

BIDDING DOCUMENTS

FOR

PROJECT 23-064.1

PIER 84S PILE REPAIRS

Key Dates:

<u>Mandatory Pre-Bid Meeting</u>: Wednesday, July 19, 2023 at 10:00 AM at Pier 84. Attendees should meet at the Pier 84S main gate. The main gate is located at 2401 S. Christopher Columbus Blvd Philadelphia, PA 19148. <u>ALL ATTENDEES MUST WEAR HIGH-VISIBILITY SAFETY VESTS.</u>

<u>Questions:</u> Questions must be in writing and should be sent to the attention of the Procurement Department at e-mail address <u>procurement@philaport.com</u>. Questions must be received by <u>Wednesday</u>, <u>July 26</u>, 2023 by NOON.

<u>Bid Submission Deadline:</u> Bids will be received via the Bonfire Portal. More information on submissions will be issued via an Addendum to the Project. Bid Submissions will be received on the portal until **Wednesday**, **August 9**, **2023 by 2:00 PM**.

Instructions on submitting bids via Bonfire can be found in Part 1, Instructions to Bidders.

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PART 1

INSTRUCTIONS TO BIDDERS

FOR

PHILADELPHIA REGIONAL PORT AUTHORITY CONTRACTS

(Revised as of September 28, 2018)

FOR USE ONLY WITH INVITATIONS TO BID FOR CONSTRUCTION.

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FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN THE REJECTION OF THE BID AS NOT RESPONSIVE

Section 1 Work to be Performed:

The Work to be performed is described in the Contract Documents for the prime contractor contracts to be awarded on the Project. The Contract Documents may be inspected during regular business hours at the offices of PhilaPort, 3460 N. Delaware Avenue 2nd Floor Philadelphia, Pennsylvania 19134. During the bidding process, the Contract Documents are available on PhilaPort's website www.philaport.com and can be accessed under the procurement tab. Presently there is no charge for obtaining a copy from the website. One or more copies of the Contract Documents may be obtained upon application to the Procurement Department by making a nonrefundable payment in the amount specified by PhilaPort for each set of Plans, Specifications, and Bidding Documents requested.

All contractors must be registered with the Vendor Data Management Unit ("VDMU") of the Commonwealth of Pennsylvania if they wish to do business with PhilaPort. Registration may be done via the internet or via telephone and is required in order to be awarded a contract. VDMU will assign each contractor a vendor ID number which will be used to identify that contractor within the Commonwealth. Please use the following information to complete the vendor registration form, or to make changes to an existing vendor ID number:

Central Vendor Management Unit

Phone 717-346-2676 Toll Free 1-866-435-7363

Web Address: www.vendorregistration.state.pa.us

The Bidding Documents consist of the Notice to Bidders, these Instructions to Bidders, the Bid Form, the Certification Form, Bid Security, submissions related to PhilaPort's Diversity Inclusion Policy and Plan, the Non-collusion Affidavit, and forms and submittals required by the Specifications or other Bidding or Contract Documents to be submitted with the Bid. The Contract Documents are identified in the General Conditions.

Section 2 Familiarity with Proposed Work:

A. The Bidder is responsible for examining the nature and location of the Work for the Project, including the Work of other prime contractors, the conformation of the ground, existing underground conditions and structures, the soil and rock conditions, all utilities, and the character, quality and quantity of the materials that will be required. The Bidder shall also examine the proposed Contract, including plans, specifications and all other documents and data pertaining to the Project, and has obtained all information on or before the submission of his Bid necessary for the submission of his Bid and the completion of the Work. After the award of the contract, the Contractor may not submit any claim alleging insufficient data, incorrectly assumed conditions, or misunderstanding of any kind related to the Project.

- **B.** Bidders are required to comply with any and all access control requirements imposed at the site to gain entry. In addition, to gain access to PhilaPort facilities, Bidders are required to comply with the Maritime Security ("MARSEC") regulations requiring contractors entering PhilaPort facilities to have knowledge of, thorough training or equivalent job experience, in the following, as appropriate:
 - 1. Relevant Provisions of the Facility Security Plan;
 - 2. The meaning and consequential requirements of the different MARSEC levels as they apply to them, including emergency procedures & contingency plans;
 - 3. Recognition and detection of dangerous substances and devices;
 - 4. Recognition of characteristics and behavior patterns of persons who are likely to threaten security; and
 - 5. Techniques used to circumvent security.

Each marine terminal maintains its own Facility Security Plan and Facility Security Officer. Due to the sensitive security information contained in such plans, they are not available for review. The Facility Security Officer for the terminal will brief you on relevant provisions of the Security Plan and application of the different MARSEC levels. Sections (3) (4) & (5) listed above apply to your operations and their interaction with the Port as a result of working on Port Facilities.

C. Any information obtained as a result of the Geotechnical testing ("Geotechnical Information") concerning subsurface materials or conditions was obtained by PhilaPort for the Engineer's use in designing the Project. This Geotechnical Information is included in the Specifications for the Project or, in the alternative, available to the Bidders upon request written. Bidder acknowledges that he may request Geotechnical Information.

The technical data found in the Geotechnical Information is represented to be accurate by PhilaPort, but the conclusions and inferences that may be found in or inferred from the Geotechnical Information is not warranted and the accuracy or completeness of any such conclusions and inferences is not guaranteed by PhilaPort. The Contractors must assume all responsibility in excavating for this Project and may rely only upon the factual subsurface information obtained from PhilaPort or Engineer.

Bidders shall make their own investigation of existing subsurface conditions. If Bidder desires to obtain additional information or data to supplement that which exists in the form of Geotechnical Information, Bidder shall make a written request for documents or for access to the site. PhilaPort will, to the extent reasonably feasible, afford the Bidder the opportunity, at Bidder's own expense, to conduct additional tests and examinations and to make measurements and studies of all kinds; where PhilaPort cannot grant such rights, it will cooperate with Contractor in

endeavoring to secure such rights. The ground and existing structures shall be returned to its original condition as prior to testing. PhilaPort may require a bond to secure the restoration of the original conditions.

Before making any such excavations, borings or soundings, driving test piles, digging test pits on the Site, or undertaking any other examination of the subsurface thereof, the Bidder shall provide to PhilaPort proof of insurance that is satisfactory to PhilaPort. Bidder is responsible for field verifying locations of all existing utilities. Prior to excavation or earth moving, the Bidder is to contact PA One-Call to mark out locations of existing utilities.

- **D.** The Work herein contemplated being public work, the Bidder acknowledges that no mechanics liens may be filed.
- **E.** The Bidder acknowledges that, should Work to be performed be specified or indicated in more than one prime contract and no clarifications received by Addenda prior to Bid date, each Bidder so affected who is submitting a Bid shall consider the Work to be part of his contract. A subsequent determination will be made and an amount commensurate to the labor, material and equipment to be provided will be deducted from the Bidder determined not to be responsible.
- **F.** The Bidder acknowledges that he has ascertained all governmental and utility requirements with respect to wage scales, materials, labor, safety and sanitation and shall base his Bid prices on full compliance therewith.
- **G.** The Bidder acknowledges that he has familiarized himself with labor conditions which might affect or influence the performance of the Work.
- **H.** The Bidder acknowledges that he was afforded the opportunity to attend and participate in the pre-bid meeting.
- I. The Bidder acknowledges that he is fully aware of the Owner's status as a governmental entity in relation to this Project and the requirements of Applicable Laws generally, and those specifically related to certain exemptions from the application of sales and use taxes.
- **J.** The Bidder acknowledges that the awarded Contractor on the Project is responsible for coordination of his own construction activities and for resolving coordination issues with his Subcontractors and any other prime contractors.
- **K.** The Bidder acknowledges that he is aware and has been advised that the Contractor is solely responsible for initiating, maintaining and supervising all safety precautions and programs required under his portion of the Work and the Work of the Bidder's Subcontractors and Sub-Subcontractors and that the Bidder has reviewed, evaluated and taken into consideration these requirements when submitting the Bid.
- L. The Bidder acknowledges that he is aware and has been advised that his Subcontractors must be given the complete Bidding and Construction Documents for bidding purposes so as to ensure consistency and adherence to the Contract Documents, that the Bidder as Contractor is

responsible fully to the Owner for the performance of his Subcontractors and that the Bidder will require each Subcontractor, through legally enforceable written agreements, to meet all of the responsibilities with respect to any portion of the Work performed by any Subcontractor.

- M. The Bidder acknowledges that he assumes all risks resulting from any changes in the conditions which may occur during the progress of the Work, subject to the right of any Contractor to recover from another Prime Contractor damages for interference and delay.
- **N.** The Bidder has reviewed the scheduling requirements issued by and on behalf of the Owner and appearing on the Plans and in the Specifications and has to the extent appropriate incorporated the information set forth therein in preparing his Bid.

Section 3 Pre-Bid Conferences:

- **A.** In the event PhilaPort chooses to conduct a mandatory pre-bid conference, notice of the time and location of such conference will either be provided in the Notice to Bidders, or in the "Notice to Bidders" on the cover page of the Specifications, mailed to each Bidder at the address provided to PhilaPort by the Bidders or posted on PhilaPort's website. The failure of a Bidder to attend a mandatory pre-bid conference shall result in the Bidder's Bid being rejected. Minutes taken at such a mandatory pre-bid conference will be maintained by PhilaPort and a copy of the minutes will be provided upon written request to PhilaPort.
- **B.** In the event PhilaPort chooses to conduct an optional pre-bid conference, attendance is not mandatory and notice of the time and location of such conference will either be provided in the Notice to Bidders, or in the "Notice to Bidders" on the cover page of the Specifications, mailed to each Bidder at the address provided to PhilaPort by the Bidders or posted on PhilaPort's website. Minutes taken at such an optional pre-bid conference will be maintained by PhilaPort and a copy of the minutes will be provided upon written request to PhilaPort.

Section 4 Interpretation of Contract Documents:

- A. During the Bidding Phase, every request for interpretation shall be made in writing to the Director of Procurement. All written requests ("Requests for Interpretation") related to the proposed Work or proposed Contract Documents must be received by the Director of Procurement at the offices of PhilaPort, no later than close of business ten (10) calendar days prior to the Bid Opening Date. If a request is received within ten (10) calendar days of the bid opening date, PhilaPort may, in its sole discretion, answer the request. Requests must be submitted by hand-delivery, courier, regular or expedited mail, or facsimile transmission. Requests sent via email will not be considered "written" requests.
- B. BIDDERS ARE PROHIBITED FROM SEEKING ANY ORAL INTERPRETATION REGARDING THE MEANING OF THE BIDDING OR CONTRACT DOCUMENTS. ANY CONVERSATION BETWEEN A BIDDER AND PHILAPORT OR THE ENGINEER MAY NOT BE RELIED UPON BY ANY BIDDER, IS NOT BINDING UPON PHILAPORT AND SHALL NOT BECOME PART OF THE

CONTRACT DOCUMENTS. ONLY INFORMATION APPEARING IN WRITTEN BULLETINS ISSUED BY PHILAPORT OR ITS ENGINEER MAY BE RELIED UPON BY THE BIDDERS.

- C. PhilaPort's response to any Request for Interpretation will be in the form of a written Addendum or Bulletin signed by PhilaPort. PhilaPort will post all Addenda and Bulletins to its website at www.philaport.com and it shall be the responsibility of the Bidder to check for updates. The Bidder is responsible for all Addenda and Bulletins issued, whether or not reviewed. All addenda and Bulletins become a part of the Contract Documents, and all Bidders are bound by their provisions.
- D. Whenever an item is defined in the Bidding or Contract Documents by trade name and catalogue number of a manufacturer or vendor, the term "or approved equal," if not inserted therewith shall be implied. Any reference to a particular manufacturer's product either by trade name or by limited description is solely for the purpose of more clearly indicating the minimum standard of quality desired, except where a "no substitute" is requested. When a "no substitute" is requested, PhilaPort will consider bids for the referenced product only. The term "or approved equal" is defined as meaning any other make which, in the sole opinion of the Engineer, is of such character, quality, and performance equivalence as to meet the standard of quality of products specified for which it is to be used equally as well as that specified.
- E. A Bidder who wishes to (i) offer an alternate to the requested item or (ii) include a request for the Engineer to approve an equal, must submit a Request for Interpretation pursuant to Section A. above. The Request for Interpretation must include a complete description of the alternate or equal and must identify the product's deviations from the specifications. For consideration of approved equals, the Request for Interpretation must include the (a) complete identification of the product the Bidder proposes to offer by trade name, brand and/or model number; (b) furnish descriptive literature and data with respect to the substitute product it proposes to furnish; and (c) indicate any known specification deviations from the referenced product. Upon receipt of the Request for Interpretation, the Engineer will determine whether the alternate or equal is acceptable. If the Engineer, in his discretion, determines that the alternate or equal is acceptable, the Director of Procurement will issue an addendum to the Bidding or Contract Documents revising the specification. If the alternate or equal is not accepted, there will be no addendum issued.
- F. Unless otherwise specified in these Instructions to Bidder, all products offered by Bidders must be new or re-manufactured. A "new" product is one that will be used first by PhilaPort after it is manufactured or produced. A "re-manufactured" product is one which: 1) has been rebuilt, using new or used parts, to a condition which meets the original manufacturer's most recent specifications for the item; 2) does not, in the opinion of the Engineer, differ in appearance from a new item; and 3) has the same warranty as a new item. Unless otherwise specified in this invitation for bids, used or reconditioned products are not acceptable. This clause shall not be construed to prohibit Bidders from offering products with recycled content, provided the product is new or remanufactured.
- **G.** The Contractor awarded the Contract on the Project is required to pay Pennsylvania Sales

and Use Taxes and may claim an exemption only for some construction materials. To obtain exemptions for some of the construction materials, the Contractor must submit an application to the Pennsylvania Department of Revenue.

- **H.** Should the Work require the use of Steel or Steel Products, Bidders shall note that only steel products produced in the United States of America shall be used. Bidders are required to familiarize themselves with the Commonwealth of Pennsylvania's Act No. 1978-P.L.6 No. 3, the Steel Procurement Act, as it pertains to this requirement.
- **I.** The Director of Procurement is the single point of contact for the bidding on the Project. PhilaPort reserves the right to reject the Bid of a Bidder who violates this provision.

Section 5 Submission of Bids:

- **A.** All Bids shall be submitted on forms prepared by PhilaPort. All entries on the Bid Form and Certification must be in ink or typewritten, preferably in blue ink to indicate an original writing.
- **B.** All Base Bids will be considered as separate and distinct bids. If a base bid is left blank, PhilaPort will interpret this to mean the Bidder did not submit a bid on that base bid, but this will not invalidate any remaining Base Bids. The Bidder may not, however, withdraw a single base Bid when more than one Base Bid has been submitted. In this circumstance, if the Bidder wishes to withdraw any Base Bid, the Bidder must withdraw every Base Bid he submitted.

Section 6 Bid Requirements:

- **A.** The Bid Form and Signature Page shall be filled out and completed and signed by each Bidder. The signature must be an ORIGINAL and HAND-SCRIPTED signature.
- **B.** Every Bidder must complete and execute (including verification) with the Bid a Non-Collusion Affidavit.
- C. All Bids must be sealed, marked, and delivered in accordance with the Notice and these Instructions to Bidders. Bids will be opened and read publicly promptly after the deadline for the submittal of Bids.
- **D.** The failure to execute or complete a blank on the Bid Form shall cause the Bid to be rejected only if the amount of the base Bid or Bid for an Alternate or Unit Price cannot be determined. The failure of the Bidder to sign the Bid Form shall be conclusively treated as a nonresponsive Bid, and the Bid shall be rejected. The failure to attest to the signature made on behalf of a corporate Bidder or a Bidder which is Limited Liability Company shall not make the Bid nonresponsive.
- **E.** The blanks provided for the entry of sums on the Bid Form shall permit the Bidder to enter his Bid in words, or in numerical figures, or in both words and numerical figures. In case

234706.7 04/27/2022 24903590.2 of discrepancy where both words and numerical figures are entered, the numerical figures shall control. No Bid shall be rejected solely by reason of the failure to enter sums in both words and numerical figures provided that a sum is ascertainable. If a sum is ascertainable, the Bid will conclusively be determined to be responsive.

- **G.** All Bids should be regular in every respect. Interlineations, additions, excisions or conditions made or included in the completed Bid Form by the Bidder shall be disregarded and the Bid, if otherwise sufficient, shall be accepted. Only in the event that, notwithstanding the disregard of the interlineation, addition, excision or condition, the amount of the Base Bid or Bid for a Unit Price or an Alternate cannot be determined shall the Bid be rejected.
- H. All requested Alternates shall be Bid. If an alternate price called for does not involve a change in price, the Bidder shall so indicate by writing "No Change", "None", "Zero", "0", "No cost", "N/A" or the equivalent of any of these entries, in the space provided. Bidders shall not be permitted to refuse to Bid on an Alternate, and the failure to enter a sum with the intention of refusing to Bid the Alternate shall be disregarded. The use of any of the above-identified entries, or the failure to enter an amount in the blank for an Alternate, shall be treated conclusively as a Bid of zero dollars for the Work described in the Alternate. The failure to indicate whether a sum inserted for an Alternate is an "add" or a "deduct" shall be treated conclusively as a deduction to the base Bid. The failure to make an entry for an Alternate shall not cause the Bid thereby to be made nonresponsive.
- I. All requested Unit Prices for which estimated quantities have been provided in the Bid Form shall be bid. If the Unit Price Work will be performed at no cost to PhilaPort, the Bidder shall so indicate by writing "No Change", "None", "Zero", "0", "No cost", "N/A" or the equivalent of any of these entries, in the space provided. Bidders shall not be permitted to refuse to Bid on an Unit Price, and the failure to enter a sum with the intention of refusing to provide with his Bid the cost of the Unit Price Work shall be disregarded. The use of any of these entries, or the failure to enter an amount in the blank for Unit Price Work, shall be treated conclusively as a Bid of zero dollars for that Work. The failure to make an entry for a Unit Price with an estimated quantity shall not cause the Bid thereby to be made nonresponsive. Where an error is made in computing the extension of the per Unit Price to total price, the per Unit Price quoted shall govern.
- J. All requested Unit Prices for which no estimated quantities are provided in the Bid Form shall also be bid. If the Unit Price Work will be performed at no cost to PhilaPort, the Bidder shall so indicate by writing "No Change", "None", "Zero", "0", "No cost", "N/A" or the equivalent of any of these entries, in the space provided. The use of any of these entries, or the failure to enter any of these entries or an amount in the blank for Unit Price Work shall be treated conclusively as a Bid of zero dollars for that Work.
- **K.** In the event of a discrepancy between a Unit Price and an extended price, the lesser of (i) recalculation of the extended line based upon the Unit Price; and (ii) value of the extended line as written in the bid, shall govern. In such event, the extended price shall be divided by the estimated quantity for the Work or line item to arrive at a recomputed Unit Price which shall thereafter govern for purposes of payment. In the event the total bid price does not equal the

value of the sum of all the extended line prices, the total of the sum of the extended line prices shall govern (including any recomputed prices as set forth above).

- L. The Bidder shall insert the Addenda by numbers in any spaces provided on the Bid Form. The Bidder shall ascertain, prior to submitting a Bid, that the Bidder has received all Bulletins and other Addenda issued. Bidder by the submission of the Bid, acknowledges conclusively that all Addenda properly issued are applicable and operative as a part of the Contract Documents. Failure of any Bidder to receive any Bulletin or Addenda as provided for herein shall not release such Bidder from the obligation of his Bid and the obligation to comply with the provisions of the Addenda. The failure to list one or more of the Addenda numbers on the Bid Form will not make the Bid nonresponsive.
- M. The Bidder shall not condition, qualify or otherwise assert a stipulation of any kind in the Bid. Any condition, qualification or stipulation added to the Bid Form shall be disregarded and the Bid accepted as if the condition, qualification or stipulation did not appear. Only in the event that, notwithstanding the disregarding of the condition, qualification or stipulation, the amount of the base Bid or Bid for a Unit Price or an Alternate cannot be determined, shall the Bid be rejected.
- N. Bids may be submitted by sole proprietors, partnerships, corporations, limited liability companies and forms of business organizations that are for the purposes of the contract a functional equivalent. Each Bidder must complete the Bid Form by entering the information requested, including for example the name of the Bidder, the name of the person signing the Bid, the Bidder's business address with ZIP code.
- **O.** Bids by sole proprietors must be signed by the individual proprietor and witnessed. Any fictitious name or name under which the sole proprietor trades must be stated.
- **P.** Bids by partnerships must furnish the full name of one or more general partners, and must be signed in the partnership name by one or more general partners, followed by a listing of the names of all partners.
- Q. Bids by corporations must be signed by the president of the corporation, a vice president of the corporation, or another corporate representative whose authority is established by an attached resolution. The signature of the representative must be witnessed and attested to by a secretary, assistant secretary, treasurer, assistant treasurer, or another corporate representative whose authority is established by an attached resolution. The Bid of a corporation does not require the affixing of the corporate seal. Any corporate resolutions attached to the Bid in order to establish the authority of a corporate representative may be dated as of the date of the Bid, or for a period of no more than one year prior thereto.
- **R.** Bids by a Limited Liability Company or LLC, or equivalent form of business organization, must submit the Operating Agreement or similar documentation, establishing the authority of the representative who executes the Bid and the authority of the representative who attests to the validity of the signature.

S. When requested by PhilaPort, satisfactory evidence of the authority of the individual signing on behalf of the Bidder or attesting to the signature shall be furnished. The failure to furnish satisfactory evidence of the authority of the individual with three (3) business days of PhilaPort's request, shall be conclusively treated as a deficiency requiring the rejection of the Bid.

Section 7 State of Incorporation:

As a precondition to the acceptance of any Bid tendered by any corporation not incorporated in the Commonwealth of Pennsylvania, or the Bid of any other form of business organization including, but not limited to, a sole proprietorship, a limited partnership or a limited liability company not domiciled in the Commonwealth, the corporation, limited liability company, limited partnership or sole proprietorship shall comply with any applicable Commonwealth requirements related to registration. If the Bidder is incorporated in a state other than Pennsylvania, the Bidder must state whether the corporation is registered to do business in Pennsylvania. If the Bidder operates under an assumed or fictitious name, the Bidder must state whether such name has been registered in Pennsylvania. The administration of these requirements is through the Pennsylvania Department of State, Corporation Bureau, 206 North Office Building, Harrisburg, PA 17120, telephone (717) 787-1057, facsimile (717) 783-2244.

Section 8 Award to a Foreign Corporation:

No contract will be awarded to a Bidder which is a foreign (out-of-state or non-US) corporation or which is operating under a fictitious or assumed name unless the Bidder has complied with, or agreed to comply with, the registration requirements under the laws of Pennsylvania.

Section 9 Bid Guaranty:

- A. All bids shall be accompanied by a certified bank treasurer's or cashier's check drawn in favor of the "Philadelphia Regional Port Authority" or "PhilaPort" in an amount equal to ten percent (10%) of the gross amount of the Base Bid, excluding Alternates and including Unit Price Work for which estimated quantities have been provided unless a different specific amount has been established by PhilaPort and set forth in the Bidding Documents. A bid bond from a surety company authorized to business in the Commonwealth is also acceptable.
- B. For purposes of estimating the amount of the security, the amount of labor and the quantities of materials or supplies to be furnished, must be consistent and in accordance with the estimated quantities required to perform the Work of the Base Bid in the Contract Documents. PhilaPort shall not be bound by such estimates of the quantities of labor, materials or supplies required to be furnished under the Contract.
- C. When bids are opened and the lowest responsible and responsive Bidder has been determined, PhilaPort within thirty (30) calendar days shall return the security provided by the Bidders except for the security submitted by the two apparent lowest responsive and responsible

Bidders. The security of these two Bidders, except where forfeiture of security is required, will be returned upon the execution of all Contract Documents by the lowest responsible Bidder. In the event the contract is not awarded by PhilaPort, the bid guaranty of these two Bidders will be returned on or about the sixty (60) days after the date of bid opening, unless the time for awarding the Bid has been extended by the Bidders or by operation of law.

Section 10 Timely Delivery of Bids:

The Bidder must submit his Bid to PhilaPort prior to the time scheduled for bid opening, regardless of the method of delivery used. Any Bid received after the time set for the bid opening will be rejected and, to the extent practicable, returned to the Bidder without being considered by PhilaPort.

Section 11 Submission of Bids in Bonfire:

To be considered, it is the responsibility of the contractor to ensure that the contractor's bid submission is received by the Authority prior to the time scheduled for the receipt of submissions. Submissions are due prior to the time set forth on the cover page of this Invitation for Bid. No submission shall be considered if it arrives after the time set for the deadline of submissions. PhilaPort will be utilizing an e-Sourcing platform called Bonfire. Contractor's must register with Bonfire to submit an electronic submission with PhilaPort. submitted through online Bonfire Portal Submissions must he the at: https://PHILAPORT.bonfirehub.com.

Instructions and video tutorial can be found at:

- https://support.gobonfire.com/hc/en-us/articles/360011135513-Vendor-Registration.
 and
- https://support.gobonfire.com/hc/en-us/articles/203903356-Vendor-Registration-and-Submission-

Be sure to register well in advance of the submission date and time. Submissions by other methods will not be accepted. Contractors must use Internet Explorer 11, Microsoft Edge, Google Chrome, or Mozilla Firefox. JavaScript must be enabled. Browser cookies must be enabled. Ensure pop-up blockers are turned off to avoid any issues. Respondents should contact Bonfire at Support@GoBonfire.com for technical questions related to submissions or visit Bonfire's help forum at https://bonfirehub.zendesk.com/hc.

Submission materials should be prepared in the file formats listed under Requested Information for this opportunity in the Bonfire Portal. The maximum upload file size is 1000 MB. Documents should not be embedded within uploaded files, as the embedded files will not be accessible or evaluated.

Within one (1) business day of the submission date, the original bid submission, with an original signature must be mailed to:

Kate Bailey PhilaPort 3460 North Delaware Avenue 2nd Floor Philadelphia, PA 19134

PhilaPort reserves the right to reject all questionnaires submitted, to cancel the solicitations requested under this notice, and/or to re-advertise solicitation for these services.

Section 12 Withdrawal or Modification of a Bid Prior to Bid Opening:

- A. Complete Withdrawal Before Date and Time. Subject to the provisions of Section 5.B, a Bid may be withdrawn by written notice or in person by a Bidder or his authorized representative (if their identity is established by photographic identification and proof of authorization, preferably on Bidder letterhead) and a receipt for the Bid is signed prior to the exact hour and date set for the opening of bids.
- **B.** Modification Before Bid Date or Time of a Bid Already Submitted But Not Opened. If, before the time of the bid opening, a Bidder wishes to modify a Bid already delivered to PhilaPort, the Bidder's authorized representative (if their identity is made known through photographic identification and proof of authorization) may request that PhilaPort return the Bid, but only if the Bidder's representative signs a receipt for the Bid before the exact hour and date set for the opening of bids. The Bidder may then modify the Bid and resubmit the Bid so long as the modified Bid complies with the requirements set forth in these instructions to Bidders. PhilaPort will not, under any circumstances, open a Bid before the bid opening date and time.

Section 13 Bid Opening Procedure:

Bids will be opened and read aloud publicly at the time and place designated in the Notice to Bidders.

No inspection or photocopies of any Bid will be made at the bid opening. The amount of each Bid, together with the name of each Bidder will be recorded. Such recorded information shall be considered unofficial and shall be open to public inspection at the bid opening.

The bid tabulation, listing the Bidders and their bid amount, will formally be made available to interested parties within ten (10) days of the opening.

Section 14 Rejection of Bid Proposal:

PhilaPort reserves the right to reject any or all bids or parts thereof for failure to meet the requirements of these Instructions to Bidders or any other requirements set forth in the Bidding Documents. A Bid which reflects or shows an omission, alterations of form, additions or deductions not called for, conditional bid or uninvited alternate, or irregularities of any kind shall not be rejected but instead the irregularity shall be disregarded. PhilaPort reserves the right to waive technical defects or irregularities on bids as set forth in these Instructions to Bidders.

Section 15 Withdrawal of Bids after Bid Opening:

Within two (2) days after the opening of the bids, but before award, a Bidder may request permission to withdraw his Bid if it submits a request, in writing, to PhilaPort. The request must be addressed to the Director of the Procurement, Philadelphia Regional Port PhilaPort, 3460 N. Delaware Avenue, Philadelphia, PA 19134. The request may be hand-delivered, emailed to kbailey@philaport.com, or faxed to the same official at (215) 426-6800. The request will not be considered received unless it is delivered as set out in this Section and includes evidence that the requested withdrawal is consistent with the requirements of the Bid Withdrawal Act.

Section 16 Experience Questionnaire and Financial Statement Provided On Request:

At PhilaPort's request, or if specifically required by the Bidding Documents, Bidders shall file an experience questionnaire on the form provided by PhilaPort and an audited financial statement. The questionnaire and statement shall be certified to be true and correct by an affidavit sworn to or affirmed before a Notary Public, or other empowered or administer oaths or affirmations. Falsification of any requested information or documentation shall result in a determination that the Bidder is not responsible, forfeiture of the bid bond and cancellation of any contract award. The Bidder must make a good-faith effort at providing complete information in response to the questions. A Bidder will be disqualified on the ground of nonresponsiveness if the effort at completing the form is substantially incomplete or demonstrates bad faith. The failure to furnish the original questionnaire or to respond to specific inquiry from PhilaPort within three (3) business days of PhilaPort's request shall conclusively disqualify a Bidder. An apparent low Bidder shall upon request submit the most recent audited financial statement or, if an audited financial statement is unavailable, a financial statement prepared after a compilation or review, within three (3) days of PhilaPort's request.

Section 17 Requests for Additional And Corrected Information:

A. Evaluation of Responsibility. In evaluating the Bid Proposal Form, in addition to price, PhilaPort may consider completion time, Bidder's experience, past record of Bidder in meeting commitments and any other general factors that may be deemed pertinent to the Bidder's responsibility as a contractor and the best interests of PhilaPort. PhilaPort reserves the right to request Bidder to provide additional information prior to award of contract.

- **B.** Evaluation of Responsiveness. The failure to execute or complete a blank on the Bid Form shall cause the Bid to be rejected only if the amount of the base Bid or a Unit Price cannot be determined. The failure of the Bidder to sign the Bid Proposal Form shall be conclusively treated as a nonresponsive Bid, and the Bid shall be rejected. The failure to attest to the signature made on behalf of a corporate Bidder or a Bidder which is Limited Liability Company shall not make the Bid nonresponsive.
- **C.** Conditioned Bid. The Bidder shall not condition, qualify, or otherwise assert a stipulation of any kind in the Bid. Any condition, qualification or stipulation added to the Bid and Certification Form shall be disregarded and the Bid accepted as if the condition, qualification or stipulation did not appear. Only in the event that, notwithstanding the disregarding of the condition, qualification or stipulation, the amount of the Base Bid cannot be determined shall the Bid be rejected.
- D. Incomplete and Insufficient Submittals. Provided that the integrity of the amounts of the Base Bid, Alternatives, and Unit Prices are not compromised, the failure of the Bidder to submit with his completed and executed Bid and Certification Form, (1) a document required by these Instructions, including but not limited to a Non-Collusion Affidavit, (2) documents required to establish participation in an approved Apprenticeship Program, (3) documents otherwise required to be included with the Bid, or to provide a complete document, shall be conclusively treated as an irregularity which, in the discretion of PhilaPort may be ignored and the Bid accepted, provided that the omitted document or missing portion of the document is submitted after the Bid within three (3) days of written notice from PhilaPort of the deficiency and of the opportunity to cure. In the event the Bidder fails, refuses or neglects to submit any requested information within the three (3) business days of the request, Bidder's bid guaranty may be forfeited to the use of PhilaPort.

Section 18 Collusive Bids Will Be Rejected:

The Bids of any Bidder or Bidders who engage in collusive bidding will be rejected. Any Bidder who submits more than one Bid in such manner as to make it appear that the bids submitted are on a competitive basis from different parties will be considered a collusive Bidder. Submission of collusive bids will result in a Bidder being rejected as not responsible for subsequent projects. Nothing in this Section prevents a Bidder from superseding a Bid by submitting a subsequent Bid, delivered prior to the bid opening, which expressly revokes the previous Bid.

Section 19 Bid Protest Procedure:

The Commonwealth Procurement Code (62 P.C. § 1711.1, as amended) governs the protest procedure, which is summarized below. In the event this general description conflicts with the statute, the statutory language controls.

A. Who may File: Any Bidder or prospective Bidder who is aggrieved in connection with the bid or the award of a contract resulting from the bid may file a protest.

- 1. Prospective Bidder is an entity that has not submitted a Bid in response to the Notice to Bidders.
- 2. Bidder is an entity that has submitted a Bid in response to the Notice to Bidders.

B. Time Limits.

- 1. If a protest is filed by a Prospective Bidder, a protest must be filed, in writing, with the Executive Director of PhilaPort **prior** to the bid opening date and time described in the Notice to Bidders.
- 2. If a protest is filed by a Bidder, the protest must be filed, in writing, with the Executive Director of PhilaPort within seven (7) days after the protesting Bidder knew or should have known of the facts giving rise to the protest **except** in no event may a protest be filed later than seven (7) days after the Notice of Award is posted on PhilaPort (www.philaport.com) website.
- 3. Filed shall be defined as the date upon which the Executive Director of PhilaPort receives the written protest
- 4. If the Bidder fails to file a bid protest or files an untimely protest, then he shall be deemed to have waived the right to protest the solicitation or award of the contract in any forum. Untimely protests will be disregarded by PhilaPort.
- C. PhilaPort may cancel an invitation for bids or may reject all bids at any time prior to the time a contract is executed by all parties when it is in the best interests of PhilaPort. The Bidder may not submit a protest relating to cancellation of the bid or rejection of all bids.
- **D.** A protest shall state all grounds upon which the protestant asserts the solicitation or award of the contract was improper. The protestant may submit with the protest any documents or information it deems relevant to the protest.
- E. The full text of the Bid Protest Procedure can be found at 62 Pa. C.S. § 1711.1 et seq.

Section 20 Bidder Certified Not Under Debarment:

The Bidder must certify following award and in conjunction with the execution of the Contract that he is not currently under suspension or debarment by the Commonwealth, any other state, or the federal government, and if the Bidder cannot so certify, then the Bidder agrees to submit along with the Bid a written explanation of why such certification cannot be made and why the award may nevertheless be made.

Section 21 Subcontract with Debarred or Suspended Firm:

If the successful Bidder enters into subcontracts or employs any subcontractors or individuals who are currently suspended or debarred by the Commonwealth or the federal government or who become suspended or debarred by the Commonwealth or federal government during the term of this contract or any extensions or renewals thereof, PhilaPort shall have the right to require the Contractor to terminate such subcontract or employment.

Section 22 Reimbursement of Costs of Inspector General Investigation:

The Contractor shall reimburse PhilaPort and any other Commonwealth agency for the reasonable costs of investigation incurred by the Office of Inspector General for investigations of the Contractor's compliance with the terms of this or any other agreement between the Contractor and PhilaPort which result in the suspension or debarment of the Contractor. Such costs shall include, but not be limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations which do not result in the Contractor's suspension or debarment.

Section 23 Current List of Suspended and Debarred Contractors:

The Bidder may obtain a list of suspended and debarred contractors by referring to the Department of General Services website:

https://www.dgs.internet.state.pa.us/debarment list/

or by contacting DGS:

Department of General Services Office of Chief Counsel 603 North Office Building Harrisburg, Pennsylvania 17125 Telephone No. (717) 783-6472 Fax No. (717) 787-9138

The Bidder may also secure a list of suspended and debarred contractors from the Department of Labor and Industry website:

http://www.portal.state.pa.us/portal/server.pt?open=514&objID=553544&mode=2

or by contacting L&I:

Department of Labor & Industry Office of Chief Counsel 10th Floor Labor & Industry Building Harrisburg, PA 17120 Telephone No. (717) 787-4186 Fax No. (717) 787-1303

Section 24 Assignment of Antitrust Claims:

The Contractor and PhilaPort recognize that, in actual economic practice, overcharges by the Contractor's suppliers, resulting from the violations of State or Federal antitrust laws, are, in fact, borne by PhilaPort. As part of the consideration for the award of this contract, and, intending to be legally bound, the Contractor assigns to PhilaPort all right, title and interest in, and to, any claims contractor now has, or may hereafter acquire, under State or Federal antitrust laws relating to the goods or services which are the subject of this contract.

Section 25 Contractor Integrity Provisions:

It is essential that those who seek to contract with PhilaPort observe high standards of honesty and integrity. They must conduct themselves in a manner that fosters public confidence in the integrity of PhilaPort and Commonwealth procurement processes.

In furtherance of this policy, Contractor agrees to the following:

- 1. Contractor shall maintain the highest standards of honesty and integrity during the performance of this contract and shall take no action in violation of state or federal laws or regulations or any other applicable laws or regulations, or other requirements applicable to Contractor or that governs contracting with PhilaPort or the Commonwealth.
- 2. Contractor shall establish and implement a written business integrity policy, which includes, at a minimum, the requirements of these provisions as they relate to Contractor employee activity with PhilaPort, the Commonwealth and Commonwealth employees, and which is distributed and made known to all Contractor employees.
- 3. Contractor, its affiliates, agents and employees shall not influence, or attempt to influence, any Commonwealth employee to breach the standards of ethical conduct for Commonwealth employees set forth in the Public Official and Employees Ethics Act, 65 Pa.C.S. §§ 1101 et seq.; the State Adverse Interest Act, 71 P.S. §776.1 et seq.; and the Governor's Code of Conduct, Executive Order 1980-18, 4 Pa. Code § 7.151 et seq.; or to breach any other state or federal law or regulation.
- 4. Contractor, its affiliates, agents and employees shall not offer, give, or agree or promise to give any gratuity to a Commonwealth official or employee or to any other person at the direction or request of any Commonwealth official or employee.
- 5. Contractor, its affiliates, agents and employees shall not offer, give, or agree or promise to give any gratuity to a Commonwealth official or employee or to any other person, the acceptance of which would violate the Governor's Code of Conduct, Executive Order

- 1980-18, 4 Pa. Code § 7.151 et seq. or any statute, regulation, statement of policy, management directive or any other published standard of the Commonwealth or PhilaPort ethics policy.
- 6. Contractor, its affiliates, agents and employees shall not, directly or indirectly, offer, confer, or agree to confer any pecuniary benefit on anyone as consideration for the decision, opinion, recommendation, vote, other exercise of discretion, or violation of a known legal duty by any Commonwealth official or employee.
- 7. Contractor, its affiliates, agents, employees, or anyone in privity with him or her shall not accept or agree to accept from any person, any gratuity in connection with the performance of Work under the contract, except as provided in the contract.
- 8. Contractor shall not have a financial interest in any other contractor, subcontractor, or supplier providing services, labor, or material on this project, unless the financial interest is disclosed to PhilaPort and Commonwealth in writing and PhilaPort and Commonwealth consent to Contractor's financial interest prior to PhilaPort's execution of the contract. Contractor shall disclose the financial interest to PhilaPort and Commonwealth at the time of bid or proposal submission, or if no bids or proposals are solicited, not later than Contractor's submission of the contract signed by Contractor.
- 9. Contractor, its affiliates, agents and employees shall not disclose to others any information, documents, reports, data, or records provided to, or prepared by, Contractor under this contract without the prior written approval of PhilaPort, except as required by the Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, or other applicable law or as otherwise provided in this contract. Any information, documents, reports, data, or records secured by Contractor from PhilaPort or a third party in connection with the performance of this contract shall be kept confidential unless disclosure of such information is:
 - a. Approved in writing by PhilaPort prior to its disclosure; or
 - b. Directed by a court or other tribunal of competent jurisdiction unless the contract requires prior PhilaPort approval; or
 - c. Required for compliance with federal or state securities laws or the requirements of national securities exchanges; or
 - d. Necessary for purposes of Contractor's internal assessment and review; or
 - e. Deemed necessary by Contractor in any action to enforce the provisions of this contract or to defend or prosecute claims by or against parties other than PhilaPort or Commonwealth; or
 - f. Permitted by the valid authorization of a third party to whom the information, documents, reports, data, or records pertain; or

- g. Otherwise required by law.
- 10. Contractor certifies that neither it nor any of its officers, directors, associates, partners, limited partners or individual owners has been officially notified of, charges with, or convicted of any of the following and agrees to immediately notify PhilaPort contracting officer in writing if and when it or any officer, director, associate, partner, limited partner or individual owner has been officially notified of, charges with, convicted of, or officially notified of a governmental determination of any of the following:
 - a. Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.
 - b. Commission of fraud or a criminal offense or other improper conduct or knowledge of, approval of or acquiescence in such activities by Contractor or any affiliate, officer, director, associate, partner, limited partner, individual owner, or employee or other individual or entity associated with:
 - (1) Obtaining;
 - (2) Attempting to obtain; or
 - (3) Performing a pubic contract or subcontract.

