

# PORT OF ILWACO BID SOLICITATION



**PROJECT:**

***Bulkhead Resilience Project***

***Ilwaco Washington***

***Pacific County, Washington***

**Bids: September 25, 2024  
at 10:00 a.m.**

**PORT OF ILWACO**  
**Bulkhead Resilience Project**  
**Ilwaco, WA**

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**PORT OF ILWACO**  
**Ilwaco Bulkhead Resilience Project**  
**Ilwaco, WA**  
**NOTICE OF BID**

Notice is hereby given that sealed bids for the Ilwaco Bulkhead Resilience project located in Ilwaco, Washington will be received at the Office of the Port of Ilwaco, 165 Howerton Way SE, Ilwaco, Washington until 10:00 a.m., Wednesday, September 25, 2024. The official time shall be taken from the designated clock at the Port Office. Any bids received after the specified time and date will not be considered. Bids will then and there be publicly opened and read aloud.

The scope of work for this project consists of furnishing all labor, materials, and equipment necessary for the project identified above including the following major work items:

- Selective demolition and waste haul of existing structures including timber and steel piles, timber bulkhead, derelict timber elements, concrete rubble, asphalt paving, and earth fill.
- Replacement of an aging deteriorated timber pile bulkhead with an anchored steel sheet pile bulkhead.
- Installation of grouted tie-back anchors.
- Site grading and asphalt paving.
- Shoreline armoring.

A **mandatory** pre-bid conference for prospective bidders will be held Tuesday August 20, 2024, at 10:00 a.m. at the Port of Ilwaco Office located at 165 Howerton Way SE, Ilwaco, Washington 98624. A site visit will follow.

Each bid must be accompanied by a cashier's check, money order, or an original signed and stamped surety bid bond in an amount not less than five percent (5%) of the total bid, made payable to the Port of Ilwaco.

Any and all questions related to this project must be submitted via email prior to 4:30 PM, local time, on Wednesday, September 11, 2024. No questions will be accepted after that time.

The Port of Ilwaco reserves the right to reject any or all bids and to waive any irregularities or informalities.

To register your company on the Project Roster list, please contact Kari Kosa, Administrator Assistant by email at [kkosa@portofilwaco.org](mailto:kkosa@portofilwaco.org)

All bids submitted shall be considered as valid offers for a period of forty-five (45) days from the date of the bid opening during which time the Port of Ilwaco will make the award or return all bids.

**Notice to be published:**            Wednesday, August 28, 2024



## **PORT OF ILWACO**

### **BIDDER'S CHECKLIST**

The bidder's attention is especially called to the following forms which must be completed in full as required and submitted collectively as the bid proposal package:

- \_\_\_\_\_ **1. PROPOSAL FORM** – The unit prices **must** be shown in the space provided. Show **all** unit prices in both words and figures when indicated. If a discrepancy exists between the price per unit and the extended amount of any item, the price per unit will control.
- \_\_\_\_\_ **2. BID GUARANTEE** – Original signed and stamped surety Bid Bond or Bid Deposit (cashier's check). The amount of the bid guarantee shall not be less than five percent (5%) of the total amount of the bid. See POI General Conditions #7 & the "Form of Bid Guarantee" for instructions on how to prepare the bid guarantee.
- \_\_\_\_\_ **3. LIST OF SUBCONTRACTORS** – If the invitation to bid is expected to cost one million dollars or more then the bidder shall comply with RCW 39.30.060.
- \_\_\_\_\_ **4. LOBBYING DISCLOSURE CERTIFICATION** – Each Bidder shall check the appropriate boxes, sign, and date. Volume I, Exhibit H.
- \_\_\_\_\_ **5. CERTIFICATION OF OFFEROR/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTION** – Each bidder shall check the appropriate boxes, sign, and date. Volume I, Exhibit I.
- \_\_\_\_\_ **6. DEBARMENT CERTIFICATION** – Each bidder shall check the appropriate boxes, sign, and date. Volume I, Exhibit G.

The following forms shall be executed and submitted within five (5) calendar days after Notice of Award.

- \_\_\_\_\_ **1. CONTRACT** – To be executed by the successful bidder.
- \_\_\_\_\_ **2. PAYMENT AND PERFORMANCE BOND** – Owner provided form to be completed by Contractor's Surety and submitted with Contractor executed Contracts.
- \_\_\_\_\_ **3. CERTIFICATE OF INSURANCE** – Contractor shall furnish a Certificate of Insurance and all applicable Endorsements naming the Port as additional insured on its Commercial General Liability and Automobile Liability Policies.
- \_\_\_\_\_ **4. WAGE LAWS COMPLIANCE CERTIFICATION** – To be submitted by Contractor with executed Contract.
- \_\_\_\_\_ **5. SCHEDULE OF VALUES** – To be submitted by Contractor with executed Contract.
- \_\_\_\_\_ **6. MATERIAL PROCUREMENT AND CONSTRUCTION SCHEDULE** – To be submitted by Contractor with executed Contract.

7. LIST OF SUBCONTRACTORS – To be submitted by Contractor with executed Contract.

8. PROJECT LABOR RATES AND EQUIPMENT RATES FOR CHANGE ORDER WORK -  
To be submitted by Contractor and Subcontractors with executed Contract.

9. CONTRACTOR'S W-9 – To be submitted by Contractor with executed Contract.

*The following shall be filed prior to Notice to Proceed.*

1. STATEMENT OF INTENT TO PAY PREVAILING WAGES – To be filed immediately by the Prime Contractor after Contract is awarded and before work begins and subsequently by all those providing labor on the project.

**Ilwaco Bulkhead Resilience Project**  
**Ilwaco, WA**

**PROPOSAL FORM**

PORT OF ILWACO  
165 Howerton Way SE  
ILWACO, WA 98624

1. BIDS - Having carefully examined the site(s), bid documents, and specifications for the Ilwaco Bulkhead Resilience Project located in Ilwaco, Washington the undersigned proposes to furnish all labor, materials and equipment required to perform all work in accordance with the above-named documents for the following price. The Total Bid Amount includes all work, regardless of whether it is specifically itemized below.

**BID SCHEDULE: Ilwaco Bulkhead Resilience Project**

Item No.	Description of Item	Approx. Quantity	Units	Unit Price Dollars/Cents	Total Price Dollars/Cents
1.	Mobilization And Demobilization	1	LS	\$	\$
2.	Project Administration	1	LS	\$	\$
3.	Temporary Environmental Controls and Monitoring	1	LS	\$	\$
4.	Health And Safety	1	LS	\$	\$
5.	Field Engineering	1	LS	\$	\$
6.	Project Closeout	1	LS	\$	\$
7.	Demolition	1	LS	\$	\$
8.	Steel Sheet Pile Bulkhead	212	LF	\$	\$
9.	Concrete Pile Cap	212	LF	\$	\$
10.	Permanent Ground Anchors	18	EA	\$	\$
11.	Furnish, Place and Compact Imported Bulkhead Gravel Backfill	733	TON	\$	\$
12.	Furnish, Place and Compact Imported Fill	410	TON	\$	\$
13.	Furnish, Place and Compact Imported Crushed Surfacing Base Course	482	TON	\$	\$
14.	Furnish, Place and Compact Asphalt Paving	223	TON	\$	\$
15.	Miscellaneous Finish Work	1	LS	\$	\$
16.	Import and Place Armor Stone	270	TON	\$	\$
17.	Import and Place Bedding Stone	188	TON	\$	\$
18.	Import and Place Fish Mix	35	TON	\$	\$

**SUB-TOTAL:**

\$ \_\_\_\_\_

**8.2% WSST:**

\$ \_\_\_\_\_

**TOTAL BID AMOUNT:**

\$ \_\_\_\_\_

2. BID GUARANTY - Accompanying this proposal is a Bid Guaranty in the amount of five percent (5%) of the total bid amount.
3. WITHDRAWAL - The above proposal will not be withdrawn within forty-five (45) days after the actual date of the opening hereof.
4. CONTRACT - If the undersigned be notified of acceptance of this Proposal within forty-five (45) days of the time set for opening of bids, they agree to execute a contract for the above stated sum and shall bond their work as required by law and that they will begin work within ten (10) days after Notice to Proceed. The undersigned also agrees to execute the contract contained in this Bid Solicitation without modification.
5. SIGNING AUTHORITY – By signing below, the undersigned hereby acknowledges that they are authorized and duly bound to execute this Bid Proposal Form on behalf of the Contractor and that their signature is binding upon the Contractor. The signing party further certifies that the Contractor represented has visited the Port of Ilwaco's website before the bid due date and time to familiarize themselves with the bid documents and all changes made via Addendum.
6. CONTRACTOR VERIFICATION - The bidder is instructed to provide with this bid submittal the following registration and identification numbers.  
**CONTRACTOR REGISTRATION NO.**  
(insert number here) \_\_\_\_\_  
**DEPT. OF LABOR AND INDUSTRIES ACCOUNT NO.**  
(insert number here) \_\_\_\_\_  
**EMPLOYMENT SECURITY DEPARTMENT NO.**  
(insert number here) \_\_\_\_\_  
**WASHINGTON UNIFIED BUSINESS IDENTIFIER (UBI) NO.**  
(insert number here) \_\_\_\_\_
7. CONTRACTOR - certifies by signing below that they are not disqualified from bidding on any public works contract under RCW 39.06.010 or RCW 39.12.065(3).
8. CONTRACTOR - certifies by signing below that they have not violated RCW 39.04.370 more than one time as determined by the Department of Labor and Industries.
9. NON-COLLUSION DECLARATION - CONTRACTOR (as signed below), under penalty of perjury under the laws of the State of Washington, do state and affirm that the quote submitted to the Port of Ilwaco is a genuine and not a sham or collusive quote, or made in the interest or on behalf of any person not herein named; and further says that the said Contractor has not directly or indirectly induced or solicited any Contractor on the above work or supplies to put in a sham quote or any other person or corporation to refrain from quoting; and that said Contractor has not in any manner sought by collusion to secure an advantage over any other Contractor or Contractors.
10. ADDENDA – Bidder acknowledges receipt of Addenda by checking the box(es):

1   ☐   2   ☐   3   ☐   4   ☐   5   ☐   6   ☐   7   ☐

**CONTRACTOR -**

\_\_\_\_\_

**SIGNED -**

\_\_\_\_\_

\_\_\_\_\_  
**Print name and title**

**ADDRESS -**

\_\_\_\_\_

\_\_\_\_\_

**TELEPHONE -**

\_\_\_\_\_

**DATE:**

\_\_\_\_\_

**NOTE: PLEASE PUT NAME OF PROJECT ON ENVELOPE CONTAINING BID DOCUMENTS.**

**BID BOND**

(surety bond)

**KNOW ALL BY THESE PRESENTS:**

That we \_\_\_\_\_, as  
Principal, and \_\_\_\_\_, as  
Surety, are held and firmly bound unto the **Port of Ilwaco**, as Obligee, in the penal sum at least  
equal to FIVE PERCENT (5%) OF THE TOTAL AMOUNT OF THE BID, for the payment of  
which the Principal and Surety bind themselves, their heirs, executors, administrators, successors  
and assigns, jointly and severally, by these presents.

The Condition of this Obligation is such that if the obligee shall make any award to the principal for  
\_\_\_\_\_ according to the  
terms of the proposal or bid made by the Principal therefor and the Principal shall duly make and  
enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award  
and shall give bond for the faithful performance thereof, with Surety or Sureties approved by the  
Obligee; or if the Principal shall in case of failure so to do, pay and forfeit to the Obligee the penal  
amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise  
it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the  
Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS \_\_\_\_\_, DAY OF \_\_\_\_\_, 2024.

BY: \_\_\_\_\_  
Principal

(ORIGINAL SEAL HERE)

BY: \_\_\_\_\_  
Surety

**The Bid Bond consists of this form and a Power of Attorney of the Surety evidencing the authority of the signor of this Bid Bond. Both this Bid Bond and the Power of Attorney shall be submitted in a fully executed, original hard copy document. The Bid Bond shall have original signatures for the principal and surety and include the original surety seal. The Power of Attorney shall be an original document and include the original corporate seal of surety represented. Submission of copies will render bid non-responsive.**

**BID DEPOSIT**

(certified or cashier's checks)

Attached is a deposit in the form of a certified check or cashier's check in an amount at least equal to five percent (5%) of the total bid.

The condition of this obligation is that if the Port of Ilwaco (the "Port") shall make an award to the principal for

\_\_\_\_\_  
(title of Project)

according to bid or proposal made by the principal, and the principal enters into a contract with the Port in accordance therewith and provides the Port with a bond for the faithful performance thereof, with Surety or Sureties approved by the Port, the attached Bid Deposit shall be returned to the Principal. Alternatively, if the principal, after submitting a bid for the above named project, is awarded the Contract and fails to provide a performance bond acceptable to the Port, Principal shall forfeit to the Port the penal amount of the Bid Deposit.

SIGNED, SEALED and DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Principal (Signature)

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State

# **PORT OF ILWACO**

## **GENERAL CONDITIONS**

### **1. STANDARD SPECIFICATIONS**

The term "Standard Specifications" as used herein means the most recent version of the "M 41-10 Standard Specifications for Road, Bridge and Municipal Construction," as published by the Washington State Department of Transportation. Except as may be otherwise provided in the Contract Documents, the Standard Specifications are expressly incorporated into the Contract Documents and shall govern all aspects of the Project.

### **2. SUBMITTALS**

Prior to commencing the work, Contractor shall provide to the Engineer submittals for all materials and equipment installed on the project **AND** all other submittals required by the Contract Documents. The Project Engineer may also request that the Contractor develop, submit to the Engineer, and maintain a Submittals Log to track the progress of all Contract-required Submittals. Contractor shall update and submit the Submittal Log to the Engineer on a weekly basis until all Submittals are determined by the Engineer to be complete. No portion of the Work requiring a Submittal shall be commenced until the Submittal has been reviewed and returned as set forth in the Contract Documents. All portions of the Work involving Submittals shall be performed in accordance with the returned Submittals. Submittals marked "subject to change" or the like will not be reviewed.

By providing Submittals the Contractor represents that it has determined and verified all materials, field measurements, and related field construction criteria are in accordance with the Contract Documents, and that the Contractor has checked and coordinated the information contained within the submittal with the requirements of the Work and the Contract Documents. The Engineer's review of any Submittal shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, sequences, techniques, or procedures of construction, or to safety precautions or programs incident thereto. Review by the Engineer of the Contractor's Submittals shall not relieve the Contractor of responsibility for the accuracy of dimensions and details.

At the time of submission of each Submittal, Contractor shall in writing call Engineer's attention to any deviations that the Submittals or Samples may have from the requirements of the Contract Documents. Such Submittals shall be given to the Port in a complete and final version and the Contractor shall take into account sufficient time for the possibility of rejection of the Submittal, needed revisions, and resubmittal review time. Any Work delayed because of a rejected or reviewed "Amend and Resubmit" or revised Submittal is deemed to be entirely the Contractor's risk and shall not be the basis for a claim by the Contractor for additional compensation or an extension of Contract Time.

When resubmitting a Submittal, the Contractor shall direct specific attention, in writing or on the resubmittal itself, to all revisions it has made. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals. The Port will allow one (1) review of the original Submittal and one (1) submittal reiteration, which is included in the cost of the project. The Port has the right to recover any additional cost that may result from the review of any subsequent resubmittals. Cost recovery will be in the form of a deductive change order to the Contract.

### **3. BIDS**

All bids received by the Port of Ilwaco shall be considered valid for a period of forty-five (45) calendar days from the date of the opening of bids. Contractors or vendors that withdraw their bid during this 45- calendar-day period will forfeit their bid guarantee. The right is reserved by the Port of Ilwaco to reject any or all bids and to waive any informalities or irregularities.

3.1 The Total Bid constitutes a price for all work on the Project, regardless of whether it is specifically itemized on the Proposal Form. If the Proposal for this Project required the Total Bid to be allocated to various items of work, those allocations were solely for the benefit of the Port and are not to be construed as a limitation on the work to be performed. Accordingly, WSDOT Section 1-04.1(2) shall not apply to this Contract.

### **4. LIQUIDATED DAMAGES**

In the event that a contractor and/or vendor does not complete the proposed work in the contractually- specified time limit, the Port shall be entitled to liquidated damages pursuant to the Standard Specifications and the Contractor and/or surety under the performance bond shall be liable for payment of such damages.



## 5. PREVAILING WAGES

The rate of wages to be paid to all workmen, laborers or mechanics employed in the performance of any part of this contract shall be in accordance with the provisions of CHAPTER 39.12 R.C.W., as amended, and the rules and regulations of the Department of Labor and Industries.

**INASMUCH AS THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR PAYING THE PREVAILING WAGE, IT IS IMPERATIVE THAT ALL CONTRACTORS FAMILIARIZE THEMSELVES WITH THE CURRENT WAGE RATES BEFORE SUBMITTING ON THESE SPECIFICATIONS.**

All work performed under a public works contract must be classified into one or more of the many labor classifications for which prevailing wage rates have been established so that the appropriate wage can be applied. The successful contractor will need to file, and have approved, their Statement of Intent to Pay Prevailing Wages ("Statement of Intent") before any subcontractors can file their Statement of Intent for the same project.

**The Port cannot make any payment(s) to any contractor or subcontractor who has not submitted a Statement of Intent form which includes all classifications of persons performing work on the Project and which has been approved by the Industrial Statistician.** If the Port subsequently finds that an approved Statement of Intent omits classifications of persons that are performing work on the Project, the Port may withhold progress payments until such time as contractor (or subcontractor) files, and has approved, a revised Statement of Intent which includes the previously omitted classifications. The Port will not release final payment until all contractors and all subcontractors have submitted Affidavit of Wages Paid forms that have been certified by the Industrial Statistician.

**Each contractor performing work on the project shall keep accurate Certified Payroll records for three (3) years from the date of acceptance of the public works project in complete compliance with WAC 296-127-320 and RCW 39.12.120. It is the responsibility of the Contractor to collect and maintain Certified Payroll records from Sub-Contractors and provide upon request.**

## 6. INSURANCE

**CONTRACTORS ARE STRONGLY ENCOURAGED TO SEND THIS ENTIRE SECTION TO THEIR INSURANCE PROVIDER(S) TO CAPTURE ANY PREMIUM COSTS PRIOR TO SUBMITTING THEIR BID.**

Delete WSDOT Standard Specification Section 1-07.18 and replace with:

The Contractor shall procure and maintain for the duration of the contract, and for one (1) year from Physical Completion, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the contractor, their agents, representatives, employees, or subcontractors. The Contractor shall furnish a Certificate of Insurance naming the Port as an additional insured on its Commercial General Liability and Automobile Liability Policies. The Contractor shall furnish the Port with original Certificates of Insurance including all required additional insured endorsements or copies of the applicable policy language effecting coverage and a copy of the Declarations and Endorsement Page of the policies listing all policy endorsements.

### MINIMUM SCOPE AND LIMIT OF INSURANCE

- A. Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01, including products and completed operations, with limits of no less than \$5,000,000 per occurrence for bodily injury, personal injury, and property damage. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- B. Automobile Liability:** Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than \$1,000,000 per accident for bodily injury and property damage.
- C. Worker's Compensation** insurance as required by the State of Washington Statutory Limits, and Employers' Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
- D. Contractors' Pollution Legal Liability** and/or Asbestos Legal Liability and/or Errors and Omissions (if project involves environmental hazards) with limits of no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.
- E. Builder's Risk:** Provided by Owner.
- F. Marine General Liability:** In the event that Contractor will be utilizing marine vessels to perform any portion of the Project, Contractor shall procure and maintain a Marine General Liability policy with limits of not less than \$5,000,000 per occurrence for bodily injury, personal injury, property damage, and fuel

and other spills. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

- G. Unmanned Aerial Vehicles (UAVs or Drones):** If Unmanned Aerial Vehicles (UAVs or Drones) are to be used during the project, contractor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the ownership, maintenance or use of UAVs. This insurance shall include limits of no less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate and shall name the Port of Ilwaco as an additional insured. The Contractor shall furnish the Port with original Certificates of Insurance including all required additional insured endorsements or copies of the applicable policy language effecting coverage as required by this clause, and a copy of the Declarations and Endorsement Page of the policy listing all policy endorsements.

The insurance policies are to contain, or be endorsed to contain, the following provisions:

- A. The Port, its officers, officials, employees, and volunteers are to be covered as additional insured** on the CGL and automobile liability policies with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General Liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used). A blanket Additional Insured Endorsement is not acceptable.
- B.** For any claims related to this project, the **Contractor's insurance coverage shall be primary** insurance as respects the Port, its officers, officials, employees, and volunteers. Any insurance or self- insurance maintained by the Port, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- C.** Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with at least thirty (30) day notice to the Port. The Contractor shall have an independent duty to notify the Port of any cancellation.

#### ***Claims Made Policies***

If any coverage required is written on a claims-made coverage form:

- A.** The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.
- B.** Insurance must be maintained and evidence of insurance must be provided (upon request) for at least three (3) years after completion of contract work.
- C.** If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor must purchase extended reported period coverage for a minimum of one (1) year after Physical Completion of contract work.
- D.** A copy of claims reporting requirements must be submitted to the Port of Ilwaco for review.
- E.** If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

#### ***Acceptability of Insurers***

Insurance is to be placed with insurers with a current A.M. Best rating of no less than A VII.

#### ***Waiver of Subrogation***

**Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire** from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation.

#### ***Verification of Coverage***

Contractor shall furnish the Port of Ilwaco with original certificate and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the Port of Ilwaco before work commences. The Port

of Ilwaco reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time. The Port's receipt and acceptance of the Contractor's certificate of insurance does not waive the Contractor's obligation to comply with the insurance requirements of the Contract Documents.

In the event that the contractor fails to provide said certificates prior to commencement of work, then the contractor shall be considered as not performing and the Bid Guarantee shall be forfeited. The Contractor shall bear all cost for such insurance, including any payments of deductible amounts.

Prospective bidders are advised that projects with Work on or adjacent to water may require insurance coverage in compliance with:

- A. The Longshoremen's and Harbor Worker's Compensation Act (administered by U.S. Department of Labor), or
- B. The State Industrial Insurance (administered by the Washington State Department of Labor and Industries) or
- C. Both.

The project may require USL & H insurance. Unless the Contract expressly requires USL&H insurance, the contractor is SOLELY responsible for determining whether this project has situs (location) and status (work type) under the Longshore and Harbor Workers' Compensation Act. The Contractor must procure any US L & H coverage that (i) is expressly required by the Port as a contract requirement in the Special Provisions or (ii) if not so required by the Port, is required by law, regardless of whether this Contract expressly requires it. If the Contractor fails to procure such coverage and the Port later determines that it is required by law, then (i) the Port may withhold progress payments until such time as the Contractor obtains such insurance and provides proof thereof to the Port and (ii) the Contractor shall defend, indemnify, and hold the Port of Ilwaco harmless from any and all claims, losses, damages, and costs resulting from the Contractor's failure to timely obtain such insurance.

#### **Subcontractors**

The required insurance shall cover all of the Contractors' operations of whatever nature connected in any way with this Contract, including any operations under subcontract. It is the obligation of the Contractor to ensure that all Subcontractors (at whatever level) carry a similar program which provides the identified types of coverage and limits of liability, unless otherwise specifically indicated within the Special Provisions.

Contractor shall require and verify that all subcontractors maintain insurance meeting the requirements stated herein.

### **7. BID GUARANTEE**

The contractor/vendor shall supply with their proposal a Bid Guarantee in the amount of five percent (5%) of the total amount of the bid underwritten either by an authorized surety insurer under RCW 48.05.110, or an unauthorized surety insurer as a surplus line pursuant to RCW 48.15 utilizing the Bid Bond form provided **OR** a Bid Deposit in the amount of five percent (5%) of the total amount of the bid by utilizing the Bid Deposit form provided and attaching a certified check or cashier's check payable to the Port of Ilwaco. **The Bid Bond consists of the Bid Bond form provided in the Bid Solicitation Documents and a Power of Attorney of the Surety evidencing the authority of the signor of the Bid Bond. Both the Bid Bond and the Power of Attorney shall be submitted in a fully executed, original hard copy document. The Bid Bond shall have original signatures for the principal and surety and include the original surety seal. The Power of Attorney shall be an original document and include the original corporate seal of surety represented. Submission of copies will render bid non-responsive.**

In the event that the selected contractor/vendor fails to execute a contract within the timeframe specified by the Port of Ilwaco bid documents, the surety on such bond shall be liable for the penal amount of the bond. To the extent that this provision conflicts with WSDOT Section 1-03.3, this section controls.

The Owner will return bid guarantees (surety bid bonds upon request only) to unsuccessful bidders as soon as practicable, but not sooner than the execution of a contract with the successful bidder.

### **8. PERFORMANCE and PAYMENT BOND REQUIREMENTS**

The successful Contractor / Vendor will be required to comply with the bonding requirements of RCW 39.08.010. If a Payment and Performance Bond is used to fulfill this requirement, the successful Contractor / Vendor shall use owner provided Payment and Performance Bond form and shall execute and deliver to the Port of Ilwaco the bond or other surety for one hundred percent (100%) of the bid amount for the entire project in compliance with RCW 39.08.010. The Contractor is also responsible for forwarding copies of

Payment and Performance Bonds to all subcontractors, suppliers and all other service providers as requested. **The Payment and Performance Bond consists of the Payment and Performance Bond form provided in the Bid Solicitation Documents and a Power of Attorney of the Surety evidencing the authority of the signor of the bond. Both the Payment and Performance Bond and the Power of Attorney shall be submitted in a fully executed, original hard copy document. The Payment and Performance Bond shall have original signatures for the principal and surety and include the original surety seal. The Power of Attorney shall be an original document and include the original corporate seal of surety represented. Submission of copies will not be accepted.**

#### **9. WAGE COMPLIANCE CERTIFICATION**

The successful Contractor / Vendor shall use the owner provided Wage Laws Compliance Certification form stating that the Contractor / Vendor has not violated Washington State wage laws in a three-year period prior to award of contract in accordance with RCW 39.04.350.

#### **10. RETAINAGE**

The Port of Ilwaco will retain funds in accordance with RCW 60.28.

ALL RETAINAGE (subject to allowance for claims) WILL BE HELD AND RELEASED AUTOMATICALLY ONCE ALL OF THE FOLLOWING CONDITIONS ARE MET:

- Receipt of the Department of Labor and Industries Affidavit of Wages Paid.
- Receipt of release from Department of Labor and Industries.
- Receipt of certificate of payment of excise taxes from the Department of Revenue.
- Receipt of release from Employment Security Dept.

If the Contractor wishes to submit a bond for all or any portion of the contract retainage, the Contractor shall satisfy all of the following conditions:

- Comply with RCW 60.28 in all respects;
- Submit a bond written on owner provided bond form;
- Assure that the Bond in Lieu of Retained Funds is underwritten by an authorized surety insurer having a minimum A.M. Best financial strength rating of A-.
- By submitting a bond for contract retainage, the Contractor attests (i) that Contractor will accept like bonds from any subcontractors or suppliers from which the Contractor has retained funds and further (ii) that Contractor shall then release the funds retained from the subcontractor or supplier to the subcontractor or supplier within thirty days of accepting the bond from the subcontractor or supplier.

#### **11. MOBILIZATION AND DEMOBILIZATION**

Mobilization shall be included in the contractor's bid and shall consist of preparatory work and operations performed by contractor, including, but not limited to, those necessary for movement of their personnel, equipment, supplies, and incidentals to the project site. Demobilization shall also be included in bid, and the job site will be inspected upon completion by the Port to ensure all contractor/vendor property and personnel have been properly removed. Final payment will not be made prior to said inspection and Port site approval.

#### **12. ADDENDA TO SPECIFICATIONS**

To the extent that they are legally permissible, changes, additions or clarifications to the contract documents, specifications, or design drawings made after advertising and before the bid submittal and bid opening will be posted on the Port's Bid Postings page (<https://www.portofilwaco.com/documents/>) as numbered and dated addenda. All such deletions, additions, clarifications or corrections will be in written or graphic form. All bidders must acknowledge receipt of any addenda on the bid form to ensure that all bidders have submitted their bids on the same information. Sufficient time, as determined solely by the Port of Ilwaco, will be provided between issuance of addenda and submittal of bids to permit the bidders to incorporate the addenda data into their proposal.

Any prospective bidder desiring an explanation or interpretation of the bid documents must request the explanation or interpretation in writing soon enough to allow a written reply to reach all prospective bidders before the submission of their bids. The bidder agrees that the Port shall not be liable for any claim based on ambiguity of which the bidder knew and did not inform the Port of or of which the bidder should have reasonably known. **It is the sole responsibility of the Contractor to visit the Port of Ilwaco's website daily throughout the bidding process for any changes to the bid documents issued via Addendum; the bidder agrees that the Port shall not be liable for any claim based on the Contractors failure to monitor the Port of Ilwaco's website.**

#### **13. NON-COLLUSION STATEMENT**

By signing the Proposal Form, the bidder certifies that the Bid submitted herewith is a genuine and not a collusive or sham bid and is not made in the interest of or on behalf of any person herein named and that the person, firm, association, joint venture, co-partnership or corporation herein named has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in the submittal of this bid.

#### **14. TAXES**

All bid proposals shall include an allocation for the appropriate sales and use taxes.

#### **15. PAYMENT**

Progress payments will be made monthly for Work duly certified, approved by the Manager, and performed (based on the Schedule of Values and actual quantities of Work performed) during the calendar month preceding the Application for Payment. The Port of Ilwaco processes payments on the last Wednesday of each month. All Applications for Payment must be received no later than the 2<sup>nd</sup> business day of each month to be considered for payment in that month or it will automatically be entered into the next month's payment cycle. Following receipt of an Application for Payment, the Port Engineer will either authorize payment, thereby making it "Complete", or indicate in writing to the Contractor the specific reasons why the payment request is being denied, in whole or in part, and the remedial action the Contractor must take to receive the withheld amount. A "Complete" Application for Payment dated by the Port Engineer on or before the 15<sup>th</sup> of each month will be paid on the last Wednesday of the same month, subject to Commission approval. A "Complete" Application for Payment dated by the Port Engineer after the 15<sup>th</sup> of each month will be paid on the last Wednesday of the following month, subject to Commission approval. All Applications for Payment shall be submitted to the attention of the Project Engineer. By submitting an application for payment the Contractor certifies that: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); (3) all Work covered by the Application for Payment is in accordance with the Contract Documents and is not defective; and (4) Prevailing Wages Rates have been paid in accordance with RCW 39.12.

The Port cannot make any payments to any contractor or subcontractor who has not submitted an Intent form that has been approved by the Industrial Statistician. The Port may not release final payment until all contractors and all subcontractors have submitted Affidavit forms that have been certified by the Industrial Statistician.

Prior to application for final payment, the contractor shall provide proof of payment of all subcontractors. The Port reserves the right to require proof of payment of all subcontractors in a form acceptable to the Port. The Port may, in its sole discretion, withhold final payment until such proof of payment has been received.

#### **16. CONTRACT EXTENSION**

The Port of Ilwaco may, at its sole discretion, extend the time to complete the project if so requested by the contractor/vendor and the contractors'/vendors' bondsmen. Both the request and the authority to extend must be in writing and approved by the appropriate representative of each party.

#### **17. STATUTES, LAWS, CODES, AND REGULATIONS**

All statutes, codes, municipal ordinances and regulations shall be complied with in the pursuit of all portions of the work.

#### **18. OBLIGATION TO REPORT EMPLOYEES WHO USED EARLY RETIREMENT FACTORS; LIABILITY FOR FAILURE TO REPORT**

The Port is an employer of one or more members of the Washington State Department of Retirement Systems (DRS). As a DRS covered employer, the Port is required to advise DRS of any retiree performing services for the Port who has used the 2008 Early Retirements Factors (ERFs) to retire early and is under age 65. Workers meeting these factors cannot perform services in any capacity for a DRS-covered employer and continue to receive a pension benefit (WAC 415-02-325).

Concurrently with the execution of the Contract and prior to commencing work, Contractor shall verify if any person who will be performing work on this project retired from a DRS employer using ERFs. Contractor must report any such persons to the Port by: (1) completing the DRS Contractor or Third-Party Worker Retirement Status Verification form that can be downloaded by following this link

([Employer form Retirement Status Verification - DRS MS 147 \(drsms147\) \(wa.gov\)](#)) and (2) emailing it [finance@portofilwaco.org](mailto:finance@portofilwaco.org), [tlofstrom@portofilwaco.org](mailto:tlofstrom@portofilwaco.org) or mailing it to Port of Ilwaco at PO Box 307, Ilwaco, WA 98624.

If Contractor fails to timely report any employee who used ERFs to the Port in accordance with this section, Contractor shall be liable for all assessments issued to the Port by DRS and all legal fees and costs incurred by the Port in connection with such assessment. Contractor agrees that the Port may deduct such amounts from any amounts that may be owed to Contractor. Any additional amounts owed will be paid to the Port within fifteen (15) days of receiving an invoice from the Port.

#### **19. EXAMINATION OF SITE AND CONDITIONS**

Bids shall reflect the bidder's anticipated costs for completing the work, including labor, materials and equipment. Before submitting their bid, the bidder shall examine the site of the work to ascertain all the physical conditions in relation thereto. Failure to take this precaution will not release the successful bidder from entering into contracts or excuse the bidder from performing the work in strict accordance with the terms of the contract.

In submitting the bid, the bidder warrants that it understands: (1) the requirements for the performance of completed work; (2) the nature and location of the work; (3) the general and local conditions which can affect the work and/or its costs (including surface and subsurface materials or obstacles); (4) the time necessary to complete the work; (5) the bid documents and contract; and (6) the applicable Federal, State and local laws, ordinances and regulations. The bidder agrees that the Port shall not be liable for any change order, claim for additional payment of additional time, or any other claim whatsoever that arises from bidder's failure to fully investigate and familiarize itself with the project conditions.

No oral statements made by any officer, agent, or employee of the Port in relation to the physical conditions pertaining to the site of the work will be binding on the Port.

#### **20. ASSIGNMENT OF CONTRACT AND SUBLETTING**

The contractor shall not assign this contract nor any part thereof, nor any monies due or to become due thereunder without the prior written approval of the Port. The contractor shall not sublet any part of this contract without first having obtained the written consent of the Port to do so. In case such consent is given, it shall in no way release the contractor from any responsibility, but the contractor shall be held in all respects accountable for the same as if no consent had been given. The contractor will be required to give personal attention to the work which is sublet.

#### **21. CLAIMS FOR DAMAGES**

Except for unreasonable delays as referenced in RCW 4.24.360, the contractor or subcontractor shall not be entitled to any claim for damages on account of hindrance or delays in the completion of the work due to the acts of the Port or the acts of another contractor in the performance of a contract with the Port.

The contractor or subcontractor shall not be charged with liquidated damages because of any delays in the completion of the work due to unforeseeable causes beyond the contractor's control and without fault or negligence of the contractor, including, but not restricted to, unusually severe weather, fire or other casualty, strikes and other exceptional causes as provided herein or in the Standard Specifications or delays of subcontractors due to such causes; provided the contractor shall first give notice in writing of the cause of any such act, hindrance or delay within ten (10) days after its occurrence.

#### **22. PROTECTION OF WORK SITE**

The contractor shall erect and maintain good and sufficient guards, barricades, and signals at all unsafe places at or near the work and shall in all cases maintain safe passageways at all road crossings, crosswalks and street intersections, and shall do all other things necessary to prevent accident or loss of any kind.

The contractor shall protect from damage all water, sewer, gas, steam or other pipes or conduits and all hydrants and all other property likely to become displaced or damaged by the execution of the work.

The contractor shall routinely, and at the conclusion of each workday, inspect the work site and the guards, barricades and signals thereon to ensure that there are no safety hazards or attractive nuisances which may cause injury.

#### **23. PERMITS**

The contractor shall procure all necessary permits (unless otherwise instructed by the Port), pay for the same, and obtain all official licenses for the construction of the work and for temporary obstructions, enclosures and opening of streets for pipes, walls, etc., arising from the construction and completion of the work as mentioned in the specifications. The contractor shall be responsible for all violations of the law for any cause

in connection with the construction of the work or obstructing streets, sidewalks, etc., and shall give all requisite notices to public authorities.

#### **24. ROYALTIES AND PATENTS**

The contractor shall pay royalties and license fees and defend all suits resulting from claims for same on all materials and equipment purchased outright and installed according to the specifications of the Port.

#### **25. INSPECTION OF WORK**

All materials furnished by the contractor shall be subject to the inspection and approval of the Port's representative at any time during the progress of the work and until final completion thereof. The materials shall be delivered by the contractor sufficiently in advance of the work to enable the Port's representative to make the proper tests and inspection. As soon as materials have been tested and inspected, the contractor shall immediately remove all rejected materials from the work to such place as distant therefrom as the Port's representative may require, but the neglect or failure on the part of the Port's representative to condemn or reject inferior materials or work shall not be construed to imply an acceptance of the material or work. The contractor shall furnish, at their own expense, such labor as may be required to enable the Port's representative to make a thorough inspection and culling of the materials.

The Port will not pay for unauthorized or defective work. At the direction of the Port's representative, the contractor shall immediately remedy, remove, replace or dispose of unauthorized or defective work or materials and bear all costs of doing so.

#### **26. DEFECTIVE AND NON-CONFORMING WORK**

The contractor, upon being notified by the Port representative, shall remove or reconstruct, or make good without cost to the Port, any work which the Port representative may deem to have been defectively executed or not performed in accordance with the Contract Documents.

#### **27. CLEANUP**

From time to time as may be ordered by the Port's representative and, in any event, immediately after completion of work, the contractor shall, at their own expense, clean up and remove all refuse and unused materials of any kind resulting from the work. Upon failure to do so within twenty-four (24) hours after having been notified by the Port's representative, the work may be done by the Port and the costs thereof charged to the contractor and deducted from the final estimate.

#### **28. WARRANTY**

The contractor shall warranty against defects appearing or developing in the material or workmanship provided or performed under this contract for a period of one year after the Physical Completion Date, unless noted otherwise in the Contract Documents, which may extend the warranty period. The Physical Completion Date will be, as established in writing, by the Port of Ilwaco. The Contractor warrants that its workmanship will meet or exceed industry standards for work performed in the Baker Bay region.

#### **29. BIDDER RESPONSIBILITY CRITERIA**

It is the intent of the Owner to award a contract to the "responsible" bidder submitting the lowest "responsive" bid for the project. Before the award of a public works contract, a bidder must meet the following responsibility criteria to be considered a responsible bidder and qualified to be awarded a public works project. In addition, the bidder may be required by the Port to submit documentation demonstrating compliance with these requirements. The bidder must:

- At the time of bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW;
- Have a current state unified business identifier number;
- If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW; and
- Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).
- A bidder must not have violated the "Off-Site Prefabricated Non-Standard Project Specific Items" reporting requirements more than one time as determined by the Department of Labor and Industries.

Pursuant to RCW 39.04.350 the Port may establish relevant Supplemental Bidder Responsibility Criteria applicable to a particular project for determining bidder responsibility and if so, Bidders are advised that the Port has adopted criteria for determining bidder responsibility, including the basis for evaluation and the deadline for appealing a determination that a bidder is not responsible. The Bidder, by written request in a timely manner but not later than seven (7) days prior to bid opening, may request the Port modify the supplemental criteria. The Port will evaluate the request submitted by the potential bidder and respond before

the bid submittal deadline. If the evaluation results in a change of the criteria, the Port will issue an addendum to the bidding documents identifying the new criteria.

### **30. CONTRACTOR and SUBCONTRACTOR RESPONSIBILITY CRITERIA**

At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meet the following bidder responsibility criteria:

- Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
- Have a current Washington Unified Business Identifier (UBI) number;
- If applicable, have:
  - i. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees work in Washington, as required in Title 51 RCW;
  - ii. A Washington Employment Security Department number, as required in Title 50 RCW;
  - iii. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
  - iv. An electrical contractor license, if required by Chapter 19.28 RCW;
  - v. An elevator contractor license, if required by Chapter 70.87 RCW.
- Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).

### **31. DEBARMENT / SUSPENSION COMPLIANCE**

The bidder must not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3). The bidder/offeror certifies, by submission of this bid proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, or declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency. It further agrees by submitting this proposal or acceptance of the Contract that it will include this clause without modification in all lower tier transactions, solicitations, proposals, agreements, contracts, and subcontracts. Where the bidder/offeror or any lower tier participant is unable to certify to this statement it shall attach an explanation to this Proposal. The Port reserves the right to require Contractor to replace a sub-contractor or lower tier participant who cannot meet the foregoing certification requirements.

### **32. CONFLICT OF INTEREST**

Contractor covenants that it presently has no interest and shall not acquire an interest, directly or indirectly, which would conflict in any manner or degree with its performance under this Contract. Contractor further covenants that in the performance of this Contract, no person having such interest shall be employed by it or any of its sub-contractors.

### **33. SUBCONTRACTORS' LIST**

If the invitation to bid is expected to cost one million dollars or more the bidder shall comply with RCW 39.30.060.

Regardless of the expected cost of the project, the Contractor shall at the time of executing this Contract provide the Port with a list of all subcontractors to be utilized on the project. The contractor shall provide the Port with an updated list if any of the subcontractors change.

### **34. PROJECT CLOSE-OUT DOCUMENTS**

As part of the project close-out the Contractor shall submit the following **directly to the Port:**

- Manufacturer information for all product use (PDF)
- O & M Manuals (2 hard copies, PDF)
- Warranties (PDF)
- Shop Drawings (CAD, PDF, Paper 11x17)

**and to the Consultant:**

- Complete set of Redline drawings

### **35. DEFINITIONS**

The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

### **36. CERTIFICATION OF NON-SEGREGATED FACILITIES**

**[THIS SECTION FOR USE IN CONTRACTS FOR PROJECTS INVOLVING FEDERAL FUNDS]**

The **Contractor** agrees by signature herein below, and for purposes of this project, that they are deemed to



have signed and agreed to the provisions of Certification of Non-Segregated Facilities, which is included as Exhibit "A" and made a part hereof.

### **37. EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES**

#### **[THIS SECTION FOR USE IN CONTRACTS FOR PROJECTS INVOLVING FEDERAL FUNDS]**

The **Contractor** by signing this Contract hereby agrees to fully comply with all equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Orders 11246 and 11375 and the Standard Specifications which are imposed pursuant to Section 140 of Title 23, U.S.C.

**38. MODIFICATIONS TO STANDARD SPECIFICATIONS.** The Standard Specifications are modified in the following respects:

### **Section 1-01 DEFINITIONS AND TERMS**

#### **Section 1-01.3 DEFINITIONS:**

"CONTRACTING AGENCY" or "OWNER": Port of Ilwaco is substituted for "State," "Department," and "Department of Transportation" when the context indicates that such term refers to the owner of the Project.

"ENGINEER" and "PROJECT ENGINEER": Whenever Contractor is required or entitled to provide notice to the Engineer or Project Engineer under Section 1-04.5 (Procedure and Protest by the Contractor) or 1-09.11 (Disputes and Claims), such notice shall be given to the Director of Facilities of the Port of Ilwaco.

#### **Section 1-02 BID PROCEDURES AND CONDITIONS:**

Section 1-02.2 is deleted.

Section 1-02.4(1) - The first sentence of the last paragraph in this section beginning with "Any prospective Bidder desiring an explanation..." is deleted in its entirety and replaced with "Any prospective Bidder desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing four (4) business days prior to the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids."

#### **Section 1-04.2 COORDINATION OF CONTRACT DOCUMENTS, PLANS, SPECIAL PROVISIONS SPECIFICATIONS, AND ADDENDA**

Delete the second paragraph and replace with the following:

Any inconsistency in the parts of the Contract shall be resolved by following this order of precedence (e.g., A presiding over B,C,D,E,F,G, and H; B presiding over C,D,E,F,G, and H; and so forth):

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| A. Addenda,                           | E. Technical Specifications        |
| B. Proposal Form,                     | F. Contract Plans (i.e., Drawings) |
| C. Port of Ilwaco Special Provisions, | G. Standard Specifications, WSDOT  |
| D. Port of Ilwaco General Conditions, | H. Standard Plans – WSDOT          |

#### **Section 1-05.10 GUARANTEES:**

Delete the existing Section and replace with the following:

#### **Section 1-05.10 Guarantees:**

The Contractor shall furnish to the Contracting Agency any guarantee or warranty furnished as a normal trade practice in connection with the purchase of any equipment, materials, or items used in the completion of Work in the Contract.

When corrections are required pursuant to this warranty, the Contractor shall be responsible for correcting all defects in workmanship and/or materials in the Work at Contractor's sole expense. The Contractor shall commence remedying such defects within five (5) calendar days of receipt of notice of discovery thereof from the Owner and shall complete such Work within a reasonable time. In emergencies, where damage may result from delay or where loss of service may result, such corrections may be made by the Owner, in which case the cost shall be the obligation of the Contractor. In the event the Contractor **does not complete corrections within a reasonable time, the Work shall be otherwise accomplished and the cost of same** shall be paid by the Contractor.

The Contractor shall be liable for any costs, losses, expenses, or damages, including consequential damages, suffered by the Owner resulting from defects in the Contractor's Work, including, but not limited to, costs, labor, materials, equipment, and administration incurred by Owner in making emergency repairs of such defective Work and associated costs of construction, inspection, and supervision by the Owner. The Contractor shall defend, indemnify, and hold the Owner harmless from any and all claims which may be made against the Owner as a result of Contractor's defective Work.

### **Section 1-08.3                    PROGRESS SCHEDULE:**

1-08.3(1) General Requirements - Add the following to the end of this section, "If the Contractor changes Work outlined in the schedule without sufficient notification to the Project Engineer, as solely determined by the Project Engineer, the Port reserves the right to recover any additional costs incurred by the Port as a result of insufficient notice from the Contractor to the Project Engineer; these costs may include, but are not limited to: financial impacts to the Port's or its Tenant's operations and staff, the Port's consultants, cancelled or rescheduled special inspections, etc. Cost recovery will be in the form of a deductive change order to the Contract."

### **Section 1-09                    MEASUREMENT AND PAYMENT:**

Section 1-09.1 Measurement of Quantities clarification; At the Owners discretion and direction the Contractor shall be required to show specific units of measurements for Items of payment that have "Lump Sum" or "Force Account" in the Bid item of Work.

Sections 1-09.13 (1) – (4) Disputes and Claims are deleted.

Section 1-09.6 Force Account is deleted in its entirety and replaced with the following:

All **Work** which will increase or decrease the total project cost, or project completion time, to the Port of Ilwaco must be authorized in writing by the Port of Ilwaco as provided for herein prior to the contractor/vendor undertaking the work. Any increase in price due to a change order which is not authorized in writing by the Port prior to the contractor/vendor undertaking the work will not be paid for by the Port. Although the Engineer can negotiate such changes, they cannot approve change orders; such approval must come from the Port Manager or their designee.

All change orders will be executed in accordance with the Standard Specifications and when executed shall be inclusive of all costs and time extensions. The Port shall not be bound by any statements which have not been incorporated into an approved change order as provided for herein.

The amount to be paid for Work by Change Order shall be determined as follows:

- A. For Labor** – Labor reimbursement calculations shall be based on a "Project Labor Rates" prepared and submitted by the Contractor and by any Subcontractor before that firm commences the work. Throughout the term of the Contract, as needed, Contractor shall provide updated Project Labor Rates for labor classifications and/or Subcontractors not previously identified. Once Rates are approved by the Engineer, it shall be used to calculate all the change order labor for the duration of the Contract.

To be approved, the List must be accurate and meet the requirements of this Section. It shall include regular time and overtime rates for all employees (or work classifications) expected to participate in the Work. The rates shall include the basic wage and fringe benefits, the current rates for Federal Insurance Compensation Act (FICA), Federal Unemployment Tax Act (FUTA) and State Unemployment Tax Act (SUTA), the company's present rates for Medical Aid and Industrial Insurance premiums and the planned payments for travel and per diem compensation.

In addition to compensation for direct labor costs defined above, the Contracting Agency will pay 22 percent of the sum of the costs calculated for labor reimbursement to cover project overhead, general company overhead, profit, bonding, insurance required by Sections 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. This amount will include any costs of safety training and health tests. All Labor costs shall be inclusive of small tools, no additional payments for Contractor-owned small tools will be made. For further detail see Tables A, B & C below.

- B. For Materials** – The Contracting Agency will reimburse for Contractor supplied materials. For the purpose of this provision, "Materials" shall include those items incorporated into the Work, supplies used during the Work and items consumed. This cost shall include freight and handling charges and applicable taxes. Before Work is started, or as reasonably practicable, the Engineer will require the

Contractor to attach invoices or quotes and may be required to obtain multiple quotations for each material(s) anticipated to cost over \$250. To support the prices, the Contractor shall attach valid copies of vendor invoices or quotes.

If invoices are not available for materials from the Contractor's stocks, the Contractor shall certify, by affidavit, actual cost for material reimbursement requests up to \$250. If, in the case of non-invoice materials supported by Contractor affidavit, the price appears to be unreasonable the Engineer will determine the cost for all or part of those materials, utilizing the best data available.

The Contracting Agency reserves the right to provide materials. In this case, the Contractor will receive no payment for any costs, overhead, or profit arising from the value of the materials themselves. Additional costs to handle and place the Agency-furnished material shall be compensated as described in this Subsection.

In addition to compensation for direct materials cost, the Contracting Agency will pay **15** percent of the sum of the costs calculated for materials reimbursement to cover project overhead, general company overhead, profit, bonding, insurance, required by Section 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. For further detail see Tables A, B & C below.

- C. For Equipment** – The Contracting Agency will reimburse the Contractor for the cost of equipment utilized in the Work. The equipment provided by the Contractor shall be of modern design and in good working condition. For the purpose of this provision, "provided" shall mean the equipment is owned (either through outright ownership or through a long-term lease) and operated by the Contractor or Subcontractor or that the equipment is rented and operated by the Contractor or Subcontractor. Equipment that is rented with operator shall not be included here, but shall be considered a service and addressed according to Subsection D.

The amount of payment for any Contractor-owned equipment that is utilized shall be determined according to the Contractor and Subcontractor's "Equipment Rates" in effect at the time of the Contract execution, or updated as needed throughout the Contract, to account for equipment needs not previously identified. Rates shall be full compensation for all fuel, oil, lubrication, ordinary repairs, maintenance, and all other costs incidental to furnishing and operating the equipment except labor for operation.

Payment for rented equipment will be made on the basis of a valid invoice, covering the time period of the Work. Before Work is started, the Engineer may require the Contractor to obtain multiple quotations for the rental of equipment to be utilized and select the Vendor with prices and terms most advantageous to the Contracting Agency.

The Contracting Agency will add **15** percent to equipment costs to cover project overhead, general company overhead, profit, bonding, insurance, required by Sections 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. For further detail see Tables A, B & C below.

- D. For Services** – Compensation for specialized services shall be made on the basis of receipt of an invoice from the providing entity. A "specialized service" shall be one that is typically billed through invoice in standard industry practice. Before Work is started, the Engineer may require the Contractor to obtain multiple quotations for the service to be utilized and select the provider with prices and terms most advantageous to the Contracting Agency.

Except as noted below, the Contracting Agency will pay an additional **15** percent of the sum of the costs included on invoices for specialized services to cover project overhead, general company overhead, profit, bonding, insurance, required by Sections 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred.

When a supplier of services is compensated through invoice, but acts in the manner of a Subcontractor, as described Subsection F of this provision, then markup for that invoice shall be according to Subsection F, "Contractor Mark-up on Subcontractor "Work". For further detail see Tables A, B & C below.

- E. For Mobilization** – Mobilization is defined as the preparatory Work performed by the contractor including procurement, loading and transportation of tools and equipment, personal travel time (when such travel time is a contractual obligation of the Contractor or a customary payment for the Contractor to all employees). Mobilization also includes the costs incurred during demobilization. The Contracting Agency will pay for mobilization for off-site preparatory Work provided notice has been provided sufficiently in advance to allow the Engineer to witness the activity, if desired.

All costs experienced during mobilization activities for labor, equipment, materials or services shall be listed in the Sections herein described and paid accordingly.

- F. For Contractor Markup on Subcontractor's Work** – When Change Order work is performed by one or more approved Subcontractors, lower-tier subcontractors or suppliers, or through invoice by firm(s) acting in the manner of a Subcontractor, the Port will pay one (1) additional markup to the Contractor calculated using Table C below to compensate for all administrative costs, including project overhead, general company overhead, profit, bonding, insurance required by Sections 1-07.10 and 1-07.18, Business & Occupation tax, and any other costs incurred. For further detail see Tables A, B & C below.

A firm may be considered to be acting as a Subcontractor when the Engineer observes one or more of the following characteristics:

- The person in charge of the firm's activities takes an active role in managing the overall project, including extensive coordination, interpretation of Plans, interaction with the Contracting Agency or management of a complex and interrelated operation.
- Rented equipment is provided fueled, operated and maintained by the firm. Operators of rented equipment are supervised directly by the firm's representative. There is little interaction between the Contractor and the employees of the firm.
- The firm appears to be holding the risk of performance and quality of the Work.
- The firm appears to be responsible for liability arising from the Work.

The payments above shall be full payment for all Work done on a change order. The calculated payment shall cover all expenses of every nature, kind, and description, including those listed above and any others incurred on the Work being paid by change order.

Table A: Markup For Work Completed by Contractor		
Costs	Contractor Markup	Subcontractor Markup
Labor	22%	N/A
Materials	15%	N/A
Equipment	15%	N/A
Services	15%	N/A

Table B: Markup For Work Completed by Subcontractor		
Costs	Contractor Markup	Subcontractor Markup**
Labor	See Table C	22%
Materials		15%
Equipment		15%
Services		15%

\*\* Markup applies to subcontractor performing the work, only, regardless of tiered subcontracting. There is no additional markup for tiered subcontracting (e.g., first-tier subcontractor markup on second-tier subcontractor work).

Table C: Contractor Markup for Work Completed by Subcontractor		
Costs	Contractor Markup	Subcontractor Markup
< \$25,000	12%	N/A
\$25,000 - \$100,000	10%	
> \$100,000	7%	

Section 1-09.7 **Mobilization is deleted in its entirety and replaced with the following:**

Section 1-09.7 Mobilization and Demobilization

**Mobilization** consists of preconstruction expenses and the costs of preparatory Work and operations performed by the Contractor which occur before 10 percent of the total original Contract amount is earned from other Contract items. The following items are excluded from Mobilization:

1. Any portion of the Work covered by the specific Contract item or incidental Work which is to be included in a Contract item or items.
2. Profit, interest on borrowed money, overhead, or management costs.
3. Any costs of mobilizing equipment for force account Work.

**Demobilization** consists of work to demobilize from the project site including project cleanup, site restoration, removal of Contractor-owned materials and equipment from the site, return of any keys or other loaned materials provided by the Port, and as-built drawings.

Based on the lump sum Contract price for "Mobilization and Demobilization", partial payments will be made as follows:

1. 50 percent of the amount Bid for Mobilization and Demobilization will be paid when 10 percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand.
2. 80 percent of the amount Bid for Mobilization and Demobilization will be paid when 50 percent of the total original Contract amount is earned from other Contract items, excluding amounts paid for materials on hand.
3. 100 percent of the amount Bid for Mobilization and Demobilization will be paid when all of the following conditions are met:
  - a. 100 percent of the total original Contract amount is earned from other Contract Items (excluding amounts paid for materials on hand).
  - b. All work included in Demobilization, as described above, has been completed to the satisfaction of the Port.
  - c. All work included in the Punch List generated by the Port has been completed to the satisfaction of the Port.

Nothing herein shall be construed to limit or preclude partial payments otherwise provided by the Contract.

**END OF SECTION**

**PORT OF ILWACO**  
**Ilwaco Bulkhead Resilience Project**  
**Ilwaco, WA**  
**SPECIAL PROVISIONS**

The scope of work generally consists of furnishing all labor, materials, and equipment necessary for the project entitled: **Port of Ilwaco Bulkhead Resilience Project**.

The project involves the following general description of major work items that will be completed:

- Selective demolition and waste haul of existing structures including timber and steel piles, timber bulkhead, derelict timber elements, concrete rubble, asphalt paving, and earth fill.
- Replacement of an aging deteriorated timber pile bulkhead with an anchored steel sheet pile bulkhead.
- Installation of grouted tie-back anchors.
- Site grading and asphalt paving.
- Shoreline armoring.

The scope of work is further described in Section 01 10 00 of the Specifications.

This project is funded in part by a grant from the Marine Administration (MARAD) of the US Department of Transportation. The Owner reserves the right to reject all bids in the absence of adequate grant funding. It is also the policy of the Port of Ilwaco to practice nondiscrimination based on race, color, sex or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership. The Port of Ilwaco encourages all bidders to take active race/gender neutral steps to include DBE's in this and other contracts.

The following listed Special Conditions apply to this contract.

1. **Bid Proposal Form:** The bid proposal is a Unit Price Bid and all Bidders must provide bid amounts for all items shown on the Proposal Form. The successful bidder will be selected based on both the price bid.
2. **Pre-bid Meeting and Site Visit:** A **MANDATORY** pre-bid meeting and site visit for prospective bidders will be held at **10:00 am on August 20, 2024, beginning at the Port of Ilwaco Office, 165 Howerton Way SE, WA**. A visit to the project sites will be conducted after the meeting. Access to the project site will be via the West Main Ramp on the west side of the Port. Participants shall bring identification and wear appropriate PPE, including hard hats and eye protection.

Due to the restricted access to much of the project work site, in order to view the work areas after this pre-bid site visit, bidders will need to make special arrangements in advance with the Owner.

**All potential bidders that plan to bid the work as the Prime Contractor are required to participate in the pre-bid meeting and site visit.**

3. **Contract Days:** Total contract days shall be **273 consecutive calendar days**, from Notice to Proceed for Substantial Completion of all Work. Substantial Completion is as defined in the Standard Specifications.

The Contractor shall be aware of and abide by all permit conditions (Appendix A), including without limiting, the allowable in-water work dates and durations as specified in each permit and shall sequence, schedule, and perform the work in a manner that complies with all permit requirements and the specified contract days for Substantial Completion and

Physical Completion of the contract documents. Prior to the close of the in-water work window, the Owner, Engineer and Contractor will jointly inspect the portions of the completed work that is subject to the in-water work window and the Engineer will develop a list of incomplete or defective work (referred to herein as a "In-Water Punchlist"). All in-water work, including any In-Water Punchlist work, must be completed in compliance with the permit conditions.

Physical Completion shall be no later than **30 consecutive calendar days** following Substantial completion. Physical Completion is as defined in the Standard Specifications. If work is not fully completed by the Contractor in all respects within this 30-day final physical completion period the Owner may, at its sole discretion, perform or cause to have performed all outstanding work as identified in the Final Inspection and apply all costs for this work completion against the Contract amounts.

The Contractor shall anticipate and include allowance for inherent delays while conducting all construction activities as part of this project. Inherent delays include, without limiting, operations of Port and tenant at the Port of Ilwaco and other commercial activities within the project vicinity and inclement weather. An effort has been made to minimize other activities within the project area. However, the project site is located within an active marina and fish processing plant that will remain active throughout construction. Operations of the Port, tenants, and other commercial operations shall have precedence over the Contractor's activities and will require the Contractor to stop, move, adjust, and/or slow down to accommodate Port and tenant work.

Costs for inherent delays shall be included in the Contractor's bid prices for this contract.

Final Acceptance of the work is as defined as the "Completion Date" in the Standard Specifications.

By executing the contract the Contractor confirms that the contract time is a reasonable period for performing all the work.

4. **Schedule:** Within five (5) calendar days of receipt of Notice of Award, the Contractor shall submit a material procurement and Preliminary Construction Schedule for the Owner's review and approval. **The schedule shall highlight the procurement of all long lead time items (e.g. steel piles) and identify the critical path.** Any revisions to the schedule shall be made within seven (7) calendar days of the Owner's completing the review. The schedule and all subsequent revisions shall be kept at the Contractor's field office with copies available for the Engineer and Owner.

The Schedule shall be arranged chronologically by the start date of each item, and consider the following:

- a. Show complete sequence of construction by activity.
- b. Show start and stop dates of each major construction element.
- c. Show projected percent completion for major construction element at the first of each month.
- d. Throughout construction, the Contractor shall record progress of each major construction element.
- e. Revisions shall show changes relative to previously submitted schedules, updated projections of progress and completion, and effects of Change Order Proposals or Change Orders, if any.
- f. The schedule shall be updated as specified in the Specifications.

