

2017 LORA LAKE APARTMENTS MTCA REMEDIATION PROJECTS

at
Seattle-Tacoma International Airport

PROJECT MANUAL

Volume 1 of 1 Divisions 0 - 35

MC-0318573 Work Project #s: 104395 & 104396

August 29, 2016 100% Submittal – Not For Construction

Division 00

Bidding Requirements, Contractor Forms and Conditions of the Contract

ATTENTION TO BIDDERS

NOTICE

Forms must be completed and submitted with the bid as indicated below. To complete the Bid Form, signatures are required on the following:

- 1. Document 00 41 00 Bid Form
- 2. Bid Bond or other Bid Security
- 3. Document 00 43 70 Subcontractor Work Listing
- 4. Document 00 83 00 Subcontractor Bidding Report

Documents 1, 3, and 4 are included in the "Bid Package" issued to each Bidder who indicates an intention to bid the entire contract as a Prime Contractor. These documents, with the exception of Documents 3 and 4, together with the bid bond or other bid security, must be fully completed and submitted with the sealed bid at time of bid opening.

Document 3 - Subcontractor Work Listing - shall be completed by all Bidders in accordance with RCW 39.30.060 and submitted with the Bid, or within one (1) hour after the published bid submittal time, to the CPO Bid Desk.

Document 4 - Subcontractor Bidding Report – shall be included with the bid, should list all potential subcontractors contacted and should be signed.

NOTICE TO BIDDERS

NOTICE REGARDING PLANHOLDER LISTS

The Contractor's list for this job is continually changing by the addition of new planholders. The Port will make the current written list of planholders, their firm names, addresses, phone numbers and trade association available to interested parties at the Central Procurement Office Bid Desk. Planholders list is also available at the Port's Procurement and Roster Management System (PRMS) website at https://hosting.portseattle.org/prms/; click on "Solicitations" and select this project, then click on "View Details", then select "Planholders".

Due to a substantial increase in planholders, selective or total lists will not be recited by way of telephone. Updated planholders lists are normally available at the plan centers.

NOTICE REGARDING SITE INSPECTION

To register for the Pre-Bid Meeting, log into PRMS at https://hosting.portseattle.org/prms/; click on "Solicitations" and then on the solicitation of interest and "View Details," and then click on the "Events" tab and then on "Registration." The preferred method for registration is through the Port's PRMS website. If a bidder does not have the capability to register on-line, then they may contact Jesse Giordano, Contract Administrator, at 206-787-5147 to register.

A Pre-bid Meeting and Site Tour will be held on the date, time and location indicated in Document 00 10 00 – Advertisement for Bids. Personal protective equipment (PPE) will be as indicated in Document 00 10 00 - Advertisement for Bids.

Work areas to be examined during the pre-bid examination of the work site may contain potential chemical contaminant and physical hazards in varying degree. Prospective bidders shall provide and wear protective clothing which they alone determine to be sufficient to protect themselves from chemical contaminant and physical hazard exposure. The prospective bidder further agrees to indemnify, and hold harmless, the Port and its agents from any and all claims of personal injury arising from its participation in the pre-bid examination.

NOTICE REGARDING BID CLARIFICATIONS

To submit questions regarding Bidding Documents, log into PRMS at https://hosting.portseattle.org/prms/; click on "Solicitations" and then on the solicitation of interest and "View Details," and then click on the "Questions" tab. The preferred method for submitting questions is through the Port's PRMS website. If a bidder does not have on-line capability, submit all questions to the address in Document 00 20 00, paragraph IB-04.02 B 1.

SEA-TAC INTERNATIONAL AIRPORT

2017 LORA LAKE APARTMENTS MTCA REMEDIATION PROJECTS (MC-0318573)

LORA LAKE APARTMENTS SITE REMEDIATION (104395)

LORA LAKE PARCEL SITE REMEDIATION (104396)

100% SUBMITTAL (NOT FOR CONSTRUCTION)

August 29, 2016

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Tech Edit: Move Preparer to the subtitle line?

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Appendix C	Nationwide Permit No. 33- Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No.NWP-2016-0314-WRD).
Appendix D	Nationwide Permit No. 38- Cleanup of Hazardous and Toxic Waste administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD).
Appendix E	Consent Decree No. 15-2-21413-6, Lora Lake Apartments Site, Burien, Washington. Washington State Department of Ecology v. Port of Seattle. September 9, 2015.

REFERENCE DOCUME	REFERENCE DOCUMENTS ²		
Reference Document 1	Lora Lake Apartments Site, Engineering Design Report, XXXX, 2016, prepared by Floyd Snider		
Reference Document 2	EDR Appendix A Lora Lake Parcel Groundwater Modeling and SR 518 Construction Stormwater Pond Infiltration Assessment: Lora Lake Remediation Implementation — Support for Remedial Action Design Memoranda		
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¹ Appendices not included in 100% Submittal.

² Reference Documents not included in 100% Submittal.

CERTIFICATION OF TECHNICAL SPECIFICATIONS

Technical Specifications in this project manual were prepared by the design professionals whose initials appear opposite the Specification Division or Section in the Table of Contents. Stamps, names, and initials of the Design Professionals are:

<u>NAME</u>	<u>INITIALS</u>
Jessica S. Massingale	JM
Megan M. King	MK
Kathryn H. Snider	KS
Curtis J. Loeb	CL
End of Document	

Sealed bids will be received by the Director, Central Procurement Office (CPO), Port of Seattle, CPO Bid Desk, 2529 South 194th Street, Sea-Tac, Washington, 98188 until **December**, **14**, **2016**, **2:00** p.m. for:

LORA LAKE APARTMENTS MTCA REMEDIATION PROJECTS

Document 00 43 70 - Subcontractor Work Listing, shall be submitted with the bid or within one (1) hour after the published bid submittal time of 2:00 p.m. The Bids will be publicly opened and read aloud at 3:00 p.m., one (1) hour after the published bid submittal time. Any bids received after the published bid submittal time of 2:00 p.m., cannot be considered, and will not be accepted by the Bid Desk.

Electronic copies of the Bid Documents for this solicitation can be accessed and printed through the Port's Procurement and Roster Management System website shown below. Copies of documents are not available for purchase from the Port of Seattle, but may be examined at the above named office Monday through Friday between 8:00 a.m. and 4:30 p.m.

The Port of Seattle is not responsible for any costs incurred in response to this Advertisement for Bids.

Mailing Address:

Port of Seattle Bid Desk 2529 S. 194th St. Sea-Tac, WA 98188 Bid Desk Telephone: (206) 787-3110

Web Address:

https://hosting.portseattle.org/prms/

The Work includes remediation of the Lora Lake Apartments (LLA) Parcel located in King County, Burien, Washington, and the Lora Lake (LL) Parcel and Dredged Management Containment Area (DMCA) located in King County, SeaTac, Washington. The site is collectively known as the Lora Lake Apartments Site. The remediation will be conducted under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D of the Revised Code of Washington (RCW) (Ecology, 2007), and the MTCA Cleanup Regulation, Chapter 173-340 of the Washington Administrative Code (WAC) as administered by the Washington Department of Ecology (Ecology).

The Work includes but is not limited to installation and maintenance of sediment and erosion controls, utility abandonment, demolition of existing asphalt and concrete foundations and structures, extensive clearing and grubbing, design and installation of shoring and trench safety systems, contaminated soil excavation, excavation dewatering and water treatment, contaminated soil disposal, backfilling, grading and surfacing, groundwater well decommissioning and installation, lake dewatering, sediment capping and lake filling, placement of geotextile, wetland rehabilitation, bioswale construction, hydroseeding, extensive wetland planting, construction of gravel drainage swales, stormdrain utility installation, and installation of porous hot mix asphalt pavement.

The Engineer's estimate range for this project is \$XX,XX0,000 - \$XX,XX0,000.

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

Performance and Payment bonds will be required with the Contract.

Time limit for substantial completion of the Work is 645 calendar days.

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ARTICLE 1: DEFINITIONS

IB-01.01 - DEFINITIONS

All definitions set forth in the General Conditions of the Contract, or other definitions within the Contract Documents are applicable to the Bidding Documents.

- A. Alternate Bid: The sum stated in the Bid offered by the Bidder to be added to or deducted from the Base Bid for Work described as a change in the project. An Alternate Bid may change price, time, scope, materials, or methods of construction.
- B. Alternative Bid: A statement and price submitted by a Bidder which accompanies a conforming Bid and proposes a different design, procedure, method, product or material than that specified and is intended to accomplish the same end result as that required by the Contract; all as referenced in paragraph IB-06.05 of this Document.
- C. Base Bid: The sum stated in the Bid offered by the Bidder to perform the Work described as the base, to which Work may be added to or deducted from based upon the sum(s) of Alternate or Alternative bids accepted by the Port.
- D. Bidding Documents: Bidding Documents include references therein, namely the Advertisement, Instruction to Bidders, Bid form, Sample forms, supplemental forms and the proposed Contract Documents including Addenda, if any, issued prior to the time specified for opening of the Bids.
- E. Small Works: Construction contracts with a total cost less than \$300,000.00.
- F. Substitutions: The product, equipment, material, or method proposed by a Bidder or Contractor to be incorporated into this project in place of that specified. Substitutions are not Alternative Bids. Substitutions shall not be considered prior to award.
- G. Unit Price: An amount stated in the Bid as the price for a particular unit of the Work measured as described within the Contract Documents.

ARTICLE 2: QUALIFICATION OF BIDDERS

IB-02.01 - GENERAL

- A. Generally, no prequalification requirements are imposed prior to submitting a Bid. However, the Port of Seattle may make such investigations as they deem necessary to determine the ability of the Bidder to perform the Work. The Bidder shall furnish to the Port all such information and data for this purpose as the Port may request. The Port reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Port that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein.
 - 1. In accordance with RCW 39.04.380 effective March 30, 2012, the State of Washington is enforcing a Reciprocal Preference for Resident Contractors. Any public works bid received from a nonresident contractor from a state that provides an in-state percentage bidding preference, a comparable percentage disadvantage must be applied to the bid of that nonresident contractor. A nonresident contractor from a state that provides a percentage bid preference means a contractor that:

- a) is from a state that provides a percentage bid preference to its resident contractors bidding on public works contracts; and
- b) at the time of bidding on a public works project, does not have a physical office located in Washington.

The state of residence for a nonresident contractor is the state in which the Contractor was incorporated or, if not a corporation, the state where the contractor's business entity was formed. All nonresident contractors will be evaluated for out of state bidder preference. If the state of the nonresident contractor provides an in-state contractor preference, a comparable percentage disadvantage will be applied to their bid prior to Contract award. This section does not apply to public works procured pursuant to RCW 39.04.155, 39.04.280, or any other procurement exempt from competitive bidding.

- B. The Bidder must be familiar with all Federal, State and local laws, including RCW 18.27 Registration of Contractors, ordinances and regulations which in any manner might affect those engaged or employed in the Work, the materials, equipment or procedures used in the Work, or which in any other way would affect the conduct of the Work. It is assumed the Bidder is familiar with such laws and regulations, and no plea of misunderstanding or ignorance of the law will be considered.
- C. The Bidder must be registered and licensed as may be required by the laws of the State of Washington at the time Bids are publicly opened.

IB-02.02 - SPECIAL QUALIFICATION QUESTIONNAIRES

Special qualification questionnaires, if any, shall be submitted as requested.

IB-02.03 - RESERVED

IB-02.04 - RESERVED

IB-02.05 - CIVIL RIGHTS, TITLE VI, AND NON-DISCRIMINATION:

A. Bidders are required to comply with Port policies, procedures and requirements relating to Resolution 3668 – Non-Discrimination and Equal Opportunity, a copy is included in Document 00 83 00.

ARTICLE 3: BIDDER'S REPRESENTATION

IB-03.01 - GENERAL

Each Bidder, by submitting a Bid, represents that:

- A. The Bidder has read and understands the Bidding Documents and that the Bid is made in accordance with all applicable documents.
- B. The Bidder has inspected or investigated the site(s) of the Work (if a site investigation was offered) and has become familiar with the local conditions under which the Work is to be performed and has familiarized itself with the quantity and character of all materials to be demolished.

- C. The Bid is based upon the Work described or presented within the Bidding Documents and described in detail in the Project Manual.
- D. The failure or omission of the Bidder to examine all pertinent forms, instruments, applicable statutes, or other documents shall in no way relieve the Bidder from the contractual obligations required by the Bidding Documents.
- E. The Bid submitted is unconditional in all respects.

ARTICLE 4: BIDDING DOCUMENTS

IB-04.01 - AVAILABILITY

Check with Bid Desk to verify the following list is correct.

- A. Informational copies of the Project Manual and Drawings will be placed on file in the Port of Seattle CPO Bid Desk and in the following plan centers:
 - Puget Sound Area: Valley Plan Center; McGraw Hill/Dodge; McGraw Hill Plan Center; CDCC; Builders Exchange; Contractor's Resource Center; Minority Contractors; Sub-Hub; Daily Journal of Commerce; SW WA Contractor's Assoc.: Northwest Contractor's Network;
 - 2. Spokane Area: AGC Spokane; Associated Builders & Contractors;
 - 3. Oregon Area: DJC Plan Center; Eugene Builders Exchange; McGraw Hill Plan Ctr. c/o Willamette Print & Blueprint Co.; Oregon Contractors; Willamette Valley Bid Center;.
- B. Copies of the Project Manual and Drawings are not available for purchase from the Port of Seattle, but may be examined at the Port of Seattle, CPO Construction Services Office, 2529 S. 194th St., SeaTac, Washington.
- C. Only complete sets of Bidding Documents shall be used in preparing bids. The Port of Seattle assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- D. Bidding Documents issued as stated above are for bidding purposes only. The Port does not confer a license or grant for any other use.

IB-04.02 - INTERPRETATION & CLARIFICATION

- A. Bidders shall promptly notify the Port of ambiguities, inconsistencies, or errors, if any, which they may discover upon examination of the Bidding Documents or of the site and local conditions.
- B. Interpretations and Clarifications
 - Every request for interpretation or clarification should be submitted using the Port's Procurement and Roster Management System
 https://hosting.portseattle.org/prms/. If a Bidder does not have on-line capability, then submit in writing, addressed to the Bid Desk, Port of Seattle, 2529 S. 194th St., SeaTac, WA 98188 or fax to (206) 787-5715. To be given consideration the request must be received seven (7) working days prior to the date fixed for the opening of the bids.

- 2. The Port's responses, if there are any, which do not change the Scope of Work described in the Contract Documents may be mailed, delivered, telegraphed, faxed, or by other electronic means, to all planholders of record, at the respective address furnished for such purposes, prior to the date fixed for the receipt of bids. Such letters of clarification shall not be considered part of the Contract Documents and therefore need not be acknowledged by the Bidders as part of the Bid Form. The Port will determine at its sole discretion whether or not any clarification or interpretation changes the Scope of Work and should be included in the Contract Documents.
- 3. Clarifications, interpretations, or supplemental instructions which do change the Scope of Work and or schedule described in the Contract Documents, will be issued only in the form of written addenda.
- C. Oral interpretations or clarifications will be without legal effect.

IB-04.03 - SUBSTITUTIONS

- A. The product, equipment, materials, or methods described or noted within the Bidding Documents, whether currently available or not, are to establish a standard of quality, function, appearance and dimension. A proposed substitution shall have equal attributes in all respects.
- B. No substitution will be considered unless a written request for approval is submitted by the Contractor, after Award, in accordance with the applicable provisions of Section 01 25 00 of these Specifications. Each such request shall describe the proposed substitution in its entirety including 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 substitute. The Bidder shall bear the burden of proof of merit of the proposed substitution. The Director, Engineering Services decision of approval or disapproval of a proposed substitution shall be final.
- C. For Small Works, time and material On-Call Contracts, A and B above do not apply. The Contractor shall furnish materials that are acceptable to the CM for inclusion in its work as authorized by the Work Authorization.

IB-04.04 - ADDENDA

- A. Addenda will be issued on the Port's Procurement and Roster Management System https://hosting.portseattle.org/prms/. Bidder is required to sign up as a planholder to receive addenda notifications prior to the date fixed for the receipt of bids. Addenda for major construction projects will also be available at the Port of Seattle Bid Desk.
- B. Each Bidder shall acknowledge on Bid that it has obtained all addenda issued.
- C. All addenda so issued shall become part of the Contract Documents.

IB-04.05 - ADDITIONAL INFORMATION PROVIDED BY THE PORT

The following documents are available at the Bid Desk for the Bidder's inspection and information:

- Cleanup Action Plan, Lora Lake Apartments Site, September 9, 2016, prepared by Α. the Washington State Department of Ecology (Appendix A).
- В. Nationwide Permit No. 27 – Aquatic Habitat Restoration, Establishment, and Enhancement Activities administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (Appendix B).
- C. Nationwide Permit No. 33 - Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No.NWP-2016-0314-WRD) (Appendix C).
- D. Nationwide Permit No. 38 - Cleanup of Hazardous and Toxic Waste administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (Appendix D).
- E. Consent Decree No. 15-2-21413-6, Lora Lake Apartments Site, Burien, Washington. Washington State Department of Ecology v. Port of Seattle. September 9, 2015 (Appendix E).
- F. Lora Lake Apartments Site, Engineering Design Report, XXXX, 2016, prepared by Floyd|Snider, and relevant appendices (Reference Documents 1 through 8).

IB-04.06 - EXAMINATION OF THE WORK SITE AND CONTRACT DOCUMENTS

The Contractor may make a pre-bid examination of the site by registering online through the Port's Procurement and Roster Management System https://hosting.portseattle.org/prms/. Pre-bid tours are scheduled for 10:00AM Friday, November 18, 2016 and 2:00PM Wednesday, November 23, 2016.

The premises will be made available prior to the deadline for submission of bids for whatever inspections and tests prospective bidders deem appropriate.

Work areas to be examined during the pre-bid examination of the work site may contain potential chemical contaminant and physical hazards in varying degree. Prospective bidders shall provide and wear protective clothing which they alone determine to be sufficient to protect themselves from chemical contaminant and physical exposure. The prospective bidder further agrees to indemnify, and hold harmless, the Port and its agents from any and all claims of personal injury arising from its participation in the pre-bid examination.

ARTICLE 5: BONDING & INSURANCE REQUIREMENTS

IB-05.01 - BID BOND

Each Bid shall be accompanied by a Bid security, cashier's check, money order, or surety bid bond, in the amount of not less than five percent (5%) of the total bid including Alternates, if any. A bid bond shall not be conditioned in any way to modify the minimum five percent (5%) required. Surety companies executing Bid Bonds must appear on the U.S. Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Washington. In addition, the surety must be rated "A-, FSC (VI)", or higher by A.M. Best Rating Guide. Checks shall be payable to the Port of Seattle.

IB-05.02 - BOND COSTS

The costs or premiums for all bonds shall be paid by the successful bidder.

IB-05.03 - CONTRACT BONDS AND INSURANCE CERTIFICATES

Prior to the execution of the Contract, the successful bidder shall furnish in a form satisfactory to the Port, Insurance Certificates, Performance Bond and a Payment Bond covering the faithful performance of the Contract and the payment of all obligations arising there under. Each Performance and Payment bond shall be in the full amount of the Contract Sum. See Document 00 70 00 - General Conditions Article G-11 for more information.

IB-05.04 - POWER OF ATTORNEY

Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each bond a certified and effectively dated copy of their Power of Attorney.

ARTICLE 6: EXECUTION OF BID

IB-06.01 - FORM OF BID

- A. Bids shall be submitted on the forms provided by the Port.
- B. All blanks on the Bid Form shall be filled in by typewriter or printed by hand in ink.
- C. For lump sum Bids the total contract lump sum price shall be submitted.
- D. Where so indicated by the makeup of the Bid Form, sums shall be expressed in figures only.
- E. For unit price Bids a price shall be submitted for each item of the Work, an extension thereof, and the total amount bid. Such prices shall be stated in clearly legible figures only and shall be in ink or typed.
- F. Alterations, erasures, or interlineations, if any, shall be in ink and initialed by the signer of the Bid.
- G. The Bidder shall make no additional conditions or stipulations on the Bid or qualify its Bid in any manner.
- H. The Bid Form shall include the legal name and registration number of the Bidder and a statement indicating whether Bidder is a sole proprietor, a partnership, a corporation, joint venture, or other legal entity. The Bid Form shall be signed by the person or persons legally authorized to bind the Bidder to a contract and shall be accompanied by satisfactory evidence of such authorization. A Bid submitted by an agent shall have a current Power of Attorney attached certifying agent's authority to bind the Bidder.
- I. The Bid Form shall not become a part of the Contract Documents except by inclusion into the Agreement.

IB-06.02 - IRREGULAR BIDS

A bid shall be considered irregular and may be rejected by the Port for any of the following reasons:

A. If the Bid Form furnished or authorized is not used or is altered;

- B. If the Bid Form is incomplete or if any required supplemental documents contain any additions, deletions, unauthorized alternate bids, conditions, or otherwise fail to conform to the Port of Seattle requirements;
- C. If the Bidder adds any provisions reserving the right to reject or accept the award, or enter into the Contract:
- D. If the Bid fails to include a unit price for every bid item;
- E. If the Port deems any of the Bid prices to be excessively unbalanced either above or below the amount of a reasonable bid for the item of Work to be performed to the potential detriment of the Port.
- F. If Bid is not based on United States of America dollars;

IB-06.03 - RESPONSIBLE BIDDER

It is the intent of the Port to award a Contract to the "lowest responsible Bidder". Before award, the Bidder must meet the following Bidder responsibility criteria to be considered a responsible Bidder. The Bidder may be required by the Port to submit documentation demonstrating compliance with the criteria. The Bidder must:

- A. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal.
- B. Have a current Washington Unified Business Identifier (UBI) number.
- C. If applicable:
 - 1. Have Industrial Insurance (workers' compensation) coverage for the Bidder's employees working in Washington, as required in Title 51 RCW.
 - 2. Have a Washington Employment Security Department number, as required in Title 50 RCW.
 - 3. Have a Department of Revenue state excise tax registration number, as required in Title 82 RCW.
- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).
- E. Meet the minimum Small Contractors and Suppliers utilization requirements in accordance with Project Manual Document 00 87 00.
- F. Meet the qualifications listed in Document 00 44 00 Qualifications Information.
- G. A Bidder may be deemed not responsible and its Bid rejected if:
 - 1. More than one Bid on the same project from a Bidder under the same or different names.
 - 2. Evidence of collusion with any other Bidder or Bidders. Participants in such collusion may be disqualified from submitting Bids on further work.
- H. If requested, the apparent low Bidder must provide within two (2) business days of receiving the Port's request:
 - 1. Information demonstrating that the Bidder is responsible, consistent with the criteria set forth above. The Port may specifically request information addressing any of the items listed above. The Port reserves the right to request such documentation from other Bidders also.

If the Port determines that the apparent low Bidder is not responsible, the Port will notify the Bidder of its preliminary determination in writing. Within two (2) days of receipt of the preliminary determination, the Bidder may either withdraw its bid or protest the Port's determination by presenting additional information to the Port. (Protest procedures are outlined in Document 00 20 00 IB-11.02 and IB-11.03.) The Port will consider the additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Port will not execute a contract with any other Bidder until two (2) business days after the Bidder determined to be not responsible has received the final determination.

IB-06.04 - NON-RESPONSIVE BIDDER

A. A Bidder will be declared non-responsive for failure to comply with the Apprenticeship program requirements of Document 00 83 50 when included in the project manual.

IB-06.05 - ALTERNATIVE BIDS

At the time of bidding, any Bidder having submitted a conforming bid may, in addition, submit with bid an "Alternative Bid" based on plans and specifications provided by the Bidder which it considers to be in the interest of the Port. The Bidder's "Alternative Bid" shall be accompanied by sufficient information to indicate the bid is for a different design, procedure, method, product, or material than specified and is to be prepared, supplied and provided by the Bidder who assumes all responsibility therefore. The information submitted with the "Alternative Bid" shall describe the various attributes in detail to allow the Port to evaluate the alternative in all respects. The Port may consider such alternatives in evaluating bids and shall be the sole judge as to whether or not such alternatives are in its best interest.

IB-06.06 - STATE AND LOCAL TAXES

Bidders shall not add State and local retail sales taxes to any Bid Price except as may be provided for in the Bid Form Schedule of Prices.

ARTICLE 7: SUBMISSION OF BIDS

IB-07.01 - SUBMISSION OF BID

- A. If the Bid is hand delivered, the bid security if applicable and all other documents required to be submitted with the Bid shall be sealed in an opaque envelope. The envelope shall be clearly marked with the words "Bid By" followed by the name and address of the Bidder, the Port designated project name, and the date and time for the opening of the Bid.
- B. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof.
- C. Oral, telephonic, or telegraphic bids are invalid and will not receive consideration.
- D. No Bid shall be considered which has not been received by the Director, Central Procurement Office before the time fixed for the opening of Bids in the published call for Bids.

IB-07.02 - TIMELY DELIVERY

Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

ARTICLE 8: WITHDRAWAL OR MODIFICATION OF BIDS

IB-08.01 - PRIOR TO BID OPENING

Prior to the time and date designated for the receipt of Bids, a Bidder may withdraw or modify a Bid submitted earlier. Withdrawal, or modification, of the Bid shall be by written or electronic notice signed by the Bidder and received prior to the time and date designated for the receipt of Bids. Modifications submitted via electronic means shall be followed by written confirmation mailed and postmarked on or before the date set for receipt of Bids and shall include reasonable assurance of Bid security changes if applicable.

IB-08.02 - AFTER BID OPENING

A Bid may not be modified, withdrawn or canceled by the Bidder after the time and date set for the opening and for the period of time stipulated in the Bid Form. By submitting a Bid the Bidder agrees to the above conditions.

IB-08.03 - RESUBMITTAL OF MODIFIED BIDS

A Bid which has been withdrawn or modified prior to the time and date designated for the receipt of Bids may be resubmitted. The resubmitted Bid will be considered valid only if it is received prior to the date and time originally set for the receipt of Bids and contains the Bid security covering all modifications, and all documents requested in the original submittal, signed and initialed as mentioned heretofore.

For Small Works only - If the Bid is submitted via email multiple times, the latest responsive submission will govern.

ARTICLE 9: OPENING OF BIDS

IB-09.01 - PUBLIC OPENING

Bids will be opened and read publicly at the time indicated in the Advertisement for Bids unless the Port has changed through Addendum the date of opening Bids to another date, rejected any Bid or Bids, or has canceled the call for Bids. Bidders, their authorized agents, and other interested parties are invited to be present:

Port of Seattle CPO Construction 2529 S. 194th St. Sea-Tac, WA 98188 Telephone: (206) 787-3110

IB-09.02 - READING OF BIDS

Unless stated otherwise in the Advertisement, all Bids which have been properly identified and received will be publicly opened and read aloud. No evaluation of the Bids will be made at that time except for the announcement of the "Apparent Low Bidder," if pertinent.

IB-09.03 - EVALUATION OF BIDS

After evaluation by the Director, Central Procurement Office and recommendation to the Port of Seattle Commission, the Port retains the right to reject any or all Bids.

IB-09.04 - SUBCONTRACTOR WORK LISTING

Subcontractor Work Listing Document 00 43 70 shall be completed, if required, and submitted with the Bid or within one (1) hour after the published Bid submittal time. This requirement is for all contract bids equal to or exceeding \$1,000,000 and applies to all subcontractors and bidder work in heating, ventilation, air conditioning, plumbing or electrical categories. Failure to complete and submit this document may result in the Bid being declared not responsive.

IB-09.05 – SUBCONTRACTOR BIDDING REPORT

In support of data collection requirements for federal grant recipients, the Port is required to collect the Subcontractor Bidding Report. This report provides anecdotal data used in calculation of DBE goals and other small business data. As such, this information is important, yet does not affect the performance of the Contract. Failure to submit the Subcontractor Bidding Report may result in the bid being declared not responsive.

ARTICLE 10: ACCEPTANCE OF BIDS (AWARD)

IB-10.01 - VERIFICATION OF BID PRICES

When Bids are opened and read, they will be checked for mathematical accuracy with respect to the extensions of unit bid prices and the total Bid price. If there is a discrepancy between a unit Bid price and the extended amount of any Bid item, the unit Bid price shall control. The total of extensions, corrected where necessary, will be used as the amount of the Bid for award purposes and will fix the amount of the Contract bonds.

IB-10.02 - RETURN OF BID SECURITY

As soon as Bid prices have been compared, the Director, Central Procurement Office will return the Bid security accompanying any Bids which would not be considered in making the award. All other Bid securities will be held until the Contract and bonds have been executed, after which all remaining Bid securities, except such as have been forfeited, will be returned to the Bidders.

IB-10.03 - RIGHTS OF THE PORT

- A. The Port shall have the right to waive any informality or irregularity in any Bid received.
- B. The right is reserved to accept a Bid of the lowest responsible Bidder, an Alternative Bid, if applicable, based upon plans and specifications prepared by the Bidder, to reject any or all Bids, republish the call for Bids, revise or cancel the Work to be performed, or to do the Work otherwise, if in the judgment of the Port Commission, the best interest of the Port is served thereby.
- C. Bidders are advised that regulations governing the permit application and approval process are becoming so complex and uncertain as to results that this project may not receive the approval of all regulatory agencies and therefore may not be awarded to any Bidder, notwithstanding that the price offered is within the budget approved by the Commission.

IB-10.04 - FAILURE TO EXECUTE CONTRACT

If the Bidder awarded the Contract fails to execute the Contract and furnish satisfactory bonds within ten (10) days from receipt of the Notice of Intent to Award, or declares in writing its intent to not execute the Contract, the Bid deposit shall be forfeited to the Port and the Port Commission may provide Notice of Intent to Award to the second lowest responsible Bidder. If the second lowest responsible Bidder fails to enter into the Contract and furnish bonds within ten (10) days after receipt of the Notice of Intent to Award, forfeiture of its Bid deposit shall also be made and the Contract may be awarded to the third lowest responsible Bidder, and in like manner until the Contract and bonds are executed by a responsible Bidder to whom award is made, or further Bids are rejected or the number of Bids is exhausted.

IB-10.05 - NOTICE OF INTENT TO AWARD

- A. The successful Bidder will receive a "Notice of Intent to Award" by email, certified mail, express mail, or private courier. The letter will direct the Bidder to provide, in writing, an acknowledgement of receipt of the "Notice of Intent to Award". It will also list out the contract submittals required for execution of the Contract.
- B. The Bidder is to submit Certificates of Insurance, and the required bonds for review and approval within ten (10) days after receipt of the "Notice of Intent to Award.".
- C. The Bidder shall also submit an executed Agreement form, furnished by the Port Commission, within ten (10) days after receipt of the "Notice of Intent to Award."

IB-10.06 - EXTENSION OF TIME

If the Contract is not executed or not provided within the time required, and there appears circumstances which the Port Commission deems to warrant an extension of time, it may extend the time for execution of the Contract or for furnishing bonds for not to exceed ten (10) additional days.

IB-10.07 - SIGNING OF CONTRACT

Copies of Contract Documents shall be signed by the Port Commission or Authorized Representative and the Contractor.

IB-10.08 - CANCELLATION OF AWARD

The Port reserves the right to cancel its Intent to Award of any Contract at any time before the execution of said Contract by all parties without liability to the Port.

ARTICLE 11: PROTESTS

IB-11.01 - PURPOSE

To provide a prompt, fair and equitable administrative remedy to all Bidders and Prospective Bidders regarding alleged substantive errors or omissions in the bidding documents or regarding the decision by the Port to award the Contract or notice from the Port that a Bid is non-responsive or that a Bidder is not responsible.

IB-11.02 - TIMING

Any actual or prospective Bidder showing a substantial economic interest in this Contract, who is aggrieved by either the solicitation or award of this Contract, may PROTEST to the Port, only in accordance with the procedures set forth below.

- A. Protests Based on the Form or Content of the Bidding Documents: Any Protest based on the form or content of the bidding documents, which is or should have been apparent prior to the date established for submittal of Bids, must be clearly labeled on the transmittal envelope as a "Protest" and filed as soon as practicable at 2529 S. 194th St, SeaTac, WA 98188, Attention: Director, Central Procurement Office, Contract Administrator. No protest based on the form or content of the bidding documents will be considered if received by the Port later than ten (10) calendar days prior to the specified bid submittal date.
- B. Other Protests: Protests based on any other circumstances must be received by the Port at 2529 S. 194th St, SeaTac, WA 98188, Attention: Director, Central Procurement Office, Contract Administrator in a transmittal envelope, clearly marked "Bid Protest", within two (2) business days after the aggrieved person knows or should have known of the facts and circumstances upon which the protest is based; provided, however, that in no event shall a protest be considered if all Bids are rejected or if the protest is received after award of the Contract.

IB-11.03 - CONTENTS OF PROTEST:

To be considered, a Protest shall be in writing and shall include: (1) the name, street address, fax number and email address of the aggrieved party; (2) the contract title and number under which the Protest is submitted; (3) a detailed description of the specific grounds for the Protest and any supporting legal and/or factual documentation; and (4) the specific ruling or relief requested. In addition, in the event the protesting party asserts its responsibility as a contractor as a ground for Protest, it must address in detail each of the matters addressed in RCW 39.04.350.

- A. Initial Administrative Review: The Protest shall be promptly considered on the written submittal by the Contract Administrator. The Contract Administrator will give notice of the Protest and provide a copy to any others as required. In its sole discretion, the Contract Administrator may give notice of the Protest to other interested parties, including other Bidders. The Port reserves the right to resolve or to attempt to resolve any Protest that concerns the form or content of the solicitation and which Protest was received before the bid opening through written ADDENDA TO THE BIDDING DOCUMENTS. Any ADDENDA will be provided to all parties who have obtained a copy of the solicitation from the Port.
- B. The Contract Administrator will issue a written decision on the Initial Administrative Review within two (2) business days following the receipt of the Protest, stating the reasons for the action taken. A copy of the decision shall be provided to the aggrieved party, and any other party as may be required, by either: (i) personal service, (ii) facsimile, or (iii) email, with telephonic confirmation.

C. The aggrieved party may appeal the decision of the Contract Administrator by filing a Notice of Administrative Appeal at 2529 S. 194th St, SeaTac, WA 98188, Attention: Director Central Procurement Office, Contract Administrator not more than two (2) business days after receipt of the Initial Administrative Review decision. The Contract Administrator will provide a copy of the Notice of Administrative Appeal to other interested parties as required. The Notice of Administrative Appeal shall be in writing and clearly labeled on the transmittal envelope as a "Notice of Administrative Appeal." A copy of the initial Protest shall be attached to the Notice of Administrative Appeal.

IB-11.04 - ADMINISTRATIVE APPEAL PROCEDURES

Within five (5) business days of receipt of the Notice of Administrative Appeal, an appeal hearing shall be conducted before a two person panel ("the Panel") consisting of a representative of the Port of Seattle's legal department and the Port's Director of Central Procurement Office or, in his/her absence or unavailability, his/her designee.

- A. Except as the Panel may allow in its discretion, no discovery shall be available.
- B. At the Administrative Appeal Hearing, the aggrieved party will be given a reasonable opportunity to present relevant testimony and evidence and to make legal arguments. The hearing shall be recorded and the Panel shall maintain an official record of all documentary evidence presented at the hearing. The Panel shall issue a written Final Decision within five (5) business days after the close of the hearing. A copy of the Final Decision shall be provided to the aggrieved party, and any other party as may be required, by either: (i) personal service, (ii) facsimile, or (iii) email, with telephonic confirmation.
- C. Standard of Review on Administrative Appeal: On Administrative Appeal, the Panel will consider the Protest, de novo. The aggrieved party shall, however, be restricted from raising any matter or ground not reasonably within the scope of the materials placed before the Contract Administrator.
- D. Stay of the Award of the Contract: The Port will stay award of the Contract for two (2) business days, following the issuance of its Final Decision.

IB-11.05 - JUDICIAL PROCEEDINGS

All judicial proceedings must be filed within two (2) business days of the issuance of the Port's Final Decision.

IB-11.06 - STRICT COMPLIANCE

Strict compliance with these protest procedures is essential in furtherance of the public interest. Any aggrieved party that fails to comply strictly with these protest procedures is deemed, by such failure, to have waived and relinquished forever any right or claim with respect to alleged irregularities in connection with the solicitation or award of the Contract. No person or party may pursue any judicial or administrative proceedings challenging the solicitation or award of this Contract, without first exhausting the administrative procedures specified herein.

IB-11.07 - REPRESENTATION

An aggrieved party may participate personally or, if a corporation or other artificial person, by a duly authorized representative. Whether or not participating in person, an aggrieved party may be represented, at the party's own expense, by counsel.

IB-11.08 - COMPUTATION OF TIME

In computing any period of time prescribed by this procedure, the day of the act or event from which the designated period of time begins to run shall not be included. The last day of the period shall be included. The term "business day" shall mean any day on which the Port of Seattle is open for regularly conducted business. Any document received after the close of regular business hours (8:00 a.m. to 5:00 p.m.) shall be deemed received the following business day.

IB-11.09 - ACKNOWLEDGEMENT

By submitting a bid in response to this solicitation, the Bidder acknowledges that it has reviewed and acquainted itself with the bid protest procedures herein and agrees to be bound by such procedures as a condition of submitting a bid.

ARTICLE 12: FORM OF AGREEMENT

IB-12.01 - FORM OF AGREEMENT

Unless otherwise provided in the Supplementary Conditions, the Contract for Work will be executed on the Port's standard Agreement form, a sample of which is included in Document 00 52 00 - Agreement Forms, for Work between the Port and the Contractor.

End of Document	

Contractor Name:	
Date:	
Pro	ject Number: <u>104395 & 104396</u>

Name of Project: 2017 Lora Lake MTCA Remediation Projects

TO: Port of Seattle
Director, Central Procurement Office
Bid Desk
2529 S. 194th Street
Sea-Tac, Washington 98188

1. <u>Bid</u>: Having carefully examined the Contract Documents titled:

a. 2017 Lora Lake MTCA Remediation Projects

as well as the site of the project and conditions affecting the Work, the undersigned proposes to furnish all the labor, materials, equipment, superintendence, insurance and other accessories and services necessary to perform and complete all of the Work required by and in strict accordance with the above documents and the implied intent thereof, for the following schedule of prices:

ITEM	ITEMS OF WORK	BID	UNIT	UNIT PRI	ICE	AMOUN	IT
NO.		QUANTI TY	,D		¢	\$	¢
GENE	RAL BID ITEMS		<u>I</u>		1	-	<u> </u>
1	Mobilization and Demobilization Season 1	1	LS				
2	Mobilization and Demobilization Season 2	1	LS				
3	Temporary Erosion and Sediment Control	1	LS				
4	Construction Water Management and Treatment System	1	LS				
5	Construction Water Management and Treatment System – Force Account	1	FA	\$100,000	00	\$100,000	00
6	Traffic Control	1	LS				

ITEM	ITEMS OF WORK B	BID	UNIT	T UNIT PRICE		AMOUNT	
NO.		QUANTI TY		\$	¢	\$	¢
7	Unforeseen Conditions	1	FA	\$50,000	00	\$50,000	00
8	Trench Safety Systems	1	LS				
LL PA	RCEL SEASON 1 BID ITEMS						
9	Excavation Areas 5 and 6	1	LS				
10	Temporary Construction Lake Access Road	1	LS				
11	Lora Lake Shoreline Clearing and Disposal	50	TON				
12	Lake Water Management and Creek Protection	1	LS				
13	Lora Lake Geotextile Furnish and Install	1	LS				
14	Sediment Capping and Lake Filling	56,600	TON				
15	Settling Basin Remediation	1	LS				
16	Settlement Monitoring	1	LS				
ΙΙ ΡΔ	RCEL SEASON 2 BID ITEMS						
17	Additional Lake Fill Placement and Grading	7,000	TON				

ITEM	ITEMS OF WORK	BID	UNIT	UNIT PRICE		AMOUNT	
NO.		QUANTI TY		\$	¢	\$	¢
18	LL Parcel Sediment Cap Monitoring Point Installation	1	LS				
19	LL Topsoil Placement and Final Grading	10,300	CY				
20	Wetland Rehabilitation	1	LS				
DMCA	A BID ITEMS						
21	DMCA Clearing, Grading, and Surfacing	1	LS				
22	Planted Filter Strip	1	LS				
LLA P	ARCEL BID ITEMS						
23	LLA Demolition	1	LS				
24	LLA Site Access and Security	1	LS				
25	Excavation, Dewatering, Soil Disposal and Backfill	1	LS				
26	LLA Grading and Surfacing	1	LS				
27	Unsuitable Material Management	1,126	TON				
28	LLA Storm Drainage Infrastructure	1	LS				

ITEM	ITEMS OF WORK	BID	UNIT	T UNIT PRIC	IT PRICE AMOUNT		
NO.		QUANTI TY		\$	¢	\$	¢
29	LLA Parcel Monitoring Well Installation	1	LS				
	TOTAL:				\$		

- 2. State Sales Tax: State or Local retail sales taxes have not been added to the Total Bid Price stated above, except as may be provided for "Public Road Construction" in GC-04.11 of the General Conditions, these Contract Documents.
- 3. Completion: The undersigned agrees to substantially complete all of the Work included in this
- 4. Pro tha be cor

s Ċo	ontract within <mark>645</mark> calendar days as provided for in the General Conditi	ons.
ıt, d reta	ess Payment Retention: In accordance with RCW 60.28.011, the under during the life of the Contract, the money withheld from Contract progre ained in the financial institution indicated below. Failure to indicate a character as approval of Item (a).	ess payments
a.	A fund with the Port. (There is no interest with this option)	(Initials)
b.	An interest bearing account with a bank which is listed on the State o Public Depositaries current list.	f Washington
	i.	
	(Name of Bank, Mutual Savings Bank or S&L Assoc.)	(Initials)
	ii	
	(Address)	
C.	Placed on deposit at the bank which is listed on the State of Washing Depositories current list or trust company to be converted into bonds securities chosen by the Contractor and approved by the Port of Sear approval granted for bonds and securities listed below. Selected bond securities to be held in escrow until authorized release of retained fur	and ttle, with said ds and
	i	
	(Name of Financial Institution)	(Initials)
	ii	
	(Address)	
	iii	
	(Type of Security; see authorized list below)	

- Bills, certificates, notes or bonds of the United States; (1)
- (2) Other obligations of the United States or its agencies;

- Obligations of any corporation wholly owned by the government of the United States;
- (4) Indebtedness of the Federal National Mortgage Association;
- (5) Repurchase agreements secured by U.S. government obligations;

	(6)	Bankers Acceptance	purchased on	the secondary m	arket.
		ounts and deposits mad State of Washington P			e, <u>must</u> be in a bank which is
5.	<u>Addenda</u>	: Receipt of addenda n	umbered []	through [] is	hereby acknowledged.
6.	Legal Re represen		al matters relati	ng to this Contra	ct, the undersigned will be
7.		drawal: The above bid vie opening thereof.	will not be witho	drawn within nine	ety (90) days after the actual
8.		cuments Requiring Exempt with its bid the following the contractions of the contraction o			y with these conditions and
	a. Bid S	ecurity - See "Instruction	ons to Bidders,'	paragraph IB-05	5.01.
9.	By submission of this bid, each bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other bidder or with any competitor.				
		A BIDDER TO SUBM MAY DISQUALIFY TH		S WITH ITS BID,	EXECUTED WHERE
Со	ntractor _				
	Individua	l Proprietor	Partnersh	ip	
	Limited L	iability Company	☐ Corporati	on	☐ Joint Venture
	ashington le RCW 50	Employment Security [).	Department No.		in accordance with
Wa	ashington	State Reg. No		since (date)	expires (date)
By:				(dato)	(dato)
Оу	(Name; p	lease print)		(Title)	
(Si	gnature)				
Ad	dress:				

DIVISION 0 - BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF THE CONTRACT Document 00 41 00 - Bid Form

Phone:		
Email:		
Name Partners (if a Partnership):		
	End of Document	

PART 1 GENERAL

- 1.01 The Port of Seattle estimates that this major construction project may cost \$1,000,000 or more. All Bidders shall pursuant to R.C.W. 39.30.060, with the bid submission or within one (1) hour after the published bid submittal time, submit to the Port of Seattle Central Procurement Office Bid Desk, a listing of contract work to be performed by themselves and their subcontractors.
 - A. List and identify all subcontractors that will perform heating, ventilation, air conditioning, plumbing or electrical work, and the category of work to be performed. If the work for any of these categories will be self-performed by the Bidder, the Bidder must list themselves.
 - B. The bidder shall not list more than one 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.
 - C. Use the form titled "SUBCONTRACTOR LISTING FORM" (Attachment 1) provided by the Port of Seattle to report subcontractor work and work to be performed by Contractor.
 - D. Bidders are required to submit this completed form with their bid regardless of the Bidder's actual bid amount.
 - E. Failure of the bidder to submit as part of the bid the names of 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, therefore, void.

PART 2 NOT USED

PART 3 NOT USED

PART 4 NOT USED

End of Document

List of Attachments

Attachment 1 Subcontractor Listing Form

ATTACHMENT 1: SUBCONTRACTOR LISTING FORM - RCW 39.30.060

Pursuant to RCW 39.30.060, for every invitation to bid that is expected to cost **one million dollars or more** for the construction, alteration, or repair of any public building or public work, the Bidder shall list as part of its bid in the space provided below either itself or the names of the subcontractors with whom the Bidder, if awarded the Contract, will subcontract for performance of the work of: HVAC (heating, ventilation, and air conditioning); plumbing as described in chapter 18.106 RCW; and electrical as described in chapter 19.28 RCW. The Bidder shall ensure that two or more subcontractors are not performing the same scope of work.

The Bidder shall comply with RCW 39.30.060. Failure to comply with RCW 39.30.060 shall render the bidder's bid nonresponsive and, therefore, void. The requirement of this section to name the Bidder's proposed HVAC, plumbing, and electrical subcontractors applies only to proposed HVAC, plumbing, and electrical subcontractors who will contract directly with the Bidder.

The Port estimates this major construction project may cost one million dollars or more; therefore, Bidders are required to complete and submit this form with their bid.

SUBCONTRACTOR(S) PERFORMING HVAC, PLUMBING OR ELECTRICAL WORK

CATEGORY OF WORK	NAME OF FIRM
HVAC	
Plumbing	
Electrical	

ARTICLE 1: OVERVIEW

QI-01.01 - RESPONSIBILITY EVALUATION

- A. The Bidder shall demonstrate to the satisfaction of the Port of Seattle that the Bidder is qualified to perform the Work under this Contract and therefore a responsible Bidder. To be responsible, the Bidder, subcontractors, and project team members must demonstrate an appropriate level of experience, technical competence and successful past performance of work. The information requested in this section will assist the Port of Seattle in making such determination.
- B. Qualifications are a matter of responsibility. In the event the Port of Seattle finds the Bidder's qualification information lacking or if the Port of Seattle determines that the Bidder, subcontractor, and/or project team member(s) are not qualified, the Port of Seattle may reject the Bidder, meet with the Bidder, request additional information, allow Bidder opportunity to correct the deficiency by (1) providing additional information and/or (2) proposing other project personnel or subcontractors, and/or take other appropriate measure. Timeliness of Contract Execution is critical to success of this project; therefore, the Port of Seattle may give a Bidder limited or no opportunity and time to remedy a matter(s) of responsibility before rejecting the bid and going to the next low bidder. Such decisions are in the sole discretion of the Port of Seattle.
- C. To assist the Port of Seattle in the review of the Bidder's qualifications, the Bidder shall provide the information required by each item set forth below. The Port of Seattle reserves the right to inspect records, reports and access other information about the Bidder, as determined by the Port of Seattle, to verify, clarify, or otherwise consider the Bidder's responsibility.
- D. The Port of Seattle reserves the right to contact references and investigate past performance and qualifications of the Bidder, subcontractor, and project team members, including contacting third parties and/or the references provided by the Bidder.
 - 1. The Port of Seattle may contact references for other projects, including the Port of Seattle projects, even though the Bidder did not identify those projects and/or references.
 - 2. References may be asked to rate the performance of and describe their experience with project team members, subcontractors, the Bidder, and/or members of the Joint Venture (JV) or other similar Business Organizational Structure (BOS) such as a partnership or limited liability partnership. Information may be solicited and evaluated on the following subjects: type and features of work; overall quality of project performance and quality of work; experience and technical knowledge and competence of the Bidder and Project Team Members; ability, capacity and skill to perform the Work; compliance with laws, ordinances, and contract provisions; and other information as deemed necessary by the Port of Seattle.
 - 3. Poor reference(s) may be justification to determine a Bidder is not responsible.

QI-01.02 - SIMILAR IN SCOPE AND COMPLEXITY CHARACTERISTICS

A. For purposes of this section, the elements of "Similar in Scope and Complexity" are projects having the following elements:

- 1. Involved environmental remediation actions under the regulatory authority of the Washington State Department of Ecology and/or Environmental Protection Agency; and
- 2. Included removal and disposal of a minimum of 20,000 cubic yards of Subtitle "D" contaminated soil as part of upland excavation; and
- 3. Involved exclusion/reduction/support zones and decontamination of personnel and equipment; and
- 4. Included demolition, soil excavation and stockpiling, shoring systems, dewatering systems and construction stormwater treatment systems with the treatment and capacity consistent with the Bid, and
- 5. Involved capping of contaminated sediments and permit compliant work within waterways, lakes, streams, or rivers, and
- 6. Included the placement or amendment of planting soils and the planting of native plants for restoration purposes.
- 7. Included erosion control and water pollution control measures similar in nature to the measures required for the Lora Lake project.

QI-01.03 - SUBMITTAL INSTRUCTIONS

- A. Qualification information shall be submitted in a clear, comprehensive, and concise manner. Submit one (1) unbound original and 5 bound copies. The original and copies shall be indexed with tabs for each item, using recycled, white, 8½"x11" paper where possible, and a minimum font size of ten points. The cover sheet shall include this Contract Title, Contract Number, Bidder's name, mailing address, contact person, email address and telephone number.
- B. The apparent low bidder and second low bidder shall submit qualification information within 2 business days from the Port of Seattle's request for qualification information. The Port of Seattle may at its sole discretion grant the Bidder additional time to provide information if the circumstances justify such extension.
- C. If the Bidder has been in business for less than the time period set forth in any item, the Bidder shall submit information about the firm for the time it has been in business.
- D. To the extent this section refers to members of partners of the JV or BOS, the term member and partner are used interchangeably.

ARTICLE 2: QUALIFICATION INFORMATION

QI-02.01 - WORK PERFORMED BY BIDDER

A. RESERVED

QI-02.02 - BIDDER'S EXPERIENCE

A. <u>General Contractor</u>. The Bidder shall demonstrate successful past experience and competence in managing no less than 2 construction projects within the last 10 years that meet the elements listed in Paragraph QI-01.02 above. The Bidder must have been the general/prime contractor on the project with responsibility for managing and coordinating all subcontractors performing remediation construction. To qualify as a project, the Owner must have determined the project to be substantially complete or issued final acceptance.

- 1. Identify all construction contracts (whether completed or in progress) entered into and performed by the Bidder within the past 10 years that meet the Similar in Scope and Complexity elements.
 - a. For this requirement, the term Bidder includes: (i) the legal entity that signed this bid; or (ii) any member of the JV or BOS provided the member was responsible for managing the day-to-day administrative activities for the referenced projects and is responsible for management of day-to-day activities of this contract.
- 2. For each project, identify the name of the project, describe the project and how it meets each Similar in Scope and Complexity element, initial contract time (start and end dates), final contract time (actual end date), initial contract value, final contract value, name and phone number of the Owner, and name and telephone number of the Owner's project manager or other person who can verify the Bidder's experience.
- 3. If the Bidder is a JV or BOS, provide information for the members of the JV or BOS who will be managing the day-to-day administrative activities for this Contract. Administrative activities involve the contract administration activities contained in Division 0 and Division 1. If a JV/BOS partner is only providing financial support for this Contract, this information is not required and will not be evaluated with regard to this element.
- B. If the Bidder is a JV or BOS, the Bidder shall submit the additional following information:
 - A copy of the Joint Venture Agreement and any related documents; or a copy of the agreement establishing the relationship of the parties and any related documents;
 - Description of the business relationship between the parties;
 - 3. Description of the specific roles and responsibilities each member of the JV will have in relation to this Contract.
 - 4. RESERVED

QI-02.03 - PROJECT TEAM MEMBERS

A. RESERVED

QI-02.04 - CONTRACT HISTORY

- A. The Port of Seattle will evaluate to determine if the Bidder's contract history demonstrates quality of past performance and the capability to successfully manage and construct this Project.
- B. RESERVED

QI-02.05 - ADDITIONAL INFORMATION

A. At the Port of Seattle's request, provide any additional explanation or information, which would assist in evaluating the qualifications of the Bidder, subcontractors, project team members, JV or BOS members, and bid price.

End of Document

PART 1 GENERAL

- 1.01 The following documents are included in these Specifications as examples, in order that the Bidder be informed of the requirements of the Contract, in the event the Bidder is awarded the Contract:
 - A. Agreement Form (Attachment 1)
 - B. Escrow Retainage Account Agreement (for Bonds or Securities) (Attachment 2)
 - C. Interest Bearing Retainage Account Agreement (for Savings Account) (Attachment 3)
 - D. Contract Change Order (Attachment 4)
 - E. Daily Force Account Field Documentation (Attachment 5)
 - F. Contractor's Release (Attachment 6)
 - G. Certificate of Contract Completion (Attachment 7)

PART 2 NOT USED

PART 3 NOT USED

PART 4 NOT USED

End of Document

List of Attachments

Attachment 1	Agreement Form
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Attachment 2 Escrow Retainage Account (for Bonds or Securities)

Attachment 3 Interest Bearing Retainage Account Agreement (for Savings Account)

Attachment 4 Contract Change Order

Attachment 5 Daily Force Account Field Documentation

Attachment 6 Contractor's Release

Attachment 7 Certificate of Contract Completion



AGREEMENT FORM

THE PORT OF SEATTLE ("Port") and the undersigned ("Contractor") agree as follows:					
ARTI	CLE I				
		The Project			
	ontractor shall perform and provideing Project:	all of the Work required by the Contract Documents, for the			
TITLE		WORK PROJECT #:			
LOCA	TION:	CONTRACT #:			
Execut Addition deduct 00/100	nal Milestones may be provided els ions by Change Order, the Port wil	countersigns this Agreement Form as reflected below. ewhere in the Contract Documents. Subject to additions and pay Contractor the total Contract Sum of and and and set forth in the General Conditions and according to the			
ARTI	CLE II				
	<u>The</u>	Contract Documents			
Contra		cuments listed below. The following is an enumeration of the der of precedence. The order of precedence is set forth in			
1. T	his Agreement Form; and				
2. T	he Specifications, which include the and	e General Conditions and Supplementary Conditions (if any);			
3. T	he Drawings; and				
4. [I	nsert the name/date of additional d	ocuments to be included in the Contract]			
PORT	OF SEATTLE	CONTRACTOR			
		License No.:			
Signate	ure:	Signature:			
Ву:	Name	Ву:			
Title:	Title	Title:			

Executed this ____ day of _____.



ESCROW NO.:	
PUBLIC BODY:	PORT OF SEATTLE
CONTRACT NO	D.:
ESTIMATED CONTRACT CO	MPLETION DATE:

ESCROW RETAINAGE ACCOUNT AGREEMENT

TO: (Bank or Trust Company of Washington)

City, Main Branch

P.O. Box

City, WA 98000-0000

This Escrow Agreement is for investment of retained percentages for the above numbered Contract in accordance with Chapter 38, Laws of 1970, amending RCW 60.28.011, and 60.28.051.

The undersigned, **CONTRACTOR NAME AND ADDRESS**, hereinafter referred to as the Contractor, has directed the Port of Seattle, PO Box 1209, Seattle, WA 98111, hereinafter referred to as the Public Body, deliver to you its warrants, checks or drafts made payable to you. Such warrants, checks or drafts are to be held and disposed of by you in accordance with the instructions and upon the terms and conditions hereinafter set forth.

INSTRUCTIONS

- 1. Upon delivery to you, warrants, checks or drafts made payable to you and the Contractor jointly shall be endorsed by you and forwarded for collection. The moneys from all such warrants, checks or drafts received hereunder shall be used by you to purchase bonds or other securities selected by the Contractor and approved by the Public Body. For the purpose of each such purchase, you may follow the last written direction received by you from the Contractor, provided said direction otherwise conforms with the restrictions on investments received herein. Attached is a list of such bonds, or other securities approved by the Public Body. Other bonds or securities, except stocks, may be selected by the Contractor, subject to express written approval of the Public Body.
- 2. Monthly statements must be supplied to both the Public Body and the Contractor.
- 3. The established account shall be recorded in the name of The Port of Seattle/ Contractor. The Public Body may at any time require additional information from you regarding this account. The Public Body also reserves the right to close this account if deemed in the public interest. This account shall be established to serve as a holding account for moneys retained under RCW 60.28.011. As such the Contractor may only select options for investments and may not give other directions regarding this account. The Public Body is the sole authority for establishing and directing this account.
- 4. The Public Body will provide in writing a list of authorized individuals who may request information or give direction regarding this account. The Public Body reserves the right to change individuals on this list at its option. You will be informed in writing of any such changes.
- 5. The investments purchased by you on behalf of the Contractor, must mature on or prior to the date set for completion of the Contract, including extensions thereof. After the completion

- date of the Contract, you shall not be required to invest the money held by you and derived from the sale or redemption of matured investments until authorized to do so by the Public Body, which authorization shall include the completion date of the extension.
- 6. When and as interest on this account held by you pursuant to this agreement accrues, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Public Body.
- 7. You are not authorized to deliver to the Contractor all or any part of the account held by you pursuant to this agreement <u>except</u> in accordance with written instructions issued from the Public Body. Compliance with such instructions shall relieve you of any further liability related thereto.
- 8. In the event the Public Body orders you to do so in writing, you shall, within five (5) days of receipt of such order, reconvert into money the securities held by you pursuant to this agreement and return such money together with any other moneys held by you hereunder, to the Public Body. At that time you shall also supply to the Public Body with a copy of the payment instrument and the transmittal letter for that instrument to the Contractor.
- 9. The Contractor agrees to pay you for your services hereunder compensation in accordance with your published schedule of Escrow Fees-Public Works Contracts. Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this agreement until and unless the Public Body directs the release to the Contractor the securities and moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as provided for herein above. In the event that you are made a party to a litigation with respect to the property held by you hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this escrow or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorney fees occasioned by such default, delay, controversy or litigation.
- 10. This agreement shall not be binding until executed by the Contractor and the Public Body and accepted in writing and returned to the Public Body by you.
- 11. This instrument contains the entire agreement between you, the Contractor, and the Public Body with respect to this agreement and you are not a party to nor bound by any instrument or agreement other than this; you shall not be required to take notice of any default or any other matter, nor be bound by nor required to give notice or demand, nor be required to take any action whatever except herein expressly provided; you shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.
- 12. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the parties hereto.

The undersigned have read and hereby approve the instructions as given above govern	ing the
administration of this agreement and do hereby execute this agreement on this	day of

Established for and by:	Acknowledged by:
PORT OF SEATTLE (Public Body)	(Contractor)
By: (Name, Title)	By:(Name, Title)
	(Address)
	(Tax Identification Number)
The above instructions received and accept	red this day of
(Bank, Mutual Savings Bank or Savings an	d Loan Assoc.)
By:(Authorized Officer)	
Phone Number: ()	



	ACCOUNT NO.:
	PUBLIC BODY: PORT OF SEATTLE
5	CONTRACT NO.:
ESTIMATED (CONTRACT COMPLETION DATE:

INTEREST BEARING RETAINAGE ACCOUNT AGREEMENT

TO: (Bank of Washington)

Main Seattle Branch

P.O. Box

Seattle, WA 98000-0000

This Agreement is for the investment of the retained percentages of the above Contract in accordance with Chapter 38, Laws of 1970, amending RCW 60.28.

The undersigned, **CONTRACTOR NAME AND ADDRESS**, hereinafter referred to as the Contractor, has directed **Port of Seattle**, P.O. Box 1209, Seattle, WA 98111, hereinafter referred to as the Public Body, to deliver to you its warrants, checks or drafts which shall be made payable to you. Such warrants, checks or drafts are to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth.

INSTRUCTIONS

- 1. Upon delivery to you, warrants, checks or drafts made payable to you shall be endorsed by you and forwarded for collection. The moneys from all such warrants, checks or drafts received hereunder shall be used by you to invest in an interest bearing account, in accordance RCW 60.28.011.
- 2. Monthly statements must be supplied to both the Public Body and the Contractor.
- 3. The established account shall be recorded in name as the Port of Seattle/Contractor. The Public Body may at any time require additional information from you regarding this account. The Public Body also reserves the right to close this account if deemed in the public interest. This account shall be established to serve as a holding account for moneys retained under RCW 60.28.011. As such the Contractor shall have no authority over this account and may not give direction to the financial institution regarding that account except to choose the mode of investment. The Public Body shall be the sole authority for establishing and directing any other action pertaining to this account.
- 4. The Public Body will provide a written list of authorized individuals who may request information or give direction regarding this account. The Public Body reserves the right to change individuals on this list at its option. You will be informed in writing of any such changes.
- 5. The investments purchased by you on behalf of the Contractor must mature on or prior to the date set for the completion of the Contract, including extensions thereof. After the completion date of the Contract, you shall not be required to invest the money held by you and derived from the sale or redemption of matured investments until authorized to do so by the Public Body, which authorization shall include the completion date of the extension.

- 6. When and as interest on this account held by you pursuant to this agreement accrues and is paid, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Public Body.
- 7. You are not authorized to deliver to the Contractor all or any part of the account held by you pursuant to this agreement <u>except</u> in accordance with written instructions from the Public Body. Compliance with such instructions shall relieve you of any further liability related thereto.
- 8. In the event the Public Body orders you to do so in writing, you shall, within five (5) days of receipt of such order, return moneys held by you pursuant to this agreement to the Public Body. At that time you shall also supply to the Public Body a copy of the payment instrument and the transmittal letter for that instrument to the Contractor.
- 9. The Contractor agrees to pay you for your services hereunder compensation in accordance with your published schedule of Escrow Fees-Public Works Contracts. Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this agreement until and unless the Public Body directs the release to the Contractor of the moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as provided for herein above. In the event that you are made a party to a litigation with respect to the property held by you hereunder, or in the event that the conditions of this agreement are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this agreement or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorney fees occasioned by such default, delay, controversy or litigation.
- 10. This agreement shall not be binding until executed by the Contractor and the Public Body and accepted in writing and returned to the Public Body by you.
- 11. This instrument contains the entire agreement between you, the Contractor, and the Public Body with respect to this agreement and you are not a party to nor bound by any instrument or agreement other than this; you shall not be required to take notice of any default or any other matter, nor be bound by nor required to give notice or demand, nor be required to take any action whatever except herein expressly provided; you shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.

. .

approve the instructions as given above	ng upon the assigns, successors, personal hereto. The undersigned have read and hereby e governing the administration of this agreement and his day of,
Established for and by:	Acknowledged by:
PORT OF SEATTLE (Public Body)	(Contractor)
By:(Name, Title)	By:(Name, Title)

	(Address)	
	(Tax Identification Nu	mber)
The above instructions received and accep	ted this day of _	
(Bank, Mutual Savings Bank or Savings ar	nd Loan Assoc.)	_ AGENT
By:(Authorized Officer)		_
Phone Number: ()		

Port of Seattle			1 CONTRACT CHANGE ORDER	NUMBER	
A CONTRACTOR OF THE CONTRACTOR			2		
CONTRACT CHANGE	ORDER		Page 1 of 1		
3 CONTRACT NUMBER	4 WORK PROJECT NUM	BER	5 EFFECTIVE DATE OF CHANG	iΕ	
S 1951 ISD DV	7		(If blank, block 12 applies)		
6 ISSUED BY:	7 NAME OF CONTRACTO	OR	8 PROJECT TITLE		
9 DESCRIPTION OF CHANGE:					
POS Trend			Work Project # Ac	ljustment \$	
			ınchanged and in full effec		
10 ADJUSTMENT TO CONTRACT SUM AND CON					
constitute the complete and final settlemer indirect, and any other claim by the contrac	,	, , , ,	head, fee, and damages, whe	ther direct or	
A. For this Contract Change Order, the Contra	act Sum is adjusted by the	e sum of:		\$X,XXX.XX	
B. For this Contract Change Order, the Contra	act Time is adjusted by th	is number of days:		Days	
C. Previous Contract Completion Date:				Month/Day/Year	
D. New Contract Completion Date as a result	of this and all previous C	ontract Change Orders:		Month/Day/Year	
11 NOTE: Execution of this Contract Change Order above described adjustments, if any, in the Contract		s the Contractor's irrevocab	ole acceptance of all the terms he	reof, including the	
12 BY PORT OF SEATTLE		13 ACCEPTANCE OF CO	ONTRACTOR		

12 BY PORT OF SEATTLE		13 ACCEPTANCE OF CONTRACTOR			
SIGNATURE	DATE	SIGNATURE	DATE		
PRINTED NAME AND TITLE		PRINTED NAME AND TITLE			
[Name], [Title]		[Name], [Title]			



DATE:					DAI	LY FORC	E ACCOU	NT FIELD	DOCUMENTATION
PROJECT NAME or WP#:				FORCE ACCOUNT BID ITEM OR CO #:					
CONTRACTOR						DATI	E WORK PE	RFORMED:	
PERFORMING WORK:								REPORT #:	
REPORTED BY:						CONT	RACTOR T	RACKING #:	
LOCATION:	DESCRIPTION:								
LABOR	<u>'</u>				STRAIGH	HT TIME		RTIME	
NAMI		TRAD	E/CLASSIFICA	ATION	HOURS	RATE	HOURS	RATE	AMOUNT
								0 0 0 0 0	
MATERIALS							1017	AL LABOR \$	
DESCRIPTION (Include S	Size, Type, Manufacture	er, Etc)	VEN	DOR	UNIT	QTY	PR	RICE	AMOUNT

							N 1 N 1 1	N. 1. N. 1. N.	
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YEAR/MAKE/MODEL/EQ#	DESCRIPTIC	N	IN USE	IDLE	BLUE BO	OK RATE	RENTA	AL RATE	AMOUNT
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							TOTAL EQ	UIPMENT \$	
							S	UBTOTAL \$	0.00
SUBMITTED BY - CONTRACT	OR/ PRINT NAME	REQUIRED	- OWNER RI	EP./ PRINT	T NAME		20%	MARKUP \$ TOTAL \$	0.00 0.00
	,	2,5		,				. O IAL 9	3,00
SUBMITTED BY - CONTRACT	OR/SIGN & DATE	BEUI IIDED	- UNIVIED DI	D / CICNI/	ATURE & DAT	F	GC SIGNIA	LI IBE EUD CI	JBS (optional)
	Rep to Mark if Applicable:				titlement to be				
The contractor certifies tha									
The owners representative	varifies that this is a fa	ir and roas	onable listin	a of the la	hor materia	al and oqui	nmont au	ntitios usos	hut it is not an

authorization for payment until all backup for costs are submitted, verified and approved by the Resident Engineer



CENTRAL PROCUREMENT OFFICE Construction

PO Box 68727 Seattle, WA 98168

CONTRACTOR'S RELEASE

Release By: Contract No: Known As:
KNOW ALL MEN BY THESE PRESENTS:
In consideration of the promise of the total sum of \$, including Washington State Sales Tax of \$, lawful money of the United States of America, \$ which has already been paid, and retainage in the amount of \$ which is to be disbursed by the Port of Seattle in accordance with the provisions of RCW 60.28; the undersigned Contractor,, does and by receipt of the said sum shall, for itself, its successors and assigns, releases and forever discharges the Port of Seattle, its officers, agents and employees, of and from all liabilities, obligations and claims whatsoever in law and in equity under or arising out of said Contract.
The undersigned Contractor certifies that all subcontractors and suppliers have been notified of the completion of this Public Works Project in accordance with General Conditions G-8.09(C) of the project manual and this release constitutes notification to the Port.
The undersigned Contractor certifies that all Industrial Insurance premiums have been paid to the Department of Labor and Industries for the undersigned Contractor and all Subcontractors for this project.
IN WITNESS WHEREOF, this release has been executed this day of, 20
WITNESS:
By:
Title:
CERTIFICATE:
I,, certify that I am the Corporate Secretary of the corporation named as Contractor in the foregoing release; that, who signed said release on behalf of the Contractor was then of said corporation; that said release was only signed for and in behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.
(Corporate Seal)



CENTRAL PROCUREMENT OFFICE Construction Contract Services PO Box 1209 Seattle, WA 98111

CERTIFICATE OF CONTRACT COMPLETION

Contractor:	
Project Title:	
Contract Number:	Work Project Number:
Date of Completion:	
The above referenced Contract is hereby of Documents.	complete consistent with and pursuant to the Contract
All Submittals and documentation required Manual have been received by the Port of	by Section 01 77 00 – Project Closeout of the Project Seattle.
•	ill be released, in the absence of Liens and upon tate Labor and Industries Department, Employment Revenue.
Name Title	Date
cc:	

PART 1 GENERAL

- 1.01 The following documents are included in these Specifications as examples, in order that the Bidder be informed of the requirements of the Contract:
 - A. Performance Bond (Attachment 1)
 - B. Labor and Material Payment Bond (Attachment 2)
 - C. Bid Bond Sample (Attachment 3)
 - D. Certificate of Insurance (Attachment 4)

PART 2 NOT USED

PART 3 NOT USED

PART 4 NOT USED

End of Document

List of Attachments

Attachment 1 Performance Bond

Attachment 2 Labor and Material Payment Bond

Attachment 3 Bid Bond Sample

Attachment 4 Certificate of Liability Insurance

Bond #	

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENT	S:
That	as Principal, hereinafter called
Contractor, and	as Surety, hereinafter
	Port of Seattle as Obligee, hereinafter called the
Port, in the amount of Dollars (\$	
Surety bind themselves, their executors, adminis assigns, jointly and severally, firmly by these pre	
WHEREAS:	
Contractor has executed an agreement with the which Contract is by reference made a part here the aforesaid agreement together with all the Coalterations, additions thereto, deletions therefron incorporated into the Contract) and is hereinafted	of (the term "Contract" as used herein to include ntract Documents, addenda, modifications, all and any other document or provision
This bond is executed and issued pursuant to the	e provisions of Chapter 39.08 Revised Code of

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

FURTHER:

Washington.

- 1. Surety hereby waives notice of any alterations, change orders, modifications or extension of time made by the Port.
- Surety recognizes that the Contract includes provisions for additions, deletions and
 modifications to the Work or Contract Time and the amounts payable to the Contractor.
 Subject to the limitations contained in (1) above, Surety agrees that no such addition,
 deletion, or modification, or any combination thereof, shall avoid or impair Surety's
 obligation hereunder.
- 3. Whenever Contractor has been declared by the Port to be in default, and the Port has given Surety notice of the Port's determination of such default, Surety shall promptly (in no event more than fifteen (15) days following receipt of such notice) advise the Port of its intended action to:
 - a. Remedy the default within fifteen (15) days following its advice to the Port as set forth above, or
 - Assume within fifteen (15) days, following its advice to the Port as set forth above, completion of the Contract in accordance with all the Contract Documents and become entitled to payment of the balance of the Contract Sum, or
 - c. Pay the Port upon completion of the Contract, in cash, the cost of completion together with all other reasonable costs and expenses incurred by the Port as a result of the Contractor's default, including but not limited to, those reasonable costs and expenses incurred by the Port in its efforts to mitigate its losses, which

may include but are not limited to, attorneys fees and efforts to complete the Work prior to the Surety exercising the options available to it as set forth herein.

- 4. If the Port shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment, shall pay all costs and attorney's fees incurred by the Port in enforcement of its rights hereunder. Venue for any action arising out of or in connection with this bond shall be in King County, Washington.
- 5. No right or action shall accrue on this bond to or for the use of any person or corporation other than the Port of Seattle.

Signed and Sealed this	day of	,	
IMPORTANT: Surety compan (6) or higher and appear on the amended), have an underwrith transact business in the State	e Treasury Departmening limitation of not less	nt's most current list (C	Circular 570 as
(Surety)	(Contra	actor)	
Power of Attorney attached.			

Bond #	

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRES	ENTS:	
That	as Principal, hereinafter called	
Contractor, and	as Surety,	ı
hereinafter called Surety, are held and firml	y bound unto the Port of Seattle as Obligee,	
Dollars (\$) for the payr	ntitled to recovery hereunder, in the amount of ment whereof Contractor and Surety bind then entatives, successors and assigns, jointly and	nselves
WHEREAS:		
Contractor has executed an agreement with	n the Port dated forproje	ect a

copy of which Contract is by reference made a part hereof (the term "Contract" as used herein to include the aforesaid agreement together with all the Contract Documents, addenda, modifications, alterations, additions thereto, deletions there from and any other documents or provisions incorporated into the Contract) and is hereinafter referred to as the Contract.

This bond is executed pursuant to the provisions of Chapter 39.08 Revised code of Washington.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly make payment to all claimants, as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and shall indemnify and save the Port harmless from all cost and damage by reason of Contractor's default, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject to the following conditions:

- 1. The Surety hereby waives notice of any alterations, change orders, modifications or extension of time made by the Port.
- Surety recognizes that the Contract includes provisions for additions, deletions and
 modifications to the Work or Contract Time and the amounts payable to the Contractor.
 Surety agrees that no such addition, deletion, or modification, or any combination thereof,
 shall avoid or impair Surety's obligation hereunder.
- 3. Surety hereby agrees that every person protected under the provisions of RCW 39.08.010 who has not been paid as provided under the Contract and pursuant to RCW 39.08.010, less any amounts withheld pursuant to statute, and less retainage withheld pursuant to RCW 60.28, after the expiration of a period of thirty (30) days after the date on which the completion of the Contract in accordance with RCW 39.08, may sue on this bond, prosecute the suit to final judgment as may be due claimant, and have execution thereon including recovery of reasonable costs and attorney's fees as provided by RCW 39.08. The Port shall not be liable for the payment of any costs or expenses of any such suit.
- 4. No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the Port, and where required, the Contractor, in accordance with RCW 39.08.030.
- 5. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

hereunder, then the Surety, in addition RCW 39.08.030, shall also pay such	and obtain judgment against the Surety for recovery on to such judgment and attorney fees as provided by costs and attorney fees as may be incurred by the or any action arising out of or in connection with this ngton.
Signed and Sealed this day of _	,
(6) or higher and appear on the Treasury De	bonds must have an A.M. Best Rating of A- FSC of epartment's most current list (Circular 570 as f not less than the Contract total, and be authorized to n.
(Surety)	(Contractor)

Bond # _____

Power of Attorney attached.

BID BOND SAMPLE FORM PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

BID BOND

KNOW ALL BY THESE PRESENTS	:	
That we,		as Principal, hereinafter called
Contractor, and	to the Poor	as Surety, nereinarte ort of Seattle as Obligee, hereinafter called the tal amount bid for the payment of which tors, administrators, legal representatives,
THE CONDITION OF THIS OBLIGA	TION	S SUCH THAT WHEREAS:
Contractor has submitted or is about to sub	mit a pro	pposal to the Port on a contract for
(Project Name and Contract #)		
NOW, THEREFORE,		
as may be specified, enter into the Contract	t in writir perform	ance of the said Contract, then this obligation
Signed and sealed this day of _		
Bv∙	Bv [.]	
By: (Surety), Attorney-in-Fact	Jy.	(Contractor)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

(A/6 N = 5-1)	CONTACT NAME: PHONE			
(A/C, No, Ext): (A/C, No): E-MAIL	(A/C, No, Ext): (A/C, No):			
ADDRESS:				
PRODUCER CUSTOMER ID #:				
INSURER(S) AFFORDING COVERAGE	NAIC #			
INSURED INSURER A:				
INSURER B:				
INSURER C:				
INSURER D :	47			
INSURER E :				
INSURER F :				
COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:	E DOLLOV DEDIOD			
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT				
CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO				
EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.				
INSR TYPE OF INSURANCE ADDL SUBR POLICY NUMBER POLICY EFF POLICY EXP MM/DD/YYYY) MM/DD/YYYY) LIMITS				
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DAMAGE TO RENTED	\$			
The second secon	\$			
PERSONAL & ADV INJURY S				
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1 SEIST JECT ESS	\$			
AUTOMOBILE LIABILITY COMBINED SINGLE LIMIT (Ea accident)	\$			
ANY AUTO BODILY INJURY (Per person)	\$			
ALL OWNED AUTOS BODILY INJURY (Per accident) \$	\$			
SCHEDULED AUTOS PROPERTY DAMAGE	Φ			
HIRED AUTOS (Per accident)	Φ 			
NON-OWNED AUTOS	\$			
	\$			
UMBRELLA LIAB OCCUR EACH OCCURRENCE	\$			
EXCESS LIAB CLAIMS-MADE AGGREGATE S	\$			
DEDUCTIBLE	\$			
	\$			
WORKERS COMPENSATION WC STATU- OTH-	Ψ			
7/N Y/N	¢			
OFFICER/MEMBER EXCLUDED?	\$			
(Mandatory in NH) If yes, describe under	•			
DÉSCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT \$	\$			
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)				
CERTIFICATE HOLDER CANCELLATION				
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN			
THE EXPIRATION DATE THEREOF, NOTICE WILL BE ACCORDANCE WITH THE POLICY PROVISIONS.				
ACCORDANCE WITH THE POLICE PROVISIONS.				
AUTHORIZED REPRESENTATIVE				
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GENERAL CONDITIONS FOR CONSTRUCTION CONTRACT

2016 EDITION January 2016

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ARTICLE G-01 ABBREVIATIONS AND DEFINITIONS OF TERMS

G-01.01 ABBREVIATIONS

Abbreviations may be utilized throughout the Contract Documents. Any such abbreviation, unless commonly understood in the local construction industry, will be defined in the particular portion of the Contract Documents where it is used.

G-01.02 DEFINITIONS

Whenever in the Contract Documents or Bidding Requirements the following words and defined terms are used, the meaning shall be applicable to both the singular and plural forms thereof:

Addendum: A written or graphic document issued by the Port prior to the Bid Opening Date that clarifies, corrects, or changes a document contained or referenced within the Contract Documents.

Allowance: An amount established in the Contract Documents for inclusion in the Contract Sum to cover Work which may or may not be carried out by the Contractor and which cannot be accurately quantified as of the Bid Opening Date. Any amount included in the Contract Sum but not authorized for expenditure in the course of performing the Work shall be deducted from the Contract Sum by way of a reconciling Change Order.

Agreement Form: The written form executed by the Port and the Contractor that binds the Contractor to perform the Work in accordance with the Contract Documents.

As-Built Drawings: A neatly and legibly marked set of Drawings that reflect the manner in which the Work has been performed in the field. The requirements for the As-Built Drawings are separately set forth in the Specifications.

Assistant Director of Engineering, Construction Services: The authorized representative of the Engineer that supervises the Construction Manager, Resident Engineer and administration of the Contract after Contract Execution. The Assistant Director of Engineering, Construction Services will be identified by the Port, in writing, subsequent to Contract Execution Date.

Bid: The offer of a Bidder, on the prescribed bid form, properly executed, setting forth the price or prices for the Work to be performed.

Bid Documentation: Any work papers, spreadsheets, takeoffs, material lists, subcontractor quotes, vendor or material quotes, wage rates, equipment rates (both rented and owned), and any other papers, documents, or electronic information created or used by the Contractor when preparing its Bid. Bid Documentation includes the data files associated with any software program utilized by Contractor when preparing its Bid but does not include the software program itself.

Bid Opening Date: The date on which the Port publicly opens the Bids.

Bidding Requirements: The Advertisement for Bids contained in Document 00 10 00, the Instructions to Bidders contained in Document 00 20 00, any supplementary instructions to bidders, any supplementary bidder responsibility criteria, and any sample forms that pertain to the Bidding Requirements (all as the same may be revised by Addendum).

Certificate of Contract Completion: The document issued by the Port after the retainage has been completely consumed in the payment of claims (including by the Port) or released and

Contractor has satisfied any requirements set forth in the Contract to provide completed operations insurance coverage after Final Acceptance.

Change Order: A written document signed and issued by the Port on or after the Contract Execution Date that authorizes and directs an addition, deletion, or revision in the Work, or adjustment in the Contract Time or Contract Sum.

Claim: A written demand or assertion by the Contractor in accordance with Article G-09 after denial of a Request for Change Order seeking, as a matter of right, adjustment of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract.

Closeout Administrative Requirements: Those administrative requirements that are not necessary for Physical Completion but which the Contractor must fulfill in order to complete the Work under the Contract. The Closeout Administrative Requirements include, but are not necessarily limited to, the return of ID Badges and keys, the submission of all required equal employment opportunity and electronic payroll information, the provision of all approved prevailing wage documentation, the resolution of any Claims, the reconciliation of any Allowances, Not-to-Exceed Change Orders, and similar items, the submission of Contractor's Final Payment request, and the delivery of the final Contractor's release.

Construction Manager: The authorized representative of the Engineer that holds direct responsibility for the administration of Contract. The Construction Manager is usually assisted by one or more Resident Engineers. The Construction Manager will be identified by the Port, in writing, subsequent to Contract Execution Date.

Contract: The Contract governs the relationship between the Port and the Contractor concerning the Work. The Contract Documents form the Contract.

Contract Documents: The Contract Documents consist of the executed Agreement Form, the Drawings and Specifications, any Change Orders, and any other form or document listed in the Agreement Form as being part of the Contract Documents. The Contract Documents do not include the Bidding Requirements or any version of the Drawings or Specifications that may be deleted, replaced or superseded by Addendum prior to the Bid Opening Date. The Contract Documents also do not include any portion of the Reference Documents unless expressly listed in the Agreement Form.

Contract Execution Date: The date the Port officially binds itself to the Contract and thereby triggers the commencement of the Contract Time.

Contract Sum: The Contract Sum stated in the Agreement Form, including authorized adjustments thereto, to be paid by the Port to the Contractor for the performance of the Work.

Contract Time: The time allotted in the Contract for the Substantial Completion of the Work. The Contract Time begins on the Contract Execution Date and ends on the date of Substantial Completion of the Work by the Contractor.

Contractor: The Contractor is the individual, partnership, firm, corporation, joint venture, or other business entity with which the Port of Seattle has entered into the Contract. Unless the context clearly requires otherwise, the term Contractor includes all of the Contractor's authorized representatives. The term Contractor does not include any Subcontractor or Supplier of any tier.

Critical Path: Critical Path is the longest, continuous sequence of interrelated activities that begins on the Contract Execution Date and extends to Substantial Completion of the Work. This path represents the longest chain of interrelated activities throughout the network from beginning to end. These activities are critical because delay to an activity on this path will extend Milestones or Contract Time.

Day: The term day, regardless of whether capitalized, shall mean a calendar day unless otherwise specifically designated.

Drawings: The Drawings are that portion of the Contract Documents that present the Work (or parts thereof) visually, graphically, symbolically or diagrammatically and which generally indicate the size, form, location, and arrangement of the various elements of the Work.

Engineer: The Chief Engineer and Director of the Port's Engineering Services Department, Capital Development Division. The Engineer acts for the Port in the administration of the Contract and has overall authority for such administration after Contract Execution Date.

Event: Any act, omission, directive, condition, instruction or determination that the Contractor believes may entitle it to an adjustment in the Contract Time or Contract Sum, including (without limitation): (i) directives by the Engineer, (ii) responses to RFIs, issuance of Construction Bulletins, or comments on Submittals, (iii) acceleration, suspension, delay, or stand-by of the Work, (iv) discovery of conflicts, inconsistencies, omissions, or ambiguities in the Contract Documents. (v) unexpected discovery of hazardous, potentially hazardous, infectious, toxic or dangerous materials, (vi) discovery of any item of potential archeological significance, (vii) "differing site conditions," including without limitation unidentified or mis-located utilities, (viii) issuance of a Change Order; (ix) performance of Unit Price work quantities below or above the percentages listed in Paragraph G-05.04.B; (x) rejection of an "Or Equal" request; (xi) failure to issue an authorization for work within the scope of an Allowance, (xii) failure by the Port to cooperate with Contractor to facilitate performance of the Work, and (xiii) any other act or omission by the Port which the Contractor believes may entitle it to additional time or money. An Event is deemed to occur upon the earlier of: (a) the act, omission, directive, condition, instruction, or determination that constitutes the Event or (b) the time the Contractor discovered, or in the exercise of reasonable inquiry, should have discovered the act, omission, directive, condition, instruction or determination that constitutes the Event.

Final Acceptance: The Port's formal, written acknowledgment, signed by the Engineer to whom authority to accept Work has been delegated by the Port Commission, reflecting completion and acceptance of the Work. Final Acceptance is required by Section 39.08 of the Revised Code of Washington and commences the time for submission of any third-party claims against performance or payment bonds under Chapters 39.08 and statutory retention under RCW 60.28.

Final Payment: The final Progress Payment made to the Contractor. Final Payment is not the payment to the Contractor of the retainage required by RCW 60.28 following satisfaction of the conditions necessary to release that retainage.

Impact to Unchanged Work: The disruption to performance of Work that is not changed by a Change Order or Event, including without limitation any reduction in planned efficiency or productivity of the unchanged Work whether through trade stacking, overtime or otherwise.

Inspector: A representative of the Engineer that is assigned to make inspections and record the progress of Contractor's performance of the Work. An Inspector may or may not be identified by the Port in writing, but the Resident Engineer or Construction Manager will always confirm the authority of an Inspector on request.

Milestone: A specified milestone date in the Contract by which the Contractor is required to complete or attain a designated portion of the Work. A Milestone may, for example, exist with respect to the end of Contract Time, a deadline for Partial Substantial Completion, a deadline for completion of a portion of the Work that would not constitute Substantial Completion or Partial Substantial Completion, or some other specified occurrence (such as issuance of a Notice to Proceed).

Non-Conforming Work: Any portion of the Work (including but not limited to material, equipment or workmanship proposed or incorporated into the Work) that does not conform (including as a result of latent defect) to the requirements of the Contract. Non-Conforming Work specifically includes any Substitution that is not expressly accepted by the Port under Paragraph G-04.08.B. Non-Conforming Work also includes Work that generally conforms to the requirements of the Contract but fails within the term of any applicable warranty period.

Notice of Event: Written notice by Contractor to the Port of an Event made in accordance with the provisions of Paragraphs G-04.34 and G-05.

Notice of Intent to Award: The official notice from the Port that it intends to execute the Contract with the selected responsible, responsive bidder.

Notice to Proceed: Written notice issued by the Port that indicates that the Contractor can mobilize on the Project Site and begin all, or a designated part, of the physical construction Work at the Project site.

Notice of Completion of a Public Works Contract: The written notice provided by the Port to the Washington State agencies having authority to assert a lien against the retention required by Chapter 60.28 of the Revised Code of Washington by which the Port requests authority to release the retention. The Notice of Completion of Public Works Contract is issued following Final Acceptance.

Notice Requirements: The provisions of the Contract that set forth the requirements the Contractor must follow when providing a Notice of Event, making a Claim, or submitting any other notice the Contractor is required to submit to as a condition of obtaining any change in, or relief under, the Contract Documents. Notice Requirements specifically include both temporal and substantive requirements. Notice Requirements are generally set forth in these General Conditions and the Supplementary Conditions (if any) but may also appear in other portions of the Specifications.

Operating and Maintenance Documentation: Documentation required by the Specifications that pertains to and specifically describes the requirements for operation and maintenance of various portions of the completed Work. The Operating and Maintenance Documentation may apply to such things as equipment, materials and finishes and may cover such topics as operating instructions, maintenance requirements, and cleaning.

Or: When the word "or" is utilized anywhere in the Agreement Form, Bidding Requirements, General Conditions, Supplementary Conditions or Division 1 of the Specifications, the Port specifically intends the logical or inclusive disjunction (i.e. and/or) unless the language or context clearly indicates otherwise. When the word is used in other portions of the Specifications or the Drawings, the meaning must be ascertained from the context.

Or Equal: Equal or better function, quality and performance to that specified in the Contract Documents. An item is not Or Equal if it is materially different, with respect to other constraints or requirements in the Contract Documents, in size, weight or other aspect from the item specified in the Contract Documents. Similarly, an item is not Or Equal if it is expected to have significantly higher total cost of ownership over the life of the completed Work.

Partial Substantial Completion. The time at which a designated Milestone or part of the Work has progressed to the point where all of the following conditions are met: (a) it is sufficiently complete in accordance with the Contract Documents such that the Port or its tenant has full, unrestricted and permanent occupancy and use of that part of the Work, (b) only minor or incidental physical construction Work (Punchlist) remains to be completed, (c) all systems and parts of the Work are commissioned and functional, (d) utilities are connected and operate

normally, (e) Contractor has provided all occupancy permits and easement releases for that part of the Work so designated, (f) Contractor has submitted, and the Port has accepted (or accepted as noted) draft Operating and Maintenance Documentation, (g) Contractor has submitted, and that Port has accepted (or accepted as noted) draft Warranty Documentation and (h) all training required to be provided by Contractor has been satisfactorily completed.

Partially Completed Work: A specific portion of the Work that is not yet Substantially Complete but which portion the Port elects to take early possession or use of as described in Paragraph G-08.08.

Physical Completion: The time at which all of the Work has progressed to the point where (a) Contractor has achieved Substantial Completion, (b) the Contractor has completed all items identified on the Punchlist and the Punchlist Backcheck has been completed, (c) the Contractor has submitted and the Port has accepted all required As-Built Drawings, (d) the Contractor has fulfilled its obligations associated with any Contractor maintenance period, (e) the Contractor has submitted final Operating and Maintenance Documentation consistent with the accepted draft, (f) the Contractor has submitted final Warranty Documentation consistent with the accepted draft, and (g) the Contractor has completed closeout cleaning and fully and satisfactorily demobilized from the Project Site and any other Port property provided for use under the Contract. Physical Completion does not require completion of the Closeout Administrative Requirements. It is possible, although highly unlikely, for the Contractor to achieve Physical Completion as to a portion, but less than all, of the Work.

Physical Completion Date: The date the Port determines that the Contractor has achieved Physical Completion.

Port: The Port of Seattle. Unless the context clearly requires otherwise, the term Port includes all of the Port's authorized representatives. The term Port, however, specifically excludes the Airport Building Department, the Port of Seattle Fire Department, and members of the Aviation Facilities & Infrastructure Group when acting as a utility purveyor at Seattle-Tacoma International Airport.

Product Data: The illustrations, standard schedules, performance charts, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.

Progress Payment: Periodic payments to the Contractor of the Contract Sum for Work completed in accordance with the Contract Documents. Progress Payments are made to the Contractor as otherwise provided in the Contract Documents.

Project Records: Project Records shall mean those data and records maintained by Contractor related to the performance of the Work as more particularly set forth in Paragraph G-04.38.

Project Site: The location(s) where the Work will be performed or constructed by the Contractor as set forth in the Drawings and Specifications. Project Site specifically includes areas identified by the Port for Contractor's logistics or staging but does not include any areas separately secured by the Contractor, a Subcontractor of any tier, or Supplier for use in connection with the Work (e.g. Contractor's home office, an off-site fabrication plant, etc.).

Provide: A verb that, when used in connection with a requirement for the Contractor undertake or perform certain Work, specifically includes all actions necessary to furnish, install, connect, commission, adjust, test, and otherwise make ready for use and occupancy such Work.

Punchlist: A list(s) of the physical construction Work that remain to be completed after the achievement of Substantial Completion or Partial Substantial Completion of the Work which must be satisfactorily completed in order to attain Physical Completion. In addition, the Punchlist may

be expanded by the Port for other non-conforming issues as described under Paragraph G-08.06.C.2.

Punchlist Backcheck: The backcheck completed by the Engineer used to verify that the items identified on the Punchlist are complete. Upon acceptance of the Punchlist Backcheck by the Engineer, the Punchlist process is complete.

Punchlist Inspection: The inspection undertaken by the Engineer after receipt of the Punchlist from the Contractor.

Reference Documents: Drawings, specifications, or other documents that do not specify Work required by the Contract Documents, but which provide supplemental information that offers insight into the means, methods, techniques, sequences, or procedures of construction that may be necessary to perform or accomplish the Work and which the Port expects the Contractor to take notice of in preparing its Bid and performing the Work. Reference Documents are not, however, the exclusive source for such information.

Request for Change Order: A document, designated as a Request For Change Order, prepared by the Contractor requesting (1) a change in Contract Sum; (2) a change in Contract Time; (3) a change in Contract Work; (4) payment of money or damages; or (5) any other relief arising out of or relating to this Contract.

Request for Information (RFI): A document by which the Contractor requests clarification, verification or information on a portion of the Work.

Resident Engineer: The authorized representative of the Engineer that is generally located on or near the Project Site and assigned to be the primary point of contact for the Contractor. The Resident Engineer has immediate, day-to-day charge of the on-site engineering and administration of the Project. The Resident Engineer will be identified by the Port, in writing, subsequent to Contract Execution Date.

Samples: Physical examples of materials, equipment, systems or workmanship establishing standards by which the Work will be evaluated for acceptance.

Schedule: The critical path method schedule prepared by the Contractor in accordance with the requirements of the Contract and accepted by the Engineer setting forth the logical sequence of activities required for the Contractor's orderly performance and completion of the Work in accordance with the Contract and specifically to meet any specified Milestones. The Schedule includes updates – whether by progress schedule(s), recovery schedule(s) or otherwise – required by the Contract.

Schedule of Prices: That portion of Contractor's Bid that sets forth the price for which Contractor will perform specific portions of the Work and, in total, the entire Work.

Software: Any computer program, computer database or documentation related thereto for which any party claims protection under patent, copyright, trade secret or other proprietary or intellectual property right.

Specifications: The Specifications are that portion of the Contract Documents that consist of the written requirements for contract administration, materials, equipment, systems, standards, and workmanship for the Work and for the performance of any related services, and the Specifications include Division 0 (except the Bidding Requirements) through Division 48, which are generally bound together with other documents related to the Contract in one or more volumes commonly referred to collectively as the "Project Manual."

Subcontractor: A Subcontractor is a business entity that has a direct contract with the Contractor to perform a portion of the Work. Unless the context clearly requires otherwise, the term Subcontractor includes all of the Subcontractor's authorized representatives.

Submittal: Written or graphic document (including electronic) or sample that is required by the Contract Documents and is prepared for the Work by the Contractor, a Subcontractor or Supplier at any tier, and submitted to the Port by the Contractor, including product data, samples, certificates, schedules of material or other data. Submittals are not Contract Documents.

Substitution: An item of significant difference in material, equipment, process or configuration that functionally meets the express and implied requirements of the Contract Documents.

Sub-subcontractor: A Sub-subcontractor is a business entity that has a direct or indirect contract with a Subcontractor or another Sub-subcontractor to perform a portion of the Work. Unless the context clearly requires otherwise, the term Sub-subcontractor includes all of the Sub-subcontractor's authorized representatives.

Substantial Completion: The time at which all of the Work as a whole has progressed to the point where (a) it is sufficiently complete in accordance with the Contract Documents so that the Port or its tenant has full, unrestricted and permanent occupancy and use of that part of the Work, (b) only minor or incidental physical work (Punchlist) remains to be completed, (c) all systems and parts of the Work are commissioned and functional, (d) utilities are connected and operate normally, (e) Contractor has provided all occupancy permits and easement releases for that part of the Work so designated, (f) Contractor has submitted and the Engineer has accepted (or accepted except as noted) draft Operating and Maintenance Documentation, (g) Contractor has submitted and the Engineer has accepted (or accepted except as noted) draft Warranty Documentation, and (h) all training required to be provided by Contractor has been completed.

Substantially Complete: An adjective, used with respect to either the Work (or a specific portion thereof), that indicates the Work (or specific portion thereof) has progressed to point where it qualifies for Substantial Completion (or Partial Substantial Completion as to a specific portion).

Supplementary Conditions: That portion of the Contract Documents that amends or supplements the General Conditions set forth in this Document 00 70 00.

Supplier: An entity that supplies material or equipment used in the performance of the Contract. Unless the context clearly requires otherwise, the term Supplier includes all of the Supplier's authorized representatives.

Surety: A surety company that is bound, by the terms of the performance or payment bonds required under the terms of the Contract, to ensure the performance of the Contractor and the Contract.

Unit Price Work: Work to be paid for on the basis of unit prices stated in the Schedule of Prices or a Change Order.

Unusually Severe Weather: Adverse weather that, at the time of year it occurred, is very unusual for the place in which it occurred. Weather may be unusually severe either as a result of its severity (e.g. exceptionally heavy rain or snow) or the unusual number of days that it persists. Unusually Severe Weather will be judged against the ten-year average values determined from U.S. Department of Commerce, National Oceanic and Atmospheric (NOAA) National Climactic Data Center monthly climatological data for the Seattle, Washington station closest to the Project Site. While the combination of two or more weather conditions outside one standard deviation of the ten-year mean may be considered Unusually Severe Weather, a single weather condition must generally fall outside one and a half standard deviations of the ten-year mean in order to be considered Unusually Severe Weather.

Warranty Documentation: Documentation required by the Specifications that pertains to and specifically describes the warranties for the completed Work. The Warranty Documentation shall not include the Contractor's general one-year warranty under GC-04.29 but otherwise extends to all special warranties required anywhere in the Contract Documents. The Warranty Documentation may cover such topics as the length of the warranty, the manner of making a claim, and any accepted conditions on such warranty.

Warranty Start Date: The date that a particular warranty to be provided by Contractor commences to run. Different warranties may have different Warranty Start Dates. The Warranty Start Date for any particular warranty will occur on the later of: (1) the Contractor's attainment of Substantial Completion or Partial Substantial Completion of the Work to which the warranty applies, (2) fifteen (15) days following the date on which the Contractor submits draft Operating and Maintenance Manuals that are accepted (or accepted subject to minor revision as noted) for the particular portion of the Work to which the warranty applies, (3) the date the Contractor successfully completes all of the training required by the Contract for the particular portion of the Work to which the warranty applies, and (4) fifteen (15) days following the date on which the Contractor submits draft Warranty Documentation that is accepted (or accepted subject to minor revision as noted) for the particular portion of the Work to which the warranty applies.

Work: Work shall mean the construction to be completed under the terms of this Contract. The Work is summarized in Section 01 11 00 – Summary of Work of the Specifications and detailed more fully in the remainder of the Specifications and Drawings. Work specifically includes the furnishing of all labor, materials, equipment, and all incidentals necessary to the successful completion of the construction, whether they are temporary or permanent, and whether they are incorporated into the finished Work or not. Work also includes all other obligations imposed on the Contractor by the Contract. The Work is sometimes generally referred to as the "Project."

Working Drawings: Shop drawings, erection plans, false work plans, framework plans, dewatering dam plans, stress diagrams, bending diagrams for reinforcing steel, or other diagrams, plans, or data used to illustrate some portion of the Work that the Contractor is required to submit to the Engineer.

G-01.03 TITLES OR HEADINGS

The titles or headings of the sections, divisions, parts, articles, paragraphs, or subparagraphs, of the Contract Documents are intended only for convenience of reference and shall not be considered as having any bearing on the interpretation of the text.

G-01.04 STANDARD ABBREVIATIONS AND MEANINGS

Unless otherwise defined in the Contract Documents, words and abbreviations that have well-known technical or trade meanings are used in accordance with such recognized meanings.

ARTICLE G-02 INTENT, CORRELATION AND EXECUTION OF CONTRACT

G-02.01 INTENT OF THE CONTRACT DOCUMENTS

A. The intent of the Contract Documents is to prescribe the complete Work. The Contractor shall furnish all labor, materials, equipment and incidentals necessary to complete all parts of the Work. Where the Contractor is directed to provide something as part of the Work, that term specifically includes everything necessary to furnish, install, connect,

- adjust, test and make ready for use or occupancy. Compensation for the cost of the complete Work and for full performance of the Contract is included in the Contract Sum.
- **B.** The Contract shall be construed in accordance with the laws of the State of Washington. Venue for any action between the Port and the Contractor arising out of or in connection with this Contract shall be in King County, Washington.
- C. The Contract represents the entire and integrated agreement between the Port and the Contractor. It supersedes all prior discussions, negotiations, representations or agreements pertaining to the Work, whether written or oral.

G-02.02 CORRELATION OF THE CONTRACT DOCUMENTS

- A. Each Contract Document is an essential part of the Contract between the Port and the Contractor, and a requirement present in one Contract Document is binding as though it was present in all. The Contract Documents are intended to be complementary and prescribe and provide for all Work required by the Contract. Work, materials or equipment that have not been specifically included in the Contract Documents but which are required to produce the intended result shall be provided by the Contractor as though they had been specifically included.
- **B.** Work required by the Contract Documents but for which a specific line item is not provided in the Schedule of Prices shall nevertheless be considered as a part of the Work and all costs of the same are included in the Contract Sum.
- C. The Contract Documents are listed below in order of precedence. Contract Documents amended or revised by Addendum retain the same order of precedence. To the extent that there are different provisions in Contract Documents that address the same matter or subject, these provisions shall be reconciled and harmonized to the maximum extent possible. In the event these different provisions cannot be reconciled, the provisions set forth in the Contract Document having the highest precedence will control. If provisions within the same level of Contract Document cannot be reconciled, and one is more stringent than another, the more stringent provision will prevail.
 - 1. Change Orders.
 - 2. Agreement Form.
 - 3. Supplementary Conditions.
 - 4. General Conditions set forth in this Document 00 70 00.
 - Other Division 00 Conditions of the Contract Documents.
 - 6. All other Specifications.
 - 7. Drawings.
 - 8. Other documents included in the Contract by the terms of the Agreement Form.
- D. In case of differences between small-scale and large-scale drawings, the large-scale drawings shall govern. In the event of discrepancy between any Drawing and the figures written thereon, the figures, unless otherwise indicated, shall govern over scaled dimensions.
- E. In the event of a conflict between the Contract Documents and applicable laws, codes, ordinances, regulations or orders of governmental authorities having jurisdiction over the Work or any portion thereof, or in the event of any conflict between such applicable laws, codes, ordinances, regulations, or orders, the most stringent requirements of any of the above shall govern.

G-02.03 EXECUTION OF THE AGREEMENT FORM

The Contract is not binding upon the Port until the Contract Execution Date. No bidder shall have a right, interest or claim with respect to the Contract or the Work until the Contract Execution Date. After being executed by the Port, the Contractor will receive a copy of the Agreement Form. Work performed prior to the Contract Execution Date is at the sole risk of the Contractor.

G-02.04 OWNERSHIP OF THE CONTRACT DOCUMENTS

The Contract Documents furnished to the Contractor shall remain Port property. The Contract Documents furnished to the Contractor are for use solely with respect to this Project and are not to be used by Contractor, Subcontractors, Sub-subcontractors, or Suppliers on other projects without the prior specific written consent of the Port. Neither the Contractor nor any Subcontractors, Sub-subcontractors, or Suppliers shall own or claim a copyright in the Contractor Documents. All Documents submitted to the Port and not returned to the Contractor shall be retained by the Port, including Software and source codes developed or used for the Project. See Paragraph G-04.37.

G-02.05 NO WARRANTIES BY THE PORT

- A. Any "bid quantities" set forth in the Schedule of Prices are estimates only, having been provided only as a basis for the comparison of Bids by the Port. The Port provides no representations or warranties, expressed or implied, that the actual amount of Work will correspond to those estimates. Furthermore, the bid quantity estimates are not indications or representations that may give rise to any differing site condition claim. The sole and exclusive remedy for any variation in bid quantities is as described in Paragraph G-05.04.B.
- B. The Reference Documents and any other information, records, or reports that may be made available by the Port to the Contractor are provided solely for the convenience of the Contractor. While the Port considers the Reference Documents to be reasonably reliable when considered in context (specifically including the lapse of time and any subsequent activity) and expects the Contractor to reasonably make use of them when preparing its Bid and performing the Work, the Port make no representations or warranties, express or implied, regarding the content of the Reference Documents or any other information, records, or reports. No information derived from inspection of Reference Documents or other information, records, or reports will in any way relieve the Contractor from its responsibility for properly performing its obligations under the Contract. The Contractor shall make its own conclusions and interpretations from the data supplied, information available from other sources, and the Contractor's own observations.

G-02.06 PARTNERING

- A. The Port is committed to the principles of project partnering, which includes collaboration and cooperation to identify and engage in measures to prevent and resolve potential sources of conflict before they escalate into Claims or legal actions. The Port and Contractor shall, as they work together on this Project, adhere to this partnering concept.
- **B.** To the extent request by either party, the Port and Contractor will participate in a partnering session promptly as soon as practicable following the Contract Execution Date or, if the parties are having difficulty in connection with the administration of the Contract and management of Requests for Changes and/or Claims, at that time. The purpose of the workshop(s) shall be:

- 1. To establish mutual understanding of partnering concepts;
- 2. To develop the mission statement and goals for the Project for all parties;
- 3. To develop a process so that critical issues can be quickly resolved;
- 4. To review Port processes such as billing procedures, substantiation requirements and audit process; and
- 5. For meetings later in the Project, to discuss issues related to potential conflicts and to engage in collaborative problem solving.

The Port will provide facilities for any partnering session. The cost for any outside consultant to lead the partnering session(s) will be subject to reimbursement by the Port; otherwise, each party shall bear its own costs in connection with its participation in any such partnering session.

C. Contractor shall including language from this Paragraph in contracts for Subcontractors who become involved in the performance of the Work.

ARTICLE G-03 PORT OF SEATTLE

G-03.01 AUTHORITY OF THE ENGINEER

- A. Subject to the limits of authority established by the Port of Seattle Port Commission, the Engineer is the Port's representative for this Contract, will administer the Contract, and has the authority to enforce all obligations imposed on the Contractor by the Contract Documents.
- B. The Work shall be done to the reasonable satisfaction of the Engineer. The Engineer specifically has the authority to reject Non-Conforming Work; however, the failure of the Engineer to do so shall not constitute approval or acceptance of any Non-Conforming Work. The fact that the Engineer was present during the progress of the Work or inspected any portion of the Work does not relieve the Contractor from responsibility for Non-Conforming Work nor does it bind the Port in determining whether to grant Final Acceptance of the Work.
- C. The Engineer is not responsible for, or will not have any control over, the acts or omissions of the Contractor, Subcontractors, Sub-subcontractors, Suppliers, or any of their agents or employees, or any other persons performing a portion of the Work. The Engineer is not responsible for, and will not have any control over, the means, methods, techniques, sequences, or procedures of construction, or for safety precautions or programs incidental thereto. Nothing in this Paragraph or elsewhere in the Contract Documents shall be construed as requiring the Engineer to assume such responsibility or control or to direct or advise the Contractor in any such regard. Any advice nonetheless given by the Engineer will not relieve the Contractor of its obligations under the Contract and shall not constitute a representation or warranty by the Port that the advice, if followed, will conform to the Contract Documents or achieve the desired results.
- D. The Assistant Director of Engineering, Construction Services, the Construction Manager, and the Resident Engineer are all authorized to act on behalf of the Engineer. The Engineer may also employ Inspectors or consultants to assist in the administration and management of the Contract. While any such Inspectors or consultants may make

recommendations to the Engineer, they are not authorized to approve or accept Work, to suspend the Work, or to change the Contract Documents.

G-03.02 OFFICERS AND EMPLOYEES OF THE PORT HAVE NO PERSONAL LIABILITY

Neither the Port Commission, Engineer, Assistant Director of Engineering-Construction Services, Construction Manager, Resident Engineer, Inspector, nor any other officer, employee or agent of the Port, acting within the scope of their employment, shall be personally liable for any of their acts or omissions in connection with this Contract, it being understood that in such matters they are acting solely as agents of the Port.

G-03.03 INFORMATION PROVIDED BY THE PORT

Upon request, the Port will furnish the Contractor prior to the Notice to Proceed, without charge, up to 5 hardcopy full size sets of Drawings and Specifications.

G-03.04 PORT'S RIGHT TO CARRY OUT OTHER WORK

The Port reserves the right at all times to perform or cause to be performed other and additional work on or near the Project Site, whether with its own forces or those of other contractors. This specifically includes work related to, or for other portions of, the Project. Other government agencies may also be performing other work in the vicinity of or relating to this Contract such as inspections, utility maintenance / relocation / construction, road maintenance/construction and other activities. Private developers or businesses may be engaged in activities in the vicinity of, or relating to, this Contract. The Port will cooperate with the Contractor, other agencies, and other contractors or developers in scheduling and coordinating the Contractor's Work with the work of others in order to minimize conflicts, avoid interruptions or delays to others and promote the orderly completion of the Work as a whole.

G-03.05 SERVICE OF NOTICES BY OR ON THE CONTRACTOR

Any written notice required under the Contract to be given by or to the Contractor may, at the option of either party, be served on or by the Contractor by electronic means via the Port's Construction Document Management System, personal service, certified or registered mail, or recognized overnight courier. Delivery of the notice will be made to the last address provided in writing to the Engineer or the Contractor. Notices shall be deemed delivered: (i) when sent through the Port's Construction Document Management System, (ii) when personally delivered; (iii) on the third day after mailing when sent by certified or registered mail and the postmark affixed by the United States Postal Service shall be conclusive evidence of the date of mailing; or (iv) on the first business day after deposit with a recognized overnight courier if deposited in time to permit overnight delivery by such courier as determined by its posted cutoff times for receipt of items for overnight delivery to the recipient. Unless specifically provided otherwise in the Contract, service of notice by email is not allowed or recognized.

ARTICLE G-04 CONTRACTOR'S RESPONSIBILITIES

G-04.01 EXAMINATION OF THE SITE OF WORK AND CONTRACT DOCUMENTS

- A. By executing the Agreement Form, the Contractor represents that it has carefully examined and investigated the Contract Documents, Project Site, and any other areas necessary to complete the Work. The Contractor likewise represents that it has reasonably reviewed the Reference Documents and any other information necessary for an understanding of, and to successfully complete, the Work. The submission of its Bid shall be conclusive evidence that the Contractor represents and acknowledges that it has made such examinations and investigations and is satisfied as to the conditions to be encountered in the performance of the Work, including the character, quantity, quality and scope of the Work, the quantities and qualities of materials to be supplied, the character of the site, and equipment and labor to be used, the requirements of all documents contained or referenced in the Contract Documents and how all such requirements correlate to the conditions at the site(s) of the Work.
- B. In the event that the Contractor discovers any error, inconsistency, omission, or variance in the Contract Documents, whether arising from applicable laws, statutes, codes, ordinances, regulations, or otherwise, the Contractor shall provide timely notice thereof in accordance with Paragraphs G-04.34 and G-05.02. The Contractor shall likewise make all reasonable efforts to mitigate any impact resulting from such error, inconsistency, omission or variance. If the Contractor proceeds with the Work and fails to provide timely notice of the error, inconsistency, omission, or variance, the Contractor shall assume full responsibility therefore and shall bear all costs, liabilities and damages attributable to such error, inconsistency, omission, or variance.
- C. If any part of the Contractor's Work depends on existing conditions or the proper execution of work by others, the Contractor shall report to the Engineer anything that renders such conditions or work unsuitable for the Contractor's Work. Such report shall be in writing and shall be submitted within thirty (30) days of being granted access to the area or the completion of the work by others and, in any event, before using such conditions or work. Failure of the Contractor to report such problems shall constitute an acceptance of the conditions or work by others as fit and proper for the execution of the Contractor's Work and shall preclude any claim for additional compensation or schedule extension unless arising from conditions not reasonably discernible or latent defects in the work by others.

G-04.02 USE OF PROJECT SITE NOT EXCLUSIVE; INTERFERENCE AND DAMAGE

A. Unless specifically identified otherwise, the Contractor may not have exclusive access to or use of the Project Site or other work areas. Unless the Contractor has exclusive access to a work area, the Contractor may be required to use facilities and areas, including the Project Site, concurrently with others, including the Port, other agencies, utilities, other contractors, developers, and tenants. The Contractor will cooperate with the Port and others that may be present on or about the Project Site in scheduling and coordinating the Contractor's Work with the work of others in order to minimize conflicts, avoid interruptions or delays to others and promote the orderly completion of the Work and other work as a

whole. The Contractor shall make any necessary revisions to the Schedule to accommodate this cooperation and coordination.

B. Damage.

- 1. If the Contractor wrongfully causes damage to the property of the Port or to other work of the Port on or about the Project Site, the Contractor shall promptly remedy and be wholly responsible for such damage.
- In the event there is more than one contractor engaged in work of the Port on or about the Project Site, each such contractor shall be responsible to the other for damages to the work of the other contractor, injury to any person, or other recognized property damage. Likewise, any loss, cost, expense or damage arising from non-conforming work shall be borne by the contractor responsible for that work.
- 3. If the Contractor wrongfully causes damage to the work or property of any other agency, utility, developer, or tenant, the Contractor shall promptly attempt to settle with such other party by agreement or otherwise resolve the dispute at law. If such other party sues or initiates a proceeding against the Port on account of any damage alleged to have been caused by the Contractor, the Port will notify the Contractor who shall defend such proceedings at its own expense, and if any judgment or award is entered against the Port, the Contractor shall pay or satisfy it and shall reimburse the Port for all attorney's fees and costs that the Port incurs.
- 4. If any other agency, utility, developer, or tenant causes damage to the Work, the Contractor shall promptly attempt to settle with such other party by agreement or otherwise resolve the dispute at law.

C. Delay.

- 1. The Contractor shall be responsible to the Port for loss to other contractors caused by the Contractor's delays and for failure to finish the Work or any portion thereof within the time specified in a Milestone.
- 2. If Contractor has knowledge or believes that others working on or about the Project Site is delaying or threatening to delay timely performance of the Work, Contractor shall provide the Port notice, whether oral or written, within 24 hours to permit the Port to mitigate any delay. If the Contractor is nonetheless unreasonably delayed by others, written notification shall be made in writing to the Engineer in accordance with Paragraphs G-04.34 and G-05.02. Any request for a time extension or additional compensation allegedly resulting from such delay shall be made in accordance with the procedures of Paragraph G-05.02. The Contractor shall mitigate and minimize any such delay to its Work caused by others.

D. Coordination.

- 1. The Contractor shall afford the Port and separate contractors' reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate its Work with theirs as required by the Contract Documents.
- Whenever the Contractor receives items from a separate contractor or from the Port for storage, erection or installation, the Contractor receiving such items shall give receipt for items delivered, and thereafter will be held responsible for care, storage and any necessary replacing of item or items received.

3. When certain items of equipment and other work are indicated as Not In Contract (or "NIC") or to be furnished and installed under other contracts, the Port will provide any requirements for preparation of openings, provision of backing, etc., for receipt of such "NIC" work the Contractor shall properly form and otherwise prepare its work in a satisfactory manner to receive such "NIC" work.

G-04.03 SUPERVISION AND CONSTRUCTION PROCEDURES

- A. The Contractor shall supervise and direct the Work using its best efforts, skills and attention. The Contractor shall be solely responsible for, and shall have full control and charge of construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract, including the work of Subcontractors, Sub-subcontractors, Suppliers and all other persons performing a portion of the work. The Contractor shall not be relieved from its obligation to perform the Work in accordance with the Contract Documents either by the activities of the Engineer or by reason of inspections, tests, or approvals required or performed by or for the Engineer. The Contractor is for all purposes an independent contractor and not an agent or employee of the Port.
- **B.** The Contractor shall be fully responsible to the Port for the acts or omissions of its employees, agents, Subcontractors, Sub-subcontractors, Suppliers and their agents and employees, and all other persons who are to perform any of the Work.
- C. The Contractor shall keep a competent Project Manager or Superintendent at the site of the Work continuously during its progress. The Project Manager and Superintendent shall be experienced, capable of understanding and familiar with the Work and able to properly supervise performance of the Work. The Project Manager or Superintendent shall be the Contractor's representative and shall have authority to act on behalf of and bind the Contractor with respect to this Contract, except that the Contractor may indicate, in writing, limits on the authority of the Project Manager or Superintendent. Communications or notices directed or given to the Project Manager or Superintendent shall be as binding as if given to the Contractor. The Port may require the Contractor to remove the Project Manager, Superintendent, or any other employee from the Site in the event such person fails to uphold or meet the requirements of the Contract, including without limitation, compliance with non-discrimination laws and regulations, or fails to perform in a competent, qualified, safe or professional manner. Incompetent, careless, or negligent workers shall be immediately removed from the performance of the Work by the Contractor upon written request of the Engineer. Failure by the Port to require the Contractor to remove any personnel shall not relieve the Contractor of its Contract obligations.

G-04.04 PERFORMANCE SPECIFICATIONS

A. The Contract Documents may describe portions of the Work using performance specifications (as opposed to a prescriptive or design specifications). When the Port utilizes a performance specification, it describes the Work by setting forth the end result required rather than precisely how the Work is to be accomplished. Performance specifications set forth the required attributes of the Work rather than the specific component materials, equipment, and processes, their arrangement, or method of assembly of the Work. Where performance specifications are utilized, the Contractor is responsible, within the Contract Sum and Contract Time, for determining precisely how the Work is to be accomplished (including, but not limited to, the component materials,

- equipment, and processes, their arrangement, and method of assembly) to meet the end result required. The method for testing and evaluating Work described by performance specifications will be set forth, and may include (but is not limited to) code requirements, applicable standards, and life-cycle considerations.
- B. Performance specifications may also list certain materials, equipment, or processes (including by proprietary name, model number, etc.) as examples that might be utilized by the Contractor or might achieve the desired result. It is not the intent of the Port to exclude other materials, equipment, or processes by such listing unless the performance specification indicates that the particular material, equipment, process must be utilized in achieving the end result required and that no substitutions will be permitted. Otherwise, the listing of any such example shall not be considered a warranty by the Port that the particular materials, equipment, or processes will achieve the desired result. Nor will such listing convert a performance specification requiring a particular end result into a prescriptive or design specification.
- C. Notwithstanding the foregoing, in the event a performance specification indicates that a particular material, equipment, or process must be utilized when achieving the end result required, the Contractor may reasonably rely on the accuracy and suitability of such material, equipment, or process in accomplishing the end result required. In the event the Contractor believes that the particular material, equipment, or process is not suitable, the Contractor shall provide timely notice thereof in accordance with Paragraphs G-04.34 and G-05.02 and make all reasonable efforts to mitigate any impact resulting from the unsuitability. If the Contractor nonetheless proceeds with the Work, the Contractor shall assume full responsibility therefore and shall bear all costs, liabilities and damages associated with such unsuitability.

G-04.05 CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT

Unless specified otherwise in the Contract Documents, the Contractor shall include in its Bid and shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, taxes (other than sales taxes separately payable by Port), tariffs, transportation and other facilities and services necessary for the proper execution of the Work to completion, whether the same are temporary or permanent and whether or not incorporated or to be incorporated into the Work.

G-04.06 PREVAILING WAGE RATES TO BE PAID

- A. The wage rates to be paid all laborers, workers and mechanics who perform any part of this Contract shall meet or exceed the prevailing wage rates as required by Chapter 39.12 of the Revised Code of Washington, as amended. This requirement applies to laborers, workers and mechanics whether they are employed by the Contractor, Subcontractors, Sub-subcontractors, or any other person who performs a portion of the Work contemplated by this Contract.
- B. The current prevailing wage rates as provided to the Port by the Industrial Statistician of the Washington State Department of Labor and Industries are included and incorporated in the Contract Documents. In referencing such rates, the Port does not imply or warrant that the Contractor will find labor available at those rates. It is the Contractor's sole responsibility to determine the wage rates it will actually have to pay.

- C. In case any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries of the State and the Director's decision therein shall be final and conclusive and binding on all parties involved in the dispute, as provided for by Section 39.12.060 of the Revised Code of Washington, as amended.
- D. In connection with this Contract, the Contractor will be required, pursuant to Section 39.12.040 of the Revised Code of Washington to file with the Port a "Statement of Intent to Pay Prevailing Wages" and an "Affidavit of Wages Paid" for itself and all Subcontractors and Sub-subcontractors. The Statements require the "approval" of, and the Affidavits the "certification" of, the industrial statistician of the State Department of Labor and Industries before the Statements or Affidavits are to be presented to the Port. The Department of Labor and Industries charges a fee for such approval and certification, which fee shall be paid by the Contractor. Any change in the fee will not be grounds for revision in Contract Sum.
- E. On work funded in whole or in part by Federal monies current Federal wage determination rates are included in the Contract Documents. If a State of Washington minimum wage rate conflicts with a Federal minimum wage rate for the same labor classification, the higher of the two shall govern.
- F. All workers delivering fill, sand, gravel, crushed rock, transit/concrete mix, asphalt or other similar materials and all workers removing any materials from the construction site as required by the Specifications are subject to the provisions of RCW chapter 39.12 and are entitled to the appropriate Prevailing Wage Rate. For purposes of this Contract, such materials are for specified future use and per WAC 296-127-018, delivery and pick-up of the above listed materials constitutes incorporation.
- **G.** The Contractor is required to include this provision in all sub-contracts and shall require that it be placed in all sub-sub contracts at any tier.

G-04.07 MATERIALS AND EQUIPMENT TO BE NEW

All materials and equipment required to be incorporated into the Work shall be new, except as otherwise provided in the Contract Documents. All such materials and equipment shall be applied, installed, connected, erected, used, cleaned, maintained and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processor, except as otherwise provided in the Contract Documents. Upon the request of the Engineer, the Contractor shall furnish satisfactory evidence as to the kind, quality and manufacturer of materials and equipment.

G-04.08 OR EQUAL/SUBSTITUTIONS

A. Or Equal. When material or equipment is specified by one or more patents, brand names, or catalog numbers, it shall, unless otherwise expressly stated, be understood as if followed by the words Or Equal whether or not such words appear. If the Contractor proposes to furnish an Or Equal material or equipment, then Contractor shall demonstrate (1) conformance to the specified performance, testing, quality, life-cycle or dimensional requirements and (2) suitability of the material or equipment for the use intended. Intended use of any Or Equal material or equipment shall be specifically identified as part of the submittal process, and the Engineer must accept the Contractor's proposed Or Equal material or equipment before it may be used. Any such acceptance shall not relieve Contractor of its obligations to achieve the specified performance, testing, quality,

life-cycle or dimensional requirements and suitability of any accepted the Or Equal material or equipment for the use intended under this Contract.

- **B.** Substitutions. Requests for Substitution shall be made in accordance with the Contract Documents.
 - 1. Substitutions will be considered after Contract Execution Date, unless otherwise expressly stated. The Port will consider Substitution requests only from the Contractor and not from Suppliers, distributors, manufacturers, or Subcontractors. If the offered Substitution necessitates reconfiguration, design changes, layout or performance changes or coordination with other portions of the Work, the Contractor, as a condition of the Port's acceptance of the Substitution, shall perform such reconfiguration, redesign and changes or coordination at no additional cost to the Port. Substitutions shall be submitted to the Port in sufficient time to avoid delays to the Work. The Contractor shall be responsible for any delay or cost resulting from untimely submittal of Substitution requests.
 - 2. The Contractor has the burden of demonstrating that the proposed Substitution's function, quality, operation and maintenance requirements, and performance will function consistently with the specified item and otherwise fully meet the intent of the Contract Documents.
 - 3. A request for Substitution constitutes a representation that the Contractor:
 - a. Has investigated the proposed product and determined that it meets or exceeds the functional level of the specified product;
 - b. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to the Port;
 - c. Waives claims for additional costs or time extension that may subsequently become apparent; and
 - d. Bears all costs of any redesign or modification to other systems, parts, equipment or components of the Work resulting from the substitution. The Port shall have the right to insist that the Contractor undertake such redesign or modification as a condition of approving the Substitution.
 - 4. Substitutions will not be considered when they are indicated or implied on Shop Drawings or product data submittals without a separate written Substitution request. Substitutions will not be considered when they are due to the Contractor's failure to order the specified items in a timely manner.
 - 5. The Engineer, in his/her sole discretion, shall determine whether to accept or reject the offered Substitution and the changes to other portions of the Work necessitated by the incorporation of the offered substitution. In the event that a substituted item is expected to realize substantial cost savings over the indicated item, the Port shall have the right to share in the cost savings (but in no event more than it would be entitled in the event of a Value Engineering Cost Proposal). Denial of a request for Substitution is not a basis for a Request for Change Order or Claim against the Port.

G-04.09 CONTRACTOR TO COMPLY WITH ALL LAWS

The Contractor shall at all times comply with all federal, state and local laws, ordinances and regulations, including but not limited to those environmental laws and other laws listed in the

Contract Documents and other laws referred to herein, which in any manner apply to the performance of this Contract. Such compliance shall include, but is not limited to, the payment of all applicable taxes, royalties, license fees, penalties and duties.

G-04.10 DISPOSAL OF WASTE MATERIALS

- A. Waste material is defined as all material from demolition, excavation, dredging, or other source that is unsuitable to, or in excess of the needs of the Work, or material that is designated for removal and disposal from the Port property. Hazardous material is waste material containing substances classified as hazardous, potentially hazardous, infectious, toxic or dangerous under applicable Local, State or Federal law.
- **B.** Both waste material and hazardous materials shall be disposed of in strict compliance with all laws, regulations and the Contract Documents.
- C. All waste material shall become the property of the Contractor. The Contractor is solely responsible for the lawful managing and disposal of waste material and shall indemnify, defend and hold the Port harmless from all liability, damages, claims, lawsuits, penalties and expenses, whether direct, indirect or consequential (including but not limited to attorney's and consultant's fees and other expenses of litigation or arbitration) arising from or in any way connected with, the demolition, excavation, removal or disposal of waste materials.
- **D.** The value of waste materials, if any, shall be credited to the Port in the total Contract Sum.
- **E.** Contractor is responsible for disposal of hazardous materials generated by the Contractor, such as used motor oils, lubricants, cleaners, etc. according to the Contract Documents and according to local, State, and Federal law.
- F. If the Contractor, during the course of the Work, unexpectedly encounters materials that it believes may be hazardous material, it shall immediately stop work on this activity and notify the Engineer and, to the extent Contractor believes the encounter may entitle it to an adjustment in the Contract Time or Contract Sum, shall provide timely notice thereof in accordance with Paragraphs G-04.34 and G-05.02.
- G. The Port of Seattle will retain title to all hazardous material that is on the Project Site as of the Contract Execution Date and encountered during demolition, removal, and excavation. The Port of Seattle will be identified as the hazardous waste generator and will sign all hazardous waste shipment manifests for non-contractor generated hazardous wastes. Nothing contained within these Contract Documents shall be construed or interpreted as requiring Contractor to assume the status of Owner or generator of hazardous waste substances for non-contractor generated hazardous wastes.