Contractor' acceptance of the benefits derived from the conduct shall be deemed evidence of such knowledge, approval or acquiescence.

- c. Violation of federal or state antitrust statutes.
- d. Violation of any federal or state law regulating campaign contributions.
- e. Violation of any federal or state environmental law.
- f. Violation of any federal or state law regulating hours of labor, minimum wage standards or prevailing wage standards; discrimination in wages; or child labor violations.
- g. Violation of the Act of June 2, 1915 (P.L. 736, No. 338), known as the Workers' Compensation Act, 77 P.S. § 1 et seq. or the Longshore and Harbor Workers' Compensation Act, 33 U.S.C § 901 to 950.
- h. Violation of any federal or state law prohibiting discrimination in employment.
- i. Debarment by any agency or department of the federal government or by any other state.

j. Any other crime involving moral turpitude or business honesty or integrity.

Contractor acknowledges that PhilaPort may, in its sole discretion, terminate the contract for cause upon such notification or when PhilaPort otherwise learns that Contractor has been officially notified, charged, or convicted.

- 11. If this contract was awarded to Contractor on a non-bid basis, Contractor must, (as required by Section 1641 of the Pennsylvania Election Code) file a report of political contributions with the Secretary of the Commonwealth on or before February 15 of the next calendar year. The report must include an itemized list of all political contributions known to Contractor by virtue of the knowledge possessed by every officer, director, associate, partner, limited partner, or individual owner that has been made by:
- a. Any officer, director, associate, partner, limited partner, individual owner or members of the immediate family when the contributions exceed an aggregate of one thousand dollars (\$1,000) by any individual during the preceding year; or
- b. Any employee or members of his immediate family whose political contribution exceeded one thousand dollars (\$1,000) during the preceding year.
 - To obtain a copy of the reporting form, Contractor shall contact the Bureau of Commissions, Elections and Legislation, Division of Campaign Finance and Lobbying Disclosure, Room 210, North Office Building, Harrisburg, PA 17120.
- 12. Contractor shall comply with requirements of the Lobbying Disclosure Act, 65 PA.C.S. § 13A01 et seq., and the regulations promulgated pursuant to that law. Contractor employee activities prior to or outside of formal PhilaPort and Commonwealth procurement communication protocol are considered lobbying and subjects the Contractor employees to the registration and reporting requirements of the law. Actions by outside lobbyists on Contractor's behalf, no matter the procurement stage, are not exempt and must be reported.
- 13. When Contractor has reason to believe that any breach of ethical standards as set forth in law, the Governor's Code of Conduct, or in these provisions has occurred or may occur, including but not limited to contact by a Commonwealth officer or employee which, if acted upon, would violate such ethical standards, Contractor shall immediately notify PhilaPort contracting officer or Commonwealth Inspector General in writing.
- 14. Contractor, by submission of its bid or proposal and/or execution of this contract and by the submission of any bills, invoices or requests for payment pursuant to the contract, certifies and represents that it has not violated any of these contractor integrity provisions in connection with the submission of the bid or proposal, during any contract negotiations or during the term of the contract.
- 15. Contractor shall cooperate with the Office of Inspector General in its investigation of any alleged Commonwealth employee breach of ethical standards and any alleged Contractor

non-compliance with these provisions. Contractor agrees to make indentified Contractor employees available for interviews at reasonable times and places. Contractor, upon the inquiry or request of the Office of Inspector General, shall provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Inspector General to Contractor's integrity and compliance with these provisions. Such information may include, but shall not be limited to, Contractor's business or financial records, documents or files of any type or form that refers to tor concern this contract.

- 16. For violation of any of these Contractor Integrity Provisions, PhilaPort may terminate this and any other contract with Contractor, claim liquidated damages in an amount equal to the value of anything received in breach of these provisions, claim damages for all additional costs and expenses incurred in obtaining another contractor to complete performance under this contract, and debar and suspend Contractor from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those PhilaPort may have under law, statute, regulation, or otherwise.
- 17. For purposes of these Contractor Integrity Provisions, the following terms shall have the meanings found in this Paragraph 17.
 - a. "Confidential information: means information that a (is not already in the public domain; b) is not available to the public upon request; c) is not or does not become generally known to Contractor from a third party without an obligation to maintain its confidentiality; d) has not become generally known to the public through act or omission of Contractor; or e) has not been independently developed by Contractor without the use of confidential information of PhilaPort or Commonwealth.
 - b. "Consent" means written permission signed by a duly authorized officer or employee of PhilaPort, provided that where the material facts have been disclosed, in writing by pre-qualification, bid, proposal or contractual terms, PhilaPort shall be deemed to have consented by virtue of execution of this contract.
 - c. "Contractor" means the individual or entity that has entered into this contract with PhilaPort, including those directors, officers, partners, managers, and owners having more that a five percent interest in Contractor.
 - d. "Financial interest" means:
 - (1) Ownership of more than a five percent interest in any business; or
 - (2) Holding a position as an officer, director, trustee, partner, employee, or holding any position of management.

- e. "Gratuity" means tendering, giving or providing anything of more that nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the Governor's Code of Conduct, Executive Order 1980-18, the 4 Pa. Code § 7.153 (b), shall apply.
- f. "Immediate family" means a spouse and any unemancipated child.
- g. "Non-bid basis" means a contract awarded or executed by PhilaPort with Contractor without seeking bids or proposals from any other potential Bidder or offeror.
- h. "Political contribution" means any payment, gift subscription, assessment, contract, payment for services, dues, loan, forbearance, advance or deposit of money or any valuable thing, to a candidate for public office or to a political committee, including but not limited to a political action committee, made for the purpose of influencing any election in the Commonwealth of Pennsylvania or for paying debts incurred by or for a candidate or committee before or after any election.

Section 26 Product Discrimination:

A. Reciprocal Limitations Act.

- 1. Background Requirements of the Act. The Act (62 Pa.C.S. (2006 Supp.) §107) requires PhilaPort:
 - i. In the award of contracts, exceeding \$10,000, for the erection, construction, alteration, improvement or repair of any building or public work, or the purchase or lease of any goods, supplies, equipment, printing or materials, to give resident Bidders a preference against nonresident Bidder from any state that gives or requires a preference to Bidders from that state. The amount of preference shall be equal to the amount of the preference applied by the state of the nonresident Bidder. A resident Bidder is a person, partnership or corporation or other business entity authorized to transact business within Pennsylvania and having a bona fide establishment for transacting business within Pennsylvania at which it was transacting business on the date when bids for the public contract were first solicited.
 - ii. In the erection, construction, alteration, improvement or repair of any public building or other public work, and in all purchases of goods, supplies, equipment, printing or materials, not to specify, use or purchase any goods, supplies, equipment, printing or materials which are produced, manufactured, mined, grown or performed in any state that prohibits the specification for use, or purchase of such items in or on its public buildings or other works, when such items are not produced, manufactured, mined, grown or performed in such state.

2. List of Discriminating States.

i. States which apply preference favoring in-state Bidders and the amount of such preference, (that may affect this contract), as found by the Department of General Services:

STATE PREFERENCE

1. Arizona 5% (construction material from Arizona resident dealers only)

2. Montana 3%

3. West Virginia 2.5% for construction, repair improvement of any buildings.

4. Wyoming 5%

ii States which prohibit the use of out-of-state goods, supplies, equipment, materials or printing and the prohibition (that may affect this contract), as found by the Department of General Services:

STATE PREFERENCE

Georgia Forest Products only

Indiana Coal

New Jersey For Bidders for the following items: major household appliances,

chain link fence, portable sanitation units, glass, glazier supplies, storage batteries, carpet and cushion, shades, room air conditioning, electrical supplies, plumbing supplies, hardware supplies, fasteners, lumber, building supplies, audio-visual/video equipment, fire extinguishers, fire hose, motor oils, fuel oil, photographic supplies,

Venetian blinds, drapes, paper towel dispensers, water hose

New Mexico Construction

3. Calculation of Preference.

In calculating the preference for purposes of determining the low Bidder, the amount of a bid submitted by Commonwealth resident Bidder shall be reduced by the percentage preference which would be given to a nonresident Bidder by its state of residence. Similarly, the amount of a bid offering Pennsylvania goods, supplies, equipment, materials and printing shall be reduced by the percentage preference which would be given to another Bidder by the state where the

goods, supplies, equipment, materials or printing are produced, manufactured, mined, grown or performed.

B. Trade Practices Act.

It has been the policy of the Commonwealth not to purchase any supplies, equipment or materials manufactured in any foreign country which prohibits the specification for or use of supplies, equipment or materials manufactured in Pennsylvania.

- a. Many world trading countries, directly or indirectly by statute, regulation, policy, procedure or practice, grant or bestow a preference for supplies, equipment or materials manufactured in their country, thereby discriminating against the use of supplies, equipment or materials manufactured in the Commonwealth.
- b. It is the Policy of the Commonwealth that aluminum steel products made in the United States should be purchased by all public agencies in preference to aluminum and steel products made in foreign countries which discriminate against supplies, equipment or materials manufactured in Pennsylvania.

1. Definitions

- a. The Word "discriminates" means an act, regulation or policy of a foreign country which, directly or indirectly:
- (i) Prevents the importation, sale or use of any supplies, materials or equipment manufactured in this Commonwealth.
- (ii) Grants or bestows a preference, discount or other competitive advantage to supplies, materials or equipment manufactured in the foreign country, the effect whereof is to place similar supplies, materials or equipment manufactured in this Commonwealth at a competitive disadvantage;
- (iii) Restricts the opportunities for persons having a business situs in this Commonwealth to bid on or compete for government contracts including, but not limited to, a preference for residents of the foreign country;
- (iv) Solicits for, awards or negotiates public works contracts on a selective tender basis;
- (v) Imposes discriminatory duties, tariffs or border taxed on the importation of supplies, materials or equipment no produced in the foreign country, the effect whereof is to place supplies, materials or equipment manufactured in this Commonwealth at a competitive disadvantage with like goods manufactured in any foreign country; and
- (vi) Adopts or condones any other unfair method of competition in international trade including, but not limited to, the exportation of aluminum or steel products made in the foreign country through cartels or the subsidization of said products.

- b. The word "person" means natural persons, corporations, partnerships, business units and associations existing under or authorized by the laws of the United States, the laws of any territories or the laws of any state.
- c. The words "public agency" mean:
- (i) Counties, cities, boroughs, townships, school districts and any other governmental unit or district;
- (ii) The General State PhilaPort, the State Public School Building PhilaPort, the State Highway and Bridge PhilaPort and any other authority now in existence or hereafter created or organized by the Commonwealth;
- (iii) All municipal or school or other authorities now in existence or hereafter created or organized by any county, city, borough, township or school district or combination thereof; and
- (iv) Any and all other public bodies, authorities, officers, agencies or instrumentalities, whether exercising a governmental or proprietary function.
- d. The words "public works" mean any structure, building, highway, waterway, street, bridge, pier, transit car or system, airport or other betterment, work or improvement whether of a permanent or temporary nature and whether for governmental or proprietary use contracted for by any public agency or financed in whole or in part by any public agency.
- e. The words "aluminum or steel products made in a foreign country" mean aluminum or steel products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed or processed by a combination of two or more of such operations, from aluminum or steel not made in the United States.
- f. The word "importer" means any person registered in the Commonwealth and doing business in the Commonwealth who engages in the receiving, storing, distributing or other processing of aluminum or steel products made in a foreign country; or who engages in the solicitation or acceptance of orders or contracts for the furnishing of or supplying of aluminum or steel products made in a foreign country.

In accordance with the Trade Practices Act (71 P.S. §773.101 et seq.) the Contractor shall not use, or permit to be used, in the Work any aluminum or steel products made in a foreign country that discriminates against aluminum or steel products manufactured in Pennsylvania. The countries of Brazil, South Korea, Spain, and Argentina have been found to discriminate against certain products manufactured in Pennsylvania. Therefore, the purchase or use of those countries' products, as listed below, is not permitted for a project. Penalties for a violation of this paragraph may be found in the Trade Practices Act. Penalties include becoming ineligible for award of any public works contracts for a period of three years.

- 1. **Brazil:** Welded carbon steel pipes and tubes; carbon steel wire rod; tool steel; certain stainless steel products, including hot-rolled stainless steel bar; stainless steel wire rod and cold-formed stainless steel bar; pre-stressed concrete steel wire strand; hot-rolled carbon steel plate in coil; hot-rolled carbon steel sheet and cold-rolled carbon steel sheet.
- 2. **Spain:** Certain stainless steel products, including stainless steel wire rod, hot-rolled stainless steel bars and cold-formed stainless steel bars; pre-stressed concrete steel wire strand; certain steel products including hot-rolled steel plate, cold-rolled carbon steel plate, carbon steel structural shapes, galvanized carbon steel sheet; hot-rolled carbon steel bars and cold-formed carbon steel bars.
- 3. **South Korea:** Welded carbon steel pipes and tubes; hot-rolled carbon steel plate and hot-rolled carbon steel sheet and galvanized steel sheet.
- 4. **Argentina:** Carbon steel wire rod and cold-rolled carbon steel sheet.

C. Steel Products Procurement Act.

In accordance with the Steel Products Procurement Act of March 3, 1978, P.L. 6 as amended (73 P.S. Sections 1881 et seq.), only steel products as defined in the Act shall be used or supplied in the performance of the contract or any subcontracts thereunder.

In the performance of the Contract the Contractor, subcontractors, material men or suppliers shall use only: 1) steel products, rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed by a combination of two or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process; and 2) cast iron products made in the United States.

The Contractor shall certify that all steel and cast iron products to be used or supplied in the performance of the Contract comply with this Act. No payment will be made to the Contractor for steel and cast iron products until such certification has been received.

This section shall not apply in any case where the Executive Director of PhilaPort, in writing, determines that steel and/or cast iron products as herein described are not produced in the United States in sufficient quantities to meet the Contract needs.

PhilaPort shall not provide for, or make any payments to any person who has not complied with the Act. Any such payments made by PhilaPort to anyone that should not have been made as a result of the Act shall be recoverable directly from the Contractor, subcontractor, manufacturer or supplier that did not comply with the Act.

In addition to the withholding of payments, any person who willfully violates any of the provisions of the Act shall be prohibited from submitting any bids to any public agency for a period of five (5) years from the date of the determination that a violation has occurred. In the

event the person who violated the provisions of the Act is a subcontractor, manufacturer or supplier, such person shall be prohibited from performing any work or supplying any materials to a public agency for a period of five (5) years from the date of the determination that a violation has occurred.

The Contractor shall include the provisions of the Steel Products Procurement Act in every subcontract and supply contract, so that the provisions of the Act shall be binding upon each subcontractor and supplier.

Where trade names, catalog numbers and manufactures of material or equipment are specified, they are mentioned therein for the purpose of establishing a standard of quality, performance and appearance, and for establishing a standard of competitive bidding. The use of this descriptive information will not relieve the Contractor from compliance with all aspects of the Act.

Section 27 Apprenticeship Training Program Participation:

To qualify as a responsive bidder for the purposes of this bid, the Bidder must certify (1) that the Bidder (or the labor force) participates at the time of the bid submission in an approved Apprenticeship Program as defined in the General Conditions for each craft or trade of the labor force contemplated to perform the work, (2) that such Program is currently registered with the Pennsylvania Apprenticeship and Training Council and (3) that such Program has apprentices and trainees currently participating.

To qualify as a responsible contractor and to comply with contractual requirements, the awarded Contractor shall utilize labor enrolled in an approved Apprenticeship Program registered with the Pennsylvania Apprenticeship and Training Council for each craft or trade of the labor force necessary to perform the work for the full duration of the contract Work.

Section 28 Diversity Inclusion Policy and Plan:

PhilaPort has adopted a policy on diversity inclusion, set forth in Part X of the Contracting, Procurement, and Leasing Policies and Procedures, revised as of November 2015 (the "Diversity Inclusion Policy" or the "Policy"). In order to implement this Policy, PhilaPort has further adopted the "Diversity Inclusion Plan (Construction)," appearing here as Attachment "A". Bidders must comply with the requirements of the Plan to be eligible for the award of the contract, in accordance with the provisions of Attachment "B".

Section 29 Award of Contract:

If PhilaPort awards a Contract, it will be made to the lowest responsive, responsible Bidder within sixty (60) days from the Bid Opening Date. This 60-day period may be extended by written consent of the lowest responsible Bidder(s) or by operation of law. Notice of Award of Contract will be made by letter mailed to the Contractor and will be effective upon the date mailed. If the lowest Bidder withdraws his bid, declines to extend the bid or refuses the award of

contract, PhilaPort may award the Contract to then next lowest responsive, responsible Bidder or reject all bids and re-bid the Contract. The proposed contract shall be considered awarded when both the Bidder and PhilaPort have executed the Agreement. No contract with PhilaPort exists until the Agreement is fully executed.

Section 30 Execution of Contract, Bond and Return of Insurance Certificates:

Within ten (10) days after receipt of the Contract, the successful Bidder, must:

- **A.** Sign and return the Contract to the Philadelphia Regional Port PhilaPort, 3460 N. Delaware Avenue, Philadelphia, PA 19134; and
- **B.** Sign and return payment and performance bonds, on a form acceptable to PhilaPort executed by a surety company or companies qualified to do business in Pennsylvania:
 - a. A performance bond at 100 percent of the contract amount, conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions of the contract. Such bond shall be solely for the protection of PhilaPort. The performance bond shall remain in effect for at least twelve (12) months following the date of final acceptance of the Work.
 - b. A payment bond at 100 percent of the contract amount. Such bond shall be solely for the protection of claimants supplying labor or materials to the prime contractor to whom the contract was awarded, or to any of his subcontractors, in the prompt payment of all such material furnished or labor supplied or performed in the prosecution of the work. "Labor or materials" include public utility services and reasonable rentals of equipment, but only for the periods when the equipment rented is actually used at the site.; and
- C. Sign and return all insurance certificates required by the General and/or Special Conditions to the Contract.
- **D.** As PhilaPort is an independent agency of the Commonwealth, for the purposes and within the meaning of the Act of October 15, 1980 (P.L. 950, No. 164), known as the Commonwealth Attorneys Act, all Contracts must be approved as to form and legality by the Office of the Attorney General.

Section 31 Failure to Execute Contract:

Failure or refusal of the Contractor to properly execute the Contract Documents and/or to furnish the required Bonds and/or to furnish the required insurance certificate within the 10-day time will be viewed as a refusal to accept the Award. In the event any of these documents are not returned or properly submitted, the successful Bidder shall be required to pay PhilaPort the lesser

of the following amounts:

- **A.** The amount of the bid guaranty, or
- **B.** The difference between the amounts specified in the bid of the lowest responsible Bidder and such larger amount for which PhilaPort may enter into a contract with another party to perform the Work covered by said bid.

If the successful Bidder fails or refuses to properly execute the Contract Documents and/or to furnish the required Bonds and/or to furnish the required insurance certificates within the 10-day time, PhilaPort may award the Contract to the next lowest responsible Bidder, or reject all bids and re-bid the Contract.

Section 32 Proof of Surety's Responsibility on Contract Bond:

The surety company, which is designated by the lowest responsive, responsible Bidder for the faithful performance of the contract and prompt payment of materials, equipment and labor, shall, with his Contract Bond, furnish to PhilaPort a certificate showing that the amount of the Bond is within the limit of net retention, or evidence that appropriate reinsurance or other security has been obtained in conformance with Section 661 of the Pennsylvania Insurance Company Law of 1921 (40 P.S. § 832).

Section 33 Reinsurance:

If the surety has entered into an agreement for reinsurance under the foregoing paragraph, the bond shall be supported by a duplicate original of the reinsurance agreement. the reinsurance agreement must contain a "direct liability to insured" clause, enabling PhilaPort to maintain an action against the company reinsured jointly with the reinsurer, and upon recovering judgment against such reinsured, to have recovery against such reinsurer, for payment to the extent to which it is liable under such reinsurance and in discharge thereof.

Section 34 Veteran's Preference:

PhilaPort recommends that contractors give preference in employment on PhilaPort projects to veterans of the Armed Services of the United States of America.

Section 35 Provisions Concerning The Americans With Disabilities Act:

During the term of this contract, the Contractor agrees as follows:

A. Pursuant to federal regulations promulgated under the authority of the Americans with Disabilities Act, 28 C.F.R. 35.202 et seq., the contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded

from participation in this contract or from such activities provided for under this contract. As a condition of accepting and executing this contract, the Contractor agrees to comply with the "General prohibitions Against discrimination," 28 C.F.R. 35.130, and all other regulations promulgated under Title II of the American with Disabilities Act which are applicable to the benefits, services, programs, and activities provided by PhilaPort and the Commonwealth of Pennsylvania through contracts with outside contractors.

B. The Contractor shall be responsible for and agrees to indemnify and hold harmless PhilaPort and the Commonwealth of Pennsylvania from all losses, damages, expenses, claims, and demands, suits, and actions brought by any party against PhilaPort and or the Commonwealth of Pennsylvania as a result of the Contractor's failure to comply with the provisions of paragraph A above.

Section 36 Environmental Statement:

According to the Commonwealth Procurement Code, Act of May 15, 1998, P.L. 358, No. 57, 62 Pa.C.S. §§ 101-4509, all invitations for bids and requests for bids for construction projects issued by any government agency shall set forth any provision of Federal and State statutes, rules and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources that affect the projects.

Section 37 Applicable Laws:

The Contractor shall obey all Federal, State, County, and municipal laws and ordinances in any way pertaining to the Work and shall obtain all permits that may be necessary for his performance if required.

The Bidder is hereby specifically notified that this Project is subject to those statutes, rules and regulations shown on the following list and the Work must be carried out in compliance with these statutes, rules and regulations.

STATE LAW (Updated 6/1/07)

I. Purdon's Statutes – Title 3 (Agriculture)

Fertilizer Act, Act of Dec. 13, 2001 (P.L. 876, No. 97§ 6701 et seq.

Soil and Plant Amendment Act, Act of Dec. 13, 2001 (P.L.876, No. 97 §1), 3 Pa.C.S.A. § 6901 et seq.

PA Pesticide Control Act of 1973, Act of March 1, 1974 (P.L. 90, No. 24), as amended, 3 P.S. 111.21 et seq.

Agricultural Liming Materials Act, Act of March 17, 1978 (P.L. 15, No.9), as amended, 3

P.S. 132-1 et seq.

The PA Plant Pest Act of 1992, Act of December 16, 1992 (P.L. 1228, No. 162 § 1), as amended, 3 P.S. 258.1 et seq.

Noxious Weed Control Law, Act of April 7, 1982 (P.L. 228, No. 74), as amended, 3 P.S. 255.1 et seq.

Conservation District Law, Act of May 15, 1945 (P.L. 547 § 1), as amended, 3 P.S. 849 et seq.

(Relating to weather modification), Act of January 19, 1968 (P.L. (1967) 1024, § 1), as amended, 3 P.S. 1101 et seq.

II. Purdon's Statutes – Title 16 (Counties)

(Relating to land use), Act of January 13,1966 (P.L. (1965) 1292, § 1), as amended, 16 P.S. 11941 et seq.

III. Purdon's Statutes – Title 18 (Crimes and Offenses)

The Crimes Code, Act of December 6, 1972 (P.L. 1482, No. 334), as amended, 18 Pa. C.S.A. 101 et seq.

IV. Purdon's Statutes – Title 24 (Education)

Public School Code of 1949, Act of March 10, 1949 (P.L. 30, art VII, § 741), as amended,24 P.S. 7-731 et seq.

V. Purdon's Statutes – Title 30 (Fish)

The Fish and boat Code, Act of October 16, 1980 (P.L. 996, No. 175), as amended, 30 Pa. C.S.A. 101 et seq.

VI. Purdon's Statutes – Title 32 (Forests, Waters and State Parks)

(Relating to water power and water supply permits), Act of June 14, 1923 (P.L. 704, § 1), as amended, 32 P.S. 591 et seq.

Water Well Drillers License Act, Act of May 29, 1956 (P.L. (1955) 1840, § 1), as amended, 32 P.S. 645.1 et seq.

(Relating to Flood Control), Act of August 7, 1936 (P.L. 106, 1st Ex. Sess., No. 46) as amended, 32 P.S. 653 et seq.

Flood Plain Management Act, Act of October 4, 1978 (P.L. 851, No. 166), as amended 32

P.S. 679.101 et seq.

Storm Water Management Act, Act of October 4, 1978 (P.L. 864, No. 167), as amended, 32 P.S. 680.1 et seq.

Dam Safety and Encroachments Act, Act of November 26, 1978 (P.L. 1375, No. 325), as amended, 32 P.S. 693.1 et seq.

(Relating to Stream Clearance), Act of June 5, 1947 (P.L. 422, § 1), as amended, 32 P.S. 701 et seq.

(Relating to Potomac River Pollution), Act of May 29, 1945 (P.L. 1134 § 1), as amended, 32 P.S. 741 et seq. Repealed in Part. Section 4 of Act 1981, May 1, P.L. 22 No.9, repeals this section to "the extent it required one of the members of the Interstate Commission on the Potomac River Basin to be a member of the Pennsylvania Commission on Interstate Cooperation."

(Relating to Schuylkill River Pollution), Act of June 4, 1945 (P.L. 1383, § 1), as amended, 32 P.S. 751.1 et seq.

(Relating to Delaware River Pollution), Act of April 19, 1945 (P.L. 272, § 1) as amended, 32 P.S. 815.31 et seq.

Delaware River Basin Compact, Act of July 7, 1961 (P.L. 518, §§ 1 to 3), as amended, 32 P.S. 815.101 et seq.

Ohio River Valley Water Sanitation Compact, Act of April 2, 1945 (P.L. 103 § 1), as amended, 32 P.S. 816.1 et seq.

Great Lakes Basin Compact, Act of March 22, 1956 (P.L. (1955) 1333, § 1), as amended, 32 P.S. 817.1 et seq.

Brandywine River Valley Compact, Act of September 9, 1959 (P.L. 848, § 1), as amended, 32 P.S. 818 et seq.

Wheeling Creek Watershed Protection and Flood Prevention District Compact, Act of August 2, 1967 (P.L. 189, § 1), as amended, 32 P.S. 819.1 et seq.

Chesapeake Bay Commission Agreement, Act of June 25, 1985 (P.L. 64, No. 25), as amended, 32 P.S. 820.11 et seq.

Relating to Preservation and Acquisition of Land for Open Space uses), Act of January 19, 1968 (P.L. (1967) 992, § 1), as amended, 32 P.S. 5001 et seq.

Land and Water Conservation and Reclamation Act, Act of January 19, 1968 (P.L. (1967) 996, § 2), as amended, 32 P.S. 5101 et seq.

Bluff Recession and Setback Act, Act of May 13, 1980 (P.L. 122, No. 48), as amended, 32 P.S. 5201 et seq.

Wild Resource Conservation Act, Act of June 23, 1982 (P.L. 597, No. 170), as amended, 32 P.S. 5301 et seq.

VII. Purdon's Statutes – Title 34 (Game)

The game and Wildlife Code, Act of July 8, 1986 (P.L. 442, No. 93) as amended, 34 Pa. C.S.A. 101 et seq.

VIII. Purdon's Statutes – Title 35 (Health and Safety)

(Related to public eating and drinking places), Act of May 23, 1945 (P.L. 926, § 1), as amended, 35 P.S. 655.1 <u>et seq.</u> Repealed in Part. Section 6(b) of Act 1994, Dec. 12, P.L. 903, No. 131, repealed this section in so far as it is inconsistent with said act (3 Pa. C.S.A. § 6501 et seq.

The Public Bathing Law, Act of June 23, 1931 (P.L. 899 § 1), as amended, 35 P.s. 672 et seq. (Related to the protection of public water supply), Act of June 22, 1937 (P.L. 1987, art. 1, § 1), as amended, 35 P.S. 691.1 et seq.

PA Safe Drinking Water Act, Act of May 1, 1984 (P.L. 206, No. 43), as amended, 35 P.S. 721.1 et seq.

PA Sewage Facilities Act, Act of January 24, 1966 (P.L. (1965) 1535 § 1), as amended, 35 P.S. 750.1 et seq. Repealed in Part. Section 15 of Act 1990, July 1, P.L. 277, No. 67, repealed this section insofar as it related to fee payments.

PA Solid Waste- Resource Recovery Development Act, Act of July 20, 1974 (P.L. 572, No. 198), as amended, 35 P.S. 755.1 et seq.

(Related to Pollution from abandoned mines), Act of December 15, 1965 (P.L. 1075, § 1), as amended, 35 P.S. 760.1 et seq.

Low Level Radioactive Waste Disposal Act, Act of February 9, 1988 (P.L. 31, No. 12, § 101), as amended, 35 P.S. 7130.101 et seq.

(Related to Camp Regulation), Act of November 10, 1959 (P.L. 1400 § 1), as amended 35 P.S. 3001 et seq.

Air pollution Act, Act of January 8, 1960 (P.L. (1959) 2119, § 1), as amended, 35 P.S. 4001 et seq.

Solid Waste Management Act, Act of July 7, 1980 (P.L. 380, No. 97), as amended, 35 P.S. 6018.101 et seq. Repealed in Part. Section 905(b) of Act 1988, Feb. 9, P.L. 31 No. 12, § 101,

the Low-Level Radioactive Waste Disposal Act (35 P.S. § 7130.101 et seq.), repealed this section insofar as it is inconsistent with said act.

Radiation Protection Act, Act of July 10, 1984 (P.L. 688, No. 147, § 101), as amended, 35 P.S. 7110.101 et seq. Repealed in Part. Section 17(b) of Act 1992, Dec. 18, P.L. 1638, No. 180, provides that this section is repealed insofar as it is inconsistent with said act.

Worker and Community Right-to-Know Act, Act of October 5, 1984 (P.L. 734, No. 159), as amended, 35 P.S. 7301 et seq.

IX. Purdon's Statutes – Title 36 (Highways and Bridges)

State Highway Law, Act of June 1, 1945(P.L. 1242 art. I, § 101), as amended, 36 P.S. 670-101 et seq. Repealed in Part. Section 4 of Act 1985, July 3, P.L. 159, No. 43 repealed this act insofar as it is inconsistent with said act.

(Related to Junkyards along Highways), Act of July 28, 1966 (P.L. 91, § 1, Sp. Sess.), as amended, 36 P.s. 2719.1 et seq.

Highway Vegetation Control Act, Act of December 20, 1983 (P.L. 293, No. 79), as amended, 36 P.S.2720.1 et seq.

X. Purdon's Statutes – Title 37 Appendix (Historical & Museums)

History Code, Act of May 26, 1988 (P.L. 414, No. 72 § 1), as amended, 37 Ps.C.S.A. 101 et seq.

XI. Purdon's Statutes – Title 43 (Labor)

Related to General Safety), Act of May 18, 1937 (P.L. 654, § 1) as amended, 43 P.S. 25-1 et seq.

Seasonal Farm Labor Act, Act of June 23, 1978 (P.L. 537, No. 93, § 101), as amended, 43 P.S. 1301.101 et seq.

XII. Purdon's Statutes – Title 52 (Mines and Mining)

The Coal Min Sealing Act of 1947, Act of June 30, 1947 (P.L. 1177, § 1) as amended, 52 P.S. 28.1 et seq.

Coal Refuse Disposal Control Act, Act of September 24, 1968)P.L. 1040, No. 318, § 1), as amended, 52 P.S. 30.51 et seq.

(Related to Coal Land Improvements), Act of July 19, 1965 (P.L. 216, No. 117 § 1), as amended, 52 P.S. 30.101 et seq.

(Related to Mine Fires and Subsidence), Act of April 3, 1968 (P.L. 92, No. 42, § 1), as amended, 52 P.S. 30.201 et seq.

PA Anthracite Coal Mine Act, Act of November 10, 1965 (P.L. 721, No. 346, art. I, § 101), as amended, 52 P.S. 70-101 et seq.

(Related to discharge of coal into streams), Act of June 27, 1913 (PP.L. 640, § 1), as amended, 52 P.S. 631 et seq.

(Related to Caving-in, Collapse, Subsidence), Act of May 27, 1921 (P.L. 1198, § 1), as amended, 52 P.S. 661 et seq.

(Related to Subsidence), Act of September 20, 1961 (P.L. 1538, § 1), as amended, 52 P.S. 672.1 et seq.

Anthracite Strip Mining and Conservation Act, Act of June 27, 1947 (P.L. 1095, § 2), as amended, 52 P.S. 681.1 et seq. Repealed in Part. Section 16 of Act 1971, Nov. 30, P.L. 554, No. 147, provided that this section repealed insofar as it is inconsistent with Act No. 147.

(Related to control and drainage of water from coal formations), Act of July 7, 1955 (P.L. 258 § 1), as amended, 52 P.S. 682 et seq.

PA Bituminous Coal Mine Act, Act of July 17, 1961 (P.L. 659, art, I, § 101), as amended, 52 P.S. 701-101 et seq.

(Related to Abandoned Mines), Act of May 7, 1935 (P.L. 141 § 1), as amended, 52 P.S. 809 et seq.

(Related to maps and plans of mines), Act of June 15, 1911 (P.L. 954, § 1), as amended, 52 P.S. 823.

Surface Mining Conservation and Reclamation Act, Act of May 31, 1945 (P.L. 1198, § 1), as amended, 52 P.S. 1396.1 et seq. Repealed in Part. Section 27 of Act 1984, Dec. 19, P.L. 1093, No. 219, provides that, except as provided in § 3304 of this title, this section "is repealed to the extent that is applies to the surface mining of minerals other than bituminous and anthracite coal."

The Bituminous Mine Subsidence and Land Conservation Act, Act of April 27, 1966 (P.L. 31, 1st Sp.Sess., § 1), as amended, 52 P.S. 1406.1 et seq.

(Related to cave-in or subsidence of surface above mines), Act of July 2, 1937 (P.L. 2787, § 1), as amended, 52 P.s. 1407 et seq.

(Related to Coal Stripping), Act of June 18, 1941 (P.L. 133 § 1), as amended, 52 P.S. 1471 et seq.

(Related to Coal under State Lands), Act of June 1, 1933 (P.L. 1409, § 1), as amended, 52 P.S. 1501 et seq.

(Related to Mining Safety Zones), Act of December 22, 1959 (P.L. 1994, § 1), as amended, 52 P.S. 3101 et seq.

(Related to Coal Mine Subsidence Insurance Fund), Act of August 23, 1961 (P.L. 1068 § 1), as amended, 52 P.S. 3201 et seq.

Interstate Mining Compact, Act of May 5, 1966 (P.L. 40, Sp. Sess. No. 1, § 1), as amended, 52 P.S. 3251 et seq.

Noncoal Surface Mining Conservation and Reclamation Act, Act of December 19, 1984 (P.L. 1093, No. 219, § 1), as amended, 52 P.S. 3301 et seq.

XIII. Purdon's Statutes – Title 58 (Oil and Gas)

Oil and Gas Conservation Law, Act of July 25, 1961 (P.L. 825, § 1), as amended, 58 P.S. 401 et seq.

PA Used Oil Recycling Act, Act of April 9, 1982 (P.L. 314, No. 89), as amended, 58 P.S. 471 et seq.

Coal and Gas Resource Coordination Act, Act of December 18, 1984 (P.L. 1069, No. 214), as amended, 58 P.S. 501 et seq.

Oil and Gas Act, Act of December 19, 1984 (P.L. 1140, No 223, § 101), as amended, 58 P.S. 601.101 et seq. Repealed in Part. Section 4 of Act 1985, July 11, P.L. 232, No. 57, repealed this act insofar as it is inconsistent with said act.

XIV. Purdon's Statutes Title 63 (Professions and Occupations)

Sewage Treatment Plant and Waterworks Operators' Certification Act, Act of November 18, 1968 (P.L. 1052, No. 322, § 1), as amended, 63 P.S. 1001 et seq.

XV. Purdon's Statutes – Title 64 (Public Lands)

PA Appalachian Trail Act, Act of April 28, 1978 (P.L. 87 No. 41 § 1), as amended, 64 P.S. 801 et seq.

XVI. Purdon's Statutes – Title 71 (State Government)

The Administrative Code of 1929, Act of April 9, 1929 (P.L. 177, art. I, § 1), as amended, 71 P.S. 51 et seq.

XVII. Purdon's Statutes – title 72 (Taxation and Fiscal Affairs)

Project 70 Land Acquisition and Borrowing Act, Act of June 22, 1964 (P.L. 131, Sp. Sess., No.8, § 1), as amended, 72 P.S. 3946.1 et seq.

(Related to Pollution control services), Act of March 4, 1971 (P.L. 6, No. 2 § 602.1, added

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1971, Aug. 31, P.L. 362, No. 93 § 6), as amended, 72 P.S. 7602.1 et seq.

Purdon's Statutes – Title 73 (Trade and Commerce)

Infrastructure Development Act, Act of July 11, 1996 (P.L. 677, No. 116 § 1), as amended, 73 P.S. 393.21 et seq.

(Related to Explosives), Act of July 1, 1937 (P.L. 2681, § 1), as amended, 73 P.S. 151 et seq.; Suspended in Part. This section is suspended insofar as it is in conflict with the provisions of Reorganization Plan No. 8 of 1981. See 71 P.S. § 751-35.

(Related to Explosives), Act of July 10, 1957 (P.L. 685, § 1), as amended, 73 P.S 164 et seq. Suspended in Part. Section 164 is suspended insofar as it is in conflict with the provisions of Reorganization Plan No. 8 of 1981. See 71 P.S. 751-35.

(Related to Black Powder), Act of May 31, 1974 (P.L. 304, No. 96 § 1) 73 P.S. 169 et seq.

(Related to excavation and demolition), Act of December 10, 1974 (P.L. 852, No. 287, § 1), as amended, 73 P.S. 176 et seq.

XVIII. Purdon's Statutes – Title 75 (Vehicles)

Vehicle Code, Act of June 17, 1976 (P.L. 162 No. 81 § 1), as amended, 75 Ps. C.S.A. 101 et seq.

Snowmobile Law, Act of June 17, 1976 (P.L. 162, No. 81§ 1), as amended, 75 Pa. C.S.A. 7701 et seq.

(Related to hazardous materials transport), Act of June 30, 1984 (P.L. 473, No. 99 § 4), 75 Pa. C.S.A. 8301 et seq.

XX. Purdon's Statutes – Title 77 (Workmen's Compensation)

Worker's Compensation Act, Act of June 2, 1915 (P.L. 736, art. 1, § 101), as amended, 77 P.S. 1 et seq.

PA Occupational Disease Act, Act of June 21, 1939 (P.L. 566, No. 284, § 101), as amended, 77 P.S. 1201 et seq.

XXI. Other Statutes

(Relating to Medical Waste-Manifesting and Transporter Licensing), Act of July 13, 1988 (P.L. 525, No. 93§ 1), 35 P.S. § 6019.1 et seq.