- 5. Permits:** The following requirements are applicable to this contract. The project permits are located in Appendix A and are to be considered a part of these Bid Documents.
- a. Haul Route Agreement, as applicable – If applicable, by requirement of City of Ilwaco Public Works, and/or Pacific County Public Works, and/or Washington State Department of Transportation, this agreement shall be required to be executed by the Contractor, or applicable subcontractor(s), if sufficient quantities of import and/ or export of materials to/ from the project site triggers this requirement, as determined by these agencies. The Contractor shall investigate their proposed material sources, quantities from each source, and haul routes and notify the applicable agencies to determine if a Haul Route Agreement will be required. If a Haul Route Agreement is required, the Contractor shall be required to participate in pre- and post- Haul Roads inspection and any interim inspections determined as necessary by these agencies. The Contractor's costs for this participation, coordination, and payment for any and all damages associated with material hauling on the Haul Roads that are designated in the Agreement with the agencies are incidental to the costs of materials in the various bid items for this contract.
  - b. Transport of materials: The Contractor is required to abide by all applicable local, state and federal laws pertaining to transport of the waste materials associated with this project and to obtain all required permits and certifications prior to transport of any of the various classifications of materials. Any costs associated with these permits are incidental to the contract amount.
  - c. See Section 01 57 19 – Temporary Environmental Controls and Appendix A for a list of all required federal, state, and local permits, and approvals, and copies of those received to date.

- 6. Domestic Material Requirements:** This project has domestic material requirements, see the grant funding requirements in Appendix B to the specifications.

**7. Port and Tenant Access:**

The Contractor shall maintain access to the portions of the Ilwaco Marina that are outside of the project work area as shown on the contract drawings and detailed in this section, at all times without exception. All water accessible facilities shall be accessible at all times from both upland and from the water. The Contractor shall also coordinate their operations and vessel travel to avoid interfering with the tenant's activities outside of the project work area.

**8. Work Areas, Staging Areas, and Haul Routes:**

The Contractor's operations shall be limited to the work areas, staging and laydown areas as shown on the Contract Drawings. No work, staging, parking, maintenance, or any other Contractor operations will be permitted outside of these designated areas.

The Owner has made available material unloading and staging areas for the Contractor to unload materials, store materials, tools, job office, and equipment required for performance of the work.

The sites are shown on the plans. Stockpiling of soils on the project site will not be permitted except as summarized in Item 11 below.

Contractor haul routes shall follow truck routes when available.

The Contractor is responsible for maintaining the work sites, staging areas, and haul routes by controlling any debris such as but not limited to paper, packaging, dirt, mud, demolition material, gravel or other substances or debris from leaving the work sites or staging areas,



except through proper transportation.

The Contractor is responsible for maintaining fencing (as required), barricades and construction safety signing.

The Contractor shall vacate and cleanup and restore to as good or better condition the staging areas within two (2) calendar days after the staging area is no longer required for material or equipment storage for the project.

These requirements are incidental to the contract amount and no separate payments will be made by the Owner for use of, or for clean-up of work sites, haul routes or staging areas.

- 9. Construction Site Field Office:** The Contractor and subcontractors shall provide their own Construction Site Field Office in accordance with Section 01 50 00 of the Specifications.
- 10. Site Safety and Health Manager, and Temporary Environmental Controls Manager:**  
The Contractor shall provide a Site Safety and Health Manager in accordance with Section 01 35 29 and Temporary Environmental Controls (TEC) Manager in accordance with Section 01 57 19 of the Specifications.
- 11. Excavated and Backfill Soil Handling and Stockpiling:** The Contractor shall coordinate their upland excavation and hauling work to allow excavated soils to be placed directly into trucks and immediately hauled off-site or stockpiled briefly within the project site prior to hauling off-site. Stockpiling of excavated or backfill soils shall be limited to within the limits of the project site as shown on the contract drawings and **will not** be permitted for greater than 24 hours. Similarly, backfill materials shall be delivered to the site on an "as needed" basis and shall be immediately backfilled in the excavation. All stockpiled soils shall be hauled off-site or utilized on the project site within 24 hours of excavation or delivery to the site.  
  
Space is limited on the project site and staging of multiple hauling trucks on the project site will not be permitted. The Contractor shall coordinate excavation, backfill and hauling activities to ensure that no more than two dump trucks (one actively loading and one in queue) are on-site at any time. Staging of trucks on Port-owned property or City streets will not be permitted without written authorization from the Port or the City. The Contractor shall identify off-site staging areas for trucks as needed.  
  
Contractor's excavating and hauling activities shall not impede access or interfere with operations of any Port tenants or other businesses within the project vicinity.  
  
All costs associated with coordinating the management and hauling of excavated and backfill materials, including any off-site staging areas shall be included in the various lump sum and unit prices bid.
- 12. Removal and Disposal of Materials:** The Contractor shall use care in the removal operations to properly barricade the work sites and provide visual and physical barriers for all personnel and vehicles, abutting Port and other tenants and property owners, and the general public regarding the limits of the work areas. The Contractor shall cleanup around the demolition sites on a daily basis to remove any debris from loading and hauling operation that falls outside of the barricaded work zone boundary. Removal and disposal methods shall be submitted for the Engineer's review and approval. Disposal Facilities shall be properly documented and certified as approved Disposal Facilities, in accordance with the Specifications, for each of the various materials to be removed from the site. The Contractor shall submit documentation of all Disposal Facilities prior to hauling of the material, and shall obtain and submit all records of delivery receipts for the various materials.
- 13. Traffic Control:** The Contractor shall submit traffic control and site barricade plans to the

Engineer. The Contractor shall obtain the Engineer's approval of the plan prior to commencement of the work. The plan shall include routing and signage for the Contractor's traffic and other traffic around the work zones and staging areas. All required signage shall be the responsibility of the Contractor to furnish, erect, light and continuously maintain for the duration of the project, except as otherwise expressly defined in the Drawings and Specifications.

- 14. Utility Interruptions:** The Contractor shall provide ten workdays of advanced notice to the Owner for interruptions to services including electrical power, water, sanitary sewer, storm drainage, communications, or any other services. Interruptions to electrical and communications utilities shall be limited to 15 minutes. Interruption of all other utilities shall be limited to three hours. In the event that extended outages are required, the Contractor shall, at no additional cost to the Owner, provide temporary utilities equivalent to the interrupted utility for the entire duration of the outage.
- 15. Surveying:** The Contractor shall provide survey and layout of the work area as needed to accomplish their work as described in the Specifications. The Owner will conduct Quality Assurance check surveys as deemed necessary by the Owner.
- 16. Utility Locates:** The Contractor shall be responsible for locating all utilities within the project boundary and any costs resulting from damage to existing utilities caused by the Contractor. The Contractor is required to contact the following organizations a minimum of 48 hours prior to needing utility locates:

Underground Utility Locates: 1-800-424-555 or 811

- 17. Testing and Inspections:** The Owner will provide a testing agency to perform special inspections as required by the building permit issued by the City of Ilwaco. Scheduling and coordination of such inspections and testing shall be the responsibility of the Contractor. No additional compensation to the Contractor will be made for such coordination. Costs, if any, incurred by the Owner for repeat inspections and/or testing caused by either the Contractor's failure to perform a scheduled event or for failure to pass any inspections shall be the responsibility of the Contractor.

Unless noted otherwise, the Contractor is required to pay for and complete all other materials and equipment testing associated with various elements of the work, in accordance with the Specifications.

- 18. Record Drawings:** Record Drawings shall be maintained in accordance with Section 01 70 00 of the Specifications.
- 19. Taxes:** Unless otherwise provided in the Contract Document, the Contractor shall pay all consumer use, and other similar taxes that are legally enacted when bids are received, whether or not yet effective or merely scheduled to go into effect. All applicable taxes shall be included in the bid proposal and included in progress payments.

- 20. Contact Information:** Please direct questions regarding this project to the following:

- a. For technical questions contact Tracy Lofstrom, [tlofstrom@portofilwaco.org](mailto:tlofstrom@portofilwaco.org)
- b. For contractual questions and submissions of bids and statements of bidder supplemental responsibility criteria contact Tracy Lofstrom, [tlofstrom@portofilwaco.org](mailto:tlofstrom@portofilwaco.org)

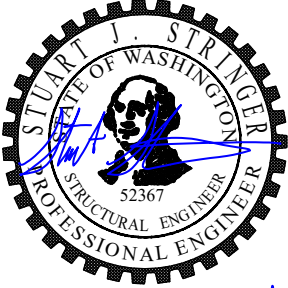


**END OF SECTION**

**PORT OF ILWACO**  
**Ilwaco Bulkhead Resilience Project**  
**Ilwaco, WA**  
**TECHNICAL SPECIFICATIONS**

## DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

### Section 00 01 07 – Seal Page

The engineering material and data contained in these Contract Documents were prepared under the direction of the following registered professionals:

 <p><i>July 5, 2024</i></p> <p>Structural Engineer Stuart J. Stringer, P.E., S.E. <b>Moffatt &amp; Nichol</b></p>	 <p><i>July 5, 2024</i></p> <p>Civil Engineer James Todd, P.E. <b>Moffatt &amp; Nichol</b></p>
 <p><i>July 2, 2024</i></p> <p>Geotechnical Engineer Brett Larabee, P.E. <b>GeoEngineers</b></p>	

Use and distribution of this specification is solely and exclusively in connection with a single construction project for which this specification was originally produced, and which said project is further identified as the Port of Ilwaco Marina Structures Replacement Project.

**END OF SECTION**

<b>SPECIFICATION NUMBER</b>	<b>SPECIFICATION TITLE</b>
<b>DIVISION 01 – GENERAL REQUIREMENTS</b>	
01 10 00	SUMMARY OF WORK
01 20 00	PRICE AND PAYMENT PROCEDURES
01 25 00	SUBSTITUTION PROCEDURES
01 29 73	SCHEDULE OF VALUES
01 31 00	PROJECT MANAGEMENT AND COORDINATION
01 32 00	CONSTRUCTION PROGRESS DOCUMENTATION
01 33 00	SUBMITTAL PROCEDURES
01 35 29	HEALTH SAFETY AND EMERGENCY RESPONSE PROCEDURES
01 45 00	QUALITY CONTROL
01 50 00	TEMPORARY FACILITIES AND CONTROLS
01 57 19	TEMPORARY ENVIRONMENTAL CONTROLS
01 60 00	PRODUCT REQUIREMENTS
01 70 00	EXECUTION AND CLOSEOUT REQUIREMENTS
01 71 23	FIELD ENGINEERING
<b>DIVISION 02 – EXISTING CONDITIONS</b>	
02 32 00	GEOTECHNICAL INVESTIGATIONS
02 41 00	DEMOLITION
<b>DIVISION 03 - CONCRETE</b>	
03 10 00	CONCRETE FORMING AND ACCESSORIES
03 20 00	CONCRETE REINFORCEMENT
03 30 00	CAST-IN-PLACE CONCRETE
03 60 00	GROUTING

<b>SPECIFICATION NUMBER</b>	<b>SPECIFICATION TITLE</b>
<b>DIVISION 05 - METALS</b>	
05 50 00	METAL FABRICATIONS
<b>DIVISION 09 – FINISHES</b>	
09 96 00	HIGH PERFORMANCE COATINGS
<b>DIVISION 31 – EARTHWORK</b>	
31 00 00	EARTHWORK
31 09 00	GEOTECHNICAL INSTRUMENTATION AND MONITORING
31 35 16	ROCK PROTECTION
31 51 13	SOIL ANCHORS
31 62 00	DRIVEN PILES
<b>DIVISION 32 – EXTERIOR IMPROVEMENTS</b>	
32 12 16	ASPHALT PAVING

END SECTION

## **DIVISION 01 - GENERAL REQUIREMENTS**

### **Section 01 10 00 – Summary of Work**

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#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. The work included in this Contract is defined in the drawings and within these specifications under the following Division Numbers:
1. DIVISION 01 – GENERAL REQUIREMENTS
  2. DIVISION 02 – EXISTING CONDITIONS
  3. DIVISION 03 – CONCRETE
  4. DIVISION 05 – METALS
  5. DIVISION 09 – FINISHES
  6. DIVISION 31 – EARTHWORK
  7. DIVISION 32 – EXTERIOR IMPROVEMENTS
- B. The Ilwaco Marina Structures Replacement Project consists of the following elements, but this summary neither necessarily nor completely describes all work elements or potential construction features. The Contractor shall review the entire set of Contract Documents and referenced documents to ascertain all the contract and project requirements.
- Selective demolition and waste haul of existing structures including timber and steel piles, timber bulkhead, derelict timber elements, concrete rubble, asphalt paving, and earth fill.
  - Replacement of an aging deteriorated timber pile bulkhead with an anchored steel sheet pile bulkhead.
  - Installation of grouted tie-back anchors.
  - Site grading and asphalt paving.
  - Shoreline armoring.

##### **1.02 SCHEDULE**

- A. Substantial Completion and Intermediate Completion dates for each phase of the construction work shall be as defined in the contract Special Provisions.

## **DIVISION 01 - GENERAL REQUIREMENTS**

### **Section 01 10 00 – Summary of Work**

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#### **1.02 LOCATION**

- A. This project is located in the Port of Ilwaco Marina, in Ilwaco Washington.

#### **1.03 ACCESS TO SITE**

- A. The Contractor shall have access to the construction site via water from Baker Bay and via land by Waterfront Way. Absolutely no parking of Contractor employee vehicles is permitted within the Safe Coast Seafoods Facility. As part of its bid the Contractor shall provide necessary shuttle service to transport its employees to and from the work areas.
- B. The Contractor may be required to relocate entry and related work areas as required by Owner. Contractor shall conduct all business through the gate assigned by the Owner.

#### **1.04 SITE SECURITY**

- A. The Contractor shall notify the U.S. Coast Guard (USCG) as required to comply with USCG, Maritime Security (MARSEC), and Port regulations for operating within Baker Bay. All costs associated with implementation of required security measures will be considered inclusive to the Contract and should be included in the Contractor's Bid.
- B. Contractor shall verify and adhere to the Port tenant's site access and security requirements.

#### **1.05 ENGINEERING AND INSPECTION**

- A. Engineers, inspectors and other representatives of the Port of Ilwaco will perform necessary engineering and inspection work throughout the duration of the Contract. Refer to Section 01 45 00, Quality Control, for general requirements.
- B. Engineers and inspectors of the City of Ilwaco will enter the project site and shall perform the necessary engineering and inspection work.

#### **1.06 COORDINATION**

- A. The Contractor shall coordinate its activity with the Port of Ilwaco operations, so interference with Port and tenant activities will be minimized.
- B. The Contractor shall also coordinate its work with others throughout the life of this contract at no additional expense to the Port. Others may include, but are not limited to, the City of Ilwaco.



## **DIVISION 01 - GENERAL REQUIREMENTS**

### **Section 01 10 00 – Summary of Work**

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- C. Coordinate work of sub-trades. Convene meetings between subcontractors, Contractor and the Port whose work interfaces and ensure awareness of areas and extent of interface required.
- D. Provide each subcontractor with a complete set of Drawings and Specifications for the Contract, to assist them in planning and carrying out their respective work.
- E. Develop coordination drawings when required, illustrating potential interference between works of various trades, and distribute to affected parties.
- F. Facilitate meetings and review coordination drawings. Ensure subcontractors agree and sign off on drawings.
- G. Plan and coordinate work in such a way to construct as-built conditions as shown on the Drawings.
- H. Ensure that each trade provides all other trades reasonable opportunity for completion of work and in such a way as to prevent unnecessary delays, and removal or replacement of completed work.
- I. The Owner is not responsible or accountable for extra costs incurred as a result of the Contractor's failure to coordinate work among trades and subcontractors.

#### **1.07 TRAFFIC CONTROL**

- A. The Contractor shall erect and maintain all construction signs, warning signs, detour signs, flaggers, and other traffic control devices necessary for the safe ingress and egress at the project site. Access to the Shipping Terminal site shall be maintained at all times.

#### **1.08 FISH WINDOW**

- A. This project is subject to in-water work restrictions. In water work shall be as defined in the project permits included in the Appendices.

#### **1.09 MATERIALS TESTING**

- A. Materials testing shall be performed and paid for by the Contractor, unless specifically noted otherwise. Special inspections shall be performed by an independent testing laboratory and paid for by the Port. Confirmational sampling shall be performed by others and paid for by the Port. Access to the area necessary to perform the testing and/or to secure the material for testing, shall be provided by the Contractor.

## **DIVISION 01 - GENERAL REQUIREMENTS**

### **Section 01 10 00 – Summary of Work**

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#### **1.10 PROTECTION OF EXISTING FACILITIES**

- A. Any damage to the surrounding structures, and/or existing facilities caused by the Contractor's operations, as determined by the Engineer or Owner, shall immediately be repaired to the pre-project condition at the Contractor's expense.
- B. Condition Survey of Existing Structures: The Contractor, Owner, and Engineer shall jointly review and verify the pre-construction condition of the surrounding structures, fender systems, electrical vaults, storm drains, catch basins and outfalls within the work areas prior to beginning work to ascertain existing conditions.

#### **1.11 PERMITS**

- A. The Contractor is to comply with all conditions, provisions, and requirements noted in all permits.
- B. Permits obtained by the Port are contained in the Appendices.
- C. The Contractor shall be responsible for, obtain, and pay for all other permits required to perform the work specified in the Contract Documents.
- D. The Contractor shall be responsible for the costs of compliance with any of the permit conditions contained within the Contract Documents including those acquired by the Port of Ilwaco and those not yet issued, as conditions of the permit approval.

#### **1.12 AS- BUILT DRAWINGS**

- A. The Contractor shall maintain at all times "as-built" drawings that clearly indicate, in colored pencil on copies of Contract Drawings, any deviations from the Contract Drawings. The as-built Drawings will be subject to review prior to approval of each progress payment.
- B. At completion of the project the Contractor shall deliver a complete set of prints marked clearly and legibly, with colored pencil, showing all deviations from the Contract Drawings. Prints will be supplied by the Engineer at the Contractor's Request for this purpose. These as-built prints shall be delivered to the Engineer before final payment is made for the Contract.

**PART 2 - PRODUCTS – NOT USED**

**PART 3 - EXECUTION – NOT USED**

**END OF SECTION**

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 20 00 – Measurement and Payment**

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**PART 1 - GENERAL**

**1.01 RELATED WORK DESCRIBED ELSEWHERE**

- A. Section 01 29 73 – Schedule of Values
- B. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related to this Section is described throughout these specifications.
- C. Individual submittals are described throughout and required in accordance with the pertinent sections of these specifications.

**1.02 PAYMENT PROCEDURES**

- A. Monthly pay estimates shall clearly identify the work performed for the given time period based on a percentage of work completed for lump sum bid items.
  - 1. At the Pre-construction meeting, the Engineer and the Contractor shall agree upon a date each month when payment applications shall be submitted.
- B. Prior to submitting pay estimates to the Port, the Contractor, and Engineer shall review the work accomplished to determine the actual quantities including labor, materials and equipment charges to be billed. Following the Port's review, the Contractor shall prepare an original pay estimate with complete supporting documentation attached and submit to the attention of the Tracy Lofstrom, Port Manager; or submitted electronically using Adobe PDF file format. PDF files can be e-mailed to the Owner at Tracy Lofstrom <tllostrom@portofilwaco.org>.

**1.03 PAYMENT PRICING**

- A. Pricing for the various lump sum or unit prices in the Bid Form, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents.
- B. Pricing also includes all costs of compliance with the regulations of public agencies having jurisdiction, including, but not limited to, safety and health requirements of the Occupational Safety and Health Administration (OSHA)

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of the U.S. Department of Labor, and the U.S. Longshore and Harbor Workers' Compensation Act.

- C. No separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore shall be included in the prices named in the Bid Form for the various appurtenant items of work.
- D. All other work not specifically mentioned in the measurement and payment sections identified below shall be considered incidental to the work performed and merged into the various unit and lump sum prices. Payment for work under one item will not be paid for under any other item.
- E. The Port of Ilwaco reserves the right to make changes should unforeseen conditions necessitate such changes. Where work is on a unit price basis, the actual quantities occasioned by such changes shall govern the compensation in accordance with Section 1-04.6.

**1.04 LUMP-SUM MEASUREMENT**

- A. Lump-sum measurement will be for the entire item, unit of Work, structure, or combination thereof, as specified and as indicated in the Contractor's submitted bid.
  - 1. If the Contractor requests progress payments for lump-sum items, such progress payments will be made in accordance with pre-approved schedule of values. The quantity for payment for completed work shall be an estimated percentage of the lump sum amount, assigned or determined by the Engineer, payable in monthly progress payments in increments proportional to the work performed in amounts as agreed between the Engineer and the Contractor.

**1.05 MEASUREMENT FOR PAYMENT:**

- A. Measurement for payment will be at the Lump Sum or Unit Price as stipulated in the Bid Form for the items listed below. Payment shall be considered full compensation for furnishing all labor, materials, and equipment to complete the Work as specified.
  - 1. Bid Item No. 1 – MOBILIZATION AND DEMOBILIZATION
    - a. Payment for MOBILIZATION AND DEMOBILIZATION shall be for preparatory work and operations performed by the Contractor including, but not limited to, those necessary for the movement of its personnel, equipment, supplies and incidentals to and from the Work site; for the establishment

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and removal of its offices, buildings and other facilities necessary for work on the project; for premiums on bonds and insurance for the project, for other work and operations which it must perform or costs it must incur before beginning production work on the various items at the Work project site; and for preparation of pre-construction and post-construction submittals. This item also includes the removal of personnel, equipment, supplies, offices, building facilities, sheds, fencing, and other incidentals from the Work Site and to clean and restore all work areas and laydown areas to their preconstruction condition or better.

- b. MOBILIZATION AND DEMOBILIZATION will be paid at the lump sum price listed in the bid, but not to exceed a maximum of five percent (5%) of the other bid items. Incremental payment shall be made as follows:
  - (1) 40% after completion of 5% of the total contract amount of other bid items have been earned.
  - (2) 40% after completion of 20% of the total contract amount of other bid items have been earned.
  - (3) 20% after Substantial Completion, demobilization, and cleanup.

2. Bid Item No. 2 – PROJECT ADMINISTRATION

- a. Payment for PROJECT ADMINISTRATION shall be full compensation for all administrative costs associated with administering and supervising the project including supervision of personnel, coordination of all work activities, coordination of subcontractors and /or suppliers, preparation and transmittal of submittals, permit acquisitions, temporary facilities and controls, project overhead, traffic control, flaggers and spotters.
- b. PROJECT ADMINISTRATION will be paid at the lump sum price listed in the bid form. Incremental payment for completed work shall be a percentage, determined by the Engineer, payable in monthly progress payments, proportional to the work completed.

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**Section 01 20 00 – Measurement and Payment**

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3. Bid Item No. 3 – TEMPORARY ENVIRONMENTAL CONTROLS AND MONITORING

- a. Payment for TEMPORARY ENVIRONMENTAL CONTROLS AND MONITORING shall be for all work necessary to provide and maintain temporary stormwater, erosion, sediment, and pollution control, and environmental monitoring throughout the project. Work also includes development and implementation of the Spill Prevention, Control, and Countermeasures (SPCC) Plan, and the Stormwater Pollution Prevention Plan (SWPPP). Work also includes all environmental monitoring required including marine mammal monitoring and water quality monitoring. The work includes full compensation for the cost of labor, materials, tools, equipment, and incidentals required to comply with the regulations of the federal, state, and local jurisdictions, and all permits as described in the Contract Documents.
- b. TEMPORARY ENVIRONMENTAL CONTROLS will be paid at the lump sum price listed in the bid form. Incremental payment for completed work shall be a percentage, determined by the Engineer, payable in monthly progress payments, proportional to the work completed.

4. Bid Item No. 4 – HEALTH AND SAFETY

- a. Payment for HEALTH AND SAFETY shall be for all work necessary for providing and maintaining health and safety provisions at the site throughout the project. The work also includes compliance with all laws, permits, regulations, and ordinances with respect to safety, noise, dust, fire action, police action, civil disobedience, and security.
- b. HEALTH AND SAFETY will be paid at the lump sum price listed in the bid form and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required to accomplish the work and as specified in Section 01 35 29 – Health, Safety, and Emergency Response Procedures of these specifications.

5. Bid Item No. 5 – FIELD ENGINEERING

- a. Payment for FIELD ENGINEERING shall be for all work necessary for Field Engineering, professionally licensed surveying, non- professionally licensed surveying, including

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verifying survey reference points, conducting pre-construction, progress, and post-construction surveys, and locating utilities.

- b. Payment for FIELD ENGINEERING will be paid at the lump sum price listed in the bid form and shall be full compensation for furnishing all labor, equipment, materials, and incidentals required to accomplish the work and as specified in Section 01 71 23 – Field Engineering of these Specifications.

6. Bid Item No. 6 – PROJECT CLOSEOUT

- a. Payment for PROJECT CLOSEOUT shall be for all work necessary to finish the project including operations and maintenance manuals, project as-built drawings, providing certificates, punchlist items, and cleanup.
- b. Payment for PROJECT CLOSEOUT will be paid at the lump sum price listed in the bid form and shall be full compensation for furnishing all labor, equipment and incidentals required to accomplish the work as specified in Section 01 70 00 - Execution and Closeout Requirements of these specifications.

7. Bid Item No. 11 – DEMOLITION

- a. Payment for DEMOLITION shall be full compensation for the cost of labor, materials, tools, equipment and incidentals required to demolish, remove, and dispose of all elements indicated for demolition shown on the drawings including timber and steel piles, derelict timber structures, selective demolition of the existing timber bulkhead, paving, and any miscellaneous structures, without damage to existing structures or utilities to remain, as shown on the drawings and defined in the specifications.
- b. DEMOLITION will be paid at the lump sum price listed in the bid form. Incremental payment for completed work will be a percentage, determined by the Engineer, payable in monthly progress payments, proportional to the work completed.

8. Bid Item No. 8 – STEEL SHEET PILE BULKHEAD

- a. Payment for STEEL SHEET PILE BULKHEAD shall be full compensation for the cost of labor, materials, tools,

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equipment, handling, transportation, and incidentals required to furnish and install the steel sheet piles including repair of coating as required in specifications, fabrication of connection pieces, excavation shoring and templates required for installation, moving of rip rap slope protection in order to drive piles, and installation of weep holes as shown on the drawings and defined in these specifications.

- b. Payment for STEEL SHEET PILE BULKHEAD will be paid at the unit price listed in the Bid Form per foot of wall as measured in plan.

9. Bid Item No. 9 – CONCRETE PILE CAP

- a. Payment for CONCRETE PILE CAP shall be full compensation for the cost of labor, materials, tools, equipment, handling, transportation, and incidentals required to furnish and install the concrete pile cap. Concrete pile cap includes, but is not limited to, furnishing and installation of all materials and construction devices required for a complete installation, and coordination with permanent ground anchor installation for a complete and functional bulkhead wall as shown on the drawings and defined in these specifications.
- b. Payment for CONCRETE PILE CAP will be paid at the unit price listed in the Bid Form per foot of wall as measured in plan.

10. Bid Item No. 10 – PERMANENT GROUND ANCHORS

- a. Payment for PERMANENT GROUND ANCHORS shall be full compensation for the cost of labor, materials, tools, equipment, handling, transportation, and incidentals required to design, furnish, install, proof test, and tension the ground anchors as shown on the drawings and defined in these specifications.
- b. Payment for FURNISH GROUTED TIE-BACK ANCHORS will be paid at the each unit price listed in the Bid Form.

11. Bid Item No. 11 – FURNISH, PLACE AND COMPACT IMPORTED BULKHEAD GRAVEL BACKFILL

- a. FURNISH, PLACE AND COMPACT IMPORTED BULKHEAD GRAVEL BACKFILL will be measured by the ton of material



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placed below MHHW. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.

- b. Payment for FURNISH, PLACE AND COMPACT IMPORTED BULKHEAD GRAVEL BACKFILL will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

12. Bid Item No.12 – FURNISH, PLACE AND COMPACT IMPORTED FILL

- a. FURNISH, PLACE AND COMPACT IMPORTED FILL will be measured by the ton of material placed above MHHW. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.
- b. Payment for FURNISH, PLACE AND COMPACT IMPORTED FILL will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

13. Bid Item No. 13 – FURNISH, PLACE AND COMPACT IMPORTED CRUSHED SURFACE BASE COURSE

- a. FURNISH, PLACE AND COMPACT IMPORTED CRUSHED SURFACE BASE COURSE will be measured by the ton. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.
- b. Payment for FURNISH, PLACE AND COMPACT IMPORTED CRUSHED SURFACE BASE COURSE will be paid at the ton

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unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

14. Bid Item No. 14 – FURNISH, PLACE AND COMPACT ASPHALT PAVING
  - a. FURNISH, PLACE AND COMPACT ASPHALT PAVING will be measured by the ton. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used are required.
  - b. Payment for FURNISH, PLACE AND COMPACT ASPHALT PAVING will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.
15. Bid Item No. 15 – MISCELLANEOUS FINISH WORK
  - a. Payment for MISCELLANEOUS FINISH WORK shall be full compensation for the cost of labor, materials, tools, equipment, handling, transportation, and incidentals required to furnish and install miscellaneous finish work items including, mooring hardware, curbs, and fences as shown on the drawings and defined in these specifications.
  - b. Payment for MISCELLANEOUS FINISH WORK will be paid at the lump sum price listed in the Bid Form.
16. Bid Item No.16 – IMPORT AND PLACE ARMOR STONE
  - a. IMPORT AND PLACE ARMOR STONE will be measured by the ton. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.

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**Section 01 20 00 – Measurement and Payment**

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- b. Payment for IMPORT AND PLACE ARMOR STONE will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

17. Bid Item No.17 – IMPORT AND PLACE BEDDING STONE

- a. IMPORT AND PLACE BEDDING STONE will be measured by the ton. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.
- b. Payment for IMPORT AND PLACE BEDDING STONE will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

18. Bid Item No.18 – IMPORT AND PLACE FISH MIX

- a. IMPORT AND PLACE FISH MIX will be measured by the ton. Weights will be as determined by the vendor's certified scales. Individual weight tickets for each truck used to import fill are required.
- b. Payment for IMPORT AND PLACE FISH MIX will be paid at the ton unit price listed in the Bid Form. Payment shall be full compensation for all costs of purchasing, loading, transporting, dumping, stockpiling and/or re-handling materials (if necessary), placing, spreading, compacting, and for all costs incidental to completion of the Work as shown on the Plan and as specified herein. The quantity for payment shall be measured from certified weight tickets submitted to the Engineer at the time of delivery.

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**Section 01 20 00 – Measurement and Payment**

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PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

**END OF SECTION**

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 25 00 – Substitution Procedures**

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**PART 1 - GENERAL**

**1.01 RELATED WORK DESCRIBED ELSEWHERE**

- A. Section 01 33 00-Submittal Procedures
- B. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related to this Section is described throughout the Specifications.
- C. No separate payment will be made for effort associated with work described in this Section. Work required to comply with this Section is considered to be inclusive to all other activities described in the Contract Documents.

**1.02 QUALITY CONTROL**

- A. The Contract is based upon products and standards established in the Contract Documents without consideration of proposed substitutions.
- B. Products specified define standard of quality, type, function, dimension, appearance, and performance required. All equipment, materials, and articles incorporated into the permanent work:
  - 1. Shall be new, unless the Specifications permit otherwise
  - 2. Shall meet the requirements of the Contract and be approved by the Engineer
  - 3. May be inspected or tested at any time during their preparation and use
  - 4. Shall not be used in the work if they become unfit after being previously approved
- C. The Engineer will consider proposals for substitutions of materials, equipment, and methods only when such proposals are accompanied by full and complete technical data as required by the Engineer to evaluate the proposed substitution.
- D. Do not substitute materials, equipment, or methods unless such substitution has been specifically approved in writing for this work by the Engineer.
- E. Do not substitute products unless substitution has been accepted and approved in writing by the Engineer.

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 25 00 – Substitution Procedures**

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**1.03 TIME OF SUBSTITUTION REQUESTS**

- A. Each substitution request shall, in accordance with the applicable provisions of Section 01 33 00, describe the proposed substitution in its entirety including the name of the material or equipment, drawings, catalog cuts, performance or test data, and all other information required for an evaluation. The submittal shall also include a statement noting all changes required in adjoining, dependent, or other interrelated work necessitated by the incorporation of the proposed substitution. The bidder shall bear the burden of proof to show that the proposed substitution meets or exceeds the required function and is equal or superior to the specification.
- B. The Engineer may require that samples be submitted or demonstration made prior to approval. The Engineer will be the sole judge as to the type, function, and quality of any such substitute material or equipment. The Engineer's decision of approval or disapproval of a proposed substitution will be final.
- C. Approval of substitutions will be made by addenda. When, in the sole opinion of the Engineer, the product is equivalent, in all respects to the product specified, it will be approved subject to Contract requirements and the Contractor's assumption of all responsibility therefore.
- D. After written approval, this submission shall become a part of the Contract and may not be deviated from except upon written approval of the Engineer.
- E. Catalog data for equipment approved by the Engineer does not, in any case, supersede the Contract Documents. The approval by the Engineer shall not relieve the Contractor from responsibility for deviations from Drawings or Specifications, unless the Contractor has, in writing, called the Engineer's attention to such deviations at the time of the submission, nor shall it relieve the Contractor from responsibility for errors of any sort in the items submitted. Check the work described by the catalog data with the Contract Documents for deviations and errors.
- F. It shall be the responsibility of the Contractor to ensure that items to be furnished fit the space available. The Contractor shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Drawings and Specifications.
- G. Where equipment requiring different arrangement of connections from those shown as approved is used, it shall be the responsibility of the Contractor to install the equipment to operate properly, and in harmony with the intent on the Drawings and Specifications, and to make all changes in

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 25 00 – Substitution Procedures**

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the work required by the different arrangement of connections together with any cost of redesign necessitated thereby, all at the Contractor's expense.

- H. Where the phrase "or equal" or "or equal as approved by the Engineer" occurs in the Contract Documents, do not assume that material, equipment, or methods will be approved as equal by the Engineer unless the item has specifically been approved as a substitution for this work by the Engineer.
- I. The decision of the Engineer will be final.

**1.04 SUBSTITUTION PROCEDURES**

- A. Limit each request to one proposed substitution.
- B. Submit substitution requests complete with attachments necessary to fully document the proposed substitution.
- C. Document each request with supporting data substantiating compliance of proposed substitution with the Contract Documents, including:
  - 1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
  - 2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
  - 3. Reference to article and paragraph numbers in Specifications Section.
  - 4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
  - 5. Changes required in other work.
  - 6. Availability of maintenance service and source of replacement parts, as applicable.
  - 7. Certified test data to show compliance with performance characteristics specified.
  - 8. Samples, when applicable or requested.
  - 9. Other information as necessary to assist the Engineer's evaluations.
- D. A request for substitution constitutes a representation that the Contractor:

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**Section 01 25 00 – Substitution Procedures**

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1. Has investigated the proposed product and determined that it is equal or superior in all respects to the specified product.
2. Will provide identical or better warranty as required for the specified product.
3. Will coordinate installation and make changes to other work that may be required.
4. Waives claims for additional costs or time extension that may subsequently become apparent.
5. Certifies that the proposed product will not affect or delay the Construction Progress Schedule.
6. Will pay for changes to building design, including architectural or engineering design, detailing, and construction costs caused by the requested substitution.

**E. Substitutions will not be considered when:**

1. Indicated or implied on shop drawings or product data submittals without a formal request submitted in accordance with this Section.
2. Submittal for substitution request by a subcontractor has not been reviewed and approved by the Contractor.
3. Acceptance will require substantial revision of Contract Documents or other items of the work.
4. Submittal for substitution request does not include point-by-point comparison of proposed substitution with specified product.

**PART 2 - PRODUCTS – NOT USED**

**PART 3 - EXECUTION – NOT USED**

**END OF SECTION**



## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 29 73 – Schedule of Values**

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#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. Section includes preparation, format, and submittal procedures for the Schedule of Values.
- B. The Schedule of Values will establish the basis for incremental payments to the Contractor for various lump sum bid items, and provide a basis for establishing unit prices for individual items or smaller portions of work.
- C. The division of the lump sums in the Schedule of Values shall reflect the Bidder's genuine estimate of work category values that may be compared to, and are consistent with, the detailed construction schedule submitted by the Contractor.
- D. The Port may require a Schedule of Values for other Bid Items during completion of the work at no additional cost to the Port.
- E. No separate payment will be made for effort associated with work described in this Section. Work required to comply with this Section is considered to be inclusive to all other activities described in the Contract Documents.

##### **1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. Section 01 20 00 – Price and Payment Procedures
- B. Section 01 31 00 – Project Management and Coordination
- C. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related to this Section is described throughout the Specifications.

##### **1.03 PREPARATION**

- A. To facilitate monthly pay requests, the lump sum prices stipulated in the Bid Form shall be divided up to reflect the elements of work identified on the Drawings and in the Specifications. The listing shall include, at a minimum, the proposed value for the major work components as described in Section 3.01 herein. The summary of detail provided in the Schedule of Values shall separately include material costs (as appropriate by unit), installation costs (labor and equipment components), and other incremental breakouts. The detail summary total shall match the Contractor's lump sum bid amount for each bid item.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 29 73 – Schedule of Values**

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- B. The quantity for payment for each work element indicated in the Schedule of Values shall be an estimated percentage of the lump sum amount, agreed to between the Engineer and Contractor, payable in monthly progress payments in increments proportional to the work performed.
- C. Submit a Schedule of Values as outlined below at the preconstruction meeting. DO NOT SUBMIT THE SCHEDULE OF VALUES WITH YOUR BID PACKAGE.

#### **1.04 SUBMITTALS**

- A. Submit for approval a copy of the Schedule of Values ten (10) calendar days after receiving the Notice of Award. The Schedule of Values will be evaluated for unbalancing of the category values, and may be rejected by the Engineer if determined to be unbalanced or lacking sufficient detail. Submit a corrected Schedule of Values within ten (10) calendar days upon receipt of the reviewed/rejected Schedule of Values.
- B. For all values, support prices with data that will substantiate their correctness.

#### **PART 2 - PRODUCTS – NOT USED**

#### **PART 3 - EXECUTION**

##### **3.01 SAMPLE SCHEDULE OF VALUES**

- A. The suggested Schedule of Values provided below is a partial list. Bid items reflected on the Bid Form but not shown in the list below shall be included in the monthly pay request based on the unit of measure indicated on the Bid Form.
  - 1. Mobilization/Demobilization
    - a. 40% after completion of 5% of the total contract amount of other bid items have been earned.
    - b. 40% after completion of 20% of the total contract amount of other bid items have been earned.
    - c. 20% after Substantial Completion, demobilization, and cleanup.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 29 73 – Schedule of Values**

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2. Project Administration
  - a. Project coordination and supervision
  - b. Submittal preparation
  - c. Permits
  - d. Temporary facilities and controls
  - e. Traffic control, flaggers and Spotters
3. Temporary Environmental Controls and Monitoring
  - a. Environmental Protection Plan
  - b. Marine Mammal Monitoring Plan
  - c. Marbled Murrelet Monitoring Plan
  - d. Hydro-Acoustic Monitoring Plan
  - e. Install temporary erosion and sediment control measures
  - f. Maintain temporary erosion and sediment control measures
4. Health and Safety
  - a. Develop and Maintain Health and Safety Plan
  - b. Weekly Safety Meetings
5. Field Engineering
  - a. Verify existing conditions
  - b. Pre-construction survey and controls
  - c. Utility locate
  - d. Survey during construction
  - e. Post construction survey final locations for as-built
6. Project Closeout

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 29 73 – Schedule of Values**

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- a. Operation and maintenance manuals
- b. Punchlist items and clean-up
- c. As-Built Drawings
- 7. Demolition
- 8. Steel Sheet Pile Bulkhead
- 9. Concrete Pile Cap
- 10. Permanent Ground Anchors
- 11. Furnish, Place, and Compact Imported Bulkhead Gravel Backfill
- 12. Furnish, Place, and Compact Imported Fill
- 13. Furnish, Place, and Compact Imported Crushed Surface Base Course
- 14. Furnish, Place, and Compact Asphalt Paving
- 15. Miscellaneous Finish Work
- 16. Import and Place Armor Stone
- 17. Import and Place Bedding Stone
- 18. Import and Place Fish Mix

**END OF SECTION**

**DIVISION 01 - GENERAL REQUIREMENTS**  
**Section 01 31 00 – Project Management and Coordination**

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**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. The work described in this Section includes the requirements for the Pre-Construction Meeting, Progress Meetings, and coordination throughout the duration of the project.
- B. The Contractor shall attend all required meetings and provide required preparation and follow-up materials.
- C. No separate payment will be made for effort associated with work described in this Specification Section. Work required to comply with this Specification Section is considered to be inclusive to all other activities described in the Contract Documents.

**1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related in this Section is described throughout the Specifications.

**1.03 ADMINISTRATIVE**

The Contractor shall complete the following activities regarding administration of meetings throughout the progress of the work:

- A. Attend weekly Progress Meetings or other meetings as requested by the Engineer.
- B. Provide physical space for weekly Progress Meetings including support for virtual attendance.
- C. Representatives of the Contractor, subcontractors, and suppliers attending Progress Meetings will be qualified and authorized to act on behalf of the party each represents.

**1.04 PRECONSTRUCTION MEETING**

**A. NOTIFICATION**

Following the award, the Owner will notify the selected bidder of the time and date of the Pre-Construction meeting.

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**Section 01 31 00 – Project Management and Coordination**

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**B. LOCATION**

The Pre-Construction meeting will be scheduled at the Port of Ilwaco's offices, located at 165 Howerton Ave, Ilwaco, WA 98624.

**C. ATTENDANCE**

The following are requested to attend:

**a. Port Representatives:**

- (1) Project Manager
- (2) Engineer
- (3) Contract Administrator
- (4) Consultants
- (5) Other Port personnel

**b. Contractor's Representatives:**

- (1) Project Manager (Superintendent)
- (2) Quality Control (QC) Supervisor
- (3) Site Safety and Health Manager
- (4) Environmental Protection Manager
- (5) Professional Land Surveyor
- (6) Major Subcontractors

**D. SUGGESTED AGENDA:**

The Contractor shall be prepared to discuss and/or provide at a minimum, the following information:

1. Introductions, roles and responsibilities, communications and routing
2. The work: sequence, phasing, and occupancy
3. Precontract Submittals

**DIVISION 01 - GENERAL REQUIREMENTS**  
**Section 01 31 00 – Project Management and Coordination**

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- a. Certificate of Insurance
  - b. Payment and Performance Bond
  - c. Schedule of Values
  - d. List of major subcontractors
4. Cashflow Forecast: The Contractor shall prepare a Cashflow Forecast reflecting the financial progress of the work. The Cashflow Forecast shall be submitted to the Engineer on a monthly basis at the time of monthly invoice submittal. Cashflow Forecast should accurately represent cost by bid item (spent to date), and projected cost to complete contract work.
5. Execution of the Contract
- a. Submittals
    - (1) Health and Safety Plan
    - (2) Construction Quality Control Plan
    - (3) Environmental Protection Plan
    - (4) General
  - b. Requests for Information, Request for Clarification
  - c. Progress meetings
  - d. Site access, parking, and laydown requirements
  - e. Special site conditions and constraints
6. Discussion of the General Conditions
- a. Progress payments
  - b. Change orders
7. Discussion of the Special Provisions
8. Discussion of the General Requirements
- a. Safety and first-aid procedures
  - b. Security

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- c. Environmental controls and protection
  - d. Temporary facilities, execution, project management, and field engineering
  - e. House Keeping
  - f. Record documents
  - g. Other
9. Discussion of the Technical Specifications
10. Permit Requirements

**1.05 PROGRESS MEETINGS**

- A. During the course of the work, the Engineer shall schedule Progress Meetings at least once per week. The Engineer may call special meetings at the project site or at other locations to coordinate the work, facilitate discussions, respond to questions, and resolve problems.
- B. The Engineer will arrange meetings, record minutes, and distribute copies within three (3) calendar days to the Contractor, meeting participants, and others affected by decisions made. The Contractor and meeting participants will review Progress Meeting minutes and provide revisions within two (2) calendar days of receipt of the draft minutes. The Engineer shall provide a final copy of Progress Meeting minutes within two (2) calendar days after receipt of comments from the Contractor and meeting participants
- C. Attendance is required for the Contractor's job superintendent, Quality Control Supervisor, Health and Safety Manager, major subcontractors and suppliers, Engineer, and Port's representative as appropriate to the agenda topics for each meeting.
- D. Standard Agenda
  - 1. Review minutes of previous meeting.
  - 2. Health and Safety Concerns
  - 3. Review of work progress.
  - 4. Field observations, problems, and decisions.
  - 5. Environmental Management



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6. Identification of problems that impede planned progress.
7. Updated Construction Schedule: The Contractor shall prepare weekly updates of its Construction Schedule reflecting the progress of the work. Weekly updates shall be submitted to the Engineer at the Weekly Construction Meeting in the form of the 3-week look ahead Progress Schedule. Project Progress Schedule shall also include previous week.
8. Effect of proposed changes on progress schedule and coordination.
9. Maintenance of progress schedule.
10. Corrective measures to regain projected schedules.
11. Coordination requirements with Shipping Terminal operations.
12. Maintenance of quality and work standards.
13. Current or potential change order discussion.
14. Demonstration that the project record drawings are up-to-date.
15. Pay request (as required)
16. Other business relating to the work.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

**END OF SECTION**

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**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. The work described in this Section includes the requirements for preparation of construction schedules, maintaining documents on the Work Site, documenting daily quantities, and daily and weekly construction reports and logs.

**1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related to this Section is described throughout the Specifications.

**1.03 CONSTRUCTION SCHEDULE**

- A. Within fourteen (14) calendar days of receipt of Notice of Award, submit to the Engineer a Preliminary Construction Schedule in a Gantt chart format showing specific tasks, dates, and critical path necessary for completion of the project within the Contract time limits.
  - 1. After receiving the comments, re-submit the Construction Preliminary Schedule within seven (7) calendar days for Owner acceptance.
- B. Upon the Owner's acceptance, the Preliminary Construction Schedule shall become the Project Construction Schedule.
  - 1. The Project Construction Schedule will be updated regularly to coincide with and substantiate each month's progress payment request and shall be submitted at least three (3) days prior to the progress payment request.
  - 2. All changes to the Project Construction Schedule of more than three (3) calendar days shall be documented on the updated Project Construction Schedule.
  - 3. The Project Construction Schedule, as accepted by the Owner, shall be an integral part of the Contract and establishes interim completion dates for the various activities under the Contract.
  - 4. The Project Construction Schedule shall be updated and submitted regularly in paper and electronic formats.

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- C. The Project Construction Schedule format shall be a network analysis of the critical path method (CPM).
  - 1. The Project Construction Schedule shall identify the work clearly, showing the detailed items of work.
  - 2. The breakdown of work shall, at a minimum, show all of the items identified in the Schedule of Values and significant design, manufacturing, construction, and installation activities.
  - 3. Submittals and long lead items shall be included and the relationship between submittal and the work item shall be identified.
  - 4. The relationship between the work items shall clearly show the starting dates, and include all details of the work within the time frame shown.
  - 5. A graphical network diagram showing the logical sequence of activities, their precedence relationships, and estimated float or leeway available for each.
  - 6. The different categories of work as distinguished by crew requirements, equipment requirements, and construction materials.
  - 7. The different areas of responsibility, such as distinctly separate or subcontracted work, and identifiable subdivisions of work such as structural, electrical, civil, mechanical, etc.
- D. The Project Construction Schedule shall be used to justify time extension days requested by the Contractor. For additional days requested, the Project Construction Schedule shall be detailed enough to identify the work item(s) affected and the relationship to the changed or added work.
- E. Should any activity not be completed by the stated scheduled date, the Port reserves the right to require the Contractor to expedite completion of the activity by whatever means appropriate and necessary, without additional compensation to the Contractor.

#### **1.04 PROGRESS SCHEDULES**

- A. From the regularly-maintained Project Construction Schedule, progress schedules showing a three-week look ahead, one-week look back, shall be submitted and distributed at the weekly meetings. The progress schedule shall represent a practical plan to complete the work shown within the contract work window presented. At a minimum,

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the presentation, typically a Gantt-style chart, shall convey the task durations, a logical work sequence, task interdependencies, and identify important or critical constraints.

- B. Submittal and distribution of progress schedules will be understood to be the Contractor's representation that the scheduled work meets the requirements of the contract documents and that the work will be executed in the manner and sequence presented, over the durations indicated.
- C. The scheduling, coordination, and execution of construction in accordance with the contract documents are the responsibility of the Contractor. The Contractor shall involve, coordinate, and resolve scheduling with all subcontractors, material suppliers, or others affected in development of the progress schedule.

#### **1.05 ON-SITE DOCUMENTS**

- A. Maintain at the Work Site, in good order for ready reference by the Port, one complete record copy of the Contract Documents, including the Addenda, Change Orders, and all working drawings, Project Construction Schedule, and other approved submittals.
- B. Generate and keep on site all documents and reports required by applicable permit conditions.
- C. The Contract record drawings shall be marked to record all changes made during construction.
  - 1. The location of all existing or new underground piping, valves and utilities, and obstructions as located during the work, shall be appropriately marked on the ground until the Contractor incorporates the actual field location dimensions and coordinates into the project's record drawings.
  - 2. The project's record drawings shall be updated on a weekly basis and before elements of the Work are covered or hidden from view.
  - 3. After the completion of the work or portions of the work and before requesting final inspection, the record copy of the Drawings shall be given to the Engineer.
  - 4. The Port reserves the right to withhold monthly progress payments until such time as the record drawings are brought current.

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#### **1.06 DOCUMENTATION OF WEEKLY QUANTITIES**

- A. Meet with the Engineer weekly to agree upon the quantities of materials or work completed during the day's work. Both parties shall initial the Weekly Construction Report that shows there is agreement (or a lack of agreement) over the amount of work performed during that week.

#### **1.07 WEEKLY CONSTRUCTION REPORTS**

- A. Submit to the Engineer a Weekly Construction Report that provides a summary of the week's construction activities that were completed as part of the Contract, including documentation of weekly quantities of different types of work performed. Specific submittal requirements for the Weekly Construction Report are described in the individual Specification Sections. The Weekly Construction Report shall be submitted on a weekly basis before noon on Monday morning following the previous week's work.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

**END OF SECTION**

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 33 00 – Submittal Procedures**

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#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. The work described in this Section includes the format and procedures required for project submittals.
- B. The Contractor shall be required to provide submittals to the Engineer in advance of, and throughout, the duration of the work.
- C. This Section specifies general requirements and procedures for the Contractor's submissions of all required submittals following award of the Contract (including the Construction Work Plan, other plans, product samples, and product testing data) to the Engineer for review. Additional specific requirements for submissions are specified in the individual Sections.
- D. No separate payment will be made for effort associated with work described in this Section. Work required to comply with this Section is considered to be inclusive to all other activities described in the Contract Documents.

##### **1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Specification. Work related to this Section is described throughout the Specifications.
- B. Individual submittals required in accordance with the pertinent sections of these specifications. Other submittals may be required during the course of the project and are considered part of the normal work to be completed under the Contract.

##### **1.03 SUBMITTALS LIST**

- A. The Contractor shall, within 14 days of Notice of Award, prepare and submit for Port approval a detailed log of all the submittals required under this Contract, along with any other submittals identified by the Port or the Engineer. The list shall include, but not be limited to, schedules, required construction work plans, equipment and material cut sheets, shop drawings, project record documents, test results, survey records, record drawings, results of QC testing, and all other items for which a submittal is required. The submittal list shall be organized by CSI Specifications Division, and Section number and include the following information:
  - 1. Submittal Number

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2. Item identification
  3. Scheduled submittal date, date returned, date approved.
  4. Date submittal or material is needed.
- B. After the submittal list is reviewed and approved by the Port, it shall become the basis for submittal of all items by the Contractor.

**1.04 ADMINISTRATIVE**

- A. Submit to the Engineer all submittals required for review as described in these Specifications. Submit promptly and in an orderly sequence so as to not cause a delay in work. Failure to submit in ample time is not considered sufficient reason for extension of Contract duration and no claim for extension by reason of such default will be allowed.
- B. Allow necessary time for the following:
1. Review of product and sample data
  2. Review of re-submissions as necessary
  3. Ordering of accepted materials and/or products
- C. The Contractor shall allow a minimum of seven (7) calendar days for Engineer review of each submittal and an additional seven (7) calendar days for Engineer review of re-submittals. Unless stated otherwise in the Specifications, the Contractor shall be allowed seven (7) calendar days for revising initial submittals and providing re-submittals to the Engineer. The Contract time shall not be extended on the basis that the Contractor experienced delays due to rejection of submittals.
- D. Do not proceed with work affected by a submittal until Engineer review and approval, if appropriate, is complete.
- E. Review submittals prior to submission to the Engineer. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of work and Contract Documents. Submittals with content that does not meet the requirements of the Specifications, not signed, dated, and identified as to specific project, will be returned without being examined and considered rejected. Engineer review time starts only when a complete submittal is received.

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- F. Notify the Engineer, in writing at time of submission, identifying deviations from requirements of Contract Documents and stating reasons for deviations.
- G. Verify that field measurements and affected adjacent work are coordinated.
- H. The Contractor's responsibility for errors and omissions in its submissions is not relieved or diminished by the Engineer's review and acceptance of the Contractor's submissions. The Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Engineer's review and acceptance of submittals.
- I. The Contractor shall revise all submittals that are determined by the Engineer to be inadequate or non-compliant with the Contract Documents or permit conditions.
- J. Re-submittals are the responsibility of the Contractor and shall be compensated at no additional costs to the Port. Submittals shall be completed to the satisfaction of the Engineer.
- K. Keep one reviewed, and approved, if appropriate, copy of each submission at the Work Site.

## **PART 2 - PRODUCTS**

### **2.01 COMPLIANCE**

- A. Failure to comply with these requirements shall be deemed as the Contractor's agreement to furnish the exact materials specified or materials selected by the Port based on these Specifications.

### **2.02 SHOP DRAWINGS**

- A. The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data that are to be provided by Contractor to illustrate details of a portion of work.
- B. Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes, and other information necessary for completion of work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of section under which adjacent items will be supplied and installed. Indicate cross-references to design Drawings and Specifications.
- C. Adjustments made on shop drawings by the Engineer are not intended to change the Bid Price for the Contract. If adjustments affect value of work,



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state such in writing to the Engineer and obtain approval to proceed prior to proceeding with work.

- D. Make changes in shop drawings as the Engineer may require, consistent with Contract documents. When resubmitting, notify the Engineer in writing of revisions other than those requested.
- E. The Engineer will not accept shop drawings that prohibit the Port from making copies for its own use.
- F. Quality: Shop drawings shall be prepared accurately to a scale sufficiently large to indicate all pertinent features of the products and the method of fabrication, connection, erection, or assembly with respect to the work.
- G. Submittals typically provided on paper may be submitted electronically as PDFs. This is the preferred method of the Port.
- H. All shop drawings submitted to the Engineer for approval shall be drawn on full-size (ANSI D) copy or half-scale sets on 11 inches by 17 inches, bond paper only. Electronic versions of the shop drawings shall also be submitted in the following formats via email:
  - 1. DWG
  - 2. TIF
  - 3. PDF - Formatted to print to half-scale set on 11-inch by 17-inch paper
- I. Type of Prints Required:
  - 1. Submit six paper copies of all shop drawings or supplemental working drawings in accordance with the General Conditions.
  - 2. In lieu of the above, the Contractor may submit shop drawings or supplemental working drawings in the form of one sepia transparency of each sheet plus one blue line or black line print of each sheet.
  - 3. Distribution: In the event the action described in I.2 above is selected by the Contractor, the Engineer will review the drawings, mark the sepia with appropriate notations, prepare the required number of prints for their use, and return the marked sepia to the Contractor. The Contractor may then order as many additional copies as required for Contractor's work.
- J. If, upon review by the Engineer, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and

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installation of work may proceed. If shop drawings are rejected, a noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of work may proceed.

- K. The review of shop drawings by the Engineer is for sole purpose of ascertaining conformance with general concept.
  - 1. This review shall not mean that the Port, the Engineer, or others approve detail design inherent in shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting requirements of construction and Contract documents.
  - 2. The Contractor is responsible for dimensions to be confirmed and correlated at the Work Site, for information that pertains solely to fabrication processes or to techniques of construction and installation, and for coordination of work of subcontractors.

#### **2.03 MANUFACTURERS' LITERATURE**

- A. Submittals typically provided on paper may be submitted electronically as PDFs. The manufacturer's original electronic issue is preferred by the Port.
- B. Submit six paper copies of manufacturers' literature for approval.
- C. Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions, or brochures shall show the type, size, ratings, style, color, manufacturer, physical appearance, and catalog number of each item and be complete enough to provide for positive and rapid identification in the field. Catalog data shall be submitted in an orderly bound form. General catalogs or partial lists will not be accepted.

#### **2.04 SAMPLES**

- A. The sample submitted shall be the exact or precise article proposed to be furnished.

#### **2.05 SUBSTITUTIONS**

- A. Refer to Section 01 25 00

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### **Section 01 33 00 – Submittal Procedures**

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#### **PART 3 - EXECUTION**

##### **3.01 TRANSMITTALS**

- A. Submittals typically provided on paper may be submitted electronically as PDFs. This is the preferred method for the Port.
- B. Preparation: A separate submittal form shall be prepared for each product or procedure and shall be further identified by referencing the Section and paragraph number, and each submittal shall be numbered consecutively. All submittals shall be dated, signed, and certified by the Contractor as being correct and in conformance with the Contract Documents.
- C. Mailing: The original shall be sent in every instance and shall be the Contractor's record and final correspondence for every submittal.

##### **3.02 COORDINATION**

- A. Shop and detail drawings shall be submitted in related packages. All equipment or material details that are interdependent or are related in any way must be submitted indicating the complete installation. Submittals shall not be altered once approved for construction. Revisions shall be clearly marked and dated. Major revisions must be submitted for approval.
- B. Thoroughly review all shop and detail drawings, prior to submittal, to ensure coordination with other parts of the work. The Contractor's failure to do this may be cause for rejection. Submittals shall bear this approval stamp and initials.
- C. Any costs or delays associated with fabrication and project schedule due to submittals that were incomplete, incorrect, or otherwise not sufficient for the Engineer to perform an efficient review shall be the sole responsibility of the Contractor.

**END OF SECTION**

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 35 29 – Health, Safety, and Emergency Response Procedures**

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#### **PART 1 - GENERAL**

##### **1.01 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements apply to this work as if specified in this section.

##### **1.02 DESCRIPTION OF WORK**

- A. The work includes the requirements for health and safety provisions necessary for all work at the site for this project. The work also includes compliance with all laws, regulations and ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security or traffic.
- B. Information regarding the known nature and extent of hazardous materials in the project area is included in the Appendices.
- C. The Contractor shall monitor soils, groundwater, and waste materials for indications of materials containing or potentially containing hazardous materials (suspicious materials). Indicators of suspicious materials include, but are not limited to, refuse or waste, oily sheen or coloring on soils or water, or oily or chemical odors. If suspicious materials are encountered, the Contractor shall stop all work in that area and notify the Engineer immediately.

##### **1.03 SUBMITTALS**

- A. Prior to the start of any work, prepare and submit a site-specific Spill Prevention, Containment, and Countermeasures (SPCC) Plan as described in Section 01 57 19 – Temporary Environmental Controls. The SPCC Plan shall be submitted as part of the Environmental Protection Plan as described in 01 57 19 – Temporary Environmental Controls.
- B. Prior to the start of any work, prepare and submit a site-specific Health and Safety Plan (HASP), which meets all the requirements of local, state and federal laws, rules and regulations and the pertinent regulations listed in Divisions 00 through 35 of the contract documents. The HASP shall address all requirements for general health and safety and shall include, but not be limited to, the following.
  - 1. Name of Site Safety and Health Manager
  - 2. Description of work to be performed and anticipated chemical and/or physical hazards associated with the work.

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3. Map of the sites illustrating the location of the anticipated hazards and areas of control for those hazards.
4. Hazardous material inventory and Safety Data Sheets (SDSs) for all chemicals which will be brought on site.
5. Signage appropriate to warn site personnel and visitors of anticipated site hazards.
6. Documentation that the necessary workers have completed the required HAZWOPER training.
7. Engineering controls/equipment to be used to protect against anticipated hazards.
8. Personal protective equipment and clothing including head, foot, skin, eye, and respiratory protection.
9. Procedures which will be used for:
  - a. Lockout/tagout;
  - b. Fall protection;
  - c. Trenching and shoring;
  - d. Hot work;
  - e. Explosive conditions due to methane;
  - f. Oxygen deficient conditions;
  - g. Physical hazards;
  - h. Hazardous building materials;
  - i. Asbestos and lead hazards;
  - j. Trenching and shoring;
  - k. Suspicious materials;
  - l. Confined-space entry (could include dewatering storage tanks, manholes, or other items); and
  - m. Odorous conditions.
10. Exposure monitoring to be used to evaluate actual hazards compared with anticipated conditions.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 35 29 – Health, Safety, and Emergency Response Procedures**

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11. Site housekeeping procedures and personal hygiene practices.
  12. Personnel and equipment decontamination plan.
  13. Administrative controls.
  14. Emergency plan including locations of and route to nearest hospital.
  15. Medical surveillance program for site personnel before, during, and after completion of site work.
  16. Medical removal protection
  17. Record keeping including:
    - a. Documentation of appropriate employee training
    - b. Respirator fit testing
  18. Name and qualification of person preparing the health and safety plan and person designated to implement and enforce the plan.
  19. Signatory page for site personnel to acknowledge receipt, understanding, and agreement to comply with the plan.
- C. Prior to the start of any work, prepare and submit a project-specific Demolition Management Plan (DMP). See Section 02 41 00 – Demolition, for requirements.

