actions. If any subcontractors are used, Contractor shall also ensure that all subcontractor personnel provide assistance to Agency as participants in legal actions. Assistance in legal actions will be covered by a separate Task Order Contract, or if after this PA has expired or terminated, by a separate contract. Upon Agency request, Contractor shall require that its personnel assist in the recovery of public expenditures



regarding any of the operations or projects for which Contractor or its subcontractor(s) perform Work under a Task Order Contract, or assist in any other legal action involving matters which personnel provided by Contractor (or subcontractor(s)) have gained expertise as a result of Work performed. This assistance in legal actions includes the preparation of reports, assistance to State of Oregon or federal attorneys in preparation of the government's case, testimony in court (expert or other types of testimony), testimony at depositions, and the preparation and execution of interrogatories and affidavits, as prosecution of legal actions require.

Agency shall reimburse Contractor for such assistance as described above at the prevailing rate for the employee's primary classification at the time services are required. Contractor shall insert an identical obligation to provide such assistance in all subcontractor agreements to perform Work. Failure to meet the requirement of this section is a breach of contract.

Depositions and discovery conducted by opposing parties and trial testimony under subpoena for an opposing party are deemed assistance on legal action as provided in this section, provided that if the applicable Task Order Contract has been terminated before such deposition, discovery, or trial has been commenced, Agency is not obligated to pay Contractor. In such a case, Agency may by separate agreement agree to pay some or all of Contractor's costs.

## **2. Covenant Against Contingent Fees.**

Contractor represents that it has not employed or retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this PA, and that it has not paid or agreed to pay any company, or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this PA. For breach or violation of this representation, Agency may annul this PA or any Task Order Contracts without liability, or at its discretion, deduct from consideration payable

under Task Order Contracts or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

### **3. Affirmative Action.**

Contractor shall affirmatively support Agency in supporting and encouraging the participation of MBEs and WBEs in contracts and subcontracts; and shall comply with the applicable requirements of 40 CFR Part 33 for Work involving federal funding. Through the duration of this PA, Agency intends to set MBE and WBE participation objectives in each Task Order Contract. Each budget and assumption submitted by Contractor must clearly identify how the MBE and WBE objectives for each Task Order Contract will be met, or justification must be provided if the objectives cannot be fully achieved.

### **4. Certification by The State of Oregon Office for Business Inclusion and Diversity (“COBID”) is required to participate as an MBE or WBE.**

Contractor shall submit to Agency records supporting the percentages of MBE and WBE participation with monthly invoice documentation, and shall provide a summary to Agency on a semi-annual basis for all federally funded Task Order Contracts.

### **5. Contract Provisions Required by Federal Regulations/Policy.**

Task Order Contracts funded in whole or in part by federal funds directly incorporate 2 CFR Part 200, and to the extent applicable, 40 CFR Part 33 and 40 CFR Part 35 sub-part O, attached as **Exhibit E** and incorporated by reference. For those Task Order Contracts, Contractor shall comply, and shall assist Agency in complying with 2 CFR Part 200, and 40 CFR Part 33 and Part 35 sub-part O. Contractor shall also require all subcontractors performing services in support of those Task Order Contracts to abide by the terms and conditions of 2 CFR Part 200, and 40 CFR Part 33 and Part 35 sub-part O.

## **6. Certified Firm Compliance.**

When Task Order Contracts are funded in whole with State of Oregon funds, Contractor shall meet the provisions of any Certified Firm Outreach Plan the Contractor has established for the Task Order Contract and shall otherwise comply with the provisions of ORS 200.055, ORS 279A.100 and ORS 279A.107.

## **7. PA Interpretation; Captions.**

The word “or” as used in this PA is non-exclusive, and can mean any or all options of a list, e.g. “A or B” means “A or B or A and B”; not “A or B but not A and B.” The captions or headings in this PA are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this PA.

## **8. Green Remediation.**

In performing Work under this PA, Contractor shall seek to promote, support, and implement sustainable practices that lessen the overall environmental impacts of investigation and remediation projects, including but not limited to site assessments, remedial investigations, feasibility studies, remedy selection, remedial design/remedial actions, operation and maintenance, and No Further Action determinations. Contractor shall:

- A. Evaluate methods to assess energy and natural resource use, emissions, waste generation and other potential impacts to communities and air, land and water quality associated with cleanup Work.
- B. Identify green remediation guidelines, best management practices and other resources that Contractor can use as tools in project design and implementation.
- C. Implement practical green remediation strategies in investigation and remediation Work, where feasible and approved in writing by Agency.

**EXHIBIT D - CONTRACTOR AND TEAM SUBCONTRACTOR FEES, RATES AND COSTS**

**PERSONAL/PROFESSIONAL SERVICES PA FOR ON-CALL ENVIRONMENTAL SERVICES**

**PA No. 067-23**

On CPFF Task Order Contracts issued under the PA, Agency will establish a fixed fee based upon the estimated direct labor costs. Listed below is the Fixed Fee (profit) base and percentage of that base to be used to establish the fixed fee (fee) for Task Order Contracts issued under this PA, unless otherwise agreed in writing by Agency and Contractor. Fee changes may only be made via amendment to the PA.

<u>CONTRACTOR NAME</u>	<u>FIXED FEE BASE</u>	<u>PERCENTAGE (NEGOTIATED MULTIPLIER)</u>	<u>FIXED FEE</u>
Maul Foster & Alongi, Inc.	Direct Labor	■	= Fixed Fee Base x Percentage

Proposed Team Subcontractors, if any, were identified in Contractor’s Statement of Qualifications, Technical Proposal, and Cost Proposal submitted in response to Agency’s RFP. Additions or deletions to the list of Team Subcontractors below may only be made via amendment to the PA.

**Team Subcontractor Names:**  
(none)

Contractor “direct labor costs” and “indirect costs,” Team Subcontractor costs, if any, and Contractor or Team Subcontractor “other direct costs” identified in Contractor’s Cost Proposal, if any, as modified through negotiations with Agency during Phase III of the RFP process that supported this PA, are incorporated by reference into this PA as though fully set forth herein. Contractor must notify Agency in writing (email is acceptable) and receive Agency’s acceptance in writing (email is acceptable) of any Contractor “direct labor costs” or “indirect costs,” Team Subcontractor costs, if any, or Contractor or Team Subcontractor “other direct costs” changes, additions, or deletions prior to submitting invoices to Agency which include any of the changes, additions, or deletions.

**EXHIBIT E - PROVISIONS REQUIRED BY FEDERAL LAW****PERSONAL/PROFESSIONAL SERVICES PA FOR ON-CALL ENVIRONMENTAL SERVICES**PA No. 067-23**I. 2 CFR Part 200 – Appendix II:**

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by [41 U.S.C. 1908](#), must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under [41 CFR Part 60](#), all contracts that meet the definition of “federally assisted construction contract” in [41 CFR Part 60-1.3](#) must include the equal opportunity clause provided under [41 CFR 60-1.4\(b\)](#), in accordance with Executive Order 11246, “Equal Employment Opportunity” ([30 FR 12319, 12935, 3 CFR Part, 1964-1965](#) Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at [41 CFR part 60](#), “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended ([40 U.S.C. 3141-3148](#)). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act ([40 U.S.C. 3141-3144](#), and [3146-3148](#)) as supplemented by Department of Labor regulations ([29 CFR Part 5](#), “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to

the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act ([40 U.S.C. 3145](#)), as supplemented by Department of Labor regulations ([29 CFR Part 3](#), “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act ([40 U.S.C. 3701-3708](#)). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with [40 U.S.C. 3702](#) and [3704](#), as supplemented by Department of Labor regulations ([29 CFR Part 5](#)). Under [40 U.S.C. 3702](#) of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of [40 U.S.C. 3704](#) are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under [37 CFR § 401.2 \(a\)](#) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of [37 CFR Part 401](#), “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act ([42 U.S.C. 7401-7671q](#).) and the Federal Water Pollution Control Act ([33 U.S.C. 1251-1387](#)), as amended - Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act ([42 U.S.C. 7401-7671q](#)) and the Federal Water Pollution Control Act as amended ([33 U.S.C. 1251-1387](#)). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689) - A contract award (see [2 CFR 180.220](#)) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names



of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment ([31 U.S.C. 1352](#)) - Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by [31 U.S.C. 1352](#). Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See [§ 200.323](#) - Procurement of Recovered Materials:

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at [40 CFR part 247](#) that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

(K) See [§ 200.216](#) – Procurement on Certain Telecommunications and Video Surveillance Services or Equipment:

(a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

(1) Procure or obtain;

(2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in [Public Law 115-232](#), section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video

surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(b) In implementing the prohibition under [Public Law 115-232](#), section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(c) See [Public Law 115-232](#), section 889 for additional information.

(d) See also [§ 200.471](#).

(L) See [§ 200.322](#) – Domestic Preferences for Procurements:

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

## **II. Build America, Buy America Compliance (Effective May 14, 2022).**

- (a) The Owner has received federal funding for the Project that requires Owner, Contractor and applicable subcontractor/materials supplier compliance with the Buy America Sourcing requirements under the Build America, Buy America provisions of the Infrastructure Investment and Jobs Act (“IIJA”) (P.L. 117-58, §§70911-70917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States, regardless of the appropriation for the types of infrastructure projects specified in the chart entitled "Environmental Protection Agency's Identification of Federal Financial Assistance Infrastructure Programs." These Buy America Sourcing requirements require that all iron, steel, manufactured products, and construction materials used in Federally funded infrastructure projects must be produced in the United States. The Owner must implement these requirements in its procurements, and the provisions of this Section L.5 apply to any Project contracts at any tier---including, but not limited to, this Owner-Contractor Contract, and any subcontract or other agreement between the Contractor and any applicable subcontractors or materials suppliers. Contractor must include these Section L.5 provisions in any subcontracts or other agreements between the Contractor any applicable subcontractors or materials suppliers. For legal definitions and sourcing requirements, the Contractor must consult EPA’s Build America, Buy America website.
- (b) When supported by rationale provided in IIJA §70914, the Owner may submit a waiver to EPA. Owner will inform the Contractor if and when any such waiver is approved by EPA that is applicable to this Contract. A list of approved EPA waivers is also available on the EPA Build America, Buy America website.

## **III. 40 CFR Part 33 – Participation by Disadvantaged Business Enterprises in United States Environmental Protection Agency Programs**

### **Appendix A to Part 33 - Terms and Conditions:**

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of [40 CFR part 33](#) in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

## **IV. 40 CFR Part 35 sub-part O – Cooperative Agreements and Superfund State Contracts for Superfund Response Actions**

### **[§ 35.6000 Authority.](#)**

This subpart is issued under section 104(a) through (j) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA)([42 U.S.C. 9601 et seq.](#)).

[§ 35.6005 Purpose and scope.](#)

(a) This subpart codifies recipient requirements for administering Cooperative Agreements awarded pursuant to section 104(d)(1) of CERCLA. This subpart also codifies requirements for administering Superfund State Contracts (SSCs) for non-State-lead remedial responses undertaken pursuant to section 104 of CERCLA.

(b) [2 CFR part 200](#), “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards to Non-Federal Entities,” establishes consistency and uniformity among Federal agencies in the administration of grants and Cooperative Agreements to non-federal entities. For CERCLA-funded Cooperative Agreements, this subpart supplements the requirements contained in [2 CFR parts 200](#) and [1500](#) for States, political subdivisions thereof, and Indian Tribes. This subpart references those sections of [2 CFR parts 200](#) and [1500](#) that are applicable to CERCLA-funded Cooperative Agreements.

(c) Superfund monies for remedial actions cannot be used by recipients for Federal facility cleanup activities. When a cleanup is undertaken by another Federal entity, the State, political subdivision or Indian Tribe can pursue funding for its involvement in response activities from the appropriate Federal entity.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76059](#), Dec. 19, 2014]

[§ 35.6010 Indian Tribe and intertribal consortium eligibility.](#)

(a) Indian Tribes are eligible to receive Superfund Cooperative Agreements only when they are federally recognized, and when they meet the criteria set forth in [40 CFR 300.515\(b\)](#) of the National Oil and Hazardous Substances Pollution Contingency Plan (the National Contingency Plan or NCP), except that Indian Tribes shall not be required to demonstrate jurisdiction under [40 CFR 300.515\(b\)\(3\)](#) of the NCP to be eligible for Core Program Cooperative Agreements, and those support agency Cooperative Agreements for which jurisdiction is not needed for the Tribe to carry out the support agency activities of the work plan.

(b) Although section 126 of CERCLA provides that the governing body of an Indian Tribe shall be treated substantially the same as a State, the subpart O definition of “State” does not include Indian Tribes because they do not need to comply with all the statutory requirements addressed in subpart O that apply to States.

(c) Intertribal consortium: An intertribal consortium is eligible to receive a Cooperative Agreement from EPA only if the intertribal consortium demonstrates that all members of the consortium meet the eligibility requirements for the Cooperative Agreement, and all members authorize the consortium to apply for and receive assistance.

[§ 35.6015 Definitions.](#)

(a) As used in this subpart, the following words and terms shall have the following meanings:

*Activity.* A set of CERCLA-funded tasks that makes up a segment of the sequence of events undertaken in determining, planning, and conducting a response to a release or potential release of a hazardous substance. These include Core Program, pre-remedial (*i.e.*, preliminary assessments and site inspections), support agency, remedial investigation/feasibility studies, remedial design, remedial action, removal, and enforcement activities.

*Allowable costs.* Those project costs that are: Eligible, reasonable, necessary, and allocable to the project; permitted by the appropriate Federal cost principles; and approved by EPA in the Cooperative Agreement and/or Superfund State Contract.

*Architectural or engineering (A/E) services.* Consultation, investigations, reports, or services for design-type projects within the scope of the practice of architecture or professional engineering as defined by the laws of the State or territory in which the recipient is located.

*Award official.* The EPA official with the authority to execute Cooperative Agreements and Superfund State Contracts and to take other actions authorized by EPA Orders.

*Budget period.* The length of time EPA specifies in a Cooperative Agreement during which the recipient may expend or obligate Federal funds.

*CERCLA.* The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ([42 U.S.C. 9601](#) - 9657).

*Change order.* A written order issued by a recipient, or its designated agent, to its contractor authorizing an addition to, deletion from, or revision of, a contract, usually initiated at the contractor's request.

*Claim.* A demand or written assertion by a contractor seeking, as a matter of right, changes in contract duration, costs, or other provisions, which originally have been rejected by the recipient.

*Closeout.* The final EPA or recipient actions taken to assure satisfactory completion of project work and to fulfill administrative requirements, including financial settlement, submission of acceptable required final reports, and resolution of any outstanding issues under the Cooperative Agreement and/or Superfund State Contract.

*Community Relations Plan (CRP).* A management and planning tool outlining the specific community relations activities to be undertaken during the course of a response. It is designed to provide for two-way communication between the affected community and the agencies responsible for conducting a response action, and to assure public input into the decision-making process related to the affected communities.

*Construction.* Erection, building, alteration, repair, remodeling, improvement, or extension of buildings, structures or other property.

*Contract.* A written agreement between an EPA recipient and another party (other than another public agency) or between the recipient's contractor and the contractor's first tier subcontractor.

*Contractor.* Any party to whom a recipient awards a contract.

*Cooperative Agreement.* A legal instrument EPA uses to transfer money, property, services, or anything of value to a recipient to accomplish a public purpose in which substantial EPA involvement is anticipated during the performance of the project.

*Core Program Cooperative Agreement.* A Cooperative Agreement that provides funds to a State or Indian Tribe to conduct CERCLA implementation activities that are not assignable to specific sites but are intended to develop and maintain a State's or Indian Tribe's ability to participate in the CERCLA response program.

*Cost analysis.* The review and evaluation of each element of contract cost to determine reasonableness, allocability, and allowability.

*Cost share.* The portion of allowable project costs that a recipient contributes toward completing its project (i.e., non-Federal share, matching share).

*Equipment.* Tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit.

*Fair market value.* The amount at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts. Fair market value is the price in cash, or its equivalent, for which the property would have been sold on the open market.

*Health and safety plan.* A plan that specifies the procedures that are sufficient to protect on-site personnel and surrounding communities from the physical, chemical, and/or biological hazards of the site. The health and safety plan outlines:

- (i) Site hazards;
- (ii) Work areas and site control procedures;
- (iii) Air surveillance procedures;
- (iv) Levels of protection;
- (v) Decontamination and site emergency plans;
- (vi) Arrangements for weather-related problems; and
- (vii) Responsibilities for implementing the health and safety plan.

*In-kind contribution.* The value of a non-cash contribution (generally from third parties) to meet a recipient's cost sharing requirements. An in-kind contribution may consist of charges for real



property and equipment or the value of goods and services directly benefiting the CERCLA-funded project.

*Indian Tribe.* As defined by section 101(36) of CERCLA, any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. For the purposes of this subpart, the term, "Indian Tribe," includes an intertribal consortium consisting of two or more federally recognized Tribes.

*Intergovernmental Agreement.* Any written agreement between units of government under which one public agency performs duties for or in concert with another public agency using EPA assistance. This includes substate and interagency agreements.

*Intertribal consortium.* A partnership between two or more federally recognized Indian Tribes that is authorized by the governing bodies of those Indian Tribes to apply for and receive assistance agreements. An intertribal consortium must have adequate documentation of the existence of the partnership, and the authorization to apply for and receive assistance.

*Lead agency.* The Federal agency, State agency, political subdivision, or Indian Tribe that has primary responsibility for planning and implementing a response action under CERCLA.

*National Priorities List (NPL).* The list, compiled by EPA pursuant to CERCLA section 105, of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response. The NPL is published at Appendix B to 40 CFR Part 300.

*Operable unit.* A discrete action, as described in the Cooperative Agreement or Superfund State Contract, that comprises an incremental step toward comprehensively addressing site problems. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.

*Operation and maintenance.* Measures required to maintain the effectiveness of response actions.

*Personal property.* Property other than real property. It includes both supplies and equipment.

*Political subdivision.* The unit of government that the State determines to have met the State's legislative definition of a political subdivision.

*Potentially Responsible Party (PRP).* Any individual(s) or company(ies) identified as potentially liable under CERCLA for cleanup or payment for costs of cleanup of Hazardous Substance sites. PRPs may include individual(s), or company(ies) identified as having owned, operated, or in some other manner contributed wastes to Hazardous Substance sites.

*Price analysis.* The process of evaluating a prospective price without regard to the contractor's separate cost elements and proposed profit. Price analysis determines the reasonableness of the proposed contract price based on adequate price competition, previous experience with similar work, established catalog or market price, law, or regulation.

*Profit.* The net proceeds obtained by deducting all allowable costs (direct and indirect) from the price. (Because this definition of profit is based on applicable Federal cost principles, it may vary from many firms' definition of profit, and may correspond to those firms' definition of "fee.")

*Project.* The activities or tasks EPA identifies in the Cooperative Agreement and/or Superfund State Contract.

*Project manager.* The recipient official designated in the Cooperative Agreement or Superfund State Contract as the program contact with EPA.

*Project officer.* The EPA official designated in the Cooperative Agreement as EPA's program contact with the recipient. Project officers are responsible for monitoring the project.

*Project period.* The length of time EPA specifies in the Cooperative Agreement and/or Superfund State Contract for completion of all project work. It may be composed of more than one budget period.

*Quality Assurance Project Plan.* A written document, associated with remedial site sampling, which presents in specific terms the organization (where applicable), objectives, functional activities, and specific quality assurance and quality control activities and procedures designed to achieve the data quality objectives of a specific project(s) or continuing operation(s).

*Real property.* Land, including land improvements, structures, and appurtenances thereto, excluding movable machinery and equipment.

*Recipient.* Any State, political subdivision thereof, or Indian Tribe which has been awarded and has accepted an EPA Cooperative Agreement.

*Services.* A recipient's in-kind or a contractor's labor, time, or efforts which do not involve the delivery of a specific end item, other than documents (e.g., reports, design drawings, specifications). This term does not include employment agreements or collective bargaining agreements.

*Simplified acquisition threshold.* The dollar amount specified in the Office of Federal Procurement Policy Act, [41 U.S.C. 403](#). The threshold is currently set at \$100,000.

*Small business.* A business as defined in section 3 of the Small Business Act, as amended ([15 U.S.C. 632](#)).

*State.* The several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of Northern Marianas, and any territory or possession over which the United States has jurisdiction.

*Statement of Work (SOW).* The portion of the Cooperative Agreement application and/or Superfund State Contract that describes the purpose and scope of activities and tasks to be carried out as a part of the proposed project.

*Subcontractor.* Any first tier party that has a contract with the recipient's prime contractor.

*Superfund State Contract (SSC).* A joint, legally binding agreement between EPA and another party(ies) to obtain the necessary assurances before an EPA-lead remedial action or any political subdivision-lead activities can begin at a site, and to ensure State or Indian Tribe involvement as required under CERCLA section 121(f).

*Supplies.* All tangible personal property other than equipment as defined in this section.

*Support agency.* The agency that furnishes necessary data to the lead agency, reviews response data and documents, and provides other assistance to the lead agency.

*Task.* An element of a Superfund response activity identified in the Statement of Work of a Superfund Cooperative Agreement or a Superfund State Contract.

*Title.* The valid claim to property that denotes ownership and the rights of ownership, including the rights of possession, control, and disposal of property.

*Unit acquisition cost.* The net invoice unit price of the property including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the property usable for the purpose for which it was acquired. Other charges, such as the cost of installation, transportation, taxes, duty, or protective in-transit insurance, shall be included or excluded from the unit acquisition cost in accordance with the recipient's regular accounting practices.

*Value engineering.* A systematic and creative analysis of each contract term or task to ensure that its essential function is provided at the overall lowest cost.

(b) Those terms not defined in this section shall have the meanings set forth in section 101 of CERCLA, [2 CFR part 200](#), and [40 CFR part 300](#) (the National Contingency Plan).

[[72 FR 24504](#), May 2, 2007, as amended at [73 FR 15922](#), Mar. 26, 2008; [72 FR 24504](#), May 2, 2007]

#### [§ 35.6020 Requirements for both applicants and recipients.](#)

Applicants and recipients must comply with the applicable requirements of [2 CFR part 1532](#), “Nonprocurement Debarment and Suspension and of [2 CFR part 1536](#), “Requirements for Drug-Free Workplace (Financial Assistance).”

[[72 FR 24504](#), May 2, 2007]

[§ 35.6025 Exceptions from this subpart.](#)

On a case-by-case basis, EPA will consider requests for official exceptions from the non-statutory provisions of this subpart. Refer to the requirements regarding exceptions described in [2 CFR 1500.4](#).