Municipal Waste Planning, Recycling and Waste Reduction Act, Act of July 28, 1988 (P.L. 556, No. 101§ 1501), 53 P.S. § 4000.1501.

Hazardous Sites Cleanup Act, Act of October 18, 1988 (P.L. 756, No. 108 § 101), 35 P.S. § 6020.101.

XXII. Pennsylvania Constitution – Article I, Section 27 (Adopted May 18, 1971)

FEDERAL LAW

Acid Precipitation Act of 1980 (42 U.S.C. 8901-8912).

Act to Prevent Pollution from Ships (33 U.S.C. 1901-1915).

Americans with Disabilities Act, (42 U.S.C. 121011-12213 and 42 U.S.C. 225 and 611).

Asbestos Hazard Emergency Response Act of 1986 [see Toxic Substances Control Act secs. 201-214 (15 U.S.C. 2641-2656)

Atomic Energy Act of 1954 (42 U.S.C. 2014, 2021, 2021a, 2022, 2111, 2113, 2114).

Aviation Safety and Noise Abatement Act of 1979 (49 U.S.C. 47501-47510).

Clean Air Act (42 U.S.C. 7401-7642).

Clean Water Act [see Federal Water Pollution Control Act].

Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1466).

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601-9675).

Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001-11050).

Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 791-798).

Environmental Quality Improvement Act of 1970 (42 U.S.C. 4371-4375).

Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

Federal land Policy and Management Act of 1976 (43 U.S.C. 1701-1784).

Federal Water Pollution Control Act (33 U.S.C. 1251-1387.

Geothermal Energy Research, Development, and Demonstration Act of 1974 (30 U.S.C. 1101-1164).

Global Climate Protection Act of 1987 (15 U.S.C. 2901 note).

Hazardous Substance Response Revenue Act of 1980 (see 26 U.S.C. 4611, 4612, 4661, 4662).

Low-level Radioactive Waste Policy Act (42 U.S.C. 2021b-2021d).

Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401-1445)

National Climate Program Act (15 U.S.C. 2901-2908).

National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f).

Noise Control Act of 1972 (42 U.S.C. 4901-4918).

Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101-10270).

Outer Continental Shelf Land Act Amendments of 1978 (43 U.S.C. 1801-1866).

Public Health Service Act (42 U.S.C. 300f-300j-11).

Safe Drinking Water Act [see Public Health Services Act secs. 1401-1451 (42 U.S.C. 300f-300j-26).]

Soil and Water Resources Conservation Act of 1977 (16 U.S.C. 2001-2009).

Solid Waste Disposal Act (42 U.S.C. 6901-6991i).

Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201-1328).

Toxic Substances Control Act (15 U.S.C. 2601-2692).

Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901-7942).

Water Resources Research Act of 1984 (42 U.S.C. 10301-10309).

Section 38. Prevailing Wage:

Pennsylvania Prevailing Wage Act 442: All employees performing work on the site under this contract shall be paid at least the applicable prevailing wages for the respective occupation classifications designated, as set forth in the minimum wage schedule attached, for the applicable part of the specification. The Contractor shall post the general prevailing minimum wage rates for each craft and classification involved, as determined by the secretary, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the work, or at such place or places as are used by them to pay

workmen their wages. The Prevailing Minimum Wage Predetermination, if applicable to the project, is a separate section of these Contract Documents, attached hereto and made a part hereof.

1. The general prevailing minimum wage rates including contributions for employees benefits as shall have been determined by the Secretary of Labor and Industry which must be paid to the workman employed in the performance of the Contract are included in this Project Manual.

The Contract shall specifically provide that the Contractor shall pay no less than the wage rates as determined in the decision of the Secretary of Labor and Industry and shall comply with the conditions of the Pennsylvania Prevailing Wage Act approved August 15, 1961 (Act No. 442), as amended August 9, 1963, (Act No. 342), and the Regulations issued pursuant thereto, to assure the full and proper payment of said rates.

- 2. The Contract shall contain the stipulation that such workmen shall be paid no less than such general prevailing minimum wage rates and such other provisions to assure payment thereof as heretofore set forth in this Section.
- 3. The Contract provisions shall apply to all work performed on the contract by the Contractor and to all work performed on the contract by all Subcontractors.
- 4. The Contractor shall insert in each of their subcontracts all of the stipulations contained in these required provisions and such other stipulations as may be required.
- 5. The Contract shall provide that no workmen may be employed on the public work except in accordance with the classifications set forth in the decisions of the Secretary of Labor and Industry. In the event that additional or different classifications are necessary the procedure set forth in Section 7 of these Regulations shall be followed.
- 6. The Contract shall provide that all workmen employed or working on the public work shall be paid unconditionally, regardless of whether any contractual relationship exists or the nature of any contractual relations which may be alleged to exist between any Contractor, Subcontractor and workmen, not less than once a week without deduction or rebate, on any account, whether directly or indirectly, except authorized deductions, the full amounts due at the time of payment, computed at the rates applicable to the time worked in the contract, the Act, or these Regulations shall prohibit the payment of more than the general prevailing minimum wage rates as determined by the Secretary to any workman on the public work.
- 7. The Contract shall provide that the Contractor and each Subcontractor shall post for the entire period of construction the wage determination decisions of the Secretary of Labor and Industry, including the effective date of any changes thereof, in a prominent and easily accessible place or places used by them to pay workmen their wages. The posted notices of wage rates must contain the following information:
- a. Name of project.
- b. Name of public Bid of which it is being constructed.

- c. The crafts and classifications of workmen listed in the Secretary's general prevailing minimum wage rate determination for the particular project.
- d. The general prevailing minimum wage rates determined for each craft and classification and the effective date of any changes.
- e. The statement advising workmen that if they have been paid less than the general prevailing minimum wage rate for their job classification or that the Contractor and/or Subcontractor are not complying with the Act or these Regulations in any manner whatsoever, they may file a protest in writing with the Secretary of Labor and Industry within three (3) months of the date of the occurrence, objecting to the payment to any Contractor to the extent of the amount or amounts due or to become due to them as wages for work performed on the public work project. Any workmen paid less than the rate specified in the contract shall have civil right of action for the difference between the wage paid and the wages stipulated in the contract, which right of action must be exercised within six (6) months from the occurrence of the event creating such right.
- 8. The Contract shall provide that the Contractor and all Subcontractors shall keep an accurate record showing the name, craft and/or classification, number of hours worked per day and the actual hourly rate of wage paid (including employee benefits) to each workman employed by them in connection with the public work and such record must include any deductions from each workman. The record shall be preserved for two years from the date of payment and shall be open at all reasonable hours to the inspection of the public body awarding the contract and to the Secretary of Labor and Industry or his duly authorized representatives.
- 9. The Contract shall provide that apprentices shall be limited to such members as shall be in accordance with a bona fide apprenticeship program registered with and approved by the Pennsylvania Apprenticeship and Training Council and only apprentices whose training and employment are in full compliance with the provisions of the Apprenticeship and Training Act approved July 14, 1961 (Act No. 304) and the Rules and Regulations issued pursuant thereto shall be employed on the public work project. Any workman using the tools of a craft who does not qualify as an apprentice within the provisions of this subsection shall be paid the rate predetermined for journeyman in that particular craft and/or classification.
- 10. Wages shall be paid without any deductions except authorized deductions. Employers not parties to a contract requiring contributions for employee benefits which the Secretary of Labor and Industry has determined to be included in the general prevailing minimum wage rate shall pay the monetary equivalent thereof directly to the workman.
- 11. Payment of compensation to workmen for work performed on public work on a lump sum basis, or a piece work system, or a price certain for the completion of a certain amount of work, or the production of a certain result shall be deemed a violation of the Act and these Regulations, regardless of the average hourly earnings resulting therefrom.
- 12. The Contract shall also provide that each Contractor and each Subcontractor shall file a notarized statement each week and a final statement at the conclusion of the work on the contract with PhilaPort, under oath, and in form satisfactory to the Secretary of Labor and

Industry, certifying that all workmen have been paid wages in strict conformity with the provisions of the contract as prescribed by this Section 3 of these Regulations, or if any wages remain unpaid to set forth the amount of wages due and owing to each workman respectively. Classification of workman used on the certified payroll form shall exactly match the classifications put forth by the Department of Labor and Industry in their prevailing wage determination for the project.

13. The provisions of the Act and these Regulations shall be incorporated by reference in the contract.

39. Non-Discriminating Provision:

A. The Contractor agrees that he will comply with the provisions of the Pennsylvania Human Relations Act in providing equal employment opportunities in connection with all work performed by him at the job site pursuant to this contract.

The Contractor, therefore, agrees:

- 1. The Contractor will not discriminate or permit discrimination by his agents, servants or employees against any employee or applicant for employment with record to hiring, tenure of employment, promotion, terms, conditions or privileges of employment at the job site covered by this contract, because of race, color, religion, age or national origin, and will take such affirmative action as in hereinafter set forth to prevent same.
- 2. The Contractor will, in all publications or advertisements for employees to work at the job site covered by this contract, placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, age or national origin.
- 3. The Contractor will send to each labor union or representative of the workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Pennsylvania Human Relations Commission, advising the said labor union or workers representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to his employees and applicants for employment.
- 4. The Contractor shall supply the Owner with a periodic report, called a "Compliance Report", relating to work performed at the job site under this contract as may be required by the Pennsylvania Human Relations Commission. The Commission shall at all times have access to the employment records of said Contractor for purposes of investigation to ascertain compliance with rules, regulations, and orders of the Pennsylvania Human Relations Commission, relating to discrimination.
- 5. The Contractor shall insert the provisions of subsection c-1, 2, 3 and 4 of the above in all subcontracts which are entered into by the Contractor under this contract requiring work to be done at the job site, as covenants to be binding upon such Subcontractors.
- 6. Compliance by the Contractor with subsections c-1, 2, 3, 4 and 5, above shall discharge

the Contractor from liability hereunder, relating to non-discriminatory provisions of this agreement.

- 7. The Liability of the Subcontractor: The Subcontractor of the Contractor under subsection c-5 above shall have the same responsibilities and obligations as the Contractor to comply with the provisions of subsections c-1, 2, 3, 4 and 5 thereof, and shall be subject to the applicable penalties for failure to comply as hereinafter set forth in subsection c-8 hereinafter.
- 8. Penalties for failure to comply: It is hereby agreed that the failure to comply with the foregoing requirements shall constitute a substantial breach of this contract.
- **B.** In the event the Pennsylvania Human Relations Commission, after investigation and hearing, shall determine that the Contractor or Subcontractor, as the case may be, has failed to comply with any of the provisions of subsections c-1, 2, 3, 4, 5 and 6 hereof, the Commission in addition to issuing any order it deems appropriate pursuant to Section 9 of the Pennsylvania Human Relations Act, shall certify such findings to the Owner with a recommendation for termination of the contract or subcontract, as the case may be, or with a recommendation that such Contractor or Subcontractor be declared ineligible for any further public works contracts or subcontracts for a period of not more than two years from the date of such recommendations.
- C. Should the Owner adopt the recommendation to direct the Contractor to terminate a subcontract entered into by the Contractor under this contract, written notice of this fact shall be given to the Contractor by registered mail addressed to the Contractor registered office in Pennsylvania, and it shall then be the obligation of the Contractor to terminate such subcontract pursuant to said written notice.
- **D.** Should the Owner adopt the recommendation to declare the Contractor or Subcontractor, as the case may be, ineligible for further public works contracts or subcontracts, written notice of this fact and of the duration of such period of ineligibility shall be given to the Contractor or Subcontractor by registered mail addressed to the Contractor or Subcontractor registered office in Pennsylvania.
- **E.** From any order of the Pennsylvania Human Relations Commission, the Contractor or Subcontractor, as the case may be, shall have a right of appeal as in other cases provided by law, and the Owner shall not act upon the recommendation of the Commission specified in subsection 8 above until the Contractor or Subcontractor has exhausted the right-to-appeal provided by law, or the time for such appeal shall have expired.

Attachment "A"

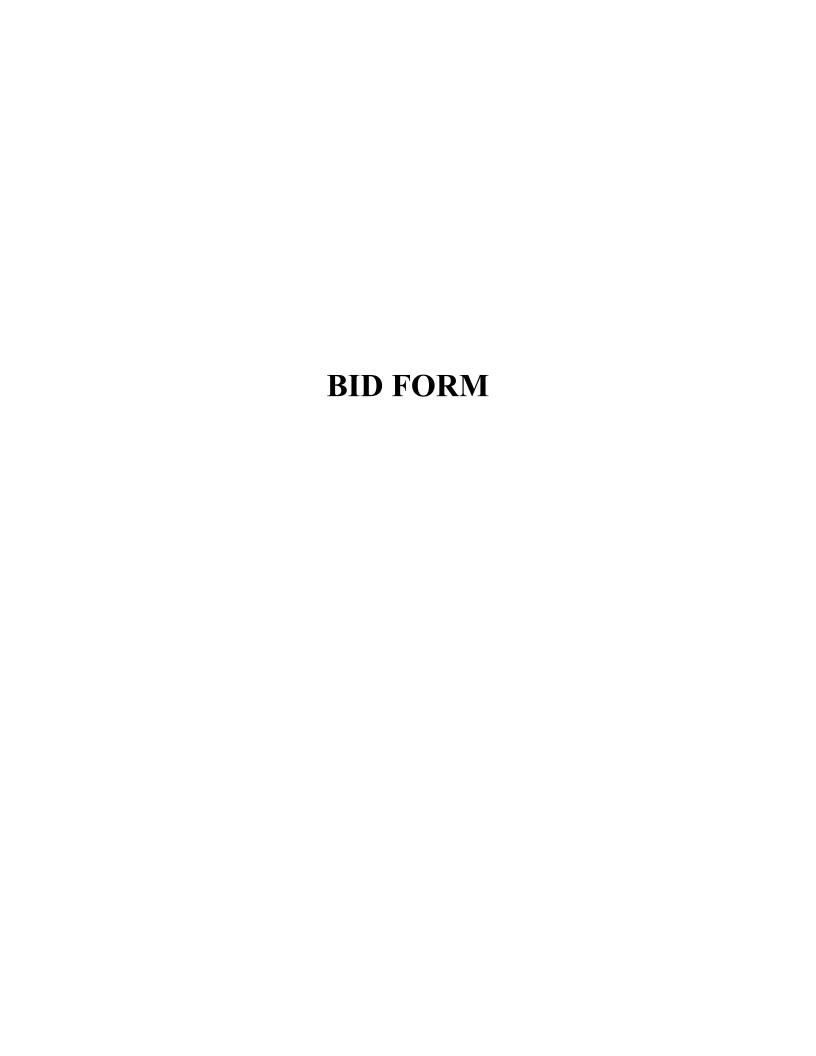
See Part 3 of Bid Document for Diversity and Inclusion Plan for Construction

Attachment "B"

See Part 3 of Bid Document for Minimum Participation Levels for this Project

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PART 2



Item	Description	Unit	Quantity	Unit Price Written in Words	Unit Price	Total Price
1.0	GENERAL CONDITIONS	LS	1			
2.0	14" DIA. CORE DRILL AND SLEEVE INSTALL	EA	18			
	15.25" DIA. CORE DRILL AND SLEEVE INSTALL	EA	6			
	SUPPLY & INSTALL OF 12.75" DIA. PILES	LF	2448			
	SUPPLY & INSTALL OF 14" DIA. PILES	LF	816			
	SUPPLY & INSTALL OF PIPE COLLAR TYPE 1	EA	18			
	SUPPLY & INSTALL OF PIPE COLLAR TYPE 2	EA	6			

Project 23-064.1 Pier 84S Pile Repairs

8.0	SUPPLY & INSTALL OF PILE WRAP ON NEW 12.75" DIA. PILES	LF	270		
9.0	SUPPLY & INSTALL OF PILE WRAP ON NEW 14" DIA. PILES	LF	90		
10.0	SUPPLY & INSTALL OF PILE WRAP ON EXISTING PILES	LF	1020		

TOTAL CONTRACT AMO	UNT (Tota	l Cost of Item	s 1.0-10.0)			
\$				<u> </u>		
Written in Words				Written in	n Number	

Notes: Quantities are estimated and for bid purposes only. Contractor shall invoice for and be paid on actual quantities incurred. Contractor guarantees the unit prices regardless of quantity. The unit price for each item above should be all inclusive of labor, materials, and equipment.

II. Bidder Responsiveness Section:

- A. The Bidder certifies to the best of his knowledge, information, and belief that:
 - i. That for the Bidder and his Subcontractors required to be disclosed or approved by PhilaPort, and as of the date of its execution of this Bid, neither the Bidder, nor any such Subcontractors, are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Bidder cannot so certify, then it agrees to submit, along with its Bid, a written explanation of why such certification cannot be made and why the Contract should nonetheless be awarded to Bidder.
 - ii. That as of the date of its execution of this Bid, the Bidder has no tax liabilities or other Commonwealth obligations or has filed a timely administrative or judicial appeal if such liabilities or obligations exist or is subject to a duly approved deferred payment plan if such liabilities exist.
- iii. That the Bidder possesses all required business, contracting and trade licenses required to perform the Work.
- iv. That the Bidder possesses all the technical qualifications and resources, including equipment, personnel and financial resources, to perform the Work.
- v. (1) That the Bidder (and the labor force) participates at the time of bid submission in an approved Apprenticeship Program as defined in the General Conditions for each craft or trade of the labor force contemplated to perform the work, (2) that such Program is currently registered with the Pennsylvania Apprenticeship and Training Council and (3) that such Program has apprentices and trainees currently participating.
- B. The bidder acknowledges by submission of this bid, that the Bidder shall perform on the site and with his own organization at least twenty percent (20%) of the total amount of Work to be performed under this contract, exclusive of profit, overhead and the costs of procuring insurance and bonds. The bidder shall submit with his bid a complete description of the work that will be performed (e.g., earthwork, paving, brickwork, roofing, etc.), the percentage of the total work this represents, and the estimated dollar value thereof, as set forth below:

The Bidder shall perform the following Work:				

Percentage of Work to be performed by my organization%
Estimate cost of Work to be performed by my organization
\$

III. Bidder Responsibility Section:

- A. The Bidder certifies that:
 - i. He has a satisfactory record of past contract performance and past law compliance that demonstrates a solid history of both technical competency and business integrity sufficient to justify receiving a Port PhilaPort contract; and
 - ii. He currently possesses all qualifications, skills, resources, equipment personnel, financial resources and other required performance capabilities needed to successfully complete the prospective contract it is seeking to perform; and
- iii. He will comply with all relevant security requirements.
- iv. He will utilize labor enrolled in approved Apprenticeship Programs as defined in the General Conditions for the full duration of the contract Work.
- B. The Bidder certifies the following responses to the questions posed to assist PhilaPort in its determination of Bidder Responsibility:
- 1. Has the Bidder been suspended and/or debarred or voluntarily agreed not to bid as a result of an action by any federal, state or local government agency or authority in the past three years?

Yes No

2. Has any officer, director, owner or managerial employee of the Bidder been convicted of a felony relating to construction, maintenance, service or repair contracting industries?

Yes No.

3. Has the Bidder defaulted on any project in the past three years?
Yes No
4. Has the Bidder had any type of business, contracting or trade license revoked or suspended by any government agency or authority in the past three (3) years?
Yes No
5. Has the Bidder been found in violation of any other law relating to its contracting business, including, but not limited to antitrust laws, licensing laws, tax laws, wage, or hour laws, environmental or safety* laws, by a final decision of a court or government agency authority in the past three (3) years?
Yes No
*For purposes of this question, violations of safety laws may be limited to serious or willful safety violations.
6. Has the Bidder been the subject of voluntary or involuntary bankruptcy proceedings at any time in the past three years?
Yes No
C. Bidder's Vendor Data Management Unit Number is:
IV. Bidder's Point of Contact Section:
Contact Information for the Bidder on this project (for purposes of affirming bid price, issuing notice to proceed, insurance information, diversity information, etc.):
Name:
Title:
Phone:
Email:

V. Acknowledgment and Disclaimers Section:

It is understood that the right is reserved by PhilaPort to reject any or all bids and to waive any informalities in the Bid, as may be provided in the Instructions to Bidders.

Submission of false or misleading information or statements in connection with this Certification shall render the Bidder ineligible to perform work for PhilaPort and/or shall be considered a material breach of any contract entered and entitle PhilaPort to all applicable remedies available at law or in equity.

Further, in the event Contractor fails to gain entry or cannot perform Work due to noncompliance, the Authority reserves the right to provide escorts to be billed to the Contractor with no increase in cost under the contract or terminate the contract for failure to perform.

VI. Representation and Authorization Section:

By making this Bid, Bidder understands, represents, acknowledges, and certifies:

- a) That the foregoing representations regarding the past performance and present qualifications of the undersigned Bidder are true and correct;
- b) The Bidder has read and understands the terms and conditions of the Invitation for Bids and this Bid is made in accordance with those terms and conditions;
- c) The item(s) offered in the Bid will be in conformance with the specifications referenced in the Instructions for Bids without exceptions;
- d) The price(s) and amount of the Bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder or potential bidder;
- e) Neither the price(s) nor the amount of the Bid, and neither the approximate price(s) nor the approximate amount of the bid, have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed prior to the bid opening;
- f) No attempt has been made or will be made to induce any firm or person to refrain from bidding on the contract, or to submit a bid higher than the bid, or to submit an intentionally high or noncompetitive bid or other form of complementary bid;
- g) The Bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid;
- h) This bid has been completed by an authorized representative of the Bidder that the sufficient knowledge and information to address all matter addressed herein;
- i) If an award is made to the Bidder, the Bidder agrees that it intends to be legally bound to the contract that is formed between PhilaPort and the Bidder; and

j) If an award is made to the Bidder, the Bidder will enter into and execute a contract based upon this bid, without delay, upon notice of award of contract, and will not withdraw this bid in accordance with the Instructions to Bidders and Applicable Law.

[Signature pages to follow; select the page that is appropriate to your form of business organization.]

[SIGNATURE PAGE FOR INDIVIDUAL BIDDER]

Name of Bidder (Printed)	
Signature of Individual	_
Trading and doing business as:	
Business Address:	
Tax Identification Number:	
*If fictitious or trade name is employed in appropriate, the following statement:	conduct of business, complete, by deletion as
[Foregoing fictitious or trade name (has) (has no under Pennsylvania Law.]	ot) been registered by the individual proprietorship

[SIGNATURE PAGE FOR PARTNERSHIP BIDDER]

Name of Partnership		
Name of General Partner (Printed)	_	
Rv·	Witness:	
By:(Signature of General Partner)		
Business Address:		
Tax Identification Number:		
The partners constituting the partnership Partner:		
Partner:	Address:	
Add additional lines for the names and a four Partners in the Partnership, by attac	<u>g</u>	· ·
*If fictitious or trade name is employed bhere:	by the partnership in cond	duct of its business, insert name
Next, complete, by deletion as appropriat	e, the following statemer	nt:
[Foregoing fictitious or trade name (has) Pennsylvania Law.	(has not) been registered	by the partnership under

[SIGNATURE PAGE FOR CORPORATE BIDDER]

Name of Corporation	
Attest:	By:
Signature of Secretary, Assistant Secretary Treasurer, Assistant Treasurer or other authorized representative**	Signature of President, Vice President or other authorized representative*
(Print Name of Representative)	(Print Name of Representative)
on its behalf, then attach a valid corporate resort as of the date of the Bid, evidencing authorit ** If a representative other than the Secreta Assistant Treasurer attests to the signature of	a Vice President of the Corporation signs this Bid colution or other appropriate proof, dated prior to by to execute this Bid on behalf of the Corporation. Try, an Assistant Secretary, the Treasurer or and the corporate representative, then attach a valid pof, dated prior to or as of the date of the Bid, of this Bid on behalf of the Corporation.
Business Address:	
Tax Identification Number:	
(1) Complete the following statement: The Corlaws of the State/Commonwealth of:	poration has been organized and is existing under
of Pennsylvania, complete, by deletion as appro	d a certificate of authority to do business in the
	laws other than those of the Commonwealth of certificate of authority, complete, by deletion as

[SIGNATURE PAGE FOR CORPORATE BIDDER]

[The Corporation (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.]

[SIGNATURE PAGE FOR A LIMITED LIABILITY COMPANY (LLC) BIDDER]

Name of Limited Liability Company	
Attest:	By:
Signature of an Authorized Representative*	Signature of Authorized Representative**
(Print Name of Representative)	(Print Name of Representative)
and this Bid has been executed by a Manager fully Agreement and by Resolutions of the LLC. Copies Bid or can be provided upon request within three The Certificate of Organization domanagers, and this Bid has been executed by a Mo Operating Agreement and by Resolutions of the provided with the Bid or can be provided upon reconstruction.	LLC) is duly authorized in accordance with the ovides that LLC is to be managed by managers, authorized by the Certificate, by the Operating of the relevant documents are provided with the (3) working days. The opening of the that LLC is to be managed by the ember fully authorized by the Certificate, by the end LLC. Copies of the relevant documents are quest within three (3) working days. The office of (insert the office of (insert the office of (insert thorized by the Certificate, by the Operating of the relevant documents are provided with the (3) working days. The Bidder and the individuals ament further represent that (1) execution of the he LLC authorizes the execution of this Bid even the tying on business in the usual way for the LLC; and belief, the Owner has no knowledge of the
Business Address:	
Tax Identification Number:	

[SIGNATURE PAGE FOR A LIMITED LIABILITY COMPANY (LLC) BIDDER]

(1) Complete the following statement: The LLC has been organized and is existing under laws of the State/Commonwealth of
(2) If the LLC has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement: [The LLC (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.]
(3) If the LLC has been organized under laws other than those of the Commonwealth of

Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

[The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth

[The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.]

PREVAILING WAGE RATES

Project Name:	Pier 84S Pile Repairs
Awarding Agency:	PhilaPort
Contract Award Date:	6/15/2023
Serial Number:	23-04733
Project Classification:	Highway
Determination Date:	5/18/2023
Assigned Field Office:	Philadelphia
Field Office Phone Number:	(215)560-1858
Toll Free Phone Number:	
Project County:	Philadelphia County

Commonwealth of Pennsylvania Report Date: 5/18/2023

Project: 23-04733 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	5/1/2021		\$54.35	\$39.95	\$94.30
Asbestos & Insulation Workers	6/1/2023		\$57.84	\$43.36	\$101.20
Boilermaker (Commercial, Institutional, and Minor Repair Work)	1/1/2019		\$29.26	\$18.48	\$47.74
Boilermakers	1/1/2022		\$50.17	\$35.30	\$85.47
Boilermakers	1/1/2023		\$51.27	\$35.30	\$86.57
Bricklayer	5/1/2021		\$45.45	\$30.76	\$76.21
Bricklayer	5/1/2022		\$46.45	\$31.21	\$77.66
Carpenter - Chief of Party (Surveying & Layout)	5/1/2022		\$58.36	\$28.96	\$87.32
Carpenter - Chief of Party (Surveying & Layout)	5/1/2023		\$60.54	\$29.27	\$89.81
Carpenter - Chief of Party (Surveying & Layout)	5/1/2024		\$62.83	\$29.27	\$92.10
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		\$65.14	\$29.27	\$94.41
Carpenter - Instrument Person (Surveying & Layout)	5/1/2021		\$49.50	\$28.96	\$78.46
Carpenter - Instrument Person (Surveying & Layout)	5/1/2022		\$50.75	\$28.96	\$79.71
Carpenter - Instrument Person (Surveying & Layout)	5/1/2023		\$52.64	\$29.27	\$81.91
Carpenter - Instrument Person (Surveying & Layout)	5/1/2024		\$54.64	\$29.27	\$83.91
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		\$56.64	\$29.27	\$85.91
Carpenter - Rodman (Surveying & Layout)	5/1/2021		\$24.75	\$20.56	\$45.31
Carpenter - Rodman (Surveying & Layout)	5/1/2022		\$25.38	\$20.56	\$45.94
Carpenter - Rodman (Surveying & Layout)	5/1/2023		\$26.32	\$20.87	\$47.19
Carpenter - Rodman (Surveying & Layout)	5/1/2024		\$27.32	\$20.87	\$48.19
Carpenter - Rodman (Surveying & Layout)	5/1/2025		\$28.32	\$20.87	\$49.19
Carpenters	5/1/2022		\$50.75	\$28.96	\$79.71
Carpenters	5/1/2023		\$52.64	\$29.27	\$81.91
Carpenters	5/1/2024		\$54.64	\$29.27	\$83.91
Carpenters	5/1/2025		\$56.64	\$29.27	\$85.91
Cement Finishers & Plasterers	5/1/2022		\$41.97	\$32.40	\$74.37
Cement Masons	5/1/2022		\$42.05	\$33.46	\$75.51
Cement Masons	5/1/2023		\$44.20	\$32.96	\$77.16
Dockbuilder, Pile Drivers	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder, Pile Drivers	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder, Pile Drivers	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder, Pile Drivers	5/1/2026		\$56.98	\$37.99	\$94.97
Dockbuilder/ Pile driver diver	5/1/2023		\$63.10	\$37.99	\$101.09
Dockbuilder/ Pile driver diver	5/1/2024		\$66.25	\$37.99	\$104.24
Dockbuilder/ Pile driver diver	5/1/2025		\$69.04	\$37.99	\$107.03
Dockbuilder/ Pile driver diver	5/1/2026		\$71.23	\$37.99	\$109.22
Dockbuilder/pile driver tender	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder/pile driver tender	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder/pile driver tender	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder/pile driver tender	5/1/2026		\$56.98	\$37.99	\$94.97
Drywall Finisher	5/1/2022		\$41.56	\$30.60	\$72.16
Drywall Finisher	5/1/2023		\$41.80	\$31.76	\$73.56
Electricians	5/3/2021		\$64.03	\$41.71	\$105.74
Electricians	5/2/2022		\$65.76	\$43.48	\$109.24

Commonwealth of Pennsylvania Report Date: 5/18/2023 Department of Labor & Industry Page 2 of 10

Project: 23-04733 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Electricians	5/1/2023		\$68.18	\$42.97	\$111.15
Electricians-Telecommunications Senior Technician	4/29/2019		\$57.78	\$27.22	\$85.00
Elevator Constructor	1/1/2021		\$61.43	\$36.36	\$97.79
Elevator Constructor	1/1/2023		\$66.21	\$43.64	\$109.85
Floor Coverer	5/1/2022		\$52.49	\$29.46	\$81.95
Floor Coverer	5/1/2023		\$54.74	\$29.46	\$84.20
Floor Coverer	5/1/2024		\$56.94	\$29.46	\$86.40
Glazier	5/1/2022		\$46.09	\$35.61	\$81.70
Glazier	5/1/2023		\$46.68	\$36.62	\$83.30
Interior Finish	5/1/2019		\$31.65	\$26.62	\$58.27
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2022		\$49.70	\$39.51	\$89.21
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	1/1/2023		\$50.70	\$39.51	\$90.21
Iron Workers (Riggers)	7/1/2017		\$41.78	\$27.92	\$69.70
Ironworker (Rodman)	7/1/2020		\$47.41	\$31.60	\$79.01
Laborer (Mason Tenders, Brick)	5/1/2017		\$29.77	\$26.00	\$55.77
Laborers (Class 01 - See notes)	5/1/2020		\$33.65	\$26.07	\$59.72
Laborers (Class 01 - See notes)	5/1/2022		\$35.20	\$26.82	\$62.02
Laborers (Class 02 - See notes)	5/1/2020		\$35.15	\$26.15	\$61.30
Laborers (Class 02 - See notes)	5/1/2022		\$36.70	\$27.00	\$63.70
Laborers (Class 03 - See notes)	5/1/2020		\$34.07	\$26.50	\$60.57
Laborers (Class 03 - See notes)	5/1/2022		\$35.62	\$27.05	\$62.67
Laborers (Class 04 - See notes)	5/1/2020		\$34.07	\$26.50	\$60.57
Laborers (Class 04 - See notes)	5/1/2022		\$35.62	\$27.05	\$62.67
Laborers (Class 05 - See notes)	5/1/2020		\$33.65	\$26.07	\$59.72
Laborers (Class 05 - See notes)	5/1/2022		\$35.20	\$26.82	\$62.02
Landscape Laborer	5/1/2020		\$26.55	\$23.13	\$49.68
Marble Finisher	5/1/2022		\$38.27	\$29.15	\$67.42
Marble Mason	5/1/2022		\$45.90	\$31.20	\$77.10
Mason Tender, Cement	5/1/2019		\$32.07	\$26.85	\$58.92
Millwright	5/1/2021		\$48.60	\$33.19	\$81.79
Millwright	5/1/2022		\$49.83	\$34.53	\$84.36
Operators (Building, Class 01 - See Notes)	5/1/2021		\$49.50	\$31.51	\$81.01
Operators (Building, Class 01 - See Notes)	5/1/2022		\$51.04	\$31.97	\$83.01
Operators (Building, Class 01 - See Notes)	5/1/2023		\$52.20	\$32.81	\$85.01
Operators (Building, Class 01A - See Notes)	5/1/2021		\$52.51	\$32.39	\$84.90
Operators (Building, Class 01A - See Notes)	5/1/2022		\$54.05	\$32.85	\$86.90
Operators (Building, Class 01A - See Notes)	5/1/2023		\$55.20	\$33.70	\$88.90
Operators (Building, Class 02 - See Notes)	5/1/2021		\$49.25	\$31.44	\$80.69
Operators (Building, Class 02 - See Notes)	5/1/2022		\$50.79	\$31.90	\$82.69
Operators (Building, Class 02 - See Notes)	5/1/2023		\$51.95	\$32.74	\$84.69
Operators (Building, Class 02A - See Notes)	5/1/2021		\$52.26	\$32.32	\$84.58
Operators (Building, Class 02A - See Notes)	5/1/2022		\$53.81	\$32.77	\$86.58
Operators (Building, Class 02A - See Notes)	5/1/2023		\$54.97	\$33.61	\$88.58
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Project: 23-04733 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Building, Class 03 - See Notes)	5/1/2021		\$45.16	\$30.24	\$75.40
Operators (Building, Class 03 - See Notes)	5/1/2022		\$46.71	\$30.69	\$77.40
Operators (Building, Class 03 - See Notes)	5/1/2023		\$47.87	\$31.53	\$79.40
Operators (Building, Class 04 - See Notes)	5/1/2021		\$44.87	\$30.14	\$75.01
Operators (Building, Class 04 - See Notes)	5/1/2022		\$46.41	\$30.60	\$77.01
Operators (Building, Class 04 - See Notes)	5/1/2023		\$47.57	\$31.44	\$79.01
Operators (Building, Class 05 - See Notes)	5/1/2021		\$43.14	\$29.64	\$72.78
Operators (Building, Class 05 - See Notes)	5/1/2022		\$44.69	\$30.09	\$74.78
Operators (Building, Class 05 - See Notes)	5/1/2023		\$45.85	\$30.93	\$76.78
Operators (Building, Class 06 - See Notes)	5/1/2021		\$42.16	\$29.34	\$71.50
Operators (Building, Class 06 - See Notes)	5/1/2022		\$43.70	\$29.80	\$73.50
Operators (Building, Class 06 - See Notes)	5/1/2023		\$44.85	\$30.65	\$75.50
Operators (Building, Class 07A- See Notes)	5/1/2021		\$60.00	\$36.21	\$96.21
Operators (Building, Class 07A- See Notes)	5/1/2022		\$61.86	\$36.75	\$98.61
Operators (Building, Class 07A- See Notes)	5/1/2023		\$63.33	\$37.68	\$101.01
Operators (Building, Class 07B- See Notes)	5/1/2021		\$59.72	\$36.11	\$95.83
Operators (Building, Class 07B- See Notes)	5/1/2022		\$61.57	\$36.66	\$98.23
Operators (Building, Class 07B- See Notes)	5/1/2023		\$63.04	\$37.59	\$100.63
Painters Class 1 (see notes)	2/1/2022		\$41.77	\$31.61	\$73.38
Painters Class 1 (see notes)	5/1/2023		\$42.32	\$32.91	\$75.23
Painters Class 4 (see notes)	5/1/2022		\$41.77	\$31.61	\$73.38
Painters Class 4 (see notes)	5/1/2023		\$44.41	\$32.91	\$77.32
Plasterers	5/1/2021		\$41.52	\$31.85	\$73.37
Plumbers	5/1/2022		\$62.73	\$36.61	\$99.34
Plumbers	5/1/2023		\$64.73	\$37.61	\$102.34
Pointers, Caulkers, Cleaners	5/1/2021		\$46.75	\$29.50	\$76.25
Pointers, Caulkers, Cleaners	5/1/2022		\$47.64	\$30.06	\$77.70
Roofers (Composition)	5/1/2021		\$40.33	\$33.12	\$73.45
Roofers (Composition)	5/1/2022		\$41.48	\$33.87	\$75.35
Roofers (Composition)	5/1/2023		\$42.63	\$34.62	\$77.25
Roofers (Shingle)	5/1/2021		\$30.50	\$21.55	\$52.05
Roofers (Slate & Tile)	5/1/2021		\$33.50	\$21.55	\$55.05
Sheet Metal Workers	5/1/2021		\$53.84	\$45.94	\$99.78
Sheet Metal Workers	5/1/2022		\$55.75	\$47.28	\$103.03
Sign Makers and Hangars	7/17/2021		\$29.49	\$23.90	\$53.39
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sprinklerfitters	5/1/2022		\$62.79	\$31.43	\$94.22
Sprinklerfitters	1/1/2023		\$62.23	\$31.99	\$94.22
Steamfitters	5/1/2021		\$60.47	\$40.89	\$101.36
Steamfitters	5/1/2022		\$64.57	\$40.59	\$105.16
Steamfitters	5/1/2023		\$67.37	\$41.99	\$109.36
Stone Masons	5/1/2021		\$44.90	\$30.75	\$75.65
Stone Masons	5/1/2022		\$45.90	\$31.20	\$77.10
Terrazzo Finisher	5/1/2022		\$42.44	\$27.71	\$70.15

Project: 23-04733 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Terrazzo Grinder	5/1/2022		\$42.71	\$27.71	\$70.42
Terrazzo Mechanics	5/1/2021		\$48.01	\$28.81	\$76.82
Terrazzo Mechanics	5/1/2022		\$48.81	\$29.46	\$78.27
Tile Finisher	5/1/2022		\$38.27	\$29.15	\$67.42
Tile Setter	5/1/2022		\$48.81	\$29.46	\$78.27
Truckdriver class 1(see notes)	5/1/2021		\$36.48	\$17.96	\$54.44
Truckdriver class 1(see notes)	5/1/2022		\$35.60	\$20.74	\$56.34
Truckdriver class 2 (see notes)	5/1/2021		\$36.58	\$17.96	\$54.54
Truckdriver class 2 (see notes)	5/1/2022		\$35.70	\$20.74	\$56.44
Truckdriver class 3 (see notes)	5/1/2021		\$36.83	\$17.96	\$54.79
Truckdriver class 3 (see notes)	5/1/2022		\$35.95	\$20.74	\$56.69
Window Film / Tint Installer	6/1/2019		\$24.52	\$12.08	\$36.60