#### **1.04 SITE SAFETY AND HEALTH MANAGER**

- A. The Contractor Site Safety and Health Manager shall be responsible for establishing the standards for all Contractor employees and sub-contractors on the site at all times. The Contractor Site Safety and Health Manager shall ensure that all Contractor and subcontracted personnel working at the site follow the directions of the Site Safety and Health Manager, including the designated level of personal protection. If the Contractor or Contractor Site Safety and Health Manager elect to require a higher level of protection than that specified in the HASP, the extra costs associated with such higher level shall be borne by the Contractor.

#### **1.05 POTENTIAL CHEMICAL HAZARDS**

- A. On-Site Hazardous Materials
1. The Contractor must provide site workers with Hazard Communication standard information for known hazardous materials on-site (in accordance with WAC 296-62-054). The Contractor shall

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ensure that all site workers are aware of and understand this information.

2. Additional information shall also be provided by the Contractor, as necessary, to meet the Hazard Communication Standard and Health and Safety Plan requirements as noted in WAC 296-62-054 and 296-62-300. Workers shall be instructed on basic methods or techniques to assist in detecting suspicious material.
3. Construction activities that pose a potential risk of exposure to contaminated materials (such as excavations and dredging) shall be supervised by personnel who have both a current 40-hour HAZWOPER certification, and an 8-hour HAZWOPER Supervisor's certification. These individuals shall be able to identify the potential need for upgrading the level of health and safety protection. All personnel working in direct contact with contaminated soil, sediment, or water shall have a current 40-hour HAZWOPER certification and medical monitoring, as required in Hazardous Waste Operations, Chapter 296-843 WAC and in accordance with OSHA regulations.

#### **B. Potential Exposures Routes**

1. Inhalation: Airborne dust may be created during site activities. Inhalation of vapors or gases may occur if volatile contaminants or hydrogen sulfides are present.
2. Skin and Eye Contact: Dusts generated during site work activities may settle on the skin or clothing of site workers. Also, workers may contact sediments or water containing hazardous materials, in the normal course of their work. Precautions to prevent skin or eye contact with hazardous materials will be included in the Health and Safety Plan.
3. Ingestion: Inadvertent transfer of site hazardous materials from hands or other objects to the mouth could occur if site workers eat, drink, smoke, chew tobacco, or engage in similar activities in areas where such materials exist. This could result in ingestion of site contaminants. Precautions to prevent accidental or inadvertent ingestion of hazardous materials will be included in the Health and Safety Plan.

- C. Chemical hazards may also result from Contractor operations resulting in inadvertent release of fuel, oil, or other chemicals in a manner that would expose workers.

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#### **1.06 POTENTIAL PHYSICAL AND OTHER HAZARDS**

- A. The Work of the Contractor is described elsewhere in these specifications. Precautions to prevent all anticipated physical and other hazards, including heavy equipment and vessels, shall be addressed in the Health and Safety Plan.
- B. Specific aspects of construction resulting in physical hazards anticipated for this project included, but are not limited to the following:
  - 1. Work over water, presenting hazards of falling overboard, hypothermia from exposure to the elements, and drowning.
  - 2. Operation of marine equipment, including winches, dredges, and related equipment, presenting hazards of entrapment, ensnarement, and being struck by moving parts.
- C. Other anticipated physical hazards include, but are not limited to the following:
  - 1. Heat stress, such as that potentially caused by impermeable clothing (may reduce the cooling ability of the body due to evaporation reduction).
  - 2. Cold stress, such as that potentially caused during times when temperatures are low, winds are high, especially when precipitation occurs during these conditions.
  - 3. Biological hazards, such as insect stings or bites.
  - 4. Trips and falls.

#### **PART 2 - PRODUCTS**

##### **2.01 PRODUCTS SPECIFIED FOR HEALTH AND SAFETY**

- A. Provide the equipment and supplies necessary to support the work as described in the site-specific Health and Safety Plan. Equipment and supplies may include but are not limited to the following:
  - 1. Chemicals to be used on site including dust suppressants/wetting agents, cleaning degreasing, and/or welding/cutting supplies;
  - 2. Hazardous materials inventory and MSDSs for the chemicals brought on site;
  - 3. Enclosure equipment (for dust and asbestos fiber control);



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4. Fencing and barriers;
5. Warning signs and labels;
6. Trenching equipment;
7. Fire extinguishers;
8. Equipment to support 'hot' work;
9. Equipment to support lock out/tag out procedures;
10. Scaffolding and fall protection equipment;
11. Personal protective equipment (hard hats, foot gear, skin, eye, and respiratory protection, and personal floatation device [PDF]);
12. Area and personnel exposure monitoring equipment;
13. Demolition equipment and supplies;
14. Decontamination equipment and supplies;
15. First aid equipment;
16. Release prevention equipment; and
17. Field documentation logs/supplies.

## **PART 3 - EXECUTION**

### **3.01 WORK AREA PREPARATION**

- A. Contractor shall comply with health and safety rules, regulations, ordinances promulgated by the local, state, and federal government, the various construction permits, and other sections of the Contract Documents. Such compliance shall include, but not be specifically limited to: any and all protective devices, equipment and clothing; guards; restraints; locks; latches; switches; and other safety provisions that may be required or necessitated by state and federal safety regulations. The Contractor shall determine the specific requirements for safety provisions and shall cause inspections and reports by the appropriate safety authorities to be conducted to ensure compliance with the intent of the regulations.
- B. Contractor shall inform employees and subcontractors and their employees of the potential danger in working with any potentially contaminated materials, equipment, soils and groundwater at the project site.

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- C. Contractor shall perform whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees of the Engineer, Engineer's Representative, and Contractor) and property during the Contract period. This requirement applies continuously and is not limited to normal working hours.
- D. The Engineer's review of the Contractor's performance does not include an opinion regarding the adequacy of, or approval of, the Contractor's safety supervisor, the site specific Health and Safety Plan, safety program or any safety measures taken in, on, or near the construction site.
- E. Accidents causing death, injuries, or damage must be reported immediately to the Engineer in person or by telephone or messenger. In addition, promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.
- F. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing within 24 hours after occurrence, to the Engineer, giving full details of the claim.

#### **3.02 SITE SAFETY AND HEALTH MANAGER**

- A. Provide a person designated as the Site Safety and Health Manager, who is thoroughly trained in rescue procedures, HAZWOPER, and the use of all necessary safety equipment, air monitoring equipment, and gas detectors. The person must be present at all times while work is being performed and conduct testing, as necessary.
- B. The Site Safety and Health Manager shall be empowered with the delegated authority to order any person or worker 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 and Health Manager is responsible for determining the extent to which any safety equipment must be utilized, depending on conditions encountered at the site.

#### **3.03 SITE MAINTENANCE**

- A. Keep the work site, laydown areas, staging areas, access routes, and Contractor facilities clean and free from debris, trash, clutter, rodents, and rubbish. Materials and equipment shall be removed from the site when they are no longer necessary.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 35 29 – Health, Safety, and Emergency Response Procedures**

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1. Waste material shall not be permitted to remain on the site, adjacent properties, adjacent streets, and access routes. Immediately collect and remove any such materials from these areas and prepare the material for Contractor disposal.
  2. Keep all Contractor-occupied buildings clear of equipment, construction materials, debris, waste, and refuse. Prevent any accumulation of such materials from any source and maintain the cleanliness as directed by the Engineer.
  3. If the cleanliness of the site is not maintained, as determined by the Engineer, the Port reserves the right to have Contractor-generated waste material, refuse, debris, and rubbish removed from the site, adjacent properties, adjacent streets, and access routes at the Contractor's expense.
  4. Prevent paints, solvents, petroleum products, hazardous substances, and regulated solid wastes from entry into the storm drains, surface waters, and soils. Dispose of any such unused or excess materials off site and in accordance with applicable local, state, and federal regulations.
  5. Maintain and monitor all pH-modifying sources and prevent entry of those contaminants into storm drains, surface waters, and soils. Typical pH-modifying sources include Portland cement, unhardened concrete, unhardened cementitious grout, concrete truck washout water, water used to cure concrete, lubricating water from concrete drilling or sawing, exposed aggregate processes, and pump truck washout water.
  6. Prevent dirt, dust, debris, and construction materials from leaving trucks departing the site. Use all best management practices including covering dusty areas of the site, washing truck tires, sweeping, etc., in order to prevent debris from leaving the site.
  7. When dump trucks or other equipment are traveling on paved streets and roadways, clean the traveled streets and roadways regularly in compliance with air and stormwater regulatory requirements, and as directed by the Engineer.
  8. If the cleanliness of the streets and roadways is not maintained, as determined by the Engineer, the Port reserves the right to have them cleaned by others as necessary at the Contractor's expense.
- B. Upon completion of the work, and before final acceptance, clear the work site of equipment, unused materials, waste, debris, and rubbish to present

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 35 29 – Health, Safety, and Emergency Response Procedures**

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a clean and neat appearance consistent with the condition of the site before construction, or as directed by the Engineer.

#### **3.04 SPILL PREVENTION AND CONTROL**

- A. The Contractor shall be responsible for prevention, containment and cleanup of spilling oil, fuel and other petroleum and chemical products used in the Contractor's operations. All such prevention, containment and cleanup costs shall be borne by the Contractor. The Contractor shall prepare a Spill Prevention, Containment, and Countermeasures (SPCC) Plan prior to the start of construction activity.
- B. Discharge of oil or other petroleum or chemical products from equipment or facilities into state waters or onto adjacent land is not permitted under state water quality regulations.
- C. At a minimum, take the following measures regarding spill prevention, containment and cleanup.
  - 1. Maintain and store the following items properly to prevent spills. Regularly inspect these items for drips, leaks, or signs of damage. Properly secure these items at all times to discourage vandalism.
    - a. Hoses for fuel, other petroleum based products, or chemical products
    - b. Lubrication or dispensing equipment for petroleum based or chemical products
    - c. Metal or plastic drums or containers for petroleum based or chemical products
    - d. Tanks containing petroleum based or chemical products
    - e. Other equipment or facilities associated with petroleum based or chemical products
  - 2. All land-based petroleum based and chemical and products' storage tanks shall be diked, contained and/or located so as to prevent spills from escaping into the water. Diking and containment area surfaces shall be lined with impervious material to prevent oil from seeping through the ground and dikes.
  - 3. All visible floating oils shall be immediately contained with booms, dikes or other appropriate means and removed from the water prior to discharge into state waters. All visible spills on land shall be immediately contained using dikes, straw bales or other appropriate means and removed using sand, ground clay, sawdust or other

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absorbent material, which shall be properly disposed of by the Contractor. Waste materials shall be temporarily stored in drums or other leak-proof containers after cleanup and during transport to disposal. Waste materials shall be disposed off site in accordance with applicable local, state and federal regulations.

- D. The Contractor shall maintain the following materials (as a minimum) within 300-feet of the project site with the ability to deploy and maintain:
1. Oil-absorbent booms: 4 each, 5 feet long.
  2. Oil and chemical absorbent pads or bulk material, adequate for coverage of 200 square feet of surface area.
  3. Oil-skimming system.
  4. Oil dry all, gloves and plastic bags.

**END OF SECTION**

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 45 00 – Quality Control**

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#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION OF WORK**

- A. This Section describes the Contractor's quality control requirements, duties, and responsibilities during execution of the work. The intent of this Section is to require the Contractor to establish a necessary level of control that will:
1. Provide sufficient information to assure both the Contractor and the Engineer that the Specification requirements are and have been met.
  2. Establish, provide, and maintain a Construction Quality Control (CQC) Plan as specified herein, detailing the methods and procedures that will be taken to ensure that all materials and completed construction elements conform to the Drawings, Specifications, and other requirements. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the Specifications, it is the responsibility of the Contractor to ensure that construction and construction quality control are accomplished in accordance with the stated purpose and Specifications as described herein.
  3. Be prepared to discuss and present, at the Pre-construction Meeting, an understanding of the quality control requirements. Do not begin any construction until the CQC Plan has been reviewed and approved by the Engineer.
- B. No separate payment will be made for effort associated with work described in this Section. Work required to comply with this Section is considered to be inclusive to all other activities described in the Contract Documents.

##### **1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work as if specified in this Section. Work related to this Section is described throughout these Specifications.

##### **1.03 SUBMITTALS**

- A. Contractor's Construction Quality Control (CQC) Plan.
1. Submit a CQC Plan to the Port as a Pre-Construction Submittal within twenty-one (21) calendar days after Notice of Award. The CQC Plan will be reviewed by the Port and must be approved before any work can start. The CQC Plan will be used to document inspections,

## **DIVISION 01 – GENERAL REQUIREMENTS**

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monitoring, surveys, and other actions to be taken by the Contractor to ensure that the work complies with all Contract requirements.

2. The CQC Plan shall identify personnel, procedures, methods, instructions, records, and forms to be used to control the work and verify that the work conforms to the Contract Documents.
3. The CQC Plan shall include the following elements, at a minimum:
  - a. Description of the quality control organization, including an organization chart showing the various Quality Control (QC) team members, along with their designated responsibilities and lines of authority. At a minimum, the Contractor shall identify the following key personnel:
    - (1) Superintendent
    - (2) Quality Control Supervisor
    - (3) Site Safety and Health Manager
    - (4) Survey Lead (or firm that the Contractor has hired to perform measurement and payment, and Progress Surveys)
    - (5) Other key personnel deemed necessary by the Contractor for the successful implementation and completion of this work
  - b. Quality control methods and procedures to ensure compliance with specifications and permit conditions.
  - c. Acknowledgement that the QC staff will conduct inspections for all aspects of the work specified, and shall report to the QC Supervisor, or someone of higher authority in the Contractor's organization.
  - d. The name, qualifications, duties, responsibilities, and authorities of each person assigned a primary QC function.
  - e. A summary of the delegated responsibilities of the QC Supervisor, signed by an authorized official of the firm.
  - f. Procedures for scheduling and managing submittals, including those of subcontractors, off-site fabricators, and material suppliers.

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### **Section 01 45 00 – Quality Control**

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- g. Testing methods, schedules, and procedures used to report QC information to the Port, including samples of the various reporting forms.
  - 4. QC Organization
    - a. QC Supervisor: Identify an individual within the Contractor's organization, located at the Work Site, who shall be responsible for overall QC management, and have the authority to act in all QC matters for the Contractor.
    - b. Personnel: A staff shall be maintained under the direction of the QC Supervisor to perform all QC activities. The actual number of the staff during any specific work period may vary to cover shift needs and rates of performance. The personnel of this staff shall be fully qualified by experience and technical training to perform their assigned responsibilities and shall be directly hired for the work by the Contractor.
    - c. Submit the qualifications in resume format of the personnel identified in this Specification as part of the CQC Plan.
  - 5. The Contractor is encouraged to add any additional elements to the CQC Plan deemed necessary to adequately control all production and/or construction processes required by this Contract.
- B. Daily CQC Reports.
- C. Landfill or Recycling Facility disposal documentation (certified weight tickets) submitted as part of the Daily CQC Report.

#### **1.04 REFERENCES AND STANDARDS**

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where a specific date is established by code.
- C. Obtain copies of standards where required by product Specification Sections.
- D. Neither the contractual relationships, duties, nor responsibilities of the parties in the Contract, nor those of the Port, shall be altered from the



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Contract Documents by mention or inference otherwise in any reference document.

- E. All pertinent laws, ordinances, rules, regulations, and codes shall govern construction activities at the Work Site.
- F. Construction that is not governed by governmental regulations or the Specifications will be governed by the more stringent provisions of the latest published edition or statute adopted edition, at the time of Contract signing, following applicable codes and standards:
  - 1. International Building Code
  - 2. National Electrical Code
  - 3. Uniform Plumbing Code
  - 4. Uniform Fire Code

#### **1.05 PERMITS**

- A. Refer to the Specification appendices for permit requirements.

#### **1.06 TESTING PAID FOR BY THE CONTRACTOR**

- A. Unless noted otherwise, all testing shall be paid for by the Contractor.
- B. Initial sampling and testing necessary to secure approval of materials shall be performed by an independent certified laboratory. These tests must be dated within six (6) months of the submittal date. Contractor is to submit accredited documents and all laboratory results to the Engineer.
- C. Re-testing required because of non-conformance to specified requirements shall be performed by the independent firm that performed the initial testing. Payment for re-testing will be charged to the Contractor by deducting testing charges from the contract sum.
- D. All testing associated with the Water Quality Monitoring and Protection Plan (WQMPP).

#### **1.07 TESTING PAID FOR BY THE PORT**

- A. Testing and inspections associated with Special Inspections required by the City of Ilwaco shall be performed by an independent testing laboratory during the execution of the work and will be paid for by the Port of Ilwaco. Access to the area necessary to perform the testing, or to secure the material testing, shall be provided by the Contractor.

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- B. Confirmational sampling associated with the upland clean-up and dredging shall be performed and paid for by the Port. Access to the area necessary to perform the testing, or to secure the material testing, shall be provided by the Contractor.

#### **1.08 CONTRACTOR PERSONNEL REQUIREMENTS**

- A. All Contractor personnel shall be trained, experienced, and qualified to perform the tasks assigned to them.
- B. Submit the Bidder Qualifications of the Contractor's proposed Site Superintendent to the Engineer for review and approval. The Port reserves the right to reject the Contractor's proposed Superintendent or other key personnel for any reason. The Contractor shall provide a Superintendent that is acceptable to the Port, and who shall be the full time Superintendent for this project. The Contractor may not remove and replace the Superintendent from the project without submitting a formal request to the Engineer. Any proposed replacement Superintendent must be approved by the Port before he or she can take over the role of Superintendent. The proposed field superintendent shall have a minimum of 5 years of experience as a field superintendent.

#### **PART 2 - PRODUCTS – NOT USED**

#### **PART 3 - EXECUTION**

##### **3.01 DOCUMENTATION**

- A. Specific Contractor Quality Control Records required for the Contract shall include, but are not necessarily limited to, the following records:
  - 1. Quality Control Records are those documents that have been reviewed and accepted by the Contractor as complete, correct, and legible. Quality Control Records shall include the documents such as:
    - a. Drawings, specifications, procedures used for construction, procurement documents, inspections, and test records
    - b. Submittals
    - c. Personnel and procedure qualification records
    - d. Material, chemical, and physical property test results
    - e. Certificates of Compliance, and shipment releases

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 45 00 – Quality Control**

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- f. Landfill and Recycling Facility certified weight tickets
- g. Non-compliance reports and corrective action

All Quality Control Records shall be identified in the CQC Plan and maintained in the Contractor's Work Site files. The Engineer shall be provided access to these files when requested. Upon the completion of the Contractor's contractual activities, these files shall be turned over to the Engineer.

- 2. Daily CQC Report: Prepare and maintain a Daily CQC report of operations. At a minimum, information in this daily CQC report will include the date, period covered by the report, personnel and subcontractors on site, equipment used, description of activities, downtime and delays to the operation, health and safety status, and other relevant comments concerning conduct of the operation. The report shall include the results of all Contractor inspections, surveys, and monitoring activities and shall be signed by the Contractor's Superintendent or QC Supervisor.

#### **B. Document Control**

The Contractor's CQC Plan must require that Contractor-generated documents pertaining to quality-related items be controlled. The following types of documents shall be on controlled distribution to ensure that changes to them are transmitted and received when applicable:

- 1. Manuals
- 2. Instructions
- 3. Procedures
- 4. Specifications
- 5. Drawings
- 6. Inspection and test plans
- 7. Field change requests

### **3.02 CORRECTIVE ACTION REQUIREMENTS**

- A. The CQC Plan shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 45 00 – Quality Control**

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#### **3.03 QUALITY CONTROL-CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from the Port before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
- H. Familiarity with Pertinent Codes and Standards: In procuring all items used in this work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this work meet or exceed the specified requirements.
- I. Rejection of Non-Complying Items: The Port reserves the right to reject items incorporated into the work that fail to meet the specified minimum requirements. The Port further reserves the right, and without prejudice to other recourse the Port may take, to accept non-complying items subject to an adjustment in the Awarded Contract Price as approved by the Port.

#### **3.04 OVERSIGHT BY THE ENGINEER**

- A. All items of material and equipment shall be subject to oversight by the Engineer at the point of production, manufacture, or shipment to determine if the Contractor, producer, manufacturer, or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable Specifications and Drawings. In addition, all items of materials, equipment, and work in place shall be subject to inspection by the Engineer at the Work Site for the same purpose.
- B. To facilitate oversight by the Engineer, allow the Engineer access to any equipment at the request of the Port while the work is being performed.

## **DIVISION 01 – GENERAL REQUIREMENTS**

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- C. In cases of dispute, decisions as to standard or quality of work rest solely with the Engineer, whose decision is final.
- D. Oversight by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

#### **3.05 NON-COMPLIANCE**

- A. The Engineer will notify the Contractor of any non-compliance with any of the foregoing requirements. After receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his/her authorized representative to the Contractor or his/her authorized representative at the Work Site, shall be considered sufficient notice.

**END OF SECTION**

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**Section 01 50 00 – Temporary Facilities and Controls**

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**PART 1 - GENERAL**

**1.01 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and other sections of the General Requirements, apply to this work as if specified in this section.

**1.02 DESCRIPTION OF WORK**

- B. The Work includes the requirements to provide temporary facilities required by both the Contractor and the Port of Ilwaco until the acceptance of the Contract. The Work also includes compliance with all controls or ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security, or traffic.

**1.02 SUBMITTALS**

- A. Submit a Temporary Facilities and Controls Work Plan that describes the Contractor's management of all likely environmental conditions and hazards to be encountered throughout the project duration. The plan shall detail the methods to be used, the facilities to be provided, and the controls to be in place while performing the work. Submit and obtain the Engineer's approval before commencing work. At a minimum, include the following.
  - 1. Methods for maintaining site security.
  - 2. Methods for maintaining traffic control and safety.
  - 3. Methods for noise reduction and management.
  - 4. Methods for protecting adjacent facilities, tenants, and property.

**PART 2 - PRODUCTS – NOT USED**

**PART 3 - EXECUTION**

**3.01 UTILITIES**

- A. It shall be the Contractor's responsibility to provide adequate facilities for Contractor's operation, including:
  - 1. Water: Drinking water for employees shall be provided in sanitary containers and maintained fresh each day.
  - 2. Construction Electricity: The Contractor shall make all arrangements for the furnishing of electric power for construction purposes. The

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**Section 01 50 00 – Temporary Facilities and Controls**

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power meter shall be registered in the name of the Contractor and all charges for installation and electric energy shall be borne by the Contractor.

3. Temporary Sanitary Facilities: The Contractor shall install and maintain necessary temporary sanitary toilet facilities during the term of this contract. Toilet facilities for employees shall be maintained in a sanitary condition. Toilets shall be of a chemical type; remove at completion of work and disinfect the premises.
4. Communications: Provide, maintain, and pay for telephone, internet, and other data services to the job-site field office throughout the duration of the project. The Contractor shall provide his own means of job-site communication.

**3.02 USE AND OCCUPANCY**

- A. The Contractor will be allowed space for the storage of materials and the pursuance of Work under this Contract in the areas as directed by the Owner and as shown on the Drawings. The Contractor shall limit storage of materials, tools, and other items necessary to the Work to the work and staging area. Items stored outside the designated staging area shall be prohibited without prior approval of the Port.

**B. SECURITY**

1. The construction site shall be closed to the public at all times.
2. The Contractor shall abide by special request of security personnel, and local police and fire departments.

**C. FENCES & ENCLOSURES**

1. General: Furnish and install a temporary fence around the entire construction area as indicated on the drawings. Coordinate fencing with the Port to accommodate and maintain operations of the Shipping Terminal.
2. Construction: The temporary fence shall consist of woven wire mesh not less than six feet in height, complete with metal or wood posts and all required bracing, and with truck and pedestrian gates, as indicated on the drawings.

**D. FIELD OFFICES**

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1. The Contractor shall provide a suitably furnished temporary office for its own use. It shall also provide telephone and data service to this office. Temporary office shall be located within upland staging area.
2. The temporary office shall include adequate space for meetings.
3. Designated areas shall be provided for smoking. Contractor personnel shall limit smoking to designated areas only and during designated break times during the workday only.
4. Payment shall be full compensation for furnishing, installing, maintaining, and removing the facilities, including all costs associated with all required utility hookups and disconnects, and monthly charges for all utilities, including telephone. Remove all field offices at the completion of the contract and restore the site to pre-installation conditions, or as directed by the Engineer.

**END OF SECTION**



**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 57 19 – Temporary Environmental Controls**

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**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. This Section covers environmental compliance and preventing environmental pollution during, and as a result of, construction operations. Other Sections may also contain specific requirements for environmental protection. Those specific requirements are in addition to the requirements in this Section; the more stringent requirements shall control. The control of environmental pollution requires consideration of noise levels, air, water, and land.
- B. The Contractor is responsible for environmental protection during all construction activities at all locations it performs work. Work locations include, but are not limited to, the Work Site, Transload Facility(ies), On- and Off-Site Staging Area(s), and during barge transport over water and land-based transportation of all contaminated materials. This Section primarily addresses work conducted at the Work Site, but the Contractor is responsible for complying with environmental protection regulations at all locations that are used for the work of this project.
- C. Environmental degradation arising from construction activities shall be prevented, abated, controlled, and minimized by complying with all applicable federal, state, and local laws and regulations concerning environmental pollution control and abatement, as well as the specific requirements in the project permits. The Contractor shall comply with all permit conditions; permits have precedence over these Specifications.
- D. The work includes compliance with all controls or local, state, and federal ordinances with respect to safety, noise, odor, dust, fire and police action, civil disobedience, security, or traffic.
- E. The work also includes implementing temporary erosion and sediment controls (TESC), including stormwater pollution prevention measures to prevent excavated soils, and contaminated stormwater from entering Baker Bay.
- F. The work also includes providing control measures to prevent or limit to the extent practicable recontamination of cleaned up areas or adjacent non-contaminated areas during construction activities.

**1.02 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the Procurement and Contracting Requirements and General Requirements, apply to this work

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 57 19 – Temporary Environmental Controls**

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as if specified in this Section. Work related to this Section is described throughout the Specifications.

**B. Related sections**

1. Section 01 35 29 – Health, Safety, and Emergency Response Procedures
2. Section 01 50 00 – Temporary Facilities and Controls
3. Section 02 41 00 – Demolition
4. Section 31 00 00 – Earthwork

**1.03 REFERENCES**

**A.** The following is a general list of federal, state, and local environmental statutes, ordinances, and regulations that deal with the prevention of environmental pollution and the preservation of public natural resources that affect or may affect this project. This list is not to be considered as all inclusive, nor shall the absence of a law, ordinance, or regulation from this list be construed to relieve the Contractor from complying with such law, ordinance, or regulation, to the extent it is applicable to the Contractor and this project:

1. Federal Statutes, Regulations, and Guidelines:
  - a. Clean Air Act
  - b. Clean Water Act
  - c. Coast Guard Regulations on Oil Spills
  - d. Endangered Species Act (ESA), Section 7
  - e. Environmental Protection Agency Regulations Establishing Effluent Guidelines
  - f. Environmental Protection Agency Regulations for Hazardous Waste Management
  - g. Environmental Protection Agency Regulations on Discharge of Dredged or Fill Material into Navigable Waters
  - h. Environmental Protection Agency Regulations on National Primary and Secondary Ambient Air Quality Standards

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- i. Environmental Protection Agency Regulations on Discharge of Dredged or Fill Material into Navigable Waters
  - j. Environmental Protection Agency Regulations on the Discharge of Oil
  - k. Marine Mammal Protection Act (MMPA)
  - l. Migratory Bird Treaty Act
  - m. National Environmental Protection Act (NEPA)
  - n. National Historic Preservation Act of 1966 (NHPA), Section 106
  - o. Rivers and Harbors Act of 1899
  - p. Resource Conservation and Recovery Act
  - q. Toxic Substances Control Act
2. State Statutes, Regulations, and Guidelines:
- a. Washington Hazardous Waste Disposal Law
  - b. Washington State Department of Ecology Regulations for Waste Discharge Permits
  - c. Washington State Department of Ecology Regulations Relating to Minimum Functional Standards for Solid Waste Handling
  - a. Washington State Department of Ecology Stormwater Management Manual for Western Washington, current edition
  - b. Washington State Department of Ecology Regulations for Waste Discharge Permits
  - c. Washington State Department of Ecology Regulations for Dangerous Waste
  - d. Washington State Department of Ecology Regulations Relating to Noise
  - e. Washington State Department of Ecology Model Toxics Control Act Cleanup Regulations

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- f. Washington State Department of Ecology Shoreline Management Act Regulations
- g. Washington State Department of Transportation 2023 Standard Specification M41-10, Division 8-01 Erosion Control and Water Pollution Control
- h. Washington Department of Fish and Wildlife
- i. Washington State Environmental Policy Act (SEPA)
- j. Washington State Sediment Management Standards
- k. Water Pollution Control Act

3. Local Ordinances and Regulations

- a. City of Ilwaco Surface and Stormwater Comprehensive Plan, City of Ilwaco Public Works, December 2020 or current edition
- b. City of Ilwaco Shoreline Master Program (2017 or current edition)
- c. City of Ilwaco Growth Management Act Ordinance No. 910 – Critical Areas regulations
- d. Northwest Clean Air Agency

1.04 COMPLIANCE WITH ENVIRONMENTAL STATUTES, ORDINANCES AND REGULATIONS

- A. The Contractor shall be knowledgeable of, and comply with, all applicable federal, state and local environmental regulatory requirements dealing with the prevention of environmental pollution and the preservation of public natural resources that affect or may affect this Project.

1.05 COMPLIANCE WITH PROJECT-SPECIFIC REGULATORY REQUIREMENTS:

- A. In addition to the requirements of Sections 1.01 through 1.04, the Contractor shall be knowledgeable of, and comply with, the list of identified and obtained federal, state, and local permits and approvals in Section 1.06, 1.07, and 1.08, along with any other identified permits and approvals that the Contractor may also need to obtain to complete the proposed work. All currently held permits and applications are attached (see Appendix A). Conditions of all permits and approvals (received or still undergoing agency review and not yet issued) must be adhered to during completion of the Project. The contractor will be responsible for identifying the most up to date

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 57 19 – Temporary Environmental Controls**

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permits, approvals, and/or applications and associated requirements. Updated versions of permits, approvals, and/or applications will supersede earlier versions, as applicable.

- B. The Contractor shall also be responsible for complying with and/or maintaining these permits, approvals, licenses, certificates, and other environmental regulatory requirement correspondence on-site, or as specified within the permit.
- C. The contractor shall be responsible for completing all monitoring as required by the permits and coordinating with the Port for report submittal to the applicable regulatory agencies (see Section 1.10).

#### **1.06 FEDERAL PERMITS**

- A. US Army Corps of Engineers (USACE) Permit No. NWP-2022-525, dated July xx, 2024 (Appendix A1) is PENDING ISSUANCE IN JULY 2024. The Contractor shall comply with all conditions and conservation/mitigation measures, including identified in-water work windows and conditions within the USACE permit, the permit application materials and drawings, and any other correspondence or additional documentation submitted and approved by the USACE including, but not limited to:
- B. National Marine Fisheries Service (NMFS) ESA Section 7(a)(2) Letter of Concurrence (LOC), dated August 16, 2023; WCRO-2022-03087, along with affiliated emails, dated October 5, 2023 and May 16, (Appendix A2).
- C. US Fish and Wildlife Service (USFWS) ESA Section 7(a)(2) LOC, dated August 28, 2023; FWS/R1/2023-0026807 and affiliated emails, dated September 6, 2023 and April 8, 2024 and (Appendix A3).
- D. The Joint Aquatic Resources Permit Application (JARPA) signed July 3, 2023 (Appendix A4) and the Biological Evaluation (BE) dated December 15, 2022 (Appendix A5).
- E. US Department of Transportation Maritime Administration (MARAD) NEPA Finding of No Significant Impact (FONSI) and Environmental Assessment (EA), dated June 5, 2024 (Appendix 6).

#### **1.07 STATE PERMITS**

- A. Washington Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA) No. 2024-6-66+01, dated February 22, 2024 along with the WDFW Minor Modification to Application ID 32313 dated March 22, 2024 (Appendix A7).

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- B. Washington State Department of Ecology (Ecology) Coastal Zone Management Federal Consistency Decision, dated February 26, 2024 (Appendix A8).
- C. Washington State Department of Ecology 401 Water Quality Certification (WQC) Order No. 22523, dated February 22, 2024 and affiliated email correspondence, dated May 21, 2024 (Appendix A9).
- D. Washington State Department of Ecology National Pollutant Discharge Elimination System (NPDES) Stormwater Permits (Construction/ Industrial/ Municipal). Contractor to obtain if deemed necessary.
- E. Other Washington State construction permits (if deemed necessary) will be obtained by the Contractor.

**1.08 LOCAL PERMITS**

- A. City of Ilwaco SEPA Determination of Non-significance (DNS) and Checklist (Appendix A10).
- B. City of Ilwaco Shoreline Substantial Development and Conditional Use Permit (SCUP), dated February 6, 2024 and Washington State Department of Ecology SCUP No. 2024-SWRO-7840, dated February 6, 2024 (Appendix A11). The City Hearing Examiner's Report, dated January 7, 2024 and the City Staff Report, dated December 14, 2023 are also included (Appendix A11).
- C. Other City of Ilwaco construction permits (if deemed necessary) will be obtained by the Contractor.

**1.09 PERMIT FEES**

- A. Contractor shall secure and pay for all additional required permits needed to complete the Work that are not obtained by the Owner. This will include governmental fees, licenses and inspections necessary for the proper execution and completion of the Work and as required to meet all applicable codes and standards. Owner obtained permits are included in the Appendices.

**1.10 SUBMITTALS**

- A. The following submittals shall be made to the Owner for review, approval, and/or Owner submittal to the applicable regulatory agency/entity, within the appropriate timeframe (as specified within the individual permits). Submittals shall be in accordance with all project permits and Section 01 33 00.

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- B. Submit within twenty-one (21) calendar days after Notice of Award an Environmental Protection Plan (EPP) that presents the procedures by which the Contractor shall establish and maintain quality control for environmental protection during all construction activities.
  - 1. The EPP shall comply with all applicable federal, state, and local statutes, ordinances, and regulations; and all project permit and approval conditions.
  - 2. The Engineer must review and approve the EPP before the Notice to Proceed is given to the Contractor.
  - 3. The Contractor shall address all comments from the Engineer's review(s) and resubmit a revised EPP for review. No additional compensation to the Contractor will be made for revising the EPP.
- C. Submit an EPP that includes, at the minimum, the following items:
  - 1. Name Temporary Environmental Control (TEC) Manager, including qualifications and phone numbers (home and office). The TEC Manager shall be responsible for overall TEC management, and have the authority to act in all TEC matters for the Contractor.
  - 2. Site Layouts: Prior to mobilization to the Work Site, and as part of the EPP; for each Phase of work submit site layout drawings for the Work Site, the Contractor's Transload Facility(ies), and On- and Off-Site Staging Area(s) showing existing conditions and facilities, Contractor's temporary facilities, and temporary controls provided by the Contractor including the following:
    - a. Means of ingress, egress, and temporary traffic control facilities
    - b. Contractor parking areas
    - c. Equipment and material staging areas
    - d. On-site equipment refueling and/or maintenance areas
  - 3. Temporary Erosion and Sediment Control (TESC) Plan that addresses the requirements of this Specification:
    - a. Describe and ensure implementation of practices that will be used for erosion control and to reduce the pollutants in the stormwater discharge associated with the excavation, loading, and transport of the sediment, debris, and soil from the Work Site, and in placing clean backfill material on site.

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- b. Describe the methods to control surface drainage from cuts and fills, borrow and waste disposal areas, staging areas, and other work areas.
- 4. Spill Prevention, Control, and Countermeasures (SPCC) Plan that addresses the requirements of this Specification:
  - a. Name of the individual who will be responsible for implementing and supervising spill containment and cleanup.
  - b. The SPCC Plan shall identify construction planning elements and recognize potential spill sources at the work site. The SPCC Plan shall outline responsive actions in the event of a spill or release and shall describe notification and reporting procedures. The SPCC Plan shall outline contractor management elements such as personnel responsibilities, project site security, site inspections, and training.
  - c. The SPCC Plan shall outline what measures will be taken by the Contractor to prevent the release or spread of hazardous materials (either found on-site and encountered during construction, or any hazardous materials that the Contractor stores, uses, or generates on-site during remediation activities). These items include, but are not limited to, gasoline, diesel, oils, and chemicals. Hazardous materials are defined in Revised Code of Washington (RCW) 70.105.010 under “hazardous substance.”
  - d. Methods to protect groundwater from contamination, and methods to protect monitoring wells, as applicable.
  - e. On-site upland and in-water fueling procedures.
  - f. Copies of Safety Data Sheets (SDS) for all hazardous materials brought on-site for use by the Contractor must be provided to the Engineer and attached to the SPCC.
  - g. Oil spill prevention and response procedures, including Contractor's notification procedures, to be used in the event of a spill of regulated substance.
- 5. Hazardous Waste Contingency Plan
  - a. Identify the procedures that the Contractor shall implement if Contractor encounters suspected hazardous waste during construction.



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6. Air Pollution and Odor Control Plan
  - a. Describe air pollution control procedures, as applicable.
  - b. Describe dust minimization practices.
  - c. Describe contingency actions to address odor from sediment stockpiles if necessary. Describe methods and materials that may be used should odor control be required.
7. Water Quality Monitoring and Protection Plan (WQMPP)
  - a. The Contractor's Water Quality Monitoring and Protection Plan shall meet the requirements of the Ecology-approved project Water Quality Monitoring and Protection Plan included in the Appendices.
  - b. Describe the Best Management Practices (BMPs), specialized equipment, means, methods, and procedures used to prevent marine water quality criteria exceedances during completion of in-water activities, such as in-water pile removal, pile installation, and shoreline protection operations.
  - c. Describe Contractor's contingency actions that will be taken to restore compliance with marine water quality criteria should water quality exceedances occur during any in-water activities.
  - d. Delays caused by complying with marine water quality criteria will not be cause for additional compensation to the Contractor.

**D. Permit Required Monitoring Submittals**

- a. Pending Permit Requirements

**1.11 ENVIRONMENTAL RESPONSIBILITY**

- A. The Contractor shall demonstrate in the performance of the work that it is environmentally responsible by complying with environmental laws, ordinances and regulations; following all Engineer instructions and policies, practices, and procedures established by the Engineer with respect to the environment that are communicated by the Engineer to the Contractor from time to time; being observant for, and immediately notifying the Engineer of, any environmental problems that develop at the Work Site or Contractor Facilities; and taking all reasonable and necessary measures in the performance of the work to avoid causing negative impacts to the

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environment. Where negative impacts occur, the Contractor must immediately advise the Engineer and shall be solely liable to undertake all reasonable and necessary measures to minimize the effect of such negative impacts.

- B. Maintain key pollution control systems in working condition throughout the project and undertake all works such that there are no unauthorized discharges of liquids or solids to the marine environment, or of gas to the atmosphere.
- C. Maintain a neat work area free of unnecessary debris, tools, equipment, or materials; dispose of sewage, refuse, and chemical wastes in compliance with the applicable regulations and permit requirements for this work; and remove all tools, equipment, supplies, and wastes from the Work Site upon completion of the work.
- D. Maintain all equipment and machinery in good working order and free of leaks or excess oil, grease, and debris. Ensure that appropriately equipped spill kits are available on all equipment at the Work Site and Contractor Facilities, and that workers and supervisory staff are knowledgeable with the provisions of the EPP and are adequately trained to implement the measures contained therein.

**1.12 FIRES**

- A. Fires and burning of rubbish at the Work Site are not permitted.

**1.13 NOTIFICATION**

- A. The Engineer will notify the Contractor, in writing, of observed noncompliance with federal, state, or local environmental statutes, ordinances or regulations, permits, and other elements of the Contractor's EPP. Notwithstanding this notification process, the Contractor shall be responsible for conducting all construction activities in a manner compliant with these regulations.
- B. The Contractor shall inform the Engineer of proposed corrective action after receipt of such notice, and take such action for approval by the Engineer.
- C. The Owner may issue a stop work order until satisfactory corrective action has been taken.
- D. No time extensions shall be granted or equitable adjustments allowed to the Contractor for such suspensions.

**PART 2 - PRODUCTS**

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**2.01 TURBIDITY CURTAIN**

- A. The Contractor shall have a turbidity curtain available as a contingency measure to be implemented if water quality monitoring indicates exceedances of water quality parameters as outlined the project WQC, included in the attachment. The curtain, if needed, shall be supported by floats at the top or suspended from existing structures to keep the top of the turbidity curtain above the water surface, and weighted at the bottom. It shall be designed, installed, managed, and moved such that minimal dispersion of suspended sediment in the water column occurs, and to help meet the water quality requirements of the WQMPP.
- B. The Contractor shall be responsible for design, procurement, installation, operation, inspection, maintenance, and repair of all turbidity curtains, if used for this work.
- C. The Contractor shall submit manufacturer information and a turbidity curtain installation, operations, and maintenance plan to the Engineer as part of the EPP.

**PART 3 - EXECUTION**

**3.01 GENERAL**

- A. Maintain a copy of the EPP at the Work Site and at Contractor's Transload Facility(ies).
- B. In the event of conflict between these requirements and environmental and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply as determined by the Port.
- C. No discharge of water to Baker Bay shall be allowed that exceeds the regulated pollutant levels in the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges Associated with Construction Activities.
- D. The Contractor shall be solely responsible for any damages, fines, or delays incurred as a result of Contractor activities in implementing storm and erosion control measures.
- E. The Contractor shall be solely responsible for schedule impacts incurred because of Contractor, subcontractor, or supplier actions in implementing the requirements of this Section.
- F. Supervision

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1. During the work, the Contractor shall supervise all activities, including those of subcontractors, to ensure compliance with the intent and details of the EPP. The Contractor shall conduct weekly environmental compliance meetings for itself and its subcontractors to ensure that all personnel working at the site are familiar with the environmental protection provisions. All equipment and materials for environmental protection shall be inspected every week to assure that they are in proper order, being applied correctly, and have not deteriorated.

**G. Daily Inspection**

1. Conduct daily inspection of the environmental protection measures to ensure that all are working properly and adequately maintained during the duration of construction.

**3.02 SITE MAINTENANCE**

- A.** The Contractor shall keep the Work Site, Transload Facility(ies), On- and Off-Site Staging Area(s), and Contractor's temporary facilities clean and free from rubbish and debris. Materials and equipment shall be removed from the Work Site when they are no longer necessary. Upon completion of the work, and before final acceptance, the Work Site shall be cleared of equipment, unused materials, and rubbish to present a clean and neat appearance in conformance with the present condition of the Work Site.

**B. Catch Basins**

1. Clean catch basins of all debris and sediment. Debris and sediment removed shall be disposed of in a Subtitle D landfill.
2. Maintain catch basin inserts during construction. Clean out or replace catch basin inserts when one-quarter full of sediment and debris.
3. Remove and dispose of catch basin inserts after substantial completion. Remove and dispose of all sediment and debris in catch basins.

**C. Cleanup:**

1. Maintain work in tidy condition, free from accumulation of waste products and debris.
2. Soil, debris, and other material spills that occur during transportation throughout the Site shall be cleaned up daily.

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3. Dispose of waste materials and debris off site in accordance with these Specifications.
4. Waste material of any kind shall not be permitted to remain on the site of the work or on adjacent streets. Immediately upon such materials becoming unfit for use in the work, they shall be collected, carried off the site, and properly disposed of by the Contractor.
5. Keep all buildings occupied by the Contractor clear of all refuse, rubbish, and debris that may accumulate from any source and shall keep them in a neat condition to the satisfaction of the Engineer.
6. Paints, solvents, petroleum products, hazardous substances, bulk cement, concrete cure washings, crushed concrete, waste streams generated during construction, and other construction materials shall be handled with care to prevent entry of contaminants into storm drains, surface waters, or soils. Excess materials shall be disposed of off-site in accordance with applicable local, state, and federal regulations.
7. In the event that waste material, refuse, debris, and/or rubbish are not removed from the work by the Contractor, the Port reserves the right to have the waste material, refuse, debris and/or rubbish removed, and the expense of the removal and disposal charged to the Contractor.

**D. Street Cleaning:**

1. Prevent dirt and dust from escaping from trucks departing the Work Site, by covering all loads, scrubbing and/or washing truck tires and undercarriages before leaving the site, installing inserts at catch basins, and other reasonable methods. Take all measures necessary to prevent the tracking of mud and other debris from the Work Site to the surrounding streets.
2. When working dump trucks and/or other equipment are on paved streets and roadways, clean said streets and roadways at the conclusion of each day's operations at a minimum and as required by the Engineer to prevent tracking of soil or other transported materials on paved roads at no additional cost to the Port. Properly dispose of all collected material. This shall be the case, whether the vehicles or equipment is owned and/or operated by the Contractor or its subcontractors or not.
3. In the event that the above requirements are violated and no action is taken by the Contractor after notification of non-compliance by the

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Engineer, the Port reserves the right to have the streets and roadways in question cleaned by others and the expense of the operation charged to the Contractor.

**3.03 AIR POLLUTION AND ODOR CONTROL**

- A. Maintain all equipment at the site and do not discharge smoke, dust, odor, and/or other contaminants into the atmosphere that violate the regulations of any legally constituted authority. Internal combustion engines shall not be allowed to idle for prolonged periods of time. Maintain construction vehicles and equipment in good repair. Exhaust emissions that are determined to be excessive by the Engineer shall be repaired or replaced.
- B. Minimize dust nuisance by cleaning, sweeping, vacuum sweeping, sprinkling with water, or other means. The use of water, in amounts that result in mud, is not acceptable as a substitute for sweeping or other methods. Equipment for this operation shall be on the jobsite or available at all times.
  - 1. Execute work by methods to minimize raising dust from construction operations.
  - 2. Apply water as required for dust control, and when advised by Engineer. Dust control methods shall be chosen such that a minimal amount of water is required.
  - 3. Apply water with distributors equipped with spray system to ensure uniform application and with means of shut off.
  - 4. Runoff from water used for dust control shall not enter the storm drains.
- C. Conduct all operations and maintain the Work Site so as to minimize and suppress objectionable odors and the potential for organic vapors associated with the Work consistent with all local, state, and federal regulations.
  - 1. Monitor odor as necessary to comply with any applicable health and safety regulations and implement procedures to reduce or eliminate odor from sediment, soil, or demolition waste if necessary.
  - 2. Implement measures to suppress organic vapor concentrations and/or odors at no additional cost to the Port. Acceptable measures include covering stockpiles with polyethylene sheeting, and/or backfilling open excavations.

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3. The Port reserves the right to suspend Work at any time in the event the Contractor's operations result in organic vapors or objectionable odors that are deemed to cause a potential safety and/or air quality issue. Contractor shall not be entitled to any additional compensation for suspension of Work under such conditions.

**3.04 NOISE AND LIGHTING CONTROL**

- A. Construction involving noisy operations, including starting and warming up of equipment, shall be in compliance with local noise ordinances. Noisy operations shall be scheduled to minimize their duration. Adhere to the City of Ilwaco limits on construction hours.
- B. Comply with all local controls and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the Contract.
- C. Each internal combustion engine used for any purpose on the job or related to the job shall be enclosed and be equipped with a muffler and spark arrester of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler" and enclosure. Ensure that noise control devices on construction equipment are properly maintained. All construction equipment shall be operated with exhaust systems in good repair to minimize noise.
- D. If necessary, the Contractor shall implement use of lighting shrouds for work to be completed during nighttime hours to minimize lighting disruptions to local residents.

**3.05 SPILL PREVENTION AND CONTROL**

- A. The Contractor shall maintain at the job site the applicable equipment and material designated in the SPCC Plan.
- B. A copy of the SPCC Plan shall be kept at the construction site and shall be familiar to construction personnel. Prior to starting any work on-site, personnel shall be briefed on the contents of the SPCC Plan and shall be made aware of where the SPCC Plan is located on-site. All personnel will be aware of the locations of all spill response materials and appropriate use.
- C. The Contractor shall be responsible for prevention, containment, and cleanup of spilling of oil, fuel, and other petroleum products used in the Contractor's operations. All such prevention, containment, and cleanup costs shall be borne by the Contractor.
- D. The Contractor is advised that discharge of oil from equipment or facilities into state waters or onto adjacent land is not permitted under state water quality regulations.

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- E. The Contractor shall, at a minimum, take the following measures regarding oil spill prevention, containment, and cleanup:
1. Fuel hoses, lubrication equipment, hydraulically-operated equipment, oil drums, and other equipment and facilities shall be inspected regularly for drips, leaks, or signs of damage, and shall be maintained and stored properly to prevent spills. Proper security shall be maintained to discourage vandalism.
  2. All land-based oil and products storage tanks shall be diked or located so as to prevent spills from escaping to the water, stormwater system, or ground. Diking and sub-soils shall be lined with impervious material to prevent oil from seeping through the ground and dikes.
  3. All visible floating oils shall be immediately contained with booms, dikes, or other appropriate means and removed from the water prior to discharge into state waters. All visible oils on land shall be immediately contained using dikes, straw bales, or other appropriate means and removed using sand, ground clay, sawdust, or other absorbent material, which shall be properly disposed of by the Contractor. Waste materials shall be temporarily stored in drums or other leak-proof containers after cleanup and during transport to disposal. Waste materials shall be disposed off property at an approved and permitted Disposal Facility
  4. Use environmentally sensitive hydraulic fluids that are non-toxic to aquatic life and that are readily or inherently biodegradable.
  5. In the event of any oil or product discharges into public waters, or onto land with a potential for entry into public waters, the Contractor shall immediately stop the source and notify the Engineer, Owner and other required reporting agencies at their 24-hour response numbers.

Reporting agencies include but are not limited to:

- National Response Center: (800) 424-8802
- Washington Emergency Management Division: (800) 258- 5990 or (800) OILS-911
- Washington State Department of Ecology, Southwest Regional Office: (360) 407-6300
- U.S. Coast Guard: (206) 217-6002



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6. Maintain within 300-feet of the active work the following equipment and materials in sufficient quantities to address potential spills from Contractor's floating and land-based equipment:
  - a. Oil-absorbent booms
  - b. Oil-absorbent pads or bulk material
  - c. Oil-skimming system
  - d. Straw bales
  - e. Oil dry-all, gloves, and plastic bags
  - f. Contractor employee PPE for emergency spill response
  - g. Concentrated odor neutralizer
- F. Perform construction activities by methods that will prevent entrance or accidental spillage of solid matter, contaminants, debris, or other pollutants or wastes into saltwater bodies, streams, flowing or dry watercourses, lakes, wetlands, reservoirs, or underground water sources. Such pollutants and wastes include, but are not restricted to: refuse, garbage, cement, sanitary waste, industrial waste, hazardous materials, radioactive substances, oil and other petroleum products, aggregate processing tailings, mineral salts, and thermal pollution.
- G. The Contractor will perform the Work in such a way as to minimize escape of materials and pollution into the surrounding environment. Fuel and oil spills will be addressed in a timely manner so as not to allow released fluids to leave the site or containment areas and affect the bay. All pollutants, including waste materials and construction debris, that occur on-site will be handled and disposed of in a manner that does not cause contamination of soil, surface water, or stormwater. Good housekeeping and preventative measures will be taken to ensure that the Site will be kept clean, well-organized, and free of debris.
- H. All vehicles and construction equipment shall be regularly inspected to detect any leaks or spills. Spill prevention measures, such as drip pans, shall be used when conducting maintenance and repair of vehicles or equipment. When performing emergency repairs, temporary plastic shall be placed beneath, and, if raining, over the vehicle.
- I. The Contractor shall maintain excavation and dredge equipment in good working order. The Contractor must immediately clean up any contaminated soil resulting from any spilled hydraulic oils or other hazardous materials.

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- J. No on-site central fueling area will be established. A vendor fueling truck may periodically come on-site to fuel the equipment, using fueling procedures as specified in the SPCC. Only small amounts of fuel (less than 100 gallons) will be stored on-site, and all fuel and hazardous materials storage containers will be stored within secondary containment.
- K. No equipment fueling or maintenance activities will be conducted outside the work or staging areas shown on the plans.
- L. A primary spill kit shall be maintained in the Work area by the Contractor, with smaller spill kits maintained in all vehicles and construction equipment.
- M. Contaminated surfaces and impacted media will be immediately cleaned following any discharge or spill incident. All spills must be documented and reported as directed in the Contractor's SPCC.
- N. Spill cleanup waste shall not be disposed in the trash or waste containers maintained by the Port. Any fuel/oil that has been released or any fuel/oil-contaminated media (such as absorbent materials) from a spill or overfill must be properly disposed off-site by the Contractor in accordance with all applicable local, state, and federal regulations.

**3.06 TEMPORARY EROSION AND SEDIMENT CONTROL**

- A. The Contractor shall address the following issues as part of developing and implementing the TESC BMPs:
  - 1. The TESC notes and details shown in the Drawings and the information in this Section of these Specifications are minimum requirements for the anticipated site conditions during the construction period. During the construction period the Contractor shall, at no additional cost to the Owner, upgrade the TESC facilities as needed for unexpected storm events and modify these facilities for changing site conditions (such as relocation silt fences, etc.).
  - 2. The Contractor shall implement best management practices (BMPs) to prevent tracking soil onto paved areas, roadways, and off-site areas. Tracking of soil from active portions of the work area onto other areas of the property or public roads is not allowed. For earthwork equipment exiting the work area, soil will be removed from the tires and body of trucks and equipment so that it is not deposited outside the work area.
  - 3. The Contractor shall conform to the regulations and requirements of legally authorized surface water management agencies.

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4. Provide methods to control surface water to prevent damage to the project, the site or adjoining properties. Surface water that flows into the Work areas from upgradient areas must be managed without resulting in erosion, discharge of turbid water to water bodies, mobilization of contaminants from the work area, flooding, or other adverse effects.
5. Inspect the TESC facilities daily and maintain these facilities to ensure continued proper functioning during the construction period. Written records of these inspections shall be submitted to the Engineer on a weekly basis.
6. Any areas of exposed soils, including embankments, which will not be disturbed for 2 days during the wet season (October 1 through April 30) or 7 days during the dry season (May 1 through September 30), shall immediately be stabilized by the Contractor with the approved TESC measure (e.g., plastic covering, etc.).
7. Any areas needing TESC measures not requiring immediate attention shall be addressed by the Contractor at the Engineer's discretion.
8. Erosion control measures, including silt fences, filter fabric, plastic sheeting and placement of straw bales along the peripheries of construction sites shall be employed as appropriate and shall be in place prior to any clearing or grading activity.

**B. Silt Fences**

1. Provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Properly install silt fences to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g., clearing and grubbing, excavation, embankment, and grading).

**C. Straw Bales**

1. Provide bales of straw as a temporary structural practice to minimize erosion and sediment runoff. If bales are used, properly place the bales to effectively retain sediment immediately after completing each phase of work and remove/replace/relocate the bales as needed for work to progress in the area.

- D.** If monitoring or inspection shows that the erosion controls are ineffective, mobilize work crews immediately to make repairs, install replacements, or install additional controls as necessary.

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- E. Remove all temporary erosion and sediment controls at the end of project.

**3.07 STORMWATER MANAGEMENT CONTROLS**

**A. Drainage and Surface Water Management**

1. Conform to the regulations and requirements of legally authorized surface water management agencies.
2. Divert stormwater runoff from upslope areas away from stockpile and/or excavation areas. Implement structural practices to divert flows from exposed soils, or otherwise limit runoff and the discharge of pollutants from exposed areas of the Work Site.
3. Use methods of excavating sediment, soil, and debris materials that include prevention measures to control silting and erosion, and that will intercept and settle any runoff of soil- or sediment-laden wastewaters.
4. Before construction begins, establish appropriate perimeter barriers to prevent excess surface water flows from causing erosion. Work areas shall be kept free of surface water run-on from adjacent upland areas and as free from immersion as possible. Unless otherwise specified, all temporary facilities, equipment, and structures for care and diversion of water shall be removed upon completion of the work, except the permanent drainage features of the project.
5. To avoid solids or turbid runoff from entering Baker Bay, cover, secure, and/or berm excavated areas and stockpiles and employ other methods as necessary such as straw bale around storm drains or around excavated areas; use of cut and cover construction method.
6. Prevent construction site runoff from directly entering any storm drain or the waterway; use straw bales or other filtration method suitable to the Engineer.

**3.08 FUEL STORAGE TANKS MANAGEMENT**

- A. Storage tank placement: Place fuel or other petroleum product (hereinafter referred to collectively as fuel) storage tanks or containers at least 20 feet from saltwater bodies, streams, flowing or dry watercourses, wetlands, reservoirs, and any other water source in a discharge area.
- B. Storage area dikes: Construct storage area dikes at least 12 inches high or graded and sloped to permit safe containment of leaks and spills equal to

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the capacity located in each area plus a sufficient amount of freeboard to contain the 25-year rainstorm.

- C. Diked area barriers: Provide diked areas with an impermeable barrier at least 50 mils thick. Provide areas used for refueling operations with an impermeable liner at least 50 mils thick buried under 2 to 4 inches of soil.
- D. Underground tank prohibitions: Do not use underground storage tanks.

**3.09 MARINE WATER QUALITY CRITERIA COMPLIANCE**

- A. The Contractor will perform water quality monitoring in accordance with the Contractor's WQMPP during construction operations carried out under this contract. The Contractor's WQMPP shall meet the requirements of the WQMPP attached in the Appendices. The Contractor will suspend performing in-water activities if water quality monitoring results indicate that water quality is outside allowable ranges. The Contractor shall cease operations in the event of a regulated substance spill (e.g., oil) or at the first indication of distressed or dying fish. The Contractor will discuss corrective actions with the Engineer before reinitiating construction operations.
- B. The Contractor shall be responsible for meeting marine water quality criteria for in-water construction activities as defined in the Ecology 401 Water Quality Certification, and applicable local, state, and federal standards. The Port may conduct its own marine water quality monitoring during the project to assess the Contractor's compliance, but this does not alleviate the responsibility of the Contractor to conduct its own monitoring to comply with the 401 Water Quality Certification conditions. In the event of a water quality exceedance, the Contractor will be required to modify its procedures, methods, or equipment appropriately to remedy the exceedances, at no additional expense to the Port. The purpose of the specified water quality monitoring is to provide ongoing assessment of water quality impacts during dredging, capping, and other in-water construction activities as specified in the Water Quality Monitoring and Protection Plan. The Contractor shall have in place:
  - 1. BMPs to prevent water quality exceedances within the Work Site from in-water construction activities
  - 2. Contingency measures to implement should water quality exceedances occur
- C. All over-water and in-water operations shall be conducted in accordance with the Contractor's WQMPP so as to minimize turbidity in the water. In the event of a water quality exceedance, the Contractor will be required to

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modify its procedures, methods, or equipment appropriately so as to remedy the exceedances, at no additional expense to the Port.

- D. State water quality standards and monitoring must be adhered to during construction. Water quality monitoring requirements for in-water construction are described within the applicable permits/approvals in Appendix A.

**3.10 CONTAMINATED/HAZARDOUS SOILS AND GROUNDWATER**

**A. Contractor's Responsibility**

1. Monitor soils, groundwater, and waste materials by instructing workers to observe and report questionable materials and odors, such as oily sheen or color on soils or water, and oily or chemical odors. If suspected hazardous or contaminated materials (other than debris) are encountered, stop all work in that area and notify the Engineer immediately.
2. Be responsible for all matters related to work safety and for detection of contaminated soils and groundwater encountered during the construction as they relate to worker safety. Ensure the protection of the safety and health of construction workers and other authorized persons at the work site from exposure to potential toxic materials.
3. As part of the Contractor's safety program, workers shall be instructed by a Contractor provided and qualified specialist on methods or techniques to assist workers in detecting hazardous soils or groundwater during construction of this project.

**B. Notification and Suspension**

1. In the event that the Contractor detects the presence of suspicious materials, the Contractor's Safety Manager shall immediately notify the Engineer. Following such notification by the Contractor, the Engineer shall, in turn, notify the various regulatory agencies concerned with the presence of potentially dangerous materials. Depending upon the type of problem identified, the Engineer may suspend the work in the vicinity of the material discovery under the provisions of the General Conditions.
2. Following completion of any further testing necessary to determine the nature of the materials involved, the Engineer will determine how the material shall be handled and disposed of. Although the actual procedures used in resuming the work shall depend upon the nature

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 57 19 – Temporary Environmental Controls**

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and extent of the questionable material, the following alternate methods of operation are foreseen as possible:

- a. Contractor to resume work as before the suspension.
- b. Contractor to move its operations to another portion of the Work Site until measures to eliminate any hazardous conditions can be developed and approved by the appropriate regulatory agencies.
- c. For dangerous or hazardous waste, or other non-municipal refuse waste, the Engineer will direct the Contractor to dispose of the material in accordance with regulatory requirements.