[[87 FR 30400](#), May 19, 2022]

[Pre-Remedial Response Cooperative Agreements](#)

[§ 35.6050 Eligibility for pre-remedial Cooperative Agreements.](#)

States, political subdivisions, and Indian Tribes may apply for pre-remedial response Cooperative Agreements.

[§ 35.6055 State-lead pre-remedial Cooperative Agreements.](#)

(a) To receive a State-lead pre-remedial Cooperative Agreement, the applicant must submit an “Application for Federal Assistance” (SF-424) for non-construction programs. Applications for additional funding need include only the revised pages. The application must include the following:

(1) *Budget sheets* (SF-424A).

(2) *A Project narrative statement*, including the following:

(i) *A list of sites* at which the applicant proposes to undertake pre-remedial tasks. If the recipient proposes to revise the list, the recipient may not incur costs on a new site until the EPA project officer has approved the site;

(ii) *A Statement of Work (SOW)* which must include a detailed description, by task, of activities to be conducted, the projected costs associated with each task, the number of products to be completed, and a quarterly schedule indicating when these products will be submitted to EPA; and

(iii) *A schedule of deliverables*.

(3) *Other applicable forms and information* authorized by [2 CFR part 200 Subpart C](#) - Pre-Federal Award Requirements and Contents of Federal Awards.

(b) *Pre-remedial Cooperative Agreement requirements*. The recipient must comply with all terms and conditions in the Cooperative Agreement, and with the following requirements:

(1) *Health and safety plan*.

(i) Before beginning field work, the recipient must have a health and safety plan in place providing for the protection of on-site personnel and area residents. This plan need not be submitted to EPA, but must be made available to EPA upon request.

(ii) The recipient's health and safety plan must comply with Occupational Safety and Health Administration (OSHA) [29 CFR 1910.120](#), entitled "Hazardous Waste Operations and Emergency Response," unless the recipient is an Indian Tribe exempt from OSHA requirements.

(2) *Quality assurance.*

(i) The recipient must comply with the quality assurance requirements described in [2 CFR 1500.12](#).

(ii) The recipient must have an EPA-approved non-site-specific quality assurance plan in place before beginning field work. The recipient must submit the plan to EPA in adequate time (generally 45 days) for approval to be granted before beginning field work.

(iii) The quality assurance plan must comply with the requirements regarding split sampling described in section 104(e)(4)(B) of CERCLA, as amended.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76059](#), Dec. 19, 2014; [87 FR 30400](#), May 19, 2022]

[§ 35.6060 Political subdivision-lead pre-remedial Cooperative Agreements.](#)

(a) If the Award Official determines that a political subdivision's lead involvement in pre-remedial activities would be more efficient, economical and appropriate than that of a State, based on the number of sites to be addressed and the political subdivision's history of program involvement, a pre-remedial Cooperative Agreement may be awarded under this section.

(b) The political subdivision must comply with all of the requirements described in [§ 35.6055](#).

[§ 35.6070 Indian Tribe-lead pre-remedial Cooperative Agreements.](#)

The Indian Tribe must comply with all of the requirements described in [§ 35.6055](#), except for the intergovernmental review requirements included in the "Application for Federal Assistance" (SF-424).

[Remedial Response Cooperative Agreements](#)

[§ 35.6100 Eligibility for remedial Cooperative Agreements.](#)

States, Indian Tribes, and political subdivisions may apply for remedial response Cooperative Agreements.

[§ 35.6105 State-lead remedial Cooperative Agreements.](#)

To receive a State-lead remedial Cooperative Agreement, the applicant must submit the following items to EPA:

(a) *Application form*, as described in [§ 35.6055\(a\)](#). Applications for additional funding need to include only the revised pages. The application must include the following:

(1) *Budget sheets* (SF-424A) displaying costs by site, activity and operable unit, as applicable.

(2) *A Project narrative statement*, including the following:

(i) *A site description*, including a discussion of the location of each site, the physical characteristics of each site (site geology and proximity to drinking water supplies), the nature of the release (contaminant type and affected media), past response actions at each site, and response actions still required at each site;

(ii) *A site-specific Statement of Work (SOW)*, including estimated costs per task, and a standard task to ensure that a sign is posted at the site providing the appropriate contacts for obtaining information on activities being conducted at the site, and for reporting suspected criminal activities;

(iii) *A statement designating a lead site project manager among appropriate State offices*. This statement must demonstrate that the lead State agency has conducted coordinated planning of response activities with other State agencies. The statement must identify the name and position of those individuals who will be responsible for coordinating the State offices;

(iv) *A site-specific Community Relations Plan* or an assurance that field work will not begin until one is in place. The Regional community relations coordinator must approve the Community Relations Plan before the recipient begins field work. The recipient must comply with the community relations requirements described in EPA policy and guidance, and in the National Contingency Plan;

(v) *A site-specific health and safety plan*, or an assurance that the applicant will have a final plan before starting field work. Unless specifically waived by the award official, the applicant must have a site-specific health and safety plan in place providing for the protection of on-site personnel and area residents. The site-specific health and safety plan must comply with Occupational Safety and Health Administration (OSHA) [29 CFR 1910.120](#), entitled, "Hazardous Waste Operations and Emergency Response," unless the recipient is an Indian Tribe exempt from OSHA requirements;

(vi) *Quality assurance* -

(A) *General*. If the project involves environmentally related measurements or data generation, the recipient must comply with the requirements regarding quality assurance described in [2 CFR 1500.12](#).



(B) *Quality assurance plan.* The applicant must have a separate quality assurance project plan and/or sampling plan for each site to be covered by the Cooperative Agreement. The applicant must submit the quality assurance project plan and the sampling plan, which incorporates results of any site investigation performed at that site, to EPA with its Cooperative Agreement application. However, at the option of the EPA award official with program concurrence, the applicant may submit with its application a schedule for developing the detailed site-specific quality assurance plan (generally 45 days before beginning field work). Field work may not begin until EPA approves the site-specific quality assurance plan.

(C) *Split sampling.* The quality assurance plan must comply with the requirements regarding split sampling described in section 104(e)(4)(B) of CERCLA, as amended.

(vii) *A schedule of deliverables* to be prepared during response activities.

(3) *Other applicable forms and information* authorized by [2 CFR part 200 Subpart C](#) - Pre-Federal Award Requirements and Contents of Federal Awards.

(b) *CERCLA Assurances.* Before a Cooperative Agreement for remedial action can be awarded, the State must provide EPA with the following written assurances:

(1) *Operation and maintenance.* The State must provide an assurance that it will assume responsibility for all future operation and maintenance of CERCLA-funded remedial actions for the expected life of each such action as required by CERCLA section 104(c) and addressed in [40 CFR 300.510\(c\)\(1\)](#) of the NCP. In addition, even if a political subdivision is designated as being responsible for operation and maintenance, the State must guarantee that it will assume any or all operation and maintenance activities in the event of default by the political subdivision.

(2) *Cost sharing.* The State must provide assurances for cost sharing as follows:

(i) *Ten percent.* Where a facility, whether privately or publicly owned, was not operated by the State or political subdivision thereof, either directly or through a contractual relationship or otherwise, at the time of any disposal of hazardous substances at the facility, the State must provide 10 percent of the cost of the remedial action, if CERCLA-funded.

(ii) *Fifty percent or more.* Where a facility was operated by a State or political subdivision either directly or through a contractual relationship or otherwise, at the time of any disposal of hazardous substances at the facility, the State must provide 50 percent (or such greater share as EPA may determine appropriate, taking into account the degree of responsibility of the State or political subdivision for the release) of the cost of removal, remedial planning, and remedial action if the remedial action is CERCLA-funded.

(3) *Twenty-year waste capacity.* The State must assure EPA of the availability of hazardous waste treatment or disposal facilities within and/or outside the State that comply with subtitle C of the Solid Waste Disposal Act and that have adequate capacity for the destruction, treatment, or secure disposition of all hazardous wastes that are reasonably expected to be generated within the State during the 20-year period following the date of the response agreement. A remedial

action cannot be funded unless this assurance is provided consistent with [40 CFR 300.510](#) of the NCP. EPA will determine whether the State's assurance is adequate.

(4) *Off-site storage, treatment, or disposal.* If off-site storage, destruction, treatment, or disposal is required, the State must assure the availability of a hazardous waste disposal facility that is in compliance with subtitle C of the Solid Waste Disposal Act and is acceptable to EPA. The lead agency of the State must provide the notification required at [§ 35.6120](#), if applicable.

(5) *Real property acquisition.* If EPA determines in the remedy selection process that an interest in real property must be acquired in order to conduct a response action, such acquisition may be funded under a Cooperative Agreement. EPA may acquire an interest in real estate for the purpose of conducting a remedial action only if the State provides assurance that it will accept transfer of such interest in accordance with [40 CFR 300.510\(f\)](#) of the NCP. The State must provide this assurance even if it intends to transfer this interest to a third party, or to allow a political subdivision to accept transfer on behalf of the State. If the political subdivision is accepting the transferred interest in real property, the State must guarantee that it will accept transfer of such interest in the event of default by the political subdivision. If the State or political subdivision disposes of the transferred real property, it shall comply with the requirements for real property in [2 CFR 200.311](#). (See [§ 35.6400](#) for additional information on real property acquisition requirements.)

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76059](#), Dec. 19, 2014; [87 FR 30400](#), May 19, 2022]

#### [§ 35.6110 Indian Tribe-lead remedial Cooperative Agreements.](#)

(a) *Application requirements.* The Indian Tribe must comply with all of the requirements described in [§ 35.6105\(a\)](#). Indian Tribes are not required to comply with the intergovernmental review requirements included in the “Application for Federal Assistance” (SF-424). Consistent with the NCP ([40 CFR 300.510\(e\)\(2\)](#)), this subpart does not address whether Indian Tribes are States for the purpose of CERCLA section 104(c)(9).

(b) *Cooperative Agreement requirements.*

(1) The Indian Tribe must comply with all terms and conditions in the Cooperative Agreement.

(2) If it is designated the lead for remedial action, the Indian Tribe must provide the notification required at [§ 35.6120](#), substituting the term “Indian Tribe” for the term “State” in that section, and “out-of-an-Indian-Tribal-area-of-Indian-country” for “out-of-State”.

(3) Indian Tribes are not required to share in the cost of CERCLA-funded remedial actions.

#### [§ 35.6115 Political subdivision-lead remedial Cooperative Agreements.](#)

(a) *General.* If the State concurs, EPA may allow a political subdivision with the necessary capabilities and jurisdictional authority to conduct remedial response activities at a site. EPA will

award the political subdivision a Cooperative Agreement to conduct remedial response and enter into a parallel Superfund State Contract with the State, if required (*See* [§ 35.6800](#), when a Superfund State Contract is required). The political subdivision may also be a signatory to the Superfund State Contract. The political subdivision must submit to the State a copy of all reports provided to EPA.

*(b) Political subdivision Cooperative Agreement requirements -*

(1) *Application requirements.* To receive a remedial Cooperative Agreement, the political subdivision must prepare an application which includes the documentation described in [§ 35.6105\(a\)\(1\)](#) through [\(a\)\(3\)](#).

(2) *Cooperative Agreement requirements.* The political subdivision must comply with all terms and conditions in the Cooperative Agreement. If it is designated the lead for remedial action, the political subdivision must provide the notification required at [§ 35.6120](#), substituting the term “political subdivision” for the term “State” in that section.

[§ 35.6120 Notification of the out-of-State or out-of-an-Indian-Tribal-area-of-Indian-country transfer of CERCLA waste.](#)

(a) The recipient must provide written notification of off-site shipments of CERCLA waste from a site to an out-of-State or out-of-an-Indian-Tribal-area-of-Indian-country waste management facility to:

- (1) The appropriate State environmental official for the State in which the waste management facility is located; and/or
- (2) An appropriate official of an Indian Tribe in whose area of Indian country the waste management facility is located; and
- (3) The EPA Award Official.

(b) The notification of off-site shipments does not apply when the total volume of all such shipments from the site does not exceed 10 cubic yards.

(c) The notification must be in writing and must provide the following information, where available:

- (1) The name and location of the facility to which the CERCLA waste is to be shipped;
- (2) The type and quantity of CERCLA waste to be shipped;
- (3) The expected schedule for the shipments of the CERCLA waste; and
- (4) The method of transportation of the CERCLA waste.

(d) The recipient must notify the State or Indian Tribal government in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the CERCLA waste to another facility within the same receiving State, or to a facility in another State.

(e) The recipient must provide relevant information on the off-site shipments, including the information in [paragraph \(c\)](#) of this section, as soon as possible after the award of the contract and, where practicable, before the CERCLA waste is actually shipped.

### [Enforcement Cooperative Agreements](#)

#### [§ 35.6145 Eligibility for enforcement Cooperative Agreements.](#)

Pursuant to CERCLA section 104(d), States, political subdivisions thereof, and Indian Tribes may apply for enforcement Cooperative Agreements. To be eligible for an enforcement Cooperative Agreement, the State, political subdivision or Indian Tribe must demonstrate that it has the authority, jurisdiction, and the necessary administrative capabilities to take an enforcement action(s) to compel PRP cleanup of the site, or recovery of the cleanup costs. To accomplish this, the State, political subdivision or Indian Tribe, respectively, must submit the following for EPA approval:

- (a) A letter from the State Attorney General, or comparable local official (of a political subdivision) or comparable Indian Tribal official, certifying that it has the authority, jurisdiction, and administrative capabilities that provide a basis for pursuing enforcement actions against a PRP to secure the necessary response;
- (b) A copy of the applicable State, local (political subdivision) or Indian Tribal statute(s) and a description of how it is implemented;
- (c) Any other documentation required by EPA to demonstrate that the State, local (political subdivision) or Indian Tribal government has the statutory authority, jurisdiction, and administrative capabilities to perform the enforcement activity(ies) to be funded under the Cooperative Agreement.

#### [§ 35.6150 Activities eligible for funding under enforcement Cooperative Agreements.](#)

An enforcement Cooperative Agreement application from a State, political subdivision or Indian Tribe may request funding for the following enforcement activities:

- (a) PRP searches;
- (b) Issuance of notice letters and negotiation activities;
- (c) Administrative and judicial enforcement actions taken under State or Indian Tribal law;
- (d) Management assistance and oversight of PRPs during Federal enforcement response;

(e) Oversight of PRPs during a State, political subdivision or Indian Tribe enforcement response contingent on the applicant having taken all necessary action to compel PRPs to fund the oversight of cleanup activities negotiated under the recipient's enforcement authorities. If the State, political subdivision, Indian Tribe or EPA cannot obtain PRP commitment to fund such oversight activities, then these activities will be considered eligible for CERCLA funding under an enforcement Cooperative Agreement.

[§ 35.6155 State, political subdivision or Indian Tribe-lead enforcement Cooperative Agreements.](#)

(a) The State, political subdivision or Indian Tribe must comply with the requirements described in [§ 35.6105 \(a\)\(1\)](#) through [\(a\)\(3\)](#), as appropriate.

(b) The CERCLA section 104 assurances described in [§ 35.6105\(b\)](#) are not applicable for enforcement Cooperative Agreements.

(c) Before an enforcement Cooperative Agreement is awarded, the State, political subdivision or Indian Tribe must:

(1) Assure EPA that it will notify and consult with EPA promptly if the recipient determines that its laws or other restrictions prevent the recipient from acting consistently with CERCLA; and

(2) If the applicant is seeking funds for oversight of PRP cleanup, the applicant must:

(i) Demonstrate that the proposed Statement of Work or cleanup plan prepared by the PRP satisfies the recipient's enforcement goals for those instances in which the recipient is seeking funding for oversight of PRP cleanup activities negotiated under the recipient's own enforcement authorities; and

(ii) Demonstrate that the PRP has the capability to attain the goals set forth in the plan;

(iii) Demonstrate that it has taken all necessary action to compel PRPs to fund the oversight of cleanup activities negotiated under the recipient's enforcement authorities.

[Removal Response Cooperative Agreements](#)

[§ 35.6200 Eligibility for removal Cooperative Agreements.](#)

When a planning period of more than six months is available, States, political subdivisions and Indian Tribes may apply for removal Cooperative Agreements.

[§ 35.6205 Removal Cooperative Agreements.](#)

(a) The State must comply with the requirements described in [§ 35.6105\(a\)](#). To the extent practicable, the State must comply with the notification requirement at [§ 35.6120](#) when a removal action is necessary and involves out-of-State shipment of CERCLA wastes, and when,

based on the site evaluation, EPA determines that a planning period of more than six months is available before the removal activities must begin.

(b) Pursuant to CERCLA section 104(c)(3), the State is not required to share in the cost of a CERCLA-funded removal action, unless the removal is conducted at a site that was publicly operated by a State or political subdivision at the time of disposal of hazardous substances and a CERCLA-funded remedial action is ultimately undertaken at the site. In this situation, the State must share at least 50 percent in the cost of all removal, remedial planning, and remedial action costs at the time of the remedial action as stated in [§ 35.6105\(b\)\(2\)\(ii\)](#).

(c) If both the State and EPA agree, a political subdivision with the necessary capabilities and jurisdictional authority may assume the lead responsibility for all, or a portion, of the removal activity at a site. Political subdivisions must comply with the requirements described in [§ 35.6105\(a\)](#). To the extent practicable, political subdivisions also must comply with the notification requirement at [§ 35.6120](#) when a removal action is necessary and involves the shipment of CERCLA wastes out of the State's jurisdiction, and when, based on the site evaluation, EPA determines that a planning period of more than six months is available before the removal activities must begin.

(d) The State must provide the cost share assurance discussed in [paragraph \(b\)](#) of this section on behalf of a political subdivision that is given the lead for a removal action.

(e) Indian Tribes must comply with the requirements described in [§ 35.6105\(a\)](#). To the extent practicable, Indian Tribes also must comply with the notification requirement at [§ 35.6120](#) when a removal action is necessary and involves the shipment of CERCLA wastes out of the Indian Tribe's area of Indian country, and when, based on the site evaluation, EPA determines that a planning period of more than six months is available before the removal activities must begin.

(f) Indian Tribes are not required to share in the cost of a CERCLA-funded removal action.

### [Core Program Cooperative Agreements](#)

#### [§ 35.6215 Eligibility for Core Program Cooperative Agreements.](#)

(a) States and Indian Tribes may apply for Core Program Cooperative Agreements in order to conduct CERCLA implementation activities that are not directly assignable to specific sites, but are intended to develop and maintain a State's or Indian Tribe's ability to participate in the CERCLA response program.

(b) Only the State or Indian Tribal government agency designated as the single point of contact with EPA for CERCLA implementation is eligible to receive a Core Program Cooperative Agreement.

(c) When it is more economical for a government entity other than the recipient (such as a political subdivision or State Attorney General) to implement tasks funded through a Core



Program Cooperative Agreement, benefits to such entities must be provided for in an intergovernmental agreement.

### [§ 35.6220 General.](#)

The recipient of a Core Program Cooperative Agreement must comply with the requirements regarding financial administration ([§§ 35.6270](#) through [35.6290](#)), property ([§§ 35.6300](#) through [35.6450](#)), procurement ([§§ 35.6550](#) through [35.6610](#)), reporting ([§§ 35.6650](#) through [35.6670](#)), records ([§§ 35.6700](#) through [35.6710](#)), and other administrative requirements under a Cooperative Agreement ([§§ 35.6750](#) through [35.6790](#)). Recipients may not incur site-specific costs. Where these sections entail site-specific requirements, the recipient is not required to comply on a site-specific basis.

### [§ 35.6225 Activities eligible for funding under Core Program Cooperative Agreements.](#)

(a) To be eligible for funding under a Core Program Cooperative Agreement, activities must develop and maintain a recipient's abilities to implement CERCLA. Once the recipient has in place program functions described in [paragraphs \(a\)\(1\)](#) through [\(a\)\(4\)](#) of this section, EPA will evaluate the recipient's program needs to sustain interaction with EPA in CERCLA implementation as described in [paragraph \(a\)\(5\)](#) of this section. The amount of funding provided under the Core Program will be determined by EPA based on the availability of funds and the recipient's program needs in the areas described in [paragraphs \(a\)\(1\)](#) through [\(a\)\(4\)](#) of this section:

- (1) Procedures for emergency response actions and longer-term remediation of environmental and health risks at hazardous waste sites (including but not limited to the development of generic health and safety plans, quality assurance project plans, and community relation plans);
- (2) Provisions for satisfying all requirements and assurances (including the development of a fund or other financing mechanism(s) to pay for studies and remediation activities);
- (3) Legal authorities and enforcement support associated with proper administration of the recipient's program and with efforts to compel potentially responsible parties to conduct or pay for studies and/or remediation (including but not limited to the development of statutory authorities; access to legal assistance in identifying applicable or relevant and appropriate requirements of other laws; and development and maintenance of the administrative, financial and recordkeeping systems necessary for cost recovery actions under CERCLA);
- (4) Efforts necessary to hire and train staff to manage publicly-funded cleanups, oversee responsible party-lead cleanups, and provide clerical support; and
- (5) Other activities deemed necessary by EPA to develop and maintain sustained EPA/recipient interaction in CERCLA implementation (including but not limited to general program management and supervision necessary for a recipient to implement CERCLA activities, and interagency coordination on all phases of CERCLA response).

(b) Continued funding of tasks in subsequent years will be based on an evaluation of demonstrated progress toward the goals in the existing Core Program Cooperative Agreement Statement of Work.

[§ 35.6230 Application requirements.](#)

To receive a Core Program Cooperative Agreement, the applicant must submit an application form (“Application for Federal Assistance,” SF-424, for non-construction programs) to EPA. Applications for additional funding need include only the revised pages. The application must include the following:

(a) *A project narrative statement*, including the following:

(1) *A Statement of Work (SOW)* which must include a detailed description of the CERCLA-funded activities and tasks to be conducted, the projected costs associated with each task, the number of products to be completed, and a schedule for implementation. Eligible activities under Core Program Cooperative Agreements are discussed in [§ 35.6225](#); and

(2) *A background statement*, describing the current abilities and authorities of the recipient's program for implementing CERCLA, the program's needs to sustain and increase recipient involvement in CERCLA implementation, and the impact of Core Program Cooperative Agreement funds on the recipient's involvement in site-specific CERCLA response.

(b) *Budget sheets* (SF-424A).

(c) *Proposed project and budget periods* for CERCLA-funded activities. The project and budget periods may be one or more years and may be extended incrementally, up to 12 months at a time, with EPA approval.