G-04.11 STATE AND LOCAL TAXES

- A. All or a portion of the labor and materials furnished under this Contract may be subject to retail sales taxes and other state and local taxes, which taxes are payable by the Contractor.
 - State Taxes: The Washington State Department of Revenue has issued special
 rules designed to assist the Contractor in accurately reporting to the Department of
 Revenue the Contractor's tax liability. Although information may be included in the
 Contract Documents regarding the application of state taxes to a particular
 contract or Bid Item, it shall be the Contractor's responsibility as to the correct

interpretation of the laws and regulations relating to such taxes. Adjustments will not be made in the amount to be paid by the Port under the contract because of any misunderstanding by the Contractor as to the Contractor's liability for, or the amount of, any taxes. If the Contractor is in doubt as to the tax procedures in any particular case, the Contractor shall consult with the Washington State Department of Revenue.

- 2. State Sales Tax Rule 170: WAC 458-20-170, and its related rules, applies to the constructing and repairing of new or existing buildings, or other structures, upon real property. For work performed in such cases, the Port will automatically add this sales tax to each payment to the Contractor and the Contractor shall timely remit this sales tax to the Washington State Department of Revenue. The Contractor shall not include the retail sales tax in the schedule of prices, or in any other contract amount subject to Rule 170.
- 3. State Sales Tax Rule 171: WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used, primarily, for foot or vehicular traffic. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various schedule of prices, or other contract amounts, including those that the Contractor pays on the purchase of materials, equipment, or supplies used or consumed in doing the Work.
- **B.** The Schedule(s) of Prices will indicate which bid items are subject to Rule 171. Any such identification by the Port is not binding upon the Department of Revenue.

G-04.12 PERMITS, LICENSES, FEES AND NOTICES

- A. Unless otherwise specified in the Supplementary Conditions, the Contractor shall procure and pay for all permits, licenses and all governmental inspection fees which are necessary or incidental to the performance of the Work and shall give all notices required by such permits and licenses. Any action taken by the Port to assist the Contractor in obtaining permits or licenses shall not relieve the Contractor of its sole responsibility to obtain permits or licenses.
- **B.** Where applicable law, regulations, ordinances or agency policy prohibits the issuance of a necessary temporary operational or other permit to entities other than a public agency, the Port will support the Contractor's request for such permit and will accept the permit in the Port's name, but only if:
 - 1. The Contractor takes all necessary action leading to the issuance of the permit;
 - 2. The permit is determined to be in the public interest;
 - 3. The permit applies only to work performed in connection with this Project;
 - 4. The Contractor agrees in writing, in a form approved by the Port, to abide by all requirements of the permit, and to indemnify, defend and hold harmless the Port from any liability in connection with work prosecuted under the permit; and
 - 5. The Contractor agrees, in writing, to indemnify, defend and hold the Port harmless from all expenses incurred in connection with such permit.
- C. All costs incurred in connection with obtaining permits and licenses identified by the Contract to be the responsibility of the Contractor shall be considered incidental to the

Contract and included in the Contract Sum and (1) no increase in the Contract Sum will be made due to any delay in obtaining such permits, but (2) an adjustment in the Contract Time may be made if, in spite of Contractor's commercially reasonable efforts, the permits or licenses are not issued within a reasonable period of time (specifically considering the length of time, under currently prevailing conditions, it regularly takes for the agency having jurisdiction to issue a permit for a project of similar size and complexity to the Project) and Contractor submits a timely Notice of Event in accordance with Paragraphs G-04.34, G-05.02 and G-07.02. Any loss of Contract Time suffered by the Contract of due to unreasonable delays in obtaining permits or licenses identified by the Contract to be the responsibility of the Port may be considered in relation to a request by the Contractor for an adjustment to the Contract Time in accordance with Paragraph G-07.02, provided timely Notice of Event is first provided.

- **D.** The Contractor shall assume all costs and liabilities arising from the use of patented devices, materials, or processes used on or in performance of the Work.
- **E.** Contractor is responsible to notify in writing appropriate agencies at the start of construction.
- F. For purposes of this Contract and specifically the provisions of this Paragraph, Contractor acknowledges and agrees that the Airport Building Department, the Port of Seattle Fire Department, and members of the Aviation Facilities & Infrastructure Group when acting as a utility purveyor at Seattle-Tacoma International Airport shall be considered separate governmental authorities having independent authority over, and responsibility for the Project, and over whom the Engineer does not have control. For purposes of RCW 4.24.360, the Airport Building Department, the Port of Seattle Fire Department, and members of the Aviation Facilities & Infrastructure Group when acting as a utility purveyor at Seattle-Tacoma International Airport have independent authority over the Project, and the acts or omissions of any of them shall not be considered acts or omissions of the Port.

G-04.13 UTILITIES AND SIMILAR FACILITIES

- A. In connection with any underground and utility Work, the Contractor shall strictly comply with Chapter 19.122 of the Revised Code of Washington. Washington State law, RCW 19.122, requires anyone planning to excavate to know what is below the ground surface before they dig. Any cost or scheduling impact resulting from the Contractor's failure to comply with these statutory provisions shall be borne by the Contractor.
 - 1. The Port of Seattle is now a member of the One Call system. Two business days before commencing any excavation, the Contractor shall call 811 or 1-800-424-5555 to provide notice of the scheduled start of excavation. On busy days (M-W) hold time can be lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.
 - 2. If utility locating is needed for design or other purposes, where no digging is involved, then please only fill out the POS-811 form and email to posutility@portseattle.org. Do not call 811 if you will not be digging 12" or deeper.
- B. Unless specified otherwise by the Contract, Contractor shall plan and execute its work to prevent outages in existing utilities or disruption of service. Where removal or relocation of known or disclosed utilities or temporary utility connections are necessary to accommodate the Work, such removal, relocation or temporary connections shall be performed at the Contractor's sole expense unless it is specified in the Contract Documents that it will be performed by the Port or by others.

- C. The Port or utility owner may enter the Project Site from time to time to make changes as may be necessary for the relocation of utilities or to make necessary connections or repairs. Where the utility owner is identified as being responsible for removing or relocating utilities, the Contractor shall make timely arrangements with the utility owner to schedule such work to accommodate the Work. The Contractor shall also cooperate with and facilitate any necessary access to or on the job site by the forces engaged in such work and shall conduct its operations in such a manner as to avoid delay or hindrance to the work being performed by such other forces.
- D. Contractor shall not commence any excavations until existing utilities have been staked or marked by the utility owner. The Port will provide utility locates for Port-owned utilities. The Contractor may encounter underground utilities adjacent to their work operations. It shall be the Contractor's responsibility to protect these utilities from damage. If the Contractor discovers the presence of any unknown/unidentified utilities at the Project Site, the Contractor shall provide the Port oral or written notice promptly (and in no event more than 24 hours after discovery). If the Contractor asserts that the discovery is an Event, written notification shall be made in accordance with Paragraphs G-04.34 and G-05.02.
- E. The Contractor may request Port approval for changes or rearrangement to any utility for the Contractor's convenience in order to facilitate construction of the Work. The Port shall be the sole judge of whether the proposed change or rearrangement is acceptable. The Contractor shall be responsible for any delay or cost resulting from this request.
- F. Loss of time, if any, suffered by the Contractor due to delays in removal or relocation of any utilities by others may be considered in relation to a request by the Contractor for an adjustment to the Contract Time in accordance with Paragraph G-07.02, provided that Contractor first submits a timely Notice of Event in accordance with Paragraphs G-04.34 and G-05.02.
- **G.** If any underground utility not identified in the Contract Documents must be relocated to accommodate the Project, the Engineer will either arrange for the relocation of such utility or provide a Change Order to the Contractor to do such work.
- H. Utilities damaged by the Contractor shall be repaired by the Contractor to their original condition at the Contractor's expense. The Contractor shall notify the Engineer of any such damage promptly (and in no event more than 24 hours after the damage occurs) and shall begin repairs immediately and work continuously until the utility is restored to the satisfaction of the Engineer.

G-04.14 SAFETY

A. The Contractor assumes full responsibility for and shall comply with all safety laws, regulations, ordinances and governmental orders with respect to the performance of this Contract. The Contractor shall so conduct all operations under this Contract as to offer the least possible obstruction and inconvenience to the Port, its tenants, abutting property owners, and the public. In addition to the obligation imposed by this Subparagraph, the Contractor shall be responsible for employing adequate safety measures and taking all other actions reasonably necessary to protect the life, health and safety of the public and to protect adjacent and Port-owned property in connection with the performance of the Work. The Contractor shall have the sole responsibility for the safety, efficiency and adequacy of the Contractor's plant, equipment and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the Project Site, including safety of all persons and property in performance of the Work. This requirement shall

apply continuously, and not be limited to normal working hours. Any commitment or obligation of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the Project site.

- **B.** The Contractor shall establish and supervise:
 - 1. A safe and healthy working environment;
 - 2. An accident prevention program; and
 - 3. Training programs to improve the skill and competency of all employees in the field of occupational safety and health.
- C. The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).
- D. The Contractor shall comply with the Federal Occupational Safety and Health Act of 1970 (OSHA), including all revisions and amendments thereto; the provisions of the Washington Industrial Safety Act of 1973 (WISHA); and the requirements of the following chapters of the Washington Administrative Code:
 - 1. Chapter 296-24 WAC General Safety and Health Standards.
 - 2. Chapter 296-62 WAC Occupational Health Standards.
 - 3. Chapter 296-155 WAC Safety Standards for Construction Work.
- **E.** In addition, the Contractor shall comply with the following requirements when they are applicable:
 - 1. Chapter 296-44 WAC Safety Standards Electrical Construction Code.
 - 2. Chapter 296-45 WAC Safety Standards Electrical Workers.
 - Local Building and Construction Codes.
- F. In cases of conflict between different safety regulations or requirements, specifically including those imposed by the Port under Specification 01 35 29, the most stringent shall apply.
- G. The Contractor shall maintain at the Project Site office, or other well-known place at the Project Site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the Project Site. Employees may not be permitted to work on the Project Site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

G-04.15 DISRUPTIONS CAUSED BY LABOR OR OTHER DISPUTES

- A. Definition: The term "dispute" as used in this Paragraph includes employment and labor-related disputes, whether or not the persons or other entities involved in the dispute have an employment relationship with the Contractor, the Port or its tenants. Examples of such disputes include, but are not limited to, informational or other picketing and all other forms of concerted or non-concerted activity.
- B. Notice to Port of Labor Disputes

- 1. If Contractor has knowledge that any actual or potential labor dispute is delaying or threatening to delay timely performance of the Work, the Contractor shall provide the Port oral or written notice promptly (and in no event more than 24 hours after discovery) to permit the Port to attempt to mitigate any delay. If the Contractor is, in fact, unreasonably delayed, written notification shall be made in writing to the Engineer in accordance with Paragraphs G-04.34 and G-05.02.
- 2. The Contractor agrees to insert a provision in its Subcontracts and to require insertion in all subcontracts, that in the event timely performance of any sub contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor, as the case may be of all relevant information concerning the dispute.
- C. Required Contractor Actions. The Contractor will take all reasonable steps to prevent all disputes arising from the presence of the Contractor, its Subcontractors, Sub-subcontractors or Suppliers or the performance of the Work by any of them, from disrupting the Project or otherwise interfering with access to Port property by the Port, its agents, employees, tenants or employees thereof, or other contractors engaged on or near the Project Site. If such dispute disrupts the progress of the Work or interferes with access to Port property, the Contractor shall promptly take all reasonable action to eliminate or minimize such disruption or interference, including but not limited to: (a) utilizing all reasonable means to prevent all unlawful conduct or picketing, or to restrict all lawful picketing or other activities to a single entrance to Port property; (b) posting notices or signs which advise interested persons and labor organizations that a particular entrance to Port property is for the employees of "primary" or, as the case may be, "neutral" employers: (c) policing entrances to assure that only authorized personnel may use the same; (d) notifying all interested labor organizations of the "primary" or "neutral" status of particular entrances; (e) upon the request of the Port, altering or rerouting the access to the site(s) of the Work; and (f) in the event any such picketing or activity is unlawful or has a secondary impact upon the employees of neutral employers, tenants or their suppliers or contractors, promptly taking appropriate action to seek recourse through the appropriate governmental agency or State or Federal courts to limit the location of such picketing so as to reduce the impact thereof upon neutral employers.
- D. The Port will cooperate with the Contractor to accomplish the foregoing actions and will render its assistance where appropriate; however, the Port shall have the right, without providing additional compensation to the Contractor, to direct the Contractor to modify any of the foregoing actions which the Contractor has taken or plans to take, or to overrule such actions, to designate the entrances to be used as "primary" or "neutral" entrances, and to take appropriate legal action in order to protect the interests of the Port and those of its tenants and other contractors. The foregoing actions to be taken by the Contractor are the Contractor's primary responsibility. Neither the failure of the Port to request that the Contractor take a specific action nor the exercise by the Port of its rights under this Paragraph shall modify or constitute a defense to or waiver of the obligations imposed upon the Contractor in this Paragraph.
- E. Failure to take the action described above or to comply with the directives of the Port shall be considered a breach of the Contract. If the Contractor fails to satisfy the obligations imposed on it by this Paragraph G-04.15, the Contractor shall be liable for and defend, indemnify and hold the Port and its agents harmless from all liability, claims, damages, losses and expenses (including, but not limited to, attorneys' and consultants' fees and other expenses of litigation or arbitration) brought against the Port by a third party

(including, but not limited to, lessees, tenants, contractors, customers, licensees and invitees of the Port) for injunctive relief or for monetary losses to the extent (but only to the extent) arising from and attributable to Contractor's failure to satisfy the obligations imposed on it by this Paragraph G-04.15.

G-04.16 SCHEDULE

- A. The Contractor shall prepare and submit to the Engineer a Schedule in the form specified and within the time specified. If the Contractor fails to provide, maintain and update a Schedule in compliance with the Contract, the Port is entitled to invoke its rights under the Contract, including those rights set forth in Paragraph G-10.10.
- B. The Contractor shall not less than monthly update, revise and keep current the Schedule pursuant to the specified requirements. If the Contractor fails to comply with this Paragraph, the Port has the option to invoke its rights under the Contract, including those rights set forth in Paragraph G-10.10.
- C. When required by the Contract Documents, the Contractor shall follow the construction sequencing or phasing set forth therein. Full compensation for conforming to such sequencing or phasing requirements is included in the Contract Sum, and no additional compensation will be allowed for any necessary sequencing or phasing.

G-04.17 RESPONSIBILITY FOR COMPLETION

- A. The Contractor shall furnish such manpower, services, materials, facilities and equipment and shall work such hours, including night shifts, overtime operations, Sundays and holidays, as may be necessary to ensure the prosecution and completion of the Work or specified portions thereof within the Contract Time and Milestones set forth in the Contract. If it becomes apparent to the Engineer that Milestones will not be achieved or the Work will not be completed within the Contract Time, the Contractor agrees that it will, as necessary, take some or all of the following actions, at no additional cost to the Port to recover lost time:
 - 1. Increase manpower in such quantities and crafts as will substantially eliminate, in the judgment of the Engineer, the delay in prosecution of the Work,
 - 2. Increase on-site project management or superintendent service in order to assist with recovering time,
 - 3. Increase the number of working hours per shift, shifts per day, days per week or the amount of equipment, or any combination of the foregoing, sufficiently to substantially eliminate, in the judgment of the Engineer, the delay in prosecution of the Work, or
 - 4. Reschedule activities to achieve maximum practical concurrency of accomplishment of activities.

The Port shall have the right to require the Contractor, at no cost to the Port, to pursue one or more of these items in the event that: (i) the Schedule, as updated, indicates that the Contractor is fourteen (14) or more days behind schedule at any time until thirty (30) days prior to Milestones or Substantial Completion; or (ii) the Schedule, as updated, indicates that the Contractor is seven (7) or more days behind schedule at any time during the last thirty (30) days prior to Milestones or Substantial Completion.

- B. In addition, the Engineer may require the Contractor to submit a Recovery Schedule as defined in the Contract demonstrating its proposed plan to make up lag in scheduled progress and to ensure completion of the Work within the Contract Time. If the Engineer finds the proposed plan not acceptable, the Engineer may require the Contractor to revise or submit a new plan. If the actions taken by Contractor or the second plan proposed are not satisfactory, the Engineer may require Contractor to take any of the actions set forth in this Paragraph without additional cost to the Port to make up the lag in prosecution of the Work.
- **C.** Failure of the Contractor to substantially comply with the requirements of this Paragraph may be considered grounds for a determination by the Engineer that the Contractor is failing to prosecute the Work with such diligence as will ensure its completion within the time specified in the Contract and will entitle the Port to take whatever action it deems necessary and appropriate under Article G-10.

G-04.18 DOCUMENTS TO BE MAINTAINED AT PROJECT SITE

The Contractor shall maintain at the Project Site, in good order for use by the Engineer, one complete hardcopy of the Contract Documents, Requests for Information, approved Submittals, Working Drawings, Schedules, and As-Built Drawings. All of these documents shall be continuously updated. Without limiting any of the Port's other rights, the failure to keep As-Built Drawings current may result in the withholding of funds from payment in accordance with Paragraph G-10.07.

G-04.19 REQUESTS FOR INFORMATION

- A. The Contractor shall exercise reasonable diligence to determine if the Work to be performed is not sufficiently detailed or explained in the Contract Documents or if there is an apparent conflict or inconsistency between any part of the Contract Documents that is not resolved by Paragraph G-02.02, and shall promptly submit to the Engineer for further written explanations. Before submitting an RFI, the Contractor shall diligently and thoroughly examine the Contract Documents. The Port reserves the right to back charge the Contractor for costs incurred by the Port to respond to RFIs which could have been avoided had the Contractor examined the Contract Documents. The Contractor shall also plan its Work in an efficient manner so as to allow for timely responses to RFIs without impacting the Work. If requested by the Engineer, the Contractor shall prioritize its RFIs and explain the reasons for such priority. The Contractor's submission of an RFI does not fulfill the requirements of Paragraphs G-04.34 and G-05.02.
- B. The Port will endeavor to reply to the RFI as fast as the needs of the Project warrant. The Port will at a minimum be entitled to 7 days to process an RFI and provide a response, provided, however, that such 7 day period is not to be construed as commitment that the Port will respond to all RFIs within 7 days. RFIs involving Work to be executed more than 30 days from the Port's receipt of the RFI are presumed to be non-critical. In submitting any RFI, the Contractor shall alert the Port if it considers the issue to be critical and the Port will attempt to prioritize and expedite a response to any such RFI if the Port concurs the issue is critical and if the criticality was not caused by the Contractor's failure to plan.
- C. Responses by the Port to RFIs are not changes to the Contract. If Contractor believes a response to an RFI constitutes changed work or causes an Impact to Unchanged Work or a delay to the Schedule, the Contractor is required to submit a Notice of Event in accordance with the requirements of Paragraphs G-04.34 and G-05.02.

G-04.20 WORKING DRAWINGS AND SUBMITTALS

- A. Where required by the Contract, the Contractor shall submit specified Submittals that will demonstrate that the Contractor's proposed materials, equipment, or methods of Work are in compliance with the Contract. The Port will not be obligated to accept or pay for materials, equipment or Work for which Submittals are required herein, unless and until all Submittals have been submitted and accepted by the Port.
- B. By making Submittals and in submitting Working Drawings, the Contractor represents that it has determined and verified all materials, field measurements, and related field construction criteria, and that the Contractor has checked and coordinated the information contained within the Submittal or Working Drawing with the requirements of the Work and the Contract Documents.
- C. Review by the Port of the Contractor's Working Drawings or Submittals shall not relieve the Contractor of full responsibility for the accuracy of dimensions and details. Such review shall likewise not constitute acceptance by the Port of the correctness or adequacy of such Submittals, nor shall it constitute a representation or warranty by the Port that the Submittals will satisfy the requirements of the Contract. The Port's review of a Submittal shall not relieve the Contractor from responsibility for errors or omissions in the Submittals. Review by the Port shall not constitute approval of the safety precautions employed by the Contractor during construction, or constitute approval of the Contractor's means or methods of construction. The Contractor shall not deviate from Submittals that have been reviewed with a finding of "Accepted" without submitting the proposed deviation for the Port's review and acceptance.
- D. Any delay arising from an incomplete, late, or otherwise improper Submittal (or a properly requested resubmission of a Submittal) shall be entirely at 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. Submittals marked "subject to change" will not be reviewed. The Port will not review Submittals that depend for their review on other Submittals not yet submitted, that are not required by the Contract Documents, or that are not submitted by the Contractor.
- **E.** When resubmitting a Submittal, the Contractor shall direct specific attention, in writing or on the resubmittal itself, to all revisions it has made by clouding, bolding, shading or highlighting.

G-04.21 CUTTING, FITTING AND PATCHING OF WORK

- **A.** The Contractor shall be responsible for all cutting, fitting, patching or such other altering as may be required to complete the Work, or to make its several parts fit together properly.
- **B.** The Contractor shall not damage or endanger any portion of the Work, Port property or facilities, other work of the Port, or that of any separate contractors by cutting, fitting, patching or other altering of any work, or by excavation. The Contractor shall not alter any of the work of the Port or any separate contractor without written authorization from the Port.

G-04.22 INSPECTION OF THE WORK

A. It is the Contractor's responsibility to provide materials, supplies, equipment and workmanship that conform to the Contract Documents. Unless specifically provided otherwise in the Contract, the Contractor shall be responsible for demonstrating and

- documenting that the materials or equipment to be incorporated into the Work comply with the Contract. All materials testing or special inspections (whether required by applicable code, Contract requirement, or otherwise) shall be performed in strict accordance with the Contract Documents, and the Contractor shall undertake, cooperate with, and bear all costs of said tests as provided in the Contract Documents.
- B. If conformance of materials or equipment to the requirements in the Contract is not determinable through inspection and tests, the Contractor shall provide properly authenticated documents, certificates, or other satisfactory proof of conformance at its sole cost. Such documents, certifications, and evidence shall include performance characteristics, materials of construction, and the physical and chemical characteristics of materials.
- C. All Work and all materials and equipment furnished shall be subject to inspection by the Engineer. The Contractor shall provide the Port and its authorized employees, agents and consultants access to the Work at all times, including sufficient, safe and proper facilities (lifts, scaffolding, boats, including operators, etc.) to enable the Engineer to ascertain that the materials and equipment furnished and Work performed are in conformance with the Contract.
- D. Upon request of the Engineer, the Contractor shall furnish without charge such samples of materials used or to be used in the Work to ensure conformance with the Contract Documents. Work performed or materials used without such inspection may be ordered removed and replaced at the Contractor's expense.
- E. Inspections, tests, measurements, or other acts or functions performed for or by the Port are recognized as being solely to assist the Engineer in determining that the Work, materials, rate of progress and quantities installed comply with the Contract requirements. Such activities shall in no manner whatsoever be construed to relieve the Contractor from the responsibility for performing its own inspections and tests as necessary to ensure compliance with the Contract. In addition, any inspection, test or measurement by or for the Port does not constitute or apply acceptance of the Work by the Port or waive any rights of the Port to require the Work be completed in strict accordance with the Contract and does not impair the Port's authority to reject Non-Conforming Work or evoke any remedy to which it may be entitled.
- F. The Work may be subject to inspection by various governmental agencies, utility owners or by consultants or agents of the Port. The Contractor shall cooperate and make the site available for all such persons or agencies with regard to their inspections, including providing access for inspection by way of safe and proper facilities (i.e., lifts, scaffolding, boats, including operators). Such inspection shall in no way make such agencies or persons parties to this Contract and shall not constitute an interference with the Work or the rights of either the Port or the Contractor. In its scheduling and planning the Contractor shall allow sufficient time for such inspections.
- **G.** Where Work is required to be done on any railroad, utility, or other similar facility, representatives of the same shall be permitted by the Contractor to inspect the Work upon the request of the Engineer.

G-04.23 UNCOVERING OF WORK

A. If any portion of the Work is covered prior to inspection called for by applicable legal requirements (specifically including permit requirements) or as required by the Contract Documents, the Contractor shall, upon request of the Engineer, uncover or remove the

- Work for inspection by the Engineer or other governmental representatives, and replace the Work to the standard required by the Contract Documents, all at the Contractor's expense.
- B. If any other portion of the Work has been covered or completed, the Contractor shall, upon the request of the Engineer, remove or uncover such Work for the Engineer's observation. The Contractor shall subsequently restore that portion of the Work to the standard required by the Contract. If the exposed Work meets the Contract requirements, the cost of removing or uncovering the Work and restoring that portion of the Work shall be paid for by the Port at a price previously agreed to by the Port and Contractor, or on a Force Account basis. If the exposed Work fails to meet the Contract requirements, all costs associated with the removing or uncovering, correction and restoring that portion of the Work shall be at the Contractor's expense.

G-04.24 CORRECTION OF WORK

- A. The Contractor shall, at no additional expense to the Port, correct all Non-Conforming Work. Upon notice from the Engineer of Non-Conforming Work, the Contractor shall within a designated time period identified by the Port correct or replace the Non-Conforming Work or provide a written plan satisfactory to the Engineer indicating corrective action to be taken. Such Work shall be corrected even though it was previously inspected by the Port, payment for it was included in a Progress Payment, whether or not it was completed, whether or not it was observed before or after the date of Final Acceptance, and whether or not it occurred or manifested itself before or after Final Acceptance. If the Contractor fails to correct Non-Conforming Work within the time designated by the Port, the Port may correct it as provided for in Paragraph G-10.05.
- **B.** Notwithstanding the foregoing, if the Port determines that Non-Conforming Work does not constitute a dangerous or unsuitable condition, the Port may, at in its sole discretion, waive the right to require correction and elect to accept such Work. In such case, the Port shall reduce the Contract Sum in a reasonable amount to account for such Non-Conforming Work. If Contractor disputes the amount of the reduction, it shall comply with Paragraphs G-04.34 and G-05.02.

G-04.25 RESPONSIBILITY FOR WORK

- A. All Work performed under the Contract and all materials to be incorporated in the Work, whether in storage or on the site and whether under the care, custody and control of the Contractor, Subcontractors, or Sub-subcontractors, shall be at the sole risk and responsibility of the Contractor until Substantial Completion of the entire Work, except as may be limited by the Engineer in writing for Partial Substantial Completion of a designated portion thereof as provided in Paragraph G-08.06. Damage from any cause to either permanent or temporary work, utilities, materials, equipment, existing structures, the Project Site and other property owned by the Port or others, shall be repaired by the Contractor to the satisfaction of the Engineer at no additional cost to the Port.
- **B.** Without limiting the generality of the foregoing, it is the Contractor's responsibility to protect the Work from weather damage. In instances when the Contractor believes weather may be detrimental to prosecution of the Work, Contractor shall provide the Port notice, whether oral or written, as soon as possible to consider whether any action by the Contractor is necessary or advisable. No extension of the Contract Time for such weather will be approved unless the Contractor also complies with Paragraphs G-04.34, G-05.02 and G-07.02. Where weather-sensitive Work is scheduled during periods where the

- weather may reasonably be expected to impact the performance of the Work, the Contractor is responsible for providing any temporary weather enclosures necessary for Work to proceed without weather delays.
- C. In preparation for and during any suspension of Work as provided in Article G-10, the Contractor shall take reasonable precautions to prevent damage to, or deterioration of, the Work. Except as provided elsewhere in the Contract Documents, the Contractor shall be responsible for all damage or deterioration to the Work during the period of suspension and shall, correct or restore such damaged and deteriorated Work to a condition acceptable to the Engineer prior to resuming Work. A suspension of Work shall not relieve the Contractor of any of its responsibilities under the Contract. The Contractor may be entitled to compensation for the necessary cost of protecting the Work during periods of suspension as allowed by Paragraph G-10.04.

G-04.26 RESPONSIBILITY FOR PROTECTION OF PROPERTY

- A. The Contractor shall bear sole responsibility for any pollution which may occur as a result of its operations, including but not limited to soil, air, water, noise, or other pollution, including but not limited to any costs (including attorneys' and consultants' fees), penalties, or other liabilities imposed or sought to be imposed as a result of such pollution.
- B. The Contractor shall protect from damage all private, public and Port-owned utilities, including but not limited to communication lines, power lines, sewer and water lines, railroad tracks and appurtenances, traffic lighting and signal systems and similar facilities.
- C. On the Contractor's own volition or upon written notice from the Engineer, the Contractor shall, at no expense to the Port, provide and install safeguards acceptable to the Engineer to protect public and private property. If public or private property is damaged or destroyed or its use interfered with by the Contractor, the Contractor's agents or the Contractor's employees, such interference shall be terminated and damaged or destroyed property repaired and restored immediately to its former condition by the Contractor at the Contractor's expense. If the Contractor does not respond promptly to a written request or refuses to restore damaged or destroyed property to its original condition, the Engineer may have such property restored by other means at the Contractor's expense.

G-04.27 EMERGENCIES

In an emergency affecting the safety of persons, the Work, or adjoining property, the Contractor, without special instructions or authorization from the Engineer, shall act to prevent such threatened loss or injury. In such an emergency, the Contractor shall perform such additional work as required. Any compensation claimed by the Contractor on account of emergency work shall be governed by Paragraph G-08.05, or as deemed appropriate by the Engineer. If, during the progress of the Work or during the Warranty period, the Contractor is absent from the locations of the Work at the time when a failure or faulty condition of the Contractor's work requires emergency action in the public interest, the Port shall have the right to make repairs or corrections by itself or with other forces, as required, and the Port may withhold from the Contractor any costs which the Port incurs from such emergency work.

G-04.28 CLEANUP

At all times, and as may specifically be requested by the Engineer or required by the Contract Documents, the Contractor shall clean up and remove all refuse resulting from the Work in order that the Project site remains free from an accumulation of construction debris. Upon failure to do so within 24 hours after request by the Engineer, such cleanup work may be done by the Port and the cost thereof back charged to the Contractor and deducted from the Contract Sum.

G-04.29 WARRANTIES

- A. Good Workmanship and New Materials. The Contractor warrants to the Port that all workmanship, materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from fault or defect and in conformance with the Contract Documents.
- B. Title. The Contractor warrants that title to all Work, materials and equipment covered by a request for a Progress Payment or Final Payment will pass to the Port upon the receipt of payment by the Contractor free and clear of all liens, claims, security interests or encumbrances. Passage of title shall not, however, (1) relieve Contractor from any of its obligations and responsibilities for the Work, equipment or materials, (2) waive any rights of the Port to require full compliance by Contractor with the Contract requirements, or (3) constitute acceptance of the Work, equipment or materials.
- **C.** One-Year General Warranty.
 - 1. If, within one year after the applicable Warranty Start Date (or such longer period of time as may be prescribed by law or the terms of any applicable special warranty required by the Contract Documents), the Work or any specific portion thereof is found to be Non-Conforming Work, the Contractor shall correct such Non-Conforming Work within the time designated by the Port.
 - 2. Work corrected by the Contractor under this Subparagraph C shall also be subject to the provisions of this Subparagraph for a one-year period from the date the Port accepts the corrected Work.
 - 3. Nothing contained in this Subparagraph C shall be construed to establish a period of limitation (whether legal, equitable or otherwise) with respect to any other obligation imposed on the Contractor by the Contract Documents, including (but not limited to) the obligation imposed by Paragraphs G-04.24 and G-04.25.
- **D.** Special Warranties. Additional, special warranty obligations may be imposed in other parts of the Contract Documents.
- E. Enforcement. All Subcontractors', Sub-subcontractors', Manufacturers', and Suppliers' warranties and guarantees, express or implied, respecting any part of the Work and all materials used therein shall be obtained and enforced by the Contractor for the benefit of the Port without the necessity of separate transfer or assignment thereof. When specified in the Contract Documents, the Contractor shall require Subcontractors, Sub-subcontractors, Manufacturers and Suppliers to execute separate warranties and guarantees in writing directly to the Port.
- **F.** Cumulative. The obligations and remedies described in this Paragraph G-04.29 are in addition to the obligations and remedies described in Paragraph G-04.24.

G-04.30 SURVEYS

A. If the Port is required by the Contract Documents to set points and elevations or otherwise perform on-site measurement, the Contractor shall provide sufficient space and safe facilities to enable the Engineer to do so. The Contractor is responsible for detailed dimensions and elevations measured from stakes and marks established by the Engineer.

- **B.** All Work performed shall be in conformance with the lines, grades and dimensions indicated on the Drawings or as staked by the Engineer. If a discrepancy is noted between the Drawings and staking, the Contractor shall provide the Port oral or written notice promptly (and in no event more than 24 hours after discovery). Where tolerances are stated, the work performed shall be within those tolerances. The Engineer will determine if the Work conforms to such lines, grades and dimensions, and his determination shall be final.
- C. All controls set by the Port or others shall be carefully preserved by the Contractor. Any cost to reset controls due to the Contractor's negligence shall be the burden of the Contractor.

G-04.31 NOTIFICATION REGARDING EXCAVATED ARCHEOLOGICAL ITEMS

If resources of potential archeological significance are encountered during construction or excavation, the Contractor shall immediately stop work, secure the Project Site in the vicinity of the find and notify the Engineer. Further instructions will be provided by the Port. Pending those instructions, the Contractor shall arrange 24-hour security to protect the find. The Contractor shall not notify the media and shall direct any media inquiries to the Port. The Port and Contractor shall work with a professional archaeologist to resume construction as soon as possible without compromising the archeological find. This will be done in accordance with the treatment plan and mitigation activities outlined in the Archeological Assessment to be done and provided by the Port.

G-04.32 GRATUITIES

The Contractor shall not extend any loan, gratuity, or gift of money or services in any form whatsoever to any employee or officer of the Port, nor shall the Contractor rent or purchase any equipment, materials, or services from any employee or officer of the Port.

G-04.33 SUBCONTRACTING

- **A.** The Contractor is fully responsible for the acts and omissions of all Subcontractors, Sub-subcontractors, Suppliers and all other persons performing a portion of the Work.
- **B.** The organization of the Specifications and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of the Work to be performed by any trade. Such division of work is the sole responsibility of the Contractor.
- C. Unless otherwise provided in the Contract Documents, the Contractor shall submit to the Engineer in writing the identity of the proposed Subcontractors and those Suppliers who are to furnish materials or equipment specifically designed for this Project. This information shall be provided to the Port prior to Notice to Proceed. The Engineer will respond to the Contractor within the deadline otherwise established in the Contract and state whether the Port has an objection to any proposed Subcontractor or Supplier. If the Port unreasonably rejects a proposed Subcontractor or Supplier, and the Contractor is required to replace that Subcontractor or Supplier at an increased cost, the Contract Sum and Contract Time shall, subject to compliance with the requirements of Paragraphs G-04.34 and G-05.02, be subject to adjustment. If at any time during the performance of this Contract the Contractor wishes to add or make a substitution for a Subcontractor or such Supplier, the Contractor shall first give the notice required above,

- and the Port may object to such proposed substitute within ten (10) days of being so notified. The Contractor shall not enter into a contract with a proposed Subcontractor or a Supplier of specifically designed equipment to whom the Port has made reasonable objection.
- D. By an appropriate agreement, the Contractor shall require that each Subcontractor and Supplier, to the extent of the Work to be performed by that Subcontractor or Supplier, be bound to the Contractor to perform such portion of the Work according to the terms of the Contract Documents and to assume toward the Contractor all of the obligations which the Contractor assumes toward the Port under this Contract. Such agreement shall preserve and protect the rights of the Port with respect to the Work to be performed by the Subcontractor or Supplier so that the contracting thereof by the Contractor to others will not prejudice the Port's right to have the Work performed in accordance with the Contract Documents. The Contractor shall require each Subcontractor and Supplier to enter into similar agreements with all Sub-subcontractors and Suppliers, so that this requirement shall be applicable to Sub-subcontractors and Suppliers at all tiers. The Port reserves the right to obtain copies of any Subcontractor, Sub-subcontractor and Supplier agreements at any tier from the Contractor. The award of a subcontract or contract for the supplying of materials or equipment, by the Contractor does not create a contract between the Port and the Subcontractor or Supplier. Subcontractors and Suppliers shall have no rights whatsoever against the Port by reason of their contract with the Contractor. The foregoing provision shall apply with equal force to Subcontractors, Sub-subcontractors, Suppliers and all other persons otherwise engaged to do any portion of the Work.
- E. At the time of subcontract execution, the Contractor shall verify that each of its first-tier Subcontractors meet all of the bidder responsibility criteria required by Section 39.06.020 of the Revised Code of Washington and this Contract. The Contractor shall include the language of this Paragraph in each of its first tier subcontracts, and shall require each of its Subcontractors to include the same language of this Paragraph in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Port, the Contractor shall promptly provide documentation to the Port demonstrating that the Subcontractor meets all applicable subcontractor responsibility criteria. The requirements of this Paragraph apply to all Subcontractors regardless of tier.
- F. When a portion of the Work that has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the Engineer, the Contractor shall, on the written request of Engineer, take immediate steps to correct the deficiency or remove the Subcontractor, or Sub-subcontractor, from the Project at no cost to the Port. In the event of removal, the removed Subcontractor, or Sub-subcontractor, shall not be further employed in the Work.

G-04.34 NOTICE OF EVENTS

The Contractor must provide a timely Notice of Event if the Contractor encounters, experiences, or suffers any Event during the course of Project. Detailed requirements regarding the Notice of Event and additional, required documentation are set forth in Paragraph G-05.02. If the Contractor fails to satisfy these requirements, the Contractor shall be deemed to have waived all right to submit any Request for Change Order to the Port arising from or related to the Event, to make any Claim against the Port arising from or related to the Event or to pursue any other recovery of any kind arising from or related to the Event.

G-04.35 PREREQUISITE TO SUIT

No legal action against the Port may be filed on account of a Claim or other liability arising out of or related to this Contract unless:

- A. The requirements of Paragraph G-04.34 and G-05.02 have been strictly complied with, and
- **B.** The procedures of Paragraph G-09.01 and G-09.02 have been exhausted, and
- C. The lawsuit is filed in the exclusive venue specified in Paragraph G-02.01.B and served on the Port within 180 days of the later of (i) the date of Substantial Completion or (ii) thirty (30) days following the date on which the parties complete the dispute resolution process provided for in G-09.02.F. The Contractor's failure to strictly comply with all requirements of this Paragraph shall be a complete bar to any lawsuit.

G-04.36 INDEMNIFICATION

- Α. In addition to any other duty to defend or indemnify set forth in the Contract, the Contractor shall defend, indemnify and hold harmless the Port and its agents from all liability, claims, damages, losses and expenses, whether direct, indirect or consequential (including, but not limited to, attorneys' and consultants' fees and other expenses of litigation or arbitration) arising out of the performance of this Contract, which is caused, or alleged to be caused, in whole or in part, by any breach of Contract or negligent act or omission of the Contractor (which for the purposes of Subparagraphs A and B of this Paragraph only shall include the Contractor and all of its Subcontractors, Sub-subcontractors, Suppliers, agents, any other person directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable); provided, however, that where such liability, claim, damage, loss or expense arises from the concurrent negligence of (1) the Port or its agents, and (2) the Contractor, it is expressly agreed that the Contractor's obligations of defense and indemnity under this Paragraph shall be effective only to the extent of the Contractor's negligence. Such obligations shall not be construed to negate, abridge or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any person or entity described in this Paragraph. This Paragraph shall not be construed so as to require the Contractor to defend, indemnify, or hold harmless the Port from such claims, damages, losses or expenses caused by or resulting from the sole negligence of the Port or its agents.
- B. In any and all claims against the Port or its agents by any employee of the Contractor, the indemnification obligation of Subparagraph A above shall not be limited in any way by any limitation on the amount or type of damages, compensation benefits payable by or for the Contractor under applicable workers' or workmen's compensation, benefit, or disability laws (including, but not limited to the Industrial Insurance laws, Title 51 of the Revised Code of Washington). The Contractor expressly waives any immunity the Contractor might have had under such laws, and, by agreeing to enter this Contract, acknowledges that the foregoing waiver has been mutually negotiated by the parties.
- C. The Contractor shall pay all attorney's fees and expenses incurred by the Port in establishing and enforcing the Port's rights under this Paragraph, whether or not suit was instituted.
- **D.** Additional indemnification obligations may be imposed on the Contractor elsewhere in the Contract Documents, including (but not limited to) Paragraphs G-04.10, G-04.12, G-04.15 and G-04.37.

G-04.37 SOFTWARE

- A. Notwithstanding any provisions to the contrary contained in any standard commercial license pertaining to any Software delivered under this Contract, the Port shall have the following rights as to such Software:
 - 1. The Port of Seattle will have a perpetual, irrevocable, royalty-free (or paid up) license of the Software. Unless otherwise provided in the Supplementary Conditions, the license may be nonexclusive and nontransferable, subject only to the Port's right to transfer to a successor-in-interest.
 - 2. The Port shall have the right to use the Software, and may copy the Software for use: (i) on computer/hardware for which the Software was acquired and any replacement thereof, (ii) on any backup computer/hardware, in the event that the computer/hardware for which the Software was acquired is inoperative, and (iii) on such other media as the Port may elect for safekeeping (archival) or backup purposes.
 - 3. Excluding only commercial off-the-shelf Software for which no customization has been provided, the Port shall be provided with a complete copy of the source code for all Software. For any commercial off-the-shelf Software for which Contractor has performed any configuration (other than that automatically provided by the installation utility bundled with the particular commercial off-the-shelf Software) or customization, the Port shall be provided with a complete record the process, information, code or data used in the configuration and a complete copy of the source code for any customized portion of the Software.
 - 4. The Port shall specifically have the right to make modifications to, and create derivative works from, any portion of the Software for which the Port is entitled to receive the source code. Any such derivative work shall remain subject to the terms set forth in this Paragraph.
- В. To the extent that the Software (and specifically the source code) constitutes an unpublished work for which Contractor claims trade secret protection, the Port of Seattle take reasonable measures to protect the secrecy of, and avoid the disclosure of and unauthorized use of, the Software; provided, however, the Port may disclosure the Software: (i) as required by law, including Washington's Public Disclosure Act, (ii) to Port employees who require access to the information for purposes of the performance of their job or the fulfillment of any job-related responsibilities, and (iii) to contractors or subcontractors retained by the Port to perform repair or make modifications to the Software, provided those contractors or subcontractors likewise agree to maintain the confidentiality of the Software. The confidentiality restrictions set forth in this Paragraph shall end, as to any particular piece of information, in the event that that information (i) was publicly known or made generally available in the public domain prior to the time of disclosure by the Port; (ii) becomes publicly known and made generally available after disclosure to the Port through no action or inaction of the Port; (iii) is already in the possession of the Port at the time of disclosure, as shown by the Port's files and records immediately prior to the time of disclosure; (iv) is obtained by the Port from a third party without a breach of such third party's obligations of confidentiality; (v) is independently developed by the Port without use of or reference to the Software, as shown by the Port's files and records.
- C. In addition to any other warranties set forth in the Contract, Contractor warrants that the Software: (i) will not contain any routine, program, "virus" or code which has been intentionally designed or created to either allow unauthorized access to, or use of, the

Software by any agent or employee of Contractor or by any third party, or cause the Software or other program or programs to malfunction; (ii) will not contain any timer, clock, counter, or other limited design or routine which causes the Software to be erased, inoperable, or otherwise incapable of being used in the full manner for set forth under this Contract, (iii) will be compatible and consistent with the current release of all Port operating system(s) and database system(s) (if any) on which the Software will be used, (iv) will make use of only supported systems and products (i.e.- no shareware, freeware, or unsupported legacy products); (v) will include application of all current upgrades and patches; and (vi) uses appropriate protocols and methods for integrity and security (i.e. encryption, authentication, logging, etc.).

D. In addition to any other indemnities set forth in this Contract, Contractor will defend, indemnify and hold the Port harmless from all liability, claims, damages, losses and expenses (including, but not limited to, attorneys' and consultants' fees and other expenses of litigation or arbitration) for claims for actual or alleged infringement of any patent, copyright, trade secret or other proprietary or intellectual property right arising from the Software; provided, however, Contractor shall have no obligation with respect to such liability, damages, losses and expenses to the extent attributable to the acts or omissions of the Port.

G-04.38 AUDITS AND RETENTION OF RECORDS

- A. The Port or its designee shall have the right to inspect, audit or copy Project Records for the evaluation and determination of any issue related to the Contract or to the Contractor's performance thereunder, specifically including but not limited to any Requests for Change Orders or Claims brought by the Contractor or any Subcontractor or Supplier.
- **B.** For the above-referenced purpose, all of the Project Records related to this Contract shall be open to inspection, audit, or copying by the Port or its designee:
 - 1. During the Contract Time;
 - 2. For a period of not less than six (6) years after the date of Final Acceptance or termination of the Contract: and
 - 3. If any Claim, audit, or litigation arising out of, in connection with, or related to this Contract is initiated, all documents and records shall be resolved or completed, whichever occurs later.
- C. The Contractor shall retain the Project Records related to this Contract for the periods required above. The Contractor shall also ensure that the Project Records of all Subcontractors and Suppliers at all tiers shall be retained and open to similar inspection or audit for the periods required above by incorporating the provisions of this Audit Paragraph into any agreements with Subcontractors or Suppliers related to this Contract.
- D. The Contractor, its Subcontractors and Suppliers shall make a good faith effort to cooperate with the Port and its designees when the Port gives notice of its need to inspect or audit Project Records. Cooperation shall include assistance as may be reasonably required in the course of inspection or audit, including access to personnel with knowledge of the contents of the records being inspected or audited so that the information in the records is properly understood by the persons performing the inspection or audit. Cooperation shall also include establishing a specific mutually agreeable timetable for making the records available for inspection by the Port and its designee. Unless otherwise agreed, if the Contractor, its Subcontractors and Suppliers cannot make at least some of the relevant records available for inspection within fourteen (14) days of

- the Port's written request, cooperation will necessarily entail providing the Port with a reasonable explanation for the delay in production of records. Failure to cooperate may impact future evaluation and determination of Requests for Change Order and Claims.
- E. The Contractor agrees that no Claim shall be made against the Port for the Work described herein unless the Contractor makes available to the Port all documents and records. Failure to maintain and retain sufficient Project Records to allow the Port to verify all costs or damages or failure to permit the Port or its designee access to the Project Records shall constitute a waiver of the rights of the Contractor, Subcontractor, and Supplier to claim or be compensated for any damages, additional time or money under this Contract and shall bar any recovery thereunder.
- F. Inspection, audit, or copying of Project Records may be performed by the Port or its designee at any time with not less than fourteen (14) days written notice; provided however, if an audit is to be commenced more than sixty (60) days after Final Acceptance of the Contract, the Contractor will be given thirty (30) days' notice of the time when the audit or inspection is to begin.
- **G.** The Contractor and its Subcontractors and Suppliers shall provide adequate facilities, acceptable to the Port, for inspection, auditing, or copying during normal business hours.
- H. No additional compensation will be provided to the Contractor, its Subcontractors, or Suppliers for time or money spent in complying with the requirements of this Audit Paragraph. If the Contractor is formally dissolved, assigns or otherwise divests itself of its legal capacity under this Contract, then it shall notify the Port and preserve all Project Records, at its expense, as directed by the Port.
- I. This Audit Paragraph shall survive for six (6) years after the termination or expiration of this Contract, or conclusion of all Claims, audits or litigation, whichever occurs later.
- **J.** At a minimum the following documents shall be considered Project Records and made available for inspection, auditing and copying:
 - 1. Daily time cards or time sheets and daily reports, inspection reports, and supervisor's reports.
 - 2. Collective Bargaining Agreements governing the base wages and benefits paid to or on behalf of those employees on the project as well as any invoice or payment documentation summarizing the amounts paid to the unions by the employer for those employees working on the project.
 - 3. Insurance, welfare, and benefits records.
 - 4. Payroll registers.
 - 5. Earnings records.
 - 6. All relevant tax forms and records, including any state and federal payroll tax rate schedules governing the employer's payroll tax rates paid on behalf of employees that work on the project and any payroll tax forms summarizing the amounts paid.
 - Material invoices and requisitions.
 - Material cost distribution worksheets.
 - 9. Equipment records (including a list of company-owned equipment and an equipment distribution report containing equipment descriptions, equipment number, equipment rates, recorded equipment hours, phase or cost codes, dates,

- and any other relevant information as related to how equipment was recorded to the project).
- 10. Vendors' rental agencies', Subcontractors', and lower tier subcontractors' invoices.
- Contracts, purchase orders and agreements between the Contractor and each of its Subcontractors, and all lower tier subcontractor contracts and supplier contracts.
- 12. Subcontractor' and lower tier subcontractors' payment certificates/payment applications.
- 13. Canceled checks (payroll and vendors).
- 14. Job cost reports, including both a job cost summary report comparing budgeted amounts to recorded amounts by cost type and phase (or cost code) and a job cost history/detail/transaction report listing each individual transaction by phase (or cost code).
- 15. General Ledger.
- 16. Cash disbursements journal.
- 17. Financial statements for all years reflecting the operations on this Contract. In addition, the Port may require, if it deems appropriate, additional financial statements for three years preceding execution of the Contract and three years following Final Acceptance of the Contract.
- 18. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others.
- 19. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
- 20. All documents which relate to each and every claim together with all documents that support the amount of damages to each claim.
- 21. Bid Documentation.
- 22. Take off sheets, calculations, quotes, and other financial data to support change proposals, request for change order or claims.
- 23. Worksheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, Suppliers, all documents which establish time periods, individuals involved, the hours for the individuals, and the rates for the individuals.
- 24. Worksheets, software, and all other documents used (a) by the Contractor to prepare its bid and schedule(s) or (b) to prepare quotes and bids to the Contractor.
- 25. All schedule documents, including man-loaded schedules, work plans, planned resource codes, phasing documents and summaries.
- 26. All other documents, including email, related to the Project, Claims, or Change Orders.
- 27. Any documentation or information relied upon for the purposes of translating the bid amounts to original budget amounts.

- 28. Original budget and updated budgets used for tracking job performance throughout the project.
- 29. Labor distribution reports summarizing straight time, overtime, and double time by employee and also separately summarizing base wage amounts versus labor burden and benefit amounts.
- 30. Copies of all draft and approved change orders including any supplementary documentation or information relied upon for the purposes of pricing the change orders.
- K. To the extent any of the above-referenced records exist in machine-readable format, Contractor shall make them available in that form. This requirement specifically includes (but is not limited to) an obligation to provide the information and access thereto in the native format in which it is maintained by Contractor. The Contractor shall, as reasonably requested by the Port, provide read-only access to and reasonable technical support necessary to make use of any enterprise or legacy software utilized by the Contractor to manipulate or store the relevant data.

G-04.39 JOINT VENTURE CONTRACTOR

In the event the Contractor is a joint venture of two or more partners, all rights and responsibilities of the Contract shall be joint and several. Any notice, order, direction, request, or communication given by the Port to the Contractor under this Contract shall be considered given to all joint venture partners if given to any one or more of such joint venture partners. Any notice, request or other communication given to the Port by any joint venture partner shall be deemed to have been given by, and shall bind, all joint venture partners. In the event of the dissolution of the joint venture Contractor, the Port shall have the unqualified right to select which joint venture partner(s), if any, shall continue with the Work under this Contract. Such selected partner(s) shall assume all liabilities, obligations, rights, and benefits of the Contractor under this Contract. Dissolution of the joint venture shall not be effected without prior consultation with the Port. In the event of failure or inability of any joint venture partner(s) to continue performance under this Contract, the remaining joint venture partner(s) shall perform all services and Work and assume all liabilities, obligations, rights, and benefits of the Contractor under this Contract. Nothing in this Paragraph shall be construed or interpreted to limit the Port's rights under this Contract or by law to determine whether the Contractor or any joint venture partner thereof has performed within the terms of this Contract.

ARTICLE G-05 CHANGES

G-05.01 THE PORT MAY MAKE CHANGES

- **A.** Without invalidating the Contract and without notice to the Surety, and at any time during the progress of the Work, the Port may by Change Order make changes in the Work, which changes include but are not limited to the following:
 - Increases or decreases in quantities of Work;
 - 2. Deletion or alteration of any portion of the Work;
 - Changes in design or Specifications; and
 - 4. Addition of new Work.

- B. All such changes in the Work shall be authorized and directed by Change Order. The Change Order shall provide for any increase or decrease in the Contract Time or Contract Sum caused by such change and such increase or decrease may at the Port's option be stated on a Lump Sum basis, a Not to Exceed basis, a Force Account basis or otherwise. The Contract Sum and Contract Time may be changed only by Change Order. If the Contractor fails to fully comply with Paragraph G-04.34 and this Article G-05, any Request for Change Order or Claim for an increase in the Contract Sum or extension of the Contract Time on account of changes in the Work is waived.
- C. Upon receipt of the Change Order from the Port, the Contractor must proceed with the changed work whether or not Contractor elects to protest the Change Order. In addition, upon receipt of the Change Order, the Contractor has three options as described in greater detail below in Paragraph G-05.01.D, E and F: (1) sign and return the Change Order to the Port within no more than seven (7) days; (2) make no response, in which case the Change Order issued by the Port automatically becomes a part of the Contract and a mutually binding obligation of the Parties as of the eighth (8th) day after its receipt by the Contractor; or (3) submit a properly documented Notice of Event in accordance with Paragraph G-05.02 in the event Contractor disagrees with any part of the Change Order. Notwithstanding the foregoing, in the event that Contractor is issued a not-toexceed Change Order (where the Work is to be performed on a Force Account basis) and Contractor's sole point of disagreement is the not-to-exceed amount, Contractor shall not be required to submit a Notice of Event in order to document its disagreement with that not-to-exceed amount, it being understood the execution of a not-to-exceed Change Order does not represent an affirmation or agreement that the changed Work can necessarily be performed within the not-to-exceed amount.
- D. If the Contractor agrees to the terms and conditions of the Change Order issued by the Port, including any adjustment in the Contract Time or Contract Sum, the Contractor shall sign and return the Change Order to the Port within seven (7) days of its issuance by the Port. Such Change Orders once signed by both the Port and Contractor shall represent full and complete payment and final settlement of all changes, Claims, damages or costs for all (a) time; (b) direct, indirect, and overhead costs; (c) profit; and (d) any and all costs or damages associated with delay, inconvenience, disruption of Schedule, impact, ripple effect, loss of efficiency or productivity, acceleration of work, lost profits, stand-by, and any other costs or damages related to any work either covered or affected by the Change Order, or related to the events giving rise to the Change Order.
- E. If the Contractor makes no response to the Change Order within seven (7) days after its issuance by the Port, the Change Order automatically becomes part of the Contract as of the eighth (8th) day from its issuance by the Port. Without limiting the foregoing, a Change Order incorporated into the Contract pursuant to this Paragraph G-05.01.E shall be full payment and final settlement of all Claims for an extension of Contract Time or adjustment to the Contract Sum, including costs of delay, related to any Work either covered or affected by the Change Order. By not responding to the Change Order, the Contractor waives any additional entitlement and accepts from the Port all of the terms and conditions itemized in the Change Order.
- F. If the Contractor disagrees with any part of the Change Order issued by the Port, including the adjustment (if any) to the Contract Sum and the extension (if any) to the Contract Time, the Contractor shall within seven (7) days of its issuance by the Port submit a properly documented Notice of Event in accordance with Paragraph G-05.02.B and shall thereafter comply with the applicable provisions of Paragraph G-05.02.C. Failure to comply with Paragraph G-05.02.B or C shall constitute a waiver by Contractor of any

- disagreement with the terms or conditions of the Change Order and shall forever bar Contractor from seeking or obtaining any adjustment to the Contract Sum or extension of Contract Time, whether by a Request for Change Order or Claim, related in any way to the Work described in the Change Order.
- G. When a Contractor elects to exercise its right to protest the terms of a Change Order within seven (7) days of its issuance as provided for in Paragraph G-05.01.F, the Port will - consistent with the requirements of Article G-08 related to payment -proceed with payment to the Contractor of the undisputed part of the compensation for the Change Order. Unless otherwise agreed in writing by the Port and the Contractor, the undisputed compensation for the Change Order shall be equal to the sum stated by the Port in the Change Order on a Lump Sum or Not To Exceed basis. The Contractor may begin to bill the Port for the undisputed part of the Change Order compensation in the next regular Progress Payment cycle based on the progress of the Work at issue in the Change Order. Provided Contractor has filed a timely and properly documented Notice of Event protesting the remaining parts of the Change Order, Contractor's receipt of payment on the undisputed compensation for the Change Order shall not constitute a waiver by the Contractor of its rights or remedies to obtain an adjustment to the Contract Sum or an extension of the Contract Time in accordance with Paragraph G-05.02 for the disputed part of the Change Order.

G-05.02 NOTICE OF EVENT; REQUEST FOR CHANGE

- A. General. As set forth in Paragraph G-04.34, the Contractor must provide Notice of Event if the Contractor encounters, experiences or suffers any Event that may entitle it to an adjustment of the Contract Sum, an extension of the Contract Time or any other relief related to his Contract. This Paragraph G-05.02 outlines the two step process (G-05.02.B and C) the Contractor must comply with in order to preserve and not waive its right to seek an adjustment to the Contract Sum, an extension of Contract Time or any other remedy or relief due to the occurrence of any Event.
- **B.** Notice of Event. The Contractor shall provide the Engineer with a written Notice of Event no later than seven (7) days after the occurrence of the Event giving rise to a potential Request for Change Order, provided, however, that if the Event is an alleged Differing Site Condition or an alleged Impact to Unchanged Work, Contractor shall comply with Paragraphs G-05.02.E and G-05.02.F, respectively, in addition to the other provisions of this Paragraph G-05.02. The Contractor shall include the following information in the Notice of Event:
 - 1. A description of the Event and when it occurred;
 - Reasonable order of magnitude estimate of the change to the Contract Sum whether to execute the changed work itself or due to the cost of any Impact to Unchanged Work;
 - 3. Reasonable order of magnitude estimate of the impact to the Contract Time; and
 - 4. Grounds demonstrating why the Event is the Port's responsibility, including any applicable Contract provisions.

In the event that Contractor is submitting a Notice of Event claimed by any Subcontractor, Sub-subcontractor, or Supplier, Contractor shall specifically review the Notice of Event provided by the Subcontractor, Sub-subcontractor, or Supplier to ensure that it fully complies with the requirements of this Paragraph.

- C. Request for Change Order. Within thirty (30) days after the Event giving rise to the Notice of Event, unless the Engineer issues written notice authorizing the Contractor additional time to submit the Request for Change Order, the Contractor shall provide, in writing, a detailed Request for Change Order. The Request for a Change Order shall include:
 - 1. A full discussion of the circumstances which caused the Event, including names of persons involved, time, duration and nature of the Work involved, and review of the Contract Documents to support the Request for Change Order;
 - 2. A Time Impact Analysis (TIA) of the Schedule showing the change or disruption if the Contractor is asserting a Schedule change or disruption;
 - 3. Specific dollar amount covering all costs, direct and indirect (including costs due to any Impact to Unchanged Work) associated with the Request for Change Order calculated in accordance with Paragraph G-05.04; and
 - 4. All documentation supporting the Request for a Change Order, including but not limited to all cost records.

In the event that Contractor is submitting a Request for Change claimed by any Subcontractor, Sub-subcontractor, or Supplier, Contractor shall specifically review the Request for Change provided by the Subcontractor, Sub-Subcontractor, or Supplier to ensure that it fully complies with the requirements of this Paragraph. This review shall specifically include, but not be limited to, the appropriate calculation of markups as the same may be allowed by Paragraphs G-05.04 and G-08.05 and the inclusion of all required supporting documentation.

- **D.** Port's Response to Contractor's Request for Change Order. The Port will make a written determination with respect to the Contractor's Request for Change Order within thirty (30) days of receipt of said Request, unless one of the following activities occurs:
 - 1. The Port may request additional information and specify a time period for receipt of the information. The Contractor shall comply with the Port's request for additional information.
 - The Port may inform the Contractor that additional time is needed to review the Contractor's Request for Change Order and identify a date certain when a decision will be rendered.
 - 3. If the Port requests additional information, the Port will make a written determination within thirty (30) days receipt of Contractor's additional information.

If the Port does not make a determination within the applicable time period (as the same may be extended), the Request For Change Order is deemed denied.

E. Differing Site Condition. If the Contractor encounters (a) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents and, when considered in context (specifically including the lapse of time and any subsequent activity), the Reference Documents or (b) unknown physical conditions of an unusual nature at the site differing materially from those ordinarily encountered and generally recognized as inherent in the Work of the character provided for in the Contract, the Contractor shall provide the Port oral or written notice promptly (and in no event more than 24 hours after discovery) and before the conditions are disturbed (for convenience in this paragraph, the "Initial Notice"). This deadline for the submission of this Initial Notice related to an alleged Differing Site Condition is in addition to (and not in lieu of) the seven (7) day deadline described in Paragraph G-05.02. If such Initial Notice of Event is not given prior to the condition being disturbed (or other action being taken by the Contractor

which may result in a claim for an increase in the Contract Time or the Contract Sum), or such condition is disturbed before the Port directs the Contractor to proceed with the Work despite the condition, the Contractor will be deemed to have waived any claim for extra compensation or extension of the Contract Time (including labor, material and equipment) incurred because of such condition. The Initial Notice of Event may be provided by email.

- After submission of the Initial Notice, the Contractor shall thereafter comply with the Request for Change Order process described in Paragraph G-05.02.B and C. After receipt of the Request for Change Order, the Port will respond in accordance with the time limits set forth in Paragraph G-05.02.D. If the Port and the Contractor agree on such adjustment, the same shall be set forth in a Change Order to be executed by both parties.
- 2. If all or part of Contractor's Request for Change is denied or deemed denied, but the Contractor believes it does have merit, the Contractor must submit a Claim in accordance with Paragraph G-09.01 if it wishes to preserve its right to seek any adjustment to the Contract Sum or Contract Time.
- F. Impact to Unchanged Work. If the Contractor encounters an Event that has the potential or actual ability to cause an Impact to Unchanged Work, the Contractor shall (in addition to providing the Notice of Event under Paragraph G-05.02.B and the Request for Change Order under G-05.02.C) comply with the terms of this Paragraph G-05.02.F.
 - 1. In the event the Contractor cannot (in spite of reasonable best efforts) accurately quantify the cost of an Impact to Unchanged Work within the time periods prescribed for the Notice of Event or the Request for Change, the Contractor shall provide the Port (as detailed below) with an effective opportunity to mitigate the costs of the alleged Impact to Unchanged Work whether through acceleration, deletion of the changed Work or otherwise.
 - 2. In order to provide the Port with such opportunity, the Contractor shall first provide the Port a detailed written evaluation of how the Event may cause an Impact to Unchanged Work (with a description of the trades or Work expected to be impacted and the expected date(s) of the impact) and how the Contractor is proactively taking steps to mitigate any such cost or impact. This evaluation and description shall be submitted no later than the deadline for the Request for Change Order under Paragraph G-05.02.C.
 - 3. In addition, if and as soon as the cost incurred by Contractor (or any Subcontractor) due to Impact to Unchanged Work exceeds ten percent (10%) of Contractor's (or any Subcontractor's) bid-time estimate of the cost to perform such Work in the absence of the impact (the "unimpacted estimate"), the Contractor shall notify the Port in writing that such unimpacted estimate has been exceeded by such percentage. For clarity, the obligation in this Paragraph 5.02.F. specifically applies to costs incurred by Contractor and each of its Subcontractors; as soon as the cost incurred by Contractor or any of its Subcontractors exceeds ten percent of their respective unimpacted estimate, notice shall be required. This additional notice shall be provided as soon as reasonably possible and in no event more than seven (7) days after the cost incurred exceeds the unimpacted estimate.
 - 4. If the Contractor fails to provide such written notice of the estimate overrun, the Port's liability for any Impact to Unchanged Work shall be capped at ten percent (10%) of the unimpacted estimate for the impacted work activity and any costs incurred in excess of this cap are solely at the risk of the Contractor.

- **G.** Contractor Procedure upon Denial or Deemed Denial of a Request for a Change Order. If the Contractor disagrees with the denial or deemed denial of a Request for Change Order, the Contractor's sole remedy shall be to file a fully documented Claim in compliance with Article G-09.
- **H.** Contractor's Obligation to Continue to Work. Pending resolution of the Contractor's Request for Change Order, the Contractor shall continue to perform all Work including, at the written request of the Port the work associated with the pending Request for Change Order. The Contractor shall maintain its progress with the Work.
- Waiver. Failure to follow the provisions set forth herein shall constitute a waiver of the Contractor's right to receive any extension of the Contract Time, any adjustment to the Contract Sum or any other relief or remedy of any kind as a result of any Event.
- **J.** Any Request for Change Order that is approved by the Port will be incorporated into a Change Order.

G-05.03 REQUESTS FOR PROPOSAL

- A. In connection with a possible or proposed change, the Port may request that the Contractor submit a proposal from the Contractor and Subcontractors or provide other information to the Port. The Contractor will submit such proposal or other information in a form and within the time period requested by the Port.
- **B.** If failure by the Contractor to respond in a complete and timely manner delays the completion of the Work, such delay is the responsibility of the Contractor.
- C. The Contractor's proposal shall include detailed price calculations for the proposed change, which shall specify the quantities, hours, rates, and costs of all labor, material, and equipment for the Work and the same detail for Subcontractors at any tier utilizing the requirements established in the Table of Cost Categories and Markups. A request by the Port to the Contractor for a proposal shall not constitute authorization for the Contractor to proceed with any such proposed change in the Work, nor shall such request justify any delay in the performance of existing Work.
- D. If the Port and Contractor have agreed on the terms of a negotiated Change Proposal, the negotiated Change Proposal will be executed as a Change Order and shall represent full and complete compensation and final settlement of all (1) time; (2) direct, indirect, and overhead costs; (3) profit; and (4) costs or damages associated with delay, inconvenience, disruption of Schedule, impact, ripple effect, loss of efficiency or productivity, acceleration of work, lost profits, or any other costs or damages related to any work either covered or affected by the Change Proposal, or related to the events giving rise to the Change Proposal.
- E. If the Port and Contractor are unable to agree on the terms of a Change Order for the Work contemplated by the Change Proposal, the Port may at its option issue a Change Order for the contemplated new Work and, upon receipt of the Change Order, the Contractor will have the right to exercise one of the three options identified in Paragraph G-05.01.C.
- F. The sums paid by the Port in connection with any given Change Order or Change Proposal (including any sums paid for alleged impact, inefficiency or disruption) will only apply to that given Change Order or Change Proposal and will not set a precedent for future Change Orders or Change Proposals. Sums paid for future Change Orders or Change Proposals will be determined on an individualized and discrete basis.

G-05.04 COMPENSATION FOR CHANGES

- **A.** General. Changed Work under this Contract will be measured for payment in accordance with this Paragraph G-05.04 as Unit Price Work, as Lump Sum Work or as Force Account Work.
 - 1. "Unit Price Work," as used in this Paragraph, refers to Work for which a unit price is established in the Contract's Schedule of Prices or by Change Order.
 - 2. "Bid quantity," as used in this Paragraph, means the total unit quantity listed in the Schedule of Prices for an item of Unit Price Work.
- **B.** Changes in the Quantity of Unit Price Work. Where the nature of the changed Work does not differ materially from Work which is Unit Price Work, the change shall be measured and paid for (or credited) at the established unit prices, subject to the following exceptions:
 - 1. Where quantity is less than 75%. If the quantity of an item of Unit Price Work actually performed or to be performed is less than 75% of the bid quantity, for that portion of quantity that is less than 75% of the bid item the Contractor may request or the Port may issue a Change Order revising the unit price for the item. Such request shall be accompanied by evidence to support the requested revision. The proposed revision will be evaluated by the Port considering such factors as the changes in actual costs to the Contractor of the item, and the share, if any, of fixed expenses properly chargeable to the change in quantity of that item. In any event, the total cost for the Work shall not be more than 75% of the bid quantity for that item. The Contractor shall not be compensated for lost profit associated with the work not performed. If the Port and the Contractor agree on the change to the Unit Price, a Change Order will be executed. If the parties cannot agree, the Port may nevertheless issue the Change Order pursuant to Article G-05, and the Contractor will have the rights provided in Paragraph G-05.02.
 - 2. Where quantity is more than 125%. If the quantity of an item of Unit Price Work actually performed or to be performed is more than one hundred twenty five percent (125%) of the bid quantity for that item, the Contractor or the Port may request a Change Order revising the unit price for that portion of the Work that exceeds 125% of the bid quantity. Such request shall be accompanied by evidence to support the requested revision. The proposed revision will be evaluated considering such factors as the change in actual cost to the Contractor of that portion of the work exceeding 125% of the bid quantity, and the share, if any, of fixed expenses properly chargeable to that portion of change in quantity which exceeds 125% of the bid quantity. If the Port and Contractor agree on the change to the Unit Price, a Change Order shall be executed in accordance with Paragraph G-05.01. If the parties cannot agree, the Port may nevertheless issue a Change Order pursuant to Paragraph G-05.01 and the Contractor will have the rights provided in Paragraph G-05.02.
- **C.** Administration of Unit Price Changes.
 - 1. Unless explicitly directed otherwise in writing by the Engineer, Contractor is without the need for or issuance of a Change Order expressly authorized to perform and install Unit Price quantities in excess of 125% of the bid quantity, all to the extent necessary for the successful completion of the Work in a manner consistent with the standards set forth in Paragraphs G-02.01 and G-02.02. Notwithstanding the foregoing, the performance or installation of Unit Price quantities over 125% of the bid quantity shall constitute an Event. In the event that

the Contractor seeks any adjustment in the amount for Unit Price Work in excess of 125% of the bid quantity for that item, it shall provide a Notice of Event in compliance with Paragraphs G-04.34 and G-05.02. The Port shall have a reasonable period of time following notice from the Contractor that it has exceeded 125% of the bid quantity to determine whether to request a Change Order revising the unit price for that portion of the Work that exceeds 125% of the bid quantity. In the absence of a Change Order that makes adjustment to the unit price for that portion of the Work that exceeds 125% of the bid quantity, the overrun will generally be managed as an administrative matter in connection with requests for Progress Payments, but the Port shall have the right to require a reconciling Change Order to conform the Contract to the actual unit quantity.

- 2. In order to assist the Port in managing the cost of Unit Price work, Contractor shall also notify the Port in writing when its performed/installed quantity of any given Unit Price item equals 100% of the Bid quantity.
- **D.** Changes to Work Other than Unit Price Work.
 - 1. Additional Work: If no unit price has been established for Work added to the Contract by the Port, the Port has the option of (a) attempting to reach agreement as to the Lump Sum increase or decrease, if any, in the Contract Sum and the Contract Time caused by such change or (b) directing that the changed work be executed on a Force Account basis. The Engineer may require, prior to approval of such Change Order, that the Contractor submit a proposal detailing the information identified in Paragraph G-05.03. If the Port and Contractor agree on the Lump Sum change, a Change Order will be issued by the Port and signed by the Contractor. Such Change Order shall be final and no increase in the Contract Sum or Contract Time for such change shall be allowed beyond that stated in the Change Order. Markup(s) as referenced in Paragraph G-08.05 (Table of Cost Categories and Markups) shall be used. The Port may issue a Change Order on a Force Account basis and the Contractor will have the rights provided in Paragraph G-05.02.
 - 2. Deleted Work. If the Port elects to delete all or a portion of the Work, the Engineer shall so advise the Contractor in writing, and the Contract Sum shall be decreased in an amount determined as follows:
 - a. The deducted value will be based upon the applicable unit price, or if there is no such unit price applicable to the deleted Work, the deducted value will be a Lump Sum agreed upon in writing by the Contractor and the Port based on cost information submitted by the Contractor or otherwise obtained by the Port. In the event no agreement can be reached, the Port shall be entitled to a deduction based on its reasonable determination of the fair market value of the deleted Work at the time of the bid, provided that if the Contractor disagrees with amount of the deduction, it may submit a Notice of Event and pursue a Request for Change Order under Paragraph G-05.02. The amount allowed for markups shall be determined in the same manner as if the deleted Work was to be performed on a Force Account basis pursuant to Paragraph G-08.05. The Port may then issue a Change Order pursuant to Paragraph G-05.01 and the Contractor shall have rights provided in Paragraph G-05.02.
 - b. Acceptable materials ordered by the Contractor or delivered prior to the date the Contractor was notified to delete the Work may, at the Port's

- option, be purchased from the Contractor at the Contractor's actual cost and thereupon become the property of the Port, or the Port will reimburse the Contractor for its actual, out-of-pocket costs connected with returning such materials to the Suppliers.
- c. No amount will be paid to the Contractor for any anticipated or estimated profit that the Contractor could or would have earned if the deleted Work had been performed.
- 3. Added and Deleted Work. In the event a change in the Work requested by the Port or proposed by the Contractor involves both the addition and deletion of Work, the same rates (labor, equipment, material, markup) will be used to price both the addition and the credit unless the Contractor can demonstrate to the Port's satisfaction that it would be unreasonable to use the same rates.

G-05.05 VALUE ENGINEERING CHANGE PROPOSALS (VECPS)

- A. The Port encourages the Contractor to submit Value Engineering Change Proposals (VECPs) in order to avail the Port of potential cost or time savings or increased safety during construction. The Contractor and the Port will share any savings in accordance with this Paragraph. VECPs may be submitted at any time after the Contract Execution Date. A proposal merely to delete or reduce scope of Work does not constitute a VECP.
- **B.** The Contractor shall submit VECPs directly to the Engineer. As a minimum, the following information shall be submitted by the Contractor with each VECP:
 - 1. Description of the existing Contract requirements that are involved in the proposed change;
 - Description of the proposed change;
 - 3. Discussion of differences between existing requirements and the proposed change, together with advantages and disadvantages;
 - 4. Itemization of the Contract requirements that shall be changed if the VECP is accepted (e.g., drawing numbers and specification);
 - 5. Justification for changes in function or characteristics of each affected item, and effect of the change on performance of the end item;
 - 6. Effect of proposed change on life-cycle costs, including operation, maintenance, replacement costs, and life expectancy:
 - 7. Date or time by which a Change Order adopting the VECP shall be issued in order to obtain the maximum cost reduction, noting any effect on contract completion time or delivery schedule; and
 - 8. Cost estimate for existing Contract requirements correlated to the Contractor's unit price or lump sum breakdown and the proposed changes in those requirements.
 - 9. Costs of development and implementation by the Contractor shall be provided.
 - 10. Additional costs to the Port (e.g., costs of testing, redesign, and effect on other contracts) shall also be estimated.
- C. The Port retains the right to reject a VECP without review and without recourse by the Contractor if in the Port's sole opinion, the potential savings are unlikely to justify the cost of the review or if the proposed change is otherwise unacceptable to the Port.

- D. The Port will expeditiously process VECPs accepted for review and may accept, in whole or in part, by Change Order, any VECP submitted pursuant to this Paragraph. Until a change order to proceed is issued identifying the VECP to which it applies, the Contractor shall remain obligated to perform in accordance with this Contract. The Port's decisions as to acceptance or rejection of any VECP shall be at the Port's sole discretion and shall be final and not subject to review by any dispute resolution process or otherwise.
- E. If a VECP submitted by the Contractor pursuant to this Paragraph is accepted, the Contract Sum shall be reduced by an amount equal to 50 percent of the Estimated Net Savings (ENS) to the Contractor plus 50 percent of the Port's Review Costs (or the reduction = 0.5ENS + 0.5 Review Costs). The Estimated Net Savings shall be calculated by subtracting the Contractor's Costs from the Contractor's Estimated Gross Savings. For the purposes of this Paragraph, the Contractor's Costs are defined as the reasonable costs incurred by the Contractor in preparing the VECP and making the change, such as cancellation or restocking charges; and the Contractor's Estimated Gross Savings are defined as the difference between the direct and indirect cost of performing the Work according to the existing requirement and the direct and indirect cost to perform the Work according to the proposed change. The Contractor's profit shall not be considered part of the cost and shall not be reduced by application of the VECP.
- F. The Contractor shall include appropriate value engineering incentive provisions in all subcontracts of \$100,000 or greater, and may include those provisions in any subcontract. In determining Estimated Net Savings for cost reduction proposals that involve a Subcontractor, only actual costs to the Contractor and Subcontractor, as defined in Subparagraph E above, will be allowed as Contractor Costs. Incentive payments made to the Subcontractor by the Contractor in connection with the cost reduction proposal will not be allowed in determining Net Savings.
- **G.** The compensation provisions of this Paragraph shall constitute the Contractor's exclusive and complete compensation for the Port's use of the VECP, and the Contractor shall have no right to additional compensation for future or additional uses of the VECP.
- **H.** In the event the Port and Contractor cannot agree on the Estimated Net Savings, the Port may reject the Proposed VECP or accept the Proposed VECP and issue a Change Order identifying the Estimated Net Savings, which Contractor may thereafter protest in accordance with Paragraph G-05.02.

G-05.06 REVIEW OF BID DOCUMENTATION

- A. If this Contract requires the escrow of Bid Documentation, the Contractor warrants to the Port that the Bid Documentation submitted in accordance with these requirements represents the complete and accurate information used by the Contractor to prepare its Bid, and that the calculations, rates, and quotations provided therein constitute the basis under which the Contractor bid the Work. The Contractor further warrants that no other Bid Documentation concerning the Contractor's calculation of its Bid shall be utilized by the Contractor during disputes or litigation of Claims brought by the Contractor arising out of this Contract, unless otherwise approved by the Port.
- **B.** Bid Documentation may be reviewed and used by the Port to determine the Contractor's bid concept, to evaluate the Contractor's breakdown of the Contract Sum, evaluate productivity and schedule in association with Change Orders, Requests for Change Orders or Claims.

- C. If the Port elects to obtain access to Bid Documentation, the Port will notify the Contractor and permit the Contractor to obtain equal access. By mutual agreement between the Port and the Contractor, the Port may copy the Bid Documentation and provide the working copies to the Port personnel, agents or consultants. The Port, its agents and consultants may maintain such working copies of the Bid Documentation and, at the request of the Engineer, all copies of the Bid Documentation will be returned to the Port. The Contractor's authorized representative shall access the Bid Documentation only in the presence of an authorized Port representative. The Contractor shall notify the Engineer at least seven (7) days prior to the desired date to schedule such access.
- D. If a Disputes Resolution Board or mediator is used to resolve disputed Claims, the Board members or mediator shall have unrestricted use and access to the Bid Documentation for purposes of evaluating, understanding, resolving and settling Claims. The Dispute Resolution Board or mediator shall maintain submitted documents in a secure location, marked confidential and proprietary, and shall return said documents to the Port at the conclusion of the hearing or mediation process.
- E. If the Contractor fails to fully meet the requirements of this Paragraph and later presents a Claim to the Port for additional compensation or time extension, such failure to fully comply with said requirements shall act as a waiver of all Claims made.
- F. In the event that the Port receives a public disclosure request under Washington's Public Records Act. Chapter 42.56 of the Revised Code of Washington, for any portion of Contractor's Bid Documentation before such time as the Port has reviewed the portion of Bid Documentation under this Paragraph G-05.06 (i.e. while the portion remains in escrow), the Port will provide Contractor notice of such request. In the event that the Port receives a public disclosure request for any portion of the Contractor's Bid Documentation after such time as the Port has reviewed the portion of Bid Documentation under this Paragraph G-05.06 (i.e. after the portion has been released from escrow and used by the Port), the Port will reasonably endeavor to provide Contractor notice of such request where it is reasonably clear the Bid Documentation is within the materials otherwise subject to production (e.g. clearly marked as confidential Bid Documentation on the face of a document included in a change order file) but does not commit to do so. Contractor shall be responsible for and bear the costs of taking legal action in an attempt to prevent disclosure of such documents. In no event shall the Port be liable to Contractor for disclosure of Contractor's documents the Port deems disclosable under the Public Records Act.
- **G.** The rights, responsibilities and warranties of this Paragraph G-05.06 shall apply equally to any Subcontractor that is required, by terms of the Contract Documents, to escrow its Bid Documentation.

G-05.07 PUBLIC DISCLOSURE REQUEST OF PORT

In the event that the Contractor, any Subcontractor, or Supplier submits to the Port a request for public disclosure under Washington's Public Records Act, Chapter 42.56 of the Revised Code of Washington, related to this Contract, any conduct of the Port related to this Contract, or any other contract that Contractor, its Subcontractor, or Suppliers submits may have bearing on this Contract, the Port shall – in addition to, and not in lieu of, any rights otherwise granted under this Contract – have the right to require Contractor and any of its Subcontractors or Suppliers to produce similar records, whether or not otherwise within the scope of Project Records or the Port's audit rights under Paragraph G-04.38. Compliance with this obligation shall not, however, be a condition or limitation on the Port's obligation to comply with its obligations under the Public

Records Act. Instead, Contractor's failure to comply with the obligation imposed by this Paragraph within a manner and period of time that is comparable to the Port's compliance with its obligation under the Public Records shall be considered a failure to provide documentation relevant to a pending Request for Change Order or Claim that will constitute a waiver of Contractor's right to receive an extension of the Contract Time, an adjustment to the Contract Sum or any other relief or remedy of any other kind. The specific purpose of this Paragraph is not to limit Contractor's right to make a public records request or penalize Contractor for doing so, but rather to ensure parity in the information held by the Port and Contractor, its Subcontractors, and Suppliers in the consideration of Request for Change Orders and resolution of Claims.

ARTICLE G-06 NON-DISCRIMINATION AND EQUAL EMPLOYMENT

G-06.01 COMPLY WITH ALL LAWS

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- 1. 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 CFR part 21;
- 2. 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);
- 3. 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 CFR part 27;
- 4. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- 5. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- 6. 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);
- 7. 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 CFR parts 37 and 38;
- 8. 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 discrimination 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);
- 11. 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.).

G-06.02 COMPLY WITH PORT OF SEATTLE POLICY AND REQUIRED ACTIONS

The Port has a comprehensive policy regarding equal employment opportunities for minority and women's business enterprises and affirmative action. Pursuant to such policy, the Contractor is required to take certain specific actions, including providing the Port with reports and affidavits in connection with its performance of this Contract. It is the basic policy of the Port of Seattle to provide equal opportunity to users of all Port services and facilities and all contracting entities. Specifically, the Port will not tolerate discrimination against any persons on grounds of age, race, color, national origin/ancestry, ethnicity, religion, disability, Family Medical Leave Act (FMLA) use, pregnancy, sex/gender, sexual orientation, whistle-blower status, marital status, workers' compensation use, transgender status, political beliefs, or any other protected status, as guaranteed by local, state and federal laws. Port's policy and the specific obligations to be performed by the Contractor are set forth in the Contract.

ARTICLE G-07 TIME

G-07.01 CONTRACT TIME

All time limits stated in the Contract Documents, specifically including the Milestones and the Contract Time, are of the essence of this Contract. While the Engineer may, in certain circumstances, provide a written extension, reduction or waiver of certain time limits, the Milestones and the Contract Time may be extended or reduced only by Change Order. Contractor shall not be entitled to receive delay damages or other, similar costs associated with any failure to realize early completion of the Work (even if set forth in the Schedule) before the end Contract Time. For purposes of the Schedule, any such early completion will be treated only as an early finish in the Critical Path that otherwise extends through Substantial Completion.

G-07.02 EXTENSIONS OF CONTRACT TIME; COMPENSATION

A. Contract Time will only be extended for delays to the Critical Path of the Work. If an extension of Contract Time is warranted under any of the following provisions, the extension of Contract Time will be limited to the period of time the Engineer determines the Critical Path was delayed/extended.

- **B.** Reasonable Delays. The Contractor should anticipate that some reasonable delays, including those caused by normal weather patterns, will occur. The Contractor shall not be entitled to any compensation, damages, or extension of the Contract Time for such reasonable delays.
- C. Non-Excusable and Non-Compensable Delays. Delays in the prosecution of the Work that could have been avoided by the exercise of due care, coordination and diligence on the part of the Contractor, its Subcontractors or its Suppliers at any tier are neither excusable nor compensable under the Contract. No extension of Contract Time or increase in the Contract Sum shall be allowed for any claimed delay that is caused by or results from the breach, fault, negligence, or collusion of the Contractor, or its Subcontractors, Sub-Subcontractors, or Suppliers. Nonexclusive examples of such non-excusable and non-compensable delays include, but are not limited to:
 - 1. Contractor's failure to make timely Submittals to the Port, and
 - 2. Contractor's failure to procure materials or labor or perform the Work in accordance with the requirements of the Contract Time or to adequately plan for such functions.

Non-excusable and non-compensable delays shall potentially subject the Contractor to damages as more specifically set forth in Paragraph G-10.10.

- D. Excusable and Non-compensable Delays. The Contract Time may be extended without compensation by the Port for a period equivalent to the time that the Engineer determines that the Contractor was delayed in the Critical Path of the Work by one or more of the following causes, beyond the control of the Port and the Contractor, occurring during the performance of the Work:
 - 1. Fire or other casualty for which the Contractor is not at fault or otherwise responsible;
 - 2. Riot, war, terrorism, or civil disorder;
 - 3. Unusually Severe Weather;
 - 4. General industry strikes or labor disputes beyond the reasonable control of Contractor:
 - 5. Unreasonable delay in issuance of a permit by the agency having jurisdiction as described in Paragraph G-04.12.C; and
 - 6. Delay to the Critical Path resulting from causes beyond the control of Contractor and Port and that could not have been avoided by Contractor with the exercise of coordination, foresight and diligence.

Such non-compensable extensions of Contract Time will be allowed only to the extent that Substantial Completion of the Work is unreasonably delayed through no fault of the Contractor, which must in all cases be substantiated by impact to the Critical Path on the Schedule. Any extension of the Contract Time by the Port will be set forth in a Change Order, which shall specify the days by which the Contract Time is to be increased.

- **E.** Excusable and Compensable Delays. The Contract Time may be extended and the Contract Sum increased in the event that:
 - 1. The Critical Path was delayed by reason of changes made by the Port or by any unreasonable act or omission of the Port, the Engineer, or any other party for whom the Port is responsible.

- 2. The Contractor was not concurrently responsible for the Critical Path delay.
- 3. The Contractor has suffered actual losses as a result of the Critical Path delay,
- 4. The Critical Path delay could not have been mitigated despite the Contractor taking reasonable work-around actions, and
- 5. The Critical Path delay was not within the contemplation of the Contract,

In that event, the Contract Time will be extended for a period equivalent to the time that the Engineer determines that the Contractor was delayed in the Critical Path of the Work and the Contract Sum will be increased to compensate the Contractor for its loss from such delay and associated disruption. Any extension of the Contract Time and increase in the Contract Sum by the Port will be set forth in a Change Order, which shall specify the days by which the Contract Time is to be increased and the amount by which the Contract Sum is to be increased.

F. Notwithstanding any of the foregoing, if the Contractor fails to fully comply with Paragraphs G-04.34 and G-05.02, any claim for an extension of Contract Time or increase in the Contract Sum on account of such claimed delay shall be waived.

ARTICLE G-08 PAYMENTS, COMPLETION AND FINAL ACCEPTANCE

G-08.01 ALL PAYMENTS SUBJECT TO APPLICABLE LAWS

All payments made to the Contractor under this Contract are subject to all laws applicable to the Port in general and to this Contract in particular. Without limiting the generality of the foregoing, the law does not permit the Port to make any payments to the Contractor under this Contract until proper and approved Statements of Intent to Pay Prevailing Wages have been filed with the Port, as required by Paragraph G-04.06 and Section 39.12.040 of the Revised Code of Washington. In addition, the Port will retain five percent (5%) of all earned payment as required by Section 60.28.011 of the Revised Code of Washington, and the retained amounts shall be deposited as indicated by the Contractor in its Bid.

G-08.02 SCOPE OF PAYMENT

The Contractor shall be compensated for performing the Work, including any changes made by Change Order, as provided for in this Contract. Payment of the Contract Sum shall constitute the full compensation to the Contractor for performance of the Work, including all risk, loss, damage, or expense of whatever character arising out of the nature of the Work or the prosecution thereof, and for all reasonable expenses properly incurred, including in the event of suspension or termination. The Port will not pay for work done beyond lines and grades established by the Engineer, or extra work or materials furnished without prior written approval of the Engineer. The Port may order such unauthorized work to be removed at no expense to the Port.

G-08.03 PROGRESS PAYMENTS

A. Progress Payments will be made no more often than monthly following Contractor's request. Payment shall be based upon invoices approved by the Engineer. All requests for Progress Payments must be accompanied by all required documentation; otherwise, the Progress Payment will not become due or be processed. Unless otherwise revised by the Supplementary Conditions, the Contractor's Progress Payment request shall be made by the 25th of each month, based on the percentage of Work completed. Progress Payments

- will be made within thirty (30) days after completion of Port review and determination of the amount due. The Port will generally review Contractor's request for Progress Payments and identify any significant issues affecting payment within fourteen (14) days of submission.
- **B.** All Progress Payments will be made by Direct Deposit. Contractor shall submit, as a pre-award submittal, the Port of Seattle "Direct Deposit (ACH) Enrollment Form and Agreement" to establish the electronic payment path.
- C. Payment shall be based upon the actual quantities of Work performed as verified and agreed by the Engineer according to the Contract Documents. For lump sum items, Progress Payments will be determined based upon the percentage of completion against a schedule of values established in accordance with the Contract. Where the Contract provides for unit prices, quantities will be determined by the actual measurement of completed units listed in the Schedule of Prices attached to the Agreement Form. Allowance items may be performed, and will be paid for, only with prior written authorization by the Engineer (typically through a Construction Bulletin). Force Account items will be paid as more specifically set forth in Paragraph G-08.05.
- D. The Contractor shall promptly submit all Subcontractor or Supplier invoices as part of its monthly Progress Payment requests. The Contractor is likewise required to make payment to all Subcontractors and Suppliers for all Work included within the Progress Payment within ten (10) days from the receipt of the Progress Payment. Furthermore, the Contractor shall require all subcontracts issued under this Contract to all Subcontractors and Suppliers at all tiers to also make all due payments within ten (10) days of their receipt of payment. The Contractor must justify to the Port in writing any intent to withhold payment of monies due to any Subcontractor or supplier.
- E. The Contractor shall supply with each payment request a certification signed by a corporate or company officer. This certification shall attest that all payments by the Contractor due to Subcontractors or Suppliers from the last payment estimate have been made within the ten (10) day payment period. The certification shall attest that the Contractor will make payment within ten (10) days of all obligations due from the current payment estimate. The Contractor is required to receive the same certification from all Subcontractors and Suppliers at all tiers. No Progress Payments will be processed until the Contractor's certification is received.

G-08.04 PAYMENT FOR STORED MATERIALS

- A. On-Site Materials: A Progress Payment may include payment for permanent materials or equipment to be incorporated into the Work if approved in advance by the Engineer and properly stored and safeguarded on the site. To be entitled to a Progress Payment for such materials delivered to the site but not yet incorporated into the Work, the Contractor's claimed purchase price must be supported by (1) certified invoices of Subcontractors or Suppliers and (2) proof of payment of such invoices in the form of cancelled checks or acknowledgment by such Subcontractors or Suppliers of receipt of payment in full for such invoices.
- B. Off-Site Materials: A Progress Payment may also include payment for permanent prefabricated materials or specially designed equipment to be incorporated into the Work if approved in advance by the Engineer and properly stored and safeguarded, even though off-site. The maximum allowable payment for such off-site material will be eighty percent of the invoice price for the material. To be entitled to such a Progress Payment for such materials or equipment located offsite, the Contractor's claimed purchase must be

supported by the certified invoices and proofs of payment described above in Paragraph G-08.04.A and, in addition, as a condition precedent to making any such Progress Payment, the Port may require that the Contractor at its expense either (1) furnish the Port with an irrevocable letter of credit on terms acceptable to the Port that the Port shall be entitled to draw on in the event the Contractor fails to deliver the materials or equipment to the Site or (2) provide the Port with a first priority perfected security interest ("Security Interest") in the materials or equipment covered by the payment request pursuant to a written security agreement in the form and substance acceptable to the Port supported by Uniform Commercial Code ("UCC") financing statements describing the subject materials, UCC searches and other terms and conditions acceptable to the Port at its discretion.

C. As a condition of making payment for stored materials (whether on-site or off-site), the Port will have the right to inspect the materials before or after making any such payment. In addition, the Port shall have the right to require the Contractor to furnish evidence, reasonably satisfactory to the Engineer, that the Contractor has maintained adequate insurance in the case of materials and equipment stored off-site.

G-08.05 PAYMENT FOR WORK DONE ON A FORCE ACCOUNT BASIS

- A. Whenever, under the terms of the Contract, labor, materials, or equipment are to be paid for on a Force Account basis, the amount of such payment shall be determined as follows (also see Table of Cost Categories and Markups):
 - 1. Labor: For all direct labor, the Contractor shall be paid an amount equal to the sum of the following:
 - a. Weighted Wage Rate: The agreed weighted wage rate for all labor used shall include and be restricted to the actual current certified basic wages earned, plus fringe benefits made the obligation of the Contractor by a collective bargaining agreement or other employment agreement, plus benefits paid on account of such labor by the Contractor pursuant to the:
 - 1) Federal Insurance Compensation Act (FICA);
 - 2) Federal Unemployment Tax Act (FUTA); and
 - 3) State Unemployment Compensation Act (SUCA).
 - Only bona fide employee fringe benefits that accrue to the direct benefit of the employee (such as pension and annuity, health and welfare, vacation apprenticeship, and training funds) shall be included in the calculation of the weighted wage rate. Other fringe benefits that are not a direct benefit of the employee (such as union promotion funds) shall be paid as part of the markups allowed on the Work.
 - b. Travel Allowance or Subsistence: The Contractor shall be reimbursed the actual costs of travel and subsistence allowances paid to laborers engaged upon the Work when such allowances are required by the terms of employment for such laborers.
 - c. Industrial Insurance and Medical Aid Premiums: The Contractor shall receive reimbursement for Marine Industrial Insurance, State of Washington Industrial Insurance and Medical Aid premiums that become an obligation of the Contractor and are chargeable to the labor performed on the Work to be paid for on a Force Account basis. The rate of

- compensation for the above premiums shall be a composite rate based upon the full premium for Industrial Insurance and one-half the premium for Medical Aid, which premiums are prescribed by the regulatory body for the Contractor, Subcontractor, Sub-subcontractor, or other person actually performing the Force Account work. This composite rate may be adjusted upon request to conform to adjustment prescribed by the regulatory body.
- d. The Work may be performed and paid on an overtime basis only if specifically directed or authorized by the Engineer in advance of the work being performed. The Contractor may request that the Work be done on overtime if it supports the request with specific reasons for incurring the additional cost of overtime.

Materials:

- a. For all materials furnished by the Contractor for the Work, payment shall be made in the amount of the actual invoice cost for such materials, including actual freight and express charges and applicable taxes paid by the Contractor and not already addressed for payment herein, (i.e. B&O tax see Table of Cost Categories and Markup; and see Subparagraph A.7 regarding sales tax.) less all offered or available discounts and rebates, notwithstanding the fact that they may not have been taken by the Contractor. Before work is started, the Engineer may require the Contractor to obtain multiple quotations for the materials to be utilized and select the vendor with prices and terms most advantageous to the Port.
- b. The Contractor shall furnish to the Port, as support for all charges for materials, valid copies of Supplier invoices, including freight and express bills. As to such materials as may be furnished from the Contractor's own inventory for which an invoice is not available, the Contractor shall furnish current cost quote to determine the fair market value of the material. The Contractor may be asked to provide a sworn affidavit certifying its actual cost of such materials.
- c. If the Port determines that the Contractor's cost of such furnished materials is excessive or if the Contractor does not furnish documentary evidence of its costs, the Port reserves the right to establish the cost of all or part of such materials at the lowest current wholesale prices less all applicable discounts and exemptions at which said materials are available in the quantities required to be furnished by the Contract.
- d. The Port reserves the right to furnish such materials to the Contractor as it deems advisable, and the Contractor shall have no claim for any costs, overhead, or profit on such furnished materials.

3. Equipment:

a. For any machine-power tools or equipment which the Engineer deems necessary for the Contractor to use, payment shall be made for equipment owned or rented by the Contractor in accordance with the rates stated in the current Rental Rate Bluebook as modified by the "AGC/WSDOT Equipment Rental Agreement" in effect at the time such tools or equipment were used, subject to reduction under Subparagraph b below. Any sales tax paid by the Contractor for rental equipment shall also be reimbursed in accordance with Subparagraph 7 below.

- b. The rates stated in the current Rental Rate Bluebook as modified by the "AGC/WSDOT Equipment Rental Agreement," are the maximum rates allowable for equipment of modern design and in good working condition, and include and are full compensation for overhead, profit, bonds and for furnishing all fuel, oil, lubrication, repairs, maintenance, insurance and all other costs incidental to the furnishing of such tools and equipment, except for the labor to operate the same. The stated compensation for use of tools or equipment not of modern design or not in good working conditions shall be reasonably reduced determined by the Engineer. If equipment is required for which a rental rate is not included in the current schedule, an agreed rental rate shall be established for that equipment based upon the most similar model found in the Blue Book of rental rates. Rented Rates for specialty equipment such as dredging equipment and barges not found in the Blue Book shall be established by past or present Port audit using standard accounting procedures. Such rates must be approved by the Engineer prior to use of the equipment on the Force Account Work.
- c. Payment for Standby Time, Shutdown and Breakdowns in equipment shall be paid as prescribed in the "AGC/WSDOT Equipment Rental Agreement".
- d. The Port defines Small Tools and Small Equipment to be any contractor owned piece of equipment with a monthly rental rate of less than \$100 or any piece of equipment with a purchase price of less than \$500. The Port does not incorporate the "AGC/WSDOT Equipment Rental Agreement" section on Small Tools into this Contract. The Port does not pay for small tools as a direct cost of the work performed but as a part of the markup allowed on the changed work.
- e. Current rates stated in the current Rental Rate Bluebook as modified by the "AGC/WSDOT Equipment Rental Agreement" are maintained at each district office of the Department of Transportation and at each of the offices of the Associated General Contractors of America.
- f. If the necessary equipment is not already at the site of the project and it is not anticipated that it would be required for the performance of other work under the terms of the Contract, the Contractor will be paid for mobilization in accordance with the terms and conditions specified in the then current Rental Rate Bluebook as modified by the "AGC/WSDOT Equipment Rental Agreement."
- g. For equipment owned by the Contractor that is (1) listed by the Port in the Supplementary Conditions or (2) not listed in the Bluebook, payment shall be made for owned equipment on the basis of Actual Cost. The term Actual Cost means the ownership and operating cost of the equipment as determined by the Port based on records made available by the Contractor. The Port in determining Actual Cost may consider the equipment's acquisition cost, the equipment's useful life, any indirect costs associated with ownership of the equipment, depreciation and other commercially reasonable factors. It is the responsibility of the Contractor to provide cost records to the Port upon request to assist with determining the Actual Cost for the equipment. If the Contractor did not keep and maintain such cost records or fails to comply with the document request made by the Port, the Port may at its option make a reasonable determination of the Actual Cost.

If the Contractor disagrees with this determination, it must file a written Notice of Event and pursue a Request for Change Order as set forth in Paragraphs G-04.34 and G-05.02.

Other:

a. As shown in the Table of Cost Categories and Markups.

5. Subcontractors:

a. When Work is performed on a Force Account basis by Subcontractors, the subcontractor will be allowed the total cost computed for labor, materials, and equipment as stated above plus markups as indicated in Subparagraph 6 below.

6. Markups:

- a. The entity that performs the Work shall be reimbursed a markup in an amount equal to twenty percent (20%) of the sum of the Direct Cost items listed above in Subparagraphs 1, 2, 3, and 4 above.
- b. The Contractor shall also be reimbursed an amount equal to seven percent (7%) of the total Subcontractor amount of Subparagraph 5 above for all costs associated with the subcontracted Work; provided, however, in the event the subcontracted Work requires the Contractor, by virtue of where (e.g. separate, distant Project site) or when (e.g. at night when otherwise only day-shift work is being performed or after Substantial Completion) it is performed, requires the Contractor to mobilize significant, additional supervision or equipment not otherwise regularly present on the Project, the Port may consider requests for additional Contractor compensation.
- c. Subcontractor on Subcontractor markup of five percent (5%) on the respective subcontracted Work will be allowed up to two tiers of subcontractor Work only. If more than two tiers of subcontractors are involved, the Contractor will allocate the available markup (two tiers at five percent (5%) each) but the Port will not pay more than the two tiers.
- 7. Sales Tax. Sales tax shall be paid as otherwise provided in the Contract Documents.
- 8. The payments provided above shall be full payment for all work done on a Force Account basis and shall cover all expenses of every nature, kind, and description, including those listed and any others incurred on the work being done.
- **B.** No compensation for Work performed on a Force Account basis shall be paid unless the Engineer provided prior written direction to the Contractor to perform the Work on such a basis. No work shall be considered to be Force Account work, which can be measured and paid for at a unit price in the Schedule of Prices.
- C. The amount of Work to be paid for on a Force Account basis shall be documented in writing on a daily basis by the Contractor and the Engineer. The force account work shall be tracked on the Port of Seattle Force Account Form provided by the Engineer. The Contractor shall complete the force account form (including manpower, equipment, materials, change order number or bid item number, project number, description) on a daily basis and submit it within 24 hours to the Inspector (or Engineer) for verification. The Contractor shall maintain records and invoices for all costs associated with the Allowance Work in accordance with the requirements specified in Paragraph G-04.38. If reasonably

- subject to question, the Port may require Contractor to certify its Force Account documentation in the same manner as set forth in Paragraph G-09.02.B.8.
- **D.** The Contractor shall give notice to the Inspector of Contractor's intent to commence the Force Account work prior to starting the work. Such notice shall be given on a daily basis to alert the Port Inspector of the work being performed for which the Contractor will seek the Port Inspector's verification or certification.
- E. The Contractor shall give the Port notice when 80% of the amount authorized to be spent on an issue has been expended or as soon as the Contractor is aware that there is not enough funds authorized to complete the Work. Application for payment for Work done on a Force Account basis must be submitted with a detailed spreadsheet detailing the work performed no later than thirty (30) days following the performance of the Force Account work.

G-08.06 EARLY USE; SUBSTANTIAL COMPLETION; PHYSICAL COMPLETION

- A. Early Possession or Use of Partially Completed Work. The Port shall have the right to take early possession or use of Partially Completed Work notwithstanding that the Contractor is not yet required to have Substantially Completed the particular portion of the Work. Indeed, this Contract may specifically contemplate the possession or use of portions of the Work (including certain temporary facilities) before Substantial Completion as part of a contemplated sequencing, phasing, or operations plan. Any such early use or possession by the Port shall not be construed as Substantial Completion, Physical Completion or Final Acceptance of the Work and shall not trigger the commencement of any warranty provisions under this Contract (or as may additionally be provided by manufacturers) unless specifically provided otherwise by the Contract.
 - 1. If the Port elects to take early use or possession of any Partially Completed Work, the Port will, unless otherwise provided in the Contract Documents, be responsible for costs to operate such Partially Completed Work but only for the period of use. The Port shall not, however, be responsible for the costs to operate any temporary facilities required by the terms of the Contract, even if the Port or its tenants may be said to have the use of or benefit from such temporary facilities.
 - 2. If the Port elects to take early use or possession of any Partially Completed Work, the Contractor will, unless otherwise provided in the Contract Documents, be responsible for costs to maintain and repair such Partially Completed Work for the period of use; provided, however, that if the Port or a tenant of the Port damages the Partially Completed Work, the Contractor will repair or replace the negatively affected portion at the Port's cost.
 - 3. If such early use or possession by the Port increases the cost or delays the completion of remaining portions of the Work for which Contractor seeks payment or additional time, the Contractor shall notify the Port in writing as required by Paragraphs G-04.34 and G-05.02. Absolutely no such request will be considered for any use or possession specifically contemplated by the Contract Documents.
- **B.** Punchlist Process. The Punchlist process is split into three distinct steps: (1) Contractor Punchlist, (2) Punchlist Inspection, (3) Punchlist Backcheck.
 - 1. Contractor Punchlist Development: Upon Substantial Completion of the Work, the Contractor shall prepare a Punchlist of all incomplete or corrective items related to the Work. The Contractor shall complete and correct open items. When the

- Contractor believes that all of the incomplete or corrective items on the Punchlist are complete, with only minor requirements of the Contract remaining (e.g. final As-Built Drawings, landscaping, and minor deficiencies in the Work requiring correction), it shall submit a copy of its Punchlist along with a Request for Punchlist Inspection to the Engineer at least seven (7) days in advance of the date requested for Punchlist Inspection.
- 2. Punchlist Inspection: The Engineer will review the Contractor's Punchlist and the Work to determine the readiness to begin the Punchlist Inspection. If the Contractor Punchlist appears complete, and the Engineer believes that no more than 10% by number of additional items will need to be added to the Punchlist by the Engineer, the Engineer will perform a Punchlist Inspection of the Work, and develop and deliver a consolidated Punchlist to the Contractor for corrections. If the Engineer believes that there is a significant number of incomplete Work items, the Engineer will notify the Contractor in writing that the Contractor is not ready for the Punchlist inspection and provide the reasons. The Contractor shall proceed to complete the items as needed prior to a subsequent request to the Engineer for a Punchlist Inspection. A completed Punchlist Inspection is specifically required for Substantial Completion.
 - a. If the Contractor does not expeditiously proceed with correction and completion of items identified in the Punchlist Inspection, the Engineer may, in his/her sole discretion upon three (3) days prior notice to Contractor, delete the uncompleted or uncorrected work from the Contract by Change Order. In such instance, the Port may choose to (1) have the Work performed by another contractor with the cost of such work to be deducted from the amount due the Contractor, or (2) issue a deductive Change Order for the uncompleted or uncorrected work. The rights provided the Port under this Paragraph shall not relieve the Contractor of its responsibilities as required under any other provisions of this Contract.
 - b. Failure of the Engineer to include items on the Punchlist does not alter the Contractor's responsibility to complete all Work in accordance with the Contract Documents. The Engineer may revise the Punchlist at any time prior to Physical Completion when items needing completion or correction are discovered.
- 3. Punchlist Backcheck: When the Contractor considers work on the Punchlist to be complete, the Contractor shall request that the Engineer schedule and conduct Punchlist Backcheck to complete the Punchlist process. The Contractor shall request the Punchlist Backcheck at least seven (7) days in advance of the date requested for the Punchlist Backcheck. A completed Punchlist Backcheck is specifically required for Physical Completion.
- C. Substantial Completion. At the Contractor's request (or as determined by the Port even in the absence of such a request), the Port will conduct the Punchlist Inspection to determine whether the Work is Substantially Complete. The Port will not generally consider a request from the Contractor to consider any portion of the Work for Partial Substantial Completion unless set forth in the Contract Documents. If upon such Punchlist Inspection and review of all required documents, the Port determines that the Contractor has in fact achieved Substantial Completion, the Engineer will issue a formal Notice of Substantial Completion.

- 1. After Substantial Completion, the Port will be responsible for the costs to operate, maintain and repair the Work unless it is Non-Conforming Work or otherwise provided in the Contract Documents.
- 2. Notwithstanding the foregoing, if Contractor has otherwise attained Substantial Completion except for (i) accepted Operating and Maintenance Documentation for all of the Work, (ii) accepted Warranty Documentation for all of the Work, or (iii) required training for all of the Work, the Port at its sole option may nonetheless declare Substantial Completion and add these tasks, to the extent not yet completed, to the Punchlist. If the Port exercises this option, then:
 - a. For purposes of the assessment of any Liquidated Damages tied to Substantial Completion, the Contractor will nonetheless be deemed to have achieved Substantial Completion;
 - b. The Contractor will, notwithstanding Subparagraph A.1 above, be responsible to operate, maintain and repair all portions of the Work for which the Contractor has not completed all of these tasks until such time as they are completed to the degree otherwise required for Substantial Completion; and
 - c. The warranties for any portion of the Work for which the Contractor has not completed all of these tasks will not commence to run until such time as they are completed to the degree otherwise required for Substantial Completion. This will specifically be reflected in any documentation reflecting the Warranty Start Date.

If Contractor fails or refuses to perform and pay for all such maintenance, operation and repair, the Port may at its option perform or pay for such services, and withhold sums otherwise due Contractor for reimbursement of such costs. The Contract Documents may, in some instances, specifically set forth the expected cost for such services.

D. Physical Completion. At the Contractor's request (or as determined by the Port even in the absence of such a request), the Port will conduct the Punchlist Backcheck to determine whether the Work is Physically Complete. If upon such Punchlist Backcheck and review of all required documents, the Port determines that the Contractor has in fact achieved Physical Completion, the Engineer will issue a formal Notice of Physical Completion.

G-08.07 FINAL PAYMENT

- A. The Port will make Final Payment, excluding held retention, to the Contractor following (1) Physical Completion and (2) final resolution by settlement, mediation or litigation of all Requests for Change Orders or Claims. Final Payment shall include the entire sum found to be due hereunder after deducting therefrom such amounts as the terms of the Contract permit. Prior estimates and payments, including those relating to unit price work, extra work or work omitted, shall be subject to review and correction by the Final Payment. Final Payment will be made only for materials actually incorporated in the Work; and, all unincorporated materials remaining for which Progress Payments have been made shall, unless otherwise agreed, revert to the Contractor and any Progress Payments made for these items shall be deducted from the Final Payment for the Work.
- **B.** By accepting Final Payment, the Contractor shall be deemed thereby to have released the Port from all claims of Contractor and all liability to the Contractor for things done or furnished in connection with the Work and for every act and neglect of the Port and others

relating to or arising out of the Work, other than release and held retention. Final Payment by the Port shall not release the Contractor or its Surety from any obligation under the Contract or under the performance and payment Bonds or under any warranty obligations.

G-08.08 FINAL ACCEPTANCE

Following issuance of the Notice of Physical Completion and the completion of all the Closeout Administrative Requirements, the Port will formally accept the Project. Once the Port determines that the Contractor has fulfilled these requirements, the Engineer will issue a formal Memorandum of Final Acceptance.

G-08.09 RELEASE OF RETAINAGE

- **A.** Promptly following Final Acceptance, the Port will prepare the Notice of Completion of Public Works Contract and submit it to the relevant Washington State agencies.
- **B.** Release of the retainage will be made no sooner than sixty (60) days after issuing the Notice of Completion of a Public Works Contract provided the following conditions are met:
 - 1. On Contracts totaling more than \$35,000, a release has been obtained from the Washington State Department of Revenue (RCW 60.28.051);
 - 2. Receipt of a certificate of Payment of Contributions Penalties and Interest on Public Works Contract from the Washington State Employment Security Department;
 - 3. Receipt of a certificate from Washington State Department of Labor and Industries showing the Contractor is current with payments of industrial insurance and medical aid premiums;
 - 4. All claims, as provided by law, filed against the retainage have been resolved. In the event claims are filed and provided the conditions of 1 through 3 above are met, the Contractor will be paid such retained percentage less an amount sufficient to pay any such claims together with a sum determined by the Port sufficient to pay the cost of foreclosing on claims and to cover attorney's fees.
- C. It is the responsibility and a condition of this Contract that Contractor promptly notifies all Subcontractors and Suppliers of the commencement of the period and of the final day for submitting any liens. As a further condition of this Contract the Contractor is required to place within all subcontracts a clause that states that this shall be done. The Contractor shall by letter inform the Port of the compliance with this provision. Failure of the Contractor to comply with this provision may be used by the Port as a basis to withhold retainage to ensure payment to uninformed Subcontractors. Failure to comply will also be made a matter of record for future determinations of bidder responsibility

G-08.10 CERTIFICATE OF CONTRACT COMPLETION

Following issuance of the Memorandum of Final Acceptance, payment of the Final Payment, consumption (in payment of claims) or release of the full amount of the retainage and satisfaction of the Contract's requirement (if any) for the Contractor to maintain completed-operations insurance coverage for the completed Work, the Port will issue a Certificate of Contract Completion.

G-08.11 PAYMENTS DO NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR WORK

The Port's actions in making any Progress Payment or Final Payment, in issuing the Notice of Substantial Completion, the Notice of Physical Completion, the Memorandum of Final Acceptance, the Notice of Completion of Public Works Contract or the Certificate of Contract Completion, and in releasing the retainage do not in any way relieve the Contractor from its responsibility for the Work or its responsibility to repair, replace, or otherwise make good Non-Conforming Work. Nor do any of these actions constitute a waiver of the Port's right to reject Non-Conforming Work or any other rights. Without limiting the generality of the foregoing, the Port shall have the right to seek reimbursement of any amount it determines was overpaid to the Contractor and to recover damages for any unauthorized or Non-Conforming Work.

Nov-14

TABLE OF COST CATEGORIES AND MARKUPS

Direct Costs Direct Costs Direct Costs						
Labor	Material	Equipment	Other	20% Entity that performs Work	7% Contractor on Sub	max
	-		•			
All Craft	Scope Changes	Large Equipment and Large Tools	Added Shop Drawings	As-Built Drawings Project Staff	GC Management of Sub	Management of Sub
Working Foremen (Not in OH) Working General Foremen	Special Warranties	Rental Equipment	Reproduction	Foreman (Non-Working) Supervision/Superintendent	Supervision	Supervision
(not in OH)	Freight	Temporary Fence	Dump Fees	Administration	Home Office Overhead	Home Office Overhead
Labor Burden Field Engineering Layout /	Special Clothing	Barricades	Design	Project Manager	Field Office Overhead	Field Office Overhead
Surveying Clean Up (not in rates /Hrs or	Testing	Walkways		Project Engineer (unless Design)	Profit	Profit
OH)	Signs	Dumpsters Safety Equipment		Estimating	Administration Cost	Administration Cost
Traffic Control (not in OH)	Access Roads	(not PPE)		Contract Administration	B&O Tax	B&O Tax
Escalation		Temporary Heat		Office Engineering	Insurance	Insurance
Overtime Premium		Temporary Light		General Foreman (portion not in directs)	Bond	Bond
		Temporary Power			Incidentals	Incidentals
		Pumping		Small Tools and Equipment	General Conditions	General Conditions
		Hoisting		Insurance	Fee General &	Fee
				Home Office Overhead	administrative	General & administrative
				Field Office Overhead	Vehicles	Vehicles
				Bond	Safety	Safety
				Profit	Coordination drawings	Coordination drawings
				Permit		
				B&O Tax		
				Warrantee (unless special)		
				Schedule Updates		
				Personal Protective Equipment (PPE)		
				Transportation		
				Badging and keys		
				Consumables		
				Incidentals		
				General Conditions		
				Fee		
				General & administrative		
				Red lines		
OH = Overhead				Vehicles for Project Staff		
				Safety		
				PLA		
				Coordination drawings		

NOTE: The above is the total markups allowed. It shall be the responsibility of the Contractor for determining with its Subcontractors, the allocation of the overall markup amounts.

ARTICLE G-09 CLAIMS

G-09.01 TIME FOR FILING CLAIMS

- A. The following action is a mandatory condition precedent to filing a Claim under the Contract: a Request for Change Order is denied or deemed denied by the Port.
- **B.** Unless otherwise agreed in writing by the Engineer, the fully documented Claim shall be received by the Engineer within thirty (30) days after the denial (or the deemed denial) of a Request for Change Order.
- C. Failure to comply with the time requirements set for filing the Claim shall constitute acceptance by the Contractor, on behalf of itself and its Subcontractors and Suppliers, of the Port's denial or deemed denial of a Request for Change Order. Such acceptance shall be considered complete, full and final settlement of all costs, damages and Claims related to or arising from the Request for Change Order.

G-09.02 CLAIM RESOLUTION

- A. The parties shall enter into the Claim resolution process in good faith and not use the Claim resolution processes for purposes other than resolving a good faith dispute. At all times during the course of the Claim, the Contractor agrees to continue to perform the Work with due diligence, unless a stop work order under Paragraph G-10.03 has been issued by the Port. Both parties have a duty to take all reasonable steps necessary to mitigate losses resulting from the Claim whether those losses are their own or another party's losses.
- **B.** Every Claim must be submitted by the Contractor in writing and clearly designated by the Contractor as a fully documented Claim. At a minimum, a fully documented Claim must contain the following information:
 - A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations and items of Work affected by the Claim:
 - 2. The date on which facts arose which gave rise to the Claim;
 - 3. The name of each employee of the Port or A/E knowledgeable about the Claim;
 - 4. The specific provisions of the Contract Documents which support the Claim;
 - 5. Identification and copies of any documents that support the Claim;
 - 6. If an extension in the Contract Time is sought, the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor's analysis of its Schedule to demonstrate the reason for the extension in Contract Time (Time Impact Analysis);
 - 7. If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories composed of labor, material, equipment, job overhead, general and administrative overhead (if any), subcontractor claims and other categories may be specified by the Port, and

- 8. A notarized statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data have been incurred, are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes the Port is liable. The individual signing such certification shall be a duly authorized representative of the Contractor who has the necessary and appropriate authority and responsibility to commit the Contractor to the truthfulness of the certification.
- 9. A statement that the Claim covers all changes in cost and in time (direct, indirect, impact, consequential, and otherwise) to which the Contractor (and Subcontractors and Suppliers of any tier) is entitled.

In the event that the Contractor is submitting a Claim asserted on behalf of Subcontractor, Sub-Subcontractor, or Supplier, Contractor shall specifically review the Claim documentation provided by the Subcontractor, Sub-Subcontractor, or Supplier to ensure that it fully complies with the requirements of this Paragraph.

- C. The Contractor must demonstrate that an impact has occurred, and it has been hurt due to this impact, through such means as, schedule analysis, cause/effect analysis, impact analysis, etc. and provide documentation that clearly points to the Port as the responsible party for the impact. Use of inefficiency studies, such as Hanna, MCAA, Leonard, and the like, are not sufficient, of and by themselves, to demonstrate or establish entitlement or quantum for a claim, and will not be accepted by the Port as the sole documentation of impact. The Contractor must demonstrate that application of a particular inefficiency study, if used, is appropriate and applicable to the circumstances of their claim (for example, use of MCAA for demolition work may not be applicable). Also refer to Paragraph G-05.02.F (Impact to Unchanged Work).
- **D.** The Port has the right to recover its analysis/administration cost of processing and evaluating a Claim for that portion of the Claim that is determined, in light of the final resolution, to be unfounded or unsupported. The cost of reimbursement will be the percentage of the original Claim that is determined to be unsupported times the cost of analysis/administration.
- **E.** Provided the Claim is submitted within the time period identified in Paragraph G-09.01 and contains the information and documentation required in this Paragraph G-09.02, the Claim will be reviewed and processed in accordance with Paragraph G-09.02.F.
- F. Dispute Resolution Process
 - 1. Level 1. Within fourteen (14) days of receipt of the Claim by the Port, the Port and Contractor shall establish a schedule for evaluating and resolving the Claim. The first step in this process will be a meeting between the General Manager for the Contractor and the Construction Manager for the Port. At this meeting, the Port and the Contractor shall be jointly briefed by both the Port and Contractor representatives primarily responsible for the preparation of the subject Request for Change Order and its denial by the Port. If the Contractor representative presents significant new information that was not brought to the attention of the Port during the Request for Change Order process, the Port may at its option suspend the Level 1 process and return the matter to the Resident Engineer for consideration. The Port shall have the right to request additional information from the Contractor and its Subcontractors or Suppliers at any time prior to or during the Level 1

meeting. If an adjustment to the meeting schedule is necessary to accommodate such requests for additional information, such adjustment shall be as mutually agreed by the representatives. Failure to provide requested information will delay the elevation process and will be treated as an admission that supporting documentation does not exist. The Port will issue a Change Order for the resolved portions of the Claim. Following the Level 1 meetings, the Port will issue findings and provide them to the Contractor. If the Contractor does not agree with the findings of the Level 1 process, it must submit a written rebuttal addressing each point of disagreement, and citing the specific documentation supporting its opinion. This rebuttal must be received by the Port within 30 days of the Level 1 findings or the claim will be deemed abandoned. Within 14 days of receipt of the Contractor's rebuttal, the Port will (i) request a further meeting (ii) issued revised findings or (iii) re-affirm its previous findings. The Contractor may not proceed to the Level 2 process until the Level 1 process has been exhausted.

- 2. Level 2: If the Level 1 process has been fully exhausted without achieving a mutually acceptable resolution, the Contractor may initiate the Level 2 process. The owner or corporate officer of the Contractor (who did not attend the Level 1 meetings) and the Port's Assistant Director of Engineering Services, Construction Services shall be jointly briefed by both the Port and Contractor Level 1 representatives on the results of the Level 1 meeting, their respective positions, and remaining areas of disagreement. If the Contractor representative presents significant new information that was not brought to the attention of the Port during the Level 1 process, the Port may at its option suspend the Level 2 process and return the matter to the Construction Manager of the Port for further Level 1 consideration. Otherwise, the Port and Contractor Level 2 representatives shall establish a schedule for attempting to resolve the Claim. The Port shall have the right to request additional information from the Contractor and its Subcontractors and Suppliers at any time prior to or during the Level 2 meeting. If an adjustment to the Level 2 meeting schedule is necessary to accommodate such requests for additional information, such adjustment shall be as mutually agreed by the representatives. Failure to provide requested information will delay the elevation process and will be treated as an admission that supporting documentation does not exist. The Port will issue a Change Order for the resolved portions of the Claim. The Port will make findings after the Level 2 meetings and provide them to the Contractor. If the Contractor does not agree with the findings of the Level 2 process, it must submit a written rebuttal addressing each point of disagreement, and citing the specific documentation supporting its opinion. This rebuttal must be received by the Port within 30 days of the Level 2 findings or the Claim will be deemed abandoned. Within 14 days of receipt of the Contractor's rebuttal, the Port will (i) request a further meeting (ii) issued revised findings or (iii) re-affirm its previous findings. The Contractor may not proceed to with the next step of the Claim resolution process unless the Level 2 process has been fully exhausted.
- 3. Mediation. If the Claim is not resolved in the Level 2 process, the Contractor may bring no claim against the Port in litigation unless the claim is first subject to mediation. In the absence of agreement to the contrary, the mediation shall be conducted before a single mediator under the Voluntary Construction Mediation Rules of the American Arbitration Association. The parties shall schedule mediation sessions at the earliest possible date(s), subject to the schedule of the selected (or appointed) mediator. The parties shall cooperate with the mediator and assure timely and full access to such personnel and documents as the

- mediator may request. The costs of mediation shall be equally divided between the parties.
- 4. Dispute Resolution Board (DRB). The Supplementary Conditions will define whether and when a DRB is to be used. If used, the DRB (i) does not waive the separate mediation requirement in Paragraph G-09.02.F.3 and (ii) can be inserted by mutual agreement of the parties at any point during the resolution process. If agreement on the timing of the DRB cannot be reached or is not otherwise specified in the Contract Documents, the Port will determine when to utilize the DRB.
- G. Exhaustion of Remedies; Litigation. The Contractor may bring no litigation on Claims unless such Claims have been properly raised and considered in the procedures above. All unresolved Claims of the Contractor shall be waived and released unless the Contractor has strictly complied with the time limits of the Contract Documents, and a lawsuit is served and filed within the limits stated in Paragraph G-04.35. This requirement cannot be waived except by an explicit written waiver signed by the Port.

ARTICLE G-10 PORT OF SEATTLE'S RIGHTS AND REMEDIES, SUSPENSION AND TERMINATION

G-10.01 GENERAL

- A. The rights and remedies afforded the Port by this Contract are to be considered as cumulative and are in addition to and not in limitation of any rights and remedies otherwise available to the Port under law. The pursuit of any remedy by the Port shall not be construed to bar the Port from the pursuit of any other remedy in the event of similar, different, or subsequent breaches of this Contract.
- **B.** The rights reserved or possessed by the Port to take any action with respect to the Project shall not give rise to any duty on the part of the Port to exercise any such right for the benefit of the Contractor, Subcontractor, Sub-subcontractor, Supplier, or any other person.
- C. The Contract shall not be assigned in whole or in part by the Contractor without the prior consent of the Port. To the maximum extent permitted by law, involuntary assignment of the Contract caused by the Contractor being adjudged bankrupt, assignment of the Contract for the benefit of the Contractor's creditors, or appointment of a receiver on account of the Contractor's insolvency shall be considered as a failure to comply with the provisions of the Contract and subject to the termination provisions contained herein.

G-10.02 NO WAIVER OF PORT'S RIGHTS

A. No action, delay in acting, or failure to act by the Port shall constitute a waiver of any right or remedy of the Port or be held to reduce any amount owed to the Port by the Contractor. Nor shall such action, delay, or failure to act constitute an approval or acquiescence in any breach or defect in Work, materials, or equipment. Likewise, delay or failure of the Port to act upon or enforce any provision of this Contract shall not constitute a waiver of such provision or otherwise prejudice the right of the Port to enforce such provision at any subsequent time. No provision of this Contract shall be held to be waived, modified, or deleted except as expressly stated in a Change Order.

- **B.** The Port shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the Substantial Completion, Physical Completion or Final Acceptance of the Work and payment therefore from showing the true amount and character of the Work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate or certificate is untrue or was incorrectly made, or that the Work or materials do not conform in fact to the requirements of the Contract.
- C. Neither the inspection, measurement, estimate, certificate, Substantial Completion, Physical Completion, Final Acceptance, nor any payment for the whole or any part of the Work, nor any extension of time, nor any possession or use of the Work taken or made by the Port, shall operate as a waiver by the Port of any provision of the Contract or of any rights, remedies, or damages herein provided for, or bar recovery of any money wrongfully or erroneously paid to the Contractor.

G-10.03 PORT'S RIGHT TO STOP THE WORK FOR CONTRACTOR NON-PERFORMANCE

- **A.** If the Contractor fails to perform the Work in accordance with the Contract Documents, fails to correct Non-Conforming Work as required by Paragraph G-04.24, or fails to comply with any requirement of the Contract, the Port may order, in writing, except for stoppages related to safety or security which may be issued orally, that the Contractor stop all or any portion of the Work until the cause for such order is eliminated.
- **B.** In the event of an order to stop work arising from any such failure, the Contractor shall not be entitled to any increase in the Contract Time or Contract Sum, nor to any damages or relief from liability, on account of such order to stop work.