Project: 23-04733 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter - Chief of Party (Surveying & Layout)	5/1/2022		\$60.71	\$29.06	\$89.77
Carpenter - Chief of Party (Surveying & Layout)	5/1/2023		\$63.24	\$29.06	\$92.30
Carpenter - Chief of Party (Surveying & Layout)	5/1/2024		\$65.19	\$29.06	\$94.25
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		\$67.15	\$29.06	\$96.21
Carpenter - Chief of Party (Surveying & Layout)	5/1/2026		\$69.10	\$29.06	\$98.16
Carpenter - Instrument Person (Surveying & Layout)	5/1/2022		\$52.79	\$29.06	\$81.85
Carpenter - Instrument Person (Surveying & Layout)	5/1/2023		\$54.99	\$29.06	\$84.05
Carpenter - Instrument Person (Surveying & Layout)	5/1/2024		\$56.69	\$29.06	\$85.75
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		\$58.39	\$29.06	\$87.45
Carpenter - Instrument Person (Surveying & Layout)	5/1/2026		\$60.09	\$29.06	\$89.15
Carpenter - Rodman (Surveying & Layout)	5/1/2022		\$42.23	\$22.41	\$64.64
Carpenter - Rodman (Surveying & Layout)	5/1/2023		\$43.99	\$22.41	\$66.40
Carpenter - Rodman (Surveying & Layout)	5/1/2024		\$45.35	\$22.41	\$67.76
Carpenter - Rodman (Surveying & Layout)	5/1/2025		\$46.71	\$22.41	\$69.12
Carpenter - Rodman (Surveying & Layout)	5/1/2026		\$48.07	\$22.41	\$70.48
Carpenter	5/1/2022		\$52.79	\$29.06	\$81.85
Carpenter	5/1/2023		\$54.99	\$29.06	\$84.05
Carpenter	5/1/2024		\$56.69	\$29.06	\$85.75
Carpenter	5/1/2025		\$58.49	\$29.06	\$87.55
Carpenter	5/1/2026		\$60.19	\$29.06	\$89.25
Cement Masons	5/1/2021		\$39.65	\$33.41	\$73.06
Cement Masons	5/1/2022		\$41.15	\$33.41	\$74.56
Cement Masons	5/1/2023		\$43.20	\$32.91	\$76.11
Dockbuilder, Pile Drivers	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder, Pile Drivers	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder, Pile Drivers	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder, Pile Drivers	5/1/2026		\$56.98	\$37.99	\$94.97
Dockbuilder/ Pile driver diver	5/1/2023		\$63.10	\$37.99	\$101.09
Dockbuilder/ Pile driver diver	5/1/2024		\$66.25	\$37.99	\$104.24
Dockbuilder/ Pile driver diver	5/1/2025		\$69.04	\$37.99	\$107.03
Dockbuilder/ Pile driver diver	5/1/2026		\$71.23	\$37.99	\$109.22
Dockbuilder/pile driver tender	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder/pile driver tender	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder/pile driver tender	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder/pile driver tender	5/1/2026		\$56.98	\$37.99	\$94.97
Electric Lineman	5/30/2022		\$59.17	\$31.48	\$90.65
Electric Lineman	5/29/2023		\$60.48	\$32.77	\$93.25
Electric Lineman	6/3/2024		\$62.07	\$33.96	\$96.03
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2022		\$49.70	\$39.51	\$89.21
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	1/1/2023		\$50.70	\$39.51	\$90.21
Ironworker (Rodman)	7/1/2020		\$47.41	\$31.60	\$79.01
Laborers (Class 01 - See notes)	5/1/2021		\$36.20	\$25.65	\$61.85
Laborers (Class 01 - See notes)	5/1/2022		\$36.30	\$27.20	\$63.50

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BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 23-04733 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 02 - See notes)	5/1/2021		\$36.40	\$25.65	\$62.05
Laborers (Class 02 - See notes)	5/1/2022		\$36.50	\$27.20	\$63.70
Laborers (Class 03 - See notes)	5/1/2021		\$36.40	\$25.65	\$62.05
Laborers (Class 03 - See notes)	5/1/2022		\$36.50	\$27.20	\$63.70
Laborers (Class 04 - See notes)	5/1/2021		\$31.00	\$25.65	\$56.65
Laborers (Class 04 - See notes)	5/1/2022		\$31.10	\$27.20	\$58.30
Laborers (Class 05 - See notes)	5/1/2021		\$37.05	\$25.65	\$62.70
Laborers (Class 05 - See notes)	5/1/2022		\$37.15	\$27.20	\$64.35
Laborers (Class 06 - See notes)	5/1/2021		\$37.10	\$25.65	\$62.75
Laborers (Class 06 - See notes)	5/1/2022		\$37.20	\$27.20	\$64.40
Laborers (Class 07 - See notes)	5/1/2021		\$36.95	\$25.65	\$62.60
Laborers (Class 07 - See notes)	5/1/2022		\$37.05	\$27.20	\$64.25
Laborers (Class 08 - See notes)	5/1/2021		\$36.70	\$25.65	\$62.35
Laborers (Class 08 - See notes)	5/1/2022		\$36.80	\$27.20	\$64.00
Laborers (Class 09 - See notes)	5/1/2021		\$36.55	\$25.65	\$62.20
Laborers (Class 09 - See notes)	5/1/2022		\$36.65	\$27.20	\$63.85
Laborers (Class 10- See notes)	5/1/2021		\$36.70	\$25.65	\$62.35
Laborers (Class 10- See notes)	5/1/2022		\$36.80	\$27.20	\$64.00
Laborers (Class 11 -See Notes)	5/1/2021		\$36.50	\$25.65	\$62.15
Laborers (Class 11 -See Notes)	5/1/2022		\$36.70	\$27.20	\$63.90
Laborers (Class 12 -See Notes)	5/1/2021		\$37.40	\$25.65	\$63.05
Laborers (Class 12 -See Notes)	5/1/2022		\$38.40	\$27.20	\$65.60
Laborers (Class 13 -See Notes)	5/1/2021		\$40.33	\$25.65	\$65.98
Laborers (Class 13 -See Notes)	5/1/2022		\$40.43	\$27.20	\$67.63
Laborers (Class 14 -See Notes)	5/1/2021		\$36.45	\$25.65	\$62.10
Laborers (Class 14 -See Notes)	5/1/2022		\$36.55	\$27.20	\$63.75
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2017		\$23.52	\$17.58	\$41.10
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2022		\$30.17	\$19.18	\$49.35
Laborers Utility (PGW ONLY)	5/1/2022		\$37.20	\$19.18	\$56.38
Landscape Laborer	5/1/2020		\$26.13	\$22.95	\$49.08
Landscape Laborer	5/1/2022		\$27.73	\$23.65	\$51.38
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2021		\$49.50	\$31.51	\$81.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2022		\$51.04	\$31.97	\$83.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2023		\$52.20	\$32.81	\$85.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2024		\$53.36	\$33.65	\$87.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2025		\$54.52	\$34.49	\$89.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2026		\$55.67	\$35.34	\$91.01
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2021		\$52.51	\$32.39	\$84.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2022		\$54.05	\$32.85	\$86.90

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
5/1/2023		\$55.20	\$33.70	\$88.90
5/1/2024		\$56.37	\$34.53	\$90.90
5/1/2025		\$57.52	\$35.38	\$92.90
5/1/2026		\$58.68	\$36.22	\$94.90
5/1/2021		\$49.25	\$31.44	\$80.69
5/1/2022		\$50.79	\$31.90	\$82.69
5/1/2023		\$51.95	\$32.74	\$84.69
5/1/2024		\$53.11	\$33.58	\$86.69
5/1/2025		\$54.27	\$34.42	\$88.69
5/1/2026		\$55.43	\$35.26	\$90.69
5/1/2021		\$52.27	\$32.31	\$84.58
5/1/2022		\$53.81	\$32.77	\$86.58
5/1/2023		\$54.97	\$33.61	\$88.58
5/1/2024		\$56.13	\$34.45	\$90.58
5/1/2025		\$57.29	\$35.29	\$92.58
5/1/2026		\$58.44	\$36.14	\$94.58
5/1/2021		\$45.16	\$30.24	\$75.40
5/1/2022		\$46.71	\$30.69	\$77.40
5/1/2023		\$47.87	\$31.53	\$79.40
5/1/2024		\$49.03	\$32.37	\$81.40
5/1/2025		\$50.18	\$33.22	\$83.40
5/1/2026		\$51.34	\$34.06	\$85.40
5/1/2021		\$44.86	\$30.15	\$75.01
5/1/2022		\$46.41	\$30.60	\$77.01
5/1/2023		\$47.57	\$31.44	\$79.01
5/1/2024		\$48.73	\$32.28	\$81.01
5/1/2025		\$49.88	\$33.13	\$83.01
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Commonwealth of Pennsylvania Report Date: 5/18/2023 Department of Labor & Industry Page 8 of 10

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 23-04733 - Heavy/Highway	Effective	Expiration	Hourly Rate	Fringe	Total
0 1 01 01 0 11 15	Date	Date	^ = · -	Benefits	A
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2026		\$51.04	\$33.97	\$85.01
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2021		\$43.14	\$29.64	\$72.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2022		\$44.69	\$30.09	\$74.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2023		\$45.85	\$30.93	\$76.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2024		\$47.00	\$31.78	\$78.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2025		\$48.16	\$32.62	\$80.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2026		\$49.32	\$33.46	\$82.78
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2021		\$42.16	\$29.34	\$71.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2022		\$43.70	\$29.80	\$73.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2023		\$44.85	\$30.65	\$75.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2024		\$46.02	\$31.48	\$77.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2025		\$47.17	\$32.33	\$79.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2026		\$48.34	\$33.16	\$81.50
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2021		\$60.00	\$36.21	\$96.21
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2022		\$61.86	\$36.75	\$98.61
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2023		\$63.33	\$37.68	\$101.01
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2024		\$64.80	\$38.61	\$103.41
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2025		\$66.26	\$39.55	\$105.81
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2026		\$67.73	\$40.48	\$108.21
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2021		\$59.72	\$36.11	\$95.83
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2022		\$61.57	\$36.66	\$98.23
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2023		\$63.04	\$37.59	\$100.63
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2024		\$64.50	\$38.53	\$103.03
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2025		\$65.97	\$39.46	\$105.43
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2026		\$67.44	\$40.39	\$107.83
Painters Class 2 (see notes)	2/1/2022		\$48.62	\$30.29	\$78.91
Painters Class 2 (see notes)	2/1/2023		\$48.82	\$32.09	\$80.91
Painters Class 3 (see notes)	2/1/2022		\$59.58	\$30.33	\$89.91

Commonwealth of Pennsylvania Report Date: 5/18/2023

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 23-04733 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Painters Class 3 (see notes)	2/1/2023		\$59.78	\$32.13	\$91.91
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$64.57	\$40.28	\$104.85
Truckdriver class 1(see notes)	5/1/2021		\$36.33	\$17.96	\$54.29
Truckdriver class 1(see notes)	5/1/2022		\$35.45	\$20.74	\$56.19
Truckdriver class 2 (see notes)	5/1/2021		\$36.43	\$17.96	\$54.39
Truckdriver class 2 (see notes)	5/1/2022		\$35.55	\$20.74	\$56.29
Truckdriver class 3 (see notes)	5/1/2021		\$36.68	\$17.96	\$54.64
Truckdriver class 3 (see notes)	5/1/2022		\$35.80	\$20.74	\$56.54

PART 3

GENERAL CONDITIONS

GENERAL CONDITIONS OF PHILADELPHIA REGIONAL PORT AUTHORITY CONTRACTS

(Revised as of September 26, 2018)

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GENERAL CONDITIONS OF PHILADELPHIA REGIONAL PORT AUTHORITY CONSTRUCTION CONTRACTS

I. Definitions:

- **A.** The following terms and expressions used in the Contract Documents shall be defined and understood as follows:
- "Agreement" shall mean the document executed by PhilaPort and the Contractor that incorporates the additional Contract Documents.
- "City" shall mean the City of Philadelphia.
- "Claim Settlement Conference" shall mean the dispute resolution process, as more particularly described in Article X.
- "Commonwealth" shall mean the Commonwealth of Pennsylvania.
- "Contract" shall mean the complete contractual understanding between PhilaPort and the Contractor. The Contract may also be referred to as the "Agreement."
- "Contract Documents" shall mean the documents described in Article VI of the Contract and otherwise identified in these General Conditions.
- "Contractor" shall mean the party of the second part to the Contract.
- "Contract Sum" shall mean the amount stated in Article III of the Contract for the payment to the Contractor.
- "Contracting Officer" The Contracting Officer shall be the Procurement Director prior to the issuance of the notice to proceed. Subsequently, the Contracting Officer shall be the Chief Engineer of PhilaPort.
- "Date of Completion" shall mean the date determined in accordance with the provisions of Article IV of the Agreement for the substantial completion of the Work.
- "Day(s)," whether or not capitalized, shall mean the number of days, excluding the first and including the last day of such period. Whenever the last day of any such period shall fall on a Saturday or Sunday or on any day made a legal holiday by the laws of the Commonwealth or the United States, such day shall be omitted from the computation.
- "Dispute Designee" shall mean the Chief Counsel of PhilaPort, or any deputy or substitute who may be so designated in writing by the Executive Director.

"Engineer" shall mean either the Chief Engineer of PhilaPort, or any successor or successors duly appointed in writing by the Chief Engineer, or any deputy or substitute who may be so designated, in writing, by the Executive Director or through a duly authorized representative within the scope of the particular duties assigned such representative. PhilaPort may also designate an outside design professional as the Professional to perform duties on behalf of the Engineer.

"Executive Director" shall mean the Executive Director of PhilaPort, or any deputy or substitute who may be so designated in writing by the Executive Director.

"FDR Meeting" shall mean a Field Dispute Review Meeting, as more particularly described in Article X.

"Inspector" shall mean the representative of the Engineer assigned to the inspection of the Work under the Contract.

"PhilaPort" shall mean the Philadelphia Regional Port Authority, also referred to as, "Owner" and "PRPA."

"Plans" shall mean the general plans and designs accompanying the Specifications and such supplementary drawings as may be furnished from time to time.

"Professional" shall mean the Engineer unless designated otherwise.

"Project" shall mean the total of the Work to be performed under the Contract and any other separate prime contracts as so designated by PhilaPort.

"Samples" are physical examples furnished by the Contractor to illustrate materials, equipment or workmanship, and to establish standards by which the Work will be judged.

"Shop drawings" are drawings, diagrams, illustrations, schedules, performance charts, brochures, catalog data, and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the Work.

"Site" shall mean the location where the construction or services will be performed or where the materials or equipment will be used pursuant to the Contract.

"Special Conditions" shall mean those special conditions which modify the General Conditions.

"Specifications" shall mean the written documentation accompanying the Plans, which set forth the Work to be performed and the methods to be used to perform the Work.

"Subcontractor" shall mean persons, firms, or corporations having a direct contract with the Contractor to perform a portion of the Work or to furnish materials or equipment.

"Substantial Completion" or "Substantially Complete" shall mean The time at which the Work

(or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended.

"Work" shall mean the subject matter of the Contract, i.e., the labor or service to be performed and/or the material and/or equipment to be supplied, delivered and/or installed as stated in Article II of the Contract or otherwise as described in the Contract Documents.

"Working Day" shall mean a calendar day except Saturday, Sunday, and any day made a legal holiday by the laws of the Commonwealth or the United States.

B. Wherever in the Specifications or the Plans the words "directed", "required", "permitted", "ordered", "designated", "prescribed", or words of similar meaning are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended, and similarly the words "approved", "acceptable", "satisfactory", or words of similar meaning, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Executive Director.

II. Contract Award & Contractor Responsibility:

A. PhilaPort's Right to Award Separate Contracts:

PhilaPort reserves the right to award other contracts in connection with other portions of the Project under these or similar conditions of the Contract. When separate prime contracts are awarded for different portions of the Project, the "Contractor" in the Contract Documents in each case shall be the contractor who signs a separate prime contract.

B. Mutual Responsibility of Contractors:

- 1. If any part of the Contractor's Work depends for proper execution or results upon the work of any other prime contractors or their subcontractors, the Contractor shall inspect and promptly report in writing to the Engineer and PhilaPort any apparent discrepancies or defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other prime contractors' or their subcontractors' work as fit and proper to receive the Contractor's Work, except as to defects which may develop in the other prime contractors' or their subcontractors' work after the execution of the Contractor's Work.
- 2. The Work shall be conducted so as not to interfere with the work of other contractors. If any part of the Contractor's Work depends for proper execution or results upon work being done by other prime contractors or their subcontractors not under contract with the Contractor, the Contractor shall inspect and promptly report in writing to the Engineer and PhilaPort any interference, defects, or delays in the work done or being done by the other prime contractors or their subcontractors. In the event that any prime contractor shall not complete the various portions of the Project in general harmony, and another

prime contractor shall be caused damage or injury by the failure to so act in harmony, the prime contractor damaged or injured shall have the right to settle by agreement or arbitration such claim or disputes in accordance with the provisions of Section XI herein. PhilaPort, however, shall not be liable to any prime contractor for any increased costs or damages resulting from the defective work, interference, or delays of other prime contractors.

C. Cooperation with Other Contractors:

- 1. The Contractor shall cooperate with any other contractors on concurrent work that may be on or adjacent to the Contractor's Work, and shall afford reasonable facilities and access to them. Except as provided in Section XI, herein, the Engineer will decide any matters in dispute as to the performance of the Work, including access to the Site and priority of performance on either side of the division line between contiguous Contract sections.
- 2. The Contractor shall afford other prime contractors and their subcontractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate the Contractor's Work with the work awarded by PhilaPort to other contractors.
- 3. Where any portion of the Work is done in combination with or affects in any way the progress of the work of other contractors, the Contractor shall cooperate with such contractors and shall perform the details of the Contract at such time and in such a manner that the Work and all other work may proceed without interruption. Where electrical, plumbing, heating, or mechanical equipment is installed under separate contracts, concurrently with construction contracts, the equipment contractors shall keep in close touch with the construction work; and the contractor for the main construction shall give the equipment contractors at least twenty-four (24) hours' notice, excepting Saturdays, Sundays, and those days made a legal holiday by the laws of the Commonwealth or the United States, of any intention to place concrete, do backfilling, or perform similar work affecting the installation of such equipment. The equipment contractors shall thereupon promptly furnish and install their equipment as required. Should the equipment contractors fail to do such work within a reasonable time after having been so notified, and the progress of the Work is thereby delayed, the Engineer shall have the right to order the installation work performed by another contractor and to deduct the cost thereof from any monies due under the equipment contract.

D. Execution of the Contract Documents:

By executing the Contract, the Contractor represents that the Contractor has visited the Site and by careful personal examination is satisfied as to the Contract Documents and the physical condition of the location where the Work is to be performed, and that the Contractor has correlated these personal observations with the requirements of the Contract Documents. The Contractor shall assume all risks resulting from the Contractor's reliance upon test data provided for reference only by PhilaPort as provided in Section 3.C of the Instructions to

Bidders, and the Contractor shall assume all risks resulting from any changes in the conditions of the Site which may occur during the progress of the Work except as provided in Section VIII.E herein.

E. Subcontracts:

- 1. The Contractor shall not assign the Contract or any part thereof, and the Contractor shall not assign any right to any monies to be paid to the Contractor under the Contract without the prior written consent of PhilaPort. The Contract as a whole shall not be sublet. No portion of the Work shall be sublet without the approval of the Engineer, and no Subcontractor shall be employed unless in the opinion of the Engineer the Subcontractor is reliable, responsible, and competent to perform the Work in compliance with the Contract Documents. All entities so employed shall be bound by the terms and provisions of the Contract, and neither the Contractor nor the Contractor's sureties will be relieved from the terms and conditions of the Contract or their duties or responsibilities under the same by reason of such employment.
- 2. The Contractor shall perform at least twenty percent (20%) of the total amount of the Work with the Contractor's own organization based upon the Contract Sum.
- 3. All Work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and, where appropriate, between Subcontractors and sub-subcontractors). All agreements between the Contractor and Subcontractors and between Subcontractors and sub-subcontractors for Work performed under the Contract shall be forwarded to PhilaPort for approval prior to the commencement of any Work by a Subcontractor or a sub-subcontractor and shall contain provisions, acceptable to PhilaPort, that:
 - a. preserve and protect the rights of PhilaPort, and the Engineer with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice any such rights;
 - b. require that such Work be performed in accordance with the Contract Documents;
 - c. require submission to the Contractor of applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with Section XIV, herein;
 - d. require that all claims for additional costs, extensions of time or otherwise with respect to subcontracted portions of the Work shall be submitted to the Contractor (via any Subcontractor or sub-subcontractor where appropriate) in the time and manner provided in the Contract Documents for like claims by the Contractor against PhilaPort;
 - e. require that each Subcontractor to fully warrant and guarantee for the benefit of PhilaPort the effectiveness, fitness for the purpose intended, quality and

merchantability of any item provided and/or installed by such Subcontractor;

- f. require that the Subcontractor is without privity of contract to PhilaPort and that the Subcontractor agrees by signing the subcontract that the Subcontractor neither acquires nor intends to acquire any rights against PhilaPort pursuant to a third party beneficiary theory or any other theory; and
- g. obligate each Subcontractor (and sub-subcontractor) to specifically consent to all provisions of this Section II.E.

F. Contractor's Obligations:

The Work to be done under the Contract is indicated in detail in the Contract Documents. The Contractor shall furnish all labor, materials, plans, tools, and appliances necessary to complete the Work to the satisfaction of the Engineer in the manner and within the time required in the Contract Documents at the prices bid, agreed upon, and fixed therefore. If, at any time, the Contractor's methods, force, or equipment appear to the Engineer to be unsafe, insufficient, or inadequate for the proper performance of the provisions of the Contract, the Engineer may order the Contractor to make such changes as the Engineer may deem necessary, and the Contractor shall comply with such orders, but the failure of the Engineer to make such demands shall not relieve the Contractor of its obligations under the Contract Documents. The Contractor shall maintain an office where orders and instructions may be delivered, and shall give personal attention to the faithful performance of the Work. The Contractor shall employ a competent representative or superintendent who shall have full authority to receive and execute orders, and to supply such labor, tools, and materials as may be required for the proper performance of the Work. The Contractor shall be responsible to the Engineer and to PhilaPort and to all other Contractors for the acts and/or omissions of the Contractor's employees and Subcontractors, their agents and employees, and all other persons performing any of the Work under a contract with the Contractor. The Contractor, its agents and employees, shall act in an independent capacity and shall not act or be deemed to act as employees, officers, or agents of PhilaPort or the Commonwealth.

G. Supervision and Procedures:

- 1. The Contractor shall be solely responsible for all means, techniques, and portions of the Work to be performed under the Contract, whether by the Contractor, a Subcontractor or otherwise.
- 2. The Contractor shall provide continuous supervision of the Work by a duly authorized and competent superintendent. At the time that PhilaPort, or the Engineer acting on behalf of PhilaPort, issues the notice to proceed with the Work, the Contractor shall submit to PhilaPort the name and qualifications of a superintendent acceptable to PhilaPort. The Contractor shall not change the superintendent without the prior written approval of PhilaPort, and the Contractor must submit to PhilaPort, in writing, the justification for any such change, along with the name and qualifications of the individual whom the Contractor proposes to be the new superintendent.

- 3. PhilaPort may demand of the Contractor the dismissal of any person employed by the Contractor who, in the sole opinion of PhilaPort, is incompetent or guilty of misconduct.
- 4. PhilaPort may withhold any payments which are or may become due the Contractor or PhilaPort may suspend the Work at the expense of the Contractor, if the Contractor fails to comply with the provisions of this Section II.G.

H. Contractor Integrity:

- 1. The following terms used in this Section II.H shall be defined and understood as follows:
 - a. "Confidential" means information that is not public knowledge, or available to the public on request, disclosure of which would give an unfair, unethical, or illegal advantage to another desiring to contract with PhilaPort.
 - b. "Consent" means written permission by a duly authorized member or employee of PhilaPort, provided that where the material facts have been disclosed, in writing, by prequalification or contractual terms, PhilaPort shall be deemed to have consented by virtue of execution of the Contract.
 - c. "Financial Interest" means ownership of more than a five percent (5%) interest in any business; or holding a position as an officer, director, trustee, partner, employee, or the like, or holding any position of management.
 - d. "Gratuity" means any payment of more than nominal monetary value in the form of cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment or contracts of any kind.
- 2. The Contractor shall maintain the highest standards of integrity in the performance of the Contract and shall take no action in violation of Federal or Commonwealth laws, regulations, or other requirements that govern contracting with the Commonwealth or PhilaPort.
- 3. The Contractor shall not disclose to others any confidential information gained by virtue of the Contract.
- 4. The Contractor shall not, in connection with the Contract or any other contract with PhilaPort or the Commonwealth, directly or indirectly, offer, confer, or agree to confer any pecuniary benefit on anyone as consideration for the decision, opinion, recommendation, vote, other exercise of discretion, or violation of a known legal duty by any member or employee of PhilaPort or the Commonwealth.
- 5. The Contractor shall not, in connection with the Contract or any other contract with PhilaPort or the Commonwealth, directly or indirectly, offer, give, or agree or promise to give to anyone any gratuity for the benefit of or at the direction or request of any member

or employee of PhilaPort or the Commonwealth.

- 6. Except with the consent of PhilaPort or the Commonwealth, neither the Contractor nor anyone in privity with the Contractor shall accept or agree to accept from, or give or agree to give to, any person, any gratuity from any person in connection with the performance of the Work under the Contract except as provided therein.
- 7. Except with the consent of PhilaPort, the Contractor shall not have a financial interest in any other contractor, Subcontractor providing services, labor, or materials for the Work.
- 8. The Contractor, upon being informed that any violation of this Section II.H has occurred or may occur, shall immediately notify PhilaPort in writing.
- 9. The Contractor, by execution of the Contract and by the submission of any bills or invoices for payment pursuant thereto, certifies and represents that the Contractor has not violated any of these provisions.
- 10. The Contractor shall, upon request of PhilaPort or the Office of State Inspector General, reasonably and promptly make available to PhilaPort and that office and its representatives, for inspection and copying, all business and financial records of the Contractor of, concerning, and referring to the Contract or which are otherwise relevant to the enforcement of this Section II.H
- 11. For a violation of this Section II.H, PhilaPort may terminate the Contract and any other contract with the Contractor, claim liquidated damages in an amount equal to the value of anything received in breach of this Section II.H, claim damages for all expenses incurred in obtaining another contractor to complete performance under the Contract, and debar and suspend the Contractor from doing business with PhilaPort. These rights and remedies are cumulative, and the use or nonuse of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those PhilaPort and/or the Commonwealth may have under law, statute, regulation or otherwise.

I. Offset of Tax Liability:

- 1. By executing the Contract, the Contractor:
 - a. Certifies that the Contractor has no outstanding tax liability to the Commonwealth;
 - b. Authorizes the Department of Revenue of the Commonwealth to release information related to its tax liability to PhilaPort and the Commonwealth's Department of General Services; and
 - c. Authorizes the Commonwealth and PhilaPort to set off any state and local tax liabilities of the Contractor or any of its subsidiaries, as well as any other amount

due to the Commonwealth from the Contractor, against any payment due to the Contractor under the Contract.

2. The certification of no outstanding tax liability is a material representation of fact upon which reliance is placed by PhilaPort in entering into the Contract. If it is later determined that the Contractor knowingly rendered an erroneous certification, PhilaPort may find the Contractor in default and terminate the Contract. Erroneous certification may also be grounds for the initiation of civil or criminal proceedings.

J. Commonwealth Audit:

- 1. The funds for the Contract are subject to audit by PhilaPort and other agencies and representatives of the Commonwealth in accordance with applicable laws and regulations. PhilaPort reserves the right to perform additional audits of a financial/compliance, economy/efficiency or program results nature, if deemed necessary.
- 2. The Contractor will submit to PhilaPort copies of any audit conducted by or at the request of the Contractor that involves the funds for the Contract.

K. Contractor Responsibility Provision:

- 1. By executing the Contract, the Contractor certifies that it is not currently under suspension or debarment by the Commonwealth, any other state or the federal government. The Contractor also acknowledges that if it is currently under suspension or debarment, its bid, in most instances, will not be accepted or considered.
- 2. If the Contractor enters into any subcontracts under the Contract with subcontractors who are currently suspended or debarred by the Commonwealth during the term of the Contract or any extensions or renewals thereof, PhilaPort shall have the right to require the Contractor to terminate such contracts.

L. Professional Services:

If the Professional is one other than the Engineer, at the time of execution of the agreement between PhilaPort and the Professional, PhilaPort may at PhilaPort's sole discretion require the Professional to give security for the full and faithful performance of such agreement by the Professional. Nothing herein creates any rights on the part of the Contractor or any other party.

M. Status and PhilaPort of the Engineer:

Unless otherwise delegated to the Professional, the Engineer shall have the status and authority as provided in this Section II.M. The Engineer shall have responsibility for the general supervision and direction of the Work, the interpretation of the Plans and Specifications, the ordering of additions to or deductions from the Work, and the

determination of procedure. The Engineer shall give all orders and directions contemplated under the Contract Documents. The actions of the Engineer shall in no way alter the status of the Contractor as an independent contractor, and no action of the Engineer shall be interpreted as making the Contractor an agent of PhilaPort. The Engineer shall in all cases determine the amount, quality, acceptability, and fitness of the Work to be paid for under the Contract, and shall have the authority to reject all Work which does not conform to the Contract Documents. The Engineer shall determine all other questions that may arise in relation to the execution of the Work. The Engineer shall adjust and decide any differences or conflicts that may arise between the Contractor and other contractors for concurrent work.

N. Third-party Actions

- 1. The Agreement between PhilaPort and the Contractor and the other Contract Documents, and information supplied to the Contractor in connection with this Project, including any deficiency, inconsistency or misrepresentation therein, shall not create any cause of action in favor of or against any third party, whether such action may be for breach of contract, breach of warranty, negligence, misrepresentation or other tort, or otherwise including claims against the architect and its consultants, and their employees, officers and representatives.
- 2. Except when Contractor is required to pursue a claim directly against another contractor or a Subcontractor as directed elsewhere in the Contract Documents, Contractor agrees that any and all claims, disputes or legal actions filed or pursued by the Contractor in connection with this Contract, the Contract Documents or the Project, shall be filed or pursued only against PhilaPort under the claims procedures set forth in the General Conditions and that no claims or legal actions will be filed or pursued against PhilaPort's design professionals, administrators, officers, directors, their employees, representatives, or consultants, or their employees or representatives. Contractor agrees that this paragraph shall survive termination of this agreement. Contractor also agrees that this paragraph shall be binding whether or not it claims prior breach of this contract and that this paragraph shall apply to any and all claims including breach of contract, breach of warranty, negligence, misrepresentation or other tort, or otherwise.
- 3. If any portion of the Contract Documents shall be in conflict with any other portion after the application of the rules of interpretation set forth elsewhere in these General Conditions, the various documents comprising the Contract Documents shall govern in this order and sequence, with the document listed first controlling over the document listed thereafter:
 - a. Amendments and other Modifications issued subsequent to the execution of this Agreement
 - b. Agreement or Contract between PhilaPort and the Contractor

- c. Addenda issued prior to execution of the Contract
- d. General Conditions, as amended and modified
- e. Notice or Notices to Proceed
- f. General or Special Requirements
- g. Plans and Specifications
- h. Instructions to Bidders
- i. Performance and Payment Bonds
- j. Other documents referenced in the Contract Documents or attached to another Contract Document and not specifically excluded as a Contract Document

Where two documents are of equal precedence, the document with the later date of execution shall control.

III. General Legal Compliance:

A. Laws and Ordinances:

The Contractor shall give all notices and comply with all applicable laws, ordinances, regulations, rules, and orders of any public authority bearing on the Work, as may be amended from time to time ("Applicable Laws"). If the Contractor observes that any of the Contract Documents are in conflict with any Applicable Laws in any respect, the Contractor shall promptly notify the Engineer in writing. If the Contractor performs any Work knowing it to be contrary to Applicable Laws, with or without such written notice to the Engineer, the Contractor shall assume full responsibility therefor and shall bear all costs attributable thereto.

B. Hours and Conditions of Employment:

The Contractor agrees to abide and be bound by the laws of the Commonwealth relating to and regulating the hours and conditions of employment by Acts of Assembly in such case made and provided.

C. Americans with Disabilities Act:

1. Pursuant to federal regulations promulgated under the authority of the Americans With Disabilities Act, 28 C.F.R. § 35.101 et seq., the Contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in the Contract or from activities provided for under the Contract. As a condition of accepting and executing the Contract, the Contractor agrees to comply with the "General Prohibitions Against Discrimination," 28 C.F.R. § 35.130, and all other regulations promulgated under Title II of the Americans With Disabilities Act which are applicable to the benefits, services, programs, and activities provided by the Commonwealth through contracts with outside contractors.

2. The Contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth and PhilaPort from all losses, damages, expenses, claims, demands, suits, and actions brought by any party against the Commonwealth or PhilaPort as a result of the Contractor's failure to comply with the provisions of this Section III.C.

D. Equal Employment Opportunities:

- 1. In accordance with Pa. Stat. Ann. tit. 55, § 697.16, the nondiscrimination and contract compliance plans used by PhilaPort are required to be the same as those used by the Commonwealth's Department of General Services.
- 2. During the term of the Contract, the Contractor agrees to comply with the following "nondiscrimination clause":
 - a. The Contractor shall not discriminate against any employee, applicant for employment, independent contractor, or any other person because of race, color, religious creed, ancestry, national origin, age, or sex. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, ancestry, national origin, age, or sex. Such affirmative action shall include, but is not limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training. The Contractor shall post in conspicuous places, available to employees, agents, applicants for employment and other persons, a notice setting forth the provisions of this nondiscrimination clause.
 - b. The Contractor shall in advertisements or requests for employment placed by it or on its behalf state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, ancestry, national origin, age, or sex.
 - c. The Contractor shall send each labor union or workers' representative with which it has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representative of its commitment to this nondiscrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by the Contractor.
 - d. It shall be no defense to a finding of noncompliance with the Contract Compliance Regulations (the "Contract Compliance Regulations", 16 Pa. Code Chapter 49) issued by the Pennsylvania Human Relations Commission (the "Commission") or with the terms and provisions of this nondiscrimination clause that the Contractor had delegated some of its employment practices to any union, training program, or other source of recruitment which prevents it from meeting its obligations. However, if the evidence indicates that the Contractor was not on

- notice of the third-party discrimination or made a good faith effort to correct such discrimination, such factor shall be considered in mitigation in determining appropriate sanctions.
- e. Where the practices of a union or any training program or other source of recruitment will result in the exclusion of minority group persons, so that the Contractor will be unable to meet its obligations under the Contract Compliance Regulations or pursuant to the terms and provisions of this nondiscrimination clause, the Contractor shall then employ and fill vacancies through other nondiscriminatory employment procedures.
- f. The Contractor shall comply with the Contract Compliance Regulations, which are incorporated herein by reference as if fully set forth herein, and with all laws prohibiting discrimination in hiring or employment opportunities. In the event of the Contractor's noncompliance with the terms and provisions of this nondiscrimination clause or with any such laws, the Contractor may, after hearing and adjudication, be terminated or suspended, in whole or in part, and the Contractor may be declared temporarily ineligible for other contracts with agencies of the Commonwealth, and such other sanctions may be imposed and remedies invoked as provided by the Contract Compliance Regulations.
- g. The Contractor shall furnish to PhilaPort and the Commission, all necessary employment documents and records and shall permit access by PhilaPort and the Commission to the Contractor's books, records, and accounts, for purposes of investigation to ascertain compliance with the provisions of the Contract Compliance Regulations. If the Contractor does not possess documents or records reflecting the necessary information requested, it shall furnish such information on reporting forms supplied by PhilaPort or the Commission.
- h. The Contractor shall actively recruit minority Subcontractors and Subcontractors with substantial minority representation among their employees. The Contractor shall comply with its obligations under the Diversity Inclusion Plan, including specifically the periodic submittal of forms and reports.
- i. The Contractor shall include the provisions of this nondiscrimination clause in every subcontract, so that such provisions will be binding upon each Subcontractor.
- j. The terms used in this nondiscrimination clause shall have the same meanings as used in the Contract Compliance Regulations.
- k. The Contractor's obligations under this nondiscrimination clause are limited to the Contractor's facilities within the Commonwealth, or, where the Contract is for the purchase of goods manufactured outside of the Commonwealth, the facilities at which such goods are actually produced.

3. It is hereby agreed that any failure to comply with the foregoing nondiscrimination clause shall constitute a substantial breach of the Contract. It is further agreed that in the event PhilaPort, or the Commission if the Commission assumes sole responsibility for the determination of the compliance status of the Contractor, determines after a hearing and adjudication that the Contractor or any Subcontractor or any person acting on behalf of the Contractor or of any Subcontractor hereunder, has failed to comply with any of the provisions of the foregoing nondiscrimination clause, PhilaPort or the Commission may provide for the fixed-period suspension of the remaining obligations under the Contract pending compliance by the Contractor with the Contract Compliance Regulations; provided that the failure of the Contractor to comply with the adjudication within the fixed-period stated in the order, but not fewer than thirty (30) days, shall be considered a material breach and shall give the Commonwealth the right to bring an action against the Contractor and the surety on the Contractor's bond to recover expenses incurred in reletting the Contract, delay in performance, or other verifiable damages.

E. Prevailing Wages:

- 1. The Contractor and all Subcontractors are subject to the provisions, duties, obligations, remedies, and penalties of the Pennsylvania Prevailing Wage Act, Pa. Stat. Ann. tit. 43, §165-1 et seq., which is incorporated herein by reference as if fully set forth herein. Not less than the prevailing minimum wages as determined by the Secretary of Labor and Industry of the Commonwealth shall be paid to all workers employed by the Contractor and all Subcontractors.
- 2. The Contractor and all Subcontractors of whatever tier agree to employ or utilize labor that participates in an approved Apprenticeship Program as defined herein for each craft or trade of the labor force performing the Work. An approved Apprenticeship Program is one that is registered at the time the Contract is executed with the Pennsylvania Apprenticeship and Training Council. Apprentices employed on the Project shall be those participating in the approved Apprenticeship Program and whose training and employment are in full compliance with the provisions of the Act dated July 14, 1961 (P.L. 604), as amended, known as "The Apprenticeship and Training Act" and the rules and regulations issued pursuant thereto. Any employee using the tools of a craft who does not qualify as an apprentice within the provisions shall be paid the minimum wage predetermined for journeymen in that particular craft and/or classification
- 3. Should the Contract Documents include information on Davis-Bacon wage rates, Contractor shall pay the higher of the Pennsylvania Prevailing Wage rate and the Davis-Bacon wage rate.

F. Preferential Hiring of Veterans:

The Contractor, Subcontractor(s) or any person in either of their behalf, shall carry out the provisions of Section 1 of the Act of August 1, 1975 (P.L. 233, No. 92), 51 Pa. C.S.A. §7106, which concerns the giving of preferences to honorably discharged persons who have served in the armed forces of the U.S. during any war or armed conflict, in determining who shall be

employed on public works, which act in part provides:

Whenever the Commonwealth issues specifications for the construction, alteration or repair of any public works, such specifications shall include a provision under which the contractors and subcontractors shall agree to give a preferential rating similar to that given by the Commonwealth to any soldier making application for employment upon such public works.

G. Environmental Laws:

- 1. The Contractor shall be required to comply strictly with the provisions of all Federal, Commonwealth, multi-state, local, county, municipal or any other governmental law, directive, statute, ordinance, rule, regulation, or standard, common law or any judgment, order, writ, notice, decree, permit, license, approval, consent or injunction, relating to any environmental, health or safety matters or conditions, hazardous materials, pollution or protection of the environment, as amended, including, but not limited to: the Act to Prevent Pollution from Ships, 33 U.S.C. § 1901 et seq.; the Clean Air Act, 42 U.S.C. § 7401 et seq.; the Coastal Zone Management Act of 1972, 16 U.S.C. § 1451 et seq.; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et seq.; the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11001 et seq.; the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq.; the Noise Control Act of 1972, 42 U.S.C. § 4901 et seq.; the Ocean Dumping Ban Act of 1988, 33 U.S.C. §§ 1414b, 1414c; the Public Health Service Act, 42 U.S.C. §§ 300f - 300j-26; the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq.; the Air Pollution Control Act, 35 P.S.§ 4001 et seq.; the Boiler and Unfired Pressure Vessel Law, 35, P.S. § 1331 et seq.; the Building Energy Conservation Act, 35 P.S. § 7201 et seq.; the Clean Streams Law, 35 P.S. § 691.1 et seq.; the Dam Safety Act, 32 P.S. § 693.1 et seq.; the Fire and Panic Act, 35 P.S. § 1221 et seq.; the Hazardous Sites Cleanup Act, 35 P.S. § 6020.101 et seq.; the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. § 4000.101 et seg.; the Pennsylvania State Police Code (Fire Marshal Code), 37 Pa. Code Chapters 11, 13; the Storage Tank and Spill Prevention Act, 35 P.S. § 6021 et seq.; the Pennsylvania Sewage Facilities Act, 35 P.S. §750.1 et seq.; the Storm Water Management Act, 32 P.S. § 680.1 et seq.; the Worker and Community Right to Know Act 35 P.S. §7301 et seq.; and the Air Management Code, Philadelphia, Pa., Code § 3-101 et seq. and applicable provisions of local fire codes.
- 2. If the Contractor must undertake additional Work due to the enactment of new or the amendment of existing statutes, rules or regulations occurring after the submission of the Contractor's bid, PhilaPort shall issue a change order setting forth the additional Work that must be undertaken, which shall not invalidate the Contract. The cost of such a change order shall be determined in accordance with Section VIII.E herein, provided, however, that such additional costs to undertake Work not specified in the invitation for bids shall not be approved unless written authorization is given the Contractor prior to the undertaking of such additional Work.