(d) *Other applicable forms and information* authorized by [2 CFR part 200 Subpart C](#) - Pre-Federal Award Requirements and Contents of Federal Awards.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[§ 35.6235 Cost sharing.](#)

A State must provide at least ten percent of the direct and indirect costs of all activities covered by the Core Program Cooperative Agreement. Indian Tribes are not required to share in the cost of Core Program activities. The State must provide its cost share with non-Federal funds or with Federal funds, authorized by statute to be used for matching purposes. Funds used for matching purposes under any other Federal grant or Cooperative Agreement cannot be used for matching purposes under a Core Program Cooperative Agreement. The State may provide its share using in-kind contributions if such contributions are provided for in the Cooperative Agreement. The State may not use CERCLA State credits to offset any part of its required match for Core Program Cooperative Agreements. (See [§ 35.6285 \(c\)](#), [\(d\)](#), and [\(f\)](#) regarding credit, excess cash cost share contributions/over match, and advance match, respectively.)

## Support Agency Cooperative Agreements

### § 35.6240 Eligibility for support agency Cooperative Agreements.

States, political subdivisions, and Indian Tribes may apply for support agency Cooperative Agreements to ensure their meaningful and substantial involvement in response activities, as specified in sections 104 and 121(f)(1) of CERCLA and the NCP ([40 CFR part 300](#)).

### § 35.6245 Allowable activities.

Support agency activities are those activities conducted by the recipient to ensure its meaningful and substantial involvement. The activities described in section 121(f)(1) of CERCLA, as amended, and in subpart F of the NCP ([40 CFR part 300](#)), are eligible for funding under a support agency Cooperative Agreement. Participation in five-year reviews of the continuing protectiveness of a remedial action is also an eligible support agency activity.

### § 35.6250 Support agency Cooperative Agreement requirements.

(a) *Application requirements.* The applicant must comply with the requirements described in [§ 35.6105\(a\)\(1\)](#) and [\(3\)](#), and other requirements as negotiated with EPA. (Indian Tribes are exempt from the requirement of Intergovernmental Review in [40 CFR part 29](#).) An applicant may submit a non-site-specific budget for support agency activities.

(b) *Cooperative Agreement requirements.* The recipient must comply with the requirements regarding financial administration ([§§ 35.6270](#) through [35.6290](#)), property ([§§ 35.6300](#) through [35.6450](#)), procurement ([§§ 35.6550](#) through [35.6610](#)), reporting ([§§ 35.6650](#) through [35.6670](#)), records ([§§ 35.6700](#) through [35.6710](#)), and other administrative requirements under a Cooperative Agreement ([§§ 35.6750](#) through [35.6790](#)).

## Combining Cooperative Agreements

### § 35.6260 Combining Cooperative Agreement sites and activities.

(a) EPA may award a Cooperative Agreement to a recipient for:

- (1) A single activity, or multiple activities;
- (2) A single activity at multiple sites; and
- (3) Except as provided in [paragraphs \(b\)](#), [\(c\)](#), and [\(d\)](#) of this section, multiple activities at multiple sites.

(b) EPA will not award or amend a Cooperative Agreement to a political subdivision to conduct multiple activities at multiple sites. Before awarding or amending a Cooperative Agreement to permit multiple activities at multiple sites, EPA must determine that the State or Indian Tribe has adequate administrative, technical, and financial management and tracking capabilities. A State's

or Indian Tribe's request for such a Cooperative Agreement will be considered only if EPA determines that consolidating these activities under one Cooperative Agreement would be in the Agency's best interests.

(c) EPA will not award a single Cooperative Agreement to conduct multiple remedial actions at multiple sites.

(d) EPA will require separate Cooperative Agreements for eligible removal actions that exceed the statutory monetary ceiling or whenever a consistency waiver is likely to be sought.

### Financial Administration Requirements Under a Cooperative Agreement

#### § 35.6270 Standards for financial management systems.

(a) *Accounting system standards* -

(1) *General.* The recipient's system must track expenses by site, activity, and, operable unit, as applicable, according to object class. The system must also provide control, accountability, and an assurance that funds, property, and other assets are used only for their authorized purposes. The recipient must allow an EPA review of the adequacy of the financial management system as described in [2 CFR 200.302](#).

(2) *Allowable costs.* The recipient's systems must comply with the appropriate allowable cost principles described in [2 CFR part 200 Subpart E](#) - Cost Principles.

(3) *Pre-remedial.* The system need not track expenses by site. However, all pre-remedial costs must be documented under a single Superfund account number designated specifically for the pre-remedial activity.

(4) *Core Program.* Since all costs associated with Core Program Cooperative Agreements are non-site-specific, the systems need not track expenses by site. However, all Core Program costs must be documented under the Superfund account number(s) designated specifically for Core Program activity.

(5) *Support Agency.* All support agency agreements will be assigned a single Superfund activity code designated specifically for support agency activities. All support agency costs, however, must be documented site specifically in accordance with the terms and conditions specified in the Cooperative Agreement.

(6) *Accounting system control procedures.* Except as provided for in [paragraph \(a\)\(3\)](#) of this section, accounting system control procedures must ensure that accounting information is:

(i) Accurate, charging only costs attributable to the site, activity, and operable unit, as applicable; and

(ii) Complete, recording and charging to individual sites, activities, and operable units, as applicable, all costs attributable to the recipient's CERCLA effort.

(7) *Financial reporting.* The recipient's accounting system must use actual costs as the basis for all reports of direct site charges. The recipient must comply with the requirements for financial reporting contained in [§ 35.6670](#).

(b) *Recordkeeping system standards.*

(1) The recipient must maintain a recordkeeping system that enables site-specific costs to be tracked by site, activity, and operable unit, as applicable, and provides sufficient documentation for cost recovery purposes.

(2) The recipient must provide this site-specific documentation to the EPA Regional Office within 30 working days of a request, unless another time frame is specified in the Cooperative Agreement.

(3) In addition, the recipient must comply with the requirements regarding records described in [§§ 35.6700](#), [35.6705](#), and [35.6710](#). The recipient must comply with the requirements regarding source documentation described in [2 CFR 200.302](#).

(4) For pre-remedial and Core Program activities, the recordkeeping system must comply with the requirements described in [paragraphs \(a\)\(3\)](#) and [\(a\)\(4\)](#) of this section.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

#### [§ 35.6275 Period of availability of funds.](#)

The recipient must comply with the requirements regarding the availability of funds described in [2 CFR parts 200](#) and [1500](#).

(b) Except as permitted in [§ 35.6285](#), the Award Official must sign the assistance agreement before costs are incurred. The recipient may incur costs between the date the Award Official signs the assistance agreement and the date the recipient signs the agreement, if the costs are identified in the agreement and the recipient does not change the agreement.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

#### [§ 35.6280 Payments.](#)

(a) *General.* In addition to the following requirements, the recipient must comply with the requirements regarding payment described in [2 CFR 200.305](#).

(1) *Assignment of payment.* The recipient cannot assign the right to receive payments under the recipient's Cooperative Agreement. EPA will make payments only to the payee identified in the Cooperative Agreement.

(2) *Interest.* The interest a recipient earns on an advance of EPA funds is subject to the requirements of [2 CFR 200.305](#).

(b) *Payment method -*

(1) *Letter of credit.* In order to receive payment by the letter of credit method, the recipient must comply with the requirements regarding letter of credit described in [2 CFR 200.305](#). The recipient must identify and charge costs to specific sites, activities, and operable units, as applicable, for drawdown purposes as specified in the Cooperative Agreement.

(2) *Reimbursement.* If the recipient is unable to meet letter of credit requirements, EPA will pay the recipient by reimbursement. The recipient must comply with the requirements regarding reimbursement described in [2 CFR 200.305](#).

(3) *Working capital advances.* If the recipient is unable to meet the criteria for payment by either letter of credit or reimbursement, EPA may provide cash on a working capital advance basis. Under this procedure EPA shall advance cash to the recipient to cover its estimated disbursement needs for an initial period generally geared to the recipient's disbursing cycle. Thereafter, EPA shall reimburse the recipient for its actual cash disbursements. In such cases, the recipient must comply with the requirements regarding working capital advances described in [2 CFR 200.305](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[§ 35.6285 Recipient payment of response costs.](#)

The recipient may pay for its share of response costs using cash, services, credits or any combination of these, as follows:

(a) *Cash.* The recipient may pay for its share of response costs in the form of cash.

(b) *Services.* The recipient may provide equipment and services to satisfy its cost share requirements under Cooperative Agreements. The recipient must comply with the requirements regarding in-kind and donated services described in [2 CFR 200.306](#).

(c) *Credit -*

(1) *General credit requirements.* Credits are limited to State site-specific expenses that EPA determines to be reasonable, documented, direct, out-of-pocket expenditures of non-Federal funds for remedial action, as defined in CERCLA section 101(24), that are consistent with a permanent remedy at the site. Credits are established on a site-specific basis. Only a State may claim credit.

(i) The State may claim credit for response activity obligations or expenditures incurred by the State or political subdivision between January 1, 1978, and December 11, 1980.



(ii) The State may claim credit for remedial action expenditures made by the State after October 17, 1986. If such expenditures occurred after the site was listed on the NPL (Appendix B to 40 CFR Part 300), they will be eligible for a credit only if the State initiated the remedial action after obtaining EPA's written approval.

(iii) The State may not claim credit for removal actions taken after December 11, 1980.

(2) *Credit submission requirements.* Although EPA may require additional documentation, the State must submit the following before EPA will approve the use of the credit:

(i) Specific amounts claimed for credit, by site (estimated amounts are unacceptable), based on supporting cost documentation;

(ii) Units of government (State agency, county, local) that incurred the costs, by site;

(iii) Description of the specific function performed by each unit of government at each site;

(iv) Certification (signed by the State's fiscal manager or the financial director for each unit of government) that credit costs have not been previously reimbursed by the Federal Government or any other party, and have not been used for matching purposes under any other Federal program or grant; and

(v) Documentation, if requested by EPA, to ensure the actions undertaken at the site are cost eligible and consistent with CERCLA, as amended, and the NCP requirements in [40 CFR part 300](#). This requirement does not apply for costs incurred before December 11, 1980.

(3) *Use of credit.* The State must first apply credit at the site at which it was earned. With the approval of EPA, the State may use excess credit earned at one site for its cost share at another site (*See CERCLA section 104(c)(5)*). Credits must be applied on a site-specific basis, and, therefore, may not be used to meet State cost share requirements for Core Program Cooperative Agreements. EPA will not reimburse excess credit.

(4) *Credit verification procedures.* Expenditure submissions are subject to verification by audit or other financial review. EPA may conduct a technical review (including inspection) to verify that the claimed remedial action is consistent with CERCLA and the NCP ([40 CFR part 300](#)).

(d) *Excess cash cost share contributions/overmatch.* The recipient may direct EPA to return the excess funds or to use the overmatch at one site to meet the cost share obligation at another site. The recipient may not use contributions in excess of the required cost share at one site to meet the cost share obligation for the Core Program cost share. Overmatch is not "credit" pursuant to [paragraph \(c\)\(3\)](#) of this section.

(e) *Cost sharing.* The recipient must comply with the requirements regarding cost sharing described in [2 CFR 200.306](#). Finally, the recipient cannot use costs incurred under the Core Program to offset cost share requirements at a site.

(f) *Advance match.*

(1) A Cooperative Agreement for a site-specific response entered into after October 17, 1986, cannot authorize a State to contribute funds during remedial planning and then apply those contributions to the remedial action cost share (advance match).

(2) A State may seek reimbursement for costs incurred under Cooperative Agreements which authorize advance match.

(3) Reimbursements are subject to the availability of appropriated funds.

(4) If the State does not seek reimbursement, EPA will apply the advance match to off-set the State's required cost share for remedial action at the site. The State may not use advance match for credit at any other site, nor may the State receive reimbursement until the conclusion of CERCLA-funded remedial response activities. Also, the State may not use advance match for credit against cost share obligations for Core Program Cooperative Agreements.

(5) Claims for advance match are subject to verification by audit.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[§ 35.6290 Program income.](#)

The recipient must comply with the requirements regarding program income described in [2 CFR 200.307](#) and [2 CFR part 1500](#). Recoveries of Federal cost share amounts are not program income, and whether such recoveries are received before or after expiration of the Cooperative Agreement, must be reimbursed promptly to EPA.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[Personal Property Requirements Under a Cooperative Agreement](#)

[§ 35.6300 General personal property acquisition and use requirements.](#)

(a) *General.*

(1) Property may be acquired only when authorized in the Cooperative Agreement.

(2) The recipient must acquire the property during the approved project period.

(3) The recipient must:

(i) Charge property costs by site, activity, and operable unit, as applicable;

(ii) Document the use of the property by site, activity, and operable unit, as applicable; and

(iii) Solicit and follow EPA's instructions on the disposal of any property purchased with CERCLA funds as specified in [§§ 35.6340](#) and [35.6345](#).

(b) *Exception.* The recipient is not required to charge property costs by site under a pre-remedial or Core Program Cooperative Agreement.

#### [§ 35.6305 Obtaining supplies.](#)

To obtain supplies, the recipient must agree to comply with the requirements in [§§ 35.6300](#), [35.6315\(b\)](#), [35.6325](#) through [35.6340](#), and [35.6350](#). Supplies obtained with Core Program funds must be for non-site-specific purposes. All purchases of supplies under the Core Program must comply with the requirements in [§§ 35.6300](#), [35.6315\(b\)](#), [35.6325](#) through [35.6340](#), and [35.6350](#), except where these requirements are site-specific.

#### [§ 35.6310 Obtaining equipment.](#)

To obtain equipment, the recipient must agree to comply with the requirements in [§§ 35.6300](#) and [35.6315](#) through [35.6350](#).

#### [§ 35.6315 Alternative methods for obtaining property.](#)

(a) *Purchase equipment with recipient funds.* The recipient may purchase equipment with the recipient's own funds and may charge EPA a fee for using equipment on a CERCLA-funded project. The fee must be based on a usage rate, subject to the usage rate requirements in [§ 35.6320](#).

(b) *Borrow federally owned property.* The recipient may borrow federally owned property, with the exception of motor vehicles, for use on CERCLA-funded projects. The loan of the federally owned property may only extend through the project period. At the end of the project period, or when the federally owned property is no longer needed for the project, the recipient must return the property to the Federal Government.

(c) *Lease, use contractor services, or purchase with CERCLA funds.* To acquire equipment through lease, use of contractor services, or purchase with CERCLA funds, the recipient must conduct and document a cost comparison analysis to determine which of these methods of obtaining equipment is the most cost effective. In order to obtain the equipment, the recipient must submit documentation of the cost comparison analysis to EPA for approval. The recipient must obtain the equipment through the most cost-effective method, subject to the following requirements:

(1) *Lease or rent equipment.* If it is the most cost-effective method of acquisition, the recipient may lease or rent equipment, subject only to the requirements in [§ 35.6300](#).

(2) *Use contractor services.*

(i) If it is the most cost-effective method of acquisition, the recipient may hire the services of a contractor.

(ii) The recipient must obtain award official approval before authorizing the contractor to purchase equipment with CERCLA funds. (See [§ 35.6325](#), regarding the title and vested interest of equipment purchased with CERCLA funds.) This does not apply for recipients who have used the sealed bids method of procurement.

(iii) The recipient must require the contractor to allocate the cost of the contractor services by site, activity, and operable unit, as applicable.

(3) *Purchase equipment with CERCLA funds.* If equipment purchase is the most cost-effective method of obtaining the equipment, the recipient may purchase the equipment with CERCLA funds. To purchase equipment with CERCLA funds, the recipient must comply with the following requirements:

(i) The recipient must include in the Cooperative Agreement application a list of all items of equipment to be purchased with CERCLA funds, with the price of each item.

(ii) If the equipment is to be used on sites, the recipient must allocate the cost of the equipment by site, activity, and operable unit, as applicable, by applying a usage rate subject to the usage rate requirements in [§ 35.6320](#).

(iii) The recipient may not use CERCLA funds to purchase a transportable or mobile treatment system.

(iv) Equipment obtained with Core Program funds must be for non-site-specific purposes. All purchases of equipment must comply with the requirements in [§§ 35.6300](#), and [35.6310](#) through [35.6350](#), except where these requirements are site-specific.

#### [§ 35.6320 Usage rate.](#)

(a) *Usage rate approval.* To charge EPA a fee for use of equipment purchased with recipient funds or to allocate the cost of equipment by site, activity, and operable unit, as applicable, the recipient must apply a usage rate. The recipient must submit documentation of the usage rate computation to EPA. The EPA-approved usage rate must be included in the Cooperative Agreement before the recipient incurs these equipment costs.

(b) *Usage rate application.* The recipient must record the use of the equipment by site, activity, and operable unit, as applicable, and must apply the usage rate to calculate equipment charges by site, activity, and operable unit, as applicable. For Core Program and pre-remedial activities, the recipient is not required to apply a usage rate.

#### [§ 35.6325 Title and EPA interest in CERCLA-funded property.](#)

(a) *EPA's interest in CERCLA-funded property.* EPA has an interest (the percentage of EPA's participation in the total award) in both equipment and supplies purchased with CERCLA funds.

(b) *Title in CERCLA-funded property.* Title in both equipment and supplies purchased with CERCLA funds vests in the recipient.

(1) *Right to transfer title.* EPA retains the right to transfer title of all property purchased with CERCLA funds to the Federal Government or a third party within 120 calendar days after project completion or at the time of disposal.

(2) *Equipment used as all or part of the remedy.* The following requirements apply to equipment used as all or part of the remedy:

(i) *Fixed in-place equipment.* EPA no longer has an interest in fixed in-place equipment once the equipment is installed.

(ii) *Equipment that is an integral part of services to individuals.* EPA no longer has an interest in equipment that is an integral part of services to individuals, such as pipes, lines, or pumps providing hookups for homeowners on an existing water distribution system, once EPA certifies that the remedy is operational and functional.

[§ 35.6330 Title to federally owned property.](#)

Title to all federally owned property vests in the Federal Government.

[§ 35.6335 Property management standards.](#)

The recipient must comply with the following property management standards for property purchased with CERCLA funds. The recipient may use its own property management system if it meets the following standards.

(a) *Control.* The recipient must maintain:

(1) *Property records* for CERCLA-funded property which include the contents specified in [§ 35.6700\(c\)](#);

(2) *A control system* that ensures adequate safeguards for prevention of loss, damage, or theft of the property. The recipient must make provisions for the thorough investigation and documentation of any loss, damage, or theft;

(3) *Procedures* to ensure maintenance of the property are in good condition and periodic calibration of the instruments used for precision measurements;

(4) *Sales procedures* to ensure the highest possible return, if the recipient is authorized to sell the property;

(5) *Provisions for financial control and accounting* in the financial management system of all equipment; and

(6) *Identification* of all federally owned property.

(b) *Inventory and reporting for CERCLA-funded equipment -*

(1) *Physical inventory.* The recipient must conduct a physical inventory at least once every two years for all equipment except that which is part of the in-place remedy. The recipient must reconcile physical inventory results with the equipment records.

(2) *Inventory reports.* The recipient must comply with requirements for inventory reports set forth in [§ 35.6660](#).

(c) *Inventory and reporting for federally owned property -*

(1) *Physical inventory.* The recipient must conduct a physical inventory:

(i) Annually;

(ii) When the property is no longer needed; and

(iii) Within 90 days after the end of the project period.

(2) *Inventory reports.* The recipient must comply with requirements for inventory reports in [§ 35.6660](#).

[§ 35.6340 Disposal of CERCLA-funded property.](#)

(a) *Equipment.* For equipment that is no longer needed, or at the end of the project period, whichever is earlier, the recipient must:

(1) Analyze two alternatives: The cost of leaving the equipment in place, and the cost of removing the equipment and disposing of it in another manner.

(2) Document the analysis of the two alternatives in the inventory report. See [§ 35.6660](#) regarding requirements for the inventory report.

(i) If it is most cost-effective to remove the equipment and dispose of it in another manner:

(A) If the equipment has a residual fair market value of \$5,000 or more, the recipient must request disposition instructions from EPA in the inventory report. See [§ 35.6345](#) for equipment disposal options.

(B) If the equipment has a residual fair market value of less than \$5,000, the recipient may retain the equipment for the recipient's use on another CERCLA site. If, however, there is any



remaining residual value at the time of final disposition, the recipient must reimburse the Hazardous Substance Superfund for EPA's vested interest in the current fair market value of the equipment at the time of disposition.

(ii) If it is most cost-effective to leave the equipment in place, recommend in the inventory report that the equipment be left in place.

(3) Submit the inventory report to EPA, even if EPA has stopped supporting the project.

(b) *Supplies.*

(1) If supplies have an aggregate fair market value of \$5,000 or more at the end of the project period, the recipient must take one of the following actions at the direction of EPA:

(i) Use the supplies on another CERCLA project and reimburse the original project for the fair market value of the supplies;

(ii) If both the recipient and EPA concur, keep the supplies and reimburse the Hazardous Substance Superfund for EPA's interest in the current fair market value of the supplies; or

(iii) Sell the supplies and reimburse the Hazardous Substance Superfund for EPA's interest in the current fair market value of the supplies, less any reasonable selling expenses.

(2) If the supplies remaining at the end of the project period have an aggregate fair market value of less than \$5,000, the recipient may keep the supplies to use on another CERCLA project. If the recipient cannot use the supplies on another CERCLA project, then the recipient may keep or sell the supplies without reimbursing the Hazardous Substance Superfund.

[§ 35.6345 Equipment disposal options.](#)

The following disposal options are available:

(a) Use the equipment on another CERCLA project and reimburse the original project for the fair market value of the equipment;

(b) If both the recipient and EPA concur, keep the equipment and reimburse the Hazardous Substance Superfund for EPA's interest in the current fair market value of the equipment;

(c) Sell the equipment and reimburse the Hazardous Substance Superfund for EPA's interest in the current fair market value of the equipment, less any reasonable selling expenses; or

(d) Return the equipment to EPA and, if applicable, EPA will reimburse the recipient for the recipient's proportionate share in the current fair market value of the equipment.

[§ 35.6350 Disposal of federally owned property.](#)

When federally owned property is no longer needed, or at the end of the project, the recipient must inform EPA that the property is available for return to the Federal Government. EPA will send disposition instructions to the recipient.

### Real Property Requirements Under a Cooperative Agreement

#### § 35.6400 Acquisition and transfer of interest.

(a) An interest in real property may be acquired only with prior approval of EPA.

(1) If the recipient acquires real property in order to conduct the response, the recipient with jurisdiction over the property must agree to hold the necessary property interest.

(2) If it is necessary for the Federal Government to acquire the interest in real estate to permit conduct of a remedial action, the acquisition may be made only if the State provides assurance that it will accept transfer of the acquired interest in accordance with [40 CFR 300.510\(f\)](#) of the NCP. States must follow the requirements in [§ 35.6105\(b\)\(5\)](#).

(b) The recipient must comply with applicable Federal regulations for real property acquisition under assistance agreements contained in [part 4 of this chapter](#), “Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.”

#### § 35.6405 Use.

The recipient must comply with the requirements regarding real property described in [2 CFR 200.311](#).