G-10.04 PORT'S RIGHT TO SUSPEND WORK

- A. The Engineer may direct the Contractor in writing to suspend all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of the Port. The Contractor shall, subject only to protecting the work as may either be directed by the Port or required under G-04.25.C., immediately comply with such directive. The Contractor shall resume the suspended Work when so directed by the Engineer.
- B. If the performance of all or any part of the Work is suspended for an unreasonable period of time (1) by an act of the Port in the administration of this Contract, or (2) by the Port's failure to act within the time specified in this Contract (or within a reasonable time if not specified), the Contractor may be entitled to an adjustment in the Contract Sum or Contract Time, provided that:
 - 1. The Contractor submits a Notice of Event and Request for Change Order in accordance with the requirements of the Contract Documents;
 - 2. The Port directive results in an increase in the time required for, or in Contractor's cost properly allocable to, the performance of any part of this Contract; and
 - 3. The Port directive was not caused by Contractor's default or other act or omission within the control or responsibility of Contractor.

However, no adjustment shall be made under this clause for any suspension, deferral, or interruption to the extent that performance would otherwise have been impacted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this Contract.

- C. The Contractor may be entitled to recovery unabsorbed home office overhead, but only in the event of a suspension in which all or substantially all of the work is stopped. The Contractor must, in any event, comply with Paragraphs G-04.34 and G-05.02. It is the Contractor's responsibility to demonstrate that a suspension decreased its stream of direct costs against which to assess a percentage of home office overhead for reimbursement, and the Contractor could not reassign workers to other work, or pursue (e.g. bid, negotiate) other work as a replacement for that Work which is suspended. The burden of proof for not being able to reassign workers or pursue replacement work rests with the Contractor. The following, non-exclusive list of items may never be recovered in home office overhead:
 - Legal fees
 - 2. Advertising, promotional, and marketing cost
 - 3. Travel expenses
 - 4. Penalty fees such as, late charges, tax penalties, bad debt cost, etc.
 - Personal expenses
 - Direct cost
 - 7. Field overhead cost
 - 8. Small tools (that portion not covered in change order markup can be claimed)

G-10.05 PORT'S RIGHT TO PERFORM THE WORK ITSELF

If the Contractor fails to perform all or any portion of the Work in accordance with the Contract Documents or fails to correct Non-Conforming Work, the Port, without prejudice to any other rights it may have, may correct the failure using its own or other work forces, and issue a Change Order to deduct from the Contract Sum the cost incurred by the Port in taking the corrective action (including all additional administrative costs incurred by the Port in doing so).

G-10.06 PORT'S RIGHT TO PERFORM DISPUTED WORK

If a dispute arises between the Contractor and separate contractors retained by the Port to perform work on or about the Project Site as to their respective responsibility for performance of any Work or either, including cleaning up as required by the Contract Documents of either, for accomplishing coordination or doing required cutting, filling, excavating or patching as required by the Contract Documents of either, the Port may carry out such work and charge the cost thereof to the Contractor and other contractors responsible therefore as the Port shall determine to be just.

G-10.07 PORT'S RIGHT TO WITHHOLD PAYMENT

- A. The Port has the right to withhold payment otherwise due the Contractor if and so long as the Contractor does not meet any of its obligations under this Contract. The Engineer will notify the Contractor of the reasons for any amounts withheld and the remedy required.
- **B.** The Contractor shall be paid monies earned by fulfilling its responsibilities under this Contract, less the 5 percent retention required by 60.28.011 RCW. Monies shall not be considered earned if any of the following conditions applies:
 - 1. The Work for which the Contractor is claiming payment was not performed in accordance with the Contract;

- 2. The Contractor's pay request does not contain the required documentation or is otherwise not in conformance with the requirements of this Contract;
- 3. There is a good faith dispute over all or a portion of the amount due, in accordance with 39.04.250 RCW;
- 4. Failure of the Contractor to make payments owed to Subcontractors, or for labor, materials, or equipment;
- 5. Failure of Contractor to submit Schedule(s), Schedule(s) of Value or updated any schedules as required by the Contract;
- 6. Failure to prosecute progress of the Work in a timely manner or failure to take necessary steps to regain time or deliver the Work in the prescribed Contract Time;
- 7. Failure to comply with Contract safety requirements;
- 8. Imposition of any liquidated damages under the Contract; or
- 9. Non-Conforming Work.
- C. In the event the Port withholds all or a part of a payment for deficiencies in either performance, or in a payment request, the Port will notify the Contractor in accordance with RCW 39.76. The Contractor shall have the right to correct all deficiencies that are the basis for the withholding and resubmit the pay request at any time for reconsideration.

G-10.08 TERMINATION FOR DEFAULT

- **A.** The Port may terminate the Contract following written notice to the Contractor and its Surety:
 - If the Contractor disregards the authority of the Port or refuses or fails to prosecute the Work with such diligence as will ensure its completion within the original Contract Time and any extensions of time which may have been granted to the Contractor by Change Order or otherwise;
 - 2. If the Contractor is bankrupt, insolvent or its financial condition impairs its ability to perform, or if it makes a general assignment for the benefit of creditors, or if the Contractor or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the Contractor, or if a trustee or receiver is appointed for the Contractor or for any of the Contractor's property on account of the Contractor's insolvency, and the Contractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within ten (10) days of receipt of a request for assurance from the Port;
 - 3. If the Contractor disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction over the Contractor, the Work, or the Project Site;
 - 4. If the Contractor performs Work which deviates from the Contract, and neglects or refuses to correct rejected Work; or
 - 5. If the Contractor otherwise violates in any material way any provisions or requirements of the Contract.

- B. Once the Port determines that sufficient cause exists to terminate the Contract, the Port shall give written notice to the Contractor and its Surety indicating that the Contractor is in breach of the Contract and that the Contractor is to satisfactorily remedy the breach within ten (10) days after the notice is sent. In case of an emergency such as potential damage to life or property as determined by the Engineer, the response time to remedy the breach after the notice may be shortened. If the remedy does not take place to the satisfaction of the Port within ten-day period, the Engineer may, by serving written notice to the Contractor and Surety either:
 - 1. Transfer the performance of the Work from the Contractor to the Surety; or
 - 2. Terminate the Contract and at the Port's option prosecute it to completion by Contract or otherwise. Any extra costs or damages to the Port shall be deducted from any money due or coming due to the Contractor under the Contract.
- **C.** If the Engineer elects to pursue one remedy, it will not bar the Engineer from pursuing other remedies on the same or subsequent breaches.
- D. Upon receipt of a notice that the Work is being transferred to the Surety, the Surety shall immediately enter upon the premises and take possession of all materials, tools and appliances for the purpose of completing the Work included under the Contract and employ by Contract or otherwise any person or persons satisfactory to the Engineer to finish the Work and provide the materials without termination of the Contract. Such employment shall not relieve the Surety of its obligations under the Contract and the payment and performance bonds required under the Contract. If there is a transfer to the Surety, payments on estimates covering work subsequent to the transfer shall be made to the extent permitted under law to the Surety or its agency without any right of the Contractor to make any claim.
- E. If the Engineer terminates the Contract, the Contractor shall not be entitled to receive any further payments on the Contract until all the Work contemplated by the Contract has been fully performed. The Contractor shall bear any extra expenses incurred by the Port in completing the Work, including all increased costs for completing the Work, and all damages sustained, or which may be sustained, by the Port by reason of such refusal, neglect, failure, or discontinuance of Work by the Contractor. If liquidated damages are provided in the Contract, the Contractor shall be liable for such liquidated damages until Substantial Completion of the Work, including a reasonable charge for the engineering, managerial and administrative costs incurred by the Port. After all the Work contemplated by the Contract has been completed, the Engineer will calculate the total expenses and damages for the completed Work. If the total expenses and damages are less than any unpaid balance due the Contractor, the excess will be paid by the Port to the Contractor, If the total expenses and damages exceed the unpaid balance, the Contractor and the Surety shall be jointly and severally liable to the Port and shall pay the difference to the Port.
- F. In exercising the Port's right to prosecute the completion of the Work, the Port shall have the right to exercise its sole discretion as to the manner, method and reasonableness of the costs of completing the Work. In the event the Port takes bids for remedial work or completion of the project, the Contractor shall not be eligible for the award of such contracts.
- **G.** In the event the Contract is terminated, the termination shall not affect any rights of the Port against the Contractor. The rights and remedies of the Port under this termination clause are in addition to any other rights and remedies provided by law or under this

- Contract. Any retention or payment of monies to the Contractor by the Port will not release the Contractor from liability. The clauses of the contract shall remain in full force and effect until completion of the termination proceedings. Warranties, extended warranties, for work completed or partially completed shall continue as though a termination had not occurred.
- H. If, after notice of termination for Default, it is determined for any reason that the Contractor was not in default under the provisions of the Contract, or that the Contractor was properly entitled to an extension of time under the Changes provisions of the Contract, the rights, obligations, and remedies of the parties shall be the same as if the Contract had been terminated for convenience.

G-10.09 TERMINATION FOR CONVENIENCE

- **A.** Upon ten (10) days' written notice to the Contractor, the Port may, at its convenience and without cause, terminate all or part of the Contract.
- **B.** If the Port terminates the Contract or any portion thereof for convenience, Contractor shall be entitled to be paid for:
 - The Adjusted Contract Work executed in conformance with the Contract and completed prior to the date of the termination set forth in the Port's notice together with the reasonable cost of terminating any agreements for the supply of materials and/or equipment specially ordered for the Project prior to the date of termination; and
 - 2. Overhead and profit for Adjusted Contract Work actually performed in conformance with the Contract and accepted by the Port prior to the date of termination, at a rate not to exceed the percentage amount set forth in the Contract; and,
 - 3. The term "Adjusted Contract Work" as used herein means the Contract Work as adjusted by any additive or deductive Change Order executed by the parties or otherwise made effective prior to the effective date of the termination.
- C. Termination for convenience shall not modify, alter or in any way convert the rights or remedies (if any) of Contractor with respect to any request for revision to the Contract Sum or Contract Time pending at the time of the termination, all of which shall be made in accordance with Paragraphs G-04.34 and G-05.02. Without limiting the foregoing, the termination for convenience shall not convert any such request that is pending into no-fault or assumed liabilities of the Port. Following any termination for convenience, therefore, Contractor's rights or remedies (if any) to any extra compensation, change in the Contract Sum or additional Contract Time for any request pending at the time of termination for convenience shall be continue to be decided in accordance with the same Contract provisions, legal rules, defenses and burdens of proof that would apply but for the termination for convenience.
- D. Except as provided for herein, the Contractor shall not be entitled to any other costs or damages whatsoever (including without limitation profit and overhead on the terminated Work). The total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments.
- E. If it appears that the Contractor for any cause or reason would have incurred a loss on the entire Contract had it been completed, the Port shall not reimburse Contractor any profit or overhead for the Adjusted Contract Work completed and shall reduce the settlement to reflect the indicated rate of loss.

- **F.** If the payments made by the Port prior to the effective date of the termination exceed the reasonable cost of the Adjusted Contract Work, the Port shall at its option be entitled to a credit for the overpayment. The Contractor shall cooperate with any audit the Port elects to conduct pursuant to the terms of the Contract.
- **G.** Title to all Work performed at the time of termination shall be transferred to the Port upon payment therefore. The clauses of the Contract shall remain in full force and effect until completion of the termination proceedings. Warranties, extended warranties, for work completed or partially completed shall continue as though a termination had not occurred.

G-10.10 DAMAGES FOR UNEXCUSED DELAYS BY THE CONTRACTOR

- A. The Contractor recognizes that any unexcused delay by the Contractor in the prosecution and completion of the Work will cause inconvenience and expense to the Port, its lessees, and other users of Port facilities. The Contractor further acknowledges that unexcused delays in the prosecution and completion of the Work may obstruct air, water, or other traffic, interfere with and delay business and commerce, or expose the Port to possible claims of direct and consequential damages from third parties. Additionally, such delays may cause the Port to incur substantially increased costs of administration, engineering, supervision and inspection in connection with the completion of the Work.
- B. It is recognized that it will be impracticable and extremely difficult to ascertain and determine the actual damages, as generally described above, that the Port will suffer as a result of an unexcused delay by the Contractor in achieving a particular Milestone. In such circumstances where specifically provided for in the Supplementary Conditions, the Contractor shall be liable to the Port for liquidated damages, in the amount set forth in the Supplementary Conditions for a particular Milestone, for each day following the contractually required deadline for such Milestone. Neither this Subparagraph nor any amounts specified in the Supplementary Conditions as liquidated damages shall be considered to be a penalty, it being the express agreement of the Contractor and the Port that the liquidated damages provided shall be a reasonable approximation of actual damages to be suffered by the Port in the event of an unexcused delay.
- C. The liquidated damages amount shall be deducted from any monies due or coming due to the Contractor and shall be the Port's exclusive monetary remedy for the specific, stated Milestone delay for which such liquidated damages are assessed. However, the liquidated damages are designed to compensate the Port only for the specific, stated delay, shall not in any way release the Contractor from any further or other obligation and liability with respect to Contractor's performance of the Contract, and do not preclude or reduce the Port's legal right to pursue other remedies related to or arising out of the delay for which liquidated damages are assessed. Without limiting the generality of the foregoing, any stated liquidated damages specifically shall not limit the Port's ability to perform work, withhold payment and/or terminate for default as provided in Paragraphs G-10.05, G-10.07 and G-10.08 and, in the event of any termination for default, the Port's monetary remedy includes (in addition to the continued assessment of liquidated damages) all excess costs of re-procurement and completion.
- D. If the Supplementary Conditions do not provide for liquidated damages (as provided in Subparagraph B of this Paragraph), the Contractor shall be subject to liability for the actual damages (including but not limited to the items set forth in Subparagraph A) suffered by the Port as a result of unexcused delays in the Substantial Completion, Physical Completion, or any other Milestone associated with the Work.

ARTICLE G-11 BONDS AND INSURANCE

G-11.01 PERFORMANCE BOND

The Contractor shall furnish a duly executed Performance Bond upon a form furnished by the Port within ten (10) days following receipt of the Notice of Intent To Award. The bond shall be executed by a surety or sureties who are acceptable to the Port and must appear on the Treasury Department's most current list (Circular 570 as amended), have an underwriting limitation of not less than the Contract total, and be authorized to transact business in the State of Washington. In addition, the surety or sureties must be rated "A-, FSC (6)", or higher by A.M. Best Rating Guide. The penal amount of the bond shall be in an amount equal to the Contract Sum and conditioned upon the faithful performance of the Contract by the Contractor within the Contract Time.

G-11.02 PAYMENT BOND

The Contractor shall also furnish a duly executed Payment Bond upon a form furnished by the Port, within ten (10) days following receipt of the Notice of Intent To Award. The bond shall be executed by a surety or sureties who are acceptable to the Port and must appear on the Treasury Department's most current list (Circular 570 as amended), have an underwriting limitation of not less than the Contract total, and be authorized to transact business in the State of Washington. In addition, the surety or sureties must be rated "A-, FSC (6)", or higher by A.M. Best Rating Guide. The penal amount of the bond shall be in an amount equal to the Contract Sum and conditioned upon the payment by the Contractor to all laborers, mechanics, Subcontractors, materialmen and all persons who shall supply the Contractor, Subcontractors or Sub-Subcontractors with provisions, equipment, or supplies for the performance of the Work covered by this Contract.

G-11.03 FAILURE TO PROVIDE BONDS

- **A.** Failure to provide timely Performance and Payment Bonds will result in Non-Award and forfeiture of any Bid bond or Security to the Port.
- B. The Port may, from time to time, require the Contractor's Surety (or Sureties) to appear and qualify themselves upon the bonds. If such Surety (or Sureties) refuse or fail to so appear and qualify, or if the Port determines that such Surety (or Sureties) are insufficient to fulfill the terms and conditions of the bonds, then the Port shall require the Contractor to furnish additional Surety (or Sureties) as may be necessary to fulfill the terms and conditions of the bonds.
- C. If the Contract Sum is increased by Change Order, the Contractor agrees to provide the Port with such additional Performance and Payment Bonds as required to assure performance of any additional Work and payment for the labor and materials incidental to such Work.

G-11.04 CONTRACTOR LIABILITY INSURANCE

- A. Within ten (10) days after receipt of the Notice of Intent to Award, Contractor shall provide liability insurance as specified in the Supplementary Conditions. All such insurance shall be kept in force until Final Acceptance or longer to the extent so required by the Contract.
- B. The insurance requirements shall specifically apply to any Subcontractors and Sub-Subcontractors (of any tier), and Contractor shall specifically require such coverage under the terms of any Subcontract entered for completion of any portion of the Work.

- C. No Limitation of Liability. The limits of insurance required in this Contract or as carried by Contractor shall not limit the liability of Contractor nor relieve Contractor of any obligation hereunder. Any specified limits of insurance shall not be construed as to relieve the Contractor from liability in excess of the limits. The minimum limits indicated are not a representation or warranty that the Port has assessed the risks that may be applicable to the Contractor under this Contract.
- D. Other Insurance. The insurance required within this Contract may not fully cover the Contractor for any indemnity obligations the Contractor may have to the Port or others. It is Contractor's obligation to review the scope of the Contract with Contractor's insurance agent or broker to address coverage needs for Contractor. The Port reserves the right to modify and add insurance requirements if the scope of the Contract changes during the course of construction and/or if the Contract is amended or extended beyond original agreed upon completion date.
- E. Contractor is fully responsible for providing evidence of current compliance with the Revised Code of Washington, Title 51 Industrial Insurance for Contractor and all subcontractors. Contractor shall submit a current worker's compensation certificate as issued by the Washington Department of Labor and Industries that shows the status of Contractor's worker compensation account prior to commencing work on any portion of the Contract.
- F. Contractor is fully responsible for ascertaining whether any federal industrial insurance laws apply to this agreement such as from the Federal Employers' Liability Act, the Jones Act, or the United States Longshore and Harbor Workers Compensation Act. Contractor shall comply with all required workers compensation requirements whether through purchase of commercial insurance or as a qualified self insurer relative to federal industrial insurance laws.
- G. Waiver of Subrogation. Without affecting any other rights or remedies, Contractor (for itself and on behalf of anyone claiming through or under it by way of subrogation or otherwise) hereby waives any rights it may have against the Port, its officers, agents and employees (whether in contract or in tort) on account of any loss or damage occasioned to Contractor arising out of or incident to the perils required to be insured against within the Contract. Accordingly, Contractor shall cause each insurance policy required by Contract to further contain a waiver of subrogation clause. The effect of such release and waiver of the right to recover damages shall not be limited by the amount of insurance carried or required or by any deductibles applicable thereto.
- H. If the Contractor is required to make corrections to the Work after Final Acceptance, the Contractor shall obtain at its own expense, prior to the commencement of any corrective work, such insurance coverage as is required by Paragraph G-11.04 and the Supplementary Conditions of this Contract. Coverage shall be maintained until the corrections to the Work have been accepted by the Port.
- I. Safety and Abatement of Fire and Other Hazards. Contractor agrees to evaluate and follow up on all recommendations and requirements of Contractor's insurance company as they pertain to safety and loss control while work is being performed under this Contract.

G-11.05 PORT PROPERTY INSURANCE

A. The Port maintains annual property insurance that includes course of construction coverage for projects involving both new and existing assets. Unless otherwise specified

- in the Supplementary Conditions, this Project is covered under the Port's property insurance policy in effect on the Bid Opening Date. The Port, the Contractor, and all Subcontractors are covered as insureds under this property insurance policy to the extent of their insurable interest in the property that is part of the Project.
- B. This property insurance covers the Port on an "all-risk" basis, subject to the exclusions and other policy provisions set forth in the actual policy. Terms, limits of insurance, exclusions, and covered perils are specifically subject to review and revision during annual renewal, which occurs on or about July 1. The current policy is available for review and examination by the Contractor and other interested parties at the Port of Seattle.
- C. Any deductibles and exclusions of the policy that may apply to a given project under construction and for those projects for which the Contractor is considered an "insured" on the policy shall be the responsibility of and for the account of the Contractor. The current deductible for work under construction, defined in the policy as Course of Construction, is \$50,000. If the deductible increases at the annual renewal or otherwise during the course of the Project, the Port shall be responsible for the deductible to the extent (but only to the extent) it exceeds this amount.
- **D.** The Contractor may, at its option, elect to purchase additional insurance to cover deductibles, policy exclusions, or non-scheduled projects.
- E. The property policy, including course of construction coverage, may change as to coverage, limits, exclusions, which property and projects are scheduled for coverage purposes, and who is defined as an "insured" at any time. If any change occurs during the course of the Project that will negatively modify or limit the coverage otherwise available to Contractor on the Bid Opening Date, the Port shall promptly, and in no event more than ten (10) days following the Port learning of any such change, notify the Contractor of such changes.
- F. By way of description, but not limitation, the insurance provided under this Paragraph does not cover, nor does it relieve the Contractor of liability for, the following types of losses: defective workmanship or materials; damage or loss to Contractor's equipment; liability of the Contractor for personal injury or property damage as set forth elsewhere in this Contract; infidelity of Contractor's employees; and mechanical breakdown. These exclusions are not exhaustive, and the Contractor shall examine the Port's current policy to determine the precise extent of coverage provided under this Paragraph.

End of Document

SC-00.01 - GENERAL

The following supplements shall modify, delete or add to the General Conditions. Where any article, paragraph or subparagraph in the General Conditions is supplemented by one of the following paragraphs, the provisions of such article, paragraph or subparagraph shall remain in effect and the supplemental provisions shall be considered as added thereto. Where any article, paragraph or subparagraph in the General Conditions is amended, voided or superseded by any of the following paragraphs, the provisions of such article, paragraph or subparagraph not so amended, voided or superseded shall remain in effect. The supplements referenced within this section are identified with the same number and title used for that topic in the General Conditions.

SC-01.02 - DEFINITIONS

Add the following:

WSDOT Standard Specifications: The 2016 Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction, including Divisions 2 through 9 and excluding all of Division 01, as amended and issued by WSDOT and the Washington State Chapter of the American Public Works Association. The Specifications apply only to performance and materials and how they are incorporated into the Work. The legal/contractual relationship sections and the measurement and payment sections do not apply to the Contract.

WSDOT Standard Plans: The 2016 Washington State Department of Transportation (WSDOT) Standard Plans as amended and issued by WSDOT.

SC-04.01 - EXAMINATION OF THE SITE OF WORK AND CONTRACT DOCUMENTS

Add the following paragraph:

D. After Award and prior to Notice to Proceed, the Contractor shall meet at the site with the Engineer and jointly perform a site assessment survey. The purpose of this survey will be to accurately document the existing conditions of the site prior to the Contractor commencing work. The survey shall include documentation of Port mitigation and wetland areas, conditions at the project work area limits, conditions in areas to be restored and/or planted, and adjacent right-of-way conditions. The Contractor shall videotape the site assessment survey and submit a copy of the video to the Engineer. The extent of the survey area shall include the project limits, adjacent right-of-ways, plus any areas outside the project limits as deemed necessary by the Engineer.

SC-04.06 - PREVAILING WAGES TO BE PAID

Add the following to paragraph B:

The most current Apprenticeship Wage Rates can be obtained from the State of Washington Department of Labor and Industries' website at: https://fortress.wa.gov/lni/wagelookup/ApprenticeWageLookup.aspx.

SC-04.12 - PERMITS, LICENSES, FEES AND NOTICES

Add the following to paragraph A:

1. Army Corps of Engineers Nationwide Permits: Nationwide permits have been obtained and paid for by the Port of Seattle.

- Nationwide Permit No. 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (Appendix B).
- Nationwide Permit No. 33 Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No.NWP-2016-0314-WRD) (Appendix C).
- c. Nationwide Permit No. 38 Cleanup of Hazardous and Toxic Waste administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (Appendix D).

2. Contractor Obtained Permits:

- a. Right-of-Way Haul Permit and Right-of-Way Use Permit: For transport of material over right-of-ways owned by the City of SeaTac, and right-of-way use and/or closure, permits are required from the City of SeaTac.
- b. The specifications restrict accessing the Site from City of Burien right-of-ways, and therefore no permits are required from the City of Burien for this project.
- a. Electrical permit: An electrical permit is required for some of the work within this contract.
- b. Ecology Permit: For the operation of an onsite concrete batch plant, a permit is required with the Washington State Department of Ecology.
- c. Puget Sound Clean Air Agency: For the operation of an onsite concrete batch plant, a permit is required with the Puget Sound Clean Air Agency. Contractor shall obtain any other permits necessary to operate a batch plant.
- d. Other permits for the project include but may not be limited to the following:

SEAPORT/REAL ESTATE PROJECTS				
Type of Permit	Issuing Agency			
Welding and Hot Work Permits	Port of Seattle Fire Department			

3. Licenses

a. The Contractor is responsible for obtaining a Business License from the appropriate jurisdiction in which the Work is being performed.

4. Contractor Notifications

- a. The Contractor shall notify the following agencies prior to start of construction:
 - 1) Puget Sound Clean Air Agency
 - 2) State of Washington Department of Labor & Industries
 - 3) Port of Seattle Fire Department

SC-04.14 - SAFETY

Add the following paragraph:

- I. Entry Into Confined Spaces
 - Work on this project may include entry into confined spaces as defined by 296-809 WAC.

- 2. The Contractor shall read and follow the requirements of the Port of Seattle's Confined Space Entry Program.
- 3. Confined spaces on this project include, but are not limited to, utility vaults, utility manholes, utility trenches, excavations.
- 4. The Contractor is obligated to identify any other confined spaces that may be involved in the project and immediately notify the Engineer if they have not been properly identified.
- 5. The Contractor shall provide the Engineer two (2) copies of its Confined Space Entry program, and shall fulfill all requirements as stated in the Port of Seattle's Confined Space Entry Program, as found in the Capital Improvement Project Safety and Health Manual. In addition, a "Contractor Confined Space Entry Certificate" shall be signed by the Contractor and submitted to the Engineer prior to any entry into confined spaces.
- 6. No work will be allowed to start in a confined space until the required submittals have been made.
- 7. Should the Contractor employ sub-contractors to work in confined spaces it shall be the Contractor's responsibility to submit the required documentation for each sub-contractor.
- 8. Delays caused by failure to submit the required documentation will not be considered a reason for extension of Contract time.

SC-04.24 - CORRECTION OF WORK

Add the following paragraph.

It is expressly understood that the furnishing of a Manufacturer's Certificate of Compliance will not relieve the Contractor from the obligation to replace materials found defective after delivery to the project. All materials used on the basis of a Manufacturer's Certificate of Compliance may be sampled and tested at any time. Any material not conforming to the requirements will be subject to rejection whether in place or not

SC-05.06 - REVIEW OF BID DOCUMENTATION [PORT TO CONFIRM INCLUSION/DELETION OF THIS SECTION]

Add the following paragraph:

- H. This Contract requires the escrow of Bid Documentation from the Contractor.
- I. Within ten (10) days of execution of the Contract, the Contractor shall submit the required Bid Documentation in a securely sealed package, clearly labeled "Bid Documentation" along with the Contractor's name, contract number and project title. The Contractor may also provide a lockable box, no wider than 14 inches, no longer than 16 inches, and no taller than 10 inches (so that it will fit in a standard legal size file cabinet), to which Contractor may hold the key/combination. The Port will place the Bid Documentation inside of a secure file cabinet belonging to the Port. The key to the file cabinet will be held and controlled by the Senior Manager, Public Works Contracting, and access to the Bid Document shall be only as provided in G-05.06. The date and time of delivery of the sealed package shall be coordinated with the CPO construction Office, which is located at 2529 S. 194th St, Seattle, WA 98188.

- J. The Port may require escrow of a Subcontractor's Bid Documentation at any time up to and including ten days following the date on which the Port is notified of the particular subcontract award. The categories of the subcontracted Work would typically be HVAC, plumbing, electrical and other (as designated by the Port). The Subcontractor's Bid Documentation shall be submitted in same manner as required for the Contractor. The date and time of delivery of the sealed package shall be coordinated with the CPO Construction office.
- K. The submittal shall contain, in addition to the Bid Documentation, an affidavit signed under oath by the individual(s) authorized by the Contractor/Subcontractor(s) to execute the respective bid proposal. The affidavit shall list each bid document with sufficient specificity to ensure that all of the Bid Documentation listed in the affidavit has been submitted. The affidavit shall show that the affiant has personally examined the Bid Documentation and that the affidavit lists all of the documents used by the Contractor (or Subcontractor) to determine the bid for this project and that all such Bid Documentation have been enclosed in the sealed package.

SC-07.01 - CONTRACT TIME

This Contract includes the following Milestones:

- A. Contractor must achieve Substantial Completion within 645 days of the Contract Execution Date.
- B. Contractor must achieve Physical Completion within 60 days of Substantial Completion.
- C. Contractor must achieve Partial Substantial Completion of the Work conducted during Season 1 by October 31, 2017.

SC-08.01 - ALL PAYMENTS SUBJECT TO APPLICABLE LAWS

Replace existing paragraph in GC 08.01 with the following:

All payments made to the Contractor under this Contract are subject to all laws applicable to the Port in general and to this Contract in particular. Without limiting the generality of the foregoing, the law does not permit the Port to make any payments to the Contractor under this Contract until proper and approved Statements of Intent to Pay Prevailing Wages have been filed with the Port, as required by Paragraph G-04.06 and Section 39.12.040 of the Revised Code of Washington. Progress Payment Retention: In accordance with RCW 60.28.011 (b) public improvement contracts funded in whole or in part by federal transportation funds must rely upon the Contract bond as referred to in chapter 39.08 RCW for the protection and payment of (i) The claims of any person or persons arising under the Contract to the extent such claims are provided for in RCW 39.08.010; and (ii) the state with respect to taxes, increases, and penalties incurred on the public improvement project under Title 50, 51, and 82 RCW which may be due. The Contract bond must remain in full force and effect until, at the minimum, all claims filed in compliance with chapter 39.08 RCW are resolved. In accordance with 49 CFR 26.29, the Port obligates the Contractor to make prompt and full payment of any retainage kept by the Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed including Prevailing Wages. The Contractor must report to the Port the release of said retainage to the subcontractor at that time.

SC-08.06 - EARLY USE, SUBSTANTIAL COMPLETION; PHYSICAL COMPLETION

Add the following subparagraph to paragraph C:

- 3. The Contractor shall provide, as a part of the Contract and at no additional cost to the Port, operation and maintenance services for the following item after partial Substantial Completion and through Substantial Completion of the Contract:
 - a. Maintenance of all plantings in accordance with Section 32 90 00 Planting, including all watering, weeding, fertilizing and mulch replacement necessary to keep the plant materials in a health growing condition and to keep the planted areas neat and orderly throughout the Maintenance Period. The Maintenance Period ceases on the date Notice of Physical Completion or Certification of Substantial Completion, whichever is last.

Add the following if the project is subject to RCW 60.28.11 as a Federally-funded project and no retainage will be withheld. Delete if not applicable. [PORT INPUT NEEDED ON INCLUSION/DELETION]

SC-10.07 - PORT'S RIGHT TO WITHHOLD PAYMENT

Replace paragraph B with the following:

- B. The Contractor shall be paid monies earned by fulfilling its responsibilities under this Contract, with no retention withheld per RCW 60.28.011. Monies shall not be considered earned if any of the following conditions applies:
 - 1. The Work for which the Contractor is claiming payment was not performed in accordance with the Contract:
 - 2. The Contractor's pay request does not contain the required documentation or is otherwise not in conformance with the requirements of this Contract;
 - 3. There is a good faith dispute over all or a portion of the amount due, in accordance with 39.04.250 RCW;
 - 4. Failure of the Contractor to make payments owed to Subcontractors, or for labor, materials, or equipment;
 - 5. Failure of Contractor to submit Schedule(s), Schedule(s) of Value or updated any schedules as required by the Contract;
 - 6. Failure to prosecute progress of the Work in a timely manner or failure to take necessary steps to regain time or deliver the Work in the prescribed Contract Time;
 - 7. Failure to comply with Contract safety requirements;
 - 8. Imposition of any liquidated damages under the Contract; or
 - 9. Non-Conforming Work.

Add the following paragraph:

D. In accordance with 49 CFR 26.29 the Port obligates the Contractor to make prompt and full payment of any retainage kept by the Contractor to the Subcontractor within 30 days after the subcontractor's work is satisfactorily completed including Prevailing Wage requirements.

SC-10.10 - DAMAGES FOR UNEXCUSED DELAYS BY THE CONTRACTOR

This Contract includes the following Liquidated Damages:

The liquidated damages for failure to achieve Substantial Completion Milestone shall be xxx dollars (\$xxx) per day.

The liquidated damages for failure to achieve Physical Completion Milestone shall be xxx (\$xxx) per day.

The liquidated damages for failure to achieve Partial Substantial Completion Milestone of the Work associated xx Milestone shall be xxx dollars (\$xxx) per day.

SC-11.04 - CONTRACTOR LIABILITY INSURANCE

- A. Within ten (10) calendar days after receipt of the Notice of Intent to Award, the Contractor at Contractor's own expense shall satisfy the insurance required in this section. All insurance is to be kept in force for the life of this Contract and until the Work is completed.
 - 1. Insurance shall be procured from primary and excess insurance carriers, whether admitted or on surplus lines basis, that have an A.M. Best's rating of no less than "A Minus FSC VI" or higher. Should a rating of an insurance company fall below an A.M. Best's rating of "A Minus FSC VI", the Contractor shall replace the insurance company with a company that can meet the required rating at its expense.
 - 2. Within ten (10) days after receipt of the Notice of Intent to Award, the Contractor shall submit to the Port a Certificate of Insurance and all Additional Insured Endorsements (where specified below) and any Waivers of Subrogation (where specified below); and primary and non-contributory endorsements (where specified below) which shows that it has obtained the required coverage(s).
 - The Port reserves the right to reject any insurance policy or endorsement as to company, form, or substance. Upon rejection, Contractor shall replace with an acceptable policy and/or endorsement form within ten days of notice to Contractor from Port.
 - 4. The Port's acceptance of the Contractor's certificate of insurance and endorsements does not waive the Contractor's obligation to comply with the insurance requirements of this Contract.
 - 5. Certificates of Insurance shall list each deductible or retention in excess of \$25,000 for each line of required insurance coverage.
 - 6. 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 these Supplementary Conditions.

- 7. Contractor is solely responsible for all deductibles or self-insured retentions under any required policy of insurance, including any deductibles that are triggered by claims that the Port may submit to Contractor's insurance carrier as an additional insured on any policy. This deductible responsibility extends to deductibles that are owed on any policy of insurance following termination of the Contract if the event or cause of loss occurred during the term of the Contract.
- 8. Contractor shall provide evidence of insurance including certificates of insurance, endorsements and waivers, where required, annually up until the Contract is closed out or on a more frequent basis if requested by the Port.
- 9. Any insurance deductible or retention that equals or exceeds \$1 million is considered a form of self-insurance which requires written approval from the Port. See Section "C" below.
- 10. The Port reserves the right to request a copy of Contractor's and Sub-Contractor's policies of insurance at any time throughout this project, with thirty days advance written notice to Contractor. Upon such notice and request by the Port, Contractor shall submit electronic copies to the Port along with all applicable endorsements for each policy of insurance requested.
- 11. Cancellation/Non-Renewal - Insurance is to remain current throughout the term of the Contract. The Port shall receive documentation annually to include a certificate of insurance and all applicable endorsements to validate the insurance required herein has been purchased and is compliant with the Contract requirements within 10 (ten) days of each insurance renewal. Should any insurance required herein be terminated, cancelled, or not renewed, the Contractor will have five (5) days to obtain replacement insurance from the date of the termination, cancellation or non-renewal. Allowing the insurance to lapse, or the failure to maintain required insurance is a material breach of this Contract.
- 12. Contractor may meet required insurance limits for commercial general liability and automobile liability insurance through a combination of primary and umbrella or excess insurance. Excess and coverage insurance must include the specific components of the underlying required coverage identified below. Any insurance the Port carries will apply strictly on an excess and noncontributory basis over any applicable insurance the Contractor carries.
- B. Contractor shall procure and maintain insurance in the following minimum form and limits.
 - 1. Commercial General Liability insurance on ISO Form CG 00 01 10 01 (or equivalent) for third party property damage, bodily injury, personal and advertising injury, and medical payments in an amount which is not less than \$5 million per occurrence. If the policy contains an annual general aggregate limit, this limit shall be no less than \$10 million per year. The insurance shall cover liability arising from premises, operations, independent Contractors, products completed operations, personal and advertising injury, and liability assumed under an insured contract. The Contractor's insurance shall be primary and non-contributory with respect to any insurance the Port carries and apply separately to each insured. The Port shall be named as an additional insured for all work arising out of Contractors Work, including "on-going" and "completed operations" using ISO Endorsement Form CG 20 26 11 85 or an equivalent endorsement approved by the Port.

- a) Completed operations coverage shall continue for **one (1) year** beyond project completion and include the Port as an additional insured. The additional insured coverage shall remain as primary insurance with respect to any other insurance or self-insurance the Port may carry. Evidence of coverage shall be provided by means of a Certificate of Insurance and additional insured endorsement during this time frame.
- b) If the policy contains a general aggregate limit, the policy shall be endorsed such that the limits of insurance that are specified herein shall apply separately to this Contract and an appropriate endorsement forwarded to the Port to validate this.
- c) The Port shall be named as an additional insured, by endorsement, for all work performed by Sub-Contractors.
- 2. Automobile Liability Insurance. Contractor shall provide business automobile insurance for all owned, non-owned, hired, leased, borrowed, or rented vehicles, including trailers, in an amount not less than \$DNA million per occurrence for all driving on the ramp of the aircraft non-movement area and \$DNA million on the movement area of the air operations area at Seattle-Tacoma International Airport. Minimum limits elsewhere are \$5 million per occurrence to include all areas outside of the Air Operations Area.
 - a) The Port shall be included on the policy form as an insured; or an additional insured endorsement shall be provided.
 - b) Where applicable and as required by the Motor Carrier Act of 1980 (which requires evidence of mandatory liability insurance coverage for transportation of hazardous materials), attach a copy of an MCS-90 Endorsement to the commercial auto liability policy for all operations in which the Contractor is to remove and transport any hazardous or other regulated material onto or off the project site.
- 3. Contractor's Pollution Liability. Contractor shall provide this coverage, with the Port named as an additional insured on the policy, with limits of not less than \$5 million per occurrence. The coverage shall extend to sudden and accidental incidents, claims, damages, and losses, including defense costs that arise from the operations of the Contractor as it relates to the services to be performed under this Contract and that occur on or after the notice to proceed (NTP) and extending to include all claims occurring during the project, including claims from incidents occurring during the project period but reported after project completion, for up to 60 days following the end of the project.
 - a) The policy shall cover incidents, claims, damages, and losses, at the project site, including clean-up and remediation as well as third party bodily injury, third party property damage, and clean-up/remediation, both on and off the project site.
 - b) The Contractor shall have the discretion to determine which of its sub-contractors, if any, shall purchase this coverage, and to what limit if applicable.

- 4. Protection and indemnity coverage in the amount of **\$DNA million per occurrence** for all work that the Contractor is to complete in (or on) water to include, such as, but not limited to, dredging, dock improvements, crane work, tower improvements, fender piles, and pile driving; **and** in which the Work will utilize floating docks or platforms, skiffs, boats, vessels, or any other equipment that floats.
 - (1) Coverage shall be written on marine vessel form issued by the American Institute of Marine Underwriters such as the SP-23, the SP-38, and the American Institute of Marine Underwriters (equivalent forms accepted upon review). Insurance coverage shall provide liability coverage for the vessel owners, and the Port of Seattle as an additional assured, on a scheduled basis for each vessel, platform, skiff, boat, or other watercraft which is to be used in the completion of the project whether or not the vessel, dock/platform, skiff, boat, or watercraft is actually owned by the Contractor.
 - (2) Liability coverage shall also extend to property such as materials and equipment to be installed into the project should the property be damaged in part or in whole while on board, or during the course of being loaded or unloaded from the vessel.
 - (3) The Port of Seattle shall be listed as an additional assured on all policies which apply to the vessel(s) used to complete the Work.
- C. Employers Liability Insurance (Washington Stop Gap Liability). The Contractor shall provide Washington State Stop Gap employers' liability insurance. This shall be in an amount of \$1 million per accident and \$1 million per disease using ISO CG 04 42 11 03 or equivalent. This coverage may be provided by endorsing the primary commercial general liability policy. An endorsement evidencing this coverage must be submitted to the Port, along with the other insurance documentation.
- D. Self-Insurance. Any Company wishing to use a program of self-insurance to meet any or all of the required pollution liability, general liability and/or automobile liability insurance (excluding Industrial Insurance as defined in Title 51 of the Revised Code of Washington) must receive written approval from the Port during the bidding process and prior to the award of the Contract. If professional liability insurance is required as part of this Contract, a commercial policy must be purchased and self-insurance will not be an option in lieu of a professional liability practice or project specific policy. Self-insurance as applicable to this Contract means that the Contractor is itself or through an owned insurance captive acting as though it were the insurance company providing the liability insurance required under the Contract, including self-insured retentions that exceed \$1 million. The Port agrees that it will reasonably consider any request by Contractor to use a program of self-insurance to meet required insurance limits.
 - 1. If Port agrees to Contractor's self-insurance program, Contractor agrees to waive any subrogation rights it may have against the Port for any and all claims it pays or is required to pay, due to loss or damage resulting from the risks for which Contractor has elected to self-insure.

- In the event that the Port permits Contractor to self-insure and an event or claim occurs for which a defense and/or coverage would have been available from the insurance company, Contractor shall specifically: (i) undertake the defense of any such claim, including a defense of the Port, at Contractor's sole cost and expense; and (ii) use its own funds to pay any claim or replace property or otherwise provide the funding which would have been available from insurance proceeds but for such election by Contractor's to self-insure.
- 3. To evaluate a Contractor's program of self-insurance, Contractor during bidding shall disclose to the Port its lines it seeks to use self-insurance, a statement of company net worth, statement of worth from any insurance captives used to fund claims (if applicable), and a general statement that explains how it manages third party claims within the self-insured line of coverage and/or the self-insured retention, including claims from additional insured's.
- E. Contractor is fully responsible for providing evidence of current compliance with the Revised Code of Washington, Title 51 Industrial Insurance for Contractor and all subcontractors. Contractor shall submit a current worker's compensation certificate as issued by the Washington Department of Labor and Industries that shows the status of Contractor's worker compensation account prior to commencing work on any portion of the Contract.
- F. Other Insurance. The insurance required within this Contract may not fully cover the Contractor for any indemnity obligations the Contractor may have to the Port or others. It is Contractor's obligation to review the scope of the Contract with Contractor's insurance agent or broker to address coverage needs for Contractor. The Port reserves the right to modify and add insurance requirements if the scope of the Contract changes during the course of construction and/or if the Contract is amended or extended beyond original agreed upon completion date.
- G. The insurance requirements required within this section shall apply to any Subcontracts that the Contractor may enter into for completion of Contract unless otherwise specifically indicated within the insurance requirements.
- H. No Limitation of Liability. The limits of insurance required in this Contract or as carried by Contractor shall not limit the liability of Contractor nor relieve Contractor of any obligation hereunder. Any specified limits of insurance shall not be construed as to relieve the Contractor from liability in excess of the limits. The minimum limits indicated below do not indicate that the Port has assessed the risks that may be applicable to the Contractor under this Contract.
- I. Waiver of Subrogation. Without affecting any other rights or remedies, Contractor (for itself and on behalf of anyone claiming through or under it by way of subrogation or otherwise) hereby waives any rights it may have against the Port, its officers, agents and employees (whether in contract or in tort) on account of any loss or damage occasioned to Contractor arising out of or incident to the perils required to be insured against within the Contract. Accordingly, Contractor shall cause each insurance policy required by Contract to further contain a waiver of subrogation clause. The effect of such release and waiver of the right to recover damages shall not be limited by the amount of insurance carried or required or by any deductibles applicable thereto.

- J. If the Contractor is required to make corrections to the Work after the Work has been given Notice of Completion, the Contractor shall obtain at its own expense, prior to the commencement of any corrective work, such insurance coverage as is required by Section G-11.04 and the Supplementary Conditions of this Contract. Coverage shall be maintained until the corrections to the Work have been accepted by the Port.
- K. Safety and Abatement of Fire and Other Hazards. Contractor agrees to evaluate and follow up on all recommendations and requirements of Contractor's or Port's insurance company as they pertain to safety and loss control while work is being performed under this Contract.

End of Document
End of Document

PART 1 GENERAL

- 1.01 CIVIL RIGHTS GENERAL (Reference: 49 USC § 47123):
 - A. GENERAL CIVIL RIGHTS PROVISIONS
 - The Contractor agrees that it will comply with pertinent statutes, Executive
 Orders and such rules as are promulgated to ensure that no person shall,
 on the grounds of race, creed, color, national origin, sex, age, or handicap
 be excluded from participating in any activity conducted with or benefiting
 from Federal assistance.
 - 2. This provision binds the contractors from the bid solicitation period through the completion of the Contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.
 - 3. This provision also obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport through the Airport Improvement Program, except where Federal assistance is to provide, or is in the form of personal property; real property or interest therein; structures or improvements thereon.

In these cases the provision obligates the party or any transferee for the longer of the following periods:

- the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or
- b. the period during which the airport sponsor or any transferee retains ownership or possession of the property.

1.02 CIVIL RIGHTS - TITLE VI ASSURANCES:

- A. Compliance with Nondiscrimination Requirements. During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest agrees as follows:
 - 1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Statutes and Authorities, 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 CFR 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 sponsor or the Federal Aviation Administration 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 sponsor or the Federal Aviation Administration, 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 sponsor will impose such contract sanctions as it or the Federal Aviation Administration 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 sponsor or the Federal Aviation Administration 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 sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.
- B. Title VI List of Pertinent Nondiscrimination Authorities. (Source: Appendix E of Appendix 4 of FAA Order 1400.11, Nondiscrimination in Federally-Assisted Programs at the Federal Aviation Administration)
 - 1. During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- 2. 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);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- 4. 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);
- 5. 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 CFR part 27;
- 6. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- 7. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- 8. 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);
- 9. Titles II and III of the Americans with Disabilities Act of 1990, 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 CFR 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);
- 11. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination 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;
- 12. 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);

- 13. 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).
- 1.03 COMPLIANCE WITH RESOLUTION 3668 NON-DISCRIMINATION AND EQUAL EMPLOYMENT REQUIREMENTS:
 - A. The Contractor shall ensure that the requirements of Resolution 3668 (Attachment 1) are contained in each and every subcontract, binding each and every Subcontractor and Supplier at all tiers to comply with Resolution 3668.

1.04 SUBCONTRACTOR BIDDING REPORT REQUIREMENTS:

- A. Each Bidder shall sign and include with its Bid a copy of the "Subcontractors Bidding Report" (Attachment 2). Requirements for the Subcontractors Bidding Report are provided in Attachment 3 Equal Employment Opportunity Submittal Requirements.
- B. This information is collected to develop a statistic on EEO program effectiveness. The intent is to collect data for future disparity studies and to better understand the composition of the work force ready, willing and able to perform for purposes of our Federal DBE requirements (49 CFR 26.45 2 (c) 2).
- C. Bidders should list all prospective subcontractors who were contacted and asked to provide a subcontract bid for this project.

1.05 ELECTRONIC PAYROLL INFORMATION REPORTING REQUIREMENTS:

- A. The Contractor shall submit to the Port, for each of its subcontractors at any level, the end date "date work completed". The information shall be submitted monthly on the EPI (Electronic Payroll Information) form (Attachment 4).
- B. The Contractor shall submit to the Port, Employee and Work Hour Records in an electronic format EPI (Attachment 4), for itself and every subcontractor required to submit payroll information, for each week from the time work starts on the project until completion. Employee Record and Work Hour record electronic files (EPI) shall be in weekly increments but submitted monthly to the CPO Systems Administrator. The electronic records shall be submitted in one of the following ways:
 - 1. A comma-delimited flat file should be uploaded to the Port at https://www2.portseattle.org/app/cds. Web based submitters should contact the CPO Systems Administrator for training and access at Mailbox-CDS@portseattle.org. Alternative arrangements may be made with the approval of the Manager, Contract Services if unable to comply with the web based submittal process. Alternative methods include submitting a comma-delimited flat file on a CD-ROM sent to the Port of Seattle (see Attachment 5 EPI Contractor Submittal Instructions and Attachment 6 Import File Specifications and Work Codes to be used for this option).
 - 2. An EPI spreadsheet uploaded to the Port at https://www2.portseattle.org/app/cds. Contact the CPO Systems
 Administrator for training and access at Mailbox-CDS@portseattle.org.
 Specifically the Contractor shall be responsible for downloading the spreadsheet file from the Internet, filling out the spreadsheet file(s) for each required contractor and subcontractor, transferring the filled out form file(s)

- to be uploaded to the Port at https://www2.portseattle.org/app/cds. The web address for the spreadsheets and forms is https://hosting.portseattle.org/prms. Alternative arrangements may be made with the approval of the Manager, Contract Services; if unable to comply with the web based submittal process. Alternative methods include submitting on a CD-ROM sent to the Port of Seattle.
- 3. Confidentiality issues (regarding employee Social Security Numbers, etc.) preclude the submission of the spreadsheet or flat file formats (options 1 and 2) via attachment to an electronic mail (email) message or utilizing the Port's Construction Document Management System (CDMS).
- C. In addition to the electronic payroll information, the Contractor, and each of his subcontractors, shall submit an "Affirmation" and/or "Certificate of No Work Performed". The "Affirmation" shall be submitted monthly. No Work Performed may be reported weekly, submitted monthly on the EPI form (Attachment 4). If not a "Certificate of No Work Performed" which shall be submitted monthly, shall be required for each week that no work is performed by the Contractor or its subcontractors.
- D. Failure of the Contractor to supply sufficient and timely reports as required or determined by the Port's Sr. Manager, Public Works Contracting or the Resident Engineer shall be grounds for the withholding of the amount of money estimated to produce the required reports from the contract progress payments.

1.06 REPORTING OF AMOUNTS PAID TO ALL SUBCONTRACTORS

- A. The Contractor shall submit, with each application for progress payment, a completed form titled "Monthly Amounts Paid to All Subcontractor Participants". A sample is appended to this Section (Attachment 7). The Contractor, Subcontractors and all lower tier Subcontractors shall include Subcontractors and Suppliers data on this form. The purpose of this document is to support data collection needed to evaluate the requirements outlined in Document 00 70 00 General Conditions G-04.05 (prevailing wages) and G-08.04 (certification of payment).
- B. The Contractor shall submit, upon request, copies of canceled checks paid to all such Subcontractors. If requested, check copies shall be submitted within ten (10) working days.

1.07 PAYROLL INFORMATION

- A. The Port's authority to request and collect certified payrolls is derived from WAC 296.127.320. Upon request by the Engineer, the Contractor and each of its subcontractors shall be required to submit certified payrolls. Failure to meet this requirement would be a violation of RCW 39.12.050.Payroll Retention Every Contractor (including every subcontractor) must keep a complete set of its own payrolls and other basic records such as time cards, tax records, evidence of fringe benefit payments, in accordance with WAC 296.127.320, for at least 3 years from the date of acceptance of the public works project by the Port.
- B. Payroll Inspection In addition to submitting payroll information to the CPO Systems Administrator, every Contractor (including subcontractors) must make its own copy of the payrolls and other basic records available for review or copying to any authorized representative of the Port of Seattle.

C. Electronic Payroll Information (EPI) - EPI shall be submitted simultaneously with the monthly payment request, typically for the same time period payment is requested for. EPI submissions provide data to support key labor agreements, like the Project Labor Agreement (PLA) and Apprenticeship programs. Should the Contractor fall behind, fail to provide correct data and/or data format, or completely fail to comply; some of, but not limited to, possible remedies are: correcting the EPI submittals with Port staff and back charging the Contractor by deductive unilateral change order; or engaging a construction accounting firm to audit/review the delinquent Contractor's payroll records to extract the required information in the required format with a resulting deductive unilateral change order will be made to compensate the added expense to the Port.

PART 2 NOT USED

PART 3 NOT USED

PART 4 NOT USED

End of Document

List of Attachments:

Attachment 1	Resolution 3668
Attachment 2	Subcontractor Bidding Report
Attachment 3	Equal Employment Opportunity Submittal Requirements
Attachment 4	Electronic Payroll Information (EPI) Form – Example Screen Shot "Employee Report" and "Work Hours Report"
Attachment 5	EPI Contractor Submittal Instructions
Attachment 6	Import File Specifications and Work Codes
Attachment 7	Monthly Amounts Paid to All Subcontractor Participants Form

RESOLUTION NO. 3668, as amended

A RESOLUTION of the Port Commission of the Port of Seattle repealing Resolution No. 3166 and restating Port policy relating to the prohibition of discrimination and equal employment in employment and subcontracting by Port of Seattle contractors, subcontractors, consultants, and suppliers and establishing policies, procedures, and requirements for compliance.

WHEREAS, the Port of Seattle Commission adopted Resolution No. 3166 on July 26, 1994, wherein a policy of commitment to Employment Opportunity and Affirmative Action was incorporated and adopted in the exhibit thereto; and

WHEREAS, changes to Resolution No. 3166 are required to comply with current state law and facilitate administration and clarify Port requirements to contractors, subcontractors, consultants and suppliers doing business with the Port;

NOW THEREFORE, BE IT RESOLVED by the Port Commission of the Port of Seattle that Resolution No. 3166 is repealed; and

BE IT FURTHER RESOLVED that this Resolution shall not prohibit the Port from implementing any policies and procedures regarding non-discrimination or equal opportunity where the law requires or allows;

BE IT FURTHER RESOLVED that the following statement of policy, procedure and requirement is adopted by the Port Commission for the purpose of establishing uniformity and standardization and confirming compliance with respect to non-discrimination and equal employment opportunity in employment and subcontracting by contractors, subcontractors, consultants and suppliers bidding and being awarded contracts for work projects of the Port of Seattle.

NON-DISCRIMINATION POLICY.

It is the basic policy of the Port of Seattle to provide equal opportunity to the users of all Port services and facilities and all contracting entities. Specifically, the Port will not tolerate discrimination against any persons on grounds of age, race, color, national origin/ancestry, ethnicity, religion, disability, Family Medical Leave Act (FMLA) use, pregnancy, sex/gender, sexual orientation, whistleblower status, military affiliation, marital status, workers' compensation use, transgender status, political beliefs, or any other protected status, as guaranteed by local, state and federal laws. The equal opportunity principles in employment

and subcontracting described in this policy shall apply to the Port's employees, customers, consultants, contractors, subcontractors, and suppliers to the extent possible as required by law.

CONTRACT REQUIREMENTS.

- Non-Discrimination Policy. The Port's policy as stated above requiring nondiscrimination and equal opportunity in employment and subcontracting for contractors, subcontractors, consultants, and suppliers shall be included in all Port contracts.
- 2. Submission of a properly executed contract constitutes a contractual commitment to the terms of this Resolution.

EQUAL OPPORTUNITY ASPIRATIONAL GOALS.

Contractors, subcontractors, consultants and suppliers are encouraged to create a workplace that reflects the diverse communities in which we live and work and to ensure non-discrimination and equal opportunity in employment and subcontracting through application of the following guidelines:

<u>Recruiting</u>. Recruitment efforts, both oral and written, will ensure non-discrimination and equal opportunity in application and hiring practices, policies and procedures. An official may be designated to monitor employment related activity to ensure non-discrimination and equal employment opportunities.

<u>Self-Assessment</u>. Employment policies and procedures may be reviewed, including review of hiring and training practices and policies, performance evaluations, seniority policies and practices, job classifications, and job assignments, to assure that they provide for non-discrimination and equal employment opportunities.

<u>Training</u>. On-the-job training opportunities and/or participation in training programs that include non-discrimination and equal opportunity in employment and subcontracting may be developed.

Workforce Composition. Workforce composition statistics may be provided to the Port on a voluntary basis to corroborate compliance with this Resolution.

Union Cooperation. Contractors, subcontractors, consultants, suppliers and tenants are encouraged to work with union representatives, including, but not limited to representatives from maritime and transportation unions, to meet the goals of this resolution.

VIOLATIONS.

Any violation of this Resolution shall be deemed a breach of a material provision of the contract between the Port and the contractor, consultant or supplier. Such breach shall be

grounds for cancellation, termination, or suspension, in whole or in part, of the contract by the Port.

ADOPTED b	y the Port Commission of the Port of Seattle this 13 day of	
November	, 2012, and duly authenticated in open session by the signatures of the	;
Commissioners votin	ng in favor thereof and the seal of the Commission duly affixed.	

TOM ALBRO

GAEL TARLETON

BILL BRYANT

ROB HOLLAND

PORT COMMISSION



SUBCONTRACTOR BIDDING REPORT

Project Name: _____

			Project Number:					
Prime Contractor: Prime Contractor Address: Form Completed By:								
SUBCONTRACTOR SOLICITATION (NAME)	SUBCONTRACTOR'S ADDRESS	TYPE OF WORK	WA STATE UBI	DBE Y/N	MBE Y/N	WBE Y/N	DATE FIRM ESTABLISHED	ANNUAL GROSS RECEIPTS RANGE(1)
	uracy of the foregoing information: background and financial status of firms versions of the public Disclosure Act		Signature				Date mation unless its	s disclosure is

(1) Please enter the code associated with the range of annual gross receipts as follows: (a) less than \$500,000; (b) \$500,000-\$1 million; (c)\$1-2 million; (d) \$2-5 million; (e) \$5-7 million, (g) over \$10 million.

EQUAL EMPLOYMENT OPPORTUNITY (EEO) SUBMITTAL REQUIREMENTS

SUBMITTAL CODES

(Indicates who the report is required from; the Contractor is responsible for providing all submittals)

- P Required from Contractor
- S Required from all Subcontractors
- M Required from all Material Suppliers with P.O.s over \$10,000.00

	WHEN REQUIRED										
DOCUMENT	With Bid	Prior to Execution of Contract	Prior to NTP	On-going During Contract	Prior to Final Inspection	Prior to Release of Retainage					
Certificate of Non-segregated Facilities*		P*	S*, M*								
Letter Naming Subcontractors and Suppliers			P, (S for lower tiers)								
Electronic Employee Records and Work Hour Records files, (run weekly, submit monthly) For Federal Projects: In addition, submit Certified Payrolls (run daily, submit weekly)				P, S	Р	Р					
Affirmation or Certificate of No Work Performed (submit monthly)				P, S	Р	Р					
Copies of Canceled Checks to Subcontractors/Suppliers (upon request)				Р	Р	Р					
Monthly Amounts Paid to All Subcontractor Participants				P, (S for lower tiers),	Р	Р					

Rev. 04/03/15

^{*} for Federally Funded projects only



Work Hours Report

Electronic data may be submitted only via CDS Web or disk. DO NOT E-MAIL

Contractor Name:		_		N	o Work Performe	ed	
Date Submitted:			1st Week	2nd Week	3rd Week	4th Week	5th Wee
Prepared By:	NV	WP Start Date:					
Phone:	NV	WP End Date:					
Email:		-					
Contractor Sub To:							

Date Work
Completed:

NOTE: This date may be utilized by the ID / Access Office to determine Badge duration / expiration.

Please use formats illustrated in the shaded Sample Line below

Touco doc Torrilato	Week Ending	SSN Last Four				Hourly BASE Rate		Hourly Benefit Rate			
Contract Number	Date	Digits 1234	Last Name	First Name	Hours	BASE Rate	Hours Type REG	Rate	Classification	Trade	SS Version
MC-0312345	1/1/2004	1234	John	Doe	40.00	20.10	REG		Journey-worker	Asbestos	
											1.01H



Employee Report

Electronic data may be submitted only via CDS Web or disk. DO NOT E-MAIL

Contractor Name:	
Date Submitted:	
Prepared By:	
Phone:	
Email:	
Contractor Sub To:	

			Please use format	s illustrate	d in the	shaded Sar	nple Line be	elow				Require	ed for apprentices			
Contract Number	SSN Last Four Digits	Last Name	First Name	Mid. Init.	Gender	Ethnicity	Zip Code	On Job Start Date	Trade	Classification	Local	App ID	Apprentice Registration Date	SS Version		
MC-0312345	1234	Doe	John	S	М	White	98101	12/31/2004	Carpenters	Apprentice	47	1234567	01/01/04			
														1.02E		
											<u></u>					
				1	1						1			1		



Office of Contractor Data Electronic Payroll Information (EPI) Report

1. General Instructions:

 a. Port of Seattle Electronic Payroll Information (EPI) Report Submit payroll report monthly showing weekly pay period detail.

b. EPI Template

Send in native Excel format.

Do not alter template.

Do not alter format.

Do not scan.

c. Affirmation of Correctness (WA State form F700-065) with signature. Submit one Affirmation of Correctness per submittal.

May be scanned.

- d. No Work Performed (NWP) included on Work Hours Report (Sheet 2).
- e. Date Work Completed noted on Work Hours Report

2. Employee Report (Sheet 1) Instructions:

a) Enter all current employees on this sheet – this is your baseline report. Add employees as they are hired, former employees need not be deleted.

Example: May 2005 One Employee, John Smith – baseline report

June 2005 Four Employees, including John Smith – list three new employees on the report, John Smith need not be included. July 2005 Three Employees, all previously reported – no employee report need be filed.

b) Column Information.

Contract #: Enter the complete Port of Seattle contract number and letters.

SSN: Enter the last 4 digits of the employee's Social Security Number.

Last Name: Enter the employee's last name. First Name: Enter the employee's first name.

Mid Name: Enter the employee's middle name or initial.

Gender: Enter M or F.

Ethnicity: Select from the pull-down menu.

Zip Code: Enter the employee's 5 or 9 digit zip code.

Trade: Select from the pull-down menu. Classification: Select from the pull-down menu.

Local: Enter Local #

App ID: For Apprentices Only – enter complete Apprentice ID#.

3. Work Hours Report (Sheet 2) Instructions:

a) One line of entry per Hourly Rate, Hours Type, Classification or Trade performed per employee during the pay period.



Office of Contractor Data Electronic Payroll Information (EPI) Report

Work Hours Report (Sheet 2) Instructions (cont'd):

b) Work Hours and No Work Performed can now be submitted on this one report. Examples: Work hours pay period end dates 01/08/2005, 01/15/2005. No work performed beginning 01/16/2005, ending 01/31/2005. OR Work hour pay period end dates 01/08/2005 and 01/22/2005 and No work performed 01/15/2005 and 01/31/2005

c) Column Information.

Contract Number: Enter the complete Port of Seattle contract number.

Pay Period End Date: Enter last day of pay period.

SSN: Enter the last 4 digits of the employee's Social Security Number.

Last Name: Enter the employee's last name.
First Name: Enter the employee's first name.
Hours: Enter hours work during pay period.

Hourly Rate: Enter hourly BASE pay rate.
Hours Type: Select from the pull-down menu.

Hourly Benefit Rate: Enter hourly benefit rate.

Trade: Select from the pull-down menu. Classification: Select from the pull-down menu.

Port of Seattle Contractor Data System Import File Specifications Version 2.0 – Revised October 31, 2014

This document describes the format and specification for employee and work hour data files, which are acceptable for import into the CDS. The intent is to allow data submitters to export data directly from their electronic payroll systems and then, if necessary, manipulate it to fit the following requirements. The specifications described in the document are subject to revision.

Employee Data - comma separated variable file with following fields in same order: Version, Contract Number, SSN, Zip Code, Last Name, First Name, Middle Initial, Gender, Ethnicity, Zip Code, Start Date, Trade, Classification, Local, App ID, Apprentice Start Date

Field Specifications - Employee Data

	Employee Data
Field Name	Format
Version	1.02E (not editable)
Contract Number	MC-###### 20 Character limit
SSN	#### (last 4 digits)
Last Name	30 Character limit
First Name	30 Character limit
Middle Initial	30 Character limit
Gender	M or F for (Male or Female)
Ethnicity	Valid ethnicity code from ethnicity listing
Zip Code	####-### (5 or 9 digits)
Start Date	MM/DD/YYYY
Trade	Valid craft codes from trade listing.
Classification	Valid class codes from classification listing.
Local	10 Character limit
App ID	######
Apprentice Start	MM/DD/YYYY
Date	
Contractor Name	50 Character limit

Work Hours Data – comma separated variable file with following fields in same order: Version, Contract Number, Period Ending Date, SSN, Last Name, First Name, Hours, Hourly Rate, Hours Type, Hourly Benefit Rate, Wages, Classification, Trade

Field Name	Format
Version	1.01H (not editable)
Contract Number	MC-###### 20 Character limit
Period Ending Date	MM/DD/YYYY
SSN	#### (last 4 digits)
Last Name	30 Character limit
First Name	30 Character limit
Hours	Numeric to 2 decimal places (no commas)
Hourly Rate	Numeric to 2 decimal places (no commas or \$)
Hours Type	Valid hours type codes from hours type listing.
Hourly Benefit Rate	Numeric to 2 decimal places (no commas or \$)
Wages	Numeric to 2 decimal places (no commas or \$)
Classification	Valid class codes from classification listing.
Trade	Valid trade codes from trade listing.
Contractor Name	50 Character limit

Asbestos Abatement Workers Boilermakers Boilermakers Boilermakers Boilermakers Brick and Marble Masons BRCK Building Service Employees BSE Cabinet Makers (In Shop) Carpenters CARP Cement Masons Divers and Tenders DVTD Dredge Workers Drywall Applicator Drywall Applicator Drywall Tapers Electrician Fixture Maintenance Workers Electricians - Inside Electricians - Inside Electricians - Motor Shop Electricians - Motor Shop Electronic & Telecommunications Technicians Elevator Constructors Elevator Constructors Elevator Constructors Elevator Constructors FPCP Fence Erectors Flaggers Glaziers Heat & Frost Insulators and Asbestos Workers Heating Equipment Mechanics Hed Hod Carriers and Mason Tenders Industrial Engine And Machine Mechanics Industrial Engine And Machine Mechanics Inspection/Cleaning/Sealing-Sewer & Water Systs-RC Insulation Applicators Insulators Insulation Applicators Insulation Appl	Trade Name	Code
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Refrigeration & Air Conditioner MechanicsRACMRoofersROOF		
Roofers ROOF		

Sign Makers & Installers (Electrical)				
Sign Makers & Installers (Non-Electrical)	SMNE			
Soft Floor Layers	SFL			
Solar Controls For Windows	SCW			
Sprinkler Fitters (Fire Protection)	SPKF			
Stage Rigging Mechanics (Non Structural)	SRM			
Stone Masons	STM			
Street And Parking Lot Sweeper Workers	STSW			
Surveyors	SURV			
Telecommunication Technicians				
Telephone Line Construction - Outside	TLCO			
Terrazo Workers and Tile Setters	TWTS			
Tile Setters	TILS			
Tile, Marble & Terrazzo Finishers	TMTF			
Traffic Control Stripers	STRP			
Truck Drivers	TRCK			
Well Drillers & Irrigation Pump Installers	WDIP			
Shipbuilding & Ship Repair	SHIP			

Ethnicity Listing

Ethnicity Description	Race Code
Black	В
Hispanic	Н
Native American	N
White	W
Asian Pacific Islander	AP
Asian Subcontinent	AS
Other	0

Class Listing

Class Description	Class Code
Apprentice	Α
Journey-worker	J
Foreperson	F

Hours Type Listing

Hours Type Descriptions	Hours Type Code
Regular	REG
Time and a half	R+1/2
Double Time	DBL
Triple Time	TRP
Other	OTHR
Shift Differential	SHFT
Holiday	HOL



MONTHLY AMOUNTS PAID TO ALL SUBCONTRACTOR PARTICIPANTS

This form is to be completed by the Prime and all Subcontractors that hire lower tier subs and suppliers.

Contractor (Primo/Subcontractor): Stroot Addro							
Contractor (Prime/Subcontractor):			Street Address:				
City: Sta			ate: Zip:			For the Month Of:	
Contract Number:			Work Project Number:				
Project Title:							
Prime Bid Price			Dollar Amount of the DBE Goal at Award				
Subcontractor Participant (Name And Address)	Date Paid	DBE, MBE WBE	Ethnic Code	Contract Type	Specification Section	Amount Paid This Mont	Amount Paid h To Date
			bcontractor aterial Supplier			Total DBE Participation Achieved To Date	
						Total MBE Participation	
			t venture		Achieved To Date		
						Total WBE Achieved	Participation To Date
Comments CANCELLED CHECKS REQUEST.	UIRED		Attached				
□ Not available this report							
			Checks At	tached Are	For Previous	Reporting Pe	eriod
Signature			Title			D	ate

INSTRUCTIONS FOR COMPLETING THE MONTHLY AMOUNTS PAID TO ALL SUBCONTRACTOR PARTICIPANTS FORM

DUE MONTHLY AND AT END OF PROJECT

- A. Complete the form for each project, every month and at the end of the project. Each form should reflect payments made during the month and cumulative to date. At the end of the job, the form should reflect all payments made since the last form was submitted.
- B. The form is due in the Port's EEO office **on the 5th** of each month and at the end of the project. A company may be requested to submit forms for progress payments prior to the end of the quarter if there have been unusual circumstances. This would include: exceptionally large projects, companies or contractors having a poor record of EEO responsibility, refusal to submit timely reports, complaints, etc.
- C. The Contract Number is the number assigned to the Contract by the Port of Seattle. (Example: MC-0310234)
- D. The Work Project Number is the specification number assigned to the project by the Port of Seattle at the time that bids are advertised.
- E. The Project Title is the job title from the specifications, contracts, etc.
- F. The Contract Bid Price is the total amount for which the Contract was signed with the Contractor.
- G. The DBE Award Amount is the total dollar amount of the subcontractors' bids.
- H. Please enter one of the following into the Ethnic Code column.
 - C Caucasian
 - B Black
 - H Hispanic
 - A Asian American
 - I American Indian or Alaskan Native
 - O- Other
- I. Enter one of the following codes into the Contract Type column.
 - S Subcontractor
 - M Material Supplier
 - JV Joint Venture
- J. The Amount Paid This Month is to be the actual dollar amount disbursed to each participant from the 1st day to the last day of the month. This figure does not include any monies owing or retained at the time the form is signed.
- K. The Amount Paid to Date is the actual cumulative dollar amount disbursed to each participant from the beginning of the project and includes the amounts paid during the reporting month.
- L. Forms should be completed in ink or typed. Forms completed in pencil will be returned to the Contractor.
- M. All forms not properly completed will be returned to the Contractor for correction.
- N. Progress payments may not be released if the form is not received by the 5th of each month.

PART 1 GENERAL

- 1.01 Policy. The Port of Seattle (Port) promotes equitable opportunities for Small Contractors and Suppliers (SCSs) to participate in the performance of public works contracts. It is the intention of the Port that Contractors, Subcontractors, and Sub-subcontractors, shall afford equal small business opportunity while providing materials, supplies, and services for and to the Port. Rules for evaluating participation and utilization of SCSs are defined in this section.
- 1.02 <u>Inquiries and Information Regarding Certified SCS Firms</u>. Information about becoming a Certified SCS Firm, as well as a Directory of Certified Firms is available at:

http://info.kingcounty.gov/exec/contractreporting/Public/SCS/default.aspx

- 1.03 <u>Definitions</u>. The following definitions shall apply throughout this Section.
 - A. A "Certified SCS Firm" means a business that has been certified as an SCS by King County.

1.04 Requirements.

- A. <u>SCS Utilization Requirements</u>. The Bidder shall ensure that it subcontracts with Subcontractors, Sub-subcontractors and Suppliers for work, materials and supplies at least: **X% of the Total Bid Price to Certified SCS Firms** (Total Bid Price will NOT include alternates).
- B. <u>Supplemental Bidder Responsibility Criteria</u>. Compliance with the SCS requirements will be a supplemental bidder responsibility requirement. Bidders who fail to timely demonstrate commitment to the SCS utilization requirement will be rejected as not responsible.
 - Within 2 business days after bid opening, the Bidder shall submit documentation of their commitment. The Bidder shall provide a list; see Attachment 1 – Small Contractors and Suppliers Commitment Form that will identify: (1) name of the Subcontractor, Sub-subcontractor and/or Supplier and SCS Certification number; (2) brief description of the work; and (3) contract value of the subcontracted work.
 - 2. The Bidder and Certified SCS Firms shall cooperate with the Port and provide all requested information to the Port within the time specified.
 - a. A bidder will only be given limited opportunity and time to remedy any failure to demonstrate compliance with the utilization requirement.
 - b. If the bidder fails to supply the information within the time and manner specified, the Port may find the Bidder not responsible (RCW 39.04.350).
- C. <u>Evaluating & Calculating Certified SCS Firm Utilization</u>. For purposes of calculating the Bidder's SCS utilization, the Port will count the Bidder's identified Certified SCS Firm participation as follows:
 - 1. Utilization shall be calculated as a percentage of the Bidder's total bid price.
 - 2. If a Certified SCS Firm is the prime contractor, the total bid price will be counted and the SCS Utilization will be 100%.

- A Certified SCS Firm that is a subcontractor to the prime contractor may further subcontract a portion of the work. The Port will count the total value of the subcontracted work even if the Certified SCS subcontractor has non-Certified SCS firms doing portions of the work.
- 4. If a Certified SCS Firm is a supplier, the total price of the work performed (supplies) by the supplier will be counted.
- 5. The Port will round to the nearest tenth of a percent.
 - a. Example 1: Bidder A's total base bid price is \$100,000. Bidder A identified Certified SCS Firm Y to perform the mechanical work for a total value of \$10,000. The SCS utilization is 10% for Bidder A.
 - b. Example 2: Bidder B total bid price is \$100,000 and identified Certified SCS Firm Z to perform the mechanical work for the total value of \$9,999.99. The SCS utilization is 9.9999% and will be rounded up to 10%.
 - c. Example 3: Bidder C's total bid price is \$100,000 and it identified Certified SCS Firm Y to perform the mechanical work for a total value of \$9,900.00. The SCS utilization is 9.90% and will be rounded to 9.9%. Bidder C would not meet the utilization requirement.
- 6. Firms must be certified as SCS Firm at the time of bid opening.
- 7. Only Certified SCS Firms performing a commercially useful function according to custom and practice in the industry shall be counted.
 - a. A commercially useful function includes, but is not limited to, the performance of a distinct element of Work by a firm, which has the skill and experience as well as the responsibility of actually performing, managing, and supervising the Work using, its own work force, and resources.
 - b. No credit will accrue for a Certified SCS Firm acting merely as a passive conduit of funds to some other non-Certified SCS Firm.
 - c. A Certified SCS Firm that acts as a broker in a transaction shall not count towards the Bidder's SCS utilization requirement. A broker is a firm that does not, itself, perform, manage, or supervise the Work of its Contract or subcontract in a manner consistent with the standard and customary business practices for Contractors or Subcontractors in its line of business.
 - d. In order to verify that firms indentified as Certified SCS Firms qualify and will be included in the calculation, the Port may, at its discretion, undertake verification practices and/or request additional information.
- D. Substitution of Certified SCS Firms Prior to Award/Contract Execution
 - 1. If the bidder determines, before award/contract execution, that it is necessary to substitute a Certified SCS Firm, the Bidder shall notify the Port in writing of such intent.

E. SCS Requirements During Contract Performance

- Compliance. Contractor shall comply with the SCS utilization requirement.
 The Port will verify compliance with the requirement through the submission of monthly pay estimates (CDS system).
- 2. Substitution of Subcontractors After Contract Execution.
 - If the Contractor proposes to substitute a Certified SCS Firm with a different Certified SCS Firm, the Port will verify the proposed Certified SCS Firm's status.
 - b. If the Contractor proposes to substitute a Certified SCS Firm with a non-Certified SCS Firm, the Contractor shall demonstrate the steps it took to locate another qualified Certified SCS Firm and why it was unsuccessful in securing the services of a Certified SCS Firm. The Contractor will still be required to comply with the SCS utilization requirement; unless the Port, in its sole discretion, agrees to revise the SCS utilization requirement if the Contractor can demonstrate a sound basis for the substitution and that no other SCS Firms have the capacity and qualifications to perform the work.
 - c. The Port shall not be responsible for any costs resulting from substitution of Subcontractors.

F. Change Order.

- 1. The SCS utilization requirement will not apply to change orders that increase the Total Bid Price.
- 2. If the Total Bid Price is decreased as a result of a change order or adjustment to unit quantities <u>and</u> the work that was eliminated or reduced was subcontracted to a Certified SCS Firm, the SCS utilization requirement will be reduced to reflect the change.
- G. <u>Failure to comply with the SCS requirements</u>. The Port may use failure to comply with SCS utilization requirements as additional supplemental responsibility criteria on future procurements.

PART 2 NOT USED PART 3 NOT USED

PART 4 NOT USED

End of Document

List of Attachments

Attachment 1 Small Contractors and Suppliers Commitment Form



SMALL CONTRACTORS AND SUPPLIERS COMMITMENT FORM

Make copies as required

Bidder: Prime Name:							
Project Name:	2017 Lora Lake Apartments MTCA Remediation Projects						
Total Bid Price:	SCS Requirement: %						
SCS Firm	SCS Cert. Number	SCS Contract Value	Description of SCS Contract Work				
	Total						
Approved by Office of Social	Responsib	ility:	Date:				

Division 01

General Requirements

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

- A. The Contract Work will consist of remediation of the Lora Lake Apartments (LLA) Parcel located in King County, Burien, Washington, and the Lora Lake (LL) Parcel and Dredged Management Containment Area (DMCA) located in King County, Seatac, Washington. The site is collectively known as the Lora Lake Apartments Site. The remediation will be conducted under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D of the Revised Code of Washington (RCW) (Ecology, 2007), and the MTCA Cleanup Regulation, Chapter 173-340 of the Washington Administrative Code (WAC) as administered by the Washington Department of Ecology (Ecology). All applicable Federal, State, and local regulations shall be adhered to by the Contractor in addition to project-specific permits provided in Appendices A through E.
- B. The Work includes labor, materials, tools, equipment, supplies, testing, transportation services, and superintendence for the Contractor to perform, demolition, clearing and grubbing, excavation, disposal, backfilling, lake capping and filling, grading and surfacing, groundwater well decommissioning and installation, wetland rehabilitation, and all related Work at the Lora Lake Apartments Site. All workers with potential to contact existing site soils and Lake sediment are required to have HAZWOPER training. All construction activities will be implemented in accordance with a Contractor Health and Safety Plan.
- C. The base items of this Contract include the following general Work at the LLA Parcel:
 - 1. Installation and maintenance of sediment and erosion controls, clearing and grubbing, utility abandonment, demolition of existing asphalt and concrete foundations and structures, installation of trench safety systems, excavation dewatering, and water treatment.
 - 2. Excavation and off-site landfill disposal of Contaminated Soil that exceeds remediation levels within the Excavation Areas. Excavation Areas are gridded by excavation depth and are complex. These gridded areas were designed to remove all contamination while minimizing over excavation. The Contractor will develop an excavation approach consistent with their means and methods that balances the use of slope setbacks and shoring to minimize the quantity of material requiring landfill disposal.
 - 3. Excavation or grading of soil outside of the Excavation Areas for use as backfill for Excavation Areas.
 - 4. Grading to a new site elevation, placement of imported topsoil, construction of a bioswale, hydroseeding and fencing.
 - 5. Installation of a new catch basin, manhole and storm drain, with connection to a stub at South 152nd Street, installed by the City of Burien.
 - 6. A Port of Seattle owned property located directly south of the Lora Lake Apartments Parcel (LLA Parcel) will be available for staging, project office and site access.

- D. The base items of this Contract include the following general Work at the Lora Lake Parcel (LL Parcel):
 - 1. Installation and maintenance of sediment and erosion controls, clearing and grubbing, construction of a temporary access road, lake dewatering, and water treatment.
 - 2. Excavation and off-site disposal of Contaminated Soil that exceeds remediation levels within the Excavation Areas. After excavation, the areas will be backfilled, graded, and replanted.
 - 3. Excavation, placement of geotextile, capping, and filling of the northwest corner of the lake, where the existing storm drain and rock berm are located.
 - 4. Placement of a geotextile and carbon amended sediment cap and fill sand to immobilize sediment COCs in Lora Lake and associated water treatment. Following filling of the lake, a rehabilitated palustrine scrubshrub wetland will be constructed in its place. Rehabilitation includes construction of gravel drainage swales, installation of topsoil, and extensive planting at the former lake.
 - 5. Stabilization of the lake berm adjacent to Miller Creek and construction of a new wetland outlet at the lake's southern berm to discharge to Miller Creek.
- E. The base items of this Contract include the following general Work at the DMCA:
 - Installation and maintenance of sediment and erosion controls, clearing and grubbing, and construction of a temporary construction access and staging area to be used for work being conducted at the Lora Lake Parcel.
 - 2. Following completion of use by the Contractor for construction access and staging in Construction Season 2, grading of the DMCA and installation of a porous hot mix asphalt pavement wildlife barrier, crushed rock wildlife barrier, and planted filter strip.
- F. Construction on the LL Parcel will occur over 2 Construction Seasons. During Construction Season 1, Work on the LL Parcel will include site preparation and temporary access road construction, settling basin and rock berm excavation, sediment cap and fill placement within Lora Lake and stabilize the fill surface, and excavation of the areas of Contaminated Soil. Between Construction Seasons 1 and 2, the lake fill material will be allowed to settle. The Contractor will return to the LL Parcel in Construction Season 2 to place any additional fill needed to bring the site to final fill grade, install sediment cap monitoring wells, place wetland topsoils and drainage channel materials, perform final grading, place stabilizing materials, seeding and planting, and construct new wetland outlet to Miller Creek.
- G. Construction on the LLA Parcel may occur in Construction Season 1 or in Construction Season 2 and must be completed within one season.
- H. Stormwater from the LLA Parcel is currently piped to Lora Lake. Before ground is broken at the LLA Parcel, this stormwater may be rerouted to minimize inflow to Lora Lake during LL Parcel remedial actions. If the Contractor chooses to reroute this stormwater, the Contractor will construct a tight-lined system to divert the flow to discharge without treatment at acceptable downstream receiving locations as

- defined in Section 01 57 13 Temporary Erosion and Sediment Control Planning and Excavation. After ground is broken at the LLA Parcel, LLA Parcel stormwater will be handled as contaminated, and must be collected and treated.
- I. All stormwater generated within construction areas, including LLA Parcel stormwater following groundbreaking, and all water generated from excavation dewatering and lake dewatering, will be collected and treated. Treatment discharge will meet specified effluent limits. Water generated on the LLA Parcel can be infiltrated on the LLA Parcel following treatment. All other treated water shall be discharged to the "SR 518 Construction Stormwater Pond" for infiltration.
- J. The Contractor will provide water storage and sequence Work such that all treated water can be infiltrated at the LLA Parcel of the SR 518 Construction Stormwater Pond. Water that is unable to be infiltrated shall be trucked to off-site disposal.
- K. The Contractor will be required to establish survey layout and maintenance of all work areas. Port surveyors will complete the final survey and periodic progress surveys for their own record purposes.
- L. There are three infrastructure construction projects occurring adjacent to the site. These projects include realignment of the on-ramp to SR 518 from Des Moines Memorial Drive, construction of a new eastbound off-ramp from SR 518 to Des Moines Memorial Drive, and retrofitting of the City of Burien stormwater conveyance system to prevent the current system from traversing the LLA Parcel and discharging to Lora Lake. The City of Burien stormwater retrofit and the realignment of the on-ramp to SR 518 from Des Moines Memorial Drive are anticipated to be completed prior to this Project and project drawings reflect post-construction conditions of those projects. Work by WSDOT on the SR 518 off-ramp project may overlap with this Project, and is scheduled to begin no sooner than June 2017. The Drawings reference the 90% design for the SR 518 off-ramp project. When the 100% drawings for the SR518 off-ramp become available, they will be made available to the Contractor.
- M. Use of the Des Moines Memorial Drive right-of-way for construction work conducted under the Project will be required.

1.02 LOCATION

- A. The LLA Parcel is located within the City of Burien, at 15001 Des Moines Memorial Drive. The LL Parcel and DMCA are located across Des Moines Memorial Drive, both within the City of SeaTac.
- B. The Work to be conducted at the LL Parcel and the DMCA occurs near the Seattle-Tacoma International Airport, beneath the final approach lighting system at the north end of runway 16R/34L.
- C. Access to the site parcels are limited to the construction access routes as shown on the Drawings.
- D. The vegetation surrounding Lora Lake is part of the Miller Creek/Lora Lake/Vacca Farm Wetland and Floodplain Mitigation Area. Minimize damage to existing vegetation around Lora Lake. All Contractor Work shall be confined to areas outside of the restrictive covenant and wetland boundaries unless otherwise directed. The Contractor is responsible for repair of any damage to vegetation outside of the identified Work area at no additional cost to the Port.

1.03 PROJECT LOGISTICS

- A. The Contractor shall have access to the construction site by Des Moines Memorial Drive. The Contractor shall conduct all business through access and haul gates located on Des Moines Memorial Drive.
- B. Hours of Work/Closures:
 - 1. Standard Project Work Hours
 - a. Standard Work Hours: 0700 hours to 1900 hours (7:00 AM to 7:00 PM), Monday through Friday.
 - 2. Holiday Closures
 - a. 2017: May 29, July 4, Sept 4, Nov 23, 24 and Dec 22, 25.
 - b. 2018: Jan 1, Jan 15, Feb 19, May 28, July 4, Sept 3, Nov 22, 23 and Dec 24, 25.
 - 3. Work outside of the standard work shift hours, as defined in this specification section, can be requested and may be granted by the Engineer. No Work outside of the standard work hours, as defined in this section, shall be allowed without written approval by the Engineer.

1.04 PROJECT PHASING OR SEQUENCING REQUIREMENTS

- A. The Contractor shall coordinate the progress of its Work with the established requirements for completion and phasing described as follows:
 - 1. It is assumed that this project shall be constructed over a two-year period, utilizing two primary dry-weather construction seasons.
 - 2. All Work at the LLA Parcel shall be completed within one Construction Season, which can be conducted in either the first or second Construction Season, with Substantial Completion by October 31, 2018.
 - 3. Construction of a temporary construction access and staging area at the DMCA will be completed in Construction Season 1 to allow use of the area for Work being conducted at the LL Parcel, in both Construction Season 1 and 2. Following completion of use by the Contractor for construction access and staging in Construction Season 2, grading of the DMCA and installation of a porous hot mix asphalt pavement wildlife barrier, crushed rock wildlife barrier, and planted filter strip will be completed in Construction Season 2, with Substantial Completion by October 31, 2018.
 - 4. Lake filling and stabilization at the LL Parcel shall be completed within the first construction season, with Season 1 Substantial Completion by October 31, 2017.
 - Construction Season 2 additional lake fill placement and wetland rehabilitation shall begin in May 2018 and all Season 2 Work at the LL Parcel must be completed in the dry-weather construction period, with Substantial Completion by October 31, 2018.

1.05 WORK BY OTHERS ON THIS PROJECT

A. The Contractor shall coordinate and cooperate with other Contractors, Port forces, and others (i.e. public utilities) performing work on this project and shall not impact its and others' Work.

- 1. The following described work is to be accomplished by others:
 - a. Per Section 01 71 23.16 Surveying, Port Survey will conduct all surveys for the purposes of completing as-built drawings.
 - b. Per Section 02 87 00 Fugitive and Silica Dust Control Procedures, an environmental consultant or Port personnel will perform oversight for fugitive and silica dust control.
- B. The Port will furnish the Contractor with the following material:
 - 1. Approximately 550 linear feet of ecology blocks are located at the DMCA for Contractor use at the DMCA.
 - a. Ecology blocks may be used for construction of the Ecology Block Wall, and protection of the RW 16R/34L Lighting System and foundations. At project completion, any blocks not used for wall construction shall be returned to their original location.
 - b. The Contractor shall accept the materials at the above location and be responsible for all moving, handling, storage, or transportation costs and coordination required to incorporate the material into the project.
 - 2. Approximately 1,100 cubic yards of clean gravel is located along retaining walls at the LLA Parcel.
 - a. Gravel may be used for construction of Temporary Construction Access
 - b. Upon receiving the Port-furnished items, Contractor shall examine and promptly report to Port the conditions of the material received, including deficiencies, if any. After receiving and taking possession of Port-furnished material, the Contractor shall be responsible for the material until installed, tested, and accepted by the Port.

1.06 WORK BY OTHERS ON ADJACENT PROJECTS

A. The Contractor shall coordinate and cooperate with other Contractors, and others (i.e. public utilities, WSDOT) performing work on adjacent projects, and shall not impact its and others' Work.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

Find of Onethon
End of Section

PART 1 GENERAL

1.01 DESCRIPTION

A. This section identifies the requirements for identifying and measuring work and applying for contract payments.

1.02 REQUIRED SUBMITTALS

- A. Preconstruction Submittals:
 - Submittals shall be made in accordance with the requirements of Section 01 32 19 – Preconstruction Submittals and as specified herein.
 - 2. As part of the Preconstruction Submittal, submit a Schedule of Values, which is a complete <u>cost</u> breakdown of all lump sum bid items, whether for the entire Contract or lump sum bid items, showing the value assigned to each part of the Work (activity), including allowance for overhead and profit. Upon acceptance of the Schedule of Values by the Engineer, it shall be used as a basis for all lump sum progress payments.
 - a. The cost of each activity shall be a portion of the lump sum price as it relates to each activity. The cost shall include labor, material, overhead and fee. Normally, cost for order/delivery activities will not be allowed. The cost of material and equipment shall be associated with the installation of such material and equipment unless otherwise required by the Engineer. The total cost of all activities shall equal the lump sum bid price for the bid item or total Contract as applicable.
 - On material where the Contractor anticipates requesting payment in advance of installation, it shall be identified as a separate line item in the Schedule of Values.
 - 3. As a Preconstruction Submittal, submit the force account labor and equipment rates:
 - Submit for the Contractor and each subcontractor, a list of labor a. rates for each trade applicable to the scope of work to be performed. These submitted rates shall be broken down to include the base wage, fringes, FICA, SUTA, FUTA, industrial insurance and medical aid premiums as stated in the General Conditions. The rates shall not contain any travel time, safety, loss efficiency factors, overhead or profit. Rates shall be submitted for straight time, overtime and double time. Once the rates have been reviewed and accepted, they will become the basis for pricing labor in Change Order Work. Contractor shall provide proof of all labor rate costs as required by the Engineer including the submission of a copy of the most current Workers Compensation Rate Notice from Labor & Industries and a copy of the Unemployment Insurance Tax Rate notice from the Employment Security Department. If labor rates change during the course of the project the Contractor may submit new rates for acceptance.

- b. Submit for the Contractor and each subcontractor, a list of equipment and rates applicable to the scope of work to be performed. The equipment rates shall conform to the rates shown in the current Rental Rate Blue Book as modified by AGC\WSDOT Equipment Rental Agreement as stated in the General Conditions. In the event a specific piece of equipment does not appear or is applicable to the Rental Rate Blue Book as modified by the AGC\WSDOT Rental Rate Agreement specified rate, a rate shall be developed based on the terms of the Rental Rate Blue Book criteria. Once these rates are reviewed and accepted, they shall be used as the basis for pricing Change Order Work.
- c. No change orders will be processed for the Contractor or subcontractor until the respective labor and equipment rates have been submitted and accepted.

B. Applications for Payment:

- 1. For each application for payment the Contractor shall submit the following:
 - a. Completed "Application and Certificate for Payment" on form as required by Division 1 or as established by the Engineer.
 - b. Schedule and narrative update as required by the applicable schedule section of the Project Manual.
 - c. Certification that as-built drawings are current per Section 01 77 00
 Project Closeout.
 - d. Certification of Payment to subcontractors and suppliers. Also, the Contractor shall submit, with each application for progress payment, a completed form titled "Monthly Amounts Paid to All Subcontractor Participants." The Prime Contractor is to include all of its Subcontractors on this form.
 - e. "Application and Certificate of Payment" shall be submitted on the date specified General Conditions.

C. Final Application for Payment:

- 1. Refer to Section 01 77 00 Project Closeout and Section 00 70 00 General Conditions, for other requirements. For application for payment, the Contractor shall submit the following:
 - a. Completed "Application and Certificate for Payment" on form as required in Division 1 or as established by the Engineer showing the Work 100% complete.

1.03 PREPARATION OF APPLICATIONS FOR PAYMENT

- A. All required information on the forms shall be legible.
- B. Execute certification of signature of authorized officer.
- Identify percentage complete for each item on the accepted Schedule of Values.
- D. List each authorized Change Order, listing Change Order number and dollar amount as for an original item of Work.
- E. A letter certifying payment to subcontractors as required by the General Conditions.

1.04 PAYMENT FOR STORED MATERIAL

- A. Payment for stored items will be in accordance with –the General Conditions.
- B. Proof of Need. With payment request for stored material, submit a copy of purchase order and payment voucher clearly identifying the material, specification reference, Contract number, and price. The following additional documentation may be included:
 - Notarized certification of payment from supplier.
 - 2. Copy of canceled check to supplier.
 - 3. Lien release from supplier.
- C. Stored material items may be included in monthly application for payment only after drawings and data submittals, if any are required, have been completed per Contract Documents.
- D. Verification of price and payment: the Contractor shall demonstrate that the costs of materials have been paid and will establish the Port's title to such materials or equipment or otherwise protect the Port's interest including applicable insurance and transportation for those items stored off-site.
- E. Partial payment for materials and equipment in advance of installation shall not constitute acceptance thereof and will not relieve Contractor of full responsibility for condition and subsequent acceptance by the Port. Faulty materials discovered will be rejected even through partial payment may have been made.

1.05 SUBSTANTIATING DATA

A. When the Port requires substantiating information, submit data within seven (7) days of request justifying line item amounts in question.

1.06 UNIT PRICES

A. Any unit prices listed in the Bid Form are complete including labor, plant, equipment, products, fees, and any incidental charges; and including allowance for overhead and profit. Unit prices are not for work required by the Drawings and Specifications that are stated as lump sums in the Base Bid.

1.07 MEASUREMENTS STANDARDS

- A. Measurement and payment descriptions for each item listed in the Bid Form are as set forth throughout the applicable sections of the Contract Documents and as noted herein.
 - All bid items of work acceptably completed under the Contract will be measured by the Engineer according to United States standard measure.
 - 2. Measurements will be made as hereinafter provided unless otherwise provided for by their individual measurement specifications.
 - 3. The method of measurement and computations to be used in determination of quantities of material furnished or of Work performed under the Contract will be those methods generally recognized as conforming to accepted engineering practice and will be carried to the proper significant figures or fractions of units for each item to conform to the usual practice of the Port Engineering Department.

4. Items of Work for which payment is made by a lump sum will be measured as a complete unit. Partial payment, if made, will be made according to the completed percentage of the various components of the lump sum item detailed in a Schedule of Values.

B. Weighing Equipment:

- 1. Scales for the weighing of natural, manufactured or processed construction materials obtained from natural deposits, stockpiles or bunkers, which are required to be proportioned or measured and paid for by weight, shall be furnished, erected and maintained by the Contractor, or be certified, permanently installed commercial scales. Copies of scale certifications shall be provided to the Engineer prior to the first payment.
- 2. In the event the Contractor elects to furnish, erect and maintain weighing equipment at the site, such equipment shall meet the requirements and conditions set forth in State of Washington Standard Specifications for Road, Bridge and Municipal Construction, current edition.

C. Measurement of Quantities:

- Unless otherwise specified, measurements will be made horizontally or vertically. In determining the area for items bid on a square yard basis, the measurements will be on the neat dimension indicated on the drawings or as altered by the Engineer.
- 2. Structures will be measured according to neat lines indicated on the drawings or as altered by the Engineer to fit field conditions.
- 3. All items which are measured by the linear foot, such as sewers, water mains, pipe culverts, gutters, under-drains, etc., will be measured parallel to the base or foundation upon which such structures are placed, unless otherwise noted on the Drawings or Specifications. Drainage system pipes, including but not limited to storm drain, sewer or IWS, are measured to the inside face of the manhole or catch basin. Pressurized pipes, including but not limited to water mains, are measured to the point of connection.
- 4. In computing volumes of excavation and embankment, the method used will be average end-area method, or as stated in the appropriate sections of the specifications.
- 5. The term "gage," when used in connection with the measurement of plates, means the U.S. Standard Gage, except that when reference is made to measurement of galvanized sheets used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing, the term "gage" or thickness means that specified in AASHTO M 36, M 167, M 196, M 197 or M 219. Corrugated siding or roofing or coated material gage shall refer to material measurement before coating or covering.
- 6. When the term "gage" refers to the measurement of wire, it means the wire gage specified in AASHTO M 32.
- 7. The term "ton" means the short ton consisting of 2,000 pounds avoirdupois. All materials that are measured or proportioned by weight shall be weighed in accordance with the standards set forth in this section. Trucks used to haul material being measured by weight, shall be weighed empty and each truck shall bear a plainly legible identification mark.

- 8. Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. When required by the Engineer, the loads shall be leveled when the vehicles arrive at the point of delivery to facilitate measurement.
- 9. When a complete structure or structural unit or piece of equipment is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.
- 10. When standard manufactured items are specified, such as railroad rail, ties, fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions, not including bolts or other connectors. Unit Prices bid should include allowances for any bolts and connectors. Unless more stringently controlled by tolerance in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
- 11. No measurement will be made for work performed or materials placed outside of lines indicated on the plans or established by the Engineer; materials wasted, used or disposed of in a manner not called for under the Contract; material rejected after it has been placed, by reason of the failure of the Contractor to conform to the provisions of the Contract; hauling and disposing of rejected materials; material remaining on hand after completion of the work; or other Work or material payment for which is contrary to the provisions of the Contract.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

PART 1 GENERAL

1.01 SUMMARY

A. This Section describes product options available to the Contractor, plus procedures for securing acceptance of proposed substitutions during construction in coordination with the requirements set forth in the General Conditions.

1.02 SUBSTITUTION REQUIREMENTS

- A. If the Contractor wishes to furnish or use substitute materials, equipment, or processes in connection with this Contract, the Contractor shall make a written application to the Engineer for consideration of the substitute, together with a certification by the Contractor that the proposed substitute will adequately perform the functions called for in the project design, is of similar and equal substance to the equipment, material, or process named, is suited to the same use, complies with all codes, laws, or regulations affecting the Work and is capable of performing the same function as the materials, equipment, or process named in the Contract Documents. Substitutions shall be provided at no additional cost or time impact to the project. The Contractor is responsible to coordinate all associated Work that may be affected by the substitution. The application shall also state whether or not acceptance of the substitute will require a change in the Contract Documents to adapt the design to the substitute and whether or not the use of the substitute is subject to payment of any license fee or royalty by the Contractor.
- B. All variations of the proposed substitute from the materials, equipment, or process named in the Specifications shall be identified in the Contractor's application, including variations between maintenance, repair, and replacement service entities.
- C. Should any proposed product substitution require any re-design Work by the Design Consultant or the Design Consultant's consultants to accommodate the substitute product, costs for such re-design Work shall be the responsibility of the Contractor.

1.03 SUBMITTALS

- A. Substitution submittal procedure:
 - All substitution submittals shall be accompanied with the attached Substitution Request Form completely filled out. Limit each request form to one proposed substitution.
 - 2. Submit complete sets of substitution request forms and supporting data as required by Section 01 33 00 Submittals.
 - 3. Clearly indicate with red arrows on the supporting data the proposed substitution and accessories.

1.04 EVALUATION AND REVIEW

- A. The evaluation and acceptance or rejection of the proposed substitute shall not be grounds for an increase in the Contract Time or the Contract Sum.
- B. The Engineer may require that the Contractor furnish, at no additional expense to the Port, additional data concerning the proposed substitute. The Engineer will be allowed a reasonable time within which to evaluate the proposed substitute. The Engineer will be the sole judge of the acceptability of the proposed substitute.

1.05 TIME

A. The Contractor shall allow forty-five (45) days for review and evaluation of requests for substitutions.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Substitution Request Form

Attachment 2 Certification of Equal Performance and Assumption of Liability for Equal

Performance

Substitution Request Form

TO:									
PROJECT N.	PROJECT NAME:								
We hereby submit for consideration, the following product instead of the specified item for the above project:									
Section	Paragraph	Specified Item							
Proposed Su	bstitution:								

Attach complete dimensional information, engineering calculations, and technical data including laboratory tests, if applicable.

Include complete information on changes to Drawings or Specifications which proposed substitution will require for its proper installation.

Submit with request all necessary samples and substantiating data to provide equal quality, performance, and appearance to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance. Differences in quality of materials and construction shall be indicated.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

- 1. The proposed substitution does not affect dimensions shown on Drawings.
- 2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.
- 3. The proposed substitution will have no adverse affect on other trades, the construction schedule, or specified warranty requirements.
- 4. Maintenance and service parts will be locally available for the proposed substitution.
- 5. The proposed substitution will have no affect on applicable codes.
- 6. The manufacturer's guarantee or warranties of proposed product is equivalent to; or exceeds that of the specified product.

List of names and location of three similar projects on which product was used, date of installation, and Architect's name and phone number.

CERTIFICATION OF EQUAL PERFORMANCE AND ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE: UNDERSIGNED ATTESTS THAT **FUNCTION AND QUALITY ARE** EQUAL TO OR SUPERIOR TO SPECIFIED ITEMS Submitted By: Signature Title Above signature must be by person having authority to legally bind his firm to the above terms. Firm Address City / State Zip Telephone Date FOR USE BY THE ENGINEER: Accepted: Accepted as Noted: Not Accepted: Rec'd Too Late: By: Date: Remarks:

PART 1 GENERAL

1.01 SUMMARY

A. Provide project organization information indicating Contractor's project personnel and contact information, and their experience records for acceptance.

1.02 QUALIFICATIONS

- A. Contract project personnel shall have the following qualifications:
 - 1. Project Manager at least 10 years of experience in managing projects of equal or greater in size and type as this Project.
 - 2. Project Engineer at least 5 years of experience in managing projects of equal or greater in size and type as this Project.
 - 3. Superintendent at least 10 years of supervisory experience in projects of equal or greater in size and type as this Project.
 - 4. Quality and Environmental personnel as described in 1.03.
- B. The following Contract project personnel shall be submitted separately and have the following qualifications:
 - 1. Contractors Quality Control Personnel, qualifications and organizational chart per Section 01 45 16.13a Contractor's Quality Control Program.
 - 2. Contractor's Haul Route and Personnel including Supervisors, per Section 01 55 16 Haul Routes.
 - 3. Contractor's Traffic Control Management Personnel, including Traffic Control Supervisors, per Section 01 55 26 Traffic Control.
 - 4. Contractor's Erosion Sediment Control Lead, qualifications and certificate per Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution.

1.03 REQUIRED SUBMITTALS

- A. Submit as part of Preconstruction Submittals a project organization diagram and qualifications and resumes for your project management team, outlining areas of responsibility and authority. Submit the qualifications for individuals that are proposed for each of the positions indicated below. As a minimum, include on your project team the following personnel:
 - 1. General Manager: The Contractor's employee authorized to resolve disputes per the General Conditions.
 - 2. Project Manager: On-site manager for the project (both seasons), shall not be the same person as the Project Engineer or the Superintendent
 - 3. Project Engineer: Full-time, on-site (both seasons), shall not be the same person as the Project Manager, the Superintendent, Environmental Compliance Manager
 - 4. Superintendent: Full-time, on-site, superintendent (both seasons), shall not be the same person as the Project Manager or the Project Engineer
 - 5. Administrator of your Quality Control program

- 6. Environmental Compliance Manager: Full-time, on-site (both seasons), shall not be the same person as the Project Engineer. Shall meet the following minimum requirements:
 - a. Be on-site at all times for all construction activities. If construction occurs during more than one shift in 24 hours, the Project Engineer shall be on-site when the Environmental Compliance Manager is not.
 - b. Have current 40-hour HAZWOPER certification.
 - c. Have current CESCL certification from the Washington State Department of Ecology.
 - d. Have proven oversight responsibilities for at least one cleanup project under EPA or State Order (Ecology) in the past five years.
 The project shall have involved removal and disposal of at least 12,500 cubic yards of Subtitle "D" contaminated soil or sediment, including upland excavation and in-water capping.
 - e. Have three years proven experience with construction stormwater and dewater management, including oversight of treatment systems designed to remove dioxins/furans, metals, turbidity, and other Contaminants of Concern as identified in the Contract.
 - f. Have proven experience with prevention, control and clean-up of construction-caused pollution from petroleum, hazardous materials, and construction wastes. And ability to instruct installation, inspection, maintenance and removal of Pollution Prevention BMPs.
 - g. Have ability to perform basic control, containment, or confinement operations within the capabilities of the resources and personal protective equipment available.
- B. Keep organization diagram current.
- C. Resubmit qualifications for acceptance by the Engineer whenever above personnel change.
- D. The Port reserves the right to accept or reject the Contractor's proposed personnel.
- E. Contractor personnel shall not be replaced without prior written notice to and acceptance by the Port. Resubmit evidence that the proposed personnel successfully meet the qualifications.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

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PART 1 GENERAL

1.01 DESCRIPTION OF WORK

- A. Contractor shall perform the following Project Coordination Requirements:
 - Coordinate the Work of all Subcontractors with the Work of the Contractor
 - Distribute information and coordinate necessary action of subcontractors and suppliers in response to information and direction provided by the Port (i.e., Requests for Information, Requests for Proposal, executed Change Orders, etc.)
 - b. For temporary utilities
 - c. Among the work of the trades specified in technical specification sections.
 - d. Ensure that notification to and inspections by permitting agencies are completed in a timely manner
 - 2. Coordinate the schedules of all subcontractors to:
 - a. Verify timely deliveries of products for installation by other trades
 - b. Verify that labor and materials are adequate to maintain schedules
 - c. Manage the schedule in sequence for all subcontractors
 - 3. Contractor's Daily Construction Report (Form CM03)
 - a. Daily construction reports utilizing Form CM 03 will be submitted to the Engineer weekly. Along with the other information shown on this form, a summary of all schedule activities worked on each day is required. Divide the activities worked on by trade and employer. Identify activities by activity number per the accepted schedule. Identify activities that are behind schedule. State the cause and amount of the delay and propose what action is necessary to bring the activity back on schedule. If multiple daily shifts are used, submit a report for each shift (see Attachment 1).
 - b. Include required information for <u>all</u> subcontractors at any tier working on the Contract in addition to Prime Contractor.
 - 4. Conduct conferences among all subcontractors, and other concerned parties, as necessary to:
 - a. Maintain coordination and schedules
 - b. Resolve matters in dispute
 - c. Coordinate utility outages
 - 5. Participate in Project meetings:
 - a. As required by these specifications
 - b. Report progress of the Work
 - c. Recommend needed changes in schedules
 - d. Transmit minutes of meetings to all other trades, as appropriate

- 6. Temporary Utilities Required During Construction:
 - a. Coordinate submittals, installation, operation and maintenance, to verify compliance with Project requirements and with Contract Documents, see Section 01 50 00 – Temporary Facilities and Controls
 - b. Verify adequacy of service at required locations
- 7. All Required Submittals: Prior to submittal, in accordance with Section 01 33 00 Submittals, review for compliance with Contract Documents. The Contractor shall review and coordinate all subcontractor submittals of any tier. All submittals must be submitted by the Contractor, and not by others
- 8. Coordination Drawings:
 - a. Prepare, as required to ensure coordination of work of, or affected by, mechanical and electrical work, or to resolve conflicts
 - b. Submit to the Engineer for review
 - c. Reproduce and distribute accepted copies to all concerned parties
- 9. Observe required testing; maintain a record of tests as required by Section 01 45 16.13a Contractor's Quality Control Program
- 10. Verify that subcontractors maintain accurate record documents
- 11. Substitutions:
 - a. Review proposals and requests:
 - (1) Check for compliance with Contract Documents
 - (2) Verify compatibility with Work and equipment of other trades
 - b. Submit to the Engineer for acceptance in accordance with Section 01 25 00 Substitutions
- 12. Observe the Work for compliance with requirements of Contract Documents
 - a. Maintain list of observed deficiencies and discrepancies
- 13. Promptly report and correct deficiencies or discrepancies in accordance with Section 01 45 16.13a Contractor's Quality Control.
- 14. Assemble documentation for handling of disputes involving mechanical, electrical or other trades
- 15. Utility and Equipment Operations:
 - a. Check to ensure that utilities and specified connections are complete and that equipment is in operable condition
 - b. Coordinate the acceptance of new and remodeled equipment through the Engineer after Contractor functional testing is completed.

16. Punchlist Inspection:

- a. Prior to inspection, check that equipment is clean, repainted as required, tested and operational and that the Contractor's punch list is prepared and delivered to the Engineer
- b. Assist Engineer; prepare consolidated list of items to be completed or corrected after inspection
- 17. Assemble As-built Record Document information and ensure that completed record documents are submitted to the Engineer in accordance with Section 01 78 29 As-Built Redline Drawings.

1.02 PROJECT SCHEDULE

- A. The Schedule shall be prepared as required by Section 01 31 16 Bar Chart Schedule and designate areas of activity of the Contractor and subcontractors for the various items of work for the Project. The Schedule shall be prepared, submitted for review, and accepted by the Engineer as specified in these Contract Documents.
- B. Contractor shall:
 - 1. Maintain Schedule throughout construction period; record changes in responsibilities due to:
 - Accepted modifications to Contract
 - b. Accepted substitutions
 - Changes to work responsibility
 - 2. Reproduce and distribute revised Schedule promptly after each change to:
 - a. Affected subcontractors
 - b. Engineer

1.03 EXCAVATION COORDINATION

- A. Call Before You Dig. Washington State law, RCW 19.122.010 requires anyone planning to excavate, to know what is below the ground surface before they dig. Any entity, including but not limited to the Contractor or any subcontractor conducting excavation operations on Port projects shall comply with the law which at a minimum requires the following actions.
 - 1. Before excavating 12" or deeper on Port projects, the Contractor shall call the Washington Utility Notification Center's One Call System at 811 or 1-800-424-5555 to provide notice two days before the scheduled start of earthwork. On busy days (M-W) hold time can be very lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.
 - 2. Utility locating is provided by Port of Seattle Engineering Survey and requires the submission of Port Form 811 via an email to posutility@portseattle.org (see Attachment 2).
 - a. Form submission requires the 811 ticket number obtained from the One Call system notification.

3. If a project's excavation operations are completed within 45 days of notification, only one call and form needs to be made for each project, however, certain projects may have different requirements which will be discussed at the pre-construction meeting. Projects with longer-term excavation operations require a call every 45 days of the last notification.

1.04 REQUESTED INFORMATION

- A. Requests for Information (RFI): In the event there is a question regarding intent of the documents by the Contractor, or any subcontractors, the Contractor shall submit a written RFI to the Engineer. There will be no additional compensation to the Contractor for the preparation of a RFI. All costs are considered incidental to the scope of work in question.
- B. Contractor may submit an RFI to the Engineer to clarify or confirm minor discrepancies, conflicts, errors or omissions in the Contract Documents.
 - 1. See Attachment 3 for the RFI form used for this project.
- C. Each RFI shall bear the Contract name and work order number; date of submission to the Engineer; requested response date; name and position of the person submitting request; pertinent drawing and detail number; grid location and building level; specification section number; or other references as appropriate.
- D. Prepare a separate RFI for each item or issue.
- E. The Port will provide a response to the RFI within 14 days, typically. It is understood that some RFI's may require shorter response durations. If the Contractor requires a shorter response duration it must be clearly noted on the RFI. The Engineer will make a reasonable attempt to accommodate the Contractor's request.
- F. The Port utilizes the CDMS (Section 01 78 39 Construction Document Management System) RFI Workflow Process. RFI's shall be submitted electronically by the Contractor to the Engineer.
- G. Any response to an RFI issued by the Engineer does not constitute a change to the Contract or a commitment to extend or to pay. If the Contractor believes the response received to be an additional cost or impact to the prosecution of the Project the Contractor must follow the requirements of the Contract listed in Article G-09 Changes, Claims, Protests and Disputes.

1.05 COMMUNICATION REQUIREMENTS AND COORDINATION FORMS

- A. Interested parties have a general understanding of the project and as detailed in the Contract Documents. However, day-to-day project activity that may impact their operations is not known. The Contractor shall establish and maintain a system for communications with the stakeholders and other interested parties through the Engineer.
- B. The Contractor shall provide the following specific schedule and work plan information directly to the Engineer for distribution to the appropriate parties:
 - 1. If any construction activity affects usable spaces or creates an operational impact, a Construction Advisory Form (CAF) will be required (see Attachment 4). The Contractor shall coordinate this with the Engineer.

- a. The Contractor shall submit the form two weeks prior to commencement of work at the respective locations, unless noted otherwise. The most stringent notification requirements apply. The Construction Advisory Form shall be based on the three-week look ahead schedule (or interval schedule) submitted each week to the Engineer at the weekly construction progress meeting.
- b. All CAFs are subject to operational requirements and shall be coordinated with the Engineer and other Port department to mitigate impacts to Port operations.
- 2. A statement of planned disruptions and revised access routes for the next thirty (30) days as a result of acceptance of the monthly progress schedule by the Engineer.
- 3. "News Flash" updates immediately upon occurrence of events causing planned disruptions to continue longer than originally scheduled, or if an unplanned disruption occurs."

1.06 UTILITY DEACTIVATION AND REACTIVATION PLANS AND SHUTDOWNS

- A. The Contractor shall submit a shutdown plan to the Engineer for review (see Attachment 5 Shutdown Request Form). The plan shall outline the proposed procedure to deactivate and reactivate utility services, lines and equipment required to be disrupted, disassembled, cut into, or modified during the course of the Work.
- B. All shutdowns are subject to operational requirements and shall be coordinated with the Engineer and other Port departments to mitigate impacts to Port Operations.
- C. Plan Content: The plan shall include but not be limited to:
 - Shutdown and restart schedules.
 - 2. Sequences required to deactivate, depressurize, and reactivate the utility service lines and equipment.
 - 3. Detailed description of proof positive verification or tests to assure that utility service line and equipment are properly deactivated before proceeding with the Work.
 - 4. Methods of: discharging residual fluids from lines and equipment; value sequencing; electrical load shedding for deactivating and reactivating service lines, equipment and the system reactivation procedure.
 - 5. Incorporation of the specific deactivation and reactivation requirements of the relevant technical specifications.
 - 6. Compliance with safety standards.
 - 7. Coordination required with the Port or utility owners.
- D. It is the Contractor's responsibility to fully understand and verify the condition of any utility service lines, and equipment at all times directly prior to and during the course of the Work. The Contractor shall be responsible for all damages resulting from its actions.

1.07 POWDER-ACTUATED FASTENER TOOLS

A. On projects that may require powder-actuated fasteners to be used, the Contractor is required to pay special attention with respect to personnel qualifications, proper notifications, and control of the material.

B. Personnel Qualifications:

- 1. Only a qualified operator shall be allowed to handle and operate the powder-actuated tools. A qualified operator is a person that meets the requirements of WAC 296-155-36321 (1) and (2), and who is in possession of a qualified operator card signed both by the operator and the authorized instructor.
- 2. Qualified operators shall have their operator card in their possession at all times while operating the equipment.

C. Operation:

1. The qualified operator must be competent in all aspect of tool usage, handling, storage, maintenance, and inspections, as required by the Port of Seattle safety manual, and all applicable WAC rules and regulations.

D. Permit Requirements:

- 1. If a construction activity on the project requires the use of powder-actuated fasteners, the Contractor shall seek project pre-approval for the use of the powder-actuated tool before starting such work. The Contractor shall complete and submit the Port of Seattle Fire Department Powder Actuated Fasteners Permit at least 21 calendar days prior to the commencement of work. The Contractor shall use the permit form located at the end of this section (Attachment 6). The Engineer will route the permit form to the Fire Department, the Airport Security Department, and Construction Safety for approval. Upon approval, the Engineer will route a copy of the signed permit back to the Contractor.
 - a. A Pre-Installation Meeting, specifically for the use of Powder-Actuated Tools, is required prior to submitting the permit.

E. Notification Requirements

- Once an approved permit for use of Powder-Actuated Tools for the project has been obtained, notifications are required for each scheduled finite duration of use. The Contractor shall complete and submit the Construction Advisory Form (CAF) in accordance with paragraph 1.05 B. of this Specification Section and include a copy of the approved permit. The CAF shall cover a defined work activity that utilizes the Powder Actuated Tools. As a minimum, the CAF shall contain the following information:
 - a. The name and contact information for the qualified operator who will be in custody of the tool at all times while on the Port of Seattle property.
 - b. Description of the Work; type of surface to be penetrated and the material/item to be fastened.
 - c. A copy of the Qualified Operator's Card issued and signed by both the authorized instructor and the operator.

- d. The location(s) where the tool is to be used.
- e. Date(s) and time(s) of operation.
- f. The amount of powder loads to be kept on-site during work shifts. Please note that the Port of Seattle Fire Department permit limits the number/amount of powder loads. The maximum amount allowable is regulated by the International Fire Code.
- g. The type of tool used; direct or indirect acting, and whether it is classified as low velocity (≤328 ft/s), or medium velocity (328<v≤492ft/s).
- h. The method of storage and safekeeping.
- Note: No high velocity powder-actuated tools will be permitted for use on Port of Seattle property.
- 2. The Engineer will distribute the CAF to the Port of Seattle Operations, who will in turn notify the tenants/stakeholders, Port of Seattle Security, Police and Fire Departments.
- F. Control of the powder-actuated tools and powder loads:
 - 1. The powder-actuated tools and powder loads must never be left unattended.
 - 2. When not in use, the powder-actuated tools and powder loads must be locked in a tamper proof container, labeled according to the requirements of WAC 296-155-36307, and must be accounted for at all times.
 - 3. Overnight/off shift storage of the powder-actuated tools and powder loads on-site is not permitted.
 - 4. The number of tools and powder loads shall never exceed the amount authorized by the Port of Seattle Security and Fire Departments.
 - 5. Misfired loads must be neutralized and promptly removed from Port of Seattle property.
 - 6. If any powder-actuated tools or powder loads are lost or stolen, the Contractor must immediately notify the Port of Seattle Police, and the Engineer.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1	Contractor's Daily Construction Report Form
Attachment 2	POS-811 Form – Call Before you Dig
Attachment 3	Request for Information Form
Attachment 4	Sea-Tac Airport Construction Advisory Form
Attachment 5	Shutdown Request Form
Attachment 6	Port of Seattle Fire Department Powder-Actuated Fasteners Permit



CONTRACTOR'S DAILY CONSTRUCTION REPORT

PROJECT TITLE:	DAT	E:		
CONTRACTOR:	WEATHER:			
CONTRACT NO: MC-0318573	TEMPERA	ATURE:		
WORK PROJECT NO: WP-104395		AM:	PM:	
PRIME/SUBCONTRACT	OR'S WORK FORCE			
Activity or Number of		Total		**Act.

Activity or CO#	Number of Personnel	Trade	Employer	Total Hours	*Qtys	**Act. Comp
Use insert to	add rows		**	If applicable Activity Comp	lete? State	ves or no

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EQUIPMENT

Act or	Equipment	Rented or			*Statu.			Total
CO #	Туре	Owned	Qty.	Up	Down	Std-by	Description of Operation	Hours
					1 (77) 1			
Use insert	to add rows.	* Is equipn	nent ope	erationa	I (Up), bi	roken down	(Down), or operational but not used (So	tand-By).

CARRENT INCO	VECTION 1/ TECTING DEDECORMED TODAY
SAFETY: SAFETY	ECTION and/or TESTING PERFORMED TODAY
INCRECTION.	
INSPECTION:	
TESTING:	
CONSTRUCTION STATUS	(For activities behind schedule, State cause and action required)
Use insert to add rows.	
	Contractor's Representative Signature
CM RE FILE Port of Seattle CM-03A	

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POS-811 FORM

IF YOU ARE DIGGING 12" OR DEEPER

2. Fill out POS-811 FORM then send to:

1. Call 811 or 1-800-424-5555

PROCEDURE:

POS CALL BEFORE YOU DIG / 811 ENGINEERING/SURVEY RCW 19.122.010 DIG LAW

		posutility@portseattle.org
REQUESTED BY:		
		IF YOU ARE NOT DIGGING
OFFICE PHONE:		PROCEDURE:
811 TICKET #		1. Fill out POS-811 FORM then send to:
OII HOREI #	<u> </u>	posutility@portseattle.org
PROJECT NUMBER:	104395	TODAYS DATE:
PROJECT NAME:	Lora Lake	DATE SERVICE REQUIRED:
	Attach map to email if needed	
DESCRIPTION /		
SUMMARY OF WORK:		

"NOTICE" Two business days before commencing any excavation the excavator shall call 811 or 1-800-424-5555 to provide notice of their scheduled start of excavation. On busy days (M-W) hold time can be very lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.

CONTACTS:

Garry Ensley	Jeff Dixon	Adam Dreller	Braden Monson
Manager of Survey and Mapping	Utility Locating Tech	Mapping Manager	Survey Crew Manager
206-787-5670	206-708-5089	206-787-7771	206-787-5846



PROJECT TITLE: CONTRACTOR:

REQUEST FOR INFORMATION

RFI NO.	
RFI REV	
DATE	
PREV RFI NO.	

CONTRAC WORK OR				
SPECIFIC	CATION OR DRAWING	G REFERENCE:	SUBJECT:	
REQUEST:				
PLEASE RE	PLY BY:	SIC	GNED:	
RESPONSE	***			
DATE.		SIC	ENFD.	

**NOTE: If this response represents a change in contract time or cost, notify the PORT in accordance with G-04-31.

Discipline:

Seattle-Tacoma International Airport

CONSTRUCTION ADVISORY

CAF#

Where

Affected Businesses

Start Date
End Date
Work Hours

Description of Work

Who to Contact with Questions:	
Port of Seattle, Inspector:	Cell #
Port of Seattle, Resident Engineer:	Cell #
Name of Contractor, Superintendent:	Cell #
Port of Seattle, Airport Operations:	(206)

Project name – Lora Lake Project #104395





Port of Seattle Fire Department

Powder-Actuated Fasteners Permit

On projects that may require powder-actuated fasteners be used, the Contractor is required to pay special attention with respect to the personnel qualifications, proper notifications, and control of the material.

A. Personnel Qualifications:

- Only a qualified operator is allowed to handle and operate the powder-actuated tools. A
 qualified operator is a person that meets the requirements of WAC 296-155-36321 (1) and (2),
 and who is in possession of a qualified operator card signed both by the operator and the
 authorized instructor.
- 2. Qualified operators shall have their operator's card in their possession at all times while operating the equipment.
- The qualified operator must be competent in all aspect of tool usage, handling, storage, maintenance, and inspections, as required by the Port of Seattle safety manual, and all applicable WAC rules and regulations.

B. Notification Requirements:

The Contractor shall provide a specific Construction Advisory Form (CAF) and a copy of the approved permit every time powder actuated fasteners are to be used on the Project. The form should as a minimum contain the following information:

- 1. The location where the tool is to be used.
- 2. Description of the work; type of surface to be penetrated, and the material/item to be fastened.
- 3. Date(s), and times of operation.
- 4. The name and contact information for the qualified operator who will be in custody of the tool at all times while on the Port of Seattle property.
- 5. A copy of the Qualified Operator's Card issued and signed by both the authorized instructor and the operator.
- 6. The amount of power loads to be kept on site at any given time. The Port of Seattle Fire Department will limit the number/amount of power loads (Per IFC table 5604.3) to a max. of 10lbs of 1.3 explosive and must be in a steel cabinet
- 7. The type of tool used; direct or indirect acting, and whether it is classified as low, medium or high velocity tool.
- 8. The method of storage and safekeeping.

The Engineer will distribute the form to the Port of Seattle Operations, Security, Police, Fire and Building Departments. The Engineer must obtain concurrence from all five departments before the work can proceed.

C. Control of the powder actuated tools and power loads:

- 1. The powder actuated tools and power loads must never be left unattended.
- 2. When not in use, the Powder actuated tools and power loads must be locked in steel, properly marked container and within a site distance from the qualified operator in custody of the tools and power loads.
- 3. Overnight/off shift storage of the powder-actuated tools and powder loads on site is not permitted.
- 4. The number of tools and power loads shall never exceed the amount authorized by the Port of Seattle Security and Fire Departments.
- 5. Unused or misfired loads must be neutralized, and properly disposed of.
- 6. Port of Seattle Dispatch **(206) 787-5380** must be notified prior to beginning work using powder actuated tools.

The Qualified Operator\Contractor acknowledges and agrees to fully comply with all qualifications and requirements as stated above. Any violation of the permit may result in immediate suspension of work.

Date issued	Time issued	Permit Expires	
Port of Seattle Proje	ect Name		
Port of Seattle Wor	k Project No		
Location		Contractor	
Powder Actuated To	ool Qualified Operators (list	t all)	
	gnature of qualified person	performing tool work	
	gnature of Fire Department		
Permit Number			



PART 1 GENERAL

1.01 DESCRIPTION

- A. In general, project meetings will be held weekly at the job site unless agreed otherwise with the Engineer. The Engineer will conduct project meetings throughout the construction period.
- B. The purpose of the project meetings is to enable orderly review of progress during construction and to provide for systematic discussion and analysis of problems that might arise between the Port, Designer, or Contractor relative to execution of the Work.

1.02 AUTHORITY DESIGNATION

A. Persons designated by the Contractor to attend and participate in project meetings shall have all required authority to commit the Contractor to solutions as agreed upon in the project meetings.

1.03 AGENDA DEVELOPMENT

- A. See Attachments 1 and 2 for typical preconstruction and weekly project meeting agendas.
- B. Agenda Items: To the maximum extent possible, inform the Engineer at least twenty-four (24) hours in advance of the project meeting regarding any agenda items desired for discussion.

