PORT OF TACOMA

TACOMA, WASHINGTON

ADMINISTRATIVE BUILDING ROOF REPLACEMENT PROJECT

PROJECT NO. 101339.04

CONTRACT NO. 071518

Thais Howard, PE

Director, Engineering

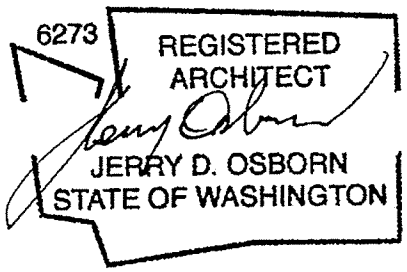
Norman Gilbert, PE

Project Manager

END OF SECTION

The undersigned Engineer of Record hereby certifies that the Technical Specifications for the following portions of this project were written by me, or under my direct supervision, and that I am duly registered under the laws of the State of Washington, and hereby affix my Professional Seal and signature.

Those Sections prepared under my direct supervision and being certified by my seal and signature below are as follows:

SEAL & SIGNATURE	SECTION(S)
	02 07 00 – Selective Demolition 06 10 00 – Miscellaneous Carpentry 07 25 00 – Weather Barriers 07 41 13 – Metal Roof Panels 07 42 13 – Metal Wall Panels 07 62 00 – Sheet Metal Flashing and Trim 07 72 00 – Roof and Wall Accessories 07 92 00 – Joint Sealants 09 91 13 – Exterior Painting 10 81 13 – Grid Wire Bird Deterrent System 11 01 00 – Fall Protection Systems

END OF SECTION

PROCUREMENT AND CONTRACTING REQUIREMENTS

SPECIFICATIONS

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Contract Drawings: The following drawings are a part of the Contract Documents:

Sheet No.	Drawing Title
G1.0	COVER SHEET
G1.1	GEN. NOTES, SYMBOLS, & ABREVIATIONS
G1.2	CODE SUMMARY & WSEC CALCULATIONS
A0.1	SITE PLAN
A0.2	REFERENCE SCOPE OF WORK NOTES
A0.3	REFERENCE SITE PHOTOS
A0.4	REFERENCE PHOTOS
AD1.1	ROOF DEMOLITION PLAN
AD2.1	OVERALL DEMOLITION ELEVATIONS
AD2.2	ENLARGED DEMOLITION ELEVATIONS
A1.1	REPLACEMENT ROOF PLAN
A1.2	SECOND FLOOR REFLECTED CEILING PLAN
A2.1	EXTERIOR ELEVATIONS
A2.2	ENLARGED ELEVATIONS AND SCHEDULES
A3.1	BUILDING SECTIONS
A4.1	ENLARGED PLATFORM DETAILS
A5.0	ROOF AND WALL ASSEMBLIES
A5.1	DETAILS
A5.2	DETAILS
A5.3	DETAILS

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

ADMINISTRATIVE BUILDING ROOF REPLACEMENT PROJECT

PROJECT NO. 101339.04 | CONTRACT NO. 071518

Scope of Work:	The Work required for this Project includes: the removal and disposal of approximately 24,000 sqft of existing SPF coated metal roof panels and adjacent metal fascia panels and replace with new metal roof and fascia panels; installation of new gutters, downspouts, fall protection and bird deterrent systems; temporary support and minor modification of mechanical; temporary support of other utilities located on the roof; and relocation of access door and exhaust vents.
Bid Estimate:	Estimated cost range is $1,552,000 to $1,716,000, plus Washington State Sales Tax (WSST). In accordance with RCW 39.04.320, fifteen (15) percent apprenticeship participation is required for certain projects estimated to cost one million ($1,000,000) dollars or more. Bidders may contact the Department of Labor and Industries, Specialty Compliance Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530, by phone (360) 902-5320, or e-mail at Apprentice@lni.wa.gov, to obtain information on available apprenticeship programs.
Sealed Bid Date/ Time/Location:	Bids will be received at the Front Reception Desk, Port Administration Office, One Sitcum Plaza, Tacoma, Washington 98421 until **2:00 P.M. on August 4, 2021**, at which time they will be publicly opened and read aloud and the apparent low bid will be determined.
Pre-Bid Conference and Site Tour:	A pre-Bid conference and site visit have been set for July 27, 2021 at 9:30 A.M.. The site visit will convene at the Port's Administrative building, located at One Sitcum Plaza. The following Personal Protective Equipment is required for the site visit: sturdy shoes and reflective vest. Attendees will be required to sign a Release and Acceptance of Responsibility and Acknowledgement of Risks Form prior to entering the site and shall provide their own Personal Protection Equipment (PPE) as required above.
Bid Security:	Each Bid must be accompanied by a Bid security in an amount equal to five (5) percent of the Base Bid in a form allowed by the Instructions to Bidders.
Bid Security:	A Bid Security Bond is not required for this project.
Contact Information:	Any questions to the Port may be emailed to procurement@portoftacoma.com. No oral responses will be binding by the Port.

Questions will not be accepted after seven (7) days prior to the Bid Date.

Bidding Documents:

Plans, Specifications, Addenda, and Plan Holders List for this Project are available on-line through The Port of Tacoma's Website portoftacoma.com. Click on "Contracts," "Procurement," and then the Procurement Number 071518. Bidders must subscribe to the Holder's List on the right hand side of the screen in order to receive automatic email notification of future addenda and to be placed on the Holder's List.

Contact procurement@portoftacoma.com with questions. Holder' s Lists will be updated regularly. Additional Instructions available in Section 00 21 00 - Instructions to Bidders.

Public Works Training Requirements:

Effective July 1, 2019, all businesses are required to have training before bidding on public works projects and prevailing wage under RCW 39.04.359 and RCW 39.12, or is on the list of exempt businesses maintained by the Department of Labor and Industries. The bidder must designate a person or persons to be trained on these requirements. The training will be provided by the Department of Labor and Industries or by a training provider whose curriculum is approved by the Department of Labor and Industries.

Please refer to Labor and Industries' web site (https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp?utm_medium=email&utm_source=govdelivery) for more information and training dates, requirements, and exemptions. Failure to attend this training could result in a determination of "not responsible" and the bidder not being awarded a public works contract.

END OF SECTION

PART 1 - SUMMARY

1.01 DEFINITIONS

All definitions set forth in the Agreement, the General Conditions of the Contract for Construction, and in other Contract Documents are applicable to the Bidding Documents.

A. "Addenda" are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections. The contents of an Addendum are issued in no particular order and therefore should be carefully and completely reviewed.

B. An “Apprentice” is a worker for whom an apprenticeship agreement has been registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-05).

C. "Award" means the formal decision by the Port of Tacoma (“Port”) notifying a Responsible Bidder with the lowest responsive Bid of the Port’s acceptance of their Bid and intent to enter into a Contract with the Bidder.

D. The “Award Requirements” include the statutory requirements as a condition precedent to Award.

E. The “Base Bid” is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.

F. A “Bid” is a complete and properly signed proposal to do the Work, submitted in accordance with the Bidding Documents, for the sums therein stipulated and supported by any data called for by the Bidding Documents.

G. The “Bid Date” is the day and hour specified in the Bidding Documents, as may be changed through an Addendum, by which Bidders are required to submit Bids to the Port.

H. The “Bid Form” is the form(s) included with the Bidding Documents, with Specification Section 00 41 00, through which a Bidder submits a Bid.

I. A “Bidder” is a person or entity who submits a Bid.

J. The “Bidding Documents” include the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, any other sample bidding and contract forms, including those provided by reference, the Bid security, and the proposed Contract Documents, including any Addenda issued prior to the Bid Date.

K. The “Contract Documents” proposed for the Work consist of the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.

L. A “Sub-Bidder” is a person or entity of any tier who submits a bid or proposal to or through the Bidder for materials, equipment or labor for a portion of the Work.

1.02 BIDDER’S REPRESENTATIONS

By making its Bid, each Bidder represents that:

A. BIDDING DOCUMENTS. The Bidder has read and understands the Bidding Documents, and its Bid is made in accordance with them.

B. PRE-BID MEETING. The Bidder has attended pre-Bid meeting(s) required by the Bidding Documents. Attendance at a mandatory meeting or training session means that, in the sole opinion of the Port, a Project representative of a Bidder has attended all or substantially all of such meeting or session.

C. BASIS. Its Bid is based upon the materials, systems, services, and equipment required by the Bidding Documents, and is made without exception.

D. EXAMINATION. The Bidder has carefully examined and understands the Bidding Documents, the Contract Documents including, but not limited to, any liquidated damages, insurance provisions, and the Project site, including any existing buildings, it has familiarized itself with the local conditions under which the Work is to be performed, has correlated its observations with the requirements of the proposed Contract Documents, and it has satisfied itself as to the nature, location, character, quality, and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services, and other items to be furnished, and all other requirements of the Contract Documents. The Bidder has also satisfied itself as to the conditions and other matters that may be encountered at the Project site or that may affect performance of the Work or the cost or difficulty thereof, including, but not limited to, those conditions and matters affecting transportation, access, disposal, handling and storage of materials, equipment and other items; availability and quality of labor, water, electric power, and utilities; availability and condition of roads; climatic conditions and seasons; physical conditions at the Project site and the surrounding locality; topography and ground surface conditions; and equipment and facilities needed preliminary to, and at all times during, the performance of the Work. The failure of the Bidder to fully acquaint itself with any applicable condition or matter shall not in any way relieve the Bidder from the responsibility for performing the Work in accordance with, and for the Contract Sum and within the Contract Time provided for in, the Contract Documents.

E. PROJECT MANUAL. The Bidder has checked its copies of the Project Manual (if any) with the table of contents bound therein to ensure the Project Manual is complete.

F. SEPARATE WORK. The Bidder has examined and coordinated all Drawings, Contract Documents, and Specifications with any other contracts to be awarded separately from, but in connection with, the Work being Bid upon, so that the Bidder is fully informed as to conditions affecting the Work under the Contract being Bid upon.

G. LICENSE REQUIREMENTS. The Bidders and Sub-Bidders are registered and hold all licenses required by the laws of Washington, including a certificate of registration in compliance with RCW 18.27, for the performance of the Work specified in the Contract Documents.

H. CERTIFICATION. The Bidder verifies under penalty of perjury that the Bidder has not have been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW within the three (3) year period immediately preceding the Bid Date.

I. NO EXCEPTIONS. Bids must be based upon the materials, systems, and equipment described and required by the Bidding Documents, without exception.

1.03 BIDDING DOCUMENTS

A. COPIES

1. Bidders may obtain complete sets of the Bidding Documents from The Port of Tacoma’s Website www.portoftacoma.com. Click on "Contracts" then "Procurement."

2. Complete Sets. Bidders shall use complete sets of Bidding Documents in preparing Bids and are solely responsible for obtaining updated information. The Port does not assume any responsibility for errors or misinterpretations resulting from the use of incomplete and/or superseded sets of Bidding Documents.
3. Conditions. The Port makes copies of the Bidding Documents available only for the purpose of obtaining Bids on the Work and does not confer a license or grant permission for any other use.
4. Legible Documents. To the extent any Drawings, Specifications, or other Bidding Documents are not legible, it is the Bidder's responsibility to obtain legible documents.

B. INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

1. Format. The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into Work performed by the various building trades, any Work by separate contractors, or any Work required for separate facilities in, or phases of the Project.
2. Duty to Notify. Bidders shall promptly notify the Port in writing of any ambiguity, inconsistency, or error that they may discover upon examination of the Bidding Documents or of the site and local conditions.
3. Products and Installation. All Bidders shall thoroughly familiarize themselves with specified products and installation procedures and submit to the Port any objections (in writing) no later than seven (7) days prior to the Bid Date. The submittal of the Bid constitutes acceptance of products and procedures specified as sufficient, adequate, and satisfactory for completion of the Contract.
4. Written Request. Bidders requiring clarification or interpretation of the Bidding Documents shall make a written email request to procurement@portoftacoma.com at least seven (7) days prior to the Bid Date.
5. Request to Modify Responsibility Criteria. No later than seven (7) days prior to the Bid Date, a potential Bidder may request in writing that the Port modify the Responsibility Criteria. The Port will evaluate the information submitted by the potential Bidder and respond before the Bid Date. If the evaluation results in a change of the Criteria, the Port will issue an Addendum identifying the new Criteria.
6. Addenda. The Bidder shall not rely on oral information provided at any pre-Bid meetings or during site visits. Verbal statements made by representatives of the Port are for informational purposes only. Any interpretation, correction, or change of the Bidding Documents will be made solely by written Addendum. Interpretations, corrections, or changes of the Bidding Documents made in any manner other than by written Addendum, including but not limited to, oral statements will not be binding, and Bidders shall not rely upon such statements, interpretations, corrections, or changes. The Port is not responsible for explanations or interpretations of the Bidding Documents other than in a written Addendum.
7. Site Visits. Any site visits are provided as a courtesy to potential Bidders to assist them in becoming familiar with the Project site conditions. However, only the Bidding Documents, including any issued Addenda, may be relied upon by Bidders.
8. Singular References. Reference in the singular to an article, device, or piece of equipment shall include as many of such articles, devices, or pieces as are indicated in the Contract Documents or as are required to complete the installation.

9. Utilities and Runs. The Bidder should assume that the exact locations of any underground or hidden utilities, underground fuel tanks, and plumbing and electrical runs may be somewhat different from any location indicated in the surveys or Contract Documents.

C. SUBSTITUTIONS

1. For substitutions during bidding, refer to Section 00 26 00 – Substitution Procedures.

D. ADDENDA

1. Distribution. All Addenda will be written and will be made available on the Port's website or any other source specified by the Port for the Project.
2. Copies. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
3. Verification and Acknowledgment of Receipt. Prior to submitting a Bid, each Bidder shall ascertain that it has received all Addenda issued. Each Bidder shall acknowledge its receipt and consideration of all Addenda in its Bid.

1.04 BIDDING PROCEDURE

A. FORM AND STYLE OF BIDS

1. Form. Bids (including required attachments) shall be submitted on forms identical to the Bid Form included with the Bidding Documents. No oral, email, or telephonic responses or modifications will be considered.
2. Entries on the Bid Form. All blanks on the Bid Form shall be filled in by typewriter, printer, or manually in ink.
3. Figures. All sums shall be expressed in figures, not words. Portions of the Bid Form may require the addition or multiplication of component bids to a total or the identification of component amounts within a total. In case of discrepancy between unit prices listed and their sum(s), the unit prices listed shall govern (rather than the sum).
4. Initial Changes. Any interlineation, alteration, or erasure shall be initialed by an authorized representative of the Bidder.
5. Bid Breakdown. The Bid Form may contain, for the Port’s accounting purposes only, a breakdown of some or all of the components included in the Base Bid.
    a. For lump-sum Bids, the total Contract Sum shall be submitted.
    b. For unit-price Bids, a price shall be submitted for each item of the Work, an extension thereof, and, if requested, the total Contract Sum.
6. No Conditions. The Bidder shall make no conditions or stipulations on the Bid Form, nor qualify its Bid in any manner.
7. Identity of Bidder. The Bidder shall include in the specified location on the Bid Form, the legal name of the Bidder and, if requested, a description of the Bidder as a sole proprietor, a partnership, a joint venture, a corporation, or another described form of legal entity. The Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. The Port verifies signature authority on the Labor and Industries website https://fortress.wa.gov/lni/bbip/Search.aspx under the contractor registration business owner information. If the business owner information is not current, the Bidder shall show proof of authority to sign at the request of the Port. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent’s authority to bind the Bidder

8. Bid Amounts Do Not Include Sales Tax. The Work to be performed constitutes a "retail sale" as this term is defined in RCW 82.04.050. Thus, the Base Bid amount shall include in the sum stated all taxes imposed by law, EXCEPT WASHINGTON STATE AND LOCAL SALES TAX due on the Base Bid. The engaged Contractor will pay retail sales tax on all consumables used during the performance of the Work and on all items that are not incorporated into the final Work; this tax shall be included in the Base Bid price and in any other prices set forth on the Bid Form. The Port will pay state and local retail sales tax due on each progress payment and final payment to the engaged Contractor for transmittal by the Contractor to the Washington State Department of Revenue or to the applicable local government.

B. POTENTIAL LISTING OF SUB-BIDDERS (SUBCONTRACTORS)

1. Procedure. On projects equal to or greater than $1,000,000, the Bid Form includes a requirement that certain Sub-Bidders be listed, in which case the Bidder must complete the required list. In these circumstances, and regardless of the anticipated cost of the Project, the Bidder must name the Sub-Bidder or Sub-Bidders with whom the Bidder, if awarded the Contract, will subcontract directly (i.e., not lower-tier Sub-Bidders) for performance of the Work of:
   a. HVAC (heating, ventilation, and air conditioning) Work;
   b. Plumbing Work as described in RCW 18.106;
   c. Electrical Work as described in RCW 19.28; and
   d. Any other categories of Work listed on the Sub-Bidder listing form and/or Bid Form.
2. Self-Performance. If the Bidder intends to self-perform any of these categories of Work, it must name itself for each such category of Work.
3. Multiple Entries. The Bidder shall not list more than one (1) entity for a particular category of Work identified, unless a Sub-Bidder will vary based on an Alternate Bid, in which case the Bidder shall identify the Sub-Bidder to be used for the Alternate and the affected portion of the Work.
4. Failure to Submit. In accordance with RCW 39.30.060, failure of a Bidder to submit, as part of the Bid, the names of such proposed HVAC, plumbing, and electrical Sub-Bidders, or to name itself to perform such Work, or the naming of two (2) or more Sub-Bidders to perform the same Work, shall render the Bidder’s Bid non-responsive and; therefore, void.
5. Requirement to Subcontract. The Bidder, if Awarded the Contract, will subcontract with the listed Sub-Bidders for performance of the portion of the Work designated on the Bid Form, subject to the provisions of the Contract for Construction and RCW 39.30.060. The Bidder shall not substitute a listed Sub-Bidder in furtherance of bid shopping or bid peddling.
6. Sub-Bidder Qualification. Listed Sub-Bidders may be required to provide evidence of their qualifications, including a statement of experience and references, prior to Award, or at any time during the Contract Time. Such information shall be provided within twenty-four (24) hours of request. This evidence shall demonstrate that the Sub-Bidder meets or exceeds all requirements for experience, qualifications, manufacturer’s certifications, or any other requirements specified in any of the technical sections of the Contract Documents for which the Sub-Bidder proposes to perform Work.
7. Replacement. If a listed Sub-Bidder fails to provide adequate evidence of qualifications, is unable to comply with any bonding requirements of the Bidding Documents or with other requirements of the Contract or Bidding Documents, is not properly licensed, or fails to

meet the Responsibility Criteria of the Bidding Documents, the Port may require the Bidder to replace the Sub-Bidder with another subcontractor reasonably acceptable to the Port at no change in the Contract Sum or Contract Time.

8. Sub-Bidder Standards. Sub-Bidders shall meet contractual and technical qualification standards, and provide specialized certification, licensing, and/or payment and performance bonding, if required.

9. MWBE, Veteran-owned, and small business participation encouraged. The Port's policy is to encourage the Contractor to solicit and document participation, and to provide and promote the maximum lawful, practicable opportunity for increased participation, by MWBE firms certified by the Office of Minority and Women's Business Enterprises (OMWBE), Veteran-owned businesses (defined in RCW 43.60.010, and Small, Mini and Micro business enterprises (defined in RCW 39.26.010).

C. BID SECURITY

1. Purpose and Procedure. Each Bid shall be accompanied by Bid security payable to the Port in the form required by the Bidding Documents and equal to five (5) percent of the Base Bid only (i.e., not including any Alternates or Unit Prices). The Bid security constitutes a pledge by the Bidder to the Port that the Bidder will enter into the Contract with the Port in the form provided, in a timely manner, and on the terms stated in its Bid, and will furnish in a timely manner, the payment and performance bonds, certificates of insurance, and all other documents required in the Contract Documents. Should the Bidder fail or refuse to enter into the Contract or fail to furnish such documents, the amount of the Bid security shall be forfeited to the Port as liquidated damages, not as a penalty. By submitting a Bid, each Bidder represents and agrees that the Bid security, if forfeited, is a reasonable prediction on the Bid Date of future damages to the Port. Failure of the Bidder to provide Bid Security as required shall render the bid non-responsive.

2. Form. The Bid security shall be in the form of a certified or bank cashier's check payable to the Port or a Bid bond executed by a bonding company reasonably acceptable to the Port, licensed in the State of Washington, registered with the Washington State Insurance Commissioner, possess an A.M. Best rating of "A-," Fiscal Size Category (FSC) six (6) or better, and be authorized by the U.S. Department of the Treasury. The Bid security shall be signed by the person or persons legally authorized to bind the Bidder. Bid bonds shall be submitted using the form included with the Bidding Documents.

3. Retaining Bid Security. The Port will have the right to retain the Bid security of Bidders to whom an Award is being considered until the earliest of either: (a) mutual execution of the Contract, and the Port's receipt of payment and performance bonds, (b) the specified time has elapsed so that Bids may be withdrawn, or (c) when all Bids have been rejected.

4. Return of Bid Security. Within sixty (60) days after the Bid Date, the Port will release or return Bid securities to Bidders whose Bids are not to be further considered in awarding the Contract. Bid securities of the three apparent low Bidders will be held until the Contract has been finally executed, after which all un-forfeited Bid securities will be returned. Bid security may be returned in the form provided or by separate payment.

D. SUBMISSION OF BIDS

1. Procedure. The Bid, the Bid security, and other documents required to be submitted with the Bid, shall be enclosed in a sealed envelope identified with the Project name and number and the Bidder's name and address. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face of the mailing envelope.

a. If a Bid is mailed, it shall be addressed to the Port of Tacoma, Contracts Department, 1 Sitcum Plaza, Tacoma, WA 98421.

b. If a Bid is delivered, it shall be delivered to the Front Reception Desk, Port of Tacoma, 1 Sitcum Plaza, Tacoma, WA 98421.

c. The time stamp clock at the Front Reception Desk at 1 Sitcum Plaza is the Port's official clock.

2. Deposit. Bids shall be deposited at the designated location prior to the Bid Date indicated in the Advertisement or Invitation to Bid, or any extension thereof made by Addendum. Bids received after the Bid Date and time specified shall be returned without consideration at the discretion of the Port, or rejected at the time of receipt.

3. Delivery. The Bidder assumes full responsibility for timely delivery at the location designated for receipt of Bids.

4. Form. Oral, facsimile, telephonic, electronic, or email Bids are invalid and will not be considered.

E. MODIFICATION OR WITHDRAWAL OF BID

1. After the Bid Date. A Bid may not be modified, withdrawn, or canceled by the Bidder during a ninety (90) day period following the Bid Date, and each Bidder so agrees by virtue of submitting its Bid.

2. Before the Bid Date. Prior to the Bid Date, any Bid submitted may be modified or withdrawn only by notice to the party receiving Bids at the place designated for receipt of Bids. The notice shall be in writing, with the signature of the Bidder, and shall be worded so as not to reveal the amount of the original Bid. Email notice will not be accepted. It shall be the Bidder's sole responsibility to verify that the notice has been received by the Port in time to be withdrawn before the Bid opening.

3. Resubmittal. Withdrawn Bids may be resubmitted up to the time designated for the receipt of Bids, provided that they are then fully in conformance with these Instructions to Bidders.

4. Bid Security with Resubmission. Bid security shall be in an amount sufficient for the Bid as modified or resubmitted.

F. COMMUNICATIONS

1. Communications from a Bidder related to these Instructions to Bidders must be in writing to procurement@portoftacoma.com. Communications, including but not limited to, notices and requests by Sub-Bidders shall be made through the Bidder and not directly by a Sub-Bidder to the Port.

1.05 CONSIDERATION OF BIDS

A. OPENING OF BIDS. Unless stated otherwise in the Advertisement or Invitation to Bid or an Addendum, the properly identified Bids received on time will be opened publicly and will be read aloud. An abstract of the Base Bids and any Alternate Bids will promptly (and generally within twenty-four (24) hours) be made available to Bidders and other interested parties.

B. REJECTION OF BIDS. The Port shall have the right, but not the obligation, to reject any or all Bids for any reason, or for no reason, to reject a Bid not accompanied by the required Bid security, or to reject a Bid which is in any way incomplete or irregular.

C. BIDDING MISTAKES. The Port will not be obligated to consider notice of claimed Bid mistakes received more than twenty-four (24) hours after the Bid Date. In accordance with Washington

law, a low Bidder that claims error and fails to enter into the Contract is prohibited from Bidding on the Project if a subsequent call for Bids is made for the Project.

D. ACCEPTANCE OF BID (AWARD)

1. Intent to Accept. The Port intends, but is not bound, to Award a Contract to the Responsible Bidder with the lowest responsive Bid, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Port has the right to waive any informality or irregularity in any Bid(s) received and to accept the Bid which, in its judgment, is in its own best interests.

2. Requirements for Award. Before the Award, the lowest responsive Bidder must be deemed Responsible by the Port and must satisfy all Award Requirements.

E. BID PROTEST PROCEDURES

1. Procedure. A Bidder protesting, for any reason, the Bidding Documents, a Bidding procedure, the Port's objection to a Bidder or a person or entity proposed by the Bidder, including but not limited to, a finding of non-Responsibility, the Award of the Contract or any other aspect arising from, or relating in any way to, the Bidding, shall cause a written protest to be filed with the Port within two (2) business days of the event giving rise to the protest. (Intermediate Saturdays, Sundays, and legal holidays are not counted as business days.) The written protest shall include the name of the protesting Bidder, the bid solicitation number and title under which the protest is submitted, a detailed description of the specific factual and legal grounds for the protest, copies of all supporting documents, evidence that the apparent low bidder has been given notice of the protest, and the specific relief requested. The written protest shall be sent by email to procurement@portoftacoma.com.

2. Consideration. Upon receipt of the written protest, the Port will consider the protest. The Port may, within three (3) business days of the Port's receipt of the protest, provide any other affected Bidder(s) the opportunity to respond in writing to the protest. If the protest is not resolved by mutual agreement of the protesting Bidder and the Port, the Contracts Director of the Port, or his or her designee, will review the issues and promptly furnish a final and binding written decision to the protesting Bidder, and any other affected Bidder(s), within six (6) business days of the Port's receipt of the protest. (If more than one (1) protest is filed, the Port's decision will be provided within six (6) business days of the Port's receipt of the last protest.) If no reply is received from the Port during the six (6) business-day period, the protest will be deemed rejected.

3. Waiver. Failure to comply with these protest procedures will render a protest waived.

4. Condition Precedent. Timely and proper compliance with, and exhaustion of, these protest procedures shall be a condition precedent to any otherwise permissible judicial consideration of a protest.

1.06 POST BID INFORMATION

A. THE LOWEST RESPONSIVE BIDDER SHALL:

1. Responsibility Detail Form. Within 24 hours of the Low Responsive Bidder Selection Notification, the apparent low Bidder shall submit to the Port the Responsibility Detail Form and other required documents (Section 00 45 13) executed by an authorized company officer. As requested from the Port, the low responsive Bidder shall provide written confirmation that the person signing the Bid on behalf of the Bidder was duly authorized at the time of bid, a detailed breakdown of the Bid in a form acceptable to the Port, and other information required by the Port.

2. The apparent low Bidder shall submit to the Port upon request:

    a. Additional information regarding the use of the Bidder's own forces and the use of subcontractors and suppliers;

    b. The names of the persons or entities (including a designation of the Work to be performed with the Bidder's own forces, and the names of those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work (i.e., either a listed Sub-Bidder or a Sub-Bidder performing Work valued at least ten (10) percent of the Base Bid), consistent with the listing required with the Bid; and

    c. The proprietary names and the suppliers of the principal items or systems of materials and equipment proposed for the Work.

3. Failure to provide any of the above information in a timely manner will constitute an event of breach permitting forfeiture of the Bid security.

4. Bidder Responsibility. The Bidder will be required to establish, to the satisfaction of the Port, the reliability and responsibility of itself and the persons or entities proposed to furnish and perform the Work described in the Bidding Documents. If requested, the Bidder shall meet with the Port to discuss the Bid, including any pricing, the Bid components, and any assumptions made by the Bidder.

5. Sub-Bidder Responsibility. The Responsibility of the Bidder may be judged in part by the Responsibility of Sub-Bidders. Bidders must verify the Responsibility Criteria for each first-tier Sub-Bidder. A Sub-Bidder of any tier that hires other Sub-Bidders must verify Responsibility Criteria for each of its lower-tier Sub-Bidders. The verification shall include a representation that each Sub-Bidder, at the time of subcontract execution, is Responsible and possesses required licenses.

6. Objection. Prior to an Award of the Contract, the Port will notify the Bidder in writing if the Port, after due investigation, has reasonable objection to the Bidder or a person or entity proposed by the Bidder. Upon receiving such objection, the Bidder may, at Bidder's option: (a) withdraw their Bid, (b) submit an acceptable substitute person or entity with no change in the Contract Time and no adjustment in the Base Bid or any Alternate Bid, even if there is a cost to the Bidder occasioned by such substitution, or (c) file a protest in accordance with the Bidding Documents.

7. Change. Persons and entities proposed by the Bidder to whom the Port has made no reasonable objection must be used on the Work for which they were proposed and shall not be changed, except with the written consent of the Port.

8. Right to Terminate. The Bidder's representations concerning its qualifications will be construed as a covenant under the Contract. If a Bidder makes a material misrepresentation on a Qualification Statement, the Port has the right to terminate the Contract for cause and may then pursue any remedies that exist under the Contract or that are otherwise available.

B. INFORMATION FROM OTHER BIDDERS: All other Bidders designated by the Port as under consideration for Award of a Contract shall also provide a properly executed Qualification Statement, if so requested by the Port.

1.07 PERFORMANCE BOND, LABOR AND MATERIAL PAYMENT BOND, AND INSURANCE

A. BOND REQUIREMENTS. Within fifteen (15) days after the Port's Notice of Award of the Contract, the successful Bidder shall obtain and furnish statutory bonds pursuant to RCW 39.08

covering the faithful performance of the Contract and the payment of all obligations arising thereunder in the form and amount prescribed in the Contract Documents. Bonds shall be written for one hundred (100) percent of the contract award amount, plus Washington State Sales Tax and Change Orders. The cost of such bonds shall be included in the Base Bid.

1. On contracts of one hundred fifty thousand dollars ($150,000) or less, at the option of the Contractor or the General Contractor/Construction Manager as defined in RCW 39.10.210, the Port may, in lieu of the bond, retain ten (10) percent of the contract amount for a period of thirty days after date of final acceptance, or until receipt of all necessary releases from the department of revenue, the employment security department, and the department of labor and industries and settlement of any liens filed under RCW 60.28, whichever is later. The recovery of unpaid wages and benefits must be the first priority for any actions filed against retainage held by a state agency or authorized local government.
2. On contracts of one hundred fifty thousand dollars ($150,000) or less, the Port may accept a full payment and performance bond from an individual surety or sureties.

B. TIME OF DELIVERY AND FORM OF BONDS. The successful Bidder shall deliver an original copy of the required bonds to the Port, 1 Sitcum Plaza, Tacoma, WA 98421, within the time specified in the Contract Documents.

C. INSURANCE. The successful Bidder shall deliver a certificate of insurance from the Bidder's insurance company that meets or exceeds all requirements of the Contract Documents.

D. GOVERNMENTAL REQUIREMENTS. Notwithstanding anything in the Bidding or Contract Documents to the contrary, the Bidder shall provide all bonding, insurance, and permit documentation as required by governmental authorities having jurisdiction for any portions of the Project.

1.08 FORM OF AGREEMENT

A. FORM TO BE USED. The Contract for the Work will be written on the form(s) contained in the Bidding Documents, including any General, Supplemental, or Special Conditions, and the other Contract Documents included with the project manual.

B. CONFLICTS. In case of conflict between the provisions of these Instructions and any other Bidding Document, these Instructions shall govern. In case of conflict between the provisions of the Bidding Documents and the Contract Documents, the Contract Documents shall govern.

C. CONTRACT DELIVERY. Within fifteen (15) days after Notice of Award, the Bidder shall submit a signed Contract to the Port in the form tendered to the Bidder and without modification.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for substitutions.

1.02 DEFINITIONS/CLARIFICATIONS

A. Substitutions. Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

B. The Contract Documents include performance specifications for products and equipment which meet Project requirements. In those cases where a representative item or manufacturer is named in the specification, it is provided for the sole purpose of identifying a product meeting the required functional performance, and where the words “or equal” are used, a substitution request as further described, is not required.

C. Where non-competitive or sole source products or manufacturers are explicitly specified with the words “or approved equal,” or “Engineer approved equal,” or “as approved by the Engineer” are used, they shall be taken to mean “or approved equal.” In these cases a substitution request as further described in this Section, is required.

1.03 SUBMITTALS

A. Substitution Request Form. Use copy of form located at the end of this Section.

B. Pre-Bid Substitution Requests. Submit one (1) PDF of the Substitution Request Form along with all supporting documentation for consideration of each request. Identify product, fabrication, or installation method to be replaced. Include Drawing numbers and titles. Substitution requests prior to the Bid Date may originate directly from a prime Bidder, or from a prospective Sub-Bidder.

1. Documentation. Show compliance with requirements for substitutions with the following, as applicable:

a. Statement indicating why specified product, fabrication, or installation cannot be provided.

b. Coordination information, including a list of changes or modifications needed to other parts of the Work that will be necessary to accommodate proposed substitution.

c. Product Data, including drawings and descriptions of products, fabrication, and installation procedures.

d. Samples, where applicable or requested.

e. Certificates and qualification data, where applicable or requested.

f. Research reports evidencing compliance with building code in effect for the Project.

2. Engineer's Action. Engineer will review substitution requests if received electronically to procurement@portoftacoma.com at least seven (7) days prior to the Bid Date. Substitution requests received after this time will not be reviewed.

a. Forms of Acceptance. Substitution requests will be formally accepted via written addendum prior to the Bid Date. Bidders shall not rely upon approvals made in any other manner.

b. Use product originally specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.

c. The Port’s decision of approval or disapproval of a proposed substitution shall be final.

C. Post-Award Substitution Requests must be submitted by the Contractor and not a Subcontractor nor Supplier.

1. Documentation. Show compliance with requirements for substitutions with the following, as applicable:

a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.

b. Coordination information, including a list of changes or modifications needed to other parts of the Work that will be necessary to accommodate proposed substitution.

c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification Section. Significant qualities may include, but are not limited to, attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified. ·

d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.

e. Samples, where applicable or requested.

f. Certificates and qualification data, where applicable or requested.

g. List of similar installations for completed projects with project names and addresses. Also provide names and addresses of the applicable architect, engineer, and owner.

h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

i. Research reports evidencing compliance with building code in effect for the Project.

j. Comparison of the approved Baseline Project Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.

k. Cost information, including a proposal of change, if any, in the Contract Sum.

l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.

m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

2. Engineer's Action. If necessary, Engineer will request additional information or documentation for evaluation within seven (7) calendar days of receipt of a request for substitution. Engineer will notify Contractor through Port of acceptance or rejection of proposed substitution within fifteen (15) calendar days of receipt of request, or seven (7) calendar days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance. Change Order or Minor Change in Work.

b. Use product originally specified if Engineer does not issue a decision on use of a proposed substitution within time allocated.

3. Substitutions for Cause. Submit requests for substitution immediately upon discovery of need for change, but not later than fourteen (14) days prior to date required for preparation and review of related submittals.

   a. Conditions. Engineer will consider Contractor's request for substitution when the following conditions are satisfied:

      1) Requested substitution is consistent with the Contract Documents and will produce indicated results.

      2) Requested substitution will not adversely affect the Baseline Project Schedule.

      3) Requested substitution has received necessary approvals of authorities having jurisdiction.

      4) Requested substitution is compatible with other portions of the Work.

      5) Requested substitution has been coordinated with other portions of the Work.

      6) Requested substitution provides specified warranty.

      7) If requested substitution involves more than one (1) contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

4. Substitutions for Convenience. Engineer will consider Contractor’s requests for substitution if received within fourteen (14) days after the Notice of Award.

   a. Conditions. Engineer will consider Contractor's request for substitution when the following conditions are satisfied:

      1) Requested substitution offers Port a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities· Port must assume. Port's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Port, and similar considerations.

      2) Requested substitution does not require extensive revisions to the Contract Documents.

      3) Requested substitution is consistent with the Contract Documents and will produce indicated results.

      4) Requested substitution will not adversely affect the Baseline Project Schedule.

      5) Requested substitution has received necessary approvals of authorities having jurisdiction.

      6) Requested substitution is compatible with other portions of the Work.

      7) Requested substitution has been coordinated with other portions of the Work.

      8) Requested substitution provides specified warranty.

      9) If requested substitution involves more than one (1) contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors

involved.

D. Substitutions will not be considered when:

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

1.04 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

PROJECT TITLE: Administrative Building Roof Replacement Project PROJECT NO.: 101339.04

SUBMITTED BY: _____ CONTRACT NO.: 071518

PRIME/SUB/SUPPLIER: _____ DATE: _____

Specification Title: _____ Section No.: _____

Description: _____ Paragraph: _____

_____ Page No.: _____

Proposed Substitution: _____

Trade Name: _____ Model No.: _____

Manufacturer: _____

Address: _____ Phone No.: _____

Installer: _____

Address: _____ Phone No.: _____

Differences between proposed substitution and specified product: _____

_____

_____

☐ Point-by-Point comparative data attached - REQUIRED

Reason for not providing specified item: _____

_____

Similar Installation:

Project: _____ A/E: _____

Address: _____

Owner: _____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

Supporting Data Attached:

☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Other:_____

_____

Applicable to Substitution Requests During Construction:

Proposed to Port for accepting substitution: $_____

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] ____ # days.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.

- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay Baseline Project Schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted By: _____

Signed By: _____ Firm: _____

Address: _____

_____

Telephone: _____ Email: _____

Attachments: _____

_____

A/E's REVIEW AND RECOMMENDATION

☐ Approved Substitution

☐ Approved Substitution as Noted

☐ Reject Substitution - Use specified materials.

☐ Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

ENGINEER'S REVIEW AND ACTION

☐ Substitution Approved - Make submittals in accordance with this Specification Section. If during construction, prepare Change Order.

☐ Substitution Approved as Noted - Make submittals in accordance with this Specification Section. If during construction, prepare Change Order.

☐ Substitution Rejected - Use specified materials.

☐ Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

END OF SECTION

PART 1 - GENERAL

1.01 EXISTING CONDITIONS

A. Certain information relating to existing surface and subsurface conditions and structures is available to Bidders online at www.portoftacoma.com, but will not be part of the Contract Documents, as follows:

1. Site Drawings: Entitled Port of Tacoma Administrative Office Building, dated 04/24/81.
2. Site Drawings: Entitled Administration Building Soffit and Gutter Upgrades, dated 06/10/97.
3. Site Drawings and Specifications: Entitled Port Administration Roof Improvements, dated 03/12/13.
4. Existing Conditions Survey: Entitled Port of Tacoma Administration Building Conditions Assessment, dated 08/05/19.
    a. This survey identifies conditions of existing construction prepared primarily for the use of Engineer in establishing the extent of the new Work versus existing conditions visible.
    b. This survey includes a photographic record of existing conditions visible.
5. Existing Conditions Survey: Entitled Port Administration Building Roof/Gutter/Skylight Condition Evaluation and Recommendation, dated 06/25/12.

1.02 AVAILABILITY

A. Reference Documents are available online through the Port of Tacoma’s Website www.portoftacoma.com. Click on "Contracts," "Procurement," and then the Procurement Number.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section provides the notification required for disclosure of asbestos, lead-containing or other hazardous materials.

1.02 HAZARDOUS MATERIALS NOTICE

A. The Port is reasonably certain that asbestos and lead will not be disturbed by the project. If the Contractor encounters material suspected of containing lead or asbestos which will interfere with the execution of the work, the Contractor shall stop work and notify the Engineer.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

BIDDER'S NAME: _____

PROJECT TITLE: **ADMINISTRATIVE BUILDING ROOF REPLACEMENT PROJECT**

The undersigned Bidder declares that it has read the Contract Documents (including documents provided by reference), understands the conditions under which the Work will be performed, has examined the Project site, and has determined for itself all situations affecting the Work herein Bid upon. Bidder proposes and agrees, if this Bid is accepted, to provide at Bidder's own expense, all labor, machinery, tools, materials, etc., including all Work incidental to, or described or implied as incidental to such items, according to the Contract Documents, and that the Bidder will complete the Work within the time stated, and that Bidder will accept in full the lump sum or unit price(s) set forth below:

ITEM NO.	DESCRIPTION OF ITEM	QTY	UOM	UNIT PRICE	EXTENDED PRICE (QTY. x UNIT PRICE)
1	Mobilization and Demobilization	1	LS		
2	Project Administration	1	LS		
3	Demolition and Disposal	1	LS		
4	New Roof Panels and Trim	1	LS		
5	New Wall Panels and Trim	1	LS		
6	Access and Debris Containment	1	LS		
7	Unforeseen Conditions Allowance	1	LS	$20,000	$20,000

TOTAL BID AMOUNT	
10.2% WASHINGTON STATE SALES TAX (WSST) ON BASE BID SUBTOTAL	
BID TOTAL (WITH WSST)	

Note: Show prices in figures only.

Evaluation of Bids. In accordance with the provisions of the Contract Documents, Bids will be evaluated to determine the lowest Base Bid Subtotal offered by a responsible Bidder submitting a responsive Bid.

Principal Subcontractors/Suppliers. For Bids greater than one million ($1,000,000) dollars, the Bidder shall list below the name of each subcontractor or supplier to whom the Bidder proposes to subcontract the portions of the work listed below, or name itself for the work.

Work to be Performed	Name of Firm
HVAC (Heating, Ventilation and Air Conditioning) Work	
Plumbing Work as described in RCW 18.106	

Electrical Work as described in RCW 19.28	

Non-Collusion Representation. The Bidder declares under penalty of perjury that the Bid submitted is genuine and not a sham or collusive bid, or made in the interest or on behalf of any person or firm not therein named; and further represents that the Bidder has not directly or indirectly induced or solicited any other bidder to submit a sham bid, or encouraged any other person or corporation to refrain from bidding; and that the Bidder has not in any manner sought by collusion to secure to the Bidder an advantage over any other bidder or bidders.

RCW 39.04.350 Certification. The Bidder represents and certifies, under penalty of perjury, that within the three- (3-) year period immediately preceding the Bid Date, the Bidder has not been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries, nor through a civil judgment entered by a court of limited or general jurisdiction, to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, nor 49.52 RCW.

Addenda. Bidder acknowledges receipt and acceptance of all Addenda through No. ____ (Identify Last Addenda By Number)

Bid Security. A certified check, cashier's check, or other obligation of a bank, or a bid bond in substantially the form set forth in Section 00 43 13, Bid Security Form for at least five (5) percent of the Base Bid Subtotal, shall be submitted with this Bid.

Apprenticeship Requirements. For Bids greater than one million ($1,000,000) dollars, the apprentice labor hours required for this project are fifteen (15) percent of the total labor hours. The Bidder agrees to utilize this level of apprentice participation.

_____	_____
Name of Firm	Date
_____	_____
Signature	By Title
_____	_____
Mailing Address	City, State Zip Code
_____	_____
Telephone Number	Email Address
_____	_____
WA State Contractor's License No.	Employment Security Department No.

_____

Identification of Bidder as a sole proprietor, a partnership, a joint venture, a corporation, or another described form of legal entity

END OF SECTION

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto the PORT OF TACOMA as Obligee, in the penal sum of _____ Dollars, for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigned, jointly and severally, by these present.

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

SIGNED, SEALED AND DATED THIS _____ DAY OF _____, 20___

BY _____
PRINCIPAL

BY _____
SURETY

_____

_____

_____

AGENT AND ADDRESS

Note: Bidder may submit Surety's bid bond form, provided it is similar in substance, made out in the name of the Port of Tacoma, and that the agent’s name and address appear as specified. Bonds containing riders limiting responsibility for toxic waste or limiting the term of responsibility will be rejected.

END OF SECTION

THIS IS NOT TO BE SUBMITTED WITH A BID.

THE LOW RESPONSIVE BIDDER SHALL BE REQUIRED TO COMPLETE THIS RESPONSIBILITY DETAIL FORM AS SPECIFIED IN SECTION 00 21 00 - INSTRUCTIONS TO BIDDERS. **THIS COMPLETED RESPONSIBILITY DETAIL FORM SHALL BE SUBMITTED ELECTRONICALLY (PDF) VIA EMAIL TO THE CONTACT(S) IDENTIFIED IN THE LOW RESPONSIVE BIDDER SELECTION NOTIFICATION.**

BIDDER'S COMPANY NAME: _____

For the below Mandatory Bidder Responsibility Criteria, please mark the appropriate choice.

1.01 MANDATORY BIDDER RESPONSIBILITY CRITERIA

A. The Bidder shall meet the following mandatory responsibility criteria as described in RCW 39.04.350(1). The Bidder shall be rejected as not responsible if any answer to questions 1 through 5 is "No" or any answer to questions 6 through 8 is "Yes."

1. Does the Bidder have a Certificate of Registration in compliance with RCW 18.27?

   ☐ Yes ☐ No

2. Does the Bidder have a current Washington State Unified Business Identifier number?

   ☐ Yes ☐ No

3. Does the Bidder have Industrial Insurance Coverage for the Bidder's employees working in Washington State as required in RCW 51?

   ☐ Yes ☐ No

4. Does the Bidder have an Employment Security Department number as required in RCW 50?

   **__Attach__ letter dated within six (6) months of Bid Date.*

   **Request a letter electronically by clicking on the following link https://fortress.wa.gov/esd/twt/pwcinternet/ or by emailing a request to publicworks@esd.wa.gov.*

   ☐ Yes ☐ No

5. Does the Bidder have a Washington State Excise Tax Registration number as required in RCW 82?

   ☐ Yes ☐ No

6. Has the Bidder been disqualified from bidding on any public works project under RCW 39.06.010 or 39.12.065(3)?

   ☐ Yes ☐ No

7. Has the Bidder violated RCW 39.04.370 more than one (1) time as determined by the Washington State Department of Labor and Industries?

   ☐ Yes ☐ No

8. Has the Bidder ever been found to be out of compliance with Apprenticeship Utilization requirements of RCW 39.04.320?

   ☐ Yes ☐ No

9. Has the Bidder ever been found to have willfully violated, as defined in RCW 49.48.082, any provision of Chapters 49.46, 49.48, or 49.52 RCW within the three- (3-) year period immediately preceding the date of this bid solicitation?

   ☐ Yes ☐ No

10. Has the Bidder completed the training required by RCW 39.04.350, or is the Bidder on the list of exempt businesses maintained by the Department of Labor and Industries?

    ☐ Yes ☐ No

If any answer to questions 1 through 5 is "No" or any answer to questions 6 through 8 is "Yes" - **STOP HERE** and contact the Contract Administrator. The Bidder is not responsible for this Work. Otherwise proceed to 1.02. **Provide attached to this completed form documentation to confirm responsibility criteria.**

For remaining criteria below, check or fill-out the appropriate item. Based upon the answer provided by the Bidder, the Port may request additional information or seek further explanation. As needed, provide backup documentation for any explanations listed below.

1.02 CONTRACT AND REGULATORY HISTORY

A. The Port will evaluate whether the Bidder's contract and regulatory history demonstrates an acceptable record of past project performance and consistent responsibility. The Bidder shall answer the following questions. The Bidder may be rejected as not responsible if any answer to questions 1 through 5 below is "Yes."

   1. Has the Bidder had a contract terminated for cause or default in the last five (5) years?

      ☐ Yes, **If YES, explain below.** ☐ No

      _____

   2. Has the Bidder required a Surety to take over all, or a portion of, a project to cure or respond to an asserted default or material breach of contract on the part of the Bidder on any public works project in the last five (5) years?

      ☐ Yes, **If YES, explain below.** ☐ No

      _____

   3. Have the Bidder and major Sub-Bidders been in bankruptcy, reorganization, and/or receivership on any public works project in the last five (5) years?

      ☐ Yes, **If YES, explain below.** ☐ No

      _____

4. Have the Bidder and major Sub-Bidders been disqualified by any state or local agency from being awarded and/or participating on any public works project in the last five (5) years?

   ☐ Yes, **If YES, explain below.** ☐ No

   _____

5. Are the Bidder and major Sub-Bidders currently a party to a formal dispute resolution process with the Port (i.e., a pending mediation, arbitration, or litigation)?

   ☐ Yes, **If YES, explain below.** ☐ No

   _____

1.03 ACCIDENT/INJURY EXPERIENCE

A. The Port will evaluate the Bidder's accident/injury Experience Modification Factor ("EMF") from the Washington State Department of Labor and Industries to assess whether the Bidder has an acceptable safety record preventing personal injuries on projects.

B. List the Bidder's accident/injury EMF for the last five (5) years. An experience factor is calculated annually by the Washington State Department of Labor and Industries.

Year	Effective Year	Experience Factor
1		
2		
3		
4		
5		

If the Bidder has received an EMF of greater than 1.0 for any year, explain the cause(s) of the designation and what remedial steps were taken to correct the EMF. The Bidder may be rejected as not responsible if the Bidder's EMF is greater than 1.0 and sufficient remedial steps have not been implemented.

_____

1.04 WORK PERFORMED BY BIDDER

A. The Bidder shall state the amount of the Work, as an equivalent to the Base Bid, excluding taxes, insurance, and bonding, the Bidder will execute with its own forces.

_____ %

1.05 ADDITIONAL CONTRACTOR INFORMATION

A. As part of completing this Responsibility Detail Form, **submit the following information with the completed Responsibility Detail Form:**

   1. Bidder's recent job resume, including a list of similar projects performed and contact information for the similar project owner(s), a brief description of work, start and end dates, and contract amount.

   2. Resumes of Bidder's proposed project manager and job superintendent.

B. The Bidder's failure to provide the required project information may result in a determination of the Bidder being declared non-responsible by the Port.

C. The Bidder shall submit this completed, **SIGNED** Responsibility Detail Form electronically (PDF), with all requested backup documentation, via email to the contact(s) noted on the Low Responsive Bidder Selection Notification.

D. The Bidder and its subcontractors to verify that its subcontractors at each tier meet the responsibility criteria as required by RCW 39.06.020 and 39.04.350.