[[79 FR 76060](#), Dec. 19, 2014]

### Copyright Requirements Under a Cooperative Agreement

#### § 35.6450 General requirements.

The recipient must comply with the requirements regarding copyrights described in [2 CFR part 200.315](#). The recipient must comply with the requirements regarding contract copyright provisions described in [§ 35.6595\(b\)\(2\)](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

### Use of Recipient Employees (“Force Account”) Under a Cooperative Agreement

#### § 35.6500 General requirements.

(a) Force Account work is the use of the recipient's own employees or equipment for construction, construction-related activities (including architecture and engineering services), or repair or improvement to a facility. When using Force Account work, the recipient must

demonstrate that the employees can complete the work as competently as, and more economically than, contractors, or that an emergency necessitates the use of the Force Account.

(b) Where the value of Force Account services exceeds the simplified acquisition threshold, the recipient must receive written authorization for use from the award official.

### Procurement Requirements Under a Cooperative Agreement

#### § 35.6550 Procurement system standards.

(a) *Recipient standards.*

(1) In addition to the procurement standards described in 2 CFR 200.317 through 200.327 and 2 CFR part 1500, the State shall comply with the requirements in the following: Paragraphs (a)(5), (a)(9), and (b) of this section, § 35.6555(c), in § 35.6565 the first sentence of the introductory text, the first sentence of paragraph (b), paragraph (d), and §§ 35.6570, 35.6575, and 35.6600. Political subdivisions and Tribes must follow all of the requirements included or referenced in this section through § 35.6610.

(2) *EPA review.* EPA reserves the right to review any recipient's procurement system or procurement action under a Cooperative Agreement.

(3) *Code of conduct.* The recipient must comply with the requirements of 2 CFR 200.318 (c)(1) which describes standards of conduct for employees, officers, and agents of the recipient.

(4) *Completion of contractual and administrative issues.*

(i) The recipient is responsible for the settlement and satisfactory completion in accordance with sound business judgment and good administrative practice of all contractual and administrative issues arising out of procurements under the Cooperative Agreement.

(ii) EPA will not substitute its judgment for that of the recipient unless the matter is primarily a Federal concern.

(iii) Violations of law will be referred to the local, State, Tribal, or Federal authority having proper jurisdiction.

(5) *Selection procedures.* The recipient must have written selection procedures for procurement transactions.

(i) EPA may not participate in a recipient's selection panel except to provide technical assistance. EPA staff providing such technical assistance:

(A) Shall constitute a minority of the selection panel (limited to making recommendations on qualified offers and acceptable proposals based on published evaluation criteria) for the contractor selection process; and

(B) Are not permitted to participate in the negotiation and award of contracts.

(ii) When selecting a contractor, recipients:

(A) May not use EPA contractors to provide any support related to procuring a State contractor.

(B) May use the Corps of Engineers for review of State bidding documents, requests for proposals and bids and proposals received.

(6) *Award.* The recipient may award a contract only to a responsible contractor, as described in [2 CFR 200.318 \(h\)](#) and must ensure that each contractor performs in accordance with all the provisions of the contract. (See also [§ 35.6020](#).)

(7) *Protest procedures.* The recipient must comply with the requirements described in [2 CFR 200.318 \(k\)](#) regarding protest procedures.

(8) [Reserved]

(9) *Intergovernmental agreements.*

(i) To foster greater economy and efficiency, recipients are encouraged to enter into intergovernmental agreements for procurement or use of common goods and services.

(ii) Although intergovernmental agreements are not subject to the requirements set forth in this section through [§ 35.6610](#), all procurements under intergovernmental agreements are subject to these requirements except for procurements that are:

(A) Incidental to the purpose of the assistance agreement; and

(B) Made through a central public procurement unit.

(10) *Value engineering.* The recipient is encouraged to include value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions.

(b) *Contractor standards -*

(1) *Disclosure requirements regarding Potentially Responsible Party relationships.* The recipient must require each prospective contractor to provide with its bid or proposal:

(i) Information on its financial and business relationship with all PRPs at the site and with the contractor's parent companies, subsidiaries, affiliates, subcontractors, or current clients at the site. Prospective contractors under a Core Program Cooperative Agreement must provide comparable information for all sites within the recipient's jurisdiction. (This disclosure requirement encompasses past financial and business relationships, including services related to any proposed or pending litigation, with such parties);

(ii) Certification that, to the best of its knowledge and belief, it has disclosed such information or no such information exists; and

(iii) A statement that it shall disclose immediately any such information discovered after submission of its bid or proposal or after award. The recipient shall evaluate such information and if a member of the contract team has a conflict of interest which prevents the team from serving the best interests of the recipient, the prospective contractor may be declared nonresponsible and the contract awarded to the next eligible bidder or offeror.

(2) *Conflict of interest* -

(i) *Conflict of interest notification.* The recipient must require the contractor to notify the recipient of any actual, apparent, or potential conflict of interest regarding any individual working on a contract assignment or having access to information regarding the contract. This notification shall include both organizational conflicts of interest and personal conflicts of interest. If a personal conflict of interest exists, the individual who is affected shall be disqualified from taking part in any way in the performance of the assigned work that created the conflict of interest situation.

(ii) *Contract provisions.* The recipient must incorporate the following provisions or their equivalents into all contracts, except those for well-drilling, fence erecting, plumbing, utility hook-ups, security guard services, or electrical services:

(A) *Contractor data.* The contractor shall not provide data generated or otherwise obtained in the performance of contractor responsibilities under a contract to any party other than the recipient, EPA, or its authorized agents for the life of the contract, and for a period of five years after completion of the contract.

(B) *Employment.* The contractor shall not accept employment from any party other than the recipient or Federal agencies for work directly related to the site(s) covered under the contract for five years after the contract has terminated. The recipient agency may exempt the contractor from this requirement through a written release. This release must include EPA concurrence.

(3) *Certification of independent price determination.* The recipient must require that each contractor include in its bid or proposal a certification of independent price determination. This document certifies that no collusion, as defined by Federal and State antitrust laws, occurred during bid preparation.

(4) *Recipient's Contractors.* The recipient must require its contractor to comply with the requirements in [§§ 35.6270\(a\)\(1\)](#) and [\(2\)](#); [35.6320 \(a\)](#) and [\(b\)](#); [35.6335](#); [35.6700](#); and [35.6705](#). For additional contractor requirements, see also [§ 35.6710\(c\)](#); [35.6590\(b\)](#); and [35.6610](#).

[[72 FR 24504](#), May 2, 2007, as amended at [73 FR 15922](#), Mar. 26, 2008; [79 FR 76060](#), Dec. 19, 2014; [87 FR 30400](#), May 19, 2022]

[§ 35.6555 Competition.](#)

The recipient must conduct all procurement transactions in a manner providing maximum full and open competition.

(a) *Restrictions on competition.* Inappropriate restrictions on competition include the following:

- (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
- (2) Requiring unnecessary experience and excessive bonding requirements;
- (3) Noncompetitive pricing practices between firms or between affiliated companies;
- (4) Noncompetitive awards to consultants that are on retainer contracts;
- (5) Organizational conflicts of interest;
- (6) Specifying only a “brand name” product, instead of allowing “an equal” product to be offered and describing the performance of other relevant requirements of the procurement; and
- (7) Any arbitrary action in the procurement process.

(b) *Geographic and Indian Tribe preferences -*

(1) *Geographic.* When conducting a procurement, the recipient must prohibit the use of statutorily or administratively imposed in-State or local geographical preferences in evaluating bids or proposals. However, nothing in this section preempts State licensing laws. In addition, when contracting for architectural and engineering (A/E) services, the recipient may use geographic location as a selection criterion, provided that when geographic location is used, its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(2) *Indian Tribe.* Any contract or subcontract awarded by an Indian Tribe or Indian intertribal consortium shall comply with the requirements of the Indian Self Determination Act.

(c) *Written specifications.* The recipient's written specifications must include a clear and accurate description of the technical requirements and the qualitative nature of the material, product or service to be procured.

(1) This description must not contain features which unduly restrict competition, unless the features are necessary to:

- (i) Test or demonstrate a specific thing;
- (ii) Provide for necessary interchangeability of parts and equipment; or
- (iii) Promote innovative technologies.



(2) The recipient must avoid the use of detailed product specifications if at all possible.

(d) *Public notice.* When soliciting bids or proposals, the recipient must allow sufficient time (generally 30 calendar days) between public notice of the proposed project and the deadline for receipt of bids or proposals. The recipient must publish the public notice in professional journals, newspapers, or publications of general circulation over a reasonable area.

(e) *Prequalified lists.* Recipients may use prequalified lists of persons, firms, or products to acquire goods and services. The list must be current and include enough qualified sources to ensure maximum open and free competition. Recipients must not preclude potential bidders from qualifying during the solicitation period.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[§ 35.6565 Procurement methods.](#)

The recipient must comply with the requirements for payment to consultants described in [2 CFR 1500.10](#). In addition, the recipient must comply with the following requirements:

(a) *Small purchase procedures.* Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the simplified acquisition threshold in the aggregate. If small purchase procurements are used, the recipient must obtain and document price or rate quotations from an adequate number of qualified sources.

(b) *Sealed bids (formal advertising).* (For a remedial action award contract, except for Architectural/Engineering services and post-removal site control, the recipient must obtain the award official's approval to use a procurement method other than the sealed bid method.) Bids are publicly solicited and a fixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price.

(1) In order for the recipient to use the sealed bid method, the following conditions must be met:

(i) A complete, adequate, and realistic specification or purchase description is available;

(ii) Two or more responsible bidders are willing and able to compete effectively for the business; and

(iii) The procurement lends itself to a fixed-price contract and the selection of the successful bidder can be made principally on the basis of price.

(2) If the recipient uses the sealed bid method, the recipient must comply with the following requirements:

(i) Publicly advertise the invitation for bids and solicit bids from an adequate number of known suppliers, providing them sufficient time prior to the date set for opening the bids;

(ii) The invitation for bids, which must include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;

(iii) Publicly open all bids at the time and place prescribed in the invitation for bids;

(iv) Award the fixed-price contract in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, the recipient shall consider factors such as discounts, transportation cost, and life cycle costs in determining which bid is lowest. The recipient may only use payment discounts to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(v) If there is a sound documented reason, the recipient may reject any or all bids.

(c) *Competitive proposals.* The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If the recipient uses the competitive proposal method, the following requirements apply:

(1) Recipients must publicize requests for proposals and all evaluation factors and must identify their relative importance. The recipient must honor any response to publicized requests for proposals to the maximum extent practical;

(2) Recipients must solicit proposals from an adequate number of qualified sources;

(3) Recipients must have a method for conducting technical evaluations of the proposals received and for selecting awardees;

(4) Recipients must award the contract to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(5) Recipients may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitor's qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. This method, where price is not used as a selection factor, may only be used in the procurement of A/E professional services. The recipient may not use this method to purchase other types of services even though A/E firms are a potential source to perform the proposed effort.

(d) *Noncompetitive proposals.*

(1) The recipient may procure by noncompetitive proposals only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals, and one of the following circumstances applies:

- (i) The item is available only from a single source;
  - (ii) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation (a declaration of an emergency under State law does not necessarily constitute an emergency under the EPA Superfund program's criteria);
  - (iii) The award official authorized noncompetitive proposals; or
  - (iv) After solicitation of a number of sources, competition is determined to be inadequate.
- (2) When using noncompetitive procurement, the recipient must conduct a cost analysis in accordance with the requirements described in [§ 35.6585](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014; [87 FR 30400](#), May 19, 2022]

[§ 35.6570 Use of the same engineer during subsequent phases of response.](#)

- (a) If the public notice clearly stated the possibility that the firm or individual selected could be awarded a contract for follow-on services and initial procurement complied with the procurement requirements, the recipient of a CERCLA remedial response Cooperative Agreement may use the engineer procured to conduct any or all of the follow-on engineering activities without going through the public notice and evaluation procedures.
- (b) The recipient may also use the same engineer during subsequent phases of the project in the following cases:
  - (1) Where the recipient conducted the RI, FS, or design activities without EPA assistance but is using CERCLA funds for follow-on activities, the recipient may use the engineer for subsequent work provided the recipient certifies:
    - (i) That it complied with the procurement requirements in [§ 35.6565](#) when it selected the engineer and the code of conduct requirements described in [2 CFR 200.318\(c\)\(1\)](#).
    - (ii) That any CERCLA-funded contract between the engineer and the recipient meets all of the other provisions as described in the procurement requirements in this subpart.
  - (2) Where EPA conducted the RI, FS, or design activities but the recipient will assume the responsibility for subsequent phases of response under a Cooperative Agreement, the recipient may use, with the award official's approval, EPA's engineer contractor without further public notice or evaluation provided the recipient follows the rest of the procurement requirements to award the contract.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014]

[§ 35.6575 Restrictions on types of contracts.](#)

(a) *Prohibited contracts.* The recipient's procurement system must not allow cost-plus-percentage-of-cost (e.g., a multiplier which includes profit) or percentage-of-construction-cost types of contracts.

(b) *Removal.* Under a removal Cooperative Agreement, the recipient must award a fixed-price contract (lump sum, unit price, or a combination of the two) when procuring contractor support, regardless of the procurement method selected, unless the recipient obtains the award official's prior written approval.

(c) *Time and material contracts.* The recipient may use time and material contracts only if no other type of contract is suitable, and if the contract includes a ceiling price that the contractor exceeds at its own risk.

§ 35.6580 [Reserved]

[§ 35.6585 Cost and price analysis.](#)

(a) *General.* The recipient must conduct and document a cost or price analysis in connection with every procurement action including contract modification.

(1) *Cost analysis.* The recipient must conduct and document a cost analysis for all negotiated contracts over the simplified acquisition threshold and for all change orders regardless of price. A cost analysis is not required when adequate price competition exists and the recipient can establish price reasonableness. The recipient must base its determination of price reasonableness on a catalog or market price of a commercial product sold in substantial quantities to the general public, or on prices set by law or regulation.

(2) *Price analysis.* In all instances other than those described in [paragraph \(a\)\(1\)](#) of this section, the recipient must perform a price analysis to determine the reasonableness of the proposed contract price.

(b) *Profit analysis.* For each contract in which there is no price competition and in all cases in which cost analysis is performed, the recipient must negotiate profit as a separate element of the price. To establish a fair and reasonable profit, consideration will be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

[§ 35.6590 Bonding and insurance.](#)

(a) *General.* The recipient must meet the requirements regarding bonding described in [2 CFR 200.326](#). The recipient must clearly and accurately state in the contract documents the bonds and insurance requirements, including the amounts of security coverage that a bidder or offeror must provide.

(b) *Accidents and catastrophic loss.* The recipient must require the contractor to provide insurance against accidents and catastrophic loss to manage any risk inherent in completing the project.

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76060](#), Dec. 19, 2014; [87 FR 30400](#), May 19, 2022]

[§ 35.6595 Contract provisions.](#)

(a) *General.* Each contract must be a sound and complete agreement, and include the following provisions:

- (1) Nature, scope, and extent of work to be performed;
- (2) Time frame for performance;
- (3) Total cost of the contract; and
- (4) Payment provisions.

(b) *Other contract provisions.* Recipients' contracts must include the following provisions:

(1) *Energy efficiency.* A contract must comply with mandatory standards and policies on energy efficiency contained in the State's energy conservation plan, which is issued under [10 CFR part 420](#).

(2) *Patents inventions, and copyrights.* All contracts must include notice of EPA requirements and regulations pertaining to reporting and patent rights under any contract involving research, developmental, experimental or demonstration work with respect to any discovery or invention which arises or is developed while conducting work under a contract. This notice shall also include EPA requirements and regulations pertaining to copyrights and rights to data contained in [2 CFR 200.315](#).

(3) *Labor standards.* The recipient must comply with Appendix II to 2 CFR part 200 - Contract Provisions for Non-Federal Entity Contracts Under Federal Awards.

(4) *Conflict of interest.* The recipient must include provisions pertaining to conflict of interest as described in [§ 35.6550\(b\)\(2\)\(ii\)](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76061](#), Dec. 19, 2014]

[§ 35.6600 Contractor claims.](#)

(a) *General.* The recipient must conduct an administrative and technical review of each claim before EPA will consider funding these costs.

(b) *Claims settlement.* The recipient may incur costs (including legal, technical and administrative) to assess the merits of or to negotiate the settlement of a claim by or against the recipient under a contract, provided:

- (1) The claim arises from work within the scope of the Cooperative Agreement;
- (2) A formal Cooperative Agreement amendment is executed specifically covering the costs before they are incurred;
- (3) The costs are not incurred to prepare documentation that should be prepared by the contractor to support a claim against the recipient; and
- (4) The award official determines that there is a significant Federal interest in the issues involved in the claim.

(c) *Claims defense.* The recipient may incur costs (including legal, technical and administrative) to defend against a contractor claim for increased costs under a contract or to prosecute a claim to enforce a contract provided:

- (1) The claim arises from work within the scope of the Cooperative Agreement;
- (2) A formal Cooperative Agreement amendment is executed specifically covering the costs before they are incurred;
- (3) Settlement of the claim cannot occur without arbitration or litigation;
- (4) The claim does not result from the recipient's mismanagement;
- (5) The award official determines that there is a significant Federal interest in the issues involved in the claim; and
- (6) In the case of defending against a contractor claim, the claim does not result from the recipient's responsibility for the improper action of others.

[§ 35.6605 Privity of contract.](#)

Neither EPA nor the United States shall be a party to any contract nor to any solicitation or request for proposals.

[§ 35.6610 Contracts awarded by a contractor.](#)

The recipient must require its contractor to comply with the following provisions in the award of contracts (i.e., subcontracts). (This section does not apply to a supplier's procurement of materials to produce equipment, materials and catalog, off-the-shelf, or manufactured items.)

- (a) The requirements referenced in [§ 35.6020](#).



- (b) The limitations on contract award in [§ 35.6550\(a\)\(6\)](#).
- (c) [Reserved]
- (d) The requirements regarding specifications in [§ 35.6555 \(a\)\(6\)](#) and [\(c\)](#).
- (e) The Federal cost principles in [2 CFR part 200 subpart E](#).
- (f) The prohibited types of contracts in [§ 35.6575\(a\)](#).
- (g) The cost, price analysis, and profit analysis requirements in [§ 35.6585](#).
- (h) The applicable provisions in [§ 35.6595 \(b\)](#).
- (i) The applicable provisions in [§ 35.6555\(b\)\(2\)](#).

[[72 FR 24504](#), May 2, 2007, as amended at [73 FR 15922](#), Mar. 26, 2008; [79 FR 76061](#), Dec. 19, 2014]

### [Reports Required Under a Cooperative Agreement](#)

#### [§ 35.6650 Progress reports.](#)

- (a) *Reporting frequency.* The recipient must submit progress reports as specified in the Cooperative Agreement. Progress reports will be required no more frequently than quarterly, and will be required at least annually. Notwithstanding the requirements of [2 CFR 200.328](#) and [200.329](#), the reports shall be due within 60 days after the reporting period.
- (b) *Content.* The progress report must contain the following information:
  - (1) An explanation of work accomplished during the reporting period, delays, or other problems, if any, and a description of the corrective measures that are planned. For pre-remedial Cooperative Agreements, the report must include a list of the site-specific products completed and the estimated number of technical hours spent to complete each product.
  - (2) A comparison of the percentage of the project completed to the project schedule, and an explanation of significant discrepancies.
  - (3) A comparison of the estimated funds spent to date to planned expenditures and an explanation of significant discrepancies. For remedial, enforcement, and removal reports, the comparison must be on a per task basis.
  - (4) An estimate of the time and funds needed to complete the work required in the Cooperative Agreement, a comparison of that estimate to the time and funds remaining, and a justification for any increase.

[[72 FR 24504](#), May 2, 2007, as amended at [75 FR 49417](#), Aug. 13, 2010; [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

[§ 35.6655 Notification of significant developments.](#)

Events may occur between the scheduled performance reporting dates which have significant impact upon the Cooperative Agreement-supported activity. In such cases, the recipient must inform the EPA project officer as soon as the following types of conditions become known:

(a) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(b) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

[§ 35.6660 Property inventory reports.](#)

(a) *CERCLA-funded property* -

(1) *Content.* The report must contain the following information:

(i) Classification and value of remaining supplies;

(ii) Description of all equipment purchased with CERCLA funds, including its current condition;

(iii) Verification of the current use and continued need for the equipment by site, activity, and operable unit, as applicable;

(iv) Notification of any property which has been stolen or vandalized; and

(v) A request for disposition instructions for any equipment no longer needed on the project.

(2) *Reporting frequency.* The recipient must submit an inventory report to EPA at the following times:

(i) Within 90 days after completing any CERCLA-funded project or any response activity at a site; and

(ii) When the equipment is no longer needed for any CERCLA-funded project or any response activity at a site.

(b) *Federally owned property* -

(1) *Content.* The recipient must include the following information for each federally owned item in the inventory report:

- (i) Description;
- (ii) Decal number;
- (iii) Current condition; and
- (iv) Request for disposition instructions.

(2) *Reporting frequency.* The recipient must submit an inventory report to the appropriate EPA property accountable officer at the following times:

- (i) Annually, due to EPA on the anniversary date of the award;
- (ii) When the property is no longer needed; and
- (iii) Within 90 days after the end of the project period.

§ 35.6665 [Reserved]

[§ 35.6670 Financial reports.](#)

(a) *General.* The recipient must comply with the requirements regarding financial reporting described in [2 CFR 200.328](#).

(b) *Financial Status Report -*

(1) *Content.*

(i) The Financial Status Report (SF-269) must include financial information by site, activity, and operable unit, as applicable.

(ii) A final Financial Status Report (FSR) must have no unliquidated obligations. If any obligations remain unliquidated, the FSR is considered an interim report and the recipient must submit a final FSR to EPA after liquidating all obligations.

(2) *Reporting frequency.* The recipient must file a Financial Status Report as follows:

(i) If a Financial Status Report is required annually, the report is due 90 days after the end of the Federal fiscal year or as specified in the Cooperative Agreement. If quarterly or semiannual Financial Status Reports are required, reports are due in accordance with [2 CFR 200.328](#);

(ii) Within 90 calendar days after completing each CERCLA-funded response activity at a site (submit the FSR only for each completed activity); and

(iii) Within 90 calendar days after termination or closeout of the Cooperative Agreement.

[[72 FR 24504](#), May 2, 2007, as amended at [75 FR 49417](#), Aug. 13, 2010; [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

## Records Requirements Under a Cooperative Agreement

### § 35.6700 Project records.

The lead agency for the response action must compile and maintain an administrative record consistent with section 113 of CERCLA, the National Contingency Plan, and relevant EPA policy and guidance. In addition, recipients of assistance (whether lead or support agency) are responsible for maintaining project files described as follows.