3. PhilaPort shall not be responsible for any asbestos, PCBs, petroleum, hazardous waste, radioactive materials, or other toxic materials uncovered or revealed at the Site which were brought to the Site by the Contractor, any Subcontractor, anyone else for whom the Contractor is responsible, or any other person.

H. Taxes:

The Contractor shall pay all sales, mercantile, consumer, use, service, and other similar taxes which are required by Applicable Laws for the Work or portions thereof provided by the Contractor. The Contractor is required to pay Pennsylvania Sales and Use Taxes and may claim an exemption only for some construction materials. The Contractor shall pay all Federal Excise Taxes if due.

I. Permits and Licenses:

The Contractor shall obtain all permits and licenses required by Federal, State, and local laws, ordinances, and regulations which are applicable to the Contractor and the Work, unless otherwise specifically directed; and the Contractor shall pay all necessary fees, costs, or expenses incurred in obtaining such permits and licenses including, but not limited to, building permits, water permits, air permits and certificates of occupancy. In addition, the Contractor will be required to pay the fee where a service is rendered or materials, supplies, or equipment is provided.

J. Maintenance of Waterways:

- 1. In and around navigable waterways, the Work shall be carried on in full compliance with applicable requirements of the United States Department of Defense, Coast Guard, the Philadelphia Department of Commerce, and any other governmental agency having jurisdiction. Movement of boats and vessels of all kinds shall be maintained unless interference is permitted otherwise by the United States Department of Defense and the Navigation Commission for the Delaware River and its Navigable Tributaries, and any other governmental agency having jurisdiction, and then only within the limits and times specified. Should the Contractor, during the progress of the Work, sink or lose any material, plant, machinery, etc., which may be dangerous to or obstruct navigation, the Contractor shall forthwith recover and remove the same. The Contractor shall give immediate notice to the proper authorities of such obstruction, and, if required, shall, under the directions of said authorities, mark or buoy such obstructions until the same are removed.
- 2. Upon the completion of the Work affecting waterways of any character, all equipment shall be removed, and material deposited in such waterways shall also be removed unless otherwise ordered or permitted, so as to leave an unobstructed channel of not less than the

same width and depth and with the banks, retaining structures, or wharves in a condition at least equal to that existing before the beginning of the Work.

IV. Specific Legal Requirements:

A. Assignment of Antitrust Claims:

The Contractor and PhilaPort recognize that in actual economic practice, overcharges by the Contractor's Subcontractors resulting from violations of State or Federal antitrust laws are in fact borne by PhilaPort. As part of the consideration for the award of the Contract, and intending to be legally bound, the Contractor assigns to PhilaPort all right, title and interest in and to any claims the Contractor now has or may hereafter acquire under State or Federal antitrust laws relating to the goods or services which are provided under the Contract.

B. Accidents:

The Contractor shall be deemed and considered an independent contractor with respect to the Work, and shall assume all risks and responsibility for casualties of every description in connection with the Work. The Contractor shall have charge of the Work until completion and acceptance, and shall alone be liable and responsible for any accidents to persons and any loss or damage to property, buildings, or adjacent work that may occur as a consequence of or during the progress of the Work, whether such damage or accident is due to the negligence of the Contractor's servants, agents, employees, or whether such damage or accident is due to the inherent nature of the Work. It is not the intention of this Section IV.B or of anything herein provided to confer a third party beneficiary right of action upon any person whatsoever and nothing hereinbefore or hereinafter set forth shall be construed so as to confer upon any person other than PhilaPort a right of action either under the Contract or in any manner whatsoever.

C. Indemnification:

The Contractor shall indemnify, defend, and hold harmless PhilaPort, the agent of PhilaPort acting as Construction Manager, the Commonwealth, and the tenants of any facilities affected by the Work, and their officers, employees, and agents, from and against any and all losses, costs (including litigation costs and counsel fees), claims, suits, actions, damages, liability, and expenses in connection with loss of life, bodily injury, personal injury, or damage to tangible property to the extent occasioned wholly or in part by the Contractor's act or omission or the act or omission of the Contractor's agents, contractors (including subcontractors and suppliers), officers, employees, or servants pursuant to the Contract.

D. Intellectual Property:

As part of the consideration for the award of the Contract, the Contractor agrees to assign to PhilaPort all of its rights, title, and interest in its inventions, patents, patent applications, copyrights, ideas, improvements, trade secrets, know-how, technical data, drawings and manufacturing information (the "Intellectual Property") which arise out of or relate to the Work, Plans, or Specifications, but only insofar as such have been prepared for the purposes of the Project. The Contractor shall promptly disclose the Intellectual Property to PhilaPort, and shall keep confidential the Intellectual Property which is not publicly known. Upon request by PhilaPort, the Contractor shall take all actions, including execution of documents, to assist PhilaPort in documenting, recording, registering, perfecting, or otherwise securing, maintaining, and enforcing the Intellectual Property rights, title and interest. Upon request by PhilaPort, the Contractor shall promptly deliver to PhilaPort all documents or other tangible materials which comprise or embody the Intellectual Property.

E. Patented Appliances, Products or Processes:

To the fullest extent permitted by law, the Contractor agrees to indemnify, defend, and hold harmless PhilaPort, all its members, officers, and employees from all suits and actions of every name, nature, and description brought against them, or any of them, for or on account of the use of patented appliances, products, processes, constructions, designs, or methods, or the infringement of any patent, trademark, or copyright, and the Contractor shall pay all royalties, charges, and penalties which may become due or payable by reason of such use or infringement. Prior to the issuance of the final estimate, upon request by the Engineer, the Contractor shall submit evidence of the full payment of such royalties, charges, and penalties, or in lieu thereof the Contractor shall give such security, approved by PhilaPort's legal counsel, as may in the opinion of the Engineer be necessary to indemnify and hold harmless PhilaPort, all its members, officers, and employees as aforesaid.

F. No Estoppel or Waiver of Legal Rights:

Neither PhilaPort nor the Engineer shall be precluded or estopped by the approved applications for payment or payments made or given by any of them or by any of their agents or employees, under any provision or provisions herein, at any time, either before or after the completion and acceptance of the Work and payment thereof, from showing the true and correct amount and character of the Work performed by the Contractor; nor from showing at any time, that any such approved applications for payment or payments are untrue or incorrectly made in any particular; or that the Work or any part thereof does not conform to the Contract Documents. PhilaPort shall have the right to reject the whole or any part of the aforesaid Work should the said approved applications for payment or payments be found or be known to be inconsistent with the terms of the Contract Documents, or otherwise improperly given; and PhilaPort shall not be precluded or estopped, notwithstanding any such approved applications for payment or payments, from demanding and recovering from the Contractor or the surety or both such damages as PhilaPort may sustain by reason of the failure to comply with the terms of the Contract Documents, or on account of any overpayments made. Neither the acceptance by PhilaPort or the Engineer or any of their

agents or employees, nor any certificate approved for payment of money, nor any payments for, nor acceptance of the whole or any part of the Work by PhilaPort, nor any extension of time, nor any position taken by PhilaPort or its employees, shall operate as a waiver of any portion of the Contract or any power herein reserved by PhilaPort or any right to damages; nor shall any waiver of any breach of the Contract be held to be a waiver of any other subsequent breach.

G. Legal Relations and Responsibilities:

- 1. The Contract is not to be construed as being made for the benefit of any person or political subdivision not a party to the Contract, nor shall the Contract be construed to authorize any person or political subdivision not a party to the Contract to maintain any lawsuit hereunder, nor shall the Contract be construed to constitute the basis for the maintenance of any lawsuit by any person, other than as provided in Section IV(B) herein, or political subdivision not a party hereto.
- 2. The Contractor acknowledges that PhilaPort, as an agency of the Commonwealth, enjoys sovereign immunity as provided in Section 18 of the Philadelphia Regional Port Authority Act, 55 P.S. §697.18.

H. Unauthorized Acts:

Any act of an PhilaPort representative, official, agent, or employee, that is not within the scope of that person's authority or employment as delineated in the Contract Documents, shall not be binding on PhilaPort nor shall it be deemed to be a defense by the Contractor for the breach of any of the conditions and provisions of the Contract.

I. Successors and Assigns:

The Contract shall be binding on the parties hereto, their heirs, executors, administrators, successors, and assigns, but it may not be assigned by the Contractor without the prior written consent of PhilaPort.

J. Governing Law:

The Contract shall be governed by and construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania, without giving effect to the principles of conflicts of law thereof.

V. Standards of Review & Project Compliance:

A. Sketch Drawings:

If the Contractor requires sleeves and openings for the Work in any deck, concrete slab or wall, the Contractor shall furnish to PhilaPort and all other prime contractors involved a complete set of location sketch drawings in triplicate showing size and shape of openings. Each prime contractor shall be responsible for reviewing the drawings in order that there will be no interference and/or conflict in their respective portions of the Work. When this review is finalized, the Contractor shall submit these drawings to PhilaPort and the Engineer in a final workable form.

B. Chases and Openings:

- 1. The contractor for general construction will construct or have built into building walls, partitions, and floors all such chases and openings as are required. Each prime contractor will be responsible to see that the chases and openings affecting their work are installed in accordance with the Plans submitted to the contractor for general construction.
- 2. All construction pertaining to the cutting of chases and openings shall be done to the entire satisfaction of PhilaPort and the Engineer. Should the cutting of such chases and openings be required after construction of walls, partitions, floors or other work are completed, PhilaPort may require such work to be performed in a manner so as to result in unmarred work even to the extent of requiring the removal and rebuilding of walls, partitions, and other work, all of which shall be at the sole cost and expense of the responsible prime contractor.

C. Shop Drawings and Samples:

- 1. The Contractor shall submit all necessary shop drawings or catalog data to the Engineer in accordance with a priority schedule established by the Engineer.
- 2. When drafting is required, transparent reproductions of shop drawings (one of each drawing) shall be submitted by the Contractor during the checking period prior to the required submittal and within the time period which is established in the Contract Documents, in order to enable the Engineer to make corrections in pencil, reproduce them for the Engineer's records, and return for correction the original shop drawing tracings. The Contractor shall include in the Contractor's submittal one line print of each transparency for the Engineer to keep as a record. Until shop drawings have received the Engineer's approval as being in compliance with the Contract Documents, the Contractor shall resubmit them in the manner last marked for correction. When shop drawings are noted "Approved" for compliance with the Contract Documents by the Engineer, the Contractor shall have ten (10) sets of final shop drawings or catalog data printed and furnished to the Engineer. Where no special drafting is involved, such as cuts of standard equipment, catalog cuts, and other matter so printed in quantity, the printed matter may be submitted instead of the transparencies.
- 3. The Contractor shall review, stamp with approval and submit, with reasonable promptness in an orderly sequence so as to cause no delay in the Work or in the work of

any other contractor, all shop drawings and samples required by the Contract Documents or required subsequently by the Engineer for modifications. Shop drawings and samples shall be properly identified as specified, or in such manner as the Engineer may require. If the shop drawings show variations from the Contract Documents because of standard shop practice or other reason, the Contractor shall make specific mention of such variations on the shop drawings and in the Contractor's letter of submission, in order that, if accepted, suitable action may be taken for proper adjustment by way of increase or decrease in the Contract Sum; otherwise, the Contractor will not be relieved of the responsibility for executing the Work in complete conformity with the Contract even though the shop drawings, samples or catalog data have been approved.

- 4. By approving and submitting shop drawings and samples, the Contractor thereby represents that the Contractor has determined and verified all applicable field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that the Contractor has checked and coordinated each shop drawing and sample with the requirements of the Work and the Contract Documents.
- 5. The Engineer will review and approve shop drawings and samples with reasonable promptness, but the Engineer's review and approval is only for conformance with the design concept of the Project and with the information given in the Contract Documents. The Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions.
- 6. The Contractor shall make any corrections required by the Engineer and shall resubmit the required number of corrected copies of shop drawings or new samples until approved, which resubmission shall be acted upon by the Engineer with reasonable promptness. When resubmitting shop drawings, the Contractor shall direct specific attention to any revisions made, other than the corrections requested by the Engineer on previous submissions, by noting such revisions on the resubmitted shop drawings.
- 7. The Engineer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents, unless the Contractor has informed the Engineer in writing of such deviation at the time of submission, has noted the deviation on the shop drawings, and the Engineer and PhilaPort have given written approval of the specific deviation; nor shall the Engineer's approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.
- 8. No portion of the Work requiring a shop drawing or sample submission shall be commenced until the submission has been approved by the Engineer. Any Work commenced by the Contractor prior to final approval of the shop drawings and/or samples by the Engineer shall be performed by the Contractor at the Contractor's own risk.

D. Plans and Specifications:

- 1. The Plans, with all notes thereon, and the Specifications are intended to be correlative and of equal force and effect. However, if a discrepancy arises between them, the more stringent standard shall apply. The Plans give general dimensions and sizes, and such details as are required to cover special features. Figures shall have preference over scale in reading dimensions. The Plans and Specifications are intended to provide a standard of quality and quantity. The Contractor is required to field verify all dimensions, sizes, quantities, etc. prior to beginning Work.
- 2. The organization of the Specifications into divisions, sections and articles, and the arrangement of drawings shall not control the Contractor in dividing the Work among any Subcontractors or in establishing the extent of the Work to be performed by any trade. The thorough and complete coordination of all aspects of the Project is the responsibility of the Contractor.
- 3. Where the Work is shown in complete detail on only a portion of a drawing, or there is an indication of continuation the remainder being shown in outline, the Work drawn out in detail shall be understood to apply to other like portions of the Work. On all Work of a remodeling nature or installation within present buildings, the actual situation at the Site controls any information given which may affect the quantity, size and quality of materials required for a satisfactorily completed Contract, whether or not such information is indicated on the Plans or within the Specifications.
- 4. The Contractor shall maintain at the Site for PhilaPort and the use of the Engineer one (1) copy of all Plans, Specifications, bulletins, addenda, approved shop drawings, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, guarantees and other operating and maintenance data, change orders, and other modifications, including as-built drawings (to be printed on mylar), in good order and marked daily by the Contractor to record all approved changes made during the Work. These shall be turned over to the Engineer by the Contractor at the time of the Substantial Completion of the Contract for the purpose of assembling and correlating said material for use by PhilaPort.

E. Copies Furnished and Ownership of the Contract Documents:

- 1. Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge by PhilaPort (or the Engineer acting on behalf of PhilaPort), one (1) complete set of Plans and Specifications if such are needed for the Work. If additional sets are required, PhilaPort (or the Engineer, at the direction of PhilaPort) shall be reimbursed by the Contractor for the cost of providing the additional sets.
- 2. All Plans, Specifications and copies thereof furnished by PhilaPort or the Engineer are and shall remain the property of PhilaPort. They are not to be used on any other project, and with the exception of one (1) set for each party to the Contract, are to be returned at the completion of the Work to PhilaPort within thirty (30) days of PhilaPort's request for such documents.

- 3. The Contractor expressly agrees and acknowledges that the Engineer and PhilaPort will not be responsible for the acts or omissions of any contractor under the Project, or any Subcontractor, or any of their agents or employees, or any other persons performing any of the Work under the Project.
- 4. If corrective work or drawings are required of the Engineer due to defective or nonconforming work by the Contractor, the cost for additional professional services shall be borne by the Contractor, provided that the Engineer submits those costs to PhilaPort and the Contractor within thirty (30) days after the completion of said additional services. PhilaPort shall review for approval the corrective work and/or drawings which are prepared by the Engineer in order to determine that the corrective work and/or drawings fall within the original scope of the Contract.

F. Standards of Quality:

- 1. Where trade names, catalog numbers and manufacturers of material or equipment are specified in the Contract Documents, except where specific requirements are noted, they are mentioned therein for the purpose of establishing a standard of quality, performance, and appearance, and for establishing a standard of competitive bidding. Should the Contractor desire to deliver or install material or equipment other than that which is specified, the Contractor shall certify that the proposed substitute material or the equipment is equal in quality, performance and appearance to that identified in the Specifications, and the Contractor shall submit to the Engineer and PhilaPort, subsequent to the award of the Contract, a request to deliver or install such material or equipment. The Contractor's request shall include a comprehensive description of the proposed substituted material or equipment, including engineering, construction, dimension and performance data, along with a statement of cost involved. Within thirty (30) days after receipt of the Contractor's request, the Engineer, with the approval of PhilaPort, shall render a written determination to the Contractor which shall be final and conclusive. If the Contractor shall refuse or fail to proceed as directed by PhilaPort, PhilaPort may declare the Contractor in default.
- 2. The Contractor shall be responsible for any and all costs incurred as a result of any substitution. If the cost of the substituted item is less than the specified item, PhilaPort is entitled to a credit for the difference between the cost of the substituted item and the cost of the item specified.

G. Quantities are Approximate:

When quantities of the various classes of the Work to be done and materials to be furnished under the Contract are stated, they are estimated and approximate. When stated in the Proposal they are given only for the purpose of comparing the bids on a uniform basis. PhilaPort does not guarantee that the amount stated will correspond to the actual amounts that are eventually comprised in the Work, and no claim for damages, for anticipated profit, or for loss of profit, will be allowed the Contractor in the event of a disagreement with the final estimate of the Work completed. PhilaPort reserves the right to increase or decrease the

quantities or to entirely omit any of the items as contained in the Proposal, to the extent found necessary by the Engineer.

H. Methods to be Approved:

Before commencing the Work, the Contractor shall, when required by the Engineer, submit for approval the proposed methods of performing the Work, including maintaining travel, underpinning, bulkheading, shoring, sinking foundations, handling spoils, lighting, maintaining structures, street surfaces, and drainage, and all other branches of operations. Such approval is reserved in order to safeguard PhilaPort's interest, but it will in no way relieve the Contractor of the obligation or responsibility for the safe and proper conduct of the Work.

I. Completeness of Data:

The term "structures" as used in the Contract shall apply to all surface, subsurface and overhead structures of whatever character within the zone of influence of the Work, including buildings situated in or adjacent to the excavation. Where these structures are shown or indicated on the Plans, the information given is in accordance with the best information in the possession of PhilaPort, but is approximate only. The data is not warranted to be either complete or correct, and the Contractor shall assume all risks resulting from the conditions differing from the approximations shown.

J. Lines and Grades; City Datum:

Vertical dimensions are given in United States standard feet and fractions thereof. Unless otherwise stated, elevations preceded by a plus ("+") or a minus ("-") sign refer respectively to distances above or below the established City Datum, which is two and one quarter (2.25) feet above mean high water on the Delaware River at Chestnut Street, Philadelphia. Dimensions locating buildings and structures shall be verified and checked in the field by the Contractor before proceeding with construction details affected thereby. Any of the Work improperly done without lines, levels or instructions shall be removed and replaced by the Contractor at the Contractor's own expense. Failure to do so in the sole judgment of the Engineer may be considered by PhilaPort as a violation of the Contract.

K. As-Built Documents:

At the time of Substantial Completion, as such term is defined in Section XVI herein, the Contractor shall provide to the Engineer one set of all as-built drawings, and six copies of each shop drawing, catalog data, manufacturers' operating and maintenance instructions, certificates, warranties, written guarantees and related documents required by the Contract Documents. In addition, the Contractor shall supply electronic copies of each as-built drawings in Auto Cad latest version and .PDF.

If any portion of the Work is designed by the Contractor (for example, sprinkler calculations) the engineer of record performing such work shall issue a letter of certification indicating that

the work as installed meets the design intent, is in compliance with applicable codes and that it is approved by said engineer.

VI. Insurance:

A. Contractor's Insurance:

- 1. The Contractor shall, at its sole cost and expense, procure and maintain in full force and effect, covering the performance of the Work, the types of insurance specified in this Section VI.A. The insurance shall be procured from reputable insurers, acceptable to PhilaPort and authorized to do business in the Commonwealth. The insurance required, except the Professional Liability Insurance, shall be written on an "occurrence" basis and not a "claims-made" basis. In no event shall Work be performed pursuant to the Contract until the required evidence of insurance has been furnished and approved to PhilaPort. If the Contractor fails to obtain or maintain the required insurance, PhilaPort shall have the right to treat such failure as a material breach of the Contract and to exercise all appropriate rights and remedies. The Contractor shall provide for at least thirty (30) days' prior written notice to be given to PhilaPort in the event coverage is materially changed, cancelled or non-renewed.
- 2. PhilaPort, the Commonwealth, and the tenants of any facilities affected by the Work, their officers, employees, and agents are to be named as additional insureds on the General Liability Insurance policy of the Contractor. In addition, an endorsement to the insurance policy is required stating that the coverage afforded PhilaPort, the Commonwealth, and the tenants of any facilities affected by the Work, and their officers, employees, and agents as additional insureds will be primary to any coverage available to the Contractor.
- 3. The amount of insurance required by this Section VI.A is as follows:
 - a) Workers Compensation and Employers Liability and/or Harbor Worker's Compensation Act, the Jones Act or other Maritime Employer's Liability Act:
 - 1. Workers Compensation: Statutory limits.
 - 2. Employers Liability: \$500,000 each accident bodily injury by accident; \$500,000 each employee bodily injury by disease; and \$500,000 policy limit bodily injury by disease.
 - 3. Other States' coverage and Pennsylvania endorsement.
 - b) General Liability Insurance:
 - 1. Limit of Liability: \$1,000,000 per occurrence combined single limit for bodily injury and property damage; \$1,000,000 personal and advertising injury; and \$2,000,000 general aggregate.

2. Coverage: Premises operations; blanket contractual liability; personal injury liability (employee exclusion deleted); products and completed operations; independent contractors; employees and volunteers as additional insureds; cross liability; and broad form property damage (including completed operations)

c) Automobile Liability:

- 1. Limit of Liability: \$1,000,000 per occurrence combined single limit for bodily injury and property damage liability.
- 2. Coverage: Owner, non-owned and hired vehicles.
- d) Professional Liability Insurance (if required):
 - 1. Professional Liability Insurance for projects that involve design services, including, but not limited to, design/build contracts.
 - 2. Limit of Liability: \$1,000,000 with a deductible not to exceed \$25,000.
 - 3. Coverage: Errors and omissions.
 - 4. Coverage for occurrences happening during the performance of the Work shall be maintained in full force and effect under the insurance policy or "tail" coverage for a period of at least two (2) years after completion of the Work.
- e) Pollution Liability Insurance at a minimum of \$1,000,000 per occurrence with an aggregate of \$2,000,000.
- 4. Certificates of insurance evidencing the required coverages shall be submitted to PhilaPort's Insurance Department at least ten (10) days before work on site is begun. This ten (10) day requirement for advance documentation of coverage may be waived in situations where such waiver will benefit PhilaPort, but under no circumstances shall the Contractor actually begin Work without providing the required evidence of insurance. PhilaPort reserves the right to require the Contractor to furnish certified copies of the original policies of all insurance required under the Contract Documents at any time upon ten (10) days' prior written notice to the Contractor.
- 5. It is expressly understood and agreed that the furnishing of insurance pursuant to this Section VI.A shall in no way limit the liability or responsibilities and obligations of the Contractor as provided in the Contract Documents.
- 6. Where applicable, all insurance shall provide coverage for work being performed within fifty (50) feet of a railroad.

B. Contractor's Liability Insurance:

- 1. The Contractor's certificate of insurance for general liability shall contain the following statement: "The risks covered in this policy include all risks inherent in performing demolition work, including but not limited to the following: explosion, collapse, and underground hazards."
- 2. The Contractor's certificate of insurance for workmen's compensation shall contain the following statement: "All workers performing demolition work under this contract are covered under the classification for demolition workers."
- 3. The Contractor's and the Subcontractors' liability insurance shall include adequate protection against the special hazard of blasting in the amount of at least three hundred thousand dollars (\$300,000).

VII. Safety:

A. Safety of Persons and Property:

- 1. The Contractor shall take all necessary precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:
 - a. all employees on the Site, and all other persons who may be affected by the Work;
 - b. the Work, whether in storage on or off the Site, under the care, custody or control of the Contractor or any Subcontractors or sub-subcontractors; and
 - c. other property at the Site or adjacent thereto which may be affected by the Work, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of the Work.
- 2. All damages or loss to any property referred to in Sections VII.A.1.b and c caused in whole or in part by the Contractor, any Subcontractor, any sub-subcontractor, or anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable to faulty Plans or Specifications or to the acts or omissions of PhilaPort or Engineer or anyone employed by either of them or for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor.
- 3. The Contractor is responsible for safety. The Contractor shall submit a site specific safety plan. The Contractor shall comply with all applicable, laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. The Contractor shall erect

and maintain as required by existing conditions and progress of the Work, until the acceptance of the completion of the Contractor's portion of the Project, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

- 4. If and when the use of explosives and other hazardous materials or equipment is necessary for the prosecution of the Work, the Contractor shall observe the utmost care, performing such Work with experienced workers and in accordance with all Federal, Commonwealth, City and institutional regulations, so as not to endanger life or property. Rock encountered within a minimum of five (5) feet of pipe lines or buildings shall be removed without blasting. All explosives shall be stored in a secure and safe manner, in strict conformity with all Commonwealth and City regulations and all such storage shall be marked clearly, "Dangerous-Explosives" and shall be in the care of competent watch people at all times.
- 5. Prior to the initiation of any work on site, the Contractor shall designate a responsible member of the Contractor's organization at the Site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to PhilaPort and the Professional.
- 6. The Contractor shall not load or permit any part of the Work to be loaded so as to endanger the safety of the Work.

B. Safety Precautions and Programs:

The Contractor shall be responsible for initiating, maintaining and supervising all Federal, Commonwealth and City safety precautions and programs required on the Site during the term of the Contract.

C. Emergencies:

In any emergency affecting the safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Sections VIII.E through I herein.

D. Access to Fire Hydrants and Fire Alarm Boxes:

The Contractor must comply with all applicable fire codes and regulations. Fire hydrants shall be left at all times clear of obstructions and readily accessible for fire apparatus and no material or other obstructions shall be placed within fifteen (15) feet of a fire hydrant. Fire alarm boxes shall be supported and protected and maintained so as to be readily accessible and open to view. Excavations shall be decked or bridged, where necessary, to permit the safe passage of fire apparatus and to give access to fire hydrants and to adjacent buildings for the extinguishing of fires. Where necessary, branch pipes shall be extended from the nozzles

of the fire hydrants for convenient attachment to the fire engines. The pipes connecting the fire hydrants to the mains shall be protected from freezing, and the fire hydrants (particularly the high pressure type) shall, where necessary, be braced or tied to the connecting pipes to prevent movement under water pressure.

E. Safety and Sanitary Provisions:

The Contractor shall provide means and appliances and shall enforce suitable rules for the safe performance of the Work and for the safety and health of workers. The completed portions of the Work shall be kept clean and in a sanitary condition. The Contractor shall provide and maintain properly secluded sanitary facilities, in accordance with existing Federal, Commonwealth and City regulations, for the exclusive use of workers. When directed by PhilaPort, the Contractor shall dismantle and remove these facilities.

F. Danger Signals:

The Contractor, at the Contractor's own expense, shall erect and maintain all necessary warning buoys, barricades, red lanterns, and danger signals as required by the applicable laws and regulations. The lights shall be kept burning from sunset until sunrise, and necessary watchpersons shall be provided for the safety of the public. The Contractor shall observe such rules relative to signals and safeguards as the police regulations, harbor and other regulations, laws, and ordinances require.

VIII. Contract Time and Change Orders:

A. Contract Time:

- 1. Time is an essential element and of the essence of the Contract. Unless otherwise specifically provided in the Contract Documents, or authorized in writing by PhilaPort or the Engineer, the Contractor shall begin the Work within ten (10) Working Days from the date of notice to proceed, and shall complete all of the Work under the Contract on or before the date determined in accordance with the Agreement.
- 2. The Contractor will not be required to proceed with the Work, if, for any reason for which the Contractor is not responsible, the Work cannot be commenced within three (3) months from the date of execution of the Contract, and in such case, at the request of the Contractor, the Contract shall be declared null and void. This shall not apply to contracts, the beginning of which is dependent upon the progress of other contracts, where this condition is plainly indicated by PhilaPort in the Contract Documents or in another order written by PhilaPort.
- 3. Should PhilaPort cause any delay in the completion of the Contract, by failure to give possession of the Site, by changes in the Plans and Specifications, or by requiring for any cause the suspension of the Work, the Contractor will be entitled to a reasonable extension of the time specified for the completion of the Work. Any claim arising from

such delay must be made in writing to the Engineer immediately upon the occurrence of the delay, and the Engineer will determine what allowance, if any, shall be made, but no additional compensation for consequential damages arising from such delay will be allowed. The time allowed for any delay will be added to and will correspondingly extend the Date of Completion.

- 4. For a contract whose Date of Completion is on or before a specified number of calendar days, no allowance will be made for non-Working Days or delays due to unfavorable weather, to the removal, relocation or fulfillment of other requirements by utilities, or to the failure to obtain material and equipment.
- 5. For a contract whose Date of Completion is on or before a specified number of Working Days, allowances will be made for days or portions of days, in increments of one-quarter day, for conditions entirely beyond the control of the Contractor. An allowance shall be made for unsuitable weather necessitating a suspension of the Work or other unfavorable conditions when the operation which controls the progress of the Work is suspended. A record of the Working Days shall be kept by PhilaPort; and this record shall be available to the Contractor on request. The Contract time shall start with the first Working Day after the date of the notice to proceed and the scheduled Date of Completion shall be that established by the specified number of Working Days plus the allowances.
- 6. Notwithstanding the above provisions of this Section VIII, the Contractor will not be liable or responsible for delays or damage to the Work caused by acts of God, acts of public enemy, acts of Government, quarantine restrictions, general strikes throughout the trade, or freight embargoes not caused or participated in by the Contractor.

B. Liquidated Damages:

- 1. **Delay in completion of the Work**. The Contractor acknowledges and agrees that PhilaPort will incur substantial damages if the Work is not performed in accordance with the requirements of this Agreement. The parties agree that it would be extremely difficult and impractical under the presently known and anticipated facts and circumstances to ascertain and fix actual damages that PhilaPort would incur under these circumstances, and, accordingly, the parties agree that PhilaPort's remedy shall be to recover from the Contractor as liquidated damages, and not as a penalty the Contract Sum multiplied by 0.005 for each and every calendar day that the Work remains incomplete. The liquidated damages identified in this Section relate solely to the Contractor's delay in completing the Work in accordance with the requirements of this Agreement and not to other breaches, actions or omissions of the Contractor. The liquidated damages identified in this Section shall not limit PhilaPort's remedies for other breaches, actions, or omissions of the Contractor, including termination for failure to complete the Work.
- 2. Failure to meet Diversity Inclusion participation levels. The Contractor acknowledges that the diversity and inclusion commitments submitted as part of its bid were an integral part of its bid and contracting requirements. The Contractor and agrees that PhilaPort will incur substantial damages to its efforts to promote diversity and inclusion if the

commitment levels for the Work are not achieved in accordance with the requirements of this Agreement. The parties agree that it would be extremely difficult and impractical under the presently known and anticipated facts and circumstances to ascertain and fix actual damages that PhilaPort would incur under these circumstances, and, accordingly, the parties agree that PhilaPort's remedy shall be to recover from the Contractor as liquidated damages, and not as a penalty the dollar value of the participation committed multiplied by 0.10. The liquidated damages identified in this Section relate solely to the Contractor's failure to meet its commitment of diversity and inclusion in accordance with the requirements of this Agreement and not to other breaches, actions or omissions of the Contractor. The liquidated damages identified in this Section shall not limit PhilaPort's remedies for other breaches, actions, or omissions of the Contractor, including termination for failure to complete the Work.

C. Progress Schedule:

- 1. Immediately upon receipt of notice of the award of the Contract, the contractor for general construction on the Project shall furnish to each separate prime contractor within seven (7) days a schedule for the proposed prosecution of the Work under the Contract. Thereafter, each separate prime contractor shall submit to the contractor for general construction within fourteen (14) days after receipt of notice of the award of the Contract, a schedule for the proposed prosecution of the Work under their respective contracts. The contractor for general construction shall then submit to the Engineer and PhilaPort within twenty-one (21) days after receipt of notice of the award of the Contract, a complete set of progress schedule signed by all prime contractors indicating their approval, and showing in detail to the satisfaction of the Engineer and PhilaPort, the proposed coordinated dates for the performance of each phase of work under each contract on the Project. The date of notice from the Engineer to proceed with the Work will be the actual start date of the Contract. The time period from the date of the notice from the Engineer to proceed with the Work to the commencement of on-site Work is part of the time period of the Contract, and is for the purpose of performing all off-site Work including the preparation by the Contractor of all documents required by PhilaPort. No extensions of time will be granted to the Contractor for the time period commencing with the notice from the Engineer to proceed with the Work and ending with the commencement of on-site Work. In the event that PhilaPort, for any period after the commencement of on-site Work, grants an extension of time for sixty (60) days or more to the Contractor, the Contractor shall prepare a revised progress schedule and obtain the signatures of all prime contractors indicating their approval, and shall forward the revised progress schedule to the Engineer within twenty (20) days from the approval of the extension. In no event will the granting of an extension of time to any contractor under the Project automatically entitle any other prime contractor to an extension of time. In the event that the Contractor is the only contractor under the Project, the Contractor shall submit a progress schedule to the Engineer and PhilaPort within ten (10) days of receipt of notice of the award of the Contract.
- 2. The Contractor is to routinely update the schedule to accurately reflect the work that has

been performed as well as keep the future tasks on schedule with the completion date. The project schedule should be submitted to PhilaPort at least on a monthly basis.

- 3. The Contractor shall complete portions of the Work in such order of time as may be stated in the Specifications or as required in the progress charts as approved by all prime contractors and PhilaPort. PhilaPort may require the Contractor, at no additional cost to PhilaPort, to supply additional forces, equipment, tools and materials and/or provide for an increase in working hours, and/or increase the number of Working days per week in order to keep up with the progress chart. If the Contractor shall refuse or fail to proceed as directed by PhilaPort, PhilaPort may find the Contractor in breach of the Contract and/or declare the Contractor in default.
- 4. PhilaPort shall have the right to use or occupy any completed or partially completed portions of the Work, whether or not the time may have expired for completing the entire Work or said portions of the Work, but such use or occupancy shall not be deemed an acceptance of the Work so taken or used, or any portion thereof. Prior, however, to such use or occupancy, PhilaPort shall inspect the Work to be occupied to determine if it is in conformity with the Contract, and any subsequent damage thereto due solely to the use and occupancy of the completed portion, will not be the responsibility of the Contractor.

D. Progress Meetings:

Progress meetings may be held as often as required by the Engineer and must be attended by the Contractor and his representatives who are authorized to make decisions and representations affecting the progress of the Work on the Project. The dates and time of progress meetings will be given to all concerned parties and these conferences shall be attended whether or not a particular contractor may be affected. A failure to attend shall be construed to be a violation of the contract.

E. Change Orders:

- 1. If changes in the design of any portion of the Work or the requirements of the Specifications are deemed necessary by the Engineer in order to carry out and complete more fully the Work agreed to be performed under the Contract, the Engineer may order alterations to or changes in the Work covered by the Contract Documents, and the Contractor shall comply with such orders. All such changes in the Work shall be authorized by change order. If such changes increase the cost of the Work to the Contractor, additional compensation will be allowed by PhilaPort. If such changes diminish the cost of the Work to the Contractor, the amount of such diminution shall be deducted by PhilaPort in its sole discretion. No consequential loss of profit on account of changes or of the Work not executed will be allowed the Contractor, but the Contractor may be entitled to an extension of time on this account.
- 2. A change order is a written order to the Contractor, signed by PhilaPort and issued after the execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Date of Completion. The Contract Sum and the Date of Completion

may be changed only by a change order.

- 3. The cost or credit to PhilaPort resulting from a change in the Work shall be determined in one or more of the following ways in accordance with the current administrative procedures of PhilaPort, at the option of PhilaPort:
 - a. by unit prices stated in the Proposal, Specifications, or from prices agreed upon in the breakdown sheet;
 - b. by a detailed cost breakdown properly itemized, the breakdown shall include size, quantity, type, etc. and may include a maximum of fifteen percent (15%) markup to labor costs for overhead and profit and a maximum of ten percent (10%) markup to material costs for overhead and profit; or
 - c. if neither method set forth in Sections VIII.E.3.a and b are utilized after good faith negotiations, PhilaPort may direct the Contractor to proceed with the Work involved on a force account basis for which payment shall be made as provided in Section VIII.I herein.
- 4. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed change order that application of the agreed unit price to the quantities of Work proposed will create a hardship on PhilaPort or the Contractor, the applicable unit prices shall be equitably adjusted by a change order to prevent such hardship.
- 5. If the Contractor claims that additional cost or time is involved because of:
 - a. any written interpretation issued;
 - b. any order issued by the Engineer to stop the Work, provided that the Contractor was not at fault; or
 - c. any written order for a minor change in the Work;

then, pursuant to Section VIII.F herein, the Contractor shall make such claims for additional cost or time and PhilaPort shall determine if such claims are appropriate.

6. Upon the issuance of a change order, the Contractor shall proceed to perform the Work in accordance with the Contract Documents, even if the amount of additional payment or credit or adjustment in the Contract Sum or the extent of any change in the Date of Completion, if any, resulting from such Work has not yet been determined and even if there is a disagreement between PhilaPort and the Contractor as to whether the Contractor is entitled to additional payment or an extension of time for performing such Work.

7. Should concealed conditions be encountered which are unascertainable from the Contract Documents, visits to the Site and reasonable investigation, and which are at variance with the conditions indicated by the Contract Documents; or should there be encountered unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract; the Contract Sum shall be equitably adjusted by a change order upon claim by either party made within seven (7) Working Days after the first observance of the conditions. No adjustment shall be made to the Contract Sum, however, for concealed conditions encountered during the cutting and patching of the Work.

F. Claims for Additional Cost or Time:

- 1. If the Contractor wishes to make a claim for an increase in the Contract Sum or an extension in the Date of Completion, the Contractor shall give PhilaPort written notice thereof in accordance with the requirements of Section X.A herein, but in no case more than thirty (30) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property, in which case the Contractor shall proceed in accordance with Section VII.C herein. No such claim shall be valid unless so made. If PhilaPort and the Contractor cannot agree on the amount of the adjustment in the Contract Sum or the Date of Completion, it shall be determined by PhilaPort. Any determination to change the Contract Sum or Date of Completion resulting from such claim, shall be authorized by a change order.
- 2. No claims for increased costs, charges, expenses, or damages of any kind, unless otherwise provided herein, shall be made by the Contractor against PhilaPort for any delays or hindrances from any cause whatsoever, including but not limited to strikes, walkouts or work stoppages during the progress of any portion of the Work; provided, however, that PhilaPort, in its discretion, may compensate the Contractor for any such delays by extending the Date of Completion, which extension shall constitute the exclusive remedy between the parties.