1.04 MEETINGS

- A. Pre-construction Meeting
 - The Engineer will conduct this meeting prior to NTP
 - 2. Location: At a Port facility to be specified by the Engineer
 - Attendance:
 - a. Port's Project team.
 - b. Designer and professional consultants for environmental, mechanical, electrical, civil, and structural disciplines, as applicable.
 - c. Contractor's project manager and superintendent
 - d. Major Subcontractors, as appropriate
 - e. Major suppliers, as appropriate
 - 4. Typical Agenda: (See Attachment 1 for sample agenda)

B. Weekly Project Meetings

- The Engineer will conduct weekly meetings to coordinate the Work, answer questions, and resolve problems. Meetings will begin weekly after Pre-construction meeting.
- 2. Location: At a Port facility to be specified by the Engineer.
- Attendance:
 - a. Engineer
 - b. Architect and Consultants as needed
 - c. Contractor's project manager and superintendent

- d. Major subcontractors
- e. Others, as appropriate
- 4. See Attachment 2 for sample agenda.

C. Special Meetings

 The Engineer will call special meetings at the project site or at other locations to coordinate the Work, answer questions, and resolve problems. The Contractor shall attend.

1.05 PRE-INSTALLATION MEETINGS

- A. The Contractor shall schedule Pre-Installation Meetings at least five (5) days prior to commencing any portion of the Work where such meeting is required by the Specifications or as requested by the Engineer.
- B. Require attendance of parties directly affecting, or affected by the Work.
- C. Contractor to prepare agenda, lead the meeting, compile record minutes, and distribute copies within two days after meeting to participants.
- D. Review conditions of installation, preparation and installation procedures, and coordination with related work.

1.06 PRE-PROJECT CLOSE OUT MEETING

A. At approximately 80% of Contract completion or 60-days before the Substantial Completion date, whichever occurs first, the Engineer will hold a meeting with the Contractor to discuss acceptance/closeout process, to schedule the events and to review responsibilities.

1.07 MINUTES

- A. The Engineer typically prepares minutes of project meetings and will distribute copies.
- B. The minutes compiled by the Engineer will be the official record minutes and all clarifications or corrections shall be transmitted in writing to the Engineer within three (3) working days of date of receipt of the minutes.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Typical Preconstruction Meeting Agenda

Attachment 2 Typical Weekly Project Meeting Agenda

MEETING [NOTES OR AGENDA]

Project: Lora Lake WO Number: 104395

Purpose: [Kick-Off Meeting or Pre-Construction Meeting]

Meeting Date: [Day, Date, Year]
Location: [Meeting Location]

Invitees/Attendees(X):

Invitees/Attendees(X):	:						
NAME		INI.	EMAIL	TELEPHONE	CELLULAR		
POS Engineering Department							
POS Designer / Project E	ngineer						
POS Project Managemen	t Group						
POS Construction Safety							
			-				
POS Contract Administra	tion / Con	tract Con	mpliance				
2005 :							
POS Environmental/Pest	Control			T			
POS Other Departments	/DOS Con	rultants					
POS Other Departments	/PUS Cons	suitants					
Contractor							
Sub-Contractor Sub-Contractor							
Other							

DISCUSSION:

1) PURPOSE OF MEETING

- a. Introduce project team members and other key players. (Sign-In Sheet)
- b. Define lines of authority.
- c. Review key project administrative procedures
- d. Contractor's proposed schedule

[Date]

e. Open discussion

2) PROJECT OVERVIEW (RE, A/E and/or Contractor)

- a. [Summarized or have A/E provide key elements of the project]
- b. [Review Contractor Preliminary Schedule]

3) CONTRACT TIME AND LIQUIDATED DAMAGES (CM Team)

- a. [###] Calendar Day Contract
- b. [List Phasing and/or Milestone and/or Substantial Completion and/or Physical Completion Dates]
- c. Liquidated Damages

4) CORRESPONDENCE AND COMMUNICATIONS (RE)

- a. Lines of authority
- b. Project correspondence and Submittals will be managed through the Livelink/CDMS system.
- c. Use MC-XXXXXXX and WP XXXXXX on all documents submitted
- d. The address for correspondence should be as follows, but all correspondence is to be submitted electronically:

ATTN: [Resident Engineer]
Port of Seattle Engineering
Seattle-Tacoma International Airport
P.O. Box 68727
Seattle, WA 98168-0727

ATTN: [Resident Engineer]

ATTN: [Resident Engineer] Port of Seattle Engineering P.O. Box 1209 Seattle, WA 98121

5) SAFETY MANAGEMENT AND ORIENTATION REQUIREMENTS (Construction Safety Rep)

- a. Requirements of 01 35 29 Safety Management and Requirements of 01 50 00 Temporary Facilities and Controls
- b. Pre-NTP Safety Meeting

Or

- c. POS Safety Orientation
 - a. [Time and Day for Airport or Seaport]
- d. Protect the public

6) EEO, APPRENTICESHIP, SCS REQUIREMENTS (Contract Administration / Contract Compliance)

- a. Requirements of 00 83 00
 - 1. Electronic Payroll Information
 - 2. Other required Documentation
 - 3. Small Contractor and Suppliers (SCS) Utilization requirement [%]
- b. Requirements of 00 83 50
 - 1. Apprenticeship requirement [%]
 - 2. Apprenticeship goals [%]

7) PROJECT LABOR AGREEMENT (PLA Administrator)

- a. Requirements of 00 84 50
- b. Letter of Assent/Proposed Trade Assignment
- c. Pre-Job Meeting/Request for Waiver
- d. Final Trade Assignments/New Employee Reports
- e. PLA Paperwork Submittal

- f. Drug Testing
- g. Craft Workers/Core-to-Union Ratio
- h. Wages/Trust Payment Benefits

8) EROSION AND SEDIMENTATION CONTROL (Erosion Control Lead)

- a. Requirements of 01 57 13 Temporary Erosion and Sediment Control Planning and Execution
- b. Fugitive Dust Control

9) HAZARDOUS MATERIAL MANAGEMENT (POS Environmental)

a. Requirements of 01 57 23 Pollution Prevention, Planning and Execution [and any other applicable sections]

10) SOIL HANDLING IN CONTAMINATED AREAS (POS Environmental)

- a. Requirements of 02 61 13 Soil Handling in Contaminated Areas
- b. Stockpile Area
- c. Contractor proposed Contaminated Soil Disposal Facility

11) SECURITY AND BADGING REQUIREMENTS (CM Team)

- a. Requirements of [01 14 13 Airport Identification Access Control or 01 14 14 Seaport Personnel Identification_Access Control]
- b. [Badging process and SIDA training and/or AOA Training]
- c. [Use of temporary badges]
- d. Escorts
- e. [TWIC Card]
- f. [Customs Seal]
- g. Keys
- h. [Loading Dock Access]
- i. [Violations/penalties]

12) HAUL ROUTES, ACCESS POINTS, OFFICE/LAYDOWN/PARKING, AND PROJECT CONSTRAINTS (CM Team)

- a. Haul Route
 - 1. [Requirements of 01 55 16 Haul Routes]
 - 2. [Maintenance Requirements]
- b. Access Points
- c. Office / Laydown / Parking area
- d. Materials Storage, Staging, Deliveries
- e. Housekeeping
- f. Project Constraints
 - 1. Coordination with other projects

13) TEMPORARY FACILITIES AND UTILITY SHUTDOWNS

- a. Requirements of 01 50 00 Temporary Facilities and Controls
- b. Construction Water: Provided by the [Port or Contractor]
- c. Construction Electricity: a. [who to contact or where is it provided from?]
- d. [Noise Suppression]
- e. Temporary Ventilation
- f. Temporary barriers/partitions/enclosures
- g. Traffic Control
- h. Dust Control
- Water Control
- j. Utility Shutdown procedures

14) CONTRACTOR ON-SITE MANAGEMENT, SUPERVISION AND GENERAL INFORMATION (CM Team)

- a. Project Manager and/or Superintendent to be onsite when work is being performed
- b. Project Information Sheet required to be completed and submitted prior to any activity onsite

15) LAWS, REGULATIONS, PERMITS, FEES, NOTICES, ENVIRONMENTAL COMPLIANCE (CM Team)

- a. Requirements of 00 80 00.SC-04.12
 - 1. [Building Permit Airport Building Department or City of Seattle]
 - 2. [Mechanical and /or Electrical Permits L&I or City of Seattle]
 - 3. [NPDES Permit]
 - 4. [Other Permits or Notifications]
- b. Hot Work Permits

16) QUALITY CONTROL / QUALITY ASSURANCE PROGRAM (CM Team)

- a. Requirements of [01 45 16.13a Quality Control]
- b. [Special Inspection provided by the Port]
- c. [Contractor QC requirements]

17) SUBMITTALS (CM Team)

- a. Requirements of 01 33 00 Submittals
- b. All Pre-Construction Submittals have been "Accepted" or "Accepted as Noted"
- c. All [XX] days for submittal review by the Port.
- d. [Critical Submittals]
- e. [Other submittal discussions]

18) CONTRACTOR REPORTS (CM Team)

- a. Contractor Daily Report should include Safety and TESC reporting (rather than separate submittals)
- b. CDRs to be filed [daily / weekly]

19) PROJECT SCHEDULES (CM Team)

- a. Preliminary Schedule in place until Baseline Schedule is accepted
- b. Baseline Schedule shall include a Narrative and Critical Path
- c. Monthly Progress Schedule is due with the Pay Request
- d. 3-Week Look Ahead Schedule will be required prior to each Weekly Meeting
- e. Work Hours
 - 1. Regular work hours
 - 2. Noisy work hours
 - 3. No work permitted time periods
 - 4. Other work restrictions
 - 5. Contractor may request an alteration of work hours

20) MEETINGS (CM Team)

- a. Requirements of 01 31 19 Project Meetings
- b. Weekly Project Meetings will be held at [Location]. [Discuss time and day or Time and day to be determined]
- c. [List other Meetings as needed]

21) PROGRESS PAYMENTS (CM Team)

- a. Requirements of 00 70 00-G.08 and 01 20 00 Measurement and Payment
- b. Submitted on the [##] of each month

[Date]

- c. Pay Request will not be processed without required supporting documentation
 - 1. Progress Schedule
 - 2. Statement of Intent to Pay Prevailing Wages
 - 3. Monthly Amounts Paid to Sub-contractors (applies to all tiers)
 - 4. Certification of Payment per G-08.04.C
 - 5. Certification As-Builts are current
 - 6. Electronic Payroll (EPI) and/or Certified Payroll up to date
- d. Payment for Stored Materials
- e. Payment within 30 days of becoming due

22) DISCUSSIONS

Iten	n #	Action By	Item Description
Monthi	Day.##	lni.	Subject
(ie 020	07.01)		<u>Date</u> Notes regarding Discussion and/or Followup

These meeting notes are provided to document the project record and represent my understanding of the items discussed. Please provide comments, corrections, or revisions within 14 days. If no comments are received, the minutes will stand as published.

Prepared by: [Name], [Title]

[Date]

MEETING MINUTES

Project: Lora Lake **WO Number:** 104395

Purpose: Weekly Construction Progress Meeting

Meeting No: Meeting Date: Location:

ATTENDEES:

NAME		INI	EMAIL	TELEPHONE	CELLULAR		
POS Engineering Department							
POS Project Management (Gro	oup					
POS Construction Safety							
POS Design Team/Represe	nt	ative					
POS Contract Administration/EPI/OSR							
POS Other Departments/Consultants							
Contractor							
Subcontractors							
Other							

Weekly Construction Progress Meeting

ATTACHMENTS:

Attendance Record/ Sign-in Sheet (if used)
Three-Week Look Ahead Schedule

Sub	ee-Week Look Ahead Schedule omittal Status Record/Report Status Record/Report		
Oth	er Documents as Needed (NCR Log, CB Log, PLA Status R	eport, etc)
	DJECT SAFETY	Астісы	DATE DUE
ITEM#	Discussion	ACTION	DATE DUE
II. Co	NTRACT COMPLIANCE/EPI STATUS/PLA		
ITEM#	DISCUSSION	ACTION	DATE DUE
	i	<u> </u>	i
III. Pro	DJECT STATUS/SCHEDULE UPDATE/THREE-WEEK LOOK AHEAD S	CHEDULE	
ITEM#	DISCUSSION	ACTION	DATE DUE
IV. EN	/IRONMENTAL/RMM	ACTION	DATE DUE
IIEMI#	DISCUSSION	ACTION	DATE DUE
V. Shi	JTDOWN REQUESTS/CONSTRUCTION ADVISORIES		
ITEM#	DISCUSSION	ACTION	DATE DUE
<u>, </u>	•		
	ALITY CONTROL/NON CONFORMANCE		
ITEM#	DISCUSSION	ACTION	DATE DUE

Weekly Construction Progress Meeting

VII. SUBMITTAL STATUS		
ITEM# DISCUSSION	ACTION	DATE DUE

VIII.RF	STATUS		
ITEM#	DISCUSSION	ACTION	DATE DUE

IX. CHANGE MANAGEMENT		
ITEM# DISCUSSION	ACTION	DATE DUE

X. RE	QUESTS FOR PAYMENT		
ITEM#	DISCUSSION	ACTION	DATE DUE

XI. OPEN ITEMS/DISCUSSION		
ITEM# DISCUSSION	ACTION	DATE DUE

Weekly Construction Progress Meeting

[SAMPLES -DELETE]

- Numbering system: XX = Meeting Number XX = Item No.
- For each meeting, the item numbers start in section I, or first applicable section, with .01, and continue in consecutive order through section XI. Item numbers should not be restarted with .01 in each section.
- Give each item a title/subject in bold at the top of the section.
- Every item of discussion shall be numbered, even if it is just a status update.
- Sections can be added as necessary, such as Operations and Security, commonly used on Airport projects.
- Closed items shall be listed as closed, and then deleted after the next meeting.
- Focus on the issue. If the issue starts to morph, or branch out, it may be time to start a new item of discussion.
- Items added even as part of the Open Discussion should go in their respective categories whenever possible, or practical.
- Any revisions/corrections should be noted under the specific item number at the meeting when
 revisions/corrections were noted.

XI.	OPEN ITEMS/DISCUSSION		
ITEM#	DISCUSSION	ACTION	DATE DUE
07.01	Fire Protection System Shop Drawings	CLOSED	
	05/23/14 - The Port's project engineer, to expedite his review of the FM-stamped shop drawings.		
	05/30/14 - Comments were returned to PRIME with the submittal approved as noted. Item closed.		
08.01	New Room Construction	SA/LDM	06/12/14
	05/30/14 - LM described her discussion yesterday with a Port maintenance worker and their contractor regarding construction of a room at the Penthouse Level within the project area. She explained that they plan to begin construction of a new room at the designated laydown area just south of the POS Police locker rooms. The maintenance worker indicated the room will be used to store Christmas decorations and carpet. The POS Fire Department requires a safe and secure storage area for this use.		
	The construction will eliminate PRIME's staging area. Additionally, it does not sound like this work in this project has been coordinated with the design for the Penthouse Level Fire Protection Addition project.		
	Action: SA and LDM have no information on this project and will investigate the matter together. LDM will review the Penthouse Level to determine if an alternative area is available for material and equipment staging.		

[END OF SAMPLES]

These minutes are provided to document the project record and represent my understanding of the items discussed. Please provide comments, corrections, or revisions at the next meeting. If no comments are received, the minutes will stand as published.

Weekly Construction Progress Meeting

Prepared by: [Name] [Title]

DISTRIBUTION:

Attendees with asterisk (for internal distribution to others in attendance and for information)
Resident Engineer, POS AV/EN
Project Engineer, POS EN
POS Contract Compliance
Customer

END OF REPORT

PART 1 GENERAL

1.01 DESCRIPTION

- A. The Work under this Contract will be planned, scheduled, executed, and reported using a bar chart schedule. The bar chart Schedules described here serve as a communication tool between the Port and the Contractor, and the Contractor and its subcontractors. The Contractor shall use the schedules to establish a joint understanding of the assumptions regarding the Work, and the various constraints and opportunities that are possible within the plan. As the Work progresses the project team is expected to use these schedules to assess impacts and to formulate the best methods to complete the Work on, or ahead of, the contractual completion dates. Specifically, the purpose is as follows:
 - 1. To assure adequate planning, scheduling, and reporting during execution of the Contract.
 - 2. To assure coordination of the Work by and between the Contractor and the various subcontractors and suppliers.
 - 3. To assist the Contractor and Engineer in monitoring the progress of the Work and to contemporaneously evaluate proposed changes to the Contract and the project schedule.
 - 4. To assist the Contractor and Engineer in the preparation and evaluation of the Contractor's monthly progress payment.
- B. Schedules shall be in a bar chart format with a logical association of predecessor or successor ties between the activities. The Schedules shall be produced using Primavera or Microsoft Project (the most current version). The Contractor may request to use different software as a substitution, in accordance with Division 01, Section 01 25 00 Substitutions. If the alternate software is accepted, the Contractor will be required to supply the Engineer with an authorized copy of the software with all user support manuals.
- C. If the Contractor should desire or intend to complete the Work earlier than any required Critical or Completion date, the Port will not be liable to the Contractor for any costs or other damages should the Contractor be unable to complete the Work according to this earlier date. The duties and obligations of the Port to the Contractor shall be consistent with and applicable only to the completion of the Work on the Milestone and Completion dates specified in the Contract, unless the Port and the Contractor otherwise agree and a change order is issued.
- D. At any time throughout the course of the work, the Engineer reserves the right to require additional activities to be added to the Schedule to further define the Contractor's plan and intentions regarding the execution of the Work. In each instance, such activities or changes shall be made by the Contractor at no cost or delay to the Port.

1.02 SCHEDULE - BAR CHART

- A. Pursuant to the General Conditions of this Contract, the following additional scheduling requirements are a part of this Contract.
- B. Work under this Section shall consist of furnishing a Schedule showing in detail how the Contractor plans to execute and coordinate the Work. The Contractor shall use the Critical Path Method (CPM) and Precedence Diagram Method (PDM)

- to generate the Schedule. The Schedule shall be based on, and incorporate the Contract Milestone and Completion Dates included in the Contract, and shall show the order in which the Contractor shall perform the Work, projected dates for the start and completion of separable portions of the Work, and other information concerning Contractor's scheduling as Port may request.
- C. <u>Schedule Requirements:</u> The Schedule shall be in the form of a bar chart and shall consist of horizontal lines, or bars, plotted along a time scale. The horizontal bar(s) shall indicate the start and finish dates as well as the total time period of performance for each activity. The Contractor shall arrange the chart so as to show the activities which are necessary to fulfill each and every Milestone and Completion Date requirement. The schedule shall be sorted by phase, area, and early start date.
- D. <u>The Schedule Content:</u> The Contractor's Schedule shall include, but not be limited to:
 - 1. Critical procurement activities including mobilization, shop drawings and other submittals, Engineer review of submittals, fabrication, and delivery of key and long-lead equipment and materials;
 - 2. Contract Execution; Preconstruction Submittals, Notice To Proceed; Construction/erection activities; Pre Final Inspection, Final Inspection and Substantial Completion.
 - 3. Off-site activities including interfaces with the work of outside contractors, e.g. utilities, power, or any separate contractor.
 - 4. Port activities including delivery of materials and equipment, programming, abatement, and services provided.
 - 5. Testing activities; Hold and witness points in construction; Commissioning, and Training.
 - 6. Phased Completion, Milestones and associated Substantial Completion Dates if specified.
 - 7. Activities for project Contract activities and requirements which include, but are not limited to, O&M manuals and record documents.
 - 8. Activities that are impacted by Change Order or Event.
- E. The identity, and logic of activities comprising the Schedule shall meet the following criteria:
 - 1. The description of work by activity. Activity descriptions and coding shall contain the area of the work as well as the specific type of work.
 - Activity boundaries shall be easily measurable and descriptions shall be clear and concise. The beginning and end of each activity shall be readily verifiable, and progress shall be quantifiable.
 - 3. Responsibility for each activity shall be identified with a single performing organization.
 - 4. Activity duration shall be in work days. Unless agreed otherwise with the Engineer, activity durations over fifteen (15) working days shall be kept to a minimum and be used only for non-construction activities, such as shop drawing and sample submittals, fabrication and delivery of materials and equipment, concrete curing, and General Conditions activities.

- 5. The Baseline Schedule must indicate which activities are to be performed on day shift versus night shift, and which activities will be performed utilizing two work shifts, or weekend work. The Contractor is fully responsible for planning and performing the work in order to meet all of the required project delivery dates, including additional second or third shift work.
- 6. Potential problems or constraints related to the implementation of the construction plan shall be identified in writing.
- 7. Foreseeable delays to activities such as normal seasonal weather shall be considered and included in the planning and scheduling of all work.
- 8. Imposed completion dates for events other than the Completion Dates are not permitted. Artificial Constraints are also not permitted.
- 9. The format for the Schedule shall include an activity information table shown on the left side of the page and a bar graph on the right side of the page. The columns in the activity information table on the left side of the page shall include, but are not limited to; Activity ID, Activity Description, Calendar ID, Original Duration, Remaining Duration, Early Start, Early Finish, Total Float, and Predecessors. The bar chart format shall include the Start Date to the left of the bar and the Activity Description to the right of the bar. The logic ties shall be visible on the bar chart. Critical Activities bars shall be identified by a different color than the non-critical activities.

F. Other Schedules

- Three-week "Look Ahead" schedule: The three-week "Look Ahead" Schedule shall include the current week's activities from the monthly Schedule, the next two weeks of planned work activities and other schedule information deemed necessary by the Contractor.
 - a. These schedules shall identify critical work, utility shutdowns, and activities impacting operations.
- 2. As-Built project schedule: The As-built shall be submitted at the end of the Project. The as-built schedule shall show actual start and finish dates for all activities in the schedule. This is the final schedule update for the project.

G. Submittals

- 1. The submittal of the schedule documents shall include:
 - a. The Baseline Schedule shall be submitted prior to issuance of NTP, per Section 01 32 19 Preconstruction Submittals.
 - (1) The Baseline Schedule shall include a narrative that explains the basis for the Contractor's schedule of construction and any constraints.
 - (2) All requested comments on the Baseline Schedule shall be incorporated, resubmitted, and accepted prior to the second Progress Payment.
 - b. The monthly schedule shall be submitted with the monthly request for payment.

- c. Three-week "Look Ahead" schedule: Contractor shall provide to the Engineer one electronic copy (PDF format) for the project meetings, 24-hours before the scheduled meeting.
- d. As-Built project schedule shall be submitted at the end of the Project.
- All schedules and schedule documents shall be electronic, submitted to the Engineer via Livelink. Submit one (1) color pdf of each schedule report, (except the Look-ahead schedules) together with an electronic data file of the CPM schedule. The bar chart schedules shall be sized for 11" X 17" printouts.

H. Acceptance Process

- 1. The Engineer will review the Contractor's Schedule. If required, a meeting will be held between the Engineer and the Contractor to resolve any conflicts between the Contractor's schedule and the overall Project Construction. The Contractor shall revise the schedule as required by the Engineer to support the Project Construction and shall submit its revised schedule to the Engineer within five (5) days for review and acceptance.
- 2. Acceptance by the Engineer of the Contractor's Schedule is advisory only and shall not release the Contractor of the responsibility for accomplishing the Work within each and every Contract-required Milestone and Completion Date. Omissions and errors in the Schedule shall not excuse performance that is not in compliance with the Contract. Acceptance by the Engineer in no way makes the Port an insurer of the Schedule's success or liable for time or cost overruns from its shortcomings. The Port disclaims any obligation or liability by reason of its acceptance of the Schedule.

1.03 COORDINATION

- A. The Contractor shall coordinate the Work with that of other contractors working on or near the project site and shall cooperate fully with the Engineer in maintaining orderly progress toward completion of the Work as scheduled.
- B. The Contractor shall involve all applicable subcontractors in the schedule development, updating, and revisions.
- C. The Contractor shall keep subcontractors informed of the Work underway by utilizing all project schedules.
- D. The Contractor shall coordinate all Work activities with Port departments providing services and support to the project.

1.04 SCHEDULE UPDATES

A. Update Procedures

 The Contractor understands and agrees that its Schedule is intended to accurately reflect at all times the status of the Project Construction and projected activities. The Contractor also understands and agrees that updating is a key requirement to accomplish this intent and shall comply with the requirement to update.

- 2. The graphic format of the Schedule shall include actual start and actual finish dates for activities that have started or finished. For activities in progress, activity progress shall be shown on the activity bar and the forecasted completion shall indicate the earliest the activity can be completed based upon current project status.
- 3. The Contractor understands and agrees that updating the Schedule is independent from updating the cost for progress payment purposes.
- 4. Contractor shall submit the accepted updated schedule with the pay application and include a written narrative describing the overall progress of the Work. The narrative shall include the following key aspects:
 - a. Progress in the last period.
 - b. Critical Path progress and schedule concerns.
 - c. Changes to schedule logic or sequencing of the work.
 - d. Potential Delays and Time Impact Analyses.
 - e. Submittal Status (focus on critical submittals and concerns).
 - f. Equipment and Material Delivery Status.
- 5. The Engineer will not be obligated to review or to process any Application for Progress Payment until the Contractor has submitted all schedules update information and the information accepted.
- 6. Throughout the progress of the Work, the Contractor shall prepare and maintain a three-week Look-ahead bar chart field schedule reflecting the schedule of work activities accomplished for the previous week and the work scheduled for the forthcoming two weeks. This schedule shall be presented at the weekly project meetings Activities on the three-week Look-ahead schedules shall be readily identifiable with activities on the Baseline schedule. Submit a pdf of the three-week look-ahead to the Engineer, 24 hours prior to the Project Meeting.
- 7. Updates shall be submitted on a monthly basis.

1.05 FLOAT

- A. Schedule float is not for the exclusive use or benefit of either the Contractor or the Port. Neither the Port nor the Contractor "owns" the float. The project or Work "owns" the float. Liability for delay to Contract or milestone dates rests with the party whose action (or inaction) caused the delay beyond the float that was available at the time of the delaying action (or inaction).
- B. Extensions of time will be granted only to the extent that the activity or activities affected exceed the total float or slack along the critical path of activities affected at the time of Notice to Proceed of a Change Order or the commencement of any delay or condition for which an adjustment is warranted under the Contract Documents. The Contractor shall submit documentation supporting its request for a time extension in a form acceptable to the Engineer and consistent with the requirements of the General Conditions.

1.06 TIME IMPACT ANALYSIS FOR CHANGED CONDITIONS

- A. If the Contractor experiences activity delays that the Contractor believes are caused by the Port, and the Contractor seeks to obtain a Contract time extension, the Contractor shall submit a formal written Time Impact Analysis (TIA). The TIA shall define the impact of each change or delay to the current accepted Schedule. The TIA shall include a written narrative of the impact of such delays, and a schedule that depicts how the changed or delayed work affects other activities in the current accepted Schedule.
- B. The Contractor shall continue to track update and submit monthly schedules during the development review and response period for the TIA. The Engineer may withhold monthly payment if the Contractor fails to maintain and submit updated schedules.
- C. In addition to the Contractor's presentation of the impact in the TIA, the Contractor shall include in the TIA, a mitigation plan that reduces or eliminates the claimed delay. The mitigation plan shall include specific Port and Contractor actions as well as the cost to the Contractor to proceed with the mitigation.
- D. In the event that the Contractor requests a Contract time extension, the time impacts to critical path activities in the current accepted Schedule shall be clearly shown. Extensions of time will be granted only to the extent that such changes or delays cause the time for the changed activity and related activities to exceed the total float along the affected path of activities at the time of the Port directive to proceed with the change or the actual commencement of the delay included in the TIA.
- Each formal TIA shall be submitted in accordance with the General Conditions.
- F. A copy of the Port accepted TIA will be incorporated in the change order signed by the Contractor and the Port for such change. Any changes to the Schedule will be incorporated into the next update of the Schedule following the Port's acceptance of the TIA.
- G. The Contractor shall be responsible for all costs associated with the preparation of the TIA and the incorporation of accepted TIAs, or portion of TIAs, in the Schedule.
- H. If agreement is not reached on a TIA, or a portion of a TIA, the Schedule, including any time extensions, shall be revised only to the extent accepted by the Port. For any TIA, or portion of a TIA, that is not accepted by the Port, the Contractor may submit a claim in accordance with the Conditions of the Contract.

1.07 RECOVERY SCHEDULE

- A. Should any conditions exist, such that certain activities shown on the Contractor's Schedule fall behind schedule to the extent that any of the mandatory Critical dates or Completion dates are in jeopardy, the Contractor shall be required to, at no cost to the Port, prepare and submit to the Engineer a supplementary recovery schedule, in a form and detail appropriate to the need, to explain and display how it intends to reschedule those activities to regain compliance with the Schedule.
- B. After determination of the requirement for a Recovery Schedule, the Contractor shall, within five (5) work days, present to Engineer the Recovery Schedule. The Recovery Schedule shall represent the Contractor's best judgment as to how work should be reorganized for return to the accepted Schedule. The Recovery Schedule shall be prepared to a similar level of detail as the Schedule.

- 1. Recovery Schedule: The Recovery Schedule shall represent the Contractor's best judgment as to how the Contractor's work shall be reorganized such that the work may return to the accepted Schedule within a maximum one-month period. The Recovery Schedule shall be prepared at a similar level of detail as the Schedule and shall be based on the accepted Schedule. The following requirements apply to Recovery Schedules:
 - a. Conditions Requiring a Recovery Schedule: Should any conditions exist, such that certain activities shown on the Schedule fall behind schedule to the extent that any of the mandatory critical dates or milestone completion dates are at risk of being delayed, the Contractor shall, at no cost to the Port, submit to the Engineer a Recovery Schedule.
 - b. Allow five (5) work days for review by the Engineer. Any revisions that result from the Engineer's review shall be resubmitted within three (3) work days by the Contractor for acceptance by the Engineer.
 - c. Narrative: Provide narrative describing the recovery schedule logic.
 - d. Schedule:
 - (1) Complete Schedule organized by Major Area, sorted by sub area and early start date. Provide in bar chart format.
 - (2) Critical Path Schedule: This schedule shall show only the critical path. Provide in bar chart format.
 - e. Manpower Loading and Progress Curve updated to reflect the Recovery Schedule.
 - f. The accepted Recovery Schedule shall then be the Schedule that the Contractor shall use in planning, organizing, directing, coordinating, performing and executing the Work (including all activities of subcontractors, equipment vendors, and suppliers) that is included on the Recovery Schedule. All other Work shall proceed per the accepted Schedule.
 - g. No later than five (5) calendar days prior to the expiration of the Recovery Schedule, the Engineer and Contractor will meet to determine whether the Contractor has regained compliance with the accepted Schedule. At the direction of the Engineer, one of the following will occur:
 - (1) If, in the opinion of the Engineer, the Contractor is still behind schedule, the Contractor shall prepare another Recovery Schedule, at no cost to the Port, to take effect for a maximum of one additional month from the start of the new Recovery Schedule.

(2) If, in the opinion of the Engineer, the Contractor has sufficiently regained compliance with the Schedule, the use of the Schedule shall be resumed.

1.08 AS-BUILT SCHEDULE

A. Provide for the As-Built Record Document an As-Built Schedule prior to request for Final Payment.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the project.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section addresses the submittals that must be made by the Contractor and accepted by the Engineer prior to issuance of a Notice to Proceed (NTP). The Port has based the Contract time on issuing an NTP seventy (70) days after Execution and has allowed time in the Contract duration for the Contractor to prepare, submit, and gain acceptance of the required submittals detailed herein.
- B. The Port will not issue a NTP, or accept requests for partial payments, or allow for onsite mobilization (less field office setup) until the Preconstruction submittals have been received and accepted by the Engineer. At the sole discretion of the Engineer, a partial NTP may be granted for portions of the Work.
- C. No time extension shall be granted for any delays in issuance of the NTP by the Engineer due to the Contractor's failure to provide acceptable submittals required herein. The Engineer shall be the sole authority on determining the acceptability of the Contractor's submittals.
- D. Early submission is encouraged. A submittal package that has "Accepted" or "Accepted as Noted" before the Preconstruction Conference can result in a Preconstruction Conference and NTP earlier than that originally contemplated. Poorly prepared, incomplete, or inaccurate submittals as well as non-receipt by the Engineer of required submittals will cause the Preconstruction Conference and the issuance of the NTP to be delayed. The Contract completion date remains "as bid." The Contractor is expressly notified that delay in issuance of NTP, due to incomplete or unacceptable submittals, will reduce the "actual" amount of time the Contractor has to complete the Work of the Contract.

1.02 SUBMITTALS

- A. All submittals shall be made in accordance with Section 01 33 00 Submittals.
- B. Required Submittals:
 - 1. Copies of any permits or other regulatory or public agency approvals required per Document 00 80 00, Supplementary Conditions Major Construction.
 - 2. List of subcontractors in accordance with General Conditions.
 - 3. Contractor's Project Organization and personnel qualifications per Section 01 31 00 Contractor's Project Organization.
 - 4. A Baseline Schedule, per Section 01 31 16 Bar Chart Schedules.
 - 5. Schedule of Values per Section 01 20 00 Measurement and Payment Procedures.
 - 6. Submittal Log per Section 01 33 00 Submittals.
 - 7. Safety Plan per Document 01 35 29 Safety Management
 - 8. Quality Control Plan per Section 01 45 16.13a Contractor's Quality Control Program
 - 9. Temporary Power Plan per Section 01 50 00 Temporary Facilities and Controls

- 10. Preconstruction Submittals called out in Section 01 55 16 Haul Routes.
- 11. Temporary Erosion and Sediment Control Plan per Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution.
- 12. Pollution Prevention Plan per Section 01 57 23 Pollution Prevention Planning and Execution.
- 13. Waste Management Plan per Section 01 74 19 Construction Waste Management
- Construction Water Management and Treatment Plan and Construction Water Treatment System Plan per Section 02 24 50 – Construction Water Treatment System.
- 15. Demolition Plan per Section 02 41 13 Site Demolition.
- 16. Contaminated Soils Management Plan per Section 02 61 13 Handling and Disposal of Contaminated Soil.
- 17. Lead Controls Work Plan per Section 02 83 19 Lead Controls in Construction and Demolition.
- Fugitive Dust Management Plan per Section 02 87 00 –
 Fugitive and Silica Dust Control Procedures.
- 19. Excavation Plan per Section 31 23 00 Excavation.
- 20. Dewatering Plan per Section 31 23 19 Excavation Dewatering.
- 21. Wetland Rehabilitation Plan per Section 32 72 00 Wetlands Rehabilitation.
- 22. Geotextile Placement Plan per Section 35 01 00 Lake Geotextile Placement.
- 23. Temporary Lake Access Road and DMCA Stockpile Area Installation and Removal Plan and DMCA Access and Stockpile Plan per Section 35 01 10 Temporary Construction Lake Access Road and Stockpile Areas
- 24. Lake Settling Basin and Rock Berm Remediation Plan per Section 35 03 00 Lake Settling Basin and Rock Berm Remediation.
- 25. Sediment Capping and Lake Filling Work Plan per Section 35 23 43 Sediment Capping and Lake Filling.
- 26. Settlement Monitoring Plan per Section 35 23 45 Lake Fill and Settlement Monitoring.
- 27. Lake Water Management Plan and Creek Protection Plan per Section 35 41 00 Water Management and Creek Protection.
- 28. Laboratory analytical data per Section 31 22 19.13 Topsoil Placement, Section 31 23 23 Backfill and Compaction, Section 32 92 19 Seeding, and Section 35 23 43 Sediment Capping and Lake Filling.
- 29. Long lead procurement items as defined in technical specifications.
- Critical materials and systems defined in the technical specifications of the Contract Documents that will be installed during the first 120 calendar days following NTP.

- 31. Preconstruction submittals for regulated materials
 - Lead (refer to Section 02 83 19 Lead Controls in Construction and Demolition)
 - b. Fugitive and silica dust (refer to Section 02 87 00 Fugitive and Silica Dust Control Procedures)

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section	

PART 1 GENERAL

1.01 DESCRIPTION

- A. Individual Submittals are required in accordance with the pertinent sections of these Specifications.
- B. Submittal Log: After Contract Execution, the Engineer will provide an electronic draft Submittal Log (Attachment 1) to the Contractor indicating those Submittals generally required by the Specifications. The Contractor shall check the required Submittals for completeness and accuracy against the bid documents and return the completed Submittal Log to the Engineer within 15 calendar days after the receipt of the Submittal Log from the Engineer. The Port will complete the first six (6) columns. The Contractor shall complete the "Contractor Priority" and "Date Due from Contractor" columns. The Contractor may also make comments in the "Remarks" column. This date shall correspond with that shown on the Project Schedule for each Submittal. A copy of the Submittal Log is attached to this Specification Section, for reference purposes only. The Contractor is expected to provide all listed Submittals unless specifically requested to be removed from the Submittal Log and accepted by the Engineer.
- C. All Submittal coversheets shall bear the Contract name and number, the date of submission, reference to the specification section and drawing number to which the Submittal applies, the nature of the Submittal, and the Contractor's signature.
- D. Submit all shop drawings, catalog cuts, and brochures in the quantity specified herein, electronically, using the Construction Document Management System (CDMS) Submittal Workflow process or other format as accepted by the Engineer.
 - 1. Submittal drawings shall include the official Port project name and work project number in the title blocks of all drawings that are created or modified for specific use on the project.
- E. Prepare a separate Submittal form for each product or procedure and identify by referencing the specification section and paragraph number.
- F. The Port will return the Submittal electronically via the CDMS Submittal Workflow process, within 14 days of receipt by the Engineer. Submittal status is reviewed in weekly Progress Meetings. See Deferred Submittals section for additional information on submittal process and timelines.
- G. 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 re-submittals.
- H. The Traffic Control Plans in this Contract have been reviewed by WSDOT. If Contractor modifies these plans, Contractor is responsible for coordination of WSDOT review of changes.
- I. Engineer shall receive submittals, including shop drawings, product data, and samples from Contractor and shall review and take other appropriate action on them, but only for conformity with the design concept of the Project and with the provisions and intent of the Contract Documents. Shop drawings, samples, and other submission reviews by Engineer shall not include checking of dimensions or openings for potential conflict. Engineer's acceptance of a specific item shall not indicate acceptance of an assembly of which the item is a component. Submittals will be returned, "Receipt Acknowledged," "Accepted," "Accepted as noted," "Revise and Resubmit," or "Not Accepted."

- J. Section 01 32 19 Preconstruction Submittals contains required submittals that must state "Accepted" or "Accepted as Noted" by the Port prior to issuance of Notice to Proceed.
- K. Refer to Section 01 25 00 Substitutions for procedures regarding requests for substitutions.

1.02 COMPLIANCE

- A. The Port may not pay for materials delivered or incorporated into the Work without an accepted submittal.
- B. 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 Engineer based on these Specifications.

1.03 SHOP DRAWINGS

- A. Quality: Prepare shop drawings accurately to 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. Calculations associated with shop drawing design shall also be submitted.
- B. Structural Fabrication and Erection Drawings: All shop drawings which indicate structural fabrication or erection details and associated calculations shall bear the seal of a licensed structural engineer in the State of Washington.
- C. Thoroughly review all shop and detail drawings prior to submittal, including all those provided by subcontractors and suppliers at any tier, to assure coordination with other parts of the Work. Failure to comply will be cause for rejection. Submittals shall bear the Contractor's **approval** stamp and initials of the reviewer.
- D. Components or materials which require shop drawings and which arrive at the job site prior to acceptance of shop drawings shall be considered as not being made for this project and shall be subject to rejection and removal from the premises.
- E. All drawings submitted to the Engineer shall be drawn on sheets each 24 inches wide by 36 inches long in overall dimensions or on small sheets that are multiples of 8-1/2 inches by 11 inches.
- F. Type of Prints Required: Submit one (1) electronic copy of all shop drawings or supplemental working drawings in accordance with Document 00 70 00 General Conditions.
- G. Submit shop and detail drawings in related packages. All equipment or material details that are interdependent or are related in any way must be submitted together as a complete package indicating the complete system. Submittals shall not be altered once accepted for construction. Clearly mark and date revisions. Major revisions must be resubmitted for acceptance
- H. All documents submitted to the Port and not returned to the Contractor, shall be retained by the Port, including software and source codes, etc., that is developed or used for the project. See Document 00 70 00 General Conditions.

1.04 MANUFACTURERS' LITERATURE

A. Submit one (1) electronic copy of manufacturers' literature. The electronic data shall have software search features and interactive capabilities.

 Product data, catalog cuts, or brochures shall show the type, size ratings, style, color, manufacturer and catalog number of each item and be complete enough to provide for positive and rapid identification in the field. Submit catalog data in electronic form. The electronic data shall have software search features and interactive capabilities. Specific items shall be clearly marked or highlighted. General catalogs or partial lists will not be accepted.

1.05 MANUFACTURER'S CERTIFICATE OF COMPLIANCE

A. The Manufacturer's Certificate of Compliance must identify the manufacturer, the type and quantity of material being certified, the applicable specifications being affirmed, and the signature of a responsible corporate official of the manufacturer and include supporting mill tests or documents. A Manufacturer's Certificate of Compliance, when requested in the technical specs, shall be furnished with each lot of material delivered to the Work and the lot so certified shall be clearly identified in the certificate.

1.06 SAMPLES

- A. The sample submitted shall be the exact or precise article proposed to be furnished.
- B. Submit three (3) samples of each article proposed.

1.07 DEFERRED SUBMITTALS

- A. Deferral of any submittal items shall have prior approval of the Authority Having Jurisdiction (AHJ). The Deferred Submittals are listed on the Contract Documents or on the building permit(s). The Contractor shall submit complete information, including design calculations, for each individual deferred item in a single submittal package promptly after the Execution of the Contract.
- B. The Engineer shall send them to the AHJ for acceptance.
- C. Deferred Submittal items shall not be installed until the design and submittal documents have been accepted by the AHJ. The Contactor shall allow an additional 14 days for deferred submittal review beyond the time specified in paragraph 1.01F for standard submittal review to account for the additional AHJ department review time.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the work required by this section. The cost for this portion of the work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Submittal Log



0.1																					See Section 01330 for Submittal Procedures			
CI Cert. of Insur CS Copies of Sta CH Schedule DF Deferred	LS As Built FT Field Test PP Plan/Proc CA Calculations MD Manufacturer Product Data QR Qualificat CC Cert. of Compliance MN Meeting Notes SA Sample CI Cert. of Insurance MU Mock-Up SD Shop Dra CS Copies of Standards NP Notice or Permit SE Service A CH Schedule OM 0&M Manual SU Substitut				SD Shop Drawing SE Service Agreer SU Substitution TD Test Data	nent	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis 4 - Not R	ipt Acknowled oted oted as Noted e and Resubrateviewed/Not a	lged I	ed and signed	Review Period Filter Sub Out for Review Filter PreCon Submtls			CLICK HERE TO PRODUCE THE Contractor Priority. A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority									
ES Extra Stock				PC Preconstruction Submittal	WA Warranty			5 - In Pro	ocess			Unfilt	er All		Desi	gn Team	F&I / Ma	intenance	Additiona	Reviewers	1			
Sub. No	Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Date Sent to Reviewer	from	Date Sent to Contr	Status (condtn'l format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)		Contr Time (formula)
		00000		Sample 1	SA	В	6/9/2013	6/11/2013	6/11/2013	12/12/2013	6/14/2013	6/15/2013	5	N			D. Bean					4	-181	-2
		00000		Sample 2	SD	A	6/9/2013	6/7/2013	6/7/2013	6/7/2013			4	N	J. Smith			R. Wright						2
	4	00000		Sample 3	DF	C	6/9/2013	6/1/2013	6/15/2013	<u> </u>			0	Υ	J. Smith	<u> </u>			POS Fire					8
		00 70 00	G-04.33C	List of Subcontractors	PC																			
		00 80 00	SC-04.01	Site Assessment Survey- Existing conditions Videotape	PC																			
		00 80 00	SC-04.12	Contractor's Written Statement of Responsibility	PC																			
		00 80 00	SC-04.14.J	Asbestos Awareness Training	TR														PCS					
		00 83 50	1.09B	Apprentice Utilization Goal	PP																			
		01 14 13c	2A	Final Contractor Access Plan	PC/PP																			
		01 20 00	1.02A.2	Schedule of Values	PC/CH																After approval, forward a copy to CPO			
		01 20 00	1.02A.3	Labor and Equipment Rates	PC																			
		01 31 00	1.03A	Contractor's Project Organization	PC/QR/PP																			
		01 32 16	1.02G.1a	Baseline Schedule, Narrative & Reports	PC/CH														B. Pitts					
		01 32 16	1.02G.1b	Monthly Progress Schedule, Narrative & Reports	СН																			
		01 32 16	1.02G.1d	As-built Record Schedule	AS																			
		01 33 00	1.01B	Submittal Log	PC																			
		01 35 29	1.04A	Site Specific Safety Plan	PC/PP																			
		01 35 29	1.04B	Chemical Exposure Plan	PP																			
		01 45 16 13a	1.03A	Quality Control Plan	PC/PP																			
		01 45 16 13a	1.03B	Quality Control Reports	PP																			
		01 45 16 13a	1.03C	Pre-Installation Meeting List	PP																			



					:													See Section 01330 for Submittal Procedures		
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up N Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agret SU Substitution TD Test Data WA Warranty	Resume 3 ement		* STATUS 0 - Receip 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted and Resubmit eviewed/Not Accep	J	Review Period Filter Sub Out for Rev Filter PreCon Submit	iew		CLICK HERE TO PRODUCE THI		intenance	Additiona	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr		te Sent eviewer Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	01 45 29	1.03A	Schedule of Special Inspections	PC/PP																
	01 50 00	1.01C	Temporary Power Plan	PC/PP																
	01 55 16	1.03A.1-3	Haul Route Submittal info	PC/PP																
	01 55 16	1.03A.4	Haul Route Activities	AS																
	01 55 16	1.03A.5	Haul Route Closeout Activities	AS																
	01 55 26	3.08A	Traffic Control Supervision Designation	PP																
	01 55 26	3.08B	Traffic Control Plan	PP																
	01 55 26	3.08C	Haul Route Permits	PP																
	01 57 13		Contractor Erosion and Sediment Control Plan (CESCP) (as per 01305, 1.02.B13)	PC/PP																
	01 57 13	1.03B	CESCP Materials & Certifications	MD/QR																
	01 57 23	1.04.A.1	Pollution Prevention Plan	PC/PP													Environmental			
	01 57 23	1.04.A.2	Insurance Endorsements	CI																
	01 57 23	1.04.A.3	MCS-90 Certificate	СС																
	01 57 23	1.04.A.4	List of drivers with hazardous material endorsement	NP																
	01 74 19	1.03A	Waste Management Plan	PC/PP													Environmental			
	01 74 19	1.03B	Waste Management Final Report	PP													Environmental			
	01 78 23 13	1.02A.1	CMMS Source File/Forms	СН																
	01 78 23 13	1.02A.2	Draft O&M Manuals	ОМ														60 days prior to punchlist		
	01 78 23 13	1.02A.3	Final O&M Manuals	ОМ														Submit prior to final inspection		
	01 78 29	1.03B	As-Built Redline Drawings	AS																



							I											See Section 01330 for Submittal Procedures			
Submittal Type Legent AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>1</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume 3 ement	Training	* STATUS 0 - Recei 1 - Accei 2 - Accei 3 - Revis	pted as Noted se and Resubmit Reviewed/Not Accepted	nped and sign	Filter Sub Out for Revi	iew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
										Unfilter All		Desig	n Team	F&I / Ma	intenance	Additiona	l Reviewers				
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	t Date Red from er Reviewe	Status (condtn format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	01 78 29	1.03C	Final As-Built Redline Drawings	AS																	
	01 78 36	1.04A	Written Warranties	WA														60 days prior to punchlist			
	01 78 36	1.04B	Special Warranties	WA																	
	01 78 36	1.04C	Final Executed Warranties	WA														include in Final O&M			
	01 79 00	1.03	Training Plan & Syllabus	PP																	
	02 41 13	1.03A	Materials	MD																	
	02 41 13	1.03B	Demolition Plan	PP																	
	02 61 13	1.03	Contaminated Soils Management Plan	PP																	
	02 82 13	1.05.B	Work Plan Asbestos	PC												PCS					
	02 82 13	1.05.C	Daily work records - Asbestos	PP												PCS					
	02 82 13	1.05.D	Project record documents - Asbestos	PP																	
	02 83 19	1.05.B	Work Plan - Lead	PC												PCS					
	02 83 19	1.05.C	Daily work records - Lead	PP																	
	02 83 19	1.05.D	Project record documents - Lead	PP												PCS					
	02 83 33	1.03C	Work Plan	PP																	
	02 83 33	1.03D	Pre-NTP Submittals	PC/PP																	
	02 83 33	1.03E.2c	Air Monitoring Results	TD																	
	02 87 00	1.06.B	Work Plan - Fugitive and Silica Dus	st PC												PCS					
	02 87 00	1.06.C	Daily work records - Fugitive and Silica Dust	PP																	
	02 87 00	1.06.D	Project record documents - Fugitive and Silica Dust	re PP												PCS					



																		See Section 01330 for Submittal Procedures		
Submittal Type Legi AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	е		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawin SE Service Agre SU Substitution TD Test Data WA Warranty	Resume g ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	ipt Acknowledged oted oted as Noted e and Resubmit deviewed/Not Accept		Review Period Filter Sub Out for Rev Filter PreCon Subm Unfilter All	riew		CLICK HERE TO PRODUCE THI	E	intenance	Additiona	l Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Ite		Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	e Sent Date Rec from eviewer Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	03 11 00	1.03A.1	Formwork and Falsework Drawings	s SD																
	03 11 00	1.03A.2	Formwork and Falsework Sequence	ce PP																
	03 21 00	1.03B.1	Material Testing Certified Test Reports	TD																
	03 21 00	1.03B.2	Concrete Reinforcement Shop Drawings	SD																
	03 30 00	1.03B.1	Mix Designs - each class of concrete	MD/TD																
	03 30 00	1.03B.2	Non-Shrink Grout	PD/CC																
	03 30 00	1.03B.3	Membrane	PD																
	03 30 00	1.03B.4	Test Reports	TD																
	03 30 00	1.03B.6	Concrete Batch Tickets																	
	03 30 00	1.03B.7	Concrete Placement & Sequencing	g PP/SD																
	03 30 00	1.03B.8	Finishing Procedure	PP																
	03 31 00	1.03	Structural PCC Materials	MD																
	03 35 10		Blast Finished Concrete Materials																	
	03 35 10		Blasting Procedure	PP																
	03 35 10		Mock-up	MU																
	03 37 13		Shotcrete Materials Mix Design	MD																
	03 37 13		Fiber Reinforcement Certification	TD																
	03 37 13		Mockup	ми																
	03 37 13		Installation Plan	PP																
	33 01 10	1.555.4																		



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Submittal Type Leger AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedun QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	ipt Acknowledge oted oted as Noted e and Resubmit eviewed/Not Ac	t	Review Period Filter Sub Out for Filter PreCon S Unfilter A	r Review ubmtls		CLICK HERE TO PRODUCE THE		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr		Date Sent Date F from to Reviewer Review	ec Date Sent to ver Contr	format)	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	03 40 00	1.03A	Precast Concrete Materials	MD																
	03 40 00	1.03B.1	Mix Design	TD																
	03 40 00	1.03B.2	Batch Tickets																	
	03 40 00	1.03B.3	Finish Sample	MU																
	03 40 00	1.03B.4	Shop Drawings	SD																
	03 40 00	1.03B.5	Structural calculations	CA																
	03 40 00	1.03B.7	Inserts	MD																
	03 40 00	1.03B.8	Precast Concrete Piping	CC/TD/AS																
	03 52 16	1.03B.1	Insulation - each type	MD																
	03 52 16		Test Reports	TD																
	03 54 13	1.03A	Gypsum Floor Underlayment Materials	MD																
	03 63 00		Epoxy Mortar Materials Work Plan, Material Certifications,	MD																
	03 64 23	1.000	Test Data	FF/MID/TD																
	04 22 00		Mortar Mix Design(s) Grout Mix Design(s)	TD TD																
	04 22 00		Material Certifications	CC																
	04 22 00		Construction Procedures	PP																
	04 22 00 04 22 00		Sample Panel	MU																
	05 05 19	1.03B.1	Post Installed Concrete Anchor Materials	MD																
	05 05 19		Installer Qualifications	QR																



							I											See Section 01330 for Submittal Procedures			
Submittal Type Legend AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>1</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM 0&M Manual OT Owner Training	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data	Resume ment	Training	* STATUS 0 - Recei 1 - Accei 2 - Accei 3 - Revis 4 - Not R	pted as Noted se and Resubmit Reviewed/Not Accepted	ed and signo	Review Period Filter Sub Out for Revi	iew		CLICK HERE TO PRODUCE THI					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
ES EXTRA STOCK			PC Preconstruction Submittal	WA Warranty			5 - In Pro	ocess	1 (Unfilter All		Desig	n Team	F&I / Ma	intenance	Additiona	I Reviewers	1			
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Date Rec from Reviewer	Status (condtn'l format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	05 05 19	1.03B.3	Special Inspection & Testing Reports	TD																	
	05 05 23	1.03B.1	Welder certificates	QR																	
	05 05 23	1.03B.2	Shop and Erection Details	SD																	
	05 05 23	1.03B.3	Filler Materials	MD																	
	05 05 23	1.03B.4	Welder Qualifications	QR																	
	05 05 23	1.03B.5	Testing & Inspection Results	TD																	
	05 05 23	1.03B.6	Welding Supervisor Qualifications	QR																	
	05 05 23	1.03B.7	Weld Inspection Work Schedule	СН																	
	05 12 00	1.03B.1	Manufacturer/Fabricator Contact Information																		
	05 12 00	1.03B.2	Shop Drawings	SD																	
	05 12 00	1.03B.3	Erection Details	SD																	
	05 12 00	1.03B.4	Shop Primer	MD/TD																	
	05 12 00	1.03B.5	Mill Certificates	СС																	
	05 12 00	1.03B.6	Fabricator Qualifications	QR																	
	05 12 00	1.03B.7	Steel Member Identification Plan	PP																	
	05 12 00	1.03B.8	Fabrication & Erection Drawings	SD/PP																	
	05 21 00	1.03B	Steel Joist Shop Drawings	SD																	
	05 31 13	1.03B.1	Shop and Erection Details	SD																	
	05 31 13	1.03B.2	Lab Tests or Mill Certificates	CC																	
	05 40 00	1.03B	Metal Framing Shop Drawings	SD																	



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Submittal Type Legent AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification In SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume 3 ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis 4 - Not R	pted as Noted se and Resubmit Reviewed/Not Accepted	oed and sign	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE THI					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) Date Sent to Reviewer	Date Rec from Reviewe	Status (condtrul)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	05 50 00	1.03B	Metal Fabrications Shop Drawings	SD																
	05 51 00	1.03B.1	Metal Stair Shop Drawings	SD																
	05 51 00	1.03B.2	Samples	SA																
	05 51 00	3.02A.4	Design Load Criteria	CA																
	05 52 13	1.03B.1	Handrail & Railing Shop Drawings	SD																
	05 52 13	1.03B.2	Handrail & Railing Samples	SA																
	05 52 50	1.03B.1	Qualification Product Data	MD																
	05 52 50	1.03B.2	Glass Railing Shop Drawings	SD																
	05 52 50	1.03B.3	Verification Samples	SA																
	05 52 50	1.04E	Calculations	CA																
	05 52 50	2.05E	Qualification Data	QR																
	05 53 00	1.03B.1	Grating Material Data	MD																
	05 53 00	1.03B.2	Grating Shop Drawings	SD																
	05 53 00	1.03B.3	Fasteners	TD																
	05 53 00	1.04	Special Warranties	WA																
	06 05 00	1.03B	Lumber & Timber Shop Drawings	SD																
	06 10 00	1.03C	Fabricated Structural Members	SD																
	06 10 00	1.03E	Proposed Modifications	CA/SD																
	06 10 00	2.05F	Pressure Treated Lumber & Plywood	СС																
	06 10 00	2.05H	Certificates of Grade	CC																



																		See Section 01330 for Submittal Procedures			
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	06 17 53	1.03B.1	Wood Truss Shop Drawings	SD																	
	06 17 53	1.03B.2	Erection Instructions	PP																	
	06 17 53	1.03B.3	Load Carrying Certification	СС																	
	06 17 53	1.03B.4	Grade Marks	СС																	
	06 17 53	1.03B.5	Qualifications of Fabricator	QR																	
	06 20 00	1.03B.1	Finish Carpentry Samples	SA																	
	06 41 00	1.03B.1	Custom Cabinets Product Data	MD																	
	06 41 00	1.03B.2	Cabinets Quality Certification	СС																	
	06 41 00	1.03B.3	Cabinets Shop Drawings	SD																	
	06 42 19	1.03B.1	Plastic Laminate Materials	MD																	
	06 42 19	1.03B.2	Plastic Laminate & Metal Trim Samples	SA																	
	07 10 00	1.03B.1	Waterproofing Installation Drawings	SD SD																	
	07 10 00	1.03B.2	Field Quality Control Procedures	PP																	
	07 10 00	1.03B.3	Safety Data Sheet - each material																		
	07 10 00	1.03B.4	Manufacturer's Certificate of Conformance	СС																	
	07 14 00	1.03.A	Fluid Applied Waterproofing Materials	MD																	
	07 19 00	1.03A	Water Repellant Coating Materials	MD																	
	07 19 00	1.03B	Certification of Installation	СС																	
	07 19 00	1.08A	Water Repellant Coating Warranty	WA																	
	07 21 00	1.03A	Roof and Deck Board Insulation Materials	MD																	



																			See Section 01330 for Submittal Procedures		
Submittal Type Leg AS As Built CA Calculations CC Cert. of Complianc CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	be		 	FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Proced QR Qualification SA Sample SD Shop Drawin SE Service Agre SU Substitutio TD Test Data WA Warranty	n Resume ng eement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	ipt Acknowledged oted oted as Noted e and Resubmit leviewed/Not Acc	1	Review Period Filter Sub Out for R Filter PreCon Subi	eview		CLICK HERE TO PRODUCE TH	Ē	nintenance	Additiona	l Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	07 26	00	1.03A	Underslab Vapor Retarder Material	s MD																
	07 41	13	1.03A	Preformed Metal Roofing Materials	MD																
	07 41	13 1.	.03B.1	Performance Test Reports	TD																
	07 41	13 1.	.03B.2	Manufacturer's Standard Warranty	WA																
	07 41	13 1.	.03B.3	Metal Roofing Samples	SA																
	07 41	13 1.	.03B.4	Metal Roofing Shop Drawings	SD																
	07 41	18	1.03A	Preformed Metal Facia Materials	MD																
	07 41	18 1.	.03B.1	Performance Test Reports	TD																
	07 41	18 1	.03B.2	Manufacturer's Standard Warranty	WA																
	07 41	18 1.		Preformed Metal Roofing Samples	SA																
	07 41	18 1	.038.4	Preformed Metal Roofing Shop Drawings	SD																
	07 41	43		Preformed Metal Sandwich Panel Materials	MD																
	07 41	43 1.	.03B.1	Performance Test Reports	TD																
	07 41	43 1.		Manufacturer's Standard Warranty	WA																
	07 41		.005.0	Preformed Metal Sandwich Panel Preformed Metal Sandwich Panel	SA																
	07 41			Preformed Metal Sandwich Panel Shop Drawings																	
	07 50	00		Single Ply Roofing Materials	MD																
	07 50	00		Roofing and Materials	SA																
	07 50	00		Safety Data Sheet - each material																	
	07 50	00 1.0	03A.3a	Product Compatability	CC																



																			See Section 01330 for Submittal Procedures		
Submittal Type Leger AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock			FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledge oted oted as Noted e and Resubmi eviewed/Not Ac	t	Revie	ew Period ew Period er Sub Out for Revi	ew		CLICK HERE TO PRODUCE THE		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	07 50 00	1.03B.1	Singly Ply Roofing Shop Drawings	SD																	
	07 50 00	1.04A	Installer Certification	QR																	
	07 50 00	1.09A	Sample Warranty	WA																	
	07 50 00	1.09B	Final Warranty	WA																	
	07 53 00	1.03A	Elastomeric Sheet Roofing Materials	MD																	
	07 53 00	1.03B.1	Manufacturer Certification of Installation	CC																	
	07 53 00	1.03B.2	Warranty	WA																	
	07 53 00	1.03B.3	Sheet Roofing Samples	SA																	
	07 53 00	1.03B.4	Closeout Documents	ОМ																	
	07 60 00	1.03A	Flashing & Sheet Metal Materials	MD																	
	07 60 00	1.04A	Special Warranties	WA																	
	07 81 16.10	1.03A	Cementitious Fireproofing Materials	MD MD																	
	07 81 16.10	1.03B	Installation Instructions	PP																	
	07 81 16	1.03A	Cementitious Fireproofing Materials	MD MD																	
	07 81 16	1.03B.1	Certified Test Reports	TD																	
	07 81 16	1.06C	Safety Data Sheet - each material																		
	07 84 00		Firestopping Materials	MD																	
	07 84 00	1.03B.1	Firestopping Characteristics, Installation Procedures	PP																	
	07 84 00	1.03B.2	Firestopping Shop Drawings	SD																	
	07 84 00	1.03B.3	Certificate of Conformance	CC																	



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	07 92 00	1.03A	Joint Sealant Materials	MD																
	07 92 00	1.04A	Joint Sealer Warranty	WA																
	08 11 00	1.03A	Steel Doors and Frames Materials	MD																
	08 11 00	1.03B	Steel Doors and Frames Shop Drawings	SD																
	08 11 00	1.04D	Safety Data Sheet - each material																	
	08 11 16	1.03A	Aluminum Doors & Frames Materials	MD																
	08 11 16	1.03B.1	Certified Laboratory Test Reports	TD																
	08 11 16	1.03B.2	Aluminum Doors & Frames Shop Drawings	SD																
	08 11 16	1.03B.3	Finish Samples	SA																
	08 14 00	1.03B.1	Wood Door Product Data	MD																
	08 14 00	1.03B.2	Wood Door Shop Drawings	SD																
	08 14 00	1.03B.3	Wood Door Samples	SA																
	08 14 00	1.04A	Special Warranties	WA																
	08 15 13	1.03A	Laminated Plastic Doors Product Data	MD																
	08 15 13	1.05A	Special Warranties	WA																
	08 30 00	1.03A	Special Doors and Frames Product Data	MD																
	08 30 00	1.03B.1	Special Doors and Frames Shop Drawings	SD																
	08 30 00	1.03B.2	Material List	MD																
	08 30 00	3.03	Special Doors and Frames O&M Data	ОМ																
	08 31 00	1.03B.1	Plastic Laminate Access Panel Product Data & Installation Inst.	MD																



																		See Section 01330 for Submittal Procedures			
Submittal Type Lege AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>nd</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedul QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted e and Resubmit eviewed/Not Accep		Review Period Filter Sub Out for Re Filter PreCon Subn Unfilter All	view		CLICK HERE TO PRODUCE THI	E	intercers	Additional	I Peripusas	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
Sub. No Iten	Sect. No	Para. No	Title	ittal Type	Contr Priority condtn'l format)	Date Due from Contr	Date Rec from Contr		te Sent eviewer	Date Sent to	Closed	Desig Critical	n Team Other	F&I / Ma	Other3	Additiona Critical4	Other5	Remarks	Actual Turn Around Time Spent		Contr Time (formula)
				Subm	Cont (condt	Contr	Contr	(iorinuia)	Reviewer	Status	2 0								(formula)	(formula)	
	08 36 13	1.03A	Sectional Overhead Doors Product Data	MD																	
	08 36 13	1.03B	Sectional Overhead Doors Materials List	MD																	
	08 36 13	3.03A-C	Sectional Overhead Doors O&M Data	ОМ																	
	08 42 29	1.03A	Transit Station Doors Product Data	MD																	
	08 42 29	1.03B	Transit Station Doors Shop Drawings	SD																	
	08 51 13	1.03.A	Aluminum Windows Product Data	MD																	
	08 51 13	1.03.B	Aluminum Windows Shop Drawings	s SD																	
	08 70 00	1.03B.1	Hardware Samples	SA																	
	08 70 00	1.03B.3	Hardware Product Data	MD																	
	08 70 00	1.03B.4	Hardware Schedule	СН																	
	08 70 00	1.05	Special Warranties	WA																	
	08 80 00	1.03A	Glazing Samples	SA																	
	08 80 00	1.03B	Glazing Shop Drawings	SD																	
	08 80 00	1.07A	Special Warranties	WA																	
	08 91 00	1.03A	Wall Louvers Product Data	MD																	
	08 91 00	1.03B.1	Wall Louvers Shop Drawings	SD																	
	08 91 00	1.03B.2	Wall Louvers Samples	SA																	
	08 91 00	1.03B.3	Worker Qualifications	QR																	
	08 91 26	1.03A	Door Louver Product Data	MD																	
	08 91 26	1.03B	Door Louver Shop Drawings	SD																	



																		See Section 01330 for Submittal Procedures		
Submittal Type Leger AS AS Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>id</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Accep		Review Period Filter Sub Out for R Filter PreCon Subr	eview		CLICK HERE TO PRODUCE THE	E	intenance	Additions	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	09 20 00	1.03A	Gypsum Board Product Data	MD																
	09 20 13	1.03A	Lath & Plaster Product Data	MD																
	09 20 13	1.03B.1	Lath & Plaster Certificate of Conformance	СС																
	09 20 13	1.03B.2	Applicator's Qualifications	QR																
	09 20 13	1.03B.3	Manufacturer's Written Instructions	s PP																
	09 21 16.23	1.03A	Drywall Shaft System Materials	MD																
	09 21 16.23	1.03B.1	Installer Qualifications	QR																
	09 24 00	1.03A	Exterior Lath & Plaster Product Data	MD																
	09 24 23	1.03A	Stucco Materials Product Data	MD																
	09 24 23	1.03B.1	Applicator's Qualifications	QR																
	09 26 00	1.03A	Gypsum Base Materials Product Data	MD																
	09 26 13	1.03A	Gypsum Veneer Plaster Materials Product Data	MD																
	09 26 13	1.03B.1	Applicator's Qualifications	QR																
	09 30 13	1.03A	Ceramic Tile Product Data	MD																
	09 51 00	1.03A	Acoustical Ceiling Product Data	MD																
	09 51 00	1.03B.1	Acoustical Ceiling Shop Drawings	SD																
	09 51 00	1.03B.2	Acoustical Ceiling Samples	SA																
	09 51 00		Acoustical Ceiling Calculations	CA																
	09 51 13	1.03A	Metal Acoustical Ceiling Panels Product Data	MD																
	09 51 13	1.03B.1	Metal Acoustical Ceiling Panel Shop Drawings	SD																



																		See Section 01330 for Submittal Procedures		
Submittal Type Legend AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agreet SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and signe	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE THI					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) Date Sent to Reviewer	Date Rec from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	09 51 13	1.03B.2	Metal Acoustical Ceiling Panel Samples	SA																
	09 51 13	1.03B.3	Metal Acoustical Ceiling Panel Calculations	CA																
	09 51 23	1.03A	Composition Acoustical Ceilings Product Data	MD																
	09 51 23	1.03B.1	Composition Acoustical Ceilings Shop Drawings	SD																
	09 51 23	1.03B.2	Composition Acoustical Ceiling Samples	SA																
	09 51 23	1.03B.3	Composition Acoustical Ceiling Calculations	CA																
	09 51 23	1.05A	Spare Parts Information	ОМ																
	09 54 23	1.03A	Metal Linear Ceiling System Product Data	MD																
	09 54 23	1.03B.1	Metal Linear Ceiling System Shop Drawings	SD																
	09 54 23	1.03B.2	Metal Linear Ceiling System Samples	SA																
	09 54 23	1.03B.3	Maintenance Instructions	ОМ																
	09 54 23	1.03B.4	Spare Parts Information	ОМ																
	09 65 00	1.03A	Resilient Flooring Product Data	MD																
	09 65 00	1.03B.1	Resilient Flooring Samples	SA																
	09 65 00	1.03B.2	Resilient Flooring Shop Drawings	SD																
	09 65 13	1.03A	Resilient Wall Base Product Data	MD																
	09 65 13	1.03B.1	Resilient Wall Base Samples	SA																
	09 66 13	1.03A	Portland Cement Terrazzo Produc Data	MD MD																
	09 66 13	1.03B.1	Portland Cement Terrazzo Sample	es SA																
	09 66 16.16	1.03A	Plastic Matrix Terrazzo Product Data	MD																



																		See Section 01330 for Submittal Procedures		
Submittal Type Legi AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	е		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawin SE Service Agre SU Substitution TD Test Data WA Warranty	Resume g ement		* STATUS 0 - Receip 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted and Resubmit eviewed/Not Accepted	ļ	Review Period Filter Sub Out for Rev Filter PreCon Submt Unfilter All	iew		CLICK HERE TO PRODUCE THI		nintenance	Additiona	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Ite		Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	ent Date Rec ewer from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	09 66 16.16	3 1.03B.1	Plastic Matrix Terrazzo Layout Drawings	SD																
	09 66 16.16	3 1.03B.2	Plastic Matrix Terrazzo Samples	SA																
	09 66 16.16	3 1.05A	Work Area Mockup	ми																
	09 66 16.16	3 1.05B	Installer Qualifications	QR																
	09 66 16.16	3 1.06	Special Warranties	WA																
	09 68 00	1.03A	Carpet Product Data	MD																
	09 68 00	1.03B.1	Carpet Samples	SA																
	09 68 00	1.03B.2	Fire Test Certification	cc																
	09 69 00	1.03A	Access Flooring Product Data	MD																
	09 69 00	1.03B.1	Access Flooring Shop Drawings	SD																
	09 69 00	1.03B.2	Access Flooring Samples	SA																
	09 69 00	1.03B.3	Certification and Test Data	CC/TD																
	09 69 00		Access Flooring Calculations	CA																
	09 69 00		Installer Qualifications	QR																
	09 69 00		Spare Parts Information	OM																
	09 72 00 09 72 00		Wall Covering Product Data Safety Data Sheet - each material	MD																
	09 72 00		Spare Parts Information	OM																
		4.004	Acoustical Insulation Product Data																	
	09 81 00 09 84 13		Acoustical Wall System Product	MD																
			Data	5																



	See Section 01330 for Submittal Procedures												1							
	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority					CLICK HERE TO PRODUCE THE		view	Review Period Filter Sub Out for Rev	_	wledged	ceipt Acknow epted epted as No rise and Res Reviewed/N	* STATUS 0 - Reco 1 - Acce 2 - Acce 3 - Revi 4 - Not	Training	Resume g ement	PP Plan/Procedur QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data	FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training			attal Type Legen Built alculations ert. of Compliance ert. of Insurance opies of Standards chedule eferred
		I Reviewers	∆dditiona	intenance	F&I / Ma	n Team	Desi		Unfilter All	4		rocess	5 - In Pi			WA Warranty	PC Preconstruction Submittal			tra Stock
Actual Turn Around Time Spent (formula) Time (formula)	Remarks	Other5	Critical4	Other3	Critical2	Other	Critical	Closed	Status (condtn'l format)	Date Rec from Reviewer	ne to Date Sent tr to Reviewe	Date Due Contr (formula	Date Rec from Contr	Date Due from Contr	Contr Priority (condtn'l format)	Submittal Type	Title	Para. No	Sect. No	ub. No Item No
																SA	Acoustical Wall System Samples	1.03B.1	09 84 13	
																SD	Acoustical Wall System Layout Drawings	1.03B.2	09 84 13	
																ОМ	Spare Parts Information	3.02	09 84 13	
																MD	Paints and Coatings Product Data	1.03A	09 90 00	
																s SA	Paints and Coatings Color Sample	1.03B.1	09 90 00	
																MD	Coating System Product Data	1.03A	09 96 26	
																SA	Color Samples	2.04E.7b	09 96 26	
																WA	Material Warranty	2.04E.7c	09 96 26	
																CC	Coating System Certificate of Compliance	2.07A	09 96 26	
																QR	Coating System Demonstrated Performance		09 96 26	
																SD	Coating System Shop Drawings		09 96 26	
																PP/CH	Work Plan and Schedule		09 96 26	
																QR	Installer Qualifications		09 96 26	
																WID				
																MU	Mock Up		09 96 46	
																QR	Applicator's Qualifications		09 96 46	
																MD	Special Coatings Product Data	1.03A	09 97 00	
																SA	Samples - All Paints and Finishes	1.03B.1	09 97 00	
																MD	Special Coatings - Metal Product Data	1.03A	09 97 13	
																QR MD SA	Applicator's Qualifications Special Coatings Product Data Samples - All Paints and Finishes	1.03B.1 1.03B.2 1.03B.3 1.03A	09 96 46 09 97 00 09 97 00	



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Submittal Type Legend AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data	Resume ment	Training	Notes: All Submittals must be reviewed, stamped and set STATUS 0 - Receipt Acknowledged 1 - Accepted 2 - Accepted as Noted 3 - Revise and Resubmit 4 - Not Reviewed/Not Accepted		ed and signo	Review Period Filter Sub Out for Review Filter PreCon Submtls		CLICK HERE TO PRODUCE THE				Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority						
ES EXITA SLOCK			PC Preconstruction Submittal	WA Warranty			5 - In Process		i (Unfilter All		Desig	n Team	F&I / Maintenance		Additional Reviewers		1				
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewer	Status (contrul format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)	
	09 97 13	1.03C.1	Samples - All Paints and Finishes	SA																		
	09 97 13	1.07	Special Warranties	WA																		
	09 97 23	1.03A	Special Coatings - Stucco Product Data	MD																		
	09 97 23	1.03B.1	Mock Up	MU																		
	09 97 23	1.05	Special Warranties	WA																		
	10 11 00	1.03A	Miscellaneous Specialties Product Data	MD																		
	10 11 00	1.03B.1	Miscellaneous Specialties Shop Drawings	SD																		
	10 11 00	1.03B.2	Miscellaneous Specialities Sample	es SA																		
	10 14 00	1.03A	Identification Devices Product Data	a MD																		
	10 14 00	1.03B.1	Identification Devices Shop Drawings	SD																		
	10 14 13	1.03A	Specialty Sign Product Data	MD																		
	10 14 13	1.03B.1a	Specialty Sign Samples	SA																		
	10 14 13	1.03B.1b	Specialty Sign Shop Drawings	SD																		
	10 14 13	1.03B.1c	Sign Face Patterns	SD																		
	10 14 53	1.03A	Traffic Signs Product Data	MD																		
	10 14 53	1.03B	Traffic Signs Shop Drawings	SD																		
	10 21 13.13	1.03A	Metal Toilet Compartment Product Data	MD MD																		
	10 26 13	1.03A	Wall Guards Product Data	MD																		
	10 26 13	1.03B	Wall Guard Samples	SA																		
	10 28 13	1.03A	Toilet Accessories Product Data	MD																		



																		See Section 01330 for Submittal Procedures			
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training	PP Plan/Procedure QR Qualification R SA Sample SD Shop Drawing SE Service Agreen SU Substitution TD Test Data	desume ment	Training	Notes: * All Submittals must be reviewed, stamped and * STATUS 0 - Receipt Acknowledged 1 - Accepted 2 - Accepted as Noted 3 - Revise and Resubmit 4 - Not Reviewed/Not Accepted		ed and signo	signed by Contractor prior to deliv Review Period Filter Sub Out for Review Filter PreCon Submtls		CLICK HERE TO PRODUCE THE Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority									
ES Extra Stock			PC Preconstruction Submittal	WA Warranty			5 - In Pro	ocess	1 [Unfilter All		Desig	n Team	F&I / Ma	intenance	Additional	I Reviewers	1			
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	10 44 16.13	1.03A	Fire Extinguishers & Cabinets Product Data	MD																	
	10 44 16.13	1.03B	Color Samples	SA																	
	10 56 29	1.03A	Equipment Rack System Product Data	MD																	
	10 56 29	1.03B.1	Equipment Rack System Samples	SA																	
	10 56 29		Equipment Rack System Shop Drawings	SD																	
	10 86 00	1.03A	Inspection Mirrors Product Data	MD																	
	10 86 00	1.03A.1	Inspection Mirrors Shop Drawings	SD																	
	10 86 00	1.03A.2	Material List																		
	10 86 00	1.03A.3a	Inspection Mirrors Manuals	ОМ																	
	10 86 00	1.03A.3b	Inspection Mirrors Test Reports	TD																	
	10 86 00	1.03A.3c	Inspection Mirrors Certification	СС																	
	10 86 00	1.06A	Special Warranties	WA																	
	10 88 00	1.03A	Truck Scales Product Data	MD																	
	10 88 00		Detailed Construction Drawings	SD																	
	10 88 00	1.03B.2	Schematic Diagrams & Operation and Maintenance Data	ОМ																	
	10 88 00	1.04A	Manufacturer's Qualifications	QR																	
	10 88 00	1.04B	Seal of Certification	СС																	
	10 88 00	1.04C	Existing Scale Operational Status	AS																	
	10 88 00	1.06A	Special Warranties	WA																	
	10 88 00	3.02A	Operator Instruction	ОТ																	



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Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Sent Date Rec from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	10 88 00	3.03A	New Scale Service	SE																
	11 12 00	1.03A	Parking Control Equipment Produc Data	t MD																
	11 12 00	1.03B.1	Parking Control Equipment Shop Drawings	SD																
	11 12 00	1.03B.2	Material List																	
	11 13 00	1.03A	Loading Dock Equipment Product Data	MD																
	11 13 00		Loading Dock Equipment Shop Drawings	SD																
	11 13 00	1.03B.2	Detailed Equipment Assemblies	SD																
	11 13 13	1.03A	Dock Bumpers Product Data	MD																
	11 13 13	1.03B	Dock Bumpers Shop Drawings	SD																
	11 13 13	1.04A	Sample of Special Warranty	WA																
	12 21 13		Horizontal Window Blinds Product Data	MD																
	12 21 13		Horizontal Window Blinds Shop Drawings	SD																
	12 21 13	1.03B.2	Horizontal Window Blinds Samples	SA																
	12 21 13	1.03B.3	Horizontal Window Blinds Color Charts	SA																
	12 21 13	1.03B.4	Flame Resistance	СС																
	12 21 13	1.05A	Special Warranties	WA																
	13 34 00	1.08A	Pre-Engineered Structures Product Data	MD MD																
	13 34 00	1.08C.0	Steel Building Frame System Shop Drawings	SD																
	13 34 00	1.03C.10a	Panelized Stud Wall & Roof Truss System Shop Drawings	SD																
	13 34 00	1.08C.10b	Floor Plan	SD																

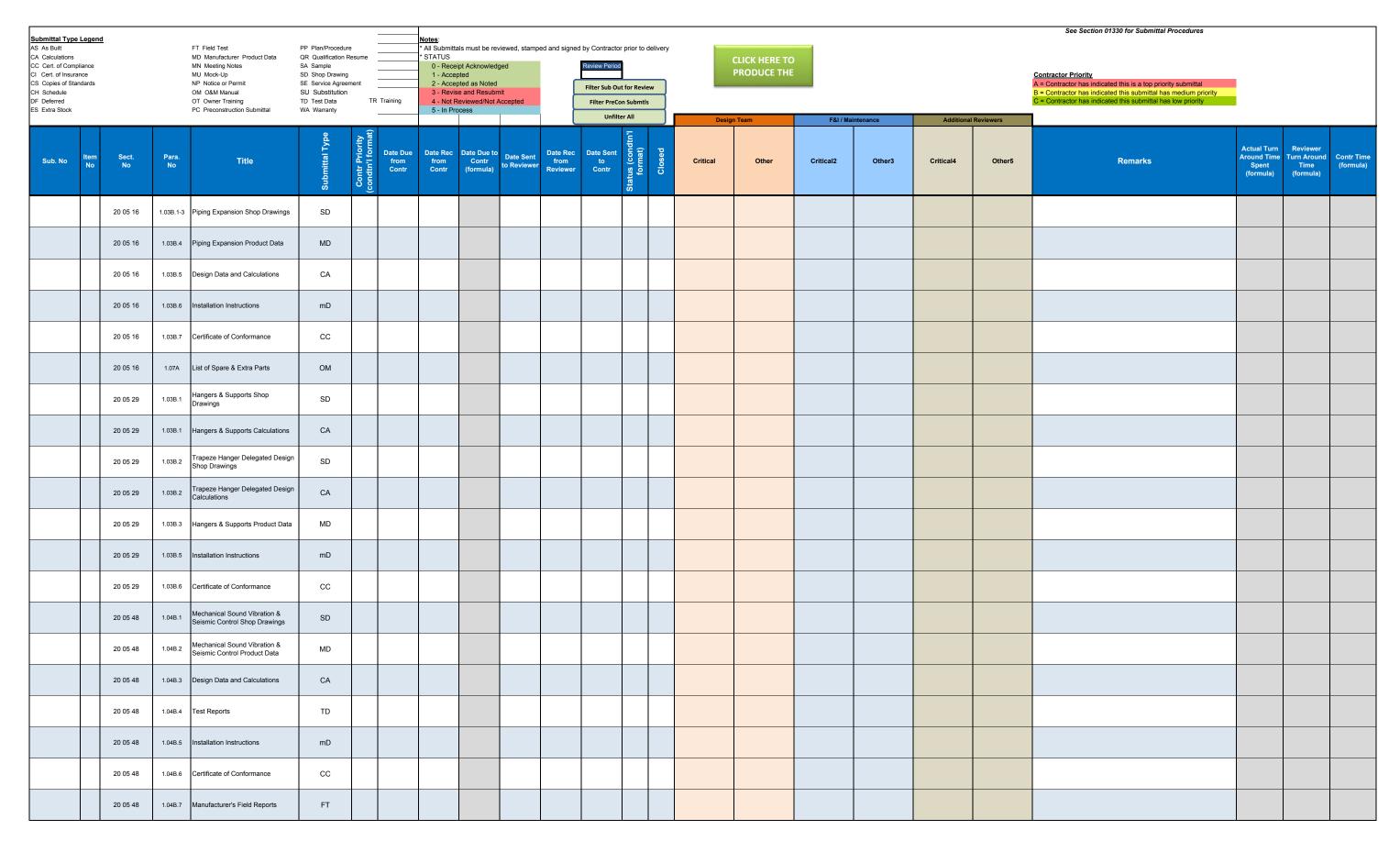


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	em So lo M	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	ate Sent Date Rev From Reviewer	to 😃 🖁	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	13 3	34 00	1.08C.10c	Installation Instructions	MD																
	13 3	34 00	1.08E.1	Roofing & Siding Shop Drawings	SD																
	13 3	34 00	1.08E.2	Roofing & Siding Product Data	MD																
	13 3	34 00	1.08E.3	Metal Finishes Color Sample	SA																
	13 3	34 00		Roofing & Siding Installation Instructions	MD																
	13 3	34 00	1.09A	Special Warranties	WA																
	14 2	21 13	1.04A	Electric Traction Freight Elevator Product Data	MD																
	14 2	21 13	1.04B	Complete Working Drawings	SD																
	14 2	21 13	1.07A	Special Warranties	WA																
	14 2	21 13	1.09	Maintenance	SE																
	14 2	21 13	3.07A	Instruction of Owner's Personnel	ОТ																
	14 2	21 13	3.07B	Operation & Maintenance Data	ОМ																
		21 13		Parts Cabinet	ES																
		21 13		Performance Test Reports Electric Traction Passenger	FT																
		21 23	1.04A	Elevator Product Data	MD																
		21 23		Detailed Shop Drawings & Layout																	
		21 23		Special Warranties	WA																
		21 23		Maintenance	SE																
				Instruction of Owner's Personnel	ОТ																
	14 2	21 23	3.07A.2	Operation & Maintenance Data	ОМ																

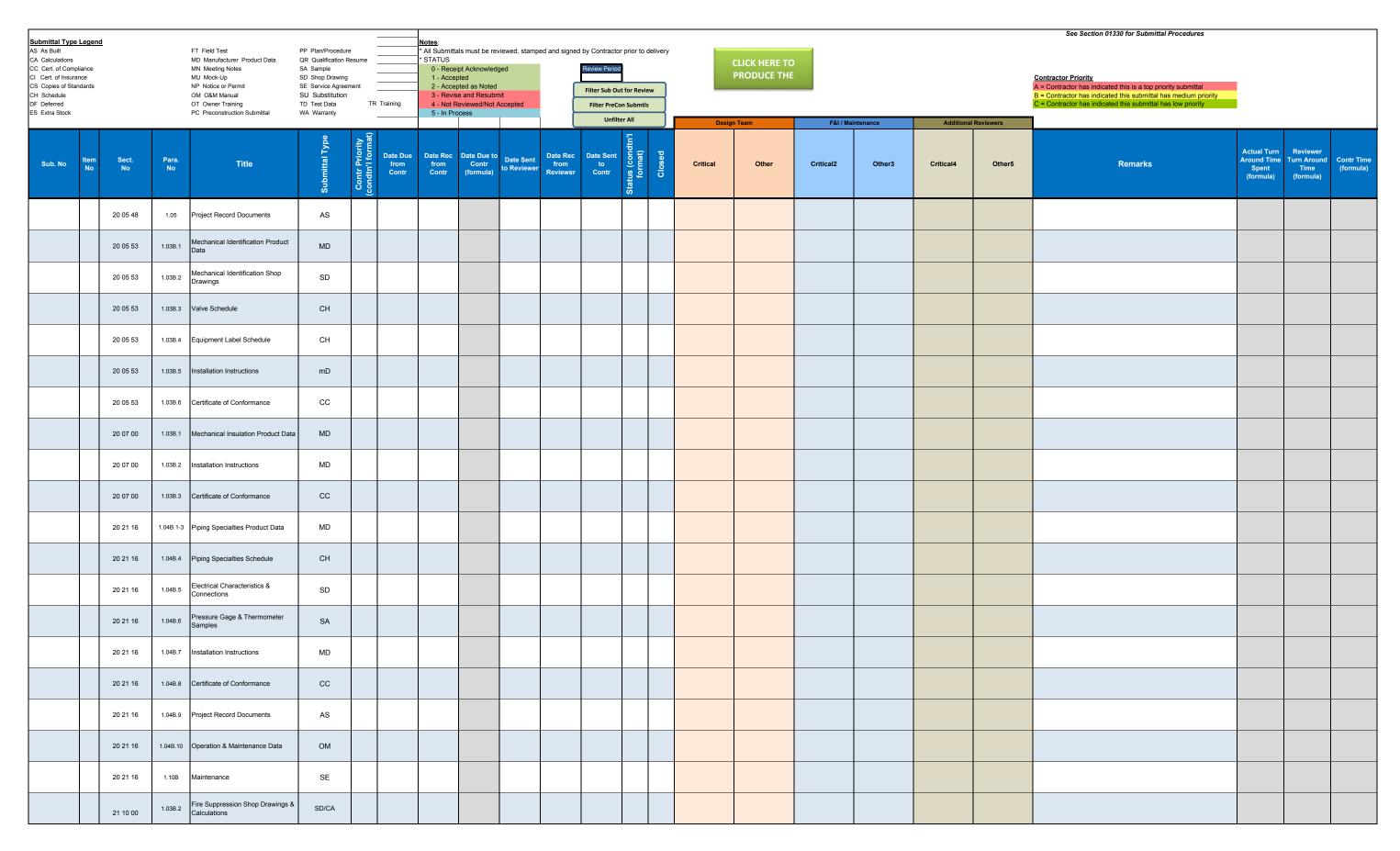


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Submittal Type I AS As Built CA Calculations CC Cert. of Complic CI Cert. of Insuran CS Copies of Stand CH Schedule DF Deferred ES Extra Stock	iance nce			FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume 3 ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted e and Resubmit eviewed/Not Accepte	J	Review Period Filter Sub Out for Rev Filter PreCon Submt Unfilter All	riew		CLICK HERE TO PRODUCE THI	E	sintenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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		14 21 23	3.07A.3	Performance Test Reports	FT																
		14 24 00	1.04B.1	Hydraulic Elevator Product Data	MD																
		14 24 00	1.04B.2	Hydraulic Elevator Shop Drawings	SD																
		14 24 00	1.04B.3	Hydraulic Elevator Certified Test Data	TD																
		14 24 00	1.04B.4	Operating Permit	NP																
		14 24 00	1.04C	Warranty	WA																
		14 24 00	3.02B	Acceptance Testing	FT																
		14 24 00	3.03A	Instruction of Owner's Personnel	ОТ																
		14 24 00	3.03C	Maintenance	SE																
		14 31 00	1.03B.1	Escalator Product Data	MD																
		14 31 00	1.03B.2	Escalator Shop Drawings	SD																
		14 31 00	1.03B.3	Escalator Finish Samples	SA																
		14 31 00	1.05A	Maintenance	SE																
		14 31 00	1.05B	Warranty	WA																
		14 31 00		Instruction of Owner's Personnel	ОТ																
		20 00 00		Mechanical Work Product Data Mechanical Supports & Anchorage	MD																
		20 00 00		Mechanical Supports & Anchorage Shop Drawings Access Door Coordination																	
		20 00 00		Access Door Coordination Drawings Mechanical Equipment	SD																
		20 00 00		Mechanical Equipment Coordination Drawings	SD																
		20 00 00	1.03B.5	Mechanical Identification Samples	SA																

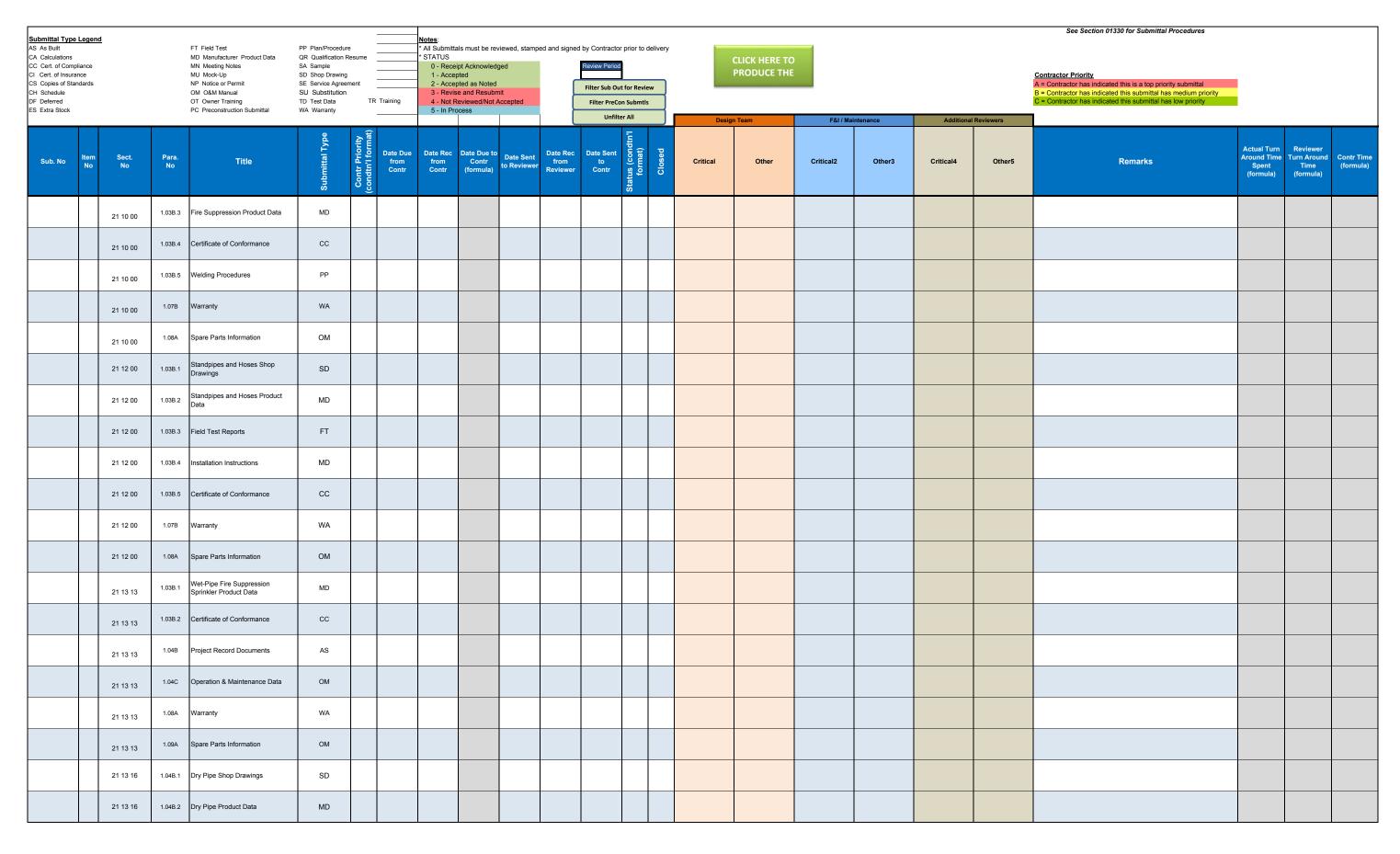














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Submittal Type Leg AS As Built CA Calculations CC Cert. of Complianc CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	e			FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume 3 ement		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted e and Resubmit eviewed/Not Acce		Review Period Filter Sub Out for Re Filter PreCon Subm Unfilter All	view		CLICK HERE TO PRODUCE THI	Ē	intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	21 13	3 16	1.04B.3	Certificate of Conformance	CC																
	21 13	3 16	1.09A	Warranty	WA																
	21 13	3 16	1.10A	Spare Parts Information	ОМ																
	21 13	3 26	1.03B.1	Deluge System Shop Drawings	SD																
	21 13	3 26	1.03B.2	Deluge System Product Data	MD																
	21 13	3 26	1.03B.3	Deluge System Samples	SA																
	21 13	3 26	1.03B.4	Deluge System Design Data	CA																
	21 13	3 26	1.03B.5	Certificate of Conformance	cc																
	21 13	3 26	1.08A	Warranty	WA																
	21 13	3 26	1.09A	Spare Parts Information	ОМ																
	21 30	000	1.03B.1	Fire Pumps Shop Drawings	SD																
	21 30	000	1.03B.2	Fire Pumps Product Data	MD																
	21 30	000	1.03B.3	Field Test Reports	FT																
	21 30	00 00	1.03B.4	Installation Instructions	MD																
	21 30			Certificate of Conformance	CC																
	21 30			Maintenance	SE																
	21 30			Spare Parts Information	ОМ																
	21 30			Instruction of Owner's Personnel Domestic Water Piping Product	ОТ																
	22 11			Domestic Water Piping Product Data	MD																
	22 11	1 16	1.03B.2	Installation Instructions	MD																



																		See Section 01330 for Submittal Procedures		
Submittal Type Legel AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>nd</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume g ement		* STATUS 0 - Receip 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted and Resubmit eviewed/Not Accepto	J	Review Period Filter Sub Out for Rev Filter PreCon Submi	riew		CLICK HERE TO PRODUCE THI	Ē	iintenance	Additiona	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr to Re (formula)	e Sent Date Rec sviewer from Reviewer	Status (condtn'l format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	22 11 16	1.03B.3	System Cleaming & Disinfection Procedures	PP																
	22 11 16	1.03B.4	Certificate of Conformance	СС																
	22 11 16	1.03B.5	Fixture Schedule	CA																
	22 11 16	1.04A	Project Record Documents	AS																
	22 11 16	1.04B	Operation & Maintenance Data	ОМ																
	22 11 23	1.03B.1	Plumbing Pumps Product Data	MD																
	22 11 23	1.03B.2	Installation Instructions	MD																
	22 11 23	1.03B.3	Certificate of Conformance	СС																
	22 11 23	1.08A	Spare Parts Information	ОМ																
	22 13 16	1.02B.1	Sanitary Waste and Vent Piping Shop Drawings	SD																
	22 13 16	1.02B.2	Sanitary Waste and Vent Piping Product Data	MD																
	22 13 16	1.02B.3	Installation Instructions	MD																
	22 13 16	1.02B.4	Certificate of Conformance	СС																
	22 13 16	1.02B.5	Drain Schedules	СН																
	22 13 16		Spare Parts Information	OM																
	22 14 13		Storm Drainage Piping Shop Drawings	SD																
	22 14 13		Storm Drainage Piping Product Data	MD																
	22 14 13		Installation Instructions	MD																
	22 14 13		Certificate of Conformance	cc																
	22 14 13	1.09A	Spare Parts Information	ОМ																



																		See Section 01330 for Submittal Procedures		
Submittal Type Leger AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agres SU Substitution TD Test Data WA Warranty	Resume 3 ement		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Acc		Review Period Filter Sub Out for Re Filter PreCon Subn Unfilter All	view		CLICK HERE TO PRODUCE THI	Ē	intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Date Reviewer Reviewe	Status (condt.)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	22 34 00	1.03B.1	Water Heater Shop Drawings	SD																
	22 34 00	1.03B.2	Water Heater Product Data	MD																
	22 34 00	1.03B.3	Installation Instructions	MD																
	22 34 00	1.03B.4	Certificate of Conformance	СС																
	22 34 00	3.03A	Spare Parts Information	ОМ																
	22 40 00	1.03B.1	Plumbing Fixtures Product Data	MD																
	22 40 00	1.03B.2	Samples	SA																
	22 40 00	1.03B.3	Installation Instructions	MD																
	22 40 00	1.03B.4	Certificate of Conformance	СС																
	22 40 00	1.03B.5	Fixture & Equipment Schedule	CH																
	22 40 00	1.03B.6	Mockup	MU																
	22 40 00	1.04A	Operation & Maintenance Data	ОМ																
	23 05 93	1.03B.1	Testing & Balancing Firm Qualifications	QR																
	23 05 93	1.03B.2	Preliminary Report & Drawings	PP																
	23 05 93	1.03B.3	Equipment Calibration Certification	n CC																
	23 05 93		Field Reports																	
	23 05 93		TAB Report - Draft	FT																
	23 05 93		TAB Report - Final	OM																
	23 05 93		Instruction of Owner's Personnel Direct Digital Control Shop	ОТ																
	23 09 23	1.03B.1	Direct Digital Control Shop Drawings	SD																



																		See Section 01330 for Submittal Procedures		
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume g ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledged sted sted as Noted e and Resubmit eviewed/Not Accepte	J	Review Period Filter Sub Out for Rev Filter PreCon Submt	riew		CLICK HERE TO PRODUCE THE		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Sent Date Rec from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	23 09 23	1.03B.2	DDC Product Data	MD																
	23 09 23	1.03B.3	Installation Instructions	MD																
	23 09 23	1.03B.4	Certificate of Conformance	СС																
	23 09 23	1.03B.5	Operation & Maintenance Data	ОМ																
	23 09 23	1.08A	Spare Parts Information	ОМ																
	23 09 23	3.22A	Instruction of Owner's Personnel	ОТ																
	23 09 23	3.22B	Training Plan	PP																
	23 11 23	1.03B.1	Process Air & Gas Piping Shop Drawings	SD																
	23 11 23	1.03B.2	Process Air & Gas Piping Product Data	MD																
	23 11 23	1.03B.3	Samples	SA																
	23 11 23	1.03B.4	Design Data and Calculations	CA																
	23 11 23	1.03B.5	Test Reports	FT																
	23 11 23	1.03B.6	Installation Instructions	MD																
	23 11 23		Certificate of Conformance	CC																
	23 11 23		Manufacturer's Field Reports																	
	23 11 23		Equipment Schedules	CH																
	23 11 23		Spare Parts Information Heating and Cooling Piping Shop	OM																
	23 20 00		Heating and Cooling Piping Shop Drawings Heating and Cooling Piping Produ																	
	23 20 00		Heating and Cooling Piping Production Heating and Cooling Piping Design																	
	23 20 00	1.04B.3	Heating and Cooling Piping Design Data	" CA																



	_																		See Section 01330 for Submittal Procedures		
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume g ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledg oted oted as Noted e and Resubm eviewed/Not A	it	Re	y Contractor prior to deview Period Filter Sub Out for Review Filter PreCon Submtls	ew		CLICK HERE TO PRODUCE THE		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	23 20 00	1.04B.4	Heating and Cooling Piping Test Reports	FT																	
	23 20 00	1.04B.5	Installation Instructions	MD																	
	23 20 00	1.04B.6	Certificate of Conformance	СС																	
	23 20 00	1.04B.7	Welder's Certification	QR																	
	23 20 00	1.10A	Spare Parts Information	ОМ																	
	23 21 23	1.03B.1	Hydronic Pumps Product Data	MD																	
	23 21 23	1.03B.2	Installation Instructions	MD																	
	23 21 23	1.03B.3	Certificate of Conformance	CC																	
	23 21 23	1.08A	Spare Parts Information	OM																	
	23 31 00		Duct Shop Drawings Smoke & Fire Damper Installation	SD																	
	23 31 00	1.045.2	Instructions	IWID																	
	23 31 00		Certificate of Conformance	CC FT																	
	23 31 00		Test Reports Glass Fiber Ducts Installation Instructions	MD																	
	23 33 00		Duct Accessories Shop Drawings																		
	23 33 00	1.03B.2	Duct Accessories Product Data	MD																	
	23 33 00	1.03B.3	Smoke & Fire Damper Installation Instructions	MD																	
	23 33 00	1.03B.4	Certificate of Conformance	cc																	
	23 33 00	1.07A	Special Warranties	WA																	
	23 33 00	1.08A	Spare Parts Information	ОМ																	



																		See Section 01330 for Submittal Procedures		
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification In SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Accept	J	Review Period Filter Sub Out for Re Filter PreCon Subm Unfilter All	view		CLICK HERE TO PRODUCE THI	E	intenance	Additiona	I Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr		e Sent Date Rec eviewer Reviewer	to $\ddot{\mathcal{Q}}$	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	23 34 00	1.03B.1	Fan Shop Drawings	SD																
	23 34 00	1.03B.2	Fan Product Data	MD																
	23 34 00	1.03B.3	Test Reports	TD																
	23 34 00	1.03B.4	Installation Instructions	MD																
	23 34 00	1.03B.5	Certificate of Conformance	СС																
	23 34 00	1.08A	Maintenance	SE																
	23 34 00	1.09A	Spare Parts Information	ОМ																
	23 34 00	3.04A	Operation & Maintenance Data	ОМ																
	23 36 00	1.03B.1	Air Terminal Units Product Data	MD																
	23 36 00	1.03B.2	Sound Power Levels	CA																
	23 36 00	1.03B.3	Installation Instructions	MD																
	23 36 00	1.03B.4	Certificate of Conformance	СС																
	23 36 00	1.08A	Spare Parts Information	ОМ																
	23 37 00	1.03B.1	Air Outlets & Inlets Product Data	MD																
	23 37 00	1.03B.2	Test Reports	TD																
	23 37 00	1.03B.3	Certificate of Conformance	СС																
	23 37 00		Spare Parts Information	OM																
	23 51 00		Breeching, Chimneys & Stacks Shop Drawings	SD																
	23 51 00	1.03B.2	Breeching, Chimneys & Stacks Product Data	MD																
	23 51 00	1.03B.3	Samples	SA																

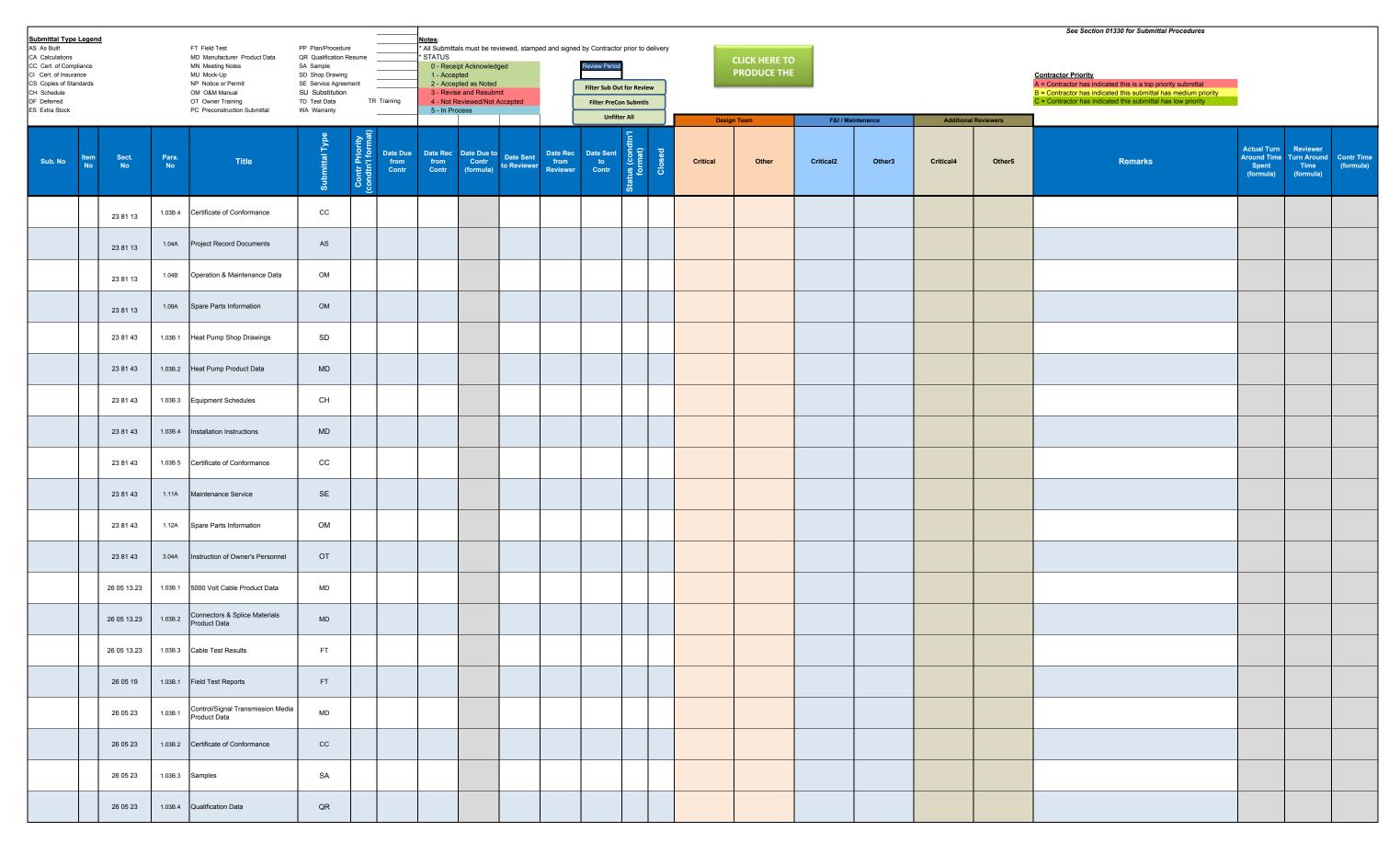


																		See Section 01330 for Submittal Procedures		
Submittal Type Legel AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up N Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawin SE Service Agre SU Substitution TD Test Data WA Warranty	Resume g ement n		* STATUS 0 - Receij 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted e and Resubmit eviewed/Not Accep	J	Review Period Filter Sub Out for Ret Filter PreCon Subm Unfilter All	riew		CLICK HERE TO PRODUCE THI		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	23 51 00	1.03B.4	Installation Instructions	MD																
	23 51 00	1.03B.5	Certificate of Conformance	СС																
	23 52 00	1.03B.1	Heating Boiler & Accessories Product Data	MD																
	23 52 00	1.03B.2	Test Reports	TD																
	23 52 00	1.03B.3	Installation Instructions	MD																
	23 52 00	1.03B.4	Certificate of Conformance	СС																
	23 52 00	1.03B.5	Manufacturer's Field Reports																	
	23 52 00	1.03B.6	Control Valves & DDC Control Panel Locations	SD																
	23 52 00	1.03B.7	Equipment Schedules	СН																
	23 52 00	1.08A	Boiler Maintenance Service	SE																
	23 52 00	1.09A	Maintenance Materials	ES																
	23 52 00	1.10A	Spare Parts Information	ОМ																
	23 52 00		Instruction of Owner's Personnel																	
	23 65 00		Packaged Cooling Tower Shop Drawings																	
	23 65 00	1.03B.2	Packaged Cooling Tower Produc Data	MD MD																
	23 65 00	1.03B.3	Field Test Reports	FT																
	23 65 00	1.03C	Certificate of Conformance	СС																
	23 65 00		Manufacturer's Field Reports																	
	23 65 00		Condenser Water Flow Diagrams																	
	23 65 00	1.04B	Operation & Maintenance Data	ОМ																



																			See Section 01330 for Submittal Procedures		
Submittal Type Le AS As Built CA Calculations CC Cert. of Complian CI Cert. of Insurance CS Copies of Standar CH Schedule DF Deferred ES Extra Stock	ce			FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Acc	i	Review Period Filter Sub Out for Filter PreCon Sul	Review		CLICK HERE TO PRODUCE TH	E	intenance	Additiona	I Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
	em Se No N	ect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr		Date Sent Date Ro From Reviewer	oc Date Sent to Contr States (Condtr.	format) Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	23 6	65 00	1.09A	Maintenance Service	SE																
	23 6	65 00	1.10A	Spare Parts Information	ОМ																
	23 6	65 00	3.05A	Instruction of Owner's Personnel	ОТ																
	23 7	73 00	1.03B.1	Air Handling Units Shop Drawings	SD																
	23 7	73 00		Air Handling Units Product Data	MD																
	23 7	73 00		Replacement Filter Media with Frame Sample	SA																
	23 7	73 00	1.03B.5	Installation Instructions	MD																
	23 7	73 00	1.03B.6	Certificate of Conformance	СС																
	23 7	73 00		Spare Parts Information	ОМ																
	23 8	31 00	1.045.1	Unitary Air Conditioning Equipment Shop Drawings Unitary Air Conditioning Equipment	30																
	23 8	31 00	1.040.2	Product Data	IMD																
	23 8	31 00		Installation Instructions	MD																
		51 00		Certificate of Conformance Maintenance Service	CC																
		31 00		Spare Parts Information	OM																
	23 8			Instruction of Owner's Personnel	ОТ																
		31 00		Operation & Maintenance Data	ОМ																
	23 8		4.000.4	Terminal Heating Units Shop	SD																
			4.000.0	Terminal Heating Units Product Data	MD																
	23 8			Installation Instructions	MD																







																			See Section 01330 for Submittal Procedures		
Submittal Type Leg AS As Built CA Calculations CC Cert. of Complianc CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	e		M M M C	FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up PV Notice or Permit DM O&M Manual DT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume g ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Acc	1	Review Period Filter Sub Out for I Filter PreCon Sub	Review		CLICK HERE TO PRODUCE THI	E	nintenance	Additiona	l Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Ite		Pa N	ıra. Io	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Date Sent Date Re P Reviewer Review	oc Date Sent to Contr States (Countr States)	format) Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	26 05 2	3 1.03	3B.5 F	Field Test Reports	FT																
	26 05 2	3 1.03	3B.6	Operation & Maintenance Data	ОМ																
	26 05 2	3 3.0)5A	Instruction of Owner's Personnel	ОТ																
	26 05 2	6 1.03	3B.1 (Grounding Product Data	MD																
	26 05 2	6 1.03	3B.2	Grounding Plan & Calculations	SD/CA																
	26 05 2	6 1.03	3B.3 (Grounding Bond Locations																	
	26 05 2	6 1.03	3B.4 F	Field Test Reports	FT																
	26 05 2	6 1.03	3B.5 F	Project Record Documents	AS																
	26 05 2	9 1.03		Hangers & Supports Product Data	MD																
	26 05 2	9 1.03	3B.2	Hangers & Supports Shop Drawings & Calculations	SD/CA																
	26 05 2			Field Quality Control Reports																	
	26 05 3			Raceways and Boxes Product Date Custom Enclosures & Cabinets																	
	26 05 3		35.2	Shop Drawings	SD																
	26 05 3			Coordination Drawings Professional Engineer Qualification Data	SD																
	26 05 3 26 05 3			Data Seismic Qualification Certification																	
	26 05 3			Cable Tray Product Data	MD																
	26 05 3			Installation Instructions	MD																
	26 05 3			Cable Tray Shop Drawings	SD																
	26 05 3			Seismic Qualification Certification																	



																		See Section 01330 for Submittal Procedures			
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM 0&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Proceduri QR Qualification R SA Sample SD Shop Drawing SE Service Agreer SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and signe	Review Period Filter Sub Out for Revi	iew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
				,						Unfilter All		Design	n Team	F&I / Ma	intenance	Additiona	l Reviewers				
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) Date Sent to Reviewer	Date Rec from Reviewer	Status (condtn")	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	26 05 36	1.03B.5	Design Data and Calculations	CA																	
	26 05 36	1.03B.6	Coordination Drawings	SD																	
	26 05 36	1.03B.7	Test Reports	TD																	
	26 05 36	1.03B.8	Field Test Reports	FT																	
	26 05 36	1.03B.9	Operation & Maintenance Data	ОМ																	
	26 05 43.13		Underground Electrical Duct Product Data	MD																	
	26 05 43		Underground Ducts and Manholes Product Data	MD																	
	26 05 43		Underground Ducts and Manholes Shop Drawings	SD																	
	26 05 43	1.03B.3	Ductbank Coordination Drawings	SD																	
	26 05 43	1.03B.4	Concrete & Steel Mill Certifications	СС																	
	26 05 43	1.03B.5	Qualification Data	QR																	
	26 05 43	1.03B.6	Factory Test Reports	TD																	
	26 05 43	1.03B.7	Project Record Documents	AS																	
	26 05 48	1.03B.1	Seismic Bracing Assemblies Layou & Details	t SD																	
	26 05 48	1.03B.2	Seismic Restraint Assemblies Structural Calculations	CA																	
	26 05 48	1.03B.3	Seismic Controls Product Data	MD																	
	26 05 48	1.03B.13	Undefined Anchorage & Bracing Shop Drawings	SD																	
	26 05 48	1.03B.14	Design Analysis	CA																	
	26 05 48		Fabrication & Arrangement Details	SD																	
	26 05 48	1.03B.16	Pre-Approval and Evaluation Documentation	СС																	



																		See Section 01330 for Submittal Procedures		
Submittal Type Legi AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standard CH Schedule DF Deferred ES Extra Stock	e		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawin SE Service Agre SU Substitution TD Test Data WA Warranty	Resume g ement	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revise	pt Acknowledged oted oted as Noted e and Resubmit eviewed/Not Accepte	J	Review Period Filter Sub Out for Rev Filter PreCon Submi	iew		CLICK HERE TO PRODUCE THI	E	iintenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Ite		Para No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Sent Date Rec from Reviewer	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	26 05 48	1.03B.	7 Coordination Drawings	SD																
	26 05 48	1.03B.	8 Certificate of Conformance	сс																
	26 05 48	1.03B.	9 Qualification Data	QR																
	26 05 53	3 1.03E	Electrical Identification Samples	SA																
	26 05 53	3 1.03C	Electrical Identification Product Data	MD																
	26 05 53	3 1.03C	2 Identification Schedule	СН																
	26 05 72	2 1.03A	Short Circuit & Protective Device Study	FT																
	26 05 72	2 1.03E	Operation & Maintenance Data	ОМ																
	26 05 72	2 1.03E	Power System Equipment Database	AS																
	26 08 00) 1.03B.	Field Test Reports	FT																
	26 09 23	3 1.03B.	Lighting Control Product Data	MD																
	26 09 23	3 1.03B.	Lighting Control Shop Drawings	SD																
	26 09 23	3 1.03B.	Certificate of Conformance	СС																
	26 09 23	3 1.03B.	Field Test Reports	FT																
	26 09 23	3 1.03B.	5 Operation & Maintenance Data	ОМ																
	26 09 23		Special Warranties	WA																
	26 09 23																			
	26 09 26)	Panelboards Product Data	MD																
	26 09 26)	Panelboards Shop Drawings	SD																
	26 09 26	1.03B.	Seismic Qualification Certification	n CC																



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Submittal Type L AS As Built CA Calculations CC Cert. of Complic CI Cert. of Insuranc CS Copies of Stand CH Schedule DF Deferred ES Extra Stock	iance ice			FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume		* STATUS 0 - Receip 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted and Resubmit eviewed/Not Accepto	ſ	d by Contractor prior to Review Period Filter Sub Out for Rev Filter PreCon Submt Unfilter All	iew		CLICK HERE TO PRODUCE THI		intenance	Additional	Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No	Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr to Re (formula)	Sent Date Rec from Reviewer	Status (condtn 1)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
		26 09 26	1.03B.4	Field Test Reports	FT																
		26 09 26	1.03B.5	Operation & Maintenance Data	ОМ																
		26 09 26	1.03B.6	Panelboard Schedule	СН																
		26 09 26	1.06A	Spare Parts Information	ОМ																
		26 11 16	1.03C.1	Secondary Unit Substation Product Data	MD																
		26 11 16		Secondary Unit Substation Shop Drawings	SD																
		26 11 16	1.03C.3	Time-Current Characteristic Curves	s SD																
		26 11 16	1.03C.4	Primary Fuses	CA																
		26 11 16	1.03C.5	Certificate of Conformance	СС																
		26 11 16	1.03C.6	Test Reports	TD																
		26 11 16		Field Test Reports	FT																
		26 11 16		Manufacturer's Seismic Qualification Certification	СС																
		26 11 16	1.03C.8	Operation & Maintenance Data	ОМ																
		26 11 16	1.08A	Spare Parts Information	ОМ																
		26 11 16	1.09A	Warranty	WA																
		26 11 16		Instruction of Owner's Personnel Modium Veltage Transformers	ОТ																
		26 12 00		Medium Voltage Transformers Product Data Medium Voltage Transformers	MD																
		26 12 00		Medium Voltage Transformers Wiring Diagrams	SD																
		26 12 00		Certificate of Conformance	CC																
		26 12 00	1.03B.5	Seismic Qualification Certification	CC																



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Submittal Type Legend AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data WA Warranty	Resume I ement	Training	* STATUS 0 - Recei 1 - Accei 2 - Accei 3 - Revis	pted as Noted se and Resubmit Reviewed/Not Accepted	ed and sign	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE TH					Contractor Priority. A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
							0			Unfilter All		Desig	n Team	F&I / Ma	intenance	Additiona	I Reviewers				
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewe	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	26 12 00	1.03B.6	Test Reports	TD																	
	26 12 00	1.03B.7	Sound Level Test Reports	TD																	
	26 12 00	1.03B.8	Field Test Reports	FT																	
	26 12 00	1.03B.9	Operation & Maintenance Data	ОМ																	
	26 12 00	1.06A	Spare Parts Information	ОМ																	
	26 12 00	3.07A	Instruction of Owner's Personnel	ОТ																	
	26 12 00	3.08A	Certification of Installation	СС																	
	26 12 00	3.09A	Record Drawings	AS																	
	26 13 00	1.03B.1	Medium Voltage Load Interrupter Switchgear Product Data	MD																	
	26 13 00	1.03B.2	Medium Voltage Load Interrupter Switchgear Shop Drawings	SD																	
	26 13 00	1.03B.3	Coordination Drawings	SD																	
	26 13 00	1.03B.4	Wiring Diagrams	SD																	
	26 13 00	1.03B.5	Test Reports	TD																	
	26 13 00	1.03B.6	Seismic Qualification Certification	cc																	
	26 13 00	1.08A	Spare Parts Information	ОМ																	
	26 13 00	1.08B	Maintenance Tools	ES																	
	26 13 00	3.08A	Instruction of Owner's Personnel	ОТ																	
	26 13 00	3.09A	Operation & Maintenance Data	ОМ																	
	26 13 00	3.09B	Record Drawings	AS																	
	26 13 19	1.03B.1	Medium Voltage Vacuum Interrupter Switchgear Product Dat	_{tta} MD																	



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Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agreet SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and sign	Review Period Filter Sub Out for Revi	iew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
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	26 13 19	1.03B.2	Medium Voltage Vacuum Interrupter Switchgear Shop Drawings	SD																
	26 13 19	1.03B.3	Coordination Drawings	SD																
	26 13 19	1.03B.4	Wiring Diagrams	SD																
	26 13 19	1.03B.5	Test Reports	TD																
	26 13 19	1.03B.6	Seismic Qualification Certification	СС																
	26 13 19	1.07A	Spare Parts Information	ОМ																
	26 13 19	3.09A	Instruction of Owner's Personnel	ОТ																
	26 13 26	1.03B.1	Medium Voltage Circuit Breaker Switchgear Product Data	MD																
	26 13 26	1.03B.2	Medium Voltage Circuit Breaker Switchgear Shop Drawings	SD																
	26 13 26	1.03B.3	Coordination Drawings	SD																
	26 13 26	1.03B.4	Certificate of Conformance	СС																
	26 13 26	1.03B.5	Seismic Qualification Certification	CC																
	26 13 26	1.03B.6	Field Test Reports	FT																
	26 13 26	1.03B.7	Test Reports	TD																
	26 13 26	1.03B.8	Operation & Maintenance Data	ОМ																
	26 13 26	1.08A	Spare Parts Information	ОМ																
	26 13 26	3.08A	Instruction of Owner's Personnel	ОТ																
	26 18 39	1.03B.1	Medium Voltage Motor Controllers Product Data	MD																
	26 18 39	1.03B.2	Medium Voltage Motor Controllers Shop Drawings	SD																
	26 18 39	1.03B.3	Coordination Drawings	SD																



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Submittal Type Legent AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Proceduri QR Qualification R SA Sample SD Shop Drawing SE Service Agreer SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and signo	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
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Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewer	Date Sent countrul (condtrul format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	26 18 39	1.03B.4	Wiring Diagrams	SD																	
	26 18 39	1.03B.5	Test Reports	TD																	
	26 18 39	1.03B.6	Seismic Qualification Certification	СС																	
	26 18 39	1.03B.7a	Dimensioned Outline Drawings of Equipment	SD																	
	26 18 39	1.03B.7b	Equipment Anchorage Devices	MD																	
	26 18 39	1.03B.8	Operation & Maintenance Data	ОМ																	
	26 18 39	1.07A	Spare Parts Information	ОМ																	
	26 18 39	3.09A	Instruction of Owner's Personnel	ОТ																	
	26 22 00	1.03B.1	Dry Type Transformers Product Data	MD																	
	26 22 00	1.03B.2	Test Reports	TD																	
	26 22 00	1.03B.3	Seismic Qualification Certification	СС																	
	26 23 00	1.03B.1	Low Voltage Switchgear Product Data	MD																	
	26 23 00	1.03B.2	Low Voltage Switchgear Shop Drawings	SD																	
	26 23 00	1.03B.3	Seismic Qualification Certification	СС																	
	26 23 00	1.03B.4	Mimic Bus Sample	SA																	
	26 23 00	1.03B.5	Qualification Data	QR																	
	26 23 00	1.03B.6	Field Test Reports	FT																	
	26 23 00	1.03B.7	Manufacturer's Field Reports																		
	26 23 00	1.03B.8	Updated Mimic Bus Diagram	AS																	
	26 23 00	1.03B.9	Operation & Maintenance Data	ОМ																	



																		See Section 01330 for Submittal Procedures		
Submittal Type Legend AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agreet SU Substitution TD Test Data WA Warranty	Resume	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and sign	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
										Unfilter All		Desig	n Team	F&I / Ma	intenance	Additional	I Reviewers			
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) Date Sent to Reviewer	Date Rec from Reviewe	to 😃 🖺	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	26 23 00	1.08A	Spare Parts Information	ОМ																
	26 23 00	3.09	Instruction of Owner's Personnel	ОТ																
	26 24 13	1.03B.1	Low Voltage Switchboards Product Data	t MD																
	26 24 13	1.03B.2	Low Voltage Switchboards Shop Drawings	SD																
	26 24 13	1.03B.3	Seismic Qualification Certification	СС																
	26 24 13	1.03B.4	Dimensioned Outline Drawings of Equipment	SD																
	26 24 13	1.03B.5	Equipment Anchorage Devices	MD																
	26 24 13	1.03B.6	Mimic Bus Sample	SA																
	26 24 13	1.03B.7	Field Test Reports	FT																
	26 24 13	1.03B.8	Manufacturer's Field Reports																	
	26 24 13	1.03B.9	Updated Mimic Bus Diagram	AS																
	26 24 13	1.03B.10	Operation & Maintenance Data	ОМ																
	26 24 13	1.08A	Spare Parts Information	ОМ																
	26 24 13	3.11	Instruction of Owner's Personnel	ОТ																
	26 24 19		Motor Control Centers Product Dat	ta MD																
	26 24 19	1.03B.2	Motor Control Centers Shop Drawings	SD																
	26 24 19		Seismic Qualification Certification	СС																
	26 24 19	1.03B.4	Dimensioned Outline Drawings of Equipment	SD																
	26 24 19	1.03B.5	Equipment Anchorage Devices	MD																
	26 24 19	1.03B.6	Field Test Reports	FT																



																		See Section 01330 for Submittal Procedures			
Submittal Type Legent AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training	PP Plan/Procedur QR Qualification F SA Sample SD Shop Drawing SE Service Agrees SU Substitution TD Test Data	desume ment	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis 4 - Not R	pted as Noted te and Resubmit deviewed/Not Accepted	ed and signo	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
ES Extra Stock			PC Preconstruction Submittal	WA Warranty	•		5 - In Pro	ocess	1 (Unfilter All		Design	n Team	F&I / Ma	intenance	Additiona	I Reviewers				
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	Date Rec from Reviewer	Status (condtrul format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	26 24 19	1.03B.7	Manufacturer's Field Reports																		
	26 24 19	1.03B.8	Operation & Maintenance Data	ОМ																	
	26 24 19	1.03B.9	Load Current & Overload Relay Heater List	AS																	
	26 24 19	1.03B.10	Load Current & List of Settings	AS																	
	26 24 19	1.07	Spare Parts Information	ОМ																	
	26 24 19	3.10	Instruction of Owner's Personnel	ОТ																	
	26 25 00	1.03B.1	Low Voltage Busway Shop Drawings	SD																	
	26 25 00	1.03B.2	Low Voltage Busway Product Data	a MD																	
	26 25 00	1.03B.3,4	Coordination Drawings	SD																	
	26 25 00	1.03B.5	Seismic Qualification Certification	СС																	
	26 25 00	1.03B.6	Dimensioned Outline Drawings of Equipment	SD																	
	26 25 00	1.03B.7	Equipment Anchorage Devices	MD																	
	26 25 00	1.03B.8	Operation & Maintenance Data	ОМ																	
	26 27 16.13	1.05	Independent Electrical Test Company	QR																	
	26 27 16.13	1.06B.1	Pad Mounted Sectionalizing Cabinets Product Data	MD																	
	26 27 16.13	1.06B.2	Pad Mounted Sectionalizing Cabinets Shop Drawings	SD																	
	26 27 16.13	1.06B.3	Field Test Reports	FT																	
	26 27 16.13	1.06B.3	Test Reports	TD																	
	26 27 16.13	1.06B.4	Seismic Qualification Certification	СС																	
	26 27 16.13	1.06B.5	Operation & Maintenance Data	ОМ																	