(a) *General*. The recipient must maintain project records by site, activity, and operable unit, as applicable.

(b) *Financial records*. The recipient must maintain records which support the following items:

- (1) Amount of funds received and expended; and
- (2) Direct and indirect project cost.

(c) *Property records*. The recipient must maintain records which support the following items:

- (1) Description of the property;
- (2) Manufacturer's serial number, model number, or other identification number;
- (3) Source of the property, including the assistance identification number;
- (4) Information regarding whether the title is vested in the recipient or EPA;
- (5) Unit acquisition date and cost;
- (6) Percentage of EPA's interest;
- (7) Location, use and condition (by site, activity, and operable unit, as applicable) and the date this information was recorded; and
- (8) Ultimate disposition data, including the sales price or the method used to determine the price, or the method used to determine the value of EPA's interest for which the recipient compensates EPA in accordance with [§§ 35.6340](#), [35.6345](#), and [35.6350](#).

(d) *Procurement records* -

(1) *General*. The recipient must maintain records which support the following items, and must make them available to the public:

(i) The reasons for rejecting any or all bids; and

(ii) The justification for a procurement made on a noncompetitively negotiated basis.

(2) *Procurements in excess of the simplified acquisition threshold.* The recipient's records and files for procurements in excess of the simplified acquisition threshold must include the following information, in addition to the information required in [paragraph \(d\)\(1\)](#) of this section:

(i) The basis for contractor selection;

(ii) A written justification for selecting the procurement method;

(iii) A written justification for use of any specification which does not provide for maximum free and open competition;

(iv) A written justification for the choice of contract type; and

(v) The basis for award cost or price, including a copy of the cost or price analysis made in accordance with [§ 35.6585](#) and documentation of negotiations.

(e) *Other records.* The recipient must maintain records which support the following items:

(1) Time and attendance records and supporting documentation;

(2) Documentation of compliance with statutes and regulations that apply to the project; and

(3) The number of site-specific technical hours spent to complete each pre-remedial product.

#### [§ 35.6705 Records retention.](#)

(a) *Applicability.* This requirement applies to all financial and programmatic records, supporting documents, statistical records, and other records which are required to be maintained by the terms, program regulations, or the Cooperative Agreement, or are otherwise reasonably considered as pertinent to program regulations or the Cooperative Agreement.

(b) *Length of retention period.* The recipient must maintain all records for 10 years following submission of the final Financial Status Report unless otherwise directed by the EPA award official, and must obtain written approval from the EPA award official before destroying any records. If any litigation, claim, negotiation, audit, cost recovery, or other action involving the records has been started before the expiration of the ten-year period, the records must be retained until completion of the action and resolution of all issues which arise from it, or until the end of the regular ten-year period, whichever is later.

(c) *Substitution of an unalterable electronic format.* An unalterable electronic format, acceptable to EPA, may be substituted for the original records. The copying of any unalterable electronic format must be performed in accordance with the technical regulations concerning Federal

Government records ([36 CFR parts 1220](#) through [1234](#)) and EPA records management requirements.

(d) *Starting date of retention period.* The recipient must comply with the requirements regarding the starting dates for records retention described in [2 CFR 1500.7](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

#### [§ 35.6710 Records access.](#)

(a) *Recipient requirements.* The recipient must comply with the requirements regarding records access described in [2 CFR 200.337](#).

(b) *Availability of records.* The recipient must, with the exception of certain policy, deliberative, and enforcement documents which may be held confidential, ensure that all files are available to the public.

(c) *Contractor requirements.* The recipient must require its contractor to comply with the requirements regarding records access described in [2 CFR 200.337](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

#### [Other Administrative Requirements for Cooperative Agreements](#)

##### [§ 35.6750 Modifications.](#)

The recipient must comply with the requirements regarding changes to the Cooperative Agreement described by subject in [2 CFR part 200](#).

[[79 FR 76061](#), Dec. 19, 2014]

##### [§ 35.6755 Monitoring program performance.](#)

The recipient must comply with the requirements regarding program performance monitoring described in [2 CFR 200.329](#).

[[87 FR 30401](#), May 19, 2022]

##### [§ 35.6760 Remedies for noncompliance and termination.](#)

The recipient must comply with all terms and conditions in the Cooperative Agreement and is subject to the remedies for noncompliance with the terms of an award and termination described in [2 CFR 200.339](#) and [200.340](#).



[[87 FR 30401](#), May 19, 2022]

[§ 35.6765 Non-Federal audit.](#)

The recipient must comply with the requirements regarding non-Federal audits described in [2 CFR part 200 subpart F](#).

[[79 FR 76061](#), Dec. 19, 2014]

[§ 35.6770 Disputes.](#)

The recipient must comply with the requirements regarding dispute resolution procedures described in [2 CFR part 1500 subpart E](#).

[[79 FR 76061](#), Dec. 19, 2014]

[§ 35.6775 Exclusion of third-party benefits.](#)

The Cooperative Agreement benefits only the signatories to the Cooperative Agreement.

[§ 35.6780 Closeout.](#)

(a) Closeout of a Cooperative Agreement, or an activity under a Cooperative Agreement, can take place in the following situations:

- (1) After the completion of all work for a response activity at a site; or
- (2) After all activities under a Cooperative Agreement have been completed; or
- (3) Upon termination of the Cooperative Agreement.

(b) The recipient must comply with the closeout requirements described in [2 CFR 200.344](#) and [200.345](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

[§ 35.6785 Collection of amounts due.](#)

The recipient must comply with the requirements described in [2 CFR 200.346](#) regarding collection of amounts due.

[[87 FR 30401](#), May 19, 2022]

[§ 35.6790 Specific conditions.](#)

If EPA determines that a recipient is not responsible, EPA may impose specific conditions on the award as described in [2 CFR 200.208](#) or restrictions on the award as described in [2 CFR 200.339](#).

[[87 FR 30401](#), May 19, 2022]

### [Requirements for Administering a Superfund State Contract \(SSC\)](#)

#### [§ 35.6800 Superfund State Contract.](#)

A Superfund State Contract (SSC) with a State is required before EPA can obligate or expend funds for a remedial action at a site within the State and before EPA or a political subdivision can conduct the remedial action. An SSC also ensures State or Indian Tribe involvement consistent with CERCLA sections 121(f) and 126, respectively, and obtains the required section 104 assurances (*See* [§ 35.6105\(b\)](#)). An SSC may also be used to document the roles and responsibilities of a State, Indian Tribe, and political subdivision during any response action at a site. A political subdivision may be a signatory to the SSC.

#### [§ 35.6805 Contents of an SSC.](#)

The SSC must include the following provisions:

- (a) *General authorities*, which documents the relevant statutes and regulations (of each government entity that is a party to the contract) governing the contract.
- (b) *Purpose of the SSC*, which describes the response activities to be conducted and the benefits to be derived.
- (c) *Negation of agency relationship between the signatories*, which states that no signatory of the SSC can represent or act on the behalf of any other signatory in any matter associated with the SSC.
- (d) *A site description*, pursuant to [§ 35.6105\(a\)\(2\)\(i\)](#).
- (e) *A site-specific Statement of Work*, pursuant to [§ 35.6105\(a\)\(2\)\(ii\)](#) and a statement of whether the contract constitutes an initial SSC or an amendment to an existing contract.
- (f) *A statement of intention* to follow EPA policy and guidance.
- (g) *A project schedule* to be prepared during response activities.
- (h) *A statement designating a primary contact* for each party to the contract, which designates representatives to act on behalf of each signatory in the implementation of the contract. This statement must document the authority of each project manager to approve modifications to the project so long as such changes are within the scope of the contract and do not significantly impact the SSC.

(i) *The CERCLA assurances*, as appropriate, described as follows:

(1) *Operation and maintenance*. The State must provide an assurance pursuant to § 35.6105(b)(1). The State's responsibility for operation and maintenance generally begins when EPA determines that the remedy is operational and functional or one year after construction completion, whichever is sooner (See, [40 CFR 300.435\(f\)](#)).

(2) *Twenty-year waste capacity*. The State must provide an assurance pursuant to § 35.6105(b)(3).

(3) *Off-site storage, treatment, or disposal*. If off-site storage, destruction, treatment, or disposal is required, the State must provide an assurance pursuant to § 35.6105(b)(4); the political subdivision may not provide this assurance.

(4) *Real property acquisition*. When real property must be acquired, the State must provide an assurance pursuant to § 35.6105(b)(5).

(5) *Provision of State cost share*. The State must provide assurances for cost sharing pursuant to § 35.6105(b)(2). Even if the political subdivision is providing the actual cost share, the State must guarantee payment of the cost share in the event of default by the political subdivision.

(j) *Cost share conditions*, which include:

(1) An estimate of the response action cost (excluding EPA's indirect costs) that requires cost share;

(2) The basis for arriving at this figure (See [§ 35.6285\(c\)](#) for credit provisions); and

(3) The payment schedule as negotiated by the signatories, and consistent with either a lump-sum or incremental-payment option. Upon completion of activities in the site-specific Statement of Work, EPA shall invoice the State for its final payment, with the exception of any change orders and claims handled during reconciliation of the SSC.

(k) *Reconciliation provision*, which states that the SSC remains in effect until the financial settlement of project costs and final reconciliation of response costs (including all change orders, claims, overmatch of cost share, reimbursements, etc.) ensures that both EPA and the State have satisfied the cost share requirement contained in section 104 of CERCLA, as amended. The recipient may direct EPA to return the overmatch or to use the excess cost share payment at one site to meet the cost share obligation at another site in accordance with [§ 35.6285\(d\)](#). Reimbursements for any overmatch will be made to the recipient identified in the SSC.

(l) *Amendability of the SSC*, which provides that:

(1) Formal amendments are required when alterations to CERCLA-funded activities are necessary or when alterations impact the State's assurances pursuant to the National Contingency

Plan and CERCLA, as amended. Such amendments must include a Statement of Work for the amendment as described in [paragraph \(e\)](#) of this section; and

(2) Any change(s) in the SSC must be agreed to, in writing, by the signatories, except as provided elsewhere in the SSC, and must be reflected in all response agreements affected by the change(s).

(m) *List of support agency Cooperative Agreements* that are also in place for the site.

(n) *Litigation*, which describes EPA's right to bring an action against any party under section 106 of CERCLA to compel cleanup, or for cost recovery under section 107 of CERCLA.

(o) *Sanctions for failure to comply with SSC terms*, which states that if the signatories fail to comply with the terms of the SSC, EPA may proceed under the provisions of section 104(d)(2) of CERCLA and may seek in the appropriate court of competent jurisdiction to enforce the SSC or to recover any funds advanced or any costs incurred due to a breach of the SSC. Other signatories to the SSC may seek remedies in the appropriate court of competent jurisdiction.

(p) *Site access*. The State or political subdivision or Indian Tribe is expected to use its own authority to secure access to the site and adjacent properties, as well as all rights-of-way and easements necessary to complete the response actions undertaken pursuant to the SSC.

(q) *Final inspection of the remedy*. The SSC must include a statement that following completion of the remedial action, the State and EPA shall jointly inspect the project to determine that the remedy is functioning properly and is performing as designed.

(r) *Exclusion of third-party benefits*, which states that the SSC is intended to benefit only the signatories of the SSC, and extends no benefit or right to any third party not a signatory to the SSC.

(s) *Any other provision* deemed necessary by all parties to facilitate the response activities covered by the SSC.

(t) *State review*. The State or Indian Tribe must review and comment on the response actions pursuant to the SSC. Unless otherwise stated in the SSC, all time frames for review must follow those prescribed in the NCP ([40 CFR part 300](#)).

(u) *Responsible party activities*, which states that if a Responsible Party takes over any activities at the site, the SSC will be modified or terminated, as appropriate.

(v) *Out-of-State or out-of-an-Indian-Tribal-area-of-Indian-country transfers of CERCLA waste*, which states that, unless otherwise provided for by EPA or a political subdivision, the State or Indian Tribe must provide the notification requirements described in [§ 35.6120](#).

[[72 FR 24504](#), May 2, 2007, as amended at [75 FR 49417](#), Aug. 13, 2010]

[§ 35.6815 Administrative requirements.](#)

In addition to the requirements specified in [§ 35.6805](#), the State and/or political subdivision must comply with the following:

(a) *Financial administration.* The State and/or political subdivision must comply with the following requirements regarding financial administration:

(1) *Payment.* The State may pay for its share of the costs of the response activities in cash or credit. As appropriate, specific credit provisions should be included in the SSC consistent with the requirements described in [§ 35.6285\(c\)](#). The State may not pay for its cost share using in-kind services, unless the State has entered into a support agency Cooperative Agreement with EPA. The use of the support agency Cooperative Agreement as a vehicle for providing cost share must be documented in the SSC. If the political subdivision agrees to provide all or part of the State's cost share pursuant to a political subdivision-lead Cooperative Agreement, the political subdivision may pay for those costs in cash or in-kind services under that agreement. The use of a political subdivision-lead Cooperative Agreement as a vehicle for providing cost share must also be documented in the SSC. The specific payment terms must be documented in the SSC pursuant to [§ 35.6805](#).

(2) *Collection of amounts due.* The State and/or political subdivision must comply with the requirements described in [2 CFR 200.346](#) regarding collection of amounts due.

(3) *Failure to comply with negotiated payment terms.* Failure to comply with negotiated payment terms may be construed as default by the State on its required assurances, even if the political subdivision is responsible for providing all or part of the cost share. (See [§ 35.6805\(i\)\(5\)](#).)

(b) *Personal property.* The State, Indian Tribe, or political subdivision is required to accept title. The following requirements apply to equipment used as all or part of the remedy:

(1) *Fixed in-place equipment.* EPA no longer has an interest in fixed in-place equipment once the equipment is installed.

(2) *Equipment that is an integral part of services to individuals.* EPA no longer has an interest in equipment that is an integral part of services to individuals, such as pipes, lines, or pumps providing hookups for homeowners on an existing water distribution system, once EPA certifies that the remedy is operational and functional.

(c) *Reports.* The State and/or political subdivision or Indian Tribe must comply with the following requirements regarding reports:

(1) *EPA-lead.* The nature and frequency of reports between EPA and the State or Indian Tribe will be specified in the SSC.

(2) *Political subdivision-lead.* The political subdivision must submit to the State a copy of all reports which the political subdivision is required to submit to EPA in accordance with the

requirements of its Cooperative Agreement. (See [§ 35.6650](#) for requirements regarding progress reports.)

(d) *Records*. The State and political subdivision or Indian Tribe must maintain records on a site-specific basis. The State and political subdivision or Indian Tribe must comply with the requirements regarding record retention described in [§ 35.6705](#) and the requirements regarding record access described in [§ 35.6710](#).

[[72 FR 24504](#), May 2, 2007, as amended at [79 FR 76061](#), Dec. 19, 2014; [87 FR 30401](#), May 19, 2022]

#### [§ 35.6820 Conclusion of the SSC.](#)

(a) In order to conclude the SSC, the signatories must:

(1) Satisfactorily complete the response activities at the site and make all payments based upon project costs determined in [§ 35.6805\(i\)](#);

(2) Produce a final accounting of all project costs, including change orders and outstanding contractor claims;

(3) Submit all State cost share payments to EPA (See [§ 35.6805\(i\)\(5\)](#));

(4) Assume responsibility for all future operation and maintenance as required by CERCLA section 104(c) and addressed in [40 CFR 300.510 \(c\)\(1\)](#) of the NCP, and if applicable, accept transfer of any Federal interest in real property (See [§ 35.6805\(i\)\(4\)](#)).

(b) After the administrative conclusion of the Superfund State Contract, EPA may monitor the signatory's compliance with assurances to provide all future operation and maintenance as required by CERCLA section 104(c) and addressed in [40 CFR 300.510\(c\)\(1\)](#) of the NCP.



# Exhibit F

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## State of Oregon General Conditions for Public Improvement Contracts



MAUL  
FOSTER  
ALONGI

**STATE OF OREGON**

**GENERAL CONDITIONS**

**FOR**  
**PUBLIC IMPROVEMENT**  
**CONTRACTS**



**NOTICE TO STATE AGENCIES AND PUBLIC IMPROVEMENT CONTRACTORS**

**January 1, 2012 Edition**

Changes to the General Conditions (including any additions, deletions or substitutions) should only be made by Supplemental General Conditions, unless the General Conditions are specifically modified in the Public Improvement Agreement (which has a higher order of precedence under Section A.3 of the General Conditions). The text of these General Conditions should not otherwise be altered.

**NOTE: THE FOLLOWING GENERAL CONDITIONS HAVE BEEN REVIEWED AS TO FORM BY THE OREGON DEPARTMENT OF JUSTICE. THE LEGAL SUFFICIENCY AND APPROVAL REQUIREMENTS OF ORS 291.047 ARE STILL APPLICABLE FOR INDIVIDUAL PROCUREMENTS OF STATE AGENCIES, UNLESS AN EXEMPTION HAS BEEN GRANTED PURSUANT TO THAT STATUTE AND ADMINISTRATIVE RULES AT OAR CHAPTER 137, DIVISION 45.**

**STATE OF OREGON**  
**GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS**  
**JANUARY 1, 2012**

TABLE OF SECTIONS

**SECTION A**  
**GENERAL PROVISIONS**

- A.1 DEFINITION OF TERMS
- A.2 SCOPE OF WORK
- A.3 INTERPRETATION OF CONTRACT DOCUMENTS
- A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE
- A.5 INDEPENDENT CONTRACTOR STATUS
- A.6 RETIREMENT SYSTEM STATUS AND TAXES
- A.7 GOVERNMENT EMPLOYMENT STATUS

**SECTION B**  
**ADMINISTRATION OF THE CONTRACT**

- B.1 OWNER'S ADMINISTRATION OF THE CONTRACT
- B.2 CONTRACTOR'S MEANS AND METHODS
- B.3 MATERIALS AND WORKMANSHIP
- B.4 PERMITS
- B.5 COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS
- B.6 SUPERINTENDENCE
- B.7 INSPECTION
- B.8 SEVERABILITY
- B.9 ACCESS TO RECORDS
- B.10 WAIVER
- B.11 SUBCONTRACTS AND ASSIGNMENT
- B.12 SUCCESSORS IN INTEREST
- B.13 OWNER'S RIGHT TO DO WORK
- B.14 OTHER CONTRACTS
- B.15 GOVERNING LAW
- B.16 LITIGATION
- B.17 ALLOWANCES
- B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
- B.19 SUBSTITUTIONS
- B.20 USE OF PLANS AND SPECIFICATIONS
- B.21 FUNDS AVAILABLE AND AUTHORIZED
- B.22 NO THIRD PARTY BENEFICIARIES

**SECTION C**  
**WAGES AND LABOR**

- C.1 MINIMUM WAGES RATES ON PUBLIC WORKS
- C.2 PAYROLL CERTIFICATION; ADDITIONAL RETAINAGE; FEE REQUIREMENTS
- C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS
- C.4 PAYMENT FOR MEDICAL CARE
- C.5 HOURS OF LABOR

**SECTION D**  
**CHANGES IN THE WORK**

- D.1 CHANGES IN THE WORK
- D.2 DELAYS
- D.3 CLAIMS REVIEW PROCESS

**SECTION E**  
**PAYMENTS**

- E.1 SCHEDULE OF VALUES
- E.2 APPLICATIONS FOR PAYMENT
- E.3 PAYROLL CERTIFICATION REQUIREMENT
- E.4 DUAL PAYMENT SOURCES
- E.5 RETAINAGE
- E.6 FINAL PAYMENT

**SECTION F**  
**JOB SITE CONDITIONS**

- F.1 USE OF PREMISES
- F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC
- F.3 CUTTING AND PATCHING
- F.4 CLEANING UP
- F.5 ENVIRONMENTAL CONTAMINATION
- F.6 ENVIRONMENTAL CLEAN-UP
- F.7 FORCE MAJEURE

**SECTION G**  
**INDEMNITY, BONDING AND INSURANCE**

- G.1 RESPONSIBILITY FOR DAMAGES/INDEMNITY
- G.2 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND
- G.3 INSURANCE

**SECTION H**  
**SCHEDULE OF WORK**

- H.1 CONTRACT PERIOD
- H.2 SCHEDULE
- H.3 PARTIAL OCCUPANCY OR USE

**SECTION I**  
**CORRECTION OF WORK**

- I.1 CORRECTIONS OF WORK BEFORE FINAL PAYMENT
- I.2 WARRANTY WORK

**SECTION J**  
**SUSPENSION AND/OR TERMINATION OF THE WORK**

- J.1 OWNER'S RIGHT TO SUSPEND THE WORK
- J.2 CONTRACTOR'S RESPONSIBILITIES
- J.3 COMPENSATION FOR SUSPENSION
- J.4 OWNER'S RIGHT TO TERMINATE CONTRACT
- J.5 TERMINATION FOR CONVENIENCE
- J.6 ACTION UPON TERMINATION

**SECTION K**  
**CONTRACT CLOSE-OUT**

- K.1 RECORD DRAWINGS
- K.2 OPERATION AND MAINTENANCE MANUALS
- K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS
- K.4 COMPLETION NOTICES
- K.5 TRAINING
- K.6 EXTRA MATERIALS
- K.7 ENVIRONMENTAL CLEAN-UP
- K.8 CERTIFICATE OF OCCUPANCY
- K.9 OTHER CONTRACTOR RESPONSIBILITIES
- K.10 SURVIVAL

**SECTION L**  
**LEGAL RELATIONS AND RESPONSIBILITY**  
**TO THE PUBLIC**

- L.1 LAWS TO BE OBSERVED
- L.2 FEDERAL AGENCIES
- L.3 STATE AGENCIES
- L.4 LOCAL AGENCIES

**STATE OF OREGON  
GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS  
("General Conditions")**

**SECTION A  
GENERAL PROVISIONS**

**A.1 DEFINITION OF TERMS**

In the Contract Documents the following terms shall be as defined below:

**ARCHITECT/ENGINEER**, means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities of the Owner's Authorized Representative to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

**CHANGE ORDER**, means a written order issued by the Owner's Authorized Representative to the Contractor requiring a change in the Work within the general scope of the Contract Documents, issued under the changes provisions of Section D.1 including Owner's written change directives as well as changes reflected in a writing executed by the parties to this Contract and, if applicable, establishing a Contract Price or Contract Time adjustment for the changed Work.

**CLAIM**, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these General Conditions.

**CONTRACT**, means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

**CONTRACT DOCUMENTS**, means the Solicitation Document and addenda thereto, the State of Oregon Public Improvement Agreement Form, General Conditions, Supplemental General Conditions, if any, the accepted Offer, Plans, Specifications, amendments and Change Orders.