G. Minor Changes in the Work:

PhilaPort may order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Date of Completion and not inconsistent with the intent of the Contract Documents. Such changes may be effected by written field order as provided in Section VIII.H herein or by other written order. Such changes shall be binding on PhilaPort and the Contractor.

H. Field Orders:

After an interpretation of the Contract Documents by the Engineer, PhilaPort may issue

written field orders consistent with the Contract Documents without changing the Contract Sum or Date of Completion. The Contractor shall carry out such field orders promptly.

I. Force Account:

- 1. Payment under Force Account will be for the actual and necessary direct cost of the Work in accordance with the orders of the Engineer, and in addition thereto the percentage of such cost hereafter stated. "Actual and necessary direct cost" shall be deemed to include the following:
 - a. For contracts for Goods and Materials only, the actual and necessary direct cost of the work done under Force Account as noted above, ten percent (10%) will be added to the actual expenditure in Work.
 - b. For Service contracts and Construction contracts, the actual and necessary direct cost shall be:
 - 1. The actual expenditure for labor for the time actually engaged in the Work, including the distributed cost of foremen in direct charge of such labor, insurance, taxes, and other payments applicable to such labor.
 - 2. The actual expenditure for materials used by or incorporated in the Work.
 - 3. A reasonable hourly, weekly or monthly rental as applicable, as determined by the Engineer, for use of motor trucks and special equipment such as power-operated shovels, cranes, drills, paving breakers, etc. (but not including small hand tools or company provided vehicles), at a rate not to exceed the current local rate charged for the type of equipment used, for the time that such equipment is required on the Site for the performance of Force Account work exclusively. The rental price shall be for the equipment provided on the Site and shall include transportation to and from the Site, fuel, power, lubricants, operating tools, repairs, insurance, depreciation, replacements, and the sharpening of drills and other tools required to keep them in the best working condition.
- 2. To the actual and necessary direct cost of the Work done under Force Account as noted above, fifteen percent (15%) will be added to the expenditure for labor as set forth in Section VIII.I.1.b.1 above and ten percent (10%) will be added to the expenditure for materials as set forth in Section VIII.I.1.b.2 above. No additions will be allowed to the rental of trucks and special equipment as set forth in Section VIII.I.1.b.3 above. These percentages, and the rental price for equipment furnished, shall be deemed to cover the cost of heat, light, use and upkeep of small hand tools, administration, engineering, superintendence, all loss, damage, risk, and expenses incidental to the Work and profit. The Contractor shall have no claim in excess of the above, such payments being in full compensation for the performance of the Work and the furnishing of such materials and for all expenses in connection therewith and incidental thereto.

- 3. Should the Contractor sublet any portion of the Work to be executed under Force Account with the approval of PhilaPort, payment for that portion will be computed as the actual and necessary direct cost as defined above, exclusive of any profit to the Subcontractor, plus the percentages allowed, plus five percent (5%) of the total paid to the Subcontractor.
- 4. The Contractor shall submit daily a statement in duplicate of the Work done on a Force Account basis within twenty-four (24) hours of the time the Work is done, and representatives of PhilaPort and the Contractor shall make daily comparison of the actual and necessary direct costs incurred, as given therein. After correction, if necessary, this comparison shall be signed by each and filed with the Engineer and the Contractor. The Contractor shall submit to the Engineer monthly, prior to each current estimate, four (4) copies of an itemized statement of the amount and value of labor and/or materials furnished, accompanied by the original receipted bills for commodities purchased or for the Work performed under a subcontract, and by an affidavit certifying the correctness of the said statement. The Engineer shall have access to any books, vouchers, records, and memoranda showing the labor employed and/or the materials actually used on the specific operation and the actual net cost thereof.
- 5. Work done under Force Account shall be subject to all of the requirements of the Contract Documents. It shall be performed in an orderly and economical way, and the prices paid for labor and/or materials and the method of performing the Work shall be subject to the approval of the Engineer. No Work will be paid for under Force Account unless it is ordered as such in writing.

IX. Acceptance of Work:

A. Tests:

1. If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction hereof require any of the Work to be inspected, tested or approved, the Contractor shall give PhilaPort timely notice of its readiness and of the date arranged so that the Engineer may observe such inspection, testing, or approval.

The Contractor shall bear all costs of such inspections, tests and approvals unless otherwise provided. With regard to samples:

- a. All expenses incurred in the collection, packing, and delivering of samples or materials or equipment to the testing site shall be paid for by the Contractor.
- b. The Contractor shall pay the costs of transporting samples to the laboratory and the testing of same, except where otherwise noted in the General Conditions, Specifications, or called for in the Contract Documents.

- c. Approved samples to be incorporated in the Work shall be returned to the Contractor by the testing laboratory under the supervision of the Contractor.
- 2. If after the commencement of the Work, PhilaPort determines that any portion of the Work requires special inspection, testing, or approval, PhilaPort will, by written authorization, instruct the Contractor to order such special inspection, testing, or approval, and the Contractor shall give notice as provided for in this Section IX.A. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents or with respect to the performance of the Work, with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction hereof, the Contractor shall bear all costs thereof, including the Engineer's additional services made necessary by such failure; otherwise, PhilaPort shall bear such costs, and an appropriate change order shall be issued.
- 3. Required certificates of inspection, testing, or approval shall be obtained by the Contractor and promptly delivered by the Contractor to the Engineer and PhilaPort.
- 4. If the Engineer wishes to observe the inspections, tests, or approvals required by this Section IX, the Engineer shall do so promptly and, where practicable, at the source of supply.
- 5. Neither the observations of the Engineer in the administration of the Contract, nor inspections, tests, or approvals by persons other than the Contractor shall relieve the Contractor from obligations to perform the Work in accordance with the Contract Documents.

B. Uncovering the Work:

- 1. If any Work should be covered contrary to the request of PhilaPort or Engineer, it must, if required by PhilaPort or Engineer, be uncovered for its observation and replaced, at the Contractor's expense.
- 2. If any other Work has been covered which PhilaPort or Engineer has not specifically requested to observe prior to being covered, PhilaPort or Engineer may request to see such Work and it shall be uncovered by the Contractor. If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement shall, by an appropriate change order, be charged to PhilaPort. If such Work is found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by another prime contractor, and in that event PhilaPort shall pay the Contractor for such costs and require reimbursement of such costs from the responsible prime contractor.

C. Correction of the Work:

- 1. The Contractor shall promptly correct all Work rejected by PhilaPort or Engineer as defective or nonconforming or as failing to conform to the Contract Documents, whether observed before or after the Date of Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including the cost of the Engineer's additional services thereby made necessary and any additional cost incurred by PhilaPort.
- 2. If, within one (1) year after the date of final acceptance of all Work required under the Contract Documents, or within such other period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any of the Work is found by PhilaPort to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from PhilaPort to do so, unless PhilaPort has previously given the Contractor a written acceptance of such specific condition. PhilaPort shall give such notice promptly after discovery of the condition. The performance bond required shall provide a guarantee in the sum of one hundred percent (100%) of the total Contract Sum for the correction and remedy of such defect. Should the Contractor or the Contractor's surety fail to comply with the orders of the Engineer to replace or repair defective material, workmanship, or equipment within ten (10) days from the date of notice thereof, PhilaPort shall have the right to declare the Contractor and/or the Contractor's surety in default, and to proceed with the correction of the defect.
- 3. All such defective or nonconforming Work under Sections IX.C.1 and 2 shall be promptly removed from the Site by the Contractor, and the Work shall be corrected to comply with the Contract Documents without cost to PhilaPort.
- 4. The Contractor shall bear the cost of making good all work of other prime contractors or Subcontractors destroyed or damaged by such removal or correction.
- 5. If the Contractor does not remove such defective or nonconforming Work within the time fixed by written notice from PhilaPort, PhilaPort may remove it and may store the materials and/or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten (10) days thereafter, PhilaPort may upon ten (10) additional days' written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor pursuant to the provisions of this Section IX.C. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate change order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor and/or the Contractor's surety shall pay the difference to PhilaPort.
- 6. If the Contractor fails to correct such defective or nonconforming Work, PhilaPort may correct the Work at the Contractor's expense.
- 7. The obligations of the Contractor under this Section IX.C shall be in addition to and not

in limitation of any obligations imposed upon the Contractor by special guarantees required by the Contract Documents or otherwise prescribed by law.

D. Acceptance of Nonconforming Work:

If PhilaPort elects to accept nonconforming Work, it may do so instead of requiring its removal and correction, in which case a change order shall be issued to reflect an appropriate reduction in the Contract Sum or, if the amount is determined after final payment, it shall be paid by the Contractor and/or the Contractor's surety.

E. Materials and Workmanship:

Where no requirements are specified for materials or for the methods of testing materials or equipment, they shall at least be equal to the latest standard or tentative specifications of nationally recognized standardizing agencies, including, but not limited to, the American Society for Testing and Materials, the American Water Works Association, the American Society of Mechanical Engineers, the latest codes of the National Board of Fire Underwriters or, as they may be applicable, the regulations of the pertinent Departments of the City and the Commonwealth.

The materials used in the Work shall conform to the requirements of the Specifications and shall be those best adapted for the kind of service required. The workmanship shall be equal to the best standard practice. Work of reconstruction and restoration of Commonwealth, City, PhilaPort, or privately owned structures shall be in accordance with the rules and regulations of the owners thereof. No materials shall be used on the Work until accepted and approved by the Engineer.

F. Inspection:

All of the Work shall be subject to supervision and inspection by the Engineer, and the Contractor shall cooperate and afford every facility for the inspection of the Work. Authorized representatives of PhilaPort shall be permitted access at all reasonable times to all portions of the Work, and to such portions of the place of manufacture of fabricated materials as may be necessary for complete inspection. Before beginning the Work, the Contractor shall notify the Engineer of the type and source of supply of the principal materials which the Contractor proposes to furnish, and, as soon as possible thereafter, shall furnish samples of materials, fixtures, and appliances offered for approval. Before beginning the fabrication of materials, or before shipping materials of a specified type, the Contractor shall notify the Engineer in ample time to permit inspection at the place of manufacture, should the Engineer so desire. Such materials shall be delivered to the Site or other location as designated in the Contract Documents properly marked for identification and shall be subject to re-inspection and final acceptance or rejection. Materials shall be delivered in sufficient time to allow for proper sampling and testing. All materials rejected by the Engineer as unsuitable or not in conformity with the Plans or Specifications shall be immediately removed. Unless otherwise specifically provided for, the cost of inspection and testing will be borne by the Contractor. Work shall be done only during regular working hours unless specifically authorized or

directed otherwise by the Engineer. The presence of the Inspector shall not lessen the obligation of the Contractor in accordance with the Contract Documents, or be deemed a defense on the part of the Contractor for infraction thereof. The Inspector is not authorized to revoke, alter, enlarge, relax, or release any of the requirements of the Contract Documents.

G. Investigation of the Work:

Should the Engineer at any time have reason to suspect that defective Work has been done, the Engineer may order an investigation made, and the Contractor shall furnish the necessary labor, appliances, Plans, Specifications, and all other material which PhilaPort finds relevant to the investigation. If any part of the Work is thus found to be defective, the Contractor shall reconstruct it to the satisfaction of the Engineer, and the cost thereof and of the investigation shall be at the sole expense of the Contractor. If the Work is found to be in accordance with the Contract Documents, the Contractor will be reimbursed for the expense incurred because of the examination.

H. Defective Work:

The Contractor shall remove, at the Contractor's own expense, any Work determined by the Engineer to be defective and not in accordance with the Contract Documents, and shall rebuild and replace the same without additional compensation. Failure to do so shall be deemed a violation of the Contract and subject to the procedures established in Section XI.A herein. Any omission or failure on the part of the Engineer to disapprove or reject any Work shall not be construed to be an acceptance of any such defective Work.

I. Restoration of Prior Conditions:

- 1. The Contractor shall remove promptly from the Site all rubbish and all unused materials and tools, and as the Work progresses the Site shall be carefully cleaned and kept clean from such rubbish and refuse. Before the Work will be considered as having been completed, the Site and places affected by the Work shall be thoroughly cleared and left clean by the Contractor; free from debris, construction plant, buildings, and materials; fit for travel or other proper use; and in as good of a condition as existed before the Work was begun. Grass plots disturbed shall be resodded or planted anew and shrubbery destroyed shall be replaced. Structures shall be broom clean, free from stains, spots or other blemishes, and ready for use, and all glass shall be washed. The restoration work shall be governed by the record of existing conditions made and filed in the office of the Engineer prior to the commencement of the Work.
- 2. If the Contractor fails to comply with this Section IX.I, PhilaPort may assign the Work to another contractor and the cost thereof shall be charged to the Contractor.
- 3. If a dispute arises between the Contractor and any other prime contractor as to their respective responsibilities under this Section IX.I, PhilaPort may authorize another contractor to perform the maintenance duties hereunder and charge the cost thereof to the several contractors as PhilaPort shall determine to be just.

X. X. Disputes & Contract Violations between the Contractor and PhilaPort:

A. Three-Step Resolution Process

1. The Contractor and PhilaPort agree that any and all disputes arising out of this Contract, which total more than five thousand dollars (\$5,000.00) in value, are subject to a three-step resolution process described in this Article X. The Contractor and PhilaPort agree that participation in each preceding step is a condition precedent to the Contractor's right to pursue any and all unresolved disputes to the next step. The Contractor expressly agrees that is shall carry on the Work during any proceedings under this Article X unless otherwise agreed by the Contractor and PhilaPort in writing.

B. Step One: FDR Meeting

- 1. The FDR Meeting is the initial step in identifying and attempting to reach a timely and equitable resolution of the variety of issues that arise on any construction project. The nature and structure of each FDR Meeting shall be flexible and consist of an informal, good-faith discussion of the current status of the Project, and identification of potential and actual disputes.
- 2. Project Intervals: A FDR Meeting will be scheduled by the Engineer to discuss issues arising as of the following intervals of the Project:
 - a. At any time an issue or dispute arises and more than 3% of the Contract Sum has been expensed by the Contractor and the Contractor provides written notice to the Engineer of such issue or dispute; and
 - b. 50% of the Contract duration has elapsed; and
 - c. 75% of the Contract duration has elapsed; and
 - d. 100% of the Contract duration has elapsed; or
 - e. At any time deemed necessary by PhilaPort.
- 3. Location: PhilaPort will schedule a mutually convenient date and time for each FDR Meeting. If possible, the FDR Meeting should be convened at the Project site.
- 4. Attendees: All prime contractors and the Engineer shall attend each FDR Meeting. The Engineer will chair the Meeting.
- 5. Procedure: As the Project progresses and the time for a FDR Meeting approaches, PhilaPort should establish the date for the meeting during Progress Meetings.
- 6. The Contractor must fill out a FDR Meeting form, a copy of which can be provided by PhilaPort. This form should be submitted to PhilaPort and provided to the other prime contractors approximately one (1) week prior to the FDR meeting. The information on this form should provide sufficient information to allow attendees to research potential

disputes, review the Contract Documents, review the project schedule and examine site conditions prior to the FDR Meeting. In all cases of misunderstanding and disputes, allegations that verbal instruction was given will not be considered. The Contractor must produce written documentation in support of its contentions and shall advance no claim in the absence of such written documentation, or use or attempt to use any conversation with any parties against the Engineer or PhilaPort, or in prosecuting any claim against the Engineer or PhilaPort.

- 7. PhilaPort shall convene the FDR Meeting and, if necessary, ensure that attendees are introduced to each other.
- 8. The FDR Meeting shall not be subject to 2 Pa.C.S. (relating to administrative law and procedure).
- 9. Neither audio recording nor videotaping will be allowed during the FDR Meeting.
- 10. No transcripts will be taken but attendees are free to take their own notes.
- 11. The FDR Meeting may be moved out to the field for visual inspection of the condition if necessary to understand and resolve the issue.
- 12. PhilaPort will allow all parties a reasonable time to present and discuss the disputes raised in the prime contractors' FDR Meeting forms.
- 13. A representative of the Contractor (an employee in the field familiar with the day-to-day work on this Contract) shall present a description of:
 - a. The Work performed since the last FDR Meeting; and
 - b. The Work to be performed in the near future; and
 - c. The status of disputes raised at the previous FDR Meeting; and
 - d. New disputes that have arisen since the previous FDR Meeting. For each new dispute, the representative shall:
 - i. Set forth the schedule impacts, which may only be presented using the current project schedule; and
 - ii. Set forth a proposed solution to the dispute, including:
 - 1. Days needed in any extension of time; and/or
 - 2. Damages attributed to the dispute; and
 - 3. Identification of the party the Contractor believes is responsible for

creating the dispute.

- 14. A representative of PhilaPort (and/or another prime contractor if so identified in above) shall present a description of:
 - a. Their understanding of the Work performed since the last FDR Meetings; and
 - b. The Work to be performed in the near future; and
 - c. The status of disputes raised at the previous FDR Meeting; and
 - d. A response to the new dispute(s) raised by the Contractor, including:
 - i. PhilaPort's and/or the Contractor's view of the schedule impact, which may only be presented using the current project schedule; and
 - ii. PhilaPort's and/or the Contractor's response to the original Contractor's proposed solution; and
 - iii. The identity of the party PhilaPort and or the Contractor believes is responsible for creating the dispute.
- 15. Within two weeks of the FDR Meeting, PhilaPort will render a written decision on the issues raised during the FDR Meeting. The decision will be issued to all attendees. The decision is not binding upon any party. PhilaPort will include in the decision the name of the employee or other representative who will serve as the Dispute Designee.
- 16. If any party is dissatisfied with the decision reached at the FDR Meeting, they may appeal the decision to the second step in the dispute process.
- 17. ANY ISSUE OR DISPUTE ARISING ON THE PROJECT MUST BE PRESENTED AT THE FIRST FDR MEETING AFTER THE DISPUTE AROSE. IF A CONTRACTOR FAILS TO RAISE AN ISSUE AT THE APPROPRIATE FDR MEETING THEN THE CONTRACTOR IS DEEMED TO HAVE WAIVED THE ISSUE.
- 18. ONLY CLAIMS RAISED DURING AN FDR MEETING MAY BE APPEALED TO THE CLAIM SETTLEMENT CONFERENCE STAGE.

C. Step Two: Claim Settlement Conference

- 1. The second step in the dispute resolution process is a Claim Settlement Conference, which is a more formal step in the process and is described in general in §1712.1 of the Commonwealth Procurement Code.
- 2. Time to File A Claim: Under this second step of the process, a Contractor may appeal the FDR Meeting decision by submitting a written claim to the Dispute Designee.

- a. ANY ISSUE OR DISPUTE ARISING ON THE PROJECT THAT IS NOT MUTUALLY RESOLVED AT THE FDR MEETING STAGE MAY ONLY BE APPEALED TO THE CLAIM SETTLEMENT CONFERENCE STAGE. IF THE CONTRACTOR FAILS TO PURSUE ANY UNRESOLVED FDR MEETING ISSUE TO A CLAIM SETTLEMENT CONFERENCE WITHIN THE 6-MONTH TIME FRAME SET FORTH BELOW, THEN THE CONTRACTOR IS DEEMED TO HAVE WAIVED THE ISSUE.
- b. A CLAIM ACCRUES UPON THE DATE OF THE AUTHORITY'S WRITTEN DECISION IN STEP ONE. IF THE CONTRACTOR DECIDES TO APPEAL THE DECISION REACHED AT THE FDR MEETING, THE CONTRACTOR MUST FILE AN APPEAL OF THE DECISION TO THE DISPUTE DESIGNEE WITHIN SIX MONTHS OF THE DATE OF THE AUTHORITY'S WRITTEN DECISION. IF THE CONTRACTOR FAILS TO FILE A WRITTEN REQUEST WITHIN THIS TIME PERIOD, THE CONTRACTOR IS DEEMED TO HAVE WAIVED ITS RIGHT TO ASSERT THE CLAIM IN ANY FORUM. THE DISPUTE DESIGNEE WILL DISREGARD UNTIMELY CLAIMS.
- 3. Contents of the Claim: The claim filed by the Contractor with the Dispute Designee shall state ALL GROUNDS upon which the Contractor asserts a controversy exists. The claim must contain, at a minimum:
 - a. A Claim Settlement Conference Request Form, a copy of which can be provided by PhilaPort
 - b. The documentation submitted by the Contractor to PhilaPort during the FDR Meeting to substantiate the Contractor's view of the issue; and
 - c. PhilaPort's decision.
- 4. Date of the Claim Settlement Conference: The Dispute Designee will schedule a mutually convenient date and time for the Claim Settlement Conference.
- 5. Attendees: All parties identified in the claim packet or deemed necessary by PhilaPort shall attend the Claim Settlement Conference. At a minimum, the Contractor and the Engineer shall attend the Claim Settlement Conference.
- 6. Procedure: The Dispute Designee will convene the Claim Settlement Conference.
 - a. The Claim Settlement Conference shall not be subject to 2 Pa.C.S. (relating to administrative law and procedure).
 - b. Neither audio recording nor videotaping will be allowed during the Claim Settlement Conference.

- c. No transcripts will be taken but attendees are free to take their own notes.
- d. The Dispute Designee will allow all parties a reasonable time to present and discuss the issues.
- e. A representative of the Contractor shall present a description of the issue, including:
 - i. The factual background of the issue;
 - ii. The schedule impacts, which may only be presented using the current project schedule; and
 - iii. The proposed solution to the dispute, including:
 - 1. Days needed in any extension of time; and/or
 - 2. Damages attributed to the dispute; and
 - 3. Identification of the party the Contractor believes is responsible for creating the dispute.
- f. A representative of PhilaPort (or other prime contractor if so identified above) shall present a description of, including
 - i. A response to the dispute(s) raised by the Contractor; and
 - ii. PhilaPort's and/or the Contractor's view of the schedule impact, which may only be presented using the current project schedule; and
 - iii. PhilaPort's and/or the Contractor's-response to the Contractor's proposed solution; and
 - iv. Identification of the party PhilaPort and/or the Contractor believes is responsible for creating the dispute.
- 7. The Dispute Designee will render a final determination on the issue(s) raised during the Claim Settlement Conference within 120 days of the receipt of the claim by the Dispute Designee. The parties may, during the 120-day period, mutually agree to extend the 120-day deadline. If extended, PhilaPort will issue written confirmation of the extension. If no decision is rendered within the 120 days, the claim is deemed to be denied on the 120th day. The determination of the Dispute Designee shall be the final order of PhilaPort with regard to the issue(s).

D. Step Three: Filing a Claim at the Board of Claims

- 1. The third step in the dispute resolution process is filing a Statement of Claim with the Board of Claims, which is a more formal step in the process and is described in general in §1712.1 and §1721 et seq. of the Commonwealth Procurement Code.
- 2. Time to File a Statement of Claim: Within fifteen (15) days of:
 - a. The mailing date of the Dispute Designee's final determination denying a claim; or
 - b. Within 135 days of the date the Contractor files a claim with the Dispute Designee, if no final determination has been rendered and no extension has been agreed to, whichever occurs first, the Contractor may proceed to the third stage of the dispute resolution process by filing a claim with the Board of Claims in Harrisburg.
- 3. ONLY CLAIMS THAT WERE RAISED ON A TIMELY BASIS DURING A CLAIM SETTLEMENT CONFERENCE MAY PROCEED TO THE BOARD OF CLAIMS.

XI. Disputes Between Contractors:

A. Damage; Injury; Delay

1. Should the Contractor, personally or by any Subcontractor or their respective agents, servants, or employees, cause damage or injury to the property or work of any prime contractor or contractors, or by failing to perform the Work hereunder with due diligence (including the Work of the Subcontractors), delay any prime contractor or contractors who shall suffer additional expense or damage thereby, the parties involved in such dispute shall settle by agreement or arbitrate said claim, dispute or disputes by referring same to the American Arbitration Association. Said dispute or disputes shall be determined pursuant to the applicable arbitration rules of the American Arbitration Association then in effect. PhilaPort shall not be a party to disputes or actions between prime contractors or subcontractors concerning such additional expense or damage, and such disputes shall not be subject to the Board of Claims proceedings provided for in Section X.A.1 herein. It is agreed by all parties that disputes or actions between contractors concerning the additional expense or damage hereinbefore mentioned shall not delay completion of the Work which shall be continued by the parties, subject to the rights hereinbefore provided. It is agreed by the parties to the Contract (PhilaPort as promisee and the Contractor as promisor) that the intent of this Section XI.A.1 is to benefit the other prime contractors on the Project or related projects and to serve as an indication of the mutual intent of PhilaPort and the Contractor that this Section XI.A.1 raise such other prime contractors to the status of third party beneficiaries only as to the terms and conditions of Sections II.A and B and XI herein. The Contractor agrees that these Sections as a benefit to the Contractor and that they specifically exclude claims against PhilaPort for delay or other damages resulting from the actions and omissions of other contractors and subcontractors.

B. Breach

1. The Contractor agrees that all claims, disputes and other matters in question between prime contractors, which arise out of, or are related to the Contract or the breach thereof, shall be settled by agreement or resolved by arbitration in accordance with the applicable arbitration rules of the American Arbitration Association then in effect, unless the parties mutually agree otherwise. The agreement to arbitrate shall be in consideration of the fact that all other prime contractors agree to the same arbitration provision as provided in each separate prime contract required for the Project, and shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. PhilaPort shall not be a party to the arbitration nor shall such claim or dispute be subject to the Board of Claims proceedings provided for in Section X.A.1 herein.

C. Demand for Arbitration

1. Notice of the demand for arbitration shall be filed in writing with the other prime contractors and with the Philadelphia Regional Office of the American Arbitration Association or such other location as the American Arbitration Association may request, and a copy shall be filed with the Engineer and PhilaPort. The demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen. PhilaPort shall not be a party to the claim, dispute or other matter in question, but shall be a witness in any arbitration at the request of any party to the arbitration.

XII. Contract Violations:

A Violations of the Contract:

1. If the Contractor shall abandon the Work, or, in the sole opinion of the Engineer neglect or fail to perform the Work with promptness and diligence, or unreasonably delay the Work so that it may not be completed within the time specified in the Contract, or if the Contractor shall neglect or refuse to furnish on a timely basis suitable materials in place of any which may be rejected by the Engineer as unsuitable, or shall refuse or neglect to furnish and supply on a timely basis a sufficiency of properly skilled workers and necessary equipment or either, or if the Contractor shall execute any of the Work improperly, carelessly, or in bad faith, and refuse to remove on a timely basis any of the Work which, in the opinion of the Engineer, is defective and unsuitable, and to replace it on a timely basis in accordance with the Contract Documents, or if the Contractor shall default in the performance of any of the terms, conditions, and provisions of the Contract Documents, then and in that event the Executive Director may provide written notice to the Contractor and the Contractor's surety to remedy the neglect or default, and require the Contractor to comply with the terms, conditions, and provisions of the Contract which are being violated. If the said notification is without effect forty-eight (48) hours after the delivery thereof, or twenty-four (24) hours when, in the opinion of the Executive Director, immediate action is necessary to safeguard life or property, the Executive

Director shall have the right to declare the Contractor in default, and to notify the Contractor to discontinue the Work or any part thereof under the Contract, and to call upon the surety to complete the same through contractors which meet the approval of the Executive Director and, in the opinion of the Executive Director, have qualifications at least equal to those required of the original Contractor. If the surety fails to begin to fully and completely perform the Work by means of such approved contractors within ten (10) days, or within twenty-four (24) hours when, in the opinion of the Executive Director, immediate action is necessary to safeguard life or property, the Executive Director shall have the right to declare the surety in default and, at the Executive Director's option:

- a. to determine the Work which needs to be completed to maintain conditions; to obtain bids, if circumstances will allow, for all or any portion of the Work; and to enter into a new contract to complete the Work of the original Contractor; or
- b. in the case of an emergency, including but not limited to danger to life or property, or serious interference with traffic or the movement of cargo, to terminate the Work, and to then and there secure in the open market, from any person or party, at the then-current market prices, the materials of the quality and quantity required, the necessary workers and mechanics, and the required equipment to continue the Work and complete the Contract.
- 2. Upon default by the Contractor as hereinabove set forth, all monies due the Contractor upon estimates, retained percentage or otherwise, materials delivered, materials built into the Work, and the Contractor's plant (including, but without limitation, tools, appliances, materials, and equipment on the Site), shall upon such default become the property of PhilaPort for use in the completion of the Work, and resort shall be had thereto by PhilaPort to the extent necessary to maintain and complete the Work and reimburse PhilaPort for its outlays and expenditures.
- 3. In case of such default by the Contractor, the remedies herein provided shall be in addition to, and not in substitution of, the rights and remedies which would otherwise be vested in PhilaPort, all of which rights and remedies are specifically reserved to PhilaPort. The failure of PhilaPort to exercise any of the remedies herein provided shall not preclude PhilaPort from seeking any other appropriate remedy or remedies.
- 4. The use of specific remedies herein provided shall not prevent subsequent or concurrent resort to any other remedy which by law or equity would be vested in PhilaPort for the recovery of damages or otherwise, in the event of default by the Contractor.
- 5. The Contractor and the Contractor's surety shall pay to PhilaPort on demand, all loss, expense, cost, or damage suffered or incurred by PhilaPort by reason of any default.

XIII. Suspension of Work:

A. Suspension of the Work Due to Unfavorable Conditions:

- 1. If, in the judgment of PhilaPort, the Contractor is taking undue risk of damage by proceeding with the Work during unfavorable weather or other conditions, which is not for the joint benefit of PhilaPort and the Contractor, or for the sole benefit of PhilaPort, then PhilaPort may suspend the Work temporarily, either wholly or in part for such periods as may be necessary on account of unsuitable weather or other conditions unfavorable to the safe and proper prosecution of the Work. In the case of such suspension, a proper extension of time will be allowed as provided herein, but no allowance will be made to the Contractor for any expenses or damages resulting therefrom. It shall be clearly understood that the failure of PhilaPort to suspend the Work shall not relieve the Contractor of the Contractor's responsibility to perform the Work in accordance with the Contract Documents.
- 2. PhilaPort has the right to require a suspension of the Work if in its opinion unforeseen conditions warrant such a suspension. When PhilaPort directs resumption of the Work, the Contractor shall resume full operations within a period of ten (10) days after receipt of written notice to do so. PhilaPort shall not be held liable for any damage or anticipated profits on account of the Work being suspended. Any Work done by the Contractor during the period of suspension shall be the Contractor's responsibility and the Contractor shall receive no payment therefor unless the Work is subsequently resumed and the Work done during the interval of suspension can be utilized in the resumed Work. Suspensions of Work as outlined above shall not in themselves operate to extend the Date of Completion. Requests for extensions of time must be submitted in writing by the Contractor setting forth the Contractor's reasons for such an extension.

B. Suspension of the Work for the Convenience of PhilaPort:

- 1. PhilaPort may, in writing, order the Contractor to suspend all or any part of the Work for such period of time as it may determine to be appropriate for the convenience of PhilaPort, except that this Section XIII.B shall not apply under the conditions enumerated in Section XII.A herein.
- 2. If the performance of all or any part of the Work is, for an unreasonable period of time, suspended by PhilaPort, an adjustment shall be made for any increase in the cost of performance of the Contract (excluding anticipated profit) necessarily caused by such unreasonable suspension, and the Contract shall be modified in writing accordingly. However, no adjustment shall be made under this Section XIII.B for any suspension to the extent:
 - a. that performance would have been so suspended by any other cause, including the fault or negligence of the Contractor; or
 - b. for which an equitable adjustment is provided for or excluded under any other provision of the Contract.

3. No claim under this Section XIII.B shall be allowed unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of such suspension, but not later than the date of final inspection under the Contract.

C. Suspension of the Work and Fault of the Contractor:

Should the Contractor fail to comply with the orders of PhilaPort relative to any particular part of the Work, PhilaPort may suspend the Work on any or all parts until its orders respecting the particular parts are complied with. In the case of such a suspension, which shall be considered due to the fault of the Contractor, no extension of time shall be given and no allowance will be made for the expenses incurred by the Contractor during the period of such suspension.

XIV. Termination:

A. Termination by the Contractor:

If the Work is stopped for a period of thirty (30) days or more under an order of any court or other public authority having jurisdiction thereof, through no act or fault of the Contractor or any Subcontractor or their agents or employees or any other persons performing any of the Work, including other prime contractors, or if the Work should be stopped for a period of thirty (30) days or more by the Contractor for PhilaPort's or the Commonwealth's failure to make payment pursuant to Section XV.F herein, then the Contractor may, upon seven (7) days' written notice to PhilaPort, terminate the Contract and recover payment for all Work performed as provided in Section XV.E herein.

B. Termination by PhilaPort:

- 1. PhilaPort shall have the right at any time and for any reason, to terminate the Contract. In such case, the Contractor shall be paid (and shall accept payment) for that portion of the entire Contract actually performed to the date of termination, excluding, however, any loss of anticipated profits. Disputes as to the sum then payable to the Contractor shall be settled in accordance with the provisions of Section X.A herein.
- 2. Such termination shall be effective in the manner and at the time specified in the notice of termination and shall be without prejudice to any claims which PhilaPort may have against the Contractor. Upon receipt of such notice from PhilaPort, the Contractor shall immediately discontinue all Work and the placing of all orders for materials and equipment, facilities and supplies in connection with the performance of the Work, and shall proceed to cancel promptly all existing orders and terminate Work under all subcontracts so far as such orders and Work are chargeable to the Contract; provided, however, that the Contractor shall take such measures for the protection of the property of PhilaPort as may be directed by PhilaPort. Upon termination of the Contract, full and complete adjustment and payment of all amounts due the Contractor arising out of the Contract as determined by an audit conducted by or for PhilaPort, shall as soon as practicable after such termination be made as follows:

- a. the Contractor shall be reimbursed for all costs incurred to the date of termination, including reasonable overhead and expenses directly applicable to the Project, made in the performance of the Contract less amounts previously paid;
- b. the Contractor shall be reimbursed for all costs to which the Contractor has been subjected to or which the Contractor is legally liable for by reason of the termination of the Contract, including reasonable costs relating to cancellation of orders, termination of subcontracts, and other similar charges to the extent the Contractor is liable therefor;
- c. the Contractor shall be reimbursed for the reasonable cost of providing protection of the property of PhilaPort as directed by the notice of termination;
- d. the sum total of the payments made under this Section XIII.B shall not exceed the authorized total amount of the Contract less payments previously made;
- e. title to all property accruing to PhilaPort by reason of the termination of the Contract shall immediately vest in PhilaPort and the Contractor shall execute and deliver to PhilaPort all papers necessary to transfer title;
- f. coincident with the making of final payment, the Contractor shall furnish PhilaPort with a final release; and
- g. PhilaPort or its representatives shall be afforded full access to all books, correspondence and papers of the Contractor relating to the Contract in order to determine the amount due thereunder.

XV. Payments:

A. Scope of Payments:

Payment for the cost of all labor, materials, and services required to be done or furnished to complete the Work, as specified in the Contract Documents (except where payment is otherwise specifically provided), will be made at the price(s) specified in the bid. If the Work includes the supply and/or installation of materials, the prices bid shall each cover the supply and/or installation, in a good, sound, substantial, and workmanlike manner, of everything required for and incidental to the full completion of the Work of that item as called for by the Plans and/or as specified, including its proportionate share of the expense of all plant, tools, and equipment required; the cost of all bonds, fees, and permits; of all administration, superintendence, and insurance; and of any loss or damage arising out of the nature of the Work, from the action of the elements, from any unforeseen difficulties encountered in the performance of the Work, and from risks of all kinds connected with the Work.

B. Mobilization:

The Contractor may include in the Contractor's breakdown a line item for mobilization in an amount of 1.5 percent of the contract award up to a maximum of \$90,000. Mobilization costs shall be limited to the cost of the Contractor's field office and the cost of heat, lights and telephone for the field office.

C. Payment to Subcontractors:

In accordance with 55 P.S. § 697.11(a), and 62 P.S.C.A § 3933, the Contractor will pay for all materials furnished and services rendered for the performance of the Contract, and any Subcontractor furnishing such materials or rendering such services may maintain an action to recover for the same against the Contractor, as though the Subcontractor was named in the Contract, provided that the action is brought within one (1) year after the time the cause of action accrued, and without prejudice to any other rights or remedies available pursuant to contract, statute or law.

D. Progress Payments:

- 1. Unless otherwise provided in the Contract Documents, during the progress of the Work, the Contractor shall prepare periodic current estimates of the value of the Work performed and shall submit to PhilaPort itemized applications for payment to the Accounts Payable Department of PhilaPort on the form provided by PhilaPort. The applications shall be supported by data substantiating the Contractor's right to payment, as PhilaPort may require. The Engineer and PhilaPort will review the applications for validity.
- 2. Prime Contractor shall submit monthly HUB reports. Specifically, Prime Contractor shall submit the Prime Contractor HUB Monthly Reporting Form Summarizing Payments (see Exhibit 2 of PhilaPort's Diversity & Inclusion Policy) made for each project as well as proof of payment in the form of invoices from subcontractors. Both form and proof of payment to subcontractors should be submitted to the Finance Department along with the Prime Contractor's monthly invoicing. PhilaPort reserves the right to reject the monthly progress payment request if the HUB monthly reporting is not deemed sufficient.
- 3. Unless otherwise provided in the Contract Documents, and as provided in Section XV.E herein, upon the determination of PhilaPort as to reasonableness, payments may be made to the Contractor on account of materials or equipment especially fabricated for the Work, which materials or equipment are delivered and suitably stored at the Site or on PhilaPort property. However, such payments shall be conditioned upon submission by the Contractor of bill of sale forms provided by or otherwise acceptable to, PhilaPort to establish PhilaPort's title to such materials or equipment. The Contractor shall remain responsible for all losses of materials and equipment which remain under the Contractor's custody and control regardless of the exclusions in the insurance policies as required under PhilaPort's bill of sale form or the location of such, whether on or off of the Site.

4. Unless otherwise provided in the Contract Documents, the Contractor warrants and guarantees that title to all materials and equipment covered by an application for payment, whether incorporated in the Project or not, will pass to PhilaPort upon the receipt of such payment by the Contractor, free and clear of all liens, claims, security interests or encumbrances; and that no materials or equipment covered by an application for payment will have been acquired by the Contractor, or by any other person performing the Work at the Site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

E. Application for Payment:

- 1. If the Contractor has made an application for payment, and subject to the schedule for payment provided in Section XIV.D herein, the Engineer will, within seven (7) days after the receipt of the application, unless otherwise provided in the Contract Documents, process the application for payment to PhilaPort, with a copy to the Contractor, for such amount as the Engineer determines to be properly due, or state in writing the Engineer's reasons for withholding the application.
- 2. By approving an application for payment, the Engineer shall not thereby be deemed to represent that the Engineer has made exhaustive or continuous inspections to check the quality or quantity of the Work, or that the Engineer has reviewed the Contractor's means, methods, techniques, sequences or procedures, or that the Engineer has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract Sum.
- 3. In the case of projects funded by Commonwealth capital funds, after the Engineer and PhilaPort have approved the application for payment, PhilaPort shall forward the application for payment to the Commonwealth and the Commonwealth shall make payment directly to the Contractor in the manner provided in the Contract Documents. In the case of projects funded by PhilaPort operating funds, payment shall be made to the Contractor by PhilaPort in the manner provided in the Contract Documents. In the absence of good and sufficient reasons, within twenty (20) days of the receipt of payment by the Contractor, the Contractor shall pay all Subcontractors, with whom the Contractor has contracted, their earned share of the payment the Contractor received.
- 4. No application for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the Project shall constitute an acceptance of any Work not in accordance with the Contract Documents, nor shall any payment constitute a waiver by PhilaPort of its right to assert a claim with respect to any matter arising under or relating to the Contract or the services provided thereunder.
- 5. Progress payments on contracts other than equipment contracts, will be reduced by ten percent (10%) until the Substantial Completion of the Work, as such term is defined in Section XV.A herein; provided, however, that when the amount of the progress payments reaches fifty percent (50%) of the Contract Sum, and all of the requirements of the

Contract, including its satisfactory progress, have been complied with, no additional percentage will be retained on succeeding payments during the continuation of such satisfactory performance of the Work. Progress payments will be the amount of the payment as thus reduced less the sum of all previous payments. When the Contract is fifty percent (50%) completed, one-half of the amount retained by PhilaPort shall be returned to the Contractor; provided, that the Engineer approves the application for payment; and provided further, that the Contractor is making satisfactory progress and there is no specific cause for greater withholding. The sum or sums withheld by PhilaPort from the Contractor after the Contract is fifty percent (50%) completed shall not exceed five percent (5%) of the value of completed Work based on monthly progress payment requests; provided, however, that in the event a dispute arises between PhilaPort and any contractor, which dispute is based upon increased costs claimed by one contractor occasioned by delays or other actions of another contractor, additional retainage in the sum of one and one-half (1½) times the amount of any possible liability may be withheld until such time as a final resolution is agreed to by all parties directly or indirectly involved, unless the Contractor causing the additional claim furnishes a bond satisfactory to PhilaPort to indemnify PhilaPort against the claim. However, all such monies retained by PhilaPort may be withheld from the Contractor until Substantial Completion of the Contract.