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Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedure QR Qualification R SA Sample SD Shop Drawing SE Service Agreer SU Substitution TD Test Data WA Warranty	desume ment	Training	* STATUS 0 - Recei 1 - Accep 2 - Accep 3 - Revis	oted as Noted e and Resubmit eviewed/Not Accepted	ed and sign	Review Period Filter Sub Out for Revi	ew		CLICK HERE TO PRODUCE THI					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority			
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Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewe	Status (condtr'l format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Reviewer Turn Around Time (formula)	Contr Time (formula)
	26 27 16.13	1.07D	As Found Satus of Shock Detector	rs AS																	
	26 27 16.13	3.07A	Instruction of Owner's Personnel	ОТ																	
	26 27 13	1.03B.1	Cabinets & Enclosures Product Data	MD																	
	26 27 13	1.03B.2	Installation Instructions	MD																	
	26 27 13	1.03B.3	Cabinets & Enclosures Shop Drawings	SD																	
	26 27 13	1.05A	Spare Parts Information	ОМ																	
	26 27 26	1.03B.1	Wiring Devices Product Data	MD																	
	26 27 26	1.03B.2	Receptacle & Switchplates Legend	d CH																	
	26 27 26	1.03B.3	Samples for Color Selection	SA																	
	26 27 26	1.03B.4	Operation & Maintenance Data	ОМ																	
	26 27 26	1.06B	TVSS Receptacles	ES																	
	26 28 13	1.03B.1	Fuses Product Data	MD																	
	26 28 13	1.06A	Spare Parts Information	ОМ																	
	26 28 13	1.06A	Fuses (3 ea. type and size)	ES																	
	26 28 16	1.005.1	Switches & Circuit Breaker Product Data	WID																	
	26 28 16	1.03B.2	Switches & Circuit Breaker Shop Drawings	SD																	
	26 28 16	1.03B.3	Seismic Qualification Certification	СС																	
	26 28 16	1.03B.4	Field Test Reports	FT																	
	26 28 16	1.03B.5	Manufacturer's Service Report																		
	26 28 16	1.03B.6	Operation & Maintenance Data	ОМ																	



																		See Section 01330 for Submittal Procedures		
Submittal Type Legen AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred ES Extra Stock	<u>d</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training PC Preconstruction Submittal	PP Plan/Procedu QR Qualification SA Sample SD Shop Drawing SE Service Agre SU Substitution TD Test Data WA Warranty	Resume 3 ement	Training	* STATUS 0 - Receij 1 - Accep 2 - Accep 3 - Revise	ot Acknowledged ted ted as Noted e and Resubmit eviewed/Not Accept	J	Review Period Filter Sub Out for Rev Filter PreCon Subm Unfilter All	riew		CLICK HERE TO PRODUCE THI	E	intenance	Additiona	l Reviewers	Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula)	e Sent Date Rec from Reviewer	Status (condtn'l format)	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	26 28 16	1.07A	Spare Parts Information	ОМ																
	26 29 13	1.03B.1	Motor Controller Product Data	MD																
	26 29 13	1.03B.2	Motor Controller Shop Drawings	SD																
	26 29 13	1.03B.3	Seismic Qualification Certification	СС																
	26 29 13	1.03B.4	Field Test Reports	FT																
	26 29 13	1.03B.5	Manufacturer's Service Report																	
	26 29 13	1.03B.6	Operation & Maintenance Data	ОМ																
	26 29 13	1.03B.7	Load Current & Overload Relay Heater List	AS																
	26 29 13	1.03B.8	Adjustable Overload Relay Setting	AS																
	26 29 13	1.07A	Spare Parts Information	OM																
	26 29 13	1.07A	Fuses & Indicating Lights	ES																
	26 29 13	3.11A	Instruction of Owner's Personnel	ОТ																
	26 29 23	1.03B.1	Variable Frequency Controllers Product Data	MD																
	26 29 23	1.03B.2	Variable Frequency Controllers Shop Drawings	SD																
	26 29 23	1.03B.3	Coordination Drawings	SD																
	26 29 23		Seismic Qualification Certification																	
	26 29 23		Field Test Reports	FT																
	26 29 23		Manufacturer's Field Reports																	
	26 29 23		Operation & Maintenance Data	ОМ																
	26 29 23	1.03B.8	Load Current & Overload Relay Heater List	AS																

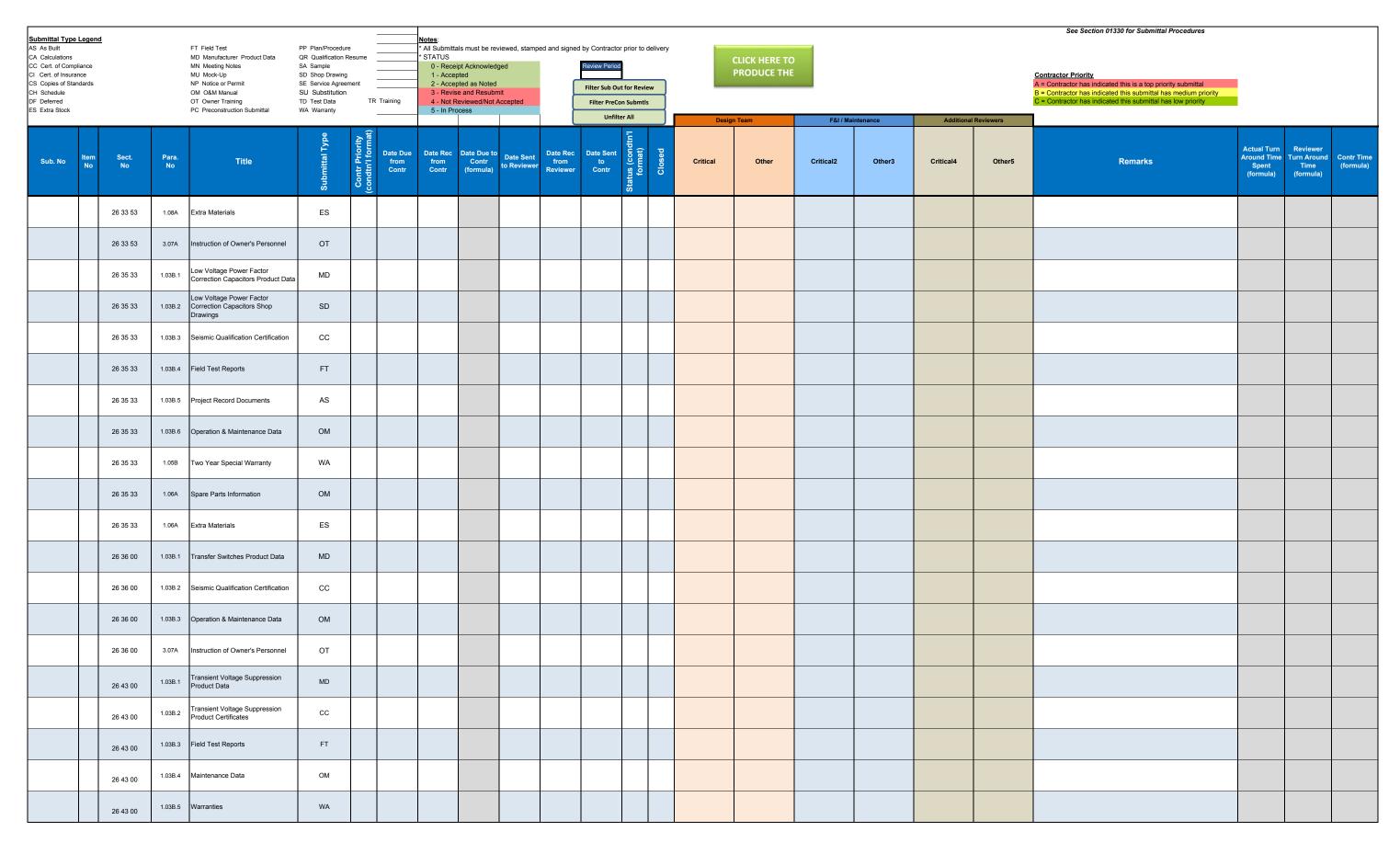


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Submittal Type Legence AS As Built CA Calculations CC Cert. of Compliance CI Cert. of Insurance CS Copies of Standards CH Schedule DF Deferred	<u>1</u>		FT Field Test MD Manufacturer Product Data MN Meeting Notes MU Mock-Up NP Notice or Permit OM O&M Manual OT Owner Training	PP Plan/Procedur QR Qualification I SA Sample SD Shop Drawing SE Service Agree SU Substitution TD Test Data	Resume I ement	Training	* STATUS 0 - Recei 1 - Accei 2 - Accei 3 - Revis 4 - Not R	pted as Noted se and Resubmit Reviewed/Not Accepted	ed and sign	Review Period Filter Sub Out for Review Filter PreCon Submt!	ew		CLICK HERE TO PRODUCE TH					Contractor Priority A = Contractor has indicated this is a top priority submittal B = Contractor has indicated this submittal has medium priority C = Contractor has indicated this submittal has low priority		
ES Extra Stock			PC Preconstruction Submittal	WA Warranty			5 - In Pro	ocess		Unfilter All		Desig	n Team	F&I / Ma	intenance	Additiona	I Reviewers			
Sub. No Item No	Sect. No	Para. No	Title	Submittal Type	Contr Priority (condtn'l format)	Date Due from Contr	Date Rec from Contr	Date Due to Contr (formula) to Reviewer	Date Rec from Reviewe	Status (condtr.')	Closed	Critical	Other	Critical2	Other3	Critical4	Other5	Remarks	Actual Turn Around Time Spent (formula)	Contr Time (formula)
	26 29 23	1.03B.10	Adjustable Overload Relay Setting	gs AS																
	26 29 23	1.07A	Spare Parts Information	ОМ																
	26 29 23	1.07A	Extra Materials	ES																
	26 29 23	3.10	Instruction of Owner's Personnel	ОТ																
	26 31 00		Wind & Solar Electrical Generation Product Data	n MD																
	26 31 00	1.03B	Seismic Qualification Certification	СС																
	26 31 00	3.02E	Instruction of Owner's Personnel	ОТ																
	26 32 13	1.03B.1	Engine Generator Product Data	MD																
	26 32 13	1.03B.2	Engine Generator Shop Drawings	SD																
	26 32 13	1.03B.3	Test Reports	TD																
	26 32 13	1.03B.3	Field Test Reports	FT																
	26 32 13	1.03B.4	Manufacturer's Field Reports																	
	26 32 13	1.03B.5	Seismic Qualification Certification	СС																
	26 32 13	1.03C	Operation & Maintenance Data	ОМ																
	26 32 13	1.07A	Spare Parts Information	ОМ																
	26 32 13	1.07A	Extra Materials	ES																
	26 32 13	1.08B	Fire Year Manufacturer's Warranty	/ WA																
	26 32 13	3.09A	Instruction of Owner's Personnel	ОТ																
	26 32 29	1.03B.1	Rotary 400Hz Converters Design Data	CA																
	26 32 29	1.03B.2	Rotary 400Hz Converters Shop Drawings	SD																

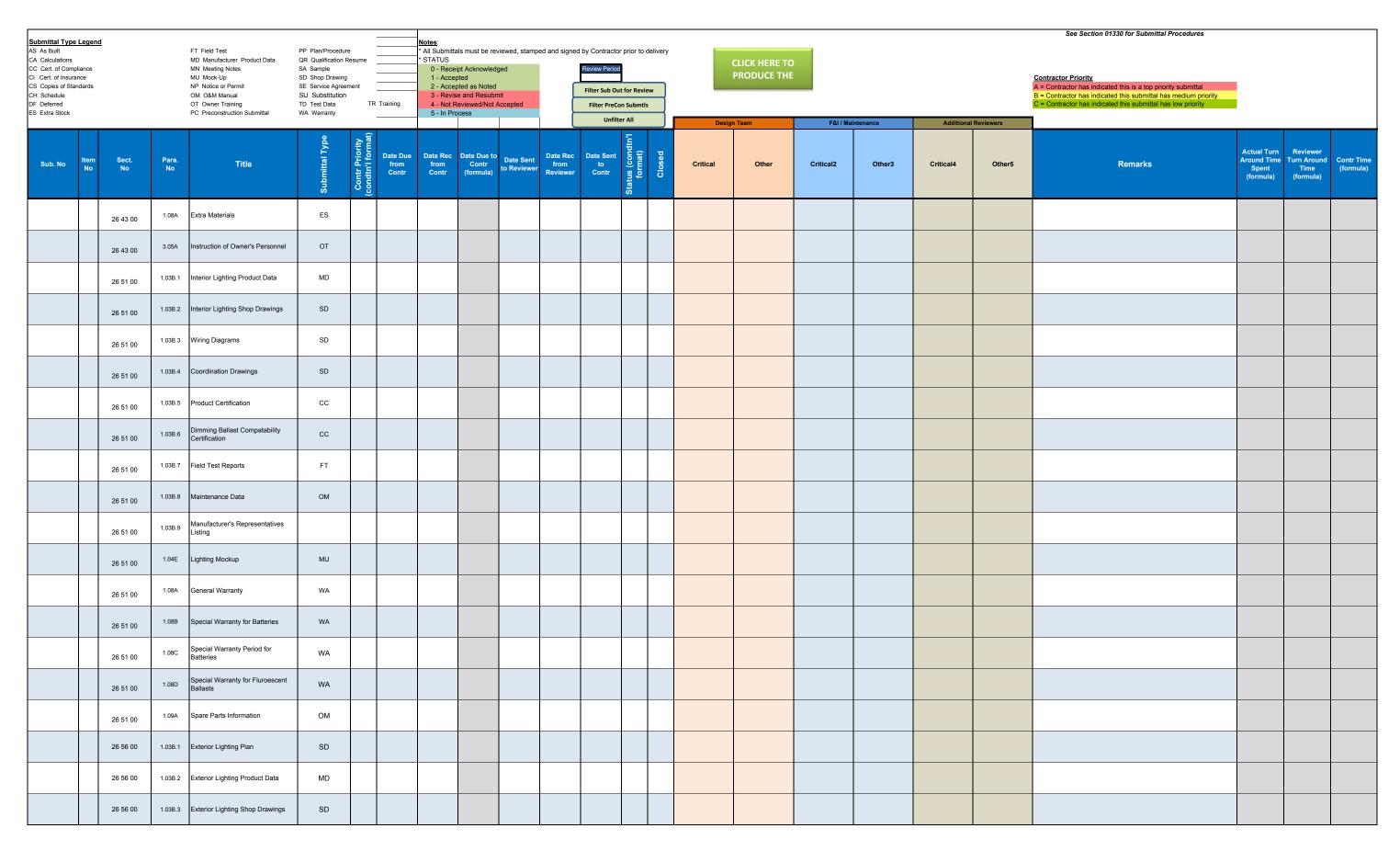


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	26 32 29	1.03B.3	Rotary 400Hz Converters Product Data	MD																
	26 32 29	1.03B.4	Test Reports	TD																
	26 32 29	1.03B.5	Seismic Qualification Certification	СС																
	26 32 29	1.03B.6	Operation & Maintenance Data	ОМ																
	26 32 29	1.06B	Five Year Manufacturer's Warranty	WA																
	26 32 29	1.07A	Service and Maintenance	SE																
	26 32 29	1.08A	Spare Parts Information	ОМ																
	26 32 29	1.08A	Extra Materials	ES																
	26 32 29		Instruction of Owner's Personnel	ОТ																
	26 33 53	1.03B.1	Static Uninterruptible Power Supply Product Data	WID																
	26 33 53		Static Uninterruptible Power Supply Shop Drawings	30																
	26 33 53		Seismic Qualification Certification	CC																
	26 33 53		Certificate of Conformance	CC																
	26 33 53		Qualification Data	QR																
	26 33 53 26 33 53		Factory Test Reports Field Test Reports	TD																
	26 33 53		Operation & Maintenance Data	OM																
	26 33 53		Special Battery Warranty	WA																
	26 33 53		Three Year UPS Warranty	WA																
	26 33 53	1.08A	Spare Parts Information	OM																

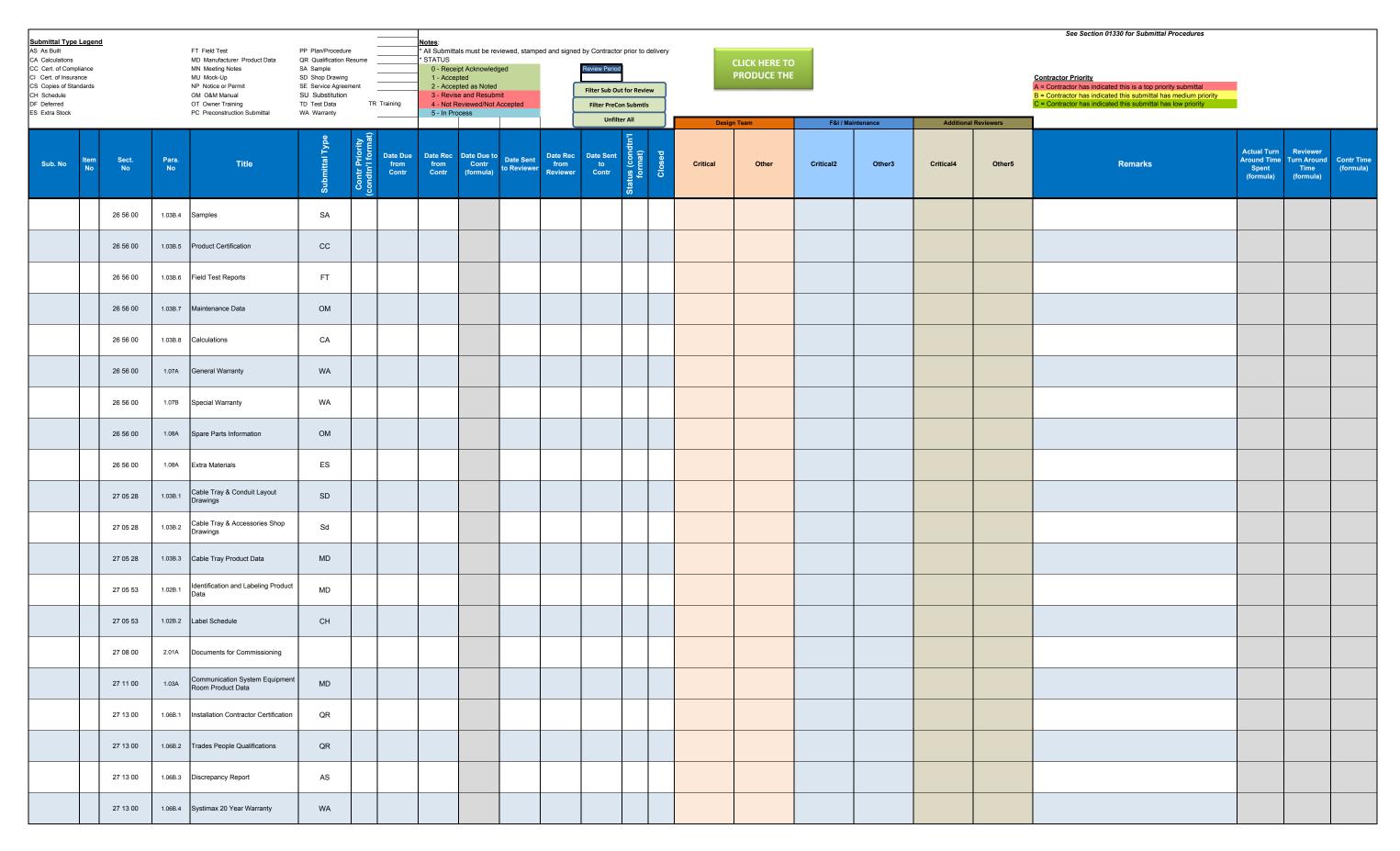




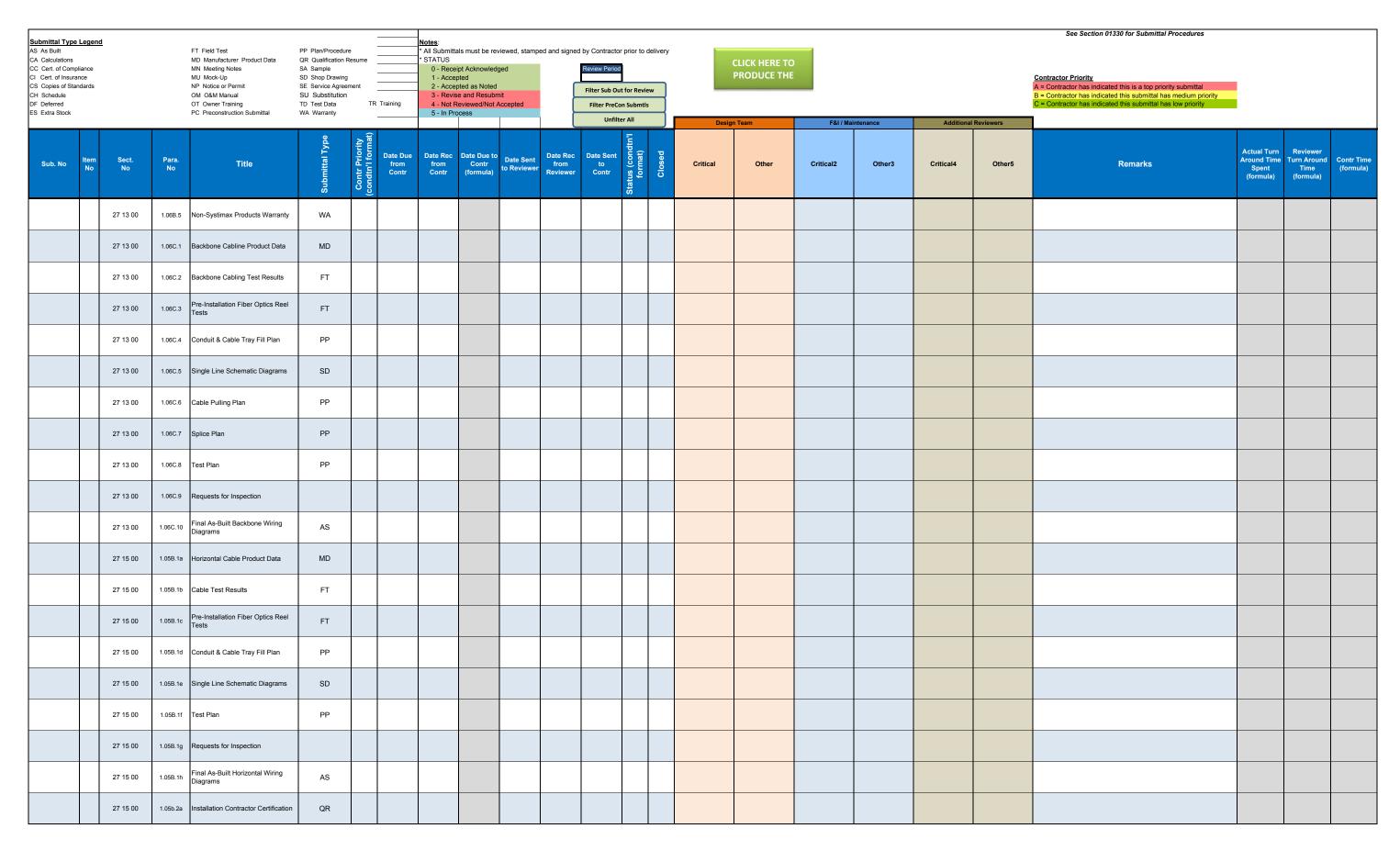




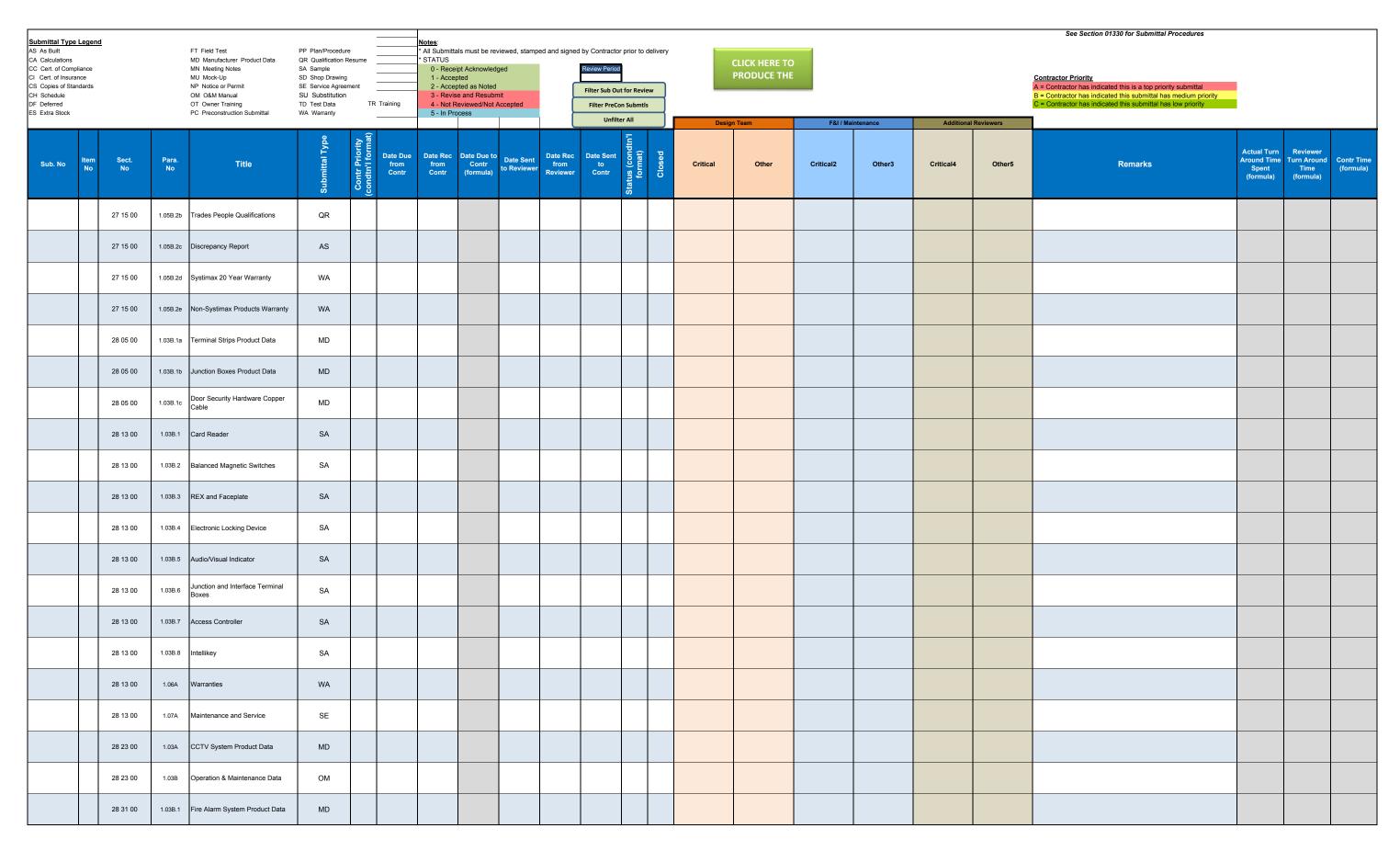












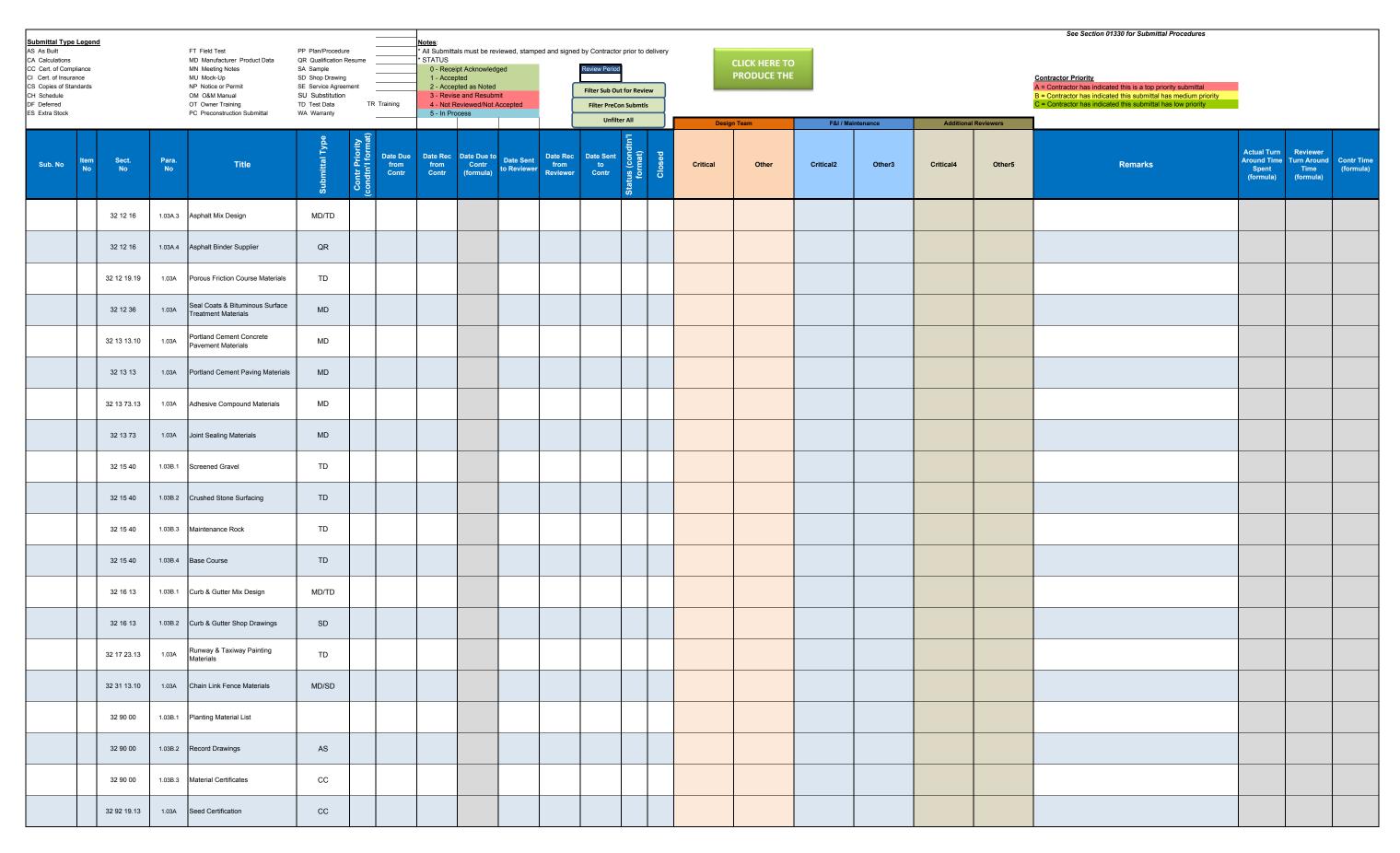


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	28 31 00	1.03B.2	Riser Diagrams	SD																	
	28 31 00	1.03B.3	Wiring Diagrams	SD																	
	28 31 00	1.03B.4	Floor Plans	SD																	
	28 31 00	1.03B.5	Device Address List	СН																	
	28 31 00	1.03B.6	Operating Instructions	MD																	
	28 31 00	1.03B.7	Product Certification	СС																	
	28 31 00	1.03B.8	Operation & Maintenance Data	ОМ																	
	28 31 00	1.03B.9	Spare Parts Information	ОМ																	
	28 31 00	1.03B.10	Contact Information of Suppliers	ОМ																	
	28 31 00	1.07A	Warranties	WA																	
	28 31 00	3.05A	Report of Pre-Testing	FT																	
	28 31 00		Report of Tests & Inspections	FT																	
	28 31 49	1.03B.1	Carbon Monoxide Detection System Operation	n PP																	
	28 31 49	1.03B.2	Control Diagrams	SD																	
	28 31 49		One Line Drawings	SD																	
	28 31 49	1.03B.4	Carbon Monoxide Detection System Product Data	m MD																	
	28 31 49	1.05A	Warranties	WA																	
	31 00 00	1.04A.1a	Select Fill Material	SA																	
	31 00 00	1.04A.1b	Backfill	SA																	
	31 00 00	1.04A.1c	Rock Rip Rap	SA																	



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	31 00 00	1.04A.10	Rip Rap Overlay	SA																	
	31 00 00	1.04A.1e	Utility Bedding	SA																	
	31 00 00	1.04A.1	Underground Marking Tape	SA																	
	31 00 00	1.04A.1g	Gravel Borrow	SA																	
	31 62 00	1.03A	Pile Driving Equipment Product Data	MD																	
	32 01 90	1.03A	Landscape Maintenance Product Data	MD																	
	32 01 90	3.13A	Monthly Status Report																		
	32 11 00	1.03A	Base Course Materials	TD																	
	32 11 13.1	3 1.03A	Lime Treated Subgrade Materials	MD																	
	32 11 16	1.03A	Subbase Course Materials	TD																	
	32 11 23.1	0 1.03A	Crushed Aggregate Base Course Materials	TD																	
	32 11 23	1.03A	Aggregate Base Course Materials	TD TD																	
	32 12 13.1	3 1.03A	Bituminous Tack Coat Materials	MD																	
	32 12 13.1	9 1.03A	Bituminous Prime Coat Materials	MD																	
	32 12 16.1	3 1.03A.1	Material Samples	SA																	
	32 12 16.1	3 1.03A.2	Pavement Quality	FT																	
	32 12 16.1	3 1.03A.3	Asphalt Mix Design	MD/TD																	
	32 12 16.1	5 1.03A	Plant Mix Bituminous Pavement Materials	MD/TD																	
	32 12 16	1.03A.1	Material Samples	SA																	
	32 12 16	1.03A.2	Asphalt Quality	TD																	







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		32 92 19.16	1.03B.1	Hydroseed Materials	MD/TD																
		32 92 19	1.03B.1	Seeding Material Samples	SA																
		32 96 43	1.03A	Soil Amendment Product Data	MD																
		33 10 00	1.03A.1	Water Distribution Product Data	MD																
		33 24 13	1.03A.1	Well Construction Notification Forms																	
		33 24 13	1.03A.2	Well Records	AS																
		33 24 13	1.03A.4	Survey Coordinate Data	AS																
		33 31 00		Industrial Waste and Sanitary System Product Data	MD																
		33 32 13	1.03A.1	Sewage Lift Station Shop Drawings	s SD																
		33 32 13	1.03A.2	Sewage Lift Station Product Data	MD																
		33 32 13		Product Certification	cc																
		33 32 13		Field Test Reports	FT																
		33 40 00		Site Drainage Product Data	MD																
		33 41 00 33 41 13	1.024	Storm Drainage Product Data Pipe for Storm Drains and Culverts	MD MD																
		33 49 13	1.00A	Product Data Manholes, Catch Basins & Inlets	MD																
		33 63 00		Product Data Steam Distribution Product Data	MD																
		34 71 13.26		Roadway Guardrail Shop Drawings																	
		34 71 13.26	1.03B.2	Roadway Guardrail Erection Drawings	SD																
		34 77 13		Disposal Manifest Form	AS																



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	34 77 13	1.03B.2	Passenger Loading Bridge Shop Drawings	SD																	
	34 77 13	1.03B.3	PLB Interface w/Terminal Drawings	SD																	
	34 77 13	1.03B.4	PLB Electrical Interface Drawings	SD																	
	34 77 13	1.03B.5	PLB Communication Interface Drawings	SD																	
	34 77 13	1.03B.6	List of Operational Limit Settings	AS																	
	34 77 13	1.03B.7	Material Inventory Log	AS																	
	34 77 13	1.03B.8	Material Damage Log	AS																	
	34 77 13	1.03B.9	Sealant	MD																	
	34 77 13	1.03B.10	Plan and Schedule	PP																	
	34 77 13	1.03B.11	Acceptance Testing Plan	PP																	
	34 77 13	1.03B.12	Special Warranties	WA																	
	35 01 50.51	1.03B.1	Borrow Source	TD																	
	35 01 50.51	1.03B.2	Cover Material	TD																	
	35 01 50.51		Work Plan	PP																	
	35 59 13		Manufacturer Qualifications Contact Information																		
	35 59 13		Fender Shop Drawings	SD																	
	35 59 13		Performance Testing	TD																	
	35 59 13 35 59 13		Fender Visual Inspection	CU																	
			Material Schedules	CH																	
	35 59 13	1.038.6	Installation Instructions	MD																	



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		35 59 13	1.03B.7	Operation & Maintenance Data	ОМ																			

PART 1 GENERAL

1.01 CONTRACTOR FULLY RESPONSIBLE FOR SAFETY

- A. The Contractor assumes full and sole responsibility for and shall comply with all laws, regulations, ordinances, and governmental orders pertaining to safety in the performance of this Contract. The Contractor shall conduct all operations under this Contract to offer the least possible obstruction and inconvenience to the Port, its tenants, the public and abutting property owners. The Contractor shall be responsible for employing adequate safety measures and taking all other actions reasonably necessary to protect the life, health, and safety of employees, the public, and to protect adjacent and Port-owned property in connection with the performance of the Work.
- B. The Contractor shall have the sole responsibility for the safety, efficiency, and adequacy of the Contractor's plan, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the Project Site, including safety of all persons and property in performance of the Work. This requirement shall apply continuously, and is not limited to normal working hours. Nothing the Port may do, or fail to do, with respect to safety in the performance of the Work shall relieve Contractor of this responsibility.

1.02 REFERENCES

- A. The Contractor shall comply with the provisions found in the Port of Seattle Construction Safety & Health Manual, the Federal Occupational Safety and Health Act of 1970 (OSHA), including all revisions and amendments thereto; the provisions of the Department of Safety & Health (DOSH) Washington Industrial Safety Act of 1973 (WISHA); and the requirements of the following chapters of the Washington Administrative Code:
 - 1. Chapter 296-24 WAC General Safety and Health Standards
 - 2. Chapter 296-62 WAC General Occupational Health Standards
 - 3. Chapter 296-155 WAC Safety Standards for Construction Work
 - 4. Chapter 296-800 WAC Safety & Health Core Rules
 - 5. ANSI/ASSE Standards
- B. In addition, the Contractor shall comply with the following requirements when they are applicable:
 - Local Building and Construction Codes
 - 2. POS Fire Department Standards
 - 3. NFPA 70E
 - 4. National Electrical Code

NOTE: In cases of conflict between different safety regulations, the more stringent regulation shall apply.

1.03 DEFINITIONS

- A. Manager, Construction Safety Services
 - 1. An employee of the Port or designated consultant who is responsible for the day-to-day management of the Port of Seattle's Construction Safety Program, and such agents, including the Field Safety Manager, as authorized to act in his/her behalf.

B. Field Safety Manager

 An employee of the Port or designated consultant who conducts and monitors jobsite inspections and verifies Contractor compliance with identified corrective actions.

1.04 SUBMITTALS

- A. The Contractor shall submit the following information as found in paragraph 1 05 A
- B. The Contractor shall submit a site specific Chemical Exposure Plan prepared by a Certified Industrial Hygienist for any products containing isocyanates, methylene chloride, Hydrofluoric Acid, lead, silica, and processes involving floor sealers, traffic coatings, terrazzo sealers, or specialty paints. The plan shall include employee exposure control methods, isolation methods to prevent spread of chemicals outside the work area and safeguarding of the public.

1.05 CONTRACTOR RESPONSIBILITIES

A. SITE SPECIFIC SAFETY PLAN

- The Contractor shall submit, for the Port's review and comment, a Site-Specific Safety Plan in connection with the Work. The submittal shall be made in accordance with Section 01 32 19 Preconstruction Submittals. An outline of the matters to be addressed in the Safety Plan is set forth in Attachment 1 to this Section. The Port's review of, or comment on, the Safety Plan shall not, in any way, relieve the Contractor of any responsibility or liability for the Safety Plan. Delay in submitting a written safety plan will not constitute grounds for a contract schedule extension or delay claim.
- The Port will not issue a Notice to Proceed (NTP), until the Safety Plan has been received and accepted by the Engineer and Manager of Construction Safety Services.

B. GENERAL OBLIGATIONS

- 1. The Contractor is responsible for accident prevention and job site safety. This responsibility cannot be delegated to Subcontractors, suppliers, the Port, or other persons. To this end, the Contractor shall:
 - a. Promote a safe and healthy work environment.
 - b. Provide an accident prevention program.
 - c. Promote training programs to improve the skill and competency of all employees in the field of occupational safety and health.
 - d. Instruct all employees of safe work methods and practices when assigning work.

- e. Ensure that employees have and use the proper protective equipment and tools for the job.
- f. Ensure that all heavy equipment operators (i.e. cranes, loaders, and forklifts) are properly qualified and trained on the specific piece of equipment in use.
- g. Plan and execute all work to comply with the stated objectives and safety requirements contained in the Contract provisions, Federal, State, local laws and regulations, and industry standards.
- h. Cooperate fully with the Port and its Consultants and insurers (if applicable) in connection with all matters pertaining to safety.
- i. Maintain an orientation program for new employees, including subcontractor employees, that includes at a minimum, a review of:
 - (1) Potential hazards in the work areas
 - (2) Required personal protective equipment and apparel
 - (3) The following prohibited conduct shall result in the immediate removal from the project: gambling, fighting or horseplay, possession of firearms, alcohol or illegal use, possession or sale of a controlled substance or being under their influence.
 - (4) Emergency procedures
- j. Perform documented daily inspections of the project in the Contractor Daily Report. Review and direct immediate action to correct any substandard safety conditions or practices, including those of any Subcontractor, regardless of classification.
- k. Conduct at minimum a health and safety briefing prior to the start of each work task, plus weekly scheduled safety meetings to discuss the Health and Safety Plan, hazardous materials, hazardous work, observed unsafe work practices or conditions, a review of the accident experience and all corrective actions. The Contractor shall encourage safety suggestions from employees. More frequent briefings should be performed as required by project activities or changes in the work.
- I. Hold a minimum of one monthly all-hands safety meeting with its employees, and subcontractor employees subcontractors at any tier. An agenda shall be prepared and distributed for this meeting. The meeting shall include a safety update, and pertinent safety information for upcoming work. The Contractor shall encourage input and involvement from the subcontractors.
- m. Ensure prompt medical treatment is administered to any injured employee.
- n. Undertake a complete investigation of all accidents and implement corrective action to prevent a recurrence.
- o. Prepare and implement a site safety plan as set forth in Paragraph 1.05. A hereof.

- p. Comply with the Administrative Procedures set forth in Paragraph 1.08 hereof.
- q. Provide the Engineer and Manager of Construction Safety Services with copies of all DOSH citations immediately upon receipt.
- r. Ensure that all of its subcontractors, suppliers, etc., are provided with a copy of this specification and are informed of their obligations regarding safety.
- s. Ensure that all Contractor and subcontractor personnel at any tier have completed a one and one-half (1 ½) hour Port of Seattle safety orientation to be held by the Port of Seattle at a time and location to be to be specified by the Port, prior to commencing work. The time expended and any associated costs such as travel time, parking, and other expenses are to be borne by the Contractor.

C. CONTRACTOR SAFETY REPRESENTATIVE

- 1. It is recognized that the responsibility for safety lies with the Contractor. Each Contractor shall appoint an individual(s) responsible for safety on each Contract. This individual(s) must be employed in a supervisory position, empowered by their employer to take corrective action; be present on the project while work is being performed; and spend the amount of time necessary to ensure the Contractor's compliance with safety requirements.
- 2. A safety inspection shall be performed and documented for each shift worked, by the Contractor's safety representative.
- 3. The Contractor shall submit a resume of the experience and qualifications for the proposed Safety Representative(s) as part of the Safety Plan submittal. Please refer to part E. Definitions, subparagraphs 1 and 2 below. The Port will review the resumes and a personal interview may be required. The Port may reject anyone it deems "Not Qualified."

D. FOREMAN SAFETY RESPONSIBILITIES:

- 1. Foremen are key individuals in an effective safety program. Their proactive efforts toward accident prevention on their daily assignments help determine the degree of safety that exists on the job. A foreman's safety responsibilities include the following as a minimum:
 - a. Inspect his/her assigned job areas to ensure that unsafe acts or conditions are identified and corrected
 - b. Ensure that safety requirements are adhered to and enforced
 - c. Provide and require the use of proper personnel protective equipment and suitable tools for the job
 - d. Set a good example for his/her crew in the matter of safety
 - e. Ensure that orderliness and good housekeeping are maintained
 - f. See that his/her assigned crew is properly instructed in the safe work practices when assigned to job tasks
 - g. Investigate all accidents that occur in areas under their direction to determine facts necessary for corrective actions

- h. Promptly assist in the completion of accident reports per contract requirements
- i. Conduct weekly toolbox safety meetings with personnel to discuss unsafe work practices and conditions identified
- j. Review accident investigations and corrective actions implemented
- k. Encourage personnel to make suggestions regarding safety and to pass these on to supervision
- I. Ensure that prompt first aid is administered

E. DEFINITIONS

- 1. Fulltime Safety Professional qualifications include:
 - a. Shall have no other duties.
 - An individual possessing a minimum of five years progressive experience managing safety programs on large construction projects comparable to this Contract in scope and complexity.
 - c. Be knowledgeable concerning all federal, state, and Port of Seattle regulations applicable to construction safety.
 - d. Possess "Competent Person" certification in construction safety disciplines related to the work performed and possess verifiable training. This individual shall also be responsible for identifying "Competent Persons" required by State and Federal safety standards for which they are not certified.
 - e. Have successfully completed the OSHA 500 Safety and Health Course. This requirement may be waived in lieu of a safety and health degree or professional safety certification.
 - f. Training and current certification for CPR and First Aid is preferred.
 - g. Be capable of performing accident investigations and developing a concise report.
 - h. Is proficient in the development and presentation of "tool box" meetings and safety training.
- 2. Site Safety Officer qualifications include:
 - a. An individual assigned to perform safety functions on any contract not requiring a Fulltime Safety Professional. This can be a collateral duty position held by a supervisor. Safety duties shall take priority over other collateral duties.
 - b. Possess a minimum 5 years progressive experience in their trade.
 - c. Be knowledgeable concerning all federal, state, and Port of Seattle regulations applicable to safety.
 - d. Have successfully completed the OSHA 30-hour Safety & Health Course.

- e. Possess "Competent Person" certification in construction safety disciplines related to the work performed and possess verifiable training. This individual shall also be responsible for identifying "Competent Persons" required by State and Federal safety standards for which they are not certified.
- f. Be trained in, and possess current certification for CPR and First Aid.
- g. Possess verifiable training and be capable of performing accident investigations and developing a concise report.
- h. Possess verifiable training in the development and presentation of "tool box" meetings and safety training.

F. DETERMINATION

- 1. When the number of personnel on any shift is under 40 (including Subcontractor employees), the Contractor's safety representative will meet the definition of "Site Safety Officer" as defined above for each shift.
- 2. For Contractors with a total of 40 or more personnel (including Subcontractor employees) on any shift, a Fulltime Safety Professional as defined above shall be required for each shift.
- 3. For each additional 75 employees (including Subcontractors employees) on any shift, a second Fulltime Safety Professional shall be required.
- 4. At the Port's discretion the requirements for Contractor safety personnel can be reviewed and action taken to decrease or increase the number of individuals.
- 5. The Contractor Safety Officer/Professional (s) shall be primarily responsible for ensuring Contractor's compliance with the safety requirements provided in this Division. Without limiting the generality of the foregoing, the Contractor Safety Officer/Professional (s) shall:
 - a. Review all subcontractor and sub-tier contractor's Site Specific Safety Programs and Job Hazard Analysis (JHA) for compliance with applicable POS Construction Safety, State, and Federal Standards and ensure that they receive a copy and are briefed on Document 01 35 29 Safety Management.
 - b. Perform a site-specific safety orientation for all employees, subcontractors and sub tier contractors prior to beginning work. This is in addition to the Port's safety orientation.
 - Perform daily safety inspections of the Contractor and Subcontractor's project to evaluate the project for unsafe conditions and/or practices, and take the appropriate corrective action when required.
 - d. Immediately report all injuries of personnel, vehicles, "Near Miss" incidents and property damage to POS Manager, Construction Safety Services and insure immediate corrective action is taken. Assist in the preparation of all accident investigations and ensure reports are submitted within 24-hours.

- e. Ensure meaningful, weekly safety meetings are held for all on-site employees. Provide the job foremen with appropriate training materials to conduct weekly "tool box" safety meetings and attend safety meetings to evaluate their effectiveness. Maintain documentation of topics discussed and attendees, with copies submitted to the Engineer or included with Contractors Daily Construction Report.
- f. Be responsible for the control, availability, and use of necessary safety equipment, including personal protective equipment and apparel for the employees.
- g. Shall attend a monthly safety committee meeting scheduled by the Manager of Construction Safety Services to discuss and resolve relevant issues related to safety and health on Port of Seattle projects.
- 6. Contractor Safety Officer/Professional (s) not performing their duties in accordance with this document, shall be replaced at the Port's discretion by an individual meeting the requirements of this section. In addition, the Contractor Safety Officer/Professional (s) may not be removed from this Contract or replaced without the Port's advanced written approval. The Contractor shall notify the Engineer and Manager of Construction Safety Services when this person cannot be on duty while work is being performed and shall submit the name(s) and qualifications of the individual assigned to perform said duties.

G. ACCIDENT PREVENTION

- 1. The Contractor has the responsibility to correct hazardous conditions and practices. When more than one Contractor is working within a given job site, any project management personnel shall have the authority to take action to prevent physical harm or significant property damage. If it is determined there is "Imminent Danger" the Contractor shall:
 - a. Take immediate action to remove workers from the hazard and stabilize or stop work until corrective actions can be implemented to eliminate the hazard.
 - b. Immediately identify and implement corrective action to eliminate the hazard.
 - c. Immediately notify the Engineer, and Manager of Construction Safety Services or others as necessary. The Engineer will notify the proper authorities if the damage cannot be promptly corrected and could develop into an emergency.
 - d. Each worker shall immediately report any condition suspected to be unsafe or unhealthy to their job foreman or safety representative. If there is no resolution of the concern at that level, the employee shall report the concern to the Engineer and Manager of Construction Safety Services.

H. ON-SITE FIRST AID

- 1. This section is designed to assure that all employees in this state are afforded quick and effective first-aid attention in the event of an on the job injury. To achieve this purpose the presence of personnel trained in first-aid procedures at or near those places where employees are working is required. Compliance with the provisions of this section may require the presence of more than one first-aid trained person.
 - a. Each employer must have available at all worksites, where a crew is present, a person or persons holding a valid first-aid certificate.
 - b. All crew leaders, supervisors or persons in direct charge of one or more employees must have a valid first-aid certificate.
 - c. For the purposes of this section, a crew means a group of two or more employees working at any worksite.

2. Additionally, the Contractor shall:

- a. Post emergency procedures which shall include telephone numbers and locations of facilities including, but not limited to, hospitals, physicians, police, fire and emergency medical services, in conspicuous locations at the job site and at all telephone locations.
- b. Provide in a readily accessible location, first-aid supplies of sufficient size and number to handle common first-aid incidents.
- c. Identify personnel qualified to render first aid with suitable emblems affixed to the rear of their hard hats for identification.
- d. Regularly discuss actions to be taken during emergencies with the Contractor's supervisory personnel and at "tool box" safety meetings.

1.06 PORT OF SEATTLE'S RIGHTS

A. INSPECTIONS/INVESTIGATIONS

- The Port may, in any reasonable manner, observe and inspect the Contractor's safety and accident prevention procedures for all activities and personnel working at the construction sites, including the Contractor, subcontractors, visitors, and materials or equipment suppliers. This specifically includes, but is not limited to, the right to attend all safety meetings.
- 2. The Port shall receive written copies of accident or incident reports completed by the Contractor within 24-hours of occurrence, using the accident investigation reports found in the Port of Seattle Construction Safety & Health Manual or contractor equivalent. This reporting shall include but not be limited to those reports prepared pursuant to OSHA and/or DOSH regulations.
- 3. The Port may, in any reasonable manner, observe or participate in any accident investigation conducted by the Contractor or anyone performing work for, on behalf of or under the Contractor. The Port may also, at its sole discretion and in any reasonable manner, undertake its own accident investigation.

B. CORRECTIVE ACTIONS/STOP-WORK

- 1. The Port shall have the right to require the Contractor to address unsafe working conditions, including taking corrective action when unsafe working conditions are observed (i.e., lack of good housekeeping practices, use of equipment in obviously poor condition, failure to adhere to statutory construction regulations, etc.).
- 2. The Port shall have the right to require the removal from the Work Site of any person, property, or equipment that, in the Port's opinion, is deemed unsafe.
- The Port shall have the right to require the Contractor to immediately cease any action and/or stop the Work (or any portion thereof) in the event that any condition exists that, in the Port's opinion, constitutes an imminent danger or serious harm.
- 4. The Port shall have the right to suspend the Work (or any portion thereof) pending the completion of any accident/incident investigation, whether undertaken by Contractor, the Port or others.

C. PORT'S ACTION/INACTION DOES NOT RELIEVE CONTRACTOR

1. Nothing the Port may do, or fail to do, with respect to safety in the performance of the Work shall relieve the Contractor of its responsibility to comply strictly with this Division and all standards referenced in Section 1.02 of this document.

D. PORT'S ACTION/INACTION NO BASIS FOR ADJUSTMENT

1. The Port's exercise of any rights under this Paragraph 1.06 shall not be a basis for any adjustment in the Contract Price or Time.

E. PORT OF SEATTLE INCLUDES CONSULTANTS

1. As used in Document 01 35 29 the terms "Port of Seattle" and "Port" specifically includes the Port's designated consultants.

1.07 PORT MANDATED SAFETY REQUIREMENTS

A. Prior to Notice to Proceed (NTP), the Contractor's Project Manager and Safety Representative shall meet with the Engineer and Manager of Construction Safety Services to review and discuss the safety requirements of this Contract.

B. SPECIFIC SAFETY PROVISIONS

- In addition to Federal, State, and Local regulations pertaining to operations and safety, the Contractor shall adhere to the following Port mandated safety requirements:
 - a. Asbestos and Contractor Personnel Asbestos Training: Ensure that all Certified Asbestos workers have current certifications, and ensure that all other site workers, including subcontractors, have received the initial and annual Asbestos Awareness training prior to the start of work.

- b. Entry into Confined Spaces: Work on this project may require entry into confined spaces as defined by WAC 296-809. The Contractor shall read and follow the requirements of the Port of Seattle's Confined Space Entry Program, as found in the Port of Seattle Construction Safety and Health Manual. The Contractor's Confined Space Entry Program must meet or exceed these requirements.
 - (1) The Contractor shall provide the Engineer a copy of its Confined Space Entry Program as part of the Contractor's Safety Plan Submittal. As part of this submittal, the Contractor shall complete the "Confined Space Entry Program Certificate" (Attachment 2).
 - (2) Should the Contractor employ subcontractors to work in confined spaces it shall be the Contractor's responsibility to submit the required documentation for each subcontractor.
 - (3) No work shall be allowed to start in a confined space until the required submittals have been made. In the event the Contractor does not comply with these regulations, ACCESS WILL BE DENIED and the Engineer notified. Delays caused by failure to submit the required documentation shall not be considered a reason for extension of Contract time.
- c. Electrical Safe Clearance Procedures
 - (1) Entry into High Voltage Areas: Work on this project may require entry into manholes, vaults, electrical rooms or other High Voltage areas.
 - (2) In the event entry is required, the Contractor is obligated to identify any High Voltage areas that may be involved in the project and immediately notify the Engineer if they have not been properly identified. Before entry into a High Voltage work area the Contractor shall notify the Engineer and contact STIA Electrical Shop at (206) 787-5311(Airport) or the Seaport Electrical Shop at (206) 787-3350.
- d. Fire Prevention: The Contractor shall ensure that fire prevention measures on-site are in accordance with OSHA, DOSH, NFPA, and POS standards. Approved safety cans shall be used for flammable and combustible liquids. Signs and fire extinguishers shall be provided where required.
- e. Traffic Control: Ensure compliance with Section 01 55 26 Traffic Control.
- f. Hazardous Materials: Ensure compliance with Section 01 57 23 Pollution Prevention, Planning and Execution.
- g. Open Flame Devices: Prohibit the use of unapproved fuel-burning types of lanterns, torches, flares or other open-flame devices on Port property.
- h. Liquid propane storage and use below grade is prohibited.

- i. Excavating & Trenching: Coordination with the Engineer shall be required for work performed on the site.
- j. Construction activities that pose a potential risk of exposure to contaminated soil (such as excavations) shall be supervised by personnel who have both a current 40-hour Hazardous Waste certification, and an 8-hour Hazardous Waste 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 Hazardous Waste certification and medical monitoring, as required in Hazardous Waste Operations, Chapter 296-843 WAC and in accordance with OSHA regulations. The plan shall also include emergency procedures and medical treatment, fire protection, Job Hazard Analysis (JHA), and PPE requirements.
- k. The Contractor is responsible for soil sampling and air monitoring to determine hazards and exposures to their employees.
- I. Safety plan shall include guidelines for the protection of construction-related workers against occupational musculoskeletal injury risk factors arising from operations connected with the construction, maintenance and repair, and demolition of structures, using a hierarchy of controls. Manual Material Handling, Body Positioning and Dynamic Stretching shall be addressed. Contractors will need to consult with their Safety Professionals to determine which tasks require an ergonomics prevention program and which selection of controls are needed to minimize injury.
- m. As defined in WAC 296-155 Part L, individuals involved in operating hoisting equipment, including but not limited to cranes, boom trucks, and forklifts so configured, shall possess recognized certification. Additionally, qualified riggers and signal persons shall also possess recognized certifications. Copies of the certification(s) shall be submitted in accordance with Section 01 32 19 Preconstruction Submittals.
- n. Personal Protective Equipment Policy: To reduce the possibility of injuries, the Contractor shall implement a policy that requires 100% use of hardhats, safety glasses, and gloves for all personnel under their control. It is the responsibility of the Contractor to supply the proper personal protective equipment for the task.
- o. Protection of the Public: The Contractor shall submit a plan for the protection of the public on or adjacent to construction and demolition operations. This plan shall include, but not be limited to, barricades, fencing, and signage. "Public" is defined as anyone not associated with the project general public, Port and tenant employees.
- p. At the Port's request, provide safety awareness training for Contractor supervisory personnel and Port management in one or more of the following: cranes & rigging, electrical, fall protection, trenching & excavation, steel erection, heavy equipment, public protection.

C. DISCIPLINARY ACTION MATRIX:

- Defining "The Plan"
 - a. The object of this matrix is to consistently and effectively control safety hazards such as unsafe acts, and unsafe conditions that lead to injuries of employees, the general public, or that cause property damage.
 - The matrix also provides a basis for the Contractor's program by standardizing how safety infractions committed by those employees will be handled.
 - c. All employees of the Contractor, subcontractor, sub tier contractor, vendor, or tenant are covered under this matrix regardless of classification.
 - d. Damage to equipment or property due to unsafe act or using damaged equipment.
 - e. Listed are the minimum requirements for discipline. The Contractor has the right to incorporate more stringent procedures from their corporate policy into this matrix. The Contractor shall not submit two Disciplinary Action Programs.
 - f. Individuals observed by the Contractor's management shall be disciplined under this matrix.
 - g. Individuals observed by the Port of Seattle management shall also be subject to disciplinary action. POS management shall immediately contact the Contractor's management or provide written information to the Contractor's management as to violation, time, date, employer, and employee.
 - h. The Contractor's Safety Manager shall perform the act of documenting and distributing the "Written Violation Notice."

2. Defining "Violation"

- a. Violations are defined as:
- b. "General Violations" are considered to be those infractions that may not cause serious injury or illness to an individual but are still violations of written safety policies and procedures. Examples include housekeeping, unregulated ACM incidents, property damage, mushroomed tools, etc. "General Violations" do not necessarily require a written warning unless they become classified as "Repeat Violations."
- c. "Serious Violations" are those violations that if left uncorrected could cause serious injury or illness to an individual. Examples include employees exposed to fall or impalement hazards or serious bodily harm.
- d. "Imminent Danger" refers to violations/situations that will most likely cause permanent disability or death to an individual. Examples can include falls, electrical, or trenching hazards and unsafe equipment.

- e. "Repeat Violations" are situations that arise as a result of a previously identified infraction not being abated in the time frame required or numerous violations of the same classification. "Repeat Violations" can also be defined as a situation where one supervisor has multiple employees working under their direction who are in violation of a written Federal, State, project, or company policy.
- f. Violations are not limited to the examples listed above.

NOTE: An "employee" may be removed from the project at any time for a safety violation that endangers his life or the life of a fellow employee.

3. Defining "Employee"

- a. As mentioned earlier, all employees of the Contractor, subcontractor, vendor, or tenant are included in this program.
- b. Job title classifications can include but are not limited to trades person, foreman, supervisor, superintendent, etc.
- c. Any person (s) directly reprimanded for their own actions or inactions, regardless of their position, shall be reprimanded as a "Worker."

4. Defining the "Procedure"

- a. Individuals observed committing infractions of written Federal, State, site, or company safety policies shall be brought to the attention of the Contractor's management.
- b. The Contractor shall in a timely manner, notify the identified employee(s) that they are in violation of written safety rules or procedures and shall abate the hazard.
- c. In the event of "Imminent Danger or" a "Serious Violation," the Contractor or POS shall immediately notify and remove the employee(s) from the hazardous situation.
- d. The Contractor shall provide timely written warning to the identified individual(s), as well as the direct supervisor and superintendent of that individual(s). The supervisor's names shall be recorded on the "Written Violation Notice."
- e. To discourage "Repeat Violations" or supervisor apathy, the supervision is subject to disciplinary action as stated in the matrix.
- f. The Contractor shall utilize the "Written Violation Notice" provided in this section.

5. Defining the "Results"

- a. Personnel (including supervisors) receiving a Written Violation
 Notice shall be retrained in the appropriate standard or procedures.

 Said training shall be documented in writing and submitted to the Engineer.
- b. Written Violation Notices received will remain in force for the duration of the project.

- c. Removal from the project of an "employee" for a minimum of 3 working days.
- d. Removal of an "employee" from any Port of Seattle project for one year.
- e. Written notice sent to the appropriate corporate president.
- f. Copies of all "written violation notices" are to be submitted to the Engineer with a copy forwarded to the Manager of Construction Safety Services within 24-hours of issuance of notice.

DISCIPLINARY ACTION MATRIX

FOCUS POINT /INCIDENT	1 ST VIOLATION	2 ND VIOLATION	3 RD VIOLATION	NOTES
Worker	Verbal & Written Notice	3 Days Off	Removed From Port Projects For One Year	
Worker's Direct Foremen	Written Notice	Written Notice	3 Days Off	3 Worker Lay-offs = Removal From Port Projects For One Year
Worker's Direct Superintendent	Written Notice	Written Notice	Written Notice to Sub/Prime Superintendent and President of Sub/Company	3 Worker Lay-offs = 3 Days Off For Superintendent
Prime Contractor's Superintendent	Written Notice	Written Notice	Written Notice to President of Prime Company	3 Worker Lay-offs = 3 Days Off For Superintendent*

^{*}Document 01 35 19 - Safety Management, this individual may also be removed from the project.

DISCIPLINARY ACTION MATRIX

WRITTEN VIOLATION NOTICE	
PROJECT NAME:	PROJECT #:
CONTRACTOR:	
EMPLOYEE BEING REPRIMANDED	
DATE:	TIME:
VIOLATION:	
TASK BEING PERFORMED:	
CORRECTIVE ACTION/TRAINING REQU	IRED:
WITNESS:	
SUPERINTENDENT:	
GC SUPERINTENDENT:	
FIRST NOTICE: SECOND NO	TICE: THIRD NOTICE:
EMPLOYEE LAY-OFF OR REMOVAL REC	QUIRED (YES/NO):
WRITTEN NOTICE TO COMPANY PRESI	DENT REQUIRED (YES/NO):
ISSUED BY:	COMPANY:

D. SAFETY PERFORMANCE

- If the Contractor experiences ongoing safety concerns such as a Lost Work Day Case or Recordable Incident Rate greater than the Bureau of Labor Statistics National Average for Construction, experiences repeated violations of safety & health rules and regulations or "Imminent Danger" situations, or fails to abate violations in a timely manner, the Contractor shall be subject to the following action at the Ports discretion:
 - a. Removal and replacement of management personnel.
 - b. Submit a written Safety Recovery plan to the Engineer and Manager of Construction Safety Services detailing what changes will be made to their safety program and a timeline as to when the changes will be implemented.
 - c. Hiring an independent safety consultant who shall audit the Contractor's procedures and operations. The consultant shall compile a plan detailing what changes the Contractor shall implement. This report shall be submitted to the Engineer, Construction Manager, and Manager of Construction Safety Services.
 - d. Notwithstanding 01 35 29 paragraph 1.05 (B)(9)(c), Disciplinary Action Matrix, above in 1.07 (C)(2), shall be used for determining the appropriate corrective action.
 - e. Conduct a "Safety Stand Down" (suspend all work or any portion thereof) in accordance with the provisions of the General Conditions 00 70 00, Article G-10-04 Port's Right to Stop the Work for Contractor Non-Performance. Suspended work shall not be allowed to resume until the Contractor has completed the following actions for review and acceptance by the Engineer:
 - (1) Hazardous conditions leading up to the Safety Stand Down shall be abated.
 - (2) Training of such type and duration shall be conducted to educate personnel on the awareness of, identification of, and correction of hazards leading up to the stand down.
 - (3) Document the completion of items a. and b. above.

E. TOUR GUIDELINES

- 1. It is imperative that the highest degree of protection is afforded to all individuals touring any Port construction site. The following guidelines have been prepared as general instructions for the organization, direction and safe conduct of such tours:
 - a. Escorted Visitors: While on the job site, non-construction personnel or groups shall be accompanied at all times by an authorized representative, the Engineer, the Contractor, or other designee familiar with the job site.
 - b. Notification and Tours: Personnel tours including technical inspections need to be cleared through the Engineer, allowing maximum advance notice. The Engineer shall be consulted to

- coordinate the tour plan, identify specific rules, and to ensure necessary safety precautions are taken.
- c. Safety Enforcement: Before entering a job site, all visitors must be informed regarding the need for careful, orderly conduct and notified of any special hazards that may be encountered.
- d. Personal Protective Equipment: All visitors and tour groups must comply with proper dress, footwear, personal protective equipment or other safety requirements deemed appropriate.

1.08 CONTRACTOR ADMINISTRATIVE PROCEDURES

A. PROJECT SAFETY INSPECTIONS

- Unsafe conditions or acts having the potential to cause bodily injury or property damage are classified as either "Imminent Danger" or "Serious." In either case, action shall be taken immediately to correct the situation. Any item(s) that cannot be corrected immediately are required to be abated within 24-hours of notification. In the interim, other steps shall be taken to insure the safety of employees or the public.
- 2. The Construction Safety Inspection Report (CSIR) will be used by the Port Construction Safety Management as the field report for recording the Safety Manager's observations in Section One (refer to Attachment 3).

The following instructions apply to the use of this form:

- a. Contractor's Corrective Action (Section Two): The Contractor shall note the action taken to abate the observation. If an item is abated immediately, it will be so noted in Section One by the Port Safety Manager.
- b. Date Corrected: The Contractor, upon completion, shall enter the date in the appropriate column.
- c. Submittal Procedure:
 - (1) Projects utilizing the CDMS system (Livelink) will use this system to transmit the CSIR Report between the Port and the Contractor until the observation is satisfactorily resolved.
 - (a) Email distribution will be used on projects not utilizing LiveLink
 - (2) When corrective action has been completed, the Contractor's Project Manager or Designee will electronically sign and date the form and return it to the Engineer via LiveLink or email (to a designated Port Engineering Staff Member).
 - (3) A member of the Port's Engineer's staff will review the form and follow-up to ensure the "Contractor's Corrective Action" has been addressed, initialing each item corrected.
 - (4) The Engineer will discuss the noted observations at the Weekly Contractor Progress Meeting.

(5) The electronically signed copy of the form shall be returned to the Manager of Construction Safety Services within five working days via Livelink.

B. ACCIDENT INVESTIGATION AND REPORTING PROCEDURES

- 1. All accidents and incidents occurring from operations or work performed under the Contract shall be reported, verified, investigated, and analyzed as prescribed by the Port of Seattle Construction Safety & Health Manual. Contractors and other individuals involved in the work shall instruct employees and other personnel to follow these procedures if someone is injured.
 - a. Seek medical assistance for anyone injured. The injured person's supervisor will see that first-aid is administered.
 - b. When a serious accident or emergency occurs/exists, secure the incident area tightly and quickly except for rescue and emergency personnel.
 - c. Send individuals as required, to assist or direct any emergency personnel arriving on the site.
 - d. The accident scene shall not be disturbed until released by the Incident Command or Manager of Construction Safety Services, except for circumstances where "Imminent Danger" exists to those performing any emergency services.
 - e. Immediately notify the Engineer and Manager of Construction Safety Services (or designee) regarding any accident or injury requiring more than First Aid treatment, any third-party incident, or any equipment or property damage estimate in excess of \$1,000. Notify the Manager of Construction Safety Services of all other incidents including near miss incidents as soon as possible following the event.
 - f. Washington State Department of Labor and Industries must be notified immediately by the Contractor in the event of an accident involving the death or hospital admission of any employee.
 - g. Employees must report all injuries or occupational-related illnesses as soon as possible to their employer or immediate supervisor.
 - h. A detailed written report, identifying causes and recommending corrective action, must be submitted to the Engineer and Manager, Construction Safety Services within 24 hours. No supervisor may decline to accept a report of an injury from a subordinate.
 - i. Within 48-hours of a Recordable or Lost Work Day Case Injury, incident involving 3rd party, or property damage incident, the Contractor shall meet with the Engineer and Manager of Construction Safety Services. The meeting shall discuss the status of the injured employee, the root cause of the incident, corrective action implemented, the Job Hazard Analysis, and retraining of the employee and supervisor.

- j. Report all accident exposures and near miss incidents that occur on the job site. These records are to be maintained and submitted to the Engineer or other designated authority upon request and shall include but not be limited to:
 - (1) First-aid injuries not reported on the OSHA No. 300 Form.
 - (2) The Contractor's OSHA 300 Form.
- k. The above information shall be provided only to authorized personnel including the Engineer and Manager of Construction Safety Services.
- All questions from the media regarding any incident occurring on site shall be referred to the Port's Public Affairs Manager via the Engineer.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

1.09 GENERAL

A. No separate measurement or payment will be made for the work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Document

List of Attachments

Attachment 1 Sample Contractor's Safety Plan

Attachment 2 Contractor Confined Space Entry Program Certificate

Attachment 3 Construction Safety Inspection Report

ATTACHMENT 1

SAMPLE CONTRACTOR'S SAFETY PLAN

The Contractor is responsible for reviewing the requirements found and referenced in this Document, the Contract, the Port of Seattle Construction Safety & Health Manual as a minimum, and incorporating any additional specific or unique safety requirements into their written plan. The Contractor's Safety Plan shall include but not be limited to the following guidelines:

A. GENERAL PROVISIONS

- 1. **Compliance**: Provisions for accident investigations and reporting, formal incident review, reporting, corrective action and disciplinary action procedures meeting the minimum Port of Seattle requirements.
- 2. Job Hazard Analysis (JHA): The Contractor shall complete detailed, written Job Hazard Analysis for the work to be performed, identifying hazards that may exist or be created, outline the equipment to be used, and what procedures and/or safety equipment will be used to eliminate or reduce those hazards. The Contractor shall use the form provided in the Port of Seattle's Construction Safety & Health Manual or contractor equivalent. Supplemental Daily Pre-Task Plans are strongly encouraged.
- 3. **Medical Treatment**: Provide medical treatment in compliance with Federal, State and local requirements. Names of individuals CPR and First Aid trained.
- 4. **Site Specific Emergency Procedures**: As related to injuries, weather or emergencies at an active POS facility including pre-determined sites for assembly and measures for accounting of employees shall be included. Emergency numbers shall be posted at the given work area(s):

Fire or Ambulance from a non-Port hard-line phone
Fire or Police from a Port hard-line phone
Fire or Police Emergency (Airport)
Fire (Seaport)

Police (Seaport)

911
(206) 787-5380
(206) 787-5380

- 5. **DOSH/OSHA Requirements and Personal Protection**: Safety and health provisions for providing adequate lighting, ventilation, hearing conservation, CO monitoring, and housekeeping. A written Personal Protective Equipment Assessment for head, face, eye, hand, and torso protection shall be included.
- 6. **Personnel Instruction**: The Contractor must identify the greatest number of employees to be working at any one time during peak construction periods, the company policies for initial safety indoctrination of all employees, and company plans for continued safety education for all employees, including: weekly safety meetings, POS Safety Orientation, Ergonomics, Asbestos Awareness training, and English as a second language.
- 7. **Responsibilities**: Acknowledgment that the Contractor is totally responsible for compliance with OSHA, DOSH, Port or other applicable rules and orders. Additionally, the plan will require a place of employment that is free of unsanitary or hazardous conditions that would harm an employee's health or safety.

- 8. **Safety Inspections**: Detailed information concerning how safety inspections will be conducted, their frequency, and their documentation.
- 9. **Safety Personnel**: State the name of the Contractor's Safety Representative(s), their experience and qualifications (i.e. Training in the OSHA 500 (or equivalent), 30-hour or 10-hour) Indicate their authority to take the appropriate measures to eliminate hazards or stop work until hazardous conditions are corrected.
- 10. Safety Requirements, Electrical: Testing, inspection and repair of electrical equipment, GFCI Program, lockout/tagout procedures, how existing circuits will be located and the installation of electrical circuits in accordance with the National Electric Code or Port Mandated Requirements.
- 11. **Safety Requirements, Equipment**: Operation, documented daily inspection, and maintenance for trucks and heavy equipment such as backhoes, dozers, motor graders, elevated work platforms, powered industrial trucks, and all hand and power tools.
- 12. **Safety Requirements, Ladders**: Types of ladders for specific uses and their training requirements.
- 13. **Site Layout**: A layout drawing of the site indicating access roads, fire and ambulance lanes, location of first aid stations, location of required alarm systems, location of offices, parking for private vehicles and equipment, and storage of all flammable and/or combustible liquids, gases, or other hazardous materials.
- 14. **Storage**: Requirements for storage of flammable and combustible liquids or gases.
- 15. **Field Sanitation**: Provisions for toilet and hand washing facilities, including the frequency at which they will be cleaned and maintained.

B. SPECIAL PROVISIONS

Depending on the type of construction, additional items must be incorporated into the Contractor's Safety Plan.

- Confined Space Entry: Procedures for confined space entry and work operations in and around confined spaces (including elevator shafts) as well as emergency measures. These procedures must meet or exceed the Port of Seattle requirements found in the Port of Seattle Construction Safety & Health Manual. Prior to daily entry, prime/general contractor shall be notified.
 - a) **Airport**: When entry is to be made into a Permit Required Confined Space the Port of Seattle Fire Department Emergency Dispatch shall be contacted prior to entry and at completion of shift.

2. Respiratory Protection Plan

- a) Submit a letter signed by the Contractor stating that all employees or agents required to wear a negative pressure or supplied air respirator have been medically evaluated in accordance with WAC 296-842.
- b) Submit National Institute for Occupational Safety and Health (NIOSH) certification for all respiratory protective devices utilized

- on-site, including a list of approved components (parts) for each type of respirator that may potentially be used on the project.
- c) Submit a letter signed by the Contractor stating that respirator fit testing is current for all Contractor employees and agents who wear negative pressure or supplied air respirators. This fit testing shall be in accordance with quantitative procedures as detailed in WAC 296-842 and 296-62-07715.
- d) Respiratory protection requirements for work impacting the following regulated materials:
 - 1) Lead (see Section 02 83 19)
 - 2) Fugitive and silica dust (see Section 02 87 00)
- 3. **Steel Erection**: These requirements shall meet or exceed the guidelines of Chapter 296-155 WAC Part P, and shall include: pre-planning, hoisting operations, fall protection procedures, overhead protection, and Site-Specific Erection Plan.
- 4. **Cranes**: Use of cranes or derricks and the testing and inspection thereof, including hooks, latches, wire rope, operator certification, boom stops, load charts, wind speed, warning devices, fire extinguishers, crane operation signals, suspended work platform pre-lift planning, and critical lift plans.
- 5. **Excavations**: Excavation plans must indicate sloping, documented daily inspections, shoring, barricading, excavation access, *fall protection*, and excavated material storage.
- 6. **Fall Protection**: How 100% protection will be maintained, identify the use of personal fall arrest equipment, fall protection systems, and fall protection work plans for heights 4-feet. NOTE: The *Monitor System is prohibited*.
- 7. **Formwork**: Submittal of formwork and false work drawings for review and approval to the Engineer.
- 8. **Hazard Communication Program**: Including SDS, their location, Master List of Chemicals, Personal Protective Equipment, Training, Labeling, and SDS review and special procedures for sealers, coatings or specialty paints.
- 9. **Interruption of Fire/Security Systems**: Plans shall include measures and/or procedures to provide interim fire and security protection to facilities or areas affected by interruptions. These include automatic detection devices and alarms, automatic sprinkler systems, fire pumps, fire hydrants, applicable water supplies and reservoirs.
- 10. **Lock-out/Tag-out**: Procedures for lock-out/tag-out of energy sources during work operations. The Contractor shall include as part of the Lock-out/Tag-out program protocol for *Clearance Orders and Switching Orders* on electrical and mechanical systems.
- 11. **Scaffolding**: Red/Yellow/Green "Use" tag system, planking, guardrails, toe boards, anchor points, fall protection, access points, and inspections of.
- 12. **Fire Protection**: Including Hot Work Permits, Welding, shields, fire extinguishers, ventilation, PPE, fire watch and cylinder storage.
- 13. **Work Adjacent to Occupied Spaces**: Procedures for ensuring occupants of spaces adjoining, above and below construction areas will be protected

- from hazards created by construction, including but not limited to, falling debris, equipment noise, and penetration of partitions, ceilings, and floors.
- 14. **Competent Persons**: Where regulatory requirements (DOSH) specify the use of Competent Persons, the Contractor shall submit in writing the names of those persons. Their area of competency and applicable experience/training documentation.
- 15. **Energized Electrical Work Plan**: Submit detailed procedures for working on and guarding of energized equipment or conducting system outages.
- 16. **Seaport Safety**: Contractors shall submit a safety plan complying with all Federal, State, Corp of Engineers, Port of Seattle, and Coast Guard rules applicable to this type of construction.
- 17. **Health Considerations**: The Contractor shall submit a plan that addresses safety & health procedures for working in contact with contaminated soils. This plan shall be revised and resubmitted in the event that conditions encountered during the Work are different than those initially planned for. It shall also include:
 - a) Identification and evaluation of the hazards and risks associated with each work task.
 - b) The names and qualifications of each contractor's representative(s) in charge of the Work and present at the project when pipeline removal is performed.
 - c) Identification of supervisory personnel and alternative responsibilities for site safety/response operations.
 - d) Determine levels of personnel protection to be worn for various site operations.
 - e) List equipment with adequate nomenclature by item that will be used at the job site and the date and location where the Engineer can inspect this equipment.
 - f) Establishment of emergency procedures, such as: escape routes, fire protection, signals for withdrawing work parties from the site, emergency communications, wind indicators, including facility notification.
 - g) Identification and arrangements with the nearest medical facility for emergency medical care of both routine-type injuries and toxicological problems. Submit the name, location, and telephone number of this facility.
- 18. **Conveyor Safety Policy**: To include procedures for deactivation of conveyor systems, lockout/tagout of systems, working around operating conveyors and required Port of Seattle conveyor safety training.
- 19. **STS Tunnel Access Procedures**: What procedures employees will follow if work requires access into the STS system.
- 20. **Demolition**: The Contractor shall submit a plan to include how they will safely demolish existing structures, ensure security, safe guard employees and the public from falling material, electrical hazards and air quality issues. An Engineering Survey performed and signed by a Qualified Person shall be included.



Port						Site Spec	cific Plan Addendum
of Seattle	•	JOB	HAZARD ANA	LYSIS WO	RKSHEET	Person in Charge* for Reporting Hazards and Injuries:	
Location/addre	ess:					Phone Number:	
						* requires OSHA 10	& complete documented daily inspections
Title of Job/Operati	ion:			Date:		Day of Safety Meetings:	
				Work Order #:			Call Fire Dept 787-5380 on airport grounds. 911 everywhere else. For
Analysis Made	Ву:			Contact person:		Emergency action	large scale emergency meet at:
Analysis Reviewed				Phone Number:		plan	
Location of Mas Prevention Progra							
Sequence of Basic		Steps	Potential Hazards	/Ergonomics	Recomm	nended Safe Job Proc	edures and Required PPE
Supervis	or Sig	nature:			Received by RE/CM:		

	Will the Scope of Work consist of the following	g tasks? (check all that apply)	(a)List Chemicals to be used on the project.	
	Traffic control*	Confined Space Entry*	Material Safety Data Sheets attached	Yes ☐ No *Physical MSDS must be on-site.
	Welding, Cutting, Grinding*	Heavy Equipment		
	Trenching or Excavation*	Flammable or Combustible materials ^(a)		
	Carpentry	Steel Erection*		
	Painting, Staining, Sealant*(a)	Ladder or Scaffold work		
	Demolition (Structural)*	Roofing		
	Energized Electrical*	Regulated Materials		
	Use of a Crane/Boom/Hoisting device*	Hazardous Materials		
	Work from heights of 6' or greater*	Conveyors*		
	* Requires additional paperwork – checklists, plans,	permits, shut-down notice, etc.		puired for products containing isocyanates, d, silica and processes involving floor sealers, lty paints.
Descr	intion of public protection measures ("Pub	ic" is defined as anyone not associated with t	the project - general public, POS, Tenant, and	Airline Employees)
Desci	iption of public protection measures (Publ	ic is defined as anyone not associated with t	nie project - general public, POS, Teliant, and	Allille Elliployees).
	oyee Disciplinary for non-compliance with s fic safety plan and site-specific orientation.	et forth safety policies and procedures will be	consistent Port of Seattle's disciplinary actio	n matrix as described within your site-
		Sign L	Jp	
	Print Name	Signature	Print Name	Signature

ATTACHMENT 2

CONTRACTOR CONFINED SPACE ENTRY PROGRAM CERTIFICATE

I hereby certify that the attached Confined Space Entry Program meets or exceeds the requirements of DOSH standards WAC 296-809 and the Port Of Seattle's Confined Space Entry Program.

My employees will utilize the Port of Seattle (POS) confined space entry permit(s). They will complete all other sections of the permit that are appropriate for the confined space being entered.

My employees will be informed that they must coordinate their confined space entry procedures with other Contractors and POS employees working in or around the confined space. On Airport projects, if entering into a Permit Required Confined Space, we will first contact the Port of Seattle Fire Department, notifying them of the specific location and activity to be performed.

My employees, who will be acting as authorized entrants, attendants, entry supervisors, and air testers, have been trained in accordance with the DOSH procedures and will be made aware of all of the POS procedures for entering confined spaces.

After the confined space entry project is complete my employees will make the Engineer and Construction Safety aware of any new hazards confronted or created during entry operations. On Airport projects, my employees will contact the Port of Seattle Fire Department and advise them that operations have ceased.

A copy of finalized permit with all attachments will be provided to the Engineer at the end of each project.

Contractor's Name:	
Contractor's Signature:	
Company Name:	Date:
Port of Seattle Resident Engineer:	
Date:	

ATTACHMENT 3

Port Feattle	CSIR [Construction Safety Inspection Report]
CSIR DATE	Click here to enter a date.
CONTRACTOR NAME	
PROJECT NUMBER	
PROJECT TITLE	
ACCOMPANIED BY	

	SECTION ONE: To be co	ompleted by Port of Seattle, Construct	tion Safety Management
	CSIR PREPARED BY		
	TITLE		
	DATE	Click here to enter a date.	
ITEM NUMBER	SAFE	TY OBSERVATION	REFERENCE
001			
002			
003			
004			

SECTION TWO: To be completed by the Contractor Project Manager, except gray column NOTE: All corrective actions shall be implemented within 48-hours, and the signed report returned immediately or within 5 working PROJECT MANAGER OR DESIGNEE TYPE NAME TO ACKNOWLEDGE RECEIPT DATE Click here to enter a date. ITEM NUMBER DATE ITEM POS INSPECTOR FINAL SAFETY REVIEW CONTRACTOR'S CORRECTIVE ACTION TAKEN (POS USE ONLY) CORRECTED (POS USE ONLY) (FROM ABOVE) Click here to 001 Choose an item. entera date. Click here to 002 Choose an item. entera date. Click here to 003 Choose an item. entera date. Click here to 004 Choose an item. enter a date.



CSIR [Construction Safety Inspection Report]

	SECTION THREE: To be (completed by Port of Seattle, Construction Safety Management
	CSIR PREPARED BY	
	TITLE	
	DATE	Click here to enter a date.
ITEM NUMBER		FINAL SAFETY REVIEW COMMENTS
001		
002		
003		
004		

PART 1 GENERAL

1.01 SUMMARY

A. General: The list of environmental laws set forth in this section is provided pursuant to Section 39.04.120 of the Revised Code of Washington. The Contractor shall fully comply with the provisions of such laws as they may apply to the Work.

1.02 LIST OF ENVIRONMENTAL STATUTES, ORDINANCES AND REGULATIONS

A. General: The following is a list of federal, State, and local environmental statutes, ordinances and regulations which 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 from this list be construed to relieve the Contractor from complying with such law, to the extent it is applicable to the Contractor.

B. Federal

Statutes:

- a. National Environmental Policy Act: Establishes a Federal policy on the environment and requires the appropriate Federal agency, in any federally assisted or authorized project, to prepare an environmental impact statement for any "major action significantly affecting the quality of the human environment.
- Clean Air Act: Establishes a Federal policy on air quality and directs each state to promulgate air quality laws and regulations to achieve the goals set forth in the Act.
- c. Clean Water Act: Establishes a Federal policy on water quality and directs each state to promulgate water quality laws and regulations to achieve the goals set forth in the Act. In addition, the Act requires a permit for discharge of pollutants and sets forth oil spill prevention provisions and penalties.
- d. Rivers and Harbors Act of 1899: Provides that discharge of refuse without a permit into navigable waters is prohibited.
- e. Port and Waterways Safety Act of 1972: Provides vessel design and construction standards to protect the marine environment.
- f. Resource Conservation and Recovery Act: Provides standards and requirements for the generation, transportation, treatment, storage, and disposal of hazardous wastes.
- g. Comprehensive Environmental Response Compensation and Liability Act: Provides standards and procedures for the investigation and remedial activities to clean up hazardous substances which substances that have been discharged into the environment.
- h. Toxic Substances Control Act: Provides standards for the manufacture and distribution of chemicals and for the handling of PCBs.
- i. Endangered Species Act: Establishes protection for species which are listed as threatened or endangered.

2. Regulations and Guidelines:

- a. Environmental Protection Agency Regulations on National Primary and Secondary Ambient Air Quality Standards: Establishes national primary and secondary air quality standards for certain compounds pursuant to Section 109 of the Clean Air Act.
- b. Environmental Protection Agency Regulations Establishing Effluent Guidelines: Establishes national effluent limitations for discharges into navigable waters.
- c. Environmental Protection Agency Regulations on Discharge of Oil: Regulations promulgated pursuant to the Clean Water Act.
- d. Coast Guard Regulations on Oil Spills: Regulations promulgated pursuant to the Clean Water Act.
- e. Army Corps of Engineers Regulations on Navigable Waters:
 Establishes procedures for obtaining permits required by the Rivers and Harbors Act of 1899 and the Clean Water Act.
- f. Environmental Protection Agency Regulations on Discharge of Dredged or Fill Material into Navigable Waters: Establishes guidelines for placing dredge or fill material into navigable waters pursuant to the Clean Water Act.
- g. Environmental Protection Agency Regulations for Hazardous Waste Management: Regulations promulgated pursuant to the Resource Conservation and Recovery Act.

C. State:

1. Statutes:

- a. State Environmental Policy Act: Establishes a State policy on the environment and requires the appropriate State or local agency to prepare an environmental impact statement for any "major action significantly affecting the quality of the environment" which the agency either undertakes directly or authorizes.
- b. Shoreline Management Act: Requires a permit for development on State shorelines.
- c. Clean Air Act: Provides that it is the policy of the State to secure and maintain such levels of air quality to protect health and comply with the Federal Clean Air Act.
- d. Water Pollution Control Act: Establishes a State policy to maintain the highest possible standards for all water of the State, requires permits for the discharge of pollutants into the waters of the State of Washington and complies with the Federal Clean Water Act.
- e. Washington Solid Waste Management Law: Establishes uniform State-wide program for handling solid wastes, which will prevent land, air and water pollution.
- f. Washington Hazardous Waste Disposal Law: Establishes a statewide program for the regulation of the disposal of hazardous waste.

- g. State Noise Control Act: Authorizes the Department of Ecology to establish maximum noise levels in order to protect against adverse effect of noise in the health, safety, and welfare.
- h. Model Toxics Control Act: State "Superfund" Law which Law that establishes how cleanups of hazardous waste will be managed and sets standards for performing cleanups.
- Washington State Hydraulic Code: (Seaport Only) Establishes standards for development activities located at or below the Ordinary High Water Mark.

2. Regulations and Guidelines:

- a. Department of Ecology Guidelines for the Implementation of the State Environmental Protection Agency. State guidelines for the implementation of the State Environmental Policy Act.
- b. Department of Ecology Shoreline Development Permit Regulations: State guidelines for the issuance of shoreline permits.
- Air Pollution Regulations on Record keeping: Requires operators of stationary sources of air contaminants to maintain records of emissions and submit periodic reports.
- d. Department of Ecology Regulations Relating to Minimum Functional Standards for Solid Waste Handling: Regulations promulgated pursuant to the State Solid Waste Act.
- e. Department of Ecology Regulations for Waste Discharge Permits: Establishes standards and procedures for obtaining permits to discharge pollutants in navigable waters pursuant to the federal and state Clean Water Acts.
- f. Department of Ecology Regulations on Dangerous Waste: Regulations promulgates pursuant to the state hazardous waste disposal statute.
- g. Department of Ecology Regulations Relating to Noise: Regulations establishing noise levels and noise performance standards for certain activities.
- h. Department of Ecology Model Toxics Control Act Cleanup Regulation: Establishing rules for reporting, listing, investigation, and cleanup of hazardous waste sites.

D. Local:

- 1. Ordinances, Regulations and Orders
 - a. King County Environmental Policy Ordinances: Provisions for carrying out the County's responsibilities pursuant to the State Environmental Policy Act.
 - b. King County Shoreline Management Ordinance: Establishes procedures for obtaining a permit under the Shoreline Management Master Program.

- c. King County Solid Waste Code: Establishes provisions for the disposal of solid waste.
- d. King County Grading Ordinance: Requires permit for grading, landfills, gravel pits, dumping, quarrying and mining operations.
- e. King County Zoning Code: Establishes zoning designations and uses within those designations.
- f. City of SeaTac codes and ordinances as agreed to within the City of SeaTac/Port of Seattle 1997 Interlocal Agreement as may be subsequently amended.
- g. Puget Sound Clean Air Agency Regulation I: A regulation to control the emission of air contaminants from all sources within the jurisdiction of the Puget Sound Air Clean Air Agency (King, Pierce, Snohomish, and Kitsap Counties) in accordance with the Washington Clean Air Act.
- h. City of Burien codes and ordinances.

E. Port of Seattle:

- a. Port of Seattle Sea-Tac International Airport National Pollutant Discharge Elimination System Waste Discharge Permit No. WA-002465-1.
- b. Port of Seattle -King County Waste Discharge Permit 7810-02.
- c. Sea-Tac International Airport Schedule of Rules No. 45.
- d. Logistics Staging Area Stormwater Pollution Prevention Plan Current Edition.

1.03 REQUIRED SUBMITTALS

A. Specific submittal requirements are called out in the applicable specification section.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION

A. Contractor Quality Control (QC) shall consist of plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction, and operations that comply with the requirements of the Contract Documents.

1.02 COORDINATION

- A. As part of the Preconstruction Meeting the Contractor shall discuss the Contractor's Quality Control program. Items for discussion shall include:
 - 1. Identification of the Contractor's QC Representative
 - 2. Persons responsible for shop drawing review
 - 3. Contractor's QC Program and Reporting

1.03 SUBMITTALS

- A. Quality Control Plan
- B. Quality Control Reports
- C. Pre-Installation Meeting List

1.04 CONTRACTOR QUALITY CONTROL REQUIREMENTS

- A. The Contractor shall staff its QC program at a satisfactory level as required to perform the activities outlined in this Section with the QC Representative having complete authority to take action necessary to ensure conformance with the Contract Documents.
- B. Quality Control Plan: Submit a job specific quality control plan for approval by the Engineer fifteen (15) working days prior to the start of work on the job site. This pre-construction submittal shall include, as a minimum:
 - 1. Statement of company QC philosophy and policy.
 - 2. Company organization and designation of responsibility of QC activity at both corporate and job site level.
 - Qualifications of QC personnel.
 - Employee QC awareness and protocols.
 - 5. Procedure for incorporating all subcontractors' QC plans into Contractor QC plan.
 - 6. Description of routine daily and periodic QC activities.
 - 7. Description of examination, testing or inspection activities, including certifications and reports.
 - 8. Procedure for communicate and controlling design changes and revisions in the field.
 - 9. Submittal and shop drawing control procedures.
 - 10. Procedure for nonconformance reporting and disposition.
 - 11. Procedure for control at off-site fabrication or production shops.

- 12. List of publications or references governing work on this job site.
- 13. Exhibits of any QC forms or checklists routinely used.
- 14. A line and grade survey controls plan.
- C. The Contractor's QC Representative must have prior experience as a Project Engineer, QC Representative, Superintendent, Architect, on-site representative or inspector on a project of comparable complexity to this project.
- D. Reporting: Contractor's QC Representative shall maintain daily Quality Control (QC) Reports for each workday. QC Reports shall be factual records reporting test results and quality control activities. Submit QC Reports on accepted forms. The Contractor's QC Representative shall verify and sign all reports. Verification shall contain the statement that all supplies and materials incorporated in the Work are in compliance with the terms of the Contract Documents with noted variances.
- E. QC Control of On-Site Construction: Contractor's Quality Control program shall include the following phases of control and management for definable features of work:
 - 1. Pre-installation and Preparation Phase: A Pre-installation Meeting will be held prior to beginning work on each definable feature.
 - 2. In-Process Inspection Phase: The follow-up phase shall be performed continuously verify that quality standards are maintained throughout the project. Adjustment to control procedures may be required based upon the results of this phase and control testing. Report the results of the inspection in the daily Contractor QC report.
 - 3. Punchlist Inspections: Punchlist Inspections will be scheduled by the Engineer after the QC Representative notifies the Port that the facility and its systems are complete and satisfactory.

F. Pre-installation Meetings

- 1. Pre-installation meetings will be required for every specification section unless agreed otherwise with the Engineer. The Contractor should submit a list of pre-installation meetings which will be held during the project and an anticipated schedule for these meetings. This list shall be submitted for acceptance by the Engineer no later than 30 days after Contract Execution.
- 2. The Contractor shall conduct these meeting with the subcontractor, Port personnel, Contractor quality control and safety personnel, and any appropriate material suppliers at the beginning of each definable feature of the Work. The purpose of the meetings is to review accepted submittals, sequence of field activities, Contract details, and potential safety hazards to prevent problems in the field. Field work shall not commence prior to these meeting.
- 3. Meeting agenda shall cover:
 - a. Introduction of responsible parties.
 - b. Discussion of submitted and accepted materials.
 - c. Status of material and equipment delivery.

- d. Preview of areas where work will begin.
- e. Brief outline of the construction procedures and interface with existing work.
- f. Job hazard analysis.
- g. Quality control tests scheduled for definable feature of work.
- h. Checklist for quality control activities during the Work.
- G. Control of Off-Site Fabrication/Construction: The Contractor's Quality Control program shall identify all off-site fabrication processes and its plan for monitoring the quality of fabricated materials prior to delivery to the project site. Coordinate inspections by Port representatives as requested.
- H. The Engineer will monitor the performance of the QC Representative. If the QC Representative fails to perform in accordance with the requirements of this specification, the QC Representative will be replaced at the Engineer's request.
 - The QC Representative's performance will be judged principally on the timeliness, accuracy and completeness of the QC's assessment of the condition of the elements of the Work.
 - 2. Contract work will not be permitted to be performed without an acceptable QC Representative unless specifically authorized by the Engineer.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 GENERAL
 - A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

PART 1 GENERAL

1.01 SUMMARY

A. Install, maintain, and operate all temporary facilities and controls as long as needed for the safe and proper completion of the Work.

1.02 TEMPORARY ELECTRICITY

- A. Cost: Unless otherwise indicated by the Engineer, the Contractor shall provide and pay for all temporary power and associated services required from utility source.
- B. No Port power supply is available on-site for connection and use by the Contractor.

1.03 TEMPORARY ELECTRICITY UTILIZING GENERATORS

A. The Contractor shall provide noise-suppressed generators where Port power is unavailable or not approved for use. All fuel-operated generators shall be located outside the building.

1.04 TEMPORARY LIGHTING

A. Provide and maintain fluorescent/LED lighting for construction operations to achieve minimum lighting levels required by the Safety and Health Core Rules (WAC 296-155-165).

1.05 COMMUNICATIONS

- A. Cost: Unless otherwise indicated by the Engineer, the Contractor shall provide and pay for telephone and data services required for the project.
- B. The Contractor shall provide his own means of job site communication.

1.06 TEMPORARY WATER

- A. Cost: Unless otherwise indicated by the Engineer, the Contractor shall provide and pay for all temporary water service required for construction operations from utility source.
- B. No Port water supply is available for on-site connection and use by the Contractor.
- C. Drinking water for employees shall be provided in accordance with Washington State Department of Labor & Industries (L & I) Division of Occupational Safety and Health (DOSH) requirements.
- D. Construction water shall be disposed of in accordance with Specification Section 01
 57 13 Temporary Erosion and Sediment Control Planning and Execution and Section 02 24 50 – Construction Water Management System.

1.07 TEMPORARY SANITARY FACILITIES

A. The Contractor must provide Temporary Sanitary Facilities as required by Washington State Labor and Industries. Sanitary facilities are not available on-site.

1.08 OFFICE AND EMPLOYEE PARKING

- A. Space for the Contractor's temporary site office and Contractor employee parking is available at the Staging Area.
- B. Temporary on-site construction offices must be permitted through the Port. Refer to Attachment 1 Airport Building Department (ABD) Construction Trailers Permit

1.09 FENCES

A. Provide a 6-foot-high chain link fence with gates around the perimeter of the site for security during the entire length of construction or unless accepted otherwise by the Port.

1.10 SECURITY

- A. Provide security and facilities to protect the Work and Port's operations from unauthorized entry, vandalism, or theft.
- B. The construction site shall be closed to the public at all times. Construction site is defined as the temporary facilities and work areas inside partitions, enclosures, and cones and tape.
- C. Abide by special requests of security personnel, Port of Seattle Police and Fire Departments.

1.11 TEMPORARY SITE ACCESS

A. Contractor shall install a Temporary Construction Access Road to the LLA Parcel as shown in the Drawings as a gravel pad, and to the LL Parcel and DMCA as specified in Section 35 01 10 – Temporary Construction Lake Access Road and Stockpile Areas.

1.12 REMOVAL OF CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- A. Remove temporary utilities, equipment, access routes, facilities, and materials, prior to Substantial Completion or as directed by the Engineer.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Removal of temporary facilities and controls, including but not limited to restoration of site and laydown area utilities to preconstruction conditions shall be an element of the final inspection and punchlist.

1.13 USE AND OCCUPANCY

A. 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 Engineer. The Contractor shall limit storage of materials, tools, and other items necessary to the Work, to areas within the construction barriers. Items stored outside the designated areas shall be prohibited without prior acceptance of the Engineer.

1.14 NOISE CONTROLS

- A. At all times keep objectionable noise generation to a minimum by:
 - 1. Equipping air compressors with silencing packages.
 - 2. Equipping jackhammers with silencers on the air outlet.
 - 3. Equipment that can be electrically driven instead of gas or diesel is preferred. If noise levels on equipment cannot reasonably be brought down to criteria, listed as follows, either the equipment will not be allowed on the job or use time will have to be scheduled subject to acceptance of the Engineer.
 - 4. All construction vehicles and equipment on the project operating between 10:00 p.m. and 7:00 a.m. shall be equipped with an ambient noise sensing variable volume backup alarm system. The system shall be in compliance with Washington Administrative Code (WAC) 296-155-615.
- B. Objectionable noise received on neighboring (non-Port owned) properties is defined as any noise exceeding the noise limits of State Regulations (WAC 173-60-040), City of Burien or City of SeaTac ordinances, or as any noise causing a public nuisance in a residential area, as determined by the Port and community representatives, or by the nuisance provisions of local ordinances.

C. The Contractor's operation shall at all times comply with all County and City requirements.

1.15 MAINTENANCE OF OPERATIONS

- A. Public Safety Convenience: The Contractor shall conduct all operations with the least possible obstruction and inconvenience to the Port, its tenants and the public.
 - 1. Maintain pedestrian traffic routes and existing roadways adjacent to the work area as specified in Section 01 55 26 Traffic Control.
 - 2. Maintain existing signing and lighting systems in operation as the Work proceeds unless noted otherwise on drawings.
 - 3. Maintain access to entrances, and driveways unless noted otherwise on drawings. Coordinate any reduction in service at such locations with Engineer.
- B. Responsible Representative: The Contractor shall appoint one employee as the Contractor's responsible representative and point of contact. The appointed representative shall have authority to act on behalf of the Contractor and shall be available, on call, twenty-four hours a day, throughout the period of construction for the Contract. A twenty-four hour telephone number shall be provided to the Engineer for use in case of an off-hour emergency. The Contractor shall provide immediate response to correct all deficiencies upon notification.
- C. Traffic Control Devices: The Contractor shall provide and maintain controls as required to warn and protect the public, tenants and Port employees from injury or damage caused by the Contractor's operations. No work shall be performed on or adjacent to any vehicular or pedestrian roadway/walkway until all necessary signage and traffic control devices have been accepted and are in place. (Section 01 55 26 Traffic Control).

PART 2 NOT USED

PART 3 NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

- A. Temporary Site Access will not be measured separately.
- B. Payment for the Temporary Site Access at the LLA Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Site Access and Security" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to construct, maintain, and remove the Temporary Construction Access Road as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

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List of Attachments

Attachment 1 Airport Building Department (ABD) Construction Trailers Permit

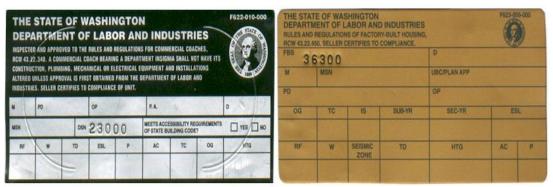


AIRPORT BUILDING DEPARTMENT (ABD)

Construction Trailers

A permit is required for any construction trailer or structure (See exemptions from permit below)

- 1. To begin the permit process, please complete a building permit application and, if applicable, a mechanical/plumbing permit application and submit to the Airport Building Department, with following:
 - a. 2 plot plans that show the location of the trailer relative to other buildings and structures and property lines.
 - b. 2 copies of trailer installation instructions which should include tie downs & skirting and access panel(s) to the under floor area.
 - c. 2 copies of drawings that indicate how access to and egress from the structure is provided.
 - i. For occupant loads 49 or less, a code compliant landing & stairway, or ramp is required.
 - ii. For occupant loads of <u>50</u> or more, a minimum of 2 exits are required. At least <u>one</u> of the two exits <u>shall</u> have a code compliant <u>ramp</u> (see attached typical ramp details).
 - iii. A minimum of <u>one</u> code compliant access ramp is required if the intended use of the trailer is <u>outside</u> of general operational purposes traditionally conducted within a construction site <u>trailer</u> (i.e. a ramp is required if the trailer will be used to hold owner's meetings, preconstruction meetings, etc), and/or the trailer is connected to plumbing utilities.
- 2. The trailer/structure must bear a Washington State black or gold insignia similar to the images below:



http://www.lni.wa.gov/TradesLicensing

Construction Trailers Exempt from Permit:

Trailers located on associated construction site and:

- 1. The trailer has no sewer or water connection. Power connected from a temporary power pole is permitted.
- 2. The trailer is not intended to hold meetings where outside personnel will be attending (owner's meetings, preconstruction meetings are examples of outside personnel.

Note: The trailer must be removed once the construction project is complete.

Trailers located off the construction site and:

- 1. Trailer will be in place less than 6 months.
- 2. The trailer has no sewer or water connection. Connecting power is permitted.
- 3. The trailer is not intended to hold meetings where outside personnel will be attending (owner's meetings, preconstruction meetings are examples of outside personnel.

Note: A letter stipulating the time, duration, and use of the construction trailer must be provided to ABD for this exception to be granted.

CODE COMPLIANT STAIR REQUIREMENTS:

Handrails: Handrails are required for both the stairway (if used) and ramp. They need to be placed within 34" to 38" above the walking surface and have to be 1-½" to 2" in diameter or provide equivalent gripping surface (a 2 x 4 on edge is not acceptable). The handrail must extend horizontally at least 12" beyond the top riser & one tread depth beyond the bottom riser.

Riser height and tread depth: Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosing of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing.

Dimensional uniformity: Stair treads and risers shall be of uniform size and shape. The tolerance between the largest and smallest riser height or between the largest and smallest tread depth shall not exceed 3 /8 inch (9.5 mm) in any flight of stairs. The greatest winder tread depth at the walk-line within any flight of stairs shall not exceed the smallest by more than 3 /8 inch (9.5 mm).

Exception: Where the bottom or top riser adjoins a sloping public way, walkway or driveway having an established grade and serving as a landing, the bottom or top riser is permitted to be reduced along the slope to less than 4 inches (102 mm) in height, with the variation in height of the bottom or top riser not to exceed one unit vertical in 12 units horizontal (8-percent slope) of stair width. The nosing or leading edges of treads at such non uniform height risers shall have a distinctive marking stripe, different from any other nosing marking provided on the stair flight. The distinctive marking stripe shall be visible in descent of the stair and shall have a slip-resistant surface. Marking stripes shall have a width of not less than 1 inch (25 mm) but not more than 2 inches (51 mm).

Landings at doors: Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Thresholds: Thresholds at doorways shall not exceed 1/2 inch (19.1 mm) in height above the finished floor or landing. Raised thresholds and floor level changes greater than 1 /4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

Guards: Guards shall be located along open-sided walking surfaces, stairs, ramps and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side.

The guard height shall be a minimum of 42" and has to have intermediate pickets spaced such that a 4" diameter object does not go through the pickets/railing. In areas that are not open to the public, guards shall not have openings that allow passage of a sphere 21 inches (533 mm) in diameter.

CODE COMPLIANT RAMP REQUIREMENTS:

RAMPS

- Ramp surfaces are stable, firm, and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps used as part of means of egress have a maximum slope of 1:12.
- The maximum rise for any run is 30 inches.
- Ramp cross slopes are not steeper than 1:48.
- Ramps may not be less than the required exit width, with a minimum dimension of 36" between the handrails for interior ramps, and 44" for exterior ramps.
- Headroom at all parts of the means of egress is not less than 80 inches.

RAMP AND LANDING EDGE PROTECTION

- Any portion of the edge of a ramp with a slope greater than 1:20, or landing which is more than ½ inch above
 the adjacent grade or floor within 10 inches horizontally, requires edge protection.
- Edge protection is required on each side of ramp runs and at each side of ramp landings, by a curb or barrier
 or by extended floor surface. (An extended floor surface occurs when the surface of ramp or landing extends
 12 inches minimum beyond the inside face of a railing.
 Exceptions:
 - Edge protection is not required on ramps not required to have handrails, provided they have flared sides complying with ICC/ANSI A117.1 2009 406.3 Sides of Curb Ramps.
 - o Edge protection is not required on sides of ramp serving an adjacent ramp run or stairway.
 - Edge protection is not required on sides of ramp landings with vertical drop-off not more than ½ of an inch within 10 inches horizontally of the minimum landing area.

Edge protection options:

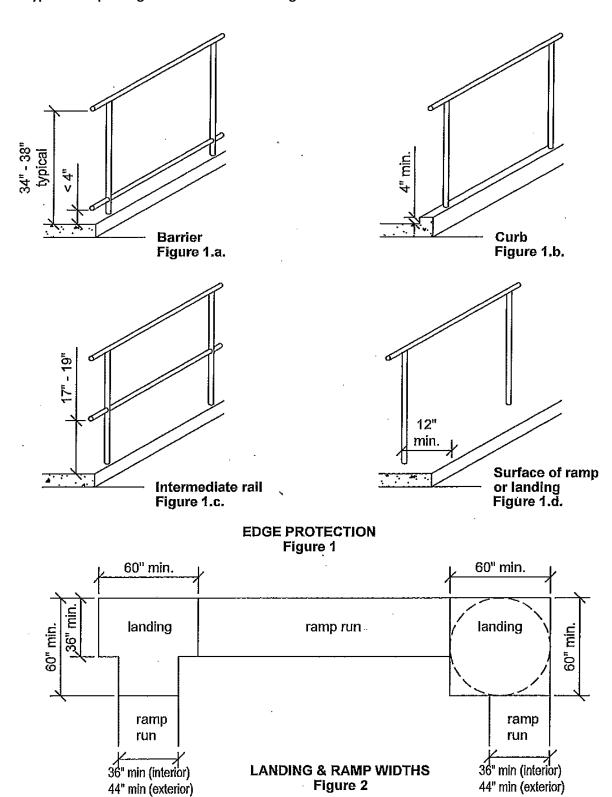
- 1. A curb or barrier is required that prevents passage of 4 inch sphere below the height of 4 inches.
- 2. Railings: When used, railings are required to have one of the following features:
 - a. An intermediate rail mounted 17-19 inches above the ramp or landing surface.
 - b. A guard complying with IBC 1013
 - c. The surface of the ramp or landing extends 12 inches beyond the inside face of the railing.

LANDINGS

- Ramp surfaces are stable, firm and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps within the accessible route of travel shall have landings at the top and bottom, points of turning, entrance, exits and doors and at least one intermediate landing for each 30 inches of rise with a minimum dimension of 60 inches in the direction of the ramp run.
- Ramps that change direction at landings shall have landings sized to provide a 60 inch turning space (60 X 60 inches) or a T-shaped intersection 60 inches long by 36 inches wide (36 inches wide at each arm of T)
- The minimum width of the landing is as wide as the widest ramp leading to the landing.
- Landings shall not slope more than 1:48.
- Maneuvering clearances for doors can overlap the landing area where doorways are adjacent to the ramp.

HANDRAIL AND GUARD REQUIREMENTS

- Ramps with a rise greater than 6 inches have handrails 34-38 inches in height.
- Handrails shall extend at least 12 inches beyond the top and bottom of any ramp run.
- Handrails are continuous except at points of access along the ramp.
- Provide guards for portions of landings or ramp that are more than 30 inches above adjacent grade.
- Guards shall be a minimum of 42 inches in height above the walking surface.



PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Deliveries:

1. The Work includes the requirements for providing route and schedule information and coordination to lessen traffic impacts for all material and equipment deliveries specified herein.

B. Removals:

- 1. The Work includes the requirements for the hauling of the material designated for disposal. Also included are the administrative tasks to ensure proper documentation as to the quantity, date and source location of the material. Documentation shall include, but not be limited to, weight tickets from a Washington State certified scale, copies of test reports, permits, copies of correspondence from regulatory agencies, and a daily "job-site field report" prepared by the Contractor and signed by both the Engineer and the Contractor's Superintendent.
- C. The work of this section includes the requirements for the hauling of fill material to the project site and hauling of Contaminated Soil and waste identified for off-site disposal from the project site.

1.02 QUALITY ASSURANCE

A. The work of this section shall be under the direction of Haul Route Supervisor who is well-trained and experienced in transportation of materials both with "on-highway" and "off-highway" equipment. The Supervisor shall be completely familiar with the accepted haul routes, origins and destinations of the materials specified herein. The Supervisor shall document all activities and answer all complaints regarding spillage, traffic violations, property damage claims, safety, equipment breakdowns and the terms and conditions of required bonds and permits. The Haul Route Supervisor will be a full-time employee dedicated to this project. The responsibilities may be shared with other project personnel provided the above-stated qualifications are satisfied.

1.03 SUBMITTALS

- A. Before any specified material or equipment is delivered to, or removed from the job site the Contractor shall submit the following information. Submittals shall be in accordance with Section 01 33 00 Submittals and Section 01 32 19 Preconstruction Submittals.
 - 1. Submit the name of the Haul Route Supervisor (Preconstruction Submittal).
 - 2. Haul Route to the site and return. The Haul Route shall include and be consistent with the route shown on the Drawings (Preconstruction Submittal).
 - 3. If applicable, copies of permits, agreements, or letter of understanding from regulatory agencies, towns, cities, or other governmental entities (Preconstruction Submittal).
 - 4. Haul Route Activities: For all haul activities provide documentation as to the quantity, date, and excavation location of the material on a daily basis. This shall be included in a "Job-Site Field Report" prepared by the Haul Route

Supervisor and signed by the Engineer and the Contractor's superintendent.

- 5. Project Completion: At project completion, provide:
 - a. Copies of correspondence from regulatory agencies.
 - b. All other submittals and documents as required by this section.

1.04 JOB CONDITIONS

- A. Removals: Prior to departure from the construction site each vehicle operator shall note the time and date on the dispatch ticket or vehicle logbook. Each stop with a loaded vehicle, other than for traffic controls, shall be entered into the logbook indicating the circumstances requiring the stop. The time the vehicle enters the disposal site property shall also be noted in the log.
- B. Once on the disposal project site the vehicle operator shall conform to the agreed upon operational procedure established by the (disposal) site operator and the Contractor. The procedure shall include but not be limited to, traffic control, turn-outs, turn-arounds, queue time, truck washing facilities, gate security, etc.
- C. Haul Route Requirements
 - City of SeaTac Haul Permit: A City of SeaTac Class E Haul Permit is required, per City of SeaTac Municipal Code Chapter 11.10. The Contractor shall obtain the permit and pay for all permit fees prior to the start of haul operations. The Contractor's operations shall meet the permit conditions at all times during haul operations.
 - 2. Site Access: All hauling vehicles shall enter and exit the Site using the access routes identified in the Drawings. Hauling vehicles shall not access the Site from 8th Avenue South, and shall limit use of residential roadways to the degree possible.
 - 3. Haul Time: The haul operation shall be limited to the days and hours permitted by the City of SeaTac. No haul operation will be allowed on Sunday.
 - 4. Haul Frequency: The haul frequency shall not exceed the number of one way haul vehicles per hour averaged over the daily haul time, applicable to each route, as permitted by the City of SeaTac.
 - 5. Traffic Control: A traffic control plan incorporating all requirements of Section 01 55 26 Traffic Control, shall be developed by the Contractor and submitted to the City of SeaTac for each haul route. The plan shall provide flaggers, an off-duty police officer and all signage in accordance with the current edition of the Manual of Uniform Traffic Control Devices (MUTCD) and as required by the City of SeaTac.
 - 6. Inspection: A City of SeaTac inspector will inspect traffic control measures and haul routes road condition per the City Code.
 - 7. Off-duty Police officer: An off-duty police officer shall be present at the site of the traffic control at each haul route at all times during the haul operation, as required by the City Code.
 - 8. Repair and Replacement Charges: To reimburse the City of SeaTac for reduction in design life of the pavement on the designated haul routes

within the City limits due to the truck traffic generated by this project, road repair and replacement charges may be assessed by the City. Pursuant with City of SeaTac Code 11.10.100, inspections by City staff of the haul route prior to approval and issuance of the permit, and upon completion of the hauling operation will be conducted. A comparison of pre- and post-haul route conditions will be performed to determine the extent of damage to City streets and right-of-way. The Contractor will be responsible for all costs associated with clean up, repair and reconstruction to bring the City streets and right-of-way to the pre-haul conditions or better.

PART 2 NOT USED

PART 3 EXECUTION

3.01 TRANSPORTATION OF WASTE MATERIALS

- A. Construction Site Loading: The material shall be loaded into the hauling vehicles under the direction of the Contractor's Haul Route Supervisor. Prior to dispatching the Supervisor shall ensure that the proper entries have been entered into the vehicle logbook.
- B. Transportation of Waste Materials: After being dispatched the hauling vehicle shall proceed to the disposal site via the accepted haul route. All stops enroute, other than traffic controls, shall be entered into the logbook indicating, location, and odometer reading. Each loaded vehicle shall cross a certified scale and obtain weight tickets in triplicate which have been machine numbered, noting time and date. One copy of the ticket will be given to the disposal site representative at the site, one copy will be given to the Engineer upon return to the construction site, and one copy shall be retained by the Contractor. The weight tickets will be used to track quantities and care shall be exercised to avoid loss or obliteration of the tickets.
- C. Disposal Site Unloading: Upon arriving at the disposal site the vehicle operator shall enter the date, time and odometer reading into log-book. Once on the disposal site the operator shall conform to the agreed upon operational procedure for unloading the material. After unloading the vehicle shall be washed, swept, or otherwise cleaned to the satisfaction of the Contractor and all regulatory agencies having jurisdiction.
- D. Return to Construction Site: On the return trip to the construction site the operator shall again cross a certified scale and obtain weight tickets in triplicate for the empty vehicle, indicating time and date. Empty weight tickets shall be delivered in the same manner as loaded weight tickets. Operators shall obtain an empty weight ticket for every load, except that no more than two empty weight tickets will be required for any one day that particular hauling unit is in service. Vehicle log-books shall be given to the hauling supervisor at the end of each day and will be a part of the summary of activities entered into the "job-site field report."
- E. Certified Scales: The certified scales utilized for the weighing of materials hauled to the disposal site shall be located within ten haul route miles of the disposal site gate. The scales shall be currently certified by the Washington State Department of Agriculture division of Weights and Measures and operated by a "Certified Weightmaster."

F. Excavated Material

- 1. When the material to be hauled is excavated natural materials from the construction site the following procedures shall apply:
 - a. Excavated materials may be direct loaded provided no leakage is observed and the requirements described in Section 02 61 13 Handling and Disposal of Contaminated Soil and Section 31 23 00 Excavation are followed.

3.02 TRANSPORTATION OF IMPORT FILL MATERIAL

A. Fill Site Loading

 The hauling vehicles shall maintain the minimum freeboard on all loads in accordance with RCW 46.61.655. Failure to maintain the required freeboard will result in the Contractor being required to cover all loads at not cost to the Port.

B. Site Unloading

Upon arriving at the project site, the operator shall conform to the operational procedures for unloading the material. After unloading, the vehicle shall be washed, swept, or otherwise cleaned to minimize the transport of material from the Work Site. Refer to Section 01 50 00 – Temporary Facilities and Controls and Section 01 57 13 – Temporary Erosion and Sediment Control Planning and Execution.

C. Documentation

Documentation of haul activity shall include, but not be limited to:

- 1. Documentation as to the quantity, date and number of hauling vehicles
- 2. Copies of permits
- 3. Copies of correspondence from regulatory agencies

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement will be made for the Work required by this section. The cost for this portion of the Work including work to obtain the City of SeaTac haul permit and comply with the permit requirements and conditions will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION

- A. Excavation work in Excavation Areas 5 and 6 will require traffic control and right-of-way closures on Des Moines Memorial Drive. Depending on the Contractor's methods, excavation work in Excavation Areas 3 and 4 adjacent to Des Moines Memorial Drive may also require right-of-way closures on Des Moines Memorial Drive.
- B. Any required coordination or permitting with the City of SeaTac prior to start of work, and throughout the project duration is the responsibility of the Contractor.
- C. The Contractor shall provide flaggers, signs, and other traffic control devices required for completion of the Work. The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations, which may occur on highways, roads, drives, or streets. No Work shall be done on or adjacent to the above locations until all necessary signs and traffic control devices are in place.
- D. These flaggers, signs, and other traffic control devices shall be used for the safety of the public, the Contractor's employees, and Port's personnel and to facilitate the movement of the traveling public. They may be used for the separation or merging of public and construction traffic when in accordance with a specific accepted traffic control plan.
- E. Upon failure of the Contractor to immediately provide flaggers; erect, maintain, and remove signs; or provide, erect, maintain, and remove other traffic control devices when ordered to do so by the Engineer, the Port may, without further notice to the Contractor or the Surety, perform any of the above and deduct all of the costs from the Contractor's payments.
- F. The Contractor shall be responsible for providing adequate flaggers, signs, and other traffic control devices for the protection of the Work and the public at all times regardless of whether or not the flaggers, signs, and other traffic control devices are ordered by the Engineer, furnished by the Port, or paid for by the Port or by any modifications made by the Contractor. The Contractor shall be liable for injuries and damages to persons and property suffered by reason of the Contractor's operations or any negligence in connection therewith.

1.02 CONFORMANCE TO ESTABLISHED STANDARDS

A. Flagging, signs, and all other traffic control devices furnished or provided shall conform to the standards established in the latest adopted edition of the Manual on Uniform Traffic Control Devices (MUTCD) published by the U.S. Department of Transportation and the Modifications to the MUTCD for Streets and Highways for the State of Washington. Copies of the MUTCD may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Modifications to the MUTCD for Streets and Highways for the State of Washington may be obtained from the Department of Transportation, Olympia, Washington 98504.

1.03 SUBMITTALS

A. Traffic Control Supervisor Designation

B. Traffic Control Plan(s)

PART 2 PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

- A. Post-mounted and wall-mounted traffic control and informational signs as specified herein.
- B. Manual and Automatic Traffic Control Signals: As approved by local jurisdictions.
- C. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- D. Flagger Equipment: As required by local jurisdictions.
- E. Manual on Uniform Control Devices (UCD) approved equipment.

2.02 FLAGGING, SIGNS, AND ALL OTHER TRAFFIC CONTROL DEVICES

A. Traffic Control Labor

- 1. The Contractor shall furnish all personnel for flagging, escorting, and for the setup and removal of all traffic control devices.
- 2. Temporary traffic control devices and construction signs necessary to control traffic during construction operations.
- 3. Flaggers and spotters shall have a current certification (flagging card) acceptable to the State Department of labor and Industries (WAC 296-155-305). Workers engaged in flagging or traffic control shall wear reflective vests and hard hats. During hours of darkness, white overalls or white or yellow rain gear shall also be worn. The vests and other apparel shall be in conformance with "High Visibility Apparel" requirements of the Standard Specifications. During hours of darkness, flagger stations shall be illuminated to ensure that flaggers can easily be seen without causing glare to the traveling public. The Contractor shall furnish the MUTCD standard Stop/Slow paddles (18 inches wide, letters 6 inches high and reflectorized) for the flagging operations.
- 4. Where required by local authorities, the Contractor shall arrange and pay for Law Enforcement personnel to assist in traffic control.

B. Construction Signs

- All signs required by the accepted traffic control plan(s) as well as any other appropriate signs prescribed by the Engineer will be furnished by the Contractor. The Contractor shall provide the posts or supports and erect and maintain the signs in a clean, neat, and presentable condition until the necessity for them has ceased. All non-applicable signs shall be removed or completed covered with either metal or plywood during periods when they are not needed. When the need for any of these signs has ceased, the Contractor, upon acceptance of the Engineer, shall take down these signs, posts, or supports. All posts or supports shall be removed from the project and shall remain the property of the Contractor.
- 2. Construction signs will be divided into two classes. Class A construction signs are those signs that remain in service throughout the construction or during a major phase of the Work. They are mounted on posts, existing fixed structures, or substantial supports of a semi-permanent nature. Sign

and support installation for Class A signs shall be in accordance with the Contract Plans or the Standard Plans. Class B construction signs are those signs that are placed and removed daily, or are used for short durations which may extend for one or more days. They are mounted on portable or temporary mountings. If it is necessary to add weight to the signs for stability, only a bag of sand that will rupture on impact shall be used. The bag of sand shall: (1) be furnished by the Contractor, (2) have a maximum weight of 40 pounds, and (3) be suspended no more than 1 foot from the ground. In the event of disputes, the Engineer will determine if a construction sign is considered as a Class A or B construction sign.

- 3. When Class A or B construction signs are required, the Work to provide these signs shall be:
 - a. Furnishing, removing and disposing of the posts or supports for the signs;
 - b. Initial installation and subsequent removal of both Class A and B construction signs; and
 - c. All other incidentals necessary for providing Class A or B construction signs according to the accepted traffic control plan(s).
- 4. Signs, posts, or supports that are lost, stolen, damaged, destroyed, or those which the Engineer deems to be unacceptable, while their use is required on the project, shall be replaced by the Contractor without additional compensation.
- C. Temporary Traffic Control Devices
 - 1. The Work required for this item shall be furnishing barricades, flashers, cones, barrels, and other channelization devices. The item "Temporary Traffic Control Devices" includes:
 - a. Initial delivery to the project site (or temporary storage) in good repair and in clean usable condition,
 - b. Repair or replacement when they are damaged and they are still needed on the project, and
 - c. Removal from the project site when they are no longer needed on the project.

PART 3 EXECUTION

3.01 CONSTRUCTION PARKING CONTROL

A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations. Monitor parking of construction personnel's vehicles. Maintain vehicular access to and through parking areas. Prevent parking on or adjacent to access roads or in non-designated areas.

3.02 FLAGGERS

- A. Traffic Control Supervisor
 - 1. The Contractor shall designate an individual or individuals to perform the Traffic Control Supervisor's (TCS) duties for the project. The TCS shall be

certified as a work site Traffic Control Supervisor by one of the organizations listed in the Special Provisions.