**CONTRACT PERIOD**, as set forth in the Contract Documents, means the total period of time beginning with the issuance of the Notice to Proceed and concluding upon Final Completion.

**CONTRACT PRICE**, means the total of the awarded Offer amount, as increased or decreased by the price of approved alternates and Change Orders.

**CONTRACT TIME**, means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the project schedule.

**CONTRACTOR**, means the Person awarded the Contract for the Work contemplated.

**DAYS**, are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

**DIRECT COSTS**, means, unless otherwise provided in the Contract Documents, the cost of materials, including sales tax, cost of delivery; cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; worker's compensation insurance; project specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater); bond premiums, rental cost of equipment, and machinery required for execution of the work; and the additional costs of field personnel directly attributable to the Work.

**FINAL COMPLETION**, means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any, released.

**FORCE MAJEURE**, means an act, event or occurrence caused by fire, riot, war, acts of God, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to this Contract who is asserting Force Majeure.

**NOTICE TO PROCEED**, means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted to Owner in a suitable form.

**OFFER**, means a bid in connection with an invitation to bid and a proposal in connection with a request for proposals.

**OFFEROR**, means a bidder in connection with an invitation to bid and a proposer in connection with a request for proposals.

**OVERHEAD**, means those items which may be included in the Contractor's markup (general and administrative expense and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), expenses of Contractor's offices at the job site (e.g. job trailer) including expenses of personnel staffing the job site office, and Commercial General Liability Insurance and Automobile Liability Insurance.

**OWNER**, means the State of Oregon acting by and through the governmental entity identified in the Solicitation Document.

**OWNER'S AUTHORIZED REPRESENTATIVE**, means those individuals identified in writing by the Owner to act on behalf of the Owner for this project. Owner may elect, by written notice to Contractor, to delegate certain duties of the Owner's Authorized Representative to more than one party, including without limitation, to an Architect/Engineer. However, nothing in these General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

**PERSON**, means an entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, or any other entity possessing the legal capacity to contract.

**PLANS**, means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

**PUNCHLIST**, means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

**RECORD DOCUMENT**, means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer to Owner, operational and maintenance manuals, shop drawings, Change Orders, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.9.1 of these General Conditions, recording all Services performed.

**SOLICITATION DOCUMENT**, means an invitation to bid or request for proposal or request for quotes.

**SPECIFICATION**, means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

**SUBCONTRACTOR**, means a Person having a direct contract with the Contractor, or another Subcontractor, to perform one or more items of the Work.

**SUBSTANTIAL COMPLETION**, means the date when the Owner accepts in writing the construction, alteration or repair of the improvement to real property or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.4.2.

**SUBSTITUTIONS**, means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Approval of any substitute item shall be solely determined by the Owner's Authorized Representative. The decision of the Owner's Authorized Representative is final.

**SUPPLEMENTAL GENERAL CONDITIONS**, means those conditions that remove from, add to, or modify these General Conditions. Supplemental General Conditions may be

included in the Solicitation Document or may be a separate attachment to the Contract.

**WORK**, means the furnishing of all materials, equipment, labor, transportation, services and incidentals necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents.

## **A.2 SCOPE OF WORK**

The Work contemplated under this Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all construction work in connection with the project described in the Contract Documents. The Contractor shall perform all Work necessary so that the project can be legally occupied and fully used for the intended use as set forth in the Contract Documents.

## **A.3 INTERPRETATION OF CONTRACT DOCUMENTS**

A.3.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

1. Contract amendments and Change Orders, with those of later date having precedence over those of an earlier date;
2. The Supplemental General Conditions;
3. The State of Oregon Public Improvement Agreement Form;
4. The General Conditions
5. The Plans and Specifications
6. The Solicitation Document and any addenda thereto;
7. The accepted Offer.

A.3.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner or Owner's Authorized Representative's interpretation in writing.

A.3.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner or Owner's Authorized Representative. Matters concerning performance under, and interpretation of requirements of, the Contract Documents will be decided by the Owner's Authorized Representative, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owner's Authorized Representative (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness.



Interpretations and decisions of the Owner's Authorized Representative (or Architect/Engineer) will be consistent with the intent of and reasonably inferable from the Contract Documents. Contractor shall not proceed without direction in writing from the Owner's Authorized Representative (or Architect/Engineer).

- A.3.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the project is occurring on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

#### **A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE**

- A.4.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.
- A.4.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.
- A.4.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner's Authorized Representative, including without limitation, any nonconformity with applicable laws, statutes, ordinances, building codes, rules and regulations.
- A.4.4 If the Contractor believes that additional cost or Contract Time is involved because of clarifications or instructions issued by the Owner's Authorized Representative (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner's Authorized Representative denies Contractor's request for additional compensation, additional Contract Time, or other relief that Contractor believes results from

the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to perform the obligations of Sections A.4.1 to A.4.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

#### **A.5 INDEPENDENT CONTRACTOR STATUS**

The service or services to be performed under this Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner.

#### **A.6 RETIREMENT SYSTEM STATUS AND TAXES**

Contractor represents and warrants that it is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under this Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual. Unless the Contractor is subject to backup withholding, Owner will not withhold from such payments any amount(s) to cover Contractor's federal or state tax obligations.

#### **A.7 GOVERNMENT EMPLOYMENT STATUS**

- A.7.1 If this payment is to be charged against federal funds, Contractor represents and warrants that it is not currently employed by the Federal Government. This does not preclude the Contractor from holding another contract with the Federal Government.
- A.7.2 Contractor represents and warrants that Contractor is not an employee of the State of Oregon for purposes of performing Work under this Contract.

### **SECTION B ADMINISTRATION OF THE CONTRACT**

#### **B.1 OWNER'S ADMINISTRATION OF THE CONTRACT**

- B.1.1 The Owner's Authorized Representative will provide administration of the Contract as described in the Contract Documents (1) during construction (2) until final payment is due and (3) during the one-year period for correction of Work. The Owner's Authorized Representative will act on behalf of the Owner to the extent provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner's Authorized Representative may rely on the Architect/Engineer or other consultants to perform some or all of these tasks.
- B.1.2 The Owner's Authorized Representative will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner's Authorized Representative

will not make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner's Authorized Representative will neither have control over or charge of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.

- B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall endeavor to communicate with each other through the Owner's Authorized Representative or designee about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner's Authorized Representative.
- B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner's Authorized Representative, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

**B.2 CONTRACTOR'S MEANS AND METHODS:  
MITIGATION OF IMPACTS**

- B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures.
- B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the project, including those caused by authorized changes, which may affect cost, schedule, or quality.
- B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, and Subcontractors on the project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

**B.3 MATERIALS AND WORKMANSHIP**

- B.3.1 The intent of the Contract Documents is to provide for the construction and completion in every detail of the Work described. All Work shall be performed in a professional manner and unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted

and used by the industry, in accordance with industry standards.

- B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's expense.
- B.3.3 Work done and materials furnished shall be subject to inspection and/or observation and testing by the Owner's Authorized Representative to determine if they conform to the Contract Documents. Inspection of the Work by the Owner's Authorized Representative does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.
- B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner's Authorized Representative to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms. Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.
- B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner's Authorized Representative and include the cost of the Samples in the Contract Price.

**B.4 PERMITS**

Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Supplemental General Conditions, for the construction of the Work, for temporary obstructions, enclosures, opening of streets for pipes, walls, utilities, environmental Work, etc., as required for the project. Contractor shall be responsible for all violations of the law, in connection with the construction or caused by obstructing streets, sidewalks or otherwise. Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, the State of Oregon, and its departments, divisions, members and employees.

**B.5 COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS**

- B.5.1 Contractor shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following as applicable: i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended (vi) all regulations and administrative rules established pursuant to the foregoing laws; and (vii) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. Owner's performance under the Contract is conditioned upon Contractor's compliance with the provisions of ORS 279C.505, 279C.510, 279C.515, 279C.520, and 279C.530, which are incorporated by reference herein.

B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations; and

(a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts.

(b) Contractor shall maintain, in current and valid form, all licenses and certificates required by law, regulation, or this Contract when performing the Work.

B.5.3 Unless contrary to federal law, Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work as described in ORS 701.005 under this Contract unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time they submit their bids to the Contractor.

B.5.4 Unless contrary to federal law, Contractor shall certify that each landscape contractor, as defined in ORS 671.520(2), performing Work under this Contract holds a valid landscape contractor's license issued pursuant to ORS 671.560.

B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503)232-1987.

B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a breach of Contract and constitute grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

## **B.6 SUPERINTENDENCE**

Contractor shall keep on the site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the site. Directions given to the superintendent by the Owner's Authorized Representative shall be confirmed in writing to the Contractor.

## **B.7 INSPECTION**

B.7.1 Owner's Authorized Representative shall have access to the Work at all times.

B.7.2 Inspection of the Work will be made by the Owner's Authorized Representative at its discretion. The Owner's Authorized Representative will have authority to reject Work that does not conform to the Contract Documents. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner's Authorized Representative, shall be removed and replaced at the Contractor's expense.

B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner's Authorized Representative timely notice of when and where tests and inspections are to be made so that the Owner's Authorized Representative may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner's Authorized Representative.

B.7.4 As required by the Contract Documents, Work done or material used without inspection or testing by the Owner's Authorized Representative may be ordered removed at the Contractor's expense.

B.7.5 If directed to do so any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without sufficient notice to the Owner's Authorized Representative, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner's Authorized Representative, the uncovering and restoration will be paid for as a Change Order.

B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's Authorized Representative's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.

B.7.7 When the United States government participates in the cost of the Work, or the Owner has an agreement with other public or private organizations, or if any portion of the Work is being performed for a third party or in close proximity to third party facilities, representatives of these organizations have the right to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner's Authorized Representative.

## **B.8 SEVERABILITY**

If any provision of this Contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected and the rights and obligations of the parties shall be construed and

enforced as if the Contract did not contain the particular provision held to be invalid.

#### **B.9 ACCESS TO RECORDS**

B.9.1 Contractor shall keep, at all times on the Work site, one record copy of the complete Contract Documents, including the Plans, Specifications, Change Orders and addenda, in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner's Authorized Representative access thereto.

B.9.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access to, for a period not less than ten (10) years, all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Contract is involved in litigation, Contractor shall retain all such records until all litigation is resolved. The Owner and/or its agents shall continue to be provided full access to the records during litigation.

#### **B.10 WAIVER**

Failure of the Owner to enforce any provision of this Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of this Contract.

#### **B.11 SUBCONTRACTS AND ASSIGNMENT**

B.11.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.

B.11.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.

B.11.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under this Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of this Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with

the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.

#### **B.12 SUCCESSORS IN INTEREST**

The provisions of this Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

#### **B.13 OWNER'S RIGHT TO DO WORK**

Owner reserves the right to perform other or additional work at or near the project site with other forces than those of the Contractor. If such work takes place within or next to the project site, Contractor will coordinate work with the other contractors or forces, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all forces involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner's Authorized Representative will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner's Authorized Representative will establish work priority (including the Work) which generally will be in the sequence that the contracts were awarded.

#### **B.14 OTHER CONTRACTS**

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of this Contract. The Contractor of this Contract will fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in section B.13.

#### **B.15 GOVERNING LAW**

This Contract shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflict of laws.

#### **B.16 LITIGATION**

Any Claim between Owner and Contractor that arises from or relates to this Contract and that is not resolved through the Claims Review Process in Section D.3 shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the State of Oregon on any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR BY EXECUTION OF THIS CONTRACT HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION B.16.

#### **B.17 ALLOWANCES**

B.17.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such

amounts and by such persons or entities as the Owner may direct.

B.17.2 Unless otherwise provided in the Contract Documents:

- (a) when finally reconciled, allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- (b) Contractor's costs for unloading and handling at the site, labor, installation costs, Overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;
- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (i) the difference between actual costs and the allowances under Section B.17.2(a) and (2) changes in Contractor's costs under Section B.17.2(b).
- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

**B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

B.18.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner's Authorized Representative if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples which are described below:

- (a) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any sub-subcontractor), manufacturer, supplier or distributor to illustrate some portion of the Work.
- (b) Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- (c) Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

B.18.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed

in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.

B.18.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect/Engineer without action.

B.18.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

B.18.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.

B.18.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.

B.18.7 In the event that Owner elects not to have the obligations and duties described under this Section

B.18 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owner's Authorized Representative.

### **B.19 SUBSTITUTIONS**

The Contractor may make Substitutions only with the consent of the Owner, after evaluation by the Owner's Authorized Representative and only in accordance with a Change Order. Substitutions shall be subject to the requirements of the bid documents. By making requests for Substitutions, the Contractor represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under this Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

### **B.20 USE OF PLANS AND SPECIFICATIONS**

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under this Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other interest in them beyond the scope of this Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

### **B.21 FUNDS AVAILABLE AND AUTHORIZED**

Owner reasonably believes at the time of entering into this Contract that sufficient funds are available and authorized for expenditure to finance the cost of this Contract within the Owner's appropriation or limitation. Contractor understands and agrees that, to the extent that sufficient funds are not available and authorized for expenditure to finance the cost of this Contract, Owner's payment of amounts under this Contract attributable to Services performed after the last day of the current biennium is contingent on Owner receiving from the Oregon Legislative Assembly appropriations, limitations or other expenditure authority sufficient to allow Owner, in the exercise of its reasonable administrative discretion, to continue to make payments under this Contract.

### **B.22 NO THIRD PARTY BENEFICIARIES**

Owner and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly, or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

## **SECTION C WAGES AND LABOR**

### **C.1 MINIMUM WAGE RATES ON PUBLIC WORKS**

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Documents establishing those conditions, as determined by the Commissioner of the Bureau of Labor and Industries (BOLI), are included as attachments to or are incorporated by reference in the Contract Documents. Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts.

### **C.2 PAYROLL CERTIFICATION; ADDITIONAL RETAINAGE; FEE REQUIREMENTS**

C.2.1 In accordance with ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Owner's Authorized Representative, on the form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed on the project and further certifying that no worker employed on the project has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of the Contractor or the Subcontractor that the Contractor or Subcontractor has read the certified statement, that the Contractor or Subcontractor knows the contents of the certified statement and that to the Contractor's or Subcontractor's best knowledge and belief the certified statement is true. The certified statements shall set out accurately and completely the payroll records for the prior week including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made and actual wages paid. Certified statements for each week during which the Contractor or Subcontractor has employed a worker on the project shall be submitted once a month, by the fifth business day of the following month.

The Contractor and Subcontractors shall preserve the certified statements for a period of ten (10) years from the date of completion of the Contract.

C.2.2 Pursuant to ORS 279C.845(7), the Owner shall retain 25 percent of any amount earned by the Contractor on this public works project until the Contractor has filed the certified statements required by section C.2.1. The Owner shall pay to the Contractor the amount retained under this subsection within 14 days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.

C.2.3 Pursuant to ORS 279C.845(8), the Contractor shall retain 25 percent of any amount earned by a first-tier Subcontractor on this public works project until the first-tier Subcontractor has filed with the Owner the certified statements required by C.2.1. Before paying any amount retained under this subsection, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 days after the first-tier Subcontractor files the required certified statement the Contractor shall pay the first-tier Subcontractor any amount retained under this subsection.



C.2.4 In accordance with statutory requirements, and administrative rules promulgated by the Commissioner of the Bureau of Labor and Industries, the fee required by ORS 279C.825(1) will be paid by Owner to the Commissioner.

### **C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS**

C.3.1 Pursuant to ORS 279C.505 and as a condition to Owner's performance hereunder, the Contractor shall:

C.3.1.1 Make payment promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the Work provided for in this Contract.

C.3.1.2 Pay all contributions or amounts due the State Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the Contract.

C.3.1.3 Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished. Contractor will not assign any claims that Contractor has against Owner, or assign any sums due by Owner, to Subcontractors, suppliers, or manufacturers, and will not make any agreement or act in any way to give Subcontractors a claim or standing to make a claim against the Owner.

C.3.1.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

C.3.1.5 Demonstrate that an employee drug testing program is in place as follows:

(a) Contractor represents and warrants that Contractor has in place at the time of the execution of this Contract, and shall maintain during the term of this Contract, a Qualifying Employee Drug Testing Program for its employees that includes, at a minimum, the following:

- (1) A written employee drug testing policy,
- (2) Required drug testing for all new Subject Employees or, alternatively, required testing of all Subject Employees every 12 months on a random selection basis, and
- (3) Required testing of a Subject Employee when the Contractor has reasonable cause to believe the Subject Employee is under the influence of drugs.

A drug testing program that meets the above requirements will be deemed a "Qualifying Employee Drug Testing Program." For the purposes of this section, an employee is a "Subject Employee" only if that employee will be working on the project job site.

(b) Contractor shall require each Subcontractor providing labor for the project to:

- (1) Demonstrate to the Contractor that it has a Qualifying Employee Drug Testing Program for the Subcontractor's Subject Employees,

and represent and warrant to the Contractor that the Qualifying Employee Drug Testing Program is in place at the time of subcontract execution and will continue in full force and effect for the duration of the subcontract, or

- (2) Require that the Subcontractor's Subject Employees participate in the Contractor's Qualifying Employee Drug Testing Program for the duration of the subcontract.

C.3.2 Pursuant to ORS 279C.515, and as a condition to Owner's performance hereunder, Contractor agrees:

C.3.2.1 If Contractor fails, neglects or refuses to pay promptly a person's claim for labor or services that the person provides to the Contractor or a Subcontractor in connection with the project as such claim becomes due, the proper officer that represents the Owner may pay the amount of the claim and charge the amount of the payment against funds due or to become due Contractor under this Contract. Paying a claim in this manner shall not relieve the Contractor or the Contractor's surety from obligation with respect to an unpaid claim.

C.3.2.2 If the Contractor or a first-tier Subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the public contract for a public improvement within thirty (30) Days after receiving payment from Owner or a contractor, the contractor or first-tier Subcontractor owes the person the amount due plus interest charges that begin at the end of the 10-Day period within which payment is due under ORS 279C.580(3) and that end upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest on the amount due is nine percent per annum. The amount of interest may not be waived.

C.3.2.3 If the Contractor or a Subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the Contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580. Every contract related to this Contract must contain a similar clause.

C.3.3 Pursuant to ORS 279C.580, Contractor shall include in each subcontract for property or services the Contractor enters into with a first-tier Subcontractor, including a material supplier, for the purpose of performing a construction contract:

- (a) A payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under the subcontract within ten (10) Days out of amounts the Owner pays to the Contractor under the Contract;
- (b) A clause that requires the Contractor to provide the first-tier Subcontractor with a standard form that the first-tier Subcontractor may use as an application for payment or as another method by which the Subcontractor may claim a payment due from the Contractor;

- (c) A clause that requires the Contractor, except as otherwise provided in this paragraph, to use the same form and regular administrative procedures for processing payments during the entire term of the subcontract. The Contractor may change the form or the regular administrative procedures the Contractor uses for processing payments if the Contractor:
  - (1) Notifies the Subcontractor in writing at least 45 days before the date on which the Contractor makes the change; and
  - (2) Includes with the written notice a copy of the new or changed form or a description of the new or changed procedure.
- (d) An interest penalty clause that obligates the Contractor, if the Contractor does not pay the first-tier Subcontractor within thirty (30) Days after receiving payment from Owner, to pay the first-tier Subcontractor an interest penalty on amounts due in each payment the Contractor does not make in accordance with the payment clause included in the subcontract under paragraph (a) of this subsection. Contractor or first-tier Subcontractor is not obligated to pay an interest penalty if the only reason that the Contractor or first-tier Subcontractor did not make payment when payment was due is that the Contractor or first-tier Subcontractor did not receive payment from Owner or Contractor when payment was due. The interest penalty applies to the period that begins on the day after the required payment date and that ends on the date on which the amount due is paid; and is computed at the rate specified in ORS 279C.515(2).
- (e) A clause which requires each of Contractor's Subcontractors to include, in each of their contracts with lower-tier Subcontractors or suppliers, provisions to the effect that the first-tier Subcontractor shall pay its lower-tier Subcontractors and suppliers in accordance with the provisions of paragraphs (a) through (d) above and requiring each of their Subcontractors and suppliers to include such clauses in their subcontracts and supply contracts.

C.3.4 All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.

**C.4 PAYMENT FOR MEDICAL CARE**

Pursuant to ORS 279C.530, and as a condition to Owner's performance hereunder, Contractor shall promptly, as due, make payment to any person, partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, all sums of which the Contractor agrees to pay for such services and all moneys and sums which the Contractor has collected or deducted from the wages of personnel pursuant to any law, contract or agreement for the purpose of providing or paying for such services.

**C.5 HOURS OF LABOR**

As a condition to Owner's performance hereunder, Contractor shall comply with ORS 279C.520, as amended from time to time and incorporated herein by this reference:

Pursuant to ORS 279C.520 and as a condition to Owner's performance hereunder, no person shall be employed to perform Work under this Contract for more than ten (10) hours in any one day or forty (40) hours in any one week, except in cases of necessity, emergency or where public policy absolutely requires it. In such instances, Contractor shall pay the employee at least time and a half pay:

- (a) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five consecutive Days, Monday through Friday; or
- (b) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four consecutive Days, Monday through Friday; and
- (c) For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

This section C.5 will not apply to Contractor's Work under this Contract if Contractor is currently a party to a collective bargaining agreement with any labor organization.

This Section C.5 shall not excuse Contractor from completion of the Work within the time required under this Contract.

**SECTION D  
CHANGES IN THE WORK**

**D.1 CHANGES IN WORK**

D.1.1 The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the Owner's Authorized Representative, and then only in a manner consistent with the Change Order provisions of this Section D.1 and after any necessary approvals required by public contracting laws have been obtained. Otherwise, a formal contract amendment is required, which shall not be effective until its execution by the parties to this Contract and all approvals required by public contracting laws have been obtained.

D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction are inherent in the nature of construction and may be necessary or desirable during the course of construction. Within the general scope of this Contract, the Owner's Authorized Representative may at any time, without notice to the sureties and without impairing the Contract, require changes consistent with this Section D.1. All Change Order Work shall be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.

- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the project.
- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible, as determined by Owner. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self perform such Work, for which the provisions of B.13 (Owner's Right to Do Work) shall then apply.

Adjustments in compensation shall be made under the provisions of D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that Change Order Work shall be administered and compensated according to the following:

- (a) *Unit pricing* may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for additional Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the additional Work.
- (b) If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, *fixed pricing* may be used for Change Order Work. In fixed pricing the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. The mark-ups set forth in D.1.3(c) shall be utilized by the parties as a guide in establishing fixed pricing, and will not be exceeded by Owner without adequate justification. Cost and price data relating to Change Orders shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.
- (c) In the event that unit pricing and fixed pricing are not utilized, then Change Order Work shall be performed on a *cost reimbursement* basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. In addition, the following markups shall be added to the Contractor's or Subcontractor's Direct Costs as full compensation for profit, Overhead and other indirect costs for Work directly performed with the Contractor's or Subcontractor's own forces:

On Labor.....	15%
On Equipment.....	10%
On Materials.....	10%

When Change Order Work under D.1.3(c) is invoiced by an authorized Subcontractor at any level, each ascending

tier Subcontractor or Contractor will be allowed a 5% supplemental mark-up on each piece of subcontract Work covered by such Change Order.

Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were incurred by the Contractor or by other forces furnished by the Contractor, including Subcontractors, for Change Order Work. Owner may establish a maximum cost for Change Order Work under this Section D.1.3(c), which shall not be exceeded for reimbursement without additional written authorization from Owner. Contractor shall not be required to complete such Change Order Work without additional authorization.

D.1.4 Any necessary adjustment of Contract Time that may be required as a result of a Change Order must be agreed upon by the parties before the start of the Change Order Work unless Owner's Authorized Representative authorizes Contractor to start the Work before agreement on Contract Time adjustment. Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of the Change Order. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) day time limit, Contractor's requests pertaining to that Change Order are barred. The thirty (30) day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.

D.1.5 If any Change Order Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of, any other part of the Work under this Contract, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of the Change Order by Contractor.

The thirty (30) day time limit applies to claims of Subcontractors, suppliers, or manufacturers that may be affected by the Change Order and that request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the compensation and additional Contract Time

requested. The Contractor will analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for additional compensation or Contract Time that Contractor submits to the Owner's Authorized Representative. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner's Authorized Representative within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner's Authorized Representative and the Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to this Contract. The consideration of such requests and claims under this section does not give any person, not a party to the Contract the right to bring a claim against the State of Oregon, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner's Authorized Representative denies the Contractor's request for additional compensation or an extension of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

D.1.6 No request or Claim by the Contractor for additional costs or an extension of Contract Time shall be allowed if made after receipt of final payment application under this Contract. Contractor agrees to submit its final payment application within ninety (90) days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to this Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be waived.

D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor is notified that numerous changes may be required and that there will be no compensation made to the Contractor directly related to the number of changes. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

**D.2 DELAYS**

D.2.1 Delays in construction include "Avoidable Delays", which are defined in Section D.2.1.1, and "Unavoidable Delays", which are defined in Section D.2.1.2. The effect of Avoidable Delays is described in Section D.2.2 and the effect of Unavoidable Delays is described in Section D.2.3.

D.2.1.1 Avoidable Delays include any delays other than Unavoidable Delays, and include delays that

otherwise would be considered Unavoidable Delays but that:

- (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of other parts of the Work nor the completion of the whole Work within the Contract Time.
- (c) Do not impact activities on the accepted critical path schedule.
- (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

D.2.1.2 Unavoidable Delays include delays other than Avoidable Delays that are:

- (a) Caused by any actions of the Owner, Owner's Authorized Representative, or any other employee or agent of the Owner, or by separate contractor employed by the Owner.
- (b) Caused by any site conditions which differ materially from what was represented in the Contract Documents or from conditions that would normally be expected to exist and be inherent to the construction activities defined in the Contract Documents. The Contractor shall notify the Owner's Authorized Representative immediately of differing site conditions before the area has been disturbed. The Owner's Authorized Representative will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner's Authorized Representative agree that a differing site condition exists, any additional compensation or additional Contract Time will be determined based on the process set forth in Section D.1.5 for Change Order Work. If the Owner's Authorized Representative disagrees that a differing site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.
- (c) Caused by Force Majeure acts, events or occurrences that could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (d) Caused by adverse weather conditions. Any adverse weather conditions must be substantiated by documentary evidence that weather conditions were abnormal for the specific time period claimed, could not have been anticipated by the Contractor, and adversely impacted the project in a manner that could not be avoided by rescheduling the Work or by implementing measures to protect against the weather so that the Work could proceed. A rain, windstorm, high water, or other natural

phenomenon for the specific locality of the Work, which might reasonably have been anticipated from the previous 10-year historical records of the general locality of the Work, shall not be construed as abnormal. The parties agree that rainfall greater than the following levels cannot be reasonably anticipated:

- (i) Daily rainfall equal to, or greater than, 0.50 inch during a month when the monthly rainfall exceeds the normal monthly average by twenty-five percent (25 %) or more.
- (ii) daily rainfall equal to, or greater than, 0.75 inch at any time.

The Office of the Environmental Data Service of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce nearest the project site shall be considered the official agency of record for weather information.

D.2.2 Except as otherwise provided in ORS 279C.315, Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.

D.2.3 In the event of Unavoidable Delays, based on principles of equitable adjustment, Contractor may be entitled to the following:

- (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
- (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.3 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing site conditions for which a review process is established under Section D.2.1.2 (b), Contractor shall submit a written notification of the delay to the Owner's Authorized Representative within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the cause of the potential delay, the project components impacted by the delay, and the anticipated additional Contract Time or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner's Authorized Representative, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2., then unless otherwise prohibited by law, Contractor's Claim shall be barred.

### **D.3 CLAIMS REVIEW PROCESS**

D.3.1 All Contractor Claims shall be referred to the Owner's Authorized Representative for review. Contractor's Claims, including Claims for additional compensation or additional Contract Time, shall be submitted in writing by Contractor to the Owner's Authorized Representative within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits established in these General Conditions. Within thirty (30) Days after the initial Claim, Contractor shall submit to the Owner's Authorized Representative, a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be waived.

D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time extension requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner's Authorized Representative. The Owner's Authorized Representative and the Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to this Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.

D.3.3 The Owner's Authorized Representative will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) based on principles of equitable adjustment, recommend approval of all or part of the Claim; or (5) propose an alternate resolution.

D.3.4 The Owner's Authorized Representative's decision shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.

D.3.5 The decision of the Owner shall be final and binding unless the Contractor delivers to the Owner its requests for mediation, which shall be a non-binding process, within fifteen (15) Days of the date of the Owner's decision. The mediation process will be

considered to have commenced as of the date the Contractor delivers the request. Both parties acknowledge and agree that participation in mediation is a prerequisite to commencement of litigation of any disputes relating to the Contract. Both parties further agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the commencement of the mediation through the mediation process set forth herein.

In the event that a lawsuit must be filed within this sixty (60) day period in order to preserve a cause of action, the parties agree that notwithstanding the filing, they shall proceed diligently with the mediation to its conclusion prior to actively prosecuting the lawsuit, and shall seek from the Court in which the lawsuit is pending such stays or extensions, including the filing of an answer, as may be necessary to facilitate the mediation process. Further, in the event settlements are reached on any issues through mediation, the parties agree to promptly submit the appropriate motions and orders documenting the settlement to the Court for its signature and filing.

- D.3.6 The mediator shall be an individual mutually acceptable to both parties, but in the absence of agreement each party shall select a temporary mediator and the temporary mediators shall jointly select the permanent mediator. Each party shall pay its own costs for the time and effort involved in mediation. The cost of the mediator shall be split equally between the two parties. Both parties agree to exercise their best effort in good faith to resolve all disputes in mediation. Participation in mediation is a mandatory requirement of both the Owner and the Contractor. The schedule, time and place for mediation will be mutually acceptable, or, failing mutual agreement, shall be as established by the mediator. The parties agree to comply with Owner's administrative rules governing the confidentiality of mediation, if any, and shall execute all necessary documents to give effect to such confidentiality rules. In any event, the parties shall not subpoena the mediator or otherwise require the mediator to produce records, notes or work product, or to testify in any future proceedings as to information disclosed or representations made in the course of mediation, except to the extent disclosure is required by law.
- D.3.7 Owner may at any time and at its discretion issue a construction change directive adding to, modifying or reducing the scope of Work. Contractor and Owner shall negotiate the need for any additional compensation or additional Contract Time related to the change, subject to the procedures for submitting requests or Claims for additional compensation or additional Contract Time established in this Section D. Unless otherwise directed by Owner's Authorized Representative, Contractor shall proceed with the Work while any request or Claim is pending, including but not limited to, a request or Claim for additional compensation or additional Contract Time resulting from Work under a Change Order or construction change directive. Regardless of the review period or the final decision of the Owner's Authorized Representative, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease Work without a written stop work order from the Owner or Owner's Authorized Representative.

## **SECTION E PAYMENTS**

### **E.1 SCHEDULE OF VALUES**

The Contractor shall submit, at least ten (10) Days prior to submission of its first application for progress payment, a schedule of values ("Schedule of Values") for the contracted Work. This schedule will provide a breakdown of values for the contracted Work and will be the basis for progress payments. The breakdown will demonstrate reasonable, identifiable, and measurable components of the Work. Unless objected to by the Owner's Authorized Representative, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner's Authorized Representative, Contractor shall revise the schedule of values and resubmit the same for approval of Owner's Authorized Representative.

### **E.2 APPLICATIONS FOR PAYMENT**

- E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses. Payments shall be based upon estimates of Work completed and the Schedule of Values. All payments shall be approved by the Owner's Authorized Representative. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest on the progress payment, not including retainage, due the Contractor. The interest shall commence thirty (30) Days after the receipt of invoice ("application for payment") from the Contractor or fifteen (15) Days after the payment is approved by the Owner's Authorized Representative, whichever is the earlier date. The rate of interest shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is thirty (30) Days after receipt of the application for payment from the Contractor or fifteen (15) Days after the payment is approved by the Owner, whichever is the earlier date, but the rate of interest shall not exceed thirty (30) percent. Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen (15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Accrual of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for payment that is correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers (EFT) through Automated Clearing House (ACH) payments. If



Owner makes this election, the Contractor will be required to arrange to receive EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner's Authorized Representative, an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor, including payments to Subcontractors. Contractor shall include, in its application for payment, a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: \_\_\_\_\_"

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. Under special conditions, applications for payment for stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner's Authorized Representative shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials only. The submitted amount of the application for payment shall be reduced by the cost of transportation and for the cost of an inspector to check the delivery at out of town storage sites. The cost of said inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the material stored.
- (g) Payment for stored materials shall in no way indicate acceptance of the materials or waive any rights under this Contract for the rejection of the Work or materials not in conformance with the Contract Documents.

(h) All required documentation must be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with the Contract Documents,
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Owner and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level under Section C.3.2.1);
- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Owner or another contractor;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- (g) failure to carry out the Work in accordance with the Contract Documents; or
- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, no amounts for changes in the Work can be included in application for payment until the Contract Price has been adjusted by Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the site at a location agreed upon in writing), less retainage as provided in Section E.5;
- (c) Subtract the aggregate of previous payments made by the Owner; and

- (d) Subtract any amounts for which the Owner's Authorized Representative has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner's Authorized Representative with regard to any application for payment, Contractor nevertheless shall continue to prosecute expeditiously the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

### **E.3 PAYROLL CERTIFICATION REQUIREMENT**

Payroll certification is required before payments are made on the Contract. Refer to Section C.2 for this information.

### **E.4 DUAL PAYMENT SOURCES**

Contractor shall not be compensated for Work performed under this Contract from any state agency other than the agency that is a party to this Contract.

### **E.5 RETAINAGE**

E.5.1 Retainage shall be withheld and released in accordance with ORS 279C.550 to 279C.580:

E.5.1.1 Owner may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of the retainage and may eliminate retainage on any remaining monthly Contract payments after 50 percent of the Work under the Contract is completed if, in the Owner's opinion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is 97-1/2 percent completed the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to 100 percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 In accordance with the provisions of ORS 279C.560 and any applicable administrative rules, unless the Owner finds in writing that

accepting a bond, security or other instrument described in options (a) or (c) below poses an extraordinary risk that is not typically associated with the bond, security or instrument, the Owner will approve the Contractor's written request:

- (a) to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds, securities or other instruments of equal value with Owner or in a custodial account or other mutually-agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner. Interest or earnings on the bonds, securities or other instruments shall accrue to the Contractor. The Contractor shall execute and provide such documentation and instructions respecting the bonds, securities and other instruments as the Owner may require to protect its interests. To be permissible the bonds, securities and other instruments must be of a character approved by the Director of the Oregon Department of Administrative Services, including but not limited to:

- (i) Bills, certificates, notes or bonds of the United States.
- (ii) Other obligations of the United States or agencies of the United States.
- (iii) Obligations of a corporation wholly owned by the federal government.
- (iv) Indebtedness of the Federal National Mortgage Association.
- (v) General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon.
- (vi) Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

- (b) that retainage be deposited in an interest bearing account, established through the State Treasurer for state agencies, in a bank, savings bank, trust company or savings association for the benefit of Owner, with interest from such account accruing to the Contractor; or

- (c) that the Contractor be allowed, with the approval of the Owner, to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims and liens in the manner and priority as set forth for retainage under ORS 279C.550 to ORS 279C.625.

Where the Owner has accepted the Contractor's election of any of the options above, Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request to deposit a surety bond under option (c), Contractor shall accept like bonds from Subcontractors and suppliers on the project from which Contractor has required retainage.

E.5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of one and one-half percent per month on the final payment

due Contractor, interest to commence thirty (30) Days after the Work under the Contract has been completed and accepted and to run until the date Contractor shall notify Owner in writing when the Contractor considers the Work complete and Owner shall, within fifteen (15) Days after receiving the written notice, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run thirty (30) Days after the end of the 15-Day period.

E.5.1.4 In accordance with the provisions of ORS 279C.560, if the Owner accepts bonds, securities or other instruments deposited as provided in paragraphs (a) and (c) of subsection E.5.1.2, the Owner shall reduce the moneys held as retainage in an amount equal to the value of the bonds, securities and other instruments and pay the amount of the reduction to the Contractor in accordance with ORS 279C.570.

E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor. Provided, however, if in accordance with the provisions of ORS 279C.560 the Contractor has deposited bonds, securities or other instruments or has elected to have the Owner deposit accumulated retainage in an interest-bearing account, the Contractor shall comply with the provisions of ORS 701.435 respecting the deposit of bonds, securities or other instruments by Subcontractors and suppliers and the sharing of interest earnings with Subcontractors and suppliers.

E.5.2 As provided in subsections C.2.2 and C.2.3, additional retainage in the amount of 25% of amounts earned shall be withheld and released in accordance with ORS 279C.845(7) when the Contractor fails to file certified statements as required by section C.2.1.

## **E.6 FINAL PAYMENT**

E.6.1 Upon completion of all the Work under this Contract, the Contractor shall notify the Owner's Authorized Representative, in writing, that Contractor has completed Contractor's part of the Contract and shall request final payment. Upon receipt of such notice the Owner's Authorized Representative will inspect the Work, and if acceptable, submit to the Owner a recommendation as to acceptance of the completed Work and the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Section K. 3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS, and other provisions as may be applicable,

the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.

E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner's Authorized Representative (1) a notarized affidavit/release of liens and claims in a form satisfactory to Owner that states that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.

## **SECTION F JOB SITE CONDITIONS**

### **F.1 USE OF PREMISES**

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, law, ordinances, permits or directions of the Owner's Authorized Representative. Contractor shall follow the Owner's Authorized Representative's instructions regarding use of premises, if any.

### **F.2 PROTECTION OF WORKERS, PROPERTY, AND THE PUBLIC**

F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage, and shall protect the Owner's Authorized Representative, workers and property from injury or loss arising in connection with this Contract. Contractor shall remedy acceptably to the Owner, any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.

shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the job site, and shall comply with the Contract Documents and all applicable provisions of federal, state and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Work site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner's Authorized Representative. The Owner's Authorized Representative has no responsibility for Work site safety. Work site safety is the responsibility of the Contractor.

F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall immediately and in writing, report to the Owner's Authorized Representative, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.

F.2.4 Contractor is responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, and materials on the site.

F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials will be conducted so no release will occur that may pollute or become hazardous.

F.2.6 In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner's Authorized Representative, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner's Authorized Representative. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with Section D.

### **F.3 CUTTING AND PATCHING**

F.3.1 Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.

F.3.2 Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor

### **F.4 CLEANING UP**

From time to time as may be ordered by the Owner the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within twenty-four hours after notification by the Owner the work may be done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

### **F.5 ENVIRONMENTAL CONTAMINATION**

F.5.1 Contractor will be held responsible for and shall indemnify, defend (with counsel of Owner's choice) and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, (including attorney fees), or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of these General Conditions, and Contractor shall take no action that would void or impair such coverages

F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and proper regulatory agencies in a manner that complies with applicable federal, state, and local laws and regulations. Cleanup shall be at no cost to the Owner and be performed by properly qualified personnel.

F.5.1.2 Contractor shall obtain the Owner's written consent prior to bringing onto the Work site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any applicable federal, state, or local statutes, rules or ordinances. Notwithstanding such written consent from the Owner, the Contractor, at all times, shall:

(a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials brought onto the Work site, in accordance with all applicable federal, state, or local statutes, rules, or ordinances;

(b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Work site; and

(c) promptly clean up, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all

applicable federal, state, or local statutes, rules or ordinances.

F.5.2 Contractor shall report all reportable quantity releases to applicable federal, state, and local regulatory and emergency response agencies. Reportable quantities are found in 40 CFR Part 302, Table 302.4 for hazardous substances and in OAR 340-142-0050 for all products addressed therein. Upon discovery, regardless of quantity, Contractor must telephonically report all releases to the Owner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:

- (a) Description of items released (identity, quantity, manifest no., and all other documentation required by law.)
- (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when it was reported.
- (c) Exact time and location of release, including a description of the area involved.
- (d) Containment procedures initiated.
- (e) Summary of communications about the release Contractor has had with members of the press or State officials other than Owner.
- (f) Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.
- (g) Personnel injuries, if any, resulting from, or aggravated by, the release.

#### **F.6 ENVIRONMENTAL CLEAN-UP**

F.6.1 Unless disposition of environmental pollution is specifically a part of this Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by this Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl (PCB), or petroleum, and any substances, materials or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or well being of Contractor's or any Subcontractor's work force.

F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the project site, Owner shall arrange for the proper disposition of such hazardous substance(s).

#### **F.7 FORCE MAJEURE**

A party to this Contract shall not be held responsible for delay or default due to Force Majeure acts, events or occurrences unless they could have been avoided by the exercise of reasonable care, prudence, foresight, and diligence by that party. The Owner may terminate this Contract upon written notice after determining that delay or default caused by Force Majeure acts, events or occurrences will reasonably prevent successful performance of the Contract.

### **SECTION G INDEMNITY, BONDING, AND INSURANCE**

#### **G.1 RESPONSIBILITY FOR DAMAGES / INDEMNITY**

G.1.1 Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by, or result from, the carrying out of the Work to be done under this Contract, or from any act, omission or neglect of the Contractor, its Subcontractors, personnel, or agents.

G.1.2 To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel approved by Owner) and hold harmless the Owner, Owner's Authorized Representative, Architect/Engineer, Architect/Engineer's consultants, and their respective officers, directors, agents, employees, partners, members, stockholders and affiliated companies (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses (including reasonable attorney fees), demands and actions of any nature whatsoever which arise out of, result from or are related to, (a) any damage, injury, loss, expense, inconvenience or delay described in this Section G.1.2, (b) any accident or occurrence which happens or is alleged to have happened in or about the project site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects, (c) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract, (d) the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder (except to the extent otherwise void under ORS 30.140), and (e) any lien filed upon the project or bond claim in connection with the Work. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section G.1.2.

G.1.3 In claims against any person or entity indemnified under this Section G.1.2 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section G.1.2 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

**G.2 PERFORMANCE AND PAYMENT SECURITY:  
PUBLIC WORKS BOND**

G.2.1 When the Contract Price is \$100,000 or more (or \$50,000 or more in the case of Contracts for highways, bridges and other transportation projects) the Contractor shall furnish and maintain in effect at all times during the Contract Period, a performance bond in a sum equal to the Contract Price, and a separate payment bond also in a sum equal to the Contract Price. The bonds may be required if the Contract Price is less than the above thresholds, if required by the Contract Documents.

G.2.2 Bond forms furnished by the Owner and notarized by awarded Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.

G.2.3 Before execution of the Contract Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Laws 2005, Chapter 360, and OAR 839-025-0015, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting the Subcontractor to start Work.

**G.3 INSURANCE**

G.3.1 Primary Coverage: Insurance carried by Contractor under this Contract shall be the primary coverage and non-contributory with any other insurance and self-insurance, and the Owner's insurance is excess and solely for damages or losses for which the Owner is responsible. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

G.3.2 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than \$100,000 for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

G.3.3 Builder's Risk Insurance:

G.3.3.1 Builder's Risk: During the term of this Contract, for new construction the Contractor shall obtain and keep in effect Builder's Risk insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or \$50,000, whichever is more. The policy will include as loss payees the

Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.2 Builder's Risk Installation Floater: For other than new construction the Contractor shall obtain and keep in effect during the term of this Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees the State of Oregon, the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

G.3.3.4 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

G.3.4 Liability Insurance:

G.3.4.1 Commercial General Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Commercial General Liability Insurance covering bodily injury and property damage in a form and with coverages that are satisfactory to the State. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnity provided under this Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis. Contractor shall provide proof of insurance of not less than the amounts listed in the following schedules:

Per Occurrence Limit for any single claimant:  
From commencement of the Contract term to June 30, 2011: \$1,600,000  
July 1, 2011 to June 30, 2012: \$1,700,000  
July 1, 2012 to June 30, 2013: \$1,800,000  
July 1, 2013 to June 30, 2014: \$1,900,000  
July 1, 2014 to June 30, 2015: \$2,000,000  
July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:  
From commencement of the Contract term to June 30, 2011: \$3,200,000  
July 1, 2011 to June 30, 2012: \$3,400,000  
July 1, 2012 to June 30, 2013: \$3,600,000  
July 1, 2013 to June 30, 2014: \$3,800,000  
July 1, 2014 to June 30, 2015: \$4,000,000  
July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:



Per Occurrence Limit for any single claimant:

From commencement of the Contract term to January 1, 2011: \$100,100.

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to January 1, 2011 : \$500,600.

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Automobile Liability Insurance covering owned, non-owned and/or hired vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Contractor shall provide proof of insurance of not less than the amounts listed in the following schedules:

Bodily Injury/Death:

Per Occurrence Limit for any single claimant:

From commencement of the Contract term June 30, 2011: \$1,600,000

July 1, 2011 to June 30, 2012: \$1,700,000

July 1, 2012 to June 30, 2013: \$1,800,000

July 1, 2013 to June 30, 2014: \$1,900,000

July 1, 2014 to June 30, 2015: \$2,000,000

July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to June 30, 2011: \$3,200,000

July 1, 2011 to June 30, 2012: \$3,400,000

July 1, 2012 to June 30, 2013: \$3,600,000

July 1, 2013 to June 30, 2014: \$3,800,000

July 1, 2014 to June 30, 2015: \$4,000,000

July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:

Per Occurrence Limit for any single claimant:

From commencement of the Contract term to January 1, 2011: \$100,100

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to January 1, 2011: \$500,600

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon

G.3.4.3 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of this Contract for a duration of 24 months or the maximum time period available in the marketplace if less than 24 months. Contractor will be responsible for furnishing certification of "tail" coverage as described or continuous "claims made" liability coverage for 24 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of this Contract. This will be a condition of the final acceptance of Work or services and related warranty (if any).