1. Bidder shall verify major subcontractors meet the responsibility criteria required. Fill out one Port of Tacoma Public Works Project Bidder Evaluation Checklist for Subcontractors for each major subcontractor and submit to the Port with this form. Backup documentation is not required to be submitted.

PROJECT: Administrative Building Roof Replacement Project

PROJECT NO.: 101339.04

CONTRACT NO.: 071518

Responsibility Certification Form

The Low responsive Bidder shall complete the Responsibility Detail Form, attach all documentation, and submit to the Port within twenty-four (24) hours following receipt of the Low Responsive Bidder Selection Notification. All forms shall be submitted electronically (PDF) via email to the contact(s) listed on the Selection Notice. Note, the same project may be used to demonstrate experience across multiple categories if applicable.

By completing and signing this Responsibility Detail Form, the Bidder is certifying that the information contained within the Form, the backup documentation, and any additional information requested by the Port is true and complete. The Bidder's failure to disclose the required information or the submittal of false or misleading information may result in the rejection of the Bidder's Bid, revocation of award, or contract termination.

The information provided herein is true and complete.

_____ _____

Signature of Authorized Representative Date

_____

Print Name and Title

PORT OF TACOMA PUBLIC WORKS PROJECT BIDDER EVALUATION CHECKLIST FOR SUBCONTRACTORS

PROJECT TITLE: Administrative Building Roof Replacement Project

BIDDER: _____

CONTRACT AND PROJECT NUMBER: 071518/ 101339.04

This checklist shall be completed by the Bidder and its subcontractors to verify that its subcontractors at each tier meet the responsibility criteria as required by RCW 39.06.020 and RCW 39.04.350.

This checklist should be submitted to the Port of Tacoma Contracts Administrator within twenty-four (24) hours of request.

Document verification information or backup data is not to be submitted to the Port, this information should remain on file with the Contractor and be presented to the Port if requested at a later date.

Item No.	Item	Initials/ Comments
1.	At the time of Bid submittal, have a certificate of registration in compliance with RCW 18.27: Check the L&I site https://fortress.wa.gov/lni/bbip/. Verify that a subcontractor has an electrical contractor license, if required by RCW 19.28, or an elevator contractor license, if required by RCW 70.87.	
2.	While reviewing registration information above, also check contractor's **Employer Liability Certificate** to verify workers' comp (industrial insurance) premium status – current account. Complete a "Submit Contractor Tracking Request" to be notified if the contractor fails to pay workers' comp premiums or renew their contractor registration or if their electrical contractor license is suspended or revoked within one year.	
3.	State excise tax registration number (Department of Revenue). (contractor's Washington State Unified Business Identifier and tax registration number) http://dor.wa.gov/content/doingbusiness/registermybusiness/brd/.	
4.	Not disqualified from bidding on any public works contract under RCW 39.06.010 or RCW 39.12.065(3). Check the Department of Labor and Industries http://www.lni.wa.gov/TradesLicensing/PrevWage/AwardingAgencies/DebarredContractors/.	
5.	Verify subcontractors are registered with the Washington State Employment Security Department (ESD) and have an account number. Request a letter to be sent from the subcontractor electronically by clicking on the following link https://fortress.wa.gov/esd/twt/pwcinternet/ or by emailing a request to publicworks@esd.wa.gov. Include ESD#, UBI#, and business name in the email. Certificate of Coverage letter issued/dated within the last six (6) months.	

Item No.	Item	Initials/ Comments
	Document if subcontractor confirms in writing, under penalty of perjury, that it has no employees and this requirement does not apply.	

END OF SECTION

THIS AGREEMENT is made and entered into by and between the PORT OF TACOMA, a State of Washington municipal corporation, hereinafter designated as the "Port," and:

The "Contractor" is: _____ (Legal Name)

_____ (Address)

_____ (Address 2)

_____ (Phone No.)

The "Project" is: **Administrative Building Roof Replacement Project** **(Title)**

101339.04 | 071518 (Project/Contract No.)

1 Sitcum Plaza (Project Address)

Tacoma, WA 98421 (Project Address 2)

The "Engineer" is: **Thais Howard, PE** **(Engineer)**

Director of Engineering (Title)

thoward@portoftacoma.com (Email)

(253) 592-6706 (Phone No.)

The "Contractor's Representative" is: _____ (Representative)

_____ (Title)

_____ (Email)

_____ (Phone No.)

BACKGROUND AND REPRESENTATIONS:

The Port publicly solicited bids on the Contract Documents. The Contractor submitted a Bid to the Port on the _____ day of _____, 20___ to perform the Work.

The Contractor represents that it has the personnel, experience, qualifications, capabilities, and means to accomplish the Work in strict accordance with the Contract Documents, within the Contract Time and for the Contract Price, and that it and its Subcontractors satisfy the responsibility criteria set forth in the

Contract Documents, including any supplemental responsibility criteria.

The Contractor further represents that it has carefully examined, and is fully familiar with, all provisions of the Contract Documents, including any Addenda, that it has fully satisfied itself as to the nature, location, difficulty, character, quality, and quantity of the Work required by the Contract Documents and the conditions and other matters that may be encountered at or near the Project site(s), or that may affect performance of the Work or the cost or difficulty thereof, including all applicable safety and site responsibilities, and that it understands and can satisfy all scheduling and coordination requirements and interim milestones.

AGREEMENT:

The Port and the Contractor agree as follows:

1.0 CONTRACTOR TO FULLY PERFORM THE WORK

The Contractor shall fully execute and complete the entire Work for the Project described in the Contract Documents, except to the extent specifically indicated in the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.

2.0 DATE OF COMMENCEMENT

The date of commencement of the Work, which is the date from which the Contract Time is measured, shall be fixed as the date of execution of the Contract.

3.0 CONTRACT TIME AND LIQUIDATED DAMAGES

The Contractor shall achieve all interim milestones as set forth in the Contract Documents and Substantial Completion of the entire Work not later than 240 calendar days from execution of the Contract, subject to adjustments of this Contract Time as provided in the Contract Documents. The Contractor shall achieve Final Completion of the entire Work within 30 calendar days of the date on which Substantial Completion is achieved.

Provisions for liquidated damages as a reasonable estimate of future loss, as of the date of this Agreement, are included in the Contract Documents. The parties agree that the stated liquidated damages are reasonable and not penalties individually nor cumulatively.

The liquidated damages for failure to achieve Substantial Completion by the required date shall be $250 per calendar day. After the required Final Completion date, the liquidated damages for failure to achieve Final Completion shall be $100 per calendar day.

Liquidated damages assessed by the Port will be deducted from monies due to the Contractor, or from monies that will become due to the Contractor. The liquidated damages, as specified and calculated herein, shall be levied, cumulatively if applicable, for each and every calendar day that Substantial Completion and/or Final Completion of the Work is delayed beyond the required completion dates, or the completion dates modified by the Port for extensions of the Contract Time.

4.0 CONTRACT PRICE

In accordance with the Contractor’s Bid dated _____, the Port shall pay the Contractor in current funds for the Contractor’s performance of the Contract, the Contract Price of

_____ Dollars ($_____), subject to additions and deductions as provided in the Contract Documents. State and local sales tax is not included in the Contract Price, but will be due and paid by the Port with each progress payment.

6.0 INSURANCE AND BONDS

The Contractor shall purchase and maintain insurance and provide bonds as set forth in the Contract Documents.

This Agreement is entered into as of the day and year first written above:

CONTRACTOR	PORT OF TACOMA
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Execution Date: _____

END OF SECTION

PERFORMANCE BOND # _____

CONTRACTOR (NAME AND ADDRESS)	**SURETY (NAME AND PRINCIPLE PLACE OF BUSINESS)**
_____	_____
_____	_____
_____	_____
OWNER (NAME AND ADDRESS)	**AGENT OR BROKER (FOR INFORMATION ONLY)**
PORT OF TACOMA	_____
P.O. BOX 1837	_____
TACOMA, WA 98401-1837	_____

KNOW ALL MEN BY THESE PRESENTS:

That _____ as Principal, hereinafter called Contractor, and _____ as Surety, hereinafter called Surety, are held and firmly bound unto the Port of Tacoma as Obligee, hereinafter called the Port, in the amount of _____ Dollars ($_____) for the payment whereof Contractor and Surety bind themselves, their executors, administrators, legal representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS:

Contractor shall execute an agreement with the Port for Administrative Building Roof Replacement Project, Project No. 101339.04/Contract No. 071518, 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, all alterations, additions thereto, deletions therefrom, and any other document or provision incorporated into the Contract) and is hereinafter referred to as the Contract.

This bond is executed and issued pursuant to the provisions of RCW 39.08.

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:

A. Surety hereby waives notice of any alterations, change orders, modifications, or extensions of time made by the Port.

B. Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the Work and/or Contract Time and the amounts payable to the Contractor. Subject to the limitations contained in (A) above, Surety agrees that no such addition, deletion, or modification, or any combination thereof, shall avoid or impair Surety’s obligation hereunder.

C. 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:

   1. Remedy the default within fifteen (15) days following its advice to the Port as set forth above, or

   2. Assume within fifteen (15) days, following its advice to the Port as set forth above, completion of the Contract in accordance with the Contract Documents and become

entitled to payment of the balance of the Contract Sum, or

3. 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, attorney's fees and efforts to complete the Work prior to the Surety exercising the options available to it as set forth herein.

D. 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 Pierce County, Washington.

E. No right or action shall accrue on this bond to, or for the use of, any person or corporation other than the Port of Tacoma.

Signed and Sealed the _____ day of _____, 20____.

IMPORTANT: Surety companies executing bonds must have an A.M. Best Rating of "A-, FSC (6)" or higher, have an underwriting limitation of not less than the Contract Sum, and be authorized to transact business in the State of Washington.

SURETY	**CONTRACTOR**
_____	_____
Signature	Signature
_____	_____
Printed Name and Title	Printed Name and Title

Power of Attorney attached.

END OF SECTION

LABOR AND MATERIAL PAYMENT BOND # _____

CONTRACTOR (NAME AND ADDRESS)	**SURETY (NAME AND PRINCIPLE PLACE OF BUSINESS)**
_____	_____
_____	_____
_____	_____
OWNER (NAME AND ADDRESS)	**AGENT OR BROKER (FOR INFORMATION ONLY)**
PORT OF TACOMA	_____
P.O. BOX 1837	_____
TACOMA, WA 98401-1837	_____

KNOW ALL MEN BY THESE PRESENTS:

That _____ as Principal, hereinafter called Contractor, and _____ as Surety, hereinafter called Surety, are held and firmly bound unto the Port of Tacoma as Obligee, hereinafter called the Port, and all others entitled to recovery hereunder, in the amount of _____ Dollars ($_____) for the payment whereof Contractor and Surety bind themselves, their executors, administrators, legal representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS:

Contractor shall execute an agreement with the Port for Administrative Building Roof Replacement Project, Project No. 101339.04/Contract No. 071518, 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 therefrom, and any other document or provision incorporated into the Contract) and is hereinafter referred to as the Contract.

This bond is executed pursuant to the provisions of RCW 39.08.

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.

A. Surety hereby waives notice of any alterations, change orders, modifications, or extensions of time made by the Port.

B. Surety recognizes that the Contract includes provisions for additions, deletions, and modifications to the Work and/or Contract Time and the amounts payable to the Contractor. Subject to the limitations contained in (A) above, Surety agrees that no such addition, deletion, or modification, or any combination thereof, shall avoid or impair Surety’s obligation hereunder.

C. 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.

D. 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.

E. 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.

F. If any Claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the Port as a result of such suit. Venue for any action arising out of, or in connection with, this bond shall be in Pierce County, Washington.

Signed and Sealed the _____ day of _____, 20____.

IMPORTANT: Surety companies executing bonds must have an A.M. Best Rating of "A-, FSC (6)" or higher, have an underwriting limitation of not less than the Contract Sum, and be authorized to transact business in the State of Washington.

SURETY	**CONTRACTOR**
_____	_____
Signature	Signature
_____	_____
Printed Name and Title	Printed Name and Title

Power of Attorney attached.

END OF SECTION

BOND NO.: _____

PROJECT TITLE: Administrative Building Roof Replacement Project

PROJECT NO.: 101339.04

CONTRACT NO.: 071518

KNOW ALL MEN BY THESE PRESENTS: That we, _____ _____ a corporation existing under and by virtue of the laws of the State of Washington and authorized to do business in the State of Washington, as Principal, and _____, a corporation organized and existing under the laws of the State of _____ and authorized to transact the business of surety in the State of Washington, as Surety, are jointly and severally held and bound unto the PORT OF TACOMA, hereinafter called Port, as Obligee, and are similarly held and bound unto the beneficiaries of the trust fund created by RCW 60.28 as their heirs, executors, administrators, successors, and assigns in the penal sum of _____($_____) plus five (5) percent of any increases in the Contract Price that have occurred or may occur, due to change orders, increases in the quantities, or the addition of any new item of work.

WHEREAS, on the _____ day of _____, the said Principal herein executed Contract No. 071518 with the Port for Administrative Building Roof Replacement Project, Project No. 101339.04.

WHEREAS, said Contract and RCW 60.28 require the Port to withhold from the Principal the sum of five (5) percent from monies earned by the Principal on estimates during the progress of the work, hereinafter referred to as earned retained funds.

WHEREAS, the Principal has requested that the Port accept a bond in lieu of earned retained funds as allowed under RCW 60.28.

NOW THEREFORE, this obligation is such that the Surety, its successors, and assigns are held and bound unto the Port and unto all beneficiaries of the trust fund created by RCW 60.28.011(1) in the aforesaid sum. This bond, including any proceeds therefrom, is subject to all claims and liens and in the same manner and priority as set forth for retained percentages in RCW 60.28. The condition of this obligation is also that if the Principal shall satisfy all payment obligations to persons who may lawfully claim under the trust fund created pursuant to RCW 60.28, to the Port, and indemnify and hold the Port harmless from any and all loss, costs, and damages that the Port may sustain by release of said retainage to Principal, then this obligation shall be null and void, provided the Surety is notified by the Port that the requirements of RCW 60.28.021 have been satisfied and the obligation is duly released by the Port.

IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal. The Surety will not be discharged or released from liability for any act, omission, or defenses of any kind or nature that would not also discharge the Principal.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, the Surety, the Port, the beneficiaries of the trust fund created by RCW 60.28 and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, said Principal and said Surety have caused these presents to be duly signed and sealed this _____ day of _____, 20____.

_____

By: _____
Principal

Address: _____

City/ST/Zip: _____

Phone: _____

_____

Surety Name: _____

By: _____
Attorney-In-Fact

Address: _____

City/ST/Zip: _____

Phone: _____

IMPORTANT: Surety companies executing bonds must have an A.M. Best Rating of "A-, FSC (6)" or higher, and be authorized to transact business in the State of Washington.

END OF SECTION

To: Bank Name, Address, Phone

_____

_____

_____

Escrow Account No.: _____

Contract No.: 071518

Project No.: 101339.04

Project Title: Administrative Building Roof Replacement Project

Agency: Port of Tacoma

PO Box 1837

Tacoma, WA 98401-1837

This Retainage Escrow Agreement (the "Agreement") is made and entered into as of _____, 20___, by and among _____ ("Contractor"), with an address of _____, the Port of Tacoma (the "Port") and _____ ("Bank").

Contractor has directed the Port to deliver to Bank its retainage warrants or checks, which shall be payable to Bank and the Contractor jointly. Such warrants or checks are to be held in a restricted deposit account as described above (the "Pledged Account") and disbursed by Bank only in accordance with this Agreement and Chapter 60.28 RCW, and upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. The Port shall deliver to Bank from time to time checks or warrants payable jointly to Bank and the Contractor. Bank is hereby authorized by the Contractor to endorse in the Contractor's name any such check or warrant so that Bank may receive the proceeds thereof and invest the same and deposit such proceeds into the Pledged Account. The power of endorsement hereby granted to Bank by the Contractor shall be deemed a power coupled with an interest and shall be irrevocable during the term of this Agreement. Although Bank may be a payee named in such warrants or checks as shall be delivered to Bank, Bank's duties and responsibilities with respect to the same shall be only those duties and responsibilities that a depository bank would have pursuant to a control agreement among the Bank, the Port, and Contractor, as such agreement may exist in a form satisfactory to the Port and Article 4 of the Uniform Commercial Code of the State of Washington, as amended, for an item deposited with Bank for collection. For the purpose of each such purchase, Bank may follow the last written direction received by Bank from the Contractor, provided such direction otherwise conforms with the restrictions on investments recited herein. Below is a list of such bonds and other securities approved by the Port (the "Securities"). Other securities, except stocks, may be selected by the Contractor, subject to the express prior written approval of the Port, in its sole and absolute discretion. Purchase of such Securities shall be in a form which shall allow the Bank alone to reconvert such Securities into money if Bank is required to do so by the Administrator as provided in Paragraph 5 of this Agreement. The investments selected by the Contractor, as approved by the Port and purchased by Bank, must mature on or prior to the completion date of the contract between the Contractor and the Port, including extensions thereof (the "Contract").
2. As security for the completion of the Project and satisfaction of the Contract, Contractor hereby pledges, assigns, hypothecates, and transfers to the Port, the Pledged Assets (as defined below) and

grants to the Port a security interest under the Uniform Commercial Code of the State of Washington, as amended, in and to the Pledged Assets. This Agreement creates and grants a valid, perfected first priority lien on the Pledged Assets, enforceable as such against all creditors of Contractor. Contractor covenants and agrees with the Port that it will not (a) sell, assign, transfer, exchange, or otherwise dispose of, or grant any option with respect to, the Pledged Assets, (b) create, incur, or permit to exist any lien or option in favor of, or any claim of any person with respect to, any of the Pledged Assets, or any interest therein, except for the lien provided for by this Agreement, (c) withdraw any money, securities or property from the Pledged Account, except as provided herein, or (d) attempt to modify or terminate Contractor's the agreement under which the Pledged Account was established. Contactor will defend the right, title, and security interest of the Port in and to the Pledged Assets against the claims and demands of all persons. "Pledged Assets" means the Pledged Account, now or hereafter constituted, including (i) all credit balances or other money now or hereafter credited to the Pledged Account; (ii) all money, certificated and uncertificated securities, commodities contracts, instruments, documents, general intangibles, financial assets or other investment property now or hereafter in, or distributed from, the Pledged Account; (iii) all income, products and proceeds of the sale, exchange, redemption or exercise of the foregoing, whenever occurring, whether as dividends, interest payments or other distributions of cash or property, including, without limitation, proceeds in the nature of accounts, general intangibles, and insurance proceeds; (iv) any rights incidental to the ownership of the foregoing, such as voting, conversion and registration rights and rights of recovery for securities violations; and (v) all books and records pertaining to the foregoing.

3. When an interest on the Securities accrues and is paid, Bank shall collect such interest and forward it to the Contractor at the address designated below unless otherwise directed in writing by the Contractor.

4. Bank is not authorized to deliver to the Contractor all or any part of the Securities (or any monies derived from the sale of such Securities, or the negotiation of the Port's warrants or checks) except in accordance with Chapter 60.28 RCW based on written instructions from the Senior Contract Administrator for the Port (the "Administrator"). The Administrator shall inform the Bank and keep the Bank informed in writing of the name of the person or persons with authority to give the Bank such written instructions. Compliance with such instructions shall relieve Bank of any further liability related thereto. The estimated completion date on the Contract underlying this Agreement is _____. Upon request by Bank, the Port shall advise Bank in writing of any material change in the estimated Contract completion date. If such estimated completion date is changed, Bank is authorized to reinvest the monies held hereunder in accordance with the new estimated completion date.

5. In the event the Administrator orders Bank to do so in writing, and notwithstanding any other provisions of this Agreement, Bank shall, within ten (10) days of receipt of such order, reconvert into money the Securities and return such money together with any other monies, including accrued interest on such Securities to the Port. Consent of Contractor shall not be required for payment to the Port hereunder, and objection or other communication from Contractor shall not prevent, delay, or otherwise affect payment to the Port forthwith in accordance with the Port's order and this Agreement.

6. The Contractor agrees to pay Bank as compensation for Bank's services hereunder as follows:

   Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any checks, moneys, Securities, or other property placed with Bank or held by Bank pursuant to this

Agreement until and unless the Port directs the release thereof to the Contractor, whereupon Bank shall be granted a first lien upon such property released and shall be entitled to reimburse Bank from such property for the entire amount of Bank's fees as provided for hereinabove. In the event that Bank is made a party to any litigation with respect to the checks, moneys, Securities, or other property held by Bank hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that Bank is 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, Bank shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including reasonable attorney fees occasioned by such default, delay, controversy, or litigation.

7. Should Bank at any time and for any reason desire to be relieved of Bank's obligation as escrow holder hereunder, Bank shall give written notice to the Port and the Contractor. The Port and Contractor shall, within twenty (20) days of the receipt of such notice, jointly appoint a successor escrow holder and instruct Bank to deliver all securities and funds held hereunder to said successor. If Bank is not notified of the appointment of the successor escrow holder within twenty (20) days, Bank may return the subject matter hereof to the Port, and upon so doing, it absolves Bank from all further charges and obligations in connection with this Agreement.

8. Any one or more of the following events constitutes an Event of Default ("Event of Default") under this Agreement: (i) Contractor breaches the Contract; (ii) Contractor fails to perform any covenant or obligation under this Agreement; (iii) Contractor shall file a voluntary petition in bankruptcy or such a petition shall be filed against Contractor; and (iv) a court of competent jurisdiction shall enter an order, judgment or decree approving a petition filed against Contractor seeking any reorganization, dissolution or similar relief under any present or future federal, state or other statute, law or regulation relating to bankruptcy, insolvency or other relief for debtors.

9. Upon the occurrence of an Event of Default, the Port may exercise, in addition to all other rights and remedies granted in this Agreement, all rights and remedies of a secured party under the Uniform Commercial Code of the State of Washington, as amended. Without limiting the generality of the foregoing, the Port, without demand of performance or other demand, presentment, protest, advertisement, or notice of any kind (except any notice required by law, this Agreement) to or upon Contractor or any other person (all and each of which demands, defenses, advertisements and notices are hereby waived to the extent not prohibited by law), may, upon the occurrence of an Event of Default, collect, receive, appropriate, and realize upon the Pledged Assets, or any part thereof, and/or may forthwith withdraw from the Pledged Account, sell, assign, give option or options to purchase or otherwise dispose of and deliver the Pledged Assets or any part thereof (or contract to do any of the foregoing).

10. This Agreement shall not be binding until executed by the Contractor and the Port and accepted by Bank.

11. This instrument contains the entire agreement between Bank, the Contractor, and the Port with respect to this Agreement and Bank is not a party to nor bound by any instrument or agreement other than this; Bank shall not be required to take notice or demand nor be required to take any action whatever, except as herein expressly provided; Bank shall not be liable for any loss or damage not caused by Bank's own negligence or willful misconduct.

12. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the partied hereto.

13. This Agreement is subject to the laws of the State of Washington and is to be construed in accordance therewith.

14. Any legal action or proceeding with respect to this Agreement may be brought in the courts of the State of Washington or in the courts of the United States for the Western District of Washington, and by execution and delivery of this Agreement, Contractor consents, for itself and in respect of its property, to the nonexclusive jurisdiction of those courts. Contractor irrevocably waives any objection, including any objection to the laying of venue or based on the grounds of forum non conveniens, which it may now or hereafter have to the bringing of any action or proceeding in such jurisdiction in respect of this Agreement or any document related hereto.

15. The Contractor's Federal Income Tax Identification number is _____.

The undersigned have read and hereby approve this Agreement on the date first set forth above.

Contractor:	**Port of Tacoma:**
_____	_____
Signature	Signature
_____	_____
Name/Title	Name/Port Treasurer or Deputy Treasurer
_____	_____
Date	Date

The above escrow instructions received and accepted this ___ day of _____, 20___.

Bank: By: _____ Name: _____
(Signature of Authorized Bank Officer) Title: _____

SECURITIES AUTHORIZED BY THE PORT:

1. FDIC insured time deposits and time deposits in commercial banks authorized by the Washington State Public Deposit Protection Commission;
2. Savings account deposits in commercial banks authorized by the Washington State Public Deposit Protection Commission;
3. Bills, certificates, notes, or bonds of the United States;
4. Other obligations of the United States or its agencies; and
5. Obligation of any corporation wholly-owned by the government of the United States.

INSTRUCTIONS FOR RETAINAGE ESCROW AGREEMENTS:

Whenever possible, use the Port approved Escrow Agreement. The Port, at its discretion, may or may not accept an agreement form from another source.

Please return all three (3) originals of the Agreement, with completed contractor and bank information and signatures, and the escrow account number. The Port will review and sign the Agreement and distribute copies. One (1) original will go directly to the Bank, one (1) original will be returned to the Contractor.

Fill in the following on the Escrow Agreement:

1. Page 1 – Escrow Account Number
2. Page 1 – Name, address, and phone number of the Bank
3. Page 4 – Signature, typed/printed name, date, and the title of the Contractor Signatory
4. Page 4 – Signature, typed/printed name, date, and the title of the Authorized Bank Officer signatory

Do not fill in the date in the introductory paragraph. The Port will fill in this date once the document has been fully executed by the Port.

END OF SECTION

TABLE OF CONTENTS **PAGE**

ARTICLE 1 - THE CONTRACT DOCUMENTS

1.01 GENERAL

A. Contract Documents form the Contract. The Contract Documents are enumerated in the Agreement between the Port and Contractor (“Agreement”). Together, the Contract Documents form the Contract. The Contract represents the entire integrated agreement between the parties and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only in writing and only as set forth in the Contract Documents.

B. Headings only for convenience. The titles or headings of the sections, divisions, parts, articles, paragraphs, and subparagraphs of the Contract Documents are intended only for convenience.

1.02 DEFINITIONS

A. "Contract Documents" proposed for the Work consist of the Agreement, the General Conditions of the Contract (as well as any Supplemental, Special, or other conditions included in the Project Manual), the Drawings, the Specifications, and all Addenda issued prior to, and all modifications issued after, execution of the Contract.

B. “Contractor” means the person or entity contracting to perform the Work under these Contract Documents. The term Contractor includes the Contractor’s authorized representative for purposes of identifying obligations and responsibilities under the Contract Documents, including the ability to receive notice and direction from the Port.

C. "Day" means a calendar day unless otherwise specifically designated.

D. "Drawings” are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, including plans, elevations, sections, details, and diagrams.

E. "Engineer” is the Port employee generally tasked with administering the Project on the Port’s behalf and the person with overall responsibility for managing, for the Port, the Project scope, budget, and schedule. To the extent empowered, the Engineer may delegate to others at the Port (such as a Project Manager or Inspector) the responsibility for performing delegated responsibilities of the Engineer’s under this Contract.

F. "Port” means the Port of Tacoma. The Port will designate in writing a representative (usually the Engineer) who shall have the authority to act on the Port’s behalf related to the Project. The “Port” does not include staff, maintenance, or safety workers, or other Port employees or consultants that may contact the Contractor or be present at the Project site.

G. “Project” is identified in the Agreement and is the total construction to be performed by or through the Port, of which the Work performed under the Contract Documents may be only a part.

H. "Specifications” are those portions of the Contract Documents that specify the written requirements for materials, equipment, systems, standards, and workmanship for the Work and for the performance of related services.

I. “Subcontractor” means a person or entity that contracts directly with the Contractor to perform any Work under the Contract Documents. “Subcontractor of any tier” includes Subcontractors as well as any other person or entity, including suppliers, that contracts with a Subcontractor or a lower-tier Subcontractor (also referred to as "Sub-subcontractors") to perform any of the Work.

J. "Work” means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all labor, tools, equipment, materials, services,

and incidentals necessary to complete all obligations under the Contract Documents. The Work may constitute only a part of the Project, and may interface and need to be coordinated with the work of others.

1.03 INTENT OF THE CONTRACT DOCUMENTS

A. Intent of Contract Documents. The intent of the Contract Documents is to describe the complete Work and to include all items and information necessary for the proper execution and completion of the Work by the Contractor.

B. Contract Documents are complementary. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor is required to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

C. No third party contract rights. The Contract Documents shall not create a contractual relationship of any kind (1) between the Port and a Subcontractor of any tier (although the Port does not waive any third-party beneficiary rights it may otherwise have as to Subcontractors of any tier), (2) between the Contractor and the Engineer or other Port employees or consultants, or (3) between any persons or entities other than the Port and Contractor.

1.04 CORRELATION OF THE CONTRACT DOCUMENTS

A. Precedence. In the event of a conflict or discrepancy between or among the Contract Documents, the conflict or discrepancy will be resolved by the following order of precedence: with an addendum or Change Order having precedence over an earlier document, and computed dimensions having precedence over scaled dimensions, and large scale drawings take precedence over small scale drawings:

1. The signed Agreement
    a. Supplemental Conditions
    b. Division 00 General Conditions
    c. Division 01 General Requirements of Specifications
    d. All other Specifications, including all remaining divisions, material and system schedules and attachments, and Drawings
    e. All other sections in Division 00 not specifically identified herein by Section

B. Inconsistency between or among Contract Documents. If there is any inconsistency between the Drawings, schedules, or Specifications, or any attachments, the Contractor will make an inquiry to the Engineer to determine how to proceed, and, unless otherwise directed, the Contractor will provide the better quality or greater quantity of any work or materials, as reasonably interpreted by the Port, at no change in the Contract Sum or Contract Time. Thus, if Work is shown on Drawings, but not contained in Specifications or schedules, or contained in Specifications or schedules, but not shown on the Drawings, the Work as shown or contained will be provided at no change in the Contract Sum or Contract Time, according to Specifications or Drawings to be issued by the Port.

C. Inconsistency with law. 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 in the event of any conflict between such laws, the most stringent requirements govern.

D. Organization of Contract Documents. The organization of the Specifications and Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the

extent of the Work to be performed. The Port assumes no responsibility for the division and proper coordination of Work between particular Subcontractors.

E. Bid quantities are estimates only. Any “bid quantities” set forth in the Contract Documents are estimates only. The Port does not warrant that the actual amount of Work will correspond to any estimates. The basis of payment will be the actual quantities performed in accordance with the Contract Documents.

1.05 OWNERSHIP OF THE CONTRACT DOCUMENTS

A. Port owns all Contract Documents. All Drawings, Specifications, and other Contract Documents furnished to the Contractor are Port property, and the Port retains all intellectual property rights, including copyrights. The Contract Documents are to be used only with respect to the Project.

ARTICLE 2 - PORT OF TACOMA

2.01 AUTHORITY OF THE ENGINEER

A. Engineer will be Port’s representative. The Engineer or the Engineer’s designee will be the Port’s representative during the Project and will administer the Project on the Port’s behalf.

B. Engineer may enforce all obligations. The Engineer has the authority to enforce all requirements imposed on the Contractor by the Contract Documents.

C. Only Engineer is agent of Port. Other than the Engineer, no other Port employee or consultant is an agent of the Port, and none are authorized to agree on behalf of the Port to changes in the Contract Sum or Contract Time, nor to waive provisions of the Contract Documents, nor to direct the Contractor to take actions that change the Contract Sum or Contract Time, nor to accept notice of protests or claims on behalf of the Port.

2.02 ADMINISTRATION OF THE CONTRACT

A. Port will administer Contract. The Port will provide administration of the Contract through the Engineer or the Engineer’s designee. All communications with the Port or its consultants related to the Contract will be through the designated representative.

B. Port not responsible for means and methods. The Port is not responsible for, and will have no control or charge of, the means, methods, techniques, sequences, or procedures of construction, or for safety precautions or programs incidental thereto, because these are the sole responsibility of the Contractor. If the Port makes any suggestion of means, methods, techniques, sequences, or procedures, the Contractor will exercise its independent judgment in deciding whether to adopt the suggestion, except as otherwise provided in the Contract Documents.

C. Port not responsible for acts or omissions of Contractor or Subcontractors. The Port is not responsible for, and will have no control or charge of, the acts or omissions of the Contractor, Subcontractors of any tier, suppliers, or any of their agents or employees, or any other persons performing a portion of the Work.

D. Port not responsible for the Work. The Port is not responsible for the Contractor’s failure to carry out the Work in accordance with the Contract Documents. The presence of the Engineer or others at the Project site at any time does not relieve the Contractor from its responsibility for non-conforming Work.

E. Port will have access to the Work. The Port and its representatives will at all times have access to the Work in progress, and the Contractor will provide proper facilities for such access and for inspection.

2.03 INFORMATION PROVIDED BY THE PORT

A. Port to furnish information with reasonable promptness. The Port shall furnish information and services required of the Port by the Contract Documents with reasonable promptness.

B. Subsurface investigation. The Port may have undertaken a limited investigation of the soil and other subsurface conditions at the Project site for design purposes only. The results of these investigations will be available for the convenience of the Contractor, but they are not Contract Documents. There is no warranty or guarantee, express or implied, that the conditions indicated are representative of those existing at the site or that unforeseen developments may not occur. The Contractor is solely responsible for interpreting the information.

2.04 CONTRACTOR REVIEW OF PROJECT INFORMATION

A. Contractor to familiarize itself with site and conditions of Work. Prior to executing the Contract, the Contractor shall visit the site, become generally familiar with local conditions under which the Work is to be performed, and correlate personal observations with the requirements of the Contract Documents and all information provided with the Bid Documents. By signing the Contract, the Contractor confirms that the Contract Sum is reasonable compensation for the Work; that the Contract Time is adequate; that it has carefully examined the Contract Documents and the Project site; and that it has satisfied itself as to the nature, location, and character of the Work, the labor, materials, equipment, and other items required and all other requirements of the Contract Documents. The Contractor's failure fully to acquaint itself with any such condition does not relieve the Contractor from the responsibility for performing the Work in accordance with the Contract Documents, within the Contract Time, and for the Contract Sum.

B. Contractor to review Contract Documents. Because the Contract Documents are complementary, the Contractor will, before starting each portion of the Work, carefully study and compare the various Drawings, Specifications, and other Contract Documents, as well as all information furnished by the Port.

C. Contractor to confirm field conditions. Before starting each portion of the Work, the Contractor shall take field measurements of and verify any existing conditions, including all Work in place, and all general reference points; shall observe any conditions at the site affecting the Contractor; and shall carefully compare field measurements, conditions and other information known to the Contractor with the Contract Documents.

2.05 PORT'S RIGHT TO REJECT, STOP, AND/OR CARRY-OUT THE WORK

A. Port may reject Work. The Port has the authority, but not the obligation, to reject work, materials, and equipment that is defective or that otherwise does not conform to the Contract Documents, and to decide questions concerning the Contract Documents. However, the failure to so reject, or the presence of the Port at the site, shall not be construed as assurance that the Work is acceptable or being completed in compliance with the Contract Documents.

B. Port may stop Work. If the Contractor fails to correct Work that does not comply with the requirements of the Contract Documents, or repeatedly or materially fails to properly carry out the Work, the Port may issue an order to stop all or a portion of the Work until the cause for the order has been eliminated. The Port's right to stop the Work shall not impose a duty on the Port to exercise this right for the benefit of the Contractor or any third party.

C. Port may carry-out Work. If the Contractor fails to perform the Work properly, fails to perform any provision of this Contract, or fails to maintain the Baseline Project Schedule, or if the Port reasonably concludes that the Work will not be completed in the specified manner or within the Contract Time, then the Port may, after three (3) days' written notice to the Contractor and without prejudice to any other remedy the Port may have, perform itself or have performed any

or all of the Work and may deduct the cost thereof from any payment then or later due the Contractor.

2.06 SEPARATE CONTRACTORS

A. Port may engage separate contractors or perform work with its own forces. The Port may contract with other contractors ("Separate Contractor") in connection with the Project or perform work with its own forces. The Contractor shall coordinate and cooperate with any Port forces or Separate Contractors, as applicable. The Contractor shall provide reasonable opportunity for the introduction and storage of materials and the execution of work by others.

B. Contractor to inspect work of others. If any part of the Contractor's Work depends on the work of the Port or any Separate Contractor, the Contractor shall inspect and promptly report to the Port, in writing, any defects that impact the Contractor. Failure of the Contractor to so inspect and report defects in writing shall constitute an acceptance by Contractor of the work of the Port or Separate Contractor.

C. Contractor to resolve claims of others. Should the Contractor, or any of its Subcontractors of any tier, cause damage of any kind, including but not limited to delay, to any Separate Contractor, the Contractor shall promptly, and using its best efforts, settle or otherwise resolve the dispute with the Separate Contractor. The Contractor shall also promptly remedy damage caused to completed or partially completed construction.

2.07 OFFICERS AND EMPLOYEES OF THE PORT

A. No personal liability. Officers, employees, and representatives of the Port, including the Commissioners, acting within the scope of their employment, shall not be personally liable to Contractor for any acts or omissions arising out of the Project.

ARTICLE 3 - CONTRACTOR'S RESPONSIBILITIES

3.01 DUTY TO PERFORM THE ENTIRE WORK

A. Contractor must perform entire Work in accordance with Contract Documents. The Contractor shall perform the entire Work required by the Contract in accordance with the Contract Documents. Unless otherwise specifically provided, the Contractor shall provide and pay for all labor, tools, equipment, materials, electricity, power, water, other utilities, transportation, and other facilities necessary for the execution and completion of the Work.

B. Contractor shall be independent contractor. The Contractor shall be, and operate as, an independent contractor in the performance of the Work. The Contractor is not authorized to enter into any agreements or undertakings for, or on behalf of, the Port and is not an agent or employee of the Port.

3.02 OBSERVED ERRORS, INCONSISTENCIES, OMISSIONS, OR VARIANCES IN THE CONTRACT DOCUMENTS

A. Contractor to notify Port of any discrepancy. The Contractor's obligations to review and carefully study the Contract Documents and field conditions are for the purpose of facilitating coordination and construction. If the Contractor at any time observes that the Contract Documents, including Drawings and Specifications, vary from the conditions of the Project site, are in error, or omit any necessary detail, the Contractor shall promptly notify the Engineer in writing through a Request for Information. Any Work done after such observation, until authorized by the Engineer, shall be at Contractor's risk. The Contractor shall also promptly report to the Engineer any observed error, inconsistency, omission, or variance with applicable laws through a Request for Information. If the Contractor fails either to carefully study and compare the Contract Documents, or to promptly report any observed error, inconsistency, omission, or variance, the Contractor shall assume full responsibility and shall bear all costs,

liabilities, and damages attributable to the error, inconsistency, omission, or variance.

B. Requests for Information. The Contractor shall submit Requests for Information concerning the Contract Documents by following the procedure and using such form as the Port may require. The Contractor shall minimize Requests for Information by thoroughly studying the Contract Documents and reviewing all Subcontractor requests. The Contractor shall allow adequate time in its planning and scheduling for a response from the Port to a Request for Information.

C. Port may provide information to supplement Drawings and Specifications. Minor items of work or detail that are omitted from the Drawings and Specifications, but inferable from the information presented and normally provided by accepted good practice, shall be provided and/or performed by the Contractor as part of the Contract Sum and within the Contract Time. Similarly, the Engineer may furnish to the Contractor additional Drawings and clarifications, consistent with the Contract Documents, as necessary to detail and illustrate the Work. The Contractor shall conform its Work to such additional Drawings and clarifications at no increase in the Contract Sum or Contract Time.

3.03 SUPERVISION AND RESPONSIBILITY FOR SUBCONTRACTORS

A. Contractor responsible for Work and workers. The Contractor shall have complete control of the means, methods, techniques, sequences, or procedures related to the Work, and for all safety precautions or programs. The Contractor shall have complete control over, and responsibility for, all personnel performing the Work. The Contractor is also responsible for the acts and omissions of the Contractor’s principals, employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors of any tier.

B. Contractor to supervise the Work. The Contractor shall continuously supervise and direct the Work using competent and skilled personnel and the Contractor’s best skill and attention.

C. Contractor to enforce discipline and good order. The Contractor shall enforce strict discipline and good order among all workers on the Project, and shall not employ any unfit person or anyone not skilled in the work to which they are assigned. Incompetent, careless, or negligent workers shall immediately be removed from the Work. The Port may, but is not obligated to, require the Contractor to remove from the Work, at no change in the Contract Sum or Contract Time, anyone whom the Port considers objectionable.

3.04 MATERIALS AND EQUIPMENT

A. Material and equipment to be new. All materials and equipment to be incorporated into the Work shall be new, unless specifically provided otherwise in the Contract Documents. The Contractor shall, if required in writing by the Port, furnish satisfactory evidence regarding the kind and quality of any materials, identify the source, and warrant compliance with the Contract Documents. The Contractor shall ensure that all materials and equipment are protected, kept dry, and stored under cover in a manner to protect such materials and equipment.

B. Material and equipment shall conform to manufacturer instructions. All materials and equipment shall conform, and shall be applied, installed, used, maintained, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, or processor, unless otherwise specifically provided by the Engineer.

3.05 CONTRACTOR WARRANTIES

A. Work will be of good quality and performed in workmanlike manner. In addition to any specific warranties set forth in the Contract Documents, the Contractor warrants that the Work, including all materials and equipment furnished under the Contract, will be of good quality and new, will be performed in a skillful and workmanlike manner, and will conform to the requirements of the Contract Documents. Any Work not conforming to this warranty, including unapproved or

unauthorized substitutions, shall be considered defective.

B. Work will be free from defects. The Contractor warrants that the Work will be free from defects for a period of one (1) year from the date of Substantial Completion of the Project.

C. Contractor to collect and deliver warranties to Port. The Contractor shall collect and deliver to the Port any written warranties required by the Contract Documents. These warranties shall be obtained and enforced by the Contractor for the benefit of the Port without the necessity of separate assignment. These warranties shall extend to the Port all rights, claims, benefits, and interests that the Contractor may have under express or implied warranties or guarantees against a Subcontractor of any tier, supplier, or manufacturer for defective or non-conforming Work. Warranty provisions that purport to limit or alter the Port's rights under the Contract Documents, or the laws of the State of Washington, are null and void.

D. General requirements. The Contractor is not relieved of its general warranty obligations by the specification of a particular product or procedure in the Contract Documents. Warranties in the Contract Documents shall survive completion, acceptance, and final payment.

3.06 REQUIRED WAGES

A. Contractor will pay required wages. The Contractor shall pay (and shall ensure that all Subcontractors of any tier pay) all prevailing wages and other wages (such as Davis-Bacon Act wages) applicable to the Project. See Specification Section 00 73 46.

B. The Contractor shall defend (at Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Port harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs, and expenses, whether direct or indirect, and including, but not limited to, attorneys' fees and consultants' fees and other costs and expenses of litigation, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or Chapter 51 RCW ("Industrial Insurance").

3.07 STATE AND LOCAL TAXES

A. Contractor will pay taxes on consumables. The Contractor will pay the retail sales tax on all consumables used during performance of the Work and on all items that are not incorporated into the final Work; this tax shall be included in the Contract Sum.

B. Port will pay taxes on the Contract Sum. The Port will pay state and local retail sales tax on the Contract Sum with each progress payment, and on final payment, for transmittal by the Contractor to the Washington State Department of Revenue or to the applicable local taxing authority. Rule 170: WAC 458-20-170.

C. Direct all tax questions to the Department of Revenue. The Contractor should direct all questions concerning taxes on any portion of the Work to the State of Washington Department of Revenue or to the local taxing authority.

D. State Sales Tax - Rule 171: WAC 458-20-171. For work performed related 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, the Contractor shall include Washington State Retail Sales Taxes in the various schedule 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.

1. The bid form will indicate which bid items are subject to Rule 171. Any such identification by the Port is not binding upon the Department of Revenue.

3.08 PERMITS, LICENSES, FEES, AND ROYALTIES

A. Contractor to provide and pay for permits unless otherwise specified. Unless otherwise specified, the Contractor shall procure and pay for all permits, licenses, and governmental inspection fees necessary or incidental to the performance of the Work. All costs related to these permits, licenses, and inspections shall be included in the Contract Sum. 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 and pay for permits, licenses, and inspections as part of the Contract Sum.

B. Contractor's obligations when permit must be in Port's name. When applicable law or agency requires a permit to be issued to a public agency, the Port will support the Contractor's request for the permit and accept the permit in the Port's name, if:

1. The Contractor takes all necessary steps required for the permit to be issued;
2. The permit applies to Work performed in connection with the Project; and
3. The Contractor agrees in writing to abide by all requirements of the permit and to defend and hold harmless the Port from any liability in connection with the permit.

C. Contractor to pay royalties. The Contractor shall pay all royalties and license fees required for the Work unless otherwise specified in the Contract Documents.

3.09 SAFETY

A. Contractor solely responsible for safety. The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work and the performance of the Contract.

B. Port not responsible for safety. The Port may identify safety concerns to the Contractor; however, no action or inaction of the Port or any third party relating to safety will: (1) relieve the Contractor of its sole and complete responsibility for safety and sole liability for any consequences, (2) impose any obligation on the Port or a third party to inspect or review the Contractor's safety program or precautions, (3) impose any continuing obligation on the Port or a third party to ensure the Contractor performs the Work safely, or (4) affect the Contractor's responsibility for the protection of property, workers, and the general public.

C. Contractor to maintain a safe Work site. The Project site may be occupied during performance of the Work. The safety of these site occupants is of paramount importance to the Port. The Contractor shall maintain the Work site and perform the Work in a safe manner and in accordance with the Washington Industrial Safety and Health Act (WISHA) and all other applicable safety laws, rules, and regulations. This requirement shall apply continuously and not be limited to working hours.

D. Contractor to protect Work site and adjacent property until Final Completion. The Contractor shall continuously protect the Work and adjacent property from damage. At all times until Final Completion, the Contractor shall be responsible for, and protect from damage, weather, deterioration, theft, and vandalism, the Work and all materials, equipment, tools, and other items incorporated or to be incorporated in the Work, and shall repair any damage, injury, or loss.

3.10 CORRECTION OF WORK

A. Contractor to correct defective Work. The Contractor shall, at no cost to the Port, promptly correct Work that is defective or that otherwise fails to conform to the requirements of the Contract Documents. Such Work shall be corrected, whether before or after Substantial Completion, and even if it was previously inspected or observed by the Port.

B. One-year correction period. The Contractor shall correct all defects in the Work appearing within one (1) year of Substantial Completion or within any longer period prescribed by law or by the Contract Documents. The Contractor shall initiate remedial action within fourteen (14) days of receipt of notice from the Port and shall complete remedial work within a reasonable time. Work corrected by the Contractor shall be subject to the provisions of this Section 3.10 for an additional one-year period following the Port's acceptance of the corrected Work.

C. Contractor responsible for defects and failures to correct. The Contractor shall be responsible for any expenses incurred by the Port resulting from defects in the Work. If the Contractor refuses or neglects to correct the defects, or does not timely accomplish corrections, the Port may correct the Work and charge the Contractor the cost of the corrections. If damage or loss of service may result from a delay in correction, the corrections may be made by the Port and reimbursed by the Contractor.

D. Port may accept defective work. The Port may, at its sole option, elect to retain defective or nonconforming Work. In such a case, the Port shall reduce the Contract Sum by a reasonable amount to account for the defect or non-conformance.

E. No period of limitation established. Nothing contained in this Section 3.10 establishes a period of limitation with respect to any obligations under the Contract Documents or law. The establishment of the one (1) year correction period relates only to the specific obligation of the Contractor to correct defective or non-conforming Work.

3.11 UNCOVERING OF WORK

A. Contractor to uncover work covered prior to inspection. If any portion of the Work is covered prior to inspection and approval, the Contractor shall, at its expense, uncover or remove the Work for inspection by the Port or others, and replace the Work to the standard required by the Contract Documents.

B. Contractor to uncover work at Port's request. After initial inspection and observation, the Port may order a reexamination of Work, and the Work must be uncovered by the Contractor. If the uncovered Work complies with the Contract Documents, the Port shall pay the cost of reexamination and replacement. If the Work is found not to comply with the Contract Documents, the Contractor shall pay the cost of replacement, unless the Contractor demonstrates that it did not cause the defect in the Work.

3.12 RELOCATION OF UTILITIES

A. Contractor should assume underground utilities are in approximate locations. The Contractor should assume that the locations of any underground or hidden utilities, underground tanks, and plumbing or electrical runs indicated in surveys or the Contract Documents are shown in approximate locations. The accuracy of this information is not guaranteed by the Port and shall be verified by the Contractor. The Contractor shall comply with RCW 19.122.030 and utilize a utility locator service to locate utilities on Port property. The Contractor shall bear the risk of loss if any of its Work directly or indirectly damages or interrupts any utility service or causes or contributes to damages of any nature.

B. Utility relocation or removal. Where relocation or removal of utilities is necessary or required, it shall be performed at the Contractor's sole expense, unless the Contract Documents specify otherwise. If a utility owner is identified as being responsible for relocating or removing utilities, the work will be accomplished at the utility owner's convenience, either during, or in advance of, construction. Unless otherwise specified, it shall be the Contractor's sole responsibility to coordinate, schedule, and pay for work performed by a utility owner.

C. Contractor to notify Port of unknown utilities. If the Contractor discovers the presence of any unknown utilities, it shall immediately notify the Engineer in writing.

3.13 LABOR

A. Contractor responsible for labor peace. The Contractor is responsible for labor peace relating to the Work and shall cooperate in maintaining Project-wide labor harmony. The Contractor shall use its best efforts as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes.

B. Contractor to minimize impact of labor disputes. The Contractor will take all necessary steps to prevent labor disputes from disrupting or otherwise interfering with access to Port property. If a labor dispute disrupts the progress of the Work or interferes with access, the Contractor shall promptly and expeditiously take all necessary action to eliminate or minimize the disruption or interference.

3.14 INDEMNIFICATION

A. Duty to defend, indemnify, and hold harmless. To the fullest extent permitted by law and subject to this Section 3.14, the Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold harmless the Port and the Northwest Seaport Alliance, including their respective Commissions, officers, managers, and employees, the Engineer, any consultants, and the agents and employees, successors and assigns of any of them (the "Indemnified Parties") from and against claims, damages, lawsuits, losses (including loss of use), disbursements, liabilities, obligations, fines, penalties, costs, and expenses, whether direct and indirect or consequential, including but not limited to, consultants' fees, and attorneys' fees incurred on such claims and in proving the right to indemnification ("Claims"), arising out of, or resulting from, the acts or omissions of the Contractor, a Subcontractor of any tier, their agents, and anyone directly or indirectly employed by any of them or anyone for whose acts they may be liable (individually and collectively, the "Indemnitor").