**3.11 EQUIPMENT DECONTAMINATION**

- A. Decontaminate equipment after working in potentially contaminated work areas and prior to subsequent work or travel on clean areas.
- B. Perform equipment decontamination on Contractor-constructed equipment decontamination pad.
- C. Each piece of equipment may be inspected by the Engineer after decontamination and prior to removal from site and/or travel on clean areas. The Engineer will have the right to require that additional decontamination be completed if deemed necessary at no additional cost to the Port.
- D. Collect decontamination wastewaters and sediments that accumulate on equipment decontamination pad and properly dispose.
- E. Furnish and equip personnel engaged in equipment decontamination with PPE including suitable disposable clothing, respiratory protection, and face shields.

**END OF SECTION**

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 60 00 – Product Requirements**

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#### **PART 1 - GENERAL**

##### **1.01 SUBMITTALS**

- A. Product Data Submittals: Prepare and submit manufacturer standard published data. Mark each copy to identify the applicable products, models, options, and other pertinent data. Where applicable, supplement the manufacturer standard published data and provide pertinent project-specific information.
- B. Shop Drawing Submittals: Prepare and submit detailed and legible project-specific shop drawings. Unless otherwise requested, shop drawings shall be drawn to scale. Indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances. Show locations of adjacent equipment or structures where applicable. Indicate geometry and identify applicable tolerances.
- C. Sample Submittals: Illustrate the functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work. For selections from standard finishes, submit samples showing the full range of the manufacturer's standard colors, textures, and patterns.

#### **PART 2 - PRODUCTS**

##### **2.01 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by the contract documents or the Engineer.

##### **2.02 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.
- D. Do not use products with zinc coatings in any location outdoor unless additional coating material over the entire exterior surface of each product is provided and approved by the Engineer prior to delivery to the site.



## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 60 00 – Product Requirements**

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#### **PART 3 - EXECUTION**

##### **3.01 TRANSPORTATION AND HANDLING**

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

##### **3.02 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. Store products with zinc coatings in weather tight enclosures.
- F. For exterior storage of fabricated products, place on sloped supports above ground.
- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Prevent contact with material that may cause corrosion, chemical interaction, discoloration, or staining.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 60 00 – Product Requirements**

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- I. Provide equipment and personnel to store products using methods that prevent soiling, disfigurement, or damage.
- J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in the as-delivered new condition.

**END OF SECTION**

**DIVISION 01 – General Requirements**  
**Section 01 70 00 – Execution And Closeout Requirements**

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**PART 1 - GENERAL**

**1.01 RELATED WORK DESCRIBED ELSEWHERE**

- A. The provisions and intent of the Contract, including the General Conditions, and other sections of the General Requirements apply to this work as if specified in this section. Work related to this section is described throughout the Specifications.
- B. Prior to requesting a final inspection by the Engineer, inspect all work products for defects, damage, specification-consistent quality, functioning equipment, etc., and ensure that all testing and commissioning is complete, and that the project is ready for Final Completion.

**1.02 SUBMITTALS**

**A. As-Built Drawings**

- 1. Each month, compile and submit project As-Built Drawings for incorporation with the project Record Drawings. Submit As-Built Drawings on full-sized paper (ANSI D) copy and, where possible, in electronic CAD format.
- 2. Keep the progress of As-Built Drawings current and make detailed markups at the time the work is completed and when the equipment is installed. Annotations to the As-Built Drawings shall be made with erasable colored pencils conforming to the following color codes.
  - a. Additions – Red
  - b. Deletions – Green
  - c. Comments and Dimensions – Blue
- 3. As-Built Drawings must be complete, submitted, and accepted by the Engineer before Final Completion will be issued.
- 4. As-Built Drawings shall be in accordance with the horizontal and vertical control shown on the contract drawings.

**B. Final Survey**

- 1. See Section 01 71 23 Field Engineering for Final Survey requirements.
- 2. Complete and submit the Final Survey within 30 calendar days of Substantial Completion.

**DIVISION 01 – General Requirements**  
**Section 01 70 00 – Execution And Closeout Requirements**

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3. The Final Survey must be completed, submitted, and accepted by the Engineer before Final Completion will be issued.
- C. Certificates
1. Certificates of Conformance, prior to Final Completion.
- D. Operation and Maintenance Manuals
1. Submit the following information (minimum of 3 copies, and one electronic file in PDF format) for each piece of equipment, and any additional items requested by the Engineer, requiring operational and/or maintenance procedures
  2. Model Information: Complete identification, including model and serial numbers.
  3. Control Diagrams: Show internal wiring, connection wiring, and as-built wiring diagrams (where applicable).
  4. Parts List: The generic title and identification number of each component part of the equipment. Include the weights of individual components weighing over 100 pounds.
  5. Spare Parts List: The manufacturer's recommendations of number of parts which should be stored by the Owner and any special storage precautions which may be required.
  6. Exploded View: When part of the manufacturer's information, include the exploded or cut views of equipment. When exploded or cut views are not available, plan and section views shall be provided with detailed callouts.
  7. Start-up Procedures: The manufacturer's recommendations for installation, adjustment, calibration, and troubleshooting.
  8. Operating Procedures: The manufacturer's recommended step-by-step procedures for starting, operating, stopping the equipment under specified modes of operation, and for long-term shut-down (moth-balling).
  9. Lubrication Information: The manufacturer's recommendations or requirements related to the lubricants to be used and the lubrication schedule to be followed. Lubricants shall be described in detail, including type, recommended manufacturer, and manufacturer's specific compound to be used.

**DIVISION 01 – General Requirements**  
**Section 01 70 00 – Execution And Closeout Requirements**

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10. Overhaul Instructions: The manufacturer's directions for the disassembly, repair and reassembly of the equipment and any safety precautions that must be observed while performing the work.
11. Warranty Information: The name, address, and telephone number of the manufacturer's representative to be contacted for warranty, parts, or service information.
12. Preventative Maintenance Procedures: The manufacturer's recommended steps and schedules for maintaining the equipment.
13. Maintenance Information Summaries: Prepared on 8-1/2" x 11" paper and digital versions (PDF format) on CD-ROM and shall contain the following information in the order shown.
  - a. Description or name of item of equipment.
  - b. Asset number (to be provided by the Port)
  - c. Manufacturer.
  - d. Name, address, and telephone number of local manufacturer's representative.
  - e. Model and Serial number.
  - f. Equipment nameplate data.
  - g. Recommended maintenance procedures:
  - h. Maintenance schedule, broken down into:
    - 1) Daily
    - 2) Weekly
    - 3) Monthly
    - 4) Quarterly
    - 5) Semi-Annually
    - 6) Annually
  - i. Recommended spare parts (where applicable).
  - j. Asset Number Information in Excel spreadsheet format:
    - 1) Asset Number
    - 2) Equipment Description
    - 3) Plan Sheet Number
    - 4) Parcel Number
    - 5) Vendor

**DIVISION 01 – General Requirements**  
**Section 01 70 00 – Execution And Closeout Requirements**

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- 6) Manufacturer
  - 7) Model
  - 8) Model Year
  - 9) Serial Number
  - 10) Warranty – Start Date; Finish Date
  - 11) Required Preventative Maintenance
  - 12) Purchase Price
  - 13) Fuel Type Used
  - 14) Capacity
14. Other Information: Other manufacturer information or specifications available, but not necessarily described above.
15. Provide electronic or digital material, video tapes, DVDs, or audio-visual training materials utilized in the manufacturer's instruction program.
16. All such information shall be organized by the Contractor into 3-inch, 3-post, expandable metal binders. The binders shall be sized for material approximately 8-1/2 by 11 inches, and the material in the binders shall not protrude beyond the covers. The binder(s) shall be divided with coversheets for each major item of equipment. The cover sheets shall be typewritten to indicate the name, type of equipment, and location(s) within the Project where installed. A neatly typewritten index shall be provided. The number of copies of such binders to be submitted shall be equal to the total of the Contractor's requirements plus five (5) paper copies and an electronic copy in PDF format to be retained by the Port.
17. All information shall be specific for the items of equipment installed on the project. Material not directly applicable shall be removed, omitted, or clearly marked as inapplicable.
18. If manufacturer's standard brochures and manuals are used to describe operating and maintenance procedures, such brochures and manuals shall be modified to reflect only the model or series of equipment used on this project.

**1.03 WARRANTY**

- A. The Contractor warrants the labor, materials and equipment delivered under the contract to be free from defects in design, material, or workmanship, and against damage caused prior to final inspection. Unless otherwise specified, this warranty extends for a period of one (1) year from the date of Substantial Completion.

**DIVISION 01 – General Requirements**  
**Section 01 70 00 – Execution And Closeout Requirements**

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- B. Repair within 48-hours, or replace, all defective or damaged items delivered or constructed under the contract. Haul away all defective or damaged items prior to Substantial Completion.
- C. In the event of equipment failure during the warranty period, where immediate repairs are necessary, respond by repairing or replacing the equipment as soon as possible. If the Contractor is not available, the Port will make the necessary repairs or replacements. The Contractor shall reimburse the Port for the costs of repairs or replacements covered by the warranty.

**PART 2 - PRODUCTS – NOT USED**

**PART 3 - EXECUTION**

**3.01 CLEAN-UP**

- A. Final clean-up and clean-up during the course of the work is defined in the Standard Specifications. Those paragraphs are supplemented with the following.
  - 1. Definition: Except as otherwise specifically provided, “clean” (for the purpose of this Article) shall be interpreted as meaning the level of cleanliness generally provided by commercial building maintenance subcontractors using commercial quality building maintenance equipment and materials.
  - 2. General: Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final progress cleaning as described above.
  - 3. Site: Unless otherwise directed by the Engineer, hose down all paved areas on the site, all public sidewalks and catch basins on adjoining streets. Completely remove all resultant debris.
- B. Timing: Schedule final clean-up, as approved by the Engineer, to enable the Port to occupy a completely clean project.

**END OF SECTION**

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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#### **PART 1 - GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

- A. The provisions and intent of the contract, including the General Conditions, and General Requirements, apply to this work as if specified in this Section. Coordinate related requirements in other sections of these Specifications, including but not limited to the following.
  - 1. Section 01 33 00 – Submittal Procedures
  - 2. Section 01 45 00 – Quality Control
  - 3. Section 01 70 00 – Execution and Closeout Requirements
  - 4. Section 31 00 00 – Earthwork

##### **1.02 REFERENCES**

US Army Corps of Engineers (USACE), latest version unless otherwise noted:

- A. Engineer Manual (EM) 1110-2-1003, Hydrographic Surveying Manual
- B. EM 1110-1-1005, Control and Topographic Surveying Manual

##### **1.03 DESCRIPTION OF WORK**

- A. This Section describes the general requirements for site surveying and grade control as follows.
  - 1. Measurement and Payment Surveying - the Pre-Construction and Post-Construction Surveys (upland topographic and bathymetric) as described in this Section. Bathymetric surveys may also be referred to as hydrographic surveys in the Section.
  - 2. Progress Surveying – the daily and weekly Progress Surveys (upland topographic and bathymetric) that define the progress of the work (dredging, filling, etc.) as described in this Section.
  - 3. Positioning control methods
  - 4. Surveying for utilities
  - 5. Surveying for new construction
  - 6. Record keeping and record drawing development
  - 7. Submittals



## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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- B. Employ a third-party professional land surveyor (PLS) currently licensed in the State of Washington (i.e., do not use Contractor in-house survey crew) to perform Pre-Construction and Post-Construction Surveys. Contractor in-house surveyors may be used to conduct Progress Surveys. Provide the name of the PLS as part of the Construction Quality Control Plan.
- C. Local survey control and upland benchmark locations are shown on the Drawings. Refer to benchmark location information to establish survey control for the Contract work.
- D. Drawings represent conditions existing on the date of the surveys provided and are for information purposes only. Drawings shall serve as the basis for the estimated quantities of materials as described in the Bid Documents.
- E. Methods and procedures for bathymetric surveys shall meet the accuracy requirements of "Navigation and Dredging Support Surveys - Hard Bottom" per USACE EM 1110-2-1003. Should there be discrepancies between this manual and this Section, the more strict survey requirements shall take precedence as determined by the Engineer, unless the Contractor obtains clarification from the Engineer otherwise.
- F. Land surveying equipment and methods shall meet the standards associated with USACE EM 1110-1-1005 for contract payment surveys. Should there be discrepancies between this manual and this Section, the more strict survey requirements shall take precedence as determined by the Engineer, unless the Contractor obtains clarification from the Engineer otherwise.
- G. Conduct and submit to the Engineer a Pre-Construction Survey for review and acceptance at least fourteen (14) calendar days prior to start of any work on site, excluding mobilization and establishment of temporary facilities.
- H. The Port may conduct its own Pre-Construction Survey to compare against the Contractor's survey. If there are discrepancies between the two Pre-construction Surveys, the Contractor's PLS shall coordinate with the Port's surveyor to determine which survey is inaccurate. If the Engineer determines that the Contractor's survey means and methods and/or survey are inaccurate, the Contractor shall adjust and correct its surveying means and methods and develop a new Pre-Construction Survey at no additional cost to the Port. No excavation or dredging work shall commence until the Engineer has accepted both the Pre-Construction Survey and the Contractor's positioning control methods.
- I. The Engineer may review the Contractor's survey work or conduct additional surveys throughout the construction work and after the work has been completed as a quality assurance check.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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- J. Establish survey and positioning control to provide an accurate method of horizontal and vertical control before any in-water or upland work starts.
- K. Work under this Section will be paid under Bid Item 6 – Field Engineering as shown on the Bid Form and described in Section 01 20 00.

#### **1.04 QUALITY ASSURANCE**

- A. Provide all necessary quality controls to successfully complete the work.
- B. Schedule the surveys and verify that the Contract requirements have been met prior to proceeding to the next sequence of work.
- C. The Contractor's PLS shall perform, seal, and sign all survey work that establishes control points, monuments, or benchmarks, or ties into existing legal survey monuments or legal evidence.
- D. The Contractor's PLS shall have actively engaged in legal land survey operations for at least the past ten (10) years.
- E. The Engineer will inspect the work for quality assurance purposes. Port inspection shall not release the Contractor from complying with these Specifications and all permits, and shall not be construed as acceptance of work. The Port reserves the right to retain an independent surveyor to periodically check the Contractor's Progress Surveys. Such surveying performed by the Port will be at no cost to the Contractor.

#### **1.05 SURVEY VERTICAL DATUM AND HORIZONTAL DATUM**

The project vertical datum and horizontal datum are provided on the Drawings.

#### **1.06 SUBMITTALS**

- A. Pre-Construction Submittals
  - 1. As part of the Contractor's Quality Control Plan, in accordance with Section 01 33 00 and Section 01 45 00, prepare a Survey and Positioning Control Plan that describes the means and methods that will be implemented for all surveying and positioning control activities required for the work. In-water construction activities shall not begin until the Quality Control Plan has been reviewed and accepted by the Engineer. At a minimum, the Survey and Positioning Control Plan shall contain the following information:
    - a) Name, address, telephone number, license number and license expiration date, and statement of qualification for the PLS proposed. The Port reserves the right to require substitution of another licensed PLS, at no additional cost to

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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the Port, if the Port determines that the proposed PLS does not have sufficient experience or capacity to conduct the Measurement and Payment Surveys.

- b) Description of equipment proposed for use in collection of all survey data for the work.
- c) Description of survey methods and procedures.
- d) Description of how positioning control (horizontal and vertical control) for the equipment used to perform the work will be provided.
- e) Description of quality control procedures used for surveying, positioning control, and volume calculations.

#### **B. Construction Submittals**

##### **1. Pre-Construction Survey**

- a) Submit surveys to the Engineer in hard copy drawing format and electronic drawing format as described below.
- b) Submit Pre-Construction Survey and calculated quantities (to be removed/added) to the Engineer at least fourteen (14) calendar days prior to start of upland excavation.

##### **2. As-Built Drawings**

- a) Upon completion of all construction activities, prepare as-built drawings. The as-built drawings shall locate all features as constructed and all real estate/property boundaries and public land survey section corners and lines. The as-built drawings shall be produced full size (ANSI D) on bond paper sealed and signed by the Contractor's PLS and signed by the Contractor. Also prepare a paper copy of half-size as-built drawings. Submit as- built drawings in paper and electronic formats.
- b) Electronic files for as-built drawings shall be fully editable so as to allow future changes by the Port.

##### **3. Hard Copy Drawing Requirements**

- a) Provide plan view contour drawings using 0.5-foot contour intervals.
- b) Provide plan view spot elevation drawings.

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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- c) On each drawing include, as a minimum, the date of survey, datum, extent of survey coverage, elevation markings (for spot elevations and contour lines), scale bar, and PLS seal and signature (for Pre-Construction Survey).
- 4. Electronic Drawing Requirements
  - a) Submit all survey data in AutoCAD/Civil3D 2018 format or older format if acceptable to the Engineer.
  - b) Submit all survey data in a separate ASCII text file with XYZ spot elevation data.
  - c) The Engineer will provide the Contractor with the work site base map file in “\*.dwg” drawing format for Contractor use.
- 5. Quantity Calculations
  - a) Upland excavation-related bid items will be paid for based on measured weights of materials disposed of at various disposal locations.
  - b) For upland excavation related bid items, weigh quantities as specified, or submit certified weight tickets from landfill disposal and/or recycling facilities.

## **PART 2 - PRODUCTS – NOT USED**

## **PART 3 - EXECUTION**

### **3.01 GENERAL**

- A. At the Pre-Construction Meeting, the Contractor's PLS shall meet with the Engineer to discuss the survey proceedings, methods, and equipment to be employed for surveys, and the survey submittal schedules.

### **3.02 SURVEY EQUIPMENT AND METHODS**

- A. The Contractor's PLS and in-house surveyors shall use multi-beam survey equipment for all Pre-Construction Surveys, unless noted otherwise. Accuracy for measured elevations shall be +/- 0.5 feet; accuracy of horizontal position shall be +/- 3 feet at the 95% confidence interval, unless noted otherwise.
- B. Employ an accepted method to locate and control horizontal position. Real Time Kinematic Global Positioning System (RTK-GPS) or Differential Global Positioning System (DGPS) are acceptable. If an alternative

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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positioning method is considered, that method shall be submitted to the Engineer and accepted prior to start of work.

#### **3.03 SURVEY AND POSITIONING CONTROL POINTS**

- A. Establish an accurate method of horizontal and vertical control before the work begins. Survey control points shown on the Drawings are provided for reference purposes only to assist in establishing horizontal and vertical control.
- B. The proposed method and maintenance of the horizontal control system shall be subject to the acceptance of the Engineer. If, at any time, the method fails to provide accurate location of the work, suspend operations until such time that accurate control is established.
- C. Lay out work using Contractor-established control points as part of the work. The Contractor's PLS shall be responsible for all measurements taken to establish these points.
- D. Furnish, at no cost to the Port, all stakes, templates, platforms, range markers, buoys, transponder stations, labor, and equipment required to lay out the work shown on the Drawings.
- E. Furnish, set, and maintain in good order, all ranges, buoys, and other markers necessary to define the work and to facilitate inspection. Establish and maintain tide gauges or boards in locations where they may be clearly seen during operations and inspections. Install an automatic recording tide gauge with water level sensor that provides a continuous recording of tidal change for every 15-minute interval or each 0.1-foot change, whichever occurs first. Record tidal changes in NOS MLLW datum. All costs for providing the tide gauges and other survey controls shall be incidental to this work.
- F. Maintain all control points established for the work until authorized by the Port to remove them. If such control points are destroyed or disturbed prior to authorized removal, replace at no additional cost to the Port.

#### **3.04 SURVEYS**

- A. Existing Condition Survey

Solmar Hydro performed the condition survey as shown on the Drawings. This multi-beam condition survey is the basis for the estimated bid quantities listed in the Bid Form.

- B. Pre-Construction Survey

## **DIVISION 01 – GENERAL REQUIREMENTS**

### **Section 01 71 23 – Field Engineering**

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1. Conduct a Pre-Construction Survey (multi-beam bathymetric survey and topographic survey) as necessary to fully identify pre-construction elevations and grades throughout the work site. Complete and submit this survey to the Engineer for review and acceptance at least fourteen (14) calendar days prior to the excavation and dredging.
2. Multiple Pre-Construction Surveys may be submitted, but only one survey shall be submitted for a given location. Clearly identify the boundaries of each survey.
3. The surveys will be used as the basis for Measurement and Payment purposes.
4. The surveys shall have adequate resolution to allow subsequent accurate calculations of excavated volumes. Locate all tops and toes of slopes, and all grade breaks, with horizontal and vertical coordinates.
5. The surveys shall cover all areas of work as shown on the Drawings, and extend at least 20 feet past the boundaries of the work site, unless noted otherwise.
6. This surveys shall cover the full extent of the work site involving any and all construction activities including, but not limited to excavation, demolition, and construction of marine facilities.
7. If vessels or other obstructions prevent a full survey of the work site, coordinate with the Engineer to determine whether to rely upon the Drawings in those areas or to re-survey those missing areas to complete the Pre-Construction Survey.

#### **3.05 UNDERGROUND UTILITIES**

- A. Locate all underground utilities and notify all underground utility companies prior to commencing work.
- B. Provide as-built drawings showing accurate locations of utilities installed or relocated as part of the work.

#### **3.06 NEW CONSTRUCTION**

Develop and make all detailed surveys necessary for construction of new work, including setting bench marks for location of working points, verification of existing structures and critical topographic features, cut sheets, slope stakes, and other surveys as required to ensure the work is installed in accordance with the Contract Documents. Perform each survey prior to start of construction of the new work. Notify the Port of any discrepancies found as a result of each detailed survey.

**DIVISION 01 – GENERAL REQUIREMENTS**  
**Section 01 71 23 – Field Engineering**

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**END OF SECTION**

**DIVISION 02 – Existing Conditions**  
**Section 02 32 00 – Geotechnical Investigations**

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**PART 1 – GENERAL**

**1.01 SUMMARY**

- A. Investigations and analyses of the subsurface conditions have been made for purposes of design. Included with the specifications as an Appendix is the report entitled “Geotechnical Engineering Services Report Revision 1”, dated June 1, 2023, prepared by GeoEngineers.
- B. The report presents the results of investigations to study the subsurface soil conditions. Some of the information in the report includes the following:
  - 1. A discussion of the soil types, densities, consistencies, classifications, etc. as observed in the subsurface borings and inferred from the site explorations.
  - 2. Logs showing soil descriptions at various depths and the corresponding standard penetration test results.
  - 3. Laboratory results of samples including moisture content, Atterberg Limits determinations, moisture content, percent fines, and particle size gradation.
  - 4. A generalized description of the existing subsurface conditions as interpreted for purposes of design.
  - 5. Various engineering studies, pile design parameters, and engineering properties of observed soils as interpreted for purposes of design.
- C. The report indicates groundwater can and should be expected and may vary as a function of tides and other factors.
- D. The accuracy of the report is subject to the limitations of scope and generally accepted practices in the field of geotechnical engineering at the time the report was prepared.
- E. The Contractor shall review the report and further investigate, interpret, and evaluate, as necessary, the subsurface conditions in order to determine and assess the required means and methods of excavation, shoring, groundwater control, demolition, pile removal, pile installation, and other activities.



**DIVISION 02 – Existing Conditions**  
**Section 02 32 00 – Geotechnical Investigations**

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**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not used.

**END OF SECTION**

**DIVISION 02 – EXISTING CONDITIONS**  
**Section 02 41 00 – Demolition and Disposal**

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**PART 1 - GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Special Provisions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in the following.

- A. Section 01 10 00 – Summary
- B. Section 01 33 00 – Submittal Procedures
- C. Section 01 35 29 – Health, Safety, and Emergency Response Procedures
- D. Section 01 50 00 – Temporary Facilities and Controls
- E. Section 01 57 19 - Temporary Environmental Controls
- F. Section 03 60 00 – Grouting
- G. Section 31 00 00 – Earthwork

**1.02 DESCRIPTION OF WORK**

- A. The extent and location of the "Demolition" work is indicated on the Drawings, in the Specifications, and as outlined below.
  - 1. Removal and disposal, in whole or in part, all items (demolition materials, debris, etc.) as indicated in the Contract Documents.
  - 2. Payment of costs required for disposal of items at approved disposal sites, including permit fees and related costs.
  - 3. Salvaging items as indicated on the drawings and in the specifications. Items noted to be salvaged shall be dismantled, transported, and reassembled at a location designated by the Port, within 5 miles of the project site.
  - 4. Backfilling and compaction of holes, voids, trenches, or pits that result from such removal.
- B. The details shown on the drawings are based upon information contained in the reference drawings. The details indicate typical features of the various structures and shall not be construed as complete or adequate to supplant actual on-site inspection, additional review, and interpretation of the reference drawings by the Contractor.
- C. Perform demolition in accordance with applicable local, state, and federal regulations, and permit requirements for the project.

**1.03 REFERENCE STANDARDS**

- A. Standard Specifications for Road, Bridge, and Municipal Construction, M41-10, 2023 edition, by Washington State Department of Transportation (WSDOT Standard Specifications).

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- B. Stormwater Management Manual for Western Washington, Department of Ecology, State of Washington, current edition at the time of bid.

**1.04 REFERENCE DRAWINGS**

- A. Review the reference drawings and related documents. Documents will be available for inspection at the Port. The Port does not warrant the completeness or accuracy of these documents and the Contractor shall assume all risk regarding their use.
- B. The following reference drawings and documents are available for review:
  - As-Built or Record drawings of the existing bulkhead are not available.
- C. American National Standards Institute (ANSI)
  - ANSI A10.6 Safety Requirements for Demolition Operations
- D. U.S. Department of Labor Occupational Safety & Health Administration (OSHA)
  - OSHA Standard 1926.850(a), Preparatory Operations
- E. U.S. Army Corps of Engineers (USACE)
  - COE EM 385-1-1 Safety -- Safety and Health Requirements

**1.05 GENERAL REQUIREMENTS**

- A. In the interest of occupational safety and health, perform the work in accordance with COE EM 385-1-1, Section 23, Demolition, and other applicable Sections.
- B. Coordinate all demolition activities with the Project Engineer.
- C. Follow applicable OSHA regulations.

**1.06 SITE CONDITIONS:**

Safe Coast Seafood is an operating facility. Perform the work in accordance with phasing and access shown on the Drawings and in other Contract Documents. Access to the site is restricted by ongoing upland operations. Restrict operations to perform the work to the designated areas.

- A. Coordinate and schedule, with the Port, access to the site in advance.
- B. For access requirements and constraints, refer to the Contractor Work Area shown on the Drawings and described in other applicable Specification sections.
- C. Demolition items not identified for salvage or recycle shall become the property of the Contractor. Dispose of demolition items in accordance with the Specifications and local, state and federal requirements.

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**1.07 SUMMARY**

- A. Items and material categories for demolition include, but are not limited to, the following:
1. Timber and steel piling
  2. Asphalt paving
  3. Concrete rubble/debris
  4. Derelict timber
- B. Items or equipment to be salvaged or recycled must be dismantled without damage. Items designated for salvage or recycling are listed below.

No.	Salvage/Recycle Item	Destination
1.	Metals, Wire, etc.	Recycle materials as appropriate
2.	Asphalt Pavement	Recycle materials as appropriate
3.	Plain and Reinforced Concrete	Recycle materials as appropriate

- C. Any damage by the Contractor's operations to materials identified to be salvaged must be repaired or replaced, as determined by the Port, by the Contractor and at the Contractor's expense.

**1.08 SUBMITTALS**

- A. Demolition Management Plan (DMP) with documentation that includes and addresses the following:
1. Work sequence and schedule. Include phased demolition requirements consistent with the overall project schedule.
  2. Activity-based schedule.
  3. List of subcontractors proposed including point of contact and telephone numbers.
  4. List of equipment to be used for demolition operations.
  5. Means and methods to protect existing infrastructure, stockpile materials, and deliver salvaged material. Include the means and methods used to provide floats, false work, temporary supports, bracing, and shoring.
  6. Means and methods to prevent demolition materials, debris, water from construction activities, etc. from falling into or entering the waterway.
  7. Means and methods to abandon existing outfall pipes.
  8. Laydown areas for materials management.
  9. Worker safety, toolbox meetings, and signs.

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10. Means to protect the public or other persons in areas surrounding the work.
  11. Environmental protection plan and compliance with permit requirements.
  12. Contractor quality control plan.
  13. Hazardous material abatement plan.
  14. Construction stormwater pollution prevention plan.
  15. Schedule of disposal sites, their locations, and the materials that will be disposed at each site.
  16. Puget Sound Clean Air Agency, Notice of Intent to Demolish.
- B. If the DMP is revised, resubmit with any proposed changes for review by the Engineer prior to incorporating changes to means, methods, equipment, tools, temporary supports, etc.
- C. Water Quality Monitoring Plan (WQMP) as required by the Washington State Department of Ecology (DOE) and included in the appendices.
- D. Marine Mammal Monitoring Plan (MMMP) as required by the Washington Department of Fish and Wildlife (WDFW) and described in the permits for this project. Refer to the permits in the appendices, the National Marine Fisheries Service established noise thresholds, the Endangered Species Act - listed marine mammals, and the project area affected.
- E. Utility locate survey results described in Part 3 – Execution
- F. Record the position of piles that break off before or while being pulled or otherwise removed. Provide a plan that shows the position of each such pile in relation to the pile arrangement for this project.

**PART 2 - PRODUCTS**

**2.01 GENERAL**

Not Used

**PART 3 - EXECUTION**

**3.01 PREPARATION**

- A. Notify the Engineer prior to beginning demolition work.
- B. There is limited upland site area available for processing and stockpiling demolition debris. Utilize barges for processing and transporting demolition debris to the extent practicable.
- C. Identify and cordon off upland site areas to be used for access and staging of equipment to be used for demolition activities, and for temporary staging and processing of demolition debris. Process demolition debris in designated areas, lined with plastic sheeting to contain all construction

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process water and stormwater. Contain and collect construction process water (e.g., dust control spray, decontamination water, etc.) and stormwater within designated processing areas and transport to an approved offsite disposal facility in accordance with the Specifications. Cover demolition debris stockpiles with plastic sheeting at the end of each shift.

- D. Perform a utility locate survey and submit to the Engineer for approval. Locate existing utilities prior to start of demolition. Coordinate and resolve with the Engineer and dock operators to turn off or de-energize affected services before starting demolition.
- E. Verify items for demolition, disposal, and salvage as early as practicable prior to start of the work. Notify the Engineer immediately if observed conditions differ from anticipated conditions.

**3.02 DEMOLITION OF STRUCTURES**

- A. All items designated for removal shall be demolished, loaded, and properly disposed of by the Contractor. Care shall be taken that damage does not occur to adjacent existing structures which are to remain in place. Any structures to remain that are damaged as a result of demolition activities shall be repaired and or replaced by the Contractor at no expense to the Port.
- B. Provide shoring and bracing as needed to prevent damage to adjacent structures that are to remain in place.
- C. Demolition and disposal shall be in accordance with all federal, state, and local laws and regulations. Contractor shall obtain all necessary permits.
- D. Break up pavements, barriers, and curbs designated for removal prior to loading and disposal. Do not damage existing pavement which is to remain in place. Accomplish pavement demolition by making neat vertical saw cuts at the boundaries of areas to be removed.
- E. Place and maintain a containment boom around the active pile removal area.
- F. Do not allow debris to enter the water at any time. Use floats, falsework, scaffolding, and other means as necessary to prevent debris from falling into the water. Debris that falls into the water, whether it sinks or floats, must be removed immediately, on an ongoing basis, and be disposed of at no additional cost to the Port.
- G. Do not use blasting at any time.

**3.03 SAWCUTTING**

- A. Perform sawcutting of asphalt and concrete pavement as indicated on the Drawings or otherwise specified. Sawcutting of existing asphalt concrete pavement shall be performed with extreme care to avoid any damage to the underlying timber components to remain.

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- B. Neatly cut and remove materials, and prepare openings to receive new work.
- C. Use care in removing the pavement and concrete to protect existing pavement or concrete which is to remain in place adjacent to the work area and that all removals are accomplished by making a neat vertical saw cut at the boundaries of the area to be removed.
- D. Provide vacuum equipment to control dust and debris generated by sawcutting operations.
- E. Replace any adjacent damaged materials not designated for removal at no additional cost to the Port.

**3.04 TIMBER REMOVAL**

- A. Remove to the limits shown on the drawings and dispose of pressure-treated and creosote-treated timber. The Contractor is responsible for disposal of creosote treated timber at an approved disposal facility.
- B. Timber spikes not shown on the Drawings are present throughout the structure; Contractor shall use caution when cutting and removing existing timber components.
- C. Cuts through components to remain shall be vertical and in straight lines.
- D. Do not allow timber, once removed, to enter the waters of the State. The Contractor shall make provisions using floats, falsework, scaffolding, and other means as necessary to prevent debris from falling into the water.
- E. Cut treated timber exposed to salt water into lengths of 4 feet or less and disposed of at an approved off-site disposal facility.

**3.05 TIMBER PILE REMOVAL**

- A. Completely remove timber piles designated for demolition in accordance with the Washington State DOE's Sediment Cleanup Manual (December 2021).
- B. Vibratory extraction shall be used to remove existing timber piles.
- C. Removed timber piling shall be placed in a containment structure on a barge or truck for transport to an approved upland disposal facility.
- D. Remove in its entirety and dispose of creosote treated timber piling. Do not allow timber, once removed, to enter the waters of the State.
- E. If a pile breaks above the mudline, the Contractor shall attempt to remove the remainder of the pile with a clamshell bucket, chain, or similar means. The size of the clamshell bucket shall be as small as possible to reduce turbidity during piling removal.
- F. If a pile cannot be removed, Contractor shall cut the pile a minimum of two feet below the mudline.

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**3.06 DEMOLITION OF UTILITIES**

- A. If unexpected utilities are encountered notify the Port immediately. Notify the Port a minimum of 72 hours before scheduled demolition of utilities. Schedule with each utility agency the work required by that agency. Meeting the conditions required by the Port and affected utility shall be the sole responsibility of the Contractor.

**3.07 BACKFILL AND EXCESS EXCAVATED MATERIAL**

- A. Backfill: Backfill areas disturbed during demolition and compact to match the elevations of the existing sub-base, as shown on the Drawings, or as directed by the Engineer, and repaved as shown on the Drawings.
- B. Excess Excavated Material: Reuse excess excavated material on site or disposed of off-site in accordance with Section 31 00 00 – Earthwork and applicable local, state, and federal regulations.
- C. The Port encourages the salvage and recycling of materials from demolished structures. Salvage or recycle to the extent possible, in a manner acceptable to environmental agencies and the Port, materials designated for demolition and disposal.
- D. Disposal of asphalt pavement at a Contractor-selected recycle site.
- E. Disposal of concrete (plain and reinforced) at a Contractor-selected recycle site.

**3.08 DUST AND DEBRIS CONTROL**

- A. Prevent the spread of dust and debris and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but no limited to, ice flooding, or pollution.

**3.09 DISPOSAL**

- A. Dispose of items in accordance with the Contract Documents, and in compliance with local, state, and federal regulatory agencies.
- B. Cleanup: After removal of all demolition items and materials, clean and grade the area. Leave a clean site, with no debris, rubble or litter at the site from any of the demolition operations.

**END OF SECTION**



## **DIVISION 03 – CONCRETE**

### **Section 03 10 00 – Concrete Forming and Accessories**

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#### **PART 1 – GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 03 20 00 – Concrete Reinforcement
- B. Section 03 30 00 – Cast-in-Place Concrete

##### **1.02 DESCRIPTION OF WORK**

The Work includes furnishing necessary material, labor, and equipment for providing the structural support and physical barriers or forms which control the shape and location of the concrete. Also included in this section are the requirements for the removal of the forms and their supports.

##### **1.03 REFERENCE STANDARDS**

- A. American Concrete Institute ACI 301-20: Specifications for Structural Concrete.
- B. American Concrete Institute ACI 318-14: Building Code Requirements for Structural Concrete and Commentary.
- C. American Concrete Institute ACI 347-14: Guide to Formwork for Concrete.
- D. Precast/Prestressed Concrete Institute PCI MNL-116-21, 5<sup>th</sup> Edition: Manual for Quality Control for Plants and Production of Structural Precast Concrete Products.

##### **1.04 QUALITY ASSURANCE**

- A. Design forms, falsework, accessories, and shoring to meet the requirements of the concrete type, sequence of placing, schedule, and other conditions of the project. Use a designer having at least five (5) years of experience designing and constructing forms and falsework under similar project conditions.
- B. Before casting concrete, inspect forms, falsework, accessories, and shoring, using workers having at least five (5) years of experience with the types of construction involved and the techniques necessary for completion of the work.

##### **1.05 SUBMITTALS**

- A. Documentation demonstrating the falsework designer's qualifications and experience as described above.
- B. Documentation demonstrating each inspection worker's qualifications in and experience at inspecting or supervising concrete work, forms, falsework, accessories, and shoring as described above.

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### **Section 03 10 00 – Concrete Forming and Accessories**

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- C. Form, falsework, and shoring drawings and calculations for review prior to executing the work.
  - 1. Show details of member sizes, connections, product data, and other related elements on the drawings, including proposed construction joints.
  - 2. Indicate the construction sequence, the methods for release, and the sequence of removal on the drawings.
  - 3. In the calculations, clearly state material weights, lateral pressures, rates of pour, direction of pour, and working loads for form ties, friction collars, wedges, she-bolts, and accessories used in the design.
  - 4. Drawings and calculations for forms, falsework, accessories, and shoring designs shall be sealed by a Professional Engineer currently licensed in the state of Washington.
- D. Documentation demonstrating friction collar capacity and clamping device test procedures and results.
  - 1. Provide drawings and documentation indicating the specific geometry, materials, and loadings used in the tests.
  - 2. Conduct tests using the same materials and in the same configuration to be used for the work.
  - 3. Successful previous test results of friction collars or clamping devices using the same configurations will be considered sufficient test data.
- E. In the event patented or prefabricated systems are used for forms or falsework, submit complete drawings, details, and calculations for review. Paper, fiberglass, micarta, asphalt-impregnated fiber, and other miscellaneous form materials shall be approved by the Engineer prior to delivery, fabrication, and construction.

## **PART 2 – PRODUCTS**

### **2.01 GENERAL**

- A. Materials for concrete forms may be new or used. The quality of the materials, not the age or previous usage, will be the determining factor as to their suitability.
- B. Submit prefabricated form details, whether they are part of a patented system or custom-fabricated, for approval by the Engineer prior to assembly or arrival on site. Keep forms in a condition to produce finished work meeting the location, alignment, and surface tolerances specified.

### **2.02 WOOD FORMS**

- A. Use Grade B-B or B-C Plyform Plywood for exposed surfaces. Provide

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### **Section 03 10 00 – Concrete Forming and Accessories**

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vertical or horizontal joints in surfaces of forms used on exposed surfaces. Run the face grain of the plywood perpendicular to the pile caps.

- B. For unexposed surfaces, use exterior type plywood without splits or knotholes and sanded smooth. Run the face grain of the plywood perpendicular to the pile caps.
- C. Plywood must not be less than 1/2-inch thick except where curved areas require the use of thinner (1/4-inch minimum) material. When thinner material is used, back thinner material with heavier material.
- D. Use commercial Grade No. 2 or better for framing lumber. Provide framing lumber of standard dimensions and of such quality as to meet the requirements of the applied stresses or loads.
- E. Shiplap, square-edged boards, or tongue-and-groove sheathing may be used for forming unexposed concrete surfaces.
- F. Use metal, fiberglass, or other special form linings where required.

#### **2.03 STEEL FORMS**

- A. Design and fabricate to meet the requirements of the member/members to be cast. Use only new materials for steel form construction.
- B. For round elements use self-supporting metal shell or tube which will give a smooth, even surface. Do not use forms which produce a spiral appearance or those made of wood.

#### **2.04 FORM LINERS AND COATINGS**

- A. Line, coat, or treat forms with a suitable release agent or bond-breaker to ensure their timely removal with no damage to the concrete.
- B. Use non-coloring release agents or bond-breakers that do not leave a film on the concrete surface that may inhibit subsequent finishing activities required to attain the prescribed finish.

#### **2.05 FORM TIES AND ACCESSORIES**

- A. Do not use form ties or she-bolts for forms, falsework, or shoring below elevation +10.0 MHHW.
- B. Do not use wire ties or wood spacers.
- C. Provide form ties that are pre-manufactured items with published allowable stress values from the manufacturer. Include a premeasured, break-back, weakened area so that ties can be removed 3/4-inch behind the concrete surface.
- D. Set back tie rods for use with she-bolts by 1-1/2 inches from the concrete surface. Provide tie-rod steel with published allowable stress values from the manufacturer.

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### **Section 03 10 00 – Concrete Forming and Accessories**

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- E. Utilize corner brackets, friction collars, column clamps, and other specialized accessories in accordance with the manufacturer's recommendations.

#### **2.06 FALSEWORK AND SHORING**

- A. Select and size materials and elements for shoring, falsework, mudsills, or structural staging according to the Contractor's design. The use of steel scaffold-type falsework, when approved by the Engineer, must be furnished, erected, and braced in accordance with the manufacturer's recommendations.
- B. Establish the capacity of friction-supported forms by tests that are performed by the manufacturer or by independent test results. Conduct tests using the same material and in the same configuration to be used in the work.

## **PART 3 – EXECUTION**

### **3.01 GENERAL**

- A. Do not construct forms or falsework until the Engineer has reviewed the drawings and calculations. Review by the Engineer does not relieve the Contractor of the responsibility for sufficiency of the forms or falsework.
- B. Set forms and falsework to allow for structural camber plus an allowance for shrinkage and settlement.
- C. Provide finished concrete conforming to the location lines and grades indicated on the drawings.
- D. Construct forms to be rigid, unyielding, true to line, level, and sufficiently tight to prevent escape of mortar.
- E. Place openings, embedded objects, and reinforcement at the locations shown on the drawings. Form and fasten these items securely in position to maintain minimum cover for reinforcement, and to leave smooth surfaces, true openings, accurate geometry, etc., after the forms are removed.
- F. Clean forms of waste, debris, or other objects and substances deleterious to the concrete, concrete surface, or concrete element, prior to casting.

### **3.02 FORM INSTALLATION**

- A. Prior to final setting or placing of reinforcing steel, treat forms for exposed concrete with a release agent, bond-breaker, or parting compound. Apply the material at a rate recommended by the manufacturer, to provide a smooth surface free of dusting action caused by the chemical reaction of the material.
- B. Immediately remove any release agent or bond-breaker that comes in contact with reinforcement or embedded objects.

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### **Section 03 10 00 – Concrete Forming and Accessories**

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- C. Forms may be set with a slight bevel or draft for easy removal, where approved by the Engineer. Use  $\frac{3}{4}$ -inch chamfer strips on all exposed inside and outside corners including the bottoms of pile caps and all vertical faces.
- D. All forms must be mortar-tight.
- E. Remove debris, waste, foreign objects from forms before assembly. Remove standing water in the forms. Clean the forms with fresh water before assembly and prior to placing concrete.

#### **3.03 FORM REMOVAL**

- A. Keep forms in place until the concrete has reached 80 percent of the required compressive strength and for a minimum of 7 days, provided the ambient temperature is 40 degrees Fahrenheit or higher during that time period. Additional concrete cylinder testing for the purpose of establishing the 80 percent threshold level shall be at the Contractor's expense.
- B. When temperatures lower than 40 degrees Fahrenheit prevail, keep forms in place longer as directed by the Engineer and at no additional cost to the Port.
  - 1. Disregard time periods where the ambient temperature is below 40 degrees Fahrenheit in determining the length of time forms are to remain in place.
  - 2. Submit for prior approval a cold-weather concreting plan in accordance with Section 03 30 00 – Cast-in-Place Concrete.
  - 3. Incorporate the approved cold-weather concreting plan into the work at no expense to the Port.
- C. For elements described on the Civil Drawings (C-series) the minimum time that forms shall remain in place may be reduced under the following conditions.
  - 1. When concrete cylinder tests, according to ACI 318, indicate that a compressive strength greater than or equal to 80 percent of the specified 28-day strength has been reached.
  - 2. Additional concrete cylinder testing for the purpose of establishing the 80 percent threshold level shall be at the Contractor's expense.
- D. Removal of forms as stipulated herein shall not relieve the Contractor of responsibility for the performance, acceptability, or finish of the work.
- E. Accomplish form and falsework removal in a manner that prevents damage to the concrete, concrete finishes, and adjacent work elements.

### **END OF SECTION**

## **DIVISION 03 – CONCRETE**

### **Section 03 20 00 – Concrete Reinforcement**

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#### **PART 1 – GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 03 10 00 – Concrete Forming and Accessories
- B. Section 03 30 00 – Cast-in-Place Concrete
- C. Section 05 50 00 – Metal Fabrications

##### **1.02 DESCRIPTION OF WORK**

The work includes the requirements for manufacture, detailing, cutting, bending, transporting, handling, and placing of concrete reinforcement and associated items required or indicated on the drawings.

##### **1.03 REFERENCE STANDARDS**

- A. American Concrete Institute ACI 301-20: Specifications for Structural Concrete for Buildings.
- B. American Concrete Institute SP-66(20): ACI Detailing Manual (including ACI 315R-2018).
- C. American Concrete Institute ACI 318-14: Building Code Requirements for Structural Concrete and Commentary.
- D. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- E. American Welding Society (AWS) D1.1 Structural Welding Code – Steel, 2020 Edition.
- F. American Welding Society (AWS) D1.4 Structural Welding Code – Reinforcing Steel, 2018 Edition.
- G. Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice (MSP), 2018, 29<sup>th</sup> Edition.
- H. Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge and Municipal Construction M41-10, 2023 Edition.
- I. Washington Association of Building Officials (WABO) Standard No. 27-13, WABO Welder and Welding Operator Performance Qualification Standard for Structural Steel, Sheet Steel, and Reinforcing Steel.

##### **1.04 QUALITY ASSURANCE**

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- A. Provide at least one (1) qualified person who must be present at all times during execution of this portion of work, be thoroughly familiar with the type of materials being installed, be skilled in the required methods for installation, and who must direct the work. Qualified personnel must have a minimum of five (5) years of experience in placement of reinforcement and accessories for concrete and prestressed concrete structures.
- B. All welders must be qualified in accordance with AWS D1.4 and WABO Standard 27-13 for the weld procedures and positions to be performed.

#### **1.05 SUBMITTALS**

- A. Documentation demonstrating the qualifications and experience of the supervisors and welders of the work, as described above.
- B. Detailed shop drawings that are coordinated and checked for all concrete reinforcing prior to casting concrete.
- C. As a minimum include material specifications, bar lengths, bar bending schedules, order lists, splice lengths, and proposed splice locations.
- D. Mill certificates for each heat of reinforcing steel, threaded bars, and other reinforcement to be furnished, indicating specification compliance, yield strength, ultimate strength, and chemistry.
- E. Qualified weld procedure specification (WPS) including all information contained in Annex A of AWS D1.4.
- F. Weld procedure and welder qualification test reports, including valid WABO card for welds and positions to be performed.
- G. Headed reinforcement details and manufacturer data sheets.
- H. Threaded bar reinforcement details and manufacturer data sheets.
- I. Data sheets for mortar blocks and chairs used for placing reinforcement.

## **PART 2 – PRODUCTS**

### **2.01 HANDLING**

- A. Protect reinforcement from damage before, during, and after installation in the work. Protect from damage the installed work and materials of other trades.
- B. Provide reinforcement that is new and free from rust, grease, oil, wax, paint, soil, dirt, kinks, bends, or other defects. Store in a manner to prevent corrosion or fouling with bond-breaking or deleterious coatings.
- C. The surface of prestressing steel must be free from any substance or coating that may impair bond transfer length or pullout strength. If calcium stearate is used as a die lubricant during manufacture, use methods approved by the Engineer to clean the steel completely.
- D. Maintain reinforcement identification after the bundles are broken. Indicate to the Engineer what bar types and grades are stored in each location.

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### **Section 03 20 00 – Concrete Reinforcement**

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- E. In the event of damage, immediately make all repairs and replacements necessary as directed by the Engineer and at no additional cost to the Port.

#### **2.02 REINFORCEMENT**

- A. Provide reinforcing bars, except as noted below, conforming to ASTM A615, Grade 60, deformed, typical, and Grade 80, deformed, where noted. Bars conforming to ASTM A706 may be substituted for ASTM A615 reinforcing steel at the Contractor's expense.
- B. Provide threaded bars meeting the requirements of ASTM A615, Grade 75. Provide bars with continuous threads and use hardware and accessories with threaded bars (nuts, washers, plates, etc.) meeting requirements for use with the threaded bars and provided by the same manufacturer as the threaded bars.
- C. Provide dowel reinforcing bars for piling, bars requiring welds, and bars designated as weldable conforming to ASTM A706, Grade 60, deformed.
- D. Provide prestressing steel conforming to ASTM A416, Grade 270, uncoated seven-wire strand.
- E. Provide spiral reinforcement conforming to ASTM A706 Grade 60 deformed.
- F. Provide welded headed studs and welded shear connectors conforming to ASTM A108, Grades 1010 through 1020 according to ASTM A29 with head geometry conforming to AWS D1.1, Section 7.2.
- G. Provide mechanical couplers as follows.
  - 1. Develop a minimum of 125% of the minimum specified yield strength of the reinforcing bar.
  - 2. Dayton Superior D-250 Bar-Lock S/CA-Series couplers.
  - 3. Lenton Connect B12 mechanical couplers by nVent.
  - 4. Headed Reinforcement Company (HRC) Series 400 High Performance Mechanical Couplers.
  - 5. Or a mechanical coupler that is equivalent and approved by the Engineer.
- H. Provide headed reinforcement (T-heads) conforming to ASTM A970, Annex A1 and as follows.
  - 1. Round head configuration with a net bearing area equal to four times the area of the bar.
  - 2. Dayton Superior D251L Bar Lock L-Series End Anchor.
  - 3. Lenton D6 mechanical anchors by nVent.
  - 4. HRC Type 555.
  - 5. Or a head that is an approved equal.



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**PART 3 – EXECUTION**

**3.01 GENERAL**

- A. Prior to installation of this section, inspect the installed work of other trades and verify that such work is complete to the point where reinforcement installation may commence.
- B. Details of bending, placing, and splicing of all reinforcing steel must conform to ACI 318, except as modified herein.
- C. Do not deliver concrete reinforcement or accessories to the site prior to acceptance of the shop drawings.

**3.02 REINFORCING STEEL BARS**

- A. Order Lists: Before ordering material, furnish order lists and bending diagrams for approval by the Engineer; reinforcement placing drawings submitted for approval must conform to the CRSI MSP. Do not order material until such lists and bending diagrams have been approved. The approval of order lists and bending diagrams by the Engineer shall not relieve the Contractor of responsibility for the correctness of such lists and diagrams.
- B. General Fabrication Requirements for Reinforcing Bars: Bend reinforcement cold to the shapes indicated on the drawings unless otherwise approved by the Engineer. Do not field-bend bars partially embedded in concrete except as indicated on the drawings or as approved by the Engineer. Make bends and hooks in accordance with the applicable portions of the CRSI MSP.
- C. Placing and Fastening:
  - 1. Place reinforcement accurately and hold firmly in the position indicated on the drawing during the placing and setting of concrete. Tie bars at all intersections.
  - 2. Provide concrete cover to reinforcement as indicated on the drawings:
  - 3. Maintain the minimum distance from the forms by means of stays, blocks, ties, hangers, or other approved supports.
    - a. Separate reinforcement from contact with the forms by approved metal or plastic chairs. Metal chairs which are in contact with the exterior surface of the concrete must be plastic-coated for the full depth of the indicated concrete cover. Do not damage the plastic coating on metal chairs during placing and fastening operations.
    - b. Separate layers of bars by plastic chairs, by precast mortar blocks of compressive strength not less than 5000 pounds per square inch, spacing bars, or by other devices that are equivalent and approved by the Engineer.
    - c. Provide minimum spacing between bars, except at lap splices, not

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be less than one bar diameter or one inch minimum, but not less than 1-1/3 times the maximum size of the coarse aggregate.

4. In the event that conduits, anchor bolts, piping, inserts, sleeves, embedded objects, headed studs, or other items interfere with placing reinforcement as indicated on the drawings, or as otherwise required, immediately contact the Engineer and obtain approval of a new procedure before placing concrete.

**3.03 SPLICING**

- A. Furnish reinforcement in the full lengths indicated on the drawings, except that reinforcement over forty feet in length may be spliced.
- B. Splice bars, except when indicated on the drawings, only at locations approved by the Engineer. When approved, stagger splices with no more than fifty percent of any particular bar type being spliced at any one location. Unless otherwise noted, provide a minimum lap splice length equal to 60 times the bar diameter (24 inches minimum) and minimum distance between spliced zones equal to three times the lap length.

**3.04 WELDING**

- A. Weld reinforcing steel only as indicated on the drawings.
- B. Perform welding with welders certified by WABO and conforming to AWS D1.4 except use weld sizes and reinforcement as shown on the drawings.
- C. Use shielded metal arc or flux core arc (inner shield only) welding processes. Remove all slag.
- D. Use an AWS-certified welding inspector (CWI) approved by the Engineer to witness welding procedures and welder qualification tests. Conduct tests in accordance with AWS D1.4 and include longitudinal tension tests and macro-etch tests. Provide procedures and welder qualification tests for weldable grade deformed reinforcing bars. Do not start welding on a production basis until qualified welding procedures have been established and approved by the Engineer.
- E. Filler metal, preheat, and interpass temperature requirements must be in accordance with AWS D1.4.
- F. Exposure times for low hydrogen coated electrodes must be in accordance with AWS D1.4.
- G. An ongoing inspection and verification program will be established by the Engineer in which visual inspection and tensile tests will be performed for quality assurance on welded splices.
  1. As a minimum, all welds will be visually inspected by the Engineer. The Engineer will reject welds failing visual inspection and direct that they be repaired according to AWS D1.4 or replaced at the Contractor's

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expense.

2. The Contractor may choose to have rejected welds further examined by a certified testing agency at its own expense. If welds prove to be of unacceptable quality, the defective welds must be removed and replaced by the Contractor at its own expense.
3. The Port, at its discretion, will perform tension test(s) of sample welded connection coupon(s) identical to the production connections. The Contractor must provide sample tension connection coupons at its own expense to the Port for this purpose.
4. In the event that a sample connection fails testing, production welds made by the welder responsible for the failing sample must be identified and considered suspect. The Contractor must demonstrate, at its own expense, by further testing, inspection, or other industry standard techniques that all suspect production welds are sufficient and free of defects according to AWS. Failure of the production welds to meet additional testing or inspection acceptability requirements must be cause for rejection by the Engineer.

**3.05 CLEANING REINFORCEMENT**

Steel reinforcement, at the time concrete is placed around it, must be free from loose rust, loose mill scale, oil, paint, and other coatings which will destroy, impair, or reduce the bond between reinforcing steel and concrete.

**END OF SECTION**

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**PART 1 – GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 03 10 00 – Concrete Forming and Accessories
- B. Section 03 20 00 – Concrete Reinforcement

**1.02 DESCRIPTION OF WORK**

The extent and location of the “Cast-in-Place Concrete” work is indicated on the drawings. The work includes the requirements for providing cast-in-place concrete and associated work in conformance with these specifications and as indicated on the drawings.

**1.03 REFERENCE STANDARDS**

- A. American Concrete Institute (ACI) 301-20: Specifications for Concrete Construction.
- B. ACI 305.1-14 (20): Specification for Hot Weather Concreting.
- C. ACI 306.1-1992 (Reapproved 2002): Standard Specification for Cold Weather Concreting.
- D. ACI 308.1-11: Specification for Curing Concrete.
- E. ACI 318-14: Building Code Requirements for Structural Concrete and Commentary.
- F. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- G. Standard Specifications for Road, Bridge, and Municipal Construction, M41-10, 2023 edition, by Washington State Department of Transportation (WSDOT).
- H. International Building Code (IBC) 2018, as amended and adopted by the City of Ilwaco.

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**1.04 QUALITY ASSURANCE**

- A. Concrete work must conform to the requirements of ACI 301, unless otherwise noted in the drawings or the specifications.
- B. Inspection and Testing: As determined by the Engineer, the Port will provide inspection and testing as required. The Contractor must provide all necessary access and assistance in carrying out such inspections and tests at its own expense. The Contractor may obtain results of tests performed by the Port from the Engineer.
- C. Qualifications of Supplier: Ready-mixed concrete plants must be approved and certified by the National Ready Mix Concrete Association (NRMCA) or qualified by WSDOT. Batch ready-mixed concrete in accordance with ASTM C 94.
- D. Qualifications of Personnel:
  - 1. Provide at least one qualified person who must be present at all times during execution of this portion of the work, who must be thoroughly trained and experienced in placing the types of concrete specified, and who must direct all work performed under this section. Qualified personnel must have at least five (5) years experience performing the work described in this section.
  - 2. Trained and experienced journeyman concrete finishers having at least five (5) years experience must be responsible for finishing all exposed surfaces.
- E. Building Code: Concrete must meet the requirements of the IBC. Where provisions of pertinent codes and standards conflict with this specification, the more stringent provisions must govern, as determined by the Engineer.

**1.05 SUBMITTALS**

- A. Documentation demonstrating the qualifications and experience of supervisors and directors of work, as described above.
- B. Proposed concrete design mixes, indicating material contents per cubic yard of concrete, including certificates of specification compliance.
- C. Written evidence that the ready-mix concrete plant is approved and certified by the NRMCA or WSDOT and other organizations.
- D. Test certificates for compressive strength, yield, air content, and slump of the proposed concrete mix. Report strength test results in accordance with ACI 318, Section 1.9.

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- E. Manufacturer's name, address, catalog number, and specifications for all proposed admixtures, concrete bonding agents, curing compounds, etc.
- F. Aggregate supply pit names and locations. Submit certificates of specification compliance for materials to be used including aggregate alkali-silica reactivity (ASR).
- G. Proposed curing methods including manufacturer's data for curing membranes, evaporation retardants, accelerated cure methods, etc. Submit detailed plans for concreting in ambient temperatures below 40 degrees F. Describe the specific methods and procedures used for substrate preparation, concrete placement, curing, and protection. Provide specific references to ACI 305.1, ACI 306.1, and ACI 308.1.
- H. Shop drawings showing pour sequences, construction joints, expansion joints, etc.
- I. Manufacturer's data for proposed pre-fabricated construction joint systems and hardware.
- J. Manufacturer's data for proposed expansion joint filler.
- K. Concrete delivery tickets for each truck delivered to the site. Submit delivery tickets to the Engineer before unloading at the site and in accordance with ASTM C 94, Section 14.
- L. Proposed patching methods and materials for concrete defects.

## **PART 2 – PRODUCTS**

### **2.01 CONCRETE**

- A. General:
  - 1. Batch and mix concrete, unless otherwise specifically permitted by the Engineer, at the approved Ready-Mix plant. Batch, mix, and deliver ready-mix concrete in accordance with ASTM C 94.
  - 2. Proportion cast-in-place concrete on the basis of field experience or laboratory trial mixtures according to ACI 318, Section 1.9.
- B. Cementitious Materials:
  - 1. Type I-II or Type II Portland cement conforming to ASTM C 150 and to WSDOT Paragraph 9-01.2(1) in mixes without flyash.
  - 2. Type I or Type I-II Portland cement conforming to ASTM C 150 in mixes

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with flyash.

3. Fly ash conforming to ASTM C 618, Type F, with the added provision that the loss on ignition must not exceed 2 percent, and that the fly ash is stored in a separate silo from the cement.

**C. Aggregates:**

1. Conform to ASTM C 33. All coarse and fine aggregate must consist of hard, tough, durable particles free from foreign and deleterious materials. Stored in such a manner as to prevent segregation, excessive breakage, and the introduction of foreign material.
2. Evaluate and test fine and coarse aggregates to be used in all concrete for alkali-aggregate reactivity in accordance with ASTM C 1260 or ASTM C 1293. Test both coarse aggregate size groups if from different sources. Test results of the combination must have a measured expansion equal to or less than 0.10 percent at 16 days after casting when aggregates are tested in accordance with ASTM C 1260 or 0.04 percent for aggregates tested in accordance with ASTM C 1293.
3. Conform to WSDOT Paragraph 9-03.1(5) for grading. Maximum nominal aggregate size must be  $\frac{3}{4}$  inch, unless approved by the Engineer and as noted in this section.
4. The maximum size of coarse aggregate must not be larger than three fourths of the minimum clear spacing between reinforcing bars, between reinforcing bars and side forms, and between reinforcing bars and top or bottom surface of the concrete.

**D. Water**

Conform to the quality requirements of WSDOT Paragraph 9-25.1.

**E. Admixtures:** Provide from one manufacturer approved by the Engineer.

1. ASTM C 260 for air-entraining admixtures. Use dosage rates in accordance with the manufacturer's recommendations to meet the air content specified herein.
2. ASTM C 494 for water-reducing admixtures. Use dosage rates in accordance with the manufacturer's recommendations.
3. Use Type A, D, F, or G water reducing admixture. Select the amount to control the desired workability and water/cement ratio of the mix and be within the manufacturer's recommended range.