G.3.5 Excess/Umbrella Insurance: A combination of primary and excess/umbrella insurance is acceptable to meet the minimum coverage requirements for Commercial General Liability and Automobile Liability Insurance. In such case, the insurance certificate must include a list of the policies that fall under the excess/umbrella insurance. Sample wording is "The Excess/Umbrella policy is excess over primary Commercial General Liability and primary Automobile Liability Insurance."

G.3.6 Additional Insured: The liability insurance coverage, except Professional Liability if included, required for performance of this Contract shall include the State of Oregon, its departments, divisions, officers, and employees, as Additional Insureds but only with respect to the Contractor's activities to be performed under this Contract.

If Contractor cannot obtain an insurer to name the State of Oregon, its departments, divisions, officers and employees as Additional Insureds, Contractor shall obtain at Contractor's expense, and keep in effect during the term of this Contract, Owners and Contractors Protective Liability Insurance, naming the State of Oregon, its departments, divisions, officers and employees as Named Insureds with not less than a \$1,500,000.00 limit per occurrence. This policy must be kept in effect for 12 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to execution of the Contract.

G.3.7 Certificate(s) of Insurance: As evidence of the insurance coverage required by this Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to execution of the Contract. The certificate(s) will specify all of the parties who are Additional Insureds or Loss Payees. Insurance coverage required under this Contract shall be obtained from insurance companies or entities acceptable to the Owner that are allowed to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to do an insurance business in the state of Oregon, and certain non-admitted surplus lines insurers that satisfy the requirements of applicable Oregon law and are approved by the Owner. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of

\$50,000 shall be approved by the Owner in writing prior execution of the Contract and is subject to Owner's approval. The Contractor shall immediately notify the Owner's Authorized Representative in writing of any change in insurance coverage.

## **SECTION H SCHEDULE OF WORK**

### **H.1 CONTRACT PERIOD**

- H.1.1 **Time is of the essence on this Contract.** The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein. Contractor shall commence Work on the site within fifteen (15) Days of Notice to Proceed, unless directed otherwise.
- H.1.2 Unless specifically extended by Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2 (f) and shall be subject to the Change Order process of Section D.1.
- H.1.3 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete in whole or in part the Work after the date described in Section H.1.2 above.

### **H.2 SCHEDULE**

- H.2.1 Contractor shall provide, by or before the pre-construction conference, a detailed schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by significant project components, significant labor trades, long lead items, broken down by building and/or floor where applicable. Each schedule item shall account for no greater than 5 % of the monetary value of the project or 5 % of the available Contract Time. Schedules with activities of less than one day or valued at less than 1% of the Contract will be considered too detailed and will not be accepted. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. Included within the schedule are the following: Notice to Proceed, Substantial Completion, and Final Completion. Schedules will be updated monthly and submitted with the monthly payment application. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner, as to the Contractor's sequencing, means, methods, or allocated Contract Time. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a request for additional compensation for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

### **H.3 PARTIAL OCCUPANCY OR USE**

- H.3.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work.

Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, insurance or self-insurance, maintenance, heat, utilities, and damage to the Work, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents with respect to such portion of the Work. Approval by the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **SECTION I CORRECTION OF WORK**

### **I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT**

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner's Authorized Representative, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than thirty (30) Days after Substantial Completion for completion of defective (punch list) work, unless otherwise agreed. At the end of that period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the Work not be complete, and all corrections made, the costs for all subsequent re-inspections shall be borne by the Contractor. If Contractor fails to complete the punch list work within the above time period, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) days after demand without affecting Contractor's obligations.

### **I.2 WARRANTY WORK**

- I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent.

The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the

event of warranty work consisting of emergency repairs, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand without affecting Contractor's obligations.

- I.2.2 This provision does not negate guarantees or warranties for periods longer than one year including without limitation such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.
- I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until affected Work has been accepted in writing by the Owner's Authorized Representative.
- I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor pursuant to this Section, as to the Work corrected. The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.
- I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## SECTION J

### **SUSPENSION AND/OR TERMINATION OF THE WORK**

#### **J.1 OWNER'S RIGHT TO SUSPEND THE WORK**

- J.1.1 The Owner and/or the Owner's Authorized Representative has the authority to suspend portions or all of the Work due to the following causes:
- (a) Failure of the Contractor to correct unsafe conditions;
  - (b) Failure of the Contractor to carry out any provision of the Contract;
  - (c) Failure of the Contractor to carry out orders;

- (d) Conditions, in the opinion of the Owner's Authorized Representative, which are unsuitable for performing the Work;
- (e) Time required to investigate differing site conditions;
- (f) Any reason considered to be in the public interest.

- J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension and Owner shall notify Contractor and Contractor's surety in writing to resume Work.

#### **J.2 CONTRACTOR'S RESPONSIBILITIES**

- J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.
- J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the project in every respect as though its prosecution had been continuous and without suspension.

#### **J.3 COMPENSATION FOR SUSPENSION**

- J.3.1 Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's forces or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension. If the suspension was caused by acts or omissions of the Owner, the Contractor shall be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party owes the other for the impact.

#### **J.4 OWNER'S RIGHT TO TERMINATE CONTRACT**

- J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:
- (a) If Contractor should voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
  - (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
  - (c) If a receiver should be appointed on account of Contractor's insolvency;
  - (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers

or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;

- (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner or its Authorized Representative; or
- (f) If Contractor is otherwise in material breach of any part of the Contract.

J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and in addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

### **J.5 TERMINATION FOR CONVENIENCE**

J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines that termination of the Contract is in the best interest of the public.

J.5.2 The Owner will provide the Contractor with seven (7) Days' prior written notice of a termination for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination.

### **J.6 ACTION UPON TERMINATION**

J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.

J.6.2 As directed by the Owner, Contractor shall upon termination transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.

## **SECTION K CONTRACT CLOSE OUT**

### **K.1 RECORD DOCUMENTS**

As a condition of final payment (refer also to section E.6), Contractor shall comply with the following: Contractor shall provide to Owner's Authorized Representative, Record Documents of the entire project. Record Documents shall

depict the project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed.

### **K.2 OPERATION AND MAINTENANCE MANUALS**

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner's Authorized Representative prior to submission of any pay request for more than 75% of the Work. No payments beyond 75% will be made by the Owner until the O & M Manuals have been received. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, phone list of consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner's Authorized Representative shall review and return one O & M Manual for any modifications or additions required. Prior to submission of its final pay request, Contractor shall deliver three (3) complete and approved sets of O & M Manuals to the Owner's Authorized Representative.

### **K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS**

As a condition of final payment, the Contractor shall submit to the Owner's Authorized Representative a notarized affidavit/release of liens and claims form, in a form satisfactory to Owner, which states that all Subcontractors and suppliers have been paid in full, all disputes with property owners have been resolved, all obligations on the project have been satisfied, all monetary claims and indebtedness have been paid, and that, to the best of the Contractor's knowledge, there are no claims of any kind outstanding against the project. The Contractor shall indemnify, defend (with counsel of Owner's choice) and hold harmless the Owner from all claims for labor and materials finished under this Contract. The Contractor shall furnish complete and valid releases or waivers, satisfactory to the Owner, of all liens arising out of or filed in connection with the Work.

### **K.4 COMPLETION NOTICES**

K.4.1 Contractor shall provide Owner notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and the time within which the Contractor shall finish all items on the punchlist accompanying the Certificate. Both completion notices must be signed by the Contractor and the Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.

K.4.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner's Authorized Representative. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the

manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a punch list be prepared by the Owner's Authorized Representative with submission of the request for the Substantial Completion notice.

#### **K.5 TRAINING**

As part of the Work, and prior to submission of the request for final payment, the Contractor shall schedule with the Owner's Authorized Representative, training sessions for all equipment and systems, as required in the individual specifications sections. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner personnel adequate notice. The O & M Manual shall be used as a basis for training. Training shall be a formal session, held after the equipment and/or system is completely installed and operational in its normal operating environment.

#### **K.6 EXTRA MATERIALS**

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the specifications, prior to final payment. Delivery point for extra materials shall be designated by the Owner's Authorized Representative.

#### **K.7 ENVIRONMENTAL CLEAN-UP**

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental pollution clean-up performed as a part of this Contract has been disposed of in accordance with all applicable rules, regulations, laws, and statutes of all agencies having jurisdiction over such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above.

#### **K.8 CERTIFICATE OF OCCUPANCY**

The Contractor shall not be granted Final Completion or receive final payment if the Owner has not received an unconditioned certificate of occupancy from the appropriate state and/or local building officials, unless failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

#### **K.9 OTHER CONTRACTOR RESPONSIBILITIES**

The Contractor shall be responsible for returning to the Owner all items issued during construction such as keys, security passes, site admittance badges, and all other pertinent items. The Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's forces continue with the Work.

#### **K.10 SURVIVAL**

All warranty and indemnification provisions of this Contract, and all of Contractor's other obligations under this Contract that are not fully performed by the time of Final Completion or termination, shall survive Final Completion or any termination of the Contract

### **SECTION L**

### ***LEGAL RELATIONS & RESPONSIBILITIES***

#### **L.1 LAWS TO BE OBSERVED**

In compliance with ORS 279C.525, Sections L.2 through L.4 contain lists of federal, state and local agencies of which the Owner has knowledge that have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract:

#### **L.2 FEDERAL AGENCIES**

Agriculture, Department of  
Forest Service  
Soil Conservation Service  
Coast Guard  
Defense, Department of  
Army Corps of Engineers  
Energy, Department of  
Federal Energy Regulatory Commission  
Environmental Protection Agency  
Health and Human Services, Department of  
Housing and Urban Development, Department of  
Solar Energy and Energy Conservation Bank  
Interior, Department of  
Bureau of Land Management  
Bureau of Indian Affairs  
Bureau of Mines  
Bureau of Reclamation  
Geological Survey  
Minerals Management Service  
U.S. Fish and Wildlife Service  
Labor, Department of  
Mine Safety and Health Administration  
Occupation Safety and Health Administration  
Transportation, Department of  
Federal Highway Administration  
Water Resources Council

#### **L.3 STATE AGENCIES**

Administrative Services, Department of  
Agriculture, Department of  
Soil and Water Conservation Commission

Columbia River Gorge Commission  
Energy, Department of  
Environmental Quality, Department of  
Fish and Wildlife, Department of  
Forestry, Department of  
Geology and Mineral Industries, Department of  
Human Resources, Department of  
Consumer and Business Services, Department of  
Land Conservation and Development Commission  
Parks and Recreation, Department of

State Lands, Division of  
Water Resources Department of

**L.4 LOCAL AGENCIES**

City Councils  
County Courts  
County Commissioner, Board of  
Design Commissions  
Historical Preservation Commission  
Planning Commissions



# Exhibit G

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## Supplemental General Conditions



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## Appendix G

# SUPPLEMENTAL GENERAL CONDITIONS To The STATE OF OREGON GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS

Revised 9/6/2024 (For this Task Order)

Task Order No. 067-23-10  
Task Order Title: Pacific Carbide Remedial Design  
Development

**For the above contract, the following supplements modify the General Conditions contained within the “State of Oregon Standard Conditions for Public Improvement Contracts” dated January 1, 2012. Where a portion of the General Conditions is modified or deleted by these Supplemental General Conditions, the unaltered portions of the General Conditions shall remain in effect.**

### **SGC-1 Section A.1, DEFINITION OF TERMS:**

1. The defined term “Contract Documents” is revised to delete the words: “State of Oregon Public Improvement Agreement Form,”
2. The defined term “Request for Interpretation” is added as follows:

**REQUEST FOR INTERPRETATION or RFI** means a written request, submitted by Contractor to Owner’s Authorized Representative on a standard form, requesting interpretation of Contract Documents.**SGC-2 Section A.3, INTERPRETATION OF CONTRACT DOCUMENTS:** The following new Section A.3.5 and Section A.3.6 is added:

“A.3.5 The characterization of provisions of the Contract as material provisions or the failure to comply with certain provisions as a material breach of the Contract shall in no way be construed to mean that any other provisions of the Contract are not material or that failure to comply with any other provisions is not a material breach of the Contract.

A.3.6 Electronic Signatures. Contractor and Owner agree that signatures, and other forms of authorized representative certification, showing on documents, including but not limited to copies of the Contract, bonds, Change Orders and amendments, submitted or received via email or other electronic means, when submittal or receipt in that manner is required or allowed by Owner, are “Electronic Signatures” under ORS Chapter 84 and bind the signing party and are intended to be and can be relied upon by the parties. Owner reserves the right at any time to require Contractor to deliver the hard copy originals of any documents.”

### **SGC-3 Section B.4, PERMITS:**

Section B.4 is deleted and replaced with the following:

Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Supplemental General Conditions, for the construction of the Work, as required for the Contract. Contractor shall be responsible for all violations of the law, in connection with the construction or caused by obstructing streets, sidewalks or otherwise. Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, the State of Oregon, and its departments, divisions, members and employees. "Permits and licenses" include all submittals and fees required by any jurisdiction as a condition of their approval to construct the Work for its intended purpose as described in any solicitation document and the Contract.

**SGC-4 Section B.5, COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS:**

- Add the following to the end of Section B.5.1:

All rights and remedies available to Owner under applicable federal, state, and local laws are also incorporated by reference herein and are cumulative with all rights and remedies under the Contract.
- Section B.5.2(a) is deleted and replaced with the following:

(a) Pursuant to ORS 279A.110, Contractor shall not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business, in the awarding of subcontracts.
- The following Section B.5.2(c) is added:

(c) Compliance with ORS 279C.520 also includes:

  - (i) As required by ORS 279C.520, the Contractor must comply with ORS 652.220 and shall not unlawfully discriminate against any of Contractor's employees in the payment of wages or other compensation for work of comparable character on the basis of an employee's membership in a protected class. "Protected class" means a group of persons distinguished by race, color; religion; sex; sexual orientation; gender identity; national origin; marital status; veteran status; disability; or age. The Contractor's compliance with this section constitutes a material element of this Contract and a failure to comply constitutes a breach that entitles Owner to terminate this Contract for cause.
  - (ii) The Contractor shall not prohibit any of its employees from discussing the employee's rate of wage, salary, benefits and other compensation with another employee or another person, and shall not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person.
- The following Section B.5.2(d) is added:

(d) Respecting certification as a disadvantaged business enterprise, minority-owned

business, woman-owned business, business that a service-disabled veteran owns or an emerging small business under ORS 200.055, as and when applicable, Contactor shall maintain the certifications, and require in its subcontracts that subcontractors maintain the certification required by ORS 279A.107.

- The following Section B.5.2(e) is added:
  - (e) It is a material term of the Contract that Contactor certifies by entering into the Contract that Contractor has a written policy and practice that meets the requirements described in HB 3060 (2017) for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class, and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.
- Section B.5.6 is deleted and replaced with the following revised Section B.5.6 and new Section B.5.7:

B.5.6 Contractor shall comply with all Oregon Tax Laws, consistent with the Contractor's Certificate of Compliance with Tax Laws and the Contractor's warranty that the Contractor has complied with the Oregon Tax Laws. Any violation of the Contractor's Certificate of Compliance or warranty will constitute a material breach of the Contract.

B.5.7 Failure to comply with any or all of the requirements of B.5.1 through B.5.6 shall be a material breach of Contract entitling the Owner to pursue and recover any and all of its available remedies at law or in equity that arise from the breach, including, but not limited to, recovery of damages, the termination of the Contract, and the exercise of the right of setoff, garnishment if applicable and the withholding of amounts otherwise due and owing to the Contractor without penalty. Damages or costs resulting from such non-compliance shall be the responsibility of the Contractor.

**SGC-5** The provisions in Section B.15 GOVERNING LAW are deleted and replaced with the following provisions:

The RFP, Price Agreement, and Task Order Contract shall be governed by, construed, and enforced in accordance with the laws of State of Oregon without regard to principles of conflicts of law.

**SGC-6** Section C.5, HOURS OF LABOR:

Add the following at the end of Section C.5:

Compliance with ORS 279C.520 includes not prohibiting employees from discussing wages, salaries, benefits and other compensation, and compliance with the wage related prohibitions in ORS 652.220, violation of which is a breach entitling Owner to terminate the Contract for cause.

**SGC-7** Make the following revisions to Section D.3 CLAIMS REVIEW PROCESS:

The following section is added:

D.4 FALSE CLAIMS (OREGON FALSE CLAIMS ACT)

D.4.1 Contractor understands and acknowledges it is subject to the Oregon False Claims Act (ORS 180.750 to 180.785) and to any liabilities or penalties associated with the making of a false claim under that Act. By its execution of the Contract, Contractor certifies the truthfulness, completeness, and accuracy of any statement or claim it has made, it makes, it may make, or cause to be made that pertains to the Contract or the Project for which the services are being performed, including but not limited to Contractor's statement of proposal and any invoices, reports, or other deliverables.

D.4.2. Contractor shall immediately disclose (in writing, via email or other written form) to Agency whenever, in connection with the award, performance or closeout of the Contract, or any subcontract thereunder, Contractor has credible evidence that a principal, employee, agent, or subcontractor of Contractor has committed—

- (i) A violation of the Oregon False Claims Act; or,
- (ii) A violation of State or Federal criminal or civil law involving fraud, conflict of interest, bribery, gratuity, or similar misconduct.

D.4.3. Contractor must include subsections D.4.1 and D.4.2 of this section in each subcontract Contractor may award in connection with the performance of the Contract. In doing so, Contractor may not modify the terms of those subsections, except to identify the subcontractors or sub grantee that will be subject to those provisions.

**SGC-8** Make the following revisions to Section E.2.4, related to Owner's right to withhold payment:

A new subsection is added to Section E.2.4 as subsection (i) and existing subsections (g) and (h) of Section E.2.4 are removed, re-numbered and revised to read as follows:

- (g) failure to carry out the Work in accordance with the Contract Documents;
- (h) assessment of liquidated damages, when withholding is made for offset purposes; or
- (i) The Contractor having liquidated and delinquent debt owed to the State of Oregon or any department or agency of the State of Oregon.

**SGC-9** Section E.6, FINAL PAYMENT:

The following Section E.6.4 is added:

E.6.4 If Owner's Authorized Representative determines the Work is not substantially complete, Owner's Authorized Representative will promptly notify Contractor in writing, giving reasons therefore. Contractor shall remedy Work deficiencies and send a second notice of Substantial Completion to Owner's Authorized Representative. Owner's Authorized Representative will then re-inspect Work. Owner's Authorized Representative will make one Substantial Completion inspection to determine any Work deficiencies and one Final Completion inspection to ascertain that deficiencies have been satisfactorily completed. If Owner's Authorized Representative is required to make more than two inspections, Owner will deduct the Owner's costs of any such additional inspections from Contractor's final payment, based upon the effective hourly rate for the Owner's Authorized Representative, plus any expenses associated with the additional inspections.

**SGC-10** Section F.1, USE OF PREMISES:

Add the following at the end of Section F.1:

Under Oregon's Indoor Clean Air Act all state of Oregon properties are smoke, aerosol and vapor free (ORS 433.835-870, effective January 1, 2016.) A person may not smoke, aerosolize, or vaporize an inhalant or carry a lighted smoking instrument within 10 feet of the following parts of public places or places of employment: Entrances; Exits; windows that open; and Ventilation intakes that serve an enclosed area.

**SGC-11** Add the following at the end of Section F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC:

F.2.7. Contractor shall comply with applicable State of Oregon Governor's executive orders and Oregon Administrative Rules promulgated by the Department of Consumer and Business Services, Oregon Occupational Safety and Health Division. Additionally, Contractor shall regularly consult Oregon OSHA guidance publications regarding construction contractors and construction sites (found at <https://osha.oregon.gov/pubs/Pages/index.aspx> and utilize those resources and information to develop, update and enforce the Contractor's policies for safety planning and safety practices on the project. Contractor shall also comply with all other federal, state and local government statutes, regulations, administrative rules, ordinances, executive orders, Owner policies and other laws/requirements applicable to the project pertaining to workplace health and safety requirements. Contractor's compliance with this section is a material term of the Contract, and Contractor's failure to comply constitutes a breach of the Contract entitling Agency to terminate this Contract for cause or pursue other available Owner remedies under the Contract.

**SGC-12** Section G.3, INSURANCE

Section G.3 is deleted. The insurance provisions of **Section 12 and Exhibit A, Section V, Subsection 9, Contractor Insurance**, of the Price Agreement, as may be amended between the Oregon Department of Environmental Quality ("DEQ" or the "Owner") and Contractor, control and apply to the Work.

**SGC-13** Section H.2, SCHEDULE:

Section H.2 is deleted and replaced with the following:

Contractor shall provide, prior to commencement of on-site work, a schedule showing major activities and milestones of the Work for review and acceptance by the Owner.

**SGC-14** Section J.4, Owner's Right to Terminate Contract

A new subsection is added to Section J.4.1 as subsection (f) and existing subsections (e) and (f) of Section J.4.1 are removed, re-numbered and revised to read as follows:

(e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances, or the instructions of the Owner or its Authorized Representative;

(f) If Contractor has liquidated and delinquent debt owed to the State of Oregon or any department or agency of the State of Oregon; or



(g) If Contractor is otherwise in material breach of any part of the Contract.

**SGC-15** Section J.4, Owner’s Right to Terminate Contract

- Subsection J.4.2 is removed and revised to read as follows

J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, including, in the event of the conditions set forth in Section J.4.1(f) regarding Contractor’s liquidated and delinquent debt (including garnishing all monies due for any and all Work performed by the Contractor, when appropriate) and otherwise recovering any liquidated and delinquent debt owed to the State of Oregon or any department or agency of the State of Oregon. In addition, the Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

- Add the following new Section J.4.3:

“J.4.3 If a termination under this Section J.4 is determined by a court of competent jurisdiction to be unjustified, the termination shall be deemed a termination for convenience. (See Section J.5 TERMINATION FOR CONVENIENCE.)”

**SGC-16** Section K.2, OPERATION AND MAINTENANCE MANUALS:

Section K.2 is deleted

**SGC-17** Section K.5, TRAINING:

Section K.5 is deleted

**SGC-18** Section K.8, CERTIFICATE OF OCCUPANCY:

Section K.8 is deleted