B. Duty to defend, indemnify, and hold harmless for sole negligence. The Contractor will fully defend, indemnify, and hold harmless the Indemnified Parties for the sole negligence or willful misconduct of the Indemnitor.

C. Duty to defend, indemnify, and hold harmless for concurrent negligence. Where Claims arise from the concurrent negligence of (1) the Port; and (2) the Indemnitor, the Contractor's obligations to indemnify and defend the Indemnified Parties under this Section 3.14 shall be effective only to the extent of the Indemnitor's negligence.

D. Duty to indemnify not limited by workers' compensation or similar employee benefit acts. In claims against any of the Indemnified Parties by an employee of the Contractor, a Subcontractor of any tier, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under this Section 3.14 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefit acts. After mutual negotiation of the parties, the Contractor waives immunity as to the Indemnified Parties under Title 51 RCW, "Industrial Insurance."

E. Intellectual property indemnification. The Contractor will be liable for and shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Indemnified Parties harmless for Claims for infringement by the Contractor of copyrights or patent rights arising out of, or relating to, the Project.

F. Labor peace indemnification. If the Contractor fails to satisfy its labor peace obligations under the Contract, the Contractor will be liable for and shall defend (at the Contractor's sole cost, with

legal counsel approved by Port), indemnify, and hold harmless the Indemnified Parties for Claims brought against the Port by third parties (including but not limited to lessees, tenants, contractors, customers, licensees, and invitees of the Port) for injunctive relief or monetary loss.

G. Cyber risk indemnification. Contractor shall defend, indemnify, and hold harmless the Indemnified Parties from and against any liability, expense, fines, penalties, cost, demand, or other obligation, resulting from or out of any cyber-related risk that includes theft, loss or misuse of data, release of private information as result of a network breach, penetration, compromise, or loss of IT systems control.

H. Joinder. The Contractor agrees to being added by the Port as a party to any arbitration or litigation with third parties in which the Port alleges indemnification or seeks contribution from the Indemnitor. The Contractor shall cause each of its Subcontractors of any tier to similarly stipulate in their subcontracts; in the event any does not, the Contractor shall be liable in place of such Subcontractor(s) of any tier.

I. Other. To the extent that any portion of this Section 3.14 is stricken by a court or arbitrator for any reason, all remaining provisions shall retain their vitality and effect. The obligations of the Contractor under this Section 3.14 shall not be construed to negate, abridge, or otherwise reduce any other right or obligations of indemnity which would otherwise exist. To the extent the wording of this Section 3.14 would reduce or eliminate an available insurance coverage, it shall be considered modified to the extent necessary so that the insurance coverage is not affected. This Section 3.14 shall survive completion, acceptance, final payment, and termination of the Contract.

3.15 WAIVER OF CONSEQUENTIAL DAMAGES

A. Mutual waiver of consequential damages. The Contractor and Port waive claims against each other for consequential damages arising out of, or relating to, this Contract. This mutual waiver includes, but is not limited to: (1) damages incurred by the Port for rental expenses, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons, and (2) damages incurred by the Contractor for principal and home office overhead and expenses including, but not limited to, the compensation of personnel stationed there, for losses of financing, business, and reputation, for losses on other projects, for loss of profit, and for interest or financing costs. This mutual waiver includes, but is not limited to, all consequential damages due to either party’s termination.

B. Limitation. Nothing contained in this Section 3.15; however, shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents, to preclude damages specified in the Agreement, or to affect the Contractor’s obligation to indemnify the Port for direct, indirect, or consequential damages alleged by a third party.

ARTICLE 4 - SUBCONTRACTORS AND SUPPLIERS

4.01 RESPONSIBILITY FOR ACTIONS OF SUBCONTRACTORS AND SUPPLIERS.

A. Contractor responsible for Subcontractors. The Contractor is fully responsible to the Port for the acts and omissions of its Subcontractors of any tier and all persons either directly or indirectly employed by the Contractor or its Subcontractors.

4.02 AWARD OF CONTRACTS TO SUBCONTRACTORS AND SUPPLIERS

A. Contractor to provide proposed Subcontractor information. The Contractor, within ten (10) days after the Port’s notice of award of the Contract, shall provide the Engineer with the names of the persons or entities proposed to perform each of the principal portions of the Work (i.e., either a Subcontractor listed in a bid or proposal or a Subcontractor performing Work valued at least ten

percent (10%) of the Contract Sum) and the proprietary names, and the suppliers of, the principal items or systems of materials and equipment proposed for the Work. No progress payment will become due until after this information has been furnished.

B. Port to respond promptly with objections. The Port may respond promptly to the Contractor in writing stating: (1) whether the Port has reasonable objection to any proposed person or entity, or (2) whether the Port requires additional time for review. If the Port makes a reasonable objection, the Contractor shall replace the Subcontractor with no increase to the Contract Sum or Contract Time. Such a replacement shall not relieve the Contractor of its responsibility for the performance of the Work and compliance with all of the requirements of the Contract within the Contract Sum and Contract Time.

C. Reasonable objection defined. “Reasonable objection” as used in this Section 4.02 includes, but is not limited to: (1) a proposed Subcontractor of any tier different from the entity listed with the bid, (2) lack of “responsibility” of the proposed Subcontractor, as defined by Washington law and the Bidding Documents, or lack of qualification or responsibility of the proposed Subcontractor based on the Contract or Bidding Documents, or (3) failure of the Subcontractor to perform satisfactorily in the Port’s opinion (such as causing a material delay or submitting a claim that the Port considers inappropriate) on one or more projects for the Port within five (5) years of the bid date.

D. No substitution allowed without permission. The Contractor shall not substitute a Subcontractor, person, or organization without the Engineer’s written consent.

4.03 SUBCONTRACTOR AND SUPPLIER RELATIONS

A. Contractor to schedule, supervise, and coordinate Subcontractors. The Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors of any tier, including suppliers. The Contractor shall ensure that appropriate Subcontractors coordinate the Work of lower-tier Subcontractors.

B. Subcontractors to be bound to Contract Documents. By appropriate agreement, the Contractor shall require each Subcontractor and supplier to be bound to the terms of the Contract Documents and to assume toward the Contractor, to the extent of their Work, all of the obligations that the Contractor assumes toward the Port under the Contract Documents. Each subcontract shall preserve and protect the rights of the Port and shall allow to the Subcontractor, unless specifically provided in the subcontract, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Port. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with lower-tier Subcontractors.

C. Contractor to correct deficiencies in Subcontractor performance. When a portion of the Work subcontracted by the Contractor is not being prosecuted in accordance with the Contract Documents, or if such subcontracted Work is otherwise being performed in an unsatisfactory manner in the Port’s opinion, the Contractor shall, on its own initiative or upon the written request of the Port, take immediate steps to correct the deficiency or remove the non-performing party from the Project. The Contractor shall replace inadequately performing Subcontractors upon request of the Port at no change in the Contract Sum or Contract Time.

D. Contractor to provide subcontracts. Upon request, the Contractor will provide the Port copies of written agreements between the Contractor and any Subcontractor.

ARTICLE 5 - WORKFORCE AND NON-DISCRIMINATION REQUIREMENTS

5.01 COMPLIANCE WITH NON-DISCRIMINATION LAWS

A. Contractor to comply with non-discrimination laws. The Contractor shall fully comply with all applicable laws, regulations, and ordinances pertaining to non-discrimination.

5.02 MWBE, VETERAN-OWNED, AND SMALL BUSINESS ENTERPRISE PARTICIPATION.

A. In accordance with the legislative findings and policies set forth in RCW 39.19, the Port encourages participation in all of its contracts by MWBE firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). Participation may be either on a direct basis in response to this invitation or as a subcontractor to a Bidder. However, unless required by federal statutes, regulations, grants, or contract terms referenced in the Contract Documents, no preference will be included in the evaluation of Bids, no minimum level of MWBE participation shall be required as a condition for receiving an award, and Bids will not be rejected or considered non-responsive on that basis. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the Contract Documents will apply.

   The Port encourages participation in all of its contracts by Veteran-owned businesses (defined in RCW 43.60.010) and located at http://www.dva.wa.gov/program/certified-veteran--and-servicemember-owned-businesses and Small, Mini, and Micro businesses (defined in RCW 39.26.010)

5.03 APPRENTICESHIP PARTICIPATION

A. In accordance with RCW 39.04.320, fifteen (15) percent Apprenticeship Participation is required for all projects estimated to cost one million ($1,000,000) dollars or more.

B. Apprentice participation, under this contract, may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (RCW 49.04 and WAC 296-05).

C. Bidders may contact the Department of Labor and Industries, Specialty Compliance Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 by phone at (360) 902-5320, or e-mail at Apprentice@lni.wa.gov, to obtain information on available apprenticeship programs.

D. For each project that has apprentice requirements, the contractor shall submit a "Statement of Apprentice and Journeyman Participation" on forms provided by the Port of Tacoma, with every request for project payment. The Contractor shall submit consolidated and cumulative data collected by the Contractor and collected from all subcontractors by the Contractor. The data to be collected and submitted includes the following:

   1. Contractor name and address
   2. Contract number
   3. Project name
   4. Contract value
   5. Reporting period "Beginning Date" through "End Date"
   6. Name and registration number of each apprentice by contractor
   7. Total number of apprentices and labor hours worked by them, categorized by trade or craft.
   8. Total number of journeymen and labor hours worked by them, categorized by trade or craft

9. Cumulative combined total of apprentice and journeymen labor hours
10. Total percentage of apprentice hours worked

E. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Port. In any request for the change, the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.

ARTICLE 6 - CONTRACT TIME AND COMPLETION

6.01 CONTRACT TIME

A. Contract Time is measured from Contract execution. Unless otherwise provided in the Agreement, the Contract Time is the period of time, including authorized adjustments, specified in the Contract Documents from the date the Contract is executed to the date Substantial Completion of the Work is achieved.

B. Commencement of the Work. The Contractor shall begin Work in accordance with the notice of award and the notice to proceed and shall complete all Work within the Contract Time. When the Contractor's signed Agreement, required insurance certificate with endorsements, bonds, and other submittals required by the notice of award have been accepted by the Port, the Port will execute the Contract and, following receipt of other required pre-work submittals, will issue a notice to proceed to allow the Contractor to mobilize and commence physical Work at the Project site, as further described in these contract documents. No Work at the Project site may commence until the Port issues a notice to proceed.

C. Contractor shall achieve specified completion dates. The Contractor shall achieve Substantial Completion within the Contract Time and shall achieve Final Completion within the time period thereafter stated in the Contract Documents.

D. Time is of the essence. Time limits stated in the Contract Documents, including any interim milestones, are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

6.02 PROGRESS AND COMPLETION

A. Contractor to maintain schedule. The Contractor's sequence and method of operations, application of effort, and work force shall at all times be created and implemented to ensure the orderly, expeditious, and timely completion of the Work and performance of the Contract. The Contractor shall furnish sufficient forces and shall work such hours, including extra shifts, overtime operations, and weekend and holiday work as may be necessary to ensure completion of the Work within the Contract Time and the approved Baseline Project Schedule.

B. Contractor to take necessary steps to meet schedule. If the Contractor fails substantially to perform in a timely manner in accordance with the Contract Documents and, through the fault of the Contractor or Subcontractor(s) of any tier, fails to meet the Baseline Project Schedule, the Contractor shall take such steps as may be necessary to immediately improve its progress by increasing the number of workers, shifts, overtime operations, or days of work, or by other means and methods, all without additional cost to the Port. If the Contractor believes that any action or inaction of the Port constitutes acceleration, the Contractor shall immediately notify the Port in writing and shall not accelerate the Work until the Port either directs the acceleration in writing or denies the constructive acceleration.

C. Liquidated damages not exclusive. Any provisions in the Contract Documents for liquidated damages shall not preclude other damages due to breaches of Contract of the Contractor.

6.03 SUBSTANTIAL COMPLETION

A. Substantial Completion defined. Substantial Completion is the stage in the progress of the Work, or portion or phase thereof, when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Port can fully occupy or utilize the Work, or the designated portion thereof, for its intended use, all requirements in the Contract Documents for Substantial Completion have been achieved, and all required documentation has been properly submitted to the Port in accordance with the Contract Documents. All Work, other than incidental corrective or punch list Work and final cleaning, must be completed. The fact that the Port may occupy the Work or a designated portion thereof does not indicate that Substantial Completion has occurred or that the Work is acceptable in whole or in part.

B. Work not Substantially Complete unless Final Completion attainable. The Work is not Substantially Complete unless the Port reasonably judges that the Work can achieve Final Completion within the period of time specified in the Contract Documents.

C. Notice of Substantial Completion. When the Work or designated portion has achieved Substantial Completion, the Port will provide a notice to establish the date of Substantial Completion. The notice shall establish responsibilities of the Port and Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall finish all remaining Work. If the notice of Substantial Completion does not so state, all responsibility for the foregoing items shall remain with the Contractor until Final Completion.

6.04 COMPLETION OF PUNCH LIST

A. Contractor shall complete punch list items prior to Final Completion. The Contractor shall cause punch list items to be completed prior to Final Completion. If, after Substantial Completion, the Contractor does not expeditiously proceed to correct punch list items or if the Port considers that the punch list items, are unlikely to be completed prior to the date established for Final Completion (or such other period of time as is specified in the Contract Documents), the Port may, upon seven (7) days' written notice to the Contractor, take over and perform some or all of the punch list items. The Port may also take over and complete any portion of the Work at any time following Substantial Completion and deduct the actual cost of performing the Work (including direct and indirect costs) from the Contract Sum. The Port's rights under this Section 6.04 are not obligations and shall not relieve the Contractor of its responsibilities under any other provisions of the Contract Documents.

6.05 FINAL COMPLETION

A. Final Completion. Upon receipt of written notice from the Contractor that all punch list items and other Contract requirements are completed, the Contractor will notify the Port, and the Port will perform a final inspection. If the Port determines that some or all of the punch list items have not been addressed, the Contractor shall be responsible to the Port for all costs, including re-inspection fees, for any subsequent reviews to determine completion of the punch list. When the Port determines that all punch list items have been satisfactorily addressed, that the Work is acceptable under the Contract Documents, and that the Work has fully been performed, the Port will promptly notify the Contractor of Final Completion.

B. Contractor responsible for costs if Final Completion is not timely achieved. In addition to any liquidated damages, the Contractor is liable for, and the Port may deduct from any amounts due the Contractor, all costs incurred by the Port for services performed after the contractual date of Final Completion, whether or not those services would have been performed prior to that date had Final Completion been timely achieved.

C. Final Completion submittals. The Port is not obligated to accept the Project as complete until the Contractor has submitted all required submittals to the Port.

D. Contractor responsible for the Work until Final Completion. The Contractor shall assume the sole risk of loss and responsibility for all Work under the Contract, and all materials to be incorporated in the Work, whether in storage or at the Project site, until Final Completion. Damage from any cause to either permanent or temporary Work, utilities, materials, equipment, existing structures, the site, or other property owned by the Port or others, shall be repaired by the Contractor to the reasonable satisfaction of the Port at no change in the Contract Sum.

6.06 FINAL ACCEPTANCE

A. Final Acceptance. Final Acceptance is the formal action of the Port accepting the Project as complete. Public notification of Final Acceptance will be posted on the Port's external website (http://www.portoftacoma.com/final-acceptance).

B. Final Acceptance not an acceptance of defective Work. Final Acceptance shall not constitute acceptance by the Port of unauthorized or defective Work, and the Port shall not be prevented from requiring the Contractor to remove, replace, repair, or dispose of unauthorized or defective Work or recovering damages due to the same.

C. Completion of Work under RCW 60.28. Pursuant to RCW 60.28, "Lien for Labor, Materials, Taxes on Public Works," completion of the Contract Work shall occur upon Final Acceptance.

6.07 PORT'S RIGHT TO USE THE PREMISES

A. Port has right to use and occupy Work. The Port reserves the right to occupy or use any part of the Work before or after Substantial Completion of some or all of the Work without relieving the Contractor of any of its obligations under the Contract. Such occupancy or use shall not constitute acceptance by the Port of any of the Work, and shall not cause any insurance to be canceled or lapse.

B. No compensation due if Port elects to use and occupy Work. No additional compensation shall be due to the Contractor as a result of the Port's use or occupancy of the Work or a designated portion.

ARTICLE 7 - PAYMENT

7.01 ALL PAYMENTS SUBJECT TO APPLICABLE LAWS AND SCHEDULE OF VALUES

A. Payment of the Contract Sum. The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Port to the Contractor for performance of the Work under the Contract Documents. Payments made to the Contractor are subject to all laws applicable to the Port and the Contractor. Payment of the Contract Sum constitutes full compensation to the Contractor for performance of the Work, including all risk, loss, damages, or expense of whatever character arising out of the nature or prosecution of the Work. The Port is not obligated to pay for extra work or materials furnished without prior written approval of the Port.

B. Schedule of Values. All payments will be based upon an approved Schedule of Values. Prior to submitting its first Application for Payment, the Contractor shall submit a Schedule of Values to the Port allocating the entire Contract Sum to the various portions of the Work. The Schedule of Values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Port may require. This schedule, unless objected to by the Port, shall be used as a basis for reviewing the Contractor's applications for payment.

7.02 APPLICATIONS FOR PAYMENT

A. Applications for Payment. Progress payments will be made monthly for Work duly certified, approved by the Engineer, and performed (based on the Schedule of Values and actual quantities of Work performed) during the calendar month preceding the Application for Payment. These amounts are paid in trust to the Contractor for distribution to Subcontractors to the extent, and in accordance with, the approved Application for Payment.

7.03 PROGRESS PAYMENTS

A. Progress payments. Following receipt of a complete Application for Payment, the Engineer will either authorize payment or indicate in writing to the Contractor the specific reasons why the payment request is being denied, in whole or in part, and the remedial action the Contractor must take to receive the withheld amount. After a complete Application for Payment has been received and approved by the Port, payment will be made within thirty (30) days. Any payments made by, or through, or following receipt of, payment from third parties will be made in accordance with the third party's policies and procedures.

B. Port may withhold payment. The Port may withhold payment in whole or in part as provided in the Contract Documents or to the extent reasonably necessary to protect the Port from loss or potential loss for which the Contractor is responsible, including loss resulting from the Contractor's acts and omissions.

7.04 PAYMENT BY CONTRACTOR TO SUBCONTRACTORS

A. Payment to Subcontractors. With each Application for Payment, the Contractor shall provide a list of Subcontractors to be paid by the Contractor. No payment request shall include amounts the Contractor does not intend to pay to a Subcontractor because of a dispute or other reason. If, however, after submitting an Application for Payment, but before paying a Subcontractor, the Contractor discovers that part or all of a payment otherwise due to the Subcontractor is subject to withholding from the Subcontractor under the subcontract (such as for unsatisfactory performance or non-payment of lower-tier Subcontractors), the Contractor may withhold the amount as allowed under the subcontract, but it shall give the Subcontractor and the Port written notice of the remedial actions that must be taken and pay the Subcontractor within eight (8) working days after the Subcontractor satisfactorily completes the remedial action identified in the notice.

B. Payment certification to be provided upon request. The Contractor shall provide, with each Application for Payment, a certification signed by Contractor attesting that all payments by the Contractor to Subcontractors from the last Application for Payment were made within ten (10) days of the Contractor's receipt of payment. The certification will also attest that the Contractor will make payment to Subcontractors for the current Application for Payment within ten (10) days of receipt of payment from the Port.

7.05 FINAL PAYMENT

A. Final payment. Final applications for payment are due within seven (7) days following Final Completion. Final payment of the unpaid balance of the Contract Sum, except retainage, will be made following Final Completion and within thirty (30) days of the Contractor's submission of an approved final Application for Payment.

B. Releases required for final payment. The final payment shall not become due until the Contractor delivers to the Port a complete release of all liens arising out of the Contract, as well as an affidavit stating that, to the best of Contractor's knowledge, its release includes all labor and materials for which a lien could be filed. If a Subcontractor of any tier refuses to furnish a release or waiver required by the Port, the Port may (a) retain in the fund, account, or escrow funds in such amount as to defray the cost of foreclosing the liens of such claims and to pay

attorneys' fees, the total of which shall be no less than 150% of the claimed amount, or (b) accept a bond from the Contractor, satisfactory to the Port, to indemnify the Port against the lien. If any such lien remains unsatisfied after all payments from the retainage are made, the Contractor shall refund to the Port all moneys that the Port may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

C. Contractor to hold Port harmless from liens. The Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold harmless the Port from any liens, claims, demands, lawsuits, losses, damages, disbursements, liabilities, obligations, fines, penalties, costs, and expenses, whether direct or indirect, including but not limited to, attorneys' fees and consultants' fees and other costs and expenses, except to the extent a lien has been filed because of the failure of the Port to make a contractually required payment.

7.06 RETAINAGE

A. Retainage to be withheld. In accordance with RCW 60.28, a sum equal to five percent (5%) of each approved Application for Payment shall be retained. Prior to submitting its first Application for Payment, the Contractor shall exercise one of the options listed below:

1. Retained percentages will be retained by the Port in a fund; or

2. Deposited by the Port in an interest-bearing account or escrow account in a bank, mutual savings bank, or savings and loan association designated by the Contractor, not subject to withdrawal until after the final acceptance of said improvement or work as completed, or until agreed to by both parties; provided that interest on such account shall be paid to the Contractor. Contractor to complete and submit Port provided Retainage Escrow Agreement (Section 00 61 23.13); or

3. If the Contractor provides a bond in place of retainage, it shall be in an amount equal to 5% of the Contract Sum plus Change Orders. The retainage bond shall be based on the form furnished in Section 00 61 23 or otherwise acceptable to the Port and duly completed and signed by a licensed surety or sureties registered with the Washington State Insurance Commissioner and on the currently authorized insurance list published by the Washington State Insurance Commissioner. The surety or sureties must be rated at least "A-, FSC(6)" or higher by A.M. Best Rating Guide and be authorized by the Federal Department of the Treasury. Attorneys-in-fact who sign the retainage bond must file with each bond a certified and effective Power of Attorney statement.

B. Contractor may withhold retainage from Subcontractors. The Contractor or a Subcontractor may withhold not more than five percent (5%) retainage from the monies earned by any Subcontractor or lower-tier Subcontractor, provided that the Contractor pays interest to the Subcontractor at the same interest rate it receives from its reserved funds. If requested by the Port, the Contractor shall specify the amount of retainage and interest due a Subcontractor.

C. Release of retainage. Retainage will be withheld and applied by the Port in a manner required by RCW 60.28 and released in accordance with the Contract Documents and statutory requirements. Release of the retainage will be processed in the ordinary course of business within sixty (60) days following Final Acceptance of the Work by the Port provided that no notice of lien has been given as provided in RCW 60.28, that no claims have been brought to the attention of the Port, that the Port has no claims under this Contract, and that release of retention has been duly authorized by the State. The following items must also be obtained prior to release of retainage: pursuant to RCW 60.28, a certificate from the Department of Revenue; pursuant to RCW 50.24, a certificate from the Department of Employment Security; and appropriate information from the Department of Labor and Industries including approved affidavits of wages paid for the Contractor and each subcontractor.

7.07 DISPUTED AMOUNTS

A. Disputed amounts. If the Contractor believes it is entitled to payment for Work performed during the prior calendar month in addition to the agreed-upon amount, the Contractor may submit to the Port, along with the approved Application for Payment, a separate written payment request specifying the exact additional amount claimed to be due, the category in the Schedule of Values to which the payment would apply, the specific Work for which additional payment is sought, and an explanation of why the Contractor believes additional payment is due.

7.08 EFFECT OF PAYMENT

A. Payment does not relieve Contractor of obligations. Payment to the Contractor of progress payments or final payment does not relieve the Contractor from its responsibility for the Work or its responsibility to repair, replace, or otherwise make good defective Work, materials, or equipment. Likewise, the making of a payment does not constitute a waiver of the Port's right to reject defective or non-conforming Work, materials, or equipment (even though they are covered by the payment), nor is it a waiver of any other rights of the Port.

B. Acceptance of final payment waives claims. Acceptance of final payment by the Contractor, a Subcontractor of any tier, or a supplier shall constitute a waiver of claims except those previously made in writing and identified as unsettled in Contractor's final Application for Payment.

C. Execution of Change Order waives claims. The execution of a Change Order shall constitute a waiver of claims by the Contractor arising out of the Work to be performed or deleted pursuant to the Change Order, except as specifically described in the Change Order.

7.09 LIENS

A. Contractor to discharge liens. The Contractor shall promptly pay (and secure the discharge of any liens asserted by) all persons properly furnishing labor, equipment, materials, or other items in connection with the performance of the Work including, but not limited to, any Subcontractors of any tier.

ARTICLE 8 - CHANGES IN THE WORK

8.01 CHANGES IN THE WORK

A. Changes in the Work authorized. Without invalidating the Contract and without notice to the Contractor's surety, the Port may authorize changes in the Work after execution of the Contract, including changes in the Contract Sum or Contract Time. Changes shall occur solely by Change Order, Unilateral Change Directive, or Minor Change in Work. All changes in the Work are effective immediately, and the Contractor shall proceed promptly to perform the change, unless otherwise provided in the Change Order or Directive.

B. Changes in the Work Defined.

1. A Change Order is a written instrument signed by the Port and Contractor stating their agreement to a change in the Work and the adjustment, if any, in the Contract Sum and/or Contract Time.

2. A Unilateral Change Directive is a written instrument issued by the Port to transmit new or revised Drawings, issue additions or modifications to the Contract, furnish other direction and documents adjustment, if any, to the Contract Sum and/or Contract Time. A Unilateral Change Directive is signed only by the Port, without requiring the consent or signature of the Contractor.

3. A Minor Change in the Work is a written order from the Port directing a change that does not involve an adjustment to the Contract Sum or the Contract Time.

C. Request for Proposal: At any time, the Port may issue a Proposal Request directing the Contractor to propose a change to the Contract Sum and/or Contract Time, if any, based on a proposed change in the Work. The Contractor shall submit a responsive Change Order proposal as soon as possible, and no later than fourteen (14) days after receipt, in which the Contractor specifies in good faith the extent to which the Contract Sum and/or Contract Time would change. All cost components shall be limited to the manner described in Section 8.02(B). If the Contractor fails to timely respond to a Proposal Request, the Port may issue the change as a Unilateral Change Directive.

1. Fixed price method is default for Contractor Change Order proposal. When the Port has requested that the Contractor submit a Change Order proposal, the Port may specify the basis on which the Contract Sum will be adjusted by the Contractor. The Engineer's preference, unless otherwise indicated, is for changes in the Work to be priced using Lump Sums or Unit Prices or on a time and material (Force Account) basis if unit pricing or lump sums cannot be negotiated or determined. In all instances, however, proposed changes shall include a not-to-exceed price for the change and shall be itemized for evaluation purposes in accordance with Section 8.02(B), as requested by the Engineer.

2. The Port may accept or reject the Contractor's Change Order proposal, request further documentation, or negotiate acceptable terms with the Contractor. If The Port and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order.

3. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment. The Port may reject a proposal, in which case the Port may either not effectuate the change or issue a Unilateral Change Directive. The Port will not make payment to the Contractor for any work until that work has been incorporated into an executed Change Order.

D. Unforeseen Conditions: If the Contractor encounters conditions at the site that are: (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or any soils reports made available by the Port to the Contractor, or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall immediately provide oral notice to the Engineer before conditions are disturbed, followed within 24 hours by an initial written notice. The Contractor shall submit a detailed proposal no later than seven (7) days following discovery of differing site conditions. The Engineer will promptly investigate these conditions and, if the Engineer determines that they differ materially and cause an increase or decrease in the Contractor's cost or time required for performance of any part of the Work, will establish a change in the Contract Sum or Contract Time, or both, consistent with the requirements of the Contract Documents. If the Contractor disputes the Engineer's determination, the Contractor may proceed as provided in the dispute resolution procedure (Article 11). No increase to the Contract Sum or the Contract Time shall be allowed if the Contractor does not comply with the contractual requirements or if the Contractor knew, or reasonably should have known, of the concealed conditions prior to executing the Contract.

E. Proceed Immediately: Pending agreement on the terms of the Change Order or upon determination of a differing site condition as defined in 8.01(D), the Engineer may direct Contractor to proceed immediately with the change in the Work. Contractor shall not proceed with any change in the Work until it has obtained the Engineer's written approval and documentation of the following:

1. The scope of work
2. An agreed upon maximum not-to-exceed amount
3. The method of final cost determination
4. Estimated time to complete the changed work
5. As a change in the Work is performed, unless the parties have signed a written Change Order to establish the cost of the change, the Contractor shall maintain an itemized accounting of all costs related to the change based on the categories in Section 8.02(B) and provide such data to the Port upon request. This includes, without limitation, invoices, including freight and express bills, and other support for all material, equipment, Subcontractor, and other charges related to the change and, for material furnished from the Contractor's own inventory, a sworn affidavit certifying the actual cost of such material. Failure to provide data to the Port within seven (7) days of a request constitutes a waiver of any claim. The Port may furnish any material or equipment to the Contractor that it deems advisable, and the Contractor shall have no claim for any costs or fee on such material or equipment.

F. Procedure for Unilateral Change Directive. Whether or not the Port has rejected a Contractor's proposal, the Port may issue a Unilateral Change Directive and the Contractor shall promptly proceed with the specified Work. If the Contractor disagrees with a Unilateral Change Directive, the Contractor shall advise the Port in writing through a Change Order proposal within seven (7) days of receipt. The Contractor's Change Order proposal shall reasonably specify the reasons for any disagreement and the adjustment it proposes. Without this timely Change Order proposal, the Contractor shall conclusively be deemed to have accepted the Port's proposal.

G. Payment pending final determination of Force Account work. Pending final determination of the total cost of Force Account Work, and provided that the Work to be performed under Force Account is complete and any reservations of rights have been signed by the Port, the Contractor may request payment for amounts not in dispute in the next Application for Payment accompanied by documentation indicating the parties' agreement. Work done on a Force Account basis must be approved in writing on a daily basis by the Engineer or the Engineer's designee and invoices shall be submitted with an Application for Payment within sixty (60) days of performance of the Work.

8.02 CHANGES IN THE CONTRACT SUM

A. Port to Decide How Changes are Measured. The Port may elect, in its sole discretion, how changes in the Work will be measured for payment. Change in the Work may be priced on a lump sum basis, through Unit Prices, as Force Account, or by another method documented in the executed Change Order, Unilateral Change Directive, or Minor Change in the Work.

B. Determination of Cost of Change. The total cost of any change in the Work, including a claim under Article 11, shall not exceed the prevailing cost for the Work in the locality of the Project. In all circumstances, the change in the Work shall be limited to the reasonable, actual cost of the following components:

1. Direct labor costs: These are the actual labor costs determined by the number of additional craft hours at their normal hourly rate necessary to perform a change in the Work. The

hourly cost of labor will be based upon the following:

a. Basic wages and fringe benefits: The hourly wage (without markup or labor burden) and fringe benefits paid by the Contractor as established by the Washington Department of Labor and Industries or contributed to labor trust funds as itemized fringe benefits, whichever is applicable, not to exceed that specified in the applicable "Intent to Pay Prevailing Wage," for the laborers, apprentices, journeymen, and foremen performing or directly supervising the change in the Work on site. These wages do not include the cost of Contractor's project manager or superintendent or above, and the premium portion of overtime wages is not included unless pre-approved in writing by the Port. Costs paid or incurred by the Contractor for vacations, per diem, subsistence, housing, travel, bonuses, stock options, or discretionary payments to employees are not separately reimbursable. The Contractor shall provide to the Port copies of payroll records, including certified payroll statements for itself and Subcontractors of any tier, upon the Port's request.

b. Workers' insurance: Direct contributions to the State of Washington as industrial insurance; medical aid; and supplemental pension by class and rates established by the Washington Department of Labor and Industries.

c. Federal insurance: Direct contributions required by the Federal Insurance Compensation Act (FICA); Federal Unemployment Tax Act (FUTA); and State Unemployment Compensation Act (SUCA).

2. Direct material costs: This is an itemization, including material invoices, of the quantity and actual cost of additional materials necessary to perform the change in the Work. The cost will be the net cost after all discounts or rebates, freight costs, express charges, or special delivery costs, when applicable. No lump sum costs will be allowed unless approved in advance by the Port.

3. Construction equipment usage costs: This is an itemization of the actual length of time that construction equipment necessary and appropriate for the Work is used solely on the changed Work times the applicable rental cost as established by the lower of the local prevailing rates published in www.equipmentwatch.com, as modified by the AGC/WSDOT agreement, or the actual rate paid to an unrelated third party. If more than one rate is applicable, the lowest available rate will be utilized. Rates and quantities of equipment rented that exceed the local fair market rental costs shall be subject to the Port's prior written approval. Total rental charges for equipment or tools shall not exceed 75% of the fair market purchase value of the equipment or the tool. Actual, reasonable mobilization costs are permitted if the equipment is brought to the site solely for the change in the Work. Mobilization and standby costs shall not be charged for equipment already present on the site.

   The rates in effect at the time of the performance of the changed Work are the maximum rates allowable for equipment of modern design, and in good working condition, and include full compensation for furnishing all fuel, oil, lubrication, repairs, maintenance, and insurance. No gas surcharges are payable. Equipment not of modern design and/or not in good working condition will have lower rates. Hourly, weekly, and/or monthly rates, as appropriate, will be applied to yield the lowest total cost.

4. Subcontractor costs: These are payments the Contractor makes to Subcontractors for changed Work performed by Subcontractors. The Subcontractors' cost of changed Work shall be determined in the same manner as prescribed in this Section 8.02 and, among other things, shall not include consultant costs, attorneys' fees, or claim preparation expenses.

5. Service provider costs: These are payments the Contractor makes to service providers for changed Work performed by service providers. The service providers' cost of changed Work shall be determined in the same manner as prescribed in this Section 8.02.

6. Markup: This is the maximum total amount for overhead, profit, and other costs, including office, home office and site overhead (including purchasing, project manager, superintendent, project engineer, estimator, and their vehicles and clerical assistants), taxes (except for sales tax on the Contract Sum), warranty, safety costs, printing and copying, layout and control, quality control/assurance, small or hand tools (a tool that costs $500 or less and is normally furnished by the performing contractor), preparation of as-built drawings, impact on unchanged Work, Change Order and/or claim preparation, and delay and impact costs of any kind (cumulative, ripple, or otherwise), added to the total cost to the Port of any Change Order work. No markup shall be due, however, for direct settlements of Subcontractor claims by the Port after Substantial Completion. The markup shall be limited in all cases to the following schedule:

   a. Direct labor costs -- 20% markup on the direct cost of labor for the party (Contractor or Subcontractor) providing labor related to the change in the Work;

   b. Direct material costs -- 20% markup on the direct cost of material for the party (Contractor or Subcontractor) providing material related to the change in the Work;

   c. Construction equipment usage costs -- 10% markup on the direct cost of equipment for the party (Contractor or Subcontractor) providing equipment related to the change in the Work;

   d. Contractor markup on Subcontractor costs -- 10% markup for the Contractor on the direct cost (excluding markup) of a change in the Work performed by Subcontractors (and for Subcontractors, for a change in the Work performed by lower-tier Subcontractors); and

   e. Service provider costs -- 5% markup for the Contractor on the direct cost (excluding markup) of a change in the Work performed by service providers.

   The total summed markup of the Contractor and all Subcontractors of any tier shall not exceed 30% of the direct costs of the change in the Work. If the markup would otherwise exceed 30%, the Contractor shall proportionately reduce the markup for the Contractor and all Subcontractors of any tier.

7. Cost of change in insurance or bond premium. This is defined as:

   a. Contractor's liability insurance: The actual cost (expressed as a percentage submitted with the certificate of insurance provided under the Contract Documents and subject to audit) of the Contractor's liability insurance arising directly from the changed Work; and

   b. Public works bond: The actual cost (expressed as a percentage submitted under the Contract Documents and subject to audit) of the Contractor's performance and payment bond arising directly from the changed Work.

   Upon request, the Contractor shall provide the Port with supporting documentation from its insurer or surety of any associated cost incurred. The cost of the insurance or bond premium together shall not exceed 2.0% of the cost of the changed Work.

8. Unit Prices. If Unit Prices are specified in the Contract Documents or established by agreement of the parties for certain Work, the Port may apply them to the changed Work. Unit Prices shall include pre-agreed rates for material quantities and shall include reimbursement for all direct and indirect costs of the Work, including overhead, profit,

bond, and insurance costs arising out of, or related to, the Unit Priced item. Quantities must be supported by field measurement statements signed by the Port, and the Port shall have access as necessary for quantity measurement. The Port shall not be responsible for not-to-exceed limit(s) without its prior written approval.

8.03 CHANGES IN THE CONTRACT TIME

A. Extension of the Contract Time. If the Contractor is delayed at any time in the commencement or progress of the Work by events for which the Port is responsible, by unanticipated abnormal weather (subject to Section 8.03(E) below), or by other causes not the fault or responsibility of the Contractor that the Port determines may justify a delay in the Contract Time, then the Contract Time shall be extended by Change Order for such reasonable time as the Port may determine. In no event, however, shall the Contractor be entitled to any extension of time absent proof of: (1) delay to an activity on the critical path of the Project, or (2) delay transforming an activity to the critical path, so as to actually delay the anticipated date of Substantial Completion.

B. Allocation of responsibility for delay not caused by Port or Contractor. If a delay was not caused by the Port, the Contractor, or anyone acting on behalf of any of them, the Contractor is entitled only to an increase in the Contract Time but not an increase in the Contract Sum.

C. Allocation of responsibility for delay caused by Port. If a delay was caused by the Port or someone acting on behalf of the Port and affected the critical path, the Contractor shall be entitled to a change in the Contract Time and Contract Sum in accordance with Section 8.02. The Contractor shall not recover damages, an equitable adjustment, or an increase in the Contract Sum or Contract Time from the Port; however, where the Contractor could reasonably have avoided the delay. The Port is not obligated directly or indirectly for damages for any delay suffered by a Subcontractor of any tier that does not increase the Contract Time.

D. Allocation of responsibility for delay caused by Contractor. If a delay was caused by the Contractor, a Subcontractor of any tier, or anyone acting on behalf of any of them, the Contractor is not entitled to an increase in the Contract Time or in the Contract Sum.

E. Adverse weather. If adverse weather is identified as the basis for a claim for additional time, the claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not reasonably have been anticipated and had an adverse effect on the critical path of construction, and that the Work was on schedule (or not behind schedule through the fault of the Contractor) at the time the adverse weather conditions occurred. Neither the Contract Time nor the Contract Sum will be adjusted for normal inclement weather. For a claim based on adverse weather, the Contractor shall be eligible only for a change in the Contract Time (but not a change in the Contract Sum) if the Contractor can substantiate that there was significantly greater than normal inclement weather considering the full term of the Contract Time.

F. Damages for delay. In the event the Contractor (including any Subcontractors of any tier) is held to be entitled to damages from the Port for delay beyond the amount permitted in Section 8.02(B), the total combined damages to the Contractor and any Subcontractors of any tier for each day of delay shall be limited to the reasonable, actual costs of the delay for which the Port is wholly responsible. The limitation on damages set forth in this Section does not apply to any damages arising exclusively from delay to which the Contractor is entitled to recover under Section 8.03(F).

G. Limitation on damages. The Contractor shall not be entitled to damages arising out of loss of efficiency; morale, fatigue, attitude, or labor rhythm; constructive acceleration; home office overhead; expectant under run; trade stacking; reassignment of workers; rescheduling of Work, concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy;

logistics; ripple; season change; extended or increased overhead or general conditions; profit upon damages for delay; impact damages including cumulative impacts; or similar damages. Any effect that such alleged costs may have upon the Contractor or its Subcontractors of any tier is fully compensated through the markup on Change Orders paid through Section 8.02(B).

8.04 RESERVATION OF RIGHTS

A. Reservations of rights void unless signed by Port. Reservations of rights will be deemed waived and are void unless any reserved rights are described in detail and are signed by the Contractor and the Port.

B. Procedure for unsigned reservations of rights. If the Contractor adds a reservation of rights not signed by the Port to any Change Order, Unilateral Change Directive, Change Order proposal, Application for Payment, or any other document, all amounts and all Work therein shall be considered disputed and not payable until costs are re-negotiated or the reservation is withdrawn or changed in a manner satisfactory to, and signed by, the Port. If the Port makes payment based on a document that contains a reservation of rights not signed by the Port, and if the Contractor cashes such payment, then the reservation of rights shall be deemed waived, withdrawn, and of no effect.

8.05 UNIT PRICES

A. Adjustment to Unit Prices. If Unit Prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed (less than eighty percent (80%) or more than one hundred and twenty percent (120%) of the quantity estimated) so that application of a Unit Price would be substantially unfair, the applicable Unit Price but not the Contract Time, shall be adjusted if the Port prospectively approves a Change Order revising the Unit Price.

B. Procedure to change Unit Prices. The Contractor or Port may request a Change Order revising a Unit Price by submitting information to support the change. A proposed change to a Unit Price will be evaluated by the Port based on the change in cost resulting solely from the change in quantity, any change in production rate or method as compared to the original plan, and the share, if any, of fixed expenses properly chargeable to the item. If the Port and Contractor agree on the change, a Change Order will be executed. If the parties cannot agree, the Contractor shall comply with the dispute resolution procedures (Article 11).

ARTICLE 9 - SUSPENSION AND TERMINATION OF CONTRACT

9.01 PORT'S RIGHT TO SUSPEND WORK

A. Port may suspend the Work. The Port may at any time suspend the Work, or any part thereof, by giving notice to the Contractor. The Work shall be resumed by the Contractor as soon as possible, but no later than fourteen (14) days after the date fixed in a notice to resume the Work. The Port shall reimburse the Contractor for appropriate and reasonable expenses consistent with Section 8.02 incurred by the Contractor as a result of the suspension, except where a suspension is the result of the Contractor repeatedly or materially failing to carry out or correct the Work in accordance with the Contract Documents, and the Contractor shall take all necessary steps to minimize expenses.

B. Contractor obligations. During any suspension of Work, the Contractor shall take every precaution to prevent damage to, or deterioration of, the Work. The Contractor shall be responsible for all damage or deterioration to the Work during the period of suspension and shall, at its sole expense, correct or restore the Work to a condition acceptable to the Port prior to resuming Work.

9.02 TERMINATION OF CONTRACT FOR CAUSE BY THE PORT

A. Port may terminate for cause. If the Contractor is adjudged bankrupt or makes a general assignment for the benefit of the Contractor's creditors, if a receiver is appointed due to the Contractor's insolvency, or if the Contractor, in the opinion of the Port, persistently or materially refuses or fails to supply enough properly skilled workmen or materials for proper completion of the Contract, fails to make prompt payment to Subcontractors or suppliers for material or labor, disregards laws, ordinances, or the instructions of the Port, fails to prosecute the Work continuously with promptness and diligence, or otherwise materially violates any provision of the Contract, then the Port, without prejudice to any other right or remedy, may terminate the Contractor after giving the Contractor seven (7) days' written notice (during which period the Contractor shall have the right to cure).

B. Procedure following termination for cause. Following a termination for cause, the Port may take possession of the Project site and all materials and equipment, and utilize such materials and equipment to finish the Work. The Port may also exclude the Contractor from the Project site(s). If the Port elects to complete all or a portion of the Work, it may do so as it sees fit. The Port shall not be required to accept the lowest bid for completion of the Work and may choose to complete all or a portion of the Work using its own work force. If the Port elects to complete all or a portion of the Work, the Contractor shall not be entitled to any further payment until the Work is finished. If the expense of finishing the Work, including compensation for additional managerial and administrative services of the Port, exceeds the unpaid balance of the Contract Sum, the excess shall be paid by the Contractor.

C. Port's remedies following termination for cause. The Port may exercise any rights, claims, or demands that the Contractor may have against third persons in connection with the Contract, and for this purpose the Contractor assigns and transfers to the Port all such rights, claims, and demands.

D. Inadequate termination for cause converted to termination for convenience. If, after the Contractor has been terminated for cause, it is determined that inadequate "cause" for such termination exists, then the termination shall be considered a termination for convenience pursuant to Section 9.03.

9.03 TERMINATION OF CONTRACT FOR CONVENIENCE BY THE PORT

A. Port may terminate for convenience. The Port may, at any time (without prejudice to any right or remedy of the Port), terminate all, or any portion of, the Contract for the Port's convenience and without cause. The Contractor shall be entitled to receive payment consistent with the Contract Documents only for Work properly executed through the date of termination, and costs necessarily incurred by reason of the termination (such as the cost of settling and paying claims arising out of the termination under subcontracts or orders), along with a fee of one percent (1%) of the Contract Sum not yet earned on the whole or part of the Work. The total amount to be paid to the Contractor shall not exceed the Contract Sum as reduced by the amount of payments otherwise made. The Port shall have title to all Work performed through the date of termination.

9.04 TERMINATION OF CONTRACT BY THE CONTRACTOR

A. Contractor may terminate for cause. The Contractor may terminate the Contract if the Work is stopped for a period of sixty (60) consecutive days through no act or fault of the Contractor or a Subcontractor of any tier, for either of the following reasons:

1. Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped; or

2. An act of government, such as a declaration of national emergency, that requires all Work to be stopped.

B. Procedure for Contractor termination. If one of the reasons described in Section 9.04A exists, the Contractor may, upon seven (7) days' written notice to the Port (during which period the Port has the opportunity to cure), terminate the Contract and recover from the Port payment for Work executed through the date of termination in accordance with the Contract Documents and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead and profit on Work executed and direct costs incurred by reason of such termination. The total recovery of the Contractor shall not exceed the unpaid balance of the Contract Sum.

C. Contractor may stop the Work for failure of Port to pay undisputed amounts. The Contractor may stop Work under the Contract if the Port does not pay undisputed amounts due and owing to the Contractor within fifteen (15) days of the date established in the Contract Documents. If the Port fails to pay undisputed amounts, the Contractor may, upon fifteen (15) additional days' written notice to the Port, during which the Port can cure, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately, and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay, and start-up.

9.05 SUBCONTRACT ASSIGNMENT UPON TERMINATION

A. Subcontracts assigned upon termination. Each subcontract is hereby assigned by the Contractor to the Port provided that:

1. The Port requests that the subcontract be assigned.

2. The assignment is effective only after termination by the Port and only for those subcontracts that the Port accepts in writing.

3. The assignment is subject to the prior rights of the surety, if any, under any bond issued in accordance with the Contract Documents.

When the Port accepts the assignment of a subcontract, the Port assumes the Contractor's rights and obligations under the subcontract, but only for events and payment obligations that arise after the date of the assignment.

ARTICLE 10 - BONDS

10.01 CONTRACTOR PERFORMANCE AND PAYMENT BONDS

A. Contractor to furnish performance and payment bonds. Within fifteen (15) days following its receipt of a notice of award, and as part of the Contract Sum, the Contractor shall secure and furnish duly executed performance and payment bonds using the forms furnished by the Port. The bonds shall be executed by a surety (or sureties) reasonably acceptable to the Port, admitted and licensed in the State of Washington, registered with the Washington State Insurance Commissioner, and possessing an A.M. Best rating of "A-, FSC (6)" or better and be authorized by the U.S. Department of the Treasury. Pursuant to RCW 39.08, the bonds shall be in an amount equal to the Contract Sum, and shall be conditioned only upon the faithful performance of the Contract by the Contractor within the Contract Time and upon the payment by the Contractor of all taxes, fees, and penalties to the State of Washington and all laborers, Subcontractors, and suppliers, and others who supply provisions, equipment, or supplies for the performance of the Work covered by this Contract. The bonds shall be signed by the person or persons legally authorized to bind the Contractor.

B. On contracts of one hundred fifty thousand dollars or less, at the option of the contractor as defined in RCW 39.10.210, the Port may, in lieu of the bond, retain ten percent of the contract amount for a period of thirty days after date of final acceptance, or until receipt of all necessary releases from the department of revenue, the Employment Security Department, and the Department of Labor and Industries and settlement of any liens filed under chapter 60.28 RCW, whichever is later. The recovery of unpaid wages and benefits must be the first priority for any actions filed against retainage held by a state agency or authorized local government.

   For contracts of one hundred fifty thousand dollars or less, the Port may accept a full payment and performance bond from an individual surety or sureties.

C. Port may notify surety. If the Port makes or receives a claim against the Contractor, the Port may, but is not obligated to, notify the Contractor's surety of the nature and amount of the claim. If the claim relates to a possibility of a Contractor's default, the Port may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

ARTICLE 11 - DISPUTE RESOLUTION

11.01 NOTICE OF PROTEST AND CLAIM

A. Dispute resolution procedure mandatory. All claims, direct or indirect, arising out of, or relating to, the Contract Documents or the breach thereof, shall be decided exclusively by the following alternative dispute resolution procedure, unless the parties mutually agree otherwise. If the Port and Contractor agree to a partnering process to assist in the resolution of disputes, the partnering process shall occur prior to, and not be in place of, the mandatory dispute resolution procedures set forth below.

B. Notice of protest defined. Except for claims requiring notice before proceeding with the affected Work as otherwise described in the Contract Documents, the Contractor shall provide immediate oral notice of protest to the Engineer prior to performing any disputed Work and shall submit a written notice of protest to the Port within seven (7) days of the occurrence of the event giving rise to the protest that includes a clear description of the event(s). The protest shall identify any point of disagreement, those portions of the Contract Documents believed to be applicable, and an estimate of quantities and costs involved. When a protest relates to cost, the Contractor shall keep full and complete records and shall permit the Port to have access to those records at any time as requested by the Port.