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F. Epoxy Bonding Agent:

1. Use only where approved by the Engineer.
2. Meet ASTM C 881, Type V, Grade 2, Temperature Class A, B, or C, and match the surface temperatures to which the bonding agent is applied, as endorsed by the manufacturer.
3. Concrete Liquid LPL manufactured by BASF, or Sikadur 32 HI-MOD LPL, manufactured by Sika Corporation, or equal, as approved by the Engineer before the start of the work where it will be used.

2.02 OTHER MATERIALS

Materials not specifically described but required for a complete and proper installation of cast-in-place concrete must be selected by the Contractor subject to the approval of the Engineer.

2.03 MIX PROPORTIONS AND STRENGTH

- A. The mix proportions must produce a mixture that will readily work into all corners, sides, and angles of the forms, around reinforcement and embedded items, with no segregation, and prevent free water from collecting on the surface.
- B. Select mix proportions in accordance with ACI 301 as follows.
1. Submit test data representing thirty recent consecutive tests for each design to establish the standard deviation used in ACI 301 Section 4.2.3.
  2. The criteria for acceptance of submitted tests must be accordance with ACI 301 Section 4.2.3.1. Amend the second sentence to read, "... 500 psi of  $f'_c$ ", instead of 1000 psi.
  3. Where 30 recent consecutive tests are not available, the standard deviation may be determined by records based on no less than 15 tests as described in ACI 301 Section 4.2.3.3.
  4. Where no previous data are available, overdesign the mix(es) in accordance with ACI 301 Section 4.2.3.1.
  5. When consecutive test data have been established during the project the overdesign criteria may be relaxed in accordance with ACI 301 Section 4.2.3.5.
  6. Do not deviate from reviewed design mix(es) without approval of the Engineer.



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- C. Unless otherwise indicated, concrete minimum 28-day compressive strengths are shown on the drawings.
- D. Concrete must meet the following requirements:
  - 1. Minimum Cementitious Material  
Cement without fly ash: 6.5 sacks/cy (611 lbs/cy)\*  
Cement with fly ash: 6 sacks/cy (564 lbs/cy) and 100 lbs/cy flyash  
\* cy is an abbreviation for cubic yard.
  - 2. Maximum Water/Cement Ratio  
(by weight, including free moisture on aggregate) 0.40\*\*  
\*\* If fly ash is used, the water/cement ratio must be calculated as the weight of water divided by the weight of cement plus the weight of the fly ash.
  - 3. Air Content: 3.5 percent to 6.5 percent
  - 4. Slump: Maximum 8 inches, and chosen to enhance workability without violating the maximum water/cement ratio requirement.

## **PART 3 – EXECUTION**

### **3.01 PREPARATORY WORK**

- A. General:
  - 1. Prior to casting, inspect the installed work of all other trades and verify it is complete to the point where this installation may commence.
  - 2. Verify that all items to be embedded in concrete are in place, properly oriented, located, and secured.
  - 3. Verify that concrete may be placed to the lines and elevations indicated on the drawings with all required clearances for reinforcement.
  - 4. Thoroughly clean areas in which concrete is to be placed to remove wood debris, sawdust, tie wire cuttings, and other deleterious material.
  - 5. Bend back tie wire ends so they do not encroach into the clear cover of concrete over reinforcement and fully embedded items.
  - 6. Thoroughly wet concrete forms which have not been treated with oils, waxes, or other bond breakers prior to placing concrete.
  - 7. Clean and roughen existing concrete or concrete from previous pours to provide a bondable surface.

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8. Clean transporting and handling equipment of hardened concrete and other debris.
- B. Notification: Notify the Engineer at least 48 hours in advance of any concrete pour. Notify the Engineer when inspection by the Contractor is complete. In the event of discrepancy, immediately notify the Engineer. Do not proceed with installation until discrepancies have been resolved.

#### **3.02 TRANSPORTING AND PLACING CONCRETE**

- A. Placement:
  1. Do not use concrete that does not reach its final position in the forms within 1-1/2 hours after the addition of cement. During hot weather, reduce this time limit in accordance with ACI 305.1.
  2. Place concrete as soon as possible after mixing. Do not retemper or remix concrete which has developed initial set or partially hardened.
  3. The method and manner of placing concrete must not allow segregation of the aggregates or displacement of reinforcement and embedded objects.
  4. When using a concrete pump as the placing system, discard the pump priming slurry before placement into the forms. Initial acceptance testing may be delayed until the pump priming slurry has been eliminated. Do not use a pump that allows free water to flow past the piston. Do not use aluminum conduits or tremies.
  5. Place concrete in continuous horizontal layers, or lifts, not exceeding 18 inches and compact so that there will be no line of separation between layers. Fill each part of the forms by depositing concrete directly in its final destination.
  6. When concrete must be dropped more than five feet into the forms, deposit it through a sheet metal or other approved conduit. Use the same conduit to place concrete in sloping forms or in other locations, as directed by the Engineer, to prevent concrete from sliding around reinforcement or other embedded objects.
  7. The methods of depositing and compacting concrete must produce compact, dense, impervious concrete with the required surface finishes and no segregation. Remove defective concrete as directed by the Engineer and at no additional cost to the Port.
  8. During pile driving, or other vibratory activity, do not place concrete within 150 feet of the activity, and do not perform or resume the activity

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within 150 feet of placed concrete until a minimum of 3 days after initial concrete set.

9. Do not place or allow concrete to fall in the water or on the slope or shore. Immediately remove concrete from the water, slope, or shore.
- B. Hot/Cold Weather Placement: Do not place concrete on frozen ground or against frosted reinforcing steel or forms. Do not mix or place concrete while the atmospheric temperature is below 40 degrees Fahrenheit. If air temperature exceeds 90 degrees Fahrenheit, provide water spray or other approved methods to cool contact surfaces to less than 90 degrees Fahrenheit. Perform hot and cold-weather concrete placement in accordance with ACI 305.1 and ACI 306.1.
- C. Underwater Placement: Do not place concrete in the water.
- D. Consolidation of Concrete:
  1. Provide suitable internal vibrators for compacting concrete. Use vibrators of the type designed to be placed directly in the concrete, and their frequency of vibration must not be less than 7,000 impulses per minute when in actual operation.
  2. Vibration must be such that the concrete becomes uniformly plastic. Insert vibrators to a depth sufficient to vibrate the bottom of each layer effectively, but do not penetrate partially hardened concrete. Do not apply the vibrators directly to reinforcing steel or embedments which extends into partially hardened concrete. The intervals between points of insertion must be not less than 2 feet, nor more than 3 feet.
  3. Do not continue vibration in any one spot such that pools of cement or cement and sand are formed. In vibrating and finishing top surfaces which are exposed to weather or wear, avoid drawing water or laitance to the surface. In relatively high lifts, the top layer must be comparatively shallow and the concrete mix must be as stiff as can be effectively vibrated into place and properly finished.
  4. Do not use vibrators to transport or move concrete inside the form.
  5. Provide a sufficient number of vibrators to effectively vibrate all of the concrete placed. Hand-tamp or rod wherever necessary to secure a smooth and dense concrete on the outside surfaces.

### 3.03 CONSTRUCTION JOINTS

- A. Joints and stoppages, except as specifically shown on the drawings, must conform to ACI 301 and 318. Do not use wire mesh or similar materials.

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- B. Submit for the Engineer's approval requests for additional, deleted, or relocated construction joints. Changes as a result of such requests must be at the Contractor's expense.
- C. Thoroughly clean and roughen joint surfaces and remove loose concrete, gravel, sediment, laitance, and other deleterious substances.
- D. Thoroughly wet and condition joint surfaces to a saturated surface dry (SSD) condition for a minimum twelve-hour period immediately prior to placing fresh concrete.
- E. Horizontal surfaces of construction joints, such as between pile cap pours, must have a clean roughened surface but need not have a bonding agent or neat cement paste applied. Use a bonding agent or neat cement paste only when approved by the Engineer.
- F. Unless otherwise noted, joints requiring roughened surfaces must have grooves ½-inch to 1-inch wide, ¼-inch to 3/8-inch deep, and spaced at twice the width of the groove.
- G. Where a roughened surface is not required, provide shear keys with a positive mechanical bond using formed depressions covering one third to one half of the joint area and 1-1/2 inches deep. Provide shear keys on vertical surfaces between pours including bulkhead sections.

#### **3.04 CURING CONCRETE**

- A. Follow ACI 308.1.
- B. Maintain concrete above 40 degrees Fahrenheit and in a moist condition for at least the first seven days (168 hours) after placement.
- C. Do not use curing compounds on surfaces to receive additional concrete.
- D. Where approved by the Engineer, apply an ASTM C 309, Type 1, Class A or B curing compound to the fresh concrete immediately after finishing the concrete and as soon as the visible bleed water has evaporated or as directed by the Engineer. Apply according to the manufacturer's recommendations. The rate of coverage must be at least one gallon per 100 square feet and be sufficient to effectively obscure the original color of the concrete.
- E. Apply the curing compound in two applications to ensure full coverage of the concrete, with the second coat applied in a direction perpendicular to that of the first application.
- F. Do not apply curing compound to construction joint surfaces, reinforcing

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- steel, or embedments in the concrete. Completely remove curing compound on construction joints, reinforcing steel, or embedments immediately.
- G. Supply backup spray equipment and employ a sufficient number of workers to properly apply the curing compound.
  - H. Within 12 hours following the application of the curing compound, cover the top surfaces with cotton mats, an approved vapor proof curing paper, or white polyethylene sheeting. If the covering used is cotton mats, it must be kept continuously wet day and night for the period of time specified above, and if curing paper or plastic film is used, it must be left in place for the same length of time.
  - I. Keep curing paper or sheeting tightly in place by taping and weighting joints, or other methods for the prescribed length of time.
  - J. Do not use membrane curing compounds which leave a waxy film on the concrete.
  - K. After the concrete has cured for the required time, sweep clean the top surfaces.
  - L. Protect concrete from damage and accelerated drying. Do not allow fire or excessive heat near the concrete at any time.
  - M. In lieu of curing compounds, wet burlap or other wet cure methods may be used as approved by the Engineer.
  - N. Use only wet cure methods on concrete surfaces against which additional concrete will be cast.
  - O. Wet cure methods must be continuous for the prescribed duration of the curing period.

#### **3.05 FINISHING CONCRETE**

- A. Finish: Permanently exposed surfaces, unless specifically noted otherwise, must be free from local bulging and ridges or lips must be removed to leave a smooth, flat surface. Patching mortar, if used, must be of the same color as the surrounding concrete. White Portland cement must be added to the patching mortar for color matching. A test section, approved by the Engineer, must be completed prior to production work.
- B. Protect finished surfaces from damage, stains and abrasion. Surfaces or edges damaged during construction must be repaired at the Contractor's expense.

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C. Defects:

1. Surface defects include honeycomb, rock pockets, spalls, chips, air bubbles, voids, pinholes, bug holes, and indentations greater than or equal to 1/4 inch in depth, or greater than or equal to 1/2 inch in width, length, or diameter. Chip out to reveal sound concrete and patch according to Section 03 60 00 – Grouting.
2. Surface cracks are defined as cracks greater than or equal to 0.007 inch in width. Patch according to Section 03 60 00 – Grouting.
3. Surface irregularities include embedded objects, embedded debris, lift lines, sand lines, bleed lines, segregation, form pop-outs, fins, form leakage, texture irregularities, stains and other discolorations that cannot be removed by water blast cleaning. Repair as specified in this Section unless otherwise directed by the Engineer.

D. Vertical Surfaces and Walls:

1. Immediately after removal of forms or form linings, inspect the concrete surfaces for defects and irregularities.
2. Repair defects, defective concrete, and tie rod holes immediately after the forms are removed unless otherwise directed by the Engineer. Remove exposed tie wires (chip out) and patch the resulting holes. Repair with BASF EMACO R350 CI or an epoxy mortar approved by the Engineer. Apply according to the manufacturer's instructions using experienced personnel qualified by the manufacturer of the repair material.
3. Vertical surfaces, against which concrete will be cast, are construction joints. Clean and roughen to an amplitude of 1/4 inch. Roughen using methods in accordance with the construction permits and approved by the Engineer, to expose sound concrete without undercutting around the edges of the larger aggregate particles or cracking the concrete to remain.

E. Horizontal Surfaces:

1. Horizontal surfaces that will carry additional concrete are construction joints. Clean and roughen to an amplitude of 1/4 inch. Roughen using methods in accordance with the construction permits and approved by the Engineer, to expose sound concrete without undercutting around the edges of the larger aggregate particles or cracking the concrete to remain.
2. Exposed horizontal surfaces that will not receive additional concrete

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must have a smooth wood float finish except for the tops of bullrails, pile caps, bulkheads, which must have a light broom finish. The broom stria must be 1/16 inch to 1/8 inch.

**3.06 TESTING**

- A. Testing of concrete will be performed by an accredited testing agency retained by the Port. Methods of sampling, testing, evaluation, and acceptance will conform to ACI 301. The Contractor must assist the Port with access to collect samples.
- B. Testing as described above will be at the Port's discretion and in no way relieves the Contractor of any obligations.
- C. The Contractor must perform its own tests and institute a quality assurance program to assure the specified quality of materials and work are provided.
- D. Tests performed by the Port will be done at no cost to the Contractor, except as noted below.
  - 1. Additional testing and inspection required because of changes in materials, proportions, and procedures requested by the Contractor.
  - 2. Additional testing of materials or concrete when either fails to meet the specification requirements when tested in accordance with the ACI standards outlined and the appropriate ASTM standards contained therein.

**END OF SECTION**

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**Section 03 60 00 – Grouting**

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**PART 1 – GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 03 30 00 – Cast-in-Place Concrete
- B. Section 05 50 00 – Metal Fabrications
- C. Section 31 51 13 – Soil Anchors

**1.02 DESCRIPTION OF WORK**

The work includes furnishing of all necessary material, labor, and equipment for grouting and doweling as shown on the drawings and described in the specifications. The work also includes the patching of demolished or damaged surfaces and epoxy coating of exposed reinforcing steel resulting from demolition activities.

**1.03 REFERENCE STANDARDS**

American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).

**1.04 QUALITY ASSURANCE**

- A. The Port will provide testing and inspection services as required. The Contractor must provide all necessary assistance in testing of materials and provide access for testing and inspection at its own expense.
- B. Provide at least one person who must be present at all times during execution of the work, who must function as a supervisor and direct the work performed, and who has at least five (5) years experience with the materials and the methods of installation necessary to meet the requirements of the contract documents.
- C. Dowel installers must be trained and certified by the dowel system manufacturer of the adhesive or grout system.

**1.05 SUBMITTALS**

- A. Documentation that the supervisor directing the work and that the dowel installers have the qualifications and experience as described above.
- B. For each application, manufacturer's name, address, catalog cuts, and specifications for grout, epoxies, adhesives, admixtures, and proprietary products.
- C. Manufacturer's test certificates for grout compressive strength and non-



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shrink properties of proposed cementitious grout. Indicate the working time, fluid consistency, flow rate, volume change characteristics, and manufacturer's recommended installation temperatures.

- D. Dowel system manufacturer's instructions for preparation, placement, drilling holes, installation of anchors and adhesive, and handling of cartridges, nozzles, and equipment.
- E. Dowel system manufacturer's International Code Council Evaluation Service reports and written letter of certification identifying the installer's qualifications to install the manufacturer's products.

**PART 2 – PRODUCTS**

**2.01 NON-SHRINK CEMENTITIOUS GROUT**

- A. Locations: Supporting metal fabrications, and all other locations not specified.
- B. Requirements:
  - 1. Meet ASTM C 1107 for hydraulic-cement non-shrink grout.
  - 2. Plastic height change of 0% to +4% according to ASTM C 827.
  - 3. Hardened height change of 0% to +0.3% according to ASTM C 1090.
  - 4. Fluid consistency at 25 to 30 seconds according to ASTM C 939.
  - 5. Minimum working time of 30 minutes.
  - 6. Minimum compressive strength of 7,500 psi @ 28 days when prepared in fluid consistency according to ASTM C 109.
  - 7. Must not contain powdered aluminum.
- C. Manufacturers:
  - 1. Euclid Chemical Co., Hi-Flow Grout, Cleveland, OH.
  - 2. Masterflow 928, by BASF Construction Chemicals LLC, Shakopee, MN.
  - 3. SikaGrout 328, by Sika Corporation, Lyndhurst, NJ.
  - 4. Sure-Grip High Performance Grout, by Dayton Superior Corp., Dayton, OH.
  - 5. Equal product, as approved by the Engineer before the start of the work where it will be used.

**2.02 REPAIR MORTAR**

- A. Typical locations: demolition surfaces, under-dock repairs, incomplete drilled holes for dowels, damaged concrete, locations determined by the Engineer.
- B. Shrinkage-compensated mortar EMACO R350 CI manufactured by BASF

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Construction Chemicals LLC, Shakopee, MN or equal, as approved by the Engineer before the start of the work where it will be used.

**2.03 EPOXY GROUT**

- A. Typical Locations: lifting locations in precast or precast prestressed concrete elements and other locations determined by the Engineer.
- B. High Performance (HP) precision epoxy grout, manufactured by Five Star Products Inc., Shelton, CT or equal, as approved by the Engineer before the start of the work where it will be used.

**2.04 DRILLED-IN AND BONDED DOWEL ADHESIVE**

- A. Store adhesive at temperatures and in locations indicated in the manufacturer's literature. Do not use and dispose of adhesives with expired shelf lives.
- B. Meet the requirements of ASTM C 881, Type IV, Grade 2 or 3. Overhead applications must meet Grade 3. Temperature Class A, B, or C must match, or be endorsed by the manufacturer, the surface temperature of the concrete to which the adhesive system is applied.
- C. Manufacturers:
  - 1. Hilti HIT-RE 500, or Hilti HIT-RE 500 SD adhesive, by Hilti Inc., Tulsa, OK.
  - 2. Epoxy-Tie SET adhesive, by Simpson Strong-Tie Co., Dublin, CA.
  - 3. Equal product, as approved by the Engineer before the start of the work where it will be used.

**2.05 CRACK REPAIR**

- A. Products must be appropriate for the specific defect and must be approved by the Engineer.
- B. Manufacturers:
  - 1. EpoXeal GS Structural, by BASF Construction Chemicals LLC, Shakopee, MN.
  - 2. Sikadur 35, Hi-Mod LV, by Sika Corporation, Lyndhurst, NJ.
  - 3. SCB Concrevice 1350, by BASF Construction Chemicals LLC, Shakopee, MN.
  - 4. SCB Concrevice 1360, by BASF Construction Chemicals LLC, Shakopee, MN.
  - 5. Equal product, as approved by the Engineer before the start of the work where it will be used.

**PART 3 – EXECUTION**

**3.01 GENERAL**

**DIVISION 03 – CONCRETE**  
**Section 03 60 00 – Grouting**

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- A. Products must be stored, mixed, placed, and cured in accordance with the manufacturer's published specifications. Surface must be prepared in accordance with manufacturer's published specifications unless otherwise indicate herein. In case of a discrepancy the more strict requirements, as determined by the Engineer, must apply.
- B. Concrete surfaces must be thoroughly cleaned and wetted before placing cementitious grout. Steel members to be embedded and grouted must be set level at proper elevation with the use of steel shims or leveling screws before grout placement begins.

**3.02 DOWEL INSTALLATION**

- A. Use pneumatic rotary type drilling hammers for dowel holes, set at medium or light impact. Do not core drill holes unless otherwise shown on the drawings or approved by the Engineer.
- B. Use a drill bit diameter meeting the ICC-ES Report requirements of each dowel system and as recommended by the manufacturer.
- C. Locate drilled holes to avoid existing reinforcing steel and other embedded objects. Prior to drilling, locate the existing reinforcement using a pachometer or other non-destructive methods approved by the Engineer.
- D. When existing reinforcing steel is encountered, obtain criteria from the Engineer for relocating and re-drilling the hole. Patch incomplete holes, or holes that expose existing reinforcing steel, using repair mortar unless otherwise approved by the Engineer. Patch to the full depth of the hole.
- E. Clean, roughen, prepare, wet, and inspect each hole in accordance with the manufacturer's instructions before installing dowels and adhesive, or grout.

**END OF SECTION**

**DIVISION 05 – METALS**  
**Section 05 50 00 – Metal Fabrications**

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**PART 1 – GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 03 30 00 – Cast-in-Place Concrete
- B. Section 03 60 00 – Grouting
- C. Section 09 96 00 – High Performance Coatings

**1.02 DESCRIPTION OF WORK**

Metal fabrications are indicated on the drawings and in the specifications. The work consists of furnishing materials, labor, and equipment for fabricating and/or repairing, galvanizing, and erecting miscellaneous metals and metal fabrications, in accordance with the drawings, notes, and this section.

**1.03 REFERENCE STANDARDS**

- A. American Galvanizers Association (AGA), Quality Assurance Manual.
- B. American Institute of Steel Construction (AISC), Specification for Structural Steel Buildings, AISC 360-16.
- C. AISC, Code of Standard Practice for Steel Buildings and Bridges, AISC 301-16.
- D. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- E. American Welding Society (AWS) D1.1 – 2020, Structural Welding Code – Steel.
- F. AWS A2.4 – 2012, Standard Symbols for Welding, Brazing, and Nondestructive Examination.
- G. Society for Protective Coatings (SSPC), Surface Preparation Specifications.
- H. Washington Association of Building Officials (WABO) Standard No. 27-13,

## **DIVISION 05 – METALS**

### **Section 05 50 00 – Metal Fabrications**

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WABO Welder and Welding Operator Performance Qualification Standard for Structural Steel, Sheet Steel, and Reinforcing Steel.

#### **1.04 QUALITY ASSURANCE**

- A. Demonstrate that the fabricator has a minimum of five (5) years experience fabricating and working similar metals and configurations, including cutting, bending, forming, welding, and finishing.
- B. Welders must be currently certified by the Washington Association of Building Officials (WABO) for structural welding.
- C. Qualify welding procedures, operations, welders, and tackers in accordance with AWS D1.1.
- D. The galvanized coating applicator must specialize in hot-dip galvanizing after fabrication and follow the procedures in the AGA Quality Assurance Manual.
- E. Perform nondestructive testing (NDT) and inspection of all shop and field welds in accordance with AWS D1.1 by an independent testing agency retained by the Port. Welds failing to comply must be repaired or replaced at the Contractor's expense.

#### **1.05 SUBMITTALS**

- A. Detailed and coordinated shop drawings indicating all shop and erection details, including cuts, copes, connections, holes, fasteners, material specifications, welds, surface preparations, and finishes.
- B. Documentation that the fabricator has the qualifications and experience described above.
- C. Welder qualifications and certifications.
- D. Weld Procedure Specifications (WPS's) proposed for use on the project. Submit supporting Procedure Qualification Records (PQR's) for all WPS's not prequalified by AWS.
- E. Galvanized coating applicator's Certificate of Compliance that the hot-dip galvanized coatings meets or exceed the specified requirements of ASTM A123, A153, or F2329 as applicable, and has followed the procedures in the AGA Quality Assurance Manual.
- F. Mill certificates for each heat number of structural and miscellaneous steel.

## **PART 2 – PRODUCTS**

## **DIVISION 05 – METALS**

### **Section 05 50 00 – Metal Fabrications**

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#### **2.01 GENERAL**

- A. Products must be new, free from oxidation, corrosion, and defects, and must be of the specified quality.
- B. Protect materials and fabrications before, during, and after installation from damage. Protect the installed work of other trades from damage.
- C. Protect galvanized finishes and painted coatings from damage by use of padded slings and straps.
- D. In the event of damage, immediately make repairs and replacements in accordance with the fabricator's written recommendations and as approved by the Engineer at no additional cost to the Port.

#### **2.02 STRUCTURAL STEEL**

- A. Plates and bars: ASTM A572, Grade 50, unless noted otherwise.
- B. Angles and channels: ASTM A572, Grade 50.
- C. Wide flange shapes: ASTM A992, Grade 50.
- D. HSS sections: ASTM A500, Grade C.

#### **2.03 BOLTS, NUTS, AND WASHERS**

- A. Anchor bolts and anchor rods: ASTM F1554, Grade 55, headed, meeting the requirements of supplements S1 and S4 unless noted otherwise. For the deck panels provide ASTM F1554, Grade 105, headed, meeting the requirements of supplement S4.
- B. Nuts and washers for Grade 105 anchor bolts and anchor rods: ASTM A563, suitable for grade of bolt or rod and ASTM F436, respectively. For plate washers provide ASTM A572 Grade 50 material.
- C. Economy bolts, hex head bolts, and other bolts not specified as high-strength: ASTM A307, Grade A.
- D. Nuts and washers for economy bolts, hex head bolts, and other bolts not specified as high-strength or Grade 105 anchor bolts/anchor rods: ASTM A563, suitable for grade of bolt, ASTM F844, wide series, maximum thickness, respectively.
- E. High-strength bolts, nuts and lock nuts, and washers: ASTM F3125 Grade 325, ASTM A563-DH, and ASTM F436, respectively.
- F. Hot-dip galvanize fasteners in accordance with ASTM A123, A153, or

**DIVISION 05 – METALS**  
**Section 05 50 00 – Metal Fabrications**

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F2329 as applicable.

**2.04 OTHER MATERIALS**

- A. Drilled-in expansion anchors AISI Type 316 stainless steel: Simpson Strong-Tie Wedge-All anchor, Hilti Kwik-Bolt 3 expansion anchor, or approved equal.
- B. Drilled in adhesive anchors: Anchors must be ICC-ES approved, with confirming evaluation report. Provide hot dipped galvanized anchors unless otherwise specified. Stainless steel anchors must be AISI Type 316 stainless steel provided with stainless steel nuts and washers of matching alloy group and minimum proof stress equal to or greater than the specified minimum full-size tensile strength of the externally threaded fastener.
  - 1. Adhesive for bonding dowels and anchors to concrete must have ICC-ES approval for compliance with the IBC using the selected dowel or anchor in the following conditions:
    - a. Shear and tensile loads
    - b. Cracked and uncracked normal-weight concrete
  - 2. Adhesive for bonding dowels must be:
    - a. Hilti HIT-RE 500-SD
    - b. Powers Pure110+
    - c. Simpson Strong Tie Set XP
    - d. Approved equal as determined by bond strength, ICC-ES approval for required embedment depths, ICC-ES approval for required materials and context in which installation will occur.
- C. Welded headed studs and shear stud connectors: See Section 03 20 00 – Concrete Reinforcement.
- D. Welded threaded studs: ASTM A307 grade A galvanized.
- E. Other materials not specifically described but required must be proposed by the Contractor, new, free of corrosion, and subject to the approval of the Engineer.

**PART 3 – EXECUTION**

**3.01 PREPARATORY REVIEW**

## **DIVISION 05 – METALS**

### **Section 05 50 00 – Metal Fabrications**

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- A. Prior to the work of this section, inspect the installed work of all other trades affecting this work and verify that other work is complete to the point where this installation may commence.
- B. Coordinate and furnish placement drawings, templates, instructions, and directions for installation of embedded anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items.
- C. Verify that the work can be fabricated and installed in accordance with the drawings, specifications, and reference standards. Immediately report discrepancies to the Engineer and do not proceed with fabrication or installation until discrepancies are resolved and direction is provided.

#### **3.02 FABRICATION**

- A. Fabricate miscellaneous metals and metal fabrications in accordance with the approved shop drawings and reference standards.
- B. Shop-fabricate and preassemble all items complete for installation to the extent practicable to minimize field assembly. Disassemble units only as necessary for shipping and handling limitations.
- C. Unless otherwise indicated on the drawings, weld shop connections unless otherwise directed on the drawings. Fabricate joints to be tightly fitting, securely fastened, square, plumb, straight, and true.
- D. Drill or punch holes required for attachments and bolted connections including those of other trades. Do not burn holes.
- E. Weld metal fabrications in accordance with AWS D1.1.
- F. Install and erect miscellaneous metal and metal fabrications in accordance with the design drawings, shop drawings, and reference standards.

#### **3.03 PROTECTIVE COATINGS**

- A. Galvanizing:
  - 1. Hot-dip galvanize miscellaneous metal, metal fabrications, and fasteners, except as noted in this section, in conformance with ASTM A123, A143, A153, A384, A385, and F2329, as applicable.
  - 2. Prepare miscellaneous metal, metal fabrications, and fasteners that have a galvanized coating, and are to be further coated (painted). Clean, prepare, prime, and coat with additional coatings over the galvanized coating as specified in Section 09 96 00 – High Performance Coatings.



## **DIVISION 05 – METALS**

### **Section 05 50 00 – Metal Fabrications**

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3. Identify proposed drain holes or vent holes required to produce galvanized coatings to the specified standards. Clearly locate these holes on the shop drawings.
  4. Galvanize items, to the extent practicable, immediately after fabrication is complete.
  5. Restore damaged galvanizing, including damage due to welding, in accordance with ASTM A780, Annex A1. Do not use zinc-rich paints or cold spray materials. Prepare surfaces and apply restoration materials according to the manufacturer's specifications.
- B. Hot-dip galvanize and coat the following metal fabrications as specified in Section 09 96 00 – High Performance Coatings.
1. Cleats

**END OF SECTION**

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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#### **PART 1 – GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 01 25 00 – Substitution Procedures
- B. Section 05 55 00 – Metal Fabrications
- C. Section 31 62 00 – Driven Piles

##### **1.02 DESCRIPTION OF WORK**

The work includes furnishing all materials, labor, equipment, and accessories for preparing and providing the required finished protective coatings on the fabrications and items identified on the drawings and in the specifications.

##### **1.03 REFERENCE STANDARDS**

- A. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- B. Society for Protective Coatings (SSPC), SSPC Painting Manual, Volume I, 4<sup>th</sup> Edition, “Good Painting Practice”.
- C. SSPC Painting Manual, Volume II, 2008 Edition, “Systems and Specifications”.
- D. SSPC, “The Fundamentals of Cleaning and Coating Concrete”.
- E. SSPC, “Procedure for Determining Conformance to Dry Coating Thickness Requirements”, SSPC-PA2.

##### **1.04 QUALITY ASSURANCE**

- A. Coating application must be by qualified and experienced personnel having demonstrated at least five (5) years of experience in coating applications for marine structures.
- B. Conform to all manufacturers’ specifications and recommendations for achieving published results with each product, application, and condition. If manufacturers’ specifications or recommendations differ from those in these specifications, report the discrepancy to the Engineer and obtain further direction before proceeding.
- C. The Contractor must retain and pay for a coating specialist to inspect all phases of pile surface preparations and coating applications.
- D. The Engineer may inspect coating preparation, application, or touchup at

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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its discretion. Provide access to the Engineer for these inspections and at no additional cost to the Port.

#### **1.05 SUBMITTALS**

- A. A complete list of products and product descriptions proposed for use as coating systems.
  - 1. Provide manufacturer product data and accessories, including specifications, physical characteristics, and performance data.
  - 2. Manufacturer instructions and directions for application of the coating systems.
  - 3. Manufacturer instructions and procedures for use in performing field repairs and touch-ups to the coating systems.
  - 4. Use the same manufacturer's products for all coats unless otherwise approved by the Engineer.
- B. Documentation that key personnel of the coating applicator have at least the minimum experience and certifications described above and below. Demonstrate consistent experience applying the proposed coating systems under similar conditions. List information by individual and include the following.
  - 1. Position or responsibility
  - 2. Employer (if other than the contractor)
  - 3. Name of facility owner
  - 4. Mailing address and telephone number of facility owner
  - 5. Name of contact reference in facility owner's organization
  - 6. Location, size, and description of structure
  - 7. Dates work was performed
  - 8. Description of work performed on structure
- C. Samples of all coatings and finishes proposed for use.
- D. Schedule of coating operations with dates and items listed.
- E. Measurement reports of dry coating thickness on metal surfaces according to SSPC-PA2.

#### **1.06 PRODUCT HANDLING**

- A. Deliver coating and associated materials in undamaged and unopened containers bearing labels of the manufacturer, which indicate the contents and directions for use, storage, and handling. Store materials in a location where the ambient temperature and humidity is not outside the ranges recommended by the manufacturer.

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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- B. Prevent fire. Open containers of inflammable materials only as needed. Keep rubbing cloths, oily rags, etc., in tightly closed metal containers, or remove from the job site daily. Benzene, gasoline, or distillates must not be stored on the job site.
- C. Do not damage the coating materials before, during, or after installation and prevent damage to the installed work and materials of other trades.
- D. In the event of damage, immediately make all repairs and replacements as directed by the Engineer according to the manufacturer's recommendations and procedures at no additional cost to the Port.

## **PART 2 – PRODUCTS**

### **2.01 COATING SYSTEMS**

- A. Manufacturers who have provided acceptable coating systems for past marine projects include the following. This does not imply that products from any manufacturer listed below will be acceptable.
  - 1. Carboline Protective Coatings (1-206-243-6494)
  - 2. International Marine Coatings of AkzoNobel (1-206-763-8003),
  - 3. Sherwin Williams Co Industrial and Marine Coatings (1-360-931-4645)
  - 4. Tnemec Company (1-206-762-5755)
  - 5. Wasser High-Tech Coatings (1-253-218-2222)
  - 6. Fields Company LLC (1-253-627-4098)
- B. Coating systems selected for each type of finish surface must be products of a single manufacturer. Coating materials must be suitable for corrosion protection in an aggressive marine environment.
- C. Materials not specifically noted but required for the work, such as thinners, or other materials, must be products of the approved coating manufacturer or compatible products accepted by the coating manufacturer.
- D. Mix products for coating systems according to the manufacturer's directions. Do not deviate except with written approval of the Engineer.

### **2.02 SUBSTITUTIONS**

- A. Manufacturer-specific coating systems are referenced in this specification. The manufacturer's product identification numbers indicate the product type, quality, and performance required for a specific application. Bids must be based upon the manufacturer-specific coating systems referenced herein.
- B. Submit in writing a request to the Engineer for review and approval prior to material procurement and in accordance with Section 01 25 00 – Substitution Procedures. Substantiating technical data and documentation

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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are required as described above for all submittals.

- C. Proposed coating system substitutions will be reviewed and evaluated, subject to the approval of the Engineer, based on equivalency to the coating systems referenced in this herein. Substitute coating system data and documentation that does not demonstrate equivalency will not be approved.
- D. Approved substitutions must be at no additional cost to the Port.

#### **2.03 COLOR SCHEDULE**

- A. OSHA safety yellow: Cleats.
- B. Black: Steel sheet piles.
- C. Standard gray: All other items scheduled for coating.

#### **2.04 COATING SCHEDULE**

- A. Galvanized surfaces to be coated, and above mean higher high water (MHHW).
  - 1. Follow the requirements of ASTM D6386 and the requirements of this section for preparation of galvanized surfaces for coating. Verify age of surface prior to preparation (newly galvanized, partially weathered galvanized, etc.) in accordance with ASTM D 6386 and follow applicable provisions of ASTM D 6386.
  - 2. Solvent cleaned to remove contaminants using a biodegradable, water soluble, cleaner in conformance with SSPC-SP1.
  - 3. Solvent cleaned galvanized surfaces must receive a light, sweeping abrasive sand blast to create a toothed surface profile in accordance with SSPC-SP7.
  - 4. Primer: Intergard 345 epoxy primer by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 5 to 6 mils on all surfaces.
  - 5. Topcoat: Intergard 345 epoxy primer by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 5 to 6 mils on all surfaces.
  - 6. Non-skid coating: Intergard 631 epoxy non-skid deck finish EK 6312A by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 40 to 44 mils on specified surfaces.
- B. Non-galvanized surfaces to be coated, and above MHHW.
  - 1. Surfaces must be “white metal blast cleaned,” conforming to SSPC-SP5.
  - 2. Primer: Interzinc 52, zinc-rich epoxy primer by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 2.5 to 3 mils on all surfaces.

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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3. Top coat: Intergard 345 epoxy primer by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 5 to 6 mils on all surfaces.
  4. Non-skid coating: Intergard 631 epoxy non-skid deck finish EK 6312A by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 40 to 44 mils on specified surfaces.
- C. Galvanized surfaces to be coated, and with any part below MHHW.
1. Follow the requirements of ASTM D6386 and the requirements of this section for preparation of galvanized surfaces for coating. Verify age of surface prior to preparation (newly galvanized, partially weathered galvanized, etc.) in accordance with ASTM D 6386 and follow applicable provisions of ASTM D 6386.
  2. Solvent cleaned to remove contaminants using a biodegradable, water soluble, cleaner in conformance with SSPC-SP1.
  3. Solvent cleaned surfaces must receive a light, sweeping abrasive sand blast to create a toothed surface profile in accordance with SSPC-SP7.
  4. Primer: Interzone 954 modified epoxy barrier coat by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 10 to 12 mils on all surfaces.
  5. Topcoat: Interzone 954 modified epoxy barrier coat by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 10 to 12 mils on all surfaces.
- D. Non-galvanized surfaces to be coated, and with any part below MHHW.
1. Solvent cleaned to remove contaminants using a biodegradable, water soluble, cleaner in conformance with SSPC-SP1.
  2. Abrasive blast to near-white metal in accordance with SSPC-SP10. Provide an angular surface profile of 2 to 4 mils unless another profile is required for the coating material selected.
  3. Primer: Interzone 954 modified epoxy barrier coat by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 10 to 12 mils on all surfaces.
  4. Topcoat: Interzone 954 modified epoxy barrier coat by International Marine Coatings of AkzoNobel, applied to a dry film thickness of 10 to 12 mils on all surfaces.

## **PART 3 – EXECUTION**

### **3.01 GENERAL**

- A. Apply coatings in accordance with the manufacturer's recommendations for each application. Adhere to the manufacturer's provisions, directions, and

## **DIVISION 09 – FINISHES**

### **Section 09 96 00 – High Performance Coatings**

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procedures for the following.

1. Surface preparation
  2. Ambient temperature and humidity monitoring
  3. Mixing techniques
  4. Minimum and maximum thickness per coat to achieve total thickness
  5. Minimum time between coats
- B. Use clean equipment and brushes. Spread materials evenly without runs, drips, sags, laps, brush marks, variations in color, texture, or sheen, and without “holidays”.
- C. Vary color or sheens between coats and apply all coats to uniform thicknesses. Refinish any work determined defective or damaged, and repair all defective or damaged work at no additional cost to the Port. Leave finished surfaces clean, completely covered, and uniform in appearance.

#### **3.02 APPLICATION**

- A. The location, lettering size, and style of the surface regulatory markings must be as indicated on the drawings and in the specifications.
- B. Number of coats as specified herein.
- C. Thickness of coats: Use ample undiluted materials; apply in uniform thickness over entire areas; do not exceed manufacturer’s recommended spreading rate per gallon.
- D. Tint prime coats if necessary to obtain uniform finish coats.

#### **3.03 TOUCHUP COATING**

- A. Restore coating damaged due to field welding or other Contractor activities must be immediately to its original thickness after thorough cleaning and necessary surface preparation according to the written manufacturer’s recommendations.
- B. Touchup coating must be at the Contractor’s expense.

#### **3.04 INSPECTION**

- A. The Contractor must perform measurements of dry film thickness on all metal surfaces by means of magnetic gages as described in SSPC-PA2.
- B. Copies of the measurement reports must be provided to the Engineer.
- C. The Engineer will perform verification testing/inspection at the Port’s expense. The Contractor must make arrangements for these tests/inspections at all facilities performing coating applications and give the Engineer a notice at least 14 calendar days in advance of each coating operation.

**DIVISION 09 – FINISHES**  
**Section 09 96 00 – High Performance Coatings**

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**END OF SECTION**



**DIVISION 31 – Earthwork**  
**Section 31 00 00 – Earthwork**

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**PART 1 – GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 01 45 00 – Quality Control
- B. Section 01 57 19 - Temporary Environmental Controls
- C. Section 01 71 23 – Field Engineering
- D. Section 02 32 00 – Geotechnical Investigations
- E. Section 02 41 00 – Demolition
- F. Section 32 12 16 – Asphalt Paving

**1.02 DESCRIPTION OF WORK**

- A. The work includes excavation and backfill of upland areas as indicated on the drawings and in the specifications.
- B. This section also describes quality control procedures including testing and characterization requirements for various material sources and products.

**1.03 REFERENCE STANDARDS**

- A. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- B. Standard Specifications for Road, Bridge, and Municipal Construction, M41-10, 2023 edition, by Washington State Department of Transportation (WSDOT).
- C. State of Washington, Washington Administrative Code (WAC). Regulations are designated by basic reference in this section.

**1.04 QUALITY ASSURANCE**

**DIVISION 31 – Earthwork**  
**Section 31 00 00 – Earthwork**

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- A. On-Site Testing and Inspection: Provide an independent testing firm to provide on-site testing and inspection services. Perform sampling and testing for compliance with the contract provisions in accordance with Section 01 45 00 – Quality Control. The Port may perform additional quality assurance testing. Assist the Port in obtaining samples. The Port will provide copies of test results performed by the Port at no cost. Tests conducted for the sole benefit of the Contractor must be at the Contractor's expense.
- B. Compaction Control Tests: Provide an independent testing firm to perform laboratory and on-site field compaction control tests in accordance with the applicable provisions of these specifications.
  - 1. The compaction control density must be the maximum density at optimum moisture content as determined by ASTM D 1557. Achieved compaction of materials in the field shall be no less than 95% of the maximum dry density unless noted otherwise on drawings.
  - 2. Perform field tests to determine in-place compliance with required densities as specified, in accordance with ASTM D 6938.
- C. Comply with the applicable provisions of all pertinent codes and regulations. References made herein to materials and execution of work may refer to designations published in the WSDOT Standard Specifications.

**1.05 SITE CONDITIONS**

- A. Subsurface investigations have been made upland of the existing wharf in connection with this project. Review and make determinations about the anticipated soil and foundation conditions from the information and report described in Section 02 32 00 – Geotechnical Investigations.
- B. Anticipate encountering groundwater at or near the existing ground surface at much of the project site. The groundwater elevation will vary depending upon proximity to the shoreline, soil conditions, tidal conditions, and weather.
- C. Verify the location of existing utilities at the site and use an independent private locate company to assist. Utilities which are to remain must be protected from damage and remain operational. Damage to utilities which are to remain must be repaired by the Contractor at its own expense.

**1.06 SUBMITTALS**

**DIVISION 31 – Earthwork**  
**Section 31 00 00 – Earthwork**

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- A. Submit an Earthwork Plan that documents the proposed approaches, equipment, and means and methods of accomplishing the work. The Plan must include the sequencing approach for the completion of earthwork. This submittal is for the Engineer's general information and does not relieve the Contractor of complete responsibility for the successful performance of the work.
- B. Before bringing to the site, perform, pay for, and submit test reports for imported materials in accordance with the off-site aggregate source characterization and characterization testing including sieve analyses, certified test results for source materials, and aggregate source characterization as required in this specification.
- C. Before bringing to the site, perform, pay for, and submit test reports for imported materials to determine the compaction control density of off-site aggregate source materials, in accordance with the requirements for compaction control tests.

**PART 2 – PRODUCTS**

**2.01 CHARACTERIZATION TESTING, REPORTING, AND CERTIFICATION**

- A. Materials and products must be of the quality, size, shape, and gradation as specified in the contract documents, or must be submitted for approval by the Engineer as equal prior to delivery to the site or use on the project.
- B. Provide and pay for source characterization, testing, reporting, and certification for off-site aggregate materials to show the materials meet the requirements described below. Provide documentation for the Engineer's approval demonstrating that imported materials from a borrow pit meet the contract requirements and certify that the materials are free of regulated materials.
- C. Physical testing is required for all import material. Physical characterization testing shall be conducted at an accredited testing laboratory per WSDOT. Provide the name of the material source with each sample submitted. Physical testing requirements include:
  - Grain Size Distribution / Sieve Analysis: ASTM D 422
  - Moisture Content: ASTM D 2216
  - Maximum Dry Density: ASTM D 1557

**2.02 OFF-SITE AGGREGATE SOURCE CHARACTERIZATION**

**DIVISION 31 – Earthwork**  
**Section 31 00 00 – Earthwork**

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- A. Characterize, test, report, and certify imported materials as specified in Section 2.01 to assure that they meet the contract document requirements; are natural and native; and are free of debris, other deleterious substances, regulated materials, and recycled materials.
- B. Submit a characterization report and certification, for approval by the Engineer, for imported material prior to placement on-site.
  - 1. Base the characterization on multiple samples, include source identification, analyses of a material source sample, and a source inspection report.
  - 2. Once approved and imported to the site, perform an on-site inspection of the material to verify that it is the material sampled, characterized, and approved.
  - 3. Provide source identification documentation of the origin of imported materials and maps identifying specific location(s) of material source(s). Submit the chemical and physical characterization reports provided by the material supplier.
  - 4. Inspect material sources for visual compliance with the contract documents. Visually inspect import material upon delivery to the site. Materials shall be inspected for presence of foreign, recycled, or reprocessed material. Report anomalies to the Engineer immediately, both verbally and in writing.
  - 5. Provide the Engineer a minimum one week notice of such inspections. The Engineer may accompany the Contractor to witness source inspections. Witnessing an inspection shall in no way be construed as a substitute for compliance with the specifications and in no way shall be construed as approval of any particular source of material.
  - 6. The Engineer may perform an independent inspection and the source material may be re-tested. Material may be rejected as a result of substandard test results from the re-test.
- C. The characterization, testing, reporting, and certification requirements described above may be waived if it's demonstrated, as determined by the Engineer, that the material is from a known source, of natural origin, is supplied by a commercial material supplier, and is free of regulated materials at the concentrations as defined above. The information used to demonstrate compliance must be recent, contain sufficient quality

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assurance/quality control data with results, and be from a laboratory recognized and acceptable to the Port.

- D. Any imported materials determined by the Engineer to be substandard must be rejected. Remove rejected material and rejected material stockpiles from the site at no cost to the Port.

**2.03 ON-SITE BACKFILL SOURCE CHARACTERIZATION**

Excavated in-situ soils generated during site construction activities may not be used or reused as backfill material.

**2.04 STRUCTURAL FILL/GRAVEL BORROW**

- A. Use where structural fill is shown on the drawings.
- B. Meet the requirements of WSDOT Section 9-03.14(1), Gravel Borrow.
- C. Characterize, test, and certify imported materials as specified herein.

**2.05 CRUSHED SURFACING BASE COURSE**

- A. Meet the requirements of WSDOT Section 9-03.9(3) Crushed Surfacing.
- B. Characterize, test, and certify each as specified herein.

**2.06 RECYCLED MATERIALS**

Transport asphalt removed by demolition activities to a Contractor-selected and Port approved recycler. Do not reuse on-site. Refer to Section 02 41 00 – Demolition.

**2.07 GRAVEL BACKFILL**

- A. Meet the requirements of WSDOT Section 9-03.12(2) Gravel Backfill for Walls.
- B. Characterize, test, and certify each as specified herein.

**PART 3 – EXECUTION**

**3.01 SUSPECT MATERIALS, SAMPLING, TESTING, AND DISPOSAL**

- A. Excavated materials must be inspected and categorized as suspect or non-suspect by the Contractor. The Engineer may also identify suspect material

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to the Contractor. Soil will be considered suspect if it has an odor, sheen, or color typical of soil containing regulated materials.

- B. Suspect materials shall be stockpiled and segregated from other stockpiles or materials. Provide and pay for sampling and characterization testing for suspect materials prior to removal from the site.
  - 1. At the Contractor's expense, suspect soils characterized to contain regulated materials, or not meeting the requirements of the contract documents, must be loaded into trucks and disposed of at a Port approved disposal facility capable of receiving regulated material.
  - 2. Surplus suspect soils characterized to be free of regulated materials, will be considered the same as non-hazardous excess material. Surplus / excess soils must be loaded, transported, hauled, and disposed of off-site in accordance with the contract documents and applicable laws and regulations and at the Contractor's expense.

**3.02 EXCAVATION AND BACKFILLING – GENERAL**

- A. Excavate and backfill as specified herein, within the tolerances established in the contract documents, and conform to recognized industry standards, whichever are more stringent.
- B. Excavation material: Homogeneous or mixtures of naturally occurring earth, fill, sand, gravel, stones, clays, or loam, moved to facilitate the construction of structures, trenches, and associated work.
  - 1. Excavation material must be moved with the use of mechanical equipment, such as shovels, clamshells, loaders, bulldozers, graders, rippers, etc., but must not require drilling and blasting or drilling and line breaking.
  - 2. Do not excavate by the sluicing method.
  - 3. Where possible, excavation must be removed in horizontal layers, and in such a way that the resulting stockpiles are a blend of the naturally occurring materials.
- C. Backfill by placing material in horizontal layers upon earth which has been undisturbed, stabilized, or otherwise approved by the Engineer.
  - 1. Use Gravel Borrow unless noted otherwise.

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2. At the time of compaction, the moisture content of that portion of the material passing a U.S. Standard No. 4 sieve must not be more than three (3) percentage points above or below the optimum moisture content as determined by Compaction Control Density Tests herein.
  3. Construct in compacted layers of uniform thickness. Carry the layers up full width from the bottom. Compact with modern, efficient compacting units, or as directed by the Engineer. The compacting units may be of any type, provided they are capable of compacting each lift of the material to the specified density. The Engineer may order the use of any particular compacting unit discontinued if it is not capable of compacting the material to the required density within a reasonable time, or if the equipment may damage underlying or adjacent soils or structures.
  4. Construct backfill areas in accordance with WSDOT Section 2-03.3(14)C, Method C. Compact each layer to 95% of the maximum density as determined by compaction control tests described herein. Use small mechanical or vibratory compactor units to compact the layers adjacent to structures that are inaccessible to other compaction equipment.
- D. Plan and stage excavation and backfill activities so they occur above the tidal water level.
- E. Segregate excavated materials and import backfill material and protect material stockpiles from the weather by lining and covering stockpiles with waterproof sheeting and managing stormwater runoff in accordance with Section 01 57 19 - Temporary Environmental Controls. Import backfill material not properly protected which becomes unsuitable or contaminated must be replaced at no additional cost to the Port.
- F. Separate stockpiles of unsuitable material shall be hauled off-site to a Port approved disposal facility that is appropriate for the material being disposed.

**3.03 EXCAVATION FOR STRUCTURES**

- A. Excavate as necessary to the lines and grades indicated on the drawings.
- B. Excavation below the designed depth, except as directed by the Engineer, shall be backfilled with CDF, Gravel Borrow, or other backfill material specified by the Engineer and compacted as specified, at the Contractor's expense.

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- C. Brace and shore sides of excavations. Comply with federal, state, and local regulations regarding shoring, bracing, and other protection requirements. Perform work in accordance with the requirements of WAC 296-155, Part N, Excavation, Trenching and Shoring.
- D. Keep water out of excavated pits and trenches by pumping or other means of dewatering. Keep the water level below the bottom of concrete pours before, during, and for a minimum of three days thereafter. Manage construction water in accordance with Section 01 57 19 - Temporary Environmental Controls.

**3.04 UNSUITABLE MATERIALS EXCAVATION AND DISPOSAL**

- A. Unsuitable materials, such as peat, muck, water-impregnated clays, swampy or other undesirable materials, including buried logs, stumps, or trash must be removed to the depth designated by the Engineer.
- B. Unsuitable material excavated must be replaced with CDF, Gravel Borrow, or other backfill material specified by the Engineer. Contact the Engineer for direction when replacing unsuitable materials.
- C. Unsuitable materials, excess material, and excavated material must be tested and then transported off-site to a proper disposal facility, all at the Contractor's expense.

**3.05 FILL AND BACKFILL FOR STRUCTURES**

- A. Beneath structures, place a minimum of 6-inches of Gravel Borrow, or more if specified on drawings, over compacted subgrade. If subgrade is soft and cannot be adequately compacted, contact the Engineer for direction.
- B. Remove water from excavated areas, by pumping or other means, before placing backfill material.
- C. Compact subgrade, as specified below, before placing fill.
- D. Do not place and compact backfill material against recently poured concrete until the concrete has attained the design compressive strength and has set and cured a minimum of 7 days, unless otherwise approved by the Engineer.
- E. Place backfill to the lines and grades indicated on the drawings.

**3.06 COMPACTION**



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A. Subgrade Preparation:

1. Grade subgrade within a tolerance of 0.05 foot plus or minus in 10 feet, ready for base course (wherever pavement is to be furnished).
2. Immediately prior to placement of backfill materials, clean the entire width and length of the area to be backfilled. Remove debris and organics and dispose of as directed by the Engineer.
3. Drain depressions or ruts that contain water.
4. Shape the entire subgrade to a smooth uniform surface, true to line, grade, and cross section in accordance with the plans and as directed by the Engineer.
5. Compact the subgrade material to a depth of 6 inches to 95% of the material's maximum dry density as determined by compaction control tests described herein or to a uniformly firm and unyielding condition approved by the Engineer. If soft or spongy material underlying the subgrade precludes satisfactory compaction, loosen, aerate, or excavate, replace and compact to the required density as directed by the Engineer.

B. Perform compaction with approved compaction equipment suited to the materials and the area being compacted. Moisten or aerate material as necessary to provide the moisture content that is in conformance with this specification and will readily facilitate obtaining the specified compaction with the equipment used.

C. Uniformly compact each lift of material placed to the density indicated for the specific material and use set forth in this section. The percent of density required is in relation to the maximum density obtainable at optimum moisture content as determined by the Compaction Control Tests.

**3.07 PREPARATION FOR CRUSHED STONE SURFACING / BASE COURSE:**

A. Preparation of Subgrade:

1. Immediately prior to placement of crushed stone surfacing or base course, clean the entire width of the area of debris and dispose of as directed by the Engineer. Drain depressions or ruts which contain water.
2. Shape the entire subgrade to a smooth uniform surface, true to line, grade, and cross section. Compact the subgrade material to 95% of

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the maximum density as determined by Compaction Control Density Tests herein or to a uniformly firm and unyielding condition approved by the Engineer. If soft or spongy material underlying the upper six inches of the area being prepared precludes satisfactory compaction of the upper six inches, loosen, aerate, or excavate, replace and compact to the required density as directed by the Engineer.

3. Remove and dispose of excess subgrade material. Subgrade areas deficient in materials shall be brought to grade by importing suitable materials from other areas.
3. Once subgrade is prepared, maintain and protect subgrade in the finished condition until the first course of crushed stone surfacing/base course has been placed.

**B. Finishing Subgrades:**

1. Before paving material is placed, bring the subgrade to the proper line, grade and cross section and maintain until the base course and paving is placed, except that extra depth of subgrade for increased thickness of the pavement, for pavement anchors, for pavement headers, and for increased thickness at the edges of the pavement may be removed just before the pavement is placed.
2. Compact the subgrade for pavement to 95% of maximum density as defined by the Compaction Control Density Tests described herein.

**C. Subgrade Protection:**

1. Take all precautions necessary to protect the subgrade from damage; hauling over the finished subgrade must be limited to that which is essential for construction purposes.
2. Equipment used for hauling over the prepared subgrade which causes damage to the prepared subgrade or underlying materials, or as determined by the Engineer, must be removed from the work at the request of the Engineer.
3. Repair cuts, ruts and breaks in the surface of the subgrade prior to placing surfacing, treated base, or paving materials at no cost to the Port.
4. Protect the prepared subgrade from both the Contractor's traffic and public traffic and maintain the subgrade by blading and rolling as

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frequently as may be necessary to preserve the subgrade in an undamaged and complete condition.

**3.08 FIELD QUALITY CONTROL**

- A. Density Tests: Test compacted fill and backfill to verify compliance with specified requirements in accordance with ASTM D6938. Conduct tests not less than the following:
1. Perform an initial test whenever material changes or source changes then follow minimum frequency below.
  2. Expansive Horizontal Areas: One test per 100 cubic yards, or fraction thereof, of fill or backfill placed.
  3. Confined Areas: One test every lift of fill or backfill placed.

**3.09 EXCESS MATERIAL DISPOSAL**

Dispose of excess soils and those that the Engineer determines to be excess material. The excess soils must be disposed at a location permitted to receive the type of excess soils to be disposed. Prior to removing from the site, perform testing of the material at no cost to the Port.

**END OF SECTION**

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#### **PART 1 – GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

- A. The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:
  - 1. Section 01 45 00 – Quality Control
  - 2. Section 01 71 23 – Field Engineering
  - 3. Section 31 62 00 – Driven Piles
  - 4. Section 31 51 13 – Soil Anchors

##### **1.02 DESCRIPTION OF WORK**

- A. The work includes installation, maintenance, and removal of monitoring instruments as well as reporting requirements for instruments to measure structure movements.
- B. This section also describes vibration monitoring requirements and condition inspection requirements.

##### **1.03 QUALITY ASSURANCE**

- A. Perform all surveying activities under the direct supervision of a licensed Professional Land Surveyor registered in the State of Washington and experienced in specified work.
- B. Vibration monitoring specialist: Provide at least one qualified person with experience performing the installation, data collection, monitoring, and analyzing of vibration instrumentation on a minimum of three projects in the past five (5) years.
- C. Conditions inspection engineer: Professional Engineer registered in the State of Washington and has completed a minimum of three projects providing construction condition inspections in the past five (5) years.

##### **1.04 SITE CONDITIONS**

- A. The Safe Coast Seafood facility is an active area. Do not interrupt the operation of the facility at any time without obtaining prior written approval from the Port.

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#### **1.05 SUBMITTALS**

- A. Qualifications.
- B. Instrumentation Installation and Monitoring Plan a minimum of 2 weeks before mobilization to the project site:
  - 1. Plan showing proposed instrumentation locations.
  - 2. Instrument type, action levels, and monitoring schedule for each monitoring location.
  - 3. Schedule and outline of procedures for installation of instrumentation including the timing of installation, baseline reading schedule, monitoring, and removal.
  - 4. Sample reports showing how instrumentation data will be shown for each instrument type.
- C. Location (as-built) data within 5 calendar days after completing installation of each settlement point including the instrument identification number.
- D. Results of monitoring data, including the following:
  - 1. Present baseline and monitoring data using the project datum.
  - 2. Transmit electronic monitoring data to the Engineer within 24 hours of the readings being taken.
  - 3. On each set of data, clearly indicate the instrument identification number and location, reference elevation and depth for readings as appropriate, directions of movement as appropriate or directed, the date and time that the readings were taken, and names of individuals who performed the measurement.
  - 4. Reporting Data from Settlement Points:
    - a. Licensed surveyor shall set control for settlement points and supervise surveying of monitoring points.
    - b. Electronic monitoring data shall be readable in Microsoft Excel.
    - c. A description of any construction activity at the time of readings.
    - d. Provide tables of current and past readings and Action Levels for each instrument.
  - 5. Reporting Data from Vibration Monitoring:

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- a. Location of the vibration monitor at the time of reading.
  - b. Distance between the instrument and the construction activities at the time of the reading.
  - c. Histogram of peak particle velocities (PPV) with time. Total time plotted not to exceed 24 hours.
  - d. Tables of maximum PPV values for the recording period with Action Levels.
- E. Pre-construction Condition Inspection Report.
- F. Post-construction Condition Inspection Report.

## **PART 2 – PRODUCTS**

### **2.01 GENERAL**

- A. All reading devices, fixtures, cables, and necessary software for the various monitoring systems are to be provided by the Contractor.
- B. Use instruments and equipment that are the manufacturer's standard products without modifications.

### **2.02 SETTLEMENT POINTS**

- A. Settlement points consist of surface settlement points and optical survey points.
- B. Surface Settlement Points: Use Survey Points that are 1-inch diameter steel rods with domed ends or driven survey nails (i.e., PK Nails).
- C. Optical Survey Points (Survey Points): Adhesive-backed targets, Leica Models # 635-317, 635-318, or 635-319 or accepted equal.

### **2.03 SURVEY SYSTEM**

- A. The accuracy requirements established in this Section apply to the final data, including the composite effects of reflectors, readout instruments, measurement methods, temperature, operator variability, and other contributing factors.
- B. An associated confidence level of 90 percent for all accuracies in this Section.
- C. Surveyed points within 0.01 foot vertical and within 0.01 foot horizontal.

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#### **2.04 VIBRATION MONITORING GEOPHONES**

- A. Portable seismographs for monitoring velocities of ground vibrations resulting from construction activities, Model Minimate Plus, as manufactured by InstanTel Inc. or approved equal. Include the following:
  - 1. Three channels for vibration monitoring.
  - 2. Alarm when vibrations exceed Maximum Level.
  - 3. Two power sources: internal rechargeable battery and charger and alternating current, capable of supplying power to monitor vibrations continuously per the requirements of this section.
  - 4. Self-triggering waveform capture mode capable of recording single-component peak particle velocities and frequencies of peaks.
  - 5. Continuous monitoring mode capable of recording single-component peak particle velocities, and frequency of peaks with an interval of one minute or less.
- B. Measurement Requirements
  - 1. Range: 0.005 to 10 inches per second.
  - 2. Accuracy: +/-5 percent of the measured peak particle velocity or better at frequencies between 4 Hertz and 125 Hertz.
  - 3. Resolution: 0.005 inches per second or less.
- C. Factory calibrated within 1 year of data acquisition.
- D. Computer software: for performing continuous monitoring, data downloading, analysis, and to produce reports.