- 6. Progress payments on contracts for furnishing and/or installing electrical, mechanical, plumbing, heating, and other equipment subject to test, will include an allowance of fifty percent (50%) of the price bid for the units especially fabricated therefor (or the apportioned value thereof), when such equipment is delivered on the Site or on PhilaPort property. A further allowance of twenty-five percent (25%) will be made when the equipment is installed and ready for test.
- 7. This Section XIV.E shall apply unless otherwise provided in the Contract Documents.

F. Failure of Payment:

If PhilaPort or the Commonwealth should fail to make payment to the Contractor as provided in Section XV.E herein within sixty (60) days after receipt of an application for payment that was approved by PhilaPort for payment, such failure shall afford the Contractor the right to an immediate Claim Settlement Conference before a Dispute Designee as provided in Section X.A herein. The Contractor shall not be entitled to stop Work in any event unless PhilaPort exercises its right to suspend the Work as provided in Sections XIII.A and B herein. Under this Section XV.F, after a decision has been rendered by the Dispute Designee, the Contractor may file a claim with the Board of Claims as provided in Section X.A herein.

G. Substantial Completion Inspection:

1. When the Contractor requests a substantial completion inspection of the Work or a designated portion thereof, the Engineer and PhilaPort shall make a substantial completion inspection within thirty (30) calendar days of the request. At any time during the progress of the Work, however, PhilaPort may schedule a substantial completion

inspection. During the substantial completion inspection, a punch list will be compiled by the Engineer listing the items to be completed or corrected to achieve Final Completion. The failure to include any items on such list shall not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. If the Engineer and PhilaPort, on the basis of a substantial completion inspection, determine that the Work is Substantially Complete, then the Engineer will issue a certificate of substantial completion, which shall establish the date of Substantial Completion, shall state the responsibilities of the Contractor for maintenance, heat and utilities and other items, if applicable, and shall fix the time within which the Contractor shall complete the items listed therein, said time to be before the Date of Completion or any extension thereof. The substantial completion certificate of completion shall be submitted by the Engineer to PhilaPort and the Contractor for their written acceptance of the responsibilities assigned to them in such certificate.

- 2. Following the substantial completion inspection, if there are items to be completed and/or corrected, PhilaPort and the Engineer will determine the dollar value to be withheld by PhilaPort. The Contractor shall complete all items to be corrected and/or completed within thirty (30) days after the date of substantial completion inspection or show just cause to the satisfaction of the Engineer and PhilaPort why they cannot be completed. If the Contractor does not complete the items to be corrected and/or completed within thirty (30) days, or show just cause to the satisfaction of the Engineer and PhilaPort why they cannot be completed, PhilaPort will have the right to correct those items at the Contractor's expense.
- 3. At no time after the date of substantial completion inspection shall the Contractor be permitted to file any claim, arising under the Contract, against PhilaPort; provided, however, that this shall not preclude the Contractor from filing claims against PhilaPort which arise subsequent to the date of substantial completion inspection and prior to acceptance by the Contractor of final payment.

H. Final Payment:

- 1. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be paid to the Contractor as provided in Section XV herein forty-five (45) days after the issuance of the certificate of final completion and the final application for payment; provided that the Work has then been fully completed and accepted by PhilaPort, and Final Completion has occurred.
- 2. If, after Substantial Completion of the Work, Final Completion is materially delayed through no fault of the Contractor, and the Engineer and PhilaPort so confirm, then upon certification by the Engineer, and without terminating the Contract, payment of the balance due for that portion of the Work fully completed and accepted shall be made to the Contractor as provided in Section XV herein. If the remaining balance of the Work not fully completed or corrected is less than the retainage stipulated in Section XIV herein, and if the appropriate bonds have been furnished, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and

accepted shall be submitted by the Contractor to PhilaPort prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of any of the claims of PhilaPort against the Contractor.

- 3. The making of final payment shall constitute a waiver of all claims by PhilaPort except those arising from:
 - a. unsettled claims;
 - b. faulty or defective Work;
 - c. failure of the Work to comply with the requirements of the Contract Documents; or
 - d. terms of any special guarantees required by the Contract Documents.
- 4. Acceptance of the Final Payment shall constitute a waiver of all claims by the Contractor.

I. Interest on Final Payment:

In accordance with Pa. Stat. Ann. tit. 62, § 3941(b), the final payment due the Contractor after Substantial Completion of the Contract shall bear interest at a rate of ten percent (10%) per annum, such interest to begin after the date that such payment shall become due and payable to the Contractor; provided, that where PhilaPort has issued bonds to finance the Project, interest shall be payable to the Contractor at the rate of interest of the bond issue or at the rate of ten percent (10%) per annum, whichever is less. The acceptance of the final payment shall constitute a waiver of all claims and liens by the Contractor not filed prior to such acceptance.

XVI. Completion:

A. Substantial Completion:

The date of Substantial Completion of the Work, or designated portion thereof, is the date on which the Engineer certifies, and PhilaPort approves, that the Work is sufficiently complete, in accordance with the Contract Documents, so that the Work, or designated portion thereof, is available for the use for which it is intended, excepting only minor punch list items in non-completion of which does not interfere with the Work's intended use. Upon Substantial Completion, PhilaPort shall accept the Work or designated portion thereof, which acceptance shall not unreasonably be withheld. Upon substantial completion, Contractor will provide all documents referenced in Sections V.E and K.

B. Final Completion:

1. The date of Final Completion of the Work is the date when all of the items set forth

below are achieved:

- a. All of the Work has been completed and accepted by PhilaPort, including but not limited to all items on the punch list;
- b. The Contract is fully performed as provided in the Contract Documents; and
- c. The following have been provided to PhilaPort;
 - i. an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which PhilaPort might in any way be responsible, have been paid or otherwise satisfied;
 - ii. statements of the surety and the Contractor which are satisfactory to PhilaPort as to the Contractor's payment of all claims for labor and materials; and
 - iii. if required by PhilaPort, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by PhilaPort. Such information includes, but is not limited to, proof of actual MBE/WBE Participation.
 - iv. all documentation referenced in Sections V.E and K.
- 2. If any Subcontractor refuses to furnish a release or waiver required by PhilaPort, the Contractor may furnish a bond satisfactory to PhilaPort to indemnify PhilaPort against any such potential or actual lien. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to PhilaPort all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.
- 3. Neither the final payment nor any remaining retained percentage shall become due until the Contractor submits to PhilaPort the items set forth in Section XVI.B.1.c above.

XVII. Warranty:

- A. Maintenance After Completion and the Contractor's Guarantee:
 - 1. The Contractor shall guarantee the Work against defects of material and workmanship for a period of one (1) year from the date of final acceptance by PhilaPort, unless another period is specified in the Contract Documents, and shall guarantee all equipment to perform the duty specified. PhilaPort shall have the benefit of all guaranties and warranties, including all equipment and material guaranties and warranties. When individual items of the Contract are accepted and used by PhilaPort prior to the Date of Completion, the period of guarantee for said items shall begin from the date of

acceptance of such items. If, within the said period of guarantee, any of the Work shall prove to be defective either in material or workmanship, or if damage occurs by settlement of any backfill placed under the Contract, or if any part or parts of equipment furnished shall prove to be inadequate, insufficient, or defective either in design, material, or workmanship, the Contractor shall, immediately upon demand from the Engineer (whose decision as to such inadequacy, insufficiency, or defectiveness shall be binding and conclusive upon the parties hereto), repair and replace the same, and shall repair and replace any consequential damage to other parts or structures, at the Contractor's own cost and expense, without cost or expense to PhilaPort, and to the approval and satisfaction of the Engineer.

2. Should the Contractor or the Contractor's sureties fail to comply with the orders of the Engineer to replace or repair defective material, workmanship, or equipment within ten (10) days from the date of such notice, PhilaPort shall have the right to declare the Contractor and/or the Contractor's surety in default, and to proceed with the correction of the defect in accordance with the provisions of these General Conditions.

XVIII. Work Site Conditions:

A. Performance of the Work:

The method of procedure shall be subject to approval as best adapted for the safe, efficient, and expeditious performance of the Work, with a minimum of interference with public traffic or convenience, or the movement of vehicular traffic or cargo on the Site. The Work shall be performed at such times and at such places as may be ordered or approved by the Engineer.

B. Maintenance of Traffic and Access to Property:

Traffic of all kinds shall be maintained continuously and access to buildings shall be provided for at all times, except where otherwise specifically permitted by the Contract Documents, or where temporary interference is authorized by the Engineer, in which case it shall be interrupted only for such time as is necessary to provide temporary substitutes for surfaces disturbed by the Work and to restore street and sidewalk surfaces after the completion of the Work. Where partial occupation of the street is allowed, materials and equipment shall be so placed as to insure a minimum of interference with traffic. No materials shall be placed on the sidewalk within one (1) foot of the curb line, and a clear sidewalk passage not less than four (4) feet in width shall be maintained at all times. The flow in gutters and inlets shall be maintained.

C. Temporary Buildings:

Buildings, fences, and equipment erected by the Contractor shall be neat in appearance, shall be approved by the Engineer, and shall be painted a medium blue or other color as designated by the Engineer. No advertising matter, other than Contract information and the name and address of the Contractor, shall be displayed on the Work.

D. Temporary Ventilation:

The Contractor shall provide temporary ventilation to remove from the structure any excessive humidity in enclosed portions of the Work resulting from the Work so that the Work may be performed without interruption and under correct conditions including required dryness for installation of the various materials. Any dangerous or noxious fumes or particles suspended in the air shall be the responsibility of the contractor whose work caused those conditions to exist. Temporary equipment used shall produce no hazard to the Work or to any person in or near the Work. The Contractor shall furnish all such equipment, pay all costs for it and for its operation, including fuel and power supplies during operation both in and out of normal working hours, and the Contractor shall remove it when no longer required.

E. Detour Signs:

When permission is given to close a highway during Contract operations and to divert the traffic therefrom, the Contractor, at the Contractor's own expense, shall erect and maintain highway barricades. Detour signs shall be placed by the Department of Streets of the City and/or the Pennsylvania Department of Transportation, as applicable. The Contractor will be required to notify PhilaPort seven (7) Working Days prior to the date of starting the Work and one (1) Working Day prior to the Date of Completion. Copies of these notices shall be sent to the Traffic Engineer of the Department of Streets and the Pennsylvania Department of Transportation.

F. Contract Identification Signs:

When so directed by the Engineer in writing, the Contractor shall, at the Contractor's own expense, erect and maintain in a prominent position upon the Work a suitable sign, plainly lettered with the name and address of the Contractor, the character of the Work and the name of PhilaPort. No advertising matter other than the signs above noted shall be displayed on the Work.

G. Storage Space:

Buildings, yards, or sidings that may be required for the delivery or storage of materials shall be provided by and at the cost of the Contractor. The use of streets for storing materials will not be permitted, unless specifically authorized in writing by the Engineer.

H. Night Work:

Work during the night shall be carried on with due regard to the comfort of nearby residents, and the method of performance shall be subject to the approval of the Engineer, who may, if conditions so require, order that no night work be done in specific localities. Workers shall refrain from loud noises, calls, or whistles; and the operation of air compressors, rock drills, and blasting is prohibited between the hours of 7:00 p.m. and 7:00 a.m. unless specifically

permitted by the Engineer.

I. Power and Light:

The Contractor shall use either electric, compressed air or internal combustion engine power, unless conditions are such that use of steam power is not objectionable and its use is approved by the Engineer. When compressed air or internal combustion engines are used the exhaust shall be muffled. Only electric lights shall be used in or under buildings or anywhere on the Site below the surface of the street.

J. Use of Water:

The Contractor shall make all necessary arrangements and obtain all permits for the use of water from the City or otherwise, and Contractor shall pay for all water used and permits required.

K. Prevention of Dust and Smoke:

The Contractor shall keep the surface of the sidewalks and streets affected by the Work, including, but without limitation, decking and temporary paving, in a clean and neat condition. The Contractor shall sprinkle with water or otherwise treat the surface sufficiently to keep the dust laid during the progress of the Work. Piles of dirt or other material shall not be left on the surface. The above mentioned requirements are not intended to take the place of the usual duties of the Department of Streets or the Pennsylvania Department of Transportation, as applicable, but to supplement them. No fires of any kind or burning of debris on the Site or adjacent to it will be permitted; debris shall not be disposed of on the Site.

L. Explosives:

If any blasting is involved in the performance of the Contract, the Contractor must obtain a blasting permit from the Department of Licenses and Inspections of the City and all such other licenses or permits as shall be required. Permits will be issued only upon approval of the appropriate governmental agency or official, and posting of a bond or delivery of a certificate of insurance covering personal injuries and property damage. Blasting may be done only by licensed blasters duly licensed by the City. The Contractor must also obtain all necessary licenses or permits for the storage of explosives and the transportation of explosives to the Site, which are issued by the Department of Licenses and Inspections of the City subject to prior approval of the appropriate governmental agency or official.

M. Work in Freezing Weather:

Masonry of all kinds, pointing, grouting, plastering, and other Work subject to the action of frost shall not be done when exposed to freezing weather, except under conditions where the Engineer may specifically direct or permit such Work, subject to the heating of materials, the

protection of finished Work, and such other measures as may be deemed necessary. The Contractor's work should take into account the possibility of normal weather conditions and the Engineer is not required to authorize additional time or money for the completion of the Work. If operations are suspended on account of freezing weather, the Work shall be properly protected until the resumption of Work is permitted. If a suspension of the Work on account of freezing weather or from any other cause is necessary, the Site shall be cleaned up and left in good order during the period of such suspension.

N. Cooperation with Public Utility Companies:

Notice shall be given by the Contractor to all individuals, companies, and the proper City officials owning or having charge of structures along any part of the Work, of the Contractor's intention to commence operations along such part of the route, at least seven (7) days in advance, and a copy of such notice shall be filed with the Engineer. The Contractor shall cooperate with other contractors and with the employees, officers, and agents of the City, Commonwealth and Federal departments and of the various companies which own, operate, or have supervision over the structures encountered, and shall conform to the reasonable requirements of the owners of such structures with regard to their safe maintenance. The Contractor shall give to authorized representatives of said departments and companies free access at all times to the excavation and to the Site to inspect the condition and support of their structures. Suitable arrangements shall be provided to facilitate access to valves and manholes. Ventilation openings shall be provided where gas is likely to accumulate. Where structures are to be constructed under the facilities of any public utility company, the Contractor shall arrange with the public utility company for the removal or support and maintenance of such facilities.

O. Gas Pipes:

The performance of any necessary alterations to the gas mains and gas service pipes, including temporary or permanent relocations thereof, are the responsibility of the Contractor and shall be performed by the Contractor or the Philadelphia Gas Works. The mains and services that have been removed may be replaced in their permanent position after the backfilling has been sufficiently compacted.

P. Traffic Control Apparatus:

The Contractor shall support and maintain in their present locations, or in approved temporary locations, any existing traffic signs or traffic control masts, signals, signs, apparatuses, and their connecting cables, in the proper condition to permit the uninterrupted functioning of the signals during the progress of the Work, on temporary poles if necessary, and in a manner satisfactory to the City's Department of Streets and/or the Pennsylvania Department of Transportation, as applicable. If the existing signal apparatus is supported on poles and these poles are moved to a temporary location during the progress of the Work, the Contractor shall either erect temporary signal poles in the approximate locations of the original poles and erect the signals thereon, or shall extend the electrical connection to the poles as relocated, as may be ordered by the Engineer. Upon the restoration of surface conditions, the Contractor shall restore the equipment, including cables and electrical connections, to its original position and condition. The Contractor's obligations under this Section XVII (P) shall be done without additional compensation.

Q. Interruption of Existing Services:

Whenever it becomes necessary to interrupt existing services in use, such as sewer, water, gas and steam lines, and electric service, the Work shall continue on a twenty-four (24) hour basis until it is completed and the service restored, or at such alternate time required by PhilaPort.

R. Support and Protection:

All structures unless specifically designated by the Engineer to be abandoned or relocated, shall be supported and protected at all times from injury, including damage from freezing, and maintained continuously in service. Should any injury occur while the Work is in progress and the structures are under the protection of the Contractor, the Contractor shall fully restore such structures to as good a condition as existed before the injury was done. The above, including also such changes of structures as are for the Contractor's own convenience in executing the Work, shall be done without additional compensation, unless otherwise specifically provided for in the Contract Documents.

S. Structures Interfering with Construction:

If, in the course of the Work, it is found that any of the existing structures occupy space required by any other structure or appurtenances thereto to be constructed under the Contract, or that they are so situated as to render it impracticable, in the opinion of the Engineer, to do the Work called for under the Contract in the manner specified, the Contractor shall excavate and uncover the portions of the structures within the pavement lines for excavating under the Contract and shall maintain such structures in service and shall notify the Engineer, who will arrange for the relocation, changing, or removal of the interfering pipes or structures within a reasonable time. The Contractor shall not move nor disturb the structures in any way without consultation with the owners and the approval of the Engineer. Structures belonging to public utility companies, which are ordered by the Engineer to be removed or relocated, will

be so removed or relocated and permanent supports placed. The Contractor, however, shall support and protect them up to the time of their removal, shall cooperate with their owners during the process of relocation, and shall maintain and protect them if and when they are relocated within the zone of influence of the Work. This Work shall be done by the Contractor without additional compensation from PhilaPort. Sewers, water pipes, electrical conduits, and other structures shall be constructed, relocated, or reconstructed as shown on the Plans or as may be ordered in the course of the Work. Payment for this Work will be made at the applicable prices in the Contract Documents unless otherwise specifically provided. If approval is given by the Engineer to a request by the Contractor to effect a temporary or permanent relocation of structures, for the Contractor's own convenience, and satisfactory arrangements can be made with the owners thereof, this Work will be done at the expense of the Contractor.

T. Abandonment of Structures:

In the case of structures, the service of which is permanently abandoned, the Engineer will designate which of the materials are to be salvaged and which are to be abandoned in the trench or otherwise disposed of. The Contractor shall remove and deliver to a designated point of storage materials ordered to be salvaged, and payment therefore will be made at the appropriate prices of the Contract, unless otherwise specifically provided. The Contractor shall allow owners of privately owned structures reasonable facilities for salvaging their property.

U. Insulation for Construction Projects:

All Insulation incorporated into the Project <u>must</u> contain the minimum percentage of postconsumer recovered paper or recovered material a shown below for the applicant product.

TA /		• 1		
M	ate	rial	Type:	

Cellulose loose – fill and spray on Perlite Composite Board Plastic rigid foam, polyisocyanurate/polyurethane Rigid Foam

Foam-in-Place Glass Rigid Foam Phenolic Rigid Foam

Rock Wool

Percent by Weight:

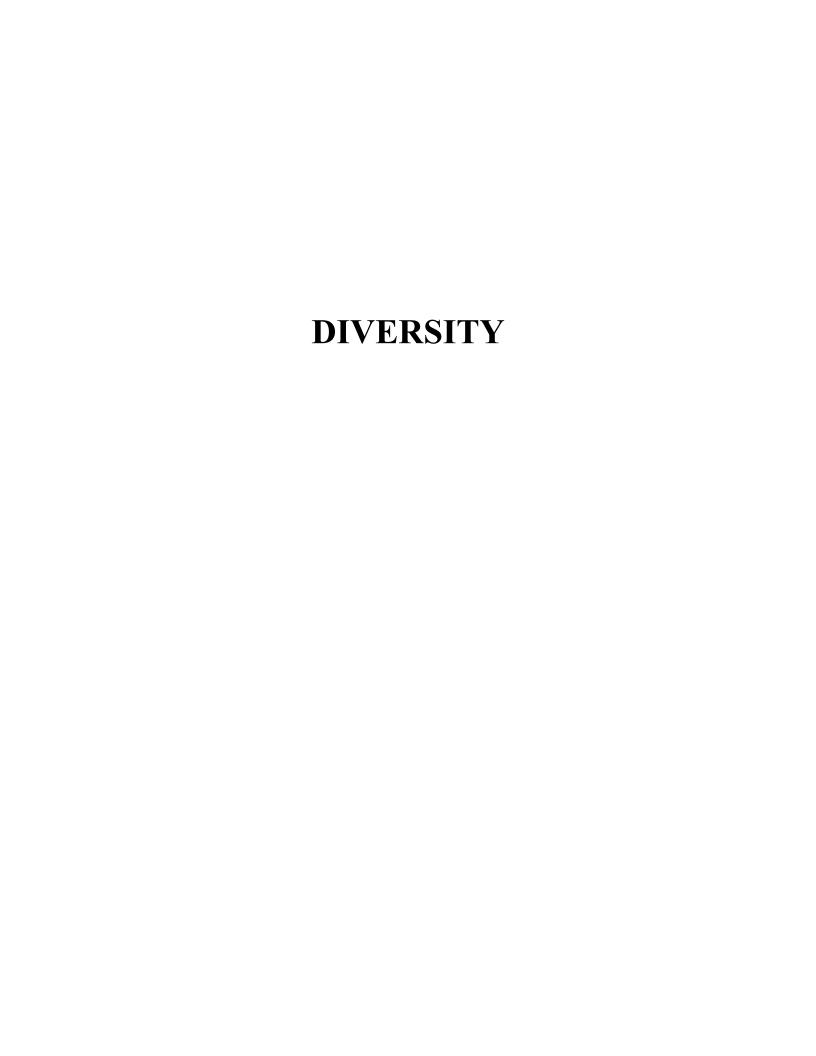
75% postconsumer recovered paper 23% postconsumer recovered paper

9% recovered material 5% recovered material 6% recovered material 5% recovered material 50% recovered material

Postconsumer recovered paper is defined as "Any paper, paperboard and fibrous wastes from retail stores, office buildings, homes and so forth, after they have been passed through their end-usage as a consumer item including; used corrugated boxes, old newspapers, old magazines, mixed waste paper, tabulating cards and used cordage, as well as all paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste."

Recovered materials are defined as "waste material and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process."

The Contractor may be required to provide PhilaPort with documentary evidence that the insulation provided for the Project was produced with the required minimum percentage of postconsumer recovered paper or recovered material.



PHILADELPHIA REGIONAL PORT AUTHORITY

Diversity Inclusion Plan (Construction)

DIVERSITY AND INCLUSION POLICY MINIMUM PARTICIPATION LEVELS

All contracts awarded for construction will have a minimum participation level (MPL) set by the Director of Procurement, but in no event shall it be less than 20% of the contract value. The participation for each award must include at least 2 of the categories that are identified as HUB with no less than 5% participation for every category being included.

Historically Underutilized Business Enterprise (HUB)

A Business Enterprise that is:

- 1. an MBE
- 2. a WBE
- 3. a Veteran or Service-Disabled Veteran Business Enterprise
- 4. an LGBT Business Enterprise

^{***}Use forms included to submit HUB solicitation and commitments at time of bidding.

ACCEPTED CERTIFICATIONS

PhilaPort accepts approved third-party certifications from any of the following entities:

- Woman's Business Enterprise National Council (WBENC)
- National Minority Supplier Development Council (NMSDC)
- United States Small Business Administration (SBA) 8(a) Program *
- Vets First Verification Program at vetbiz.gov
- US Business Leadership Network (USBLN)
- National Gay & Lesbian Chamber of Commerce (NGLCC)

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II. POLICY STATEMENT

The Board of the Philadelphia Regional Port Authority, an independent agency of the Commonwealth of Pennsylvania, pursuant to Sections 697.4 and 697.6(c)(5) of the Philadelphia Regional Port Authority Act, has adopted a policy on diversity inclusion, set forth in Part X of the Contracting, Procurement, and Leasing Policies and Procedures, revised as of November 2015 (the "Diversity Inclusion Policy" or the "Policy").

It is the policy of the Philadelphia Regional Port Authority ("PHILAPORT") to promote opportunities for full participation by Minority-owned, Women-owned, Veteran-owned or Service-Disabled-Veteran-owned and LGBT-owned small businesses, hereafter collectively referred to as disadvantaged business enterprises ("HUBs") in all project-related construction contracts to the greatest extent feasible and to do so by insuring that all Prime Contractors do not discriminate in the solicitation, award and administration of construction subcontracts on PHILAPORT's projects.

Further, PHILAPORT's policy is to extend the applicability of the Diversity Inclusion Policy to other professional and non-professional services for which PHILAPORT contracts.

III. DIVERSITY INCLUSION PLAN

A. HUB Requirements

PHILAPORT shall take all necessary and appropriate steps to assure that its Prime Contractors do not discriminate and use HUBs in accordance with this Diversity Inclusion Plan (the "Diversity Inclusion Plan" or the "Plan") for all project-related construction contract awards that exceed the bidding threshold established annually for authorities in Pennsylvania.¹

IV. **DEFINITIONS**

- A. <u>Bidder Responsiveness</u> Actions taken by a Prime Bidder to seek participation by Subcontractors as defined below who are HUBs, and documented in the bid. Responsiveness includes submission at the time of the bid of the HUB Solicitation and Commitment Statement (similar in content to Exhibit 1), and, if needed, documentation providing an explanation for failure to achieve minimum levels of participation (MPLs). This documentation must demonstrate that the bidder has not engaged in discriminatory practices and may include a description of any barriers or impediments encountered despite the actions taken.
- B. <u>Bidder Responsibility</u> Demonstration of non-discrimination in the selection of Subcontractors. Bidders are presumed to meet these responsibilities if minimum participation levels established for the project on the pertinent subcontract are

Although the Plan is termed the "Diversity Inclusion Plan," the intent of the Plan is to achieve both Diversity and Inclusion, as two distinct characteristics, with respect to its construction contracts.

achieved. Non-discrimination can also be demonstrated by submitting supplemental evidence that failure to achieve the MPLs was not motivated by consideration of race, gender or other impermissible criterion; that HUBs were not treated less favorably than others; and that solicitation and commitment decisions were not based upon policies which disparately affect HUBs.

- C. <u>Business Enterprise</u> Any legal entity that is organized in any form other than as a joint venture (e.g., sole proprietorship, partnership, corporation, etc.) to engage in lawful commercial transactions.
- D. <u>Contractor</u> An entity that contracts with the PHILAPORT to perform work in connection with a construction project.
- E. <u>Control</u> The exclusive, ultimate and sole control of a business including, but not limited to, capital investment and all other financial, property acquisition, contract negotiation, and legal matters, officer-director-employee selection and comprehensive hiring, operating responsibility, cost-control matters, income and dividend matters, financial transactions, and rights of other shareholders or partners. Control shall be real, substantial, and continuing, not merely pro forma. Control shall include the power to direct or cause the direction of the management and policies of the business and to make the day-to-day as well as major decisions in matters of policy, management, and operations. Control shall be exemplified by possession of the requisite knowledge and expertise to operate the particular business. Control shall not be vested in majority or absentee ownership. Control by a HUB defined herein shall not be deemed to exist in any case where any majority owner or employee of the business is disproportionately responsible for the operation of the firm.

F. Disadvantaged Business Enterprise (HUB)

A Business Enterprise that is:

- 1. an MBE
- 2. a WBE
- 3. a Veteran or Service-Disabled Veteran Business Enterprise
- 4. an LGBT Business Enterprise

G. <u>LGBT Business Enterprise</u>

A Business Enterprise that is:

1. a sole proprietorship, owned and controlled by a LGBT Person; or

- 2. a partnership or joint venture of Business Enterprises controlled by LGBT Persons in which 51% of the beneficial ownership interest is held by LGBT Persons; or
- 3. a corporation or other entity controlled by LGBT Persons in which at least 51% of the voting interest and 51% of the beneficial ownership interest are held by LGBT Persons.

H. <u>LGBT Person</u>

Persons who identify as lesbian, gay, bisexual, or transgender.

I. <u>Minority Business Enterprise (MBE)</u>

A Business Enterprise that is:

- 1. a sole proprietorship, owned and controlled by a Minority Person; or
- 2. a partnership or joint venture of Business Enterprises controlled by Minority Persons in which 51% of the beneficial ownership interest is held by Minority Persons; or
- 3. a corporation or other entity controlled by Minority Persons in which at least 51% of the voting interest and 51% of the beneficial ownership interest are held by Minority Persons.

J. Minority Person

Persons who are citizens of the United States and who are Black Americans, Hispanic Americans, Native Americans, Asian-Indian Americans, or Asian-Pacific Americans.

- 1. Black (African) Americans Persons having origins from any of the Black groups of Africa. The term includes persons having origins in any of the original peoples of the Cape Verdes Islands.
- 2. Hispanic Americans Persons having their origins from one or more of the Spanish- speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America or the Caribbean Islands.
- 3. Native Americans Persons having origins from one or more of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- 4. Asian-Indian Persons having origins from one or more countries in south Asia, including India and Pakistan.

5. Asian-Pacific Americans - Persons having origins from one or more of the original peoples of the Far East, Southeast Asia or the Pacific Islands, including China, Japan, Korea, Samoa, and the Philippine Islands.

K. Owner – PHILAPORT

L. Prime Bidder and Prime Contractor

For HUB purposes, the term, "Prime Bidder" means a Business Enterprise that submits a bid to PHILAPORT (e.g., general contractors, plumbing contractors). A Prime Contractor is a Prime Bidder that has received an award from PHILAPORT.

M. Service-Disabled Veteran Business Enterprise. A Business Enterprise that is:

- 1. a sole proprietorship, owned and controlled by a Service-Disabled Veteran; or
- 2. a partnership or joint venture of Business Enterprises controlled by Service-Disabled Veterans in which 51% of the beneficial ownership interest is held by Service-Disabled Veterans; or
- 3. a corporation or other entity controlled by Service-Disabled Veterans in which at least 51% of the voting interest and 51% of the beneficial ownership interest are held by Service-Disabled Veterans.

N. Service-Disabled Veteran.

Persons who are Veterans and either (1) are "disabled veterans" as defined in 5 USC 2108(2) (i.e. "individuals who have served on active duty in the armed forces, have been separated therefrom under honorable conditions, and have established the present existence of a service-connected disability or are receiving compensation, disability retirement benefits, or pension because of a public statute administered by the Department of Veterans Affairs or military department") or (2) have a disability as defined in the Social Security regulations, 42 USC 423 (i.e. "an inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death, or which has lasted, or can be expected to last for a continuous period of not less than 12 months") and have a present determination of a disability by the Social Security Administration or Veterans Administration.

- O. <u>Subcontractor</u>. A Business Enterprise that has a contract with a Prime Contractor to supply labor, equipment, materials or supplies for a project as a manufacturer, vendor, supplier or subcontractor.
- P. Veteran. Persons who served in honorably in the United States military.
- Q. Veteran Business Enterprise.

- 1. a sole proprietorship, owned and controlled by a Veteran; or
- 2. a partnership or joint venture of Business Enterprises controlled by Veterans in which 51% of the beneficial ownership interest is held by Veterans; or
- 3. a corporation or other entity controlled by Veterans in which at least 51% of the voting interest and 51% of the beneficial ownership interest are held by Veterans.

R. Women's Business Enterprise (WBE). A Business Enterprise that is:

- 1. a sole proprietorship, owned and controlled by a Woman; or
- 2. a partnership or joint venture of Business Enterprises controlled by Women in which 51% of the beneficial ownership interest is held by Women; or
- 3. a corporation or other entity controlled by Women in which at least 51% of the voting interest and 51% of the beneficial ownership interest are held by Women.
- S. <u>Women</u>. United States citizens who are of the female gender.

V. CONTRACTOR COMPLIANCE GENERALLY

A. Minimum Participation Levels (MPLs)

PHILAPORT will establish minimum participation levels (MPLs) for the HUBs on a project-by-project basis. The MPLs will be established for each prime bid to be used solely as a guide in determining Prime Bidder responsibility. MPLs are applied to each bid category. The MPLs will vary based on the market availability of subcontracting opportunities for HUB's, on a project-by-project basis.

PHILAPORT shall endeavor to establish MPLs on the basis of actual market availability that matches the scope of work included in the project and available HUB firms, on a project-by-project basis with separate participation levels for the HUB categories.

B. <u>Bidder's Submissions at Time of Bid</u>

The Prime Bidder shall submit the HUB Solicitation and Commitment Statement attached as Exhibit 1 with its bid, showing efforts made to solicit HUB Subcontractors, and written confirmations of the intent to use the identified Subcontractors if awarded the prime contract. Prime Contractor's HUB Contact/Solicitation and Commitment Statement shall include the names of all companies and individuals contacted or solicited for participation in the project,

the type of work, material, supplies or equipment involved in the solicitation, the total dollar amount of each quote received, the time of solicitation, and, where applicable, the total dollar amount of each subcontract that would be awarded.

C. <u>Safe Harbor and Compliance at Time of Bidding</u>

In the absence of evidence to the contrary, compliance with the requirements under this Plan to demonstrate both bidder responsiveness and responsibility is presumed if MPLs are achieved.

If MPLs are not met, the Prime Bidder shall document why it was not feasible to meet the numerical levels by submitting evidence that failure to achieve MPLs was not motivated by consideration of race or gender, or other disadvantaged status; that HUBs were not treated less favorably than others; that solicitation and commitment decisions were not based upon policies which disparately affect HUBs. Justification for not meeting the MPLs may include impediments encountered despite actions taken.

D. Compliance Responsibilities – PHILAPORT and Prime Contractor

PHILAPORT has the responsibility to comply with the requirements under this Plan and ensure non-discrimination in the selection of Subcontractors, and in the administration of the project.

Prime Contractor has the responsibility to meet its commitments made during bidding by utilizing each Subcontractor it selected to the full extent of the subcontract value. The failure to meet minimum participation levels at the completion of two projects shall warrant Prime Contractor's disqualification from contracting with PHILAPORT for a period of six months and the imposition of liquidated damages in the amount of 10% of the dollar amount of the shortfall in the commitment to compensate PHILAPORT for the administrative costs of addressing the deficiency and not as a penalty.

E. Prime Contractor's Submissions during Project Administration

Prime Contractor shall submit monthly reports as specified in this Plan and in the Contract Documents. Specifically, Prime Contractor shall submit the Prime Contractor's HUB Monthly Reporting Form Summarizing Payments Made (similar in content to Exhibit 2) for each project as well as proof of payment in the form of invoices from subcontractors. Both form and proff of payment to subcontractors should be submitted to the Finance Department along with the Prime Contractor's monthly invoicing. PhilaPort reserves the right to withhold payment to Prime Contractor until the HUB monthly reporting is up-to-date and in accordance with the MPLs submitted with the bid..

VI. PROCEDURES – CLAUSES INCLUDED IN BIDDING AND CONTRACT DOCUMENTS

PHILAPORT shall insert the following in the appropriate contract document, establishing requirements applicable to the Prime Bidder:

A. Advertisement / Invitation for Bid (IFB)

All advertisements for IFB will include the following statement:

"The bidder must submit documentary evidence of solicitations from HUBs, which have been contacted and to which commitments have been made. Documentation of contract solicitations and commitments shall be submitted concurrently with the bid."

B. <u>Instructions to Bidders (ITB)</u>

The following statements will be placed in the bid documents, establishing requirements applicable to the Prime Bidder:

1. Participation Level

a. PHILAPORT has established the following minimum participation levels (MPLs) for Disadvantaged Business Enterprises in accordance with a policy on diversity inclusion, set forth in Part X of the Contracting, Procurement, and Leasing Policies and Procedures, revised as of November 2015, the provisions of which are incorporated as though fully set forth herein.

•	MBEs	$_\%$ of the total dollar amount of the $_$	
	contract		
•	WBEs_	_% of the total dollar amount of the _	
	contract	_	

• Veteran or Service-Disabled Veteran Business Enterprise

	% of the tota	ıl dollar amount	of the	contract
•	LGBT Business	Enterprise	% of the	e total dollar
	amount of the	contract		

All contracts awarded for construction will have a minimum HUB participation level set by the Director of Procurement, but in no event shall it be less than 20% of the contract value. The participation for each award must include at least 2 of the categories that are identified as HUB with no less than 5% participation for every category being included.

MPLs are established for this project to be used solely as a threshold in determining Prime Bidder responsibility. Prime Bidders are presumed to meet their responsibilities under the Policy if the dollar commitments to the HUBs reflect these participation levels. A Prime Bidder will not be rejected as non-responsible solely because it fails to reach the MPLs. To determine the participation level that has been reached, a Prime Bidder shall divide the total dollar amount of the commitments for the project by the total dollar amount of the Prime Bidder's contract award.

- b. HUB subcontracts will be credited toward the MPLs at 100%. HUB stocking suppliers and manufacturers are credited at 100%. HUB non-stocking suppliers, which are commonly and ordinarily the custom in the industry and a part of the industry's trade practices, are credited at 100%. Non-stocking suppliers, which are not commonly and ordinarily the custom in the industry nor a part of the industry's trade practice, are not credited.
- c. A prospective Subcontractor that qualifies in one, two, three or all four categories, will only receive credit toward MPLs as one but not more than one. Prime Bidders must indicate on the HUB Solicitation and Commitment Statement (similar in content to Exhibit 1) how the prospective Subcontractor should be credited.
- d. A HUB which is the Prime Bidder on a project with a contract valued at \$100,000 or less will receive full MPL credit for its own work effort for services provided. Such a business bidding as Prime Contractor should nonetheless attempt to hire and solicit other, certified HUBs for participation in subcontracts.
- e. HUB Subcontractors providing labor must perform at least seventy-five percent (75%) of the cost of the subcontract, not including the cost of materials, with its own employees.

C. <u>General Conditions</u>

PHILAPORT will include following provisions in construction contracts, establishing requirements applicable to Prime Contractor.

- 1. Reporting Requirements After Award
 - Prime contractors must provide PHILAPORT directly with the a. Prime Contractor's HUB Monthly Reporting Form Summarizing Payments Made (similar in content to Exhibit 2) for each project that is underway and for which payment applications are being submitted. The report shall include the names of and the total dollar amount paid to all HUBSubcontractors utilized under this contract. **PHILAPORT** reserves the right to verify payments to subcontractors at any time.
- 2. Joint Ventures and Subcontracting
 - a. Joint Venture.

Project-related contracts that involve a joint venture with a HUB firm must include the following clause:

If	the	joint	venture	relationship	identified	as	the
				is	dissolved,		
brio	thenwi	s Eidis don	ntinued, (_),	
				Name of Replace	ment Prime Con	tractor	

Replacement Prime Contractor, as the successor on the contract, shall continue this commitment by entering into contractual agreements with other appropriate firms to perform work on this contract. Replacement Prime Contractor must submit all requests for change orders to PHILAPORT for approval.

b. Subcontracting.