- 2. The TCS's duties shall include:
 - a. Discussing proposed traffic control measures and coordinating implementation of the Contractor-adopted traffic control plan(s) with the Engineer.
 - b. Coordinating all traffic control operation, including those of subcontractors, suppliers, and any adjacent construction or maintenance operation.
 - c. Coordinating the project's activities (such as ramp closures, road closures, and lane closures) with appropriate police, fire control agencies, city or county, Engineer, medical emergency agencies, school districts, and transit companies.
 - d. Inspecting traffic control devices for proper location, visibility, installation, message, cleanliness, and effect on the traveling public. Traffic control devices should be inspected each work shift except that Class A signs need to be checked only once a week. Traffic control devices left in place for 24 hours or more should also be inspected once during the non-working hours when they are initially set up (during daylight or darkness, whichever is opposite of the working hours).
 - e. Reviewing nighttime lighting and its effect on the traveling public.
 - f. Preparing a daily traffic report which shall be submitted to the Engineer with the Contractor's Daily Report (Attachment 1 of Section 01 31 13 Project Coordination) to become a part of the project records. Include in the report such items as:
 - (1) When signs and traffic control devices are installed and removed.
 - (2) Locations of signs and traffic control devices,
 - (3) Revisions to the traffic control plan,
 - (4) Lighting utilized at night, and
 - (5) Observations of traffic conditions.
 - g. Ensuring that corrections are made if traffic control devices are not functioning as required. The TCS may make minor revisions to the traffic control plan to accommodate site conditions as long as the original intent of the traffic control plan is maintained and the revision has concurrence of the Engineer.
 - h. Overseeing all requirements of the Contract that contribute to the convenience, safety, and orderly movement of vehicular and pedestrian traffic.
 - Having the latest adopted edition of the MUTCD including the Modifications to the MUTCD for Streets and Highways for the State of Washington and applicable standards and specifications available at all times on the project.

- j. Attending all project meetings where traffic management is discussed. Traffic control management shall be provided by the TCS on a 24-hour per day basis.
- 3. The Contractor shall maintain a 24-hour telephone number at which the TCS can be contacted. The Contractor shall make arrangements so that the TCS will be available on every working day, on call at all times, and available upon the Engineer's request at other than normal working hours. During non-work periods, the TCS shall be able to respond within a 45-minute time period after notification by the Engineer. The TCS shall have appropriate manpower, equipment, and material available at all times in order to expeditiously correct any deficiency in the traffic control system.
- 4. The Contractor shall identify an alternate TCS that can assume the duties of the assigned or primary TCS in the event of that person's inability to perform. Such alternate TCSs shall be adequately trained and certified to the same degree as the primary TCS.
- 5. The TCS shall not act as a flagger except in an emergency or in relief for short periods of time. Possession of a current flagging card by the TCS is mandatory.
- B. Provide trained and equipped flaggers to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.03 FLARES AND LIGHTS

A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.04 TRAFFIC CONTROL PLANS

- A. The traffic control plan or plans appearing in the Drawings show a method of handling traffic for northbound and southbound lane closures of Des Moines Memorial Drive, should lane closure be necessary for completion of the Work. The Contractor shall modify the specific traffic control plan or plans required for their method of performing the Work. If the Contractor's methods differ from the Contract traffic control plan(s), the Contractor shall propose modification of the traffic control plan(s) by showing the necessary construction signs, flaggers, and other traffic control devices required for the project. The Contractor shall coordinate any modifications to the traffic control plan(s) with the Engineer, Washington State Department of Transportation, and the City of SeaTac for acceptance at least fifteen calendar days in advance of the time the signs and other traffic control devices will be required.
- B. Contractor shall obtain any approvals of traffic control plans required by local jurisdictions.

3.05 HAUL ROUTES

- A. See Section 01 55 16 Haul Routes for specific requirements in addition to the following general requirements.
- B. Confine construction traffic to designated haul routes.
- C. Provide traffic control at critical areas of haul routes to regulate traffic or to minimize interference with public traffic.

3.06 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Install and operate manual or automatic traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations at all times.
- C. Relocate as Work progresses, to maintain effective traffic control.

3.07 REMOVAL

A. Remove equipment and devices when no longer required. Restore surfaces to original condition. Remove all posts.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for "Traffic Control" will be as a unit.

4.02 PAYMENT

- A. Payment for "Traffic Control" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials and tools to develop, implement and maintain traffic control work included in this section, as shown on the Drawings or as required to complete the Work, through the duration of the Contract. Payments will be made as follows:
 - 1. Upon acceptance of the Contractor's Traffic Control Plan(s) by the City of SeaTac and WSDOT 20%.
 - 2. After NTP and before Substantial Completion, 60% will be prorated and paid monthly when Traffic Control measures are in place, for compliance with the Traffic Control Plan(s). Non-compliance will result in withholding of payment for the month of the non-compliance.
 - 3. At final payment, 20% for a restored site.

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This item shall consist of planning, installing, inspecting, maintaining, upgrading and removing temporary erosion and sediment control Best Management Practices (BMPs) as shown on the Drawings, in the Contractor's Erosion and Sediment Control Plan (CESCP), or as ordered by the Engineer to prevent pollution of air and water, and control, respond to, and manage eroded sediment and turbid water during the life of the Contract.
- B. This item additionally includes temporary rerouting of LLA Parcel stormwater, as needed to minimize inflow to Lora Lake during Lake Parcel remedial actions.
- C. This work shall apply to all areas associated with contract work including, but not limited to the following:
 - Work areas
 - 2. Equipment and material storage areas
 - 3. Staging areas
 - 4. Stockpiles
 - Access Roads

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. The following rules, requirements and regulations specified may apply to this work:
 - 1. Surface Water Design Manual, King County, Department of Natural Resources, (Current Edition).
 - 2. Washington State Department of Ecology Stormwater Management Manual for Western Washington, Vol. 2 http://www.ecy.wa.gov/programs/wq/stormwater/manual.html.
 - 3. Washington State Stormwater Quality Standards (WAC 173-201A).
 - 4. WAC 173 201 A, Water Quality Standards of the State of Washington.
 - 5. National Pollution Discharge Elimination System (NPDES) Waste Discharge Permit No. WA 002465-1.
 - 6. Stormwater Pollution Prevention Plan, as required by the NPDES Permit No. WA 002465 1.

1.03 SUBMITTALS

- A. As part of the required Preconstruction Submittals, Section 01 32 19 Preconstruction Submittals and before NOTICE TO PROCEED is given, the Contractor shall submit the following:
 - 1. Contractor Erosion and Sediment Control Plan (CESCP)
 - 2. Pollution Prevention Plan (refer to Section 01 57 23 Pollution Prevention, Planning and Execution)
 - 3. Construction Water Management and Treatment Plan (refer to Section 02 24 50 Construction Water Management System)

- B. The following shall be submitted in accordance with Section 01 33 00 Submittals:
 - 1. Oil Absorbent Pads
 - 2. Silt Fence
 - Straw Wattle
 - Erosion Control Blanket
 - Bonded Fiber Matrix
 - 6. Catch Basin Protection
 - 7. Temporary Piping
 - 8. CESCL Certification Cards
 - 9. CESCL Qualifications

PART 2 MATERIALS

2.01 GENERAL:

A. All products used to construct the Contractor selected BMPs shall be suitable for such use and submitted to the Engineer for approval.

2.02 OIL ABSORBENT PADS:

A. Oil absorbent pads shall be made of white, 100 % polypropylene fabric that absorbs oil-based fluids and repels water-based fluids. Each pad shall be a minimum of 15x19 inches in size and absorb no less than 50 ounces of oil-based fluids.

2.03 TESC - ASPHALT CURB & ASPHALT BERM:

A. Asphalt curb and asphalt berm shall be constructed as directed by the Engineer.

2.04 SILT FENCE:

A. Geotextile material shall meet the requirements of WSDOT Specification Section 9-33 Table 6. Geotextile material shall be backed by 2-inch by 4-inch wire mesh and shall be attached to steel "T" posts using wire or zip ties. Dimensions and spacing shall be as detailed on the Drawings.

2.05 STRAW WATTLE:

A. Wattles shall consist of cylinders of biodegradable plant material, such as straw, coir, or compost encased within biodegradable or photodegradable netting. Wattles shall be a minimum of 5 inches in diameter, unless otherwise specified. Encasing material shall be clean, evenly woven, and free of debris or any contaminating material, such as preservative and free of cuts, tears or damage. Compost filler shall meet material requirements specified in WSDOT Section 9-14.4(8) Coarse Compost. Straw filler shall be 100% free of weed seeds.

2.06 EROSION CONTROL BLANKET:

A. Erosion Control Blanket shall meet the requirements of WSDOT Specification Section 9-14, paragraph 9-14.5(2) "Erosion Control Blanket". Installation in ditches and swales shall be per WSDOT Standard Plan I-60.20-00 "Erosion Control Blanket Placement in Channel". Installation on slopes shall be per WSDOT Standard Plan I-60.10-00 "Erosion Control Blanket Placement on Slope".

2.07 BONDED FIBER MATRIX SOIL STABILIZATION:

A. Bonded Fiber Matrix soil stabilization shall be labeled as such on the unopened bags furnished by the manufacturer. Bonded fiber matrix shall be installed with seed and fertilizer included in the homogenous mix. Seeding shall be as specified in Section 32 92 19 – Seeding.

2.08 CATCH BASIN PROTECTION:

- A. Catch basin protection shall be designed and installed for the purpose of preventing sediment from entering the storm system. Protection shall:
 - 1. Be constructed of non-woven geotextile fabric with sewn seams;
 - 2. Contain a built-in lifting strap;
 - Have a built-in, high flow bypass;
 - 4. Be sized such that all water draining to the catch basin flows into the insert and does not flow directly into the storm.
 - 5. Catch basin covers shall be 30 mil PVC liner material.

2.09 TEMPORARY PIPING/CONNECTIONS:

A. Temporary piping, catch basins or manholes shall meet the requirements of the storm drain pipe, manholes and catch basins as specified in Section 33 41 00 – Storm Drainage.

2.10 TEMPORARY PIPING PLUGS:

A. Installation in Pipe/Structure to Remain. Plug shall be a mechanical secured plug.

2.11 STORMWATER STORAGE TANK:

A. The tank shall be a fixed axle weir tank with a minimum 21,000 gallon.

2.12 CONSTRUCTION LIMITS FENCING:

A. Fencing material shall be 6-foot chain link as specified in Section 32 31 13 – Chain Link Fences and Gates.

2.13 STABILIZED CONSTRUCTION ENTRANCE

A. Stabilized construction shall be constructed of stabilization geotextile fabric and quarry spalls

2.14 WHEEL WASH

A. The wheel wash shall be a high water pressure, low water volume system long enough to allow for at least two full tire rotations. Spray nozzles shall be directed at inner and outer side walls for all tires including duals, all treads from two directions, wheel wells and flaps, and truck sides up to the bottom of the windshield.

2.15 PLASTIC SHEETING

A. Plastic sheeting shall be clear, reinforced, and a minimum of 6 mil thick. Sandbags or other Engineer-approved material shall be used to secure the plastic sheeting in place. Black plastic may be used to cover stockpiles.

2.16 TEMPORARY ORGANIC MULCH

A. Temporary organic mulch shall consist of straw, wood chips, compost or other material approved by the Engineer.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

A. GENERAL

- 1. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other Federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.
- 2. The Contractor's Erosion and Sediment Control Plan (CESCP) required by this section shall be based upon the Temporary Erosion and Sediment Control (TESC) requirements of the Contract but shall specifically phase, adjust, improve and incorporate the TESC requirements into the Contractor's specific schedule and plan for accomplishing the Work. The CESCP shall be modified as changes are made to improve, upgrade and repair best management practices used by the Contractor and as the Work progresses and TESC needs change.
- 3. The Contractor shall be wholly responsible for control of water onto and exiting the construction site and/or staging areas, including groundwater, stormwater, and process water. Stormwater from off-site shall be intercepted and conveyed around or through the project and shall not be combined with on-site construction stormwater.
- 4. Stormwater from the LLA Parcel is currently piped to Lora Lake. Before ground is broken at the LLA Parcel, this stormwater may be rerouted to minimize inflow to Lora Lake during LL Parcel remedial actions. If the Contractor chooses to reroute this stormwater, the Contractor will construct a tight-lined system to divert the flow to discharge without treatment at acceptable downstream receiving locations. Acceptable downstream receiving locations include: 1) the 18-inch-diameter HDPE stormwater line stub at property line adjacent to South 152nd Street, shown on Drawing CG05.2; and 2) the Enhanced Existing Wetlands south of Lora Lake, shown on Drawing LP01.1. If stormwater is rerouted to the Enhanced Existing Wetlands, erosion protection will be provided at the discharge location. Proposed stormwater rerouting layout and details shall be included in the CESCP.
- 5. After ground is broken at the LLA Parcel, LLA Parcel stormwater will be handled as contaminated, and must be collected and treated in accordance with Section 31 23 19 Excavation Dewatering and Section 02 24 50 Construction Water Management System.
- 6. Modifications to project hydraulic conveyances, detention facilities, and TESC plan sheets shall be stamped by a Professional Engineer (P.E.) licensed by the State of Washington. All other changes to the CESCP shall be signed by the CESCL.

B. PROJECT REQUIREMENTS

- DESCRIPTION OF WORK
 - a. In order to comply with the requirements of this section, the Contractor shall:
 - (1) Develop and submit a Contractor's Erosion and Sediment Control Plan (CESCP). The CESCP shall, at a minimum, include and address the following:
 - (a) Site Description and Drawings
 - (b) Contractor Erosion and Sediment Control Personnel
 - (c) Schedule and Sequencing
 - (d) BMP Installation
 - (e) BMP Maintenance
 - (f) BMP Inspection
 - (g) Upgradient stormwater rerouting
 - (h) Record keeping
 - (i) BMP Removal
 - (j) Emergency Response
 - (k) Construction Dewatering
 - (I) Fugitive Dust Planning
 - (m) Utilities Planning
 - (n) Education
 - (2) Revise and modify the CESCP during the life of the Contract and maintain records.
 - (3) Install, maintain, and upgrade all erosion prevention, containment, and countermeasures BMPs during the life of the Contract, and removal at the end of the project.
 - (4) Contain, cleanup and dispose of all sediment and convey turbid water to existing or proposed detention/treatment facilities.
 - (5) Perform other work shown on the project Drawings, in the CESCP, or as directed by the Engineer.
 - (6) Inspect to verify compliance with the CESCP requirements including BMPs; facilitate, participate in, and implement directed corrective actions resulting from inspections conducted by others including outside Agencies and Port employees/consultants.
 - (7) Educate all Contractor and subcontractor staff in environmental compliance issues at weekly meetings and document attendance and content.

2. DEFINITION

- a. SWPPP: Stormwater Pollution Prevention Plan consisting of the following documents:
 - (1) Temporary Erosion and Sediment Control Plan sheets in the Contract Documents;
 - (2) Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution;
 - (3) Section 01 57 23 Pollution Prevention, Planning and Execution;
 - (4) Contractor's Erosion and Sediment Control Plan (CESCP), both submitted by the Contractor.
 - (5) Construction Storm Water Monitoring Plan developed by the Port.
- b. BMP: Best Management Practice
- c. NPDES: National Pollutant Discharge Elimination System
- d. CESCP: Contractor's Erosion and Sediment Control Plan
- e. CESCL: Contractor Erosion and Sediment Control Lead

PERMITS

- a. Work shall be conducted in accordance with NPDES permit No. WA- 002465-1.
- Work shall be conducted in accordance with Stormwater Pollution Prevention Plan, as required by the NPDES permit No. WA-002465-1.

4. ADMINISTRATIVE REQUIREMENTS

- a. The provisions of this section shall apply to the Contractor, subcontractors at all tiers, suppliers and all others who may have access to the Work site by way of the Contractor's activities.
- Failure to install, maintain, and/or remove BMPs shown on the Drawings, in the approved CESCP and specified herein, or by order of the Engineer; or failure to conduct project operations in accordance with Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution will result in the suspension of the Contractor's operations by the Engineer in accordance with Section 00 70 00 General Conditions.
- c. The Contractor shall be solely responsible for any damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section.
- d. Any damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section will be deducted from payment due by Modification.

- e. Any time and material costs incurred by the Port due to damages, fines, levies, or judgments incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section will be deducted from payment due by Modification.
- f. The Contractor shall be solely responsible for any schedule impacts from damages, fines, levies, judgments, or stop work orders incurred as a result of Contractor, subcontractor, or supplier negligence in complying with the requirements of this section. The
- g. Contractor shall not clear, grub, grade, demolish, or perform any earthwork after NOTICE TO PROCEED until the following has been installed per the project Drawings, the approved CESCP, or as directed by the Engineer:
 - (1) Silt Fence or other perimeter controls are in place.
 - (2) Areas not to be disturbed are delineated with safety fence.
 - (3) Water flows from off-site are tight lined and directed away from work area.
 - (4) All construction entrances are stabilized and tire wash systems in place and operational.
 - (5) Catch basin inserts are installed in all catch basins that receive drainage from the work area and haul.
 - (6) Stormwater storage tanks are located on-site to provide for additional storage volume and/or treatment volume required for treatment by settlement.
 - (7) Materials on hand, in quantities sufficient to cover all bare soil, divert all flows, contain all sediments, and prevent turbid discharges from the site during all stages of construction. These materials include, but are not limited to the following:
 - (a) Reinforced 6 mil plastic sheeting
 - (b) Straw bales
 - (c) Pipe
 - (d) Sand bags, filled
 - (e) Wire-backed silt fence
 - (f) Steel "T" posts

5. AUTHORITY OF ENGINEER

a. The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing, excavation, and fill operations, and to direct the Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams or other watercourses, lakes, ponds, wetlands or other areas of water impoundment.

- b. In the event that temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the Work as scheduled or are ordered by the Engineer, such work shall be performed by the Contractor at his/her own expense.
- c. The Engineer may increase or decrease the area of erodible earth material to be exposed at one time as determined by analysis of project conditions.
- d. In the event that areas adjacent to the work area are suffering degradation due to erosion, sediment deposit, water flows, or other causes, the Engineer may stop construction activities until the situation is rectified.
- e. In the event that the Washington State Department of Ecology issues an Inspection Report, a Notice of Non-Compliance, Notice of Violation or Enforcement Action, the Engineer may stop all construction activities until it has been determined that the project is in compliance. The Engineer may require the Contractor to send additional staff to successfully complete Contractor Erosion and Sediment Control Lead (CESCL) training before construction activities may begin. The number of working days will not be changed to accommodate the work stoppage. All costs associated with work stoppages, mitigation of the event, and/or training shall be paid by the Contractor.
- f. In the event that the Contractor discharges storm water, ground water, or process water to storm drains, ditches, gutters or any conveyance that discharges to a receiving water as defined by the Department of Ecology without prior approval of the Engineer, the Engineer may stop all construction activities and require additional Contractor staff training and may require that all parties involved in the unapproved discharge be removed from the project for a time determined by the Engineer. The project schedule will not be changed to accommodate the time lost. All costs associated with mitigation of the unauthorized discharge, work stoppages, training and/or removal of personnel from the project shall be paid by the Contractor.

COORDINATION MEETINGS

a. The Contractor shall be available, at a minimum, for a weekly coordination meeting with the Engineer, other Port Staff and outside agency representatives to review the ongoing contract work for compliance with the provision of this specification.

3.02 PREPARATION FOR EXECUTION OF WORK

A. CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN (CESCP)

The Contractor shall prepare a Stormwater Pollution Prevention Plan (SWPPP). A Draft SWPPP for Work at the LLA Parcel, and DMCA was prepared by the Port and is provided as Reference Document 5 This Draft SWPPP shall be modified by the Contractor and updated to include lake filling and wetland rehabilitation Work at the LL Parcel, and modified to be consistent with the Contractor's planned methods for management of stormwater. In addition, the Contractor shall include and address the following in the CESCP, which is part of the SWPPP:

- 1. Site Description and Drawings
 - a. Included in the CESCP shall be a written description of the construction site, including location of staging areas, stockpile areas, material storage areas, natural and constructed drainage systems within the work area and staging areas, and proximity to other construction projects.
 - b. Drawings shall be included in the CESCP which show the location of the construction site, including location of staging areas, stockpile areas, material storage areas, natural and constructed drainage systems within the work area and staging areas, and proximity to other construction projects.
 - c. The drawings shall show locations of BMPs during each phase of construction as identified by the Contractor in the Project Schedule.
 - d. The drawings and written description shall detail temporary stormwater conveyance facilities and other measures proposed by the Contractor to reroute upgradient stormwater and limit the contributing drainage areas to construction stormwater management facilities.
- 2. Contractor Erosion and Sediment Control Personnel
 - a. The Contractor shall designate sufficient employees as the responsible representatives in charge of erosion and sedimentation control. These employees' responsibility will be the oversight of all water and air quality issues. One of these designees shall be on-site at all times when any work activity is taking place.
 - b. One of the designated employees responsible for erosion and sedimentation control as discussed above shall be the Contractor Erosion and Sediment Control Lead (CESCL) who is responsible for developing, maintaining and modifying the CESCP for the life of the Contract and ensuring compliance with all requirements of this section.
 - c. The CESCL shall be qualified in the preparation of erosion and sediment control plans, in the installation, inspection, monitoring, maintenance of BMP's, and documentation required for NPDES permits as well as sensitive resource identification, water treatment, and restoration and stabilization of unstable slopes, shorelines, stream banks, and wetlands.
 - d. The CESCL shall have authority to direct all Contractor and subcontractor personnel.
 - e. Qualifications of the CESCL shall be as follows:
 - (1) Have successfully completed Contractor Erosion and Sediment Control Lead (CESCL) training given by a Washington State Department of Ecology-approved provider, and have five years of experience in construction site erosion and sediment control regulatory requirements and BMPs, erosion and sediment control plan development, and stormwater/water quality monitoring, or

- (2) Currently certified as a Certified Professional in Erosion and Sediment Control (CPESC) offered by CPESC, Inc. (www.cpesc.org) and have one year experience in state of Washington construction site erosion and sediment control regulatory requirements and BMPs, erosion and sediment control plan development and stormwater monitoring.
- f. The CESCL shall also have done the following:
 - (1) Coordinated, developed, and implemented erosion and sediment control plans for NPDES permit compliance in the State of Washington.
 - (2) Completed at least two erosion and sediment control plans for earthwork projects.
 - (3) Developed phased construction work schedules addressing all ground disturbing activities.
 - (4) Designed proper temporary and permanent erosion and sediment control measures (BMPs) during clearing, soil excavation, and for emergency situations.
 - (5) Designed plans for dust abatement, embankment stabilization, and restoration
 - (6) The Contractor shall submit for approval all documentation listed above necessary to prove CESCL qualifications including but not limited to resumes, certificates, degrees, recommendation letters, and plan examples.
- 3. Duties and responsibilities of the CESCL shall include:
 - a. Maintaining permit file on-site at all times which includes the CESCP, the SWPPP, and any associated permits and plans;
 - b. Directing BMP installation, inspection, maintenance, modification, and removal:
 - c. Availability 24 hours per day, 7 days per week by telephone;
 - d. Updating all drawings with changes made to the plan;
 - e. Keeping daily logs;
 - f. Prepare and submit for approval a SWPPP and CESCP;
 - g. Immediately notify the Engineer should any point be identified where storm water runoff potentially leaves the site, is collected in a surface water conveyance system (i.e., road ditch, storm sewer), and enters receiving waters of the State;
 - h. If water sheet flows from the site, identify the point at which it becomes concentrated in a collection system.
 - Inspect CESCP requirements including BMPs as required to ensure adequacy; facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies, Port employees, and Port consultants.

- j. The CESCL shall have authority to act on behalf of the Contractor and shall be available, on call, 24 hours per day throughout the period of construction.
- k. The CESCP shall include the name, office and mobile telephone numbers, and email of the designated CESCL and all Contractor personnel responsible for erosion and sediment control.
- In addition to the CESCL, the Contractor shall designate an Environmental Compliance Manager (ECM) who will be responsible for all erosion and sediment control, water quality, fugitive dust and other environmental compliance as directed by the CESCL. On matters concerning erosion control, the ECM shall report to the CESCL.
- m. The ECM shall have successfully completed "Contractor Erosion and Sediment Control Lead" (CESCL) training given by a Washington State Department of Ecology-approved provider.
- 4. Schedule and Sequencing
 - a. The CESCP shall include:
 - (1) Schedules for accomplishment of temporary and permanent erosion control work, that include as a minimum all specific work items as are applicable for clearing and grubbing; grading; demolition, excavation, backfilling, lake filling, wetland construction; sawcutting, dewatering, stormwater conveyances, and seeding.
 - (2) Proposed method of erosion and dust control on haul roads, excavation areas, and stockpile areas;
 - (3) Proposed method for upgradient stormwater rerouting;
 - (4) Estimated removal date of all temporary BMPs and stormwater routing;
 - (5) Estimated date of final site stabilization.
 - (6) Dates of earthwork activities.
 - (7) Dates when construction activities temporarily or permanently cease on any portion of the site.
 - (8) Dates when any stabilization measures are installed.
 - (9) Dates when structural BMPs are initiated.
 - (10) Dates for all work performed within 200 feet of sensitive environmental areas including wetlands, streams and ponds.
 - Erosion control work activities consistent with the CESCP shall be included in the Project Schedule for each work area and project activity as shown on the Drawings.

5. BMP Installation

- a. The CESCP shall include installation instructions and details for each BMP used during the life of the Project;
- b. To prepare or modify Contractor's Erosion and Sediment Control Plans, use BMPs from the Washington State Department of Ecology, Stormwater Management Manual for Western Washington, Vol. 2, (as amended in December 2014). May be downloaded at: http://www.ecy.wa.gov/programs/wg/stormwater/manual.html
- c. The CESCL shall certify that all BMP installers are trained in proper installation procedures.

6. BMP Maintenance

- a. The CESCP shall include a description of the maintenance and inspection procedures to be used for the life of the project.
- b. BMPs shall be maintained for the life of the project, the completion of a work phase and/or until removed by direction of the Engineer;
- c. BMPs shall be maintained during all suspensions of work and all non-work periods;
- d. BMPs shall be maintained and repaired as needed to assure continued performance of their intended function and in accordance with the approved CESCP;
- e. Sediments removed during BMP maintenance shall be placed away from natural and constructed storm water conveyances and permanently stabilized.
- f. All maintenance shall be completed within 24 hours of inspection

7. BMP Inspection

- a. The Contractor shall inspect all TESC best management practices daily during workdays and anytime 0.5" of rainfall has occurred within 24 hours on weekends, holidays, and after hours. Rainfall amounts can be determined by calling (206) 787-4360 Airport Projects or contacting the National Weather Service for Sea-Tac International Airport rainfall.
- b. Deficiencies identified during the inspection shall be corrected within 24 hours or as directed by the Engineer.
- c. Note repairs or improvements needed, if any, and notify CESCL or ECM to implement improvements;
- d. Observe runoff leaving the site during storms, checking for turbid water:
- e. Implement additional BMPs, if needed, to address site-specific erosion control;
- f. Inspect streets surrounding site for dirt tracking;
- g. Inspect for dust.

- h. The Contractor shall visually inspect all stormwater runoff that discharges from the project for petroleum or chemical sheen, or "rainbow". Occurrences of sheen shall be reported immediately to the Engineer and shall follow procedures specified in Section 01 57 23 Pollution Prevention, Planning and Execution.
- i. The Contractor shall collect samples and test all stormwater runoff that discharges from the project for turbidity using a calibrated turbidimeter, and for pH using test strips that measure from pH 0 -14. Turbidity that exceeds 25 NTUs or pH that is below 6.5 or above 8.5 shall be reported immediately to the Engineer.

8. Upgradient Stormwater Rerouting

- Rerouting of upgradient stormwater to reduce inflow to construction areas should be performed per approved plans provided in the CESCP. Rerouted stormwater shall be tight-lined, using temporary storm drainage piping and structures.
- b. Stormwater from the LLA Parcel is currently piped to Lora Lake. Before ground is broken at the LLA Parcel, this stormwater may be rerouted to minimize inflow to Lora Lake during LL Parcel remedial actions. If the Contractor chooses to reroute this stormwater, the Contractor will construct a tight-lined system to divert the flow to discharge without treatment at acceptable downstream receiving locations. Proposed stormwater rerouting layout and details shall be included in the CESCP. Acceptable downstream receiving locations include:
 - (1) the 18-inch-diameter HDPE stormwater line stub at property line adjacent to South 152nd Street, shown on Drawing CG05.2;
 - (2) the Enhanced Existing Wetlands south of Lora Lake, shown on Drawing LP01.1. If stormwater is rerouted to the Enhanced Existing Wetlands, erosion protection will be provided at the discharge location.
- c. After ground is broken at the LLA Parcel, LLA Parcel stormwater that does not infiltrate will be handled as contaminated stormwater, and will be collected and treated.
- d. Following completion of stormwater rerouting, Contractor shall remove all temporary stormwater piping and structures, and repair site to pre-existing conditions.

9. Record keeping

- a. Reports summarizing the scope of inspections, the personnel conducting the inspection, the date(s) of the inspection, major observations relating to the implementation of the CESCP, and actions taken as a result of these inspections shall be prepared and retained as a part of the CESCP;
- b. All inspection reports shall be kept on-site during the life of the project and available for review upon request of the Engineer.

- c. Copies of all inspection records and updated CESCP shall be submitted to the Engineer weekly.
- d. The CESCP shall include the Contractor's inspection form which includes the following:
 - (1) All best management practices to be inspected and monitored for all work areas and work activities identified in the schedule for the life of the contract.
 - (2) Inspection time and date.
 - (3) Weather information including current conditions, total rainfall since last inspection and rainfall in the 24 hours prior to the current inspection.
 - (4) Locations of BMPs inspected.
 - (5) Locations of BMPs that need maintenance and reasons why.
 - (6) Locations of BMPs that failed to operate as designed or intended.
 - (7) Locations where additional or different BMPs are needed and reasons why.
- e. A description of stormwater discharged from the site. The CESCL shall note the presence of suspended sediment, turbid water, discoloration, and/or petroleum sheen.
- f. Any water quality monitoring performed during inspection.
- g. General comments and notes, including a description of any BMP repairs, maintenance or installations made as a result of the inspection.
- h. A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance CESCP. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, as well as a schedule of implementation. If the site inspection indicates that the site is out of compliance, the CESCL shall notify the Engineer immediately.
- i. Name, title, and signature of the CESCL conducting site inspection and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

BMP Removal

- a. Temporary BMPs shall be removed upon permanent stabilization or as directed by the Engineer.
- b. Areas disturbed during removal of temporary BMPs shall be permanently stabilized.

- c. Permanent stabilization shall occur upon installation of:
 - (1) On grades 3:1 and less, soil is covered by a minimum of 85% grass growth, as determined by the Engineer.
 - (2) On grades greater than 3:1 soil is covered by an approved erosion control blanket or bonded fiber matrix and a minimum of 85% grass growth, utilizing the "Line Intercept Method".
 - (3) All stormwater discharges from the project meet the following criteria:
 - (a) 0-25 NTUs.
 - (b) 6.5-8.5 pH.
 - (c) No visible sheen.
 - (d) No settleable solids.
 - (e) Washington State Stormwater Quality Standards (WAC 173-201A) at the receiving water, as determined by the Engineer.

11. Emergency Response

- a. The CESCP shall contain information on how the Contractor shall control and respond to turbid water discharges, sediment movement, and fugitive dust. At a minimum, the Contractor's employee responsible for, or first noticing, the discharges shall take appropriate immediate action to protect the work area, private property, and the environment (e.g., diking to prevent pollution of state waters). Appropriate action includes but is not limited to the following:
 - (1) <u>Hazard Assessment</u> assess the source, extent, and quantity of the discharge.
 - (2) Securement and Personal Protection If the discharge cannot be safely and effectively controlled, then immediately notify the CESCL and the Engineer. If the discharge can be safely and effectively controlled, proceed immediately with action to protect the work area, private property, and the environment.
 - (3) Containment and Elimination of Source Contain the discharge with silt fence, pipes, sand bags or a soil berm down slope from the affected area. Eliminate the source of the discharge by pumping turbid water to a controlled area, building berms, piping clean water away from the area or other means necessary.
 - (4) <u>Cleanup</u> when containment is complete, remove sediment, stabilize, dispose of contaminated water and prevent future discharge.
 - (5) <u>Notification</u> report all discharges immediately to the Engineer.

12. Construction Dewatering

- a. Storm water and construction dewatering operations shall not discharge to the Storm Drain System (SDS) unless free from pollutants. Before discharge, water shall be measured using a properly calibrated, approved turbidity meter. Discharged water shall not exceed 25 Nephelometric Turbidity Units (NTUs) and pH levels shall be between 6.5 and 8.5.
- b. The CESCP shall address how the Contractor plans to manage clean and polluted water during the life of the project. Specific procedures shall be developed and included in the CESCP when work includes excavation within 10 feet of any water, sewer, or storm system. Procedures shall address, at a minimum, locating, protecting, and connecting to existing pipes, as well as response plans for broken pipes.
- c. The Engineer shall be notified before any disposal, hauling, pumping, or treatment of water occurs. Notification shall include location of disposal and methods of treatment.
- d. Water shall not be pumped into ditches, gutters, drainage conveyance, catch basins, or any area that drains to one of these unless it meets the specifications outlined in this section and with prior approval of the Engineer.

13. Fugitive Dust Planning:

- The CESCP shall detail the Contractor proposed approach to fugitive dust management. The plan shall include the following:
 - (1) Identification of all fugitive dust sources for each work activity.
 - (2) Description of the fugitive dust control measures to be used for each source.
 - (3) Schedule, rate of application and calculations to identify how often, how much, and when the control method is to be used.
 - (4) Provisions for monitoring and recordkeeping.
 - (5) Contingency plan in case the first control plan does not work or is inadequate.
 - (6) Name and telephone number of the person responsible for fugitive dust control.
 - (7) Source and availability of fugitive dust control materials.
- b. The Contractor shall provide whatever means is necessary to keep fugitive dust on-site and at an absolute minimum during working hours, non-working hours and any shut-down periods.
- c. The Contractor's methods for fugitive dust control will be continuously monitored and if the methods are not controlling fugitive dust to the satisfaction of the Port, the Contractor shall improve the methods or utilize new methods at no additional cost.

- d. The Contractor shall maintain as many water trucks on a site during working and non-working hours as required to maintain the site free from fugitive dust.
- e. During time periods of no construction activity, water trucks must be ready with on-site Contractor's personnel available to respond immediately to a dust or debris problem as identified by the Engineer.
- f. At no time shall there be more than a 10 minute response time to calls concerning fugitive dust/debris problems during work hours and a 90 minute response at all other times on a 24 hour basis.

B. UTILITIES PLANNING:

- 1. The CESCP shall identify when and how all underground utility work will be conducted so that water quality compliance is maintained. At a minimum, the Contractor shall:
 - a. Have all shut off valves located and have procured the means to shut off valves within 10 minutes of a water line break.
 - b. The Contractor shall not cut into an existing storm drain or connect new stormwater conveyance systems into existing systems until it has been verified to the Engineer there will be no discharge of noncompliant water during and after cutting and connection operations.
 - c. Air plugs shall not be utilized for more than 24 hours and shall be in new condition with no leaks and monitored daily for proper air pressure.
 - d. Mechanical plugs shall not be utilized for more than 5 calendar days and shall be used according to the manufacturer's instructions and engineering parameters. The Contractor shall submit instructions and engineering documentation before use.
 - e. When a plug needs to remain in place longer than 5 days, the Contractor shall utilize grout. The grout shall be installed so that the length is one and a half times the diameter of the pipe.

C. EDUCATION:

- 1. The Contractor shall provide narrative in the CESCP on how they will educate all personnel including subcontractors. At a minimum, the Contractor shall:
 - Train staff through regularly scheduled meetings to discuss environmental protection subjects as related to this project. This may be added to any existing weekly meetings (such as safety meetings).
 - b. Training shall emphasize water quality compliance, BMP installation and maintenance, sensitive areas, emergency response, spill prevention, and inspections.
 - c. Minutes of the meetings detailing attendees and subjects discussed shall be kept and submitted to the Engineer weekly.

d. Prior to commencing Work, all Contractor and subcontractor personnel at any tier shall complete a Port of Seattle Environmental Compliance Orientation given with the required Safety Orientation.

3.03 EXECUTION OF WORK

A. CONSTRUCTION REQUIREMENTS

- Saw cutting
 - Saw cut slurry and cuttings shall be vacuumed during cutting operations;
 - b. Saw cut slurry and cuttings shall not remain on permanent concrete or asphalt pavement overnight;
 - c. Saw cut slurry and cuttings shall not drain to SDS, IWS, or any other natural or constructed drainage conveyance;
 - d. Collected slurry and cuttings are the responsibility of the Contractor and shall be disposed of off-site in a manner that does not violate groundwater or surface water quality standards.
- 2. Soil and Construction Debris Stockpiles
 - Soils and construction debris, including broken concrete and asphalt paving, shall be stockpiled within the work site and managed as specified in Section 02 61 13 – Handling and Disposal of Contaminated Soil.
 - b. Clean storm water runoff from that has not contacted Contaminated Material shall be directed away from bare soil using pipes, sandbags, or other temporary diversion devices.
- Construction Roads, Entrances, and Exits
 - a. Before leaving project site, all trucks and equipment shall be inspected for mud and debris. All mud and debris shall be removed as per Section 02 61 13 Handling and Disposal of Contaminated Soil.
 - b. At no time shall mud, debris, or visible sediment be allowed outside of the project boundaries and on any Port-owned and public roads.
 - c. Mud and debris shall be removed from pavement by vacuum sweeping and shoveling and transported to a controlled sediment disposal area identified in the CESCP.
 - d. If the mud and debris are contaminated by fuels, grease, metals or other pollutants, they shall be disposed of in accordance with Section 01 57 23 Pollution Prevention, Planning and Execution.
 - e. Use of water to wash concrete or asphalt pavement shall be allowed only after sediment has been removed by vacuum sweeping and shoveling, and a Road Wash Plan has been submitted and accepted by the Engineer.
 - f. Water used to wash pavement shall not drain into the SDS any other natural or constructed storm water conveyance and shall be removed from Port property and disposed of off-site in accordance with local, state, and federal regulations.

- g. Power brooms shall not be utilized without prior approval by the Engineer.
- h. Contractor shall have sufficient working vacuum sweepers on-site at all times work is being performed. All sweepers shall have on-board water spray systems that shall be operating at all times.
- i. Vacuum sweepers shall be dedicated to this project and shall not be utilized by any other contract, nor be hired out to another contractor.
- j. If, in the Engineer's opinion, the Contractor does not adequately manage the tracking of sediment, the Port may subcontract out the control of sediment tracking at the Contractor's expense.

4. Catch Basin Protection

- All catch basins within the project limits, and outside the project limits but within the project drainage basin, including haul roads, shall be protected
- Catch basin protection shall be installed where shown in the project Drawings, in all storm drainage structures within the work area, or as otherwise directed by the Engineer.

5. Wheel Washes

- a. All haul vehicles exiting the work site to public roads shall pass through a wheel wash system to control sediment tracking. Any required modification, alteration or improvement needed on the existing wheel wash systems or supplemental vehicle washing for the successful control of dirt, debris or sediment tracking beyond the wheel wash, either on Port haul roads or public roads, for the duration of the Contract shall be the responsibility of the Contractor.
- b. No modifications of the wheel wash system will be allowed that would alter the design of a contained operation with recycled wash water with no release of sediment laden wash water. The sediment shall be contained and disposed of at an appropriate disposal facility off Port Property.
- c. The wash water is "process water" and shall not be released on-site or to the storm drain system or combined with water to be treated onsite and shall be disposed of in accordance with all water quality regulations

Silt Fence

- Silt fence shall be constructed at the locations shown in the project Drawings, in the approved Contractor Erosion and Sediment Control Plan, or otherwise directed by the Engineer.
- b. The geotextile shall be attached to the up-slope side of the posts and the wire mesh using staples, wire rings, or in accordance to the manufacturer's recommendations.
- c. Where seams are required to join two sections of fence material, the seams shall be taped together, wrapped three times around a 2-inch steel post and the post driven into the ground. All rips, tears, holes,

- and other damage to silt fences shall be repaired within 24 hours of locating the damage.
- d. When sediments deposits reach approximately one-third the height of the silt fence, the deposits shall be removed and disposed of outside Port property.

Straw Wattle

- a. The installation of straw wattles shall be per WSDOT Standard Plan I-30.30-00 "Wattle Installation on Slope", or as directed by the Engineer.
- 8. Bonded Fiber Matrix Soil Stabilization
 - a. The installation of Bonded Fiber Matrix Soil Stabilization shall be applied at a minimum rate of 3,000 pounds per acre and provide a minimum of 95% soil cover. Seed and fertilizer shall be included.
- 9. Temporary Organic Mulch
 - a. Temporary organic mulch shall be applied at a minimum rate of 1.5 tons per acre.
- 10. Temporary Piping/Connections
 - a. The Contractor shall install temporary piping, catch basins and connections to the existing storm drain system as necessary to divert stormwater prior to breaking ground at the LLA Parcel as specified herein. At the completion of the work, the piping shall be removed and the temporary connections plugged.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for Temporary Erosion and Sediment Control Planning and Execution will be as a unit.

4.02 PAYMENT

- A. Payment for Temporary Erosion and Sediment Control Planning and Execution will be made at the contract lump sum price as stated in the Schedule of Unit Prices for applicable Bid item "Temporary Erosion and Sediment Control" and shall be full compensation for furnishing all labor, equipment, materials and tools to develop, implement and maintain the temporary erosion and sedimentation control plan including implementation of temporary stormwater conveyance facilities either as shown on the Drawings or as required to complete the Work, dust control, operation, maintenance and modification of wheel wash systems, control of sediment tracking, providing and operating vacuum sweepers and water trucks, and other measures as required as detailed on the Drawings and specified herein through the duration of the Contract. Payments will be made as follows:
 - 1. Upon acceptance of the CESCP and SWPPP 10%.
 - 2. After NTP during Season 1, 40% will be prorated and paid monthly for compliance with the CESCP and SWPPP. Non-compliance will result in withholding of payment for the month of the non-compliance.

- 3. During Season 2, 40% will be prorated and paid monthly for compliance with the CESCP. Non-compliance will result in withholding of payment for the month of non-compliance.
- 4. At final payment, 10% for a clean and stabilized site.

End of Section	
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1.01 SUMMARY

- A. This section consists of planning for and implementing the temporary measures indicated herein, shown on the Drawings, or as ordered by the Engineer to prevent pollution of soil and water, and control, respond to, and dispose of potential pollutants or hazardous materials during the life of the Contract.
- B. This work shall apply to all areas associated with Work including, but not limited to the following work areas:
 - 1. Jobsite
 - 2. Equipment and material storage areas
 - 3. Staging/Laydown areas
 - 4. Stockpiles

1.02 DESCRIPTION OF WORK

- A. In order to comply with this specification the Contractor shall:
 - 1. Develop and submit a site specific Pollution Prevention Plan
 - 2. Revise the Pollution Prevention Plan during the life of the Contract
 - Install, maintain, and remove all spill prevention, containment, countermeasures, and pollution prevention Best Management Practices during the life of the Contract
 - 4. Contain, cleanup and dispose of all hazardous materials or potential pollutants
 - Perform other work shown on the Drawings or as directed by the Engineer
 - 6. Maintain any required Contractor pollution liability insurance including insurance liability for the transportation of hazardous materials for the duration of the Contract
 - 7. Maintain a proper Hazardous Material Endorsement for any driver that is transporting hazardous material in a vehicle that requires the driver to maintain a valid and current Commercial Driver's License in the State of Washington

1.03 POLLUTION PREVENTION PLAN

A. The Contractor shall develop and submit to the Port a site specific Pollution Prevention Plan. The Pollution Prevention Plan must be a site-specific document that outlines the administrative, operational, and structural Best Management Practices that will be implemented on the project. Approved BMPs may be found in the Stormwater Management Manual for Western Washington, Department of Ecology, August 2001, or current edition. The Pollution Prevention Plan, as well as the CESCP (refer to Section 01 57 13 – Temporary Erosion and Sediment Control Planning and Execution), the CWMTP (refer to Section 02 24 50 – Construction Water Management System), are the project SWPPP components and must be approved prior to project NTP.

- B. The Pollution Prevention Plan must, at a minimum, include the following:
 - Site specific description and drawings
 - 2. Contractor pollution prevention contact personnel
 - 3. Known or potential hazardous materials inventory list
 - 4. Safety Data Sheets (SDSs) for hazardous materials identified on the inventory list
 - 5. Hazardous material containers labeling system
 - 6. Hazardous material container storage and handling procedures
 - 7. Hazardous material spill prevention planning and execution
 - 8. Hazardous material spill control and response planning and execution
 - 9. Hazardous material cleanup and disposal planning and execution
 - 10. Subcontractor's acknowledgment

1.04 SUBMITTALS

- A. As part of the required Preconstruction Submittals, Section 01 32 19 Preconstruction Submittals, and before Notice to Proceed is issued, the Contractor shall submit the following information:
 - 1. Pollution Prevention Plan and the required contents.
 - 2. Insurance Endorsements verifying liability coverage for job-site work and any transportation of hazardous materials to or away from the jobsite.
 - 3. Copy of a completed MCS-90 Certificate if required under the Motor Carrier Act of 1980 for transportation of hazardous material which verifies compliance with the financial responsibility requirements of the Act.
 - 4. A list of all drivers who will be hauling hazardous material in a vehicle that requires the driver to maintain a Commercial Driver's License in the State of Washington under RCW 46.25.080. These drivers must show evidence of a proper Hazardous Material Endorsement in accordance with Washington RCW 46.25.070 and 46.25.085.

1.05 DEFINITIONS

- A. Absorbent: Any material capable of absorbing oils, water-based materials, solvents, acids, and other hazardous materials. Absorbent materials include: pads, kitty litter, floor dry, and other commercially available materials.
- B. Best Management Practice (BMP): The variety of administrative, operational, and structural measures that will be implemented to prevent and reduce the amount of contaminants in stormwater and the environment. (Example: Providing secondary containment for liquid storage is a BMP).
- C. Container: Any portable device, in which a material is stored, transported, treated, disposed of, or otherwise handled.
- D. Daily Report: The report (form CM03) that the Contractor shall submit daily to include Contractor daily activities.

- E. Dangerous Waste: Solid wastes designated by the State of Washington Under Chapter 173-303 WAC and regulated as Dangerous Waste, Extremely Hazardous Waste, or Mixed Waste. (The State of Washington is authorized to implement Federal Hazardous Waste Regulations; see also Hazardous Waste definition)
- F. Hazardous Material: A substance or material, including a hazardous substance, hazardous waste, marine pollutant, including but not limited to: diesel, gasoline, petroleum products, solvents, paints, acids, lubricants, curing compounds, form release agents, adhesives, sealants, and epoxies. (See also Hazardous Waste definition)
- G. Hazardous Material Storage Area: The area used by the Contractor to store hazardous material.
- H. Hazardous Material Container Labeling System: The system used by the Contractor for identifying the secondary containers used to store hazardous materials or wastes. Acceptable methods include: Department of Transportation (DOT), Hazardous Material Information System (HMIS); National Fire Protection Association Fire Diamond (NFPA Hazard Rating).
- I. Hazardous Waste: Solid wastes designated by 40 CFR Part 261, and regulated as hazardous or mixed waste by the United States EPA.
- J. Safety Data Sheet (SDSs): Written or printed material available for each chemical that includes information on: the physical properties, hazards to personnel, fire and explosion potential, safe handling recommendations, health effects, fire-fighting techniques, and reactivity and disposal.
- K. Secondary Container: Any container, other than the original container that is used for transferring, holding, storing or otherwise containing hazardous materials or wastes.
- L. Secondary Containment: A device designed, installed, or operated to prevent any migration of wastes or accumulated liquid to the soil, ground water, or surface water. The device must, at minimum, hold 110 percent of the volume of the largest container being stored. The device must have the strength to contain a spill and be made of materials that will not be degraded by the wastes or accumulated liquids it is intended to contain.
- M. Sorbent: A material used to soak up free liquids by either adsorption or absorption, or both.
- N. Storm Drainage System (SDS): Consists of any drain, inlet, catch basin, slot drain, pipe, gully, fissure, ditch, or other form of conveyance that collects and transports stormwater.

1.06 REFERENCES

- A. The following rules, requirements and regulations specified may apply to this Work:
 - 1. Washington State Dangerous Waste Regulations: Chapter 173-303 WAC, February 1998 Edition.
 - 2. National Pollution Discharge Elimination System Waste Discharge Permit No. WA-002465-1 (Seattle-Tacoma International Airport)

- 3. Part C Hazardous Communication: Chapter 296-62-054 WAC, "Right to Know"
- 4. Port of Seattle Regulations for Airport Construction, (Current Edition).
- 5. Puget Sound Stormwater Management Plan, Puget Sound Water Quality Action Team; 1998.
- 6. Title 40 Code of Federal Regulation Subchapter I Solid Wastes 261, 262, 263, 265, 268, 273, 279, 370 (Federal Hazardous Waste Regulations)
- 7. Sea-Tac International Airport Rules and Regulations (Current Edition).
- 8. Sea-Tac Airport Stormwater Pollution Prevention Plan, as required by NPDES permit No. WA-002465-1.
- 9. Seattle-Tacoma International Airport Spill Prevention Control and Countermeasure (SPCC) Plan: January 2003. Kennedy/Jenks Consultants.
- 10. Stormwater Management Manual for Western Washington, Department of Ecology; August 2001 (or Current Version)
- 11. Surface Water Design Manual, King County Public Works, September 1998
- 12. WAC 173-201 A, Water Quality Standards of the State of Washington.
- 13. Revised Code of Washington 46.25.085, 46.25.080, 46.25.070, 46.48.170, 4.24.314

1.07 PERMITS

A. Work shall be conducted in accordance with STIA NPDES permit No. WA-002465-1.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION

3.01 SITE DESCRIPTION AND DRAWINGS

- A. A written site description shall be included in the Pollution Prevention Plan that addresses the following:
 - 1. Physical description and location of the construction site and staging areas;
 - 2. Construction activities that will involve the use of hazardous materials or generate hazardous waste;
 - 3. Location of material storage areas and project staging areas;
 - 4. Designated fueling areas;
 - 5. Proximity to any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;
 - 6. Public areas relating to construction project;
 - 7. Proximity to other construction sites;
- B. Drawings shall be included in the Pollution Prevention Plan that show the construction site(s), location of fueling areas, equipment storage areas, catch basins and other man-made and natural drainage conveyances within the work

area and storage areas. The drawings may be hand drawn sketches but must include the appropriate spatial information.

3.02 CONTRACTOR POLLUTION PREVENTION CONTACT PERSONNEL

- A. The Contractor's Environmental Compliance Manager (refer to Section 01 31 00 Contractor's Project Organization) shall be available 24 hours a day to administer and respond to hazardous materials management requirements of the Contract. Provide the following information:
 - Contact Name
 - 2. Contact Phone Number
 - Contact E-mail Address
 - Contact Address

B. Duties

- 1. Maintain permit file on site at all times which includes the Pollution Prevention Plan, Contractor Erosion and Sediment Control Plan and any associated permits and plans;
- 2. Direct BMP installation, inspection, maintenance, modification and removal;
- 3. Available 24 hours per day, 7 days per week by telephone;
- 4. Update all drawings with changes made to the Pollution Prevention Plan;
- 5. Maintain daily logs;
- 6. Immediately notify the fire department (911) of any hazardous material spill.
- 7. Inspect for Pollution Prevention Plan requirements including BMPs as required to ensure adequacy, facilitate, participate in, and take corrective actions resulting from inspections performed by outside agencies, Port employees and Port consultants.

C. Qualifications

1. The Environmental Compliance Manager shall have the experience and qualifications listed in Section 01 31 00 – Contractor's Project Organization.

3.03 HAZARDOUS MATERIAL INVENTORY LIST

A. A complete list of all known or potential hazardous materials or waste to be used or generated during all phases of the construction project shall be included in the Pollution Prevention Plan.

3.04 SAFETY DATA SHEETS (SDSs)

- A. SDSs shall be included in the Pollution Prevention Plan for all materials on the Hazardous Material Inventory List.
- B. For all hazardous materials not submitted in the original Hazardous Material Inventory List, the Contractor shall provide to the Engineer a completed Form A-3 and SDS prior to bringing the material on-site and submit a revised inventory list (or plan if required) within 7 days.

1. Hazardous materials shall be permitted on the work site only with prior written acknowledgement of receipt of Form A-3 and SDS by the Engineer.

3.05 HAZARDOUS MATERIAL CONTAINERS LABELING SYSTEM

- A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:
 - 1. Identification of container with a legible label containing the materials product name, as was written on the material's original container label.
 - 2. Include the name of the material's manufacturer, as was written on the chemicals original container label.
 - 3. Include appropriate hazard warnings, which identify the chemicals associated risks to health, flammability, or reactivity.
 - 4. Contractor shall mark each container with the Contract project number and company owner of the container.
 - 5. The mark shall be permanent, easily identifiable and placed with care to prevent defacing of the marker through abrasion, chemical reaction, or other means that would hinder marker identification.
 - 6. At all times during the Work, the Contractor shall assure that proper and identifiable labels are attached to all hazardous materials and secondary containment.

3.06 HAZARDOUS MATERIAL CONTAINER STORAGE AND HANDLING

- A. Solid Chemicals, chemical solutions, paints, petroleum products, solvents, acids, caustics solutions, and any waste materials, including used batteries, shall be stored in a manner that will prevent the inadvertent entry of these materials into waters of the state, including groundwater. Storage shall be in a manner that will prevent spills due to overfilling, tipping, or rupture. In addition, the Pollution Prevention Plan shall address and the Contractor shall implement the following specific requirements:
 - 1. All liquid products must be stored on durable, impervious surfaces and within a berm or other means of secondary containment capable of containing 110% of the largest single container volume in the storage area.
 - Waste liquids shall be stored under cover, such as tarps of roofed structures, in addition to secondary containment. Any waste storage areas, whether for waste oil or hazardous waste, shall be clearly designated as such and kept segregated from products to be used on the site.
 - 3. All hazardous materials and waste containers shall be stored with the container lid secured, to prevent spills or leaking.
 - 4. Upon completion of a specific task for which hazardous material(s) were used, the Contractor shall document in the Daily Report (Attachment 1 of Section 01 31 13 Project Coordination), the amount of hazardous material removed from the site, and the product and manufacturer name(s) of such material(s).

3.07 HAZARDOUS MATERIAL SPILL PREVENTION

- A. The Pollution Prevention Plan shall address and the Contractor shall implement the following:
 - Hazardous Material Transfer
 - a. All hazardous materials shall be transferred from primary to secondary containers using secondary containment with spill kits in close proximity.
 - 2. Vehicle and Equipment Fueling
 - a. All equipment fueling operations shall utilize pumps and funnels and absorbent pads and / or drip pans;
 - b. Fueling shall not take place within 100 feet of any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes;
 - c. Fueling shall be restricted to designated fueling areas as submitted and accepted by the Engineer as a part of the Pollution Prevention Plan:
 - d. A spill kit will be located within 100 feet of the fueling operation.
 - 3. Vehicle and Equipment Maintenance
 - a. Engine, transmission, and hydraulic oil may be added, as needed utilizing funnels and drip pans;
 - b. Absorbent pads shall be placed to prevent fluid contact with soil;
 - c. No fresh or used engine fluids will be stored on the project site;
 - d. No vehicle maintenance other than emergency repair shall be performed on the project site.
 - 4. Small Engine Fueling and Maintenance
 - a. All small engine fueling operations shall utilize funnels.
 - b. Absorbent pads shall be placed to prevent fluid contact with soil.
 - c. Fueling shall not take place within 100 feet of any natural or manmade drainage area.
 - d. Contractor shall not drain and replace engine fluids on Port property.
 - e. These fluids may be added, as needed utilizing funnels.
 - f. Fluid addition shall be done over drip pans.
 - g. Absorbent pads shall be placed to prevent fluid contact with soil.
 - Equipment Storage
 - a. Drip pans and absorbent pads shall be placed under all equipment that is unused for more than 4 hours, overnights, weekends, and holidays.

- 6. Spill Response Kits
 - a. Spill kits shall be stored at designated locations on the project site and at the hazardous material storage areas and in close proximity to any fueling operation.
 - b. Spill Kits shall, at a minimum, contain the following:
 - (1) 1 spill response procedures sheet
 - (2) 12 oil absorbent pads
 - (3) 12 water-based absorbent pads
 - (4) 1 roll of Visqueen
 - (5) 5 gallons of loose absorbent material (i.e., kitty litter or floor sweep)
 - (6) 24 heavy duty garbage bags
 - (7) 1 shovel
 - (8) 1 broom
 - (9) 10 copies of spill report form

3.08 HAZARDOUS MATERIAL SPILL CONTROL AND RESPONSE

- A. The Plan shall contain information on how the Contractor shall control and respond to hazardous material spills. At a minimum, the Contractor's employee responsible for the spill must take appropriate immediate action to protect human health and the environment (e.g., diking to prevent contamination of state waters).
 - 1. Hazard Assessment assess the source, extent, and quantity of the spill.
 - 2. Containment and personal protection If the spill cannot be safely and effectively controlled, then evacuate the area and immediately notify outside response services (go to Step 5). If the spill can be safely and effectively controlled, secure the area and proceed immediately with spill control (impacts to waters of the state should be given the highest priority after human health and safety)
 - Containment and elimination of Source Contain the spill with absorbent materials or a soil berm around the affected area. Eliminate the source of the spill by closing valves, sealing leaks, providing containment, or deactivating pumps.
 - a. Spill control measures may include damming the spill, covering floor drains, catch basins, or preventing the contaminant from entering water systems. Contaminants include turbidity as well as chemicals.
 - 4. Cleanup when containment is complete, clean or remove the spill with absorbents or by pumping and containerizing the material for off-site disposal.
 - 5. Notification Report all spills immediately to the Port of Seattle Fire Department:
 - a. Port Phone: 911
 - b. External Phone: (206) 787-5380

- c. Provide the Following Information:
 - (1) Time spill occurred or was discovered
 - (2) Location of the spill and equipment involved
 - (3) Estimated amount of spill
 - (4) Measures taken to contain the spill and secure the area
- d. Report all spills immediately to the Engineer.

3.09 HAZARDOUS MATERIAL CLEANUP AND DISPOSAL

- A. The Plan shall contain information on how the Contractor shall characterize, cleanup and remove all hazardous material and waste generated from Contractor operations. At a minimum, the Plan shall include or communicate the following:
 - 1. For the purposes of this section, clean shall be defined as the Work site being free of all hazardous material(s), waste(s) container(s), containment device(s), scrap material(s), used spill pads or absorbent pads, or any other hazardous material debris resulting from the Contractor activities.
 - 2. The Port of Seattle will retain title to all hazardous waste presently on-site, encountered during demolition, removal, and excavation. This does not include hazardous materials generated by the Contractor, such as used motor oils, paints, lubricants, cleaners, spilled materials, etc. Contractor will be the generator and owner of these wastes and shall clean and dispose of such waste according to the Contract Documents and follow local, State, and Federal regulations. The Port of Seattle will be shown as the hazardous waste generator and will sign all hazardous waste manifests for non-Contractor generated hazardous wastes. Nothing contained within these Contract Documents shall be construed or interpreted as requiring the Contractor to assume the status of owner or generator of hazardous waste substances for non-Contractor generated hazardous wastes.
 - 3. Hazardous material(s) and waste(s) shall be disposed in a fully permitted disposal facility with the approvals necessary to accept the waste materials that are disposed. Use of the Port of Seattle's EPA Identification Number for disposal purposes must be coordinated with the Engineer and all documentation such as manifests, land disposal restriction forms, and profiles must be delivered to the Engineer if the Port of Seattle's EPA Identification number is being used for disposal on the project.
 - 4. Contaminated materials, such as absorbent materials, rags, containers, gloves, shall be collected and placed into labeled containers.
 - 5. Trench safety systems shall be decontaminated and free of soil prior to removal from the site. Any water used to clean the trench safety systems shall be collected and processed with wheel wash water.
 - 6. Any unanticipated hazardous materials, waste, or contaminated soils encountered during construction that are not generated by the Contractor shall be immediately brought to the Engineer's attention for determination of appropriate action. Contractor shall not disturb such hazardous materials or contaminated soils until directed by the Engineer.

3.10 SUBCONTRACTOR ACKNOWLEDGEMENT

A. The requirements of the Pollution Prevention Plan are the responsibility of the Contractor and compliance must be communicated at all tiers of the Contract. The Contractor must provide a written acknowledgement from all subcontractors that they have read, understand, and will comply with the requirements of the Pollution Prevention Plan. This written acknowledgement must be included in the Pollution Prevention Plan as part of the preconstruction submittal. The subcontractor acknowledgement section of the Pollution Prevention Plan must be updated as needed throughout the life of the Contract.

3.11 EDUCATION

A. The Contractor shall provide narrative in the Pollution Prevention Plan on how they will educate all personnel including subcontractors. At a minimum, the Contractor shall train staff through regularly scheduled meetings to discuss environmental protection subjects as related to this project. This may be added to any existing weekly meetings (such as safety meetings). Training content shall emphasize sensitive areas, emergency response, spill prevention and inspections. Keep minutes of the meetings detailing attendees and subjects discussed. Submit the minutes to the Engineer weekly.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the work required by this Section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

1.01 DESCRIPTION OF WORK

- A. Mobilization shall consist of preconstruction expenses and costs of preparatory work and operations performed by the Contractor which occur before 10% of the Executed Contract Price is earned from other Bid Items. Items which are not to be included in the item of mobilization are:
 - 1. Any portion of the Work covered by a specific Bid Item or incidental work which is to be included in a Bid Item or Items.
 - 2. Profit, interest on bond money, overhead or management costs.
- B. Demobilization shall consist of post-construction expenses and work that occurs after 95% of the Executed Contract Price is earned.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

- 4.01 MEASUREMENT
 - A. Measurement for "Mobilization and Demobilization Season 1" will be as a unit.
 - B. Measurement for "Mobilization and Demobilization Season 2" will be as a unit.

4.02 PAYMENT

- A. Based on the Lump Sum Bid Item prices for "Mobilization and Demobilization Season 1" and "Mobilization and Demobilization Season 2", partial payments will be made as follows:
 - 1. When the Contractor and Engineer agree 10% of the Executed Contract Price is earned for Work occurring in Season 1, excluding mobilization and amounts paid for materials on hand, 60% of the amount bid for "Mobilization and Demobilization Season 1" will be paid.
 - 2. When the Contractor and Engineer agree 95% of the Executed Contract Price is earned for Work occurring in Season 1, excluding mobilization and amounts paid for materials on hand, the remaining amount bid for "Mobilization and Demobilization Season 1" will be paid.
 - 3. When the Contractor and Engineer agree 10% of the Executed Contract Price is earned for Work occurring in Season 2, excluding mobilization and amounts paid for materials on hand, 60% of the amount bid for "Mobilization and Demobilization Season 2" will be paid.
 - 4. When the Contractor and Engineer agree 95% of the Executed Contract Price is earned for Work occurring in Season 2, excluding mobilization and amounts paid for materials on hand, the remaining amount bid for "Mobilization and Demobilization Season 2" will be paid.

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1.01 SECTION INCLUDES

- A. Surveys provided by the Port.
- B. Contractor Survey Requirements. All work must be performed by a surveyor registered in the State of Washington.
- 1.02 Elevation Datum: Project datums are:
 - A. Horizontal: NAD 83 Washington State Plan North Zone (FIPS 4601) in US feet.
 - B. Vertical: NAVD 88 in US feet.
 - C. Conversion from NAVD 88 to NGVD of 1929 is achieved by adding 3.547 feet.

1.03 SURVEYS PROVIDED BY THE PORT

- A. The Port will provide those and only those services listed below:
 - 1. As-builts of utilities. The Port Survey must locate and as-build all new underground utilities prior to placement of cover.
 - 2. Confirmation of excavation extents. The Port Survey must confirm excavation to the extents and elevations shown in the Drawings prior to placement of backfill.
 - 3. Other surveys as directed by the Resident Engineer.
- B. All surveys for the purposes of completing as-built drawings are the responsibility of the Port.

1.04 REQUIRED CONTRACTOR SUPPORT

- A. The Contractor shall be responsible for layout of the work, installation and maintenance of survey control points throughout the Work until compliance with the design has been confirmed by the Engineer. Contractor is responsible for the following:
 - 1. Establish primary survey control points for excavation and filling activities.
 - 2. Layout erosion control points.
 - 3. Layout demolition limits.
 - 4. Layout for geotextile placement.
 - 5. Slope stakes for fill or excavation areas.
 - 6. Sub-grade limits will be staked with initial set of cut or slope stakes.
 - 7. Provide storm sewer manhole and catch basin centerline and offset.
 - 8. Mark asphalt paving limits.
 - 9. Mark saw cuts for concrete.
 - 10. Utility locations.
- B. Port survey to check hubs and stakes set by the Contractor before paving operations.
- C. Requests for Port Survey to conduct final survey to verify compliance with the design of a given task shall be made at least 48 hours prior to expected completion of survey work. The Contractor shall request Port Survey to verify and as-build the following work items:

- 1. Contaminated Soil excavation to design extent and elevation
- 2. Final grading to design elevation following backfill placement and compaction. Includes subgrade, and topsoil placement
- 3. Final DMCA paved surface to design elevation
- 4. Final grading to designated control points and design elevation following lake fill placement in Season 1 and Season 2, as well as wetland topsoil placement and construction in Season 2
- 5. Storm drainage utilities new construction
- D. Delays due to Contractor failure to give timely notice to the Port for surveying services are at the sole risk and expense of the Contractor.
- E. If the Contractor encounters any underground utilities that are not shown on the existing conditions drawings, or known utilities that are not in the location that is shown on the existing conditions drawings, the Contractor must notify the Engineer immediately. The Engineer will work with Port Survey to determine whether and how this variation will be surveyed and recorded by Port Survey.

1.05 PRESERVATION OF STAKES AND MARKS

- A. All primary controls shall be set and carefully preserved by the Contractor.
- B. Major survey control points will not be removed by the Contractor without the approval of the Port Surveyor. The Contractor will be responsible to remove survey stakes and markings before substantial completion of the Work.

1.06 CONTRACTOR SURVEYS

- A. The Contractor shall establish such additional lines, grades and controls as are needed for construction.
- B. All work performed shall be in conformance with the lines, grades and dimensions indicated on the Drawings. If a discrepancy is noted between the Drawings, the same shall immediately be brought to the Engineer's attention. Where tolerances are stated, the work performed shall be within those tolerances. The Engineer will determine if the work conforms to such lines, grades and dimensions and the Engineer's determination shall be final.
- C. The Contractor assumes full responsibility for detailed dimensions and elevations measured from primary control points.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

1.01 SUMMARY

Throughout the construction period, maintain the project site where Work is carried out in a standard of cleanliness to include progress and closeout cleaning, dust control throughout construction.

1.02 QUALITY ASSURANCE

- A. Inspection: Conduct daily inspections (and more often if necessary) to verify that requirements of cleanliness are being met.
- B. Codes and Standards: In addition to the standard described in this section, comply with all pertinent requirements of governmental agencies having jurisdiction.

PART 2 PRODUCTS

2.01 CLEANING MATERIALS AND EQUIPMENT

A. Provide all required personnel, equipment, and materials needed to maintain specified standard of cleanliness.

PART 3 EXECUTION

3.01 PROGRESS CLEANING

A. Site:

- At all times, and as may specifically be requested by the Engineer, the Contractor shall cleanup and remove all refuse resulting from the Work in order that the Project site remains free from an accumulation of construction debris. Upon failure to do so within 24 hours after request by the Engineer, such cleanup work may be done by the Port and the cost thereof shall be charged to the Contractor and deducted from the Contract Sum.
- 2. Project sites adjacent to public areas shall at all times be maintained in a condition suitable for public viewing and ensure public safety is not compromised in any way. The Engineer's right to require or perform any necessary cleanup to maintain this condition as stated above applies.
- Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.
- 4. Provide adequate storage for all items, awaiting removal from the job site, observing all requirements for fire prevention and protection of the ecology.

3.02 DUST CONTROL

- A. Maintain continuous cleaning and wetting procedures to control dust pollution at project site and haul routes as required by governing authorities and the Contract Documents. Use vacuum sweeper with water system for street cleaning, if necessary. Material collected in the sweeper shall be considered contaminated and disposed as Subtitle D Contaminated Material.
- B. Schedule cleaning so that resultant dust and contaminants will not fall on wet or newly coated surfaces.
- C. See additional requirements in related sections.

3.03 CLOSEOUT CLEANING

- A. Cleaning: Provide final cleaning of Work prior to Final Inspection. Complete following cleaning operations:
 - 1. In addition to removal of debris and cleaning specified in other sections, clean interior and exterior exposed-to-view surfaces.
 - 2. Remove temporary protection not required to remain.
 - 3. Clean all exterior surfaces of structures.
 - 4. Remove waste, foreign matter, and debris from drainage system.
 - 5. Hose-clean exterior paved surfaces; rake clean other surfaces of grounds.
 - 6. Remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.
 - 7. Maintain cleaning until Physical Completion.
 - 8. Re-clean areas or equipment, after final inspection, if dirtied as result of Contractor's Work in preparing for final inspection or completion of punchlist.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

1.01 SUMMARY

A. This section includes construction waste management requirements. The requirements for the handling and disposal of project Contaminated Soils are described in Section 02 61 13 – Handling and Disposal of Contaminated Soil.

1.02 DEFINITIONS

- A. Co-mingled or Off-site Separation: Collecting all material types into a single bin or mixed collection system and separating the waste materials into recyclable material types at an off-site facility.
- B. Construction, Demolition and Land-Clearing (CDL) Waste: Includes all non-hazardous solid wastes resulting from construction, repair, demolition, and land clearing. Includes material that is recycled, reused, salvaged or disposed as garbage.
- C. Hazardous/Dangerous Waste: As defined by Chapter 70.105.010 Revised Code of Washington and 40 Code of Federal Register 261 and by Washington Administrative Code 173-303.
- D. Proper Disposal: As defined by the jurisdiction receiving the waste.
- E. Recyclable Materials: Products and materials that can be recovered and remanufactured into new products.
- F. Recycling: The process of sorting, cleaning, treating and reconstituting materials for the purpose of using the material in the manufacture of a new product. Can be conducted on-site (as in the grinding of concrete).
- G. Recycling Facility: An operation that is permitted to accept materials for the purpose of processing the materials into an altered form for the manufacture of a new product.
- H. Salvage for Reuse: Existing usable product or material that can be saved and reused in some manner on the project site or other projects off-site.
- I. Salvage for Resale: Existing usable product or material that can be saved and removed intact (as is) from the project site to another site for resale to others without remanufacturing.
- J. Source-Separated Materials: Materials that are sorted at the site into separate containers for the purpose of reuse or recycling.
- K. Sources Separation: Sorting the recovered materials into specific material types with no, or a minimum amount of, contamination on-site.
- L. Garbage: Product or material typically considered to be trash or debris that is unable to be salvaged for resale, salvaged and reused, returned, or recycled.

1.03 SUBMITTALS

- A. Waste Management Plan
- B. Waste Management Final Report

1.04 PERFORMANCE GOALS

- A. General: Divert CDL waste to the maximum extent practicable from the landfill by one or a combination of the following activities:
 - Salvage
 - Reuse
 - 3. Source separated CDL recycling
 - 4. Co-mingled CDL recycling
- B. CDL waste materials that can be salvaged, resold, reused or recycled, include, but are not limited to the following:
 - 1. Clean dimensional wood, pallet wood, plywood, OSB, and particleboard
 - Asphalt, free of contaminated soils
 - 3. Concrete and concrete masonry units without yellow paint
 - 4. Brick
 - Ferrous and non-ferrous metals
 - 6. Gypsum products
 - 7. Plastics, including plastic film
 - 8. Cardboard packaging
 - 9. Field office waste paper, aluminum cans, glass, plastic, and cardboard
- C. Hazardous/Dangerous Wastes, Contaminated Soils, wheel wash quarry spalls and settable solids, and other hazardous materials such as paints, solvents, adhesives, batteries, and fluorescent light bulbs and ballasts shall be disposed of at applicable permitted facilities. Wheel wash water shall be sampled and chemically tested for proper disposal.

1.05 WASTE MANAGEMENT PLAN

- A. Per the requirements of Section 01 32 19 Preconstruction Submittals, submit to the Engineer a Waste Management Plan narrative in accordance with these specifications. Use the Waste Management Plan Form attached at the end of this Section or other format as accepted by the Engineer (Attachment 1).
- B. The Waste Management Plan shall include the following:
 - Name of designated Recycling Coordinator
 - 2. A list of waste materials that will be salvaged for resale, salvaged for reuse, recycled, and disposed.
 - 3. Identify waste handling methods to be used, including one or more of the following:
 - a. Method 1 Contractor or subcontractor(s) hauls recyclable materials to an accepted recycling facility.
 - b. Method 2 Contracting with diversion/recycling hauler to haul recyclable material to an accepted recycling or material recovery facility.

- c. Method 3 Recyclable material reuse on-site.
- d. Method 4 Recyclable material salvage for resale.
- 4. Identification of each recycling or material recovery facility to be utilized, including name, address and types of materials being recycled at each facility
- 5. Description of the method to be employed in collecting, and handling, waste materials.
- 6. Description of methods to communicate Waste Management Plan to personnel and subcontractors.

1.06 WASTE MANAGEMENT FINAL REPORT

- A. Use the Waste Management Final Report Form attached at the end of this section or other format as accepted by the Engineer (Attachment 2). The Waste Management Final Report shall list the following for the project:
 - A record of each waste material type and quantity recycled, reused, salvaged, or disposed from the Project. Include total quantity of waste material removed from the site and hauled to a landfill.
 - 2. Percentage of total waste material generated that was recycled, reused, or salvaged.
- B. Quantities shall be reported by weight (tons) unless otherwise accepted by the Engineer.
- C. Submit copies of manifests, weight tickets, recycling/disposal receipts or invoices, which validate the calculations or a signed certification of completeness and accuracy of the final quantities reported.

1.07 QUALITY ASSURANCE

- A. Regulatory Requirements: The Contractor shall maintain compliance with all applicable Federal, State, or Local laws that apply to Construction Waste Management and material salvage, reuse, recycling and disposal.
- B. Disposal Sites, Recyclers and Waste Materials Processors: All facilities utilized for management of any materials covered under this specification must maintain all necessary permits as required by federal, state and local jurisdictions.
- C. For a comprehensive list of recycling facilities in King County, and other Contractor resources, contact King County's Construction and Demolition Recycling Program:

 http://your.kingcounty.gov/solidwaste/greenbuilding/construction-demolition.asp

PART 2 NOT USED

PART 3 EXECUTION

3.01 SOURCE-SEPARATED CDL RECYCLING

A. Provide individual containers for separate types of CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.

3.02 CO-MINGLED CDL RECYCLING

A. Provide containers for co-mingled CDL waste to be recycled, clearly labeled with a list of acceptable and unacceptable materials.

3.03 LANDFILL

- A. Provide containers for CDL waste that is to be disposed of in a landfill clearly labeled as such.
- 3.04 REMOVAL OF CDL Waste from Project Site
 - A. Transport CDL waste off Owner's property and legally dispose of them.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Waste Management Plan

Attachment 2 Waste Management Final Report

Attachment 1 WASTE MANAGEMENT PLAN

Company: Project:					
Designated Recyc	cling Coordinator:				
Waste Manageme This project will rec	nt Goals: cycle or salvage for reuse CDL waste gen	erated on-site to the maxir	num extent practicable.		
Communication P	Plan:				
Formated Burkers	Marta Biana al Facilita Calladian Of				
The following chart (e.g. source-separa Waste Managemen	Waste, Disposal Facility, Collection St s identify waste materials expected on the ate, co-mingle), and waste handling method, section 1.05 Waste Management Plan	is project, disposal facility o ods (see Division 1 - Section			
Deconstruction/D Waste Material	emolition Phase Facility (name, address)	Collection Strategy	Waste Handling Method		
		-			
Construction Phase					
Waste Material	Facility (name, address)	Collection Strategy	Waste Handling Method		
_					

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Attachment 2 **WASTE MANAGEMENT FINAL REPORT**

Drojecti	Instructions: Please fill in the details for all of the disposed materials.	
Project:	instructions. Fleuse fill in the details for all of the disposed materials.	
Contractor:	Cells highlighted in Green are required. Most cells have pulldown menus with valid valu	ies.
Submittal Date:	New rows can be added in the table below by selecting a row, right-clicking and selecting i	nsert.
•	•	

				DIVERTED FROM LANDFILL					
MATERIAL TYPE(S)	UNITS	DATE	DISPOSED IN LANDFILL	Recycled	Salvaged	On-Site Reuse	Off-Site Reuse	RECYCLING OR MATERIAL RECOVERY FACILITY	NOTES
Co-Mingled/Mixed CDL									
Acoustical Ceiling Tile									
Asphalt									
Brick									
Cardboard									
Carpet and pad									
Concrete									
Field office waste									
Glass									
Gypsum									
Insulation									
Metals									
Plastic									
Type D (Clean) Soil									
Wood									
	Tota	l Weight:			 % of	Waste [Diverted		

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1.01 DESCRIPTION

- A. Construction Project Closeout requires completing physical and administrative portions of the Work as identified in General Conditions.
- B. The Contractor shall ensure that all procedures and actions identified in this section and elsewhere in the Contract Documents necessary to fully complete the Work are accomplished in a timely and effective manner. Lack of compliance with the closeout requirements may result in Contract time delays. The Contractor is expected to take the lead role in assembly of documents, execution of the Work and coordinating the startup and closeout process.
- C. Refer to the closeout checklist (Attachment 1), which identifies major closeout actions and milestones to be accomplished.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Construction Project Closeout Checklist

ATTACHMENT 1: CONSTRUCTION PROJECT CLOSEOUT CHECKLIST

ITE	EM:	Specification Reference(s): (As Applicable)	COMPLETION DATE:
Pa	rtial/Substantial Completion		
1.	Request Punchlist Inspection (provide Contractor's Punchlist)	General Conditions	
2.	Completed Punchlist Inspection	General Conditions	
3.	Submitted draft warranties and special warranties and bonds (if required)	Section 01 78 36 – Warranties and Bonds	
4.	Perform final cleaning of project site	Section 01 74 00 - Cleaning	
5.	All Regulated Materials Project Record Documents Accepted	Section 02 61 13 – Handling and Disposal of Contaminated Soil	
Се	rtificate of Substantial Completion Issued		
Ph	ysical Completion		
6.	Punchlist Backcheck Accepted	General Conditions	
7.	Perform final cleaning of project site	Section 01 74 00 - Cleaning	
8.	Demobilization complete	General Conditions	
9.	Project As-built (redlines) documents Accepted	Section 01 78 29 – As-Built Redline Documents	
10.	Submitted Construction Waste Management Final Report	Section 01 74 19 – Construction Waste Management	
11.	Submitted final warranties and special warranties and bonds (if required)	Section 01 78 36 – Warranties and Bonds	
Се	rtificate of Physical Completion Issued		
Clo	seout Administrative Requirements		
12.	All temporary locks, keys or other items loaned/signed out by the Contractor, subcontractors, suppliers and vendors have been returned (if applicable)	General Conditions	
13.	All I.D. badges, including subcontractors, suppliers and vendors have been returned (if applicable)	General Conditions	
14.	Notices of Substantial and Physical Completion issued	General Conditions	
15.	Reconciliation of any Allowances, or Not-to- Exceed Change Orders completed	General Conditions	
16.	All open cost items resolved	General Conditions	
17.	Final progress payment requested 100%	Section 01 20 00 – Measurement and Payment Procedures	
18.	Complete all items on the Contractor's Public Works Closeout Checklist.	Section 01 77 20 – Public Works Project Closeout	

1.01 GENERAL REQUIREMENTS

- A. The Contractor shall ensure that all procedures and actions identified in this section and elsewhere in the Contract Documents necessary to fully complete the Public Works Project Closeout are accomplished in a timely and effective manner. Lack of compliance with the closeout requirements will result in delays to release of all responsibilities within the contract and retainage.
- B. Refer to the attached Typical Public Works Project Timeline (Attachment 1), which identifies the major closeout actions and milestones to be accomplished.
- C. All Milestones identified in Section 01 77 00 Project Closeout must be completed before achieving the Public Works Project Closeout Checklist (Attachment 2) identified herein.

1.02 CLOSEOUT ADMINISTRATIVE REQUIREMENTS

A. To achieve Final Acceptance, the Closeout Administrative Requirements must be achieved, as per the General Conditions.

1.03 RELEASE OF RETAINAGE TO CONTRACTOR

- A. The Contractor must request release of retainage from the Port.
- B. Refer to General Conditions for release of retainage requirements

1.04 POST-FINAL ACCEPTANCE INSURANCE REQUIREMENTS

Refer to General Conditions.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

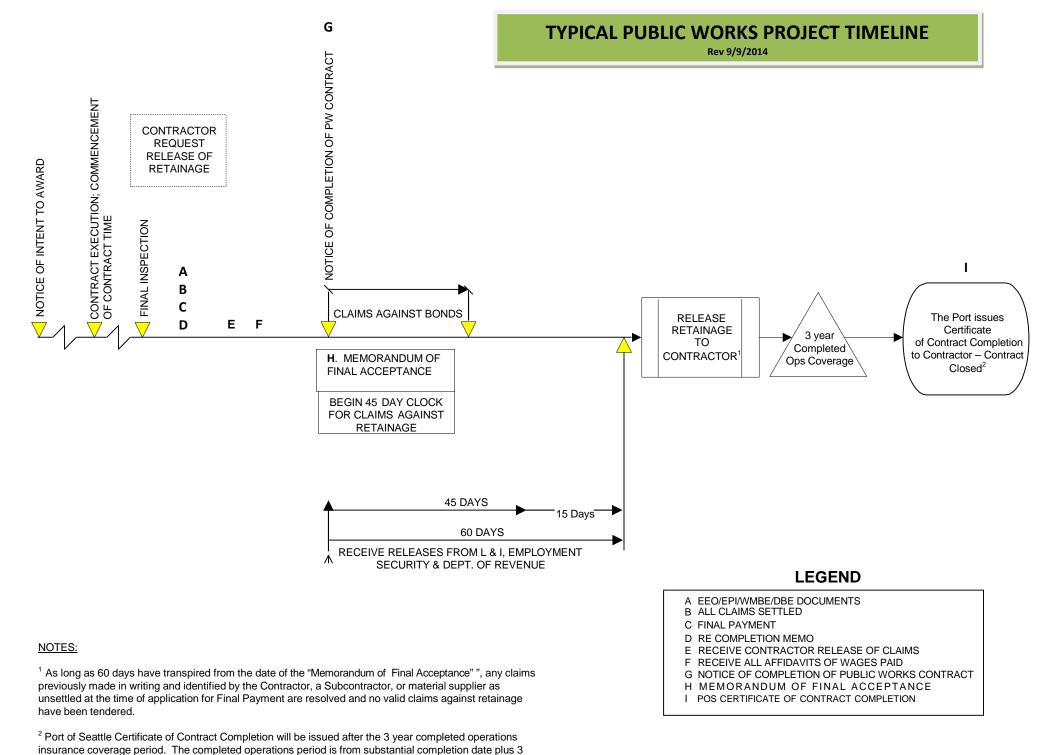
No separate measurement or payment will be made for the work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Typical Public Works Project Timeline

Attachment 2 Public Works Project Closeout Checklist



years.

ATTACHMENT 2: PUBLIC WORKS PROJECT CLOSEOUT CHECKLIST

ITE	EM:	BY:	DATE:
1.	Receive Release of Claims from Contractor and verification that all Subcontractors Industrial Insurance is in good standing		
2.	Contractor submits Affidavit of Wages Paid for Contractor and all subcontractors		
3.	Memorandum of Final Acceptance issued		
4.	Notice of Completion of Public Works Contract sent to state agencies and Contractor		
5.	Port receives releases from L&I, Employment Security and Department of Revenue		
6. Release retainage or retainage bond			

1.01 DESCRIPTION OF WORK

- A. Throughout the progress of the Work the Contractor shall maintain accurate set of As-built Redline Drawings (including shop and Contractor bidder-design drawings).
- B. As-Built (Redline) Drawings will be used by the Port at a future time as the basis of revision to the CAD drawing files and therefore must clearly communicate the changes in graphics and text to the CAD operator performing the drawing revisions.

1.02 QUALITY ASSURANCE

- A. The responsibility for maintenance of changes to the As-Built Redline Drawings shall be assigned to one person on the Contractor's staff.
- B. As-Built Redline Drawings:
 - 1. Shall be kept accurate and current per the requirements of paragraph 3.01, Maintenance of As-Built Record Documents.
 - 2. Thoroughly coordinate all changes by making red-line entries on an ongoing basis on a single set of full size Contract and Working Documents maintained at the job site. Accuracy shall be such that future users of information showing the as-built condition of the Work may reasonably rely on the information shown.
 - 3. As-Built Redline Drawings Kick-off Meeting
 - Convene a meeting with the Engineer prior to making entries in the As-Built Redline Drawings set to clarify level and style of information requirements.
 - Attendees should include the Contractor's field manager, the Contractor's staff member responsible for making the entries, the Engineer and Inspector(s) responsible for monthly review of the As-built Redline Drawings.
 - 4. Inspection and Quality of As-Built Redline Drawings
 - a. A checklist is appended to this section (Attachment 1). This checklist will be used by Port personnel reviewing the Red-Lines for currency and quality prior to the Engineer's acceptance of the Progress Payment requests. The checklist will serve to define Contract requirements for quality and content of entries.

1.03 SUBMITTALS

- A. Progress Submittals:
 - The Engineer's acceptance of the current status of changes to the As-Built Redline will be a prerequisite to the Engineer's acceptance of requests for each Progress Payment. Appropriate payment may be withheld if documents are not up to date at the time of the Progress Payment request(s).

- B. Substantial Completion:
 - At the time of Substantial Completion, provide a hard-copy and an electronic copy of the As-Built Redline Drawings including shop drawings and bidder-design drawings to the Engineer for review.
- C. Final As-Built Redline Drawings Submittal:
 - After acceptance of the final As-Built Redline Drawings by the Engineer, and within 14 days after Physical Completion of all or a part of the work, and prior to Final Payment request, submit an electronic PDF file and hard copy.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION

3.01 MAINTENANCE OF AS-BUILT PROJECT RECORDS

- A. During construction of the Work, the Contractor shall use all means necessary to maintain a record of changes to the Contract documents completely protected from deterioration and from loss and damage.
- B. As-Built Redline Drawings
 - 1. All change directives in the Work generated by Change Orders (CO), Construction Bulletins (CB), Requests for Information (RFIs) and accepted substitutions shall be recorded on the Contract Documents.
 - 2. The Contractor shall revise (1) set of full size Contract Documents by red-line process to show the as-built conditions during the course of the project. Identify documents with the title RED-LINES.
 - a. Define an accepted method for protecting the project As-Built Redline Drawings for the duration of the Contract.
 - b. Do not use the As-Built Redline Drawings for any purpose except entry of new data and for review by the Engineer.
 - c. Maintain and protect the Drawings at the site of Work.
 - 3. Changes shall show the actual Work with the same level of accuracy and completeness as the original Contract Documents. As-built Redline Drawings should include changes in location, identification and sizes of material, equipment, utilities and elements of the project and reflect the correct scale, grade, elevations, dimensions and coordinates of changes.
 - a. Use an erasable red-colored pencil (not ink or indelible pencil) to clearly indicate the changed graphics or text. The change directive (CO/RFI/CB) number should be identified on the drawing with the "clouded" changes. It is not necessary to describe the directive, when, why or who authorized the change.
 - b. Distinguish between annotations intended to be copied exactly by a future drafter creating As-Built Redline Drawings files and information that is supplemental and not meant to be copied. Examples of supplemental information would include notes to the drafter and information purely for the Contractor's information in monitoring the change. A suggested approach is to make all markings not to be copied by a CAD operator in a color other than red, reserving red for information to be copied exactly.

- c. Do not include markings or reference to documents that do not generate a graphic or text change.
- 4. Complex or complicated changes can be noted in the As-built Redline Drawings with a cloud and reference to the directive attached to the drawing sheet or the back of the sheet preceding it.
- 5. Include changes or modifications that result from final inspection.
- C. Shop drawings and Contractor bidder-design drawings shall be maintained accurate and current and show, as a minimum, the following information:
 - 1. Changes from approved detail drawings prepared and/or furnished by the Contractor; including but not limited to shop drawings, installation plans and dimensions of equipment.
 - 2. The actual bidder-design work by the Contractor to meet performance specifications, such as dewatering system, water treatment system, and Data Management systems, to the same level of detail as the submitted and approved bidder-design drawings.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 – Red-Lines Quality Checklist

Attachment 1: Red-Lines Quality Checklist

CHECK ITEM	EXAMPLE/COMMENT
Check that supplementary information is coded in such a way that it will not be transferred to the final record documents	Example: lines or notes not to be copied might be marked in a different color. An example of supplementary information might be references to dates or meetings or field conversations that the Contractor may want recorded on the Red-Lines for record purposes but that are not relevant to the physical as-built condition.
Check that the changes are marked exactly as they should be indicated in revised drawings	An example of unacceptability would be a relocated light fixture shown by a circle around the item with an arrow leader pointing to the new location. Correctly it should be drawn in the final location in which it was actually installed exactly as a drafter would be intended to draw it with all circuits or connections included and previous circuits and connections shown deleted.
Check that a drafter could access the information from which the change was constructed	The change should be clouded or otherwise identified with a reference to the actual change directive from which it was constructed (CB, FA, FD, RFI, etc.) - this may not necessarily be the official Change Order. The traditional practice of attaching the directive to the back of the preceding sheet is recommended.
Check that the original information superseded by a sketch attachment to the change directive is clearly identified	It is not necessary for the Contractor to redraw what is clearly shown and dimensioned on the sketch. However it should be clear what information the sketch replaces.
Check that the Contractor is keeping some kind of log or checklist of changes pending completion of the installation or construction in the cases where the Contractor does not record the change until the Work is completed	This is important when the practice adopted is to not mark the changes until the work is completed to assure accurate "as-built" information. Without the checklist, the Contractor can easily lose track and it will be more difficult for the Port Inspector to check the status.
In the case of Item 5 above, check the Contractor's method for verifying that the change directive does reflect the in-place (As built) work	If the work is not constructed exactly per the sketch accompanying the change directive, the variation should be noted in a way that would be clear to a drafter.

1.01 DESCRIPTION

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by Contract Documents, including manufacturers' standard warranties on products and special warranties.
 - Refer to General Conditions for terms of Contractor's overall warranty of the Work.
 - 2. Specific requirements for Work and products, and installations that are specified to be warranted are included in the technical specifications.
 - 3. Certifications and other commitments and agreements for continuing services to the Port are specified elsewhere in Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of warranty on Work that incorporates products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with Contractor.

1.02 WARRANTY REQUIREMENTS

- A. Replacement Cost: Upon determination that Work covered by warranty has failed, replace or rebuild Work to an acceptable condition complying with requirements of Contract Documents. Contractor is responsible for cost of replacing or rebuilding defective Work regardless of whether the Port has benefited from use of Work through a portion of its anticipated useful service life.
- B. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- C. Reinstatement of Warranty: When Work covered by warranty has failed and corrected by replacement or rebuilding, reinstate warranty by written endorsement. The reinstated warranty shall be equal in all respects to the original warranty duration and coverage.
- D. The Port's Recourse: Written warranties made to the Port are in addition to implied warranties, and shall not limit duties, obligations, rights, and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Port can enforce such other duties, obligations, rights, or remedies.
 - Port reserves right to reject warranties and to limit product selections to products with warranties not in conflict with requirements of Contract Documents.
 - 2. Port reserves right to refuse to accept Work for project where a special warranty, certification, or similar commitment is required on such Work or part of Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.03 SUBMITTALS

- A. Submit written warranties to the Engineer 60 days prior to the Pre-Final Inspection. Warranty start dates commence on the date of the Certification of Substantial Completion or Physical Completion, whichever comes first.
- B. Forms for special warranties are included at end of this Section (Attachment 1). Prepare a written document utilizing the appropriate form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier, or manufacturer. Submit draft to the Engineer for acceptance prior to final submission.
 - 1. Refer to technical specification for submittal of special warranties.
- C. Submit final executed sets of all required warranties.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

PART 4 MEASUREMENT AND PAYMENT

4.01 No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

List of Attachments

Attachment 1 Sample Limited Project Warranty

ATTACHMENT 1: SAMPLE LIMITED PROJECT WARRANTY

SPECIAL LIMITED PROJECT WARRANTY FOR

WHEREAS,
(Contractor),
Address
Telephone () ext has performed
(Work) on the following project:
Address
Address For the Port of Seattle
and, WHEREAS, the Contractor has agreed to warrant said Work
and, Whicheas, the Contractor has agreed to warrant said Work
NOW, THEREFORE, the Contractor hereby warrants said Work in accordance with the terms hereof, complying with the terms of the Contract with the Port dated, that
WARRANTY PERIOD, STARTING, TERMINATING
IN WITNESS THEREOF, this instrument has been duly executed this day of, 20, for
Contractoras its
(typed name) (position)
Name of Firm
Address
And has been countersigned in accordance with terms and conditions, for the Manufacturer
as its
(typed name) (position)
Name of Firm
Address

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. The Construction Document Management System (CDMS) is a web-based system developed by the Port to manage Contract documents. The CDMS will be used to generate and capture electronic Contract Documents, route them to the appropriate individuals, file them, and then allow for easy retrieval. The CDMS shall be used for all Contract communications, submittals, and shop drawings between the Port and the Contractor. CDMS shall not be used for Electronic Payroll Information (EPI) or any type of payroll submittals.

PART 2 PRODUCTS

2.01 CONSTRUCTION DOCUMENT MANAGEMENT SYSTEM

- A. The Port will provide the Contractor with one user login for the Port's CDMS located at https://cdms.portseattle.org at no cost to the Contractor. Access to the CDMS web site will be provided by way of a Port provided password and user name. The login will be subject to the terms and conditions of use as described in the Contract Documents and may be revoked by the Port at any time.
- B. Additional logins may be provided at the Port's discretion. Each login will be subject to the same terms and conditions of use as the Contractor's initial login and will similarly be subject to revocation by the Port at any time. Coordination of the integration process will be the responsibility of the Contractor.

2.02 MINIMUM REQUIREMENTS

- A. In order to utilize the CDMS, the Contractor shall use equipment and software that meets the following requirements:
 - 1. Hardware:
 - a. Pentium III compatible processor or higher IBM-compatible PC
 - b. 8 GB free space on hard drive
 - c. 512 MB of RAM (recommend 1 GB for better performance)
 - d. Require VGA or higher-resolution monitor at least 1,024x768 pixel resolution
 - e. 768 link to the Internet (DSL speed)

Software:

- a. Operating System: Windows XP, Windows Vista, or Windows 7 Internet Explorer 8.0
- b. Adobe Acrobat Reader 7.0 to X (v. 10) for viewing attachments only. For use of any CDMS Forms, delete any versions of Adobe Acrobat Reader and use Adobe Acrobat Professional as described in paragraph (c) below
- c. Adobe Acrobat Professional 7.0 to X (v. 10). Full version necessary for scanning and forms updates/edits
- d. MS Office 2003, 2007, or 2010 Professional or greater

- e. Java 1.6.0 (Also known as Java Runtime Environment (JRE) 6 Update 1) and newer is supported
- 3. Scanner: Duplex high-speed production flatbed scanner with the following specifications:
 - a. A3 Flatbed + ADF (automatic document feeder)
 - b. TWAIN Compliant drivers
 - c. Minimum 200-page Automatic Document Feeder
 - d. Scanning speed: Portrait 56 ppm simplex / 92 ipm duplex
 - e. Scanning resolution: 100 dpi 400 dpi Optical; up to 600 dpi Interpolated
 - f. Paper size: Check 2.8" x 6.7" to ledger 11" x 17"
 - g. Color scanning enabled

PART 3 EXECUTION

3.01 SETUP AND TRAINING

A. Setup

- 1. Prior to use, the Contractor shall be required to have at least two (2) project personnel attend and complete a training session conducted by the Port as specified below.
- 2. Following successful completion of the training session the Contractor will be provided with one (1) login with accompanying user name and password.

B. Training

- The Port of Seattle will provide up to eight (8) hours of on the job training.
 Training shall be coordinated through the Engineer and will provide sufficient indoctrination to the system to allow the Contractor to access the system and use the basic features thereof.
- Additional training may be requested by the Contractor to cover topics or information not included in the initial training session. These requests will be considered by the Engineer based on availability of training personnel.
- 3. Additional training may be requested by the Contractor for personnel in excess of the initial training allowed above. Such additional training requests will be considered by the Engineer based on availability of training personnel and the size of previously scheduled sessions.

3.02 SYSTEM USE

A. System Use

The Contractor shall use the Port's Web-based CDMS specified herein for all project communications, including but not limited to letters, daily reports, weekly reports, written notice of change, requests for change order, cost proposals, submittals, substitution requests, transmittals, requests for information, pay applications, etc. CDMS shall not be used for Electronic Payroll Information (EPI) or any type of payroll submittals.

- 2. Any information not transmitted via the Construction Document Management System will not be considered official documentation, unless specifically allowed as an exception by the Engineer based on extenuating circumstances. All information transmitted via the CDMS shall be in electronic format. The Contractor is required to scan all documents into a legible electronic form and will initiate the Livelink workflow following the Ports standard protocols for format and system use. The scanned documents (such as pdf's) shall be submitted to the Port in a searchable format. The Contractor shall use Optical Character Recognition (OCR) software to convert all pdf documents produced, or received from subcontractors and supplier, to a searchable format prior to submitting to the Port. Workflows not initiated using the proper formatting protocols will not be accepted by the Port. Protocols will be covered in the Contractor training held at the beginning of the project.
- 3. The Port may, from time to time, require hard paper copies of certain documents, including Change Orders and Contracts, to be signed by the Contractor. In these cases, the Port will provide the Contractor with hard copies of the signed documents, and will incorporate signed documents into the system for reference purposes. In the event that the Contractor feels a certain document should be maintained in hard-copy form in addition to electronic form, the Contractor may submit such a request to the Engineer through the CDMS. Documents accepted for hard copy in this fashion shall be prepared by the Port at the sole expense of the Contractor.
- 4. The Contractor may request that specific forms or reports be incorporated into the system for use in fulfilling the Contractor's requirements. Upon acceptance, the Port shall make reasonable efforts to prepare said form(s) or report(s) based on the Contractor's requirements at the sole expense of the Contractor.

3.03 CONTACT PERSONNEL

- A. The Contractor shall designate one employee who shall serve as their primary contact in connection with the use of the CDMS for the Contract. The Contractor may change its primary contact by providing notice to the Engineer.
- B. The Contractor shall further designate a back-up contact that shall serve as primary contact in the event the primary contact is unavailable.
- C. The Contractor shall provide 24-hour availability telephone numbers for the primary and back-up contacts.

3.04 TERMS OF USE

- A. Use And Protection Of Passwords
 - The Contractor shall use each password in furtherance of Contract work and shall use the password for no other purpose. The Contractor assumes all risks associated with the failure to adequately protect such password. The Contractor further agrees:
 - a. To prohibit the disclosure of any password to any person not authorized by the Contractor to use the password.
 - b. To protect all passwords in a secure manner that will prevent unauthorized use.

c. That any Contractor access or information developed as a result of utilizing the CDMS by way of the password(s) shall be attributed to the Contractor, and that the Port and other users may rely upon such attribution.

B. Restrictions On Use

- 1. The Contractor shall make every reasonable effort to ensure that:
 - a. Computer codes, files, and programs which may interrupt, destroy, or cause damage shall not be uploaded into the CDMS.
 - Computer codes, files, and programs which interfere with the proper working of the CDMS or its use by others shall not be allowed access.

3.05 REVOCATION OF LICENSE

A. The Port may, at any time during the Contract, choose to revoke the Contractor's login or any such additional logins. Such revocation may occur based on misuse, misconduct, termination of the Contract, or other such reasons as deemed justified by the Engineer. Such revocation may occur with or without prior notice to the Contractor or affected user(s).

3.06 DOWNTIME AND SYSTEM AVAILABILITY

A. Any interruptions in service based on Internet conditions, connection media, or the unavailability of servers for maintenance, repairs, or replacement shall not warrant additional compensation to the Contractor. The Port will not be liable for the unavailability of the system for any period of time nor will it be responsible for the inability of the Contractor to access the system or any of its components.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the work will be considered incidental to and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

End of Section

Division 02

Existing Conditions

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section includes planning for on-site treatment and discharge of water and/or collection, trucking and off-site treatment of water collected during field activities such as lake dewatering, stormwater runoff, earthwork, and groundwater collected during excavation area dewatering, and other operations. Wheel wash water cannot be treated and discharged from the water treatment system (see requirements in Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution.
- B. The water treatment system is expected to be operated whenever necessary throughout the project. Water removal and treatment will be required for lake dewatering, for the dewatering of some LL Apartment excavation areas, and water from other areas within the site where stormwater contacts soil.
- C. The construction water treatment system provided in these documents is required to comply with the Model Toxics Control Act (MTCA) and substantive requirements for NPDES discharge (regulated by the Washington State Department of Ecology [Ecology]). The Contractor is solely responsible for water treatment system design, operation, and maintenance, including full responsibility for fines imposed due to exceeding the discharge limit requirements.
- D. The minimum system requirements shall include oil/water separation, solids removal, chemical treatment, and polishing with granulated activated carbon. The Contractor shall add treatment components to the system as necessary to comply with the discharge limits.
- E. The treatment system shall be sized so that work activities are not controlled by the ability to treat water.
- F. All project water shall be treated on-site as required per the project specifications prior to discharge to the SR 518 Construction Stormwater Pond, infiltration at the LLA Parcel, or shall be trucked to an Ecology-approved off-site facility for treatment and disposal, or a combination of those options.
- G. The Contractor shall utilize whatever methods necessary to ensure that no discharge of non-compliant water occurs at any time or under any circumstance.
- H. Sufficient storage shall be available on-site to prevent non-compliant discharges. Storage capacity design shall consider flow-through discharge rates and/or trucking capacity and turnaround times.
- I. For off-site disposal, truck tickets shall be provided to the Engineer weekly and will identify location of facility and volume of water discharged.
- J. For on-site treatment and discharge to the SR 518 Construction Stormwater Pond or infiltration at the LLA Parcel, treatment logs shall be provided to the Engineer weekly and will identify discharge rates, volumes and data that proves discharged water meets all criteria specified in the project specifications.
- K. All components of the construction water management system shall meet the requirements of the Ecology Chemical treatment Assessment Protocol (CTAPE) and the Stormwater Management Manual for Western Washington. At a minimum, the following shall apply:
 - 1. BMP C250 Construction Stormwater Chemical Treatment

- 2. BMP C251 Construction Stormwater Filtration
- 3. BMP C252 High pH Neutralization Using CO2
- 4. BMP C253 pH Controls for high pH Water

1.02 SUBMITTALS

- A. Construction Water Management and Treatment Plan (CWMTP). The CWMTP shall provide sufficient detail to ensure that there shall be no discharge of water that does not comply with project requirements at any time and under any circumstance. The CWMTP, as well as the CESCP (refer to Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution), the Pollution Prevention Plan (refer to Section 01 57 23 Pollution Prevention, Planning and Execution), are the project SWPPP components and must be approved prior to project NTP. The CWMTP shall include the following:
 - 1. Design calculations, including hydraulic conveyance, pumps, and detention facilities stamped by a P.E. licensed in Washington State
 - 2. All information required by Ecology's CTAPE process
 - 3. Treatment System Operations Manual
 - 4. Operators Training Certificate(s)
- B. Construction Water Treatment System Plan (CWTSP). The CWTSP shall include the procedure outlines for start-up, normal operations, process monitoring sampling and analysis, monitoring and control of residual flocculent, control philosophy, alarm conditions and responses, freeze protection, normal shutdown and decommissioning. The CWTSP shall also have a section on safety including applicable material safety data sheets (MSDSs), safety equipment, and required personnel protective equipment.
 - The Contractor shall submit an installation layout drawing for the construction water treatment system, including the piping/water conveyance layout and method for transfer of water from the different areas of the Site to the treatment system and then to the point of discharge.
 - 2. The Contractor shall submit resumes, and appropriate certificates or licenses of key personnel assigned to operate the construction water treatment system.
 - 3. The Contractor shall follow the approved CWTSP so as not to deviate from the approved plan or effluent limits.
 - 4. The Contractor shall maintain a Daily Report of water treatment activities that includes Daily Discharge Volume Logs from a continuous totalizing water meter, hours of treatment system operation, water quality sampling parameters as required by BMP C250, C251, and substantive permit requirements, and other pertinent data for the Engineer's verification and approval, in accordance with any discharge permit or substantive requirements. The Contractor's Daily Report of water treatment activities shall be in a format acceptable to the Engineer and shall include the results of the daily system inspections and monitoring.

- 5. The Contractor shall be responsible for water quality sampling and reporting to the Engineer in accordance with the specification and substantive requirements. The Engineer may take duplicate samples of the treated water.
- C. A letter certifying that all materials used on the project, including, but not limited to, chemicals, tackifiers, topsoil, mulch, and fertilizer, shall not conflict with treatment chemistry or impair normal treatment system operation in any way that prevents complying with discharge effluent limits and discharge rates.

1.03 JOB CONDITIONS

A. Dewatering water generated on the LLA Parcel may be transferred across the Des Moines Memorial Drive right-of-way for treatment or discharge. The existing stormwater drainage system may be sliplined and used to transfer water across Des Moines Memorial Drive as described in Part 3 below.

1.04 PROJECT DESCRIPTIONS

- A. This section covers the Work to be performed by the Contractor for treating and discharging water generated during site operations. Related work also covered includes disposing of any light non-aqueous phase liquid (LNAPL), sediments/sludges produced during water treatment, and any spent adsorption and filtration media used to treat the water.
- B. Treated water shall be discharged to the SR 518 Construction Stormwater Pond or infiltrated at the LL Apartments Parcel, in accordance with these specifications.
- C. The Contractor shall design, install, and operate the construction water treatment system, so as to meet all discharge requirements and conditions listed in this section.
- D. The Contractor shall arrange process equipment components and provide means to contain any spills or overflows from the treatment process within the Site and to keep spilled contaminated water from infiltrating into the site soil.
- E. All water treatment and storage equipment shall remain the property of the Contractor and shall be removed from the site at the completion of the Work.
- F. The water treatment system shall be designed to handle influents with maximum anticipated flow rates that the Contractor anticipated developing as a result of site activities.

1.05 PERFORMANCE REQUIREMENTS

- A. Approvals: the Contractor shall design and operate the system to meet the system constraints and discharge requirements listed in this subsection. A "Proof of Treatment" process shall occur twice during the project as described below, to demonstrate that the system is operating as designed and is capable of removing contaminants to meet the discharge requirements.
- B. The Contractor shall comply with the following general procedures as a minimum:
 - 1. Pre-Treatment: Oil/Water separation and any pH adjustment required to enable adequate performance of the flocculent shall occur during pre-treatment. Water leaving the pre-treatment tank must have turbidity below 500 nephelometric turbidity units (NTUs).

- 2. Treatment: General Use Level Designation (GULD) treatment method shall be added during treatment to condition the water for filtration and subsequent granulated activated carbon adsorption.
- 3. Filtration: Water shall be passed through a sand filtration system to remove solids. Additional filtration (such as bag or canister) may be required.
- 4. Adsorption: Granular activated carbon shall be used to remove dissolved constituents.
- 5. Final Treatment: This step may include pH or dissolved oxygen adjustment to satisfy the discharge limits.
- C. The Contractor shall conduct the following testing and monitoring procedures, at a minimum:
 - 1. Effluent samples shall be tested daily for turbidity and pH using a field meter.
 - 2. A Proof of Treatment effluent sample shall be collected 1) prior to the initial project start of discharging, and 2) prior to starting discharge of the water treated from the LLA excavation area; for laboratory analysis of dioxins/furans and total suspended solids. Treated water shall be held and not discharged until receipt of sample results and confirmation of compliance with the following criterion:
 - a. Total dioxins/furans TEQ must be below 6.7 pg/L.
 - b. Total suspended solids data is for informational purposes to accompany the dioxins/furans data.
 - 3. Continuous flow monitoring and recording shall be performed.
 - 4. The following table summarizes the minimum monitoring requirements and effluent limits.

Parameter	Monitoring Location	Frequency	Effluent Limit
Turbidity	Pre-treatment	Daily	<500 NTU
Turbidity	Effluent	Daily	<5 NTU
рН	Effluent	Daily	6.5 to 8.5
TPH	Effluent	Daily	<5 mg/L, and no visible sheen*
Dioxins/Furans	Effluent	Twice; Proof of Treatment Testing	6.7 pg/L
Total Suspended Solids	Effluent	Twice; Proof of Treatment Testing	Informational

^{*}TPH numerical limit must be applied and a sample must be taken ONLY when visible sheen is observed. The numerical limit will not apply when there is no visual sheen observed.

1.06 SEQUENCING AND SCHEDULING

A. The Contractor shall be responsible for coordinating water treatment with all other Site activities.

- B. Construction on the LL Parcel will occur over 2 construction seasons. During Construction Season 1, work on the LL Parcel will include dewatering of the lake during sediment cap and fill placement. During Construction Season 2, work on the LL Parcel will include the construction of the new wetland and outlet to Miller Creek within the Enhanced Existing Wetland and is anticipated to require dewatering. Construction on the LLA Parcel may occur in either Construction Season 1 or in Construction Season 2 and must be completed within one season. All stormwater generated within construction areas, including LLA Parcel stormwater following groundbreaking, and all water generated from excavation dewatering and lake and Enhanced Existing Wetland dewatering, will be collected and treated.
- C. The Contractor shall conduct water storage and treatment such that Work is not delayed due to insufficient treatment capacity. The Contractor shall provide water storage and sequence work such that all treated water can be infiltrated at the LLA Parcel or the SR 518 Construction Stormwater Pond. Water that is unable to be infiltrated as a result of utilizing construction or pumping rates in excess of those defined in Section 3.01 below, shall be stored or trucked to offsite disposal at no additional cost to the Port.

PART 2 PRODUCTS

2.01 PRIMARY WATER TREATMENT EQUIPMENT

- A. The Contractor is solely responsible for the water treatment system design, operation and maintenance, including full responsibility for fines imposed due to exceeding the discharge limit requirements. The Contractor shall add treatment components to the system described herein to the degree they believe necessary to comply with the discharge limits.
- B. The Contractor shall keep on hand, or have immediate access to, spare parts and components to provide for any breakdown(s).
- C. The materials and equipment used for the water treatment system may be new or used but must be suitable for the Work and be maintained in good condition. The treatment system logic controller shall not be older than 3 years unless approved by the Engineer. All other treatment components shall be no older than 5 years unless approved by the Engineer.
- D. The Contractor shall provide and maintain at all times an ultrasonic totalizing flow meter to record effluent discharge. The Engineer reserves the right to install a redundant flow meter in series with the Contractor's meter.
- E. The Contractor shall choose the type and size of equipment and components needed to accomplish the functions designated.

2.02 WATER TREATMENT SYSTEM CONTROL

- F. Unattended treatment system operation shall not occur at any time.
- G. The Contractor shall provide a notification system to alert an operator if system experiences conditions that will potentially cause the treatment system to shutdown.
- H. The Contractor shall provide high-level alarms on tanks to prevent overflow conditions. Alarms may cause automatic actions to relieve the condition or may warn the operator.

- I. The Contractor shall design the control system to accomplish the functions designated. The control system is subject to review and approval by the Engineer.
- J. If an upset condition occurs which may result in a release or nonconformance with the discharge permit, the Contractor shall immediately suspend operation and notify the Engineer.

PART 3 EXECUTION

3.01 WATER TREATMENT – GENERAL

- A. The Contractor shall furnish all labor, materials and equipment, and perform all operations required to design, furnish, install, test, operate, and maintain the water treatment equipment, including but not limited to: storage tanks, secondary containment, pumps, pipes, hoses, conveyance systems, process equipment, water treatment chemicals, water meters, process controls, operator alarms, dikes, sandbags, electric power supply and distribution, domestic water supply and distribution as required to treat the collected water.
- B. The Contractor shall plan to utilize electrical power from generators as the primary power source for all treatment system components unless he is able to obtain power from the power grid. The Contractor is solely responsible for coordinating power supply from the power grid.
- C. The Contractor shall treat all the water collected for treatment with the system provided to meet the specified requirements.
- D. The Contractor shall schedule project Work such that water draw down from Lora Lake or dewatering discharge from the LL Apartments Parcel not infiltrated at the LL Apartments parcel, shall be treated and pumped to the SR518 Construction Stormwater Pond at a controlled rate such that water in the pond will not exceed the pond stage of 4.3 feet (which has a corresponding volume of approximately 800,000 gallons). Based on previous pond infiltration observations, the estimated minimum and maximum infiltration capacities of the SR 518 Construction Stormwater Pond are approximately 100 and 220 gpm, respectively (for additional details see Reference Document 2). These infiltration capacities assume that a volume of water is maintained in the pond to achieve continuous infiltration.
- E. Estimated allowable pumping rates range from 300 gpm for an 8 hour, 7-day per week operation, to 400 gpm for an 8 hour, 5-day per week operation. Contractor shall calculate pumping rates relative to Contractor Work schedule utilizing provided information in Reference Document 2. Rates of lake volume displacement during filling, and dewatering requirements during excavation at the LL Apartments Parcel, and actual pond infiltration rates may vary over time, and the Contractor shall manage treatment and pumping rates so as to not exceed the combined infiltration and storage capacity of the pond, tank storage or trucking volumes.
- F. The Contractor shall provide a water treatment system capable of treating a total volume of water of 30 million gallons <u>over the two construction seasons</u> based on the following estimated rates and Work activity durations:
 - Approximately 7 million gallons of water displaced by the Contractor's lake filling operation in Season 1 (assumed to be on the order of 120 gallons per minute [gpm] for a duration of approximately 121 days with an 8-hour, 7-day a week work schedule) and

- 2. Approximately 10 million gallons of water estimated to be discharged to the lake by groundwater and precipitation in Season 1 (groundwater inflow assumed to be on the order of 60 gpm for a duration of 121 days and 24 hours a day, and precipitation based on a monthly average rainfall of 8.4 inches through the months of June to October as measured and reported by the Seattle Tacoma International Airport rain gauge [http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?wa7473] and a lake water surface area of 2.4 acres) and
- Approximately 6 million gallons of water resulting from the potential recirculation of approximately one-third of the water discharged to the SR 518 Construction Stormwater Pond back to the lake during lake sediment cap and fill operations in Season 1 and
- 4. Approximately 2 million gallons of water resulting from dewatering the excavation at the LL Apartments Parcel conducted in Season 1 before or after lake filling operations or in Season 2 (assumed to be on the order of 100 gpm for an duration of approximately 21 days with an 8-hour, 7-day a week work schedule) and
- 5. Approximately 4 million gallons of water resulting from the dewatering of the wetland area located south of Lora Lake for the construction of the new outlet to Miller Creek in Season 2 (assumed to be on the order of 100 gpm for a duration of approximately 14 days with an 8-hour, 7-day a week work schedule) and
- Approximately 1 million gallons of water resulting from the potential recirculation of approximately one-third of the water discharged to the SR 518 Construction Stormwater Pond back to the lake during the dewatering of the southern wetland area for outlet construction in Season 2.
- G. Protection of off-site facilities and designated on-site facilities during water treatment Work shall be solely the Contractor's responsibility. Untreated water shall not be discharged to the SR 518 Construction Pond or the LL Apartments Parcel.
- H. The Contractor shall construct the system with sampling ports and the necessary valves as required to collect water treatment samples in accordance with the specified requirements. The Contractor shall perform any required sampling and analytical testing and provide Engineer with a copy of laboratory analytical results.
- I. The Contractor shall provide a Certified Wastewater Operator or licensed professional engineer with wastewater experience to supervise the water treatment operation.
 - 1. The treatment system shall only be operated by a Certified Wastewater Operator trained and certified to meet Ecology requirements.
 - 2. Operators shall have no other duties other than those specified in this section and shall be onsite at all times while the system is operating.
 - 3. Operators shall be Ecology-certified and current Contractor Erosion and Sediment Control Leads. (CESCL)
 - 4. Contractor shall submit resumes and certification documentation.

- J. The Contractor shall provide adequate freeze protection required for all water treatment equipment if necessary.
- K. The Contractor shall provide spill containment for any water treatment chemicals used on the site.
- L. The Contractor shall provide all necessary safety equipment and personal protective equipment for safe handling of contaminated water and water treatment chemicals.

3.02 SYSTEM LAYOUT

- A. The water treatment system(s) will collect and treat water generated on the LLA Parcel and the LL Parcel. There are two on-site discharge locations; 1) the SR 518 Construction Stormwater Pond, located on the east side of Des Moines Memorial Drive, and 2) the LL Apartments Parcel.
- B. Transfer of water across the Site, and across Des Moines Memorial Drive shall be conducted in a manner that does not result in release of water from the treatment system components.
- C. Transfer of water across Des Moines Memorial Drive may use existing stormwater infrastructure piping beneath Des Moines Memorial Drive.
- D. Use of existing piping systems requires slip-lining to control loss of construction water to the subsurface through cracks and breaks in the existing system.
- E. The Contractor shall provide detail on method for transfer of water across Des Moines Memorial Drive in the CWTSP submittal prior to construction.
- F. If the Contractor elects to transfer water above grade, the Contractor is responsible for coordination on any traffic control or protection requirements with the City of SeaTac.

3.03 QUALITY CONTROL

- A. The Contractor shall establish, maintain, and document quality control in a form acceptable to the Engineer for water treatment. Quality control documentation by the Contractor is required to assure compliance with specification requirements and reporting procedures. Detailed records shall be maintained by the Contractor for all water treatment operations including, but not limited to, the following:
 - 1. Fabrication, layout, installation, testing, and operation of the systems.
 - 2. Installation and monitoring of discharge flow meter.
 - 3. Layout of water conveyance system and treatment equipment.
- B. Water treatment performance monitoring and documenting requirements shall be:
 - 1. Control charts for effluent pH, influent turbidity (following pretreatment) and effluent turbidity.
 - 2. Daily treatment plant throughput (in gallons).
 - Continuous stage measurements in the SR 518 Construction Stormwater Pond.
 - 4. Reports of non-conformances or upset conditions, including releases.

- 5. Reports of changes in system configuration or operation due to change in conditions.
- 6. Reports of any sampling performed to satisfy permit or substantive requirements or to document performance of the system and all analysis results in hard copy and electronic format suitable to the Engineer.
- C. The Engineer may specify additional records as needed to satisfy permit requirements.

3.04 SAMPLING AND CHEMICAL ANALYSIS

- A. Sampling for laboratory analysis of effluent discharge shall be performed by the Contractor's Water Treatment System Operator to meet specification requirements and demonstrate system performance. Samples must be analyzed by an Ecology certified laboratory. Analytical reporting limits for dioxins/furans must be less than the specified effluent limit. The Proof of Treatment effluent samples collected for chemical analysis must have a measured turbidity level below the effluent limit of 5 NTU and must be representative of consistent system performance.
- B. The Engineer may periodically sample and analyze influent water and may take duplicate samples of effluent water.
- C. Results of the laboratory analysis shall be forwarded to the Engineer by the Contractor upon receipt.
- D. The Contractor is responsible for any additional sampling and analysis needed to monitor the performance of the water treatment process.

3.05 INSPECTION AND MAINTENANCE

- A. The Contractor shall inspect weekly or more frequently and repair or replace damaged components of construction water treatment system as directed by the Engineer.
- B. The Contractor shall monitor discharge to ensure that permit and substantive requirements are being met.
- C. Damage to construction water treatment system caused by construction operations, weather, or negligence shall be repaired immediately by the Contractor at the Contractor's sole cost.

3.06 DISPOSAL OF OTHER RESIDUALS

- A. The Contractor shall manage oil and sediment/sludge produced by the treatment system for disposal as Subtitle D Contaminated Material in accordance with Section 02 61 13 Handling and Disposal of Contaminated Soil.
- B. The Contractor shall manage any spent filtration media as Subtitle D Contaminated Material in accordance with Section 02 61 13 Handling and Disposal of Contaminated Soil.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. "Construction Water Management and Treatment System" will not be measured separately.

B. "Construction Water Management and Treatment System-Force Account" will be on a Force Account basis in accordance with Document 0700 – General Conditions, Paragraph G-08.06. An estimated amount has been entered in the Schedule of Unit Prices.

4.02 PAYMENT

- A. Payment for "Construction Water Management and Treatment System" over the two construction seasons will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to design and implement the CWMTP, install, test, operate, and maintain the construction water management and treatment system, storage systems, trucking, discharging, sampling and laboratory analyses, documentation, and other measures to manage up to 30 million gallons of water as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract, with the exception of those items measured and paid for separately. Payments will be made as follows:
 - 1. Upon acceptance of the CWMTP 25%.
 - 2. After Notice to Proceed and before Substantial Completion, 50% will be prorated and paid monthly for compliance with the CWMTP during months of system operation. Non-compliance will result in withholding of payment for the month of the non-compliance.
 - 3. At final payment, 25% at Substantial Completion.
- B. Payment for "Construction Water Management and Treatment System-Force Account" as stated in the Schedule of Unit Prices A and B will be made on a Force Account basis in accordance with Document 00 70 00 General Conditions, Paragraph G-08.05 and shall be full compensation to complete only construction water management measures to manage water volumes in excess of 30 million gallons, or that are not part of the Contract Work, not covered under existing bid items and are at the specific direction of the Engineer.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. Investigations and analyses of the subsurface conditions have been conducted for the purpose of design. The following are available Reference Documents applicable to the Work:
 - 1. Cleanup Action Plan, Lora Lake Apartments Site, September 9, 2015, prepared by the Washington State Department of Ecology (Appendix A).
 - 2. Lora Lake Apartments Site, Engineering Design Report, XXXX, 2016, prepared by Floyd|Snider (Reference Document 1).
 - EDR Appendix A Lora Lake Parcel Groundwater Modeling and SR 518
 Construction Stormwater Pond Infiltration Assessment: Lora Lake
 Remediation Implementation Support for Remedial Action Design
 Memoranda (Reference Document 2)
 - 4. EDR Appendix B Lora Lake Parcel Pump-Down/Pump-Back Test Memorandum (Reference Document 3)
 - 5. EDR Appendix D Hazardous Materials Testing and Disposal Documentation (Reference Document 4)
 - 6. EDR Appendix E Draft Stormwater Pollution Prevention Plan (Reference Document 5)
 - 7. EDR Appendix G Lora Lake Apartments Site Geotechnical Report (Reference Document 6)
 - 8. EDR Appendix I Geotechnical Support for the Lora Lake Parcel Remedial Action Memorandum (Reference Document 7)
 - 9. EDR Appendix M Inadvertent Discovery Plan (Reference Document 8)

PART 2 MATERIALS

2.01 PROJECT INFORMATION

- A. Geotechnical Information
 - The Engineer has prepared a report of soils for the LLA Parcel. This report is included as Reference Document 6. The report presents the results of an investigation to determine the subsurface soil conditions. The investigative study includes:
 - a. A discussion of the soil types by soil quality and sieve analysis as disclosed by test pits and subsurface borings.
 - b. Logs showing soil descriptions at various depths.
 - c. Laboratory results of samples including grain size analysis, moisture content, and compaction (moisture-density) relationship.
 - d. A drawing indicating existing soil profiles as extrapolated by the Engineer.
 - e. Recommendations for temporary and permanent slopes.
 - f. Temporary shoring recommendations and design parameters.

- g. A discussion of suitability for reuse of on-site soils, compaction recommendations and general backfill requirements.
- h. Hydraulic conductivity estimates based on slug testing analysis of previously tested wells.
- i. Potential dewatering flow rates, conceptual dewatering model, and approximate dewatering cost guidelines. The report indicates groundwater can and should be expected to be encountered in excavations. Elevations will vary as a function of season, precipitation, and other factors. Groundwater elevation measurements in wells were made and reported in environmental documents and should be referenced for more specific groundwater elevation information.
- 2. The Engineer has prepared a report describing expected settlement resulting from filling of Lora Lake. This report is included as Reference Document 7. The report presents geotechnical analyses and recommendations for the Work at the LL Parcel including:
 - a. Analysis of settlement to occur in lake sediments and underlying organic-rich layers following lake filling.
 - Recommendations for cap and fill materials to meet geotechnical criteria and maintain groundwater flow gradients. All requirements for cap and fill materials are detailed in Section 31 23 23 – Backfill and Compaction.
- Accuracy of report information is guaranteed only within the limits of the samples recovered from the test borings. The Bidder shall make his own conclusions and interpretations from the data supplied and from information available from other sources.
- 4. These reports are not to be construed as a part of the Contract Documents and are not to be referred to as such.

B. Environmental Conditions

- 1. Environmental reports have been prepared to support design of the Lora Lake Apartments Site MTCA Remedial Action including chemical analysis and evaluation of soil, groundwater, and Lora Lake sediment. All reports were prepared under an Agreed Order with the Washington State Department of Ecology (Ecology) and are on file with Ecology. Appendix A and Reference Document 1 include the following information:
 - a. Soil analytical results for all site contaminants of concern that establish the horizontal and vertical extent of contamination.
 - b. Groundwater analytical monitoring data and groundwater table elevation information.
 - c. Lora Lake sediment quality data.
 - d. Description of the cleanup remedy approved by Ecology for implementation at the Site.
 - e. A description of the applicable laws and regulations for the cleanup, site history and background, and regulatory status.