#### **PART 3 – EXECUTION**

##### **3.01 GENERAL**

- A. Be responsible for safety during all instrument installation and monitoring activities. Conduct all instrumentation activities in accordance with applicable Federal, State, and local regulations and all project-specific health and safety plans. The most stringent regulations and plans apply where conflicting requirements are encountered.
- B. Allow time for and include all instrumentation, monitoring baseline readings, and associated work in the construction schedule.

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- C. Verify locations of buried utilities before installing instruments that involve digging and drilling. The Contractor is solely responsible for damage to utilities, structures, or other facilities.

#### **3.02 INSTRUMENT INSTALLATION AND MAINTENANCE**

- A. Install optical survey points on the Safe Coast Seafood facility six (6) feet above the existing ground surface. Place optical survey points around the perimeter of the building and at each building corner. The distance between the points shall not exceed 100 feet.
- B. Install surface settlement points in the paved area between the bulkhead wall and the Safe Coast Seafood facility. Surface settlement points shall be placed 10 to 15 feet from the bulkhead wall. The distance between the points shall not exceed 50 feet.
- C. Two vibration monitors shall be placed between the Safe Coast Seafood facility and the sheet piles being installed. The vibration monitors should be located adjacent to the structure. The vibration monitor locations will vary each day so they can be placed in the area between pile installation and the Safe Coast Seafood facility.
- D. Install vibration monitors level and firmly mount on surface slab of concrete or asphalt or firmly anchor to undisturbed, native soil.
- E. Install all instruments in accordance with the manufacturer's recommendations and requirements unless otherwise specified.
- F. Maintain and protect all monitoring points and replace damaged instrumentation at no additional cost.

#### **3.03 INSTRUMENT MONITORING**

- A. Monitor instruments in accordance with the approved Instrumentation and Monitoring Plan and this Section.
- B. Settlement Points shall be measured relative to survey benchmarks, which shall be located more than 150 feet away from construction.
- C. For settlement points, provide baseline readings by conducting three separate and complete sets of readings on each point at least one day apart each. Baseline readings shall be provided a minimum of one week prior to demolition, pile removal, and new bulkhead construction activities.



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Readings will be taken with sufficient accuracy to produce similar results in each of the three readings.

- D. Settlement monitoring frequency shall be a minimum of once per week during pile installation work (for both the dock and bulkhead) and tieback installation work.
- E. For vibration monitoring, provide background vibration monitoring on two days for at least 4 hours per day. Provide background vibration monitoring a minimum of one week prior to dock demolition, pile removal, new bulkhead construction and new dock construction activities.
- F. Vibration monitoring shall be continuous during dock demolition, pile removal, pile installation, and tieback installation.
- G. If vibration levels exceed maximum levels, alarm shall sound.

#### **3.04 ACTION LEVELS**

- A. The two action levels are Trigger Level and Maximum Level.
- B. Trigger Levels:
  - 1. Settlement Points: 0.6 inches for the vector sum of vertical and horizontal movement.
  - 2. Vibration Monitoring: 0.5 inch/sec for the PPV for all frequencies.
- C. Maximum Levels
  - 1. Settlement Points: 1.0 inches for the vector sum of vertical and horizontal movement.
  - 2. Vibration Monitoring:
    - a. Frequencies less than 20 Hz: 1.0 inch/sec for the PPV.
    - b. Frequencies greater than 20 Hz: 2.0 inch/sec for the PPV.
- D. Exceeding Trigger Levels
  - 1. Take immediate steps to stop the cause of exceedance.
  - 2. Notify the Engineer immediately.
  - 3. Verify measurement.

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4. Perform a During-Construction condition assessment.
  5. Develop and provide a Corrective Action Plan within 24 hours. Include the identified cause of the exceedance.
  6. If trigger levels are exceeded for vibration monitoring or settlement points, double the frequency of readings of the settlement points. Continue increased frequency of monitoring until the relative incremental change of movement has returned to the pre-action trigger level rate or stabilized as determined by the Engineer.
- E. Exceeding Maximum Levels:
1. Follow all steps for exceeding Trigger Levels in this Section.
  2. If Maximum Levels for vibration monitoring are exceeded, suspend work, and adjust construction activities to lower vibrations.
  3. If Maximum Levels for settlement points are exceeded, the Engineer may suspend work activities at that location and require the submittal of alternative proposals for minimizing further movements.
  4. If work activities are suspended, obtain approval from the Engineer prior to restarting work activities at that location, under approved procedures.

#### **3.05 REMOVAL OF INSTRUMENTATION**

- A. The removal of survey points shall be completed within one month following the completion of monitoring, as approved by the Engineer.
- B. Remove instrumentation identification devices and protective barriers. Restore disturbed or damages surfaces to the conditions existing before installation.

#### **3.06 PRE-CONSTRUCTION, DURING-CONSTRUCTION, AND POST-CONSTRUCTION CONDITION INSPECTIONS**

- A. Pre-construction condition inspection shall be completed prior to the start of construction.
- B. During-Construction condition inspections shall be completed after exceeding trigger and maximum levels.
- C. Post-construction condition inspection shall be completed after the completion of construction.

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- D. Complete a pre-construction and post-construction condition inspection for the Safe Coast Seafood facility buildings.
- E. The condition inspection of the structure shall be performed by the Condition Inspection Engineer.
  - 1. Provide adequate numbers of photos of the building exterior and interior to document existing condition of structure and auxiliary buildings, such as garages, and include all cracks, sticking doors and windows, and structural distress areas. Photographs shall be taken by the Condition Inspection Engineer.
  - 2. Prepare drawings to scale and indicate location of all existing cracks, sticking doors and windows, and structural distress.
  - 3. Measure, photograph, and record all existing crack widths.
  - 4. Measure, photograph, and record all new and developing crack widths.
  - 5. Place 2-dimensional crack gauges, such as Avongard or similar, at critical and representative locations during preconstruction inspection.
  - 6. The measurements shall be taken at least once prior to construction and once after construction, prior to removal.
  - 7. Remove crack gauges after post-construction condition inspection is performed. Restore disturbed or damages surfaces to the conditions existing before installation.
- F. Document results of the condition inspections in the Preconstruction Condition Inspection Report and the separate Post-Construction Condition Inspection Report that shall be prepared, dated, stamped, and signed by the Condition Inspection Engineer.

**END OF SECTION**

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#### **PART 1 - GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Related Sections include the following:

- A. Section 01 45 00 –Quality Control
- B. Section 01 71 23 – Field Engineering
- C. Section 02 41 00 – Demolition
- D. Section 31 00 00 – Earthwork

##### **1.02 DESCRIPTION OF WORK**

- A. This section covers stonework required to construct the slope protection.
- B. All arrangements must be made prior to bid opening for rights-of-way, for adequate investigation and exploration, and for selection, development, and operation of the quarry to supply stones for this contract of the weights, sizes, and quality specified herein. Individual stone will be inspected for acceptance at the construction site.

##### **1.03 REFERENCE PUBLICATIONS**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

#### **American Society for Testing and Materials (ASTM)**

C88-99	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate.
C127-01	Specific Gravity and Absorption of Coarse Aggregates
C131-01	Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
C535-01	Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
D2938-95	Unconfined Compressive Strength of Intact Rock Core Specimens.
D 4992-01	Evaluation of Rock to be used for Erosion Control

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**U.S. Army Corps of Engineers Handbook for Concrete and Cement (CRD-C)**

CRD-C 148-69 Method of Testing Stone for Expansive Breakdown on Soaking in Ethylene Glycol.

CRD-C 144-92. Resistance of Rock to Freezing and Thawing

**1.04 DEFINITIONS**

- A. Revetment: Stone structure constructed adjacent to and along existing shoreline. Construction requires excavation, grading, and fill.
- B. Scour protection: Stone structure constructed adjacent to existing concrete walls at the west and east sides of the project.
- C. Stone: Armor and Bedding Stone for revetment and scour protection structures.
- D. Armor Stone: Large stones comprising an armor layer of revetment and scour protection structures as shown on the Drawings.
- E. Bedding Stone: Small stones comprising a bedding layer or filter layer between the armor layer and the geotextile fabric of the revetments shown on the Drawings.

**1.05 SUBMITTALS**

- A. The following items shall be submitted to the Engineer for review in accordance with Section 01 33 00:
  - 1. Product specifications for geotextile, and other materials herein specified.
  - 2. Immediately after award of this contract and within 5 business days of receipt of Notice to Proceed, all pertinent test records (for example, stone quality, testing results, gradation and previous use on coastal structures) from the stone source shall be submitted to the Engineer for review. Documentation shall include the following:
    - i Name and location of material source, and name and telephone number of supplier.
    - ii Laboratory test results for test procedures listed in Section 2.03 of this Technical Specification. Such test records will be evaluated to help determine if stones from that source can meet quality standards as hereinafter specified.
  - 3. Weigh Scale Certification:

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Prior to the use of any scale under this contract, the contractor shall submit details on the location and construction of the scale and a copy of the certification of the scale's accuracy from the local weights and measures regulating agency.

4. Daily Activities Report:

The Contractor shall provide a daily record of construction activities and shall include the following:

- i Report shall document the percentage of project completion, limits of excavation and rock placement, and adverse weather conditions or other problems for each day there are onsite work activities. The report shall be submitted to the Engineer at the end of each week.
- ii Rock Materials Shipment log: On the workday following rock material shipment, the Contractor shall submit a copy of the log of all shipments to the project from the fill source(s). The log sheets shall list for each shipment, at a minimum, the date and time of shipment, type of carrier, number of samples taken, and placement or stockpiling location. The Daily Log sheet and its format shall be approved by the Owner prior to the shipment of any stone products or beach materials.

5. Description of stone construction sequencing method.

The Contractor shall excavate for bedding stone and remove excavated material from the project site. Bedding stone shall be placed to the lines and grades shown on the Plans. Armor stone shall be installed to the lines and grades shown on the Plans and within tolerances specified in Section 3.03. Armor stone placement shall not interfere with construction of the bulkhead wall.

6. Description of proposed work area isolation method.

The Contractor shall take care to prevent debris or material excavated from the project area from reentering Baker Bay.

7. In accordance with Section 01 71 23, the Contractor shall furnish the original field notes of the pre-construction and post-construction surveys to the Engineer on the next workday following the surveying. The Contractor shall furnish plotted cross-sections to the Engineer within seven (7) business days or at a time approved by the Engineer.

**1.06 SAMPLING, ROCK QUALITY TESTING, AND ACCEPTANCE OF STONES**

A. General:

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The acceptability of stone materials will be determined by existing laboratory tests, geologic examination, sampling and laboratory testing, and drop tests. The Contractor shall submit quarry test results, as listed in Section 2.03, from a laboratory that has been validated by the Owner and the Engineer, in accordance with the tests specified herein and which are representative of the stone to be used on the project. The Contractor shall submit existing laboratory test documentation to the Engineer within 5 business days after receipt of Notice to Proceed. When satisfactory test records are not available, the proposed stone shall be subjected to all such tests as are necessary to determine that the stones are durable and suitable for constructing revetment and scour protection. Tests to which the stones may be subjected include unit weight or specific gravity, absorption, abrasion, accelerated expansion, and such other supplemental tests as may be necessary.

**B. Sampling:**

Should the Contractor's documentation not include previous satisfactory laboratory test results or fail to satisfy the Engineer, samples of all types of stone proposed for use in construction shall be selected in the presence of the Engineer and delivered to the testing lab for testing at the Contractor's expense. These samples shall be delivered to the testing lab within five (5) business days after receipt of notification of insufficient or unsatisfactory lab tests. Samples of stone shall consist of 5 to 10 pieces with a total weight of not less than 200 pounds with an average weight of 25 pounds per piece for each rock type proposed for use as armor stone, scour protection stone type 1, and scour protection stone type 2. No single piece shall weigh more than 100 pounds. Samples of bedding stone type C shall consist of 5 to 10 pieces with a total weight of not less than 20 pounds. The presence of the Engineer during selection of samples of stones will not relieve the Contractor of the responsibility to secure representative samples from the quarry for testing.

**C. Rock Quality Testing:**

Separate tests shall be made for each different rock type. All costs of tests shall be borne by the Contractor and shall be incidental to placing materials. All tests shall be conducted by an independent laboratory acceptable to the Engineer. In the event any rock type in the sample fails to pass the required tests, subsequent tests for that rock type shall also be conducted at the Contractor's expense. The Engineer will be notified of the results of laboratory tests. Satisfactory Contractor documentation of laboratory test results on stone samples will not constitute approval of all rock in the quarry and will not in any way change the Contractor's responsibility for obtaining, developing, and maintaining a satisfactory source of stones. Throughout the duration of this contract, the Owner or Engineer may sample and test stones delivered to the construction site and proposed for use in the construction. No contract extension will be granted for specified submittal and testing time or because materials fail to meet the specification requirements.

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D. Failure of Stones:

Stones failing to meet the specified requirements or as determined by the Engineer to be unsatisfactory shall be removed from the site. No subsequent materials or stones shall be placed until those materials or stones have been approved for use. Individual stones failing to meet specified requirements, or loads containing more than 10 percent by weight of stones failing to meet specified requirements, will be rejected prior to placement, or shall be removed from the site if placed on the prepared site.

**PART 2 - PRODUCTS**

**2.01 STONE SOURCES**

The name and location of the stone source the Contractor proposes for supplier of the Products shall be submitted to the Owner at time of bid. The Engineer will evaluate these sources at Contractor's expense as potential suppliers and determine if they are qualified for consideration under these Specifications. If the primary source is determined to be unqualified, subsequent sources will also be evaluated at the Contractor's expense. Contractor shall select stone materials from an existing commercial source for which all operating permits have been obtained prior to bid opening. Contractor shall assure himself of availability of an adequate and acceptable material source based on quantity, quality, production rate, and gradation standpoints prior to submitting his bid.

**2.02 STONE QUALITY**

All stone Products described hereinafter shall meet the following requirements:

- A. Stone materials shall be clean, dense, hard, sound, rough, angular, close grained, durable, naturally occurring rock, free from overburden material, and shall not slake or deteriorate on exposure to the action of water or atmosphere. The faces of individual stone shall be roughly angular, not rounded in shape.
- B. Stone shall be free of cracks, joints, faults, flaws, seams or mineral in-fillings, or other defects that would tend to increase its deterioration from the weathering process or result in breakage during normal handling, placing, or service on the revetment and scour protection.
- C. Each stone shall have sufficiently uniform physical properties throughout so that all portions of the stone will meet the specified test requirements. All quarried Products shall be cured in the quarry and stockpiled for a minimum of 48 hours after blasting during which time the atmospheric temperature does not drop below 40° F prior to shipment to the project site.
- D. Stone materials shall be produced only from quarry areas that are free of marine basalt flows, reefs, shale, or chert.



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- E. Each stone shall not have a longest dimension greater than three times its shortest dimension.
- F. Any stone containing an inferior rock material portion that does not meet the specified test requirements will be rejected as unsatisfactory and shall be removed from the project area.
- G. Weak or inferior appearing portions of any non-uniform type stone such as igneous flow breccias, volcanic breccias, scoria, cataclastic metamorphics, or irregularly cemented sedimentaries shall be subjected to all testing to determine that the stone will not be susceptible to splitting or differential weathering.

**2.03 TESTING**

- A. Testing shall be performed as stated in Section 1.06. The test results reported by the laboratory will be considered as exact results for unit weight, absorption, abrasion, accelerated expansion, or other necessary supplemental tests, regardless of any permissible variance that may be established by test procedures in determining the acceptability of stone furnished under this contract. Test procedures to be utilized and required values are as follows:

<b>Armor and Bedding Stone Testing Requirements</b>		
<b>Test</b>	<b>Required Value</b>	<b>Test Method</b>
Specific Gravity	>2.65	ASTM C127
Water Absorption	<2.7%	ASTM C127
Sodium Sulfate Soundness	<10% loss (after 5 cycles)	ASTM C88
L.A. Abrasion	<20% loss (after 500 revolutions)	ASTM C535
Freeze and Thaw	<3% (after 100 cycles)	CRD C144*
Expansive Breakdown in Ethylene Glycol	<5% loss in 15 days	CRD C148*
Unconfined Compressive Strength	>12,000 psi	ASTM D2938*

\* The need for testing for these requirements is to be determined by the Engineer upon review of the other test results and field inspection of the proposed stone source. If the Engineer is satisfied regarding the quality of the stone source based on site inspection and required test results, the additional test procedures (\*) will not be required.

- B. The Contractor shall perform a drop test on Armor Stones for some loads delivered to the project site as determined by the Engineer. The drop test shall be performed by dropping a Stone specimen, selected by the Owner or Engineer, from a height of half the average diameter of the stone onto a rigid surface or second stone. Stone fracturing as a result of the drop test constitutes test failure. Individual fractured stones will be rejected for use as Armor Stone. If a stone fractures as a result of the drop test, the Engineer may elect to test other stones from the same load. If multiple stones from a single load fail the

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drop test, the Engineer may elect to reject the entire load for use as Armor Stone.

- C. In the event any stone in the sample fails to pass the required tests, subsequent tests for that rock type shall also be conducted at the Contractor's expense. Samples shall be delivered to the testing lab with 5 business days after receipt of notification of insufficient or unsatisfactory lab tests.

**2.04 GRADATION:**

- A. Specified gradation is for the installed (in-place) condition. Contractor shall consider breakage during material handling, delivery and installation in order to provide the specified in-place stone gradations.
- B. The stone shall conform to the following size gradation for the in-place condition on the revetment and scour protection structures:
- C. Revetment Armor Stone

<b>Stone Weight (lbs.)</b>	<b>Percent Smaller by Weight</b>
500	100
275	85
100	50
20	15
5	5

- D. Revetment Bedding Stone

<b>Stone Weight (lbs.)</b>	<b>Percent Smaller by Weight</b>
5	100
2.5	85
1	50
0.25	15
0.05	5

- E. Fish Mix (Streambed Sediment)

Fish mix shall meet the following requirements for grading when placed in hauling vehicles for delivery to the project or during manufacture and placement into temporary stockpile. The exact point of acceptance will be determined by the Engineer.

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<b>Sieve Size</b>	<b>Percent Passing</b>
2 ½ inch	99-100
2 inch	65-95
1 inch	50-85
No. 4	26-44
No. 40	16 max
No. 200	5-9

Note: all percentages are by weight.

**PART 3 - EXECUTION**

**3.01 SITE PREPARATION**

All deteriorated structures, debris, and abandoned piling located within the template of the revetment and that interfere with construction shall be removed and disposed of in accordance with Technical Specification Section 02 41 00. Immediately prior to placing stone for the revetment or the scour protection structures, the area to receive the stone will be inspected by the Engineer and no material shall be placed thereon until that area has been approved.

**3.02 GENERAL STONE PLACING**

- A. Stone shall be delivered to the project site for installation on the revetment and scour protection structures by methods that will minimize multiple re-handling of the materials to minimize breakage. Acceptance of stone gradations will be provided by the Engineer based on in-place materials. If excessive breakage occurs so that in-place required gradations are not being provided, the installed stone may be rejected by Engineer which will require the Contractor to remove and replace the installed materials.
- B. Stone shall be mechanically placed on the secured geotextile fabric layer and bedding layer in such manner that will produce a well-keyed mass of stone (with maximum level of stone interlocking) and shall be constructed to the lines, grades and thickness shown on the Drawings. Stone shall be placed to its full course thickness in one operation and in such manner as to avoid displacing the underlying material. Placing stone through chutes, dropping more than 2 feet (above or below water surface), and other methods which may segregate the various sizes or damage the armor stone or underlying material will not be permitted. The large stones shall be well distributed in the mass of stones.
- C. Rearranging of individual armor stone may be required to the extent necessary to secure the results specified. Any area in the completed maintenance construction which contains objectionable segregation of stone sizes shall be excavated, removed from the site of the work, and replaced with material conforming to these specifications.

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- D. Placing of bedding and armor stone shall be suspended when adverse wave, weather, and tidal conditions will not allow proper placement.
- E. Stone shall be placed within the limits shown on the Drawings. All stone shall be placed by clamshell bucket, stone grab, or by some other method approved by the Owner that will not drop or cast the stone, but will release the stone in such a manner that they will be properly interlocked with the underlying or adjacent stones to resist displacement by wave action and provide a uniform and compact section. Stones shall be firmly set and well supported by underlying or adjacent stones to resist displacement by wave action and provide a uniform and compact section.
- F. The Contractor shall place the stone on the revetment and scour protection structures using methods, techniques, and equipment that will produce a tight fitting mass of stone.
- G. Armor Stone shall be installed using a “Select Placement” method. This method requires the careful selection and mechanical placement of individual armor stones to achieve a high degree of interlocking and stability between adjacent stones. Individual stones shall be selected for placement on the structure and repositioned as necessary to produce a tight fitting and interlocked structure.
- H. Revetment and scour protection structures shall be constructed, within the specified tolerance, to the lines and grades shown on the Drawings. The Contractor will not be paid for stone placed outside the allowable tolerance. The Contractor shall relocate the unsatisfactorily placed stone within the specified limits for payment or the weight of the stone so misplaced will be estimated by the Engineer and the payment deductions shall be determined from this estimate and the bid unit price of the stone.
- I. The largest armor stones shall be well distributed and the entire mass of armor stones in their final position shall be graded to conform to the gradation specified in Section 2.04 above. The finished armor stone shall be free from objectionable pockets of small stones and clusters of larger stones.
- J. Placing stone by dumping it at the top of the slope and pushing it down the slope will not be permitted. The desired distribution of the various sizes of stones throughout the mass shall be obtained by selective loading of the material at the quarry or other source, by controlled dumping of successive loads during final placing, or by other methods of placement that will produce the specified results.
- K. Rearranging of individual armor stones by mechanical equipment will be required to the extent necessary to obtain a reasonably well-graded distribution of armor stone sizes as specified above. Smaller armor stone shall be utilized to “chink” the voids of the structure.

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- L. Placing of armor stone shall insure that the stones are firmly set and supported by underlying materials and adjacent stones. Stones shall be placed such that at least three sides of the placed stone are in contact with the adjacent in-place stones. Loose and unstable stones shall be reset by picking the stone up off the slope and moving it back into its required position, or be replaced with a different stone to ensure sufficient stability.
- M. Any material displaced prior to acceptance and due to the Contractor's negligence shall be replaced at his own expense and to the lines and grades shown on the Drawings.

**3.03 TOLERANCES**

**A. Vertical**

A tolerance limit of plus 6 inches or minus 3 inches from the surface plane of the armor layer shown on the Drawings will be allowed for armor stone. A tolerance of plus 3 inches or minus 3 inches from the surface plane of the bedding layer shown on the Drawings will be allowed for bedding stone. Either extreme of such tolerance shall not be continuous over an area greater than 100 square feet. The tolerance limit will be determined on the basis of the average surface within 10 square feet of the plane of the surface. The armor stone surface shall be shaped with plating equipment or bucketing in order to achieve a uniform surface with no stones protruding more than 6-inches from the average surface.

**B. Horizontal**

The horizontal location tolerance of the revetment, as measured along the top of the revetment defined by work points will be +/- 1 foot.

**3.04 PROTECTION OF EXCAVATION AND BLUFF**

Alteration or disturbance of the bank shall be limited to that necessary to construct the project to the lines and grade shown on the Drawings. Excavated slopes, bedding stone, and armor stone shall be protected from erosion during construction. Protection of the placed materials from erosion shall be maintained until accepted by the Engineer. Any material displaced through the actions of wave or tides shall be replaced to the lines and grades shown on the Drawings.

**3.05 INSPECTION**

Slope lines, grades, and placement of stone will be inspected. Stone materials will be tested for gradation. The Owner may perform inspection of the stone prior to placement on the revetment and attenuator. However, this inspection does not relieve the Contractor from performing the in-place inspection. The Owner will also review the results of the quality control surveys specified in Section 01 45 00.

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#### **3.06 WORK AREA ISOLATION**

The revetment excavation areas shall be isolated and protected from inundation and impacts from vessel wakes and surges to prevent sloughing of excavation slopes and deposition of sediments in excavation areas. Contractor shall use an isolation system capable of withstanding the hydrodynamic conditions at the project site during the construction of the revetment and attenuator structures to protect the excavation and installed materials. A description of the proposed work isolation method shall be submitted to the Engineer at least 5 business days prior to the start of the on-site construction work.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 MEASUREMENT**

A. Measurement for payment of Stone work (Bedding Stone, Armor Stone, and Fish Mix) as specified in this Section will be based on the number of tons (2000 pounds) of material placed within the lines and grades shown on the Drawings and as specified herein. Measurement of installed stone material will be determined by Certified Scale approved by Owner and Engineer upon delivery of this material to the site by truck or other land transportation means. No measurement for payment will be made for increase or decrease in quantities caused by the filling of over excavated areas or for material placed outside the lines and grades shown on the Drawings, unless directed by the Engineer.

B. Vehicle Measurement

All material delivered by vehicle shall be weighed on public scales or scales provided by the Contractor and approved by the Engineer. The scales shall be of sufficient capacity to permit weighing the transporting vehicle both empty and full. Types of material shall not be mixed in any given load. Scales shall be of the type that prints weight tickets which shall include the date, time, type of material, unloaded and loaded weights, and Contractors name and job number. A duplicate copy of each weight ticket shall be furnished to the Engineer. The Contractor's weighmaster shall be subject to the approval of the Engineer. All cost for providing acceptable weighing devices shall be borne by the Contractor and shall be included in the contract unit prices for the material.

C. In the event of over or under placement of material with respect to the lines and grades shown on the Drawings, the following conversion for pay quantities shall be used. When the quantity of material is determined by weight and must be computed by the volume, the weight will be determined by calculating the in-place gross volume of material and multiplying that volume by the specific gravity of the material as measured in laboratory tests. The weight will then be reduced by 28 percent to account for voids in the gross volume for the Stone.

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**4.02 PAYMENT**

Payment for the Revetment and Scour Protection Structures construction work of this Section shall be made at the unit prices for Bid Items No.16, Import and Place Armor Stone; No. 17, Import and Place Bedding Stone; No. 18, Import and Place Fish Mix; in the Schedule of Quantities and Prices.

**PART 1 – GENERAL**

**1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 02 32 00 – Geotechnical Investigations
- B. Section 05 50 00 – Metal Fabrications
- C. Section 31 62 00 – Driven Piling

**1.02 DESCRIPTION OF WORK**

- A. Soil anchors are indicated on the drawings and in the specifications. The work consists of furnishing materials, labor, and equipment for the design, fabrication, installation, and testing of permanent grouted tie-back anchors (herein called soil anchors) and accessories in accordance with the drawings, notes, and this section. As a minimum, provide the following.
  - 1. Adequate bond length and unbonded (stressing) length to meet the requirements specified herein and shown on the drawings.
  - 2. Minimum drilled holes as shown on the drawings.
  - 3. PTI Class 1 double corrosion protection system (CPS) for soil anchors as shown on the drawings.
  - 4. Prestressing and testing the soil anchors in accordance with this section.
- B. The design of the soil anchor system shall be provided by the Contractor and shall be the Contractor's responsibility. General design criteria are shown on the drawings. Materials, design, stressing, load testing, and acceptance shall be in accordance with PTI DC35.1 and these specifications.
- C. The Contractor shall be responsible for the design of the soil anchor and bearing plate, determining drilling methods, and determining hole diameter and bond length. The complete design, including design computations, fabrication, and installation drawings and Soil Anchor Installation Plan, shall be certified by a Professional Engineer licensed in the State of Washington and submitted for approval by the Engineer. Approval of the design by the Engineer shall not relieve the Contractor of responsibility for design and performance of the soil anchors.

**1.03 REFERENCE STANDARDS**

This section incorporates, by reference, the latest edition and revisions of the following documents. They are part of this section insofar as specified and modified herein. In case of conflict between the requirements of this section and the listed documents, the requirements of this section control unless otherwise



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determined by the Engineer.

- A. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- B. Post Tensioning Institute (PTI) DC 35.1, Recommendations for Prestressed Rock and Soil Anchors
- C. PTI TAB.1-06, Post-Tensioning Manual

**1.04 QUALITY ASSURANCE**

- A. Install permanent soil anchors in accordance with PTI DC 35.1.
- B. Perform work utilizing personnel specializing in drilled and grouted permanent soil anchor systems and experienced in the installation of the system described on the drawings and in this section under similar site conditions. Provide evidence that personnel performing the work have at least five (5) years of work experience comparable to this work except as noted. Drill operators shall have a minimum of three (3) years' experience installing soil anchors.
- C. The Contractor shall perform its own quality control in accordance with their Quality Control Plan submitted to the Engineer for approval.
- D. The Contractor shall employ a Field Engineer to monitor the installation who shall be a Professional Engineer licensed in the State of Washington. The Field Engineer shall have a minimum of five (5) years' experience in design, monitoring, and certification of soil anchor installation of similar type and capacity to those of this project and in similar ground conditions.
- E. The work in this section shall be performed under the direct supervision of field supervisor(s) having a minimum of three (3) years of comparable experience in supervising the installation of similar soil anchors in similar ground conditions using similar construction methods and shall have all necessary licenses and permits required by local agencies or others having jurisdiction.
- F. The Contractor shall obtain materials and testing equipment from established manufacturers who have regularly produced such products for at least five (5) years.
- G. Do not begin work until the Engineer has approved specified submittals.
- H. The Contractor shall be responsible for the official record-keeping documents pertaining to the soil anchor installation and testing specified.
- I. Comply with Section 01 45 00 – Quality Control.

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**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Protect prestressing steel from dirt, rust, deleterious substances, or excessive heat. A light coating of rust on steel is acceptable.
- B. Do not cause excessive bending during lifting of pre-grouted tendons, which can de-bond the prestressing steel from the surrounding grout.

**1.06 SUBMITTALS**

Submit the following to the Engineer for approval in accordance with Section 01 33 00 – Submittal Procedures.

- A. Qualifications:
  - 1. Installers: list at least three similar projects completed along with the Port's contact persons for those projects demonstrating experience required in this section.
  - 2. Contractor's Engineer: experience required by this section.
  - 3. Welders: refer to Section 05 50 00 – Metal Fabrications.
- B. Soil Anchor Installation Plan: at a minimum shall include the following:
  - 1. Manufacturer's product data and recommended installation procedures for soil anchor and CPS. Include Material Safety Data Sheets (MSDS).
  - 2. The stressing strand or bar manufacturer's mill test reports.
  - 3. Technical data sheets from the cement grout supplier giving details on setting times as a function of temperature, strength gain with time, and recommended storage, mixing, and placement procedures.
  - 4. Manufacturer certification and/or literature for anchorage fittings and accessories.
  - 5. Details for methods that will be used to prevent ground loss during installation.
  - 6. Proposed procedures and manufacturer's literature for equipment to be used for testing soil anchors, including as a minimum the following.
    - a. Diagrams showing the arrangement of the testing equipment relative to the soil anchor and anchorage hardware.
    - b. Diagrams showing the reaction frame.
    - c. The method for locking off the required transfer load.
    - d. Equipment setups for monitoring elongation during soil anchor testing.

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- e. Calibration data for the testing system, including the identification number and certified calibration records for each test jack, pressure gage and load cell to be used. Jack, pressure gage, and load cell shall be calibrated as a unit. Calibration records shall show the date tested, device identification number, and the calibration test results and shall be certified for an accuracy of at least 2% of the applied certification loads by a qualified independent testing laboratory within 6 months prior to submittal.
  - f. Methods and procedures to prevent excessive sheet pile lateral movement during soil anchor testing.
  - g. Method and procedure for monitoring displacement of the sheet piling during soil anchor testing.
  - h. Plans of action in case the sheet pile lateral movement exceeds the allowable values set in this specification section during soil anchor testing.
- C. Shop Drawings: include as a minimum the following”
- 1. Details, arrangement, and method of installations of the soil anchors, including soil anchor number and location, load for each soil anchor, type and size of each soil anchor, minimum bonded length and stressing length, procedures for grout placement, and staged-grouting if used.
  - 2. The soil anchor system and PTI Class 1 double corrosion protection, including centralizers and their location, anchorage, anchorage CPS, and soil anchor head CPS.
- D. Soil Anchor Design: at a minimum include the following:
- 1. Schedule and sequence of soil anchor installation.
  - 2. Design calculations, signed and sealed by the Contractor’s Engineer, including design of bonded length for each soil anchor, soil anchor hole diameter, factored design load, and the size of the soil anchor for each soil anchor design load and requirements for grouting and staged-grouting if used.
  - 3. Grout mix, grout strength, grout pressure, and grout stages.
  - 4. Equipment to be used for installation of soil anchors.
  - 5. Materials, details, and installation procedures for the CPS.
  - 6. Design calculations signed and sealed by the Contractor’s Engineer for design of the soil anchor load testing system and each individual structural member in the system.
  - 7. Calculations for the anticipated sheet pile lateral movement during testing.

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- E. Soil Anchor and Grouting Records:
- F. Upon completion of installation of each soil anchor, furnish top of bond zone elevation, bond length, free stressing length of soil anchor, grout mix, grouting pressure, bags of cement injected, and a report of performance test or proof test results. The performance test and proof test results shall include measured lengths and inclination of drill holes and soil anchors, the loads and elongations recorded during testing, monitoring and stressing of the soil anchors, graphs of test results, and top of sheet pile displacement measurements for each soil anchor load increment.
- G. Submit a closeout report to the Engineer within 20 days after completion of the soil anchor work. Include as-built Contract Documents showing the locations, inclinations and horizontal alignments of the soil anchors, soil anchor hole diameter, soil anchor and CPS details, total soil anchor lengths, stressing lengths and bonded lengths, grout pressure achieved, maximum soil anchor test load, and soil anchor lock-off load.
- H. As-Built Documents: document installation of each anchor including at a minimum the following:
  - 1. Stationing
  - 2. Inclination
  - 3. Any deviation from the specified installation tolerances
  - 4. Free length and bond length
  - 5. Length of steel trumpet
  - 6. Lock-off load
  - 7. Testing results

**1.07 SITE CONDITIONS**

- A. Existing Facilities:
  - 1. Install soil anchors at the designated locations and be prepared to encounter slope armoring, slope protection, riprap, cobbles, coarse gravels, debris and other surface or subsurface obstructions.
  - 2. Verify location of existing utilities prior to commencement of excavation activities. Proceed with caution in areas of utility facilities and structures. Expose existing utilities by hand-excavation, pot-holing, or by other method acceptable to the utility owner.
  - 3. The Marina and the Safe Coast Seafood facility are active areas. Do not interrupt the operation of the waterway or facility at any time without obtaining prior written approval from the Engineer.
  - 4. Installation of soil anchors shall not commence prior to 7:00 AM or after 7:00 PM on weekdays. For variations to this time frame,

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prepare and submit a waiver to the Engineer for approval by the City Manager. Do not commence installation until approved.

**B. Subsurface Conditions:**

1. A geotechnical investigation was performed for this work and is referenced in Section 02 32 00 – Geotechnical Investigation. The Contractor is responsible to review this information and additional information referenced in this section and the Contract Documents. The Contractor is responsible for reviewing this information prior to bid and any conclusions it may draw from this information, including the character of the materials that may be encountered and the degree of difficulty to be expected in the performance of the work. The Port does not guarantee that materials other than those disclosed by the borings will not be encountered, or that proportions and character of the various materials will not vary from those indicated in the boring logs.

**PART 2 – PRODUCTS**

**2.01 GENERAL**

- A. Products shall be new, free from oxidation, corrosion, and defects, and shall be of the specified quality.
- B. Protect materials and fabrications before, during, and after installation from damage. Handle and store materials and fabrications in such a manner as to avoid corrosion, distortion, or physical damage. Protect the installed work of other trades from damage.
- C. Protect finishes and coatings from damage by use of padded slings and straps.
- D. In the event of damage, immediately make repairs and replacements in accordance with the fabricator's written recommendations and as approved by the Engineer at no additional cost to the Port. Damage such as abrasions, cuts, nicks, welds, weld spatters, heavy corrosion, or heavy pitting will be a cause for rejection of the soil anchors.

**2.02 SOIL ANCHORS**

- A. It is the Contractor's choice to use prestressing strand tendons or prestressing thread bars for soil anchors. The soil anchors shall be manufactured by William Form Engineering Corporation, DYWIDAG Systems International, or equal approved by the Engineer
- B. Prestressing Strand Tendons: PTI Class I double corrosion protection seven-wire strands conforming to ASTM A416 Grade 270.
  1. Epoxy coat each individual strand over the full length of strand.
  2. Fully coat the individual strands of the unbonded stressing length with corrosion-inhibiting grease and heat-shrink sheathing. The

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sheathing shall be shop, hot-melt extruded onto the strand. Ensure that all spaces between the sheathing and the strand are filled with corrosion-inhibiting grease. Alternatively, the individual seven wires of the strand during the fabrication process shall allow grease penetration into the void spaces between the wires prior to insertion into a grease-filled polyvinyl chloride (PVC) sheathing or high-density polyethylene (HDPE) sheathing.

3. Center the strands in polyvinyl chloride (PVC) corrugated sheathing or HDPE corrugated sheathing and fill the annular space between the strands and the sheathing with cementitious grout. Provide strand spacers to separate the strands from the PVC or HDPE and the individual strands within the bond length, so that the entire surface of each strand is bonded in grout.
- C. Prestressing Thread Bars: PTI Class I double corrosion protection bars conforming to ASTM A722 Grade 150. Epoxy-coat the bars full length.
- D. Plastic Sheathing/Sleeves: PVC or HDPE corrugated material as specified by soil anchor manufacture, having a minimum compressive and tensile strength of 7,000 psi and meeting the following:
1. Free of water-soluble chlorides and other ingredients that might promote corrosion, hydrogen embrittlement, or stress corrosion on the prestressing steel. The plastic shall be non-reactive with the grout and its ingredients.
  2. The sheathing encapsulating the steel tendons or thread bars shall be able to safely withstand deformations occurring during transportation, installation, stressing, testing, and load transfer to the steel strand tendons or thread bars.
  3. The sheathing shall be gas and watertight and resistant against chemical attacks and aging.
- E. Cement for Grouting: Type II conforming to ASTM C150.
1. Admixtures, if used, shall contain no chlorides or other chemicals that may have a harmful effect on the steel tendons or cement.
  2. Do not use cement stored more than 30.
  3. Keep cement under cover and in a dry condition.
- F. Cement Grout inside Sheathing:
1. Mixing Water: potable, clean, and free of injurious quantities of substances known to be harmful to Portland cement or strands.
  2. Use the lowest practical water-cement ratio with acceptable workability.
  3. Minimum Compressive Strength: exceed that required by the approved Soil Anchor Design Submittal as measured in accordance

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with ASTM C109.

4. Aggregates: Fine aggregate for sand-cement grout shall conform to ACI 301 and ASTM C 33 for grout for backfilling holes or ASTM C 144 for grout for pre-grouting. Aggregates shall not contain substances that may be deleteriously reactive with alkalis in the cement.
5. Admixtures: Admixtures that control bleed, improve flowability, reduce water content, and retard set may be used in the grout subject to the approval of the Engineer. Any admixtures used shall be compatible with the prestressing steel and sheathing and shall be mixed in accordance with the manufacturer's recommendations.

**G. Cement Grout for Soil Anchors:**

1. Mixture proportions shall be the responsibility of the Contractor.
2. Consist of a homogenous, pumpable, stable mixture of Portland cement and water.
3. Submit their proposed mix design for approval by the Engineer.
4. Water Content: minimum necessary for proper placement.
5. Water-Cement Ratio: maximum of 0.45 by weight.
6. Final proportions of materials shall be based on results of tests made on sample mixtures of grout.
7. Minimum compressive strength of 2-inch cubes, molded, cured, and tested in accordance with ASTM C109, shall be 3,500 psi at the time of stressing.
8. The Contractor shall take, cure, and break grout test cubes for determining mix design. Perform testing at an independent laboratory approved by the Engineer.

**H. Centralizers**

1. Manufacture centralizers from Schedule 40 PVC pipe or tube, or other material not detrimental to the soil anchor steel plastic sheath (do not use wood).
2. Manufactured in a configuration that permits the free flow of grout around the soil anchors.
3. Securely attach to the soil anchors.
4. Size to position the soil anchor within 1 inch of the center of the drill hole.
5. Place at maximum 10-foot intervals in the bond length starting at the bottom end so that no less than 0.5-inch of grout cover is achieved along the soil anchor.

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6. Size to allow tremie pipe insertion to the bottom of the drill hole.
  7. Size to allow grout to freely flow up the drilled hole.
  8. Size to permit the free flow of grout around the soil anchor.
- I. Spacers
1. Provide to separate the strands along the bonded length of soil anchors and placed at 10-feet on center. Locate the bottom spacer located no more than 3 feet from the bottom of the bonded length.
  2. Size to permit the free flow of grout around the soil anchor.
- J. Miscellaneous Steel Hardware:
1. Soil Anchor Head: consist of steel bearing plate with wedge plate and wedges for strand soil anchors or steel bearing plate with nut for bar soil anchors, trumpet, and corrosion protection. Anchorage devices shall be capable of developing 95% of the guaranteed ultimate strength of prestressing steel tendon. The anchorage devices shall conform to the static strength requirements of PTI TAB 1 Section 3.1.6 (1) and Section 3.1.8 (1) and (2). Design wedges to not cause premature failure of the prestressing steel due to notching or pinching. Provide special wedges as required by the strand manufacturer for epoxy-coated strand. Do not remove epoxy coating to permit use of standard wedges. Design threaded anchorage items for epoxy coated bars to fit over the epoxy coating and maintain the capacity of the prestressing steel. The trumpet used to provide a transition from the anchorage to the unbonded length corrosion protection shall be fabricated from a steel pipe or steel tube. The minimum wall thickness shall be 0.125 inch for diameters up to 4 inches and 0.20 inch for larger diameters. Weld the trumpet to the bearing plate.
  2. Casing: select and size where required. Provide the necessary type and size to permit proper drilling of soil anchor holes and placing of soil anchors as specified in this section and shown on the drawings. Straightening of casings and machining of joints may be necessary in order to meet specified alignment tolerances.
  3. Steel Plates: conform to ASTM A572 Grade 50.
  4. Bolts, nuts, and washers: conform to the soil anchor manufacturer's specifications. Provide hexagonal nuts.
  5. Hot-dip galvanize the nuts and washers in accordance with ASTM A153. Hot-dip galvanize bearing plates, trumpets and caps over the head of the steel tendon in accordance with ASTM A123.
  6. Fill anchor head caps with grease and weld to the top of the bearing plate.



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7. Anchorage components and couplers shall develop at least 95% of the minimum guaranteed ultimate strength of the steel tendon.
8. The anchorage system shall permanently secure the ends of the prestressing steel tendon.
9. Provide a corrosion-inhibiting, compound-filled trumpet and continuously weld all around the bearing plate to provide a watertight joint.
10. Provide a permanent seal between the trumpet and the free stressing length corrosion protection. The trumpet shall overlap the free stressing length corrosion protection by a 4-inch minimum.
11. For other components and hardware, refer to Section 05 50 00 – Metal Fabrication.

K. Epoxy: Carbolite “Bitumastic 300M” or equal approved by the Engineer.

**PART 3 – EXECUTION**

**3.01 DRILLING HOLES**

- A. Drill holes at the locations, inclinations, and to the depths and diameters determined by the Contractor’s Engineer to provide the design bond length and capacity indicated on the Contract Drawings.
- B. Hole locations may be changed as approved by the Engineer. Any redesign due to relocation of soil anchor holes shall be performed by the Contractor and approved by the Engineer.
- C. In the drilling method, include a temporary casing to prevent the hole from collapse for the first 40 feet of the soil anchor, at a minimum. It is noted that drilling will occur within loose granular soils below the groundwater table.
- D. Do not drill holes within 25 feet of a grouted hole until the grout has set at least 24 hours.
- E. While drilling avoid damaging the existing structures or other site features. Damages of any nature will be evaluated by the Port and the Engineer. Repairs or replacements shall be made as approved by the Engineer.
- F. Drill holes a maximum of 3 feet beyond the required soil anchor bond length.
- G. Excavation and installation of each soil anchor shall be performed in a continuous operation, without any prolonged delay except for overnight if required and the soil anchor is at least 40 feet long. Do not leave an uncased length of hole open, even overnight.
- H. Collect and recycle wastewater from drilling operations or treat. Do not discharged direct into the water or on the ground.
- I. Holes in soil may be drilled by rotary drilling, rotary percussive, or

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vibratory-driven casing. Provide holes in soil with temporary steel casing for support of the surrounding material. Where soil is susceptible to caving, drill holes through soil by the duplex method using an inner and outer casing with return water flow between the casings.

J. Records:

1. Submit driller logs and records as specified in the paragraph titled "FIELD QUALITY CONTROL".
2. The presence of an inspector or the keeping of separate drilling and soil anchor installation records by the Port or the Engineer shall not relieve the Contractor of the responsibility for the work specified in this section.
3. Payment will not be made for any work for which the required records have not been furnished by the Contractor.

K. Tolerances

1. Locate each soil anchor hole within 6 inches of the plan location.
2. Maintain an entry angle within 3 degrees of the specified inclination.
3. Align each drilled hole within 3 degrees of theoretical alignment.
4. If the hole alignment is not within these tolerances, reject the hole, backfill the hole with cement or sand-cement grout, and drill a new hole adjacent to the rejected hole.

**3.02 INSTALLATION OF SOIL ANCHORS**

- A. The Contractor shall be responsible for each drilled hole until the soil anchor has been installed, grouted, stressed, and accepted. Holes in rock and casings shall be cleaned by pressurized air and/or water to remove drill cuttings and mud.
- B. Install soil anchors in accordance with drawings, the Soil Anchor Installation Plan, Shop Drawings, and Soil Anchor Design Submittal.
- C. Install soil anchors within drilled holes. Case each hole with a temporary casing to maintain a clean and open hole where necessary. Select a drilling method that causes minimal disturbance to the surrounding ground and does not result in ground loss. Do not extend the drill bit in front of the casing at any time during drilling.
- D. The diameter of the drilled hole, minimum bond length, and stressing lengths for the soil anchors shall conform to the requirements in the drawings. The length of the soil anchor zone, diameter of the drill hole, grouting pressures, and procedures shall be determined by the Contractor's Engineer to accommodate the loads shown on the drawings. The grouting procedure and pressures shall be based on the design loads required, the depth of the soil anchors, and existing ground conditions.

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- E. Grease and surround soil anchors by a plastic sheathing to insure absence of bond on the portion of the soil anchor between the top of the soil anchor and the soil anchor bond zone.
- F. Form anchorage bond length by pressure grouting and post-grouting if required. The soil anchor in the anchor zone shall have a minimum grout cover of 1.5 inches. The grouting equipment shall be capable of continuous mixing and produce grout free of lumps. Equip the grout pump with an accurate and calibrated pressure gage at the nozzle capable of measuring twice the expected pressure with a minimum of 150 pounds per square inch. Record the quantity of grout pumped, the grout pressure, and the duration of the pressure holding period for each soil anchor and for each stage.
- G. Remove the grout and soil anchor if grouting is suspended for more than 30 minutes or does not satisfy the requirements of the specifications, the approved submittals, or the drawings, and replace with fresh grout and a new soil anchor at no additional cost to the Port.

**3.03 TESTING OF SOIL ANCHORS, GENERAL**

- A. Conform to the testing requirements in PTI DC35.1.
- B. Include dial gages, dial gage support, jack and pressure gage, electronic load cell, and reaction frame for testing of each anchor.
- C. Calibrate load cells and accompanying equipment as a set and by an independent testing laboratory.
- D. Design the testing reaction frame to be sufficiently rigid and of adequate dimensions such that excessive deformation of the testing equipment does not occur. Independently support and center the jack over the soil anchor so that it does not carry the weight of the testing equipment. Align the jack, the bearing plates, monitoring instrumentation, and stressing anchorage with the soil anchor such that unloading and repositioning of the equipment will not be required during the test.
- E. Apply and measure the test load with a hydraulic jack and a pressure gauge, which shall be graduated in 50-psi increments or less. The jack and pressure gage shall have a pressure range not exceeding twice the anticipated maximum test pressure. Provide sufficient jack ram travel to allow the test to be done without resetting the equipment. Monitor the soil anchor load during all tests with the pressure gage. Use the hydraulic jack to apply and maintain constant load for each load increment and for the load hold period during the creep test load hold increment.
- F. Measure the soil anchor head movement with a dial gage capable of measuring with an accuracy of 0.0010 inch. Provide sufficient travel on the dial gage to allow the test to be done without having to reset the gage. Visually align the gage to be parallel with the axis of the soil anchor and support the gage independently from the jack, wall or reaction frame. Use

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two dial gages when the test setup requires reaction against a soil cut face. Provide personnel to keep permanent records of the testing data and submit to the Engineer for approval.

- G. Monitor the lateral displacement of the top of sheet pile during soil anchor testing. Conduct monitoring utilizing either a system of dial gages with sufficient travel and an appropriate reference frame or by use of other survey instruments. Propose details of instrumentation methods for approval by the Engineer. Provide a system capable of monitoring the sheet pile lateral movement with an accuracy of 0.1 inch. Select a minimum of two monitoring points on the sheet pile wall near the soil anchor being tested. As a minimum, readings shall be taken for each test load increment. Limit sheet pile wall lateral movement to 1.0 inch. Propose methods to ensure the sheet pile wall will not displace laterally more than 1.0 inch. This may include constructing a temporary bracing frame or other means to provide lateral resistance to the sheet pile wall. The Contractor is responsible for providing adequate resistance to the sheet pile during this temporary condition (testing of soil anchors) and ensuring sheet pile lateral movement are within the specified levels.
- H. If sheet pile lateral movement during soil anchor testing reaches 1.0 inch, stop soil testing immediately and renders the test invalid. Do not perform a new soil anchor test until a new plan for limiting the sheet pile lateral movement is submitted to the Engineer for approval.

**3.04 FIELD QUALITY CONTROL**

- A. Prior to production soil anchor installation, at least three soil anchors shall be installed and performance tested. The locations of the performance test soil anchors should be evenly distributed along the wall. Performance test soil anchor locations shall be selected by the contractor and approved by the Engineer. The performance test soil anchors may be used as production soil anchors if approved by the Engineer. Use the performance test soil anchors to verify soil quality and the adequacy of the Contractor's soil anchor design and installation procedures. The remaining production soil anchors shall be proof tested.
- B. During the stressing of each soil anchor, the Engineer will witness the stressing and a record shall be kept of gage pressure and of soil anchor elongation at each stage of stressing to the specified test or lock-off load, as applicable. Do not exceed the test load.
- C. The Contractor's Engineer shall evaluate the soil anchor test results and determine the acceptability of the soil anchors in accordance with the criteria indicated in this section.
- D. Final acceptance of each soil anchor will be made by the Engineer.
- E. Schedule tests in advance to allow the presence of the Engineer.
- F. Performance Test: cyclically and incrementally load and unload the soil

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anchor in accordance with PTI DC35.1, Paragraph 8.3.2, as modified in this section.

All performance test soil anchors shall be installed by the same methods, personnel, material and equipment as the production anchors. Changes in methods, personnel, material or equipment may require additional verification testing as determined by the Engineer. The allowable soil anchor load should not exceed 80 percent of the steel ultimate strength. Verification soil anchors shall be incrementally loaded and unloaded in accordance with the loading schedule provided in the table below. The alignment load shall be the minimum load required to align the testing apparatus and should not exceed 5 percent of the design load. The dial gauge should be zeroed after the alignment load is applied. Soil anchor deflections during the 1.5DL test load shall be recorded at 1, 2, 3, 5, 6, 10, 20, 30, 50, and 60 minutes.

<b>Load</b>	<b>Hold Time (Minutes)</b>
Alignment Load	1
0.25 Design Load (DL)	1
0.5DL	1
0.75DL	1
1.0DL	1
1.25DL	1
1.5DL	60
1.75DL	1
2.0DL	10

During the testing of each soil anchor, the Contractor's Engineer and the Engineer shall witness the test, and a record shall be kept by the Contractor of gage pressure and of soil anchor elongation at each stage of stressing to each test load required by PTI DC35.1. Take measurements of the elongation of prestressing steel tendon in accordance with PTI DC35.1. Furnish test records, including plots and graphical analysis of test data, to the Engineer upon acceptance of each performance tested soil anchor.

- G. Proof Test: incrementally load the soil anchor in accordance with PTI DC35.1, Paragraph 8.3.3 as modified in this section.

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Proof tests shall be completed on each production soil anchor. The allowable anchor load should not exceed 80 percent of the steel ultimate strength. Proof test anchors shall be incrementally loaded and unloaded in accordance with the table below. The alignment load shall be the minimum load required to align the testing apparatus and should not exceed 5 percent of the design load. The dial gauge should be zeroed after the alignment load is applied. Soil anchor deflections during the 1.33DL test load shall be recorded at 1, 2, 3, 5, 6, and 10 minutes. Depending upon the soil anchor deflection performance, the load hold period at 1.33DL may be increased to 60 minutes. If the soil anchor deflection between 1 minute and 10 minutes is greater than 0.04 inches, the 1.33DL load shall be continued to be held for a total of 60 minutes and deflections recorded at 20, 30, 50, and 60 minutes.

<b>Load</b>	<b>Hold Time (Minutes)</b>
Alignment Load	1
0.25 Design Load (DL)	1
0.5DL	1
0.75DL	1
1.0DL	1
1.25DL	1
1.33DL	10

During the testing of each soil anchor, the Contractor's Engineer and the Engineer shall witness the test, and a record shall be kept by the Contractor of gauge pressure and of soil anchor elongation at each stage of stressing to the test load required by PTI DC35.1. Take measurements of the elongation of prestressing steel tendon in accordance with PTI DC35.1. Furnish test records, including plots and graphical analysis of test data, to the Engineer upon acceptance of each proof tested soil anchor. Compare the proof test results with similar soil anchors in which performance tests have been performed. If any significant variation from the proof tests occurs, as determined by the Engineer, the Engineer may require additional performance tests.

- H. Driller Logs: Keep accurate driller logs and records of work accomplished under this Contract. Deliver complete, legible copies of these logs and records to the Engineer upon completion of the work or at such other time or times as directed by the Engineer. Preserve records in good condition and order by the Contractor until delivered and accepted by the Engineer.

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The Port and the Engineer shall have the right to examine such records at any time prior to their delivery. Make a separate log for each hole. As a minimum, include the following information on the logs or in the records for each hole:

1. Hole number or designation and elevation of top of hole
  2. Inclination of the hole
  3. Make and manufacturer's model designation of drilling equipment
  4. Dates and time when drilling operations were performed
  5. Time required for drilling
  6. Elevation of the top of the Siltstone Formation
  7. Temporary steel casing bottom elevation
  8. Depth and elevation of rod drops, obstructions, or other unusual occurrences
  9. Depth and elevation at which groundwater is encountered
  10. Depths and elevations at which drill water is lost and regained and amounts
  11. Depth and elevation of bottom of hole, determined by measuring the drill steel length
- I. Soil Anchor Records: Upon completion of each installation, furnish the soil anchor record, as specified in this section, to the Engineer. In addition, furnish as-built drawings showing the completed installation of the soil anchors, as specified in this section, upon completion of installation of all soil anchors.

**3.05 ACCEPTANCE CRITERIA**

- A. Acceptance of soil anchors shall be determined by the Engineer. The following criteria will be used in determination of the acceptability of each soil anchor:
1. Creep: movement shall not exceed 0.040 inch at maximum test load during the first 10 minutes of the performance or proof test. If the creep movement exceeds this limit, it shall not exceed 0.080 inch at the maximum test load at the end of 60 minutes. If the creep movement exceeds 0.080 inch at the maximum test load at the end of 60 minutes, the soil anchor will be rejected.
  2. Minimum Apparent Free Length: calculate from the observed elastic movement in accordance with PTI DC35.1, Section 8.3.2. The calculated free length shall be not less than 80% of the designed free-anchor length plus the jack length. If the soil anchor does not meet this criterion, restress the soil anchor from the alignment load to the test load and recalculate the apparent free

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- length. If the soil anchor does not meet this criterion after three attempts (original plus two restresses), the soil anchor will be rejected.
3. Maximum Apparent Free Length: do not exceed 100% of the designed free-anchor length plus 50% of the bond length plus the jack length. If the soil anchor does not meet this criterion, and the cause of the behavior is not investigated and explained to the satisfaction of the Engineer, the soil anchor will be rejected.
  4. Initial Lift-Off Reading: reading shall be within 5% of the specified lock-off load. If the soil anchor does not meet this criterion, adjust the soil anchor as necessary and repeat the lift-off reading.
- B. Replacement of Rejected Soil Anchors: Replace any soil anchor that fails the performance or proof test or is rejected by the Engineer. If a soil anchor is rejected, provide two replacement soil anchors, including two new soil anchor holes, at no expense to the Port at adjacent locations. Do not install a replacement on the same sheet pile pair where the soil anchor was rejected. The replacement soil anchors shall provide the same design factored load per linear foot as the original “rejected” soil anchor.
1. The location of the replacement soil anchor shall be as directed by the Engineer.
  2. Provide materials, equipment, and labor necessary to provide new soil anchor assemblies to the satisfaction of the Engineer.
  3. Do not drill for a replacement soil anchor until the grouting of soil anchors within 50 feet of the replacement soil anchor location has been allowed to set for at least 24 hours. Rejected or failed soil anchors shall be at the Contractor’s expense.
  4. Either remove failed soil anchors and thoroughly ream and clear the soil anchor hole or remove the load and cut the soil anchor and casing flush with the sheet pile. If the soil anchor is removed, grout the hole for its entire length. If the soil anchor is cut, weld a steel plate over any hole in the sheet pile wall at the location of the cut-off anchors.

**END OF SECTION**



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### **Section 31 62 00 – Driven Piles**

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#### **PART 1 GENERAL**

##### **1.01 RELATED WORK SPECIFIED ELSEWHERE**

The provisions and intent of the Contract, including the General Conditions, Supplementary Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in:

- A. Section 02 32 00 – Geotechnical Investigations
- B. Section 03 10 00 – Concrete Forming and Accessories
- C. Section 03 20 00 – Concrete Reinforcement
- D. Section 03 30 00 – Cast-in-Place Concrete
- E. Section 03 60 00 – Grouting
- F. Section 05 50 00 – Metal Fabrications
- G. Section 09 96 00 – High Performance Coatings
- H. Section 31 00 00 – Earthwork
- I. Section 31 09 00 - Geotechnical Instrumentation and Monitoring

##### **1.02 DESCRIPTION OF WORK**

- A. The extent and location of the piling work is indicated on the drawings. The work includes the requirements for furnishing, transporting, handling, and installing steel sheet piles.
- B. The work also includes the requirements for meeting installation tolerances, daily record keeping including pile driving logs, and pile cut-offs.

##### **1.03 REFERENCES**

- A. Geotechnical report: See Section 02 32 00 – Geotechnical Investigations.
- B. American Society for Testing Materials (ASTM), Specifications, Test Methods, Practices, Guides, Terminology, Classification Systems, Tables, Nomenclature, and other publications. Publications are designated by basic reference in this section (use the most current edition at the time of bid unless otherwise indicated).
- C. American Welding Society (AWS) D1.1 – 2020, Structural Welding Code – Steel

##### **1.04 QUALITY ASSURANCE**

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- A. Provide at least one qualified person with a minimum of five (5) years of experience with marine conditions, piling types and lengths for the project, and installation methods to be used on the project, and who must supervise and direct work performed under this section.
- B. Provide at least one qualified person with a minimum of five (5) years of experience in marine piling inspection, and who must keep detailed driving records and logs for each pile from the time the member is picked until the installation is complete and accepted. A sample driving record is provided at the end of this section.
- C. Install piling in a satisfactory and undamaged manner and inspect piling as necessary to ensure that this is done.
- D. Install piling in the locations indicated on the drawings, accounting for adverse impacts from the slope on pile positioning during and after pile driving.
- E. Drive piling to the criteria provided in this section.
- F. Mark piles at 1-foot intervals beginning at the tip and, with each foot mark covering at least two thirds of the pile diameter. At a minimum, provide callouts of the length from the tip at 5-foot intervals.
- G. The Port reserves the right to inspect piling before and after installation, and the Contractor must make available the site, or portions thereof, to meet the Port's inspection schedule. Any reports including photographs or video prepared will be made available for the Contractor's review. Observed damage or defects identified by the Port must be repaired at no additional expense to the Port using damage-specific or defect-specific products specified by the Engineer.

**1.05 SUBMITTALS**

- A. Mill certificates for piling.
- B. Manufacturer's certificates of compliance for piling.
- C. Joint welding procedures for pile splices and non-destructive testing (NDT) results.
- D. Order and coating lengths for piling.
- E. Documentation demonstrating the qualifications and experience of the individuals supervising pile driving and individuals keeping driving logs, as described above.
- F. List of proposed equipment and procedures to be used in driving, including

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crane capacities, lead length, lead types, hammer types, rated energies, helmet materials, modulus of elasticity, etc., for each pile type.