C. Claim defined. A claim is a demand by one of the parties seeking adjustment or interpretation of the Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract Documents. The term "claim" also includes all disputes and matters in question between the Port and Contractor arising out of, or relating to, the Contract Documents. Claims must be initiated in writing and include a detailed factual statement and clear description of the claim providing all necessary dates, locations, and items of Work, the date or dates on which the events occurred that give rise to the claim, the names of employees or representatives knowledgeable about the claim, the specific provisions of the Contract Documents that support the claim, any documents or oral communications that support the claim, any proposed change in the Contract Sum (showing all components and calculations) and/or Contract Time (showing cause and analysis of the resultant delay in the critical path), and all other data supporting the claim. Claims shall also be submitted with a statement certifying, under penalty of perjury, that the claim as submitted is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the claim is fully supported, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes the Port is liable. A claim shall be deemed to include all changes, direct and indirect, in cost and in time to which the Contractor and Subcontractors of any tier are entitled and may not contain

reservations of rights without the Port's written approval; any unapproved reservations of rights shall be without effect.

D. Claim procedure. The Contractor shall submit a written claim within thirty (30) days of providing written notice of protest. The Contractor may delay submitting supporting data by an additional thirty (30) days if it notifies the Port in its claim that substantial data must be assembled. Any claim of a Subcontractor of any tier may be brought only through, and after review by and concurrence of, the Contractor.

E. Failure to comply with notice of protest and claim requirements waives claims. Any notice of protest by the Contractor and any claim of the Contractor, whether under the Contract or otherwise, must be made pursuant to, and in strict accordance with, the applicable provisions of the Contract. Failure to properly and timely submit a notice of protest or to timely submit a claim shall waive the claim. No act, omission, or knowledge, actual or constructive, of the Port shall waive the requirement for timely written notice of protest and a timely written claim, unless the Port and the Contractor sign an explicit, unequivocal written waiver approved by the Port. The Contractor expressly acknowledges and agrees that the Contractor's failure to timely submit required notices of protest and/or timely submit claims has a substantial impact upon, and prejudices, the Port. For the purpose of calculating time periods, an "event giving rise to a claim," among other things, is not a Request for Information, but rather is a response that the Contractor believes would change the Contract Sum and/or Contract Time.

F. False claims. The Contractor shall not make any fraudulent misrepresentations, concealments, errors, omissions, or inducements to the Port in the formation or performance of the Contract. If the Contractor or a Subcontractor of any tier submits a false or frivolous claim to the Port, which for purposes of this Section 11.01(F) is defined as a claim based in whole or in part on a materially incorrect fact, statement, representation, assertion, or record, the Port shall be entitled to collect from the Contractor by offset or otherwise (without prejudice to any right or remedy of the Port) any and all costs and expenses, including investigation and consultant costs, incurred by the Port in investigating, responding to, and defending against the false or frivolous claim.

G. Compliance with lien and retainage statutes required. If a claim relates to, or is the subject of, a lien or retainage claim, the party asserting the claim may proceed in accordance with applicable law to comply with the notice and filing deadlines prior to resolution of the claim by mediation or by litigation.

H. Performance required pending claim resolution. Pending final resolution of a claim, the Contractor shall continue to perform the Contract and maintain the Baseline Project Schedule, and the Port shall continue to make payments of undisputed amounts due in accordance with the Contract Documents.

11.02 MEDIATION

A. Claims must be subject to mediation. At any time following the Port's receipt of a written claim, the Port may require that an officer of the Contractor and the Port's designee (all with authority to settle) meet, confer, and attempt to resolve a claim. If the claim is not resolved during this meeting, the claim shall be subject to mandatory mediation as a condition precedent to the initiation of litigation. This requirement can be waived only by an explicit, written waiver signed by the Port and the Contractor.

B. Mediation procedure. A request for mediation shall be filed in writing with the other party to the Contract, and the parties shall promptly attempt to agree upon a mediator. If the parties have not reached agreement within thirty (30) days of the request, either party may file the request with the American Arbitration Association, or such other alternative dispute resolution service to which the parties mutually agree, with a copy to the other party, and the mediation shall be

administered by the American Arbitration Association (or other agreed service). The parties to the mediation shall share the mediator's fee and any filing fees equally. The mediation shall be held in Pierce County, Washington, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof. Unless the Port and the Contractor mutually agree in writing otherwise, all claims shall be considered at a mediation session that shall occur prior to Final Completion.

11.03 LITIGATION

A. Claims not resolved by mediation are subject to litigation. Claims not resolved through mediation shall be resolved by litigation, unless the parties mutually agree otherwise. The venue for any litigation shall be Pierce County, Washington. The Contractor may bring no litigation on claims, unless such claims have been properly raised and considered in the procedures of this Article 11. The Contractor must demonstrate in any litigation that it complied with all requirements of this Article.

B. Litigation must be commenced promptly. All unresolved claims of the Contractor shall be waived and released, unless the Contractor has complied with the requirements of the Contract Documents, and litigation is served and filed within 180 days of the date of Substantial Completion approved in writing by the Port or termination of the Contract. The pendency of mediation (the time period between receipt by the non-requesting party of a written mediation request and the date of mediation) shall toll these deadlines until the earlier of the mediator providing written notice to the parties of impasse, or thirty (30) days after the date of the mediation session.

C. Port not responsible for attorneys' fees. Neither the Contractor nor a Subcontractor of any tier, whether claiming under a bond or lien statute or otherwise, shall be entitled to attorneys' fees directly or indirectly from the Port (but may recover attorneys' fees from the bond or statutory retainage fund itself to the extent allowable under law).

D. Port may join Contractor in dispute. The Port may join the Contractor as a party to any litigation or arbitration involving the alleged fault, responsibility, or breach of contract of the Contractor or Subcontractor of any tier.

ARTICLE 12 - MISCELLANEOUS

12.01 GENERAL

A. Rights and remedies are cumulative. The rights and remedies of the Port set forth in the Contract Documents are cumulative, and in addition to and not in limitation of, any rights and remedies otherwise available to the Port. 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. All such rights of the Port shall survive completion of the Project or termination of the Contractor.

B. Reserved rights do not give rise to duty. The rights reserved or possessed by the Port to take any action shall not give rise to a duty for the Port to exercise any such right.

12.02 WAIVER

A. Waiver must be in writing and authorized by Port. Waiver of any provisions of the Contract Documents must be in writing and authorized by the Port. No other waiver is valid on behalf of the Port.

B. Inaction or delay not a waiver. 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 constitute an approval or acquiescence of any breach or defect in the Work, nor shall any delay or failure of the Port to act waive or

otherwise prejudice the right of the Port to enforce a right or remedy at any subsequent time.

C. Claim negotiation not a waiver. The fact that the Port and the Contractor may consider, discuss, or negotiate a claim that has or may have been defective or untimely under the Contract, shall not constitute a waiver of the provisions of the Contract Documents, unless the Port and the Contractor sign an explicit, unequivocal waiver.

12.03 GOVERNING LAW

A. Washington law governs. This Contract and the rights and duties of the parties hereunder shall be governed by the internal laws of the State of Washington, without regard to its conflict of law principles.

12.04 COMPLIANCE WITH LAW

A. Contractor to comply with applicable laws. The Contractor shall at all times comply with all applicable Federal, State and local laws, ordinances, and regulations. This compliance shall include, but is not limited to, the payment of all applicable taxes, royalties, license fees, penalties, and duties.

B. Contractor to provide required notices. The Contractor shall give notices required by all applicable Federal, State and local laws, ordinances, and regulations bearing on the Work.

C. Contractor to confine operations at site to permitted areas. The Contractor shall confine operations at the Project site to areas permitted by applicable laws, ordinances, permits, rules and regulations, and lawful orders of public authorities and the Contract Documents.

12.05 ASSIGNMENT

A. Assignment. The Port and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party and to the partners, successors, assigns, and legal representatives of such other party. The Contractor may not assign, transfer, or novate all or any portion of the Contract, including but not limited to, any claim or right to the Contract Sum, without the Port's prior written consent. If the Contractor attempts to make an assignment, transfer, or novation without the Port's consent, the assignment shall be of no effect, and Contractor shall nevertheless remain legally responsible for all obligations under the Contract. The Contractor also shall not assign or transfer, to any third party, any claims it may have against the Port arising under the Contract or otherwise related to the Project.

12.06 TIME LIMIT ON CAUSES OF ACTION

A. Time limit on causes of action. The Port and Contractor shall commence all causes of action, whether in contract, tort, breach of warranty, or otherwise, against the other arising out of, or related to, the Contract in accordance with the requirements of the dispute resolution procedure set forth in Article 11 of these General Conditions, within the time period specified by applicable law, and within the time limits identified in the Contract Documents. The Contractor waives all claims and causes of action not commenced in accordance with this Section 12.06.

12.07 SERVICE OF NOTICE

A. Notice. Written notice under the Contract Documents by either the Contractor or Port may be served on the other party by personal service, electronic or facsimile transmission, or delivery service to the last address provided in writing to the other party. For the purpose of measuring time, notice shall be deemed to be received by the other party on the next business day following the sender's electronic or facsimile transmittal or delivery by delivery service.

12.08 RECORDS

A. Contractor and Subcontractors to maintain records and cooperate with Port audit. The Contractor and Subcontractors of any tier shall maintain books, ledgers, records, documents, estimates, bids, correspondence, logs, schedules, emails, and other tangible and electronic data and evidence relating or pertaining to costs and/or performance of the Contract ("records") to such extent, and in such detail, as will properly reflect and fully support compliance with the Contract Documents and with all costs, charges, and other amounts of whatever nature. The Contractor shall preserve these records for a period of six (6) years following the date of Final Acceptance under the Contract. Within seven (7) days of the Port's request, both during the Project and for six (6) years following Final Acceptance, the Contractor and Subcontractors of any tier shall make available, at their office during normal business hours, all records for inspection, audit, and reproduction (including electronic reproduction) by the Port or its representatives; failure to fully comply with this requirement shall constitute a material breach of contract and a waiver of all claims by the Contractor and Subcontractors of any tier.

B. Rights under RCW 42.56. The Contractor agrees, on behalf of itself and Subcontractors of any tier, that any rights under Chapter 42.56 RCW will commence at Final Acceptance, and that the invocation of such rights at any time by the Contractor or a Subcontractor of any tier, or their respective representatives, shall initiate an equivalent right to disclosures from the Contractor and Subcontractors of any tier for the benefit of the Port.

12.09 STATUTES

A. Contractor to comply with Washington statutes. The Contractor shall abide by the provisions of all applicable statutes, regulations, and other laws. Although a number of statutes are referenced in the Contract Documents, these references are not meant to be, and are not, a complete list.

1. Pursuant to RCW 39.06, "Registration, Licensing of Contractors," the Contractor shall be registered and licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27, "Registration of Contractors," and shall satisfy all State of Washington bonding and insurance requirements. The Contractor shall also have a current state Unified Business Identifier number; have industrial insurance coverage for the Contractor's employees working in Washington as required by Title 51 RCW; have an Employment Security Department number as required by Title 50 RCW; have a state excise tax registration number as required in Title 82 RCW; and not be disqualified from bidding on any public works contract under RCW 39.06.010 (unregistered or unlicensed contractors) or RCW 39.12.065(3) (prevailing wage violations).
2. The Contractor shall comply with all applicable provisions of RCW 49.28, "Hours of Labor."
3. The Contractor shall comply with pertinent statutory provisions relating to public works of RCW 49.60, "Discrimination."
4. The Contractor shall comply with pertinent statutory provisions relating to public works of RCW 70.92, "Provisions in Buildings for Aged and Handicapped Persons," and the Americans with Disabilities Act.
5. Pursuant to RCW 50.24, "Contributions by Employers," in general, and RCW 50.24.130 in particular, the Contractor shall pay contributions for wages for personal services performed under this Contract or arrange for an acceptable bond.
6. The Contractor shall comply with pertinent provisions of RCW 49.17, "Washington Industrial Safety and Health Act," and Chapter 296-155 WAC, "Safety Standards for Construction Work."

7. Pursuant to RCW 49.70, “Worker and Community Right to Know Act,” and WAC 296-62-054 et seq., the Contractor shall provide to the Port, and have copies available at the Project site, a workplace survey or material safety data sheets for all “hazardous” chemicals under the control or use of Contractor or any Subcontractor of any tier.
8. All products and materials incorporated into the Project as part of the Work shall be certified as “asbestos-free” and “lead-free” by United States standards, and shall also be free of all hazardous materials or substances. At the completion of the Project, the Contractor shall submit certifications of asbestos-free and of lead-free materials certifying that all materials and products incorporated into the Work meet the requirements of this Section, and shall also certify that materials and products incorporated into the Work are free of hazardous materials and substances.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes requirements for the Contractor's insurance.

1.02 SUBMITTAL REQUIREMENTS

A. Evidence of the required insurance within ten (10) days of the issued Notice of Award to the Contractor.

B. Updated evidence of insurance as required until final completion.

1.03 COMMERCIAL GENERAL LIABILITY (CGL) INSURANCE

A. The Contractor shall secure and maintain until Final Completion, at its sole cost and expense, the following insurance in carriers reasonably acceptable to the Port, licensed in the State of Washington, registered with the Washington State Insurance Commissioner, and possessing an A.M. Best rating of "A-, FSC six (6)" or better.

B. The Port of Tacoma (Port) will be included as additional insureds for both ongoing and completed operations by endorsement to the policy using ISO Form CG 20 10 11 85 or forms CG 20 10 04 13 and CG 20 37 04 13 (or equivalent coverage endorsements). The inclusion of the Port as additional insureds shall not create premium liability for the Port.

Also, by endorsement to the policy, there shall be:

1. An express waiver of subrogation in favor of the Port;
2. A cross liabilities clause; and
3. An endorsement stating that the Contractor's policy is primary and not contributory with any insurance carried by the Port.

C. If the Contractor, Supplier, or Subcontractors will perform any work requiring the use of a licensed professional, per RCW 18, the Contractor shall provide evidence to the Port of professional liability insurance in amounts not less than $1,000,000.

D. This insurance shall cover all of the Contractor's operations, of whatever nature, connected in any way with the Contract, including any operations performed by the Contractor's Subcontractors of any tier. **It is the obligation of the Contractor to ensure that all Subcontractors (at whatever level) carry a similar program that provides the identified types of coverage, limits of liability, inclusion of the Port as additional insured(s), waiver of subrogation and cross liabilities clause.** The Port reserves the right to reject any insurance policy as to company, form, or substance. Contractor's failure to provide, or the Port's acceptance of, the Contractor's certificate of insurance does not waive the Contractor's obligation to comply with the insurance requirements of the Contract as specifically described below:

1. Commercial General Liability Insurance on an Occurrence Form Basis including, but not limited to:
    a. Bodily Injury Liability;
    b. Property Damage Liability;
    c. Contractual Liability;
    d. Products - Completed Operations Liability;
    e. Personal Injury Liability;

Alternatively, a Commercial General Liability (CGL) policy is acceptable if all of the above coverages are incorporated in the policy and there are no marine exclusions that will remove coverage for either vessels or work done by or above or around the water.

2. Comprehensive Automobile Liability including, but not limited to:
    a. Bodily Injury Liability;
    b. Property Damage Liability;
    c. Personal Injury Liability;
    d. Owned and Non-Owned Automobile Liability; and
    e. Hired and Borrowed Automobile Liability.
3. Contractor's Pollution Liability (CPL) covering claims for bodily injury, property damage and cleanup costs, and environmental damages from pollution conditions arising from the performance of covered operations.
    a. If the Work involves remediation or abatement of regulated waste to include, but not limited to asbestos containing materials, lead containing products, mercury, PCB, underground storage tanks, or other hazardous materials or substances, the CPL policy shall not exclude such coverage, or a specific policy covering such exposure shall be required from the Contractor and all Subcontractors performing such Work.
    b. If the Work involves transporting regulated materials or substances or waste, a separate policy or endorsement to the CPL policy specifically providing coverage for liability and cleanup arising from an upset or collision during transportation of hazardous materials or substances shall be required from the Contractor and all Subcontractors performing such Work.
    c. It is preferred that CPL insurance shall be on a true occurrence form without a sunset clause. However, if CPL insurance is provided on a Claims Made basis, the policy shall have a retroactive date prior to the start of this project, and this insurance shall be kept in force for at least three years after the final completion of this project. Alternatively, the contractor, at its option, may provide evidence of extended reporting period of not less than three (3) years in its place. The Contractor shall be responsible for providing the Port with certificates of insurance each year evidencing this coverage.
    d. The Port shall be named as an additional insured(s) on the CPL policy.
4. Technology Professional Liability Errors and Omissions Insurance appropriate to the Consultant's profession and work hereunder, with limits not less than $2,000,000 per occurrence. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by the Vendor in this agreement and shall include, but not be limited to, claims involving infringement of intellectual property, copyright, trademark, invasion of privacy violations, information theft, release of private information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses with limits sufficient to respond to these obligations.

    The policy shall include, or be endorsed to include, **property damage liability coverage** for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the Agency in the care, custody, or control of the Vendor.

E. Except where indicated above, the limits of all insurance required to be provided by the Contractor shall be not less than $2,000,000 for each occurrence. If the coverage is

aggregated, the coverage shall be no less than two times the per occurrence or per claim limit. However, coverage in the amounts of these minimum limits shall not be construed as to relieve the Contractor from liability in excess of such limits. Any additional insured endorsement shall NOT be limited to the amounts specified by this Contract, unless expressly waived in writing by the Port.

F. Contractor shall certify that its operations are covered by the Washington State Worker's Compensation Fund. The Contractor shall provide its Account Number or, if self-insured, its Certificate of Qualification Number. The Contractor shall also provide evidence of Stop-Gap Employers' Liability Insurance.

United States Longshoremen's and Harbor Worker's Act (USL&H) and Jones Act may be required for this project. The Contractor shall be solely responsible for determining the applicability of USL&H and Jones Act coverage. The failure of the Contractor to procure either USL&H or Jones Act coverage shall at no time create liability on the part of the Port. The Contractor shall bear all responsibility and shall indemnify and hold harmless the Port for any and all liability, cost, and/or damages.

G. The Contractor shall furnish, within fifteen (15) days following issuance of the Notice of Award, a certificate of insurance satisfactory to the Port evidencing that insurance in the types and minimum amounts required by the Contract Documents has been secured. The Certificate of Insurance shall be signed by an authorized representative of the insurer together with a copy of the endorsement, which shows that the Port are named as additional insured(s).

H. Contractor shall provide at least forty-five (45) days prior written notice to the Port of any termination or material change, or ten (10) day's-notice in the case of non-payment of premium(s).

I. If the Contractor is required to make corrections to the Work after Final Completion, the Contractor shall obtain at its own expense, prior to the commencement of any corrective work, insurance coverage as required by the Contract Documents, which coverage shall be maintained until the corrections to the Work have been completed and accepted by the Port.

1.04 BUILDER'S RISK INSURANCE

A. Until Final Completion of the Work, the construction Work is at the risk of the Contractor and no partial payment shall constitute acceptance of the Work or relieve the Contractor of responsibility of completing the Work under the Contract.

B. To the extent the Work provided under this Contract does not include the construction, rehabilitation or repair of any dam, road or bridge, and whenever the estimated cost of the Work is less than $25,000,000, the Port and Contractor acknowledge that the Port will purchase, or has purchased, from a company or companies lawfully authorized and admitted to do business in Washington, property insurance written on a Builder's Risk "all-risk" (including Earthquake and Flood with applicable sub-limits) or equivalent policy form to cover the course of construction in the amount of the full insurable value thereof. This property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the Port has an insurable interest in the property, whichever is later. Without further endorsement, the coverage afforded by this insurance includes the interests of the Port, the Contractor, and Subcontractors of any tier on the Project. Coverage for materials intended to be installed in the facility will be covered by the Builder's Risk policy. Losses up to the deductible amount, and payment of any deductible amount, shall be the responsibility of the Contractor. All tools and equipment not intended as part of the construction or installation (including but not limited to Contractor's equipment and tools) will NOT be covered by the policy.

To the extent the Work provided under this Contract involves any dam, roadway or bridge, the value of which exceeds $250,000, or whenever the estimated cost of the Work is equal to or greater than $25,000,000, Contractor will purchase from a company or companies lawfully authorized and admitted to do business in Washington, property insurance written on a Builder's Risk "all-risk" (excluding Earthquake and Flood with applicable sub-limits) or equivalent policy form to cover the course of construction in the amount of the full insurable value thereof. This Builder's Risk insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the Port has an insurable interest in the property, whichever is later. Contractor shall provide evidence satisfactory to the Port confirming the coverage afforded by this insurance shall include the interests of the Port, the Contractor, and Subcontractors of any tier on the Project. Coverage for materials intended to be installed in the facility will be covered by the Builder's Risk policy purchased by the Contractor. Losses up to the deductible amount, and payment of any deductible amount, shall be the responsibility of the Contractor.

In all instances, the Contractor shall obtain property insurance for all Contractor-owned equipment and tools and, in the event of loss, payment of any deductible amount shall be the responsibility of the Contractor.

PART 2 - PRODUCTS - NOT USED

PART 3 - PRODUCTS - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 PREVAILING AND OTHER REQUIRED WAGES

A. The Contractor shall pay (and shall ensure that all Subcontractors of any tier pay) all prevailing wages and other wages (such as Davis-Bacon Act wages) applicable to the Project.

B. Pursuant to RCW 39.12, “Prevailing Wages on Public Works,” no worker, laborer, or mechanic employed in the performance of any part of the Work shall be paid less than the “prevailing rate of wage” in effect as of the date that bids are due.

1. Based on the Bid Date, the applicable effective date for prevailing wages for this Project is August 4, 2021.

C. The State of Washington prevailing wage rates applicable for this public works Project, which is located in Pierce County, may be found at the following website address of the Department of Labor and Industries:

https://fortress.wa.gov/lni/wagelookup/prvWagelookup.aspx

D. The schedule of the prevailing wage rates is made a part of the Contract Documents by reference as though fully set forth herein, and a printed copy of the applicable prevailing wage rates are also available for viewing at the Port Administration Building, located at 1 Sitcum Plaza, Tacoma, WA 98421 (253-383-5841). Upon request to the Procurement Department at procurement@portoftacoma.com, the Port will email or mail a hard copy of the applicable Journey Level prevailing wages for this Project.

E. Questions relating to prevailing wage data should be addressed to the Industrial Statistician.

Mailing Address: Washington State Department of Labor and Industries
Prevailing Wage Office
P.O. Box 44540
Olympia, WA 98504

Telephone: (360) 902-5335

Facsimile: (360) 902-5300

1. If there is any discrepancy between the provided schedule of prevailing wage rates and the published rates applicable under WAC 296-127-011, the applicable published rates shall apply with no increase in the Contract Sum. It is the Contractor’s responsibility to ensure that the correct prevailing wage rates are paid.

F. Statement to Pay Prevailing Wages

1. Prior to any payment being made by the Port under this Contract, the Contractor, and each Subcontractor of any tier, shall file a Statement of Intent to Pay Prevailing Wages with the Department of Labor and Industries for approval.

2. The statement shall include the hourly wage rate to be paid to each classification of workers entitled to prevailing wages, which shall not be less than the prevailing rate of wage, and the estimated number of workers in each classification employed on the Project by the Contractor or a Subcontractor of any tier, as well as the Contractor’s contractor registration number and other information required by the Department of Labor and Industries.

3. The statement, and any supplemental statements, shall be filed in accordance with the requirements of the Department of Labor and Industries. No progress payment shall be made until the Port receives such certified statement.

G. The Contractor shall post, in a location readily visible to workers, at the Project site: (i) a copy of the Statement of Intent to Pay Prevailing Wages approved by the Industrial Statistician of the Department of Labor and Industries and (ii) the address and telephone number of the Industrial Statistician of the Department of Labor and Industries to whom a complaint or inquiry concerning prevailing wages may be directed.

H. If a State of Washington prevailing wage rate conflicts with another applicable wage rate (such as Davis-Bacon Act wage rate) for the same labor classification, the higher of the two shall govern.

I. Pursuant to RCW 39.12.060, if any dispute arises concerning the appropriate prevailing wage rate for work of a similar nature, and the 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, and his or her decision shall be final and conclusive and binding on all parties involved in the dispute.

J. Immediately following the end of all Work completed under this Contract, the Contractor and each Subcontractor of any tier, shall file an approved Affidavit of Wages Paid with the Department of Labor and Industries.

K. The Contractor shall defend (at the Contractor's sole cost, with legal counsel approved by Port), indemnify, and hold the Port harmless from all liabilities, obligations, claims, demands, damages, disbursements, lawsuits, losses, fines, penalties, costs, and expenses, whether direct, indirect, including, but not limited to, attorneys' fees and consultants' fees and other costs and expenses, from any violation or alleged violation by the Contractor or any Subcontractor of any tier of RCW 39.12 ("Prevailing Wages on Public Works") or RCW Title 51 ("Industrial Insurance"), including, but not limited to, RCW 51.12.050.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 REQUIREMENTS APPLICABLE PORT-WIDE

A. The Contractor shall submit, prior to the start of Work, a list of emergency contact numbers for itself and its Subcontractors, Suppliers, and manufacturer representatives. Each person on the Project site shall have a valid identification card that is tamper proof with laminated photo identification, such as one (1) of the following:

1. State-issued Driver's license (also required if driving a vehicle)
2. Card issued by a governmental agency
3. Passport
4. Pacific Maritime Association card
5. Labor organization identification card

B. Identification cards shall be visible while on the Project site or easily displayed when requested.

1.02 TRANSPORTATION WORKER IDENTIFICATION CARD (TWIC) SUMMARY

A. TWIC is required for all personnel needing unescorted access to secure and restricted areas of Port facilities subject to 33 CFR 105, including truckers, surveyors, construction personnel, and delivery personnel. Secure areas are those areas with security measures for access control in accordance with a Coast Guard approved security plan. Restricted areas are those areas within a secure area that require increased limited access and a higher degree of security protection. New terminals under construction prior to terminal operations may not be designated secure areas. Construction on existing maritime transportation facilities and punchlist or other type of work requirements on facilities that have been certified under 33 CFR will require a TWIC.

B. Contractors should allow for application and enrollment for the security threat assessment and issuance of TWIC when submitting a bid.

1.03 ESCORTING

A. To access restricted Port facilities, all un-credentialed individuals must be accompanied by a person who has been issued a TWIC and trained as an escort at that specific facility. Each restricted facility has their own guidelines for escorting. Having escort training at one facility does not qualify you to escort at other facilities. Prior to conducting escort services for non-TWIC personnel, the escorts are required to contact the Facility Security Officer at the gate for verification they are on the escort list and to document who is being escorted. For required documentation, upon completion of escorting, the escort is to inform the Security officer that the escort is complete. It is the Contractor's responsibility to schedule escort training with the Facility Security Officer.

B. For more information, refer to the Port Security website at: http://www.portoftacoma.com/shipping/security

C. For Project specific information, refer to Section 01 14 00 - Work Restrictions.

1.04 ELIGIBILITY FOR TWIC

A. Refer to the Transportation Worker Identification Credential website at: https://www.tsa.gov/for-industry/twic for information on eligibility and applying for TWIC.

1.05 TWIC USE AND DISPLAY

A. Each worker granted unescorted access to secure areas of a facility or vessel must present their cards to authorized personnel, who will compare the holder to his or her photo, inspect

security features on the TWIC, and evaluate the card for signs of tampering. The Coast Guard will verify TWIC's when conducting vessel and facility inspections and during spot checks using hand-held scanners, ensuring credentials are valid.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SCOPE

A. The accompanying Drawings and Specifications show and describe the location and type of Work to be performed under this project. Work is more specifically defined on the drawings listed in Section 00 01 15.

1. The Work under this contract is to provide, furnish and install all labor, materials and equipment required to complete the work, installed, tested, and ready for use, and as described in these documents.

2. The Administrative Building Roof Replacement Project consists of: the removal and disposal of approximately 24,000 sqft of existing SPF coated metal roof panels and adjacent metal fascia panels and replace with new metal roof and fascia panels; installation of new gutters, downspouts, fall protection and bird deterrent systems; temporary support of mechanical and other utilities located on the roof; and relocation of access door and exhaust vents.

1.02 LOCATION

A. The work is located at:

1 Sitcum Plaza

Tacoma, WA 98421

1.03 WORK PERFORMED BY OTHERS

A. Port Maintenace staff will perfrom all disconnection and reconnection of electrical and outside HVAC units. The Contractor will schedule and coordinate the this electical and HVAC work through the Engineer. A minimum of 48 hour notice is required. Temporary support, removal and replacement of the equipment shall be performed by the Contractor.

B. Port Maintenance staff hours are Mon-Fri 7:00am to 3:00pm.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies work sequence and constraints.

B. The purpose of the milestones, sequence and limitations of construction are to ensure that the Contractor understands the requirements and limitations on its work by the specific characteristics of the Contract, schedules and conducts work in a manner consistent with achieving these purposes, and complies with the construction schedule, the specific sequence, constraints, milestones and limitations of work specified.

C. Sequence of construction. Plan the sequence of construction to accommodate all the requirements of the specifications. The Contract Price shall include all specified requirements as described in this Section.

1.02 CONTRACTOR ACCESS AND USE OF PREMISES

A. Activity Regulations

1. Ensure Contractor personnel deployed to the project become familiar with and follow all regulations or restrictions established by the Engineer.

B. Occupied Building

1. The Contractor will be working on an existing building which is occupied during normal business hours, as stipulated below.

2. Protect materials and equipment in areas adjoining the immediate work area.

C. Working Facility

1. The Facility will remain in operation for the duration of construction. The Contractor shall conduct all items of the Work in such a manner as to prevent interference with the normal operations of the Facility.

D. Work Site Regulations

1. Keep within the limits of work and assigned avenues of ingress and egress. Do not enter any areas outside the designated work location unless previously approved by the Engineer. The Contractor must comply with the following conditions:

a. Restore all common areas to a clean and useable condition that permits the resumption of Owner operations after the Contractor ceases daily work.

b. Be responsible for control and security of Contractor-owned equipment and materials at the work site. Report to Port Security (phone (253) 383-9472) any missing/lost/stolen property.

c. Ensure all materials, tools and equipment will be removed from the site or secured within the designated laydown area at the end of each shift.

d. Ensure Owner work space is protected from possible falling debris throughout the project.

e. Ensure no debris is allowed to enter the water. Contractor to provide debris containment. In the event that debris enters the water, Contractor shall notify Engineer and retreive debris immediately.

1.03 CONSTRAINTS - GENERAL

A. Constraints for Work at Site

1. Mechanical Work Constraints:

a. The Contractor is to notify in writing to the Port at least 72 hours prior to any outage to the HVAC system. Notification will indicate the start date and duration of the outage.

b. Duration of HVAC system outage should be kept to a minimum of 48 hours to provide the least impact to Owner occupying the building.

c. Port Maintenance staff will perform the disconnection and reconnection of the outside HVAC units. Scheduling and coordination of Port Maintenance staff will be through the Engineer. A minimum of 48 hour notice is required. All other modifications to the HVAC system will be performed by the Contractor.

d. Reinstallation or reactivation of the HVAC equipment shall occur at the earliest possible time following completion of preceding work.

2. Electrical Work Constraints:

a. All electrical work including disconnecting and reconnecting of power shall be performed by Port of Tacoma Maintenance staff.

b. Port Maintenace staff hours are Mon-Fri 7:00am to 3:00pm.

c. The Contractor is to notify in writing to the Port at least 48 hours prior to any disconnection and reconnecting of power to provide time to schedule Port staff. Notification will indicate the start date and duration of the outage.

3. Communications Work Constraints:

a. The Contractor is to notify in writing to the Port at least 72 hours prior to any outage to the communications system (roof mounted dish and antennae). Notification will indicate the start date and duration of the outage.

b. Duration of communications system outage shall be limited to 48 hours.

4. Other:

a. There are no work hour restrictions associated with this location, although the Contractor shall comply with local ordinanaces with regard to noise and work hour restrictions. In the event that the Contractor is planning to work outside typical work hours (Monday - Friday 0700-1700) the Contractor is to notify the Engineer at least 3 days in advance to arrange for inspection and testing as may be necessary.

b. The buildings normal buisness hours are Monday - Friday 0800-1700.

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Procedures for preparation and submittal of applications for progress payments.

1.02 PAYMENT PROCEDURES

A. Monthly pay estimates shall clearly identify the work performed for the given time period based on the approved Schedule of Values.

1. At the Pre-construction meeting, the Engineer and the Contractor shall agree upon a date each month when payment applications shall be submitted.

B. For each pay estimate the Contractor shall submit the following:

1. Completed Contractor invoice and updated Schedule of Values tracking sheet as required by Division 01 or as established by the Engineer.

2. Baseline Project Schedule and narrative updated as required by Section 01 32 16 of the Project Manual.

3. Completed “Amounts Paid to Subcontracts and Suppliers” showing total contract amount, amount paid this estimate, total paid to date, and balance owing.

4. Completed “Conditional Release and Waiver of Liens and Claims.”

5. An estimated cashflow statement projecting the Contractor’s monthly billings on the project shall be submitted with each payment application.

C. Prior to submitting a payment application, the Contractor and Engineer shall meet each month to review the work accomplished to determine the actual quantities including labor, materials and equipment charges to be billed.

1. Prior to the payment application meeting, the Contractor shall submit to the Engineer all measurement documentation as referenced in these contract documents; to include all measurement by weight, volume or field.

2. For all change work being done on a force account basis, the Contractor shall submit prior to meeting with Engineer all Force Account back-up documentation as required to process the payment application where Force Account work is being billed. The Engineer and the Contractor shall review the documentation at the payment application meeting to verify quantities and review the work accomplished.

3. The Contractor shall bring a copy of all documentation to the pay application meeting with the Engineer.

4. The Contractor shall submit the updated baseline project schedule for review prior to submitting the payment application to ensure the payment processing is not held up due to necessary schedule revisions.

D. Following the Engineers’ review, the Contractor shall submit the agreed upon pay estimate electronically, with complete supporting documentation, using e-Builder®.

1.03 PAYMENT PRICING

A. Pricing for the various lump sum or unit prices in the Bid Form, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents.

B. Pricing also includes all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).

C. No separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore shall be included in the prices named in the Bid Form for the various appurtenant items of work.

D. All other work not specifically mentioned in the measurement and payment sections identified below shall be considered incidental to the work performed and merged into the various unit and lump sum prices bid. Payment for work under one item will not be paid for under any other item.

E. The Port of Tacoma reserves the right to make changes should unforeseen conditions necessitate such changes. Where work is on a unit price basis, the actual quantities occasioned by such changes shall govern the compensation.

1.04 LUMP SUM MEASUREMENT

A. Lump sum measurement will be for the entire item, unit of Work, structure, or combination thereof, as specified and as indicated in the Contractor's submitted bid.

1. If the Contractor requests progress payments for lump sum items, such progress payments will be made in accordance with an approved Schedule of Values. The quantity for payment for completed work shall be an estimated percentage of the lump sum amount, agreed to between the Engineer and Contractor, payable in monthly progress payments in increments proportional to the work performed in amounts as agreed between the Engineer and the Contractor.

1.05 REJECTED, EXCESS, OR WASTED MATERIALS

A. Quantities of material wasted or disposed of in a manner not called for under the Contract; rejected loads of material, including material rejected after it has been placed by reasons of the failure of the Contractor to conform to the provisions of the Contract; material not unloaded from the transporting vehicle; material placed outside the lines indicated on the Contract Drawings or established by the Engineer; or material remaining on hand after completion of the Work, will not be paid for, and such quantities shall not be included in the final total quantities. No additional compensation will be permitted for loading, hauling, and disposing of rejected material.

1.06 MEASUREMENT AND PAYMENT

A. Item #1: Mobilization and Demobilization

1. Payment for Mobilization and Demobilization shall be for preparatory work and operations performed by the Contractor including, but not limited to, those necessary for the movement of its personnel, equipment, supplies and incidentals to and from the project site; temporary facilities and controls; for the establishment and removal of its offices, buildings and other facilities necessary for work on the project; for other work and operations which it must perform or costs it must incur before beginning production work on the various items on the project site, and for removal of personnel, equipment, supplies, offices, building facilities, sheds, fencing, and other incidentals from the site.

2. Mobilization and Demobilization shall be paid at the lump sum price listed in the Contractor's submitted bid. Incremental payment shall be made for each location as follows:

a. 40% after completion of 5% of the total contract amount of other bid items have been earned.

b. 40% after completion of 20% of the total contract amount of other bid items have been earned.

c. 20% after completion of all work on the project has been completed, including cleanup and acceptance of the project by the Port.

B. Item #2: Project Administration

1. Item Description: The Work of this item includes all administrative costs associated with administering and supervising the project including, but not limited to supervision of personnel, coordination of all work activities, coordination of subcontractors and/or suppliers, preparation and transmittal of submittals, permit acquisitions, for premiums on bonds and insurance for the project, and project overhead.

2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

C. Item #3: Demolition and Disposal

1. Item Description: The Work of this item includes but is not limited to the removal and disposal of; SPF coated metal roofing panels, metal wall panels, wall and roof clips, wall building paper, trim, flashing, downspouts, in-built gutter, dome skylight, fall protection system, bird deterrent system, roof access door and temporary support of rooftop communications.

2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

D. Item #4: New Roof Panels and Trim.

1. Item Description: The Work of this item includes but is not limited to the furnish and installation of; new metal roof panels, coverboard, underlayment, roof clips, flashing, trim, gutters, downspouts, dome skylight, fall protection system and bird deterrent system and the infill of the existing internal gutters.

2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

E. Item #5: New Wall Panels and Trim.

1. Item Description: The Work of this item includes but is not limited to the furnish and installation of; new metal wall panels, weather barrier, wall clips, flashing, trim, access door, relocation of existing louvers. temporary support of wall mounted equipment, reattachment of wall mounted equipment.

2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

F. Item #6: Access and Debris Containment.

1. Item Description: The Work of this item includes but is not limited to the furnish, installation, maintenance and removal of; Contractor access and debris containment.

2. Measurement: This item will be measured based on a percentage complete for the overall lump sum amount.

3. Payment: This item will be paid for at the Contract lump sum price as specified in the Contractor's submitted bid, in accordance with the approved Schedule of Values.

G. Item #7: Unforeseen Conditions Allowance.

1. Item Description: This allowance will be for UNFORESEEN CONDITIONS for work unidentified at the time of bid and will be paid perferably as negotiated unit price(s) or lump sum(s). If unit prices or lump sums cannot be established, work will be paid on a time and materials basis per Section 00 72 00 General Conditions Article 8.0. Work under this bid item shall be accomplished upon written direction from the Engineer as a Minor Change in Work. This entire bid item may not be used.

2. Measurement: This item will be measured based upon the method agreed upon for each Minor Change issued..

3. Payment: This item will be paid for at the price agreed upon for each Change in Work issued by the Engineer in accordance with procedures noted in Section 01 26 00 - Change Management Procedures.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXEUCTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.02 SUBMITTALS

A. The Contractor shall submit for approval the following documentation to the Port for force account change orders:

1. List of Labor Rates

a. For the Contractor and each subcontractor, a list of labor 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 in a form acceptable to the Engineer. 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.

1) If labor rates change during the course of the project or additional labor rates become required to complete the work, the Contractor shall submit new rates for approval.

2. List of Equipment.

a. 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 on Equipment Watch. A separate page from equipment watch detailing the hourly rate shall be submitted as backup documentation for each piece of equipment.

1) If the list of equipment and/or equipment rates changes during the course of the project or additional equipment becomes required to complete the work, the Contractor shall submit a new list and rates for approval.

1.03 METHOD TO CALCULATE ADJUSTMENTS TO CONTRACT PRICE

A. One of the following methods shall be used:

1. Unit Price Method;

2. Firm Fixed Price Method (Lump Sum); or,

3. Time and Materials Method (Force Account).

B. The Port preferred methods are firm fixed price or unit prices.

1.04 MINOR CHANGES IN THE WORK

A. Engineer will issue a written directive authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

1.05 PROPOSAL REQUESTS

A. Port-Initiated Proposal Requests: The Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Work Change Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.

2. Contractor shall submit a written proposal within the time specified in the General Conditions. The proposal shall represent the Contractor’s offer to perform the requested work, and the pricing set forth within the proposal shall represent full, complete, and final compensation for the proposed change and any impacts to any other Contract Work, including any adjustments in the Contract Time.

a. Include a breakdown of the changed work in sufficient detail that permits the Engineer to substantiate the costs.

1) Generally, the cost breakdown should be divided into the time and materials categories listed in the General Conditions under Article 8.02.B for either Lump Sum Proposals or Force Account Proposals.

2) For Unit Price Proposals, include the quantity and description of all work involved in the unit pricing being proposed, along with a not to exceed total cost.

b. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or differing site conditions require modifications to the Contract, the Contractor may initiate a claim by submitting a request for a change to the Engineer.

1. Notify the Engineer immediately upon finding differing conditions prior to disturbing the site.

2. Provide follow-up written notification and differing site conditions proposal within the time frames set forth in the General Conditions.

3. Provide the differing site condition change proposal in the same or similar manner as described above under 1.05.A.

4. Comply with requirements in Section 00 26 00 Substitution Procedures if the proposed change requires substitution of one product or system for product or system specified.

5. Proposal Request Form: Use form acceptable to Engineer.

1.06 PROCEEDING WITH CHANGED WORK

A. The Engineer may issue a directive instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order per the General Conditions, Article 8.01.E.

1. The directive will contain a description of change in the Work and a not-to-exceed amount. It will designate the method to be followed to determine the change in the Contract Sum or the Contract Time.

1.07 CHANGE ORDER PROCEDURES

A. Issuance of Change Order

1. On approval of the Contractor's proposal, and following successful negotiations, the Engineer will issue a Change Order for signature by the Contractor and execution by the Engineer.
    a. The Contractor shall sign and return the Change Order to the Engineer within **four (4) days** following receipt of the Change Order from the Engineer. If the Contractor fails to return the signed Change Order within the allotted time, the Engineer may issue a Unilateral Change Directive.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes specifications for preparation, format, and submittal of Schedule of Values.

B. The Schedule of Values will establish unit prices for individual items of work.

C. The Schedule of Values will be the basis for payment of contract work.

1.02 PREPARATION

A. To facilitate monthly pay requests, develop the Schedule of Values based on the Contractor's submitted Bid Items. The Schedule of Values shall be used to provide an allocation of the Work for measurement and payment to a level of detail to ensure accurate payment for the Work accomplished. The Schedule of Values is based on unit priced bid items and a breakdown of each lump-sum bid item. The total dollars for the Schedule of Values shall total the bid amount.

B. Obtain the agreement of the Engineer on the Schedule of Values. No payment will be made prior to an agreed upon Schedule of Values.

C. Include an updated version of the Schedule of Values as changes occur. Update the Schedule of Values to include:

1. Dollars earned and percent complete for the current progress payment period,
2. Dollars earned and percent complete to-date, excluding the current progress payment period,
3. Total dollars earned and percent complete to-date,
4. Total dollars remaining, and
5. Changes resulting from Change Orders.

D. The total value of the line items in the Schedule of Values plus any approved Change Orders shall be equal to the current approved contract price.

E. The value of stored material shall be identified in the Schedule of Values with both a material-purchase activity and a separate corresponding installation activity in the Construction Schedule(s).

F. Include as exhibits, drawings or sketches as necessary, to better define the limits of pay items that are in close proximity and that have no clear boundary in the Contract Drawings.

1.03 SUBMITTAL

A. Submit preliminary Schedule of Values within 10 days of the effective date of the Notice to Proceed.

B. Submit corrected Schedule of Values within 10 days upon receipt of reviewed Schedule of Values.

C. At the Engineer's request, submit documentation substantiating the cost allocations for line items within the Schedule of Values.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 SCHEDULE OF VALUES

A. Submit the Schedule of Values in a form acceptable to the Engineer.

B. Provide updated Schedule of Values as required by the Engineer and as indicated in the Contract Documents.

END OF SECTION

PART 1 - GENERAL

1.01 SCOPE

A. The purpose of this section is to provide the framework for communication between the Port and the Contractor by defining the types and timing of administrative tasks, including meetings and other items related to communications.

1.02 NOTICE TO PROCEED

A. Contract execution will be made per the requirements of the Contract Documents. Once the contract has been executed and all pre-work submittals have been received, the Engineer will issue a Notice to Proceed (NTP).

1. In certain instances, the Engineer may issue to the Contractor a Limited NTP for specified elements of the work described in these Contract Documents.

B. The Contractor shall submit all pre-work submittals within 10 days of contract execution. A list of pre-work submittals is located in section 01 33 00 3.02 (A).

1. No contract 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 by the Contract Documents.

1.03 COORDINATION

A. The Contractor shall coordinate all its activities through the Engineer.

B. The Contractor shall coordinate construction operations as required to execute the Work efficiently, to obtain the best results where installation of one part of the Work depends on other portions.

1.04 PROJECT MEETINGS

A. Pre-Construction Meeting

1. After execution of the contract, but prior to commencement of any work at the site, a mandatory one time meeting will be scheduled by the Engineer to discuss and develop a mutual understanding relative to the administration of the safety program, preparation of the Schedule of Values, change orders, RFI’s, submittals, scheduling prosecution of the work. Major subcontractors who will engage in the work shall attend.

2. Suggested Agenda: The agenda will include items of significance to the project.

3. Location of the Pre-Construction Meeting will be held at the Port of Tacoma Administration Building located at One Sitcum Plaza.

B. Weekly Progress Meetings – Progress meetings include the Contractor, Engineer, consultants and others affected by decisions made.

1. The Engineer will arrange meetings, prepare standard agenda with copies for participants, preside at meetings, record minutes and distribute copies within ten working days to the Contractor, meeting participants, and others affected by decisions made.

a. The Engineer will approve submitted meeting minutes in writing within 10 working days.

2. Attendance is required for the Contractor's job superintendent, major subcontractors and suppliers, Engineer, and representatives of the Port as appropriate to the agenda topics for each meeting.

3. Standard Agenda
    a. Review minutes of previous meeting
    b. Review of work progress
    c. Field observations, problems, and decisions
    d. Identification of problems that impede planned progress
    e. Maintenance of Progress Schedule (3 weeks ahead; 1 week back)
    f. Corrective measures to regain projected schedules
    g. Planned progress during succeeding work period
    h. Coordination of projected progress
    i. Maintenance of quality and work standards
    j. Effect of proposed changes on progress schedule and coordination
    k. Demonstration that the project record drawings are up-to-date
    l. Other business relating to the work

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. The Port and Contractor shall use the Port Contract Management application (e-Builder®) for electronic information exchange throughout the duration of the Contract, as later described.

1. e-Builder® is a web-based application accessed via the web.

2. The Contractor will receive up to two separate user accounts for access to e-Builder®.

3. The joint use of this system is to facilitate and coordinate the electronic exchange of Requests for Information, Submittals, Change Order Proposals, Pay Applications, and project specific correspondence.

1.02 USER ACCESS LIMITATIONS

A. Contractor’s access to e-Builder® is granted and controlled by the Engineer.

1. The users assigned by the Contractor to use e-Builder® shall be competent and experienced with the practices commonly employed in the industry for electronically submitting requests for information, submittals, product data, shop drawings and related items as required by the contract and the methods commonly used for project correspondence transmission and filing.

2. Any users assigned by the Contractor whom the Engineer determines is incapable of performing the prescribed tasks in an accurate, competent and efficient manner will be removed upon request from the Engineer. The qualifications and identity of a replacement user shall be submitted within 24 hours for consideration by the Engineer. Once accepted by the Engineer, the user account will be modified accordingly.

1.03 CONTRACTOR TECHNOLOGY REQUIREMENTS

A. The Contractor is responsible for providing and maintaining web enabled devices capable of running the desktop version of the e-Builder® website effectively.

1.04 CONTRACTOR SOFTWARE REQUIREMENTS

A. The Contractor is responsible for providing and maintaining the following:

1. An office suite that is Microsoft Office 2013 compatible for generation and manipulation of correspondence.

2. A program capable of editing, annotating and manipulating Adobe pdf files for inserting the Contractor’s review stamp, clouding and adding notation to the files as necessary for review by the Engineer.

1.05 CONTRACTOR RESPONSIBILITY

A. Provide all the equipment, internet connections, software, personnel and expertise required to support the use of e-Builder® as described in the Contract documents.

1.06 PORT RESPONSIBILITY

A. Provide the Contractor with the following:

1. All forms necessary for application to obtain permissions to access e-Builder® as described above.

2. Information, basic user guides and requirements on methods for using e-Builder®.

3. Instruction for the Contractor's staff utilizing e-Builder®.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 UTILIZATION OF E-BUILDER®

A. The Contractor shall provide required information in a timely manner that also supports the project schedule and meets the requirements of the Contract.

B. The Contractor shall provide and maintain competent and qualified personnel to perform the various tasks required to support the work within e-Builder®.

C. The Port will not be liable for any delays associated from the usage of e-Builder® including, but not limited to: slow response time, Port maintenance and off-line periods, connectivity problems or loss of information. Under no circumstances shall the usage of e-Builder® software be grounds for a time extension or cost adjustment to the contract.

END OF SECTION

PART 1 GENERAL

1.01 SUMMARY

A. This section includes the requirements to provide a preliminary schedule and construction progress schedule, bar chart type.

1.02 SUBMITTALS

A. Within 10 days following execution of the contract, submit a baseline project schedule defining planned operations.

B. If the baseline project schedule requires revision after review, submit revised baseline project schedule within 10 days.

C. Within 20 days after review of baseline project schedule, submit draft of proposed complete baseline project schedule for review.

D. Submit updated progress schedule monthly to the Engineer with each pay application as required in Section 01 20 00 Price and Payment Procedures.

1.03 QUALITY ASSURANCE

A. Scheduler: Contractor's personnel or Consultant specializing in Critical Path Method (CPM) scheduling with one year’s minimum experience in scheduling construction work of a complexity comparable to this Project, and having use of computer facilities capable of delivering a detailed graphic printout within 48 hours of request.

1.04 SCHEDULE FORMAT

A. The baseline project schedule shall be produced using the CPM format.

B. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.

C. Sheet Size: Multiples of 11 x 17 (280 x 432 mm).

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 BASELINE SCHEDULE

A. Prepare baseline project schedule in the form of a horizontal bar chart.

B. The baseline project schedule shall include all the activities listed in the Schedule of Values and be directly related to items listed in the Bid Form. The Contractor is encouraged to add sufficient activities to facilitate a clear understanding of the means and methods planned for the various work items.

C. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction and critical path. At a minimum it shall include and show the following:

1. A time scale showing the elementary work items needed to complete the work;

2. Estimated time durations for each activity, defined as any single identifiable work step within the project;

3. A graphical network diagram showing the logical sequence of activities, their precedence relationships, and estimated float or leeway available for each;

4. The different categories of work as distinguished by crew requirements, equipment requirements, and construction materials; and
5. The different areas of responsibility, such as distinctly separate or subcontracted work, and identifiable subdivisions of work.

D. It shall be maintained and updated as necessary to accurately reflect past progress and the most probable future progress.

E. Activities shown shall include submittals, milestones, and sufficient task breakdown for major components of work.

F. Identify work of separate stages and other logically grouped activities.

G. Provide sub-schedules to define critical portions of the entire schedule.

H. Provide separate schedule of submittal dates for shop drawings, product data, samples, owner-furnished products, products identified, and dates reviewed submittals will be required from the Engineer. Indicate decision dates for selection of finishes.

3.02 PROGRESS SCHEDULE

A. From the regularly-maintained baseline project schedule, progress schedules showing a three-week look-ahead, one-week look-back, shall be submitted and distributed at the weekly progress meetings. The progress schedule shall represent a practical plan to complete the work shown within the contract work window presented. At a minimum, the presentation, typically a Gantt-style chart, shall convey the task durations, a logical work sequence, task interdependencies, and identify important or critical constraints.

B. Submittal and distribution of progress schedules will be understood to be the Contractor’s representation that the scheduled work meets the requirements of the contract documents and that the work will be executed in the manner and sequence presented, and over the durations indicated.

C. The scheduling, coordination, and execution of construction in accordance with the contract documents are the responsibility of the Contractor. The Contractor shall involve, coordinate, and resolve scheduling with all subcontractors, material suppliers, or others affected in development of the progress schedules.

D. The progress schedule shall be used for coordination purposes for inspection and testing purposes as well as validation of work progress against the baseline schedule.

3.03 UPDATING SCHEDULE

A. Maintain schedules to record actual start and finish dates of completed activities.

B. Indicate progress of each activity to date of revision, with projected completion date of each activity.

C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.

D. Indicate changes required to maintain Date of Substantial Completion.

E. Submit reports required to support recommended changes.

F. Contractor shall submit an updated progress schedule with each pay application and include a written narrative describing the overall progress of the work. The narrative shall include the following key aspects:

1. Progress in the last period.

2. Critical Path progress and schedule concerns.
3. Changes to schedule logic or sequencing of the work.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes the requirements to provide a submittal log and project submittals.

1.02 SUBMITTAL LOG

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

1. Item Description
2. Category
3. Specification Section information of the applicable section
4. After the submittal log is reviewed and approved by the Engineer, it shall become the basis for the submittal of all items by Contractor.

1.03 COMPLIANCE

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

1.04 SHOP DRAWINGS AND MANUFACTURERS' LITERATURE

A. The Port will not accept shop drawings that prohibit the Port from making copies for its own use.

B. Shop drawings shall be prepared accurately and to a scale sufficiently large to indicate all pertinent features of the products and the method of fabrication, connection, erection, or assembly with respect to the Work.

C. All drawings submitted to the Engineer for approval shall be drawn to scale as ANSI D.

D. Required electronic formats for these drawings are as follows:

1. AutoCad DWG
2. PDF - Formatted to print to half-scale using 11x17 paper

E. 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. General catalogs or partial lists will not be accepted. Manufacturers' original electronic files are required for submitting.

1.05 SUBMITTAL REVIEW

A. After review of each of Contractor's submittals, the submittal will be returned to Contractor with a form indicating one or more of the following:

1. No Exceptions Taken - Means, accepted subject to its compatibility with future submittals and additional partial submittals for portions of the work not covered in this submittal. But it does not constitute approval or deletion of specified or required items not shown in the partial submittal.

2. Make Corrections Noted - Same as Item 1, except that minor corrections as noted shall be made by Contractor.
3. Reviewed - Submittal has been reviewed by the Port, does not constitute approval, and the Contractor is responsible for requirements in submittal.
4. Review as Noted - Submittal has to be reviewed by the Port with comments as noted.
5. Revise and Resubmit - Means, rejected because of major inconsistencies or errors. Resolve or correct before next submittal.
6. Rejected - Means, submitted material does not conform to the Contract Documents in a major respect (e.g., wrong material, size, capacity, model, etc.).

B. Submittals marked "No Exceptions Taken," "Make Corrections Noted," "Reviewed," or “Reviewed as Noted” authorizes Contractor to proceed with construction covered by those data sheets or shop drawings with corrections, if any, incorporated.

C. When submittals or prints of shop drawings have been marked "Revise and Resubmit" or "Rejected," Contractor shall make the necessary corrections and submit required copies. Every revision shall be shown by number, date, and subject in a revision block, and each revised shop drawing shall have its latest revision numbers and items clearly indicated by clouding around the revised areas on the shop drawing.

D. Submittals authorized by the Engineer do not in any case supersede the Contract Documents. The approval by the Engineer shall not relieve the Contractor from responsibility to conform to the Drawings or Specifications, or correct details when in error, or ensure the proper fit of parts when installed. A favorable review by the Port of shop drawings, method of work, or information regarding material and equipment Contractor proposes to furnish shall not relieve Contractor of its responsibility for errors therein and shall not be regarded as assumption of risk or liability by the Port or its officers, employees, or representatives. Contractor shall have no claim under the Contract on account of failure or partial failure, or inefficiency or insufficiency of any plan or method of work, or material and equipment so accepted. Favorable review means that the Port has no objection to Contractor using, upon its own full responsibility, the plan or method of work proposed, or furnishing the material and equipment proposed.

E. It is considered reasonable that the Contractor’s submittals shall be complete and acceptable by at least the second submission of each submittal. The Port reserves the right to deduct monies from payments due Contractor to cover additional costs for review beyond the second submission.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 PREPARATION OF SUBMITTALS

A. The Contractor shall submit all shop drawings, catalog cuts, brochures and physical samples using e-Builder® (a web based construction management software). All post-document-generated notations such as notes, arrows, stamps, clouding, or other items, are required to be shown directly on the submittal document. **Each submittal shall be accompanied by a transmittal developed within the e-Builder® software.**

B. A separate submittal shall be prepared for each product or procedure and shall be further identified by referencing the Specification Section and paragraph number and each submittal shall be numbered consecutively.

C. Product submittals that cannot be accomplished electronically shall be submitted electronically without attachments, marked as being hand delivered, and accompanied by a printed version of a transmittal.

D. Shop and detail drawings shall be submitted in related packages. All equipment or material details which are interdependent, or are related in any way, must be submitted indicating the complete installation. Submittals shall not be altered once marked “No Exceptions Taken” Revisions shall be clearly marked and dated. Major revisions must be submitted for approval.

E. The Contractor shall thoroughly review all shop and detail drawings, prior to submittal, to assure coordination with other parts of the work.

F. Components or materials which require shop drawings and which arrive at the job site prior to approval of shop drawings shall be considered as not being made for this project and shall be subject to rejection and removal from the premises.

G. All submittal packages including, but not limited to, product data sheets, mix designs, shop drawings and other required information for submittal must be submitted, reviewed and approved before the relevant scheduled task may commence. It is the responsibility of the Contractor to provide the submittal information which may drive a task on the construction schedule to submit items well enough in advance as to provide adequate time for review and comment from the Engineer without adversely impacting the construction schedule.

H. When completing the e-Builder® submittal form, a Date Due field is required to be completed. This field is intended to inform the Port of the urgency of the submittal. Failure of the Port to return the submittal by the date provided by the Contractor will not be considered grounds for a contract time extension.

3.02 PRE-WORK SUBMITTALS

A. Prior to issuance of Notice to Proceed, the following submittals must be submitted and returned to the Contractor as No Exceptions Taken, Make Corrections Noted, Reviewed, or Reviewed as Noted.

1. Per 00 72 00 and 01 32 16, Baseline Project Schedule
2. Per 00 73 63, Emergency Contact Numbers
3. Per 01 35 29, Health and Safety Plan (HASP)
4. Per 01 35 29, Spill Prevention and Countermeasures Plan (SPCC)
5. Per 01 35 47, List of equipment and written certification

3.03 MAINTENANCE OF SUBMITTAL LOG

A. Prepare and submit for Port review a detailed submittal log conforming to the requirements of paragraph 1.02 of this section. When approved by the Engineer, use the submittal log to track the transmittal of submittals to the Engineer, the receipt of submittal comments from the Engineer, and all subsequent action with respect to each submittal. Provide an updated copy of the submittal log to the Engineer during each weekly progress meeting, unless otherwise approved by the Engineer.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. The work includes the requirements for health and safety provisions necessary for all work at the site for this project. The work also includes compliance with all laws, regulations and ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security or traffic.

B. The Contractor shall monitor site conditions for indications of identified and other potentially hazardous, dangerous, and/or regulated materials (suspicious material). Indicators of suspicious material include, but are not limited to, refuse, oily sheen or coloring on soil or water, or oily or chemical odors. If suspicious materials are encountered, the Contractor shall stop all work in that area and notify the Engineer immediately.

1.02 SUBMITTALS

A. Prior to Notice to Proceed, the Contractor shall provide a site specific Health and Safety Plan (HASP), which meets all the requirements of local, state and federal laws, rules and regulations. The HASP shall address all requirements for general health and safety and shall include, but not be limited to:

1. Description of work to be performed and anticipated chemical and/or physical hazards associated with the work;
2. Map of the site(s) illustrating the location of the anticipated hazards and areas of control for those hazards (including containments, exclusion/work zones, and contaminant reduction/decontamination zones);
3. Hazardous material inventory and safety data sheets (SDSs) for all chemicals which will be brought on site;
4. Signage appropriate to warn site personnel and visitors of anticipated site hazards;
5. Engineering controls/equipment to be used to protect against anticipated hazards;
6. Personal protective equipment and clothing including head, foot, skin, eye, and respiratory protection;
7. Procedures which will be used for:
    a. Lockout/Tagout,
    b. Fall protection,
    c. Hot work (if necessary),
    d. Suspicious materials and/or unidentified materials,
8. Site housekeeping procedures and personal hygiene practices;
9. Administrative controls;
10. Emergency plan including locations of and route to nearest hospital;
11. Name and qualification of person preparing the HASP and person designated to implement and enforce the HASP;
12. Truck loading procedures;
13. Lighting and sanitation; and

14. Signatory page for site personnel to acknowledge receipt, understanding, and agreement to comply with the HASP.

B. Prior to the start of any Work, the Contractor shall provide a site specific Spill Prevention, Control and Countermeasures (SPCC) Plan, which meets all the requirements of local, state and federal laws, rules and regulations.

C. Contractor may submit the HASP and SPCC Plan as one comprehensive document or may submit the plans as separate documents.

D. The Contractor shall include in the HASP recent requirements associated with the State's COVID-19 Job Site Requirements as noted at in the Appendix or online at https://www.governor.wa.gov/sites/default/files/Phase%201%20Construction%20COVID-19%20Safety%20Requirements%20%28final%29.pdf.

1.03 POTENTIAL CHEMICAL HAZARDS

A. Site Contaminants

1. The Contractor must provide site workers with Hazard Communication standard information for potential site contaminants (in accordance with WAC 296-843). The Contractor shall ensure that all site workers are aware of and understand this information. Additional information shall also be provided by the Contractor, as necessary, to meet the Hazard Communication Standard and HASP requirements as noted in WAC 296-901-14010 and 296-843. Workers shall be instructed on basic methods or techniques to assist in detecting suspicious material.

B. Potential Exposures Routes

1. Inhalation: Airborne dusts, fibers, particulates, or vapors may be released during site activities.

2. Skin and Eye Contact: Dusts generated during site work activities may settle on the skin or clothing of site workers.. Precautions to prevent skin or eye contact with hazardous materials will be included in the HASP.

3. Ingestion: Inadvertent transfer of site contaminants from hands or other objects to the mouth could occur if site workers eat, drink, smoke, chew tobacco, or engage in similar activities in work areas. This could result in ingestion of site contaminants. Precautions to prevent accidental or inadvertent ingestion of hazardous materials will be included in the HASP.

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

1.04 POTENTIAL PHYSICAL AND OTHER HAZARDS

A. The Work of the Contractor is described elsewhere in these specifications. Precautions to prevent all anticipated physical and other hazards, including heavy equipment, shall be addressed in the HASP.

B. Specific aspects of construction resulting in physical hazards anticipated for this project include, but are not limited to the following:

1. Work over or adjacent to water, presenting hazards of falling into water, hypothermia from exposure to the elements, and drowning;

2. Major hazards associated with moving construction vehicles and trucks, noise, thermal stress, contact with unguarded machines, strains from heavy lifting, and reduced visibility

and communications difficulties in work area; and

3. Operation of equipment, including forklifts, personnel lifts, and related equipment, presenting hazards of entrapment, ensnarement, and being struck by moving parts.

C. Other anticipated physical hazards:

1. Heat stress, such as that potentially caused by impermeable clothing (may reduce the cooling ability of the body due to evaporation reduction);
2. Cold stress, such as that potentially caused during times when temperatures are low, winds are high, especially when precipitation occurs during these conditions;
3. Biological hazards, such as mold, insect stings, or bites, poisonous plants (i.e., poison oak, sumac, etc.); and
4. Trips and falls.

D. Firewatch Procedures

1. A firewatch is implemented to ensure the fire-safety of a building, structure or area in the event of any act (e.g., hot work) or situation instigating an increased risk of fire. The term "firewatch" is used to describe a dedicated person or persons whose sole responsibility is to look for fires within an established area.
2. A firewatch is required when all hot work is being performed.
3. The firewatch is to perform the following functions:
   a. Firewatch personnel are to keep diligent watch for fires in the general area where the work is being performed.
   b. Firewatch personnel are to be familiar with facilities and procedures for sounding an alarm in the event of a fire.
   c. Firewatch personnel are to have fire extinguishing equipment readily available and be trained in its use, including practice on test fires.
   d. Firewatch personnel are to inspect the site prior to hot work activities to ensure that combustibles are removed or covered and that any nearby holes or penetrations in the ground and walls are sealed or covered with fire-safe materials.
   e. Firewatch personnel are to watch for fires in all exposed areas. If a fire is located, firewatch personnel are to sound the evacuation alarm immediately and after that try to extinguish the fire, only when obviously within the capacity of the equipment available.
   f. The firewatch is to be maintained for at least 120 minutes after completion of hot work such as cutting, welding, or other open flame operations, in order to detect and extinguish smoldering and flaming fires. During this time, the work area and other adjacent areas where sparks or flame may have traveled are to be searched for signs of combustion.

PART 2 - PRODUCTS

2.01 SAFETY SIGNAGE

A. The Contractor shall provide signage at strategic locations within the project site to alert jobsite workers and visitors of the work, associated hazards, and required precautions.

2.02 PRODUCTS SPECIFIED FOR HEALTH AND SAFETY

A. Provide the equipment and supplies necessary to support the work as described in the site-specific HASP. Equipment and supplies may include, but are not limited to:

1. All chemicals to be used on site;
2. A hazardous materials inventory and SDSs for the chemicals brought on site;
3. Fencing and barriers;
4. Warning signs and labels;
5. Fire extinguishers;
6. Equipment to support hot work;
7. Equipment to support lockout/tagout procedures;
8. Scaffolding and fall protection equipment;
9. Personal protective equipment (hard hats, foot gear, skin, eye, and respiratory protection);
10. Demolition equipment and supplies;
11. First aid equipment;
12. Spill response and spill prevention equipment; and
13. Field documentation logs/supplies.

PART 3 - EXECUTION

3.01 WORK AREA PREPARATION

A. Contractor shall comply with health and safety rules, regulations, ordinances promulgated by the local, state, and federal government, the various construction permits, and other sections of the Contract Documents. Such compliance shall include, but not be specifically limited to: any and all protective devices, equipment and clothing; guards; restraints; locks; latches; switches; and other safety provisions that may be required or necessitated by state and federal safety regulations. The Contractor shall determine the specific requirements for safety provisions and shall have inspections and reports by the appropriate safety authorities to be conducted to ensure compliance with the intent of the regulations.

B. Contractor shall inform employees, subcontractors and their employees of the potential danger in working with any potentially regulated materials and equipment at the project site.

1. The Contractor shall not proceed with jobsite activities that might result in exposure of employees to hazardous materials until the HASP is reviewed by the Engineer.

C. All Contractor employees expected to work at the jobsite or individuals entering the jobsite shall read the Contractor HASP before they enter the jobsite, and will sign a statement provided by the Contractor that they have read and understand the HASP. A copy of the Contractor’s HASP shall be readily available at the site at all times the work is being performed.

D. The Contractor’s HASP shall be amended as needed to include special work practices warranted by jobsite conditions actually encountered. Special practices could include provisions for decontamination of personnel and equipment, and the use of special equipment not covered in the initial plan.

E. Contractor shall perform whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees of

the Engineer, Engineer’s Representative, and Contractor) and property during the Contract period. This requirement applies continuously and is not limited to normal working hours.

F. The Engineer’s review of the Contractor's performance does not include an opinion regarding the adequacy of, or approval of, the Contractor's safety supervisor, the site-specific HASP, safety program or safety measures taken in, on, or near the job site.

G. Accidents causing death, injury, or damage must be reported immediately to the Engineer and the Port Security Department in person or by telephone or messenger. In addition, promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

H. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing within 24 hours after occurrence, to the Engineer, giving full details of the claim.

3.02 SITE SAFETY AND HEALTH OFFICER

A. Contractor shall provide a person designated as the Site Safety and Health Officer, who is thoroughly trained in rescue procedures, has a minimum current 40-hour HAZWOPER certification (minimum), and trained to use all necessary safety equipment, air monitoring equipment, and gas detectors. The person must be available and/or present at all times while work is being performed, and conduct testing, as necessary.

B. The Site Safety and Health Officer shall be empowered with the delegated authority to order any person or worker on the project site to follow the safety rules. Failure to observe these rules is sufficient cause for removal of the person or worker(s) from this project.

C. The Site Safety and Health Officer is responsible for determining the extent to which any safety equipment must be utilized, depending on conditions encountered at the site.

3.03 SPILL PREVENTION AND CONTROL

A. The Contractor shall be responsible for prevention, containment and cleanup of spilling petroleum and other chemicals/hazardous materials used in the Contractor’s operations. All such prevention, containment and cleanup costs shall be borne by the Contractor.

B. The Contractor is advised that discharge of oil, fuel, other petroleum, or any chemicals/hazardous materials from equipment or facilities into state waters or onto adjacent land is not permitted under state water quality regulations.

C. In the event of a discharge of oil, fuel or chemicals/hazardous materials into waters, or onto land with a potential for entry into waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of all spilled material and used cleanup materials.

D. The Contractor shall, at a minimum, take the following measures regarding spill prevention, containment and cleanup:

1. Fuel hoses, lubrication equipment, hydraulically operated equipment, oil drums and other equipment and facilities shall be inspected regularly for drips, leaks or signs of damage, and shall be maintained and stored properly to prevent spills. Proper security shall be maintained to discourage vandalism.

2. All land-based chemical, oil and products’ storage tanks shall be diked, contained and/or located so as to prevent spills from escaping into the water. Dikes and containment area surfaces shall be lined with impervious material to prevent chemicals or oil from seeping through the ground and dikes.

3. All visible floating sheen shall be immediately contained with booms, dikes or other appropriate means and removed from the water prior to discharge into state waters. All visible spills on land shall be immediately contained using dikes, straw bales or other appropriate means and removed using sand, sawdust or other absorbent material, which shall be properly disposed of by the Contractor. Waste materials shall be temporarily stored in drums or other leak-proof containers after cleanup and during transport to disposal. Waste materials shall be disposed offsite in accordance with applicable local, state and federal regulations.
4. In the event of any oil or product discharges into public waters, or onto land with a potential for entry into public waters, the Contractor shall immediately notify the Port Security at their listed 24-hour response number:
    a. Port Security: 253-383-9472

E. The Contractor shall maintain the following materials (as a minimum) at each of the project sites:
1. Oil-absorbent booms: 100 feet;
2. Oil-absorbent pads or bulk material, adequate for coverage of 200 square feet of surface area;
3. Oil-skimming system; and
4. Oil dry-all, gloves, and plastic bags.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section discloses procedures to follow if unknown regulated materials are encountered.

1.02 NOTIFICATION AND SUSPENSION

A. In the event the Contractor detects the presence of potentially regulated materials not previously identified in this specification, the Contractor shall stop work and immediately notify the Port. Following such notification by the Contractor, the Port shall in turn notify the various governmental and regulatory agencies concerned with the presence of regulated materials, if warranted. Depending upon the type of materials identified, the Port may suspend work in the vicinity of the discovery under the provisions of General Conditions.

1. Following completion of any further testing necessary to determine the nature of the materials involved, the Port will determine how the material shall be managed. Although the actual procedures used in resuming the work shall depend upon the nature and extent of the regulated material, the following alternate methods of operation are foreseen as possible:

a. Contractor to resume work as before the suspension.

b. Contractor to move its operations to another portion of the work until measures to eliminate any hazardous conditions can be developed and approved by the appropriate regulatory agencies.

c. The Port to direct the Contractor to dispose or treat the material in an approved manner.

d. The Port to terminate or modify the Contract accordingly, for unforeseen conditions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. The Work includes the requirements to provide air and noise control measures until Final Completion of the Work.

1.02 SUBMITTALS

A. Prior to Notice to Proceed, the Contractor shall submit a list of equipment to be used on the project and written certification that all equipment on the list and any additional equipment, including Contractor's, subcontractors or supplier's equipment, shall meet the requirements of 3.01 below.

PART 2 - PRODUCTS - NOT USED

PART 3 – EXECUTION

3.01 AIR POLLUTION CONTROL

A. The Contractor shall meet or exceed EPA Tier 2 off-road diesel engine emission standards for off-road equipment >= 25hp and meet or exceed EPA 1994 on-road diesel engine emission standards for on-road equipment except as follows:

1. Equipment being used in an emergency or public safety capacity

B. The Contractor shall not discharge smoke, dust, and other hazardous materials into the atmosphere that violate local, state or federal regulations.

C. No vehicles can idle for more than 5 consecutive minutes, except as follows:

1. Idling is required to bring or maintain the equipment to operating temperature;
2. Engine idling is necessary to accomplish work for which the equipment was designed (i.e. operating a crane); or
3. Idling vehicles being used in an emergency or public safety capacity.

D. The Contractor shall minimize nuisance dust by cleaning, sweeping, vacuum sweeping, sprinkling with water, or other means. Equipment for this operation shall be on the job site or available at all times.

3.02 NOISE CONTROL

A. The Contractor shall comply with all local controls and noise level rules, regulations and ordinances which apply to work performed pursuant to the Contract.

B. All internal combustion engines used on the job shall be equipped with a muffler of a type recommended by the manufacturer.

END OF SECTION

PART 1 - GENERAL

1.01 PERMITS, CODES, AND REGULATIONS

A. The following permits/approvals have been applied for (or are on file) and incorporated into the Contract:

1. State Environmental Policy Act (SEPA) Compliance, Exempt
2. Shoreline Substantial Development Permit Exemption LU20-0052, located in Appendix C
3. City of Tacoma Building Permit BLDCA21-0100, located in Appendix B

B. Conform with the requirements of listed permits and additional or other applicable permits, codes, and regulations as may govern the Work.

C. Obtain and pay fees for licenses, permits, inspections, and approvals required by laws ordinances, and rules of appropriate governing or approving agencies necessary for proper completion of Work (other than those listed under item 1.01.A above and Special Inspections called for by the International Building Code).

D. Conform with current applicable codes, regulations and standards, which is the minimum standard of quality for material and workmanship. Provide labor, materials, and equipment necessary for compliance with code requirements or interpretations, although not specifically detailed in Drawings or specifications. Be familiar with applicable codes and standards prior to bidding.

E. Process through Engineer, request to extend, modify, revise, or renew any of the permits (listed in 1.01.A above). Furnish requests in writing and include a narrative description and adequate Drawings to clearly describe and depict proposed action. Do not contact regulatory agency with requests for permit extensions, modifications, revisions, or renewals without the prior written consent of the Engineer.

1.02 VARIATIONS WITH CODES, REGULATIONS AND STANDARDS

A. Nothing in the Drawings and specifications permits Work not conforming to codes, permits, or regulations. Promptly submit written notice to the Engineer of observed variations or discrepancies between the Contract Documents and governing codes and regulations.

B. Appropriate modifications to the Contract Documents will be made by Change Order to incorporate changes to Work resulting from code and/or regulatory requirements. Contractor assumes responsibility for Work contrary to such requirements if Work proceeds without notice.

C. Contractor is not relieved from complying with requirements of Contract Documents which may exceed, but not conflict with requirements of governing codes.

1.03 COORDINATION WITH REGULATORY AGENCIES

A. Coordinate Work with appropriate governing or regulating authorities and agencies.

B. Provide advance notification to proper officials of Project schedule and schedule revisions throughout Project duration, in order to allow proper scheduling of inspection visits at proper stages of Work completion.

C. Regulation coordination is in addition to inspections conducted by Engineer. Notify Engineer at least 48 hours in advance of scheduled inspections involving outside regulating officials, to allow Engineer to be present for inspections.

PART 2 - PRODUCTS - NOT USED

PART 3 – EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes requirements relating to referenced standards.

1.02 QUALITY ASSURANCE

A. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard of date of issue specified in this section, except where a specific date is established by applicable code.

C. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.

D. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 QUALITY CONTROL FOR COMPLIANCE:

A. The Contractor shall perform such detailed examination, inspection, quality control and assurance of the Work as to ensure that the Work is progressing and is being completed in strict accordance with the Contract Documents. The Contractor shall plan and lay out all Work in advance of operations so as to coordinate all Work without delay or revision. The Contractor shall be responsible for inspection of portions of the Work already performed to determine that such portions are in proper condition to receive subsequent Work. Under no conditions shall a portion of Work proceed prior to preparatory work having been satisfactorily completed. The Contractor shall ensure that the responsible Subcontractor has carefully examined all preparatory work and has notified the Contractor (who shall promptly notify the Port in writing) of any defects or imperfections in preparatory work that will, in any way, affect completion of the Work.

1.02 QUALITY ASSURANCE - CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.

D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform Work by persons qualified to produce required and specified quality.

F. Verify that field measurements are as indicated on shop Drawings or as instructed by the manufacturer.

G. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 TOLERANCES

A. Monitor fabrication and installation tolerance control of Products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.

C. Adjust Products to appropriate dimensions; position before securing Products in place.

1.04 TESTING SERVICES

A. Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities.

1. Neither observations by an inspector retained by the Port, the presence or absence of such inspector at the site, nor inspections, tests, or approvals by others, shall relieve the Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.

B. Necessary materials testing shall be performed by an independent testing laboratory during the execution of the Work and paid for by the Port of Tacoma, unless otherwise specified. Access to the area necessary to perform the testing and/or to secure the material for testing, shall be provided by the Contractor.

C. Testing does not relieve Contractor from performing work to contract requirements.

D. Re-testing required because of non-conformance to specified requirements will be charged to the Contractor by deducting testing charges from the Contract Sum via Change Order.

E. Material testing for initial material approval will be performed by an independent, certified laboratory and paid for by the Contractor. These tests must be dated within six (6) months of the submittal date.

F. Subsequent sampling and testing, required as the work progresses to ensure continual control of materials and compliance with all requirements of the Contract documents, shall be the responsibility of the Port, except as required by other sections of these Specifications.

1.05 MANUFACTURER'S FIELD SERVICES

A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up equipment, test, and adjust and balance equipment as applicable, and to initiate instructions when necessary.

B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer subject to approval of Engineer.

C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes requirements relating to the following:

1. Temporary utilities,
2. Temporary telecommunications services,
3. Temporary sanitary facilities,
4. Temporary Controls: Barriers, enclosures, and fencing, and

1.02 TEMPORARY UTILITIES

A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes. Contractor is responsible for getting required permits and meters from the City of Tacoma.

B. Existing facilities shall not be used.

C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.03 TELECOMMUNICATIONS SERVICES

A. Provide, maintain, and pay for telecommunications services to field personnel at time of project mobilization. It is the Contractor’s responsibility to be able to receive phone calls and emails at the job site.

1.04 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

B. Maintain daily in clean and sanitary condition.

C. At end of construction, return facilities to same or better condition as originally found.

1.05 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for Port's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.

C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.06 FENCING

A. Construction: Contractor's option.

B. Provide 6 ft. (1.8 m) high fence around Contractor laydown area; equip with gates with locks.

1.07 EXTERIOR ENCLOSURES

A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating, and to prevent entry of unauthorized persons.

1.08 TREE AND VEGETATION PROTECTION

A. The Contractor shall carefully protect existing trees and vegetation noted to remain from damage by construction activities.

B. If a tree or vegetation designated for protection is damaged or destroyed in the course of the Work, the Contractor shall replace it with new comparable in species and size as required by the Engineer. Where it is necessary to replace trees or vegetation damaged by construction, the Contractor shall bear all expenses associated with replacement and establishment of the replacement vegetation.

1.09 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary utilities, equipment, facilities, materials, prior to final inspection.

B. Clean and repair damage caused by installation or use of temporary work.

C. Restore existing facilities used during construction to original condition.

D. Restore new permanent facilities used during construction to specified condition.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes requirements relating to the following:

1. Access roads
2. Parking
3. Construction parking controls
4. Maintenance
5. Removal, repair

PART 2 - PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

A. Post Mounted and Wall Mounted Traffic Control and Informational Signs, as specified.

B. Traffic Cones and Drums: As approved by local jurisdictions.

PART 3 - EXECUTION

3.01 ACCESS TO SITE

A. Contractor shall conduct all business through the gate assigned by the Engineer.

1. The Contractor may be required to relocate entry and related work areas as required by Port Operations.

B. Provide unimpeded access for emergency vehicles. Maintain 20 foot (6 m) width driveways with turning space between and around combustible materials.

C. Provide and maintain access to fire hydrants free of obstructions.

3.02 PARKING

A. All Contractor's employee cars and work vehicles will be parked on-site as designated by the Engineer.

3.03 CONSTRUCTION PARKING CONTROL

A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Port operations.

B. Prevent parking on or adjacent to access roads or in non-designated areas.

3.04 MAINTENANCE

A. Maintain traffic and parking areas in a sound condition free of construction equipment, Products, mud, snow, and ice.

B. Maintain existing paved areas used for construction. Promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.05 REMOVAL, REPAIR

A. Repair existing facilities damaged by use, to original condition.

B. Repair damage caused by installation.

3.06 PUBLIC STREET AND ONSITE ROADWAY CLEANING

A. The Contractor shall be responsible for preventing dirt and dust escaping from trucks and other vehicles operating on or departing the project site by sweeping, covering dusty loads, washing truck tires, and all other reasonable methods.

B. In the event that the above requirements are violated and no action is taken by the Contractor after notification of infraction by the Engineer, the Port reserves the right to have the streets, roadways, and other paved surfaces in question cleaned by others and have the expense of the operation charged to the Contractor.

END OF SECTION

PART 1 – GENERAL

1.01 SUMMARY

A. The Work shall consist of planning, installing, inspecting, maintaining and removing Temporary Erosion and Sediment Control (TESC) Best Management Practices (BMPs) to prevent pollution of air and water; and to control, respond to, and dispose of eroded sediment and turbid water during the term of the Contract.

B. These TESC requirements shall apply to all areas associated with the Work, including but not limited to the following:

1. Work areas;
2. Equipment and material storage areas;
3. Staging areas;
4. Discharge points within or adjacent to the work areas that are impacted by stormwater runoff from the site.

C. Acceptance of TESC plans does not constitute an approval of permanent Work or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).

D. Contractor shall read and conform to all requirements set forth in Washington Department of Ecology's (Ecology) Phase I Municipal Stormwater Permit (MS4) for projects less than one acre.

1.02 REFERENCES

A. The rules, requirements, and regulations that apply to this Work include, but are not necessarily limited to the following:

1. Washington Department of Ecology, "Stormwater Management Manual for Western Washington," current version.
2. Washington Department of Ecology Phase I Municipal Stormwater Permit (MS4), current version.
3. Washington State Department of Transportation, current version, Standard Specification M41-10, Division 8-01 Erosion Control and Water Pollution Control.
4. Pierce County Stormwater and Site Development Manual, current version (if applicable).

1.03 SUBMITTALS

A. Prior to the start of any construction activities, a Construction Stormwater Pollution Prevention Plan (SWPPP), as required by the MS4.

1. Contractor shall comply with a Contractor provided project SWPPP.
2. Contractor shall be responsible for updating the project SWPPP during construction to reflect the required changes to BMPs and personnel, as needed, to comply with the MS4 at no additional cost to the Port.

B. A copy of all Contractor site inspection logs at a time interval (e.g., weekly, monthly) specified by the Engineer.

PART 2 – PRODUCTS - NOT USED

PART 3 – EXECUTION

3.01 GENERAL

A. The Port is subject to a Phase I Municipal Stormwater Permit (MS4). The Contractor shall be responsible for compliance with the Department of Ecology Western Washington Stormwater Management Manual, Volume II, Construction Stormwater Pollution Prevention for the duration of the project.

B. 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 as determined by the Engineer.

C. No project discharge of water shall be allowed that exceeds the regulated pollutant levels in Ecology's NPDES permit associated with the Project.

D. Contractor shall be solely responsible for all BMP modifications and upgrades to comply with the MS4 and the requirements of this Section, at no additional cost to the Port.

E. Contractor shall be solely responsible for any damages and fines incurred because of Contractor, subcontractor, or supplier actions in implementing the requirements of this Section.

F. The Contractor shall be solely responsible for schedule impacts incurred because of Contractor, subcontractor, or supplier actions in implementing the requirements of this Section.

3.02 TEMPORARY EROSION AND SEDIMENT CONTROL DEVELOPMENT

A. Contractor shall prepare and submit a site-specific SWPPP prior to initiating on site activities.

1. The SWPPP describes construction activities and sequencing, and the proposed Temporary and Permanent Erosion and Sediment Control measures. If there are any changes to BMPs or personnel on the site, Contractor must update the SWPPP and be prepared to submit the SWPPP to the Port and Ecology upon request.

2. The SWPPP shall consist of planning, installing, inspecting, maintaining, and removing TESC BMPs per Volume II of the Stormwater Management Manual for Western Washington (current version) or equivalent. The BMPs shown in the Drawings are the minimum required to prevent pollution of air and water, to control peak volumetric flow rates and velocity of stormwater, and to control, respond to, and dispose of eroded sediment and turbid water during the term of the Contract.

3. A SWPPP template is available to the Contractor for this purpose. The template was prepared by the Port to meet part of the National Pollution Discharge Elimination System (NPDES) stormwater permit requirements for the project. Contractor may use the applicable Port template to prepare the project SWPPP or prepare their own SWPPP. If the Contractor elects to prepare their own SWPPP, it must meet or exceed the control measures required by Ecology (reference Ecology’s Stormwater Management Manual for Western Washington, current version). The template is located in Appendix A.

4. If Contractor chooses to write a SWPPP separate from the Port-provided SWPPP, it must comply with all of the requirements set forth by the CSGP.

B. Contractor shall develop project-specific TESC BMPs and incorporate them into the SWPPP. Contractor shall address the following issues as part of developing and implementing the BMPs:

1. TESC BMPs must meet the requirements in Ecology’s Volume II of the Stormwater Management Manual for Western Washington (current version) or equivalent.

2. TESC notes and details shown in the Drawings and the information in this Section form a basis of the minimum requirements for a TESC Plan. Contractor shall develop a TESC Plan specific to the construction schedule and proposed means and methods prior to commencing construction activities for the duration of the Project.

C. Contractor shall inspect the existing system and report to the Engineer the levels of existing material prior to installation of TESC BMPs.

3.03 TEMPORARY EROSION AND SEDIMENT CONTROL IMPLEMENTATION

A. Contractor is responsible for implementing and updating the SWPPP including TESC BMPs.

1. Contractor shall inspect the TESC measures daily and maintain these measures to ensure continued proper functioning for the duration of the Project.

2. Contractor will be responsible for documenting TESC site inspections on a weekly basis in areas of active construction and on a monthly basis in areas that have undergone stabilization. Contractor shall keep records of the inspections on site.

3. During the construction period the Contractor shall, at no additional cost to the Port, upgrade and/or maintain TESC measures as needed, based on Contractor means and methods, work sequencing, and changing site conditions (e.g., changes to impervious surface coverage, proximity of work to storm conveyance systems, storm events, etc.). Contractor shall modify these measures for changing site conditions and update the SWPPP to document all modifications made.

B. Contractor shall clean all stormwater components affected by construction debris prior to Work completion, per TESC BMPs for catch basin maintenance. The cleaning process shall not flush sediment-laden water into a downstream system.

C. TESC measures in an inactive area shall be inspected and maintained by the Contractor until the area is permanently stabilized.

D. In the event that additional 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 as ordered by the Engineer, such work shall be performed by the Contractor at its own expense.

E. Contractor shall remove all TESC facilities, install permanent site surfacing improvements and permanent BMPs with minimal disturbance, and shall clean stormwater facilities prior to Work completion.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes the requirements to provide product data under the applicable specification section.

1.02 SUBMITTALS

A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 - PRODUCTS

2.01 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

2.02 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 - EXECUTION

3.01 TRANSPORTATION AND HANDLING

A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

B. Transport and handle products in accordance with manufacturer's instructions.

C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.02 STORAGE AND PROTECTION

A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.

B. Store and protect products in accordance with manufacturers' instructions.

C. Store with seals and labels intact and legible.

D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

E. For exterior storage of fabricated products, place on sloped supports above ground.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

G. Prevent contact with material that may cause corrosion, discoloration, or staining.

H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes requirements relating to the following:

1. Examination, preparation, and general installation procedures
2. Cutting and patching

1.02 SUBMITTALS

A. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:

1. Structural integrity of any element of Project;
2. Integrity of weather exposed or moisture resistant element;
3. Efficiency, maintenance, or safety of any operational element;
4. Visual qualities of sight exposed elements; and
5. Work of the Port or separate Contractor.

B. Project As-Built Documents: Accurately record actual locations of capped and active utilities.

PART 2 - PRODUCTS

2.01 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.

B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.

C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.

D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.

E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 CUTTING AND PATCHING

A. Whenever possible, execute the work by methods that avoid cutting or patching.

B. Perform whatever cutting and patching is necessary to:

1. Complete the work;
2. Fit products together to integrate with other work;
3. Provide openings for penetration of mechanical, electrical, and other services;
4. Match work that has been cut to adjacent work;
5. Repair areas adjacent to cuts to required condition;
6. Repair new work damaged by subsequent work;
7. Remove samples of installed work for testing when requested; and
8. Remove and replace defective and non-conforming work.

C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.

D. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

E. Restore work with new products in accordance with requirements of Contract Documents.

F. Patching:

1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
2. Match color, texture, and appearance.
3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.05 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.

B. Provide special protection where specified in individual specification sections.

C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.06 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This section includes information for progress and final cleaning and restoration of damaged work prior to final inspection.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.01 PROGRESS CLEAN-UP

A. The Contractor shall clean the project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with all requirements for removal of combustible waste materials and debris.
2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
3. Containerize unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    a. Use containers intended for holding waste materials for the type of material to be stored.

B. Site: Maintain Project site free from waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 01 74 19.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration until Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.02 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

a. Clean Project site, yard, and grounds in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.

b. Sweep paved areas broom clean. Remove spills, stains, and other foreign deposits.

c. Rake grounds that are neither planted· nor paved to a smooth, even-textured surface.

d. Remove tools, construction equipment, machinery, and surplus material from Project site.

e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances.

f. Remove debris and surface dust from limited access spaces, including roofs. attics, and similar spaces.

g. Remove labels that are not permanent.

3.03 REPAIR OF WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surface, and touching up with matching materials. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

1. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.

END OF SECTION

PART 1 GENERAL

1.01 SUMMARY

A. This section includes construction waste management requirements.

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 nonhazardous solid wastes resulting from construction, remodeling, alterations, repair, demolition, and land clearing. Includes material that is recycled, reused, salvaged or disposed as garbage. This also includes uncontaminated soils that are designated as geotechnically unsuitable or excess excavation.

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. Time-Based Separation: Collecting waste during each phase of construction or deconstruction that results in primarily one major type of recovered material. The material is removed before it becomes mixed with the material from the next phase of construction.

M. 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:
    1. Salvage
    2. 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
    2. Asphalt
    3. Concrete and concrete masonry units
    4. Ferrous and non-ferrous metals
    5. Field office waste paper, aluminum cans, glass, plastic, and cardboard

C. Hazardous/Dangerous Wastes, contaminated soils and other hazardous materials such as paints, solvents, adhesives, batteries, and fluorescent light bulbs and ballasts shall be disposed of at applicable permitted facilities.

1.05 WASTE MANAGEMENT PLAN

A. Submit to the Engineer a Waste Management Plan narrative in accordance with these specifications. Provide a Waste Management Plan in a format as approved by the Engineer.

B. The Waste Management Plan shall include the following:
    1. 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 approved recycling facility,
        b. Method 2 - Contracting with diversion/recycling hauler to haul recyclable material to an approved recycling or material recovery facility,
        c. Method 3 - Recyclable material reuse on-site, and
        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; and
    6. Description of methods to communicate Waste Management Plan to personnel and subcontractors.

1.06 WASTE MANAGEMENT FINAL REPORT

A. Provide a Waste Management Final Report, in a format approved by the Engineer. The Waste Management Final Report shall list the following for the project:

1. 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 approved 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.

PART 2 - PRODUCTS - 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 Port's property and legally dispose of them.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Substantial Completion procedures
2. Final completion procedures
3. Warranties
4. As-Built Drawings

1.02 ACTION SUBMITTALS

A. Contractor’s List of Incomplete Items: Initial submittal at Substantial Completion.

1.03 PROJECT SUBMITTALS

A. Submittal of Project Warranties

B. Record Drawings

1. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities.

C. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.04 SUBSTANTIAL COMPLETION PROCEDURES

A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request:

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Port unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
2. Submit closeout submittals specified in individual Sections, including specific warranties, operation and maintenance manuals, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
3. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by the Contract Document or Engineer. Label with manufacturer's name and model number where applicable.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request:

1. Terminate and remove temporary facilities from Project site
2. Complete final cleaning requirements

D. Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to the date the work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Notice of Substantial Completion after inspection or will notify Contractor of items, either on the Contractor's list or additional items identified by the Engineer, that must be completed or corrected before notice will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

2. Results of completed inspection will form the basis of requirements for final completion.

1.05 PUNCH LIST (LIST OF INCOMPLETE ITEMS)

A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of Construction.

1. Organize list of spaces in sequential order.

2. Organize items applying to each space by major elements.

1.06 FINAL COMPLETION PROCEDURES

A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete and submit the following:

1. Submittal of all remaining items, including as-built documents, final completion construction photographic documentation, damage or settlement surveys, surveys, and similar final record information and all other submittals defined in the Contract Documents.

2. List of Incomplete Items: Submit copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (Punch List). Copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be complete and ready for final inspection and tests. On receipt of request, the Engineer will either proceed with inspection or notify contractor of unfulfilled requirements.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

C. Execution of all Change Orders.

1.07 FINAL ACCEPTANCE PROCEDURES

A. Submittals Prior to Final Acceptance:

1. Receipt and approval of application for final payment; due within seven (7) days of receipt of Final Completion by the Engineer;

2. Contractor's signed waiver and release of claims on the Engineer provided form;

3. Contractor's submittal of list of all suppliers and subcontractors and the total amounts paid to each on the Engineer provided form; and

4. Contractor's submittal of a list of all subcontractors and suppliers requiring Affidavits of Wages paid on the Contract and certify that each of companies will submit an approved Affidavit of Wages paid to the Port within 30 days.

B. The Engineer will issue the Final Acceptance Memo upon receipt of the required submittals.

PART 2 - PRODUCTS

2.01 CONTRACTOR'S WARRANTY

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

1. Time of Submittal: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit the Port's rights under warranty.
2. Submit Warranties to the Engineer as a submittal, as described in 01 33 00 – Submittal Procedures.
3. Provide additional copies of each warranty in Operation and Maintenance Manuals as described in 01 78 23 – Operation and Maintenance Manuals.

2.02 AS-BUILT DRAWINGS

A. Project As-Built Drawings: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

B. Project As-Built Drawings shall be compiled by the Contractor and submitted to the Engineer for translation to the Record Drawings on a monthly basis.

1. The Project As-Built Drawings will be submitted on paper full-sized (ANSI D) copy.
2. Drawings shall be kept current and shall be done at the time the material and equipment is installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:
    a. Additions – Red
    b. Deletions – Green
    c. Comments – Blue
    d. Dimensions – Graphite
3. Project As-Built Drawings must be complete and accepted by the Engineer before Final Completion is issued.
4. As-Built Drawings shall be in accordance with horizontal and vertical control as shown on the drawings.

PART 3 – EXECUTION

3.01 MAINTENANCE OF AS-BUILT DRAWINGS

A. The Contractor shall maintain at the Project site, in good order for ready reference by the Engineer, one complete copy of the Contract Documents, including Addenda, Change Orders, other documents issued by the Port, a current Progress Schedule, and approved Submittals. The Contractor shall also generate and keep on site all documents and reports required by applicable permits.

B. The Contractor's As-Built Drawings shall be updated to record all changes made during construction. The location of all existing or new underground piping, valves and utilities, and obstructions located during the Work shall be appropriately marked until the Contractor incorporates the actual field dimensions and coordinates into the as-built drawings. The as-built drawings shall be updated at least weekly and before elements of the Work are covered or hidden from view. After the completion of the Work, the as-built drawings shall be provided to the Port.

END OF SECTION

PART 1 – GENERAL

1.01 SUMMARY

A. Operation and Maintenance Manual Submittal

1.02 SUBMITTALS

A. Operation and Maintenance Data:

1. Submit 1 electronic copy of completed documents 14 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Engineer comments. Revise content of all document sets as required prior to final submission.

2. Submit 2 hardcopy and 1 electronic sets of revised final documents in final form by Final Completion.

PART 2 - PRODUCTS

2.01 OPERATION AND MAINTENANCE MANUALS

A. For small equipment and products (such as furnishings or equipment not requiring routine maintenance),the following information (minimum of 2 printed copies, plus one electronic copy on CD) shall be furnished for all items on the Project requiring operational and/or maintenance procedures and for any additional items indicated by the Engineer. Printed information shall be organized by the Contractor into appropriately sized 3-ring binders (no larger than 3”).The binders shall be sized for material approximately 8-1/2 by 11 inches, and the material in the binders shall not protrude beyond the covers. The binder(s) shall be divided with coversheets for each major item of equipment. The cover sheets shall be typewritten to indicate the name, type of equipment, and location(s) within the Project where installed. A neatly typewritten index shall be provided. Electronic information shall be in PDF format (additional formats where specified) and shall be organized with folders and appropriate file names so as to make the information easily accessible:

1. Product Summary:

a. Provide the following information (as applicable, indicate ‘N/A’ where an item does not apply) in Excel spreadsheet format:

1) Description

2) Plan Sheet Number

3) Parcel Number

4) Vendor

5) Manufacturer

6) Warranty – Start Date; Finish Date

7) Purchase Price

2. Maintenance Procedures: These instructions consist of the equipment manufacturer’s recommended steps and schedules for maintaining the product.

3. Specific Information: Where items of information not included in the above list are required, they will be provided as described in the specifications for the equipment.

4. Submittal information, as specified in Section 01 33 00 Submittal Procedures.

5. Warranty Information: This information consists of the name, address, and telephone number of the manufacturer’s representative to be contacted for warranty, parts, or service information.
6. All operation and maintenance information shall be comprehensive and detailed and shall contain information adequately covering all normal operation and maintenance procedures.
7. All information shall be specific for the items of equipment installed on the project. Material not directly applicable shall be removed, omitted, or clearly marked as inapplicable.
8. If manufacturer’s standard brochures and manuals are used to describe operating and maintenance procedures, such brochures and manuals shall be modified to reflect only the model or series of equipment used on this project.
9. Extraneous material shall be crossed out neatly or otherwise annotated or eliminated. It shall be the responsibility of the Contractor to ensure that all operation and maintenance materials are obtained. Material submitted must meet the approval of the Engineer prior to project final acceptance.

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Demolition of spray-polyurethane foam (SPF) coated metal roof panels.
2. Demolition of standing seam metal wall panels and felt underlayment.
3. Demolition of standing seam roof and wall panel clips, trim, and accessories.
4. Demolition of SPF coated metal flashing including hip, rake, ridge, and sidewall trim.
5. Demolition of in-built gutters, copings, and capping of abandoned rainwater leaders.
6. Demolition of existing wall louvers and roof access door.
7. Demolition of miscellaneous roof accessories including guy wire anchors, pipe flashings, bird deterrent wire, fall protection cables, and static roof vents.
8. Select demolition of existing roof underlayment and rigid insulation as needed to install new fall protection anchors and plywood backing.
9. Temporary removal and reinstallation of miscellaneous wall mounted equipment including disconnect switches, satellite dishes, masts, and antennae.
10. Removal and modification of existing mechanical platform components as needed to install and accommodate new metal roofing.
11. Temporary weather protection of existing exposed assemblies during demolition.

1.02 SUBMITTAL

A. Demolition Plan: Show demolition and removal sequences of operations, locations of barriers and enclosures, and temporary work and construction facilities.

1. Indicate primary offloading areas and location of waste containers.
2. Show location and construction of temporary overhead protection at egress points.
3. Illustrate location and construction of any debris containment structures.

B. Water Intrusion Plan: Describe measures taken by the contractor to addresses the prevention, management, and response to water intrusion events and potential mold growth.

1. Provide a 24-hour emergency contact person.
2. Indicate the methods and materials used for temporary weather protection.
3. Outline the steps taken to identify and eliminate the source of moisture/water.
4. Describe the steps for assessing and repairing water damage or impacted materials.
5. Describe the actions taken after a water intrusion event to monitor impacted materials and prevent mold growth.

1.03 COORDINATION

A. Existing Conditions: Contractor to familiarize himself/herself with the requirements of the work and to visit the site to determine the full extent of demolition required. Contractor shall employ all reasonable means of site verification and review of reference documents of the existing facility to make this determination.

B. Coordinate all shutdowns with the Engineer at least one week in advance. Conduct demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities, which will severely impact Owner's normal operations.