- f. Hazardous materials testing and results, and waste profiling information.
- g. Detailed description of design process and rationale for remedy implementation including development of the excavation extents.
- C. Water Management and Infiltration Information
 - Reports have been prepared to support design of the Lora Lake Apartments Site MTCA Remedial Action related to groundwater flow, excavation dewatering, lake drawdown, and infiltration within the SR 518 Construction Stormwater Pond. These reports are included as Reference Documents and include the following:
 - a. LL Parcel Groundwater Modeling Support for Remedial Action Design Memoranda (see Reference Document 2).
 - b. SR 518 Construction Stormwater Pond Infiltration Assessment: Lora Lake Remediation Implementation Memorandum (see Reference Document 2).
 - c. LL Parcel Pump-Down/Pump-Back Test Memorandum (see Reference Document 3).
 - d. Geotechnical Support for LLA Parcel Remedial Action Report (see Reference Document 7).

PART 3 EXECUTION

3.01 PREPARATION FOR EXECUTION OF WORK

A. The Contractor shall review Reference Documents 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, and other activities.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. Extent of Work: The extent and location of the Demolition Work is indicated on the Drawings, and is limited to the LLA Parcel. The Work includes the requirements for the removal, wholly or in part and satisfactory disposal of all foundations, utilities, fences, pavements, curbs, structures, or other features identified within this section.
- B. Clean concrete curbs and foundations that are not painted yellow and sidewalks shall be crushed for on-site reuse as backfill.
- C. This project is exempt from the procedural requirements of applicable local permits, but must comply with all substantive permit requirements. An exempt local permit applicable to Demolition Work is the City of Burien Demolition Permit. The Contractor must comply with all terms and requirements of the permit, but is not required to apply for and obtain a permit.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. Limited Good Faith Inspection. Port of Seattle, Port Construction Services.
- B. U.S. Department of Labor Occupational Safety & Health Administration
 - 1. OSHA Standard 1926.850(a), Preparatory Operations
- C. King County burning of debris
- D. City of Burien Codes/Standards
- E. City of SeaTac Codes/Standards
- F. Puget Sound Clean Air Agency
- G. Washington Administrative Code 173-160-381 for the decommissioning of monitoring wells.

1.03 SUBMITTALS

- A. Submittals shall include the following:
 - 1. Demolition Plan.
 - 2. Proposed landfills and recyclers.
 - 3. Trip or truck tickets, receiver tickets, waste manifests and/or other documentation for all material transported to approved landfills and recyclers.
 - 4. Copies of scale certifications and recertifications, as appropriate.

PART 2 MATERIALS

2.01 GENERAL

A. Products required to perform, or be incorporated into, the Work of this section shall be selected by the Contractor, subject to the approval of the Engineer.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Information on pavement and foundation thicknesses is provided in the Geotechnical Report included as Reference Document 6 to these Specifications.
- B. Demolition phasing shall be determined by the Contractor, with the exceptions stated within this section. The Contractor may leave asphalt paving and concrete foundations during the excavation phase of the project for use as stockpiling, staging, loading, parking, or other areas needed for completion of the Work.
 - Concrete or asphalt that is left in place for these purposes shall be removed prior to site grading and prior to completion of the project. Any concrete areas used for on-site soil stockpiling of contaminated soil for landfill disposal must be cleaned prior to demolition for reuse as on-site fill.
 - 2. Removal of these materials shall be conducted in a manner described in this section.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Prior to start of construction, the Contractor shall submit to the Engineer for approval a Demolition Plan that at a minimum addresses the following:
 - 1. Work sequencing including specific means, methods, and equipment that will be used, both for large regions and in areas of selective demolition,
 - 2. Methods for controlling fugitive dust during demolition activities,
 - 3. Methods for removal and control of dirt that is removed or brushed from demolished materials,
 - 4. Methods for cleaning the stormwater conveyance piping and handling of water and solids from that system,
 - 5. Protection of workers or other persons in areas surrounding, above, below, or nearby the demolition activities,
 - 6. Procedures for stockpiling and management of crushed concrete prior to use as backfill,
 - 7. Schedule of demolition,
 - 8. Disposal procedures.
 - 9. Selected disposal sites and applicable permits and permissions as necessary.
- B. The Contractor shall conduct utility location survey in accordance with Section 31 23 00 Excavation prior to any ground breaking activities.
- C. Demolition Items
 - 1. Structures to be demolished:
 - a. All on-site asphalt curbing and pavement within the Work Area limits. The approximate extents of asphalt, curbing, and pavement are shown on the Drawings.
 - b. All on-site concrete paving, walls, berms, curbs, foundations, and sidewalks to the extent shown in the Drawings.

- All remaining surface and subsurface structures associated with two swimming pools previously abandoned and in-place filled with gravel.
- d. Interior and select exterior fences.
- e. LLA rock berms.
- f. Sport court.
- 2. Utilities to be demolished:
 - a. All on-site stormwater conveyance system structures and piping.
 - b. Previously decommissioned utilities left in place and located within Excavation Areas that are encountered during earthwork and grading.
 - c. Groundwater monitoring wells indicated on the Drawings.

3.03 EXECUTION OF WORK

- A. The Drawings define the location of the site features to be demolished. Use saw cuts at the interface of demolished areas and pavement and/or infrastructure to remain in place.
- B. Completely remove and dispose of all pavement, and other obstructions. Break up, load, and dispose of all pavements.
- C. Completely remove and crush for reuse all clean concrete slabs, sidewalks, and curbs that are not painted yellow.
- D. The amount of dust and debris resulting from demolition shall be controlled to prevent the spread of dust to other areas of the site or off-site. The use of potable water to control dust is acceptable. Collected stormwater or groundwater may not be used for dust control. The use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions such as flooding, runoff, or pollution.
- E. Soil attached to demolished materials when they are removed from the ground shall be considered contaminated and handled as such. The amount of soil that is transported with pavement bases and concrete rubble shall be minimized. The Contractor shall limit disturbance to soils beneath concrete slabs and asphalt pavement being removed to that which is required to perform the Work. Due to possible soil contamination, the Contractor shall remove all loose material from demolished concrete slabs and asphalt pavement before slabs and pavement are hauled off-site for disposal, recycling, or crushed on-site for reuse.
- F. Demolition includes the removal of structural steel items associated with the concrete structures. Steel protrusions out of the concrete shall be removed by cutting torch or other method approved by the Engineer.
- G. The maximum rubble size shall be no larger than as required for transporting and processing.
- H. Unique or unusual methods for the removal of an existing feature / obstruction shall be subject to the approval of the Engineer. Do not use on-site blasting, burning, or jetting as part of the Demolition Work, unless approved by the Engineer and the applicable local, state, and federal agencies.

3.04 DEMOLITION OF STRUCTURES

- A. Completely remove and dispose of (or reuse as specified) legally off-site, foundations, swimming pools, sport court, rock berms, structures, fences and other obstructions. All structures, pavements, sidewalks, and curbs designated for removal shall be broken up, loaded and disposed of or prepared for reuse on-site by the Contractor. Care shall be taken in removing the pavement, so that damage does not occur to the existing pavement which is to remain in place and that all removals are accomplished by making a neat full depth vertical saw cut at the boundaries of the area to be removed. Adjacent materials designated to remain that are damaged by the Contractor due to his operations shall be replaced at no additional cost to the Port.
- B. Yellow painted concrete is known to contain lead. Demolish lead-coated materials in accordance with Section 02 83 19 Lead Controls in Construction and Demolition. For information on lead analysis and material profiling, refer to Reference Document 4.
- C. Clean concrete that is not painted yellow shall be crushed on-site for reuse as backfill. Yellow-painted concrete materials shall be disposed of as non-hazardous waste, at an approved Subtitle D Landfill.
- D. No piling is known to exist at the site.
- E. The two swimming pools that were previously abandoned in place will require removal of surface pavement and tiling, gravel fill, and the subsurface concrete pool structure. Concrete may be crushed for use as backfill, and gravel fill may be reused as backfill. Tile must be disposed of as municipal waste.

3.05 DEMOLITION OF UTILITIES

- A. All utilities located in the public right-of-way, and the LL Parcel are assumed to be active.
- B. All utilities located within the LLA Parcel site boundary, with the exception of the stormwater conveyance system, were previously decommissioned and left in place. With the exception of stormwater conveyance system, portions of decommissioned utilities at the LLA Parcel that are within the vertical and horizontal extents of the Excavation Areas or that interfere with grading activities shall be cut and removed. Depth, size, and material information for decommissioned utilities is unknown. The degree to which these utilities will be encountered is unknown.
- C. All stormwater conveyance system structures and piping within the LLA Parcel shall be removed as indicated on the Drawings.
- D. Several utility lines are present in the right-of-ways adjacent to the site including overhead power lines. Active utilities are also present on the LL Parcel adjacent to Des Moines Memorial Drive as shown in the Drawings. These utilities shall not be disturbed.
- E. At least 30 days in advance of the demolition of the stormwater conveyance utilities, the Contractor shall advise the City of Burien for any work required by that utility under this Contract. The City of Burien is responsible for disconnection of the stormwater conveyance system at the upstream property boundary, within the 8th Avenue South right-of-way. This disconnection is expected to occur prior to start of work. Special conditions required by the utility shall be the sole

- responsibility of the Contractor. Contact the utilities for bond requirements, if any, prior to bid.
- F. Clean the stormwater system prior to abandonment and removal. All pipes, catch basins, and other structures within the stormwater system shall be cleaned with the use of water and vacuum trucks to remove all residual stormwater, solids, and washwater. Cap and/or plug downstream segments prior to start of cleaning so that wash water does not exit the LLA Parcel.
- G. Off-site stormwater conveyance pipes that are left in the ground beneath Des Moines Memorial Drive right-of-way downstream of the LLA Parcel shall be cut cleanly and plugged with grout to be watertight. The locations for system disconnection is shown on the Drawings.
- H. Segregate and stockpile soil generated during utility removal from within excavation areas and from outside excavation areas. Soil from outside the excavation areas is Common Excavation Soil and shall be managed in accordance with Section 31 23 00 Excavation. Soil from within the excavation areas is Subtitle D Contaminated Material and shall be disposed off-site in accordance with Section 02 61 13 Handling and Disposal of Contaminated Soil.
- I. Storm Drains: Remove all on-site catch basins and other stormwater conveyance structures identified in the Drawings. Protect off-site catch basins and other stormwater conveyance structures identified in the Drawings.

3.06 GROUNDWATER MONITORING WELL DECOMMISSIONING

A. Decommission groundwater monitoring wells identified in the Drawings in accordance with applicable laws and regulations (WAC 173-160) and as specified in Section 33 24 13 – Monitoring Well Installation, Decommissioning, and Protection prior to the start of any excavation.

3.07 CONCRETE CRUSHING AND REUSE

- A. Process concrete rubble on-site for reuse except concrete painted yellow. Asphalt may not be reused on-site.
- B. Remove soil from all concrete that is being crushed prior to processing. Soil shall be removed using dry methods including but not limited to sweeping, brushing, shaking, or other manner approved by the Engineer.
- C. Remove reinforcing steel and embedded items, and dispose with other demolition debris.
- D. Processed material shall comply with requirements for Select Borrow per WSDOT Standard Specifications Section 9-03.14(2), maximum size: 6 inches.
- E. Do not pulverize, rubblize, or grind concrete pavements in place.
- F. The area within which concrete crushing operations are performed shall be bermed and lined to isolate stormwater. Stormwater from this area shall be infiltrated on the LLA Parcel. Contractor must maintain pH and Total Dissolved Solids (TDS) levels as set forth below, and incorporate measures in the SWPPP to comply with these benchmarks.

Parameter Benchmark

pH Maximum of 9.0 standard units

Total Dissolved Solids 500 mg/L maximum

If infiltration is not possible, water shall be collected and processed with excavation dewatering water, but only with advance approval from the Engineer.

3.08 DISPOSAL

- A. General: All materials, except those materials identified for on-site reuse, or containing substances classified as hazardous or potentially hazardous by local, state, or Federal regulating agencies, shall upon their demolition become the property of the Contractor. All material, except those materials identified for on-site reuse, including those containing hazardous or potentially hazardous substances shall be removed and promptly disposed of legally by landfilling or recycling away from the site and on property not owned by the Port, except as otherwise provided in these Specifications. No material shall be disposed of in adjoining waterways or in the fill except as provided in these Specifications. Burning of materials is forbidden under all circumstances.
- B. Cleanup: After removal of structures and foundations, clean and grade the area. There shall be no debris, rubble, or litter left at the site from any of the demolition operations and the site shall be clean.
- C. The Port encourages the salvage and recycling of materials from demolished structures. The Contractor shall salvage or recycle, in an acceptable manner to environmental agencies and the Port, at their option any of the uncontaminated materials designated for disposal including LLA Parcel rock berms and asphalt. The LLA Parcel rock berms and asphalt shall be cleaned using dry cleaning techniques to remove any attached soil prior to disposal off-site.
- Non-salvageable or non-recyclable demolition, contaminated soils, and hazardous debris shall disposed in accordance with Section 02 61 13 – Handling and Disposal of Contaminated Soil.
- E. All disposal must comply with the requirements set forth in Section 01 74 19 Construction Waste Management and Disposal and Section 02 61 13 Handling and Disposal of Contaminated Soil.
- F. The Contractor has the option to secure his own demolition debris, asphalt, concrete, and creosote materials disposal or recycle site(s) provided he has acquired all permits and approvals necessary from governing agencies and the Port. These permits and approvals must be provided to the Port prior to Notice to Proceed by the Port.

3.09 QUALITY ASSURANCE

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

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for "LLA Demolition" will be as a unit.

4.02 PAYMENT

A. Payment for Site Demolition at the LLA Parcel will be at the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Demolition" and shall be full compensation for furnishing all labor, equipment, materials and tools

necessary to prepare a Demolition Plan, locate utilities, demolish surface and subsurface structures including but not limited to foundations, utilities, fences, pavements, swimming pools, groundwater monitoring wells, curbs and other features, crush concrete for on-site reuse, and dispose and recycle generated material as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

- A. Soils excavated within the project Work Areas, as shown on the Drawings, are contaminated and require special handling. Soil to be excavated contain dioxins/furans, petroleum, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), or metals contamination. Contaminated Soils will be hauled and disposed as Subtitle D Contaminated Materials in accordance with paragraph 3.02 of this section.
- B. The Contractor must obtain applicable local traffic control and haul route permits from the City of SeaTac. The Contractor shall coordinate directly with the City of SeaTac, and conduct work in accordance with the permit.
- C. Cover all soil stockpiles and maintain stockpile areas in accordance with Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution, with the provisions described in this section.
- D. Sweep clean the surface of the active pavements outside the current Work continuously and remove all debris, rubble, or litter completely during each working shift.

1.02 HEALTH AND SAFETY

A. The Contractor is required to implement all health and safety provisions as required by Section 01 35 29 – Safety Management.

1.03 SUBMITTALS

- A. Prior to excavation of any subsurface materials, the Contractor shall submit a Contaminated Soils Management Plan to the Engineer. The Contaminated Soils Management Plan must be approved by the Engineer prior to any excavation of subsurface materials. The Contaminated Soils Management Plan must include the following:
 - 1. Identification of all soil disposal/recycling facilities to be used on the project. Acceptable facilities are identified in paragraph 3.02 of this section.
 - 2. Contingency for managing debris encountered during excavation that may disqualify soil for disposal or recycle at the approved facilities.
 - 3. General description of how equipment operators, safety personnel and other applicable Contractor management will coordinate with the Engineer and the Port of Seattle Environmental Agents to facilitate special handling of Contaminated Soil in accordance with this section.
 - 4. Description of all haul routes to be used on the project.
 - 5. The name and licensing of the company that will be providing transport of Contaminated Soil to the selected landfill(s).
 - 6. Approach and sequencing for excavation, stockpiling, and disposal.
- B. Submit copies of waste profiles, waste manifests, landfill trip tickets, weight tickets, and receiver tickets for all material transported to approved landfills on a weekly basis.

1.04 DEFINITIONS

- A. Common Excavation Soil: Common Excavation Soil is material excavated and/or scraped from the Common Excavation areas at the LLA Parcel outside of Excavation Areas 1 through 4 to be used as backfill, if suitable. For purposes of Subtitle D Contaminated Material handling and disposal, Common Excavation Soil is considered contaminated, as it contains concentrations of site contaminants in excess of Department of Ecology cleanup standards.
- B. Contaminated Soil: For purposes of handling and disposal of contaminated soil,
 Contaminated Soil refers to the soil excavated from within Excavation Areas
 1 through 6 or soil that has come in contact with soil from within Excavation Areas
 1 through 6. All Contaminated Soil must be disposed as Subtitle D Contaminated
 Material.
- C. Soil (waste) Profile: A characterization of the chemical and physical properties of a waste material including the types of contaminants and their concentrations as measured by approved laboratory analytical methods. A waste profile is required by the receiving permitted disposal or recycling facility.
- D. **Special Handling:** Refers to hauling and disposal of soils that, because they are contaminated, cannot be reused in place as backfill or as general fill at another location. Such soils must be hauled to and managed at a permitted disposal facility.
- E. **Subtitle D Contaminated Material:** Soil that must be removed from the Project site and has been determined in these Specifications and/or Drawings to contain contamination in concentrations exceeding state or federal cleanup standards. Subtitle D Contaminated Material requires disposal at one of the approved facilities listed in paragraph 3.05.A of this section.
- F. **Unanticipated Contamination:** Contamination unexpectedly found in an excavation or in other locations where there is no prior knowledge, information, or history to indicate possible spills or releases of contamination.
- G. **Unsuitable Material:** Excavated material from the Project Work Areas shown on the Drawings that is determined to be geotechnically or otherwise unsuitable and cannot be reused on-site as backfill. All Unsuitable Material must be disposed as Subtitle D Contaminated Material.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION

3.01 EXCAVATION/TESTING

- A. Soil profiling and designation: All Contaminated Soil generated during the project has been designated by the Port using existing data as a non-hazardous contaminated waste. Waste profile data are provided in Reference Document 4 for the Contractor's use during landfill selection. The Port will work with the Contractor to conduct waste profiling with the selected receiving landfill(s) prior to the start of excavation.
- B. Comprehensive soil analytical testing has been conducted at the site. This testing was used to define the horizontal and vertical extents of the excavation. Testing conducted at the site has determined that the following classification of material is present and identified for excavation:

- 1. Subtitle D Contaminated Material as defined in paragraph 1.04.E of this section.
- C. Because of the extensive pre-characterization sampling that has been conducted, additional contamination is not expected to be found at the site during excavation. Additionally, dioxins/furans cannot be detected via field screening. However, the Engineer will monitor excavation and field screen soil as necessary to asses any Unanticipated Contamination that may be encountered.

3.02 SOIL STOCKPILING AND STOCKPILE MANAGEMENT

- A. Excavated soil and other wastes shall be segregated and stockpiled based on the receiving facility of the soil. Contaminated Soil shall be stockpiled separately from demolished material that is stockpiled for disposal or recycling as described in Section 01 74 19 Construction Waste Management and Disposal. Unsuitable Material, as defined in Section 31 23 00 Excavation, shall be stockpiled separately from other soil and wastes.
- B. All stockpiles of Common Excavation Soil and Contaminated Soil shall be bermed for management of free liquids.
 - All liquid that drains from Common Excavation Soil and Contaminated Soil stockpiles shall be collected, treated, and disposed of in accordance with Section 02 24 50 – Construction Water Management System.
- C. All stockpiles with Common Excavation Soil or Contaminated Soil shall be covered with plastic sheeting when they are not being worked as specified in Section 01 57 13 – Temporary Erosion and Sediment Control Planning and Execution.
- D. The Contractor shall stockpile Contaminated Soil and other waste material on paved areas of the site indicated on the Drawings. If additional stockpile area is required, stockpile areas may be constructed in unpaved areas of the site as specified herein.
 - 1. Contaminated Soil that is stockpiled may not contact underlying soil.
 - 2. Stockpile areas shall be graded and sloped so any free draining liquid is collected in low-points.
 - 3. Prior to construction and following removal of the stockpile, the Engineer will collect and analyze surface soil samples from beneath all unpaved Contaminated Soil stockpile areas. If data indicate underlying soil has been impacted by Contaminated Soil stockpiling via infiltrated water, or mixing with stockpiled material, The Contractor will excavate and dispose of impacted soil at the Contractor's sole expense.
- E. Following removal of Contaminated Soil stockpiled material from paved areas, the Contractor shall clean the area by vacuum sweeping the pavement. Pavement shall be cleaned prior to reuse of the area to stockpile Common Excavation Soil, concrete, or other debris or waste, import materials, and prior to demolition for disposal, recycling, or on-site reuse. All material collected on-site from sweeping or other cleaning shall be handled and disposed as Subtitle D Contaminated Material or disposed off-site at a facility permitted and allowed to accept the waste. If this material is disposed separate from the Subtitle D Contaminated Material, the Contractor shall provide the Engineer with all permits, authorizations, and other approvals that show the facility can accept the waste.

3.03 DEWATERING OF EXCAVATED SOIL

A. Acceptable methods for dewatering excavated soil prior to transport and disposal are discussed in Section 31 23 19 – Excavation Dewatering.

3.04 TRANSPORT OF SOIL CONTAINING FREE LIQUID

- A. If approved by the selected landfill, the Contractor may transport and dispose of soil containing free liquid. If off-site disposal and direct load of material containing free liquid (defined as failing the paint filter test) is selected by the Contractor, the following restrictions apply.
 - The Contractor must obtain written approval from the landfill for disposal of waste containing free liquids. Documented approval from the landfill must be provided to the Engineer before start of excavation.
 - 2. The Contractor will be required to transport the material from the Site in trucks designed for transport of liquid/saturated wastes that will not release any liquid during transport.
 - 3. The Contractor will be solely responsible for all damages resulting from leakage of liquid waste during transport.

3.05 DISPOSITION OF MATERIAL

- A. Subtitle D Contaminated Material Material determined to be Subtitle D Contaminated Material which includes Contaminated Soil, material that has come in contact or been mixed with Contaminated Soil, or Unsuitable Material shall be hauled to one of the following facilities by the Contractor for disposal:
 - Waste Management Columbia Ridge Landfill via Alaska Street Transfer Station: 70 South Alaska Street, Seattle, WA 98106
 - 2. Allied Waste Roosevelt Regional Landfill via Seattle Transfer Station: 2733 3rd Ave. S. Seattle, WA 98134

3.06 LOADING AND TRANSPORTATION OF MATERIAL FOR DISPOSAL

- A. The Contractor shall implement Best Management Practices (BMPs) to control the spread of contamination during material loading and transport operations. Any material that comes into contact with or is mixed with Contaminated Soil will be considered Contaminated Soil and disposed of as such. The following shall be implemented at a minimum:
 - 1. Establish truck haul routes before beginning off-site transport of Contaminated Soil and use on-site truck routes that prevent traffic over contaminated areas.
 - Construct erosion control BMPs in accordance with Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution prior to beginning off-site transport of Contaminated Soil.
 - 3. Locate loading areas for Contaminated Soil in, or at the edge of, the stockpile location(s).
 - 4. Load trucks in a manner that prevents the spilling, tracking, or dispersal of Contaminated Soils.
- B. Transporters hauling Contaminated Soil off-site must be licensed to haul Subtitle D Contaminated Material.

- C. The Contractor shall follow the transport requirements for soil containing free liquid as discussed above in paragraph 3.04.
- D. Cover loads of Contaminated Soil prior to exiting the Site.
- E. Bottom dump trucks are not allowed for hauling Subtitle D Contaminated Material.
- F. Direct loading of Contaminated Soil from the Excavation Areas located next to Des Moines Memorial Drive is allowed as specified in 31 23 00 Excavation.

3.07 OTHER REQUIREMENTS

- A. The Engineer will prepare and provide the Contractor with required documentation and shipping papers for hauling and disposal of Subtitle D Contaminated Material prior to start of construction. Contractor shall notify the Engineer of the selected disposal facility as part of the pre-construction submittal process and obtain an account with the chosen disposal facility at the beginning of the project.
- B. The Contractor is not to haul any Subtitle D Contaminated Material off-site until a waste profile has been developed and a non-hazardous waste manifest has been issued by the Engineer. The Contractor shall ensure each load of Subtitle D Contaminated Material will receive an individual non-hazardous waste manifest.
- C. The Contractor shall provide the Engineer with all hauling receipts (or copies of receipts) from the receiving facility for all Subtitle D Contaminated Material on a daily basis.
- D. The Engineer may require shut down of excavation should unforeseen conditions warrant.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for Handling and Disposal of Contaminated Soil will be as a unit.

4.02 PAYMENT

- A. Payment for handling and disposal of Contaminated Soil at the LLA Parcel will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal and Backfill" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to stockpile, load, transport and dispose of Contaminated Soil excavated from the LLA Parcel as detailed on the Drawings and specified herein through the duration of the Contract.
- B. Payment for handling and disposal of Contaminated Soil from Excavation Areas 5 and 6 will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to load, transport and dispose of Contaminated Soil excavated from Excavation Areas 5 and 6 as detailed on the Drawings and specified herein through the duration of the Contract.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. The Contractor shall establish, provide, and maintain lead controls for the duration of the Work conducted during this Contract. The tasks to be completed under this Contract are generally not considered lead abatement projects. However, the Contractor may encounter lead-containing coatings and lead-containing materials during general construction and demolition.
- B. The intent of this section is to require the Contractor to establish procedures and controls to prevent airborne lead emissions during general construction and demolition and comply with Washington Administrative Code (WAC) 296-155-176. The Work may include:
 - 1. Limited demolition of concrete, concrete block, steel, and other items that may consist of lead or be coated with paints that contain lead.
 - 2. Disposal of lead waste in accordance with WAC 173-303, Dangerous Waste Regulations
 - 3. Providing personnel that have received training as defined in WAC 296-155-17625
- C. Materials testing of potential lead-containing materials and coatings has been conducted by the Port, and results consisting of bulk analysis and toxicity characteristic leaching procedure (TCLP) are provided in Reference Document 4. Lead-containing coatings have been classified by the Port as Non-Hazardous Solid Waste for disposal as Subtitle D Contaminated Material.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. The Contractor is responsible for monitoring work activities and determining conditions that require conformance with specified regulatory requirements and standards. The following rules, requirements, and standards may apply to the Work:
 - 1. United States Occupational Safety and Health Administration (OSHA)
 - a. 29 CFR 1910 Occupational Safety and Health Standards
 - b. 29 CFR 1910.134 Respiratory Protection
 - c. 29 CFR 1910.1200 Hazard Communication
 - d. 29 CFR 1926.55 Gases, Vapors, Fumes, Dusts, and Mists
 - e. 29 CFR 1926.57 Ventilation
 - f. 29 CFR 1926.62 Lead in Construction Standard
 - 2. United States Environmental Protection Agency (EPA)
 - a. 40 CFR 261 Identification and Listing of Hazardous Waste
 - b. 40 CFR Part 745, Subpart L Lead Based Paint Activities
 - c. EPA Publication SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods
 - d. EPA Publication EPA-740-K-10-001 Lead Safe Certified Guide to Renovate Right

- 3. National Institute for Occupational Safety and Health (NIOSH)
 - a. NIOSH/OSHA Booklet 3142 Lead in Construction
- 4. Washington State Regulations that are codified in the Washington Administrative Code (WAC) and govern lead work and lead waste management include but are not limited to:
 - a. WAC 296-62 General Occupational Health Standards
 - b. WAC 296-24 Safety Standards for Construction Work
 - c. WAC 296-155-176 Lead
 - d. WAC 296-841 Airborne Contaminants
 - e. WAC 173-303 Dangerous Waste Regulations
 - f. WAC 365-230 Accreditation of Firms And Individuals Conducting Lead-Based Paint Activities

1.03 DEFINITIONS

- A. Definitions relevant to lead:
 - Action Level (Lead): Employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period.
 - Air Monitoring: The process of measuring the concentration of lead in a specific volume of air in a stated period of time. Air samples shall be collected and analyzed in accordance with the methods specified by the National Institute for Occupational Safety and Health (NIOSH) and as required by WAC-296-155-176.
 - 3. Area Monitoring: Sampling of lead concentrations within the lead control area, inside the physical boundaries, which is representative of the airborne lead concentrations that may reach the breathing zone of personnel potentially exposed to lead.
 - 4. DOT: Department of Transportation
 - 5. Eight Hour Time Weighted Average (TWA): Airborne concentration of lead averaged over an 8-hour workday, to which an employee is exposed.
 - 6. Lead: Metallic lead, inorganic lead compounds, and organic lead compounds
 - 7. Permissible Exposure Limit (PEL Lead): A lead concentration of 50 micrograms per cubic meter of air as an 8-hour time weighted average.
 - 8. Personal Monitoring: Sampling of lead concentrations within the breathing zone of an employee to determine the 8 hour time weighted average concentration in accordance with WAC 296 155 176 and 296-841. Samples shall be representative of the employee's work tasks. Breathing zone shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 6 to 9 inches and the center at the nose or mouth of an employee.

- 9. Industrial Hygienist: The Industrial Hygienist shall be subject to approval as specified under Paragraph 1.05 of this section and shall have one of the following certifications:
 - a. Certified Industrial Hygienist certified by the American Board of Industrial Hygiene with prior experience in the health and safety aspects of a lead hazard control work project.
 - b. Professional Engineer or Certified Safety Professional with a minimum of three (3) years prior experience in industrial hygiene relating to lead hazard control work.
- 10. Waste Designation: The process of determining whether waste is regulated under WAC 173-303, Dangerous Waste Regulations.

1.04 QUALITY ASSURANCE

- A. The Contractor shall submit a Lead Controls Work Plan pursuant to Paragraph 1.05 of this section. This work plan shall establish procedures and controls to: prevent airborne lead emissions during general construction and demolition, comply with (WAC) 296-155-176 (Lead) and 296-841 (Airborne Contaminants). This work plan will be submitted to the Engineer for review and approval prior to the start of any lead work.
- B. The Engineer will perform periodic observation of the site work to ensure that it is being performed in a manner consistent with the approved Lead Controls Work Plan and this section. The Engineer will have the authority to issue a "Stop Work" order for health and safety concerns or non-compliance with regulations or this section.

1.05 SUBMITTALS

- A. The Contractor shall provide complete submittals in accordance with Section 01 33 00 Submittals and as specified below.
- B. Preconstruction Submittals: Provide a site-specific Lead Controls Work Plan which demonstrates the methods by which impact, handling and disposal of lead-coated materials will be performed. At a minimum this work plan shall include:
 - A general description of work practices, engineering controls, air monitoring, and decontamination for work involving demolition of materials coated with lead
 - 2. Qualifications, certifications, training certificates and role of each Contractor's personnel conducting work on lead-coated materials
 - 3. Qualifications of the proposed testing laboratory (to perform analysis of air samples, if required)
 - 4. Site inspection process, logs and documents
 - 5. Respirator fit testing records for personnel performing lead work, if required
 - 6. Lead Air Monitoring Plan
 - a. The Lead Air Monitoring Plan shall include the proposed sampling plan, sampling procedures, and field quality control procedures of the firm conducting the air monitoring, if required.
 - 7. Procedures for personnel and equipment cleanup and decontamination

C. Construction Phase Submittals

- Daily Work Records: Submit the following information to the Engineer daily during work with lead-coated materials. This information shall be submitted prior to the start of work on the next scheduled work shift.
 - a. Air sample data sheets and laboratory analytical results, including chain of custody
 - b. Supervisor daily inspection report, including scope of work completed, engineering controls used, hours worked, and equipment and materials used.

D. Post-Construction Closeout Submittals

- Project Overview: Provide a basic project summary identifying the scope and summarizing the work performed by the Contractor associated with lead-coated materials; and a discussion of any significant problems encountered during the course of the work. The written summary shall include a description of all changes or modifications to the Contractor's Lead Controls Work Plan.
- 2. Air Monitoring: Submit documentation of all Contractor air monitoring results relative to regulatory compliance for airborne lead. Include copies of all air monitoring data sheets, chain-of-custody documentation, and analytical reports for lead sampling conducted at the site.
- 3. Disposal Manifests: Submit copies of all lead waste disposal transportation and disposal manifests including signed receipts from the landfill, and chain-of-custody forms if disposed separate from Subtitle D Contaminated Material.
- 4. Submit copies of inspections or visits by regulatory agencies associated with lead work. Include copies of any citations or notices received by the Contractor from regulatory agencies during the course of the project related to lead-coated material work.

PART 2 MATERIALS AND EQUIPMENT NOT USED

PART 3 EXECUTION

3.01 WORK AREA PREPARATION

- A. Perform the following preliminary steps to prepare the Work Areas prior to demolition of lead coated materials.
 - 1. Establish a control area that includes a perimeter sufficient to perform demolition work that is expected to disturb lead-containing paint. The control area shall also consist of the pathway for transport of any lead-contaminated material to a stockpile or storage receptacle, if the demolition debris is not immediately transported from the site. Provide and display caution signs, in clearly visible areas, at entrances indicating that hazardous material work is being conducted, that state that unauthorized persons should not enter. Signs shall comply with WAC 296-155-176.
 - 2. Health and Safety: Conduct weekly safety meetings as specified in Section 01 35 29 Safety Management.

- 3. Prepare all storm drains, and drainage routes using the methods described in the approved Lead Controls Work Plan to prevent contaminated runoff.
- 4. Lead Waste Stockpile Area: Prepare the lead-waste storage area as described in the approved Lead Controls Work Plan.

3.02 WORK PROCEDURE

- A. General Procedures: Perform all work and comply with the safety and health provisions in the site-specific Health and Safety Plan. The work includes all measures necessary to adequately protect workers, authorized personnel, Port staff, and the public from lead exposures during the demolition process.
- B. Prevent dust generation at all times to the maximum extent practicable. Dry scraping, dry sanding, or dry grinding on lead-containing paints or lead contaminated surfaces will not be permitted without a full enclosure.
- C. The use of water shall be restricted to the smallest quantity necessary to minimize dust and to avoid the potential of contaminant migration through run-off or ponding. In no case shall liquids generated during demolition of lead-containing material come into contact with uncontaminated soils, drains, surfaces, or conduits which may constitute a release to the environment.

3.03 AIR MONITORING

A. Air Monitoring

- Monitoring of airborne concentrations of lead shall be in accordance with WAC 296-155-176, WAC 296-841, and as specified herein. Air monitoring, testing, and reporting shall be performed in accordance with the Lead Air Monitoring Plan prepared and signed by the Contractor's Industrial Hygienist. The Plan shall include personal monitoring in accordance with regulatory requirements and area monitoring outside the work area.
 - a. Submit results of air monitoring samples, signed by the Contractor's Industrial Hygienist, within 24 hours after the air samples were taken.
 - b. Notify the Engineer immediately of the corrective action taken if the exposure to lead is at or in excess of the lead action level (30 micrograms per cubic meter) outside of the lead control area.
 - c. If the area air monitoring results are above the lead action level, the Engineer shall have the option of stopping all work until the work procedures and lead hazard controls are revised to the Engineer's satisfaction.

3.04 CLEAN-UP, TESTING AND DISPOSAL

A. Cleanup

Maintain surfaces in work areas where lead is present to be free of accumulation of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the Work Area. The use of compressed air to clean up the area is strictly prohibited. At the end of each shift, clean the area of visible lead paint and dust contamination by vacuuming with a HEPA-filtered vacuum cleaner, wet mopping the area, or cleanup by other appropriate means.

- B. Disposal of Lead Demolition Waste
 - 1. Lead-containing waste that does not designate as Dangerous Waste per WAC 173-303 must be managed at a permitted disposal facility.
 - Lead-containing waste shall be disposed in accordance with requirements for Subtitle D Contaminated Material described in Section 02 61 13 – Handling and Disposal of Contaminated Soil.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. Furnish all labor, materials, facilities, equipment, services, employee training and testing, and agreements necessary to perform the Work required for potential silica dust control activities in accordance with this section and the latest worker protection regulations from the Washington State Department of Labor and Industries Division of Occupational Safety and Health (DOSH), and for fugitive dust control in accordance with this section and the latest regulations from the Puget Sound Clean Air Agency (PSCAA) and any other applicable federal, state, and local government regulations. Whenever there is a conflict or overlap of the above references, the most stringent provisions are applicable.
- B. In all cases where potential silica dust exposures may reasonably be expected to occur, the Contractor shall use any and all feasible engineering and work practice controls to reduce and maintain employee exposure levels at or below the DOSH Permissible Exposure Limits (PELs) outlined in Table 1 below.
- C. The Work specified herein shall be performed by competent persons, trained, knowledgeable and qualified in both fugitive and silica dust evaluation and control methods.
- D. If visible fugitive dust emissions are observed or respirable crystalline silica concentrations exceed applicable PELs beyond the perimeter of the Work Area, the Port is authorized to stop work. The Contractor shall perform all necessary corrective actions to eliminate visible dust and reduce respirable crystalline silica concentrations to less than 0.05 mg/m³ before resuming work. The Port may visually monitor for fugitive dust and collect air samples for silica at any time.

1.02 DEFINITIONS

- A. Definitions relevant to silica:
 - 1. Permissible Exposure Limit (PEL):

Table 1: Permissible Exposure Limits for Respirable Crystalline Silica by Type

Crystalline Silica Type (respirable)	TWA ₈	STEL
Cristobalite	0.05 mg/m ³	0.15 mg/m ³
Quartz	0.1 mg/m ³	0.3 mg/m ³
Tripoli	0.1 mg/m ³	0.3 mg/m ³
Tridymite	0.05 mg/m ³	0.15 mg/m ³

1.03 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. Washington State Department of Labor and Industries
 - 1. WAC 296-841 Airborne Contaminants
 - 2. WAC 296-62-136 Ventilation
 - 3. WAC 296-901 Global Harmonized System for Hazard Communication

- B. Puget Sound Clean Air Agency
 - 1. Regulation I, Article 9, Section 9.15 Fugitive Dust Control Measures
- C. U.S. Occupational Safety and Health Administration
 - 1. 29 CFR 1926.55 (a) Gases, Vapors, Fumes, Dusts, and Mists
 - 2. 29 CFR 1926.57 Ventilation
- D. Associated General Contractors of Washington Education Foundation
 - Guide to Handling Fugitive Dust from Construction Projects, Seattle, Washington, 1997

1.04 SCOPE OF WORK

- A. Fugitive Dust: All Construction Work will potentially generate fugitive dust. It is the responsibility of the Contractor to control the release of fugitive dust by using a combination of reasonable precautions and best work practices.
- B. Silica: Construction Work that requires control of silica shall include but not be limited to general demolition, chipping, sanding, tuck-point grinding, scabbling/scarifying, surface grinding, sawing, jackhammering on concrete building materials, cement mixing, dry sweeping of concrete dust, and significant disturbance of and/or removal of non-asbestos fireproofing associated with this project.
- C. Work activities shall include the following, as applicable:
 - 1. Provision of site security to assure that no member of the public is able to gain access to the construction Work Area at any time. The Contractor shall maintain access and egress routes at all times.
 - 2. In accordance with WAC 296-841-20005, the Contractor is responsible for determining if the activities being performed may reasonably be expected to release respirable silica at or above the exposure limits. The Contractor shall use, but not be limited to, the following criteria to determine if the Work being performed may reach or exceed the PELs:
 - a. Type of work being performed.
 - b. Duration of work.
 - c. Work practices and engineering controls being used.
 - d. Previous air monitoring data from within the last 12 months on projects that were "essentially identical."
 - e. Standard or site-specific written operating procedures.
 - f. Citation history regarding silica
 - 3. In the case of concrete and demolition Work that may generate silica dust at or above the exposure limits, the Contractor must conduct exposure evaluations to determine employee exposure to silica and implement feasible exposure controls to reduce employee exposure below the PEL. This may include the revision of work practices and provision of personal protective equipment during the following activities:
 - a. Exposure controls are being evaluated or put in place

- b. The airborne silica concentration has not been reduced below the permissible exposure limit
- c. Exposure controls are not feasible
- 4. Provision of best work practices to prevent the release of fugitive and silica dust outside of the Work Area, as described in Part 3 Execution of this section.
- 5. Provisions for worker and equipment decontamination. Worker decontamination and equipment areas shall be cleaned daily or as required more frequently to prevent dust emissions.
- 6. Decontamination of Work Area(s). Concrete dust shall be cleaned from the Work Area using wet methods and HEPA vacuuming equipment at the completion of demolition activities, before barriers are removed.
- 7. Water used for dust suppression or decontamination (provided it does not contain additional chemical contaminants) shall be controlled and disposed of as follows:
 - a. Slurry and residual dust shall be vacuumed during dust-generating operations.
 - b. Slurry and residual dust shall not remain on permanent concrete or asphalt pavement overnight.
 - Slurry and residual dust shall not drain to Storm Drain System (SDS), Industrial Waste System (IWS), or any other natural or constructed drainage conveyance.
 - d. Collected slurry residual dust and debris are the responsibility of the Contractor and shall be disposed of off-site in a manner that does not violate groundwater or surface water quality standards, or as Subtitle D Contaminated Material as described in Section 02 61 13 Handling and Disposal of Contaminated Soil.

1.05 PERSONAL PROTECTION

- A. Respiratory Protection
 - 1. Where exposures to respirable crystalline silica may exceed the PEL, workers shall be provided, at a minimum, with personally issued and marked respirators equipped with high efficiency particulate air (HEPA) filters approved by NIOSH (99.97% efficient) to be worn in the designated Work Area. Sufficient filters shall be provided for replacement as required by the workers or applicable regulations. Disposable respirators shall not be used.
 - The Contractor shall comply with OSHA 29 CFR Part 1926.134, WAC 296-841-200, WAC 296-842 and ANSI Standards Z88.6-2006, Z88.7-2010, and Z88.10-2010.
 - Worker exposure to respirable crystalline silica shall not exceed the
 permissible exposure limits. Worker exposure shall be determined by the
 protection factor of the respirator worn and measured area or personal
 respirable crystalline silica concentrations.

- 4. A sufficient supply of replacement parts and HEPA filter cartridges shall be provided to the workers.
- 5. The Contractor shall maintain daily inspection(s) of all respirators to verify cleanliness and to replace damaged, worn, or missing parts.
- 6. Where respirators are used (in most cases a half-face respirator equipped with HEPA type filters), a complete Respirator Program must be put in place in accordance with WAC 296-842. Such a program includes proper selection, fit-testing, cleaning and maintenance, supervision, training, and written procedure.

B. Protective Clothing:

- Workers shall be provided with sufficient sets of protective full-body clothing to be worn in the designated Work Area whenever a potential exposure to respirable crystalline silica concentrations above the PEL exists. Such clothing shall include, but not be limited to, coveralls and eye protection.
- 2. Protective clothing shall not be worn outside the Work Area. Non-disposable-type protective clothing and footwear shall be left in the Work Area.
- 3. Eye protection shall be provided and worn as required by applicable safety regulations. Equipment shall conform to ANSI Z87.1-2003.
- 4. Head Protection: Hard hats or other head protection shall be provided as required by applicable safety regulations. Hard hats shall conform to ANSI Z89.1-2009, Class A or B.
- 5. Foot Protection: Nonskid footwear shall be provided to all workers. Footwear shall conform to ANSI F2412-05.
- 6. Workers shall not eat, drink, smoke, or chew gum or tobacco in or near the respirable silica Work Areas.

1.06 SUBMITTALS

- A. The Contractor shall provide complete submittals in accordance with Section 01 33 00 Submittals and as specified below.
- B. Preconstruction Submittals: Prior to conducting any Work which may result in any exposure to silica-containing dust or to fugitive dust in excess of the permissible exposure limit, provide a site-specific Fugitive Dust Management Plan which demonstrates the methods by which this Work will be performed. At a minimum, the Fugitive Dust Management Plan shall include:
 - 1. Specific work practices and procedures for work that will generate silicacontaining dust or fugitive dust that may contain other site contaminants;
 - 2. Personal protective measures and decontamination requirements;
 - 3. Respirator fit testing records for all employees potentially exposed to silicacontaining dust above the permissible exposure limit;
 - 4. Description of engineering controls designed to keep fugitive dust and silica exposures below the levels specified herein, for outside and inside each Work Area;

5. Silica Air Monitoring Program;

 The Air Monitoring Program shall include the proposed sampling plan, sampling procedures, and field quality control procedures of the firm conducting the air monitoring.

C. Construction Phase Submittals

- 1. Daily Work Records: Submit the following information to the Engineer daily during work with silica-containing dust. This information shall be submitted prior to the start of work on the next scheduled work shift.
 - a. Air sample data sheets and laboratory analytical results, including chain of custody.
 - b. Supervisor daily inspection report, including scope of work completed, engineering controls used, hours worked, and equipment and materials used.

D. Post-Construction Closeout Submittals

- Project Overview: Provide a basic project summary identifying the scope of fugitive and silica dust-generating activities, and a discussion of any significant problems encountered during the course of the Work. The written summary shall include a description of all changes or modifications to the Contractor's Fugitive Dust Management Plan.
- 2. Air Monitoring: Submit documentation of all Contractor air monitoring results relative to regulatory compliance for fugitive and silica dust. Include copies of all air monitoring data sheets, chain-of-custody documentation, and analytical reports for sampling conducted at the site.
- Submit copies of inspections or visits by regulatory agencies related to fugitive or silica dust. Include copies of any citations or notices received by the Contractor from regulatory agencies during the course of the project related to fugitive or silica dust.

1.07 SILICA AIR SAMPLING EVALUATION BY CONTRACTOR

- A. If the Contractor determines that activities being performed may reasonably be expected to release respirable silica at or above exposure limits, the following shall apply:
 - The Contractor shall conduct air sampling of workers and subcontractors for respirable crystalline silica. The Contractor shall submit an Air Monitoring Plan as part of its Fugitive Dust Management Plan.
 - 2. The Contractor shall conduct personal air sampling for respirable silica in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7500. Sample volume shall be sufficient to determine if worker exposure to respirable crystalline silica is below the PEL. If analysis of the samples indicates concentrations are above the PEL, the Contractor shall determine the cause of the overexposure and revise work practices and engineering controls to reduce exposures to below the PEL. The Contractor is required to conduct re-sampling and analysis at no expense to the Port.

3. Results of air samples collected by the Contractor shall be submitted to the Engineer within 48 hours following receipt of analytical results.

PART 2 MATERIALS AND EQUIPMENT

2.01 EQUIPMENT

- A. Provide suitable tools for dust collection and water-jet dust suppression systems.
- Provide sufficient number of HEPA-filtered vacuum cleaners to clean-up visible dust residues.
- C. Air filtration devices shall utilize high efficiency particulate absolute (HEPA) filtration systems bearing a UL 586 label indicating its ability to perform under specified conditions. Provide filters marked with the name of the manufacturer, serial number, airflow rating, efficiency and resistance, and the direction of the test airflow. Units shall have two stages of pre-filtering, as follows:
 - 1. The first stage pre-filter shall be a low efficiency type for particle sizes 100 micrometers and larger.
 - 2. The second stage pre-filter shall be a medium efficiency type effective for particle sizes down to 5 micrometers.
 - 3. Pre-filters shall be installed either on or in the intake grid to the exhaust unit and shall be held in place with special housings or clamps provided by the manufacturer.

D. Air filtration devices shall also include:

- 1. An elapsed time meter showing the total accumulated hours of operation.
- 2. An electrical interlock preventing operation of the unit without a HEPA filter.
- 3. An automatic shutdown system to stop the fan in case of a rupture in the HEPA filter or a blocked air discharge.
- 4. Warning lights to indicate normal operation (green); moderately high pressure drop across the filters, such as due to filter overloading (yellow); and too high of a pressure drop due to an overloaded or ruptured HEPA filter or obstructed discharge (red).
- 5. An audible alarm if the unit shuts down due to operation of the safety systems.
- 6. Electrical components approved by the National Electrical Manufacturers Association (NEMA) and the Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be properly grounded.

PART 3 EXECUTION

3.01 CONTROL METHODS

A. The Wet Method for the control of fugitive and silica concentrations is described below. The specific method(s) used shall be detailed in the submittals and approved by the Engineer.

B. Wet Method

- 1. Use best management practices for the control of fugitive dust. This may include but is not limited to the following:
 - a. The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds.
 - b. Treating temporary, low-traffic areas (e.g., construction sites) with water, reducing vehicle speeds, constructing pavement or riprap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways.
 - c. Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials.
- 2. For activities that may generate airborne silica or fugitive dust, use "wet" systems that eliminate or reduce dust generated and tools that include dust control features where possible. Clean up sludge and/or waste immediately following its generation.

3.02 OVERSIGHT

- A. An environmental consultant (Consultant) may be retained to advise the Engineer in all matters pertaining to the Work performed in accordance with the requirements of this section. Where an outside consultant is not hired, Port personnel will serve as this Consultant. References to the Consultant herein shall include the outside Consultant or Port personnel.
- B. The Consultant will act as the Engineer's liaison in technical matters involving the fugitive dust and silica-related work.
- C. The Consultant is authorized by the Engineer to have free access to Work Areas where silica and fugitive dust may be generated, to assist in interpretation of procedures, and to advise on all provisions of the Contract Documents pertaining to the control of dust.
- D. The Consultant will advise the Engineer to stop work if in the course of performing their monitoring duties, they observe an instance of substantial nonconformance with the Contract Documents and/or a situation presenting a nuisance to the public or a health hazard to workers, Port employees, or the public. Work shall not resume until corrective measures have been enforced. Instances of substantial non-conformance shall include but not be limited to the following:
 - 1. Visible dust emissions outside of the Work Area barriers.
 - 2. Loss of negative pressurization (if required).
 - 3. Activities or misconduct affecting worker safety.
- E. If poor work practices are observed, the Consultant/Port shall direct the Contractor to make the necessary corrections. If appropriate corrections are not made, or if an immediate threat that silica dust could be released outside the Work Area exists, work shall be stopped. The decision to stop work shall be made by the Engineer.
- F. The Consultant may perform air sampling inside and outside the Work Area during the Project. The Contractor shall cooperate fully with the Consultant and ensure

- the cooperation of his workers during collection of air samples and Work Area inspections.
- G. The Consultant's role in advising the port on environmental health matters does not relieve the Contractor's obligation to comply with all applicable health and safety regulations promulgated by the federal, state, or local governments. Air monitoring results generated by the Consultant shall not be used by the Contractor to represent compliance with regulatory agency requirements for monitoring of workers exposure to airborne silica, nor shall any other activity on the part of the Consultant represent the Contractor's compliance with applicable health and safety regulations.

3.03 WORK AREA ISOLATION AND CLEANUP

- A. The Contractor shall continuously endeavor to eliminate the release of fugitive dust and silica.
- B. The Work Areas will be considered clean when all visible dust and debris has been removed.

3.04 RECORD KEEPING

- A. The Contractor shall maintain, for at least 30 years, a record of the Project. Furnish one copy to the Engineer in an electronic format as part of the post-construction closeout submittals. The record shall include the following information:
 - 1. The starting and completion dates of the project;
 - 2. A copy of all analytical results;
 - 3. Copies of negative pressure documentation records (as required);
 - 4. The name and address of the analytical laboratory used for silica analyses; and
 - 5. The name, address, and social security number (last 4 digits only) of all persons who were engaged in activities that may generate airborne silica or fugitive dust.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

A. No separate measurement or payment will be made for the Work required by this section. The cost for this portion of the Work will be considered incidental to, and included in the payments made for the applicable bid items in the Schedule of Unit Prices bid for the Project.

Division 31

Earthwork

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. All Clearing, Grubbing, and Cleanup Work will be completed during site preparation.
- B. The extent and location of the Clearing, Grubbing, and Cleanup Work is indicated on the Drawings. The Work is to be accomplished by removing and disposing of all trees, brush, down timber, stumps, roots, rubbish and debris, except such objects as are designated to remain or are to be removed in accordance with other sections of these Specifications. The Work also includes noxious weed removal, preservation from damage or defacement of trees, bushes, shrubs, or other objects designated to remain as indicated on the Drawings.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. King County burning regulations
- B. Washington State and King County Noxious Weed Control Board Regulatory Guidelines

1.03 SUBMITTALS

- A. Submit to the Engineer for approval the name and location of the proposed disposal locations for materials removed during Site Clearing and Grubbing. Disposal shall be in accordance with Section 01 74 19 Construction Waste Management and Disposal and Section 02 61 13 Handling and Disposal of Contaminated Soil.
- B. Submit copies of trip tickets and receiver tickets for all material transported to approved landfills and recyclers daily.

PART 2 MATERIALS NOT USED

PART 3 EXECUTION

3.01 PROJECT INFORMATION

A. Job Conditions

- 1. Clearing and grubbing activities will occur at the LLA Parcel, the DMCA, Shallow Standing Water Area, and the LL Parcel.
- 2. In place concrete and other surface structures to be demolished, as identified on the Drawings, shall be removed and disposed of in accordance with Section 02 41 13 Site Demolition.
- 3. Shrubs, trees, and other non-invasive vegetation that are cleared and grubbed may be disposed as compost provided it has been segregated from any soil.
- 4. Noxious weed and invasive species shall be removed and disposed off-site at the approved landfills in accordance with Section 01 74 19 Construction Waste Management and Disposal.
- Root Disposal. Root masses and any other material which has soil attached must be disposed at a licensed Subtitle D landfill as Subtitle D Contaminated Material as discussed in Section 02 61 13 – Handling and Disposal of Contaminated Soil.

6. The duff layer and other surface solid waste that is removed must be disposed at a licensed Subtitle D landfill as Subtitle D Contaminated Material as discussed in Section 02 61 13 – Handling and Disposal of Contaminated Soil.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Prior to start of Clearing, Grubbing, and Cleanup Work, the Contractor shall install all TESC and Site security measures as indicated by the Drawings and Specifications. The Contractor shall also establish on-site haul routes and stockpile locations for the stockpiling and disposal of cleared vegetation and Subtitle D Contaminated Material.
- B. The limits of Clearing, Grubbing, and Cleanup Work shall be marked, and natural vegetation and native topsoil outside the Work extents shall be retained in an undisturbed state. The Contractor shall be responsible for the replacement and repair of disturbed vegetation and topsoil outside the Work extents at the Contractor's sole cost.

3.03 EXECUTION OF WORK

A. Clearing

- 1. Within the limits shown on the Drawings and to the satisfaction of the Engineer, all trees, brush, logs, upturned stumps, roots of downed trees, rubbish, and debris shall be removed and disposed of legally off-site.
 - a. Fell all trees within the area to be cleared.
 - b. Completely remove shrubs and other vegetation.
- Cut trees as close as possible to ground surface, and do not disturb soil or remove roots during vegetation clearing. Root masses entrained with Contaminated Soil must be disposed of with excavated soil.

B. Grubbing

- Perform grubbing where indicated on the Drawings. Remove from the ground all stumps, roots, buried logs and other vegetation of a decomposable nature. Stumps and roots within the Temporary Construction Lake Access Road footprint may remain in place except where necessary for temporary road construction.
- Within the limits of grubbing, grubbing shall be to the depth necessary to remove all stumps, large roots, buried logs and other objectionable material. All stumps within the limits identified on the Drawings shall be completely removed by digging out the stump.
- 3. Remove dirt from the grubbed material to the maximum extent possible and to the satisfaction of the Engineer.
- 4. Dispose of the refuse resulting from the grubbing operations legally off-site. Grubbed material removed from the site shall be disposed at a licensed Subtitle D landfill as Subtitle D Contaminated Material as specified in Section 02 61 13 Handling and Disposal of Contaminated Soil.

C. Noxious Weed Removal

- During Season 1, Perform weed removal activities within Shallow Standing Water Area south of the Wetland Rehabilitation Area.
 - Method: Remove by manual methods, including mowing, weed whacking, hand pulling, or other Best Management Practice approved by Washington State and King County Noxious Weed Control Board, and/or application of post-emergent herbicides in accordance with Section 32 90 00 – Planting.
 - b. Targeted species: Cattail (Typha spp.), Reed Canarygrass (Phalaris arundinacea).
 - (1) Cattail: Between May 15th and July 15th, cut or crush cattail stems and all other vegetative parts to below ponding water level, sufficient to drown new shoots or leafy matter. Remove and dispose of all cattail trimmings off-site.
 - (2) Reed Canarygrass: Mow grass to ground level and apply pre-approved herbicide at application rate, frequency, and timing in accordance with Section 32 90 00 – Planting. Grass trimmings shall be removed and disposed off-site.

D. Cleanup

- Cleanup includes removal of the duff layer over the LLA parcel in areas outside the excavation extents shown in the Drawings, the entire DMCA where not currently covered with gravel, and portions of the LL Parcel where identified on the Drawings. Reference Document 9 includes site photographs of areas requiring cleanup.
 - a. Remove the duff layer consisting of leaves, compost, black non-structural surface soil, small wood pieces, pine needles, and other plant matter.
 - b. Remove plastic sheeting and debris from all areas where it exists.
 - c. Remove all trash and solid waste.
- 2. Sufficiently in advance of completion of other Work of the Project, allowing time to do cleanup, the Contractor and the Engineer shall arrange for a joint inspection of the Project for determination of cleanup to be done. Accomplish the Work by methods and equipment as necessary and as approved by the Engineer.
- 3. Dispose of the excess material and debris resulting from the operation.

E. Disposal

- 1. All materials identified within this section, upon their removal, shall be promptly disposed of away from the site and on property not owned by the Port of Seattle unless otherwise provided herein. No material shall be disposed of in adjoining waterways or in the fill. Burning of materials in these areas falls under the jurisdiction of the King County regulations and is forbidden under all circumstances.
- 2. Vegetation, except for targeted noxious weeds and invasive species, may be recycled or composted at a facility approved by the Port, if segregated

- from soil. Subsurface vegetation that has contacted or contains soil such as root masses must be disposed as Subtitle D Contaminated Material.
- 3. All vegetative parts of targeted noxious weeds and invasive species shall be disposed off-site in accordance with Section 01 74 19 Construction Waste Management and Disposal.
- 4. All disposal shall be in accordance with Section 01 74 19 Construction Waste Management and Disposal and Section 02 61 13 Handling and Disposal of Contaminated Soil.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. No separate measurement will be made for the Work required by this section.

4.02 PAYMENT

- A. Payment for clearing, grubbing, and disposal of generated material from the LLA Parcel Excavation Areas 1 through 4 and Common Excavation area will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Demolition" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of all trees, brush, down timber, stumps, roots, rubbish and debris, except such objects designated to remain from the LLA Parcel as detailed on the Drawings and specified herein through the duration of the Contract.
- B. Payment for removal and disposal of the 12-inch duff layer from the Common Excavation area of the LLA Parcel will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal and Backfill" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of 12-inches of duff layer from the LLA Parcel that is unsuitable for reuse onsite as backfill as detailed on the Drawings and specified herein through the duration of the Contract.
- C. Payment for clearing, grubbing, and disposal of generated material from Excavation Areas 5 and 6 will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of all trees, brush, down timber, stumps, roots, rubbish and debris, except such objects designated to remain from the Excavation Areas 5 and 6 as detailed on the Drawings and specified herein through the duration of the Contract.
- D. Payment for clearing, grubbing, and disposal of generated material from the LL Parcel Temporary Construction Lake Access Road will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Temporary Construction Lake Access Road" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of all trees, brush, down timber, rubbish and debris, except such objects designated to remain from the area as detailed on the Drawings and specified herein through the duration of the Contract.
- E. Payment for clearing, grubbing, and disposal of generated material from the DMCA will be included in the contract lump sum price as stated in the Schedule of

Unit Prices for applicable bid item "DMCA Clearing, Grading and Surfacing" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of all trees, brush, down timber, stumps, roots, rubbish and debris, except such objects designated to remain from the DMCA as detailed on the Drawings and specified herein through the duration of the Contract.

F. Payment for removal of noxious weeds and invasive species from the shallow standing water area of the LL Parcel will be included in the contract lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Lake Water Management and Creek Protection" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to remove and dispose of noxious weeds and invasive species as detailed on the Drawings and specified herein through the duration of the Contract.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section applies to grading and surfacing at the LLA Property, and the DMCA. Grading and surfacing at the LL Parcel is addressed by Section 35 23 43 Sediment Capping and Lake Filling and Section 32 72 00 Wetlands Rehabilitation.
- B. Excavation, dewatering, backfill, and compaction are covered by Section 31 23 00 Excavation, Section 31 23 19 Excavation Dewatering, and Section 31 23 23 Backfill and Compaction.
- C. Clearing and Grubbing is addressed by Section 31 11 00 Clearing, Grubbing, and Cleanup.
- D. Topsoiling is addressed by Section 31 22 19.13 Topsoil Placement.
- E. Porous Hot Mix Asphalt for the Porous Pavement Wildlife Barrier at the DMCA is addressed by Section 32 12 16.17 Porous Hot Mix Asphalt.
- F. Hydroseeding is addressed by Section 32 92 19 Seeding. Planting of the biofiltration swales at the LLA Parcel, and the planted filter strip at the DMCA is addressed by Section 32 90 00 Planting.
- G. Work addressed by this section includes the following:
 - 1. Finish grading at the LLA Parcel, including preparation for topsoiling, hydroseeding and planting of biofiltration swales.
 - 2. Temporary Access Road construction at the LLA Parcel.
 - 3. Interim stabilization at the DMCA for construction staging and stockpiling, construction sequence at the DMCA.
 - 4. Finish grading at the DMCA, including preparation for topsoiling and planting of the planted filter strip, and preparation for installation of wildlife barriers.
 - 5. Installation of the Ecology Block Wall, Crushed Rock Wildlife Barrier, and the base layers for the Porous Pavement Wildlife Barrier at the DMCA.

1.02 SUBMITTALS

A. The Contractor shall provide material cut sheets for the Engineer's review and approval, for all materials specified in Part 2.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

A. General

1. Materials shall be of the quality, size, shape, gradation or equal to that manufacture as specified herein.

B. Crushed Rock

 Crushed Rock used for LLA Parcel Temporary Access Road, DMCA Crushed Rock Wildlife Barrier, and Permeable Ballast for DMCA Porous Pavement Wildlife Barrier shall all be the same material, as specified here.

- Crushed Rock shall meet the requirements of WSDOT 2016 Standard Specifications 9-03.9(2) Permeable Ballast.
- 2. Material shall consist of crushed, partially crushed or naturally occurring granular material. Crushed Rock Material shall be clean, free-draining rock. Individual particles shall be free from all objectionable coating. The material shall contain no organic matter or fines in quantities considered objectionable by the Engineer. The material from which crushed rock is to be manufactured shall meet the following test requirements:
 - a. Los Angeles Wear, 500 Rev 40 percent max.
 - b. Degradation Factor 15 min.
- 3. The fracture requirement shall be at least one fractured face and will apply to the combined aggregate retained on the No. 4 sieve in accordance with FOP for AASHTO T 335. The material shall be graded between the limits specified below:

SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
2 ½ inch	99-100
2 inch	65-100
3/4 inch	40-80
U.S. No. 4	5 max.
U.S. No. 100	0-2
% Fracture	75 min.

All percentages are by weight.

- C. Non-Woven Geotextile
 - 1. Geotextile fabric shall be 8 oz./s.y. non-woven needle punched polypropylene with the following minimum average roll values:

Property	ASTM Method	Units	Min. Avg. Roll Value
Grab Tensile	D4632	lbs	205
Grab Elongation	D4632	%	50
Puncture Strength	D4833	lbs	130
Trapezoidal Tear	D4533	lbs	85
Mullen Burst	D3786	psi	400
Apparent Opening Size	D4751	US Sieve	80
Water Flow Rate	D4491	gpm/sf	90
Permittivity	D4491	sec-1	1.40
Permeability	D4491	cm/sec	0.38
UV Resistance (500 hrs)		% retained	70

D. Sand

1. Sand shall be medium sand meeting the following gradation:

U.S. SIEVE NUMBER	PERCENT PASSING (BY WEIGHT)
4	95-100
8	70-100
16	40-90
30	25-75
50	2-25
100	<4
200	<2

All percentages are by weight.

E. Ecology Blocks

 Ecology blocks shall be standard pre-cast concrete blocks constructed from waste concrete, with dimensions of 2 feet by 2 feet by 6 feet, cast with a 3-inch radius tongue and groove for interlocking stability, with a rebar picking eye located in the spacing between the tongues in the top of each block. Ecology blocks currently stored by the Port at the DMCA may be utilized.

2.02 MATERIAL HANDLING, DELIVERY, & STORAGE

- A. All materials must be handled and stored to prevent degradation.
 - 1. Geotextile shall be stored in a clean, dry location, without direct exposure to sunlight.
 - 2. Crushed rock and sand must be stored and handled in a manner to prevent mixing with DMCA soil, organic matter or any other foreign material.

PART 3 EXECUTION

3.01 EXECUTION OF WORK

A. Grading And Leveling

- In areas where the final surface consists of crushed rock, or wildlife barriers, the finished profiles of underlying soil shall be graded within a tolerance of 0.05 foot plus or minus in 10 feet, ready for placement of the surfacing materials. Areas to be seeded or vegetated (the LLA Property, back slopes, fill slopes, landscape areas, swales and planted filter strip) shall be graded to a smooth and uniform appearance in accordance with the grades indicated on the Drawings.
- B. Preparation For Topsoiling or other Surfacing
 - Preparation of Subgrade: Immediately prior to placement of topsoil or other surfacing materials, clean the entire width of the area to be surfaced of all debris and dispose of as directed by the Engineer. All depressions or ruts which contain storm water shall be drained.

2. Shape the entire subgrade to a smooth uniform surface, true to line, grade, and cross section. Following placement and compaction of backfill per Section 31 23 23 – Backfill and Compaction, Compact the subgrade to 12 inches below the surface to the compaction values as follows:

SITE AREA	SUBGRADE COMPACTION
LLA – Vegetated Areas	90-92% max.
LLA – Access Roads	95% min.
DMCA - All Areas	90-92% max.

Compaction is percentage of the maximum density as determined by compaction tests ASTM Designation D1557.

- 3. Remove and dispose of excess material which cannot be disposed of by normal drifting to low spots during blading and shaping operations or by placing in subgrade areas deficient in materials or by wasting, all as directed by the Engineer. Subgrade areas deficient in materials shall be brought to grade by importing suitable materials from other subgrade areas or other sources as directed by the Engineer. Materials added to subgrade areas deficient in materials shall be watered and compacted as necessary to yield a true finished subgrade as described above.
- 4. Once it is prepared, maintain the subgrade for surfacing in the finished condition until topsoiling or the first course of other surfacing has been placed.
- 5. Finishing Subgrades: Before any topsoil or other surfacing material is placed, the subgrade shall be brought to the proper line, grade, and cross section and shall be so maintained until the topsoil or other surfacing materials are placed.
- 6. Subgrade Protection: Take all precautions necessary to protect the subgrade from damage; hauling over the finished subgrade shall be limited to that which is essential for construction purposes. Equipment used for hauling over the prepared subgrade which, in the opinion of the Engineer, is causing undue damage to the prepared subgrade or to the underlying materials, shall be removed from the Work at the request of the Engineer. Repair at the Contractor's expense all cuts, ruts and breaks in the surface of the subgrade prior to placing surfacing, treated base, or paving materials. Protect the prepared subgrade from traffic and maintain the subgrade by blading and rolling as frequently as may be necessary to preserve the subgrade in a completely satisfactory condition.
- 7. Where approved compacted subgrades are disturbed by the Contractor's subsequent operations or adverse weather, scarify the subgrades and compact to the required density prior to further construction thereon.
- 8. Maintain the surface until topsoil or final surfacing materials are installed and hydroseeding is conducted. As surface is maintained, wet subgrade as necessary for dust control.
- 9. No measurement or payment will be made for the Work involved in protection of subgrade.

- C. LLA Property Crushed Rock Temporary Access Road Surfacing
 - As shown on the Drawings, a crushed rock Temporary Access Road shall be constructed on the LLA Property. The road surface shall consist of 6-inch minimum thickness of crushed rock.
 - 2. Surface grades of the access road shall be flush with the surrounding topsoiled and hydroseeded surface, such that the access road does not impede surface runoff.
- D. DMCA Construction Sequence, Interim Stabilization for Construction Staging
 - 1. Following installation of TESC, installation of protection for runway lighting foundations, and decommissioning of monitoring well, the Contractor shall clear and grub the vegetated areas within the DMCA that is to be used by the Contractor for imported soil stockpiling, staging and access. The cleared and grubbed area will be rough graded to produce a suitable working surface, and a 9-inch-thick (minimum) layer of crushed rock shall be placed as a temporary working surface for construction staging. During use of the area for construction staging, the Contractor shall maintain the crushed rock surface to prevent DMCA soils from contacting imported material or being tracked from the area. The existing gravel surfaced areas of the DMCA can be used for construction staging in their current condition, during both Season 1 and Season 2 of construction as required.
 - 2. Following completion of use of the DMCA by the Contractor for imported soil stockpile and handling, Contractor shall clear and grub the remaining areas of the DMCA, grade to final subgrade elevations, and install Ecology Block Wall, Porous Pavement Wildlife Barrier, Crushed Rock Wildlife Barrier, and Planted Filter Strip.
 - 3. After Porous Pavement Wildlife Barrier is installed, use of the DMCA for Contractor stockpiling and handling of soils will not be allowed
- E. DMCA Ecology Block Wall
 - 1. An Ecology Block Wall shall be installed where shown on the Drawings. A 6-inch-thick layer of crushed rock, compacted to 95% maximum density will be placed and smoothly graded below the wall alignment, to extend 1-foot laterally on both sides of the wall. The wall will be 1-block high, with blocks tightly butted against one another. Ecology blocks stockpiled on-site by the Port may be used for construction.
- F. DMCA Crushed Rock Wildlife Barrier
 - 1. The hillside area west of the Ecology Block Wall shall be cleared, grubbed, and rough graded to subgrade elevations.
 - 2. Following preparation of subgrade, install the Crushed Rock Wildlife Barrier in accordance with construction details and to the limits shown on the Drawings. Wildlife barrier construction includes placement of a non-woven geotextile above all finished subgrade surfaces, followed by placement of 12-inch thick section of compacted crushed rock. The geotextile shall be anchored at the wildlife barrier perimeter with construction of an anchor trench as detailed. Geotextile shall be anchored behind the Ecology Block Wall as well, to prevent surface exposure or unravelling of the geotextile.

- The Contractor shall phase installation of the wildlife barrier in a manner to minimize damage to underlying subgrade and the geotextile.
- Geotextile shall be placed in continuous sections, without gaps or significant folds. Adjacent sections of geotextile shall be overlapped with a minimum 1-foot overlap. Geotextile shall be secured in place with landscape staples, at a frequency to securely maintain position prior to and during placement of overlying crushed rock.
- 4. At the perimeter limits of the wildlife barrier, the geotextile shall be secured within an anchor trench as detailed. Geotextile shall not be visible in any location when wildlife barrier construction is complete.
- 5. A 12-inch minimum thickness of crushed rock (15-inch thick max.) shall be placed above the geotextile. The crushed rock surface shall be roller compacted to a smooth uniform surface, true to line, grade, and cross section.

G. DMCA Porous Pavement Wildlife Barrier

- 1. Following preparation of subgrade at the DMCA, install the Porous Pavement Wildlife Barrier in accordance with construction details and to the limits shown on the Drawings. Wildlife barrier construction includes placement of a 12-inch thick layer of sand (15-inch thick max.), followed by placement of a non-woven geotextile, a 6-inch-thick section (8-inch-thick section max.) of compacted crushed rock, and 6-inches of porous hot mix asphalt placed in two lifts in accordance with Section 32 12 16.17 Porous Hot Mix Asphalt.
- 2. Wildlife Barrier materials shall be placed and construction completed in a manner that maintains compaction of the subgrade at 90-92% maximum density as defined above for subgrade preparation, and maintains smooth subgrade conditions, without rutting.
- 3. The geotextile shall be anchored at the wildlife barrier perimeter with construction of an anchor trench as detailed. The Contractor shall phase installation of the wildlife barrier in a manner to minimize damage to underlying subgrade and the geotextile.
- 4. Geotextile shall be placed in continuous sections, without gaps or significant folds. Adjacent sections of geotextile shall be overlapped with a minimum 1-foot overlap. Geotextile shall be secured in place with landscape staples, at a frequency to securely maintain position prior to and during placement of overlying crushed rock and porous pavement.
- 5. At the perimeter limits of the wildlife barrier, the geotextile shall be secured within an anchor trench as detailed. Geotextile shall not be visible in any location when wildlife barrier construction is complete.
- 6. Compacted crushed rock shall be placed above the geotextile, as pavement base course. The crushed rock surface shall be roller compacted to a smooth uniform surface, true to line, grade, and cross section, prior to placement of pavement.
- 7. Porous hot mix asphalt should be placed in accordance with Section 32 12 16.17 Porous Hot Mix Asphalt.

- H. DMCA Planted Filter Strip
 - 1. Prepare DMCA Planted Filter Strip subgrade prior to topsoiling.
 - 2. Topsoil and plant as detailed, and as described in Section 31 22 19.13 Topsoil Placement, and Section 32 90 00 Planting.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. "DMCA Clearing, Grading and Surfacing" and "LLA Grading and Surfacing" will not be separately measured.

4.02 PAYMENT

- A. Payment for "DMCA Clearing, Grading and Surfacing" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials and tools to implement interim stabilization for construction staging and stockpiling, grading and leveling, preparation for topsoiling or other surfacing such as the planted filter strip, and installation of the ecology block wall, crushed rock and porous pavement wildlife barriers, and other measures at the DMCA as required as detailed on the Drawings or directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for "LLA Grading and Surfacing" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials and tools to develop and implement grading and leveling, preparation for topsoiling or other surfacing, crushed rock Temporary Access Road surfacing, and other measures at the LLA Parcel as required as detailed on the Drawings or directed by the Engineer and specified herein through the duration of the Contract.

End of Section		

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section provides the requirements for topsoil placement. The extent and location of Work is indicated on the Drawings.
- B. Work addressed in this section includes the following:
 - 1. LLA Parcel: Final Graded Surfaces Season 1 or Season 2
 - 2. LLA Parcel: Bioswale Season 1 or Season 2
 - 3. LL Parcel: Excavation Areas 5 and 6 Season 1
 - 4. LL Parcel: Wetland Rehabilitation Area Season 2
 - DMCA: Planted Filter Strip Season 2
 - 6. LL Parcel: Temporary Construction Lake Access Road Season 2
- C. For Biodegradable Erosion Control Fabric refer to Section 32 72 00 Wetlands Rehabilitation
- D. For seeding refer to Section 32 92 19 Seeding
- E. For planting refer Section 32 90 00 Planting

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. American Society of Testing Materials (ASTM) Methods
 - ASTM C136 (2006) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
 - 2. ASTM D422 (2007) Standard Test Method for Particle-Size Analysis of Soils
 - 3. ASTM D5268 Test for organic content
- B. U.S. Environmental Protection Agency (EPA) Publication SW846 Test Method for Sieve Analysis for Evaluating Solid Waste, Physical/Chemical Methods
 - 1. Polychlorinated Dibenzodioxins and Polychlorinated Dibenzonfurans (Dioxins/furans) per EPA SW846, Method 1613B
 - Model Toxic Control Act (MTCA) Metals including Arsenic, Cadmium, Chromium, and Lead per EPA SW846, Method 6010 and Mercury per EPA SW846, Method 7471
 - Pentachlorophenol per EPA SW846, Method 8041
 - Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) per EPA SW846, Method 8270D
 - 5. Ethylbenzene and Toluene per EPA SW846, Method 8260C.
- C. Additional Physical/Chemical Methods
 - Total Petroleum Hydrocarbons Gasoline Range per NWTPH-G
 - Total Petroleum Hydrocarbons Heavy Oil Range and Diesel Range per NWTPH-Dx
- D. Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction
 - 1. WSDOT Standard Specifications 2016 Section 9-14.1(1)
- E. City of SeaTac Clearing and Grubbing Code Chapter 13.190

1.03 SUBMITTALS

- A. Submit materials data in accordance with Section 01 33 00 Submittals. Furnish laboratory analysis of soil texture, percent organic matter, cation exchange capacity and pH.
- B. The Contractor shall identify the source and submit sample results for materials proposed for use as topsoil. The Contractor shall test a 5-gallon sample of proposed topsoil material at least 28 days prior to use on-site. The Contractor shall submit a gradation of proposed topsoil material.
- C. Submit laboratory chemical analysis results for all imported materials in accordance with Section 01 33 00 Submittals. Separate analytical results are required for each source of material.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

A. Topsoil

- 1. Topsoil shall be a mix of naturally-occurring sandy loam soil and composted yard waste. Organic matter shall be a maximum of 10% and a minimum of 5% with a pH of between 3.5 and 6.5. Topsoil shall comply with City of SeaTac Clearing and Grubbing Code Chapter 13.190. Cedar Grove 3 way topsoil may be acceptable, depending on test results.
- Chemical Criteria for topsoil: All topsoil must comply with site cleanup levels. The Contractor shall provide laboratory documentation of compliance for all topsoil material sources. Imported topsoil must comply with the following chemical criteria for use at the LLA Parcel and DMCA:

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Gasoline-Range Hydrocarbons	100	NWTPH-Gx
Sum of Diesel- and Heavy Oil- Range Hydrocarbons	2,000	NWTPH-Dx
Toluene	6,400	USEPA Method 8260C
Ethylbenzene	8,000	USEPA Method 8260C
Lead	250	USEPA Method 6010
Arsenic	20	USEPA Method 6010
Cadmium	2	USEPA Method 6010
Chromium	2,000	USEPA Method 6010
Mercury	2	USEPA Method 1631
Pentachlorophenol	2.5	USEPA Method 8041
сРАН	0.137	USEPA Method 8270D
Dioxins/Furans	1.3x10-5	USEPA Method 1613B

Topsoil must comply with the following chemical criteria for use at the LL Parcel:

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Gasoline-Range Hydrocarbons	100	NWTPH-Gx
Sum of Diesel- and Heavy Oil-Range Hydrocarbons	200	NWTPH-Dx
Toluene	6,400	USEPA Method 8260C
Ethylbenzene	8,000	USEPA Method 8260C
Lead	50	USEPA Method 6010
Arsenic	20	USEPA Method 6010
Cadmium	4	USEPA Method 6010
Chromium	42	USEPA Method 6010
Mercury	0.1	USEPA Method 1631
Pentachlorophenol	2.5	USEPA Method 8041
сРАН	0.137	USEPA Method 8270D
Dioxins/Furans	5.2x10-6	USEPA Method 1613B

2.02 MATERIAL HANDLING, DELIVERY, & STORAGE

A. Topsoil for use at the LL Parcel and DMCA locations may be stockpiled on the DMCA Stockpile Area as shown on the Drawings or delivered directly to the lakeshore at the Contractor's option.

2.03 QUALITY ASSURANCE

- A. The Contractor shall submit analytical results for chemical testing for each material source, prior to the material coming on-site and before it is placed.
- B. Each tested sample should be composed of no less than five sub-samples taken throughout any one source. The Contractor shall ensure that the samples are representative of all materials to be imported.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

3.02 PREPARATION FOR THE EXECUTION OF WORK

- A. LL Parcel Wetland Rehabilitation Area
 - Complete placement and final grading of Sediment Cap and Lake Fill Material.
 - 2. Install Monitoring Wells.
 - 3. Topsoil shall not be placed until the Engineer has approved the subgrade.
 - 4. The Contractor shall provide topographic survey of Lake Fill surface at 0.5 foot interval contour resolution for Engineer approval before placing topsoil.
- B. LLA Parcel, DMCA Planting Filter Strip, Temporary Construction Lake Access Road, and Upland Excavation Areas 5 & 6
 - Complete backfill, compaction and final grading of subgrade as defined in Section 31 23 23 – Backfill and Compaction and Section 31 22 13 – Grading and Surfacing.

3.03 EXECUTION OF WORK

- A. Topsoil LL Parcel Wetland Rehabilitation Area
 - 1. Topsoil shall be placed and compacted to achieve design grades as shown on the Drawings.
 - Placing topsoil shall be done in a manner that does not disturb the subgrade soils. Particular care shall be taken to avoid rutting when working near the edges of the fill area (within 15 feet of the edge of fill) so as not to disturb or expose the underlying contaminated sediments. Suggested protective measures include minimizing traffic across these areas, use of low ground pressure equipment, and placement of work mats on haul routes across the lake fill surface.
 - 3. Topsoil placement shall not be done when the subgrade or topsoil is frozen, excessively wet or otherwise in a condition that is detrimental to the Work.
 - 4. Topsoil shall be placed in two even lifts and compacted in between placements.
 - 5. Compaction. Following placement, the topsoil shall be compacted to a firm condition by tracking with low ground pressure excavator, bulldozer, or similar tracked equipment or other means approved by the Engineer. Compaction shall be generally firm, but overcompaction shall be avoided, Topsoil compaction and surface condition shall be completed to generally facilitate Seeding and Planting.
 - 6. The Contractor shall complete and submit to the Engineer topographic survey of the Wetland Rehabilitation Area at 0.5' contour interval resolution after topsoil placement to determine in-place volume of topsoil.
 - 7. Seed as specified in sections referred to in 1.01 Summary of Work, above.
 - 8. Install Biodegradable Erosion Control Fabric over seeded surface as specified in sections referred to in 1.01 Summary of Work, above.
 - 9. Plant as specified in sections referred to in 1.01 Summary of Work, above.

B. Topsoil – LLA Parcel Bioswale

- 1. Placing topsoil shall be done in a manner that does not disturb the subgrade soils. Placing shall not be done when the subgrade or topsoil is frozen, excessively wet or otherwise in a condition that is detrimental to the Work. Topsoil shall be placed to a uniform, compacted depth of 12 inches.
- Compaction. Following placement, the topsoil shall be compacted to a firm condition by tracking with low ground pressure excavator, bulldozer, or similar tracked equipment or other means approved by the Engineer. Compaction shall be generally firm, but over-compaction shall be avoided, Topsoil compaction and surface condition shall be completed to generally facilitate seeding.
- Install Biodegradable Erosion Control Fabric as specified in the sections referred to in 1.01 Summary of Work, above, before Seeding. Biodegradable Erosion Control Fabric extents are shown on Drawings.
- 4. Seed as specified in sections referred to in 1.01 Summary of Work, above.
- C. Topsoil –LLA Parcel, DMCA Planted Filter Strip, Temporary Construction Lake Access Road, and Upland Excavation Areas 5 & 6
 - Placing topsoil shall be done in a manner that does not disturb the subgrade soils. Placing shall not be done when the subgrade or topsoil is frozen, excessively wet or otherwise in a condition that is detrimental to the Work. Topsoil shall be placed to a uniform, compacted depth of 6 inches.
 - 2. Compaction. Following placement, the topsoil shall be compacted to a firm condition by tracking with low ground pressure excavator, bulldozer, or similar tracked equipment or other means approved by the Engineer. Compaction shall be generally firm, but over-compaction shall be avoided, Topsoil compaction and surface condition shall be completed to generally facilitate seeding and planting.
 - 3. For the LLA Parcel, install Biodegradable Erosion Control Fabric as specified in sections referred to in 1.01 Summary of Work, above, on all areas with greater than 20% slope before Seeding.
 - 4. Seed and Plant as specified in sections referred to in 1.01 Summary of Work, above.

3.04 DELIVERABLES

A. Topographic survey of Wetland Rehabilitation Area surface at 0.5' contour interval resolution before and after Topsoil placement.

3.05 QUALITY ASSURANCE

- A. The Contractor shall provide final surface elevations of the Wetland Rehabilitation Area prior to Planting or Seeding.
- B. All areas shall be inspected and approved by the Engineer prior to Planting or Seeding.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. "LL Topsoil Placement and Final Grading" shall be measured by cubic yard as furnished and measured by the supplier.

B. No separate measurement shall be made for topsoil placement at the LLA Parcel, LLA Parcel Bioswale, DMCA Planted Filter Strip, Temporary Construction Lake Access Road, and Upland Excavation Areas 5 & 6.

4.02 PAYMENT

- A. Payment for "LL Topsoil Placement and Final Grading" will be made at the contract unit price per cubic yard as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact topsoil at the LL Parcel Wetland Rehabilitation Area during Season 2 as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for topsoil placement at the LLA Parcel Final Grades Surfaces and LLA Bioswale during Season 1 or 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Grading and Surfacing" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact topsoil as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for topsoil placement at the DMCA Planted Filter Strip during Season 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Planted Filter Strip" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact topsoil as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- D. Payment for topsoil placement at the Temporary Construction Lake Access Road during Season 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Temporary Construction Lake Access Road" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact topsoil as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- E. Payment for topsoil placement at the Excavation Areas 5 and 6 during Season 1 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact topsoil as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section provides the requirements for soil excavation at the site. The extents and location of the areas to be excavated are indicated on the Drawings.
- B. The Work described herein is applicable to the LLA Parcel and Excavation Areas 5 and 6 located on the LL Parcel.
- C. All soil at the site shall be considered contaminated for purposes of handling and disposal. Specific definitions of soil that will be handled at the site are provided below.
- D. This project requires relatively deep excavation in a complex and tightly defined grid of required removals in order to remove Contaminated Soil identified during design, and as required by Consent Decree between the Port and Ecology (Appendix E). Either extensive shoring or substantial layback of slopes in addition to dewatering will be required to perform the excavation. Either method of excavation stabilization (or a combination of the methods), as well as a variety of dewatering schemes are possible and permissible. In deciding the approach to the Work the Contractor should consider the relative costs and efficiencies of each solution in the various parts of the excavation. Since all soil removed from Excavation Areas 1 through 6, or soil that has come in contact with or been mixed with soil from Excavation Areas 1 through 6 will be regarded as contaminated, it must be disposed of at a Subtitle D landfill, and the cost of such disposal must be considered in the Contractor's planning. See the geotechnical information provided in Reference Document 6.

1.02 SUBMITTALS

- A. Submit materials data in accordance with of Section 01 33 00 Submittals.
- B. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products, as applicable.
- C. Submit an Excavation Plan which at a minimum addresses:
 - 1. Work sequencing including specific means, methods, and equipment that will be used.
 - 2. Site access routes and on-site traffic flow patterns.
 - 3. Order of excavation by Excavation Area (1 through 6) and schedule.
 - 4. Approach for excavation stabilization (e.g. shoring, excavation sidewall laybacks or a combination of these methods) and specific locations where these methods will be employed. Include drawings showing the locations where each of these methods will be employed.
 - 5. Method and detail of dewatering systems to be installed in accordance with Section 31 23 19 Excavation Dewatering.
 - 6. Methods for minimizing mixing of soil located outside the neat line with soil from within the Excavation Areas.
 - 7. Methods and sequencing for backfilling.
 - 8. Methods and sequencing for Common Excavation and grading of soil outside the Excavation Areas to the final grade elevation.

- 9. Worker and public safety.
- Protection of the environment.
- 11. Methods for controlling fugitive dust during earth moving activities.
- 12. Methods and BMPs used for direct loading of Contaminated Soil from the Des Moines Memorial Drive right-of-ways.
- 13. Stockpiling and disposal procedures, stockpile locations, and loading areas in accordance with Section 02 61 13 Handling and Disposal of Contaminated Soil.
- 14. Disposal sites for approval by the Port and applicable environmental agencies, including permits and permissions as necessary.

1.03 DEFINITIONS

- A. **Common Excavation**: Excavation and/or scraping required as part of the Work at the LLA Parcel but conducted outside Excavation Areas 1 through 4.
- B. **Common Excavation Soil**: Common Excavation Soil is material excavated and/or scraped from the Common Excavation areas at the LLA Parcel outside of Excavation Areas 1 through 4 to be used as backfill, if suitable. For purposes of contaminated material handling and disposal (if required), Common Excavation Soil is considered contaminated, as it contains concentrations of site contaminants in excess of Department of Ecology cleanup standards.
- C. Contaminated Soil: For purposes of excavation and work described in this section, Contaminated Soil refers to the soil excavated from within Excavation Areas 1 through 6, or soil that has come in contact with soil from within Excavation Areas 1 through 6. All Contaminated Soil must be disposed as Subtitle D Contaminated Material.
- D. **Soil Excavation Area**: Refers to Excavation Areas 1 through 6 as defined on the Drawings.
- E. **Subtitle D Contaminated Material**: Soil that must be removed from the Project site and has been determined in these Specifications and/or Drawings to contain contamination in concentrations exceeding state or federal cleanup standards. Subtitle D Contaminated Material requires handling and disposal at a permitted Subtitle D landfill as described in Section 02 61 13 Handling and Disposal of Contaminated Soil.
- F. **Unsuitable Excavation**: Excavation of unsuitable materials such as leaf matter, organics, peat, muck, water-impregnated clays, swampy or other undesirable materials, including buried logs, stumps, or trash. Unsuitable Excavation only applies to the Common Excavation areas. Unsuitable Material excavated within Excavation Areas 1 through 6 is Contaminated Soil.
- G. **Unsuitable Material**: Excavated material from the Project Work Areas shown on the Drawings that is determined to be geotechnically or otherwise unsuitable and cannot be reused on-site as backfill. All Unsuitable Material must be disposed as Subtitle D Contaminated Material.

PART 2 MATERIALS NOT USED

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. The site groundwater table varies as shown on the Drawings and is expected to be encountered during portions of the Work. Refer to Section 31 23 19 Excavation Dewatering for requirements for dewatering.
- B. Soil excavated from Excavation Areas 1-6 as a part of this project, and material that has come in contact with or been mixed with soil from Excavation Areas 1-6, is considered Contaminated Soil. Migration of Contaminated Soil is prohibited as described in Section 01 57 13 Temporary Erosion and Sediment Control.
- C. Soil within the Excavation Areas as defined in the Drawings is to be disposed off-site in accordance with Section 02 61 13 Handling and Disposal of Contaminated Soil. Soil that is excavated or scraped from within the LLA Parcel boundary as part of the regrading Work is prohibited from leaving the LLA Parcel boundary unless it is determined to be Unsuitable Material, and is transported off-site for Subtitle D landfill disposal. No soil from the LLA Parcel can be stockpiled or used for backfilling or regrading at the LL Parcel, DMCA or Staging Area located south of the LLA Parcel.
- D. Tools, equipment, and heavy machinery that contact Contaminated Soil must be decontaminated before they contact Common Excavation Material, imported fill, or are taken out of the active Work Area.
- E. See Section 02 32 13 Subsurface Exploration for subsurface considerations.
- F. Workers in direct contact with Contaminated Soil and groundwater may require specific health and safety training, personal protective equipment, or other means to ensure their health and safety. Worker health and safety is the responsibility of the Contractor, and shall be in accordance with Section 01 35 43 Environmental Regulatory Requirements and Section 01 35 29 Safety Management.
- G. Final survey to document excavation compliance with design will be conducted by the Port.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Existing Utilities: The Contractor shall call 811 and use a private utility survey to locate existing underground utilities in the area of the Work. Known utilities in the Excavation Areas are shown on the Drawings. Known previously abandoned utilities within the Excavation Areas are to be removed during excavation activities if encountered as specified in Section 02 41 13 Site Demolition. Those active utilities which are to remain shall be adequately protected from damage. The Contractor shall provide notice of the scheduled commencement of excavation to the Engineer and all owners of underground utilities in accordance with RCW 19.122. The Contractor shall notify the Engineer of any utilities located that were not shown on the Drawings.
- B. Overhead power lines exist along Des Moines Memorial Drive. The Contractor shall coordinate required clearances and approvals with the utility owners and municipalities for all excavation adjacent to the right-of-way.
- C. Before beginning excavation operations in any area, the area shall be completely cleared and grubbed in accordance with Section 31 11 00 Clearing, Grubbing, and Cleanup.

- D. Before beginning excavation operations in each area, the overlying pavement or other structures shall be removed in accordance with Section 02 41 13 – Site Demolition.
- E. The Contractor shall establish equipment and personnel decontamination facilities as defined in Section 01 57 23 Pollution Prevention, Planning and Execution.
- F. The Contractor shall deploy structural BMPs for erosion and sediment control and stormwater pollution prevention in accordance with Section 01 57 13 Temporary Erosion and Sediment Control and the SWPPP prior to the start of earth-disturbing activities.
- G. The Contractor shall establish Traffic Control per Section 01 55 26 –
 Traffic Control on Des Moines Memorial Drive prior to starting excavation activities in Excavation Areas 5 and 6. As needed based on the Contractors plan for excavation and material loading adjacent to right-of-ways, Contractor shall establish Traffic Control per Section 01 55 26 Traffic Control on Des Moines Memorial Drive prior to starting excavation activities in Excavation Areas 3 and 4 as shown in the Drawings.
- H. Before beginning excavation operations, the Contractor shall survey and mark excavation extents to the control points indicated on the Drawings. Control points shall be maintained throughout excavation activities until excavation extents have been approved by the Engineer, and confirmed by final Port survey in accordance with paragraph 3.03 D. of this section.

3.03 EXECUTION OF WORK

A. General

- Excavation shall be the naturally occurring earth, sand, gravel, clays, or mixtures of the above, required to be moved. Excavation material shall be moved with the use of hand and mechanical equipment, such as shovels, loaders, bulldozers, graders, rippers, etc., but shall not require drilling and blasting or drilling and line breaking. Excavation by sluicing method will not be permitted. In general, Common Excavation shall be removed in horizontal layers.
- Perform this Work at the LL Parcel, including access, excavation, backfill, access removal, and site restoration during Season 1. Perform this Work at the LLA Parcel including access, excavation, backfill, access removal and site restoration during Season 1 or Season 2, completing all work in a single season.
- 3. If the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily stopped and procedures described in the Inadvertent Discovery Plan (Reference Document 8) shall be followed. At the direction of the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. If this occurs it will be considered a changed condition and associated special excavation will be paid for as extra work.
- 4. Perform Work in a manner that minimizes generation of dust. Apply water as necessary to control dust generation during excavation.

5. Install wheel washes and other BMPs at the locations indicated on the Drawings to prevent trackout from the Work Area to the public right of way. At the direction of the Engineer, if any soil is tracked out from the Work Area, it must be cleaned up immediately at the cost of the Contractor.

B. Common Excavation and Scraping

- Common Excavation and scraping refers to the material that requires excavation to achieve the final grade at the LLA Parcel but is located outside the extent of the Excavation Areas (1 through 4) identified on the Drawings. This material should be removed with the use of mechanical equipment but can be excavated or scraped at the discretion of the Contractor.
- Soil from the Common Excavation areas may not be mixed, combined, or otherwise come in contact with Contaminated Soil. Any soil from Common Excavation areas that comes in contact with Contaminated Soil shall be considered Contaminated Soil. Any Common Excavation Soil that is mixed with Contaminated Soil must be disposed off-site as Subtitle D Contaminated Material in accordance with Section 02 61 13 – Handling and Disposal of Contaminated Soil.
- 3. Segregation and management of Common Excavation Soil stockpiles shall be included as a cost of excavation. All stockpiles should be managed in accordance with requirements for Contaminated Soil stockpiles. Management and disposal of Common Excavation Soil that becomes Contaminated Soil as a result of this soil coming into contact with or mixing with Contaminated Soil will be at the Contractor's sole expense and the Contractor shall be responsible for paying for all associated costs.
- Vertical and horizontal excavation limits shall be as indicated on the Drawings and as needed to achieve the final design grade, as determined by the Contractor. Any excavation in excess of that shown in the Drawings will be as directed by the Engineer, and will be measured and paid as Varying Conditions.
- 5. Common Excavation Soil stockpiled for use as backfill material shall be protected from contamination by other materials and from damage by weather by covering with waterproof sheeting or by other means as necessary. All costs involved in preserving and protecting excavated soil shall be included in the cost of the excavation.
- 6. Common Excavation Soil from the LLA Parcel shall not be used as backfill at the Staging Area, LL Parcel, or DMCA.
- 7. Maintenance of stockpiles will be conducted by the Contractor according to the requirements in Section 02 61 13 Handling and Disposal of Contaminated Soil.
- C. Unsuitable Excavation from Common Excavation Areas:
 - Asphalt surfacing and organic topsoil in landscaped areas is unsuitable for backfill.
 - 2. The project assumes 10% of material excavated from Common Excavation Areas will be geotechnically unsuitable for use as backfill. Unsuitable Material shall be segregated and stockpiled for management at the

- direction of the Engineer. "Unsuitable Excavation" only applies to the Common Excavation areas. Unsuitable Material excavated within Excavation Areas 1 through 6 is Contaminated Soil.
- 3. Potential Unsuitable Material encountered in Common Excavation Areas shall be removed to the depth designated by the Engineer. Designation of Unsuitable Material shall be made based on the nature of the material and at the direction of the Engineer. The Engineer may collect grain size data to aid in the designation of the soil.
- 4. Potential Unsuitable Material shall be stockpiled separately from Common Excavation Soil and Contaminated Soil. The Contractor shall allow the Engineer 5 business days for evaluation of this material once stockpiled. If this material is determined to be unsuitable, the material shall be handled as Contaminated Soil and disposed as Subtitle D Contaminated Material in accordance with the procedures in Section 02 61 13 Handling and Disposal of Contaminated Soil. Costs for stockpiling potentially unsuitable material that is determined to be suitable (Common Excavation Soil) following evaluation by the Engineer shall be incidental to the cost of excavation.
- 5. The Contractor shall not make a claim for additional compensation for the handling or disposal of Unsuitable Material excavated from the Common Excavation Areas that is mixed with Contaminated Soil.
- 6. Unsuitable Material excavated shall be replaced with Common Excavation Soil or Select Fill Material as described in Section 31 23 23 Backfill and Compaction and as needed to reach the final grades.

D. Contaminated Soil Excavation

- The horizontal extents of Excavation Areas 1 through 6 shall by laid out by licensed surveyor to the control points indicated on the Drawings, and control points shall be maintained throughout completion of the Work. The Contractor is responsible for contracting the licensed surveyor to do this work.
- Remove Contaminated Soil to the extent and elevations indicated on the Drawings. The method of excavation shall be determined by the Contractor. Excavation and disposal of soil beyond the limit of the neat line that mixes with Contaminated Soil should only be a result of the Contractor's means and methods and shall be included in the Contractor's Lump Sum Price for the Work.
- 3. The lateral and vertical excavation extent is based on existing data and does not require chemical confirmation. Chemical confirmation sampling by the Engineer is required only from excavation sidewalls adjacent to Des Moines Memorial Drive in Excavation Areas 3, 4, 5, and 6. The Contractor shall provide the Engineer with notice of when this excavation will occur and a period of 24 hours for collection of samples following completion of excavation to the extents shown in the Drawings, prior to backfilling. Contractor shall provide support to the Engineer with sample collection as directed.

- 4. Install shoring or other trench safety systems as specified in Section 31 50 00 Trench Safety Systems as needed to conduct the Work. The Contractor shall select and implement safety systems at their discretion to stabilize the Excavation Areas, comply with applicable laws and regulations, and to minimize the volume of over excavation required. Refer to Reference Documents 6 and 7 for geotechnical information. Shoring or other trench safety systems shall be decontaminated and free of soil prior to removal from the site.
- 5. Dewater excavations as needed to conduct excavation in the dry. The Contractor shall plan and sequence excavation and backfill activities below the groundwater table in a manner to limit the total duration of required dewatering. Conduct dewatering in accordance with Section 31 23 19 Excavation Dewatering.
- 6. The eastern extent of Excavation Areas 3 and 4 and the western extent of Excavation Areas 5 and 6 border Des Moines Memorial Drive. The structural integrity of the sidewalk and road shall be protected and maintained. Any damage to these features shall be repaired to match existing conditions and shall be paid by the Contractor. Excavations shall not extend within 2 feet of paved sidewalks.
- 7. Active utilities are present in the public right-of-way. Protect all active utilities from damage during excavation. If excavation activities have the potential to damage active utilities, coordinate excavation plan with Engineer prior to starting work around utilities.
- 8. Excavation Areas 1 through 4, located within the LLA Parcel, shall be accessed from the Port of Seattle Property located south of the Apartments Parcel. Construct a Temporary Construction Access Road as indicated on the Drawings. Access to the LLA Parcel from the existing gates along Des Moines Memorial Drive and 8th Avenue South may not be used for Site access.
- 9. Excavation Areas 5 and 6, located on the LL Parcel, shall be accessed from the Des Moines Memorial Drive right-of-way immediately adjacent to the Excavation Areas. Eastern extents of Excavation Areas 3 and 4 may be accessed from the Des Moines Memorial Drive right-of-way immediately adjacent to the Excavation Areas. Traffic Control is required for any excavation access from public right-of-ways.
- 10. Direct loading of Contaminated Soil for off-site disposal is allowed, as specified in Section 02 61 13 Handling and Disposal of Contaminated Soil.
- 11. The following requirements are applicable to direct loading of Contaminated Soil from the Excavation Areas located next to the Des Moines Memorial Drive right-of-way when the direct loading occurs in the right-of-way.
 - a. Trackout or deposition of Contaminated Soil onto the right-of-way is strictly prohibited. Any Contaminated Soil that inadvertently reaches the right-of-way must be immediately cleaned up at the cost of the Contractor.

- b. The Contractor shall employ best management practices (BMPs) when loading trucks in the right-or-way. These BMPs at a minimum shall include:
 - (1) maintaining level excavator buckets to prevent spilling
 - (2) Placement of poly sheeting along the swing path of the excavator bucket and up over the wheels of the hauling truck.
 - (3) Use of construction personnel immediately ready with a broom to sweep any spilled material during loading.
 - (4) Replacement of the poly sheeting once it is excessively damaged.
 - (5) Avoidance of loading trucks in the right-of-way when it is raining or wet.
- c. The Contractor may suggest to the Engineer other BMPs or approved equivalent methods to avoid spilling Contaminated Soil to the right-of-way.

E. Acceptance

- 1. When excavation within a given area is complete, the Contractor shall notify the Engineer for final survey and approval. Provide up to 48 hours (excluding Sundays and Holidays) for final survey and Engineer approval. Final survey of the excavation will be conducted by the Port.
- Any Contractor conducted survey for construction layout, or QA/QC shall be provided in CAD and pdf format to the Engineer following completion of the Work.
- 3. The Contractor shall not scrape, disturb, or otherwise modify the excavation extent until the final survey has been completed by the Port and the excavation is approved by the Engineer.
- 4. The Contractor will not be compensated for excavation, backfill, or disposal costs for soil excavated beyond the design limits unless authorized by the Engineer.

F. Backfill

- 1. Once excavation of an area or part of an area has been completed and approved by the Engineer, that area can be backfilled in accordance with Section 31 23 23 Backfill and Compaction.
- 2. Backfill may not be placed in contact with Contaminated Soil that has not been excavated.
- 3. Backfill and restoration of the Lake Parcel soil Excavation Areas (Areas 5 & 6) will include the placement of surface Topsoil Type A and vegetation restoration as described in Section 31 22 19.13 Topsoil Placement, Section 32 90 00 Planting, and Section 32 92 19 Seeding.
- 4. At the end of construction, any imported roadbed material (crushed rock) and the filter fabric used for Temporary Construction Access Road construction within the Staging Area shall be left in place.

a. Any roadbed material used within the LLA Parcel and located in front of the wheel wash shall be disposed as Subtitle D Contaminated Material.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. No separate measurement will be made for the Work specified in this Section except for the item listed.
- B. "Unsuitable Excavation" of Unsuitable Material from Common Excavation Areas will be measured by the net ton as determined by the certified weight tickets submitted to the Engineer.

4.02 PAYMENT

- A. Payment for Unsuitable Excavation will be made at the contract unit price per net ton as stated in the Schedule of Unit Prices for applicable bid item "Unsuitable Material Management" and shall be the full compensation for furnishing all labor, equipment, materials, and tools necessary to segregate, stockpile, and dispose of unsuitable material as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for excavation of Contaminated Soil Excavation Areas 1 through 4 and associated Work specified in this Section will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal, and Backfill" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to perform all excavation of Contaminated Soil and below-ground roots to the design limits as detailed on the Drawings or directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for excavation of Contaminated Soil from Excavation Areas 5 and 6 and associated Work specified in this Section will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to perform all excavation of Contaminated Soil and belowground roots to the design limits as detailed on the Drawings or directed by the Engineer and specified herein through the duration of the Contract.
- D. Payment for Common Excavation and Scraping and associated Work specified in this Section will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal and Backfill" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to perform all excavation of Common Excavation soil, segregate, preserve and protect the material as detailed on the Drawings, or as directed by the Engineer and specified herein through the duration of the Contract.

1.01 SUMMARY OF WORK

- A. This section provides the requirements for excavation dewatering at the site. The locations which are anticipated to require excavation dewatering are indicated on the Drawings.
- B. Work will include dewatering portions of the excavation which are below the groundwater table, or have accumulated surface water. Dewatering water will be treated per Section 02 24 50 Construction Water Management System prior to infiltration or discharge.
- C. The Work covered by this section includes Work necessary for the Contractor to provide, operate, and maintain all necessary containment, pumping, storage, and transfer equipment needed to maintain the Site in a workable condition. Water treatment and disposal is covered in Section 02 24 50 Construction Water Management System.
- D. This section applies to soil excavation area dewatering only. Lake dewatering is included in Section 35 41 00 Water Quality and Creek Protection.
- This section does not include the routine handling, conveyance, and discharge of storm water that would otherwise be included in and handled by Section 01 57 13
 Temporary Erosion and Sediment Control.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. Nationwide Permit No. 33 Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD), provided as Appendix C to these Specifications.
- B. LL Apartments Parcel Geotechnical Report (Reference Document 6).

1.03 PERFORMANCE REQUIREMENTS

A. GENERAL

- Excavations, trenches, and pits shall be kept free of standing water. The Contractor shall control surface runoff and groundwater so as to prevent collection of water in excavations and to maintain the workable condition of the site.
- 2. The Contractor shall minimize loss of fines from the soil, prevent damage to adjacent facilities, utilities, and structures (from dewatering induced settlement), and minimize quantity of handled water to achieve construction objectives. Dewatering and wastewater handling and disposal activities that are deemed unnecessary or excessive in order to accomplish the Work is not permitted and at the Contractor's sole expense.

1.04 SUBMITTALS

- A. Submittals will be in accordance with Section 01 33 00 Submittals. Submittals shall include the following:
 - 1. At least 30 days prior to commencing dewatering activities, the Contractor shall submit a Dewatering Plan which addresses the method and installation including details of the dewatering system indicating number and type of equipment and pipelines including capacity(ies), dewatering

pits and locations, an estimate of advance time to dewater the excavation prior to Work in the excavation when necessary, and such other information necessary to verify acceptable control and performance.

- a. If well points are required for dewatering, the plan shall be produced by a licensed engineer or hydrogeologist who is experienced with construction dewatering, and is subject to review and approval by the Engineer.
- b. Detailed description of dewatering procedure and maintenance method. Include a written plan outlining sequencing and methods proposed for dewatering, and control procedures to be adopted if dewatering system is unable to meet excavation dewatering requirements. Include contingency plans for discharge noncompliance and accidental spills.
- 2. Manufacturers' technical literature, standard details, product specifications, and installation instructions for all products.
- 3. Handling and Discharge Records: The Contractor will measure and maintain dewatering and discharge records for all pumping and discharge of effluent from excavation areas. These records will be submitted weekly to the Engineer.

1.05 PROJECT INFORMATION

- A. The site groundwater table varies as shown in the Drawings and is expected to be encountered during portions of the Work.
- B. Existing Utilities: The Contractor shall locate, identify, and protect all existing utilities during the construction and operation of the construction dewatering system.
- C. The Contractor shall be aware that contaminated groundwater is present at the Site, and all groundwater should be considered contaminated.
- D. Project investigation documents have been generated by the Port and are available to the Contractor as Reference Document 1 and Appendix A.

PART 2 MATERIALS

2.01 The Contractor shall furnish, install, and operate all necessary equipment to keep excavations free from water during construction.

2.02 MATERIAL REQUIREMENTS

- A. All materials used in the dewatering system are to be sized by the Contractor.
- B. All piping shall be PVC, HDPE, or approved equivalent.
- C. Piping and hose connections shall be leak proof and inspected daily.
- D. All pumps and pipe connections shall have secondary containment.
- E. All vacuum trucks, storage tanks, and treatment tanks used must be certified clean prior to use.

2.03 MATERIAL HANDLING, DELIVERY, & STORAGE

A. Staging Areas, as indicated on the Drawings, can be used for laydown of the dewatering system and equipment staging.

PART 3 EXECUTION

3.01 IN SITU DEWATERING SYSTEMS

- A. Excavations shall be kept free of water. The Contractor shall control surface run-off and groundwater so as to prevent entry or collection of water in excavations and to maintain the undisturbed state of the native subgrade.
- B. Prior to any excavation below the ground water table, place system into operation to lower water table as required and operate it continuously until excavation zone is dewatered and a steady state exists to assure the Work Area is dewatered.
- C. The control of groundwater shall prevent softening of the bottom of excavations, or formations of quick or heaving conditions. Excavations below the groundwater table must be dewatered to 2-feet below the base of excavation.
- D. Dewatering systems shall be designed and operated so as to prevent any removal or flowing of native soils. In the event the native subgrade is compromised as a result of the Contractor's dewatering methods, the Contractor shall be fully responsible for restoring the integrity of the subgrade to preexisting conditions.
- E. Water removed from the excavation via dewatering shall be pumped to the water treatment system and treated for discharge as described in Section 02 24 50 Construction Water Management System.
- F. Sufficient pumping and power equipment in good working condition shall be available at all times for all emergencies, including power outage, and competent personnel shall be available at all times for the operation of the dewatering system. The Contractor shall coordinate power supply with the local utility. Active power connection is not present at the Site.
- G. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not drawn down to the extent that would damage or endanger adjacent structure, underground installation, sidewalk, pavement, other improvement, or property.
- H. The Contractor shall immediately repair damages to adjacent facilities caused by dewatering operations.
- I. The Contractor shall use all means and methods to reduce the total quantity of collected and handled waters and wastewater that requires handling, treatment, and disposal. This includes, but is not limited to: minimizing exposed depressions and excavation areas; expediting excavation and backfill activities, timing soil-disturbing activities during dry periods; and covering exposed Contaminated Soil (stockpiles) during wet periods.
- J. Water draining from stockpiles of contaminated soils excavated from this site shall be collected by the Contractor and conveyed to the water treatment system.
- K. The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils and supported soils, prevent disturbance of compacted bedding and backfill, and prevent flotation or movement of pipelines and drains.
- L. Prior to removal, the Contractor shall insure compliance with all conditions of regulating permits and provide such information to the Engineer. Obtain written approval from the Engineer before discontinuing operation of dewatering systems.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for Excavation Dewatering will be as a unit.

4.02 PAYMENT

A. Payment for Excavation Dewatering at the LLA Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal and Backfill" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to design, provide, operate and maintain a dewatering system at the LLA Parcel. This work includes providing all necessary containment, pumping, storage and transfer equipment needed to connect to the Construction Water Treatment System specified and paid separately and to maintain the LLA Parcel in a workable condition as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

1.01 SUMMARY OF WORK

- A. This section provides the requirements for backfill and compaction at the site. The extent and location of the areas to be backfilled are indicated on the Plans.
- B. Geotechnical information for the site is provided in geotechnical reports available as Reference Documents 6 and 7.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. Washington State Department of Transportation (WSDOT) Specifications
 - 1. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction; and Amendments (current edition)
 - 2. WSDOT Standard Specifications paragraph 9-03.12(4) gravel borrow
- B. American Society of Testing Materials (ASTM) Methods
 - ASTM C88 Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
 - 2. ASTM C127 Standard test Method for Density, Relative Density (Specific Gravity) and Absorption of Coarse Aggregate
 - 3. ASTM C666 Standard test Method for Resistance of Concrete to Rapid Freezing and Thawing
 - 4. ASTM D854 Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer
 - 5. ASTM D1556 Standard test Method for Density and Unit Weight of Soil in Place by Sand-cone Method
 - 6. ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
 - 7. ASTM D2167 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method
 - 8. ASTM D6913 Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
 - 9. ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil Aggregate in by Nuclear Methods (Shallow Depth)
- C. U.S. Army Corps of Engineers (USACE) Concrete Research Division (CRD) Methods:
 - 1. USACE CRD C145 Expansive Breakdown 15 day < 8.5% {Concrete Research Division, Handbook for Concrete and Cement (USACE)}
- D. U.S. Environmental Protection Agency (EPA) Publication SW846 Test Method for Sieve Analysis for Evaluating Solid Waste, Physical/Chemical Methods
 - 1. Polychlorinated Dibenzodioxins and Polychlorinated Dibenzonfurans (Dioxins/furans) per EPA SW846, Method 1613B

- Model Toxic Control Act (MTCA) Metals including Arsenic, Cadmium, Chromium, and Lead per EPA SW846, Method 6010 and Mercury per EPA SW846. Method 7471
- Pentachlorophenol per EPA SW846, Method 8041
- Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) per EPA SW846, Method 8270D
- 5. Ethylbenzene and Toluene per EPA SW846, Method 8260C.
- E. Additional Physical/Chemical Methods
 - 1. Total Petroleum Hydrocarbons Gasoline Range per NWTPH-G
 - Total Petroleum Hydrocarbons Heavy Oil Range and Diesel Range per NWTPH-Dx

1.03 SUBMITTALS

- A. Submit laboratory grain-size distribution analysis results for all imported materials in accordance with of Section 01 33 00 Submittals. Separate analytical results are required for each source of material.
- B. Submit laboratory chemical analysis results for all imported materials (except Quarry Spalls) in accordance with Section 01 33 00 Submittals. Separate analytical results are required for each source of material.

PART 2 PRODUCTS

2.01 MATERIAL REQUIREMENTS

- A. General
 - 1. Materials shall be of the quality, size, shape, gradation, or equal to that manufacture as specified herein.
- B. Excavated Soils
 - 1. Common Excavation Soil: Common Excavation Soil is material from on-site Common Excavation areas outside of Excavation Areas 1 through 6 that does not contain Unsuitable Material. All Common Excavation Soil is expected to be suitable for use as backfill in excavations. Common Excavation Soil stockpiled for use as backfill material shall be protected from contamination by other materials and from damage by weather by covering with waterproof sheeting or by other means as necessary. Common Excavation Soil shall not come in contact or otherwise co-mingle with Subtitle D Contaminated Material that will be hauled off-site for disposal. All costs involved in preserving and protecting excavated materials shall be included in the cost of the excavation. Common Excavation Soil that comes in contact or is mixed with Contaminated Soil must be managed and disposed as Contaminated Soil under the Lump Sum bid item for "Excavation, Disposal, and Backfill" with no additional payment.
 - 2. **Unsuitable Material:** Unsuitable material is excavated on-site material consisting of large or frozen lumps, wood, excess moisture, organics, peat, muck, water-impregnated clays, swampy or other undesirable materials, including buried logs, stumps, trash, or other extraneous material.

Unsuitable Material is contaminated, and shall be managed as such. Unsuitable Material encountered in Common Excavation Areas shall be removed to the depth designated by the Engineer, segregated, stockpiled and transported for disposal to the Subtitle D Contaminated Material disposal site separately to allow for measurement and payment separate from other Subtitle D Contaminated Material.

3. **Contaminated Soil:** For purposes of backfill and compaction work described in this section, Contaminated Soil refers to the soil excavated from within Excavation Areas 1 through 6, or soil that has come in contact with soil from within Excavation Areas 1 through 6. All Contaminated Soil must be disposed as Subtitle D Contaminated Material.

C. Select Fill Material

- Select Fill Material shall be clean, free-draining, sandy gravel or gravelly sand obtained from natural deposits. Individual particles shall be free from all objectionable coating. The material shall contain no organic matter or soft friable particles in quantities considered objectionable by the Engineer.
- 2. Material shall be graded as specified in Section 9-03.14(2) in the WSDOT Standard Specifications.

D. Backfill

1. Backfill shall be Common Excavation Soil or imported Select Fill Material unless otherwise indicated on the Drawings.

E. Quarry Spalls

1. Material shall be imported and shall be clean, free draining, quarry spalls obtained from natural deposits. Individual particles shall be free from all objectionable coating. The material shall contain no organic matter or soft friable particles in quantities considered objectionable by the Engineer. Material shall meet WSDOT Specifications per paragraph 9.13.1(5) except that all material shall have a maximum particle size less than 6 inches and material shall be graded as specified in Section 9-03.14(2) in the WSDOT Standard Specifications.

F. Crushed Concrete

1. Crushed concrete from demolished on-site facilities and structures shall comply with requirements for Select Borrow per WSDOT Standard Specifications Section 9-03.14(2), maximum size: 6 inches.

2.02 MATERIAL HANDLING, DELIVERY, & STORAGE

A. The Staging Area, as shown in the Drawings, may be used for laydown of clean fill material.

2.03 QUALITY ASSURANCE

- A. Contractor Quality Control: The Contractor shall perform the inspection and tests described below and, based upon the results of these inspections and tests, shall take the action required and shall submit specified reports to the Engineer.
 - 1. Minimum Compaction Testing for backfill material including Common Excavation Soil, Crushed Concrete, or Select Fill includes the following:

- a. 1 nuclear gauge moisture/density field test every 500 cubic yards of loose-lift backfill, material change, or word-day shift (whichever comes first).
- b. One (1) laboratory Modified Proctor test for every 5,000 cubic yards of placed backfill from a single source, or each change in material source (whichever comes first).
- 2. Baseline Compaction Testing for Crushed Concrete:
 - a. One (1) baseline Proctor test on one representative sample of Crushed Concrete prior to use of material as backfill. Crushed concrete should be conditioned to within 2% of optimum prior to placement.
- 3. Chemical criteria for backfill. All backfill must comply with site cleanup levels. Common Excavation Soil has been characterized by the Port, and does not require analysis. The Contractor shall provide laboratory documentation of compliance for imported fill materials.
- 4. Imported backfill material for use at the LLA Parcel and DMCA must comply with the following chemical criteria:

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Gasoline-Range Hydrocarbons	100	NWTPH-Gx
Sum of Diesel and Heavy Oil Range Hydrocarbons	2,000	NWTPH-Dx
Toluene	6,400	EPA Method 8260C
Ethylbenzene	8,000	EPA Method 8260C
Lead	250	EPA Method 6010
Arsenic	20	EPA Method 6010
Cadmium	2	EPA Method 6010
Chromium	2,000	EPA Method 6010
Mercury	2	EPA Method 1631
Pentachlorophenol	2.5	EPA Method 8041
сРАН	0.137	EPA Method 8270D
Dioxins/Furans	1.3x10-5	EPA Method 1613B

5. Backfill for use at Excavation Areas 5 and 6 must comply with the following chemical criteria:

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Gasoline-Range Hydrocarbons	100	NWTPH-Gx
Sum of Diesel and Heavy Oil Range Hydrocarbons	200	NWTPH-Dx

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Toluene	6,400	EPA Method 8260C
Ethylbenzene	8,000	EPA Method 8260C
Lead	50	EPA Method 6010
Arsenic	20	EPA Method 6010
Cadmium	4	EPA Method 6010
Chromium	42	EPA Method 6010
Mercury	0.1	EPA Method 1631
Pentachlorophenol	2.5	EPA Method 8041
сРАН	0.137	EPA Method 8270D
Dioxins/Furans	5.2x10-6	EPA Method 1613B

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Tools, equipment, and heavy machinery that contacts Contaminated Soil must be decontaminated prior to contacting Common Excavation of imported backfill.
- B. The site groundwater table varies as shown on the Drawings and is expected to be encountered during portions of the Work. Refer to Section 31 23 19 Excavation Dewatering for requirements.
- C. Deploy structural best management practices for erosion and sediment control and stormwater pollution prevention in accordance with the Construction Stormwater Pollution Prevention Plan and Section 01 57 13 Temporary Erosion and Sediment Control Planning and Execution prior to start of earthmoving activities.
- D. Fill limits shall be within the tolerances established as indicated on the Drawings or as established by the Engineer. The Contractor will not be compensated for fill in areas where soil was excavated beyond the design depth unless authorized by the Engineer.
- E. Crushed Concrete may not be placed within 3 feet of the groundwater table, as shown in the Drawings, or encountered in the field, or within 2 feet of final grade.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. All areas that are to receive fill shall have completed post-excavation surveys and be approved by the Engineer as specified in Section 31 23 00 Excavation.
- B. The Contractor shall notify the Engineer 24 hours before performing grading of the Site so that the Engineer can observe the grading activities.
- C. Backfill shall not be placed below the groundwater table if standing water is present in the excavation. Excavations below the groundwater table must be dewatered to 2 feet below the base of excavation prior to placement and compaction of backfill, in accordance with Section 31 23 19 Excavation Dewatering.

3.03 EXECUTION OF WORK

- A. Backfill compaction shall be performed with approved compaction equipment suited to the soil being compacted. Moisten or aerate material as necessary to provide the moisture content that will readily facilitate obtaining the specified compaction with the equipment used. In areas of limited access, as determined by the Engineer, compact the backfill by using hand or hand-operated power tampers. While backfill is being placed in layers, operate the compaction equipment continuously. Each lift of material placed shall be uniformly compacted to the density indicated for the specific material and use set forth in these Specifications. The percent of density required is in relation to the maximum density obtainable at optimum moisture content (Compaction Control Density) as determined in paragraph 3.03.F Compaction Control Tests, of this section.
- B. Embankments shall be constructed adjacent to Des Moines Memorial Drive, and SR 518 as shown in the Drawings. Embankments are to be constructed in the following manner:
 - 1. Place material used for the construction of embankments in horizontal layers upon earth which has been stabilized or otherwise approved by the Engineer for embankment construction.
 - a. Irrespective of the method of compaction specified, at the time of compaction the moisture content of that portion of the embankment material passing a U.S. No. 4 sieve shall be not more than 3 percentage points above or below the optimum moisture content at 100% density as determined by Compaction Control Density Tests, described in paragraph 3.03.F Compaction Control Tests, of this section.
 - b. Construct earth embankment in compacted layers of uniform thickness. Carry the layers up full width from the bottom of the embankment. Compact the slopes of all embankments to the required density as part of the embankment compaction Work. The embankment shall be compacted with modern, efficient compacting units satisfactory to 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 right is reserved for the Engineer to 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.
 - c. Construct earth embankments in successive horizontal layers not exceeding 12 inches in loose thickness except that the layers in the top 2 feet shall not exceed 8 inches in loose thickness. Compact each layer of the top 2 feet of embankment to 95% of the maximum dry density (MDD) as defined in ASTM D1557 and each layer of embankment below the top 2 feet to 90% of the MDD. Use small mechanical or vibratory compactor units to compact the layers adjacent to structures that are inaccessible to the loaded haul equipment or other compaction rollers.

- C. Common Excavation and Crushed Concrete Backfill
 - 1. Common Excavation Soil and Crushed Concrete shall be used to fill the excavation areas to the maximum extent practicable.
 - 2. If excavated areas contain a greater than expected percentage of Unsuitable Material, the Engineer may require that final grading be adjusted to eliminate the need for import of backfill material.
 - 3. Place Common Excavation and Crushed Concrete backfill in successive horizontal layers not exceeding 12 inches in loose thickness and compact each layer as specified below and shown in the Drawings or as directed by the Engineer.
 - a. In Excavation Areas 1,2,3,4 at the LLA Parcel:
 - (1) Compact Common Excavation backfill layers to a minimum of 90% of the MDD per ASTM D1557.
 - (2) Compact Crushed Concrete Backfill layers to a minimum of 95% of the MDD per ASTM D1557.
 - (3) In topsoil areas, compact backfill within the top 12 inches of final subgrade elevations grade to a maximum of 90-92% of MDD as specified in Section 31 22 13 – Grading and Surfacing.
 - (4) Compact topsoil as specified in Section 31 22 19.13 Topsoil Placement
 - (5) In access road areas, compact backfill within the top 12 inches of final subgrade elevations grade to a minimum of 95% of MDD as specified in Section 31 22 13 – Grading and Surfacing.

D. Select Fill

- 1. Backfill Excavation Areas 5 and 6 with imported Select Fill. Common Excavation Soil is not allowed in Excavation Areas 5 and 6.
 - a. In Excavation Areas 5 and 6 at the LL Parcel:
 - (1) Compact Select Fill backfill to a minimum of 90% of the MDD per ASTM D1557.
 - (2) In topsoil areas, compact select fill within the top 12 inches of final subgrade elevations grade to a maximum of 90-92% of MDD as specified in Section 31 22 13 – Grading and Surfacing.
 - (3) Compact topsoil as specified in Section 31 22 19.13 Topsoil Placement
- E. Storm Drainage Trench Backfill
 - Backfill and compact utility trenches as specified in Section 33 41 00 Storm Drainage.
- F. Compaction Control Tests

- Laboratory and field tests shall be performed in accordance with the applicable provisions of Section 01 45 16.13a – Contractor's Quality Control Program to determine compliance with this section. Furnish soil samples suitable for the laboratory tests at no cost to the Port if requested by the Engineer.
- Compaction control density shall be the maximum density at optimum moisture content as determined by ASTM D1557, Standard Methods for Moisture-Density Relationships of Soil and Soil Aggregates, Methods B, C, or D as applicable.
- 3. Field tests to determine in-place compliance with required densities as specified, shall be performed in accordance with ASTM D1556, D2167, or D2922.
- 4. Compaction tests shall be completed by the Contractor and the results shall be provided to the Engineer daily as part of the Contractor's Daily Construction Report.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. No separate measurement will be made for the Work required by this section.

4.02 PAYMENT

- A. Payment for backfilling and compaction in Excavation Areas 1, 2, 3 and 4 and Common Excavation Areas at the LLA Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation, Dewatering, Soil Disposal and Backfill" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact backfill as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for backfilling and compaction of the stormdrain utility trench at the LLA Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Storm Drainage Infrastructure" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact backfill as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for backfilling and compaction in Excavation Areas 5 and 6 at the LL Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place, grade, and compact backfill as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

1.01 SUMMARY OF WORK

- A. This section specifies requirements for the trench safety systems and/or shoring to be used in the excavation, existing storm drain demolition and specified storm drain installation areas for safe completion of the Work.
- B. Recommendations for trench safety systems have been provided in the geotechnical report prepared for the site, provided as Reference Document 6.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. R.C.W. Chapter 39.04.180 Public Works/Trench Excavations Safety Systems Required.
- B. R.C.W. Chapter 49.17 WISHA Safety Standards (Current Edition).
- C. WAC 296-155 Safety Standards for Construction Work (Current Edition).