- G. Detail drawings for sheet piling including fabricated sections that show complete piling dimensions (plan and elevation) and details, driving sequence and location of piling. Detail drawings must include details and dimensions of templates and other temporary guide structures for installing piling. Detail drawings must provide details of the method of handling piling to prevent permanent deflection, distortion or damage to piling interlocks. Special corner sections, corner piles, and/or arcs and circles interlock swing piles must be used to conform to the configuration shown on the drawings. The metal sheet pile shop drawings must include manufacturers section number, the designated angle (bending and/or corner) pile positioning, the Contractors established bearings for tangents, and repetitive pattern of the new sheet pile wall. These plans must also include the locations for the Bulkhead Anchor System, the existing bulkhead, building foundations, utilities, and any other observed interference that may exist. Details must consider minimization of risk to adjacent structures. The Contractor must verify the existing site conditions and positioning of the existing wall. The Contractor must monitor the upland area and existing bulkhead for settlement and movement during pile driving. It will be the responsibility of the Contractor to mitigate any detrimental movement noted by this monitoring.
- H. Detailed piling installation plan and driving schedule showing the location of each pile to be driven. As a minimum, include the following:
1. Dimensions and field-verified measurements relative to the existing features including the existing bulkhead, and demolition lines.
  2. Descriptions of proposed equipment and procedures to be used in driving. Provide data on crane types and capacities, lead types, lead lengths, hammer types, rated energies, cushion materials, helmet materials, modulus of elasticity, etc., for each pile type. A sample hammer data sheet is provided as a supplement at the end of this section.
  3. Descriptions of means and methods to install piles in the pile locations indicated on the drawings including a description of how adverse impacts from the pile slope will be accounted for during pile installation.
- I. An assessment of pile drivability made by a licensed Professional Engineer, trained in geotechnical engineering, retained by the contractor. The pile drivability assessment shall include a wave equation analysis report (WEAP) or an alternative quantitative assessment of pile drivability for each proposed hammer, pile type, and soil profile combination, as prescribed

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within this section. The pile drivability assessment shall include verification that the maximum driving stresses during pile installation will not exceed 90 percent of the specified yield strength. The pile drivability assessment shall also include all other recommendations from the Professional Engineer retained by contractor related to pile installation.

- J. Daily driving logs, as prescribed within this section: A sample driving record is provided as a supplement at the end of this section.
- K. Pile surveys, as prescribed within this section.
- L. Pile inspection reports, as prescribed within this section.

#### **1.06 SITE CONDITIONS**

##### **A. Existing Facilities:**

- 1. Drive piling at the designated locations and be prepared to encounter slope armoring, slope protection, riprap, debris and other surface or subsurface obstructions.
- 2. The waterway and adjacent Port and tenant facilities are active areas. Do not interrupt the operation of the waterway or any facility at any time without obtaining prior written approval from the Engineer.
- 3. Driving hours for piles must not commence prior to 7:00 AM or after 7:00 PM on weekdays. For variations to this time frame, prepare and submit a waiver to the Engineer for approval by the City of Ilwaco. Do not commence driving until approved.

##### **B. Subsurface Conditions:**

- 1. Subsurface conditions have been explored at the project site. See Section 02 32 00 – Geotechnical Investigations. The subsurface soils information presented in the above referenced documents is intended solely and specifically to provide a general representation of the materials that may be encountered.
- 2. Neither the Port nor Engineer warrant the correctness or completeness of the subsurface soils information presented in the previously referenced documents and of any interpretation, deduction, or conclusion regarding subsurface soils conditions that may be indicated or implied by the plans, specifications, and previously referenced documents.
- 3. The Contractor must make its own determinations and conclusions regarding the nature of the soils, and the methods and procedures

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to be utilized in performing the piling installation work, based on the available project information.

4. Investigate, interpret, evaluate, and plan for pile driving conditions that may be affected by existing piles or buried infrastructure, and potential impacts on installation methods.
5. Layout in the field, using permanent means, piles adjacent to the existing bulkhead, and existing utilities before commencing any work. Verify that the pile grids and utilities do not conflict. Immediately report potential conflicts to the Engineer for further direction.

## **PART 2 PRODUCTS**

### **2.01 PRODUCT HANDLING**

- A. Before handling or transporting, inspect and verify that piles are undamaged and free of defects and coating damage. Provide specific details to the Engineer if any member does not meet those criteria and obtain subsequent direction from the Engineer before transporting to the project site.
- B. Delivery, Handling, and Replacements
  1. Lift and support piling during manufacturing, handling, stockpiling, transporting, erection, and installation operations to prevent piling damage, permanent deformations, or coating damage.
  2. Do not cut holes in piles for operations, including lifting, handling, stockpiling, transporting, erection, or installation.
  3. At a minimum, perform transportation, site handling, and erection with industry standard equipment and methods, and by qualified personnel.
  4. Handle piling by the use of bridles, strong backs, or other rigging.
  5. Do not overstress, fracture, or produce impact forces on the piling. Repair damaged piles and coating at no additional cost to the Port. Repair methods must be approved by the Engineer prior to additional handling or driving. Remove and replace piling damaged beyond repair, as determined by the Engineer, at no additional cost to the Port.
- C. Storage
  1. Store piling so that identification marks are discernible.

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2. Separate stacked members by battens cushioned across full width of each bearing area, or other measures as necessary to prevent coating damage. Store piling on cushioned timber blocking so that the axis of each member is maintained in a straight line and that bending stresses, and misalignments are not produced. Locate the blocking of successive tiers exactly above the blocking of the lower tiers.

**2.02 STEEL SHEET PILING**

- A. Provide sheet piles in accordance with ASTM A 572, Grade 60.
- B. Coat the sheet piles as specified in Section 09 96 00 – High Performance Coatings, from the top to 10 feet below the design mudline unless otherwise indicated on the drawings.
- C. The minimum sheet pile section properties are indicated on the drawings.
- D. The interlocks must be free-sliding, provide a swing angle suitable for the intended installation but not less than 5 degrees when interlocked, and maintain continuous interlocking when installed. Fabricated sections must conform to the requirement and the piling manufacturer's recommendations for fabricated sections.

**2.03 SPECIAL INTERLOCKING PILE SECTIONS**

- A. Special corner sections, corner piles, and/or arcs and circle interlocking swing piles must be used to conform to the configuration shown on the drawings.

**2.04 PILE ORDER LENGTHS**

- A. Order lengths must be a minimum of the length indicated on the drawings between cutoff and pile tip plus 10 feet and without splices.

**2.05 HANDLING HOLES**

- A. Handling holes are the responsibility of the Contractor. The contractor must submit proposed holes for review.
- B. Handling holes if used must be located within the top 9 inches of the sheet pile. This requirement is to ensure that holes do not occur below the concrete cap.

**PART 3 EXECUTION**

**3.01 GENERAL**

**DIVISION 31 – EARTHWORK**  
**Section 31 62 00 – Driven Piles**

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- A. Engineer's review of pile driving equipment will not relieve the Contractor of responsibility to drive piles, free of damage, to the required ultimate pile capacity and the final tip elevation shown in the drawings.
- B. During pile driving operations, the Contractor must use the approved system. Any change in the driving system will only be considered after the Contractor has submitted revised pile driving equipment data to the Engineer. The Contractor will be notified of the acceptance or rejection of the driving system changes within 2 working days of the Engineer's receipt of the requested change. The time required for submission and review of a revised driving system will not constitute a basis for a contract time extension to the Contractor.

**3.02 GENERAL DRIVING REQUIREMENTS FOR PILING**

- A. Select the appropriate hammers and related equipment for driving the piling to the tip elevations shown on the drawings, based upon a review of the site conditions, available geotechnical information, and geotechnical information obtained by the Contractor.
- B. The hammer supplied must be in excellent working order and must be capable of supplying at least 90 percent of the maximum rated energy specified by the manufacturer. Hammers not performing to the required efficiency must be repaired prior to further pile driving.
- C. Maintain hammers and other equipment in proper alignment during driving operations by use of leads or guides attached to the hammer.
- D. Drive piling in true line and position. Prior to driving piling, submit details of driving equipment, templates, falsework or other methods to be used to place piling and provide assurance that plumbness, batters, and prescribed alignment can be achieved. Remove obstructions before proceeding with pile driving; do not use crooked alignment to avoid interference from obstructions.
- E. Drive piling to the minimum tip elevations shown on the drawings.
- F. Drive piling to achieve the minimum penetration of coated length into the mudline, unless otherwise indicated on the drawings. Verify this embedment on the driving log. Field verify the design mudline at each pile and record this field measurement on the driving log.
- G. Once driving has started, drive piling continuously until reaching the minimum tip elevation, even if the required ultimate load capacity has been achieved. Avoid voluntary pauses or interruptions during driving.
- H. Drive piling in the designated locations, remove visible riprap, slope armoring, and/or spud as necessary to obtain the required penetration and

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pile alignment tolerances. Adjust alignment and initial stab location to account for soil movement from driving or adjacent construction activities, so that each pile is in its designated final location after completion of driving and other construction activities.

- I. Cut off piling level and true, at the elevations indicated on the drawings. Do not allow pile cutoffs to fall into the water. All cut-off lengths of piling must remain the property of the Contractor and shall be properly disposed of offsite.
- J. Do not push, pull, or otherwise manipulate piles to force them into position. Check piles for heave. Redrive heaved piles to the required tip elevation.
- K. Do not drive piles within 150 feet of concrete until a minimum of 7 days after initial concrete set, unless otherwise approved by the Engineer.
- L. Remove any pile damaged in the driving, improperly driven, or driven at an incorrect location and drive another pile in its place at no additional cost to the Port.
- M. Do not jet or blast.

**3.03 AS-DRIVEN PILING SURVEYS AND DRIVING TOLERANCES**

- A. Survey the as-driven locations of piling immediately after pile installation has been completed. Do not erect falsework until the survey is complete for piling in a structure. For each pile, provide a written record of horizontal (plan) location, tip elevation, and top elevation (before cut-off or before build-up if necessary) and submit it to the Engineer within twenty-four (24) hours of driving.
- B. The Contractor must not demobilize pile driving equipment until the Engineer has approved the as-driven pile information and the Contractor must allow a minimum of 5 calendar days for the Engineer to complete its review.
- C. If the initial as-driven survey is not provided within the specified time frame, the Port may retain a surveyor to record such information and will deduct the cost of such survey work from the contract.
- D. Notify the Engineer immediately when piling do not meet the specified driving tolerances.
- E. After cut-offs and falsework installation, but prior to concrete placement, survey and submit the final plan locations and elevations at the tops of piles.
- F. Driving Tolerances:



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1. Horizontal (Plan) Location: The top work points must be within 4 inches of the indicated location shown on the drawings.
2. Vertical Cut-off Elevations: Deviation from elevations indicated on the drawings must not be more than 1/2 inch.
3. Plumbness: Maximum deviation from plumb must not exceed 1 horizontal to 120 vertical units of pile length (0.50 degree).

**3.04 OBSTRUCTIONS**

- A. Definition: An obstruction, unforeseen circumstance, or unforeseeable situation is a subsurface condition that prevents a pile from advancing, in its prescribed location, at its prescribed batter, at a depth greater than 10 pile diameters below the mudline.
- B. As determined by the Port, the Contractor may receive additional compensation for piles that are rejected due to obstructions, unforeseen circumstances, or unforeseeable conditions, in accordance with the pre-approved rates established for Force Account work.
- C. Where obstructions inhibit or prevent piles from being driven to capacity, to minimum tip embedment, to the prescribed location, or within tolerances, the Port may direct that special methods be incorporated including spudding, predrilling, complete pile replacement, or request that the Contractor propose means and methods to achieve pile acceptance and that meet local, state, and federal requirements and permit requirements.
- D. Any pre-approved additional measures taken, labor engaged, equipment used, and materials supplied to mitigate a pile obstruction must be detailed by the Contractor and submitted to the Port. Payment will be made as an adjustment to the contract price.
- E.

**3.05 REJECTED OR REPAIRED PILES**

- A. Any pile that deviates more than the driving tolerance limits specified above may be rejected by the Engineer.
- B. If subsurface conditions cause drifting beyond allowable tolerances, notify the Engineer immediately of the circumstances and submit proposed corrective measures for review.
- C. Any pile that does not reach the prescribed tip elevation shown on the drawings or achieve the Engineer's refusal or capacity criteria may be rejected by the Engineer.

**DIVISION 31 – EARTHWORK**  
**Section 31 62 00 – Driven Piles**

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- D. Rejected piles will not be paid for by the Port.
- E. The Engineer may direct that a rejected pile be removed and replaced with a new pile driven in its place, or that a new pile be driven adjacent to the rejected pile. The Engineer may further direct that both new and rejected piles be incorporated into the structure.
- F. Design and construction costs resulting from rejected piling, including removal, disposal, and modifications to pile caps, bulkheads, existing infrastructure, etc., must be borne by the Contractor.
- G. Repair coating damaged during handling, storage, driving, redriving, cutoffs, or connection installation (piles to pile caps) in accordance with Section 09 96 00 – High Performance Coatings, at no additional cost to the Port.

**3.06 DAILY DRIVING RECORDS**

Daily Pile Driving Records: For each pile driven, submit a driving record form. Each initial driving record and re-strike record must be submitted daily, and must show the information below. However, report damaged piles to the Engineer immediately.

- A. Date, time, and weather
- B. Start/end of coated length, pile location, pile length, pile size, and pile type
- C. Field measurement of existing grade (mudline) elevation
- D. Hammer used, rated hammer energy, pile cushion type and thickness
- E. Vibratory hammer drive records: hammer on/off times, elapsed time per 5 feet of penetration during fast driving, and elapsed time per foot of penetration as driving rate slows
- F. Impact hammer drive records:
  - 1. Hammer on/off times, blows per foot of penetration, blows per minute of driving, and hammer stroke (correlate from blows per minute)
  - 2. In the last 6 inches, blows per inch, blows per minute of driving, and hammer stroke (can be correlated from blows per minute)
  - 3. For restrikes, blows per inch, blows per minute of driving, and hammer stroke (can be correlated from blow per minute)
- G. Damage, obstructions, or any unusual occurrences during driving, and all other data required on the driving form.

**DIVISION 31 – EARTHWORK**  
**Section 31 62 00 – Driven Piles**

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**3.07 INSPECTIONS**

- A. After installation, conduct full-height inspections of piling, from the top to the existing grade, to ensure that each is undamaged and conforms to the drawings and specifications. Each inspection day, report the results to the Engineer in writing.
- B. Submit for review a written inspection report detailing the as-driven condition of each pile within fourteen (14) days of final driving, but before falsework installation begins. Note coating damage, other defects, or unusual features at the mudline.
- C. The Engineer may inspect any or all of the piling. Any discrepancy between the Engineer's and the Contractor's inspection reports must be resolved by a joint inspection. Inspections by the Engineer will be performed at no cost to the Contractor.

**3.08 SUPPLEMENTS**

The supplements, "Hammer Data Sheet" and "Driving Record" following the "END OF SECTION" marker are part of this section.

**END OF SECTION**

**DIVISION 31 – EARTHWORK**  
**Section 31 62 00 – Driven Piles**

**HAMMER DATA SHEET**

Contract No.:	Structure Name and/or No.:
Project:	
Pile Driving CONTRACTOR or Subcontractor:	
County:	Piles Driven By:

 	HAMMER	Manufacturer:	Model:
		Type:	Serial No.
	BLOCK	Rated Energy: _____ @ _____	Length of Stroke
		Modifications: _____	
	HELMET	Material:	
		Thickness:	Area:
	CUSHION	Modulus of Elasticity - E _____ (psi)	
		Coefficient of Restitution - e _____	
	PILE	ALL COMPONENTS	Weight:
		Cushion Material:	
		Thickness:	Area:
		Modulus of Elasticity - E _____ (psi)	
		Coefficient of Restitution - e _____	
		Pile Type:	Weight/ft
		Length in Leads:	
		Wall Thickness:	Taper:
		Design Pile Capacity: _____ (Tons)	
		Description of Splice: _____	
		Tip Treatment Description: _____	

NOTE: If mandrel is used to drive pile, attach separate manufacturer's detail sheet(s), including weight and dimensions.

Submitted By: \_\_\_\_\_ Date: \_\_\_\_\_

# DIVISION 31 – EARTHWORK

## Section 31 62 00 – Driven Piles

PILE-DRIVING RECORD \_\_\_\_\_ PILE NO. \_\_\_\_\_

PAGE NO. \_\_\_\_ OF \_\_\_\_

JOB NO. \_\_\_\_\_ NAME \_\_\_\_\_  
 JOB LOCATION \_\_\_\_\_  
 PILE LOCATION \_\_\_\_\_  
 DRIVING CONTRACTOR \_\_\_\_\_

DATE \_\_\_\_\_  
 JOB ENGINEER \_\_\_\_\_  
 DATUM \_\_\_\_\_  
 SUPT \_\_\_\_\_

Pile: Type\* \_\_\_\_\_  
 Length \_\_\_\_\_ Weight (lb) \_\_\_\_\_  
 Penetration: \_\_\_\_\_  
 Ground Elev. before Driving \_\_\_\_\_  
 Ground Elev. after Driving \_\_\_\_\_  
 Tip Elev. after Driving \_\_\_\_\_  
 Butt Elev. after Driving Group \_\_\_\_\_

Hammer: Make and Model \_\_\_\_\_  
 Stroke: Rated \_\_\_\_\_ Meas.\*\* \_\_\_\_\_  
 Weight of Ram \_\_\_\_\_ lb \_\_\_\_\_  
 Strokes per Minute \_\_\_\_\_  
 Steam Pressure at Boiler \_\_\_\_\_  
 Driving Cap, Anvil, Helmet, etc. \_\_\_\_\_  
 Weight \_\_\_\_\_ lb Description \_\_\_\_\_

(Make sketch on back)

Time: Start Driving \_\_\_\_\_ Finish Driving \_\_\_\_\_ Driving Time \_\_\_\_\_ Minutes

ft	No. of Blows	ft	No. of Blows	ft	No. of Blows	ft	No. of Blows	ft	No. of Blows	ft	No. of Blows	ft	No. of Blows	ft	No. of Blows
0		0		0		0		0		0		0		0	
1		1		1		1		1		1		1		1	
2		2		2		2		2		2		2		2	
3		3		3		3		3		3		3		3	
4		4		4		4		4		4		4		4	
5		5		5		5		5		5		5		5	
6		6		6		6		6		6		6		6	
7		7		7		7		7		7		7		7	
8		8		8		8		8		8		8		8	
9		9		9		9		9		9		9		9	

### DRIVING RESISTANCE LAST FOOT

1" 2" 3" 4" 5" 6" 7" 8" 9" 10" 11" 12"

Remarks\*\*\* \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* If wood, state kind, seasoning, and treatment. If concrete, state mix and age. If steel, state weight per foot.  
 \*\* Note any falling off in rated speed and stroke during driving.  
 \*\*\* Jetting, cause and duration of delays in driving, boulders, bark, condition of cushions, types and thickness of cushions, plumbness, twisting, banding, damage, driving shoe, wetting of pile surface, etc.

USE BACK OF SHEET

## **DIVISION 32 – EXTERIOR IMPROVEMENTS**

### **Section 32 12 16 – Asphalt Paving**

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#### **PART 1.0 - GENERAL**

##### **1.01 DESCRIPTION OF WORK:**

- A. Producing, transporting, placing, shaping and compacting of asphalt concrete pavement.

##### **1.02 RELATED WORK:**

- A. Section 01 33 00 – Submittal Procedures

##### **1.03 REFERENCES:**

- A. WSDOT - Standard Specifications for Road, Bridge and Municipal Construction; Washington State Department of Transportation, M 41-10; 2014.

##### **1.04 SUBMITTALS:**

- A. Submit a mix design for this project taking into account the specific plan and equipment to be used.
- B. Submit certificates of Specification compliance for materials to be used.
- C. The work cannot proceed until the mix design and placing methods are approved by the Port.

##### **1.05 QUALITY ASSURANCE**

- A. The Port will provide necessary inspection services.
- B. Sampling and testing for compliance with the Contract provisions shall be in accordance with Section 01330 - Submittal Procedures.
- C. Unless otherwise referenced or modified herein, quality control and quality standards for this section shall be as specified in the WSDOT Standard Specifications Section 5-04.
- D. Use materials furnished by a bulk asphalt concrete producer, regularly engaged in production of hot-mix, hot-laid asphalt concrete.

##### **1.06 JOB CONDITIONS**

- A. Weather limitations on performance of work described in this section shall be as described in the following sections of the Standard Specification.
  - 1. 4-04.3 (8)
  - 2. 5-02.3 (10)
  - 3. 5-04.3 (16)
- B. The Contractor shall comply with the coordination and scheduling constraints as required by the Port.
- C. Where required, the Contractor shall coordinate all traffic control required by the Port to maintain vehicular and pedestrian traffic furring paving operation. Flagmen, barricades, warning signs, and other approved devices shall be used to maintain safety and cause the least disturbance to Port operations. All vehicles shall be equipped with flashing amber lights as directed by the Port.

## **DIVISION 32 – EXTERIOR IMPROVEMENTS**

### **Section 32 12 16 – Asphalt Paving**

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#### **PART 2.0 - PRODUCTS**

##### **2.01 ASPHALT**

- A. Asphalt: HMA (hot mix asphalt) in accordance with WSDOT Standard Specifications Section 5-04.
  - 1. HMA Class 1/2" PG 58-22.
  - 2. Proportion materials according to WSDOT Standard Specifications Section 9-03.8(6).

##### **2.02 ASPHALT MATERIALS**

- A. Aggregate for Asphalt: Conform to the grading requirement of WSDOT Standard Specifications Section 9-03.8, and test according to Section 9-03.20.
- B. Asphalt for concrete shall conform to WSDOT Section 9-02.1(4).
- C. Joints: Conform to WSDOT Standard Specifications Section 5-04.3(12).
- D. Tack coat: Emulsified asphalt, CSS-1, conforming to WSDOT Standard Specifications Section 9-02.1(6).

##### **2.03 ASPHALT MIXING**

- A. Mixing plant: Conform mixing plant for preparing asphalt concrete to the specific requirements of WSDOT Standard Specifications Section 5-04.3(1).

#### **PART 3.0 - EXECUTION**

##### **3.01 PLACING ASPHALT**

- A. Prepare asphalt from materials as previously described and by plants and methods conforming to the WSDOT Standard Specifications.
- B. Deliver materials to the site in conformance with WSDOT Standard Specifications.
- C. Place HMA when the crushed surfacing is dry and weather is not rainy.
- D. Do not place mix at atmospheric temperature below 40°F unless otherwise approved by the Port.
- E. Do not allow workers to walk or stand on the finished HMA before it has been rolled or compacted.
- F. Place HMA in two lifts of equal thickness (base course and wearing course) over the leveling course, with a tack coat as needed in between. Follow specific construction requirements of WSDOT Standard Specifications Section 5-04.3.
- G. Paving shall be placed using an approved type of paving machine.

##### **3.02 TACK COAT**

- A. Apply tack coat of emulsified asphalt to all paved surfaces over which any course of HMA is to be placed or abutted. Rate of application shall be 0.10 gal/sq. yd.

##### **3.03 COMPACTION**

## **DIVISION 32 – EXTERIOR IMPROVEMENTS**

### **Section 32 12 16 – Asphalt Paving**

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- A. Rolling shall be by a heavy steel-wheel roller and shall start as soon as the operation does not result in excessive displacement. Rolling shall continue until the surface texture has completely closed and all roller marks removed. Areas inaccessible to the roller shall be compacted by means of hand or mechanical methods, continuing until the mixture is thoroughly compacted and the surface smooth. The compaction of the stable dense graded mix shall be completed while the mix is above 200°F in order to obtain optimum density.

The asphalt mix shall not be placed at less than 260°F to allow for sufficient compaction prior to cooling. The desired minimum level of compaction shall be 92% of the maximum density (as determined by WSDOT Test Method 705).

- B. Determine reference maximum density as the moving average of the most recent five determinations for the lot of asphalt concrete being placed.

#### **3.04 ADJUSTMENT OF BOXES, LIDS, ETC.**

- A. The frames of surface structures shall be set to final grade as a part of this work, include frames furnished as part of other work for this project. Refer to Section 7-05 of the Standard Specification.

#### **3.05 JOINT SEAL**

- A. Meet lines to existing pavement at project boundaries shall be cut to clean lines at the beginning of the work and sealed at completion.
- B. Fill new paving joints with joint sealer meeting the requirements of WSDOT Standard Specifications Section 9-04.2(1).

#### **3.06 SURFACE SMOOTHNESS**

- A. Surface smoothness of completed pavement in conformance with the specific requirements of WSDOT Standard Specifications Section 5-04.3(13).

#### **3.07 TESTING**

- A. Test hot mix asphalt in conformance with the WSDOT Standard Specifications Sections 5-04.3(8).
- B. Comply with the WSDOT Standard Specifications Section 9-03.8(2) and 9-03.20 for aggregate testing.

**END OF SECTION**



**EXHIBIT A**

**“Contract” (form of)**

## **CONTRACT**

THIS CONTRACT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2024, by and between the **PORT OF ILWACO**, of P.O. Box 307, Ilwaco, Washington, 98624, a public port, hereinafter referred to as **Owner**, and XXXXXXXXXXXXXXXXXXXXXXXXXXXX of XXXXXXXXXXXXXXXXXXXX, hereinafter called the **Contractor**.

### **WITNESSETH:**

1. **Contractor** shall furnish all of the material and perform all of the work and labor for the above named project in accordance with the Contract as defined in the Bid Solicitation and Division 1 of the M 41-10 Standard Specifications for Road, Bridge, and Municipal Construction (the "WSDOT Specifications"). The Bid Solicitation and WSDOT Specifications are fully incorporated herein by reference.
2. **Owner** shall pay **Contractor** per the following schedule:
  - 2.1 **Contractor** shall complete the work heretofore called for as depicted in the Contract, and **Owner**, pursuant to law, reserves the right to hold retainage in accordance with RCW 60.28.
3. **Contractor** agrees to the following anticipated construction schedule.
4. **Contractor** agrees to keep the property free from liens of any kind whatsoever and to defend and hold **Owner** harmless from any claims of third parties for damages suffered by third parties as a result of Contractor's activities in connection with the performance of this Contract.
5. **Prevailing Wage Law.** Before any payment is made of any sum or sums due, **Contractor** and any or all **subcontractors** must file and receive an approved Intent form from the Industrial Statistician, certifying the rate of hourly wage paid each classification of laborer or workman employed by them on such work and further certifying that no laborer or workman employed by them for this work has been paid less than the prevailing wage rate in Whatcom County, which certificate and statement to be so filed will be verified by the oath of the **Contractor** or **subcontractor**, as the case may be, that they have read such statement and certificate subscribed by them, knows the contents thereof, and that the same is true as they verily believe.

In case a dispute arises as to the prevailing wage rates for work of a similar nature and such dispute cannot be adjusted by the parties involved, the matter shall be referred to the Director of the Department of Labor and Industries of the State of Washington for arbitration, and their decision shall be final and conclusive and binding upon all parties involved in the dispute.

**Contractor** acknowledges their familiarity with R.C.W. 39.12 as the same pertains to payment of prevailing wages and agrees to comply therewith. The Contractor shall be responsible for the compliance with the requirements of Prevailing Wage Law by all firms (including subcontractors, lower tier subcontractors, suppliers, manufacturers and

fabricators) engaged in any part of the work necessary to complete this Contract.

6. **Contractor** agrees to furnish **Owner** all bonds required in the Specifications heretofore mentioned within the timeframe specified in the bid documents and the Notice of Award. To the extent that this provision conflicts with WSDOT Section 1-03.3, this section controls.
7. The **Contractor** shall receive no compensation for delays or hindrances to the work, except when direct and unavoidable extra cost to the **Contractor** is caused by the failure of the **Owner** to provide information or material, if any, which is to be furnished by the **Owner**. When such extra compensation is claimed, a written statement thereof providing specific detail of the basis for the claim shall be presented by the **Contractor** to the Engineer and if found correct by them shall be approved and referred by them to the Port Commission for final approval or disapproval; and the action thereon by the Port Commission shall be final and binding.
8. **Certification of Non-Segregated Facilities** (*for Federally assisted projects*). The Contractor agrees by signature herein below that he is deemed to have signed and agreed to the provisions of certification of non-segregated facilities which is included as an Exhibit to the Bid Solicitation package and made part hereof.
9. **Equal Employment Opportunity Responsibilities.** The Contractor shall fully comply with all applicable state and federal employment and discrimination laws and regulations. Contractor shall assure, by signing this Contract, to fully comply with all equal employment opportunity as required by Executive Order 11246 and 11375, including all regulations promulgated thereto.
10. **Conflict of Interest**  
Contractor covenants that it presently has no interest and shall not acquire an interest, directly or indirectly, which would conflict in any manner or degree with its performance under this Contract. Contractor further covenants that in the performance of this Contract, no person having such interest shall be employed by it or any of its sub- contractors.
11. **Indemnification.** To the fullest extent permitted by law and to the extent claims, damages or losses or expenses are not covered by insurance purchased by Contractor, the Contractor shall defend and indemnify the Owner and Owner's employees and Commissioners from any claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of, or resulting from the performance of, the Work, but only to the extent caused by the acts or omissions of the Contractor, a subcontractor or supplier, or anyone directly or indirectly employed by them or anyone for whose acts they may be liable.
  - 11.1 This indemnification obligation shall include, but is not limited to, all claims against the Owner by an employee or former employee of the Contractor or any subcontractor or supplier. For this purpose, the Contractor expressly waives, as respects the Owner only, all immunity and limitation on liability under any industrial insurance Act, including Title 51 RCW, or other workers compensation act, disability act, or other employees benefits of any act of any jurisdiction which would otherwise be applicable in the case of such a claim. **BY INITIALING BELOW THE OWNER AND CONTRACTOR CERTIFY THE WAIVER OF IMMUNITY SPECIFIED BY THIS PROVISION WAS MUTUALLY NEGOTIATED.**

12. **Obligation to Report Employees Who Used Early Retirement Factors; Liability for Failure to Report.** The Port is an employer of one or more members of the Washington State Department of Retirement Systems (DRS). As a DRS covered employer, the Port is required to advise DRS of any retiree performing services for the Port who has used the 2008 Early Retirements Factors (ERFs) to retire early and is under age 65. Workers meeting these factors cannot perform services in any capacity for a DRS-covered employer and continue to receive a pension benefit (WAC 415-02-325).

Concurrently with the execution of this Contract and prior to commencing work, Contractor shall verify if any person who will be performing work on this project retired from a DRS employer using ERFs. Contractor must report any such persons to the Port by: (1) completing the DRS Contractor or Third-Party Worker Retirement Status Verification form that can be downloaded by following this link ([Employer form Retirement Status Verification - DRS MS 147 \(drsms147\) \(wa.gov\)](#)) and (2) emailing it to [thayes@portofilwaco.org](mailto:thayes@portofilwaco.org) or mailing it to Port of Ilwaco Finance at 165 Howerton Way SE – Ilwaco, WA 98624.

If Contractor fails to timely report any employee who used ERFs to the Port in accordance with this section, Contractor shall be liable for all assessments issued to the Port by DRS and all legal fees and costs incurred by the Port in connection with such assessment. Contractor agrees that the Port may deduct such amounts from any amounts that may be owed to Contractor. Any additional amounts owed will be paid to the Port within fifteen (15) days of receiving an invoice from the Port.

13. **Successors and Assigns.** This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns. The representations and warranties contained herein shall survive the termination of this Contract. No other promises, representations or warranties shall be valid and binding unless they are reduced to writing and signed by the parties hereto. No amendment to this Contract shall be valid unless reduced to writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this CONTRACT in duplicate the day and year first above written.

XXXXXXXXXXXXXXXXXXXXXXX

PORT OF ILWACO

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Print name and Title

Tracy Lofstrom, Port Manager  
\_\_\_\_\_  
Print Name and Title

Date signed: \_\_\_\_\_

Date signed: \_\_\_\_\_

**EXHIBIT B**

**“PAYMENT AND PERFORMANCE BOND”**



# Port of Ilwaco

## PAYMENT AND PERFORMANCE BOND

Date Bond Executed

See Instruction to Bidders

NOTE: Type or Print in Ink

Principal (Legal Name and Business Address)	Type of Organization (Check One)	
	<input type="checkbox"/> Individual	<input type="checkbox"/> Partnership
Surety(ies) (Name(s) and Business Address(es))	<input type="checkbox"/> Joint Venture	<input type="checkbox"/> Corporation
	Contract Date	Contract Number
	Sum Amount of Bond (Including State Sales Tax) Dollars	
		(\$)

We, the Principal and Surety(ies), in accordance with the Revised Code of Washington, are firmly bound and obligated to the Port of Ilwaco in the above sum amount on conditions set forth below, for the payment of which we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally.

THE CONDITION OF THIS OBLIGATION AS SUCH, that the Principal entered into the contract identified above.

THE ABOVE OBLIGATION shall be void and of no effect if the Principal performs and fulfills all the provisions of such contract and any extensions or modifications thereof that may be made by the Port of Ilwaco, and faithfully pays all laborers, mechanics and subcontractors and material men, and all persons who shall supply such person or persons, or subcontractors, with materials and supplies or the carrying on of such work and shall indemnify the Port of Ilwaco against any loss or damage directly due to the failure of the Principal to faithfully perform the contract identified above.

IN WITNESS HEREOF, the Principal and Surety(ies) have executed this payment and performance bond and have affixed their signatures and seals on the date set forth above.

1. Name of Principal and Title	Phone No.	Signature	L.S. (Corporate Seal)
2.			
Name and Address		Liability Limit	
1. Name and Title (Attorney in Fact)	Phone No.	Signature	L.S. (Corporate Seal)
1. Name and Title (Resident Agent)	Phone No.	Signature	
Name and Address		Liability Limit	
1. Name and Title (Attorney in Fact)	Phone No.	Signature	L.S. (Corporate Seal)
2. Name and Title (Resident Agent)	Phone No.	Signature	

Payment-performance-bond

EXHIBIT C

**WAGE LAWS COMPLIANCE CERTIFICATION**  
**(RCW 39.04.350)**

I, \_\_\_\_\_,  
*[PRINT NAME AND TITLE OF PERSON SIGNING THIS FORM]*

do certify and declare that the bidder is in compliance with RCW 39.04.350(1)(g) and that within the three (3) year period immediately preceding the date of this bid, the bidder has not been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgement entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, chapter 49.48, or chapter 49.52 RCW.

Executed under penalty of perjury under the laws of the State of Washington at

\_\_\_\_\_ on \_\_\_\_\_  
*[PRINT CITY AND STATE WHERE SIGNED]* *[PRINT DATE SIGNED]*

\_\_\_\_\_  
*[PRINT NAME OF PROJECT]*

\_\_\_\_\_  
*[PRINT FULL NAME OF COMPANY SUBMITTING BID]*

\_\_\_\_\_  
*[SIGNATURE]*

## EXHIBIT D

# PREVAILING WAGE RATES

The rate of wages to be paid to all workmen, laborers or mechanics employed in the performance of any part of this contract shall be in accordance with the provisions of CHAPTER 39.12 R.C.W., as amended, and the rules and regulations of the Department of Labor and Industries.

The project site is located in **Pacific County**.

The effective date for prevailing wages on this project will be the prime contractor's **Quote Due Date** with these exceptions:

- If the project is not awarded within six (6) months of the quote due date, the award date is the effective date.
- If the project is not awarded pursuant to quotes, the award date (the date the contract is executed) is the effective date.
- Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, the rates in effect on the quote due date shall apply for the duration of the contract (unless otherwise noted in the solicitation).

Look up the prevailing rates of pay, benefit, and overtime codes from this link:  
<https://secure.lni.wa.gov/wagelookup/>

For prevailing wage questions, contact the Dept. of Labor and Industries at [PW1@Lni.wa.gov](mailto:PW1@Lni.wa.gov) or 360-902-5335.

A copy of the Prevailing Wage Rates are available for viewing at the Port of Ilwaco's Offices at 165 Howerton Way SE – Ilwaco WA, 98624. Please contact the Port's Manager for additional information or to obtain a hard copy by mail.

**Each contractor performing work on the project shall keep accurate Certified Payroll records for three (3) years from the date of acceptance of the public works project in complete compliance with WAC 296-127-320. It is the responsibility of the Contractor to collect and maintain Certified Payroll records from Sub-Contractors and provide upon request.**



"General Decision Number: WA20230080 10/13/2023

Superseded General Decision Number: WA20220080

State: Washington

Construction Type: Heavy Dredging

Counties: Washington Statewide.

DREDGING CONSTRUCTION PROJECTS (Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	08/25/2023

ENGI0302-030 06/01/2014

CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN), SAN JUNA, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES

	Rates	Fringes
DREDGING		
GROUP 1.....	\$ 35.93	17.40
GROUP 2.....	\$ 36.93	17.40
GROUP 3.....	\$ 37.35	17.40
GROUP 4.....	\$ 38.39	17.40
GROUP 5.....	\$ 36.93	17.40
GROUP 6.....	\$ 37.35	17.40

ZONE 2 (26-45 radius miles) - Add \$1.00 to Zone 1 rates  
 ZONE 3 (Over 45 radius miles) - Add \$1.30 to Zone 1 rates

BASEPOINTS: Kent, Everett, Mt. Vernon, Bellingham, Port Angeles, Port Townsend, Aberdeen, Shelton, Bremerton, Wenatchee, and Yakima

## WORK PERFORMED ON HYDRAULIC DREDGES:

GROUP 1: Assistant Mate (Deckhand  
 GROUP 2: Oiler  
 GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen  
 GROUP 4: Craneman, Engineer Welder  
 GROUP 5: Leverman, Hydraulic  
 GROUP 6: Maintenance

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ENGI0370-006 06/01/2021

ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

## WORK PERFORMED ON HYDRAULIC DREDGES

	Rates	Fringes
Hydraulic Dredge		
GROUP 1:.....	\$ 29.76	20.65
GROUP 2:.....	\$ 30.08	20.65
GROUP 3:.....	\$ 30.69	20.65
GROUP 4:.....	\$ 30.85	20.65
GROUP 5:.....	\$ 31.01	20.65
GROUP 6:.....	\$ 31.29	20.65
GROUP 7:.....	\$ 31.56	20.65

GROUP 1: Assistant Mate (Deckhand)  
 GROUP 2: Assistant Engineer (Electric, Diesel, Steam, or

Booster Pump)  
 GROUP 3: Engineer Welder  
 GROUP 4: Leverman, Hydraulic  
 GROUP 5: Maintenance  
 GROUP 6: Oiler  
 GROUP 7: Mates & Boatman

HEAVY WAGE RATES APPLIES TO CLAM SHELL DREDGE, HOE AND  
 DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND  
 BULLDOZERS.

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 \* ENGI0612-002 06/01/2023

PIERCE County

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates & Boatmen.....	\$ 53.94	25.07
Enginner Welder.....	\$ 56.08	25.07
Leverman, Hydraulic.....	\$ 57.70	25.07
Oiler; Assistant Mate (Deckhand).....	\$ 53.94	25.07

ZONE 1 (0-25 radius miles - Base Rate

ZONE 2 (26-45 radius miles) - Add \$1.00 to Zone 1 rates

ZONE 3 (Over 45 radius miles) - Add \$1.30 to Zone 1 rates

BASEPOINTS: Tacoma, Olympia, and Centralia

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 \* ENGI0612-013 06/01/2023

LEWIS, PACIFIC (North of a line extending from the Northwest  
 corner of Wahkiakum County to the Pacific Ocean) and THURSTON  
 Counties

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates & Boatmen.....	\$ 54.55	25.07
Enginner Welder.....	\$ 56.08	25.07
Leverman, Hydraulic.....	\$ 57.70	25.07
Oiler; Assistant Mate (Deckhand).....	\$ 53.94	25.07

ZONE 1 (0-25 radius miles - Base Rate

ZONE 2 (26-45 radius miles) - Add \$1.00 to Zone 1 rates

ZONE 3 (Over 45 radius miles) - Add \$1.30 to Zone 1 rates

BASEPOINTS: Tacoma, Olympia, and Centralia

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 \* ENGI0701-003 01/01/2017

CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH), SKAMANIA, AND  
WAHIAKUM COUNTIES

## DREDGING:

	Rates	Fringes
Dredging:		
ZONE A		
ASSISTANT ENGINEER.....	\$ 42.80	14.35
ASSISTANT MATE. ....	\$ 37.44	14.35
LEVERMAN, DIPPER,		
FLOATING CLAMSHELL.....	\$ 45.96	14.35
LEVERMAN, HYDRAULIC. ....	\$ 45.96	14.35
TENDERMAN.....	\$ 41.31	14.35
ZONE B		
ASSISTANT ENGINEER.....	\$ 45.80	14.35
ASSISTANT MATE. ....	\$ 40.44	14.35
LEVERMAN, DIPPER,		
FLOATING CLAMSHELL.....	\$ 48.96	14.35
LEVERMAN, HYDRAULIC. ....	\$ 48.96	14.35
TENDERMAN.....	\$ 44.31	14.35
ZONE C		
ASSISTANT ENGINEER.....	\$ 48.80	14.35
ASSISTANT MATE. ....	\$ 43.44	14.35
LEVERMAN, DIPPER,		
FLOATING CLAMSHELL.....	\$ 51.96	14.35
LEVERMAN, HYDRAULIC. ....	\$ 51.96	14.35
TENDERMAN.....	\$ 47.31	14.35

## ZONE DESCRIPTION FOR DREDGING:

ZONE A - All jobs or projects located within 30 road miles of  
Portland City Hall.

ZONE B - Over 30-60 road miles from Portland City Hall.

ZONE C - Over 60 road miles from Portland City Hall.

\*All jobs or projects shall be computed from the city hall by  
the shortest route to the geographical center of the  
project.

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
for Federal Contractors applies to all contracts subject to the  
Davis-Bacon Act for which the contract is awarded (and any  
solicitation was issued) on or after January 1, 2017. If this  
contract is covered by the EO, the contractor must provide  
employees with 1 hour of paid sick leave for every 30 hours  
they work, up to 56 hours of paid sick leave each year.  
Employees must be permitted to use paid sick leave for their  
own illness, injury or other health-related needs, including  
preventive care; to assist a family member (or person who is  
like family to the employee) who is ill, injured, or has other  
health-related needs, including preventive care; or for reasons  
resulting from, or to assist a family member (or person who is  
like family to the employee) who is a victim of, domestic  
violence, sexual assault, or stalking. Additional information  
on contractor requirements and worker protections under the EO

is available at  
<https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those

classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

"

"General Decision Number: WA20230001 10/13/2023

Superseded General Decision Number: WA20220001

State: Washington

Construction Type: Highway

Counties: Washington Statewide.

HIGHWAY (Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	02/03/2023



2	08/25/2023
3	09/01/2023
4	10/13/2023

CARP0003-006 06/01/2021

SOUTHWEST WASHINGTON: CLARK, COWLITZ, KLICKITAT, LEWIS(Piledriver only), PACIFIC (South of a straight line made by extending the north boundary line of Wahkiakum County west to Willapa Bay to the Pacific Ocean), SKAMANIA, and WAHAKIUM Counties.

	Rates	Fringes
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## Carpenters:

CARPENTERS.....	\$ 44.38	16.87
DIVERS TENDERS.....	\$ 49.09	16.87
DIVERS.....	\$ 93.09	16.87
DRYWALL.....	\$ 44.38	16.87
MILLWRIGHTS.....	\$ 46.89	16.87
PILEDRIERS.....	\$ 44.97	16.87

## DEPTH PAY:

50 TO 100 FEET \$1.00 PER FOOT OVER 50 FEET  
 101 TO 150 FEET \$1.50 PER FOOT OVER 101 FEET  
 151 TO 200 FEET \$2.00 PER FOOT OVER 151 FEET

## Zone Differential (Add up Zone 1 rates):

Zone 2 - \$0.85  
 Zone 3 - 1.25  
 Zone 4 - 1.70  
 Zone 5 - 2.00  
 Zone 6 - 3.00

BASEPOINTS: ASTORIA, LONGVIEW, PORTLAND, THE DALLES, AND VANCOUVER, (NOTE: All dispatches for Washington State Counties: Cowlitz, Wahkiakum and Pacific shall be from Longview Local #1707 and mileage shall be computed from that point.)

ZONE 1: Projects located within 30 miles of the respective city hall of the above mentioned cities  
 ZONE 2: Projects located more than 30 miles and less than 40 miles of the respective city of the above mentioned cities  
 ZONE 3: Projects located more than 40 miles and less than 50 miles of the respective city of the above mentioned cities  
 ZONE 4: Projects located more than 50 miles and less than 60 miles of the respective city of the above mentioned cities.  
 ZONE 5: Projects located more than 60 miles and less than 70 miles of the respective city of the above mentioned cities  
 ZONE 6: Projects located more than 70 miles of the respected city of the above mentioned cities

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CARP0030-004 06/01/2021

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM Counties

	Rates	Fringes
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## CARPENTER

BRIDGE CARPENTERS.....	\$ 49.18	19.01
CARPENTERS ON CREOSOTE		
MATERIAL.....	\$ 47.02	19.01
CARPENTERS.....	\$ 49.18	19.01
DIVERS TENDER.....	\$ 54.54	19.01
DIVERS.....	\$ 103.43	19.01
MILLWRIGHT AND MACHINE		
ERECTORS.....	\$ 50.68	19.01
PILEDRIIVER, DRIVING,		
PULLING, CUTTING, PLACING		
COLLARS, SETTING, WELDING		
OR CRESOTE TREATED		
MATERIAL, ALL PILING.....	\$ 49.58	19.01

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL  
CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the  
free zone computed from the city center of the following  
listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

## Zone Pay:

0 -25 radius miles	Free
26-35 radius miles	\$1.00/hour
36-45 radius miles	\$1.15/hour
46-55 radius miles	\$1.35/hour
Over 55 radius miles	\$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT  
AND PILEDRIIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall,  
Tacoma City center, and Everett City center

## Zone Pay:

0 -25 radius miles	Free
26-45 radius miles	\$ .70/hour
Over 45 radius miles	\$1.50/hour

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CARP0059-002 06/01/2019

ADAMS, ASOTIN, BENTON, CHELAN (East of 120th meridian),  
COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT (East of  
120th meridian), KITTITAS (East of 120th meridian), LINCOLN,  
OKANOGAN (East of 120th meridian), PEND OREILLE, SPOKANE,  
STEVENS, WALLA WALLA, WHITMAN, and YAKIMA (East of 120th  
meridian) Counties

Rates Fringes

## CARPENTER

GROUP 1.....	\$ 35.47	16.88
GROUP 2.....	\$ 47.42	18.96

GROUP 3.....	\$ 36.66	16.88
GROUP 4.....	\$ 36.66	16.88
GROUP 5.....	\$ 83.96	16.88
GROUP 6.....	\$ 40.23	16.88
GROUP 7.....	\$ 41.23	16.88
GROUP 8.....	\$ 37.66	16.88
GROUP 9.....	\$ 44.23	16.88

## CARPENTER &amp; DIVER CLASSIFICATIONS:

GROUP 1: Carpenter

GROUP 2: Millwright, Machine Erector

GROUP 3: Piledriver - includes driving, pulling, cutting, placing collars, setting, welding, or creosote treated material, on all piling

GROUP 4: Bridge, Dock, and Wharf carpenters

GROUP 5: Diver Wet

GROUP 6: Diver Tender, Manifold Operator, ROV Operator

GROUP 7: Diver Standby

GROUP 8: Assistant Diver Tender, ROV Tender/Technician

GROUP 9: Manifold Operator-Mixed Gas

## ZONE PAY:

ZONE 1	0-45 MILES	FREE
ZONE 2	45-100	\$4.00/PER HOUR
ZONE 3	OVER 100 MILES	\$6.00/PER HOUR

## DISPATCH POINTS:

CARPENTERS/MILLWRIGHTS: PASCO (515 N Neel Street) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS/PILEDRIIVER: SPOKANE (127 E. AUGUSTA AVE.) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: WENATCHEE (27 N. CHELAN) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: COEUR D' ALENE (1839 N. GOVERNMENT WAY) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: MOSCOW (306 N. JACKSON) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

## DEPTH PAY FOR DIVERS BELOW WATER SURFACE:

50-100 feet	\$2.00 per foot
101-150 feet	\$3.00 per foot
151-220 feet	\$4.00 per foot
221 feet and deeper	\$5.00 per foot

## PREMIUM PAY FOR DIVING IN ENCLOSURES WITH NO VERTICAL ASCENT:

0-25 feet	Free
26-300 feet	\$1.00 per Foot

**SATURATION DIVING:**

The standby rate applies until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. the diver rate shall be paid for all saturation hours.

**WORK IN COMBINATION OF CLASSIFICATIONS:**

Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

**HAZMAT PROJECTS:**

Anyone working on a HAZMAT job (task), where HAZMAT certification is required, shall be compensated at a premium, in addition to the classification working in as follows:

LEVEL D + \$.25 per hour - This is the lowest level of protection. No respirator is used and skin protection is minimal.

LEVEL C + \$.50 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B + \$.75 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit".

LEVEL A +\$1.00 per hour - This level utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line.

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 CARP0770-003 06/01/2021

**WEST OF 120TH MERIDIAN FOR THE FOLLOWING COUNTIES:**

CHELAN, DOUGLAS, GRANT, KITTITAS, OKANOGAN, and YAKIMA

	Rates	Fringes
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**CARPENTER**

CARPENTERS ON CREOSOTE		
MATERIAL.....	\$ 47.02	19.01
CARPENTERS.....	\$ 49.18	19.01
DIVERS TENDER.....	\$ 54.54	19.01
DIVERS.....	\$ 103.43	19.01
MILLWRIGHT AND MACHINE		
ERECTORS.....	\$ 50.68	19.01
PILEDRIIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED		
MATERIAL, ALL PILING.....	\$ 49.58	19.01

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIIVERS

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

## Zone Pay:

0 -25 radius miles	Free
26-35 radius miles	\$1.00/hour
36-45 radius miles	\$1.15/hour
46-55 radius miles	\$1.35/hour
Over 55 radius miles	\$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

## Zone Pay:

0 -25 radius miles	Free
26-45 radius miles	\$ .70/hour
Over 45 radius miles	\$1.50/hour

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ELEC0046-001 08/07/2023

CALLAM, JEFFERSON, KING AND KITSAP COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 76.99	28.60
ELECTRICIAN.....	\$ 69.99	28.39

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\* ELEC0048-003 01/01/2023

CLARK, KLUCKITAT AND SKAMANIA COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 44.22	21.50
ELECTRICIAN.....	\$ 57.35	27.54

## HOURLY ZONE PAY:

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Portland, The Dalles, Hood River, Tillamook, Seaside and Astoria

## Zone Pay:

Zone 1: 31-50 miles	\$1.50/hour
Zone 2: 51-70 miles	\$3.50/hour
Zone 3: 71-90 miles	\$5.50/hour
Zone 4: Beyond 90 miles	\$9.00/hour

\*These are not miles driven. Zones are based on Delorme Street Atlas USA 2006 plus.

ELEC0048-029 01/01/2023

COWLITZ AND WAHKIAKUM COUNTY

	Rates	Fringes
CABLE SPLICER.....	\$ 44.22	21.50
ELECTRICIAN.....	\$ 57.35	27.54

ELEC0073-001 07/01/2022

ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN  
COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 34.10	16.68
ELECTRICIAN.....	\$ 41.30	20.09

ELEC0076-002 02/01/2023

GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON  
COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 53.15	23.81
ELECTRICIAN.....	\$ 55.14	24.86

ELEC0112-005 06/01/2022

ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA  
WALLA, YAKIMA COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 54.34	24.26
ELECTRICIAN.....	\$ 51.75	24.18

ELEC0191-003 06/01/2022

ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 44.23	17.73
ELECTRICIAN.....	\$ 53.20	27.51

ELEC0191-004 06/01/2018

CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 40.82	17.63
ELECTRICIAN.....	\$ 42.45	21.34

ENGI0302-003 06/01/2022

CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF  
THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING,  
KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN),

SAN JUNA, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE  
120TH MERIDIAN) COUNTIES

Zone 1 (0-25 radius miles):

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1A.....	\$ 54.20	24.47
Group 1AA.....	\$ 54.98	24.47
Group 1AAA.....	\$ 55.78	24.47
Group 1.....	\$ 53.40	24.47
Group 2.....	\$ 52.72	24.47
Group 3.....	\$ 52.12	24.47
Group 4.....	\$ 48.78	24.47

Zone Differential (Add to Zone 1 rates):

Zone 2 (26-45 radius miles) - \$1.00

Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent,  
Mount Vernon, Port Angeles, Port Townsend, Seattle,  
Shelton, Wenatchee, Yakima

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom  
(including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom  
(including jib with attachments); Tower crane over 175 ft  
in height, base to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom  
(including jib with attachments); Crane-overhead, bridge  
type, 100 tons and over; Tower crane up to 175 ft in height  
base to boom; Loaders-overhead, 8 yards and over; Shovels,  
excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons, under 150 ft  
of boom (including jib with attachments); Crane-overhead,  
bridge type, 45 tons thru 99 tons; Derricks on building  
work; Excavator, shovel, backhoes over 3 yards and under 6  
yards; Hard tail end dump articulating off-road equipment  
45 yards and over; Loader- overhead 6 yards to, but not  
including 8 yards; Mucking machine, mole, tunnel, drill  
and/or shield; Quad 9, HD 41, D-10; Remote control operator  
on rubber tired earth moving equipment; Rollagon;  
Scrapers-self propelled 45 yards and over; Slipform pavers;  
Transporters, all truck or track type

GROUP 2 - Barrier machine (zipper); Batch Plant Operaor-  
Concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with  
attachments; Crane-overhead, bridge type-20 tons through 44  
tons; Chipper; Concrete Pump-truck mount with boom  
attachment; Crusher; Deck Engineer/Deck Winches (power);  
Drilling machine; Excavator, shovel, backhoe-3yards and  
under; Finishing Machine, Bidwell, Gamaco and similar  
equipment; Guardrail punch; Horizontal/directional drill  
operator; Loaders-overhead under 6 yards; Loaders-plant  
feed; Locomotives-all; Mechanics-all; Mixers-asphalt plant;  
Motor patrol graders-finishing; Piledriver (other than

crane mount); Roto-mill, roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self propelled, hard tail end dump, articulating off-road equipment-under 45 yards; Subgrade trimmer; Tractors, backhoes-over 75 hp; Transfer material service machine-shuttle buggy, blaw knox-roadtec; Truck crane oiler/driver-100 tons and over; Truck Mount portable conveyor; Yo Yo Pay dozer

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; A-frame crane over 10 tons; Drill oilers-auger type, truck or crane mount; Dozers-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loader-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pumps-concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrpers-concrete and carry-all; Service engineer-equipment; Trenching machines; Truck Crane Oiler/Driver under 100 tons; Tractors, backhoe 75 hp and under

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete finish mahine-laser screed; Cranes-A frame-10 tons and under; Elevator and Manlift-permanent or shaft type; Gradechecker, Stakehop; Forklifts under 3000 lbs. with attachments; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger, mechanical; Power plant; Pumps, water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

#### HANDLING OF HAZARDOUS WASTE MATERIALS:

Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing

H-2 Class ""C"" Suit - Base wage rate plus \$ .25 per hour.

H-3 Class ""B"" Suit - Base wage rate plus \$ .50 per hour.

H-4 Class ""A"" Suit - Base wage rate plus \$ .75 per hour.

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 ENGI0370-002 06/01/2021

ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

ZONE 1:

Rates

Fringes



## POWER EQUIPMENT OPERATOR

GROUP 1.....	\$ 29.76	20.65
GROUP 2.....	\$ 30.08	20.65
GROUP 3.....	\$ 30.69	20.65
GROUP 4.....	\$ 30.85	20.65
GROUP 5.....	\$ 31.01	20.65
GROUP 6.....	\$ 31.21	20.65
GROUP 7.....	\$ 31.56	20.65
GROUP 8.....	\$ 32.66	20.65

ZONE DIFFERENTIAL (Add to Zone 1 rate): Zone 2 - \$2.00

Zone 1: Within 45 mile radius of Spokane, Pasco, Washington; Lewiston, Idaho

Zone 2: Outside 45 mile radius of Spokane, Pasco, Washington; Lewiston, Idaho

## POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel, or electric power); Deck Hand; Fireman & Heater Tender; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine; Crane Oiler-Driver (CLD required) & Cable Tender, Mucking Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compressor (2000 CFM or over, 2 or more, gas diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator Hoisting Materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket elevators and conveyors); Longitudinal Float; Mixer (portable-concrete); Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad Ballast Regulation Operator (self-propelled); Railroad Power Tamper Operator (self-propelled); Railroad Tamper Jack Operator (self-propelled); Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross & similar on construction job only); Tractor (Farm type R/T with attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums); Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat (Skid Steer); Boring Machine (earth); Boring Machine (rock under 8 inch bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginaw or similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumora, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or

Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Dozer/Tractor (up to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond); Equipment Serviceman; Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Plant Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8 inch bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment (8 inch bit & over) (Robbins, reverse circulation & similar); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operator (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signaller (Whirleys, Highline Hammerheads or similar); Grade Checker

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers) (Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoe (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor patrol & attachments); Cable Controller (dispatcher); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, to and including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle & Screening Plant Operator; Dozer, 834 R/T & similar; Drill Doctor; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Roller (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, rubber-tired; Screed Operator; Shovel (under 3 yds.); Trenching Machines (7 ft. depth & over); Tug Boat Operator Vector guzzler, super sucker; Lime Batch Tank Operator (REcycle Train); Lime Brain Operator (Recycle Train); Mobile Crusher Operator (Recycle Train)

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragline; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL; H.D. Mechanic; H.D. Welder; Hydraulic Platform Trailers (Goldhofer, Shaurerly and Similar); Ultra High Pressure Waterjet Cutting Tool System Operator (30,000 psi); Vacuum Blasting Machine Operator

GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot

BOOM PAY: (All Cranes, Including Tower)  
 180 ft to 250 ft \$ .50 over scale  
 Over 250 ft \$ .80 over scale

NOTE:

In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom.

HAZMAT:

Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification.

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 \* ENGI0612-001 06/01/2023

PIERCE County

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 90% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

Zone 1 (0-25 radius miles):

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1A.....	\$ 56.08	25.07
GROUP 1AA.....	\$ 56.89	25.07
GROUP 1AAA.....	\$ 57.70	25.07
GROUP 1.....	\$ 55.26	25.07
GROUP 2.....	\$ 54.55	25.07
GROUP 3.....	\$ 53.94	25.07
GROUP 4.....	\$ 50.50	25.07

Zone Differential (Add to Zone 1 rates):

Zone 2 (26-45 radius miles) = \$1.00

Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: CENTRALIA, OLYMPIA, TACOMA

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 AAA - Cranes-over 300 tons or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes- 200 tons to 300 tons, or 250 ft of boom (including jib with attachments; Tower crane over 175 ft in height, base to boom)

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building

work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead, 6 yards to, but not including, 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9 HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled 45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operator-concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-Overhead, bridge type, 20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck engineer/deck winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Loaders, overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics- all; Mixers, asphalt plant; Motor patrol graders, finishing; Piledriver (other than crane mount); Roto-mill, roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self-propelled, hard tail end dump, articulating off-road equipment- under 45 yards; Subgrader trimmer; Tractors, backhoe over 75 hp; Transfer material service machine-shuttle buggy, Blaw Knox- Roadtec; Truck Crane oiler/driver-100 tons and over; Truck Mount Portable Conveyor; Yo Yo pay

GROUP 3 - Conveyors; Cranes through 19 tons with attachments; Crane-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozer-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside Hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pump-Concrete; Roller, plant mix or multi-lfit materials; Saws-concrete; Scrapers, concrete and carry all; Service engineers-equipment; Trenching machines; Truck crane oiler/driver under 100 tons; Tractors, backhoe under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes A-frame 10 tons and under; Elevator and manlift (permanent and shaft type); Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger-mechanical; Power plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

FOOTNOTE A- Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docks, wharfs, etc.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing, Class "D" Suit - Base wage rate plus \$ .50 per hour.

H-2 Class "C" Suit - Base wage rate plus \$1.00 per hour.

H-3 Class "B" Suit - Base wage rate plus \$1.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$2.00 per hour.