C. Ensure all safety and containment measures are in place before commencing work under this section, including overhead protection and debris containment.

D. Coordinate work of this Section with demolition procedures scheduled under other Sections. Selectively demolish as work progresses to maintain building integrity from moisture and structural damage.

E. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces, and installation of new construction to ensure that no water leakage or damage occurs to structure or interior areas of existing building. Do not leave exposed structure overnight. Protect exposed substrate structure with temporary weather protection after each workday.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that demolition activities may safely and appropriately begin.

B. Verify acquisition of required permits and permission form local governing authorities.

3.02 DEMOLITION – GENERAL

A. Conduct operations so as to prevent damage to finished surfaces and portions of building systems to remain in place. Remove abandoned items and extraneous material such as but not limited to; abandoned pipe, conduit, clips, fasteners, and fabrications.

3.03 DEMOLITION – METAL ROOF PANELS AND TRIM

A. Remove SPF coating from existing metal roof panels and flashings to the extent necessary for demolition. Limit removal of existing SPF coatings to the greatest extent possible to minimize airborne debris.

B. Remove metal roof panels by unseaming or cutting the standing seam panel rib and associated roof clips. Remove any remaining roof clip bases once panels are demolished. Contractor may propose other method to be reviewed and approved by the Engineer.

C. Conduct demolition and tear off activities in a manner to protect existing felt paper underlayment and rigid insulation to remain.

D. Visually inspect the exposed roof assembly for signs of damage and water intrusion. Notify the Engineer of any observed water damage prior to covering.

E. Proceed with installation of new coverboard and self-adhered roofing underlayment immediately following removal of metal roof panels.

3.04 DEMOLITION – METAL WALL PANELS AND TRIM

A. Remove metal wall panels and by unseaming or cutting the standing seam panel rib and associated panel clips. Remove any remaining clip bases once panels are demolished. Contractor may propose other method to be reviewed and approved by the Engineer.

B. Demolish all existing metal flashing and trim at roof to wall, sidewall, rake edge and corner conditions. Remove trim at existing roof access door and wall louvers to be demolished.

C. Demolish existing felt building paper beneath removed wall panels. Visually inspect exposed plywood sheathing for signs of damage or water intrusion. Notify the Engineer of any observed water damage prior to covering.

D. Proceed with installation of new weather barriers and membrane flashings per 07 25 00 immediately following removal of existing wall panels.

3.05 DEMOLITION – INBUILT GUTTERS

A. Proceed with demolition of inbuilt gutters once existing roof panels are removed.

B. Sequence demolition of gutters to follow installation of new gutter systems or provide temporary means of roof drainage until new gutters are installed. At a minimum, ensure water runoff is mitigated above the primary East and West building entrances.

C. Demolish existing cap flashing, clips, and cleats. Remove stainless steel liner flashing previously installed over existing gutter. Demolish strainers at rain leader drops and overflow locations.

D. Cap existing rain leaders and overflow drains. Fill existing inbuilt gutter with batt insulation and cover as detailed in the drawings. Install new PT blocking and plywood sheathing flush with adjacent roof deck per 06 10 00.

3.06 DEMOLITION – MISCELLAENOUS ITEMS

A. Wall Louvers: Inspect for and disconnect any existing ductwork prior to removal. Coordinate with the Engineer for interior access and reconnection of existing duct systems.

B. Roof Access Door: Do not begin demolition until new replacement access door is onsite. Demolish existing door and frame, including all hinges, hardware, and interior trim. Proceed with installation of new access door immediately following demolition. Coordinate with the Engineer prior to beginning demolition.

C. Mechanical Platform: Remove and reinstall existing metal grating to access areas beneath the mechanical platform. Demolish existing pipe boot flashings at structural supports and install temporary protection until new metal roofing is complete.

D. The Owner will relocate existing conduit and lineset below the mechanical platform. Coordinate timing and required clearances with the Engineer at least two weeks in advance.

E. Remove and reinstall existing disconnect switches, satellite dishes, masts and antennae. Notify the Engineer at least one week prior to removal. Contractor to provide temporary support as needed to keep all equipment operational.

F. Skylight Counterflashing: Carefully remove existing metal couterflashing along the perimeter of existing skylights to remain. Seal all penetrations at removed fastener locations.

3.07 PROTECTION

A. Install protective coverings and barriers to prevent damage to existing roof and wall assemblies and components to remain.

B. Do not demolish more roofing than can be fully “dried-in” within the same day. For this project, “dried-in” shall be achieved once new coverboard and self-adhered underlayment are installed.

C. Install temporary protection at roof penetrations including pipe vents and roof anchors.

D. Respond to any reported water intrusion events as quickly as possible, but no later than 24 hours. Remove and replace any wet or damaged materials. Ensure all areas are completely dry prior to covering.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Wood framing where rough openings are added or modified.
2. Wood blocking at roof eaves and raised roof curbs.
3. Wood sheathing used to replace or infill existing construction.

1.02 SUBMITTALS

A. Product Data: For each type or product indicated.

1. Treated roof blocking Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that materials comply with requirements.
2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to the project site.
3. Include copies of warranties from chemical treatment manufacturers for each type of treatment.
4. Fasteners, including base metal and coatings.
5. Lumber data, indicating species and grade.

1.03 PRODUCT STORAGE AND DELIVERY

A. Keep material dry at all times. Protect against exposure to weather and contact with damp or wet surfaces.

B. Stack lumber, plywood, and other panels. Place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.01 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive stained or natural finish, mark grade stamp on end or back of each piece.
3. Provide dressed lumber, S4S, unless otherwise indicated.
4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

B. Wood Structural Panels:

1. Plywood: Either DOC PS 1 or DOC PS 2, unless otherwise indicated.
2. Factory mark panels according to indicated standard.

2.02 WOOD-PRESERVATIVE TREATED MATERIALS

A. Preservative Treatment by Pressure Process: AWPA C2 (lumber) and AWPA C9 (plywood).

1. Preservative Chemicals: Do not use treatment containing CCA (chromated copper arsenate) or ammoniacal copper zinc arsenate (ACZA). Acceptable treatments:
    a. Ammoniacal, or amine, copper quat (ACQ).
    b. Copper bis (dimethyldithiocarbamate) (CDDC).
    c. Ammoniacal copper citrate (CC).
    d. Copper azole, Type A (CBA-A).

B. For lumber that is not in contact with the ground and is continuously protected from liquid water, treat according to AWPA C31 with inorganic boron (SBX). Provide treating solution of greater than 98% purity, on an anhydrous basis (AWPA P5).
    1. Acceptable Preservative Chemicals: Sodium octaborate, sodium tetraborate, sodium pentaborate, and boric acid.

C. Kiln-dry material after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.

D. Mark each treated item with treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.

E. Application: Treat items indicated on Drawings, and the following:
    1. Wood nailers, curbs, equipment support bases, blocking, and similar members in connection with roofing or in contact with masonry.
    2. Wood framing members less than 18 inches above grade.

2.03 DIMENSION LUMBER

A. General: Of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.

B. Exterior Framing: Construction, or No. 2 grade and any of the following species:
    1. Mixed southern pine; SPIB
    2. Eastern softwoods; NELMA
    3. Northern species; NLGA
    4. Western woods; WCLIB or WWPA

2.04 MISCELLANEOUS LUMBER

A. Provide miscellaneous lumber for support or attachment of other construction, including the following:
    1. Rooftop equipment bases and support curbs.
    2. Blocking.
        a. Nailers.
    3. Furring.
    4. Grounds.

B. For items of dimension lumber size, provide Standard, Stud, or No. 3 grade lumber with 19 percent maximum moisture content of any species.

C. For concealed boards, provide lumber with 19 percent maximum moisture content and any of the following species and grades:

1. Mixed southern pine, No. 2 grade; SPIB.
2. Eastern softwoods, No. 2 Common grade; NELMA.
3. Northern species, No. 2 Common grade; NLGA.
4. Western woods, Construction or No. 2 Common grade; WCLIB or WWPA.

2.05 PLYWOOD:

A. Plywood Wall and Roof Sheathing: Exposure 1 sheathing.

1. Span Rating: No greater than 16/0 O.C.

B. Replacement sheathing at perimeter of existing soffits: DOC PS 1, Exposure 1 (CDX), C-D Plugged, fire-retardant treated, in thickness, not less than 3/4" inches thick. Comply with Product Standard PS-1.

2.06 MISCELLANEOUS MATERIALS

A. Fasteners:

1. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
2. Power-Driven Fasteners: CABO NER-272.
3. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.

B. Metal Framing Anchors: Made from hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.

1. Research/Evaluation Reports: Provide products acceptable to authorities having jurisdiction and for which model code research/evaluation reports exist that show compliance of metal framing anchors, for application indicated, with building code in effect for Project.
2. Allowable Design Loads: Meet or exceed those indicated per manufacturer's published values determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.

B. Apply field treatment complying with AWPA M4 to cut surfaces of preservative- treated lumber and plywood.

C. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

1. NES NER-272 for power-driven fasteners.

2. Published requirements of metal framing anchor manufacturer.
3. Table R602.3(1), Fastener Schedule for Structural Members, and Table R602.3(2), Alternate Attachments, in 2012 IRC's International Residential Code for One- and Two-Family Dwellings.

D. Framing Standard: Comply with the American Forest & Paper Association’s National Design Specifications for Wood Construction.

E. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Set headers on edge and support on jamb studs.
1. For load-bearing walls, provide double-jamb studs for openings 72 inches and less in width, and triple-jamb studs for wider openings. Provide headers of depth according to Tables R502.5(1) and R502.5(2) in the 2012 IRC's International Residential Code for One- and Two-Family Dwellings.

F. Comply with applicable recommendations contained in APA Form No. E30K, "APA Design/Construction Guide: Residential & Commercial," for types of structural-use panels and applications indicated.

G. Coordinate with the Engineer for removal of existing ductwork prior to modifying rough openings at wall louvers.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. New weather barrier membrane installed at metal wall panel assemblies.
2. Self-adhered membrane flashing at rough openings and copings.

1.02 DEFINITIONS

A. This section includes the following items identified in the drawings as:

1. WRB - Sheet weather barrier used in rainscreen siding assemblies.
2. SAM - Self-adhered membrane flashing used at transitions and terminations.
3. FFSAM - Foil-faced self-adhered membrane used at rough openings.
4. HTSAM - High-temp self-adhered membrane flashings.

1.03 SUBMITTALS:

A. Product Data: For each type of product indicated. Include construction details, material descriptions, and installation requirements.

B. Shop Drawings: Indicate the type and location of different weather barrier products and components to be used.

1.04 QUALITY ASSURANCE:

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

B. Owner may engage a third-party consultant to inspect and observe installation of weather barriers and other items critical to the ongoing integrity building envelope.

1.05 FIELD CONDITIONS:

A. Environmental Limitations: Apply weather barrier materials within range of ambient and substrate temperatures recommended by weather barrier manufacturer.

B. Protect substrates from environmental conditions that affect material performance.

C. Contractor shall provide all necessary means of temporary weather protection during installation of weather barriers.

D. Do not apply weather barrier materials onto damp or wet substrates, or during snow, rain, fog, or other adverse weather events.

E. Do not install self-adhered membranes when ambient temperatures are at or below 41° F for 24 hours before application. Minimum temperature for installation of primer is 41° F.

F. If water penetrates the membrane due to inadequate production, contractor shall cut membranes to inspect damage and replace all damaged material to eliminate all traces of water within the assembly.

G. Do not allow membranes to remain exposed longer than 3 weeks.

PART 2 - PRODUCTS

2.01 WEATHER BARRIER (WRB):

A. Self-adhered, vapor permeable weather and air-barrier sheet installed at new metal panels.
   1. Acceptable Manufacturer/Product:
      a. Henry Company - “Blueskin VP160”
      b. Grace Construction Products – “Perm-A-Barrier VPS”
      c. VaproShield - “WrapShield SA Self-Adhered”
      d. Or approved equal.

B. Primers: Provide manufacturer’s low-VOC primer as necessary for full adhesion over existing plywood substrates.

2.02 SELF-ADHERED MEMBRANE FLASHING (SAM):

A. Self-adhered membrane flashing used at locations noted as “SAM” in the drawings.
   1. Acceptable Manufacturer/Product:
      a. Henry Company - “Blueskin SA”
      b. Grace Construction Products – “Vycor V40”
      c. VaproShield - “WrapFlashing SA Self-Adhered”
      d. Or approved equal.
   2. Performance Characteristics:
      a. Rubberized SBS
      b. 40mil minimum
      c. 6”, 9”, 12”, or 18” width as required for application

B. Primers: Provide manufacturer’s low-VOC primer as necessary for full adhesion.

2.03 FOIL-FACED SELF-ADHERED MEMBRANE FLASHING (FFSAM):

A. For use at rough openings and other locations that integrate with a sealant joint.
   1. Acceptable Manufacturer/Product:
      a. Henry Company – “Blueskin Metal Clad”
      b. Grace Construction Products – “Vycor Aluminum Flashing”
      c. VaproShield – “Vapro-SS Flashing”
      d. Or approved equal.
   2. Performance Characteristics
      a. Rubberized SBS with aluminum or stainless steel facing.
      b. 40mil minimum
      c. 6”, 9”, 12”, or 18” width as required for application

B. Primers: Provide manufacturer’s low-VOC primer as necessary for full adhesion.

2.04 HIGH TEMPERATURE, SELF-ADHERED MEMBRANE FLASHING (HTSAM):

A. High-temp self-adhered membrane used beneath metal copings and other conditions noted as “HTSAM” in the drawings.

1. Acceptable Manufacturer/Product:

a. Henry Company – “Blueskin PE200HT”

b. Grace Construction Products – “Ice & Water Shield HT”

c. Soprema – “Lastobond Shield HT”

d. Or approved equal.

2. Performance Characteristics:

a. Rubberized SBS suitable for use in high-temperature locations.

b. 40mil minimum

c. 18” or 36” widths as required for application.

B. Primers: Provide manufacturer’s low-VOC primer as necessary for full adhesion.

PART 3 - EXECUTION

3.01 EXAMINATION:

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

B. Verify that substrates are sound and free of oil, grease, dirt, excess mortar, or other contaminants.

C. Verify items that penetrate sheathing surfaces are securely installed prior to membrane application.

3.02 PREPARATION:

A. Clean, prepare, and treat substrate according to manufacturer's written instructions. Provide clean, dust-free, dry substrate for self-adhered sheet flashing application.

B. Ensure substrate is continuous, and provide solid backing as required. Unsupported membrane greater than 1/4 inch is unacceptable.

C. Round off sharp metal flashing edges to prevent puncture of self-adhered membrane and underlayment.

3.03 INSTALLATION:

A. General: Install self-adhered sheet flashings and accessory materials according to manufacturer's written instructions, recommendations, and technical bulletins.

B. Apply manufacturer’s primer to substrates at required rate, per manufacturer’s recommendations. Allow primers to dry or “tack” prior to application of membrane. Limit priming to areas that will be covered by air-barrier sheet on same day. Re-prime areas exposed for more than 4 hours or if contaminated by dust or debris.

C. Underlayment Installation: Remove and dispose of release paper layer. Roll onto substrate with a mechanical roller to encourage full contact bond. Use heat gun as required to achieve adequate continuous bond.

D. Lap each sheet or strip in a water-shedding manner with upper sheets overlapping lower sheets in a horizontal fashion. Horizontal laps to be a minimum of 6 inches. Vertical laps to be no less than 3 inches.

E. All laps to be shingle laps unless explicitly detailed otherwise in the drawings. Seal exposed membrane edges with continuous bead of mastic or silicone sealant.

F. Inspect finished installation and repair any punctures, voids, and deficient lapped seams in self-adhered membranes. Slit and flatten any “fishmouths” and blisters.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Standing seam metal roof panels and accessories.
2. Roofing coverboard and self-adhered roofing underlayment.
3. High-temperature, self-adhered roofing underlayment.
4. Miscellaneous roof panel accessories.

1.02 SUBMITTALS

A. Product Data: For each product indicated, submit manufacturer's material and finish data, installation instructions, and general recommendations for roofing applications. Include certification or other data substantiating that materials comply with requirements.

B. Stamped Clip Analysis: Project specific calculations for metal roof assemblies indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by a registered Professional Engineer registered in Washington State.

C. Submit shop drawings showing manner of forming, joining, and securing metal roofing, and pattern of seams. Show expansion joint details and waterproof connections to adjoining work and at obstructions and penetrations.

D. Samples for Verification: For Sheet Metal Roofing, submit Sample 12 inches long by actual panel width, including finished seams. Include fasteners, closures, and other attachments.

E. Installer Qualifications/Certifications.

F. Project specific written sample of special warranties required under this section.

1.03 QUALITY ASSURANCE

A. Installer Qualification: Engage an experienced installer who has complete sheet metal roofing in similar material, design, and extent to that indicated for this project.

B. Industry Standard: Except as otherwise indicated, comply with applicable recommendations and details of "Architectural Sheet Metal Manual" by SMACNA. Conform to dimensions and profiles shown.

C. Installer Certifications:

1. Installer must be approved in writing by the Roof Manufacturer.
2. Certification must be achieved prior to the published bid date.
3. Have successfully installed five metal roofs of comparable size and complexity.

D. The roof panel manufacturer must subscribe to Underwriter's Laboratories "Follow Up Service" assuring continuing product compliance with UL requirements. Shipment packaging of panels and attachment clips must bear classification markings.

1. Manufacturer shall have a minimum of 10 years of experience supplying metal roofing to the regions where the work is to be performed.
2. Comply with current independent testing and certification as specified.
3. Manufacturer shall provide proof of liability insurance for their metal roof system.

E. Source Limitations: Obtain all metal panels and accessories through one source from a single manufacturer. Manufacture all panels and trim at once from the same coil to ensure custom finish consistency.

1. Manufacturer used shall be the same as Metal Wall Panels per section 07 42 13.

1.04 PERFORMANCE REQUIREMENTS

A. Conform to recommendations of “Architectural Sheet Metal Manual”, latest edition issued by Sheet Metal and Air conditioning Contractor’s National Association (SMACNA) insofar as applicable for all metals.

B. Air Infiltration: Panel to meet the following standard when tested in accordance with ASTM E283: with factory-applied continuous sealant – 0.14 cfm/lft. At 20psf.

C. Water Penetration: Panel to meet the following standard when tested in accordance with ASTM E331: with factory-applied continuous sealant, no leakage at 20 psf.

D. Wind Uplift: Provide roof assemblies meeting requirements of UL 580 for Class 90 wind uplift resistance.

E. The metal roofing panels used for this project shall be fabricated, preformed, prefinished and tested by the manufacturer at the manufacturer’s designated facilities prior to being shipped to the site. Panels preformed on site will not be accepted.

F. Preformed metal panels are to meet or exceed the following ASTM Standards:

1. ASTM 1592 for uplift
2. ASTM 1646 and 1680 for air and water infiltration
3. ASTM A79 for base-metal coating

1.05 PRODUCT DELIVERY

A. Protect panels against damage and discoloration.

B. Handle panels with non-marring slings.

C. Store panels above ground, with one end elevated for drainage.

D. Protect panels against standing water and condensation between adjacent surfaces.

E. If panels become wet, immediately separate sheets, wipe dry, and allow to air dry.

F. Painted panels shall be shipped with protective plastic sheeting or a strippable film coating between all panels. Immediately remove protective film once panels are installed.

1.06 WARRANTY

A. Special Weathertight Warranty: Furnish manufacturers full system, “non-prorated” weathertight warranty. Warranty period is 20 years after the date of substantial completion. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the contractor under the Contract Documents. Provide manufacturer’s additional warranty services including:

1. A minimum of three (3) in-progress site inspection visits conducted by the manufacturer’s technical representative to ensure installation complies with warranty requirements. Include a written observation report that notes progress and any deficiencies after each visit.
2. Attendance at pre-construction meeting by manufacturer’s technical representative.

3. Shop drawing review to ensure compliance with warranty requirements.

B. Finish Warranty: Manufacturer's 20-year finish warranty for custom high-build finishes suitable for use in marine applications.

C. Installer Warranty: Warrant panels, flashings, sealants, fasteners, and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

D. All warranty terms and language shall match the sample documents previously reviewed during the submittal phase.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:

1. AEP Span
2. Metal Sales Manufacturing Corporation
3. Taylor Metals
4. Or approved equal.

B. Factory Formed: Panels shall be factory formed using permanent roll-forming equipment. Onsite roll-forming or offsite forming using non-factory equipment is not permitted.

2.02 METAL ROOF PANELS

A. Panel Designation:

1. Basis of Design: AEP Span "Design Span hp"
2. Panel Width: 16-inch, with striations
3. Rib Height: 1-3/4" snap lock profile

B. Base Metal: Thickness and yield strength as required for performance indicated; with aluminum-zinc alloy coating conforming to ASTM A792, Class AZ50.

1. Thickness: 22 gauge

C. Exterior Finish: Custom 3-coat high-build paint finish suitable for use in marine climates.

1. Fluoropolymer Coating: PPG Duranar XL Plus consisting of 0.70-0.80mil primer coat, 0.70-0.80mil color coat, and 0.45-0.55mil clear topcoat.
2. Salt Spray Resistance: Passes 1000 hours in accordance with ASTM B117.
3. Durability: Provide coating which has been field tested under normal range of weathering conditions for minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish, and without chalking in excess of 8 (ASTM D 659), and without fading in excess of 5 NBS units.

D. To be selected from manufacturer's full range of standard colors, including premium and metallic finishes. For purposes of this project, all prefinished metal shall be considered "custom".

E. Factory-Applied Seam Sealant: Furnish roof panels with cold-applied butyl rib sealant.

F. Notching: Provide factory notched panel ends for installation along roof eaves.

2.03 ROOFING COVERBOARD

A. Gypsum Cover Board: Fiberglass mat gypsum roof board with primed face mat to enhance bonding of adhered membranes. Acceptable products and manufacturers include:

1. Georgia Pacific - DensDeck Prime Roof Board
2. USG – Securock Gypsum-Fiber Roof Board
3. Approved equal or as recommended by roof panel manufacturer.

B. Thickness: 1/4” nominal thickness

C. Plated roofing fasteners of sufficient length to fasten through existing rigid roof insulation and plywood sheathing.

2.04 ROOFING UNDERLAYMENT

A. Self-Adhered Roofing Underlayment: High temperature, self-adhering roof waterproofing underlayment suitable for use underneath metal roofing. Acceptable products include:

1. Henry Company – “Blueskin PE200HT”
2. Grace Construction Products – “Ice & Water Shield HT”
3. Approved equal or as recommended by roof panel manufacturer.

B. SBS rubberized asphalt compound, 40mil minimum thickness

C. Provide manufacturer’s low VOC primer for adhesion to gypsum coverboard.

2.05 ACCESSORIES

A. General: Except as indicated as work of another specification section, provide components required for a complete roof system, including trim, copings, fascias, ridge closures, clips, seam covers, battens, flashings, gutters, louvers, sealants, gaskets, and closure strips. Match materials and finishes of roof.

B. Fastener Clip: UL-90 rated 18-gauge Zincalume steel, 40 ksi yield strength, standard low-profile clip suitable for installation over solid substrates.

1. Provide bearing plates when installed over rigid insulation.

C. Sealant tape: Pressure-sensitive 100 percent solids polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic non-sag, nontoxic, non-staining butyl tape supplied by the roof panel manufacturer.

D. Joint Sealant: One-part elastomeric polyurethane sealant for use at trim and closures.

1. Sika – “Sikaflex 1A”
2. Tremco – “Vulkem 116”
3. Or approved equal.

E. Penetration Flashings: EPDM rubber pipe flashing with flexible aluminum band, non-retrofit type, installed at round roof penetrations including existing pipe vents and roof anchors.

1. Acceptable Products:

a. ITW Buildex - “Dektite” Pipe Flashing

b. Oatey – “Master Flash” Pipe Flashing

c. Or approved equal.

2. Diameter as required to suit existing, field verify.

3. Standard color to be selected by Engineer to match roofing.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which sheet metal roofing is to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. Coordinate metal roofing with rain drainage work, flashing, trim, and other adjoining work to provide a permanently leak proof, secure and noncorrosive installation.

3.02 INSTALLATION – COVERBOARD AND UNDERLAYMENT

A. Install gypsum roof coverboard and self-adhered underlayment immediately following demolition of existing metal roof panels. Prior to cover, visually inspect and notify the Engineer if signs of damage or water intrusion are observed.

B. Coordinate installation of new fall protection anchors and other items attached to the roof deck prior to dry-in. Cut gypsum coverboard at new and existing penetrations to provide at least ½” of clearance.

C. Fasten gypsum coverboard through the existing plywood deck using plated roofing screws of sufficient length. Fastening pattern shall be at 24” on center, or no less than 8 fasteners per 4’ x 8 ‘board.

D. Ensure coverboard surfaces are clean, dry, and free of dust and debris prior to installing underlayment. Apply manufacturer’s primer if needed to ensure proper bonding. Do not install underlayment at temperatures below 40 deg F.

E. Install self-adhered roof underlayment parallel with the roof eave beginning from the low point of the roof and working up in a water shedding fashion.

F. At roof eaves, leave at least 12” of backing paper on self-adhered underlayment to allow installation and proper tie-in for new metal flashing and gutter.

G. Lap underlayment no less than 3-1/2” between courses, and 6” at end laps. At roof to wall conditions, continue underlayment at least 8” onto the vertical face of the wall and terminate with a continuous 2” strip of sheet metal.

H. Apply continuous pressure to underlayment to ensure complete bond. Use hand rollers along all laps and seams. Inspect and repair fishmouths or bucking laps.

3.03 INSTALLATION – METAL ROOF PANELS

A. Except as otherwise indicated or specified, comply with recommendations and instructions of the manufacturer of sheet metal being fabricated and installed.

B. Proceed with metal panel installation only once testing and installation of fall protection anchors has been completed per Section 11 01 00 – Fall Protection Systems.

C. Separate dissimilar metals by painting each metal surface in area of contact with a bituminous coating, by applying rubberized asphalt underlayment to each metal surface, or by other permanent separation as recommended by manufacturers of dissimilar metals.

D. Field Measurements and Layout

1. Field verify and measure all roof areas prior to fabrication. Notify the Engineer if measurements differ from those shown on the drawings.

2. Prior to installation, lay out and install metal roof panels in coordination with new metal wall panels. Align roof and wall panel ribs with corners and terminations, or as noted on the elevation drawings. At hip conditions, mirror rib layout along the ridge line.

E. Protection:

1. Coat the back side of metal roofing with bituminous coating where it will be in contact with wood, dissimilar metals, or cementitious construction.

2. Workers who will be walking on the roofing panels are to wear clean, soft soled shoes to avoid damage and discoloration of metal panel finishes.

3. Protect existing construction from damage during installation of new roof panels.

F. Form and fabricated sheets, seams, strips, cleats, valleys, ridges, edge treatments, integral flashings, and other components of metal roofing to profiles, patterns, and drainage arrangements shown and as required for permanently leak-proof construction. Provide for thermal expansion and contraction of the work. Seal joints as shown and as required for leak proof construction. Shop-fabricate all flashing and trim to the greatest extent possible.

G. Sealant-type joints: Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to conceal sealant completely. When ambient temperature is moderate at time of installation (40 deg to 70 deg F) set joint members for 50% movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install at temperatures below 40 deg F.

H. Fabricate and install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves, and avoidable tool marks considering temper and reflectivity of the metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Except as otherwise indicated, fold back sheet metal to from a hem on concealed side of exposed edges.

I. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

3.04 CLEANING AND PROTECTION

A. Remove protective film from exposed surfaces of metal roofing promptly upon installation. Strip with care to avoid damage to finishes.

B. Clean exposed metal surfaces of substances that would interfere with uniform oxidation and weathering.

C. Do not apply touch-up paint to damaged paint areas that involve minor scratches. Panels or flashing that have paint and/or substrate damage shall be replaced as directed by the Engineer.

D. At completion of each workday and at Substantial Completion, sweep panels, flashing and gutters clean. Do not allow fasteners, cuttings, or scraps to accumulate. Remove debris from the project site upon completion or sooner, if directed.

E. Provide final protection in a manner acceptable to installer that ensures that metal roofing is without damage or deterioration at the time of Substantial Completion.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Standing seam metal wall panels and accessories.
2. Miscellaneous wall panel accessories.

1.02 SUBMITTALS

A. Product Data: For each product indicated, submit manufacturer's material and finish data, installation instructions, and general recommendations for roofing applications. Include certification or other data substantiating that materials comply with requirements.

B. Submit shop drawings showing manner of forming, joining, and securing metal roofing, and pattern of seams. Show expansion joint details and waterproof connections to adjoining work and at obstructions and penetrations.

C. Samples for Verification: For Metal Wall Panels, submit Sample 12 inches long by actual panel width, including finished seams. Include fasteners, closures, and other attachments.

D. Installer Qualifications/Certifications.

E. Project specific written sample of special warranties required under this section.

1.03 QUALITY ASSURANCE

A. Installer Qualification: Engage an experienced installer who has complete sheet metal siding in similar material, design, and extent to that indicated for this project.

B. Industry Standard: Except as otherwise indicated, comply with applicable recommendations and details of "Architectural Sheet Metal Manual" by SMACNA. Conform to dimensions and profiles shown.

C. Installer Certifications:

1. Installer must be approved in writing by the manufacturer.
2. Certification must be achieved prior to the published bid date.
3. Have successfully installed five metal roofs of comparable size and complexity.

D. The wall panel manufacturer must subscribe to Underwriter's Laboratories "Follow Up Service" assuring continuing product compliance with UL requirements. Shipment packaging of panels and attachment clips must bear classification markings.

1. Manufacturer shall have a minimum of 10 years of experience supplying metal roofing to the regions where the work is to be performed.
2. Comply with current independent testing and certification as specified.
3. Manufacturer shall provide proof of liability insurance for their metal roof system.

E. Source Limitations: Obtain all metal panels and accessories through one source from a single manufacturer. Manufacture all panels and trim at once from the same coil to ensure custom finish consistency.

1. Manufacturer used shall be the same as Metal Roof Panels per section 07 41 13.

1.04 PERFORMANCE REQUIREMENTS

A. Conform to recommendations of “Architectural Sheet Metal Manual”, latest edition issued by Sheet Metal and Air conditioning Contractor’s National Association (SMACNA) insofar as applicable for all metals.

B. Air Infiltration: Panel to meet the following standard when tested in accordance with ASTM E283: with factory-applied continuous sealant – 0.14 cfm/lft. At 20psf.

C. Water Penetration: Panel to meet the following standard when tested in accordance with ASTM E331: with factory-applied continuous sealant, no leakage at 20 psf.

D. Wind Uplift: Provide roof assemblies meeting requirements of UL 580 for Class 90 wind uplift resistance.

E. The metal wall panels used for this project shall be fabricated, preformed, prefinished and tested by the manufacturer at the manufacturer’s designated facilities prior to being shipped to the site. Panels preformed on site will not be accepted.

F. Preformed metal panels are to meet or exceed the following ASTM Standards:

1. ASTM 1592 for uplift
2. ASTM 1646 and 1680 for air and water infiltration
3. ASTM A79 for base-metal coating

1.05 PRODUCT DELIVERY

A. Protect panels against damage and discoloration.

B. Handle panels with non-marring slings.

C. Store panels above ground, with one end elevated for drainage.

D. Protect panels against standing water and condensation between adjacent surfaces.

E. If panels become wet, immediately separate sheets, wipe dry, and allow to air dry.

F. Painted panels shall be shipped with protective plastic sheeting or a strippable film coating between all panels. Immediately remove protective film once panels are installed.

1.06 WARRANTY

A. Finish Warranty: Manufacturer’s 20-year finish warranty for custom high-build finishes suitable for use in marine applications.

B. Installer Warranty: Warrant panels, flashings, sealants, fasteners, and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

C. All warranty terms and language shall match the sample documents previously reviewed during the submittal phase.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:

1. AEP Span

2. Metal Sales Manufacturing Corporation
3. Taylor Metals
4. Or approved equal.

B. Factory Formed: Panels shall be factory formed using permanent roll-forming equipment. Onsite roll-forming or offsite forming using non-factory equipment is not permitted.

2.02 METAL WALL PANELS

A. Panel Designation:
1. Basis of Design: AEP Span “Design Span hp”
2. Panel Width: 16-inch, with striations
3. Rib Height: 1-3/4” snap lock profile

B. Base Metal: Thickness and yield strength as required for performance indicated; with aluminum-zinc alloy coating conforming to ASTM A792, Class AZ50.
1. Thickness: 22 gauge

C. Exterior Finish: Custom 3-coat high-build paint finish suitable for use in marine climates.
1. Fluoropolymer Coating: PPG Duranar XL Plus consisting of 0.70-0.80mil primer coat, 0.70-0.80mil color coat, and 0.45-0.55mil clear topcoat.
2. Salt Spray Resistance: Passes 1000 hours in accordance with ASTM B117.
3. Durability: Provide coating which has been field tested under normal range of weathering conditions for minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish, and without chalking in excess of 8 (ASTM D 659), and without fading in excess of 5 NBS units.

D. Color: To be selected from manufacturer’s full range of standard colors, including premium and metallic finishes. For purposes of this project, all prefinished metal shall be considered “custom”.

E. Factory-Applied Seam Sealant: Furnish wall panels with cold-applied butyl rib sealant.

2.03 ACCESSORIES

A. General: Except as indicated as work of another specification section, provide components required for a complete roof system, including trim, copings, fascias, ridge closures, clips, seam covers, battens, flashings, gutters, louvers, sealants, gaskets, and closure strips. Match materials and finishes of roof.

B. Weather Barrier: Self-adhering, vapor-permeable weather barrier specified under 07 25 00.

C. Fastener Clip: UL-90 rated 18-gauge Zincalume steel, 40 ksi yield strength, standard low-profile clip suitable for installation over solid substrates.
1. Provide bearing plates when installed over rigid insulation.

D. Sealant tape: Pressure-sensitive 100 percent solids polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic non-sag, nontoxic, non-staining butyl tape supplied by the roof panel manufacturer.

E. Joint Sealant: One-part elastomeric polyurethane sealant for use at trim and closures.
1. Sika – “Sikaflex 1A”

2. Tremco – “Vulkem 116”
3. Or approved equal.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which metal panels are to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION – METAL WALL PANELS

A. Except as otherwise indicated or specified, comply with recommendations and instructions of the manufacturer of sheet metal being fabricated and installed.

B. Separate dissimilar metals by painting each metal surface in area of contact with a bituminous coating, by applying rubberized asphalt underlayment to each metal surface, or by other permanent separation as recommended by manufacturers of dissimilar metals.

C. Field Measurements and Layout

1. Field verify and measure all roof areas prior to fabrication. Notify the Engineer if measurements differ from those shown on the drawings.
2. Prior to installation, lay out and install metal wall panels in coordination with new metal roof panels. Align panel ribs with corners and terminations, or as noted on the elevation drawings.

D. Protection:

1. Coat the back side of metal roofing with bituminous coating where it will be in contact with wood, dissimilar metals, or cementitious construction.
2. Workers who will be walking on the roofing panels are to wear clean, soft soled shoes to avoid damage and discoloration of metal panel finishes.
3. Protect existing construction from damage during installation of new roof panels.

E. Provide for thermal expansion and contraction of the work. Seal joints as shown and as required for leak proof construction. Shop-fabricate all flashing and trim to the greatest extent possible.

F. Sealant-type joints: Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to conceal sealant completely. When ambient temperature is moderate at time of installation (40 deg to 70 deg F) set joint members for 50% movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.

G. Fabricate and install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves, and avoidable tool marks considering temper and reflectivity of the metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Except as otherwise indicated, fold back sheet metal to from a hem on concealed side of exposed edges.

H. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

3.03 CLEANING AND PROTECTION

A. Remove protective film from exposed surfaces of metal roofing promptly upon installation. Strip with care to avoid damage to finishes.

B. Clean exposed metal surfaces of substances that would interfere with uniform oxidation and weathering.

C. Do not apply touch-up paint to damaged paint areas that involve minor scratches. Panels or flashing that have paint and/or substrate damage shall be replaced as directed by the Engineer.

D. At completion of each workday and at Substantial Completion, sweep panels, flashing and gutters clean. Do not allow fasteners, cuttings, or scraps to accumulate. Remove debris from the project site upon completion or sooner, if directed.

E. Provide final protection in a manner acceptable to installer that ensures that metal siding is without damage or deterioration at the time of Substantial Completion.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Prefinished flashing and trim profiles to match standing seam roof and wall panels.
2. Continuous roll formed gutters, gutter straps, endcaps and accessories.
3. PVC downspouts and accessories.

1.02 PERFORMANCE REQUIREMENTS

A. General: Install sheet metal flashing and trim to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing.

B. Custom High-Build Finishes: All prefinished metal flashing and trim provided under this section shall be fabricated with custom high-build finish material suitable for use in marine environments. Prefinished coils shall be procured from the same batch as material for metal roof and wall panels.

1.03 SUBMITTALS

A. Product Data: Submit manufacturer’s material and finish data, installation instructions, and general recommendations for each specified flashing material and fabricated product.

B. Submit shop drawings of each item specified showing layout, profiles, methods of joining, and anchorage details.

1. Shop drawings shall indicate the gauge, finish, and color of all formed profiles.
2. Where used, indicate sealant types.

C. Project specific written sample of special warranty required under this section.

1.04 QUALITY ASSURANCE

A. Installer Qualification: Engage an experienced installer who has complete sheet metal flashing and trim in similar material, design, and extent to that indicated for this project.

B. Custom prefinished coil shall be provided by the same manufacturer as new metal panels.

C. Source Limitations: Obtain all prefinished flat-sheet material and accessories through one source from a single manufacturer. Manufacture all prefinished flashing and trim at once from the same coil as roof and wall panels to ensure custom finish consistency.

1. Prefinished metal flat-sheet material shall be provided by the same manufacturer as Metal Roof Panels per 07 41 13 and Metal Wall Panels per 07 42 13.

1.05 PERFORMANCE REQUIREMENTS

A. Conform to recommendations of “Architectural Sheet Metal Manual”, latest edition issued by Sheet Metal and Air conditioning Contractor’s National Association (SMACNA) insofar as applicable for all metals.

B. Fabricate and install roof edge flashing and copings capable of resisting the following forces according to recommendations in FMG Loss Prevention Data Sheet 1-49: .

1. Wind Zone 2: For velocity pressures of 31 to 45 lbf/sq. ft: 90-lbf/sq. ft. perimeter uplift force, 120-lbf/sq. ft. corner uplift force, and 45-lbf/sq. ft. outward force.

1.06 WARRANTY

A. Finish Warranty: Manufacturer's 20-year finish warranty for custom high-build finishes suitable for use in marine applications.

B. Installer's warranty: warrant panels, flashings, sealants, fasteners and accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

C. All warranty terms and language shall match the sample documents previously reviewed during the submittal phase.

PART 2 - PRODUCTS

2.01 SHEET METALS

A. Coil-Coated Galvanized Steel Sheet: Zinc-coated, commercial-quality steel sheet conforming to ASTM A 755, G90 (ASTM A 755 M, Z 275) coating designation, coil coated with high-performance fluoropolymer coating as specified in "Coil-Coated Galvanized Steel Sheet Finish" Article, with the following minimum properties:

1. Fluoropolymer Coating: Custom 3-coat, high-build "PPG Duranar XL Plus" consisting of 0.70-0.80mil primer coat, 0.70-0.80mil color coat, and 0.45-0.55mil clear topcoat.

2. Prefinished flat-sheet material shall be procured from the same manufacturer and custom coil as used for metal roof and wall panels.

3. Durability: Provide coating which has been field tested under normal range of weathering conditions for minimum of 20 years without significant peel, blister, flake, chip, crack or check in finish, and without chalking in excess of 8 (ASTM D 659), and without fading in excess of 5 NBS units

4. Color: To be selected from manufacturer's full range of standard colors, including premium and metallic finishes. For purposes of this project, all prefinished metal shall be considered "custom".

5. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

6. 22 gauge

B. Galvanized Steel Sheet: Zinc coating, hot dip galvanized, smooth flattened sheet conforming to ASTM A653, G90.

1. 20 gauge, or as indicated on drawings

C. Stainless-Steel Sheet: Conforming to ASTM A240/A240M or ASTM A666, Type 316, dead soft, fully annealed;

1. 2D (dull, cold rolled)

2. 22 gauge, or as indicated on drawings.

2.02 CONTINUOUS GUTTERS

A. Gutters: Fabricate gutters from prefinished 22 gauge galvanized steel coil to match roof panels in continuous roll form lengths, of 50 feet maximum, between expansion joints. Joints in gutters not permitted if gutter length is less than 50 feet long.

1. Acceptable Manufacturers:

a. NorthClad – “GS 700 Continuous Roll Formed Gutter”

b. Or approved equal matching gutter profile above.

2. 7-inch, profile as indicated on drawings.

3. 22 gauge custom 3-coat slit coil to match roof panels.

4. Provide manufacturer accessories needed for a complete system including:

a. Cleats, straps, brackets, endcaps, and downspout drops.

b. Inside and outside corner pieces.

c. Gutter expansion joints and cover pieces.

d. Other items as recommended by the manufacturer.

2.03 PVC PIPE DOWNSPOUTS

A. Downspout Pipe: ASTM D1785, Schedule 40, sizes as indicated.

1. PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D1785 and ASTM D2665.

2. PVC DWV fittings shall conform to ASTM D2665. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer.

B. PVC Elbows: 15 degree angle, and as necessary to complete installation.

C. PVC Cleanouts: Schedule 40, Tee Cleanout with threaded plug. Locate at bottom of downspouts where indicated on the plan.

D. Cast Aluminum Dome Strainers:

1. At downspouts, provide dome cast aluminum dome strainers, sized and profiled to suit gutter and downspouts with scissor expansion anchor that fits into downspout. Wire screen dome strainers are not acceptable.

E. Field Painting: Field paint downspouts, brackets, and accessories per Section 09 91 13.

2.04 MISCELLANOUS MATERIALS AND ACCESSORIES

A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.

B. Screw and Nail Type Fasteners: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened.

1. Gasketed Fasteners: #10 x 1 1/2 painted head hex head screws with separate neoprene gasketed stainless steel washers.

2. Rivets: Stainless steel closed end pop-rivets, length as required.

C. Elastomeric Sealant: ASTM C920, elastomeric polyurethane polymer sealant of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

D. Butyl Sealant: ASTM C1311, single-component, solvent-release butyl rubber sealant, polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited

movement.

E. Non-Curing Butyl Sealant: Non-skinning, non-drying synthetic butyl elastomer sealant suitable for use and adhesion to Kynar/PVDF coated metals.

2.05 FABRICATION, GENERAL

A. Fabricate and install roof edge flashing and copings capable of resisting the following forces according to recommendations in FMG Loss Prevention Data Sheet 1-49: .

1. Wind Zone 2: For velocity pressures of 31 to 45 lbf/sq. ft: 90-lbf/sq. ft. perimeter uplift force, 120-lbf/sq. ft. corner uplift force, and 45-lbf/sq. ft. outward force.

B. General Metal Fabrication: Shop-fabricated work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA “Architectural Sheet Metal Manual” and other recognized industry practices.

C. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Fabricate sheet metal to fit substrates.

D. Comply with material manufacturer instructions and recommendations for shop fabrication and brake-forming of material.

E. Fabricate cleats and attachment devices of sizes as recommended by SMACNA's "Architectural Sheet Metal Manual" and by FMG Loss Prevention Data Sheet 1-49 for application, but not less than thickness of metal being secured.

F. Form exposed sheet metal work in 10' lengths without excessive oil-canning, buckling and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.

G. Expansion Provisions: Provide for thermal expansion of exposed sheet metal work. Space movement joints at maximum 10 feet intervals with no joints allowed within 24 inches of corner or intersection. Where lapped or bayonet-type expansion joints as detailed cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic (concealed within joints).

H. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1 1/2 inches, except where pre-tinned surfaces would show in finished work.

I. Sealant Joints: Where moveable non-expansion type joints are indicated or required for proper performance of work, form metal to provide for proper installation of urethane sealant in compliance with SMACNA standards.

J. Separate metal from non-compatible material or corrosive substrates by coating concealed surfaces at locations of contact with asphalt mastic or other permanent separation as recommended by manufacturer.

K. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of sheet metal exposed to public view.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which sheet metal flashing and trim are to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have been corrected.

B. Field verify all existing conditions prior to fabrication and sheet metal items.

3.02 INSTALLATION – GENERAL

A. Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units, conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams, laid away from southerly prevailing weather, which will be permanently watertight and weatherproof.

B. Install exposed sheet metal work that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashings and trim to fit substrates and to result in waterproof and weather-resistant performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.

C. Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.

1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
3. Space cleats not more than 12 inches apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
4. Install sealant tape where indicated.
5. Torch cutting of sheet metal flashing and trim is not permitted.
6. Do not use graphite pencils to mark material surfaces.

D. Space movement joints at maximum of 10 feet with no joints within 24 inches of corner or intersection.

E. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.

F. Use lapped expansion joints only where indicated on Drawings.

G. Fasteners: Use fastener sizes that penetrate substrate not less than recommended by fastener manufacturer to achieve maximum pull-out resistance.

H. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

I. Seal joints as required for watertight construction. Prepare joints and apply sealants to comply with requirements in Section 07 92 00 "Joint Sealants."

1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is moderate, between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher

ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.

2. Prepare joints and apply sealants to comply with requirements of 07 92 00.

J. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pretin edges of sheets with solder to width of 1-1/2 inches; however, reduce pre-tinning where pre-tinned surface would show in completed Work.

1. Do not solder prefinished metallic-coated sheet.

2. Do not use torches for soldering.

3. Heat surfaces to receive solder, and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.

4. Stainless-Steel Soldering: Tin edges of uncoated sheets, using solder for stainless steel and acid flux. Promptly remove acid flux residue from metal after tinning and soldering. Comply with solder manufacturer's recommended methods for cleaning and neutralization.

3.03 ROOF DRAINAGE INSTALLATION

A. General: Install sheet metal roof-drainage items to produce complete roof-drainage system according to cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.

B. Continuous Gutters: Join sections with riveted and sealed joints or with lapped joints sealed with sealant. Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchored gutter brackets spaced not more than 18 inches apart. Provide end cap closures and seal watertight with sealant. Slope to downspouts.

C. Downspouts: Join sections with PVC primer and pipe adhesive.

1. Provide a minimum of two (2) brackets per downspout as detailed in the drawings.

2. Locate brackets within the first 24” of each end or elbow. Provide intermediate brackets spaced at no more than 10’-0” on center.

3. Connect downspouts to existing rainwater planters located on site, or as indicated on the drawings.

4. Field paint all downspouts and accessories per Section 09 91 13.

3.04 CLEANING AND PROTECTION

A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes, and promptly apply match touch-up paint to surface scratches and cut "raw" edges prior to exposure to weather.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Exterior wall louvers and reconnection/modification of existing ductwork.
2. Roof access door.
3. Static roof vents.
4. Polycarbonate dome skylight.

1.02 SUBMITTALS

A. Product Data: For each product indicated, submit manufacturer's material and finish data, installation instructions, and general recommendations for use in roof or wall applications.

1. Exterior wall louvers.
2. Roof access door.
3. Static roof vents.
4. Polycarbonate dome skylight.

B. Shop Drawings: Submit project specific shop drawings for the following items. Drawings shall include field verified dimensions and other relevant information needed to "match existing" construction where indicated.

1. Exterior wall louvers. Indicate field verified dimensions, depth, and open area.
2. Roof access door. Indicate new door size and field verified rough opening dimensions.
3. Polycarbonate dome skylight. Indicate skylight size using field verified dimensions of existing roof curb to remain.

1.03 WARRANTY

A. Installer Warranty: Warrant roof and wall accessories against defective materials and/or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

PART 2 - PRODUCTS

2.01 EXTERIOR WALL LOUVERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:

1. Ruskin
2. Greenheck
3. Architectural Louvers
4. Or approved equal.

B. Stationary Drainable Blade Wall Louvers: Provide wall louvers in size, material, and function to match existing. Field verify all characteristics prior to order. For bidding purposes, assume:

1. Ruskin "ELF6375DX"
2. 6 inches

3. 0.125 inch
4. Extruded aluminum, Alloy 6063-T6
5. 0.125 inch
6. Extruded aluminum, Alloy 6063-T6
7. 57% open area
8. Standard mill finish for custom post-finishing by others.
    a. Custom Finish: 3-coat baked on Kynar finish in color to match wall panels.
    b. Acceptable applicators include:
        1) Artisan Finishing Systems, Arlington WA – (360) 658-0686
        2) Accurate Industries Inc., Auburn WA – (253) 736-2087
        3) Or others as recommended by louver manufacturer.
9. Louver Sizes: Field verified to match existing rough opening dimensions, see louver schedule on drawings for additional information. For bidding purposes, assume:
    a. 30” wide by 24” height
    b. 48” wide by 24” height
    c. 16” wide by 16” height
    d. 16” wide by 16” height
    e. 16” wide by 16” height
10. Accessories:
    a. Bird Screen: 5/8” x 0.040 expanded aluminum mesh, with removable frame.
    b. Attachment Angle: 1/8” x 1”extruded aluminum angle, 6061-T6 extruded.

2.02 ROOF ACCESS DOOR

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:
    1. Nystrom
    2. Babcock-Davis
    3. Or approved equal
B. Exterior Access Doors and Frames: Weatherproof assembly with flanged frame and extruded door gaskets. Custom fabricated, dimensions as needed to fit existing rough opening.
    1. Nystrom “XTL” Exterior Access Door with locking handle.
    2. Door Size: Field verify to match existing rough opening, including perimeter flange.
        a. For bidding purposes assume opening dimension of 32” wide x 48” tall.
    3. Door Material: Stainless-steel (0.025 inch), 24 gauge, 2B Finish.
    4. Insulation: 1.6” (R-11) polyurethane.
    5. Frame: 0.080 inch 6063-T5 extruded aluminum.

6. Flange: Exposed flange.
7. Gasketing: Continuous EPDM, self-adhesive.
8. Latch and Lock: Cam latch operated by handle with keyed lock in handle.
    a. Door to have two handles, including one locking handle with mortise prep.
9. Provide manufacturer's standard mill finish or primer coat for field painting per Section 09 91 13.