1.03 SUBMITTALS

A. The Contractor will submit documentation demonstrating that the safety systems for trench or other excavations deeper than 4 feet are designed in accordance with WAC 296-155-657 and other applicable regulations. This documentation shall include complete detailed drawings and design calculations stamped by a Professional Engineer licensed in Washington State, indicating all details of shoring or other safety system assembly, layout, installation, sequencing, and coordination with other substructure details. Include details of design criteria, material properties, loads and reactions, member sizes, connection details, and other salient features. Drawings and design calculations shall be submitted at least 3 weeks prior to safety system installation.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: See referenced codes.
- B. A qualified, experienced person familiar with the regulations and standards is required to design excavation safety systems. All temporary shoring systems shall be designed by a Professional Engineer, licensed in the State of Washington.
- C. Compliance with the regulations shall be the responsibility solely of the Contractor. The Contractor shall be responsible for worker safety and the Port and Engineer assume no such responsibility. Damages resulting from improper shoring or failure to shore shall be the responsibility of the Contractor.

PART 2 MATERIALS

2.01 GENERAL

A. Products that are required to accomplish, or to be incorporated into, the Work of this section shall be selected by the Contractor, subject to review by the Engineer.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Meet safety requirements for trenching and shoring activities to be used in earthwork excavation activities on this Project.
 - 1. Include trench safety systems and/or shoring for earthwork activities.

- 2. Include trench safety systems and /or shoring if required for the following Work items, including, but not limited to:
 - a. All Contaminated Soil and Common Excavation Work.
 - b. Storm drainage removal and installation Work.
 - c. Any other Work associated with the project which requires trenching.
- B. The Port has conducted subsurface investigations at the site in connection with this project. Available geotechnical information is provided in Section 02 32 13 Subsurface Exploration as well as Reference Documents 6 and 7
- C. Perform investigative analysis as appropriate and to the Contractor's satisfaction to determine safety systems designed to meet the regulations that are sufficient to protect workers and property based on the nature of the existing soil and groundwater conditions and extent of the Work.
- D. Locations and sequencing for installation of shoring is at the discretion of the Contractor in order to complete the Work in a safe and efficient manner, and in compliance with applicable safety codes and standards.
- E. Anticipate encountering groundwater at the approximate elevations indicated on the Drawings. The groundwater elevation may vary depending upon soil conditions, season, and weather.

3.02 PREPARATION FOR EXECUTION OF WORK

A. Design Criteria

1. The Contractor shall verify and independently interpret the subsurface information presented in the Contract Documents, associated Appendices, and Reference Documents, and supplement existing data, as they deem necessary in order to complete the design and construction. The costs of any supplemental information shall be included in the Bid for this item.

3.03 EXECUTION OF WORK

A. Shoring Or Extra Excavation

- 1. Trench Safety Systems or additional excavation to slope excavation sidewalls shall be implemented on all utility trench excavations in excess of 4 feet in depth to be entered by workers, conforming to the referenced requirements.
- 2. Shoring, trench safety systems or additional excavation to slope excavation sidewalls shall be implemented on all utility trench excavations or Contaminated Soil excavations in excess of 6 feet in depth where entry by workers will not occur, conforming to the referenced requirements, unless conditions indicate shoring, trench safety systems or additional excavation to slope excavation sidewalls is required for stability.
- 3. The Contractor's trench safety system shall be designed by a qualified person and meet the referenced requirements.
- 4. All excavation not included in trench safety systems shall also meet the WISHA safety standards and the requirements of Section 31 23 00 Excavation.

5. Trench safety systems shall be decontaminated at each relocation as described in Section 01 57 23 – Pollution Prevention, Planning and Execution.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for "Trench Safety Systems" will be as a unit.

4.02 PAYMENT

A. Payment for "Trench Safety Systems" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials, and tools necessary to design, install, maintain, remove and decontaminate trench safety systems including shoring, installed for utility trenches and excavations as detailed on the Drawings, or as required for completion of the Work, and specified herein through the duration of the Contract.

End of Section

Division 32

Exterior Improvements

1.01 SUMMARY OF WORK

- A. This section provides details and requirements for the final porous asphalt pavement layer required for the "Porous Pavement Wildlife Barrier" at the DMCA.
- B. Placement, compaction and preparation of underlying subgrade and base layers is provided in Section 31 22 13 Grading and Surfacing.
- C. The extent and location of "Porous Pavement Wildlife Barrier" Work at the DMCA is indicated in the Contract Documents.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

A. Unless otherwise referenced or modified, quality control and quality standards for this section shall be as specified in the Washington State Department of Transportation (WSDOT) (current edition), and WSDOT Local Agency General Special Provisions, Division 5 for Porous Hot Mix Asphalt.

1.03 SUBMITTALS

- A. Submit materials data in accordance with of Section 01 33 00 Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products. Submittals shall include the following:
 - 1. Product specifications: Aggregate Blend, Asphalt Binders
 - 2. Tests: Aggregate gradation, Asphalt Quality Control tests
 - 3. Asphalt Mix Design
 - 4. Asphalt Binder Supplier

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

A. PAVEMENT CLASS

- 1. Bituminous concrete pavement shall be Hot Mix Asphalt (HMA) Class ½ inch as modified by 2.01 D below.
- B. Aggregate for Porous Hot Mix Asphalt
 - 1. Aggregate for Porous Hot Mix Asphalt (PHMA) shall be manufactured from ledge rock, tallus, or gravel. Aggregate shall be clean, free-draining rock. Individual particles shall be free from all objectionable coating. The material shall contain no organic matter or fines in quantities considered objectionable by the Engineer. The material from which aggregate is to be manufactured shall meet the following test requirements:

Los Angeles Wear, 500 Rev – 30 percent max. Degradation Factor – 15 min.

The aggregate for PHMA shall consist of crushed stone with a percent fracture greater than 90% on two faces on the No. 4 sieve and above, and shall be tested in accordance with FOP for AASHTO T 335.

The material shall be graded between the limits in the following table.

SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
¾-inch	100
½-inch	90-100
3/8-inch	55-90
U.S. No. 4	10-40
U.S. No. 8	0-20
U.S. No 40	0-13
U.S. No 200	0-5

All percentages are by weight.

C. Asphalt Binder

- 1. Asphalt binder for PHMA shall be PG 70-22ER polymer modified or higher grade.
- 2. Prime coat, tack coat, and joint sealer will not be used for PHMA.

D. Mix Design

- The Mix Design for PHMA shall be submitted to the Engineer on Washington State DOT Form 350-042 with the additional PHMA test data required by this section provided as a one page supplemental attachment. The supplemental test data form is available at http://www.wsdot.wa.gov/partners/apwa/PorousAsphaltPavement.pdf.
- 2. The asphalt binder for PHMA shall be PG 70-22ER polymer modified or higher grade. Binder content shall be between 6.0% and 7.0% by total weight of the mix, and will be the highest percentage that passes both the drain down and void requirements tests at N_{design} = 75 gyrations. The binder content tolerance shall be ±0.3% during production/ placement of the PHMA. The Contractor shall adjust the aggregate to meet the maximum drain down test requirements within the ranges provided below.
 - a. Drain down shall be 0.3 %, maximum, according to ASTM D6390
 - b. Void ratio shall be 16% to 25% per ASTM D3203 at N_{design} = 75 gyrations.
- 3. The Contractor shall include with the submittal temperature-viscosity curves from the polymer-modified asphalt binder supplier showing the recommended mixing and compaction temperatures developed for dense graded HMA applications. Temperature-viscosity curves developed for dense graded HMA mixing and compaction applications and should be used as references only. PHMA should typically be mixed at the bottom of the temperature-viscosity curve temperature range or cooler to minimize draindown.
- 4. The Contractor shall determine anti-strip requirements for PHMA and provide data for anti-stripping. The asphaltic mix shall be tested for its resistance to stripping by water in accordance with ASTM D-3625. If the estimated coating area is not above 95 percent, anti-stripping agents shall be added to the asphalt. The Contractor shall be responsible for conducting the anti-stripping evaluation and providing a report to the Engineer.

5. Alternately, anti-strip evaluation of an existing dense graded HMA of the same maximum nominal aggregate class and from the same aggregate materials source may be used to set the anti-stripping requirements for PHMA. The anti-strip requirement for the PHMA shall be equivalent to the anti-stripping requirement for the HMA. 5-04.3(7) A.

PART 3 EXECUTION

3.01 PREPARATION FOR EXECUTION OF WORK

A. Prior to placement of PHMA, placement and compaction of subgrade, sand, geotextile, and permeable ballast will be performed as specified in Section 31 22 13 – Grading and Surfacing and indicated on Drawings.

3.02 EXECUTION OF WORK

A. ASPHALT CONCRETE

- Mix, handle, batch, haul, place, roll and compact asphalt concrete in accordance with the applicable sections of the WSDOT Standard Specifications except that the maximum thickness for a course shall be three inches. Place the material to the dimensions and grades indicated on the Drawings or as directed by the Engineer.
- 2. Fiber Supply System: If fiber stabilizing additives are determined necessary to achieve drain down criteria per GSP 5-04.3(7)A, a separate feed system that meets the following shall be required:
 - a. Accurately proportions by weight the required quantity into the mixture in such a manner that uniform distribution will be obtained.
 - b. The fibers shall be uniformly distributed prior to the injection of the asphalt binder into the mixture. When a continuous or drier-drum type plant is used, the fiber shall be added to the aggregate and uniformly dispersed prior to the injection of asphalt binder.
- 3. Surge and Storage Systems: The storage time for PHMA/PWMA mixtures shall be no more than four (4) hours for non-insulated silos or eight (8) hours for insulated silos. Placement temperature specifications shall be met regardless of silo storage time.
- 4. The temperature of the mix at the time of discharge from the haul vehicle shall be within the temperature range identified in the approved PHMA submittal. A typical temperature range would be 275-300 F for HMA. Air temperature should be no lower than 45° F and rising during placement.
- 5. Pneumatic tire rollers shall not be used for compaction of PHMA/PWMA. The Contractor shall develop a vibratory roller compaction pattern that will initially consolidate the pavement structure as well as target 15% to 18% final air voids (82% to 85% of maximum theoretical (Rice) density). The Contractor shall monitor compaction during placement of PHMA/PWMA with a pavement density gauge. Restrict traffic for at least 24 hours following final rolling.

3.03 QUALITY ASSURANCE

- A. Testing and Inspection for Contractor Quality Control: The Contractor shall perform the inspection and tests described below and, based upon the results of these inspections and tests, shall take the action required and shall submit specified reports.
 - 1. Materials testing
 - Pavement thickness
 - 3. Pavement density
 - Pavement smoothness
- B. Commercial evaluation will be the basis for acceptance of PHMA.
- C. PHMA Acceptance Infiltration Test: The Contractor shall conduct infiltration tests on the finished PHMA per ASTM C1701 at locations chosen by the Engineer. Newly-placed PHMA shall have a minimum infiltration rate of 100 inches/hour. Three evenly distributed infiltration tests shall be completed within the Porous Pavement Wildlife Barrier area, and conducted in accordance with ASTM C1701. If the average infiltration rate is less than required, additional infiltration testing will be performed to identify, remove and replace the failing section at the direction of the Engineer and at no added cost.
- D. Materials and Work shall be performed in accordance with and shall meet the requirements of the pertinent sections of the WSDOT Standard Specifications (current edition), and WSDOT Local Agency General Special Provisions, Division 5 for PHMA.
- E. Unless otherwise referenced or modified, quality control and quality standards for this section shall be as specified in the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge and Municipal Construction (current edition), and WSDOT Local Agency General Special Provisions, Division 5 for PHMA.

PART 4 MEASUREMENT AND PAYMENT

4.01 GENERAL

- A. Porous Hot Mix Asphalt will not be measured separately.
- B. Payment for the Porous Hot Mix Asphalt at the DMCA will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "DMCA Clearing, Grading, and Surfacing" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to mix, handle, batch, haul, place, roll, and compact porous hot mix asphalt as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

1.01 SUMMARY OF WORK

A. The extent and location of "Chain Link Fences and Gates" Work is shown in the Drawings. The Work includes the requirements for furnishing and installing all items and components for repair of the existing fence, as needed, and installation of the new fence along Des Moines Memorial Drive and the new gate along the southern boundary of the LLA Parcel.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

A. References

- ASTM A121 Standard Specification for Metallic-Coated Carbon Steel Barbed Wire
- 2. ASTM A392 Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric
- ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- 4. ASTM F626 Standard Specification for Fence Fittings
- 5. ASTM F900 Standard Specification for Industrial and Commercial Steel Swing Gates
- 6. ASTM F1043 Standard Specification for Strength and Protective Coatings on Steel Industrial Fence Framework
- 7. ASTM F1083 Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

1.03 SUBMITTALS

A. Submit materials data in accordance with of Section 01 33 00 – Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

A. Chain Link Fence

- The fence shall be chain link fabric supported on a steel frame, the posts of which are embedded in concrete foundations. Barbed wire supported on brackets above the fabric portion shall be installed. Materials shall be heavy industrial chain link fencing in accordance with ASTM F1043, with the additional requirements as follows:
- 2. An all-aluminum complete system meeting the performance criteria of the specified steel framed system is an acceptable alternative to the specified system, subject to the requirements of Section 01 33 00 Submittals and Section 01 25 00 Substitutions.
- Finish shall be standard mill finish.

- 4. General: All steel fabric, framework and fittings shall be hot-dipped galvanized after fabrication in accordance with the applicable ASTM specification.
- 5. Fabric: The fabric shall be manufactured in accordance with ASTM A392 for Class 1 coating, and except that the wire shall be No. 11 gage and the fabric shall be twisted and barbed on both selvages.
- 6. Framework:
 - a. Framework and coating shall be in accordance with ASTM F1083 and F1043.
 - b. Framework shall be hot dipped galvanized Schedule 40 pipe conforming to ASTM F1083 or cold rolling and radial frequency welded steel pipe conforming to ASTM A653 or A569 with a minimum yield strength of 50,000 psi. Exterior and interior coatings in accordance with ASTM F1043 Type B outside with a minimum of 0.9 oz. of zinc per sq. ft. after welding, a chromite conversion coating and a clear polymer overcoat; type B inside with a minimum of 0.9 oz. of zinc per sq. ft.
 - c. All tubular framework shall meet the following performance requirements in accordance with ASTM B117.
 - (1) Exterior: 1000 hours with maximum 5% red rust
 - (2) Interior: 650 hours with maximum 5% red rust
- 7. Line posts shall be 2.375-inch outside diameter (O.D.), at 3.65 pounds per foot, or "C" section at 2.10 pounds per foot.
- 8. End, corner, or pull posts shall be 2.875-inch O.D., at 5.79 pounds per foot.
- 9. Swing gate posts shall be sized according to the following tabulation. Pipe sizes are nominal O.D.

SWING GATE OPENING (2-INCH. FRAMES)	GATE POST	WEIGHT, POUNDS PER LINEAR FOOT
Single 6 feet or Double to 12 feet inclusive	2-7/8-inch O.D.	5.79
Single over 6 feet to 13 feet or Double over 12 feet to 20 feet inclusive	4-inch O.D.	9.11
Single over 13 feet to 18 feet or Double over 20 feet to 36 feet	6-5/8-inch O.D.	18.97
36 feet and over	8-5/8-inch O.D.	24.70

- 10. Top rails and post braces shall be 1.66-inch O.D., at 2.27 pounds per foot, or Type II "C" section as detailed on the Drawings at 1.35 pounds per foot.
- 11. Tension Wire shall be No. 7 gage, coil spring, high tensile strength wire, Marcelled and coated with not less than 0.80 oz. of zinc per square foot of uncoated wire surface.

12. Fittings: All fittings, accessories, and hardware for galvanized chain link fence shall conform to the requirements of ASTM F626 and other ASTM Designations listed therein.

13. Gates:

- a. Chain link gates shall be constructed with chain link fabric fastened to the end bars of the gate frame by tension bars and fabric bands, and to the top and bottom bars of the gate frames by tie wires in the same manner as specified for the chain link fence fabric.
- b. Gate frames shall be constructed in accordance with ASTM F900. The corners of the gate frame shall be welded and coated with two coats of GALVACON, No Equal, or shall be manufacturer's standard galvanized cast corner connections.
- c. Cross-trussing shall be 3/8-inch galvanized steel adjustable rods.
- d. Each gate shall be provided complete with necessary hinges, latch, and drop bar locking device designed for the type of gate, posts and lock used.
- e. Gates shall have positive-type latching devices with provisions for padlocking. Padlocks will be furnished by the Port of Seattle.

B. Other Materials

- 1. Each barbed wire shall conform to the requirements of ASTM A121 and shall consist of two strands of 12-1/2-gage galvanized wire, twisted with 4-point, 14-gage barbs with the barbs spaced an average of 5 inches apart. Galvanizing shall be Class 3.
- C. Concrete used in anchorage of posts shall be 2,500 psi 28 day test, standard ready-mixed concrete from an approved plant.

2.02 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has at least three years' experience and has completed at least five chain link fence projects with same material and of similar scope to that indicated for this Project with a successful construction record of in-service performance.
- B. Single-Source Responsibility: Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

A. A portion of the chain link fence along the south edge of the LLA Parcel shall be removed during the creation of a Temporary Construction Access Road, as described in Section 01 50 00 – Temporary Facilities and Control. This section of fence is shown on the Drawings. At the completion of the excavation and regrading activities, this section of fence shall be replaced and a new chain link gate shall be installed.

- B. The current fencing and gate on the LLA Parcel along Des Moines Memorial Drive shall be removed during excavation and grading activities in Excavation Areas 3 and 4 along Des Moines Memorial Drive as described in Section 02 41 13 Site Demolition. Temporary security fencing is required per Section 01 50 00 Temporary Facilities and Controls. At the completion of excavation and regrading activities, a new fence shall be installed along Des Moines Memorial Drive, as indicated in the Drawings.
- C. The current fencing on the LL Parcel along the east side of Des Moines Memorial Drive shall be removed during excavation and backfill activities in Excavation Areas 5 and 6 along Des Moines Memorial Drive as described in Section 02 41 13 Site Demolition. Temporary security fencing is required per Section 01 50 00 Temporary Facilities and Controls. At the completion of excavation, backfill and planting activities, the fence shall be re-installed along Des Moines Memorial Drive as indicated in the Drawings to match existing.
- D. The height of new fences and gates to be installed shall be 6 feet.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Clearing of the fence line will be required. Clearing shall consist of the removal and disposal of all vegetation measuring more than 1 inch in diameter or higher than 15 inches above the ground. The clearing width shall be approximately 10 feet for chain-link-type fences and approximately 3 feet for wire-type fences.
- B. Grading of the fence line shall be accomplished to eliminate abrupt changes in ground contours. Grubbing incidental to grading shall be accomplished as required. Vegetation resulting from grubbing activities shall be disposed of as cleared material. Boulders, rocks, or excess excavation shall be graded along the fence line or placed adjacent to the clearing on Port of Seattle property as directed by the Engineer.

3.03 EXECUTION OF WORK

A. General

- The location and alignment of the fence corners and gates are generally indicated on the Drawings and will be provided by the Engineer. The Contractor shall locate all intermediate line posts.
- 2. All newly installed fences will be installed per WSDOT Standard Plan L-20.10-03 for Type 1 Chain Link Fences.

B. Installation

- Fencing, gates and appurtenances shall be erected and installed by an organization regularly engaged in this business, employing labor skilled in this type of Work to provide a complete security fencing system.
- Swing gates shall be fabricated to withstand wind and swing loads. They shall have locking bars to seat into keepers that are set in concrete in ground locations which will hold the gate rigidly in position when closed. Stops which will hold the gate open shall be provided and set in concrete at the location designated by the Engineer. Hinges shall be provided which will allow the gate to swing the entire arc indicated on the Drawings. Install gates on gate posts only.

- 3. Fabric shall be fastened to posts, the top rail and the bottom wire, with wire ties, as indicated on WSDOT Standard Plan L-20.10-03.
- 4. Top rails shall be continuous. The Contractor shall provide for expansion or contraction of the continuous rail. Expansion and contraction spring couplings shall be installed at intervals of 100 feet maximum.
- Posts shall be installed vertically in the concrete with a minimum depth of embedment as indicated on WSDOT Standard Plan L-20.10-03 and at the spacing specified for the type of posts approved for the Project. In unpaved areas, the concrete shall be struck off 2 inches above the surrounding grade. In paved areas it shall be struck off flush with the paving. The top of the concrete shall be troweled smooth, with a slight slope away from the posts.

6. Surfaces Repair

- a. Minor damage to galvanizing of fabric and fence appurtenances shall be repaired by thorough cleaning of the damaged surfaces and the application of "GALVACON GC-243," "SPRAYON ZINC-RICH COLD GALVANIZING COMPOUND," "RUST-OLEUM COLD GALVANIZING COMPOUND PAINT ZINC RICH COATING," Or Approved Equal, in strict accordance with the manufacturer's recommendations. At a minimum, the coating shall be gray, fast drying (tack time 30 minutes min.), contains up to 97% pure zinc, and meet or exceed federal specifications MIL-P-26915C or MIL/DOD P-21035A.
- b. Upon completion of the fence, the Contractor shall clean the fence of all soiled places and repair marred or abraded areas.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Chain link fences and gates will not be measured separately.

4.02 PAYMENT

- A. Payment for fencing and gates at the LLA Parcel will be included in the lump sum price as stated in Schedule of Unit Prices for applicable bid item "LLA Site Access and Security" and shall be full compensation for furnishing all labor, equipment, materials and tools to install fencing, gates, and surface repairs as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for fencing at the LL Parcel Excavation Areas 5 & 6 will be included in the lump sum price as stated in Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be full compensation for furnishing all labor, equipment, materials and tools to install fencing and surface repairs as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

1.01 SUMMARY OF WORK

- A. The Lora Lake Wetland will be rehabilitated and reconnected with Miller Creek and the adjacent floodplain and previously restored wetlands. Work includes the construction of gravel swales, perimeter ditch, and Outlet installation of coir logs, modifications to the bank of Miller Creek and the berm around the lake, installation of Biodegradable Erosion Control Fabric, and Planting.
- B. Wetland Rehabilitation Work shall occur on the LL Parcel: Wetland Rehabilitation Area in Season 2 following the Sediment Capping and Lake Filling construction.
- C. Wetland Rehabilitation Work shall avoid impacting water quality within the adjacent Miller Creek and Vacca Farm wetlands according to applicable permits and codes listed below and water management requirements as outlined in Section 35 41 00 Water Management and Creek Protection.
- D. Refer to Section 31 22 19.13 Topsoil Placement for placement of topsoil in the Wetland Rehabilitation Area.
- E. Refer to Section 32 92 19 Seeding and Section 32 90 00 Planting for details regarding Seeding and Planting.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- Nationwide Permit No. 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD), provided as Appendix B to these Specifications.
- Nationwide Permit No. 33 Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD), provided as Appendix C to these Specifications.
- 3. Nationwide Permit No. 38 Cleanup of Hazardous and Toxic Waste administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD), provided as Appendix D to these Specifications.
- 4. Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction (2016).

1.03 SUBMITTALS

- A. The Contractor shall submit a "Wetland Rehabilitation Plan" no less than twelve (12) weeks prior to the commencement of Season 2 that details construction methods and sequencing of the wetland rehabilitation Work as shown in the Drawings and described in this section, including:
 - A schedule sufficient to show the sequencing and expected durations of Work.
 - 2. A description of the survey control to be used for Wetland Rehabilitation.
 - 3. A list and descriptions of equipment to be used.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

- A. Coir Log (12-inch-diameter, square or round, 9 pounds per cubic foot)
 - 1. Coir log can be a long lead time item and must be ordered at least six (6) months before the commencement of Season 2 Work.
- B. Biodegradable Erosion Control Fabric (700 grams/square meter, 50% open area)
 - 1. Biodegradable Erosion Control Fabric shall be made of coir fiber and jute and shall have 100% biodegradable construction. Shall be North American Green, BioNet® C125BN or approved equal. Wet, moldy, or otherwise damaged fabric rolls shall not be accepted.

C. Wooden Stakes

- 1. Stakes shall be made of diagonally cut, 2 foot by 4 foot lumber. Stakes shall be free of fractures.
 - a. Wooden stakes used to stake coir logs shall be 30 inches long.
 - b. Wooden stakes used to stake Biodegradable Erosion Control Fabric shall be 12 inches long.
- D. Gravel Swales (WSDOT 9-03.11(1))
 - Gravel Swale material shall consist of round (river run) streambed gravel and conform to all provisions of this section. Angular (quarry run) rock shall not be used for streambed rock. Rock shall have a minimum specific unit weight of 2.5.
 - 2. Gravels shall follow the WSDOT standard gradation for Streambed Cobbles, 4-inch Cobbles size class (maximum size of 4 inches, 50% passing or D50 median size of 1-1/2 to 2 inches).
- E. Light Loose Riprap (WSDOT 9-13.1(3))
 - 1. Light Loose Riprap shall meet general requirements for WSDOT Light Loose Riprap and shall meet the following gradation:

	PERCENT PASSING
(IN.)	(%)
14	80 – 100
8 -10	30 – 60
2-8	10 - 30

F. Dewatering dam Materials

The dewatering dam on Miller Creek as shown in the Drawings shall be constructed from weather-resistant bulk material bags of approximately one meter in width, depth, and height (meter-size sandbags). Fill sandbags with packed PCC 3/8 inch minus aggregate or similarly-sized pea gravel. Smaller sandbags or alternative fill and sandbag materials (e.g., ultrablocks and visqueen) may be substituted only upon review and approval by the Engineer.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Wetland Rehabilitation Work consists of installing Topsoil, placing coir logs and gravel swales, excavating sections of berm, placing stabilizing materials, maintaining TESC systems, Seeding, and Planting.
- B. Refer to the sections specified in 1.01 Summary of Work, above, for placement of Topsoil, Seeding, and Planting.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. No Wetland Rehabilitation Work shall occur prior to approval of the Wetland Rehabilitation Plan.
- B. Wetland Rehabilitation Work shall occur in Season 2. The Temporary Construction Lake Access Road will be constructed in Season 1 and shall be the only access to the Wetland Rehabilitation Area.
- C. The Lake shall be filled and graded according to Section 35 23 43 Sediment Capping and Lake Filling and monitoring wells installed within the fill according to Section 33 24 13 Monitoring Well Installation, Decommissioning, and Protection, before the start of Wetland Rehabilitation Work.
- D. No equipment or machinery shall be allowed below the Ordinary High Water Mark (OHWM) of Miller Creek.

3.03 EXECUTION OF WORK

A. Gravel Swales

- 1. Gravel shall be placed directly on the Lake Fill surface to create drainage swales to the invert elevations and dimensions specified on the Drawings.
- 2. Gravel shall be placed to achieve design invert elevation and shall be a minimum of 6 inches deep.
- 3. Coir Logs shall be installed along the edges of the Gravel Swales as shown on the Drawings and described below.

B. Topsoiling

- 1. Topsoiling shall occur as specified in sections referred to in 1.01 Summary of Work, above.
- The Contractor is responsible for any damage to the newly installed monitoring wells that occurs during the Wetland Rehabilitation Work.

C. Perimeter Drain

- 1. Perimeter Drain shall be constructed in the topsoiled surface to the invert elevations and dimensions shown on the Drawings.
- 2. A ditch shall be constructed, as shown on Drawings, to connect the Perimeter Drain to the Rock Splash Pad at the northwest corner of the lake.

D. Dewatering dams

- Dewatering dams (isolation dams) shall be constructed as generally shown on the Drawings. The dewatering dam shall be designed to protect the Work Area from Miller Creek water levels to a minimum water surface elevation of +269.0 feet NAVD88 at the East Lake Berm Opening location and +268.0 feet NAVD88 at the Outlet location. The dewatering dam may include alternative materials given these materials and the structure they comprise meet all requirements of this section.
- 2. Dewatering dams shall be installed in Miller Creek at the sites of both the East Lake Berm Opening and the Outlet. The dewatering dams shall completely isolate the Work Areas from the Creek.
- 3. Dewater work areas sufficiently that all streambank work may be performed in the dry and to enable visual inspection of work. A dewatering pump may be required.
- 4. No equipment or machinery shall be allowed below the ordinary high water mark of Miller Creek.
- 5. The Contractor is responsible for any damage to the Work Area that may occur due to failure of the dewatering dams.
- 6. Dewatering dams shall be removed in their entirety and only after the completion of all Season 2 Work.

E. Culvert Removal

- 1. The existing 12-inch-diameter culvert at the southeast corner of Lora Lake shall be fully removed, as shown in Drawings. The bank of the creek shall be backfilled with clean fill, such as Lake Fill Material or Topsoil.
- 2. Dispose of the removed culvert at a Subtitle D facility approved by the Port.

F. East Lake Berm Opening

- Install dewatering dam on Miller Creek at the Work site before commencing excavation.
- No excavation or equipment access shall occur below the OHWM of Miller Creek.
- Remove and salvage tree(s) as shown in Drawings and with rootwad intact.
 Place salvaged trees as shown on the Drawings and as specified under Large Wood Placement below.
- 4. Regrade the existing berm to the extents and elevations shown in the Drawings.
- 5. Excavate key trench and construct rock berm as shown on the Drawings and as specified under Key Trench and Rock Berm, below.
- 6. Excavated material shall be disposed of at a Subtitle D facility approved by the Port.
- 7. Place two coir logs along the bank of Miller Creek just inside the limits of the excavated area, as shown in Drawings and as described below.

- 8. The excavated surface shall be covered in Biodegradable Erosion Control Fabric as shown in the Drawings and installed as specified below.
- Seeding and Planting shall occur as specified in sections referred to in
 1.01 Summary of Work, above.

G. South Lake Berm Opening

- 1. Excavate the existing South Lake Berm to the extents and elevations shown in the Drawings.
- 2. Dispose of excavated material at a Subtitle D facility approved by the Port.
- 3. Seeding and Planting shall occur as specified in sections referred to in 1.01 Summary of Work.

H. Outlet to Miller Creek

- The rehabilitated wetland shall drain to Miller Creek via the Outlet.
- 2. Install dewatering dam on Miller Creek at the Work site before commencing excavation.
- 3. Drain standing water from the Enhanced Existing Wetland area before commencing excavation. Water shall be pumped to the on-site treatment system and treated and discharged to the SR 518 Construction Stormwater Pond as per Section 02 24 50 Construction Water Management and Treatment System.
- 4. Access the Outlet Work area using low ground pressure equipment as well as work mats, crane mats, and/or similar methods suitable for access and construction in extremely soft soil conditions. The equipment access route shall follow the footprint of the Outlet Channel and shall avoid and minimize disturbance to the existing wetland.
- 5. Excavate the Outlet to the extents and elevations shown in the Drawings.
- 6. Excavated material shall be side-cast into low spots in the surrounding topography within 20 feet of the edge of the Swale Outlet Channel, as directed by the Engineer. Side-cast material shall be smoothed and compacted with the excavator bucket in shallow lifts that blend in a natural manner with the surrounding wetland topography. No material shall be placed in Miller Creek.
- 7. Final connections to Miller Creek shall only be made after acceptance by the Engineer.
- 8. Seeding and Planting shall occur as specified in sections referred to in 1.01 Summary of Work.

I. Key Trench and Rock Berm

- 1. Dewater the excavation area so that rock placement is in the dry and able to be visually inspected.
- 2. Key Trench
 - a. Excavate the Key Trench as shown on the Drawings.

3. Rock Berm

- a. Construct Rock Berm to the elevations and dimensions shown on the Drawings.
- b. Place riprap in angled lifts 10 to 14-inches thick, as shown on Drawings, to facilitate washing native silts and sands into the rock matrix to encourage plant growth, as follows:
- c. On completion of each layer, place native silts and sands on top of the riprap, and wash this material into the rock matrix using a power washer. Continue washing silts and sands until water no longer infiltrates into the rock matrix.
- d. Silts and sands shall not be pre-mixed with riprap prior to placement of rock.
- e. Engineer shall visually inspect and confirm completion of these steps before proceeding with subsequent layers of rock.
- f. Place a single layer of live stakes between the rock layers, as shown on Drawings. Live stakes shall be spaced 2-feet on-center.
- g. Repeat this sequence of rock placement, power washing silts and sands into rock matrix, Engineer inspection, and live stake placement until design elevations are achieved.
- h. Seed the Rock Berm as specified in section referred to in 1.01 Summary of Work.

J. Large Wood Placement

 Reuse salvaged logs on-site as shown on the Drawings or as field-directed by the Engineer. Keyed Logs shall have rootwad attached. Pin Logs do not include rootwad, as shown in the Drawings.

East Berm Opening

a. Install Keyed Logs as shown on the Drawings. Embed a minimum of 2/3 the total log length into the ground and bury a minimum of 3 feet deep. Log shall be driven into the ground at the angle necessary to ensure that minimum embedded length and burial depth are achieved. The angle of the log shall be a minimum of 30 degrees from the bank line, so that the log is adequately embedded in the bank.

3. Miller Creek Outlet

- a. Install Keyed Logs as shown on the Drawings. Embed a minimum of 1/2 of the total log length into the ground and bury a minimum of 2 feet deep. Logs shall be driven into the ground at the angle necessary to ensure that minimum embedded length and burial depth are achieved. The angle of the log shall be a minimum of 30 degrees from the bank line, so that the log is adequately embedded in the bank.
- b. Install Pin Logs as shown on the Drawings. Pin Logs shall be driven vertically into the ground, directly at the toe of the channel. Pin Logs shall be driven directly adjacent to Keyed Logs as shown on the Drawings. Pin Logs are intended to prevent horizontal movement.
- c. Redress adjacent cleared areas with small logs and debris.

- K. Biodegradable Erosion Control Fabric
 - 1. Cover finished ground surface with Biodegradable Erosion Control Fabric after Seeding.
 - Install Biodegradable Erosion Control Fabric over Seed as shown on Drawings and stake with 12-inch wooden stakes according to manufacturer's minimum recommendations.
 - Shingle Biodegradable Erosion Control Fabric such that each piece of fabric overlaps the subsequent piece of fabric a minimum of 1 foot.
 - c. Stake around all cut edges with 12-inch wooden stakes at 12-inches on center.
 - d. Damaged material shall either be discarded or repaired. Scrap fabric shall be placed beneath tear and shall extend 24 inches beyond the damaged area in all directions.
 - e. Key edges of Biodegradable Erosion Control Fabric into finished grade to a depth of at least 12 inches around the Rock Berm and at the outer limits of fabric covered area.
- L. Coir Log
 - 1. Coir Logs shall be placed at finish grade and buried to 50% of their diameter, as shown on the Drawings.
 - 2. Logs will be staked with 30-inch stakes every 3-feet, on center, and secured to the stake with twine, as shown on the Drawings.
- 3.04 QUALITY ASSURANCE

The Contractor shall provide final surface elevations prior to Seeding.

PART 4 MEASUREMENT AND PAYMENT

- 3.05 MEASUREMENT
 - A. "Wetland Rehabilitation" will not be measured separately.
- 3.06 PAYMENT
 - A. Payment for "Wetland Rehabilitation" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing of all labor, equipment, materials and tools necessary to design and implement the wetland rehabilitation plan including installation of gravel swales, perimeter drains, dewatering dams, biodegradable erosion control fabric, and coir logs, culvert removal, key trench and rock berm construction, placement of large wood, opening the east lake berm and south lake berm, and Outlet to Miller Creek construction as detailed on the Drawings or as directed by the Engineer and specified herein for the duration of the Contract.

End of Section

1.01 SUMMARY OF WORK

- A. Extent of Work: Work required in this section is for landscaping of the Lora Lake Parcel and the DMCA Planted Filter Strip, including planting of trees, shrubs, live stakes and other ground cover tasks such as seeding and mulching. Work also includes planting area watering, weed control, placement of fertilizer and planting establishment for the planting area.
- B. Term of Contract: Proposed Scope of Work outlined in this section shall be executed in two consecutive years, Season 1 and Season 2.
- C. Planting areas addressed in this section include:
 - 1. LL Parcel: Areas 5 & 6 Season 1
 - 2. LL Parcel: Wetland Rehabilitation Area Season 2
 - 3. DMCA: Planted Filter Strip Season 2
 - 4. LL Parcel: Temporary Construction Lake Access Road Season 2
- D. Refer to Section 32 72 00 Wetlands Rehabilitation
- E. Refer to Section 31 22 19.13 Topsoil Placement
- F. Refer to Section 32 92 19 Seeding

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

A. Standards

- 1. Seattle Tacoma International Airport Landscaping Standards 2006
- 2. American Association of Nurserymen Standards Balled and Burlapped Stock
- American Association of Nurserymen standards Ground Cover Stock
- 4. American Nursery and Landscape Association (ANLA) ANSI Z60 names shown on the Drawings
- 5. American Nursery and Landscape Association (ANLA) ANSI Z60.1 measurements, caliper, branching, grading, quality, balling and burlapping
- 6. State of Washington Public Applicator's license
- 7. Washington State Department of Agriculture (WSDA)
- 8. 2016 Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction

1.03 SUBMITTALS

Submit materials data in accordance with of Section 01 33 00 – Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products required for both Season 1 and Season 2. Submittal shall include following:

A. Materials List: Within 35 days after execution of the Contract for Season 1 plantings and in October of 2017 for Season 2 plantings, and before any planting materials are delivered to the job site each season, submit to the Engineer:

- 1. A complete list of all plants to be used in that season, including source, species, size, and quality.
- 2. Documentation or purchase order of the specified plant materials to be used that season including supplier names, addresses, phone numbers, and the location of the materials.

This submittal shall in no way be construed as permitting substitution for specific items described in the Drawings or these Specifications unless the substitution has been approved in advance by the Engineer.

- B. Work Schedule: Proposed Work Schedule of each type of landscaping Work, including material delivery, furnishing and Work completion for both Season 1 and Season 2 Work periods for approval by the Engineer.
- C. Record Drawings: During the course of the installation, carefully record in red-line on a print of the planting Drawings all changes made to the planting system layout during installation. Submit an approved record drawing to the Engineer prior to final inspection.

D. Certificates:

- 1. All certificates required by law shall accompany shipments.
- 2. Upon completion of the installation and prior to final inspection, deliver all certificates to the Engineer.

PART 2 MATERIALS

2.01 PREPARATION FOR MATERIALS

- A. Verification of Plant Sources of Supply for both Season 1 and Season 2.
 - The Contract will be based on the Bidder having verified, prior to bidding, all sources of supply to ensure that all of the plants on the planting list, of the size, species, variety and quality noted and specified, can be supplied. Failure to take this precaution may result in the Port procuring the items and the Contractor being held liable for all costs for furnishing and installing the plants in accordance with the Contract requirements.

2.02 MATERIAL REQUIREMENTS

A. Plant Materials

- 1. The Contractor shall provide the plants shown on the Drawings in the size and condition indicated. Refer to the Drawings for plant density and spacing required in each planting zone.
- 2. Container Stock: Shall have been grown in its delivery container for not less than six months but not more than two years. Samples, selected at random by the Engineer, shall not exhibit rootbound conditions, and plants with broken balls of earth shall not be used in the Work unless the Contractor has obtained written permission from the Engineer. Under no circumstances shall container stock be handled by their trunks, stems, or tops. Contractor can substitute container stock with bareroot stock of equal size and vigor that conform to bareroot stock requirement in this section. All substitutions shall be submitted to Engineer for approval as part of the submittals.

- 3. Live Stake Stock: Shall be segments of dormant, live plant material without a root system. Cuttings can be sourced from nursery or collected within 7 days from installation. Source plants for live stake shall be dormant when cut. Live stakes shall have a straight top cut and an approximate forty-five (45) degree diagonal cut at the rooting end.
- 4. Bareroot Stock: Shall be dug and the earth removed without injury to the fibrous root system. Protect roots from exposure until they are planted. Plants with roots dried or shriveled from exposure are not acceptable.
- B. Fertilizer shall be placed according to the manufacturer's instructions at the time of planting.
 - 1. General: All fertilizer shall be slow release, organic granular fertilizer delivered to the site in bags labeled with the manufacturer's guaranteed analysis.
 - 2. Till in fertilizer with topsoil, prior to final tilling at a rate of 1,400 pounds per acre.

C. Topsoil

1. Refer to the sections specified in 1.01 Summary of Work, above, for placement of Topsoil.

D. Seeding

1. Refer to the sections specified in 1.01 Summary of Work, above, for Seeding.

E. Herbicides

- 1. Herbicide shall be glyphosate-based product as approved by the Engineer.
- 2. Herbicide shall only be applied by qualified personnel holding valid Public Applicator's license or Pesticide/SPI license issued by Washington State Department of Agriculture.
- 3. Usage of chemical herbicide or pesticide shall be requested in writing during the plant establishment period. Submit a written request listing type, brand, schedule, and rate and frequency of application for approval. Disapproval of such request does not void plant warranty and Contractor's responsibility and to maintain planting area during the plant establishment period.
- 4. Contractor is responsible for obtaining all required City, State, and Federal permits and approval prior to herbicide treatment on-site.
- 5. The Contractor shall notify and obtain approval from the Engineer 48 hours in advance of all herbicide applications.

F. Coir Mulch Mats

 Coir mulch mat shall be 24 inches in diameter and ½-inch thick, specifically manufactured to suppress weeds around plants, and shall be installed per the manufacturer's directions.

G. Mulch

 Wood Chip Mulch: Shall be consistent with Division 9-14.4(3) of 2016
 Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction

H. Other Materials

1. All other materials not specifically described but required for a complete and proper planting installation, shall be selected by the Contractor subject to the approval of the Engineer.

2.03 MATERIAL HANDLING, DELIVERY, & STORAGE

A. Delivery and Storage:

- 1. Deliver Season 1 and Season 2 planting materials according to approved Work Schedule.
- 2. Deliver all items to the site in their original containers, with all labels intact and legible, at the time of the Engineer's inspection.
- 3. Immediately remove from the site all plants which are not true to name and all materials which do not comply with the provisions of this section of these Specifications.
- 4. Use all means necessary to protect plant materials before, during, and after installation and to protect the installed Work and materials of all other trades. Regularly water all nursery stock in containers and place them in a cool area protected from sun and drying winds.
- B. Replacements: In the event of damage or rejection, immediately make all repairs and replacements necessary for the approval of the Engineer and at no additional cost to the Port of Seattle or its representatives.

2.04 QUALITY ASSURANCE

A. Standards:

- All planting materials shall be nursery-grown under climatic conditions similar to or hardier than those at the site. All plants shall have normal habit of growth and be healthy, vigorous, and free of disease, insects, insect eggs, and larvae. All plants shall be at least equal to the size specified prior to pruning. Measurements shall be taken with all branches in their normal growing position. No plants shall be pruned prior to delivery to the site unless authorized, in writing, by the Engineer.
- 2. Collected plants shall not be used except for Live Stake stock conforming to Material Requirements above. Substitutions shall not be made without the written approval of the Engineer.
- All plants and planting material shall meet or exceed the Specification of Federal, State and local laws requiring inspection for plant disease and insect control.

- 4. Unless otherwise noted, measurements, caliper, branching, grading, quality, balling and burlapping shall follow the American Nursery and Landscape Association (ANLA) ANSI Z60.1. Names shown on the Drawings conform to the standardized names of [ANSI Z60.] Names not present in this listing conform to accepted practice in nursery trade.
- B. Inspection: Samples of all plant material shall be submitted to the Engineer for acceptance prior to shipment to the site. The Contractor is advised that inspection and acceptance of all stock, prior to planting, is mandatory and the Engineer reserves the right to reject any or all plant material until final inspection and acceptance. All rejected plants shall be removed immediately from the site. When requested by the Engineer, provide sales receipts for all nursery stock and certificates of inspection from all Federal, State and local authorities.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Site Information.
 - 1. General site conditions shall conform to the Wetland Rehabilitation section specified in 1.01 Summary of Work.

B. Existing Utilities:

 Contractor shall verify locations of all existing underground and overhead utilities on-site and is responsible for all damages and repairs incurred during the duration of this Contract.

3.02 EXECUTION OF WORK

- A. Surface Conditions
 - 1. Inspection:
 - a. Prior to all Work of this section, carefully inspect the installed Work of all other trades and verify that all such Work is complete to the point where this installation may properly commence.
 - b. Verify that planting may be completed in accordance with the original design and the referenced standards.
 - 2. Discrepancies: In the event of discrepancy, immediately notify the Engineer for specific instructions.

B. Weed Control

- General:
 - a. The Contractor shall control weeds in all planting areas until completion of the Maintenance Period. Weed control includes prevention and removal of all undesired vegetation, Washington State listed noxious weeds, King County Weeds of Concern, and Class A, B, and C Weeds.
 - b. Control weeds by manual removal, including moving with weed whacker, hand pulling or other Best Management Practice approved by Washington State and King County Noxious Weed Control Board, and/or application of post-emergent herbicides in accordance with Part 2 of this section.

2. Disposal:

 Disposal: All vegetative parts of targeted noxious weeds and invasive species shall be disposed off-site in accordance with Section 01 74 19 – Construction Waste Management and Disposal.

C. Grading

 Rough-grade planting areas to accept planting pits as described further in these Specifications. If additional topsoil is needed to bring planting area to finish grade, material shall conform to the sections specified in 1.01 Summary of Work.

D. Layout

- 1. Plant species in clusters as indicated on Drawings.
- Locate new planting where indicated on the Drawings, except where
 obstructions below ground or overhead are encountered or where changes
 have been made in the construction. Obtain the Engineer's approval for all
 planting location changes prior to installation for Season 1 installation and
 Season 2 installation respectively.
- 3. Verify plant locations and quantities of plants on the Plant Schedule with those represented on the Drawings.
- 4. Notify Engineer prior to planting to review quality, placement, and timing accordingly to the approved Work Schedule. Stake proposed locations of all container stock with an approved coding system. For live stake stock groupings, boundary may be staked. Engineer shall review and approve locations prior to planting or relocating plant material during both Season 1 and Season 2 Work period.

E. Planting Trees And Shrubs

1. General:

- a. Plant nursery stock immediately upon delivery to the site according to Work Schedule or approved by the Engineer.
- b. Regularly water all nursery stock in containers and place them in a cool area protected from sun and drying winds.

Excavation:

- a. All trees and shrubs shall be planted in pits twice the width of the root ball, centered and set on a minimum 6 inch depth of compacted topsoil.
- b. For container stock in one-gallon containers, dig a hole 12 inches in diameter and 12 inches deep.

3. Plant installation:

- a. Remove all platform wire, containers, and burlap before planting.
- b. Fill holes with topsoil taken from the hole.
- c. Fill the hole to the proper height to receive the plant and thoroughly tamp the topsoil before setting the plant.

- d. Set the plant in an upright position in the center of the hole and compact the topsoil around the ball or roots.
- e. Thoroughly water each plant when the hole is 2/3 filled.
- f. After watering, tamp the topsoil in place until the surface of the backfill is level with the surrounding area and the root crown of the plant is at the finished grade of the surrounding area.
- g. Build up a temporary watering basin around the base of each tree and shrub indicated on the Drawings, unless otherwise directed by the Engineer.

F. Planting Live Stakes

See Drawings for Live Stakes installation details.

G. Hydroseeding

 Hydroseeding shall conform to the Seeding section specified in paragraph 1.01 Summary of Work of this section.

H. Mulching

- 1. All Container and Bareroot stocks within the Wetland Rehabilitation Area shall receive coir mulch mats.
- I. All Container, Live Stake, and Bareroot stocks planted outside of the Wetland Rehabilitation Area shall receive a 24-inch diameter Wood Chip Mulch ring at a minimum of 3-inch thickness. Protection
 - Protect all plant materials against harm from wind, unusual weather and the public. Special planting techniques, defoliating, wilt-proofing, or spraymisting may be required by the Engineer for unseasonal planting, prolonged periods of drought, or if plant materials begin to show sign of stress.

J. Inspection

- 1. In addition to normal progress inspections, schedule and conduct the following formal inspections, giving the Engineer at least 24 hours' prior notice of readiness for:
 - a. Inspection of plants in containers prior to planting.
 - b. Inspection of plant locations, to verify compliance with the Drawings.
 - c. Final inspection after completion of planting in Season 1 and Season 2 respectively. Schedule this inspection sufficiently in advance, and in cooperation with the Engineer, so that the final inspection for Season 1 and Season 2 may be conducted within 24 hours after completion of planting activities respectively.
 - d. Final inspection at the end of the maintenance period, provided that all previous deficiencies have been corrected.

K. Maintenance

 General: The Contractor shall maintain all plantings in this project; shall be responsible for 100% survival of all plant materials in healthy condition and shall maintain all landscape areas in a neat and orderly fashion until completion of the Maintenance Period. The Contractor will be held responsible for all damage or loss of trees, shrubs, and live stakes caused by his/her inattention or carelessness. The Contractor shall repair damage caused by traffic, vandalism, weather, or other outside causes.

2. Maintenance Period:

 All plant materials and planting areas shall be under Contractor maintenance throughout the Contract duration. Contractor maintenance requirements cease on the date Notice of Physical Completion or Certification of Substantial Completion, whichever is last.

Work Included:

- a. Maintenance shall include all watering, weeding, fertilizing, and mulch replenishment necessary to keep the plant materials in a healthy growing condition and to keep the planted areas neat and orderly throughout the maintenance period.
- b. Watering: Plants shall be watered by the Contractor during the growing season (April 1st October 1st) or as needed to keep them in healthy growth. Contractor shall develop watering schedules in consultation with the Engineer.
- The Contractor shall furnish in writing, a watering schedule to the Engineer. Any change in the watering schedule shall require 24-hour advance notice. The Engineer shall be notified immediately of any changes of the pre-approved schedule.
- d. The Contractor shall provide all equipment and means for proper application of water to those planted areas not equipped with an irrigation system.
- e. Plantings: Weeds shall be removed from planting areas at least once each month during the growing season (April 1st October 1st) and at other times as necessary. Dead plants shall be removed and replaced with healthy plants of the same type and size. Pruning shall be done only as designated by the Engineer. Weeds and prunings shall be disposed of by the Contractor off the project site in accordance with Section 01 74 19 Construction Waste Management and Disposal.
- f. Bark mulch shall not be allowed to scatter onto paved areas.
- g. Protect all planted areas against damage, including erosion and trespassing, by providing and maintaining proper safeguards.
- h. Mulch: Mulching material shall be applied and replaced as directed by the Engineer. Weeds shall be removed from the planting areas as often as is necessary to maintain favorable growing conditions.

- Debris Control: Debris control shall be accomplished in all planting areas on a regular basis or during monthly maintenance period.
 Report any illegal dumping activities in all areas within Port of Seattle properties immediately.
- j. Insect, Disease and Mole Control: All plant materials shall be free of diseases, pests, and fungal infection. Appropriate fungicide or insecticide shall be applied as necessary in accordance with City, State and Federal regulations. The proper insecticide shall be used as necessary to control disease infestation by harmful insects and pests, including complete control of caterpillars.
- 4. Application of Organic Herbicides and Insecticides: The Contractor shall assume all responsibility for rendering any plantings unsatisfactory by reason of chemical application. Damage to adjacent areas on or off the right-of-way shall be repaired to the satisfaction of the Engineer. The use of chemicals will not be allowed if such use will leave any residue in the soil toxic to the plant materials specified in the Contract for planting or those in adjacent areas.
- 5. Spraying shall be done by an applicator possessing a current State of Washington Public Applicator's license or Pesticide/SPI license issued by WA Department of Agriculture. The Contractor shall notify the Engineer 24 hours prior to the application of any herbicide, giving the name of the material, rate of application and where it is to be used. Application of herbicide shall be in accordance with the recommendation of the manufacturer.

6. Replacements:

- a. At the end of the maintenance period, all plant material shall meet 100% survival and in a healthy growing condition.
- b. During the maintenance period, should the appearance of a plant indicate weakness and probability of dying, immediately replace that plant with a new and healthy plant of the same type and size without additional cost to the Port.
- 7. Extension of Maintenance Period: Continue the maintenance period at no additional cost to the Port until all previously noted deficiencies have been corrected.

L. Cleanup

1. Remove all debris, such as cans, surplus materials, and trimmings, from the site. Neatly dress and planting areas and flush all adjacent paved areas, free of topsoil and bark mulch.

3.03 QUALITY ASSURANCE

A. Qualifications of Workmen: Provide at least one person who shall be present at all times during execution of the Work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all Work performed under this section.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Planting at the LL Parcel: Areas 5 & 6, LL Parcel: Wetland Rehabilitation Area, DMCA: Planted Filter Strip, and LL Parcel: Temporary Construction Lake Access Road will not be measured separately.

4.02 PAYMENT

- A. Payment for planting at the LL Parcel: Areas 5 & 6 during Season 1 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary for inspecting surface conditions, weed control and disposal, grading, planting layouts, planting installation of trees and shrubs, and mulching, protection, maintenance, cleanup, and other measures as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for planting at the LL Parcel: Wetland Rehabilitation Area during Season 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Wetland Rehabilitation" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary for inspecting surface conditions, weed control and disposal, grading, planting layouts, planting installation of trees and shrubs, and mulching, protection, maintenance, cleanup, and other measures as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for planting at the DMCA: Planted Filter Strip during Season 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Planted Filter Strip" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary for inspecting surface conditions, weed control and disposal, grading, planting layouts, planting installation of trees and shrubs, and mulching, protection, maintenance, cleanup, and other measures as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- D. Payment for planting at the LL Parcel: Temporary Construction Lake Access Road during Season 2 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Temporary Construction Lake Access Road" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary for inspecting surface conditions, weed control and disposal, grading, planting layouts, planting installation of trees and shrubs, and mulching, protection, maintenance, cleanup, and other measures as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section	

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. The extent and location of Seeding Work is indicated on the Drawings. The Work includes the requirements for providing all seeding and associated Work in conformance with this section and to the dimensions indicated on the Drawings. This section applies to the Lora Lake Apartments (LLA) Parcel, Lora Lake (LL) Parcel, and Dredged Material Containment Area (DMCA) where seeding is shown on the Drawings.
- B. Seeding areas and Construction Seasons addressed in this section include:
 - 1. LLA Parcel: Final Graded Surfaces Season 1 or Season 2
 - 2. LLA Parcel: Bioswale Season 1 or Season 2
 - LL Parcel: Excavation Areas 5 & 6 Season 1
 - 4. LL Parcel: Wetland Rehabilitation Area Season 2
 - 5. DMCA: Planted Filter Strip Season 2
 - 6. LL Parcel: Temporary Construction Lake Access Road Season 2
- C. Refer to Section 31 22 19.13 Topsoil Placement.
- D. Refer to Section 32 90 00 Planting
- E. Refer to Drawings for Seeding Areas and Schedules.

1.02 GOVERNING CODES, STANDARDS AND REFERENCES

- A. U.S. Environmental Protection Agency (EPA) Publication SW846 Test Method for Sieve Analysis for Evaluating Solid Waste, Physical/Chemical Methods
 - 1. Polychlorinated Dibenzodioxins and Polychlorinated Dibenzonfurans (Dioxins/furans) per EPA SW846, Method 1613
 - Model Toxic Control Act (MTCA) Metals including Arsenic, Cadmium, Chromium, and Lead per EPA SW846, Method 6010 and Mercury per EPA SW846, Method 7470
 - Pentachlorophenol per EPA SW846, Method 8041
 - 4. Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) per EPA SW846, Method 8270D
 - 5. Ethylbenzene and Toluene per EPA SW846, Method 8260C.
- B. Additional Physical/Chemical Methods
 - Total Organic Carbon (TOC) per Plumb 1981
 - Total Petroleum Hydrocarbons Gasoline Range per NWTPH-G
 - Total Petroleum Hydrocarbons Heavy Oil Range and Diesel Range per NWTPH-Dx
- C. Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction

1.03 SUBMITTALS

- A. Submit materials data in accordance with of Section 01 33 00 Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products.
- B. Submittals shall include the following:
 - 1. Samples: Seed Label and mulch product label
- C. Submit laboratory chemical analysis results for dyed mulch and tackifier in accordance with Section 01 33 00 Submittals. Separate analytical results are required for each source of material.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

A. General

- The Contractor shall chemically test all materials to be imported for chemicals of concern and analytical methods as listed above in paragraph 1.01.A and paragraph 1.01.B of this section. All test results must meet the chemical criteria defined in specification section 31 22 19.13 – Topsoil Placement.
- B. Hydraulically Applied Erosion Control Products (HECPs)
 - 1. Wood Strand Mulch for the Wetland Rehabilitation Area shall be Rainier Supreme as manufactured by Rainier Veneer Inc., or approved equivalent, with the understanding that the general material requirement regarding chemical quality must be met. Mulch shall be dyed green to facilitate inspection of the placement. Mulch chemical testing shall be performed after dyes have been added. Bonded Fiber Matrix (BFM) shall not be used in the Wetland Rehabilitation Area due to poor material performance in saturated conditions.
 - 2. HECP for All Other Areas shall conform to WSDOT Standard Specifications 9-14.4(2)A Long-Term Mulch and the chemical criteria specified above.

C. Seed

Seed shall be supplied by Direct Seed Sales of Issaquah WA, or approved equivalent. The Wetland Rehabilitation Area, as shown on the Drawings shall be seeded with custom Wetland Seed Mix shown below. All other seeded areas shall be seeded with Erosion Control Seed Mix. Seeds shall be machine-mixed and delivered to the job in unopened packages, plainly marked with the supplier's printed label showing his name and the contents.

2. Wetland Seed Mix shall have the following proportions by pounds of pure live seed per acre:

SEED TYPE	POUNDS PER ACRES
Blue Wildrye	10
Native Red Fescue	10
Tufted Hairgrass	3
NW Managrass	3
Bentgrass	1
Annual Ryegrass	10

3. Erosion Control Seed Mix shall have the following proportions by pounds of pure live seed per acre:

SEED TYPE	POUNDS PER ACRES
Creeping Red Fescue	60
Elka Perennial Ryegrass	60
Annual Ryegrass	20

D. Fertilizer

- Fertilizer shall be Biosol Forte 7-2-1 by Rocky Mountain Bio Products, True Organic Products 7-1-7 (TOP-9062), or Phyta Boost Plant Food Fertilizer 7-1-2, or approved equivalent. Product label shall be submitted to the Engineer for approval before application.
- 2. Fertilizer shall consist of the following:
- 3. 07 parts per 100 total nitrogen
- 4. 01 or 02 parts per 100 water-soluble potassium compounds
- 5. 01, 02, or 07 parts per 100 available phosphoric acid

E. Tackifier

 Tackifier shall be compliant with WSDOT standard specification 9-14.4(7)A and shall meet the General material requirements specified above.
 Tackifier shall not be added to Bonded Fiber Matrix, where used.

2.02 QUALITY ASSURANCE

- A. The Contractor shall submit analytical results for chemical testing for each material source, prior to the material coming on-site and before it is placed.
- B. Each tested sample should be composed of no less than five sub-samples taken throughout any one source. The Contractor shall ensure that the samples are representative of all materials to be imported.

PART 3 EXECUTION

3.01 PREPARATION

A. Preparation of the areas to be seeded shall comply with the applicable portions of paragraph 8-01.3(2)A1 of the Washington State Department of Transportation Standard Specifications. The area shall include those limits shown on the Drawings. All areas will be seeded as shown on the Drawings.

3.02 SEEDING

- A. Notify the Engineer not less than 24 hours in advance of any seeding operation and do not begin the Work until areas prepared or designated for seeding have been approved. Following the Engineer's approval, immediately begin seeding and fertilizing of the approved slopes. Unless otherwise approved, accomplish seeding between September 1 through October 1 and March 1 to May 15.
- B. Do not perform seeding during windy weather or when the ground is frozen. Place seed and fertilizer at the rate and mix specified herein or as directed by the Engineer. Seed and fertilizer may be sown by the following method:
 - An approved-type hydroseeder which utilizes water as the carrying agent and maintains a continuous agitator action that will keep seed and fertilizer mixed in uniform distribution until pumped from the tank. Pump pressure shall be such as to maintain a continuous, non-fluctuating stream of solution.
- C. It shall be the Contractor's responsibility to provide personnel experienced in seeding and fertilizing operation, equipment, and methods as herein specified.
- D. Application shall be made at the following rates or as approved by the Engineer:

MATERIAL	APPLICATION RATE
Wetland Seed Mix	35 lbs pls/acre
Erosion Control Seed Mix	100 lbs pls/acre
Fertilizer	1,400 lbs/acre
Mulch	3,000 lbs/acre

lbs = pounds

pls = pure live seed

3.03 GUARANTEE

- A. As a portion of this Work, the Contractor guarantees grass germination. Should the above-specified procedure be deemed not adequate for grass germination in any areas, the Contractor shall perform, as a part of the Contract, all re-Work necessary to produce germination.
- B. Where seeded areas fail to germinate reseed such areas as described above until adequate germination is affected.
- C. Final acceptance will be based on a uniform stand of grass.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for Seeding will be as a unit.

4.02 PAYMENT

- A. Payment for seeding of the LLA Parcel Final Graded Surfaces and the LLA Parcel Bioswale will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Grading and Surfacing" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to seed the area and establish a uniform stand of grass as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for seeding of the LL Parcel Excavation Areas 5 and 6 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to seed the area and establish a uniform stand of grass as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for Seeding of the LL Parcel Wetland Rehabilitation Area will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Wetland Rehabilitation" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to seed the area and establish a uniform stand of grass as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- D. Payment for Seeding of the DMCA Planted Filter Strip will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Planted Filter Strip" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to seed the area and establish a uniform stand of grass as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- E. Payment for Seeding of the LL Parcel Temporary Construction Lake Access Road will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Temporary Construction Lake Access Road" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to seed the area and establish a uniform stand of grass as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

Division 33

Utilities

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. The extent and location of the "Monitoring Well Installation, Decommissioning, Refurbishment and Protection" Work is indicated in the Drawings.
- B. This Work includes decommissioning, protection and installation of groundwater monitoring wells located on the LLA Parcel, LL Parcel, DMCA, and within the City of SeaTac right-of-way, and installation of Sediment Cap Monitoring Points located on the LL Parcel. This section applies to both types of monitoring points unless stated otherwise.
- C. This Work shall be conducted by a licensed well contractor in compliance with WAC 173-160 and WAC 173-162.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. Fed. Spec. SS-S-200D Sealing Compounds, Two-Component, Elastomeric, Polymer Type, Jet-Fuel-Resistant, Cold-Applied joint-sealing materials
- B. WAC 173-160 Minimum Standards for Construction and Maintenance of Wells
- C. WAC 173-162 Regulation and Licensing of Well Contractors and Operators

1.03 SUBMITTALS

- A. Licensing. Submit copy of driller's current Resource Protection Well Operator License prior to start of drilling work.
- B. Materials Data. Submit materials data in accordance with Section 01 33 00 Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products.
- C. Sediment Cap Monitoring Point Construction. Prior to installation of Sediment Cap Monitoring Points inside the Lora Lake Cleanup Area, submit the following for each location, to the nearest tenth of a foot:
 - 1. Ground surface elevation
 - 2. Thickness of wetland planting topsoil
 - 3. Sediment cap elevation
 - 4. Thickness of lake fill
 - 5. Estimated lake fill settlement remaining based on closest settlement monitoring point
 - 6. Proposed well depth from lake fill surface
 - 7. Proposed elevation of top of well casing
 - 8. Proposed elevation of aboveground monument
- D. Prior to installation of Sediment Cap Monitoring Points outside Lora Lake Cleanup Area, submit for each location the estimated area of vegetation to be disturbed.
- E. For all monitoring wells and Sediment Cap Monitoring Points, submit the following for each location:
 - Well Construction Notification Forms

- 2. Well Records
- Well survey data, including well location coordinates and elevation to the nearest hundredth of a foot of top of casing, top of monument, and ground surface.

1.04 QUALITY CONTROL

A. Work must be performed by a firm licensed for well installation, refurbishment, and decommissioning as required in WAC 173-162.

1.05 PROTECTION OF EXISTING WELLS

A. During Work activities it is the responsibility of the Contractor to protect existing monitoring wells which have not been designated for decommissioning. Work shall be conducted so as to prevent damage to the existing monitoring wells as indicated on the Drawings.

1.06 RECORD KEEPING

A. The Contractor shall notify the Washington State Department of Ecology (Ecology) of their intent to construct, refurbish, or decommission a well at least seventy-two hours before starting Work. Well Construction Notification shall be submitted on forms provided by the Ecology. The Contractor shall report the completion of all well Work on Well Record forms and submit them to the Ecology within thirty (30) days of completion of well Work. The Contractor shall submit to the Engineer a copy of all Well Construction Notification forms and Well Record forms. Submit a copy of each Ecology submittal to the Engineer. In addition provide a copy of all Ecology submittals at close of project.

PART 2 PRODUCTS

2.01 GENERAL

A. Materials shall be of the quality herein specified, new, free from defects, of the best commercial grade and approved by a nationally recognized testing laboratory for the purpose used, if such approval is granted to the equipment in question. Each type of material shall be of the same make and quality throughout the Project.

2.02 MONITORING WELLS, MONUMENTS AND SURFACE PROTECTION MATERIAL

- A. PVC Pipe: Schedule-40 PVC pipe should have smooth interior with a minimum inside diameter of 2 inches. PVC pipe shall meet WSDOT Standard Specification Section 9.05.12.
- B. PVC Well Screen: Schedule-40 PVC pipe shall be shall be slotted with 0.020-inch slots with a minimum interior diameter of 2 inches. Use of alternate screen material with 0.010-inch slots may be instructed by the Engineer during installation.
- C. Sand Filter Pack: #10/20 silica sand. Use of alternate filter pack material of #20/40 silica sand may be instructed by the Engineer during installation.
- D. Well Seal: 3/8-inch bentonite chips, hydrated following placement.
- E. Flush Mounted Monuments: Monitoring well monuments consist of a 12-inch steel flush monument
- F. Modification

- 1. Monitoring Well Identification
 - a. The steel cover of the monument shall be clearly and permanently labeled "Monitor Well." A permanent well identification number will be provided by the Port. The permanent well identification number will be stamped into the center of the steel cover using a Hanson Company hand held type holder and steel type kits, model number 27783, No Equal.
- G. Above Ground Monuments: All monuments for above ground installation shall be consistent with WAC 173-160. The Contractor responsible for obtaining all variances necessary to comply with applicable regulations, including surface protection requirements for installing protective steel posts under WAC 173-160-420 (12) (a).

2.03 WELL CAP FOR FLUSH MOUNTED INSTALLATIONS

A. Lockable 2-inch well caps shall be of EBW model number 70.772-106-01, or Morris model number 318002001, Or Approved Equal. The Port will provide a standard keyed lock.

2.04 CONCRETE

- A. Material shall be Portland Cement Ready-Mix Concrete and meet the requirements of WSDOT Standard Specification Section 6-02.3(4).
- B. Joint Sealer:
 - Joint-sealing materials shall meet the requirements of Fed.
 Spec. SS-S-200D Sealing Compounds, Two-Component, Elastomeric, Polymer Type, Jet-Fuel-Resistant, Cold-Applied.
 - 2. Deliver each lot or batch of sealing compound to the job in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch, or lot number, and the safe heating temperature, and shall be accompanied by the manufacturer's certification stating that the compound meets the requirements of this section.

PART 3 EXECUTION

3.01 NOTICE

A. The Contractor shall provide 5 working days' notice to the Engineer prior to well installation, refurbishment, or decommissioning.

3.02 PROTECTION OF MONITORING WELLS DURING CONSTRUCTION ACTIVITIES

- A. The Contractor shall be responsible for the protection of monitoring wells identified on the Drawings for protection during construction activities. The Contractor shall be responsible for the repair or replacement of wells identified to remain or be protected which become damaged during construction activities.
- B. Wells identified to be protected, which are damaged and unable to be repaired, shall be decommissioned and replaced at Contractors expense.
- C. Maintain a minimum undisturbed 1-foot radius around wellheads, or submit alternate protection plan for approval.

3.03 OF GROUNDWATER MONITORING WELLS

- A. Contractor shall comply with all related Washington State well regulations (WAC 173-160 and WAC 173-162) and details in this section.
- B. Groundwater monitoring wells shall be installed using hollow stem auger technology. Split-spoon soil samples will be collected at 2.5-foot intervals or as directed by Engineer.
- C. All groundwater monitoring wells should be screened in the shallow aquifer from 10 to 20 feet below ground surface unless otherwise noted by the Engineer.
- D. Develop groundwater monitoring wells by alternating cycles of surging with a surge block or submersible pump to draw fine-grained material into the well casing and pumping at a steady rate to remove the fine-grained material. Groundwater monitoring wells shall be developed until a minimum 10 well volumes have been evacuated and Engineer approval is given.

3.04 INSTALLATION OF SEDIMENT CAP MONITORING POINTS

- A. Contractor shall comply with all related Washington State well regulations (WAC 173-160 and WAC 173-162) and details in this section.
- B. Sediment Cap Monitoring Points shall be installed using hollow stem auger technology. Split-spoon soil samples will be collected at 2.5-foot intervals or as directed by the Engineer.
- C. Contractor shall install Sediment Cap Monitoring Points located in the Lora Lake Cleanup Area (MW-CP1, MW-CP2, MW-CP3, MW-CP4) and south of the Lora Lake Cleanup Area (MW-CP5, MW-CP6) during Season 2, following capping, filling, and rough grading but prior to topsoil placement and planting.
- D. Contractor shall access Sediment Cap Monitoring Points located in the Lora Lake Cleanup Area (MW-CP1, MW-CP2, MW-CP3, MW-CP4) and south of the Lora Lake Cleanup Area (MW-CP5, MW-CP6) with drilling and support vehicles on designated construction access roads and on rough-graded lake fill. Contractor shall install MW-CP5 and MW-CP6 outside the Lora Lake Cleanup Area by positioning the drill end of the rig and the borehole outside lake fill area, while keeping the remainder of the drill rig and support vehicles on lake fill. Contractor shall not permanently damage vegetation except as approved by the Engineer.
- E. Contractor shall access Sediment Cap Monitoring Point MW-CP7 with drilling and support vehicles from the trail east of Lora Lake. Contractor shall deploy a limited-access drill rig suitable for the slope, vegetation, and obstacles in this area, and equipped with a standard hollow-stem auger suitable for installing 2-inch monitoring wells in accordance with applicable water well regulations. Contractor shall not permanently damage vegetation except as approved by the Engineer.
- F. Contractor shall install Sediment Cap Monitoring Points located in the Lora Lake Cleanup Area (MW-CP1, MW-CP2, MW-CP3, MW-CP4) so that the total depth of the boring does not penetrate the sediment cap, and the well has a 2 or 2.5 foot screened interval extending up from the sediment cap, in accordance with the Drawings and well construction details in the approved Sediment Cap Monitoring Point Construction submittal.

- G. Contractor shall install Sediment Cap Monitoring Points located outside the Lora Lake Cleanup Area (MW-CP5, MW-CP6, MW-CP7) in the shallow aquifer with the following well construction dimensions:
 - 1. MW-CP5 and MW-CP6: total depth 15 feet, screened interval 5 to 15 feet below ground surface.
 - 2. MW-CP7: total depth 20 feet, screened interval 5 to 20 feet below ground surface.
- H. Develop each Sediment Cap Monitoring Point by alternating cycles of surging the well with a surge block or submersible pump to draw fine-grained material into the well casing and pumping at a steady rate to remove the fine-grained material. Sediment Cap Monitoring Points shall be developed until a minimum 10 well volumes have been evacuated and Engineer approval is given.

3.05 MONITORING WELL IDENTIFICATION

A. The monitoring well number shall be stamped onto the cover and painted onto the surface seal using 3-inch character stencils.

3.06 SURFACE SEAL

A. Seal Type 1:

1. Type 1 surface seal shall consist of a 20-inch-diameter by 18-inch-thick reinforced concrete pad. The concrete pad shall be steel reinforced with #3 and #4 rebar Grade 60. The surface elevation of the concrete pad shall match the surrounding surface. Where the existing surface is concrete or asphalt, joint sealing filler shall be used to seal the contact joint.

B. Seal Type 2:

1. Type 2 surface seals for wells that do not require loads of 100 KIP shall be installed in a manner and using products consistent with WAC 173-160.

3.07 DECOMMISSIONING

- A. Monitoring wells shall be decommissioned in accordance with the Drawings or as approved by the Engineer and in accordance with WAC 173-160.
- B. The criteria for decommissioning includes: improper installation, location of well interferes with Work activities, damaged well, completion of use.
- C. Method of Decommissioning Well:
 - Well log records are available and provided in the Geotechnical Report included as Reference Document 6 to these Specifications. An enviroplug or grout may be used for decommissioning. Decommissioned well shall be sealed and returned to the existing grade.
 - 2. Monitoring wells located within areas of proposed excavation shall be decommissioned prior to excavation. The decommissioning procedure shall take into account the depth of the planned excavation in relation to the depth of the monitoring well filter pack and surface seal. In the event the excavation extends below the surface seal, the Contractor shall decommission the well through over drilling and removal of well casing and filter pack in accordance with WAC 173-160-465.

3.08 SURVEY OF TOP OF CASING ELEVATIONS

A. A survey mark will be stamped into the north rim of the well cover. The well shall be surveyed from the survey mark, and top of well casing in accordance with Section 01 71 23.16 – Surveying.

3.09 WASTE GENERATED DURING INSTALLATION, REFURBISHMENT AND DECOMMISSIONING

- A. All waste materials generated from the installation, refurbishment and decommissioning of monitoring wells shall be disposed of off-site at Contractors expense and according to all pertinent federal and state requirements.
- B. Contractor is responsible for profiling waste materials for disposal with analytical testing as needed. Analytical laboratory testing will be at Contractor expense and results shall be submitted to Engineer prior to removal of waste from the Site.
- C. Soil, water, and other waste materials generated during well installation, development, refurbishment, and decommissioning shall be assumed Subtitle D Contaminated Material unless indicated otherwise by analytical testing. Waste materials shall be contained in labelled, DOT-approved 55-gallon steel drums unless directed otherwise by Engineer. Contractor will maintain a current record of the number, location, and contents of drums and provide this information to Engineer.
- D. Contractor shall provide documentation from the disposal facility for off-site disposal of all waste materials generated during installation, development, refurbishment, and decommissioning.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Monitoring well installation, decommissioning, and protection at the LL and LLA Parcels will not be measured separately.

4.02 PAYMENT

- A. Payment for groundwater monitoring well decommissioning at the LLA Parcel will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "LLA Demolition" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to decommission groundwater monitoring wells as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for groundwater monitoring well decommissioning at the LL Parcel Excavation Areas 5 and 6 will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Excavation Areas 5 and 6" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to decommission groundwater monitoring wells as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- C. Payment for groundwater monitoring well and piezometer decommissioning at the Temporary Construction Lake Access Road will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "Temporary Construction Lake Access Road" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to decommission groundwater monitoring well and piezometer as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

- D. Payment for groundwater monitoring well decommissioning at the DMCA will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "DMCA Clearing, Grading, and Surfacing" and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to decommission groundwater monitoring well and piezometer as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- E. Payment for "LLA Parcel Monitoring Well Installation" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials, and tools to install groundwater monitoring wells as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- F. Payment for "LL Parcel Sediment Cap Monitoring Point Installation" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials, and tools to install sediment cap monitoring points as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section	

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. The location and extent of "Storm Drainage" Work is indicated in the Contract Documents. The Work includes the requirements for providing culverts, storm sewers, and storm drainage structures.
 - Work includes provision of the new Catch Basin with Beehive Grate at LLA, new corrugated HDPE pipe connection to City of Burien manhole near South 152nd Street, and new manhole at construction staging area north of South 152nd Street.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. City of Burien Road Design and Construction Standards, 2008
 - 1. Chapter 7: Drainage
 - 2. Figure 7.30 Beehive Grate
- B. Washington State Department of Transportation (WSDOT) Standard Plans
 - 1. B-10.20-01 Catch Basin Type 2
 - 2. B-15.60-01 Manhole Type 3
- C. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. AASHTO M 294, Standard Specification for Corrugated Polyethylene Pipe
 - 2. AASHTO M 86, Standard Specification for Concrete Sewer, Storm Drain, and Culvert Pipe
 - 3. AASHTO M 170, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 - 4. AASHTO M198, Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
- D. American Society for Testing and Materials (ASTM)
 - 1. ASDF A 36, Standard Specification for Carbon Structural Steel
 - 2. ASTM A 123, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
 - 3. ASTM C 14, Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe
 - 4. ASTM C 76, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 - 5. ASTM C 118, Standard Specification for Concrete Pipe for Irrigation or Drainage

1.03 SUBMITTALS

A. Submit materials data in accordance with of Section 01 33 00 – Submittals. Furnish manufacturers' technical literature, standard details, product specifications, and installation instructions for all products. Submittals shall include the following:

- 1. Manufacturers cut sheet for piping
- 2. Shop drawings for catch basin and manhole structures.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENTS

- A. Corrugated HDPE Storm Sewer Pipe
 - Corrugated HDPE storm sewer pipe shall meet the requirements of ASTM 3212 and ASTM C969. Pipe shall be dual wall, with smooth interior wall and corrugated exterior wall, with integral bell, watertight joints. ADS N-12 WT or equivalent.

B. Manholes and Catch Basins

- Manholes and Catch Basins shall be of precast concrete and shall be made up from the components indicated on the Drawings. Manholes and Catch Basins shall be constructed in accordance with WSDOT Standard Plans and Specifications.
 - a. Catch Basin shall be Type 2, 48-inch pre-cast catch basin per WSDOT Standard Plan B-10.20-01, and as detailed on the Drawings.
 - Catch Basin frame and grate shall be Beehive Grate per City of Burien standard plans figure 7.30, and as detailed on the Drawings.
 - c. Manhole shall be pre-cast Manhole Type 3 48-inch, per WSDOT Standard Plan B-15.60-01, and as detailed on the Drawings.
 - d. Castings shall be stamp labeled.

C. Utilities Bedding

1. Utilities bedding shall be clean, granular, well-graded sand and gravel material of which 100% will pass the United States Standard 3/4-inch opening and not more than 3% will pass the United States No. 200 (wet sieve) with a minimum sand equivalent of 50%. At least 50% of the particles retained on a U.S. No. 4 sieve shall have at least one fractured face.

2.02 MATERIAL HANDLING & STORAGE

- A. Materials delivered to site shall be inspected for damage, unloaded, and stored with a minimum of handling.
- B. Materials shall not be stored directly on the ground.
- C. The inside of pipes and fittings shall be kept free of dirt and debris.
- D. Before, during, and after installation, plastic pipe and fittings shall be protected from any environment that would result in damage or deterioration to the material.
- E. Materials shall be handled in a manner that ensures delivery to the trench in sound, undamaged condition. Pipe shall be carried to the trench, not dragged.

2.03 QUALITY ASSURANCE & INSPECTIONS

- A. Inspection and Testing:
 - 1. The Contractor will provide field or plant inspection and testing service to the satisfaction of the Engineer. Tests conducted for the sole benefit of the Contractor shall be at the Contractor's expense.
 - 2. Pipe installation shall be inspected by the Engineer prior to backfill.
 - 3. Contractor shall perform Low Pressure Air Testing of all storm drainage piping per WSDOT Specification 7-17.3(2)F.
 - 4. All manholes, catch basins and piping shall be cleaned and jetted prior to acceptance.
- B. Codes and Standards: Comply with the applicable provisions of all pertinent codes and regulations. References made herein for manufactured materials, such as pipe, fittings, manholes, catch basins and specialties refer to designations for American Association of State Highway and Transportation Officials (AASHTO) or to American Society for Testing Materials (ASTM).

PART 3 EXECUTION

3.01 EXECUTION OF WORK

A. Earthwork

- Trench Excavation: Shall be accomplished to the lines and grades designated by the Engineer and shown on the Drawings. Trench excavation shall consist of the removal, placement, or disposal of all formations required for utility placement per the Drawings. Prior to placing any utility piping, conduit, etc., the trench shall be cleaned of all unsuitable material, backfilled with the specified bedding material and approved by the Engineer.
- 2. Backfill trenches with bedding material as specified and as called for on the Drawings. Utilities bedding shall be clean, granular, well-graded sand and gravel material of which 100% will pass the United States Standard 3/4 -inch opening and not more than 3% will pass the United States No. 200 (wet sieve) with a minimum sand equivalent of 50%. At least 50% of the particles retained on a U.S. No. 4 sieve shall have at least one fractured face.
- 3. Fine-grade the bedding material to the required slope and excavate to accommodate bell and spigot joints so the entire length of each pipe will be uniformly supported. Make minor adjustments to line and grade by scraping away, or filling in with, bedding material. Do not support pipes on blocks or mounds of any nature. Trench backfill shall be common material placed in horizontal layers not to exceed eight inches in loose thickness and carefully compacted by the use of small vibratory or mechanical compactors until the cover is one foot above the top of the pipe. On-site soil shall be used for trench backfill unless otherwise directed by the Engineer. Subsequent layers of trench backfill shall not exceed eight inches in loose thickness but may be compacted by any method which will not exceed the allowable stresses for the pipe. Each layer shall be compacted to 95% of maximum density.

4. Furnish all necessary machinery for the Work and pump, bail, or otherwise remove any water which accumulates in the trench. Perform all Work necessary to keep the trench clear of water while the foundation and the masonry are being constructed or the pipe is being laid.

B. Surveys

- 1. Alignment and grade of site drainage piping will be established by Contractor. Check the line and grade during installation to ensure that the Work is within the following allowable tolerances:
 - a. Fine-grade and prepare bedding so the pipe can be initially placed with a variation from true line or grade, measured at each joint, of not more than 1/32 inch per inch diameter or 1/2 inch maximum, provided that:
 - (1) A resulting level or backsloping length of pipe does not occur; and
 - (2) No more than one-half of the permissible variation shall be accumulated between successive joints.
 - b. Pipe laid within these tolerances shall not be subjected to any further adjustment. Measurement for grade shall be taken at the pipe invert, NOT TOP OF PIPE. Eccentricity of pipe barrels, with respect to jointing surfaces, shall not produce grade interruption adverse to flow of more than 1/4 inch maximum.
 - c. Provide 48 hours notice to the Engineer for Port of Seattle survey crew to conduct as-built survey prior to backfill. The Port Survey must locate and as-built survey all new underground utilities prior to placement of cover.

C. Jointing:

- 1. Take care to properly align the pipe and clean the bell and spigot or tongue of the pipe. Gaskets must be straight, properly lubricated and without twist. The pipe shall be partially supported by hand, sling, or crane, as required, to minimize lateral pressure on the gasket and to maintain concentricity until the pipe has been forced into final longitudinal position in accordance with the manufacturer's recommendations. Pipe handling, after the gasket has been affixed, shall be carefully controlled to avoid bumping the gasket and, thus, knocking it out of position or loading it with dirt or other foreign material. Gaskets so disturbed shall be removed, cleaned, re-lubricated, and replaced before the joint is attempted.
- Apply sufficient restraint to the line to ensure that the joints, once home, are held so by tamping fill material under and alongside the pipe. At the end of the day's work, block the last pipe in such a manner as may be required to prevent creep during down time.
- D. Installation Of Manholes, Catch Basins And Inlets
 - 1. Furnish all necessary labor, materials, or equipment to pump, bail, or otherwise dewater the trench or pit for the duration of the construction and backfill period.
 - 2. Manholes and Catch Basins:

- a. Place manholes and catch basins at the elevation and location indicated on the Drawings upon the appropriate bedding.
- b. Precast Manholes and Catch Basins:
 - (1) Carefully place on the prepared bedding so as to be fully and uniformly supported in true alignment, making sure that all entering pipes can be inserted on proper grade.
 - (a) All lift holes and all joints between precast elements shall be thoroughly wetted and then completely filled with mortar, smoothed and pointed both inside and out, to ensure watertightness.
 - (b) Place precast sections and align to provide vertical sides and vertical alignment of the ladder rungs. The completed manhole shall be rigid, true to dimensions and watertight.
 - (c) In precast manhole sections where steel loops have been provided in lieu of lift holes, remove the loops flush with the inside wall surface after the manhole has been completed. No sharp cutoff protrusions will be permitted. If concrete spalling occurs as a result of the loop removal, restore the spalled area with mortar to a uniformly smooth surface.

c. Pipe Connections:

(1) Place all un-reinforced pipes entering or leaving the manhole on firmly compacted bedding, particularly within the area of the manhole excavation, which normally is deeper than that of the sewer trench and provide with flexible joints within 12 inches of the manhole structure. Take special care to see that the openings through which pipes enter the structure are completely and firmly rammed full of mortar to ensure watertightness.

d. Backfill:

(1) Hand-place backfill around the manhole, extending at least one pipe length into each trench and tamp with selected material up to an elevation of six inches above the crown of all entering pipes.

3.02 QUALITY ASSURANCE & INSPECTIONS

A. Qualification of Workmen

 Employ at least one person who shall be present at all times during execution of this portion of the Work, shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and shall direct all Work performed under this section.

PART 4 MEASUREMENT AND PAYMENT

- 4.01 MEASUREMENT
 - A. "LLA Storm Drainage Infrastructure" will not be measured separately.
- 4.02 PAYMENT
 - A. Payment for "LLA Storm Drainage Infrastructure" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials, and tools to perform earthwork, survey, jointing, and installation of manholes, catch basins, and inlets, and other measures required as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section	
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Division 35

Waterway and Marine Construction

PART 1 GENERAL

1.01 SUMMARY OF WORK

A. This section provides the requirements for the placement of geotextile over the existing Lora Lake sediments prior to the placement of the Sediment Cap. The Work in this section includes furnishing and installing an effective geotextile barrier throughout the Lora Lake Cleanup Area, between the existing contaminated lake bottom sediments and the Sediment Cap to be installed above the sediments. The entire lake bottom from bank to bank will be covered with at least a single layer of geotextile. Geotextile will be shop-fabricated into the largest practical panels and palletized, brought to the lake, positioned on the surface of the lake, and sunk in place.

1.02 SUBMITTALS

- A. Geotextile Placement Plan. Plan shall include at least geotextile panel shop drawings, detailed explanation of methods to be used to install geotextile, method to be used to inspect and verify correct placement, description of debris that would be considered to interfere with geotextile placement, and floating and land-based equipment to be used.
- B. Manufacturer's certificates for geotextile physical properties and quality.

1.03 JOB CONDITIONS

A. Workers performing in-water Work may require specific health and safety training, personal protective equipment, or other means to ensure their health and safety. Worker health and safety is the responsibility of the Contractor, and shall be in accordance with Section 01 35 29 – Safety Management.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENT

- A. The intent of the geotextile is to provide a permeable barrier that allows water movement, but acts to contain the existing soft and silty contaminated sediments.
- B. Geotextile fabric shall be 8 ounces per square yard, non-woven, needle-punched polypropylene with the following minimum average roll values.

PROPERTY	ASTM METHOD	UNITS	MIN. AVG. ROLL VALUE
Grab Tensile	D4632	lbs	205
Grab Elongation	D4632	%	50
Puncture Strength	D4833	lbs	130
Trapezoidal Tear	D4533	lbs	85
Mullen Burst	D3786	psi	400
Apparent Opening Size	D4751	US Sieve	80
Water Flow Rate	D4491	gpm/sf	90
Permittivity	D4491	sec-1	1.40
Permeability	D4491	cm/sec	0.38
UV Resistance (500 hrs)		% retained	70

PART 3 EXECUTION

- 3.01 PREPARATION FOR EXECUTION OF WORK Prior to placing geotextile.
 - A. Construct the Temporary Construction Lake Access Road.
 - B. Plug the existing lake discharge culvert as shown on the Drawings prior to placing geotextile. See Section 35 41 00 Water Management and Creek Protection.

3.02 EXECUTION OF WORK

- A. Cover the entire lake bottom throughout the Lora Lake Cleanup Area with geotextile prior to placing Sediment Cap.
- B. Shop-fabricate largest practical panels of geotextile prior to delivery to site.
- C. Mark interfering downed trees or brush along the shoreline. After Port approval, remove and legally dispose of such downed trees or brush. Downed trees, brush, or sunken debris removed within the Lora Lake Cleanup Area extent are presumed to have been in contact with contaminated sediment and therefore must be disposed of in a Subtitle D landfill. Inspect the lake bottom to locate, remove, and legally dispose of interfering debris per approved Plan.
- D. Spread individual panels of geotextile onto the lake water surface and position per Plan.
- E. Lace panel edges firmly together to produce a continuous membrane.
- F. Hold firmly in position with mooring lines to the shore and sink geotextile in place, beginning at the deepest area. Use of Sediment Cap and Lake Fill Material, sand bags, anchor weights, chain, cable, or other approved methods to initially sink fabric will be permitted.
- G. Avoid disturbance of contaminated sediment to the greatest extent possible (e.g., do not anchor to the lake bottom or tow the fabric in shallow water with large boat motors).

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. "Lora Lake Shoreline Clearing and Disposal" will be measured by the net ton as determined by the certified weight tickets submitted to the Engineer.
- B. "Lora Lake Geotextile Furnish and Install" will not be measured separately.

4.02 PAYMENT

A. Payment will be made at the unit price stated in the Schedule of Unit Prices for "Lora Lake Shoreline Clearing and Disposal" per ton. Payment shall be full compensation for providing all labor, equipment and materials necessary to remove down trees, brush, and debris from the Lora Lake shoreline and transport the materials to a Subtitle D landfill and to provide all administrative and safety items associated with or reasonable inferable from the Contract requirements.

B.	Payment for "Lora Lake Geotextile Furnish and Install" will be made at the contract
	lump sum price as stated in the Schedule of Unit and shall be full compensation for
	furnishing all labor, equipment, materials and tools necessary to fabricate, place, and secure geotextile as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
	and opening therein through the daration of the contract.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

A. This section provides the requirements for constructing and subsequently removing access to the lakeshore and the DMCA.

1.02 SUBMITTALS

- A. Temporary Construction Lake Access Road and DMCA Stockpile Area Installation and Removal Plan. This plan shall include design drawings showing at least geotextile separation fabric and crushed rock thickness (and total quantity) to be utilized.
- B. DMCA Access and Stockpile Plan. This plan shall include layout of access road(s), intended stockpile area, circulation pattern (for on-site haul trucks as well as highway trucks), equipment maintenance and/or fueling area, office, shop or lunchroom facilities and any other proposed use of the DMCA during construction. Refer to Section 31 22 13 Grading and Surfacing for final configuration of DMCA.
- C. Layout of Temporary Construction Lake Access Road and DMCA Stockpile Area as indicated on the Drawings. Slight variations in the layout will be permitted so long as the disturbed surface area is no more than shown.
- D. Quality and gradation certificates for crushed rock to be installed. Include quarry name, number, address, ownership, and operating entity.
- E. Manufacturer, Type, Model Number (or other identifiers) and Quality Certificates for the geotextile proposed.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENT

A. The Temporary Construction Lake Access Road shall be surfaced with crushed rock and geotextile to provide a durable work surface for the project. Crushed rock shall be clean crushed ledge rock from an approved quarry. Selection of geotextile, gradation, and thickness of rock installation are at the Contractor's option.

PART 3 EXECUTION

3.01 TEMPORARY CONSTRUCTION LAKE ACCESS ROAD

- A. The Temporary Construction Lake Access Road is the Contractor's only route to approach the lake for all in-water Work.
- B. Lay out the road per the Contractor's approved Plan.
- C. Clear and Grub the road as described in Section 31 11 00 Clearing, Grubbing, and Cleanup. Stockpile fill material or topsoil on the DMCA Stockpile Area, following preparation of the DMCA surface as shown on the Drawings for reuse on-site.
- A disused piezometer and a monitoring well lie within the limits of the roadway or Work Area. Properly abandon and demolish them in accordance with Section 33 24 13 – Monitoring Well Installation, Decommissioning, and Protection.

- E. The road shall be constructed essentially as shown on the Drawings. Modifications to the indicated route may be approved as long as the total area of disturbance to the mitigation area is equal to or less than the indicated route. The access shall be no more than 25 feet wide with the exception of a widened turnout as shown on the Drawings, extending from the paved access road near Des Moines Memorial Drive down to the lake near the existing storm drain outfall (approximately 170 feet), then eastward along the lakeshore approximately 200 feet and finally northeastward approximately 160 feet to return to the paved access road and the DMCA. The southern portion of the access road, adjacent to the lakeshore, may include a turnout or widened Work Area no more than 40 feet by 40 feet for the Telebelt or crane. The lower lakeshore road and Work Area are densely wooded with small alders. The vegetation above ground may be sent to recycle or compost. Roots or any material with soil must be disposed of at the approved Subtitle D landfill.
- F. Install silt fence and erosion control measures as shown on Drawings and as described in Section 01 57 13 Temporary Erosion and Sediment Control.
- G. Install geotextile separation between existing ground and temporary crushed rock road or working surface.
- H. Install crushed rock working surface. Maintain during construction as needed.
- I. Work utilizing this access road will occur in both Season 1 and Season 2, and the temporary improvements (road construction and erosion control measures) may be left in place during the winter between the two Seasons.
- J. After completion of construction, remove the temporary rock work surface and geotextile, as well as any piping associated with lake dewatering. Rock shall be removed and legally disposed off-site. Restore cuts and fills to original contours, seed and plant as shown in the Drawings.
- K. Loosen soil below the temporary rock work surface by scarifying to a depth of at least six inches in two directions. Place topsoil on scarified surface and plant as described in Section 31 22 19.13 Topsoil Placement, Section 32 90 00 Planting, and Section 32 92 19 Seeding.

3.02 DMCA ACCESS ROADS AND STOCKPILE AREA

- A. Temporary Construction Access roads and improvements on the DMCA are intended to provide for effective use of the DMCA for stockpiling imported material for the Sediment Cap and Lake Fill Material (see Section 31 22 13 Grading and Surfacing). The extent of the DMCA available to the Contractor is shown on the Drawings.
- B. Maintain DMCA Access Roads and Stockpile Area as required during construction.
- C. Work in this DMCA Stockpile Area will occur in both Season 1 and Season 2, and the temporary improvements may be left in place until Sediment Capping and Lake Filling are complete.
- D. After completion of Sediment Capping and Lake Filling in Season 2 the DMCA shall be re-graded and surfaced to the final condition shown in the Drawings and further described in Section 31 22 13 Grading and Surfacing. Once the DMCA has been regraded and surfaced to the final configuration it may not be used for stockpiling sand, gravel or other soil material.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. "Temporary Construction Lake Access Road" will not be measured separately.
- B. The DMCA Access Roads and Stockpile Area will not be measured separately.

4.02 PAYMENT

- A. Payment for "Temporary Construction Lake Access Road" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to lay out road, clear and grub, abandon and decommission (1) piezometer and (1) monitoring well, install geotextile, install crushed rock, and after completion of construction remove crushed rock and geotextile, and scarify surface in preparation of topsoil and seeding as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for the DMCA Access Roads and Stockpile Area will be included in the lump sum price as stated in the Schedule of Unit Prices for applicable bid item "DMCA Clearing, Grading, and Surfacing" and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to maintain and stabilize the DMCA Stockpile Area as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

PART 1 GENERAL

1.01 SUMMARY OF WORK

A. This section provides the requirements for the excavation, placement of geotextile, capping and filling of the northwest corner of the lake, where the existing 24-inch storm drain and rock berm are located.

1.02 SUBMITTALS

A. Lake Settling Basin and Rock Berm Remediation Plan. Plan shall include at least the equipment to be utilized and the schedule and narrative description of means to be used for the Work.

1.03 JOB CONDITIONS

A. The lake existing 24-inch storm drain discharges into what was originally a "settling basin" in the northwest corner of the lake. The settling basin is bounded on two sides by the lakeshore and on an arc across the southern side by a rock berm in the lake. The crest of the rock berm is believed to have been designed to be on a 50-foot radius from the mouth of the storm drain as it was constructed. The berm's sides were designed to slope at 3:1. The rock berm extends to roughly elevation 267.5 to 268 feet (NAVD 88) and is believed to have been constructed of rock up to 500 lbs per piece. The area inshore of the berm ("settling basin") is now generally full of soil/sediment to elevation 266 feet or higher and is seasonally inundated with surface water.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENT

A. Materials required for this Work (geotextile, sediment cap material, and lake fill material) shall be as specified in Section 35 01 00 – Lake Geotextile Placement, and Section 35 23 43 – Sediment Capping and Lake Filling.

PART 3 EXECUTION

- 3.01 PREPARATION FOR EXECUTION OF WORK Prior to settling basin and rock berm remediation.
 - A. Construct the Temporary Construction Lake Access Road.
 - B. Plug the existing lake discharge culvert as show on the Drawings prior to settling basin and rock berm remediation. See Section 35 41 00 Water Management and Creek Protection.
 - C. Install the lake dewatering pump and pipeline system. See Section 35 41 00 Water Management and Creek Protection.
 - D. Mark interfering downed trees or brush along the shoreline. After Port approval, remove and legally dispose of such downed trees or vegetation. Downed trees or vegetation removed from within the Lora Lake Cleanup Area extent are presumed to have been in contact with contaminated sediment and therefore must be disposed of in a Subtitle D landfill. Inspect the lake bottom to locate, remove, and legally dispose of interfering debris per approved Plan.

3.02 EXECUTION OF WORK

- A. In Season 1, excavate soil/sediment and rock from the area shown on the Drawings (CG06.1 and CG06.4) as "Storm Drain Splash Pad to Be Installed" to an elevation of 264 feet (NAVD 88). Dispose of the earth and sediments legally in a Subtitle D landfill. Excavate the rock berm and any overlying sediment to an elevation of 265.5 feet. Cast excavated stone and sediment further offshore so that the lake bottom remains below elevation 264.5 feet.
- B. Install geotextile over the entire area from the storm drain to open water in the lake, including over the newly repositioned stone and sediment. Subsequently, when installing geotextile over the lake bottom throughout the Lora Lake Cleanup Area verify by visual inspection that an overlap of at least three feet is achieved.
- C. Fill the area from the offshore edge of the new splash pad to the extent of excavation with Sediment Cap Material to a minimum thickness of 18-inch and cover with lake fill material to a finished elevation of 268.5 feet.
- D. In Season 2, construct the new Storm Drain Splash Pad with quarry spalls to the lines and grades as shown on the Drawings.
 - 1. Material shall be graded between the limits specified below.

SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
8-inch	100
3-inch	40 to 60 maximum
¾-inch	0 to 10 maximum

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. No separate measurement shall be made for excavation and disposal of contaminated soil/sediment, regrading of the existing rock berm, placement of geotextile and construction of the new splash pad.
- B. "Sediment Capping and Lake Filling" will be measured by the net ton as determined by the certified weight tickets submitted to the Engineer.

4.02 PAYMENT

- A. Payment for "Settling Basin Remediation" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to excavate and dispose contaminated soil/sediment, regrade the existing rock berm, and construct the new splash pad as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract, with the exception of those items measured and paid for separately.
- B. Payment for lake geotextile placement at the Lake Settling Basin and Rock Berm will be included in the Lump Sum price as stated in the Schedule of Unit Prices for applicable bid item "Lora Lake Geotextile Furnish and Install" and shall be full compensation for furnishing all labor, equipment, materials and tools necessary to fabricate, place, and secure geotextile as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

C. Payment for "Sediment Capping and Lake Filling" will be made at the contract unit price per net ton as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to place Sediment Cap and Lake Fill Material at the Lake Settling Basin and Rock Berm as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

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PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. This section provides the requirements for the placement of the engineered sediment cap of carbon-amended sand to immobilize the existing contaminated sediments in place and filling of the lake to produce a functioning scrub-shrub wetland. The completed Work must have specific hydrologic properties to optimize connectivity with the adjacent Miller Creek and the existing surrounding wetlands and floodplain. The Work in this section includes:
 - 1. Furnishing and placing carbon-amended sand to form a minimum 18-inch-thick cap over the entire Lora Lake Cleanup Area as shown on the Drawings and delineated by the control points listed and, using the same material, to fill the lake as further specified below. The Work of this section will be performed in two phases. The first phase (during Season 1) consists of furnishing and placing Sediment Cap and Lake Fill Material (Sand) throughout the Lora Lake Cleanup Area to the control points and slope shown on sheet CG08.1 of the Drawings. The second phase (during Season 2, following settlement over the winter) consists of regrading previously placed material as needed and furnishing additional Lake Fill sand material to the control points and elevation shown on sheet CG08.1 of the Drawings.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- A. American Society of Testing Materials (ASTM) Methods
 - 1. ASTM C136 (2006) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
 - 2. ASTM D422 (2007) Standard Test Method for Particle-Size Analysis of Soils
 - 3. ASTM D2434 (2006) Standard Test Method for Permeability of Granular Soils (Constant Head)
- B. U.S. Environmental Protection Agency (EPA) Publication SW846 Test Method for Sieve Analysis for Evaluating Solid Waste, Physical/Chemical Methods
 - 1. Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans (Dioxins/furans) per EPA SW846, Method 1613B
 - Model Toxic Control Act (MTCA) Metals including Arsenic, Cadmium, Chromium, and Lead per EPA SW846, Method 6010 and Mercury per EPA SW846, Method 7471
 - 3. Pentachlorophenol per EPA SW846, Method 8041
 - 4. Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) per EPA SW846, Method 8270D
 - 5. Ethylbenzene and Toluene per EPA SW846, Method 8260C.
- C. Additional Physical/Chemical Methods
 - Total Organic Carbon (TOC) per Plumb 1981
 - 2. Total Petroleum Hydrocarbons Gasoline Range per NWTPH-Gx

 Total Petroleum Hydrocarbons – Heavy Oil Range and Diesel Range per NWTPH-Dx

1.03 SUBMITTALS

- A. Sediment Capping and Lake Filling Work Plan The Contractor shall submit this work plan for approval no less than three weeks prior to implementation. Submit a detailed explanation of means and methods to be used to import, stockpile and place Sediment Cap and Lake Fill Material (Sand), including:
 - A schedule sufficient to show the sequencing and expected durations of the material placement operations.
 - 2. A description of the GPS based software and other survey control to be used to place the Sediment Cap and Lake Fill Material (Sand).
 - 3. A list and descriptions of floating and land based equipment to be used.
 - 4. A description of the management of the DMCA Stockpile Area, the haul roads, and the Temporary Construction Lake Access Road for use in capping and filling the lake.
 - 5. A description of the material to be added to the Sediment Cap and Lake Fill Material (Sand) to provide the minimum 0.1% total organic carbon content.
 - 6. A description of the means to be employed to place initial thin lifts of material prior to beginning mass fill.
- B. Details of the source pits for each source of material, (pit name and number, address, ownership, operating entity, contact person and contact information).
- C. Analytical laboratory reports providing gradation and chemical results of testing of the Sediment Cap and Lake Fill Material (Sand) for the required contaminants of concern and analytical methods as listed above in paragraph 1.02 of this section, prior to material coming on-site.

PART 2 MATERIALS

2.01 FABRICATION, PRODUCTION, & SUPPLY OF MATERIALS

- A. The Sediment Cap and Lake Fill Material (Sand) shall be naturally occurring (not crushed) sand that will classify as a SP according to USCS, and have a minimum hydraulic conductivity of 150 ft/day as determined using ASTM D2434 Standard Test Method for Permeability of Granular Soils (Constant Head). The material may be produced using appropriate pit run, screening as necessary or produced by blending from previously screened stockpiles. Material shall be clean, freedraining, granular material obtained from natural deposits. Individual particles shall be free from all objectionable coatings.
 - 1. The borrow source for the material shall be inspected by the Contractor. Sediment Cap and Lake Fill Material (Sand) shall be sourced from a facility(s) or location(s) in which an assessment has been conducted to confirm that there are no impacts to fill material based on historical operations. The Contractor shall ensure that the Material to be delivered to the site meets the appropriate criteria. The Contractor shall provide notification to the Engineer within fourteen (14) calendar days of such inspections. At the Engineer's discretion, the Engineer or another Portrepresentative may accompany the Contractor to observe such inspections

2.02 MATERIAL REQUIREMENTS

- A. The Contractor shall test samples of all materials to be imported for gradation and grain size distribution as listed above in paragraph 1.02.A of this section.
- B. Separate samples of Sediment Cap and Lake Fill Material (Sand) shall be taken from each proposed borrow source. Each sample should be composed of no less than five sub-samples taken throughout any one source. The Contractor shall ensure that the samples are representative of all materials to be imported.
- C. The Contractor shall chemically test all materials to be imported for contaminants of concern and analytical methods as listed above in paragraph 1.02.B and paragraph 1.02.C of this section. The Sediment Cap and Lake Fill Material (Sand) must meet the chemical quality as shown in the table below.

CONSTITUENT	MAXIMUM ALLOWABLE CONCENTRATION (mg/kg)	LABORATORY ANALYTICAL METHOD
Arsenic	20	Method 6010
Cadmium	4.0	Method 6010
Chromium	42	Method 6010
Lead	50	Method 6010
Mercury	0.1	Method 7471
Gasoline Range	100	NWTPH-Gx
Ethylbenzene	8,000	Method 8260C
Toluene	6,400	Method 8260C
Diesel and Heavy Oil Range	200	NWTPH-Dx
Pentachlorophenol	2.5	Method 8041
cPAHs	0.137	Method 8270D
Dioxins/Furans	5.2x10-6	Method 1613B

D. Sediment Cap and Lake Fill Material (Sand) shall be amended with 0.1% (one tenth of one percent) of granular activated carbon. Carbon amendment may be added at the borrow source at the Contractor's option. Prior to beginning capping, the Contractor shall submit analytical results of a sample of carbon-amended sand that confirms the Contractor's method blending and quantity of amendment added produces the required 0.1% minimum carbon content.

2.03 MATERIAL HANDLING, DELIVERY, & STORAGE

A. Sediment Cap and Lake Fill Material (Sand) shall be delivered by truck to the site and weighed on certified scales prior to delivery. Tare weight of each truck shall be recorded no less than once each day. The scale ticket shall show the net tonnage for each load.

2.04 DELIVERABLES

- A. Submit current certificates for scale calibration prior to importing Sediment Cap and Lake Fill Material (Sand).
- B. Submit scale tickets daily not later than the next working day after delivery of material to the site. Maintain a ledger of scale tickets and verify the total quantity delivered with the Engineer prior to each pay estimate.
- C. Submit certificates of carbon amendment for all material brought to the site daily, specifying total weight of carbon blended with the sand at the material source location.

2.05 QUALITY ASSURANCE

- A. The Contractor shall submit analytical results as listed in paragraph 1.02.A of this section for gradation, hydraulic conductivity, chemical testing for contaminants of concern and carbon content compliance of proposed Sediment Cap and Lake Fill Material (Sand) for each material source (if more than one source is used or if sources are changed during construction), prior to the material coming on-site and before it is placed. Each tested sample should be composed of no less than five sub-samples taken throughout any one source. The Contractor shall ensure that the samples are representative of materials to be imported.
- B. Once lake capping and filling has begun, the Contractor shall collect a representative grab sample from the material intended to be actually delivered to the site, perform the same suite of tests and report the results prior to beginning shipment or placement, on a minimum of one sample per 5,000 cubic yards of Sediment Cap and Lake Fill Material (Sand) delivered to the site, except that Carbon Content Compliance shall be tested and reported on a minimum of one sample per 1,000 cubic yards.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. The extent of the Sediment Cap and Lake Fill Material (Sand) is shown on the Drawings.
- B. It is expected that the Sediment Cap and Lake Fill Material (Sand) will be placed using floating or land based equipment, or a combination.
- C. The Contractor may access the edge of the lake only via the Temporary Construction Lake Access Road shown on the Drawings.
- D. Sediment Cap and Lake Fill Material (Sand) may be delivered to the site and stockpiled on the DMCA Stockpile Area as shown on the Drawings or delivered directly to the lakeshore at the Contractor's option.
- E. The placement of the Sediment Cap and Lake Fill Material (Sand) shall not begin until the Sediment Capping and Lake Filling Work Plan has been reviewed and accepted by the Engineer.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Prepare the DMCA Stockpile Area to receive material as shown on the Drawings and described in Section 35 01 10 Temporary Construction Lake Access Road and Stockpile Areas if stockpiling is intended.
- B. Install the wheel wash as shown on the Drawings.
- C. Clear and grub the Temporary Construction Lake Access Road as shown on the Drawings and as described in Section 31 11 00 Clearing, Grubbing, and Cleanup. Do not damage vegetation outside the Work Areas shown.
- D. Grade and surface the Temporary Construction Lake Access Road as described in Section 35 01 10 – Temporary Construction Lake Access Road and Stockpile Areas.
- E. Excavate soil/sediment and rock from "settling basin" area as shown on the Drawings and as described in Section 35 03 00 Lake Settling Basin and Rock Berm Remediation.
- F. Remove down trees and debris from within the Lora Lake Cleanup Area and lake edge as needed. Materials that have been in contact with soil or sediment shall be treated as contaminated and disposed at the approved Subtitle D landfill.
- G. Install geotextile over the contaminated sediment throughout the Lora Lake Cleanup Area as shown on Drawings and described in Section 35 01 00 Lake Geotextile Placement.
- Install settlement monitoring instruments according to the Contractor's approved Settlement Monitoring Plan as described in Section 35 23 45 – Lake Fill Settlement Monitoring.

3.03 EXECUTION OF WORK

- A. Stockpile Sediment Cap and Lake Fill Material (Sand) (at the Contractor's option) on the DMCA Stockpile Area as shown on the Drawings.
- B. Transport Sediment Cap and Lake Fill Material (Sand) to the lake's edge from stockpile and/or directly from highway trucks.
- C. Place Sediment Cap and Lake Fill Material (Sand) initially in a thin lift of 6 to 12 inches to settle the geotextile against the lake bottom. Subsequent material may be placed in bulk, using haul trucks and bulldozers or other approved equipment to carry a grade.
- D. Place Sediment Cap and Lake Fill Material (Sand) along the shoreline in a swath at least 50 feet wide in a manner to encourage any loose contaminated sediment under the geotextile barrier to migrate downslope toward deeper water. Complete the shoreline swath around the entire perimeter of the lake prior to filling further offshore. Complete Sediment Capping and Lake Filling as a series of further concentric swathes, continuing to encourage contaminated sediments to flow downslope.
- E. Monitor settlement of the Sediment Cap and Lake Fill Material (Sand) as described in Section 35 23 45 Lake Fill Settlement Monitoring.
- F. In Season 1, complete the lake fill over the entire Lora Lake Cleanup Area graded to slope toward the south to the design elevations as shown on the Drawings with

- an allowable total tolerance of 6 inches, including an over placement of up to 2 inches and under placement of up to 4 inches.
- G. Stabilize the lake fill surface at the end of Season 1 in 2017 as described in Section 35 41 00 Water Management and Creek Protection.
- H. Leave the fill to settle from the end of Season 1 in 2017 until the resumption of construction in Season 2 in 2018, but continue monitoring settlement as required in Section 35 23 45 Lake Fill Settlement Monitoring.
- I. Re-mobilize for Season 2 in May of 2018.
- J. Re-grade Sediment Cap and Lake Fill Material (Sand) to lines and grades shown on the Drawings for Season 2 Fill Elevations. Import additional Sediment Cap and Lake Fill Material (Sand) as needed to achieve fill elevations. If excess Sediment Cap and Lake Fill Material (Sand) is found following the planned settlement period notify the Engineer for direction.

3.04 DELIVERABLES

- A. Post-Construction Season 1 and Pre-Construction Season 2 Fill Elevation surveys.
- B. Truck scale tickets daily.

3.05 QUALITY ASSURANCE

A. Track placement of material in water by a combination of GPS, navigation software, belt scales, leadline or electronic sounding or other approved method.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. "Sediment Capping and Lake Filling" in Season 1 and "Additional Lake Fill Placement and Grading" in Season 2 will be measured by the net ton as determined by the certified weight tickets submitted to the Engineer.

4.02 PAYMENT

- A. Payment for "Sediment Capping and Lake Filling" will be made at the contract unit price per net ton as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to place and grade the Sediment Cap and Fill Material to Season 1 fill elevations over the entire Lora Lake Cleanup Area as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.
- B. Payment for "Additional Lake Fill Placement and Grading" will be made at the contract unit price per net ton as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials, and tools necessary to place and grade Sediment Cap and Fill Material, as needed, to Season 2 fill elevations over the entire Lora Lake Cleanup Area as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

A. The Work of this section is to design, install, and operate settlement gauges or other appropriate instrumentation to monitor the settlement of the Sediment Cap and Lake Fill Material as the material is placed and through the completion of the project.

1.02 SUBMITTALS

- A. Settlement Monitoring Plan -- The Contractor shall submit a Settlement Monitoring Plan, for approval no less than two weeks prior to implementation. The Settlement Monitoring Plan shall be prepared by a competent person with experience designing, installing, and using settlement gauges or instrumentation. Settlement monitoring locations are shown on sheet CG08.1 of the Drawings.
- B. The Settlement Monitoring Plan shall describe the equipment, installation methodology, and protection and maintenance procedures the Contractor intends to implement in order to meet the requirements described within this section.
- C. The Settlement Monitoring Plan shall include a contingency plan for replacing instruments that are destroyed or lost during construction. Lost or destroyed instruments shall be replaced at no cost to the Port.
- D. The settlement monitoring program shall be sufficient to allow the Contractor to reliably monitor settlement (either through manual or remote methods) at the locations indicated in the design plans, at the scheduled frequency indicated in the details of this section, and within a measurement tolerance of one tenth of a foot.

PART 2 MATERIALS NOT USED

PART 3 EXECUTION

3.01 PROJECT INFORMATION

A. Settlement of up to four feet is possible in parts of the Lake during and after filling. In order to construct the functioning Scrub Shrub Wetland as required, it is necessary for the Engineer's geotechnical engineer to understand the amount and timing of the settlement.

3.02 PREPARATION FOR EXECUTION OF WORK

A. Install the geotextile barrier on the contaminated lake surface prior to installation of the settlement gauges or instrumentation.

3.03 EXECUTION OF WORK

A. Installation

The settlement gauge components shall be installed on the lake bottom in accordance with the Contractor's approved Settlement Monitoring Plan. Settlement gauges may consist of a simple bearing plate set on the lake bottom supporting a vertical pipe or rod marked so that the original bottom elevation can be tracked as settlement occurs. Alternatively, pressure sensors and other appropriate instrumentation may be used either with or without the vertical rod according to the approved Settlement Monitoring Plan.

- 2. The settlement plates or other lake-bottom components of the monitoring instrumentation (as shown in the approved Contractor Settlement Monitoring Plan) shall be installed prior to placement of Sediment Cap or Lake Fill Material so that the gauge or instrumentation rests directly on the geotextile barrier.
- 3. If the settlement monitoring instruments include a settlement plate and stem or other vertical marker pipe component (depending on the selected settlement instrumentation methodology) it shall be clearly visible to an elevation of at least 3 feet above the designed final maximum fill elevation for the lake in order to mark the instrument position. The initial marker pipe elevation for each settlement monitoring location shall be documented by the Contractor and confirmed by the Engineer at the time of installation and before any fill is placed.
- 4. When the installation is complete per the Contractor's approved plan, the Contractor shall notify the Engineer to observe and approve the elevation of the top of the marker pipe at that time. No lake fill shall be placed until this elevation has been determined.

B. Protection and Maintenance

- 1. If a marker pipe or rod is used, it shall remain in a near vertical position (within 5 degrees of plumb) at all times throughout the project. The marker pipe shall be flagged with high visibility flagging immediately after installation. The marker pipe shall be protected from construction activity by a substantial and highly visible protective barrier, which will remain in place at all times, except when active lake filling is occurring.
- 2. The Contractor shall operate equipment in a manner to ensure that settlement monitoring assemblies are not damaged or displaced. Vehicles or other construction equipment must be operated so as to prevent damage to or displacement of the settlement monitoring equipment.
- 3. Marker pipes or stems deviating from a vertical position (in excess of 5 degrees out of plumb), becoming uncoupled or broken (but not otherwise impeding the ability to continue monitoring for settlement at that location), shall be repaired or replaced by the Contractor, as directed by the Engineer, at the Contractor's expense.
- 4. If, after installation, any of the settlement monitoring instruments or marker pipes are disturbed, found not to be functional, or were improperly installed, they shall be replaced in kind within 24 hours at no cost to the Port.
- 5. If settlement instrumentation or equipment is irreparably damaged as a result of actions taken by the Contractor or by others under the direction or supervision of the Contractor after lake filling has begun, the instrumentation must be replaced, to include excavation to the geotextile as necessary and installation of replacement equipment. The Contractor is responsible for the security of the settlement monitoring instrumentation throughout the duration of the project.

C. Settlement Monitoring Procedure

1. The Contractor shall make two baseline measurements of each settlement device at least 24 hours apart, prior to placing any lake fill material.

- Subsequent settlement monitoring readings shall be made by the Contractor at least as frequently as shown on the following schedule, unless otherwise directed by the Engineer:
- 2. The Contractor shall provide the data in an electronic spreadsheet format that is acceptable to the Engineer.
- 3. The Contractor shall provide to the Engineer all measurements and elevations necessary for accurate interpretation of settlement data (with respect to corresponding fill height) during lake filling and between Season 1 and Season 2.

FREQUENCY	DURATION
Every 3 to 4 days	Until one week after filling is completed
Every two weeks (including over the winter when no construction is ongoing)	Until settlement is deemed complete by the Engineer or until the end of Season 2

3.04 DELIVERABLES

- A. Baseline information necessary for the Engineer to independently interpret the settlement data as it becomes available.
- B. Settlement report spreadsheet updated within 24 hours of acquiring readings at required intervals.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. "Settlement Monitoring" will not be measured separately.

4.02 PAYMENT

- A. Payment for "Settlement Monitoring" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be the full compensation for furnishing all labor, equipment, materials and tools necessary to install, protect and maintain, and monitor as detailed on the Drawings or as directed by the Engineer and specified herein for the duration of the Contract. Payments will be made as follows:
 - 1. Upon acceptance of installation to the satisfaction of the Engineer 50%.
 - 2. A final payment, 50% when the record of settlement readings is complete and accepted by the Engineer.

End of Section

PART 1 GENERAL

1.01 SUMMARY OF WORK

- A. The Work of this section consists of managing the water of the lake and furnishing and installing effective best management practices (BMPs) during Lake capping, filling, settlement, bank armoring, outlet construction, and seeding and planting, so that turbid water from the lake is prevented from entering Miller Creek.
- B. In order to prevent turbid lake water from entering the creek as lake capping or filling material is placed or when rain events add water to the system, it will be necessary both to plug the existing outlet culvert, and to pump water from the lake to an infiltration pond. The nearby SR 518 Construction Stormwater Pond just north of the lake, is available for the Contractor's use as shown on the Drawings. All water to be infiltrated must first be treated as described in Section 02 24 50 Construction Water Management and Treatment System.

1.02 GOVERNING CODES, STANDARDS, AND REFERENCES

- 1. Nationwide Permit No. 27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (see Appendix B).
- 2. Nationwide Permit No. 33 Temporary Construction Access, and Dewatering administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (see Appendix C).
- Nationwide Permit No. 38- Cleanup of Hazardous and Toxic Waste administered by the Corps of Engineers (Permit No. NWP-2016-0314-WRD) (See Appendix D).

1.03 SUBMITTALS

- A. Lake Water Management Plan. Plan shall include at a minimum:
 - 1. Detailed description and layout of pump and pipe line installations.
 - 2. Sizes, numbers and types of pumps, valves, generators. Provide sufficient equipment for 100% redundancy.
 - 3. Rates of pumping and infiltration pond capacity monitoring.
 - 4. Maximum intended lake and infiltration pond elevation during filling.
 - 5. Lake and pond overflow prevention monitoring system.
 - 6. Name(s) and 24-hour phone numbers for the personnel responsible for after-hours or weekend operation of the pump system.
 - 7. Documentation confirming that the lake dewatering and pumping activities will comply with the project specifications (see Section 02 24 50 Construction Water Management and Treatment System).
- B. Creek Protection Plan. The plan shall include at a minimum, methods and materials for preventing discharge to Miller Creek including:
 - 1. Details of the dewatering dams or other creek protection systems that will be used to isolate the creek from impacts during construction of the East Lake Berm Opening and the Outlet to Miller Creek.

2. Other BMPs as required to protect Miller Creek from any construction impacts.

PART 2 MATERIALS

2.01 MATERIAL REQUIREMENT

- A. Department of Ecology TESC BMPs in 2012 Stormwater Manual
- B. Dewatering Dams and Sand Bag Materials
 - 1. The Dewatering Dams and Sand Bags on Miller Creek shall be constructed from weather-resistant bulk material bags of approximately one meter in width, depth, and height (meter-size sandbags). Fill sandbags with packed PCC 3/8 inch minus aggregate or similarly-sized pea gravel. Smaller sandbags or alternative fill and sandbag materials (e.g., ultra-blocks and visqueen) may be substituted only upon review and approval by the Engineer.

PART 3 EXECUTION

3.01 PROJECT INFORMATION

- A. Lora Lake has historically contributed low quality (warm, low oxygen content) water to Miller Creek and during Sediment Capping and Lake Filling, the lake water will become turbid.
- B. The Lora Lake Cleanup Area shall be continuously isolated from Miller Creek for the entire Season 1, Season 2, and the settling period between seasons.
- C. Following initial drawdown, the existing 12-inch corrugated metal pipe (CMP) culvert from the lake to the creek shall be plugged to effectively prevent surface water exchange.
- D. The berm between the lake and the creek includes failed sections that shall be augmented by sand bags or other effective means to maintain a hydrologic barrier.
- E. The plug and barrier shall be routinely monitored and adjusted as necessary to maintain effectiveness.
 - Final construction of the new discharge to Miller Creek and removal of the
 existing lake discharge culvert into Miller Creek must be isolated from the
 creek by dewatering dam (see section 32 72 00 Wetlands Rehabilitation).
 No equipment or machinery shall be allowed below the ordinary high water
 mark of Miller Creek.
- F. Final connections to Miller Creek may only be constructed when the filled and landscaped former lake footprint is stable and approved by the Port or Engineer.
- G. The Port will perform turbidity monitoring within the creek daily during construction to assess the effectiveness of sediment erosion control BMPs.
- H. If monitoring results indicate that the Lora Lake Cleanup Area isolation fails, the Contractor shall adjust BMPs to prevent discharge to the creek.
- I. A lake drawdown and infiltration test was performed for this project and is described in Reference Document 3. Additionally a SR 518 Construction Stormwater Pond Infiltration Assessment (Reference Document 2) was also conducted and will be available to the Contractor for infiltration of Lora Lake water as needed.

3.02 PREPARATION FOR EXECUTION OF WORK

- A. Drawdown Lora Lake and plug the existing 12-inch CMP culvert from the lake to the creek.
- B. Install staff gauges in Lora Lake and the infiltration pond.

3.03 EXECUTION OF WORK: MILLER CREEK BANK PROTECTION

A. Prior to commencing any work that has potential to impact Miller Creek, install dewatering dams and any other needed BMPs to prevent impact. Dewater areas sufficiently that all work on the bank of Miller Creek is performed in the dry. A dewatering pump may be required. Dewatering must comply with all TESC requirements.

3.04 EXECUTION OF WORK: LAKE WATER MANAGEMENT

- A. Install lake dewatering pump(s) so that the pump suction is held near the surface in deep water above the geotextile and contaminated sediment. Secure the geotextile to protect it from the pump suction.
- B. Install discharge hoses and/or pipes from the pump(s) to the water treatment system (see Section 02 24 50 Construction Water Management and Treatment System) and from the water treatment system to the infiltration pond.
- C. Provide power to the pumps (if electrically powered). Electric service and power is not available on-site. Provide redundant capacity.
- D. Operate pumps whenever lake capping or filling operations are in progress and before or after as necessary to prevent lake water from discharging to Miller Creek. Initially, draw the lake down at least far enough to allow placement of the intended day's fill. Monitor lake level continuously until the lake fill is complete and risk of lake waters entering the creek is at an end.
- E. Operate pumps as necessary to remove storm water and groundwater. On weekends and overnight whenever Work is not ongoing at the site, have a designated person available by phone at all times to operate the pumps, maintain the lake level, maintain the SR 518 Construction Stormwater Pond infiltration level, and prevent untreated lake water from discharging to Miller Creek.
- F. Lake water shall be treated on-site and discharged to the SR 518 Construction Stormwater Pond, in accordance with project specifications (see Section 02 24 50 Construction Water Management and Treatment System).
- G. Dewatering pipelines may be laid on the surface of the ground and/or under a portion of the Temporary Construction Lake Access Road. After completion of construction, remove the dewatering system, including hoses and pipes.
- H. Standing water in the wetland area south of the Lake shall be drained and water managed per the project specifications (see Section 02 24 50 – Construction Water Management and Treatment System) at the beginning of Construction Season 2 to allow for construction access.

3.05 EXECUTION OF WORK: FILL SURFACE STABILIZATION AT END OF SEASON 1

A. At the end of Season 1, with the surface of the Lake Fill graded as shown on the Drawings, place a four inch thick layer of straw over the entire exposed surface of new fill. Straw shall be blown in place with commercial straw-blowing equipment to achieve a dense uniform layer and incorporated into the Lake Fill by discing in two

opposite directions. Disc shall incorporate the straw in 8- to 12-inch, on-center slices to a depth of 4 to 5 inches. Disc equipment shall be drawn by low ground pressure tractor so that no tire or track rutting occurs. Install straw over the entire Lake Fill, however do not disc the perimeter to within twenty feet of the fill edge to protect the integrity of the sand cap.

B. Materials

Straw: shall be certified Noxious Weed Free by the Washington State Department of Agriculture Plant Services Program in accordance with the Washington Wilderness Hay and Mulch Management Program. Straw shall be barley or wheat straw delivered in bales demonstrating the weed free certification. Straw shall be furnished in air-dry condition with a consistency compatible for application with commercial straw-blowing equipment. Straw must be free of plastic, glass, metal rocks and other refuse or other deleterious material. Straw must have not been used for stable bedding.

3.06 DELIVERABLES

- A. Straw
 - 1. A copy of the invoice and certification showing that the straw is noxious weed-free.
- B. Record the lake and infiltration pond staff gauge readings on the Contractor's Daily Report at beginning and end of each workday.

PART 4 MEASUREMENT AND PAYMENT

- 4.01 MEASUREMENT
 - A. "Lake Water Management and Creek Protection" will not be measured separately.

4.02 PAYMENT

A. Payment for "Lake Water Management and Creek Protection" will be made at the contract lump sum price as stated in the Schedule of Unit Prices and shall be full compensation for furnishing all labor, equipment, materials and tools to design and implement the lake water management plan including installing, powering, and operating pumps and hosing to manage lake water levels, and design and implement the creek protection plan to prevent discharge to Miller Creek as detailed on the Drawings or as directed by the Engineer and specified herein through the duration of the Contract.