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\* ENGI0612-012 06/01/2023

LEWIS, PACIFIC (portion lying north of a parallel line extending west from the northern boundary of Wahkaikum County to the sea) AND THURSTON COUNTIES

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 90% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

Zone 1 (0-25 radius miles):

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1A.....	\$ 54.85	25.07
GROUP 1AA.....	\$ 55.67	25.07
GROUP 1AAA.....	\$ 56.45	25.07
GROUP 1.....	\$ 54.05	25.07
GROUP 2.....	\$ 53.36	25.07
GROUP 3.....	\$ 52.75	25.07
GROUP 4.....	\$ 49.36	25.07

Zone Differential (Add to Zone 1 rates):

Zone 2 (26-45 radius miles) = \$1.00

Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: CENTRALIA, OLYMPIA, TACOMA

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 AAA - Cranes-over 300 tons or 300 ft of boom  
(including jib with attachments)

GROUP 1AA - Cranes- 200 tonsto 300 tons, or 250 ft of boom  
(including jib with attachments; Tower crane over 175 ft in height, bas to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom  
(including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building

work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead, 6 yards to, but not including, 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9 HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled 45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operator-concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-Overhead, bridge type, 20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck engineer/deck winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Loaders, overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics- all; Mixers, asphalt plant; Motor patrol graders, finishing; Piledriver (other than crane mount); Roto-mill, roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self-propelled, hard tail end dump, articulating off-road equipment- under 45 yards; Subgrader trimmer; Tractors, backhoe over 75 hp; Transfer material service machine-shuttle buggy, Blaw Knox- Roadtec; Truck Crane oiler/driver-100 tons and over; Truck Mount Portable Conveyor; Yo Yo pay

GROUP 3 - Conveyors; Cranes through 19 tons with attachments; Crane-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozer-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside Hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pump-Concrete; Roller, plant mix or multi-lfit materials; Saws-concrete; Scrapers, concrete and carry all; Service engineers-equipment; Trenching machines; Truck crane oiler/driver under 100 tons; Tractors, backhoe under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes A-frame 10 tons and under; Elevator and manlift (permanent and shaft type); Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger-mechanical; Power plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

FOOTNOTE A- Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
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H-2 Class "C" Suit - Base wage rate plus \$1.00 per hour.

H-3 Class "B" Suit - Base wage rate plus \$1.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$2.00 per hour.

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ENGI0701-002 01/01/2022

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES

POWER EQUIPMENT OPERATORS: ZONE 1

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 51.65	16.35
GROUP 1A.....	\$ 53.81	16.35
GROUP 1B.....	\$ 55.97	16.35
GROUP 2.....	\$ 49.74	16.35
GROUP 3.....	\$ 48.59	16.35
GROUP 4.....	\$ 45.26	16.35
GROUP 5.....	\$ 44.02	16.35
GROUP 6.....	\$ 40.80	16.35

Zone Differential (add to Zone 1 rates):

Zone 2 - \$3.00

Zone 3 - \$6.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or projects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens "Blast Zone" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

##### Group 1

Concrete Batch Plant and or Wet mix three (3) units or more; Crane, Floating one hundred and fifty (150) ton but less than two hundred and fifty (250) ton; Crane, two hundred (200) ton through two hundred ninety nine (299) ton with two hundred foot (200') boom or less (including jib, inserts and/or attachments); Crane, ninety (90) ton through one hundred ninety nine (199) ton with over two hundred (200') boom Including jib, inserts and/or attachments); Crane, Tower Crane with one hundred seventy five foot (175') tower or less and with less than two hundred foot (200') jib; Crane, Whirley ninety (90) ton and over; Helicopter when used in erecting work

##### Group 1A

Crane, floating two hundred fifty (250) ton and over; Crane, two hundred (200) ton through two hundred ninety nine (299) ton, with over two hundred foot (200') boom (including jib, inserts and/or attachments); Crane, three hundred (300) ton through three hundred ninety nine (399) ton; Crane, Tower Crane with over one hundred seventy five foot (175') tower or over two hundred foot (200') jib; Crane, tower Crane on rail system or 2nd tower or more in work radius

##### Group 1B

Crane, three hundred (300) ton through three hundred ninety nine (399) ton, with over two hundred foot (200') boom (including jib, inserts and/or attachments); Floating crane, three hundred fifty (350) ton and over; Crane, four hundred (400) ton and over

##### Group 2

Asphalt Plant (any type); Asphalt Roto-Mill, pavement profiler eight foot (8') lateral cut and over; Auto Grader or "Trimmer"; Blade, Robotic; Bulldozer, Robotic Equipment (any type); Bulldozer, over one hundred twenty thousand (120,000) lbs. and above; Concrete Batch Plant and/or Wet Mix one (1) and two (2) drum; Concrete Diamond Head Profiler; Canal Trimmer; Concrete, Automatic Slip Form Paver (Assistant to the Operator required); Crane, Boom Truck fifty (50) ton and with over one hundred fifty foot (150') boom and over; Crane, Floating (derrick barge) thirty (30) ton but less than one hundred fifty (150) ton; Crane, Cableway twenty-five (25) ton and over; Crane,



Floating Clamshell three (3) cu. Yds. And over; Crane, ninety (90) ton through one hundred ninety nine (199) ton up to and including two hundred foot (200') of boom (including jib inserts and/or attachments); Crane, fifty (50) ton through eighty nine (89) ton with over one hundred fifty foot (150') boom (including jib inserts and/or attachments); Crane, Whirley under ninety (90) ton; Crusher Plant; Excavator over one hundred thirty thousand (130,000) lbs.; Loader one hundred twenty thousand (120,000) lbs. and above; Remote Controlled Earth Moving Equipment; Shovel, Dragline, Clamshell, five (5) cu. Yds. And over; Underwater Equipment remote or otherwise, when used in construction work; Wheel Excavator any size

#### Group 3

Bulldozer, over seventy thousand (70,000) lbs. up to and including one hundred twenty thousand (120,000) lbs.; Crane, Boom Truck fifty (50) ton and over with less than one hundred fifty foot (150') boom; Crane, fifty (50) ton through eighty nine (89) ton with one hundred fifty foot (150') boom or less (including jib inserts and/or attachments); Crane, Shovel, Dragline or Clamshell three (3) cu. yds. but less than five (5) cu. Yds.; Excavator over eighty thousand (80,000) lbs. through one hundred thirty thousand (130,000) lbs.; Loader sixty thousand (60,000) lbs. and less than one hundred twenty thousand (120,000) lbs.

#### Group 4

Asphalt, Screed; Asphalt Paver; Asphalt Roto-Mill, pavement profiler, under eight foot (8') lateral cut; Asphalt, Material Transfer Vehicle Operator; Back Filling Machine; Backhoe, Robotic, track and wheel type up to and including twenty thousand (20,000) lbs. with any attachments; Blade (any type); Boatman; Boring Machine; Bulldozer over twenty thousand (20,000) lbs. and more than one hundred (100) horse up to seventy thousand (70,000) lbs.; Cable-Plow (any type); Cableway up to twenty five (25) ton; Cat Drill (John Henry); Chippers; Compactor, multi-engine; Compactor, Robotic; Compactor with blade self-propelled; Concrete, Breaker; Concrete, Grout Plant; Concrete, Mixer Mobile; Concrete, Paving Road Mixer; Concrete, Reinforced Tank Banding Machine; Crane, Boom Truck twenty (20) ton and under fifty (50) ton; Crane, Bridge Locomotive, Gantry and Overhead; Crane, Carry Deck; Crane, Chicago Boom and similar types; Crane, Derrick Operator, under one hundred (100) ton; Crane, Floating Clamshell, Dragline, etc. Operator, under three (3) cu. yds. Or less than thirty (30) ton; Crane, under fifty (50) ton; Crane, Quick Tower under one hundred foot (100') in height and less than one hundred fifty foot (150') jib (on rail included); Diesel-Electric Engineer (Plant or Floating); Directional Drill over twenty thousand (20,000) lbs. pullback; Drill Cat Operator; Drill Doctor and/or Bit Grinder; Driller, Percussion, Diamond, Core, Cable, Rotary and similar type; Excavator Operator over twenty thousand (20,000) lbs. through eighty thousand (80,000) lbs.; Generator Operator; Grade-all; Guardrail Machines, i.e. punch, auger, etc.; Hammer Operator (Piledriver); Hoist, stiff leg, guy derrick or similar type, fifty (50) ton and over; Hoist, two (2) drums or more; Hydro Axe (loader mounted or similar type); Jack Operator, Elevating Barges, Barge Operator, self-unloading; Loader Operator, front end and overhead, twenty five thousand (25,000) lbs. and less than sixty thousand

Group 5

Group 6

Port of Ilwaco

	Rates	Fringes
IRONWORKER.....	\$ 42.27	32.57

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IRON0086-002 01/02/2023

YAKIMA, KITTITAS AND CHELAN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.11	31.57

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IRON0086-004 01/02/2023

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,  
MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON, AND WHATCOM COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 50.90	32.57

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LAB00238-004 06/01/2021

PASCO AREA: ADAMS, BENTON, COLUMBIA, DOUGLAS (East of 120th  
Meridian), FERRY, FRANKLIN, GRANT, OKANOGAN, WALLA WALLA

SPOKANE

Rates	Fringes
26.69	13.65
28.79	13.65
29.06	13.65
29.33	13.65
29.61	13.65

Zone Differential (Add to Zone 1 rate): \$2.00

BASE POINTS: Spokane, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office.

#### LABORERS CLASSIFICATIONS

GROUP 1: Flagman; Landscape Laborer; Scaleman; Traffic Control Maintenance Laborer (to include erection and maintenance of barricades, signs and relief of flagperson); Window Washer/Cleaner (detail cleanup, such as, but not limited to cleaning floors, ceilings, walls, windows, etc. prior to final acceptance by the owner)

GROUP 2: Asbestos Abatement Worker; Brush Hog Feeder; Carpenter Tender; Cement Handler; Clean-up Laborer; Concrete Crewman (to include stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete machine, signaling, handling the nozzle of squeezecrete or similar machine, 6 inches and smaller); Confined Space Attendant; Concrete Signalman; Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dumpman; Fence Erector; Firewatch; Form Cleaning Machine Feeder; Stacker; General Laborer; Grout Machine Header Tender; Guard Rail (to include guard rails, guide and reference posts, sign posts, and right-of-way markers); Hazardous Waste Worker, Level D (no respirator is used and skin protection is minimal); Miner, Class "A" (to include all bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly & dismantle, and nipper); Nipper; Riprap Man; Sandblast Tailhoseman; Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Well-Point Man; All Other Work Classifications Not Specially Listed Shall Be Classified As General Laborer

GROUP 3: Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, Paving; Grade Checker using level; Hazardous Waste Worker, Level C (uses a chemical "splash suit" and air purifying respirator); Jackhammer Operator; Miner, Class "B" (to include brakeman, finisher, vibrator, form setter); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi-plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

GROUP 4: Air and Hydraulic Track Drill; Asphalt Raker; Brush Machine (to include horizontal construction joint cleanup

brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include laborers when laborers working on free standing concrete stacks for smoke or fume control above 40 feet high); Guniting (to include operation of machine and nozzle); Hazardous Waste Worker, Level B (uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Laser Beam Operator (to include grade checker and elevation control); Miner, Class C (to include miner, nozzleman for concrete, laser beam operator and rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzleman (to include jet blasting nozzleman, over 1,200 lbs., jet blast machine power propelled, sandblast nozzle); Pavement Breaker (90 lbs. and over); Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer); Pipewrapper; Plasterer Tender; Vibrators (all)

GROUP 5 - Drills with Dual Masts; Hazardous Waste Worker, Level A (utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line); Miner Class "D", (to include raise and shaft miner, laser beam operator on raises and shafts)

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LAB00238-006 06/01/2021

COUNTIES EAST OF THE 120TH MERIDIAN: ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA, WHITMAN

	Rates	Fringes
Hod Carrier.....	\$ 30.00	13.50

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LAB00242-003 06/01/2022

KING COUNTY

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 29.82	13.80
GROUP 2A.....	\$ 34.20	13.80
GROUP 3.....	\$ 42.86	13.80
GROUP 4.....	\$ 43.90	13.80
GROUP 5.....	\$ 44.62	13.80
Group 6.....	\$ 45.91	13.90

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$1.00

ZONE 3 - \$1.30

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$2.25

#### LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2A: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical "splash suit" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

## Group 6: Miner

LAB00252-010 06/01/2022

CLALLAM, GRAYS HARBOR, JEFFERSON, KITSAP, LEWIS, MASON, PACIFIC  
(EXCLUDING SOUTHWEST), PIERCE, AND THURSTON COUNTIES

	Rates	Fringes
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## LABORER

GROUP 1.....	\$ 29.82	13.80
GROUP 2.....	\$ 34.20	13.80
GROUP 3.....	\$ 42.86	13.80
GROUP 4.....	\$ 43.90	13.80
GROUP 5.....	\$ 44.62	13.80

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT,  
TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT.  
TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective  
city hall

ZONE 2 - More than 25 but less than 45 radius miles from the  
respective city hall

ZONE 3 - More than 45 radius miles from the respective city  
hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$1.00

ZONE 3 - \$1.30

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective  
city hall

ZONE 2 - More than 25 radius miles from the respective city  
hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$2.25

## LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window  
Washer/Cleaner (detail clean-up, such as but not limited to  
cleaning floors, ceilings, walls, windows, etc., prior to  
final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer;  
Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating  
Screed; Asbestos Abatement Laborer; Ballast Regulator  
Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter  
Tender; Cement Finisher Tender; Change House or Dry Shack;  
Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender;  
Clean-up Laborer; Concrete Form Stripper; Curing Laborer;  
Demolition (wrecking and moving including charred  
material); Ditch Digger; Dump Person; Fine Graders;  
Firewatch; Form Setter; Gabian Basket Builders; Grout  
Machine Tender; Grinders; Guardrail Erector; Hazardous  
Waste Worker (Level C: uses a chemical ""splash suit"" and  
air purifying respirator); Maintenance Person; Material

Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Grade Checker and Transit Person; High Scaler; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

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LAB00292-008 06/01/2022

ISLAND, SAN JUAN, SKAGIT, SNOHOMISH, AND WHATCOM COUNTIES

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 29.82	13.80
GROUP 2.....	\$ 34.20	13.80
GROUP 3.....	\$ 42.86	13.80
GROUP 4.....	\$ 43.90	13.80
GROUP 5.....	\$ 44.62	13.80

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$1.00

ZONE 3 - \$1.30

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 radius miles from the respective city



hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$2.25

#### LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical "splash suit" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

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LAB00335-001 06/01/2022

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHIAKUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHIAKUM COUNTIES

## Rates                      Fringes

### Laborers:

ZONE 1:		
GROUP 1.....	\$ 37.98	13.80
GROUP 2.....	\$ 38.76	13.80
GROUP 3.....	\$ 39.35	13.80
GROUP 4.....	\$ 39.85	13.80
GROUP 5.....	\$ 34.75	13.80
GROUP 6.....	\$ 31.61	13.80
GROUP 7.....	\$ 27.44	13.80

### Zone Differential (Add to Zone 1 rates):

Zone 2 \$ 0.65  
 Zone 3 - 1.15  
 Zone 4 - 1.70  
 Zone 5 - 2.75

### BASE POINTS: LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city all.  
 ZONE 2: More than 30 miles but less than 40 miles from the respective city hall.  
 ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.  
 ZONE 4: More than 50 miles but less than 80 miles from the respective city hall.  
 ZONE 5: More than 80 miles from the respective city hall.

### LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Plant Laborers; Asphalt Spreaders; Batch Weighman; Broomers; Brush Burners and Cutters; Car and Truck Loaders; Carpenter Tender; Change-House Man or Dry Shack Man; Choker Setter; Clean-up Laborers; Curing, Concrete; Demolition, Wrecking and Moving Laborers; Dumpers, road oiling crew; Dumpmen (for grading crew); Elevator Feeders; Median Rail Reference Post, Guide Post, Right of Way Marker; Fine Graders; Fire Watch; Form Strippers (not swinging stages); General Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader (Flaherty and similar types); Loading Spotters; Material Yard Man (including electrical); Pittsburgh Chipper Operator or Similar Types; Railroad Track Laborers; Ribbon Setters (including steel forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor; Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler; Tie Back Shoring; Timber Faller and Buckler (hand labor); Toolroom Man (at job site); Tunnel Bullgang (above ground); Weight-Man- Crusher (aggregate when used)

GROUP 2: Applicator (including pot power tender for same), applying protective material by hand or nozzle on utility lines or storage tanks on project; Brush Cutters (power saw); Burners; Choker Splicer; Clary Power Spreader and similar types; Clean- up Nozzlemans-Green Cutter (concrete, rock, etc.); Concrete Power Buggyman; Concrete Laborer; Crusher Feeder; Demolition and Wrecking Charred Materials; Guniting Nozzlemans Tender; Guniting or Sand Blasting Pot Tender; Handlers or Mixers of all Materials of an irritating nature (including cement and lime); Tool Operators (includes but not limited to: Dry Pack Machine; Jackhammer; Chipping Guns; Paving Breakers); Pipe Doping

and Wrapping; Post Hole Digger, air, gas or electric;  
Vibrating Screed; Tampers; Sand Blasting (Wet);  
Stake-Setter; Tunnel-Muckers, Brakemen, Concrete Crew,  
Bullgang (underground)

GROUP 3: Asbestos Removal; Bit Grinder; Drill Doctor; Drill Operators, air tracks, cat drills, wagon drills, rubber-mounted drills, and other similar types including at crusher plants; Guniting Nozzlemans; High Scalers, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping); Manhole Builder; Powdermen; Concrete Saw Operator; Powdermen; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzlemen; Sand Blasting (Dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks, Tugger Operator; Tunnel-Chuck Tenders, Nippers and Timbermen; Vibrator; Water Blaster

GROUP 4: Asphalt Raker; Concrete Saw Operator (walls); Concrete Nozzelman; Grade Checker; Pipelayer; Laser Beam (pipelaying)-applicable when employee assigned to move, set up, align; Laser Beam; Tunnel Miners; Motorman-Dinky Locomotive-Tunnel; Powderman-Tunnel; Shield Operator-Tunnel

GROUP 5: Traffic Flaggers

GROUP 6: Fence Builders

GROUP 7: Landscaping or Planting Laborers

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LAB00335-019 06/01/2022

	Rates	Fringes
Hod Carrier.....	\$ 37.98	13.80

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LAB00348-003 06/01/2022

CHELAN, DOUGLAS (W OF 12TH MERIDIAN), KITTITAS, AND YAKIMA COUNTIES

	Rates	Fringes
LABORER		
GROUP 1.....	\$ 25.37	13.80
GROUP 2.....	\$ 29.16	13.80
GROUP 3.....	\$ 31.94	13.80
GROUP 4.....	\$ 32.72	13.80
GROUP 5.....	\$ 32.09	13.19

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$1.00

ZONE 3 - \$1.30

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$2.25

#### LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical ""splash suit"" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

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PAIN0005-002 07/01/2022

STATEWIDE EXCEPT CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH),  
SKAMANIA, AND WAHIAKUM COUNTIES

	Rates	Fringes
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## Painters:

STRIPERS.....	\$ 33.37	18.53
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## PAIN0005-004 03/01/2009

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,  
MASON, PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND  
WHATCOM COUNTIES

	Rates	Fringes
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PAINTER.....	\$ 20.82	7.44
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## \* PAIN0005-006 07/01/2018

ADAMS, ASOTIN; BENTON AND FRANKLIN (EXCEPT HANFORD SITE);  
CHELAN, COLUMBIA, DOUGLAS, FERRY, GARFIELD, GRANT, KITTITAS,  
LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA,  
WHITMAN AND YAKIMA COUNTIES

	Rates	Fringes
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## PAINTER

Application of Cold Tar Products, Epoxies, Polyure thanes, Acids, Radiation Resistant Material, Water and Sandblasting.....	\$ 30.19	11.71
Over 30'/Swing Stage Work..	\$ 22.20	7.98
Brush, Roller, Striping, Steam-cleaning and Spray....	\$ 22.94	11.61
Lead Abatement, Asbestos Abatement.....	\$ 21.50	7.98

\*\$.70 shall be paid over and above the basic wage rates  
listed for work on swing stages and high work of over 30  
feet.

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PAIN0055-003 07/01/2020

CLARK, COWLITZ, KLUCKITAT, PACIFIC, SKAMANIA, AND WAHIAKUM  
COUNTIES

	Rates	Fringes
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## PAINTER

Brush & Roller.....	\$ 26.56	13.40
Spray and Sandblasting.....	\$ 26.56	13.40

All high work over 60 ft. = base rate + \$.075

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PAIN0055-006 01/01/2022

CLARK, COWLITZ, KLIKITAT, SKAMANIA, WAHIAKUM COUNTIES

Zone 2 - \$0.65

Zone 3 - 1.15 Rates Fringes

Zone 4 - 1.70

Zone 5 - 3.00

HIGHWAY &amp; PARKING LOT

STRIPER.....\$ 48.17 16.00

PLAS0072-004 06/01/2022

ZONE 1: Projects within 30 miles of the respective city hall  
 ADAMS, ASOTON, BENIGNO, CHELAN, COLUMBIA, DUGO, EFRON, the  
 FRANKLIN, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND  
 ORE, ONEZ, SPOKANE, STEVENS, WALBATA, WALLA, WHITMAN, AND YAKIMA  
 COUNTY respective city hall.

ZONE 4: More than 50 miles but  
 respective city hall.

ZONE 5: More than 80 miles from the Rates Fringes

CEMENT MASON/CONCRETE FINISHER

ZONE 1.....\$ 36.04 16.79

Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00

BASE POINTS: Spokane, Pasco, Lewiston; Wenatchee

Zone 1: 0 - 45 radius miles from the main post office

Zone 2: Over 45 radius miles from the main post office

PLAS0528-001 06/01/2022

CLALLAM, COWLITZ, GRAYS HARBOR, ISLAND, JEFFERSON, KING,  
 KITSAP, LEWIS, MASON, PACIFIC, PIERCE, SAN JUAN, SKAGIT,  
 SNOHOMISH, THURSTON, WAHIAKUM AND WHATCOM COUNTIES

Rates Fringes

CEMENT MASON

Zone 1: CEMENT MASON (Add to Zone 1 rate) \$ 50.90 19.59

Zone 2: COMPOSITION, TROWEL

Zone 3: MACHINE, GRINDER, POWER

Zone 4: TOOLS, GRINDING NOZZLE.....\$ 50.50 19.59

Zone 5: TROWELING MACHINE OPERATOR

ON COMPOSITION.....\$ 50.50 19.59

PLAS0555-002 06/01/2023

CLARK, KLIKITAT AND SKAMANIA COUNTIES

ZONE 1:

Rates Fringes

CEMENT MASON

CEMENT MASONS DOING BOTH

COMPOSITION/POWER

MACHINERY AND

SUSPENDED/HANGING SCAFFOLD...\$ 45.06 19.95

POWER MACHINERY OPERATORS...\$ 44.19 19.95

CEMENT MASONS ON

Zone SUSPENDED, SWINGING AND/OR

HANGING SCAFFOLD.....\$ 44.19 19.95

CEMENT MASONS.....\$ 43.33 19.95

GROUT COMPOSITION WORKER BY AND lift truck w/load bearing

BASE POINTS: BEND, CORVALLIS, EUGENE, MEDFORD, PORTLAND,  
SALEM, THE DALLES, VANCOUVER

less than 50 miles from the  
less than 80 miles from the  
respective city hall

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TEAM0037-002 06/01/2020

CLARK, COWLITZ, KLUCKITAT, PACIFIC (South of a straight line  
made by extending the north boundary line of Wahkiakum County  
west to the Pacific Ocean), SKAMANIA, AND WAHAKIACUM COUNTIES

	Rates	Fringes
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Truck drivers:

ZONE 1		
GROUP 1.....	\$ 29.33	16.40
GROUP 2.....	\$ 29.46	16.40
GROUP 3.....	\$ 29.60	16.40
GROUP 4.....	\$ 29.89	16.40
GROUP 5.....	\$ 30.03	16.40
GROUP 6.....	\$ 30.31	16.40
GROUP 7.....	\$ 30.53	16.40

BASE POINTS: ASTORIA, THE DALLES, LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city  
hall.

ZONE 2: More than 30 miles but less than 40 miles from the  
respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the  
respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the  
respective city hall.

ZONE 5: More than 80 miles from the respective city hall.

TRUCK DRIVERS CLASSIFICATIONS

surface; Articulated Dump Truck; Battery Rebuilders; Bus or Manhaul Driver; Concrete Buggies (power operated); Concrete Pump Truck; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations there of: up to and including 10 cu. yds.; Lift Jitneys, Fork Lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup Truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

GROUP 2: Boom Truck/Hydra-lift or Retracting Crane; Challenger; Dumpsters or similar equipment all sizes; Dump Trucks/Articulated Dumps 6 cu to 10 cu.; Flaherty Spreader Driver or Leverman; Lowbed Equipment, Flat Bed Semi-trailer or doubles transporting equipment or wet or dry materials; Lumber Carrier, Driver-Straddle Carrier (used in loading, unloading and transporting of materials on job site); Oil Distributor Driver or Leverman; Transit mix and wet or dry mix trucks: over 5 cu. yds. and including 7 cu. yds.; Vacuum Trucks; Water truck/Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia Nitrate Distributor Driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated Dump Trucks; Self-Propelled Street Sweeper; Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic-Welder-Body Repairman; Utility and Clean-up Truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

GROUP 4: Asphalt Burner; Dump Trucks, side, end and bottom dumps, including Semi-Trucks and Trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes Articulated Dump Trucks; Fire Guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Composite Crewman; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes Articulated Dump Trucks

GROUP 6: Bulk Cement Spreader w/o Auger; Dry Pre-Batch concrete Mix Trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds., and includes Articulated Dump Trucks; Skid Truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes Articulated Dump Trucks; Industrial Lift Truck (mechanical tailgate)

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\* TEAM0174-001 06/01/2020

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC (North of a straight line made by extending the



north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

## Rates                      Fringes

### Truck drivers:

#### ZONE A:

GROUP 1:.....	\$ 42.88	20.92
GROUP 2:.....	\$ 42.04	20.92
GROUP 3:.....	\$ 39.23	20.92
GROUP 4:.....	\$ 34.26	20.92
GROUP 5:.....	\$ 42.43	20.92

ZONE B (25-45 miles from center of listed cities\*): Add \$.70 per hour to Zone A rates.

ZONE C (over 45 miles from center of listed cities\*): Add \$1.00 per hour to Zone A rates.

\*Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

### TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - "A-frame or Hydralift" trucks and Boom trucks or similar equipment when "A" frame or "Hydralift" and Boom truck or similar equipment is used; Buggymobile; Bulk Cement Tanker; Dumpsters and similar equipment, Tournorockers, Tournowagon, Tournotrailer, Cat DW series, Terra Cobra, Le Tourneau, Westinghouse, Athye Wagon, Euclid Two and Four-Wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump Trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with 16 yards to 30 yards capacity: Over 30 yards \$.15 per hour additional for each 10 yard increment; Explosive Truck (field mix) and similar equipment; Hyster Operators (handling bulk loose aggregates); Lowbed and Heavy Duty Trailer; Road Oil Distributor Driver; Spreader, Flaherty Transit mix used exclusively in heavy construction; Water Wagon and Tank Truck-3,000 gallons and over capacity

GROUP 2 - Bulllifts, or similar equipment used in loading or unloading trucks, transporting materials on job site; Dumpsters, and similar equipment, Tournorockers, Tournowagon, Tournotrailer, Cat. D.W. Series, Terra Cobra, Le Tourneau, Westinghouse, Athye wagon, Euclid two and four-wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with less than 16 yards capacity; Flatbed (Dual Rear Axle); Grease Truck, Fuel Truck, Greaser, Battery Service Man and/or Tire Service Man; Leverman and loader at bunkers and batch plants; Oil tank transport; Scissor truck; Slurry Truck; Sno-Go and similar equipment; Swampers; Straddler Carrier (Ross, Hyster) and similar equipment; Team Driver; Tractor (small, rubber-tired)(when used within Teamster jurisdiction); Vacuum truck; Water Wagon and Tank trucks-less than 3,000

gallons capacity; Winch Truck; Wrecker, Tow truck and similar equipment

GROUP 3 - Flatbed (single rear axle); Pickup Sweeper; Pickup Truck. (Adjust Group 3 upward by \$2.00 per hour for onsite work only)

GROUP 4 - Escort or Pilot Car

GROUP 5 - Mechanic

#### HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

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TEAM0690-004 01/01/2019

ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA COUNTIES

	Rates	Fringes
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Truck drivers: (AREA 1:  
SPOKANE ZONE CENTER: Adams,  
Chelan, Douglas, Ferry,  
Grant, Kittitas, Lincoln,  
Okanogan, Pen Oreille,  
Spokane, Stevens, and Whitman  
Counties

AREA 1: LEWISTON ZONE CENTER:  
Asotin, Columbia, and  
Garfield Counties

AREA 2: PASCO ZONE CENTER:  
Benton, Franklin, Walla Walla  
and Yakima Counties)

AREA 1:		
GROUP 1.....	\$ 23.91	17.40
GROUP 2.....	\$ 26.18	17.40
GROUP 3.....	\$ 26.68	17.40
GROUP 4.....	\$ 27.01	17.40
GROUP 5.....	\$ 27.12	17.40
GROUP 6.....	\$ 27.29	17.40
GROUP 7.....	\$ 27.82	17.40
GROUP 8.....	\$ 28.18	17.40
AREA 2:		
GROUP 1.....	\$ 26.05	17.40
GROUP 2.....	\$ 28.69	17.40
GROUP 3.....	\$ 28.80	17.40
GROUP 4.....	\$ 29.13	17.40

GROUP 5.....	\$ 29.24	17.40
GROUP 6.....	\$ 29.24	17.40
GROUP 7.....	\$ 29.78	17.40
GROUP 8.....	\$ 30.10	17.40

Zone Differential (Add to Zone 1 rate: Zone 1 + \$2.00)

BASE POINTS: Spokane, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: Outside 45 radius miles from the main post office

#### TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraulic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver, Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yds.); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser; Trucks, side, end, bottom & articulated end dump (over 6 yards to and including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank truck (0-8,000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self-loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom and end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled, up to 14 ton); Vacuum Truck (super sucker, guzzler, etc.)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi-end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DWS & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001- 14,000 gallons); Lowboy(over 50 tons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable operated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with load bearing surface either mounted or pulled (16 through

25 tons);

GROUP 8: Prime Movers and Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.); Helicopter Pilot Hauling Employees or Materials

Footnote A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR (This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR (Uses supplied air in conjunction with a chemical splash suit or fully encapsulated suit with a self-contained breathing apparatus.

Employees shall be paid Hazmat pay in increments of four(4) and eight(8) hours.

NOTE:

Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical

order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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"General Decision Number: WA20230019 09/29/2023

Superseded General Decision Number: WA20220019

State: Washington

Construction Type: Building

County: Whatcom County in Washington.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	02/03/2023

2 08/25/2023  
3 09/29/2023

\* ASBE0007-002 06/01/2023

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR.....	\$ 66.37	20.59

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BRWA0001-010 06/01/2021

	Rates	Fringes
BRICKLAYER.....	\$ 46.14	17.18

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CARP0030-006 06/01/2021

	Rates	Fringes
CARPENTER.....	\$ 49.18	19.01
PILEDRIVERMAN.....	\$ 49.58	19.01

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL  
CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the  
free zone computed from the city center of the following  
listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

Zone Pay:

0 -25 radius miles	Free
26-35 radius miles	\$1.00/hour
36-45 radius miles	\$1.15/hour
46-55 radius miles	\$1.35/hour
Over 55 radius miles	\$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT  
AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall,  
Tacoma City center, and Everett City center

Zone Pay:

0 -25 radius miles	Free
26-45 radius miles	\$ .70/hour
Over 45 radius miles	\$1.50/hour

-----  
ELEC0191-013 06/01/2022

	Rates	Fringes
ELECTRICIAN DOUGLAS, CHELAN, and OKANOGAN Counties.....	\$ 46.15	26.10
ISLAND, SAN JUAN, SKAGIT,		



## SNOHOMISH and WHATCOM

Counties.....	\$ 53.20	27.51
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 ENGI0302-018 06/01/2022

	Rates	Fringes
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## Power equipment operators:

Group 1A.....	\$ 54.20	24.47
Group 1AA.....	\$ 54.98	24.47
Group 1AAA.....	\$ 55.78	24.47
Group 1.....	\$ 53.40	24.47
Group 2.....	\$ 52.72	24.47
Group 3.....	\$ 52.12	24.47
Group 4.....	\$ 48.78	24.47

## POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom  
(including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom  
(including jib with attachments); Excavator/Trackhoe,  
Backhoes: Over 90 metric tons

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom  
(including jib with attachments); Loaders-overhead, 8 yards  
and over; excavator/Trackhoe, backhoes: over 50 metric tons  
to 90 metric tons

GROUP 1 - Cranes 45 tons thru 99 tons, under 150 ft of boom  
(including jib with attachments); Excavator/Trackhoe,  
backhoes: over 30 metric tons to 50 metric tons; Loader-  
overhead 6 yards to, but not including 8 yards; Dozer D-10;  
Screedman; Scrapers: 45 yards and over; Grader/Blade

GROUP 2 - Cranes, 20 tons thru 44 tons with attachments;  
Drilling machine; Excavator/Trackhoe, backhoe: 15 to 30  
metric tons; Horizontal/directional drill operator;  
Loaders-overhead under 6 yards; Crane Oiler-100 Tons and  
Over; Compactor; Scraper: under 45 tons

GROUP 3 - Cranes-thru 19 tons with attachments; Dozers-D-9  
and under; Motor patrol grader-nonfinishing; Roller-Plant  
Mix; Crane Oiler under 100 tons; Excavator/Trackhoe,  
backhoe: under 15 metric tons; Forklift: 3000 lbs and over  
with attachments; Service Oiler

GROUP 4 - Roller-other than plant mix; Forklift: under 3000  
lbs with attachments

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 IRON0086-010 01/02/2023

	Rates	Fringes
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IRONWORKER (Reinforcing, Structural and Ornamental).....	\$ 50.90	32.57
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 LAB00292-002 06/01/2022

## ZONE 1:

	Rates	Fringes
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## Laborers:

GROUP 2.....	\$ 34.20	13.80
GROUP 3.....	\$ 42.86	13.80
GROUP 4.....	\$ 43.90	13.80
GROUP 5.....	\$ 44.62	13.80

## ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$1.00

ZONE 3 - \$1.30

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT,  
TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT.  
TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective  
city hall

ZONE 2 - More than 25 but less than 45 radius miles from the  
respective city hall

ZONE 3 - More than 45 radius miles from the respective city  
hall

## LABORERS CLASSIFICATIONS

## GROUP 2: Flagman

GROUP 3: General Laborer; Chipping Gun (under 30 lbs.); Form  
Stripping

GROUP 4: Chipping Gun (over 30 lbs.); Concrete Saw Operator;  
Gunite; Pipe Layer; Vibrating Plate

GROUP 5: Mason Tender-Brick; Mason Tender-Cement/Concrete;  
Grade Checker

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PAIN005-028 07/01/2022

	Rates	Fringes
PAINTER (Excluding Spray).....	\$ 35.95	13.23

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PAIN005-029 07/01/2022

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 48.46	21.73

-----  
PAIN0188-004 07/01/2022

CLALLAM, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE,  
SNOHOMISH, THURSTON COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 54.45	21.20

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\* PLUM0026-012 06/01/2023

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 54.47	30.90

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ROOF0054-007 06/01/2023

	Rates	Fringes
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ROOFER (Includes Roof Tear Off, Waterproofing, and Installation of Metal Roofs).....	\$ 44.50	16.45
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\* TEAM0174-004 06/01/2019

	Rates	Fringes
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## Truck drivers:

## ZONE A:

GROUP 1:.....	\$ 40.38	20.46
GROUP 2:.....	\$ 39.54	20.46

ZONE B (25-45 miles from center of listed cities\*): Add \$.70  
per hour to Zone A rates.

ZONE C (over 45 miles from center of listed cities\*): Add  
\$1.00 per hour to Zone A rates.

\*Zone pay will be calculated from the city center of the  
following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

## TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - Dump Trucks, side, end and bottom dump, including  
semi-trucks and trains or combinations thereof with 16  
yards to 30 yards capacity: Over 30 yards \$.15 per hour  
additional for each 10 yard increment.

GROUP 2 - Dump trucks, side, end and bottom dump, including  
semi-trucks and trains or combinations thereof with less  
than 16 yards capacity.

## HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is  
required, shall be compensated as a premium, in addition to  
the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying  
respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as  
Level A. Supplied air line is provided in conjunction with  
a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-  
encapsulated suit with a self-contained breathing apparatus  
or a supplied air line.

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\* SUWA2009-032 05/22/2009

	Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER...	\$ 16.33	1.32
LABORER: Handheld Drill.....	\$ 17.17	5.36
LABORER: Irrigation.....	\$ 11.58 **	0.00
LABORER: Landscape.....	\$ 11.08 **	0.00

OPERATOR: Bobcat/Skid		
Steer/Skid Loader.....	\$ 22.05	7.35
OPERATOR: Concrete Pumper.....	\$ 22.30	5.27
OPERATOR: Mechanic.....	\$ 24.33	4.33
PAINTER: Spray.....	\$ 24.80	0.00
SHEET METAL WORKER.....	\$ 22.40	5.38
TILE SETTER.....	\$ 18.39	4.26
TRUCK DRIVER: Semi-Trailer		
Truck.....	\$ 20.59	5.56

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

## Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

## Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

## Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

## EXHIBIT E

### “STATEMENT OF SUBCONTRACTORS”

Each Bidder must designate in its bid, or within one (1) hour after the published bid submittal time, the names of the Subcontractors with whom the Bidder, if awarded the Contract, will subcontract for performance of the work for (i) HVAC (heating, ventilation, and air conditioning), (ii) plumbing as described in chapter 18.106 RCW, and (iii) electrical as described in chapter 19.28 RCW, **or name itself for such work.**

Additionally, each Bidder must designate in its bid, or within forty-eight (48) hours after the published bid submittal time, the names of the Subcontractors with whom the Bidder, if awarded the Contract, will subcontract for performance of the work for (1) structural steel installation and (ii) rebar installation, **or name itself for such work.** The bidder shall not list more than one (1) subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the Bidder must indicate which Subcontractor will be used for which alternate. Failure to name such Subcontractors (or to name itself to perform such work) or the naming of two or more Subcontractors to perform the same work shall render the Bidder's bid non-responsive and cause it to be rejected.

<b>HVAC</b>	<b>Name and Address of Subcontractor</b> _____ _____ _____
<b>Plumbing</b>	<b>Name and Address of Subcontractor</b> _____ _____ _____
<b>Electrical</b>	<b>Name and Address of Subcontractor</b> _____ _____ _____
<b>Structural Steel Installation</b>	<b>Name and Address of Subcontractor</b> _____ _____ _____
<b>Rebar Installation</b>	<b>Name and Address of Subcontractor</b> _____ _____ _____

\_\_\_\_\_  
**Bidder**

\_\_\_\_\_  
**By**

\_\_\_\_\_  
**Title**

\_\_\_\_\_  
**Date**

In addition to the requirements of RCW 39.30.060, further reporting of subcontractors will be required of the successful responsible bidder submitting the lowest responsive bid.

## **DOT MARAD PIDP FEDERAL SUPPLEMENTAL CONDITIONS**

This project is funded in part by federal Fiscal Year 2021 Port Infrastructure Development Program (PIDP) funds through the United States Department of Transportation Maritime Administration ("MARAD") under the heading "Port Infrastructure Development Program."

These DOT MARAD PIDP Federal Supplemental Conditions (Supplemental Conditions), sets forth 2 CFR 200 and 1201 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, U.S. Department of Transportation (DOT) federal provisions and other provisions applicable to this Contract.

All contractual provisions required by the DOT are hereby incorporated by reference. If any of the provisions below conflict with the general provisions found in General Conditions or Supplementary Conditions, the provisions set forth here control and supersede those portions. Where any provisions of those portions modified or deleted by these Supplemental Conditions, the unaltered portions of the provision remain in full force and effect. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any of the Port's requests, which would cause the Port to be in violation of these Supplemental Conditions.

### **1. Davis-Bacon Act – Prevailing Wage**

This Contract is subject to both the Washington State prevailing wage requirements and the federal Department of Labor (DOL) prevailing wage requirements. The higher of the two wage rates will prevail (WAC 296-127-025).

All Statements of Intent to Pay Prevailing Wages, Affidavits of Wages Paid and Certified Payrolls shall be submitted to the Engineer using the L&I online Prevailing Wage Intent & Affidavit (PWIA) system. (Reference WSDOT ss 1-07.9(5) Required Documents).

Each Contractor and subcontractor will each week furnish a statement on the wages paid each employee during the prior week. The prime contractor is responsible to ensure the submission of certified payrolls by all subcontractors.

The contractor will comply 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").

No claim for additional compensation will be allowed that is based upon lack of knowledge or error in interpretation of these requirements by the Contractor. A copy of the most recent state and federal prevailing wages is included in the Contract Documents, however; these wages may not be the actual wages applicable to this project. The applicable Washington State Prevailing Wages will be the prevailing wage rate for Whatcom County effective on the date the bid is due. The applicable Federal Department of Labor prevailing wage rates for Whatcom County are attached.

The contractor or subcontractor shall pay all mechanics and laborers employed directly on the site of the work, unconditionally and at least once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and the laborers and mechanics.

The contractor will post the scale of wages to be paid in a prominent and easily accessible place at the site of the work; and



## EXHIBIT F

There may be withheld from the contractor so much of accrued payments as the contracting officer considers necessary to pay to laborers and mechanics employed by the contractor or any subcontractor on the work the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and the rates of wages received by the laborers and mechanics and not refunded to the contractor or subcontractors or their agents.

### **Anti-Kickback – Copeland Act**

The Contractor and Subcontractors will comply 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.

## 2. Federal Fair Labor Standards Act

The Contractor will comply with the Federal Fair Labor Standards Act – 29 USC 201 et seq pertaining to employments in and affecting interstate commerce and minimum standards of living necessary for health, efficiency, and general well-being of workers.

## 3. Environmental Requirements

### a. Historic Preservation:

The Contractor will facilitate compliance with Federal historic and archaeological preservation requirements of the National Historic Preservation Act of 1966 – 54 USC 306108 et seq, the Archaeological and Historic Preservation Act of 1974, - 54 USC 312510 et seq, the Native American Graves Protection and Repatriation Act – 25 USC 3001, et seq., The Contractor will consult with the State Historic Preservation Officer concerning investigations to identify properties and resources included in or eligible for inclusion in the National Register of Historic Places that may be affected by the Project, and will notify DOT of any such properties that will be affected. The Contractor will comply with all Federal requirements to avoid or mitigate adverse effects on those historic properties.

### b. Air Quality:

The Contractor will comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. Section 7401 et seq.

### c. Clean Water:

The Contractor will comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251 et seq.

### d. Endangered Species:

The Contractor will comply with protections for endangered species of the Endangered Species Act of 1973, as amended, 16 U.S.C. Section 1531 et seq

### e. Coastal Zone Management:

The Contractor will assure Project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972, as amended, 16 U.S.C. Section 1451 et seq.

### f. Flood Disaster Protection Act of 1973:

The Contractor will comply with Executive Order 11988 – Floodplain management and the Flood Disaster Protection Act of 1973, as amended, 42 USC 4001, et seq.

## EXHIBIT F

### g. Environmental Protection:

The Contractor will comply with all applicable requirements of the National Environmental Policy Act of 1969, as amended, 42 U.S.C. §§ 4321 et seq.

### h. Wild and Scenic Rivers:

The Contractor will comply with the Wild and Scenic Rivers Act of 1968, as amended, 16 U.S.C. Section 1271 et seq. relating to protecting components of the national wild and scenic rivers system.

### i. Power Plant and Industrial Fuel Use:

The Contractor will comply with the Power Plant and Industrial Fuel Use Act of 1978, P.L. 100-42 - Section 403 - 42 U.S.C. § 8373

### j. Fishery Conservation and Management

The Contractor will comply with Magnuson-Stevens Fishery Conservation and Management Act – 16 U.S.C. §§ 1801, et seq.

### k. Farmland

The Contractor will comply with Farmland Protection Policy Act of 1981 – 7 U.S.C. §§ 4201 et seq.

### l. Noise Control

The Contractor will comply with Noise Control Act of 1972 – 42 U.S.C. §§ 4901, et seq.

### m. Fish and Wildlife

The Contractor will comply with Fish and Wildlife Coordination Act of 1956 – 16 U.S.C. §§ 661, et seq.

### n. Rivers and Harbors

The Contractor will comply with Section 9 of the Rivers and Harbors Act and the General Bridge Act of 1946 - 33 U.S.C. §§ 401 and 525

### o. CERCLA

The Contractor will comply with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) – 42 USC 9601 et seq.

### p. Safe Drinking Water

The Contractor will comply with the Safe Drinking Water Act 42 USC 330f et seq.

### q. The Wilderness Act

The Contractor will comply with the Wilderness Act 16 USC 1131 et seq.

### r. The Migratory Bird Treaty Act

The Contractor will comply with the Migratory Bird Treaty Act 16 USC 703 et seq.

## 4. Nondiscrimination

- Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 – 49 C.F.R. Part 21
- Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance – 49 C.F.R. Part 25
- Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance – 49 C.F.R. Part 27
- Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation – 49 C.F.R. Part 28

## EXHIBIT F

### a. PIDP Grant General Conditions – Appendix E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) will comply with the following non- discrimination statutes and authorities; including but not limited to:

#### **Pertinent Non-Discrimination Authorities:**

- i. Title VI of the Civil Rights Act of 1964, (42 U.S.C. §§ 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- ii. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- iii. Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- iv. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 C.F.R. Part 27;
- v. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- vi. Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- vii. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- viii. Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- ix. The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- x. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- xi. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- xii. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).

## 5. DBE Affirmative Actions

The Recipient, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will

## EXHIBIT F

not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

### **2 CFR Part 200 Subpart D: § 200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.**

The contractor will comply with 2 CFR Part 200 Subpart D: § 200.321

The prime contractor, if subcontracts are to be let, will take the affirmative steps listed in paragraphs (a)(1) through (5) of this section listed below.

(a) Affirmative steps must include:

- (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- (5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

## 6. Religious Freedom

The Contractor will comply with American Indian Religious Freedom Act - 42 U.S.C. 1996

## 7. Substance Policies

The Contractor will comply with the Drug Abuse Office and Treatment Act of 1972, as amended, 21 USC 1101, et seq., the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended – 42, USC 4541, et seq, Sections 523 and 527 of the Public Health Service Act of 1912, as amended, 42 USC 290dd through 290dd-2, and Government wide Requirements for Drug-Free Workplace, 49 CFR Part 32.

## 8. ADA Regulations

- a) The Contractor will comply with the Architectural Barriers Act of 1968 – 42 USC 4151, et seq.
- b) The Americans with Disabilities Act of 1990 42 USC 12101, et seq.
- c) The Contractor will comply with DOT's oversight of DOJ's ADA Regulations for non-transit program, including the ADA Accessibility Guidelines, required by the DOJ regulations at 28 CFR Part 35.

## EXHIBIT F

d) The Contractor will comply with enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation 49 CFR Part 27 and 49 CFR Part 28, Part 30.

### 9. Contract Work Hours and Safety Standards Act - 40 U.S.C. §§ 3701, et seq

The Contractor will comply with 40 U.S.C. §§ 3701 et seq as supplemented by Department of Labor regulations (29 CFR Part 5), Procedures for Predetermination of Wage Rates (29 CFR Part 1), Contractors and Subcontractors on Public Building or Public Work Financed in Whole or Part by Loans or Grants From the United States (29 CFR Part 3).

#### **§3702. Work hours**

a) **Standard Workweek:** The wages and overtime of every laborer and mechanic employed by any contractor or subcontractor in the performance of work on this contract shall be computed on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permitted subject to this section. For each workweek in which the laborer or mechanic is so employed, wages include compensation, at a rate not less than one and one-half times the basic rate of pay, for all hours worked in excess of 40 hours in the workweek.

b) **Contract Requirements:** A contract described in section 3701 of this title, and any obligation of the Federal Government, a territory of the United States, or the District of Columbia in connection with that contract, must provide that—

(1) a contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall not require or permit any laborer or mechanic, in any workweek in which the laborer or mechanic is employed on that work, to work more than 40 hours in that workweek, except as provided in this chapter; and

(2) when a violation of clause (1) occurs, the contractor and any subcontractor responsible for the violation are liable—

(A) to the affected employee for the employee's unpaid wages; and

(B) to the Government, the District of Columbia, or a territory for liquidated damages as provided in the contract.

c) **Liquidated Damages:** Liquidated damages under subsection (b)(2)(B) shall be computed for each individual employed as a laborer or mechanic in violation of this chapter and shall be equal to \$10 for each calendar day on which the individual was required or permitted to work in excess of the standard workweek without payment of the overtime wages required by this chapter.

d) **Amounts Withheld to Satisfy Liabilities:** Subject to section 3703 of this title, the governmental agency for which the contract work is done or which is providing financial assistance for the work may withhold, or have withheld, from money payable because of work performed by a contractor or subcontractor, amounts administratively determined to be necessary to satisfy the liabilities of the contractor or subcontractor for unpaid wages and liquidated damages as provided in this section.

#### **§3704. Health and safety standards in building trades and construction industry**

a) **(1) Required Condition of Contracts (Contractor and subcontractors):** no contractor or subcontractor shall require any laborer or mechanic employed in the performance of the contract to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to health or safety.

## 10. Audit

The Contractor will comply with 31 U.S.C. §§ 7501, et seq.

The Comptroller General shall have direct access to sufficient records and information of the Recipient, as they determine to ensure accountability for Federal Funds.

## 11. DISCLOSURE OF LOBBYING ACTIVITIES

The Contractor will comply with 49 CFR Part 20 New Restrictions on Lobbying.

Contractor and Subcontractor Disclosure of Lobbying Activities certification provided with Addendum #8.

## 12. Buy America

The Contractor will comply with the Buy American Act – 41 U.S.C. § 8301-8305,

### **Requirement to Use Iron, Steel, Manufactured Products, and Construction Materials Produced in the United States.**

The Contractor will use iron, steel, manufactured products, and construction materials produced in the United States.

Reference M-22-11 Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure (Vol 2 Appendices, pdf page 1240).

(a) For the purpose of the award term at Exhibit C6 (see Vol 2 Appendices pdf page 1234: **Appendix B2, Exhibit C** Grant Requirements, **Exhibit C6** Required Use of American Iron, Steel, Manufactured Products, and Construction Materials), the Project is “a project for infrastructure.” The Contractor acknowledges that iron, steel, manufactured products, and construction materials used in the Project are subject to domestic content procurement requirements.

(b) If the Contractor uses iron, steel, manufactured products, or construction materials that are not produced in the United States in violation of the award term at Exhibit C6, the Port may disallow and deny reimbursement of costs incurred by the Contractor and the Port reserves the right to take other remedial actions.

(c) The Contractor will, to the greatest extent practicable under this award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States. The Recipient shall include the requirements of 2 C.F.R. 200.322 in all subawards including all contracts and purchase orders for work or products under this award.

**Exhibit C6 language:** Required Use of American Iron, Steel, Manufactured Products, and Construction Materials

Contractor will not be in compliance with this provision unless:

(1) all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;

(2) all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product; and

(3) all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

## EXHIBIT F

### Inapplicability.

The domestic content procurement preference in this award term only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

### Waivers.

When necessary, the Contractor may apply for, and the Port/USDOT may grant, a waiver from the domestic content procurement preference in this award term. The Contractor should be aware that approval of a waiver on this project will require exceptional justification, and approval is unlikely.

### Definitions

“Construction materials” includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

“Domestic content procurement preference” means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

“Primarily iron or steel” means that the cost of the iron and steel content in the article, material, or supply exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components. The origin of the elements of the iron or steel is not relevant to the determination of whether it is domestic or foreign.

## 13. John D McCain National Defense Authorization Act

Contractor will comply with the requirements of Section 889 of the John D McCain National Defense Authorization Act for Fiscal Year 2019, Pub L 115-232 and 2 CFR 200.216 which places a prohibition on Certain Telecommunication and Video Surveillance Services or Equipment (AUGUST 2020) for non-U.S. organizations implemented the statutory prohibition 889(b)(1) that prohibits the use of award funds, including direct and indirect costs, cost-share and program income, to procure covered telecommunication and video surveillance services or equipment.

### **200.216 Prohibition on certain telecommunications and video surveillance services or equipment.**



## EXHIBIT F

(a) Contractor is prohibited from providing equipment, services, or systems that use 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) See Public Law 115–232, section 889 for additional information.

(c) See also § 200.471.

### 14. Equal Employment Opportunity

The Contractor will comply with Executive Order 11246 – Equal Employment Opportunity and 41 CFR Parts 60, et seq.

### 15. Protection of Wetlands

The Contractor will comply with Executive Order 11990 – Protection of Wetlands.

### 16. Debarment and Suspension

The Contractor will comply with Executive Orders 12549 and 12689, 2 CFR Parts 180, 1200.

Contractor and Subcontractors will provide debarment status certification (Contractor and subcontractor certification documents provided in Addendum #8).

### 17. Advancing Racial Equity

The Contractor will comply with Executive Order 13985 – Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

### 18. Made in America

The Contractor will comply with the Executive Order 14005 – Contractor will maximize the use of goods, products, and materials produced in, and services offered in, the United States. Ensuring the Future is Made in All of America by All of America’s Workers.



## 19. Investigative and Enforcement Procedures

The Contractor will comply with 14 C.F.R. Part 13.

## 20. Recycled Material

### **Procurement of Recovered Materials**

Contractor will 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.

## 21. Texting

Reference Vol. 2 Appendices Exhibit C5, pdf p 1232:

(b) Workplace Safety. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving (Oct. 1, 2009) and DOT Order 3902.10, Text Messaging While Driving (Dec. 30, 2009), the Recipient, subrecipients, contractors, and subcontractors are encouraged to:

(1) adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies to ban text messaging while driving—

(i) Company-owned or -rented vehicles or Government-owned, leased or rented vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) (2) Conduct workplace safety initiatives in a manner commensurate with the size of the business, such as—

(iii)(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and (ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(c) Subawards and Contracts. To the extent permitted by law, the Recipient shall insert the substance of this exhibit, including this paragraph (c), in all subawards, contracts, and subcontracts under this award that exceed the micro-purchase threshold, other than contracts and subcontracts for the acquisition of commercially available off-the-shelf items.

## EXHIBIT G

### DEBARMENT CERTIFICATION

#### **Prime Contractor – First Tier Participant**

The Contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts and all certifications will be forwarded from tier to tier up to the Port.

#### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participant:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment, including a civil settlement, rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### **Certification**

The applicant represents that it is ☐, is not ☐ a corporation that is presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

***I certify under penalty of perjury that the above statement is true.***

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position: \_\_\_\_\_

Company: \_\_\_\_\_

**1. Instructions for Certification – FIRST Tier Participant (Prime Contractor).**

**2 CFR Parts 180 and 1200**

(Reference Vol. 2 Appendices, Appendix B2, Exhibit B4, pdf page 1211)

- a. The prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "civil judgment," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 C.F.R. Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers to any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

## DEBARMENT CERTIFICATION

### **Subcontractor – Lower Tier Participant**

The subcontractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts and all certifications will be forwarded from tier to tier up to the Port.

### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Participant:**

(1) The prospective lower tier participant certifies, by submission of this proposal, that either it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **Certification**

The applicant represents that it is ☐, is not ☐ a corporation that is presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

***I certify under penalty of perjury that the above statement is true.***

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position \_\_\_\_\_

Company: \_\_\_\_\_

**2. Instructions for Certification – LOWER Tier Participant (Subcontractor).**

**2 CFR Parts 180 and 1200**

(Reference Vol. 2 Appendices, Appendix B2, Exhibit B4, pdf page 1211)

- a. The prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms “covered transaction,” “civil settlement,” “debarred,” “suspended,” “ineligible,” “participant,” “person,” “principal,” and “voluntarily excluded,” as used in this clause, are defined in 2 C.F.R. Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a Recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a Recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction,” without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System

for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

## EXHIBIT H

### DISCLOSURE OF LOBBYING ACTIVITIES

The Contractor will comply with 49 CFR Part 20 New Restrictions on Lobbying.

#### **Certification for Contracts, Grants, Loans, and Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any grant agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or grant agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or grant agreement, the undersigned shall complete and submit Standard Form-LLL (Rev. 7-97), "Disclosure of Lobbying Activities," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and grant agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor certifies or affirms that truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, et seq. and 49 CFR Part 20 apply to this certification and disclosure, if any.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position \_\_\_\_\_

Company: \_\_\_\_\_

NOTE: CONTRACTORS ARE REQUIRED, PURSUANT TO FEDERAL LAW, TO INCLUDE THE ABOVE LANGUAGE IN SUBCONTRACTS OVER \$100,000, AND TO OBTAIN THIS CERTIFICATE FROM EACH SUBCONTRACTOR ENTERING INTO AN AGREEMENT EXCEEDING \$100,000 AT ANY TIER UNDER THIS CONTRACT.



# DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

Approved by OMB  
0348-0046

<b>1. * Type of Federal Action:</b> <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. * Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. * Report Type:</b> <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change
<b>4. Name and Address of Reporting Entity:</b> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> SubAwardee * Name <input style="width: 300px;" type="text"/> * Street 1 <input style="width: 200px;" type="text"/> Street 2 <input style="width: 200px;" type="text"/> * City <input style="width: 150px;" type="text"/> State <input style="width: 150px;" type="text"/> Zip <input style="width: 50px;" type="text"/> Congressional District, if known: <input style="width: 150px;" type="text"/>		
<b>5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:</b>     		
<b>6. * Federal Department/Agency:</b> <input style="width: 300px;" type="text"/>	<b>7. * Federal Program Name/Description:</b> <input style="width: 300px;" type="text"/> CFDA Number, if applicable: <input style="width: 150px;" type="text"/>	
<b>8. Federal Action Number, if known:</b> <input style="width: 300px;" type="text"/>	<b>9. Award Amount, if known:</b> \$ <input style="width: 150px;" type="text"/>	
<b>10. a. Name and Address of Lobbying Registrant:</b> Prefix <input style="width: 50px;" type="text"/> * First Name <input style="width: 150px;" type="text"/> Middle Name <input style="width: 150px;" type="text"/> * Last Name <input style="width: 200px;" type="text"/> Suffix <input style="width: 50px;" type="text"/> * Street 1 <input style="width: 150px;" type="text"/> Street 2 <input style="width: 150px;" type="text"/> * City <input style="width: 100px;" type="text"/> State <input style="width: 100px;" type="text"/> Zip <input style="width: 50px;" type="text"/>		
<b>b. Individual Performing Services</b> (including address if different from No. 10a) Prefix <input style="width: 50px;" type="text"/> * First Name <input style="width: 150px;" type="text"/> Middle Name <input style="width: 150px;" type="text"/> * Last Name <input style="width: 200px;" type="text"/> Suffix <input style="width: 50px;" type="text"/> * Street 1 <input style="width: 150px;" type="text"/> Street 2 <input style="width: 150px;" type="text"/> * City <input style="width: 100px;" type="text"/> State <input style="width: 100px;" type="text"/> Zip <input style="width: 50px;" type="text"/>		
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.  <b>* Signature:</b> <input style="width: 200px;" type="text"/> Completed on submission to Grants.gov  <b>*Name:</b> Prefix <input style="width: 50px;" type="text"/> * First Name <input style="width: 150px;" type="text"/> Middle Name <input style="width: 150px;" type="text"/> * Last Name <input style="width: 200px;" type="text"/> Suffix <input style="width: 50px;" type="text"/>  <b>Title:</b> <input style="width: 150px;" type="text"/> <b>Telephone No.:</b> <input style="width: 100px;" type="text"/> <b>Date:</b> <input style="width: 200px;" type="text"/> Completed on submission to Grants.gov		
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)

## EXHIBIT I

### CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The Contractor and all lower tiers of subcontractors must complete the following certification statements. Written notice of any change in certification must immediately be forwarded from tier to tier up to the Port. Each tier must indicate its current status as it relates to tax delinquency and felony conviction by marking with an X in the box following the applicable response. The Contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts and all certifications will be forwarded from tier to tier up to the Port.

#### Certifications

- 1) The applicant represents that it is ☐, is not ☐ a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is ☐, is not ☐ a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

#### Note

If an applicant responds in the affirmative to any of the above representations, the applicant is ineligible to receive an award unless the Port has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the U.S. Department of Transportation-Maritime Division, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

#### Term Definitions

**Felony conviction:** Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

**Tax Delinquency:** A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

I certify under penalty of perjury that the above statements are true.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position \_\_\_\_\_

Company: \_\_\_\_\_

## EXHIBIT J

### 1. PIDP Grant General Conditions – Appendix A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally- assisted programs of the U.S. Department of Transportation, Maritime Administration (MARAD), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or MARAD to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or MARAD, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or MARAD may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or MARAD may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

## EXHIBIT K

### **Acquisition of Property Shipped by Ocean Vessel/Aircraft and Transportation of Persons by Air**

The Contractor will comply with the following.

(a) Use of United States-flag vessels:

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Port (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(b) Contractor and Subcontractor Clauses. Use of United States-flag vessels: The contractor agrees—

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

## APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Maritime Administration (MARAD), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or MARAD to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or MARAD, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or MARAD may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant

thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or MARAD may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

## APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

### **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964, (42 U.S.C. §§ 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 C.F.R. Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 C.F.R. Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

EXHIBIT L

- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).