2.03 STATIC ROOF VENTS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:
    1. Famco
    2. Airolite
    3. Or approved equal
B. Static Roof Vent: Curb mounted roof/attic vent in size and performance to match existing. Refer to drawings for additional integration with new metal flashings. For bidding purposes, assume:
    1. Famco "JVO38"
    2. Material: Galvanized steel, 29 gauge.
    3. Finish: To be selected from manufacturer's standard color range.
    4. Open Area: 38 square inches

2.04 POLYCARBONATE DOME SKYLIGHT

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering materials that may be incorporated into the work include:
    1. Velux America, LLC
    2. CrystaLite, Inc.
    3. Or approved equal
B. Polycarbonate Dome Skylight: Thermoformed dome, curb mounted fixed skylight utilizing extruded aluminum perimeter frame for installation on existing skylight curb.
    1. VELUX Model CT2, Custom Dome Sklyight
    2. Thermoformed Dome: Outer dome formed from smooth sheet and not prismatic in order to transmit all incident daylight through outer dome. Provide polycarbonate outer domes with integral UV blocking cap layer that prevents long-term yellowing, and insures material strength and performance stability.
        a. Double dome: Outer dome clear polycarbonate with UV blocking cap layer.
        b. Inner dome prismatic polycarbonate, clear color.
    3. Aluminum Frame Counterflashing: Extruded aluminum, grade 6063-T5, 0.06 inch (1.5 mm) thick with manufacturer's standard powder coat finish. Counter-flashing frames completely welded in corners and counter flashes the curb to a minimum of 1.625 inches (41 mm). Includes a 0.75" (19 mm) continuous ledge for ease of shipping and manual handling.

4. Unit Size: Custom field verified dimension to match existing skylight curb.
    a. For bidding purposes assume 60” x 60” unit dimensions.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions under which metal panels are to be installed and verify that work may properly commence. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION – EXTERIOR WALL LOUVERS

A. Field verify and provide louvers to match existing dimensions and characteristics, including frame depth and open area.

B. Provide custom baked-on Kynar finish to match metal wall panels after fabrication. See paragraph 2.01 B-8.a in this specification for local applicators and additional information.

C. Coordinate removal and re-installation of existing ductwork with the Engineer prior to demolition. Salvage existing transition sleeves for re-installation of existing ductwork.

D. Do not remove existing louvers until the new products are onsite and ready to be installed.

E. At locations indicated on the louver schedule, modify the existing rough opening so that the sill is raised a minimum of 8” above new sheet metal roof to wall flashing. Provide new stud framing and sheathing infill per 06 10 00. Repair all existing finishes impacted by construction.

F. Flash openings with new self-adhered membrane and metal flashing as detailed in the drawings. Install foil-faced membrane at locations in direct contact with new sealant joints.

G. Install new extruded aluminum angle at the inside perimeter of the rough opening for attachment of new louver frames. Provide shims beneath the sill pan, and as needed at along the perimeter to maintain at least ½” clearance between the frame and rough opening.

H. Install louvers plumb, level, in plane of wall, and in alignment with adjacent work.

I. Install new sealant and backer-rod as specified in Section 07 92 00.

3.03 INSTALLATION – ROOF ACCESS DOORS

A. Field verify and provide new roof access door to fit existing rough opening. Ensure order dimensions account for depth of the new extruded perimeter flange as detailed in the drawings.

B. Do not proceed with removal of existing access door until the new door is onsite and ready to be installed.

C. Install new wood blocking along the opening per 06 10 00, size as needed to accommodate new perimeter door flange. Set blocking depth to align with edge of existing interior finishes.

D. Flash existing rough opening with new self-adhered membrane and sheet metal flashing as detailed in the drawings. Sequence installation of new metal flashing with adjacent roof and wall panels.

E. Maintain and protect existing interior finishes to the greatest extent possible. Patch and repair existing finishes impacted by new construction.

F. Confirm door has sufficient swing clearance from adjacent metal wall panels and trim.

G. Install new access door and attach to new blocking along the perimeter frame. Set exposed flange in heavy bed of non-skinning butyl sealant.

H. Coordinate with the Engineer for installation of new mortise in locking door handle.

3.04 INSTALLATION – STATIC ROOF VENTS

A. Field verify and provide new roof vents to match existing size, dimension, and open area.

B. Demolish existing roof vents while maintaining existing wood blocking to remain.

C. Install new metal roofing per Section 07 41 13. Coordinate layout of metal roofing so that existing roof vents are centered between standing seam ribs. Do not penetrate standing seam ribs at existing roof vent locations.

D. Install new underlayment, backpan flashing, and metal roof panels. Extend new metal flashing full height onto the face of existing curb and terminate as detailed in the drawings.

E. Integrate new roof vent with prefinished cap flashing as illustrated in the drawings. Fasten to existing curb with painted gasket fasteners along vertical flashing legs only.

3.05 INSTALLATION – POLYCARBONATE DOME SKYLIGHT

A. Field verify existing curb dimensions at demolished skylight prior to ordering. Install new blocking as detailed in the drawings per Section 06 10 00.

B. Install metal flashing and stainless steel cricket at uphill side of skylight per Section 07 62 00.

C. Install unit skylights in accordance with manufacturer's written instructions and approved shop drawings. Coordinate installation of units with installation of substrates, air and vapor retarders, roof insulation, roofing membrane, and flashing as required to ensure that each element of the Work performs properly and that finished installation is weather tight.

D. Anchor unit skylights securely to existing skylight curb only once installation of new metal flashing and custom fabricated cricket have been installed.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Exterior joint sealants.

1.02 PERFORMANCE REQUIREMENTS

A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

1.03 SUBMITTALS

A. Product Data: For each sealant and backing material.

B. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for each product exposed to view.

1.04 PROJECT CONDITIONS

A. Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer.

2. When joint substrates are wet.

3. Where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.

4. When contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

5. Coordinate installation of sealant with interfacing and adjoining construction to provide a weathertight and durable installation.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in manufacturer's unopened packages or bundles with labels intact.

PART 2 - PRODUCTS

2.01 MATERIALS: GENERAL

A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.

B. Colors of Exposed Joint Sealants: As selected by Engineer from manufacturer's full range.

C. Elastomeric Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

2.02 URETHANE JOINT SEALANTS - EXTERIOR

A. One-part Urethane Sealant: Manufactures standard nonsag, paintable, nonstaining polyurethane sealant comply with TT-S-230C, Type II, Class A and ASTM C 920, Type S, Grade NS, Class 25, Use NT, M, A and O.

B. Usage: Exposed and concealed exterior joints.

C. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to:

1. Pecora Corporation; Model Dynatrol 1XL.
2. Tremco; Model Dymonic.or Model Vulkem 921 or Model Vulkem 911
3. Chemrex/Sonneborn; Model NP-1.
4. Or Approved Equal

2.03 JOINT SEALANT BACKING

A. General: Provide sealant backings of material and type that are non-staining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Backer Rod: ASTM C 1330, Type C (closed-cell material with a surface skin), type O (open-cell material), or type B (bicellular material with a surface skin), as recommended by joint sealant manufacturer for joint application indicated, and of size and density to control sealant depth.

C. Bond-Breaker Tape: Polyethylene or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.04 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates where primer is recommended by joint sealant manufacturer, or as determined from preconstruction joint sealant substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint sealant performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint sealant manufacturer's written instructions and the following requirements:

1. Remove foreign material that could interfere with adhesion of joint sealant, including dust, dirt, loose paints, old joint sealants, oil, grease, water, and frost.
2. Clean porous joint substrate surfaces by brushing, grinding, and mechanical abrading to produce a clean, sound substrate capable of developing bond with joint sealants. Remove loose particles after cleaning by vacuuming or blowing out joints compressed air. Porous joint substrates include concrete, masonry and unglazed surfaces of ceramic tile.

3. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include, metal, glass, porcelain enamel and glazed surfaces of ceramic tile.

B. Joint Priming: Prime joint substrates, where recommended by joint sealant manufacturer, or based on preconstruction joint sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's written instructions. Confine primers to areas of joint sealant bond; do not allow spillage or migration onto adjoining surfaces.

3.03 INSTALLATION OF JOINT SEALANTS

A. General: Comply with joint sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.

B. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

C. Install backer rod to support sealants during application and at position required to produce joint depth appropriate for joint width as recommended by sealant manufacturer, and as indicated on drawings.

1. Do not leave gaps between ends of backer rod.

2. Do not stretch, twist, puncture, or tear backer rod.

3. Remove and replace backer rod that is wet.

D. Install bond-breaker tape behind sealants where backer rod is not used when indicated on drawings, or when recommended by sealant manufacturer.

E. Place sealants so they directly contact and fully wet joint substrates. Completely fill recesses in each joint configuration. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

F. Sealing Joints: Small openings, cracks, gaps and non-insulated cavities can be significant sound leaks and affect sound test results. Give special attention to caulking where called for, alignment of building elements and treatment of gaps and cavities

3.04 CLEANING

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.05 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. Field application of high performance aliphatic acrylic polyurethane coatings.

B. Items to be receive special coatings include:

1. PVC downspouts, brackets, and accessories per section 07 62 00.
2. Exterior rooftop access door per section 07 72 00.

1.02 SUBMITTALS

A. Provide product data for each coating system specified, including block fillers and primers.

1. Provide the manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
2. List each material and cross-reference the specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.

B. Samples for Verification Purposes: Provide samples of each color and material to be applied, with texture to simulate actual conditions, on representative Samples of the actual substrate.

1. Provide stepped Samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing Samples for review. Resubmit until required sheen, color, and texture are achieved.
2. Provide a list of materials and applications for each coat of each sample. Label each sample for location and application.

1.03 QUALITY ASSURANCE

A. Applicator Qualifications: Engage an experienced applicator who has completed coating system applications similar in material and extent to that indicated for this Project.

B. Single-Source Responsibility: Provide primers and undercoat material produced by the same manufacturer as the finish coats for each type of coating. Use only thinners recommended by the manufacturer and only within recommended limits.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:

1. Product name or title of material.
2. Product description (generic classification or binder type).
3. Manufacturer's name, stock number and date of manufacture.
4. Contents by volume, for major pigment and vehicle constituents.
5. Thinning instructions.
6. Application instructions.
7. Color name and number.
8. Handling instructions and precautions.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers used in storage in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and applying the coatings.

1.05 PROJECT CONDITIONS

A. Apply water-based paints only when the temperature of surfaces to be coated and surrounding air temperatures are between 45 and 95 deg F (7 and 35 deg C).

B. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dewpoint; or to damp or wet surfaces.

1. Allow wet surfaces to dry thoroughly and attain the temperature and conditions specified before proceeding with or continuing the coating operation.

2. Painting may continue during inclement weather if surfaces and areas to be coated are enclosed and the temperature within the area can be maintained within limits specified by the manufacturer during application and drying periods.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance, provide products by one of the following:

1. Tnemec Company, Inc.

2. Or approved equal

2.02 SPECIAL COATING MATERIALS, GENERAL

A. Material Compatibility: Provide primers, finish coat material, and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Material Quality: Provide the highest grade of the various coatings as regularly manufactured by acceptable coating manufacturers. Materials not displaying manufacturer’s identification as a best-grade product will not be acceptable.

1. Proprietary Names: Use of manufacturer’s proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer’s material data and certificates of performance for proposed substitutions.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas and conditions, with the Applicator present, under which coating will be performed for compliance with application requirements.

1. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.

2. Start of application will be construed as the Applicator’s acceptance of surfaces and conditions within a particular area.

B. Coordination of Work: Review other Sections in which coatings are provided to ensure compatibility of the total systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

1. Notify the Engineer of anticipated problems using the coatings specified over substrates primed by others.

3.02 PREPARATION

A. General: Remove hardware and hardware accessories, plate, machined surfaces, and similar items already installed that are not to be coated. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.

B. Cleaning: Before applying coatings or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease before cleaning.

1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

C. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.

1. Provide barrier coats over incompatible primers or remove and reprime. Notify the Engineer in writing of problems anticipated when using the specified finish-coat material with substrates primed by others.

a. Prepare surfaces to be painted in accordance with SSPC-SP3 Surface Preparation (hand tools).

2. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, lose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with the Steel Structures Painting Council's (SSPC) recommendations.

a. Blast-clean steel surfaces as recommended by the coating system manufacturer and according to requirements of SSPC-SP 10.

b. Treat bare and sandblasted or pickled-clean metal with a metal-treatment wash coat before priming.

c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, solvent clean, and touch up with the same primer as the shop coat.

D. Materials Preparation: Mix and prepare paint materials according to the coating manufacturer's written instructions.

1. Maintain containers used in mixing and applying coatings in a clean condition, free of foreign materials and residue.

2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.

3. Use only thinners approved by the manufacturer and only within recommended limits.

E. Tinting: Tint each undercoat a lighter shade to facilitate identifying each coat where multiple coats of the same materials are to be applied. Tint undercoats to match the color of the finish coat but provide sufficient difference in shade to undercoats to distinguish each separate coat.

3.03 APPLICATION

A. General: Apply special coatings by brush, roller, spray, squeegee, or other applicators according to manufacturer's written instructions. Use brushes best suited for the material being applied. Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required

1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable coating film.

2. Coating colors, surface treatments, and finishes are indicated in the Schedules.

3. Provide finish coats that are compatible with primers used.

4. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions sand between applications.

5. If undercoats or other conditions show through the final coat, apply additional coats until the cured film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

B. Scheduling Coating: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for coating as soon as practicable after preparation and before subsequent surface deterioration.

1. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being coated.

2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.

3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.

D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

E. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to the material required to be coated or finished that has not been prime coated by others.

1. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects caused by

insufficient sealing.

F. Brush Application: Brush-out and work brush coats into surfaces in an even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Neatly draw glass lines and color breaks.

1. Apply primers and first coast by brush unless the manufacturer's instructions permit using mechanical applicators.

G. Mechanical Applications: Use mechanical methods to apply coating when permitted by the manufacturer's recommendations and governing regulations.

1. Wherever using spray application, apply each coat to provide the equivalent hiding of brush-applied coats. Do not double-back with spray equipment building-up film thickness of two coats in one pass, unless recommended by the manufacturer.

H. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or recoat work not complying with requirements.

3.04 PROTECTION

A. Protect work of other trades, whether being coated or not, against damage from coating operation. Correct damage by cleaning, repairing or replacing, and recoating, as approved by Engineer. Leave in undamaged condition.

B. Provide "Wet Paint" signs to protect newly coated finishes. Remove temporary protective wrappings provided by others to protect their work after completing coating operations.

C. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

3.05 SPECIAL COATING SCHEDULE

A. Provide the following coating systems for substrates indicated.

B. PVC Downspouts and Exterior Access Doors:

1. High-Performance, Polyamide-Epoxy Coating System: Provide two coats of Aliphatic polyester polyurethane finish.

a. Primer: Tnemec Series 73 "Endura-Shield": 2-3 mils DFT

b. Finish Coats: Tnemec Series 73 "Endura-Shield": 2-3 mils DFT

c. Color: Custom mixed color to be selected by the Engineer.

END OF SECTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. New Post and Wire Grid Bird Deterrent System.

1.02 SYSTEM DESCRIPTION

A. Post and Wire Bird Deterrent: wire grid bird deterrent system consisting of stainless steel wire spanning between posts at a regular grid spacing. Components and accessories to be by a single manufacturer.

1.03 SYSTEM DESIGN RESPONSIBILITY

A. Bird Deterrent System: The layout indicated on the Drawings is conceptual only and intended only to show certain design requirements and minimum quantities of posts and wires. Provide the required elements for a complete and functional bird deterrent system.

1.04 SUBMITTALS

A. Submittals:

1. Product Data: Submit current product literature describing the proposed products with adequate specificity to determine compliance with the specifications. Where product data sheets, with multiple products, circle or otherwise indicate proposed products.
2. Shop Drawings - Dimensioned plan layout showing relevant roof conditions, dimensions, system components and general layout.
3. Sample warranty language.
4. Installer Certification.

1.05 PRODUCT DELIVERY STORAGE AND HANDLING

A. Delivery: Deliver materials in the manufacturer’s original sealed and labeled containers and in quantities required to allow continuity of application.

1.06 QUALITY CONTROL

A. Certifications

1. Materials under this section shall be furnish and installed by a manufacturer certified installer.

B. Inspections: Manufacturer’s representative to verify installation is in accordance with manufacturer’s warranty requirements

1.07 WARRANTY

A. Warranty: Provide manufacturer’s 10-year material warranty on the system components, except for wires.

PART 2 - PRODUCTS

2.01 BIRD DETERRENT SYSTEM

A. Manufacturers:

1. Seagull Control Systems
2. Bird Barriers
3. Bird-B-Gone

B. Post and Wire System:

1. Posts: Heavy duty aluminum or stainless steel, 7 feet high. Hole and slot with nylon plug for connecting the wire arrays.
2. Post Mounting Brackets: Provide custom fabricated welded aluminum brackets with welded aluminum pole holder with stainless steel set screw, fabricated by the manufacturer. Coordinate the required diameter and length of aluminum rods to fit within the manufacturer’s standard heavy-duty posts.
3. Guy Wire Mounting Brackets: Provide custom fabricated welded aluminum brackets as needed, fabricated by the manufacturer.
4. Grid Wire: high-visibility fluorescent polyethylene twine interwoven with stainless steel strands; with nickel-coated copper crimps
   a. Bird Barriers “Fluorescent Grid Twine w/ SS”
   b. Or approved equal.
5. Accessories, Fasteners and Miscellaneous: Provide as required for installing a complete and functional bird deterrent system.

C. Materials: All materials shall be corrosion-resistant in a marine environment. Uncoated galvanized steel is not permitted. Uncoated stainless steel shall be Type 316 to withstand corrosion in salt air.

PART 3 - EXECUTION

3.01 COORDINATION

A. Review, coordinate and accommodate work of other trades that interface with, affect or are affected by the work of this section.

B. Field Measure roofing area where bird deterrent system is to be installed. Verify the depth and condition for each installation surfaces.

3.02 INSTALLATION

A. Install bird deterrent system in accordance with the manufacturer’s installation requirements.

B. When possible avoid roof penetrations. When direct attachment to roofing system is required, coordinate with roofing manufacture, and provide proper attachment, flashing and sealing per roofing manufacturer's instructions.

3.03 WORKMANSHIP

A. Bird control devices shall be installed using the best workmanship in conformance with manufacturer's best practices.

B. Any part of the bird control devices installed with improper or poor workmanship shall be removed and replaced at Contractor's expense.

3.04 FIELD QUALITY CONTROL

A. Contractor Quality Control: Employ / assign quality control personnel to monitor the work of this section for conformance to the requirements of this section and to good construction practices.

B. Contractor is solely responsible for managing and controlling the quality of the work and conformance with the requirements of this section.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Work in this section includes:

1. New permanent fall protection anchors installed over existing plywood roof deck.
2. Supplemental plywood backing attached to existing roof structure at each anchor.
3. New permanent horizontal fall protection lifelines with integral impact absorber.
4. Load testing of welded post anchors prior to service.

B. Work in other sections:

1. Section 07 41 13 – Metal Roof Panels for roof anchor penetration flashing boots.

1.02 SYSTEM DESCRIPTION

A. General: Provide structural fall restraint and fall arrest systems capable of withstanding loads and stresses within limits and under conditions specified in OSHA and other applicable safety codes. Provide fall prevention anchors permanently attached to roof structure.

1.03 QUALITY ASSURANCE

A. Design of system shall be one that complies with Federal OSHA Standard 1910.66, Subpart F, "Powered platforms for building maintenance", App C, "Personal Fall Arrest Systems and State of Washington Department of Labor and Industries regulations and all other occupational, health and safety codes of the applicable governing jurisdictions.

B. Manufacturer Qualifications: Approved manufactured units shall be supplied from the product line of a firm engaged exclusively in the production of safety anchor equipment.

C. Welding Standards for Manufactured Units: Comply with the following applicable provisions:

1. AWS D1.1, "Structural Welding Code - Steel," and D1.3, "Structural Welding Code - Sheet Steel". Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.04 SUBMITTALS

A. Manufacturer's Product Information: Submit product information and detail drawings of each type of safety anchor specified for use on this project if units supplied are from a manufacturer's product line. Include installation instructions.

B. Shop Drawings: Submit shop drawings with details showing installation of safety anchors to building structural system. Submit complete layout and configuration of system, anchor locations, and all other components and accessories.

C. Test Reports: Indicate compliance with required performance requirements.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Provide fall protection system components manufactured by one of the following:

1. Guardian Fall Protection, Inc.
2. Super Anchor Safety
3. PRO-BEL Safety Systems

4. 3M DBI Sala Fall Protection
5. SafeGuard Industries
6. Or approved equal

2.02 FALL PROTECTION ANCHORS

A. Description: Manufactured fall protection post anchors designed for installation over wood deck, and compatible for use with horizontal lifeline.
   1. Basis of Design: Guardian CB-18 for Wood and Steel Deck
   2. Material: 2-1/2” schedule 80 pipe, galvanized steel with 5/8” diameter U-bar.

B. Supplemental Structural Support: Install anchors onto supplemental plywood supports, fastened through the existing roof structure as detailed in the drawings.
   1. 3/4” CDX Plywood
   2. 48” wide by required length at each anchor

2.03 HORIZONTAL LIFELINES

A. Description: Continuous wire rope assembly with integral attachment hardware and energy impact absorber at anchorage connections.
   1. Basis of Design: Guardian Metal Energy Absorber System, Stainless Steel
   2. Components: Stainless steel shackles, cable fist grips, turnbuckles.
   3. Lifeline Cable: 3/8” diameter stainless steel aircraft cable
   4. Sliding O-Rings: Provide two (2) O-rings between each post anchor.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine job condition before commencement of work. Commencement of work will denote acceptance of existing conditions unless notice is given in writing of unacceptable conditions prior to commencement.

B. Examine structural substrate at each anchor location for soundness. If any signs of decay, lack of structural integrity, or structural members other than those shown in drawings exist, notify the Engineer prior to installation.

C. Faults occurring in the work completed under this Section of the specification due to the acceptance of incorrect conditions of existing work will be rectified at no cost to the Owner.

D. Proceed with installation of roof anchors only after verifying conditions are satisfactory.

E. Check actual locations of beams, joists, and other construction to which safety anchors must fit, by accurate field measurement. Show recorded measurements on final shop drawings.

3.02 INSTALLATION

A. General: Installation of fall protection anchors and horizontal lifeline systems to be performed by contractor according to manufacturer’s instructions and recommendations.

B. Install roof anchors and supplemental backing prior to installation of new metal roof systems.

C. Perform load testing on installed anchors prior to installation of new metal roof systems as described in section 3.03. Document and repair any failures during the load testing process.

D. Install horizontal lifelines using manufacturer's attachment hardware. Provide adjustable turnbuckle at each lifeline. Lifeline cable shall have no more than 2" of sag between anchors.

E. Continuous lifeline cables shall not exceed 100 feet in length.

F. Provide energy impact absorbers at lifeline locations indicated on plan, or as recommended by the manufacturer. At a minimum, provide no less than one (1) impact absorber on lifelines up to 60 feet in length, and two (2) impact absorbers on lifelines between 60-100 feet in length.

G. Locate and gang impact absorbers at locations where they can be easily inspected and observed prior to use.

3.03 INSPECTION & LOAD TESTING

A. Instruct Owner in proper use and inspection of fall protection systems. Provide all manufacturer literature and safety inspection logs as part of O&M submittals.

B. Ensure all manufactured anchors have been installed in accordance with fall protection manufacturer's engineering documentation and specifications.

C. Conduct load testing on installed post-anchors prior to installation of metal roofing. A total of eight (8) anchors shall be tested during four (4) individual load tests. Provide a roof plan indicating test locations and photo document test procedures.

1. The test procedure shall consist of tensioning two anchors using a chain/wire rope, and a load cell to measure the force applied to the anchors.

2. Anchors shall be tensioned to a force of 1,500lbs measured using the load cell, and held at that force for a minimum of 3 minutes.

3. Any observed stress damage, broken welds, or permanent deviation of the post anchor more than ½" out of plane shall constitute a failure.

4. Notify the engineer of any failed load tests prior to starting repairs.

END OF SECTION

APPENDIX A

PORT OF TACOMA

CONSTRUCTION SWPPP

SHORT FORM

CONSTRUCTION SWPPP SHORT FORM

The threshold for using the Port of Tacoma's (Port) short form is a project that proposes to clear or disturb less than one acre of land. Projects falling within this threshold may use this short form instead of preparing a professionally designed Construction Stormwater Pollution Prevention Plan (SWPPP). If project disturbance quantities exceed this threshold, you must prepare of formal Construction SWPPP as part of your submittal package. If your project is within the threshold and includes—or may affect—a critical area, please contact the Port to determine if the SWPPP short form may be used.

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SHORT FORM

Project Name:

Address:

Contact/Owner: Phone:

Erosion Control Supervisor:

Phone: Cell: Pager:

Emergency (After hours) Contact: Phone:

Permit No.:

Parcel No.:

Required Submittals

A Construction SWPPP consists of both a project narrative and a site plan. The project narrative describes existing conditions on the site, the proposed conditions, and how construction site runoff will be managed until final site stabilization is achieved. Any additional relevant information should be included in the project narrative. All Best Management Practices (BMPs) that will be utilized onsite must be included as part of the project narrative and provided (electronically or hard copy) as part of the submittal package. If additional BMPs beyond those included in the Washington Department of Ecology's (Ecology) Western Washington Stormwater Management Manual (Ecology SWMM) or the City of Tacoma's (City) Stormwater Management Manual (City SWMM) are proposed to be used, a narrative and appropriate details describing the BMP (its function, installation method, and maintenance activities) will be required.

The site plan is a drawing which shows the location of the proposed BMPs to control erosion and sedimentation during and after construction activities.

PROJECT NARRATIVE

The Construction SWPPP Short Form narrative must be completed at part of the submittal package. Any information described, as part of the narrative, should also be shown on the site plan.

Note: From October 1 through April 30, clearing, grading, and other soil disturbing activities shall only be permitted by special authorization from the Port.

A. Project Description (Check all that apply)

☐ New Structure ☐ Building Addition ☐ Grading/Excavation
☐ Paving ☐ Utilities ☐ Other:

1. Total project area (square feet)
2. Total proposed impervious area (square feet)
3. Total existing impervious area (square feet)
4. Total proposed area to be disturbed (square feet)
5. Total volume of cut/fill (cubic yards)

Additional Project Information:

B. Existing Site Conditions (Check all that apply)

1. Describe the existing vegetation on the site. (Check all that apply)
   ☐ Forest ☐ Pasture/field grass ☐ Pavement ☐ Landscaping ☐ Brush
   ☐ Trees ☐ Other:
2. Describe how surface water (stormwater) drainage flows across/from the site. (Check all that apply)
   ☐ Sheet Flow ☐ Gutter ☐ Catch Basin ☐ Ditch/Swale ☐ Storm Sewer
   ☐ Stream ☐ Other:
3. Describe any unusual site condition(s) or other features of note.
   ☐ Steep Grades ☐ Large depression ☐ Underground tanks ☐ Springs
   ☐ Easements ☐ Existing structures ☐ Existing utilities ☐ Other:

C. Adjacent Areas (Check all that apply)

1. Check any/all adjacent areas that may be affected by site disturbance and fully describe below in item 2:

☐ Streams* ☐ Lakes* ☐ Wetlands* ☐ Steep slopes*

☐ Residential Areas ☐ Roads ☐ Ditches, pipes, culverts ☐ Other:

** If the site is on or adjacent to a critical area (e.g., waterbody), the Port may require additional information, engineering, and other permits to be submitted with this short form.*

2. Describe how and where surface water enters the site from properties located upstream:

3. Describe the downstream drainage path from the site to the receiving body of water (minimum distance of 0.25 mile [1320 feet]). (E.g., water flows from the site into a curb-line, then to a catch basin at the intersection of X and Y streets. A 10-inch pipe system conveys water another 1000 feet to a wetland.) Include information on the condition of the drainage structures.

D. Soils (Check all that apply)

The intent of this section is to identify when additional soils information may be required for applicants using this short form. There are other site-specific issues that may necessitate a soils investigation or more extensive erosion control practices. The Port will determine these situations on a case-by-case basis as part of their review.

1. Does the project propose infiltration? Infiltration systems require prior Port approval.

☐ Yes ☐ No

2. Does the project propose construction on or near steep slopes (15% or greater)?

☐ Yes ☐ No

If infiltration is proposed for the site or steep slopes (15% or greater) have been identified, the Port will require soils information as part of project design. The applicant must contact a soil professional or civil engineer that specializes in soil analysis and perform an in-depth soils investigation. If the Yes box is checked for either question, the Port may not permit the use of this short form.

E. Construction Sequencing/Phasing

1. Construction sequence: the standard construction sequence is as follows:
   - Mark clearing/grading limits.
   - Install initial erosion control Best Management Practices (BMPs) (e.g., construction entrance, silt fence, catch basin inserts, etc.).
   - Clear, grade, and fill project site as outlined in the site plan while implementing and maintaining proper temporary erosion and sediment control BMPs simultaneously.
   - Install permanent erosion protection as described in the specifications (e.g., impervious surfaces, landscaping, etc.).
   - Remove temporary erosion control methods as permitted. Do not remove temporary erosion control until permanent erosion protection is fully established.

   List any changes from the standard construction sequence outlined above:

2. Construction phasing: if construction is going to occur in separate phases, please describe:

F. Construction Schedule

1. Provide a proposed construction schedule (dates construction starts and ends, and dates for any construction phasing.)

   Start Date: **End Date:**

   Interim Phasing Dates:

   Wet Season Construction Activities: Wet season occurs from October 1 to April 30. Please describe construction activities that will occur during this time period.

Note: Additional erosion control methods may be required during periods of increased surface water runoff.

2. **Site plan** (see Figure 1, page 6)

A site plan, to scale, must be included with this checklist that shows the following items:

- ☐ a. Address, Parcel Number, Permit Number, and Street Names
- ☐ b. North Arrow
- ☐ c. Indicate boundaries of existing vegetation (e.g., tree lines, grassy areas, pasture areas, fields, etc.)
- ☐ d. Identify any onsite or adjacent critical areas and associated buffers (e.g., wetlands, steep slopes, streams, etc.).
- ☐ e. Identify any FEMA base flood boundaries and Shoreline Management boundaries.
- ☐ f. Show existing and proposed contours.
- ☐ g. Delineate areas that are to be cleared and/or graded.
- ☐ h. Show all cut and fill slopes, indicating top and bottom of slope catch lines.
- ☐ i. Show locations where upstream run-on enters the site and locations where runoff leaves the site.
- ☐ j. Indicate existing surface water flow direction(s).
- ☐ k. Label final grade contour and indicate proposed surface water flow direction and surface water conveyance systems (e.g., pipes, catch basins, ditches, etc.).
- ☐ l. Show grades, dimensions, and direction of flow in all (existing and proposed) ditches, swales, culverts, and pipes.
- ☐ m. Indicate locations and outlets of any dewatering systems (usually to sediment trap).
- ☐ n. Identify and locate all erosion control methods to be used during and after construction.

ONSITE FIELD VERIFICATION OF ACTUAL CONDITIONS IS REQUIRED.

Figure 1. (to be worked out with Engineering Dept.)

GUIDELINES FOR EROSION CONTROL ELEMENTS

This SWPPP must contain the 12 required elements, as required by Ecology. Check off each element as it is addressed in the SWPPP short form and/or on your site plan.

- ☐ 1. Mark Clearing Limits
- ☐ 2. Establish Construction Access
- ☐ 3. Control Flow Rates
- ☐ 4. Install Sediment Controls
- ☐ 5. Stabilize Soils
- ☐ 6. Protect Slopes
- ☐ 7. Protect Drain Inlets
- ☐ 8. Stabilize Channels and Outlets
- ☐ 9. Control Pollutants
- ☐ 10. Control Dewatering
- ☐ 11. Maintain BMPs
- ☐ 12. Manage the Project

The following is a brief description of each of the 12 required elements of a SWPPP. If an element does not apply to the proposed project site, please describe why the element does not apply. Applicable BMPs are listed with each element and in Table 1. Please note that this list is not a comprehensive list of BMPs available for small construction projects, but erosion and sediment control techniques most pertinent to small construction sites are included here. More detailed information on construction BMPs can be found in Ecology's SWMM Volume II and the City's SWMM Volume II (Ecology 2005; City of Tacoma 2012). Please provide hard copies of the BMPs that will be used for the project and include as part of this Construction SWPPP. BMPs that may be used if needed can be noted as being contingent in the event additional erosion control is needed. Describe any additional BMPs that will be utilized onsite and add them to the SWPPP short form.

For phased construction projects, clearly indicate erosion control methods to be used for each phase of construction.

Element #1 – Mark Clearing Limits

All construction projects must clearly mark any clearing limits, sensitive areas and their buffers prior to beginning any land disturbing activities, including clearing and grading. Clearly mark the limits both in the field and on the site plans. Limits shall be marked in such a way that any trees or vegetation that is to remain will not be harmed.

Applicable BMPs include:

- BMP C101: Preserving Natural Vegetation
- BMP C102: Buffer Zones
- BMP C103: High Visibility Plastic or Metal Fence
- BMP C104: Stake and Wire Fence

☐ The BMP(s) being proposed to meet this element are:

_____

_____

OR

☐ This element is not required for this project because:

_____

_____

_____

_____

Element #2 – Establish Construction Access

All construction projects subject to vehicular traffic shall provide a means of preventing vehicle "tracking" soil from the site onto streets or neighboring properties. Limit vehicle traffic on- and off-site to one route if possible. All access points shall be stabilized with a rock pad construction entrance or other Port-approved BMP. The applicant should consider placing the entrance in the area for future driveway(s), as it may be possible to use the rock as a driveway base material. The entrance(s) must be inspected weekly, at a minimum, to ensure no excess sediment buildup or missing rock.

Applicable BMPs include:

- BMP C105: Stabilized Construction Entrance
- BMP C106: Wheel Wash
- BMP C107: Construction Road/Parking Area Stabilization

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #3 – Control Flow Rates

Protect properties and waterways downstream of the project site from erosion due to increases in volume, velocity, and peak flow of stormwater runoff from the project site.

Permanent infiltration facilities shall not be used for flow control during construction unless specifically approved by the Environmental Department. Sediment traps can provide flow control for small sites by allowing water to pool and allowing sediment to settle out of the water.

Applicable BMPs include:

- BMP C207: Check Dams
- BMP C240: Sediment Trap

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element 4 – Install Sediment Controls

Surface water runoff from disturbed areas must pass through an appropriate sediment removal device prior to leaving a construction site or discharging into a waterbody. Sediment barriers are typically used to slow stormwater sheet flow and allow the sediment to settle out behind the barrier.

Sediment controls must be installed/constructed prior to site grading.

Applicable BMPs include:

- BMP C208: Triangular Silt Dike
- BMP C232: Gravel Filter Berm
- BMP C233: Silt Fence
- BMP C235: Straw Wattles

☐ The BMP(s) being proposed to meet this element are:

_____

_____

OR

☐ This element is not required for this project because:

_____

_____

_____

_____

Element #5 – Stabilize Soils

Stabilize exposed and unworked soils by applying BMPs that protect the soils from raindrop impact, flowing water, and wind.

From October 1 through April 30, no soils shall remain exposed or unworked for more than 2 days. From May 1 to September 30, no soils shall remain exposed or unworked for more than 7 days. This applies to all soils whether at final grade or not.

Applicable BMPs include:

- BMP C120: Temporary and Permanent Seeding
- BMP C121: Mulching
- BMP C122: Nets and Blankets
- BMP C123: Plastic Covering
- BMP C140: Dust Control

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #6 – Protect Slopes

Protect slopes by diverting water at the top of the slope. Reduce slope velocities by minimizing the continuous length of the slope.

Applicable BMPs include:

- BMP C200: Interceptor Dike and Swale
- BMP C204: Pipe Slope Drains
- BMP C207: Check Dams

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #7 – Protect Drain Inlets

All operable storm drain inlets must be protected during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment. Install catch basin protection on all catch basins within 500 feet downstream of the project.

Applicable BMPs include:

- BMP C220: Storm Drain Inlet Protection

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #8 – Stabilize Channels and Outlets

Stabilize all temporary onsite conveyance channels. Provide stabilization to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the conveyance system outlets.

Applicable BMPs include:

- BMP C202: Channel Lining
- BMP C209: Outlet Protection

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #9 – Control Pollutants

Handle and dispose of all pollutants, including demolition debris and other solid wastes in a manner that does not cause stormwater contamination. Provide cover and containment for all chemicals, liquid products (including paint), petroleum products, and other materials. Handle all concrete and concrete waste appropriately.

Applicable BMPs include:

- BMP C150: Materials on Hand
- BMP C151: Concrete Handling
- BMP C152: Sawcutting and Surface Pollution Prevention
- BMP C153: Material Delivery, Storage and Containment

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #10 – Control Dewatering

Clean, non-turbid dewatering water, such as groundwater, can be discharged to the stormwater system provided the dewatering flow does not cause erosion or flooding of receiving waters.

Applicable BMPs include:

- BMP C150: Materials on Hand

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #11 – Maintain BMPs

Maintain and repair temporary erosion and sediment control BMPs as needed. Inspect all BMPs at least weekly and after every storm event.

Remove all temporary erosion and sediment control BMPs within 30 days after final site stabilization or if the BMP is no longer needed. Any sediment trapped during construction activities should be removed or stabilized onsite. No sediment shall be discharged into the stormwater drainage system or any natural conveyance system (e.g., streams).

Applicable BMPs include:

- BMP C160: Certified Erosion and Sediment Control Lead

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Element #12 – Manage the Project

Phase development projects to prevent soil erosion and the transport of sediment from the project site during construction. Coordinate all work prior initial construction with subcontractors and other utilities to ensure no areas are worked prematurely.\

A designated erosion and sediment control person is required for all construction projects. This person is responsible for ensuring that the project's erosion and sediment control BMPs are appropriate for the site and are functioning properly. They are also responsible for updating the SWPPP as necessary as site conditions warrant. They must be available 24 hours a day to ensure compliance.

Applicable BMPs include:

- BMP C160: Certified Erosion and Sediment Control Lead
- BMP C162: Scheduling
- BMP C180: Small Project Construction Stormwater Pollution Prevention

☐ The BMP(s) being proposed to meet this element are:

OR

☐ This element is not required for this project because:

Table 1. Applicable BMPs for the 12 Elements of a SWPPP

Element #1 – Mark Clearing Limits		
BMP C101	Preserving Natural Vegetation	
BMP C102	Buffer Zones	
BMP C103	High Visibility Plastic and Wire Fence	
BMP C104	Stake and Wire Fence	
Element #2 – Establish Construction Entrance		
BMP C105	Stabilized Construction Entrance	
BMP C106	Wheel Wash	
BMP C107	Construction Road/Parking Area Stabilization	
Element #3 – Control Flow Rates		
BMP C207	Check Dams	
BMP C240	Sediment Trap	
Element #4 – Install Sediment Controls		
BMP C208	Triangular Silt Trap	
BMP C232	Gravel Filter Berm	
BMP C233	Silt Fence	
BMP C235	Straw Wattles	
Element #5 – Stabilize Soils		
BMP C120	Temporary and Permanent Seeding	
BMP C121	Mulching	
BMP C122	Nets and Blankets	
BMP C123	Plastic Covering	
BMP C140	Dust Control	
Element #6 – Protect Slopes		
BMP C200	Interceptor Dike and Swale	
BMP C204	Pipe Slope Drains	
BMP C207	Check Dams	
Element #7 – Protect Drain Inlets		
BMP C220	Storm Drain Inlet Protection	
Element #8 – Stabilize Channels and Outlets		
BMP C202	Channel Lining	
BMP C209	Outlet Protection	
Element #9 – Control Pollutants		
BMP C150	Materials on Hand	

Element #9 – Control Pollutants, cont.		
BMP C151	Concrete Handling	
BMP C152	Sawcutting and Surfacing Pollution Prevention	
BMP C153	Materials, Delivery, Storage and Containment	
Element #10 – Control Dewatering		
BMP C150	Materials on Hand	
Element #11 – Maintain BMPs		
BMP C160	Certified Erosion and Sediment Control Lead	
Element #12 – Manage the Project		
BMP C160	Certified Erosion and Sediment Control Lead	
BMP C162	Scheduling	
BMP C180	Small Project Construction Stormwater Pollution Prevention	

REFERENCES

City of Tacoma. 2012. Stormwater Management Manual 2012 Edition. Public Works/ Environmental Services, Maintenance Division, Tacoma, Washington.

Washington State Department of Ecology (Ecology). 2005. Stormwater Management Manual for Western Washington. Water Quality Program, Lacey, Washington.

APPENDIX B

CITY OF TACOMA BUILDING PERMIT BLDCA21-0100

CITY OF TACOMA

Planning and Development Services

(253) 591-5030

747 Market St. 3rd Floor
Tacoma, WA 98402
Inspections (253) 573-2587

Commercial Alteration Permit #BLDCA21-0100

Issued Date: 04/06/2021 **Expiration Date:** 10/03/2021

SITE INFORMATION

Address: 1 SITCUM PLZ **Parcel:** 2275200633

PERMIT ISSUED TO	LICENSED CONTRACTOR	PROPERTY OWNER
PORT OF TACOMA PO BOX 1837 TACOMA, WA 98401	NO CONTRACTOR ADDRESS FOUND	PORT OF TACOMA PO BOX 1837 TACOMA, WA 98401

PERMIT INFORMATION

Project Description: Remove and replace approximately 24,000sqft of existing SPF coated metal roof panels and adjacent metal fascia panels. Existing underlayment and rigid insulation to remain where occurs, roof and wall cavities will not be exposed. New work to include replacement metal roof and fascia panels, fall protection, and bird deterrent system.

Permit Fee: $11,012.15

Project Coordinator: N/A

Related Site Record: N/A

Related Land Use Record: N/A

CONDITIONS OF APPROVAL

Effective immediately until further notice, Governor Inslee's COVID-19 proclamations affect construction activities, and all applicants must review and adhere to the Proclamation 20-25, which is attached to this permit document.

To schedule or manage inspections by phone (253) 573-2587 or online at aca-prod.accela.com/TACOMA/

PRINTED PERMIT AND APPROVED PLANS MUST BE KEPT ON SITE DURING CONSTRUCTION

All plumbing, heating, and electrical work will be performed by either the home owner or by a contractor licensed to do the same. Separate permits are required for other work, including but not limited to, sanitary and storm sewer, sidewalk, curb and gutter, driveways, parking lot paving, street improvements, fire protection, and signs. Plumbing and mechanical permits can be incorporated into some permits.

CITY OF TACOMA

Planning and Development Services

(253) 591-5030

747 Market St. 3rd Floor
Tacoma, WA 98402
Inspections (253) 573-2587

Commercial Alteration Permit #BLDCA21-0100

Issued Date: 04/06/2021 **Expiration Date:** 10/03/2021

VALUATIONS

Code Calculated Valuation:
$875,000

Estimated Valuation:
$875,000

PROJECT DETAILS

Change in Occupancy:
No

Change of Use:
No

Current Building Occupancy:
B Business

Night or Weekend Work:
NO

Proposed Occupancy:
B Business

Type of Work:
Reroof

BUILDING INFORMATION

Basement:
NO

Floor Area Under Permit Scope:
NaN

Marijuana Use:
Not Applicable

Risk Category:
II

Seismic Upgrade:
Not Applicable

Single or Multi-Tenant Building?:
Single

Unreinforced Masonry:
No

CITY OF TACOMA

Planning and Development Services

(253) 591-5030

747 Market St. 3rd Floor
Tacoma, WA 98402
Inspections (253) 573-2587

Commercial Alteration Permit #BLDCA21-0100

Issued Date: 04/06/2021 **Expiration Date:** 10/03/2021

APPROVED REVIEWERS

Category	Approved By	Email	Phone Number
Building Review	David Johnson	djohnson2@cityoftacoma.org	253-229-6663
Critical Areas Review	Emma Burnfield	eburnfield@cityoftacoma.org	
Document Review	David Johnson	djohnson2@cityoftacoma.org	253-229-6663
Flood Hazard Review	David Johnson	djohnson2@cityoftacoma.org	253-229-6663
Inspection Review	Pat Barry	pbarry@cityoftacoma.org	253-304-8462

GENERAL:

PERMISSION IS HEREBY GIVEN TO DO THE DESCRIBED WORK, AS NOTED ON THE REVERSE SIDE, ACCORDING TO THE CONDITIONS HEREON AND ACCORDING TO THE APPROVED PLANS AND SPECIFICATIONS PERTAINING THERETO, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF TACOMA.,

YOUR ATTENTION IS CALLED TO THE FACT THAT IT SHALL BE THE DUTY OF THE PERMITEE (General Contractor) to assure that all necessary inspections are called for and approved by the City Inspectors.

YOUR ATTENTION IS CALLED to the fact that in addition to the called for inspections specified by the applicable codes, the Building Official may make or require any other inspections of any construction work necessary to ascertain compliance with the provisions of City Codes and other laws which are enforced by the City of Tacoma.

YOUR ATTENTION IS CALLED to the fact that in addition to regularly scheduled inspections during construction there shall be a final inspection and approval on all buildings or structures when completed and ready for occupancy. AU required off-site improvements (curbs, sidewalks, storm sewers, etc.) must be completed at time a final inspection and prior to occupancy of building. Construction of off-site improvements requires scheduled inspections during construction in addition to the final inspection.

SPECIAL PERMITS

The holder of Special Permits agrees to the following stipulations:

1. To complete the work encompassed by the Special Permit in accordance with the current edition of the WSDOTIAFWA Standard Specifications as amended by the City of Tacoma General Special Provisions and in accordance with any special provisions or conditions set forth before final acceptance as required by the provisions of the Street Obstruction Bond.
2. To indemnify and hold the City of Tacoma harmless from any and all damages done to any person or property which may arise from the construction encompassed by the Special Permit.
3. To submit for review and approval to the Traffic Engineer a traffic control plan developed in accordance with the "Manual on Uniform Traffic Control Devices" {MUTCD). The traffic control plan shall show pedestrian access through the work zone.
4. To protect the public by placing adequate barricades, signs, cones, lights or other traffic control devices in accordance with the approved traffic control plan. It is understood that traffic lane closures and or sidewalk closures are limited to that which is specifically permitted herein. No other closures will be allowed without prior written approval of the City Engineer.
5. To provide and maintain protected pedestrian and ADA compliant disability access on walkways at all times.
6. The City of Tacoma does not guarantee sewer location or depth information. It shall be the permittee's responsibility to verify sewer and sewer stub locations and depths.
7. To restore Rights-of-Way in accordance with the City's Rights-of-Way Restoration Policy and City of Tacoma Standard Plans
8. Trench backfill within all improved streets or streets proposed for improvement shall be full depth bank run gravel or approved equal by the Construction Division.
9. All cuts in arterial streets shall be patched and maintained with Hot Mix Asphalt until permanent repairs are completed. All cuts in residential streets or alleys shall be patched and maintained with cold mix asphalt until permanent repairs are made. Permanent repairs shall be per current City of Tacoma Standard Plans. Streets and alleys shall be permanently repaired within 30 days.
10. To be responsible for the preservation of any utilities within the construction area.

CALL TOLL FREE BEFORE YOU DIG -1-800-424-5555 (Utilities Underground Location Center)

11. 24 Hour notice is required prior to any inspection. Construction Division 253-591-5760, Traffic SignaVStreetlight 253-591-5287.
12. The Special Permit Expiration date is 30 days from the issue date unless otherwise noted.

The City of Tacoma encourages the reuse and recycling of construction and demolition debris to help meet its waste reduction goals and support local economic activity. More information on construction and demolition material reuse/recycling along with a list of local companies can be found here:

- Construction and Demolition Waste
- Reuse/Recycling Companies

Reinspections for Building, Plumbing, and Mechanical Permits

Reinspections are considered additional effort by the City's Planning and Development Services staff that have not been included in the original permit cost. City inspectors have limited time at each site and therefore, must have all necessary information as well as clear access to the completed work at the time of their arrival. **The approved plans and permit card must also be immediately available to the inspector upon his/her arrival.** Cancellation of inspections must occur by 6:00 AM on the day of the inspection. City inspectors may arrive at the site as early as 8:00 AM; therefore, it should be planned to have all work completed and ready for inspection by 8:00 AM on the day of the inspection.

Reinspection fees will be charged per authorized fee code Title 2.09 under the following circumstances:

1. Work for which the inspection has been scheduled is not completed when the inspector arrives on site.
2. Clear access to the inspection area has not been provided at the time of the inspector's arrival.

This policy applies to reinspections for building, plumbing and mechanical permits issued by the department of Planning and Development Services.

Appeal of a reinspection fee?

If you were issued a re-inspection fee that you believe was un-warranted, you may appeal the fee by submitting a written explanation of the circumstances. The appeal must be submitted to our office at: Planning & Development Services, 747 Market St Rm 345, Tacoma WA, 98402 or via e-mail at: pdsinspection@cityoftacoma.org

The appeal must include the following items:

1. Written explanation for appeal submitted in writing
2. Include owner/contractor name
3. Include contact phone and email address
4. Include Permit number and address

A Decision will be rendered within three (3) business days

JAY INSLEE
Governor

STATE OF WASHINGTON
Office of the Governor

MEMORANDUM

TO: Interested Stakeholders

FROM: Governor Jay Inslee

DATE: March 25, 2020

SUBJECT: Construction Guidance - Stay Home, Stay Healthy Proclamation (20-25)

In general, commercial and residential construction is not authorized under the Proclamation because construction is not considered to be an essential activity.

However, an exception to the order allows for construction in the following limited circumstances:

a) Construction related to essential activities as described in the order;
b) To further a public purpose related to a public entity or governmental function or facility, including but not limited to publicly financed low-income housing; or
c) To prevent spoliation and avoid damage or unsafe conditions, and address emergency repairs at both non-essential businesses and residential structures.

To that end, it is permissible for workers who are building, construction superintendents, tradesmen, or tradeswomen, or other trades including, but not limited to, plumbers, electricians, carpenters, laborers, sheet metal, iron workers, masonry, pipe trades, fabricators, heavy equipment and crane operators, finishers, exterminators, pesticide applicators, cleaning and janitorial staff for commercial and governmental properties, security staff, operating engineers, HVAC technicians, painting, moving and relocation services, forestry and arborists, and other service providers to provide services consistent with this guidance.

All construction activity must meet social distancing and appropriate health and worker protection measures before proceeding.

Inspection Record Card

Planning and Development Services

Schedule online at TacomaPermits.org/Inspections

Or call at:

NOTICE
Post this card and the approved plans conspicuously on the construction site for inspections.

Building

Structure, Plumbing & Mechanical	253-573-2587
Fire / Sprinkler	253-573-2587
Electrical	253-502-8277
Zoning/Landscaping Final	253-591-5030 (option 4)
Site/ROW	253-573-2587

- Storm and Sanitary Connections New/Repair
- Water Line New/Repair
- All Right-of-Way/Site work including Storm and Sanitary
- Oil Water Separator, Grease Traps, Storm Water
- Filter Devices & Source Control Inspections
- Erosion Control Initial/Final

RECORD NUMBER: BLDCA21-0100
DATE ISSUED: 04/06/2021 **TO:** PORT OF TACOMA **CONTACT#:** Invalid Phone #
ADDRESS: 1 Sitcum

WORK DESCRIPTION Remove and replace approximately 24,000sqft of existing SPF coated metal roof panels and adjacent metal fascia panels. Existing underlayment and rigid insulation to remain where occurs, roof and

Request All That Apply	Inspection Schedule	Date	BY
	Clear and Grade / Initial Erosion Control		
	Building Footing		
	Building Foundation Walls		
	Plumbing / Mechanical Groundwork		
	Slab (Base and Insulation)		
Required Before The Building Framing Inspection	Floor Framing (prior to decking)		
	Shear Wall Nailing (before siding)		
	Plumbing Rough-in		
	Mechanical Rough-in (HVAC & exhaust)		
	Gas Piping		
	Electrical Rough-in		
	Water Line Installation		
	Storm Line Installation		
	Sanitary / Side Sewer Installation		
	Erosion Control Maintenance (BPM)		
	Building Framing and Caulking		
	Insulation		
Required Before The Building Final Inspection	Drywall		
	Suspended Ceiling (see back of card)		
	Plumbing Final		
	Mechanical Final		
	Electrical Final		
	Utilities Final (Water/Sewer/Storm)		
	Sidewalk, Curb and Gutter, Driveway		
	Sanitary Device Final		
	Storm Device Final		
	Final Erosion Control & Site Stablization		
	Site Development Final		
	Building Final (see back of card)		

WARNING: It is unlawful to occupy the premises until all applicable final inspection have been made.

SUPPLEMENTAL INSPECTIONS ON THE BACK

Supplemental Erosion Control Inspections		Commercial Building Inspections That May Apply	
	By / Date		**By / Date**
Initial Inspection		Electrical for Ceiling Cover	
Maintenance Inspection:		Mechanical for Ceiling Cover	
Maintenance Inspection:		Fire/Sprinkler for Ceiling Cover	
Maintenance Inspection:		Building for Ceiling Cover	
Maintenance Inspection:		Fire/Sprinkler **FINAL**	
Maintenance Inspection:		Water/Backflow **FINAL** (253-502-8215)	
		Zoning/Landscaping **FINAL** (253-591-5030)	
		Boiler **FINAL** (253-596-3902)	

WORK DESCRIPTION

Comments

PORT OF TACOMA

ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
PROJECT NO. 101339.04
CONTRACT NO. ------

PORT COMMISSIONERS:

JOHN MCCARTHY

DON MEYER

KRISTEN ANG

RICHARD P. MARZANO

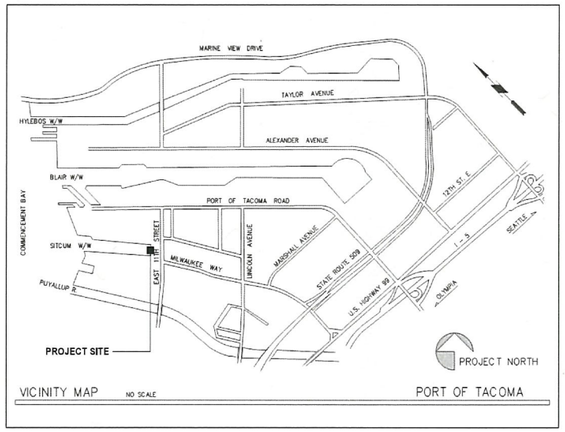
DEANNA KELLER

PORT STAFF:

ERIC JOHNSON
Executive Director

THAIS HOWARD, P.E.
Director of Engineering

NORMAN GILBERT, P.E.
Project Manager



CONSULTANT:

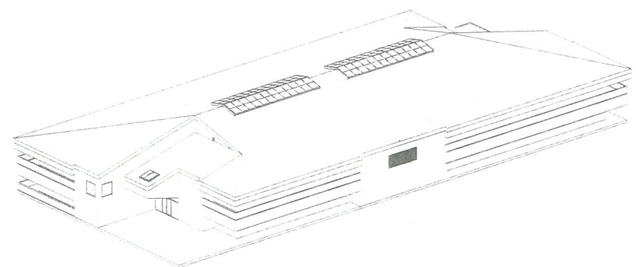
OAI PS
Architecture & Planning

ARCHITECT:
OSBORN ARCHITECTS INC, PS
1011 SW Klickitat Way, Suite 208
Seatte, WA 98134-1162

Contact: Jerry Osborn, AIA
p. (206) 631-8442 ext. 2607
e. josborn@oaips.com

DRAWING LIST

SHEET DESIGNATION	SHEET #	SHEET TITLE	REVISION
G1.0	1	COVER SHEET	1 (04/08/2020)
G1.1	2	GEN. NOTES, SYMBOLS, & ABBREVIATIONS	
G1.2	3	CODE SUMMARY & WSEC CALCULATIONS	
A0.1	4	SITE PLAN	
A0.2	5	REFERENCE SCOPE OF WORK NOTES	
A0.3	6	REFERENCE SITE PHOTOS	
A0.4	7	REFERENCE PHOTOS	
AD1.1	8	ROOF DEMOLITION PLAN	
AD2.1	9	OVERALL DEMOLITION ELEVATIONS	
AD2.2	10	ENLARGED DEMOLITION ELEVATIONS	
A1.1	11	REPLACEMENT ROOF PLAN	1 (04/08/2020)
A1.2	12	SECOND FLOOR REFLECTED CEILING PLAN	
A2.1	13	EXTERIOR ELEVATIONS	
A2.2	14	ENLARGED ELEVATIONS	
A3.1	15	BUILDING SECTIONS	
A4.1	16	ENLARGED PLATFORM DETAILS	
A5.0	17	ROOF AND WALL ASSEMBLIES	
A5.1	18	DETAILS	1 (04/08/2020)



Port of Tacoma
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OAI PS Architecture & Planning
1011 SW KLICKITAT WAY, STE. 208
SEATTLE, WA 98134 | (206) 631-8442

MARK:	REVISION:	BY:	APP'R:	DATE:
1	PERMIT REVISIONS	JJM	JDO	03/22/2021

APPROVED: – DATE

CHECKED BY DATE

DIRECTOR ENG. DATE

PROJ. ENGR DATE

PRINTED BY: JJM

PORT ADDRESS: ONE SITCUM WAY
TACOMA, WA 98401-1837

ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
COVER SHEET

XXXX
G1.0
OF

CONT/CONS: 071005 | TOWNSHIP: 21 | RANGE: 03 | SECTION: 34
JOB ID: 101339.04 | DAT-HRZ: WA83-SF | VERT:
PHASE: PERMIT SUBMITTAL | PARCEL: | DRAWING SCALE: 12" = 1'-0"

ABBREVIATIONS

A	----------
A/E	ARCHITECT/ENGINEER
AB	ANCHOR BOLT
ABV	ABOVE
ACC	ACCESSIBLE
ACS DR	ACCESS DOOR
ACS PNL	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AIB	AIR INFILTRATION BARRIER
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECT
ASSY	ASSEMBLY
AVG	AVERAGE
B	----------
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUILDING PAPER
BRKT	BRACKET
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
C	----------
CFLSH	COUNTERFLASHING
CFMF	COLD-FORMED METAL FRAMING
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLG HT	CEILING HEIGHT
CLR	COLOR
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
COORD	COORDINATE
CTR	CENTER
CU FT	CUBIC FEET
D	----------
DBL	DOUBLE
DEMO	DEMOLISH
DET	DETAIL
DIA	DIAMETER
DIR	DIRECTION
DIST	DISTANCE
DS	DOWNSPOUT
E	----------
E	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEV	ELEVATOR
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR

F	----------
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FF INSUL	FOIL FACED INSULATION
FFSAM	FOIL FACED SELF-ADHERED MEMBRANE
FIN	FINISH
FIN FLR	FINISH FLOOR
FLR	FLOOR
FM	FACTORY MUTUAL
FPA	FALL PROTECTION ANCHOR
FR	FIRE RESISTANT
FRMG	FRAMING
FSTNR	FASTENER
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
G	----------
GALV	GALVANIZED
GB	GRAB BAR
GFRG	GLASS-FIBER-REINFORCED GYPSUM
GLZ	GLAZING
GTR	GUTTER
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
GWB	GYPSUM WALL BOARD
H	----------
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HTSAM	HIGH TEMP SELF-ADHERED MEMBRANE
I	----------
IBC	INTERNATIONAL BUILDING CODE
INSUL	INSULATION
INT	INTERIOR
K	----------
KIT	KITCHEN
KPL	KICKPLATE
L	----------
LAM	LAMINATE
LAV	LAVATORY
LBR	LUMBER
LBS	POUND
LF	LINEAR FEET (FOOT)
LIN	LINEAR
LT	LIGHT
LVR	LOUVER
M	----------
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MFR	MANUFACTURER
MID	MIDDLE
MIN	MINIMUM
MIRR	MIRROR
MISC	MISCELLANEOUS
MOD	MODIFY
MB	MOISTURE BARRIER
MTL	METAL
MWP	METAL WALL PANEL

N	----------
N	NEW
NA	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	----------
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OPNG	OPENING
OPP	OPPOSITE
OPQ	OPAQUE
OPR	OPERABLE
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
P	----------
PAR	PARAPET
PAT	PATTERN
PCT	PERCENT
PERF	PERFORATED
PERIM	PERIMETER
PH	PHASE
PL	PROPERTY LINE
PL GL	PLATE GLASS
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLYWD	PLYWOOD
PMMA	POLYMETHYL METHACRYLATE FLASHING
PNL	PANEL
PRCST	PRECAST
PREFIN	PREFINISHED
PT	PRESSURE TREATED
PVC	POLYVINYL CHLORIDE
Q	----------
QTY	QUANTITY
R	----------
RB	RESILIENT BASE
RBM	REINFORCED BRICK MASONRY
RBR	RUBBER
RC	REINFORCED CONCRETE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDG INS	RIGID INSULATION, SOLID
REC	RECESSED
REF	REFERENCE
REM	REMOVE
REP	REPAIR
REPL	REPLACE
REQD	REQUIRED
REST	RESTROOM
RFG	ROOFING
RH	ROOF HATCH
RL	ROOF LEADER
RLG	RAILING
RM	ROOM
RO	ROUGH OPENING
RSD	ROLLING STEEL DOOR
RTU	ROOFTOP UNIT
RV	ROOF VENT

S	----------
SAM	SELF-ADHERED MEMBRANE
SB	SPLASH BLOCK
SCHED	SCHEDULE
SF	SQUARE FOOT (FEET)
SFTWD	SOFTWOOD
SHT MTL	SHEET METAL (FLASHING)
SHTHG	SHEATHING
SIM	SIMILAR
SKLT	SKYLIGHT
SLNT	SEALANT
SPEC	SPECIFICATION
SQ	SQUARE
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SSMR	STANDING SEAM METAL ROOF
SST	STAINLESS STEEL
STD	STANDARD
STRUCT	STRUCTURAL
SUB FL	SUBFLOOR
SV	SHEET VINYL
SW	SIDEWALK
T	----------
T&G	TONGUE & GROOVE
TC	TERRA COTTA
TD	TRENCH DRAIN
TEMP	TEMPORARY
TFF	TOP OF FINISH FLOOR
THK	THICKNESS
THRU	THROUGH
TMPD GL	TEMPERED GLASS
TN	TRUE NORTH
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOPO	TOPOGRAPHY
TOS	TOP OF SLAB
TOW	TOP OF WALL
TRANS	TRANSOM
TRTD	TREATED
TYP	TYPICAL
U	----------
UNO	UNLESS NOTED OTHERWISE
V	----------
VAR	VARIES
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
W	----------
W/	WITH
W/O	WITHOUT
WD	WOOD
WP	WATERPROOFING
WRB	WEATHER RESISTIVE BARRIER

DRAWING LEGEND & SYMBOLS

1 TYP. — DEMOLITION KEYNOTE

1 — SHEET KEYNOTE

A — SUPPLEMENTAL KEYNOTE

S1 — ROOF/WALL ASSEMBLY

W1 — DOOR/WINDOW TAG

1 — REVISION TAG

Room
Rm_Occupancy
101
150 SF
— ROOM TAG
ROOM NAME, OCCUPANCY
ROOM NUMBER, ROOM AREA

0 — GRIDLINE AND GRID MARK

1 SIM / A101 — DETAIL MARK
DRAWING NUMBER, SHEET NUMBER

1 SIM / A101 — ELEVATION/SECTION MARK
DRAWING NUMBER, SHEET NUMBER

NORTH — PROJECT NORTH DIRECTION

1 / A3.0 — PHOTO REFERENCE
PHOTO NUMBER, SHEET NUMBER

Name / Elevation — ELEVATION/LEVEL MARK

DEMOLISH

(E) EXISTING WORK

(N) NEW WORK

EXISTING WORK TO BE DEMOLISHED

(N) SHEET METAL FLASHING

V.T.R. (E) VENT THROUGH ROOF

GENERAL NOTES

1. DRAWINGS HAVE BEEN PREPARED USING AVAILABLE RECORD DOCUMENTS AND OTHER INFORMATION SUBMITTED, IN PART, BY OTHERS. WHILE THE INFORMATION USED IS BELIEVED TO BE RELIABLE, THE ENGINEER HAS NOT VERIFIED ACCURACY AND/OR COMPLETENESS OF THE INFORMATION, AND IS NOT RESPONSIBLE FOR ITS ACCURACY, NOR FOR ERRORS/OMISSIONS WHICH MAY BE INCORPORATED INTO THIS DOCUMENT AS A RESULT.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS, PROPERTY LINES, MEASUREMENTS AND CONDITIONS IN THE FIELD BEFORE BEGINNING WORK. ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

3. THE ENGINEER WILL HAVE A REPRESENTATIVE ON SITE, PART-TIME TO OBSERVE THE CONSTRUCTION FOR COMPLIANCE WITH THE DESIGN INTENT AND TO ASSIST THE CONTRACTOR IN RESOLVING VARIATIONS IN THE EXISTING CONSTRUCTION. THESE DOCUMENTS ADDRESS ALL KNOWN CONDITIONS, BUT IT IS ANTICIPATED THAT HIDDEN CONDITIONS WILL BE ENCOUNTERED DURING CONSTRUCTION. THE ENGINEER WILL OBSERVE ALL SUCH HIDDEN CONDITIONS AND ISSUE ADDITIONAL CLARIFICATIONS OR MODIFICATIONS TO THE DESIGN IN ORDER TO ADDRESS SUCH CONDITIONS, AND WILL DOCUMENT ALL CHANGES.

4. UNLESS OTHERWISE NOTED, ALL ANGLES TO BE RIGHT ANGLES, ALL LINES WHICH APPEAR PARALLEL ARE TO BE PARALLEL, AND ALL ITEMS WHICH APPEAR CENTERED ARE TO BE CENTERED. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THAT ALL LINES TRUE, LEVEL, PLUMB AND SQUARE.

5. DETAILED AND/OR LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. POSTED DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR TO VERIFY SCALED DIMENSIONS WITH ENGINEER BEFORE PROCEEDING WITH WORK.

6. ALL ATTACHMENTS, CONNECTIONS AND FASTENINGS OF ANY NATURE ARE TO BE PROPERLY AND PERMANENTLY SECURED IN CONFORMANCE WITH THE BEST PRACTICES OF THE BUILDING INDUSTRY. DRAWINGS SHOW ONLY SPECIAL DETAILS OR REQUIREMENTS TO ASSIST THE CONTRACTOR AND DO NOT SHOW EVERY DETAIL.

7. DETAILS SHOWN IN THESE DRAWINGS ARE TYPICAL AND WILL APPLY UNLESS OTHERWISE NOTED OR SHOWN. DETAILS OF CONSTRUCTION NOT FULLY SHOWN ARE TO BE OF THE SAME NATURE AS THOSE DRAWN FOR SIMILAR CONDITIONS.

8. CONTRACTOR TO COORDINATE ALL OPERATIONS WITH ENGINEER, INCLUDING: SITE ACCESS, MATERIALS STORAGE AND STAGING, INTERRUPTION OF ELECTRICAL, MECHANICAL, FIRE-ALARM, LOW-VOLTAGE SERVICES AND TIMING OF NOISY OR DISRUPTIVE OPERATIONS. CONTRACTOR TO VERIFY SEQUENCE OF WORK WITH ENGINEER.

9. ALL LUMBER OR PLYWOOD IN CONTACT WITH CONCRETE OR LUMBER INSTALLED AS NAILERS (EXCEPT PLYWOOD DECK OR CRICKETS) SHALL BE PRESSURE-TREATED WITH WATER-BORNE PRESERVATIVES.

10. ALL WORK TO BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE CODES, LAWS AND REGULATIONS OF AUTHORITIES HAVING JURISDICTION OVER THE WORK.

Port of Tacoma
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OAI PS Architecture & Planning
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SEATTLE, WA 98134 | (206) 631-8442

MARK:	REVISION:	BY:	APPR:	DATE:

APPROVED:

DIRECTOR ENG. DATE
PRINTED BY: JJM
PORT ADDRESS: ONE SITCUM WAY
TACOMA, WA 98401-1837

CHECKED BY DATE
PROJ. ENGR DATE

ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
GEN. NOTES, SYMBOLS, & ABBREVIATIONS

TOWNSHIP: 21 RANGE: 03 SECTION: 34
DAT-HRZ: WA83-SF VERT: DRAWING SCALE: As indicated
PARCEL:

CONT/CONS: 071005
JOB ID: 101339.04
PHASE: PERMIT SUBMITTAL

XXXX
G1.1
OF

CODE SUMMARY:

PROJECT NAME: ADMINISTRATIVE BUILDING METAL ROOF REPLACEMENT

PROJECT ADDRESS: ONE SITCUM PLAZA
TACOMA, WA 98421

LEGAL DESCRIPTION: SW 1/4 OF SECTION 34, T 21 N, R. 3E, WM.

SCOPE OF WORK: REMOVE AND REPLACE EXISTING METAL ROOF AND FASCIA WALL PANELS

PROJECT DESCRIPTION: ALTERATION/REPAIR

JURISDICTION: CITY OF TACOMA
PLANNING AND DEVELOPMENT SERVICES
747 MARKET STREET, 3RD FLOOR
TACOMA, WA 98402
P. (253) 591-5030

BUILDING CODE EDITION: 2018 INTERNATIONAL BUILDING CODE WITH CITY OF TACOMA AMENDMENTS

2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

2018 WASHINGTON STATE ENERGY CODE (WSEC)
- WAC 51-11C (COMMERCIAL)

CONSTRUCTION TYPE: TYPE V, FULLY SPRINKLERED

11-FR, V-1 HR (PER ORIGINAL CONSTRUCITON DOCUMENTS, DATED 1981. RECLASSIFIED AS TYPE V, FULLY SPRINKLERED IN 2002 RENOVATION

DATE BUILT: 1981

SQUARE FEET: 21,264 SF (FIRST FLOOR
19,542 SF (SECOND FLOOR)
1,216 SF (ATTIC FLOOR)
42,022 SF

OCCUPANCY: (B) BUSINESS

CONTACT INFORMATION:

OWNER: PORT OF TACOMA
ONE SITCUM PLAZA
TACOMA, WA 98421

NORMAN GILBERT, PE
P. (253) 383-9406
E. ngilbert@portoftacoma.com

ARCHITECT: OAI, PS
1011 SW KLICKITAT WAY, SUITE 208
SEATTLE, WA 98134

JERRY OSBORN | AIA, NCARB, LEED AP

ENERGY CODE ANALYSIS

Alterations Worksheet - 2018 Washington State Energy Code

Project Information	*Contact Information*
Administrative Roof Replacement	OAI, PS
One Sitcum Plaza	1011 SW Klickitat Way, Suite 208
Tacoma, WA 98421	Seattle, WA 98134

The WSEC requirements for alterations are located in Chapter 5 of the code text.
Alterations (remodels) do not need to obtain energy credits from Table R406.3

Additions must meet the requirements for new construction. This includes nonconditioned space being altered to become conditioned space.

Will the wall cavities be exposed? ☐ Yes ☑ No

If yes: Exposed wall cavities must be insulated -
2 X 4 wall studs require **R-15** insulation
2 X 6 wall studs require **R-21** insulation

Will the roof/ceiling framing cavities or attic be exposed? ☐ Yes ☑ No

If yes: Exposed roof/ceiling assemblies must be insulated -
Vaulted ceilings: Insulate to the full depth of the framing member while allowing for the minimum 1" ventilated space

Flat ceilings: Install R-49 insulation or what the attic space can accommodate based on the roof pitch

Will the floor framing cavities be exposed? ☐ Yes ☑ No

If yes: Exposed floor cavities must be insulated to R-30

Are the windows and/or doors being replaced? ☐ Yes ☑ No
(includes both window or door and frames)
If yes: New windows and doors must have an area weighted average U-factor of ≤0.30

Will the heating or cooling system be replaced? ☐ Yes ☑ No

If yes: New equipment must meet current requirements and ducts need to be tested

Will the hot water system be altered? ☐ Yes ☑ No

If yes: New water heating equipment must meet current code requirements

Are more than 50% of the light fixtures being changed? ☐ Yes ☑ No

If yes: 75% of all lamps must be high efficacy (LED or CFL)

R503.1.1 Building envelope. Building envelope assemblies that are part of the alteration shall comply with Section R402.1.1 or R402.1.4, Sections R402.2.1 through R402.2.11, R402.3.1, R402.3.2, R402.4.3 and R402.4.4.

Exception: The following alterations need not comply with the requirements for new construction provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation. 2x4 framed walls shall be insulated to a minimum of R-15 and 2x6 framed walls shall be insulated to a minimum of R-21.
3. Construction where the existing ***roof***, wall or floor cavity is not exposed. ***Note: neither the existing roof sheathing or existing roof insulaton are exposed under this proposal.***
4. Roof recover.
5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.
6. Surface-applied window film installed on existing single pane fenestration assemblies to reduce solar heat gain provided the code does not require the glazing fenestration to be replaced.

R503.1.1.1 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for *U*-factor and SHGC in Table R402.1.1. Where more than one replacement fenestration unit is being installed, an area-weighted average of the U-factor and SHGC of all replacement fenestration shall be permitted to be used to demonstrate compliance.

R503.1.2 Heating and cooling systems. New heating, cooling and duct systems that are part of the alteration shall comply with Section R403.

Exceptions:
1. Where ducts from an existing heating and cooling system are extended, duct systems with less than 40 linear feet in unconditioned spaces shall not be required to be tested in accordance with Section R403.2.2.
2. Existing duct systems constructed, insulated or sealed with asbestos.

R502.1.1.2 Heating and cooling systems. New heating, cooling and duct systems that are part of the addition shall comply with Section R403.

Exception: The following need not comply with the testing requirements of Section R403.3.3:

1. Additions of less than 750 square feet.
2. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in WSU RS-33.
3. Ducts with less than 40 linear feet in unconditioned spaces.
4. Existing duct systems constructed, insulated or sealed with asbestos.

R503.1.3 Service hot water systems. New service hot water systems that are part of the alteration shall comply with Section R403.5.

R503.1.4 Lighting. New lighting systems that are part of the alteration shall comply with Section R404.1.

Exception: Alterations that replace less than 50 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

R503.2 Change in space conditioning. Any nonconditioned or low-energy space that is altered to become *conditioned space* shall be required to be brought into full compliance with this code.

Port of Tacoma
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MARK: | REVISION: | BY: | APPR: | DATE:

Checker
CHECKED BY DATE

DIRECTOR ENG. DATE | PROJ. ENGR DATE
PRINTED BY: JJM
PORT ADDRESS: ONE SITCUM WAY
TACOMA, WA 98401-1837

APPROVED:

ADMINISTRATIVE BUILDING ROOF REPLACEMENT
-
CODE SUMMARY & WSEC CALCULATIONS

CONT/CONS: 071005 | TOWNSHIP: 21 | RANGE: 03 | SECTION: 34
DM. ID: 101339.04 | DAT-HRZ: WA83-SF | VERT: | DRAWING SCALE:
PHASE: PERMIT SUBMITTAL | PARCEL:

XXXX
G1.2
OF

City of Tacoma
Reviewed for Code Compliance

1 A0.1 SITE PLAN & STAGING LAYOUT
NTS

NORTH

Port of Tacoma
P.O. BOX 1837, TACOMA, WA 98401 (253)383-5841

OAI PS Architecture & Planning
1011 SW KLICKITAT WAY, STE. 208
SEATTLE, WA 98134 | (206) 631-8442

MARK:	REVISION:	BY:	APPR:	DATE:

APPROVED:

DIRECTOR ENG. DATE | CHECKED | DATE

PROJ. ENGR | DATE

PRINTED BY: JJM

PORT ADDRESS: ONE SITCUM WAY
TACOMA, WA 98401-1837

ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
SITE PLAN

CONT/CONS:	071005	TOWNSHIP: 21	RANGE: 03
J.N. ID:	101339.04	SECTION: 34	
PHASE:	PERMIT SUBMITTAL	DAT-HRZ: WA83-SF	VERT:
PARCEL:		DRAWING SCALE: 1" = 40'-0"	

XXXX
A0.1
OF

1 A0.2 REFERENCE AERIAL VIEW (FROM NORTHEAST)

NOT TO SCALE

SCOPE COORDINATION MATRIX

SCOPE OF WORK ITEM/DESCRIPTION	CONTRACTOR	PORT/OWNER
RAISE/MODIFY CONDUIT AND LINESET AT EXISTING HEAT PUMPS	X	
REMOVE AND RE-INSTALL ELECTRICAL DISCONNECT SWITCHES	X	
RELOCATE EXTERIOR WALL LOUVERS - EXTERIOR ONLY	X	
MODIFY/RELOCATE INTERIOR DUCTS AND MISC. MECHANICAL		X
REMOVE AND RE-INSTALL EXISTING COMMUNICATIONS EQUIPMENT		X
REMOVE AND REPLACE EXISTING ROOF ACCESS DOOR	X	
MODIFY INTERIOR LADDER AT NEW ROOF ACCESS DOOR	X	
TEMPORARY OVERHEAD PROTECTION AT EAST/WEST ENTRY AREAS	X	
REMOVE AND RE-INSTALL EXTERIOR WALL MOUNTED CONDUIT	X	
SCAFFOLDING/DEBRIS CONTROL AT NORTH ELEVATION	X	
NOTES/COMMENTS:		

PROJECT NOTES & RESTRICTIONS

- WORK ON THIS PROJECT OCCURS WITHIN A SECURITY SENSITIVE FACILITY. ALL CONSTRUCTION PERSONNEL ARE REQUIRED TO HAVE A TRANSPORTATION WORKER IDENTIFICATION CARD (TWIC) OR ESCORT..
- THE PARKING AREA LOCATED TO THE EAST OF THE ADMINISTRATION BUILDING SHALL REMAIN 100% SECURED AT ALL TIMES. CONTRACTOR SHALL COORDINATE ALL ACTIVITY IN THIS AREA WITH THE PORT ENGINEER IN ADVANCE AND WORK TO MINIMIZE "IN AND OUT" ACTIVITY.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL ROOF ACCESS. NO ROOF ACCESS THROUGH THE INTERIOR OF ADMINISTRATION BUILDING SHALL BE PERMITTED, EXCEPT FOR INTERIOR WORK.
- THE ADMINISTRATION BUILDING WILL BE CONTINUOUSLY OCCUPIED DURING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN PRIMARY POINTS OF EGRESS AT THE EAST AND WEST ENDS OF THE BUILDING AT ALL TIMES.
- CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD PROTECTION AT THE EAST AND WEST MAIN ENTRY DOORS FOR THE DURATION OF THE WORK.
- CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO MINIMIZE EXCESSIVE NOISE OR OTHER DISRUPTION TO THE BUILDING OCCUPANTS. ALL DEMOLITION AND OTHER POTENTIALLY DISTRUPTIVE ACTIVITIES SHALL BE COORDINATED WITH THE PORT ENGINEER IN ADVANCE.
- IT IS ANTICIPATED THAT REMOVAL OF THE EXISTING SPF COATED METAL ROOF PANELS WILL GENERATE A CONSIDERABLE AMOUNT OF LIGHT DEBRIS. THE CONTRACTOR SHALL PROVIDE COMPLETE CONTAINMENT MEASURES TO MINIMIZE WIND-BLOWN DEBRIS.
- CONTRACTOR SHALL TAKE MEASURES TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE SITCUM WATERWAY. ANY DEBRIS ENTERING THE WATERWAY DURING CONSTRUCTION SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- THE ADMINISTRATION BUILDING IS BOUNDED TO THE NORTH BY THE SITCUM WATERWAY, CONTRACTOR WILL NEED TO PROVIDE TEMPORARY EXTERIOR ACCESS ALONG THE NORTH ELEVATION TO COMPLETE PORTIONS OF THE WORK. FOR BIDDING PURPOSES, CONTRACTOR SHALL ASSUME THE STAGING FROM THE SECOND LEVEL EXTERIOR WALKWAY ALONG THE NORTH ELEVATION.
- ALL ROOF AREAS SHALL BE IMMEDIATELY "DRIED-IN" FOLLOWING REMOVAL OF EXISTING METAL ROOF PANELS. THE TERM "DRIED-IN" SHALL INCLUDE INSTALLATION OF NEW ROOF COVERBOARD AND SELF-ADHERED UNDERLAYMENT. CONTRACTOR SHALL PROVIDE ALL OTHER MEANS OF TEMPORARY WEATHER PROTECTION AS NEEDED THROUGHOUT THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL SUBMIT A "WATER INSTRUSION RESPONSE PLAN" PRIOR TO STARTING DEMOLITION ACTIVITIES. AT A MINIMUM, THE RESPONSE PLAN SHALL INCLUDE A 24-HOUR EMERGENCY CONTACT NUMBER. PROCEDURES FOR DOCUMENTING AREAS OF WATER INTRUSION, AND A MONITORING PLAN TO PREVENT ORGANIC GROWTH AND MOLD. EXISTING CONSTRUCTION DAMAGED BY WATER INTRUSION SHALL BE REPLACED BY THE CONTRACTOR TO THE EXTENTS DEEMED NECESSARY BY THE PORT ENGINEER.
- STRUCTURAL INTEGRITY OF THE EXISTING FALL PROTECTION CABLES CANNOT BE VERIFIED AND SHALL BE REMOVED FROM SERVICE PRIOR TO STARTING ANY WORK. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED FALL PROTECTION DURING CONSTRUCTION.
- THE SCOPE OF WORK INCLUDES DEMOLITION OF EXISTING IN-BUILT GUTTERS. WORK SHALL BE SEQUENCED SO THAT NEW GUTTERS AND DOWNSPOUTS ARE INSTALLED AND OPERATIONAL PRIOR TO THE DEMOLITION OF EXISTING IN-BUILT GUTTERS.
- UNLESS SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR IS RESPONSIBLE FOR RELOCATION AND RE-INSTALLATION OF EXISTING EXTERIOR MOUNTED FIXTURES, CONDUITS, SWITCHES AND THE LIKE. REFER TO THE "SCOPE COORDINATION MATRIX" FOR ADDITIONAL INFORMATION.

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ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
REFERENCE SCOPE OF WORK NOTES

TOWNSHIP: 21	RANGE: 03	SECTION: 34	
DAT-HRZ: WA83-SF	VERT:	DRAWING SCALE:	As indicated
PARCEL:			

XXXX
A0.2
OF

CONT/CONS:	071005
JOB ID:	101339.04
PHASE:	PERMIT SUBMITTAL

1 A0.3 WEST ELEVATION
NTS

2 A0.3 NW BUILDING CORNER
NTS

3 A0.3 WEST AT MAIN ENTRY
NTS

4 A0.3 MAIN ENTRY CANOPY
NTS

5 A0.3 SOUTH ELEVATION
NTS

6 A0.3 SOUTH ELEVATION
NTS

7 A0.3 SE BUILDING CORNER
NTS

8 A0.3 LOADING/OFFLOADING AREA
NTS

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ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
REFERENCE SITE PHOTOS

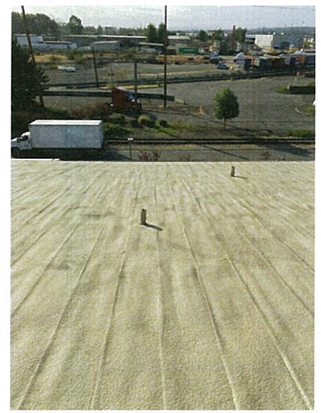
CONT/CONS:	071005	TOWNSHIP: 21	RANGE: 03	SECTION: 34	PROJ. ENGR
JOB ID:	101339.04	DAT-HRZ: WA83-SF	VERT:	DRAWING SCALE: 12" = 1'-0"	
PHASE:	PERMIT SUBMITTAL	PARCEL:			

XXXX
A0.3
OF

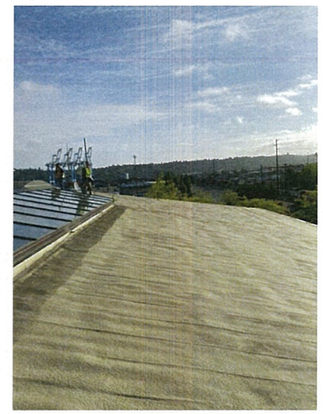
1 A0.4 (E) ROOF PANELS
NTS

2 A0.4 (E) ROOF PANELS
NTS

3 A0.4 (E) ROOF PANELS
NTS



4 A0.4 ROOF VENTS (VTR)
NTS



5 A0.4 (E) RIDGE SKYLIGHT
NTS

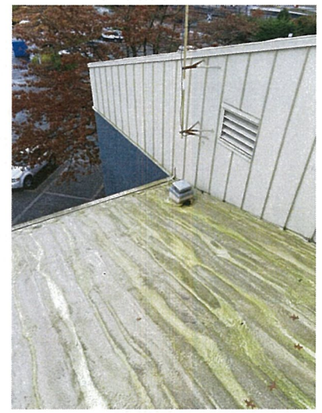
6 A0.4 (E) RIDGE SKYLIGHT
NTS

7 A0.4 SPF COATING
NTS

8 A0.4 CORE AT PANEL RIB
NTS

9 A0.4 (E) SKYLIGHT CURB
NTS

10 A0.4 (E) SKYLIGHT CURB
NTS



11 A0.4 EAST ENTRY ROOF
NTS

12 A0.4 EAST MECH SCREEN
NTS

13 A0.4 ROOF ACCESS DOOR
NTS

14 A0.4 NE ROOF CORNER
NTS

15 A0.4 EAST GABLE END
NTS

16 A0.4 EAST L2 SOFFIT
NTS

17 A0.4 L2 FASICA/SOFFIT
NTS

18 A0.4 SOFFIT AT RWL
NTS

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ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
REFERENCE PHOTOS

CONT/CONS:	071005	TOWNSHIP: 21	RANGE: 03	SECTION: 34
JOB ID:	101339.04	DAT-HRZ: WA83-SF	VERT:	DRAWING SCALE: 12" = 1'-0"
PHASE:	PERMIT SUBMITTAL	PARCEL:		

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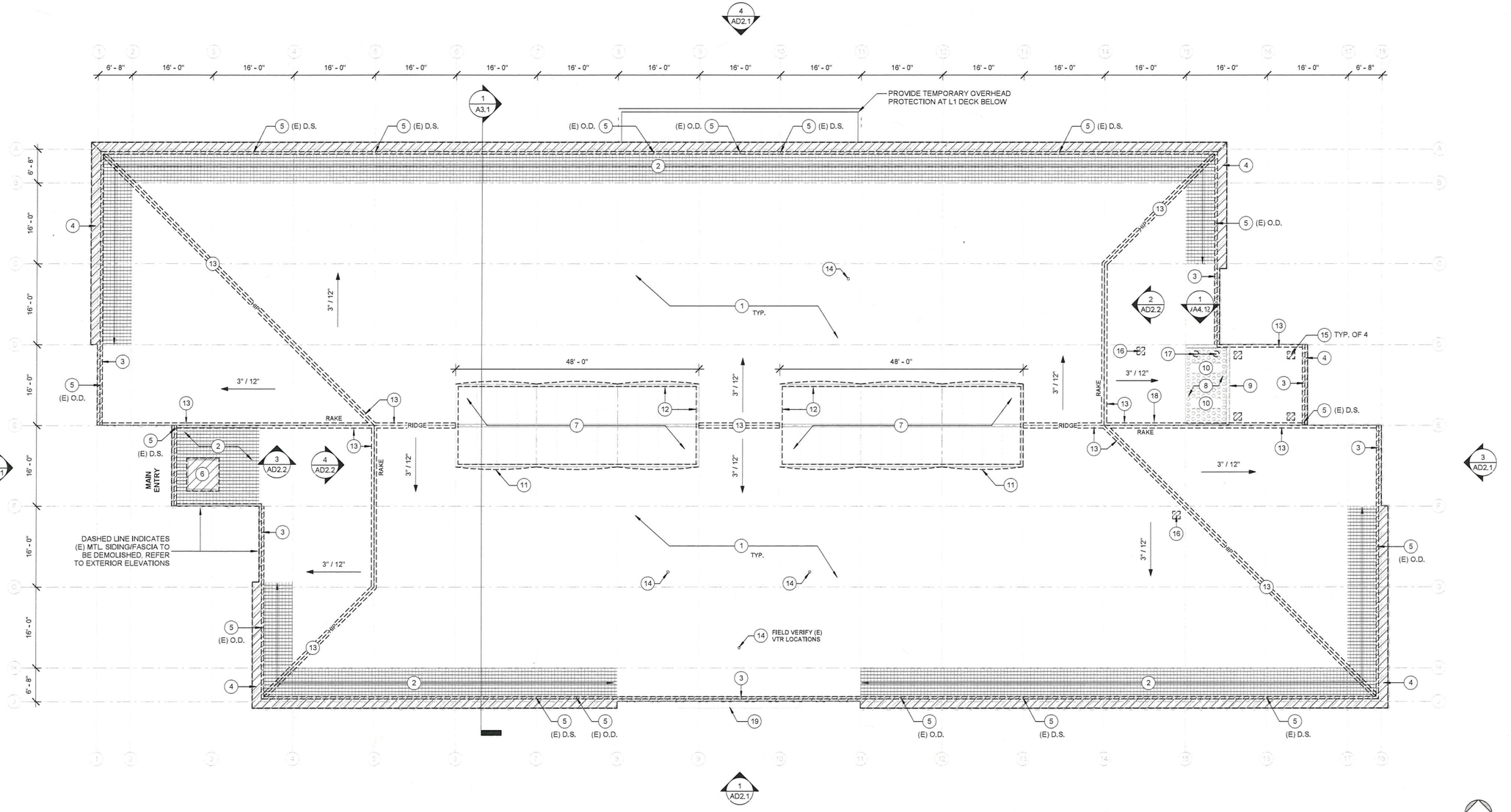
A0.4
OF



1 AD1.1 OVERALL ROOF DEMOLITION PLAN

3/32" = 1'-0"

ROOF DEMOLITION KEYNOTES

1. **R1:** DEMOLISH (E) SPF COATING AND METAL ROOF PANEL, TYP.
2. **R2:** DEMOLISH (E) SPF COATING AND METAL ROOF PANEL, TYP.
3. DEMOLISH (E) IN-BUILT GUTTER, TYP.
4. DEMOLISH (E) SHEET METAL CAP FLASHING
5. CAP (E) DOWNSPOUT/OVERFLOW DRAIN TO BE ABANDONED
6. DEMOLISH (E) DOME SKYLIGHT AT ENTRY OVERHANG
7. (E) RIDGE SKYLIGHT ASSEMBLY TO REMAIN
8. (E) MECHANICAL PLATFORM TO BE MODIFIED
9. (E) MECHANICAL SCREEN WALL TO BE MODIFIED
10. (E) HEAT PUMP TO REMAIN
11. DEMOLISH (E) FALL PROTECTION CABLE
12. DEMOLISH (E) BIRD DETERRENT WIRE AND POSTS AT SKYLIGHT
13. DEMOLISH (E) MTL. FLASHING BENEATH POLYURETHANE COATING, TYP.
14. DEMOLISH (E) FLASHING AT VENT THRU ROOF PENETRATIONS, TYP.
15. DEMOLISH (E) ROOF VENT
16. DEMOLISH (E) GUY WIRE ANCHOR - PROVIDE TEMPORARY SUPPORT UNTIL NEW SUPPORT BASES ARE INSTALLED, TYP.
17. DEMOLISH (E) BOOT FLASHING AT STRUCTURAL SUPPORT
18. DEMOLISH (E) ROOF ACCESS DOOR, REFER TO ELEVATIONS
19. (E) SIGNAGE TO BE REMOVED AND SALVAGED BY OWNER

SHEET LEGEND

- (E) NON-INSULATED ROOF ASSEMBLY
- (E) SHEET MTL. CAP FLASHING
- DEMOLISH (E) CONSTRUCTION PER DETAILS

D.S. (E) DOWNSPOUT
O.D. (E) OVERFLOW DRAIN

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ROOF REPLACEMENT
-
ROOF DEMOLITION PLAN

SECTION: 34	TOWNSHIP: 21	RANGE: 03	
VERT:	DAT-HRZ: WA83-SF		
DRAWING SCALE:	As indicated	PARCEL:	

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AD1.1
OF

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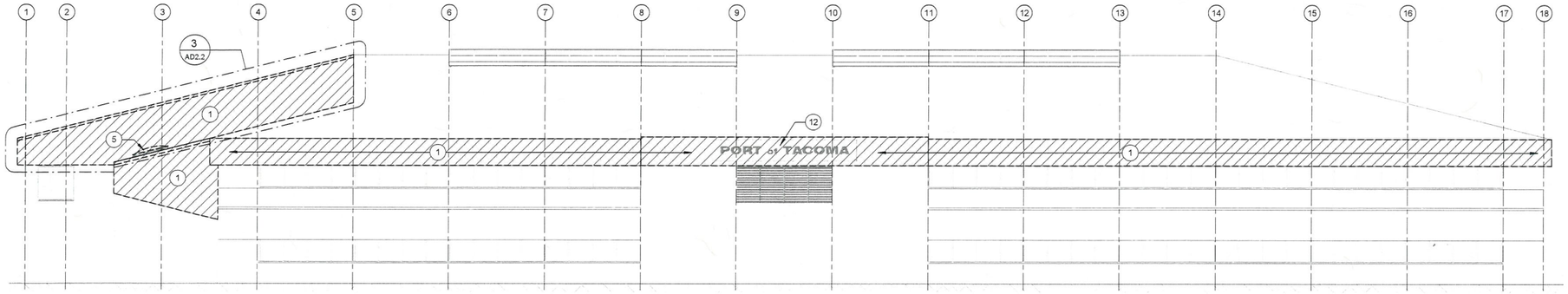
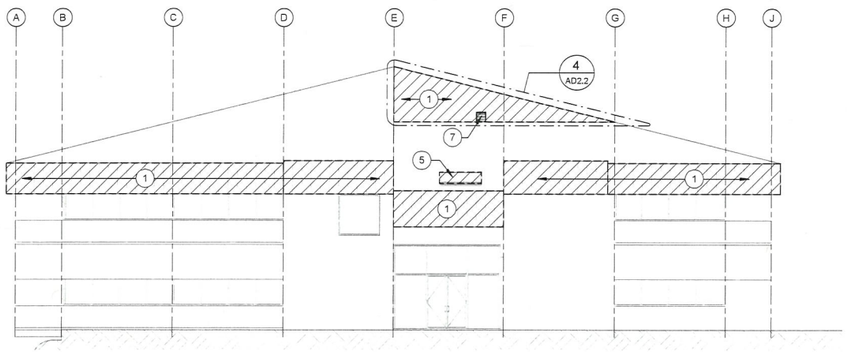
PHASE:	PERMIT SUBMITTAL



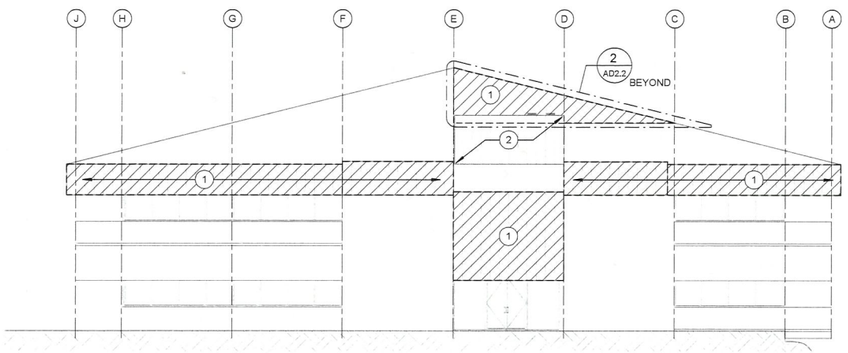
1 AD2.1 SOUTH ELEVATION (DEMO)

3/32" = 1'-0"



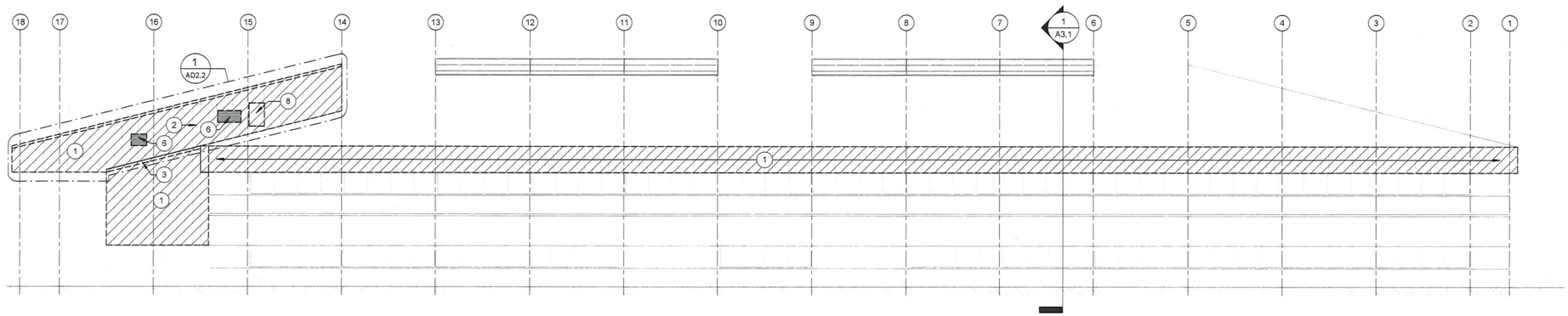
2 AD2.1 WEST ELEVATION (DEMO)

3/32" = 1'-0"



3 AD2.1 EAST ELEVATION (DEMO)

3/32" = 1'-0"



4 AD2.1 NORTH ELEVATION (DEMO)

3/32" = 1'-0"

DEMOLITION NOTES

- REFER TO SHEET A5.0 FOR DEMOLITION OF EXISTING ROOF AND WALL PANEL ASSEMBLIES.
- EXISTING WALL MOUNTED EQUIPMENT IS SHOWN ON THE ENLARGED ELEVATIONS PER SHEET AD2.2. REFER TO THE SCOPE COORDINATION MATRIX ON SHEET A0.2 FOR INFO.
- CONTRACTOR TO PROVIDE TEMPORARY ACCESS AND DEBRIS CONTROL ALONG THE NORTH ELEVATION. SEE NOTES ON SHEET A0.2 FOR ADDITIONAL INFORMATION.
- NOT ALL DEMOLITION KEYNOTES OR SCOPE OF WORK ITEMS ARE USED OR SHOWN ON THIS SHEET.
- DEMOLITION OF EXISTING METAL ROOF PANELS ARE NOT ON ELEVATIONS FOR CLARITY, REFER TO SHEET AD1.1.

DEMO ELEVATION KEYNOTES

1. DEMOLISH (E) MTL. PANEL SIDING/FASCIA PANEL
2. (E) MTL. PANEL AT MECHANICAL SCREEN TO REMAIN
3. DEMOLISH (E) SPF COATED MTL. FLASHING, TYP.
4. DEMOLISH AND FILL (E) IN-BUILT GUTTER PER DETAILS
5. DEMOLISH (E) POLYCARBONATE DOME SKYLIGHT
6. (E) WALL LOUVER TO REMAIN. DEMO (E) FLASHING
7. RELOCATE (E) WALL LOUVER, REFER TO SHEET A2.2
8. DEMOLISH (E) ROOF ACCESS DOOR AND TRIM
9. REMOVE & REINSTALL (E) WALL MOUNTED EQUIPMENT PER SCOPE COORDINATION MATRIX ON SHEET A0.2.
10. (E) STRUCT CHANNEL AT MECH PLATFORM TO REMAIN
11. REMOVE AND REINSTALL (E) 12" STEEL GRATING PLANK AT MECHANICAL PLATFORM AS REQUIRED
12. (E) SIGNAGE TO BE REMOVED AND SALVAGED BY OWNER

SHEET LEGEND

(E) 16" STANDING SEAM MTL. SIDING/FASCIA PANEL

DEMOLISH (E) CONSTRUCTION, SEE DETAILS

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ADMINISTRATIVE BUILDING
ROOF REPLACEMENT
-
OVERALL DEMOLITION ELEVATIONS

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