Subcontracts with HUB firms must include the following clause:

If the subcontracting commitment made to the Name of Subcontractor

is terminated or materially reduced, _

Name of Prime Contractor

agrees that the termination or material reduction is subject to the approval of PHILAPORT, which approval shall not be withheld unreasonably.

VII. PROCEDURE TO SOLICIT PARTICIPATION

A. HUB Certification

- 1. Prime Bidders will only be given credit for HUBs that are certified or accepted as certified HUBs by programs approved by, and in accordance with additional requirements set forth by, Board resolution.
- 2. Under the State Act of December 21, 1984, No. 230, P.L. 210, 18 PA. C.S.A. § 4107.2 a person commits a felony of the third degree if, in the course of business, he/she engages in deception relating to HUB certification.
- 3. To be credited, the certification relied upon must be for the category of labor, equipment, materials or supplies that would be used by Prime Contractor in the proposed subcontract with the Subcontractor. For example, a certification as a masonry contractor does not qualify as a certification to supply electrical equipment.

B. Notification to HUBs

The procedure for Prime Contractor to notify HUBs of contract shall be as follows:

1. Notice of ITBs

The Prime Bidder shall utilize available information regarding certified HUB firms capable of performing in the project's area. PHILAPORT shall provide reasonable assistance to the Prime Bidder. The Prime Bidder shall provide notice of the project to HUB firms so identified and to other qualified HUB firms and shall otherwise provide the same level of communication and interaction with prospective HUB Subcontractors as it would to other companies with which the Prime Bidder routinely contracts.

- 2. <u>Other Notices</u> Notices of the HUB subcontracting opportunities will be sent by PHILAPORT to appropriate organizations, such as:
 - a. local minority churches and civic organizations;
 - b. appropriate (1) minority business technical assistance organizations and schools, (2) minority, women, veteran, LGBT and small business contractor associations and appropriate trade organizations; and,
 - c. other business assistance agencies, community organizations, and media organizations such as trade association papers and newsletters, community television networks, local newsletters, and radio advertising.
- 3. <u>Plans and Specifications</u> Plans and specifications and all bidding documents on all projects will be made available to potential

Subcontractors, and HUB contractor associations, and trade organizations, through Penn Bid and similar web-based databases, and otherwise as may be appropriate.

- 4. <u>List of Plan holders</u> The names of Prime Bidders requesting bid documents will be made available upon request by PHILAPORT to HUB firms which provide labor, equipment, materials or supplies that appropriate to the scope of project work being solicited.
- 5. <u>Lists of HUB's Businesses</u> PHILAPORT will provide each Prime Bidder obtaining plans and specifications for a project with any available lists of HUB firms.

VIII. PROCEDURE TO EVALUATE BIDS

A. Responsiveness

- 1. The Prime Bidder must complete and submit the HUB Solicitation and Commitment Statement (similar in content to Exhibit 1) with the bid. Failure to submit a completed form with the bid will result in the bid being rejected as nonresponsive.
- 2. The Prime Bidder should only solicit HUB Subcontractors whose labor, equipment, materials or supplies are within the scope of work and which the Prime Bidder reasonably believes it could choose to subcontract with or purchase from.
- 3. Prime Bidders failing to meet the MPLs must submit concurrently with the bid, an explanation of why the MPLs have not been met. This explanation must demonstrate that the Prime Bidder has not engaged in discriminatory practices in the solicitation and utilization of HUBs to perform as Subcontractors on the project. The evidence submitted by the Prime Bidder must demonstrate the following:
 - a. indicate whether HUB firms were solicited for each type of work the Prime Bidder expects to subcontract for and for all materials which the Prime Bidder expects to procure and, if not, the reason(s) why no such solicitation was made;
 - b. indicate the reason why commitments were not made to HUB firms for a type of subcontract labor, equipment, materials or supplies in any areas where quotes were received from such firms; and
 - c. in any case where no quotations are received from, nor commitments made to HUB firms, indicate on Exhibit 1 that no quotes were received, and if there is another reason for no commitments being made, the reason for the lack of commitments.

- 4. If the Prime Bidder fails to submit such evidence, the bid submission shall be considered non-responsive and the bid shall be rejected.
- 5. Information related to the above shall be submitted on Exhibit 1 with the bid and on such additional materials as the Prime Bidder wishes to attach.

B. Responsibility

1. The submittals of each Prime Bidder are subject to review by PHILAPORT to determine whether the Prime Bidder has discriminated in the selection of Subcontractors.

Where the MPLs are not met, PHILAPORT will determine whether discrimination has occurred. If, after investigation including a review of Exhibit 1, other materials submitted by the Prime Bidder, and such additional documents and information as PHILAPORT has secured, it is determined that discrimination has occurred, the Prime Bidder shall be deemed to be not responsible and the bid will be rejected.

- 2. Documentation submitted by the Prime Bidder should meet the following standards for review:
 - a. the Prime Bidder whose actions resulted in a limited or no commitment to HUB firms was not motivated by consideration of race or gender;
 - b. HUB firms were not treated less favorably than other businesses in the hiring and/or contract solicitation and commitment processes; and
 - c. solicitation and commitment decisions were not based upon policies that disparately affect HUB firms.
- 3. Commitments to HUB firms at the time of bidding must be maintained throughout the project unless a change in commitment is approved in advance by PHILAPORT. Such approval shall not unreasonably be withheld.

C. Access to Information

PHILAPORT may obtain documents and information from any Prime Bidder and any Subcontractor as may be required to ascertain Prime Bidder's contractor responsibility. Failure to provide requested information may result in the Prime Bidder's bid being declared non-responsive, the Prime Bidder being declared not responsible, or both.

IX. PROCEDURES - RECORDS AND REPORTS

A. Records and Reports

- 1. PHILAPORT will review all reports received to determine if the commitments made by Prime Contractors in their bids are being met. This review is to be done contemporaneously with the receipt of payment applications, and in any event prior to final payment being made to Prime Contractor.
- 2. PHILAPORT will keep such records as are necessary to determine compliance with its HUB requirements. These records must be in sufficient detail to indicate the prime contract work performed, and the percentages of project-related work that is being performed by HUBs.
- 3. Prime Contractor must retain HUB records related to the construction period for a period of four years after final completion of the project. If any litigation, claim, negotiation, audit, or other action has been commenced before the previously mentioned record retention periods, the records must be retained until the completion of the action and resolution of all issues which arise from it or until the end of the previously referenced record retention period, whichever is later.

HUB Solicitation and Commitment Statement

HUB SOLICITATION AND COMMITMENT STATEMENT Instructions and Explanation of Columns

Project owners and all prime bidders will complete this form to document all businesses solicited and all businesses that provided solicited or unsolicited quotes for project-related contracts.

- 1. Provide your company name, address, telephone number.
- 2. Provide the project name, project number, bid opening date, contract award date, and a contact person's name.
- 3. For each business solicited and each quote/bid received, enter the firm name, Employer Identification Number (EIN) or Social Security Number (SSN) for a sole proprietorship, telephone number with area code, and e-mail address. Only the company's name is a mandatory item.
- 4. Indicate whether or not the firm is an MBE, a WBE, Veteran or Service-Disabled Veteran Business Enterprise, or LGBT Business Enterprise. Place a check mark in only one of the appropriate MBE, WBE, Veteran or Service-Disabled Veteran Business Enterprise or LGBT Business Enterprise, add the identity of the certifying entity and the HUB's certification number.
- 5. Indicate the type of work to be performed and/or material to be supplied.
- 6. Enter the total dollar amount of the quote received.
- 7. Enter the total dollar (\$) amount of the commitment which you have made to the MBE, WBE, Veteran or Service-Disabled Veteran Business Enterprise or LGBT Business Enterprise. If no amount is provided in this space, it will be presumed that your firm made no commitment to the MBE, WBE, Veteran or Service-Disabled Veteran Business Enterprise or LGBT Business Enterprise.
- 8. Enter the total percentage (%) of the commitment which you have made to the MBE, WBE, Veteran or Service-Disabled Veteran Business Enterprise or LGBT Business Enterprise. If no amount is provided in this space, it will be presumed that your firm made no commitment to the MBE, WBE, Veteran or Service-Disabled Veteran Business Enterprise or LGBT Business Enterprise.
- 9. NOTE: You must include information on both solicited and unsolicited quotes. Failure to include a firm providing solicited or unsolicited quotes may result in the rejection of the bid or a determination that you are not a responsible contractor. Adequate time equivalent to that provided to other Subcontractor proposers must be provided for HUB Subcontractors and suppliers to respond to bids.
- 10. Indicate the name, telephone number and e-mail address of the person(s) who prepared the form.

			I	HUB SOLIC	ITATION .	AND COMMIT	MENT STATEMI	ENT			
OWNER / PRIME	BIDDER'S FIRM NA	AME (1)				PROJECT NAME (2) PROJECT #					
ADDRESS						BID OPENING	DATE	CONTRACT AW	ARD DATE		
TELEPHONE NUMBER						CONTACT PERSON (Name and Email Address)					
*(3)	(4)	<u>(4)</u>	(4)	<u>(4)</u>	(4)	(4)	(5)	(6)	*(7)	*(8)	
COMPANY NAME EIN/SSN TELEPHONE NUMBER	DATE OF SOLICITATION	MBE	WBE	Veteran or Service- Disabled Veteran Business Enterprise	LGBT Business Enterprise	Certification Program and Number	TYPE OF WORK TO BE PERFORMED AND/OR MATERIAL TO BE SUPPLIED	TOTAL DOLLAR AMOUNT OF QUOTE RECEIVED	TOTAL COMMITMENT DOLLAR AMOUNT	TOTAL COMMITMENT PERCENTAGE %	
	 se certified HUB Sub ractors should be at lo							quotes in regard to	this invitation to bid.	Contact with HUB	
(10) PREPARED B	BY (please print)				Т	ELEPHONE NUM	1BER	E-MAIL			

*Use additional sheets, if necessary.

Prime Contractor's HUB Monthly Reporting Form Summarizing Payments Made

EXHIBIT 2

Mandatory S. Submit Monthly

(Page 1 of 2)

Prime Contractor's	Monthly H	UB Payment	Report

Name of Project					Contract No.:					
Prime Original Cor	ntract Value:				Report					
Change Orders (Ov	verall Add/Deduct):	,			Notice to Proceed Date:					
Total Contract Am	ount to Date:				Projec	et Mgr. Name:				
Total Payments Iss	sued from	to	((date)	•	ned HUB Goal %:				
Name of HUB Subcontractor Work Task Performed Performed Contract Amount (\$) (+/-)			Amount of Invoice Received this Month	Date of Invoice Received in this Month	Payments Made to HUB in this Month (\$)	Date(s) Payments Made this Month	Total HUB Payments Made to Date in \$	% Overall Work Finished	Final Payment (Y/N)	
	Total(s) →	\$	\$	\$	Total(s)	\$	Total(s)	\$		
Itemize payments/invo	oices and dates if pa	aid/received m	nore than one pa	ayment/invoice	between the 1st	t and 31st of this M	onth.	-		
Prime Contractor Info	ormation:									
Prime Firm Name:					Project!	Director Name:				
Address:					Project '	Director Signature:_	_			
Telephone No.:		EIN # / TIN #								
Prime's Past Due Inv	voice Information: I	List any invoic	ce more than	days past (due from the dat	te submitted to	at the time	you complete this	s form.	
Invoice #	Invoice Date	Invoic	ce Amount (\$)	No. of Days	s Past Due		С	Comments		

Prime Contractor's Monthly HUB Payment Report

. Have all HUB Subcontractors v	with executed subcontracts	been paid amounts due f	from previous progres	s payments?			
If Yes, skip the next section and	go to Number 3.						
If No, please complete fields in	box below (use additional p	paper, if necessary)					
Subcontractor Name	Amount Withheld from Invoice (\$)	Total of Invoice Amount (\$)	Invoice No.	Invoice Date	Specific Reason for Withholding		
Have you notified the HUB Sub	ocontractor(s) that you are	withholding payment and	d the reason(s) why?				
If Yes, provide a copy of written							
If No, lack of prior written notifice contact the HUB immedia	•		•		delines.		
By signing this form, I certify th	at all of the above represer	nt true and accurate infor	mation.				
					/ /		
roject Director Name (Print)		Project Director (Sig	nature)	Date	Date		
dditional Reasons/Comments for	Withholding Payment:						
OO NOT WRITE BELOW			This l	Form is Due on the	of cook Month		
Please forward to:			THIS	form is Due on the	of each Month.		
Approved							
Denied							

PART 4

SPECIFICATIONS

SECTION 024560

CONCRETE-FILLED STEEL PILES

PART 1 - GENERAL

1.1 SCOPE

- A. This Section includes Concrete-Filled Steel Pipe piles to support pier 84 South.
- B. Work covered by this section includes the furnishing of all materials and equipment, engineering and surveying services noted within the specifications, the performing of all labor necessary to install the Concrete-Filled Steel Piles shown on the Contract Drawings, and as herein specified or directed by the Engineer.
- C. The work consists of furnishing all necessary engineering and design services, supervision, labor, false work utilized to stay the test pile, production piles and welding procedures as noted.
 - 1. Design of false work utilized to stay the piles shall be signed and sealed by a Professional Engineer in the State of Pennsylvania.
 - 2. Welding procedures shall be prepared by and certified by a qualified welding specialist/inspector.
 - a. If splicing of pile shells are necessary or required, then only pre-qualified welds and procedures for welding ASTM A252 Pipe Grade 3 Pipes will be allowed when splicing piles.
- D. The steel pipe piles (test or the production piles) shall not be ordered until the indicator pile program for the piles supporting the pier repair has been completed and test results are evaluated.
- E. The Contractor shall install piles to the minimum load capacities indicated on plans. Install piles to the specified tolerances, dimensions, etc., indicated in the plans and specifications.
- F. Piles shall be installed to the minimum pile tip elevation noted on the drawings.
- G. Related Sections include the following:
 - 1. Section 033000 "Cast-in-Place Concrete
 - 2. Section 051000 "Metal Fabrications"
 - 3. Section 099700 "Coating of Steel Pipe Piles and Steel Framing"
- H. There will be work restrictions for use of pier 84 South. Refer to RFP Part 1 General Description of the Work and Special Provisions, Section 6.0 for description of work restrictions.
- I. Work Area:
 - 1. All Work, unless otherwise noted or approved by the Owner, shall be performed from work boats, barges, etc., out on the Delaware River.

- 2. Pier 84 south operation occupies areas of the PhilaPort property. The Contractor will have limited access to the landside area for construction activities and operations. Refer to the Contractor's Access Plan in the Contract Drawing Package for the available staging and lay down area.
- 3. Concrete must be transported in such that it does not interfere with or disrupt the operations on Pier 84. If the Contractor utilizes the existing pier to transport and place concrete, he or she must spread the construction loads so the existing pier is not being overstressed. No more than 600 PSF shall be allowed at one time on the pier. Concrete trucks shall wash out at designated area to be appointed during construction meeting. The Contractor shall work within PhilaPort requirements.
- 4. Contractor must submit a work plan listing construction equipment, equipment set up and bearing pressures of the equipment being imposed on the slab deck.
- 5. Submit back-up calculations for the bearing pressures.
- J. Install Temporary Turbidity Curtain around the pile installation to contain soil material being cleaned out of piles and concrete from flowing into the Delaware River. The Turbidity Curtain shall remain in place until the pile concrete fill operation is complete.

1.2 Available Sub-Surface Information:

- A. A geotechnical letter report titled "Pile Analysis, Condition Inspection and Repair of Pier-84S Port of Philadelphia," outlining the subsurface conditions and pile hammer recommendations within the extent of work has been prepared by D.W. Kozera, Inc. Owner will not be responsible for interpretations or conclusions drawn from this data.
 - 1. The Contractor may perform test borings or conduct other exploratory operations as necessary at no additional cost to the Owner. Notify Owner in advance.
 - 2. The Geotechnical Report is provided in these specifications.

1.3 SUBMITTALS

- A. General: Submit the following as indicated under the Special Provisions. Submittal items listed under this paragraph are required before commencement of driving/drilling of any piles.
- B. The Contractor shall submit a detail description of the proposed construction procedures.
- C. Product Data: For each type of pile product, accessory, and paint indicated.
- D. Shop Drawings: Show fabrication and installation details for piles, including splices and tip details.
 - 1. If splicing of pile shells are necessary or required, then provide full penetration welded splicing. Indicate welds by standard and symbols. Show size, length and arrangement of reinforcement.
 - a) All welding procedures and inspections shall be in accordance with AWS D1.1 "Structural Welding Code Steel".
 - b) Pile splice detail and welding procedures shall be prepared by the Contractor, an AWS Certified Welding Inspector. Submit procedures to engineer for review.
 - c) The pile splice shall be made with complete penetration groove welds.

- 1) Prepared welding procedures for non-cyclical loading.
- 2) Submit concrete reinforcement fabrication and placement details.

E. Steel Pile Material and Welding

- 1. Production piles specified to be in conformance with ASTM A252 Grade 3 (Mod) with physical and chemical properties and requirements that meet A572 Gr. 55. Mill certifications shall be submitted for review prior to any welding can commence. The carbon equivalent for weldability shall be reported on the mill certifications. The carbon equivalency shall be less than 0.45%.
- 2. For the purposes of welding and prequalification of base metal, steel pipe piling designated as ASTM A252 with properties conforming to ASTM A572, Grade 50, shall conform with the requirements of AWS D1.1, Table 3.1.
- 3. Acceptance criteria for ultrasonic inspection for the pipe pile splice welds shall be in accordance with AWS D1.1 Section 6, Table 6.3 for UT (non-cyclically loaded non-tubular connection).
- 4. Steel pipe piling shall be manufactured to meet the fabrication and fit up requirements to the AWS D1.1 Section 5.22.3.1 "Girth Weld Alignment (Tubular)".
- F. Welding Procedures and Qualifications: Copies of certificates for welding procedures and personnel.
 - 1. Specifications and Test Results: Submit copies of the welding procedure specifications and procedure qualification test results for each type of welding required. Approval of any procedure does not relieve the Contractor of the responsibility for producing acceptable welds.
 - a) Welding procedures shall be develop by a Certify AWS Welding Inspector (CWI)
 - 2. Certification: Before assigning welder or welding operators to the work, submit their names, together with certification that each individual is performance qualified as specified. Do not start welding work prior to procedure qualification. The certification shall state the type of welding and positions for which each is qualified, the code and procedure under which each is qualified, date qualified, and the firm and individual certifying the qualification tests.
 - 3. Pre-qualify all welds including seams, splices and other for ASTM A252.
 - a) Develop and qualify procedures for welding metals included in the work. Do not start welding until welding procedures, welders, and welding operators have been qualified. Perform qualification testing by a testing laboratory approved by the Engineer. Notify the Engineer at least 24 hours in advance of the time and place of the tests. When practicable, perform the qualification tests at or near the work site. Maintain current records of the test results obtained in welding procedure, welding operator/welder performance qualifications, and nondestructive examination (NDE) procedures. These records shall be readily available at the site for examination by the Engineer. Qualify the procedures for making transition welds between different materials or between plates or pipes of different wall thickness. The choice of welding process shall be the responsibility of the Contractor.

- G. Design Mixes: For each concrete mix, include revised mix proportions when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Laboratory Test Reports: For evaluating concrete materials and mix design test.
- H. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Engineers and owners, and other information specified.
- I. Mill test reports signed by manufacturer certifying that each of the following complies with requirements:
 - 1. Steel pipe piles and accessories
 - 2. Concrete materials
 - 3. Reinforcement materials
 - 4. Admixtures
 - 5. Centralizers
- J. Pile-Driving Equipment: Include type, make, maximum rated energy, and rated energy per blow of hammer; weight of striking part of hammer; weight of drive cap; details, type, and structural properties of hammer cushion; and details of follower and jetting equipment.
 - 1. Contractor shall submit to the Owner's Engineer a wave equation analysis for piles demonstrating that his pile driving hammer and equipment is capable of providing a rated energy to advance the steel pile shell to top of the rock layer and any other project pile requirements.
 - 2. Contractor's wave equation analysis, referenced above, shall be signed and sealed by a professional Geotechnical Engineer in the State of Pennsylvania.
 - 3. Wave Equation Analysis: Submit Wave Equation Analysis of Piles (WEAP) documenting that the proposed pile hammer and driving system is capable of obtaining the required pile tip elevations without over stressing the piles. Driving stresses in the steel piles shall not exceed 90% of the minimum yield strength of the pile.
 - a. Analysis shall be run at the estimated tip elevation to achieve the required embedment. Additional analysis will be run on piles at 50%, 90%, and 110% of the estimated lengths to assess driving stresses.
 - b. Submittal should summarize the required driving resistance (in blows per foot), maximum compressive stress, and maximum tensile stress anticipated based on the analysis.
 - c. The WEAP Analysis shall consider the effects of the pile batter.
 - d. Submit at least one (1) week prior to test pile installation.
 - e. Should the proposed driving equipment be changed at any time during the term of the Contract, the Wave Equation Analysis shall be resubmitted for approval by the Owner's Engineer prior to using the proposed equipment.
 - 4. Wave Analysis Computations: Submit WEAP computations by a Registered Engineer to establish driving criteria for piles using driving equipment to be used on the project.
 - 5. The hammer selection, stroke length, ram weight, etc., is a sole responsibility of the Contractor and is part of the Contractor's Means and Methods of pile

- installation to meet the project requirements. The Owner's review of the Contractor's WEAP Analysis does not change or take on the responsibility for the approval of the hammer. There will be no additional compensation if the Contractor's hammer is not suitable to advance the piles to meet all the project requirements.
- 6. The Contractor's hammer abilities to install the piles will be judged in the field during the actual driving of the test piles while the PDA instrument is attached to the pile.
 - a. If the Contractor's hammer in the field is not advancing the pile to meet the project pile requirements and the driving stresses in the pile are below .9 Fy, the Owner reserves the right to direct the Contractor to provide another hammer that is suitable to complete the project with no additional compensation to the Contractor.
- K. Submit procedures and equipment being utilized to install the steel pipe pile to minimum tip elevation.
- L. Submit procedures for concrete fill and concrete placement.
 - 1. Provide details of concrete placement, including proposed operational procedures for concrete tremie procedure and methods.
- M. Submit procedures and work plan for the transporting of concrete to the dock area.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer with proven record of pile installation similar in material, design, and extent to that indicated for this Project.
 - 1. Provide a list of five Steel Pipe Pile projects performed by the pile installer that involved driving in remote locations in deep water through sands and gravels, similar to those conditions expected at the project location.
 - 2. The Contractor shall be fully experienced in concrete-filled pipe piles.
 - 3. Provide resumes of key personnel who will be present on site (and will be materially involved) and who will each have at least three years of relevant experience. These personnel include superintendent, driller, and project engineer/manager.
- B. Survey Work: Provide pile-driving records, including surveys, layouts, and measurements, shall be prepared by the Contractor. A land surveyor or Professional Engineer who is legally qualified in the jurisdiction where Project is located to perform these kinds of services.
- C. Professional Engineer Qualifications: A Professional Engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services for piles that are similar to those indicated for this Project in material, design, and extent.
- D. Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM E 329 to conduct the testing indicated, as documented in accordance with ASTM E 548.

- 1. The Contractor will engage a qualified independent testing agency to perform field quality control testing and inspections.
- 2. Pile testing shall be performed by a licensed testing agency. The Contractor will pay for all pile testing and the PDA Consultant services.
- E. Comply with requirements of the following publications:
 - 1. ASIC's "Load and Resistance Factor Design (LRFD) Specification for Structural Steel Buildings."
 - 2. ASIC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
 - 3. ACI 301 "Specification for Structural Concrete."
- F. Welding Standards: Qualify welding procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel." For welding of concrete reinforcing steel, qualify welding procedures and personnel according to AWS D1.4 "Structural Welding Code Reinforcing Steel."
- G. Certified Welding Inspector: Certified Welding Inspector (CWI) shall be qualified and certify in accordance with the provisions of AWS QC1, Standard for Qualification and Certification.
 - 1. Third Party welding inspectors shall be (CWI's).
 - 2. Contractor's welding inspectors shall be (CWI's).
 - a. The Contractor's CWI cannot be one of the welder/welders.
- H. Pre-installation Conference: Conduct on site and pre-installation conference call to review Contractor procedures to install the concrete fill pipe piles.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver piles to the project site in such quantities and at such times to ensure continuity of installation. Handle and store piles at project site to prevent physical damage.
 - 1. Protect pile coating and touch-up damage to coating before driving pile.

PART 2 - PRODUCTS

2.1 STEEL PIPE PILES SHELL

- A. Steel
 - 1. Steel pipe piles marked on Drawings shall conform to ASTM A252 and chemical and physical properties of ASTM A-572 GR 50 and have a yield strength of 50 KSI.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615, Grade 60.
- B. Low-Alloy Steel Reinforcing Bars: ASTM A 706 (use when welding of rebar).

2.3 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II.
 - 1. Fly Ash: ASTM C 618, Class F.
 - 2. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 120.
- B. Blended Hydraulic Cement: ASTM C 595, Type IS, Portland blast furnace slag.
- C. Normal-Weight Aggregates: ASTM C 33, uniformly graded, 3/8-inch maximum aggregate size. Provide aggregates from a single source.
- D. Water: Potable, complying with ASTM C 94requirements.
- E. Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain no more than 0.1 percent chloride ions by mass of cementitious material.
 - 1. Air-Entraining Admixture: ASTM C 260.
 - 2. Water-Reducing Admixture: ASTM C 494, Type A.
 - 3. Retarding Admixture: ASTM C 494, Type B.
 - 4. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
 - 5. High-Range, Water-Reducing Admixture: ASTM C 494/, Type F.
 - 6. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
 - 7. Plasticizing and Retarding Admixture: ASTM C 1017/, Type II.
 - 8. Anti-Washout Admixture: ASTM (TBD)
- F. Provide concrete suitable for tremie placement.

2.4 PILE ACCESSORIES (AS NEEDED)

- A. Outside Cutting Shoes: Manufacturer's standard, outside-flanged, open-ended cutting shoe, to provide advancement of pipe pile tip. Fabricate from steel castings as follows:
 - 1. Carbon-Steel Castings: ASTM A 27/A 27M, Steel Grade as required to advance pile.
 - 2. High-Strength Steel Castings: ASTM A 148/A 148M, Steel Grade as required to advance pile.
 - 3. At the Contractor's option he may provide his own fabricated outside cutting shoe/pile shell tip reinforcement.

2.5 PAINT

- A. Paint: SSPC-Paint 16; self-priming, two-component, coal-tar epoxy polyamide. Refer to Paint/Coating on piles under specification Section 099700 "Coating of Steel Piling and Steel Framing".
 - 1. Field touch-up refer to paragraph 3.9 under this specification.

2.6 CONCRETE MIXES

A. Prepare concrete design mixes according to ACI 301, determined by either laboratory trial batch or field test data basis.

- 1. Use a qualified testing agency for preparing and reporting proposed mix designs determined by laboratory trial batch.
- B. Concrete materials shall be in accordance with the requirements of Section 033000 "Cast-In-Place Concrete."
- C. Proportion mixes according to ACI 301 to provide normal-weight concrete suitable for piles with the following properties:
 - 1. Compressive Strength (28 Days): 5000 psi (min.).
 - 2. Maximum Water-Cementitious Material Ratio at Point of Placement: 0.40.
 - 3. Slump Limit:
 - a. Slump Limit: 4" before adding high range water reducer, plus or minus 1-inch.
 - b. Slump Limit: 8" after adding high range water reducer, plus or minus 1-inch.
 - 1) Pile concrete shall be flowable. Add high range water reducers.
 - 2. Where concrete will be placed through water, adjust mix design for tremie.
 - 3. Provide anti-wash out admixture for all mix design for tremie.
- D. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than Portland cement according to ACI 301 limits as if concrete were exposed to deicing chemicals.
- E. Concrete-mix design adjustments may be considered if characteristics of materials, project conditions, weather, test results, or other circumstances warrant. Resubmit and obtain approval from Engineer of proposed changes to concrete-mix proportions.

2.7 FABRICATION

- A. Contractor may fabricate full-length piles to eliminate splicing during driving/drilling or may splice in place after driving the lower portions. The length of the lower portion of the pile shall be such that the splice is located and is driving below the mud line.
- B. Pile order lengths: Contractor is fully responsible in determining pile order length. As a minimum, the piles shall be ordered.
 - 1. Test piles minimum order length shall be 10' longer then a theoretical production pile as determine from cut off to the anticipated pile tip elevation.
 - 2. Production piles shall be ordered 10' longer then the pile length as determine from the test pile program.
 - 3. The steel pipe piles order lengths will be determine after the completion of the indicator pile program for the precast piles supporting Pier 84 South has been completed and test results are evaluated. Refer to Part 1-General 1.1.D.
- C. Fabricate full-length piles by splicing pipe piles together. Pile ends at the splice shall be pre-milled and beveled for welding. Axial alignment shall be maintained during pile splicing.
 - 1. Welded Splices: Continuously weld pile according to AWS D1.1 and as noted within this specification.
 - 2. Welded splices shall be made with a complete penetration groove weld in accordance with the latest edition of the AWS D1.1.

- 1. Splice shall be made to meet non-cyclical loading.
- 3. Accurate alignment of the pile splice is critical.
 - 1. Pipe sections shall be aligned so that the maximum misalignment between sections is no more than 1 in 200.
- 4. Splice piles during fabrication or field installation.
- D. Pile-Length Markings: Mark each pile length with horizontal line at 12-inch intervals, and the distance from pile tip at 60-inch intervals.
- E. Provide piles with 18 mils of coal tar epoxy coating to 10'-0" minimum below the mud line. Touch up coating as required

PART 3 - EXECUTION

3.1 DRIVING EQUIPMENT

- A. Pile Hammer: Air-, steam-, hydraulic, or diesel-powered type capable of consistently delivering driving energy to the pile within the range recommended by hammer manufacturer, to install pile meeting all the project requirements and to develop the ultimate pile capacity indicated considering length and weight of pile and character of subsurface material anticipated.
 - 1. The length of pile that will be allowed to be installed with a vibrating hammer will be determined by the Geotechnical Engineer during the test pile program. The remaining pile length shall be installed with an impact hammer.
- B. Hammer Cushions and Driving Caps: Between hammer and top of pile, provide hammer cushion and steel driving cap recommended by hammer manufacturer for type of pile.
- C. Leads: Use pile-driver leads that will hold full length of pile firmly in position and in axial alignment with the hammer. Extend leads to within 24 inches of elevation at which pile enters template.
 - 1. Offshore leads or similar will not be allowed.

3.2 DYNAMIC TESTING OF DRIVEN PILES

- A. General: The Owner has not completed a preconstruction dynamic test pile program.
- B. During construction, piling will require High Strain Dynamic Testing of piles (Pile Driving Analyzer) per ASTM D 4945. The PDA shall be used to verify steel pile embedment.
- C. PDA Pile Tests.
 - 1. Arrange and perform PDA testing for the steel pipe pile. Perform and execute pile tests as directed by the independent testing agency.
 - 2. Drive PDA piles at locations as per basis for bid or, to refusal, whichever occurs first. Piles will be considered as driven to refusal when five blows of hammer are required to produce a total penetration of ¼ inch or less.

- a. Number of PDA Piles:
 - 1) As directed by the Engineer, production piles will require PDA Testing. Two production piles will require PDA tested.
- b. PDA testing will be performed on initial drive and restrike.
 - 1) PDA restrike shall occur 72 hours following initial drive.
- 3. Driving criteria to install the pipe pile to meet project requirements and minimum tip elevations will be determined from the tested piles.
- D. Driving PDA Piles: Piles to be identical to those required for Project and be driven with pile-driving equipment operating at rated driving energy to be used in driving permanent piles.
- E. Pile Shell Design Load: N/A.
- F. Approval Criteria
 - 1. The CAPWAP analysis will be based on the data obtained from the dynamic testing and production pile driving criteria to advance the steel shell of the piles for the project will be developed based on the results of the tests.
- G. Driving Records
 - 1. Contractor shall prepare driving record for each PDA pile record to be compiled and attested by a qualified Professional Engineer. Record shall include the same data as required for driving records of permanent piles.
- H. The Contractor shall be cooperative throughout the testing program and shall include cost associated with this effort in his bid.
- I. The Contractor shall provide all necessary equipment required for the performance of the dynamic testing program. The equipment shall remain the property of the Contractor and shall be removed from the project site at the completion in the project. The equipment shall include, but not limited to the following:
 - 1. A source of electrical power, 10 amp, 115 volt, 55-60 cycle, AC only, at each test location.
 - 2. Drilling the pile shell and attaching PDA lead wires/transducers.
- J. PDA piles will be used for establishment of driving criteria.
- K. Testing
 - 1. PDA piles that comply with requirements, including location tolerances, may be used as production piles.

3.3 DRIVING PILES

- A. General: Continuously drive piles to elevations or penetration resistance indicated or established by the test pile program. Establish and maintain axial alignment of leads and pile before and during driving.
 - 1. Production piling may be set with a vibratory hammer.

- 2. The length of the production pile that will be allowed to be driven with a vibratory hammer will be determined during the test pile program. The remaining pile length must be driven with an impact hammer.
- B. Predrilling: Predrilling or jetting of piles will not be allowed unless authorized by the Owner's representative. Jetting, if allowed, shall be performed so that it does not violate the Owner's water quality permit.
- C. Set false work and pile driving templates or guide frames before driving any test or production piles.
- D. Heaved Piles: Redrive heaved piles to the tip elevation equal or deeper than the original tip elevation. Driving resistance shall be not less than the original driving resistance.
- E. Pile Splices: Splice locations pile segments shall be aligned. Refer to pile splice detail in the contract drawings. Pile splices shall be driven below the mud line.
- F. Driving Tolerances:
 - 1. Location: Pile head shall not deviate more than 3 inches from the plan location indicated.
 - 2. Plumb: Maintain 1 inch per 10 feet of vertical, or more than 4 inches maximum, measured from the pile head.
 - 3. Batter Angle: Maximum 1 inch in 10 feet from required angle, measured when pile is above ground in leads.
- G. Withdraw damaged or defective piles and piles that exceed driving tolerances and install new piles within driving tolerances. Fill holes left by withdrawn piles as directed by Engineer.
 - 1. Rejected piles may be abandoned and cut off as directed by Engineer.
 - 2. New piles will be installed in locations directed by the Engineer.
 - 3. Holes left by withdrawn piles to be filled by cohesionless soil material such as gravel, crushed stone, or gravel-sand mixtures. Fill will be placed and compacted in lifts not exceeding 72 inches.
- H. Cutting off: Cut off tops of driven piles square with pile axis and at elevations indicated on the drawings.
- I. Driving Record: Maintain accurate driving record for each pile. Included the following data shall be in the record:
 - 1. Project name and number.
 - 2. Name of Contractor.
 - 3. Pile group and pile location in the group.
 - 4. Sequence of driving in pile group.
 - 5. Pile dimensions.
 - 6. Mud line elevation.
 - 7. Elevation of tip after driving.
 - 8. Final tip and cutoff elevations of the pile after restrikes.
 - 9. Records of redriving.
 - 10. Elevation of splices.
 - 11. Type, make, model, and rated energy of hammer.

- 12. Weight and stroke of hammer.
- 13. Type of pile driving cap used.
- 14. Cushion material and thickness.
- 15. Actual stroke and blow rate of hammer.
- 16. Pile driving start and finish time; and total driving time.
- 17. Time, pile-tip elevation, and reason for interruptions.
- 18. Record of number of blows for each 12 inches of penetration, and number of blows per 1 inch for the last 6 inches of driving.
- 19. Pile deviations from location and plumb.
- 20. Record of preboring, jetting, or special procedures used.
- 21. Record of unusual occurrences during pile driving.

3.4 CONCRETE PLACEMENT

- A. Do not place concrete until other piles within a radius of 70 feet have been driven and approved.
- B. Inspection: Before placing concrete, allow testing and inspecting agency to visually inspect that each pile is clean, plumb, and free of distortion or other defects.
- C. Place concrete in a continuous operation from 10 feet below the mudline elevation to pile cutoff elevation and without segregation immediately after cleaning out pile.
- D. Placement of Concrete:
 - 1. Place concrete in a dry pile, by means of bottom discharge bucket, flexible drop chute, elephant-trunk hopper, or pump concrete into place.
 - 2. Placement underwater as approved by Engineer.
 - a. Place concrete underwater by tremie method or pumping. Control placement operations to ensure tremie is embedded no less than 60 inches into concrete, and flow of tremied concrete is continuous from bottom to top of pile.
 - b. Provide placement so at no time the pressure head is not lost for any reason.
 - c. Other methods of depositing concrete may be used, if approved by Engineer.
 - d. Provide proper methods to contain tremie concrete from flowing or other debris from washing or flowing in the Delaware River.
- E. Reinforcement: Comply with recommendations of CRSI's "Manual of Standard Practice"

for fabricating, placing, and supporting reinforcement. Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy bond with concrete.

- 1. Accurately position, support, and secure reinforcement against displacement during concreting. Maintain minimum cover to reinforcement.
- 2. Protect exposed ends of extended reinforcement, dowels, or anchor bolts from mechanical damage and exposure to weather.
- F. Consolidate final 10 feet of concrete during placement to ensure concrete is thoroughly worked around reinforcement and into corners.

G. Screed concrete at cutoff elevation level and apply a scoured, rough finish.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor will engage a qualified independent testing agency to perform field quality-control testing.
- B. High-Strain Dynamic Monitoring: High-strain dynamic monitoring will be performed and reported according to ASTM D 4945 during initial driving and restrike. Number of piles to be included in the Contractors bid as follows:
 - 1. Number of PDA Production Piles: As directed by the Engineer, one (1) plumb and (1) battered or two (2) batter piles production piles which is applicable shall be tested for Pier 84 South. PDA shall be performed on initial drive and restrike after a minimum of 72 hours.
- C. Weld Testing and Inspections for All Pipe Piles:
 - 1. Welding inspection procedures, techniques, methods, acceptance criteria, and inspector qualifications shall be in accordance with the latest edition of AWS D1.1 and IBC Code Special Inspections for Steel Construction. Inspection shall be performed by a Certified Welding Inspector (CWI), who shall be qualified and certified in accordance with the provision of AWS QC 1, Standard for Qualification and Certification.
 - a. All inspections shall be by a third party.
 - b. The Contractor may assign a (CWI) for his own monitoring or welding. This CWI cannot be one of the welder/welders.
 - c. Assign each welder or welding operator an identifying number, letter, or symbol that shall be used to identify his welds. When the pile is driven with a welded splice, the final pile plan must identify where the welds are located per welders' identification and sequential number.
 - 1. The Third-Party Inspection Agency shall perform nondestructive testing in addition to visual inspection. Testing and inspection shall apply to welding performed in the shop and in the field. As a minimum, the extent of the inspection shall be as follows:
 - a. Visual Inspection: All welds shall be 100 percent visually inspected. Visual inspection shall be performed before, during, and after the completion of welding.
 - b. Ultrasonic Inspection ASTM E164: Inspect 20 percent of the completed penetration groove welds in pile splices. If defects are found, repairs shall be made and additional non-destructive testing shall be performed to ensure that repairs are satisfactory. This testing shall include the repaired area plus at least 2 inches on each side of the repaired area. All repairs and additional testing are at Contractor's expense.
 - 2. Submit all test reports to the engineer for review.
 - 3. Correct all deficiencies in welds and retest welds to determine compliance with requirements.
- D. Concrete: Sampling and testing of concrete for quality control will include the following:
 - 1. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.

- a. Slump: ASTM C 143; one test at point of placement for each compressive strength test.
- b. Air Content: ASTM C 231, pressure method; one test for each compressive strength test.
- c. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each set of compressive-strength test.
- d. Compression Test Specimens: ASTM C 31; one set of seven standard cylinders for each compressive-strength test, unless otherwise directed. Mold and store five cylinders for laboratory-cured test specimens, and two field-cured test specimens are required. One (1) set of test cylinders shall be made for every fifty (50) cubic yards of concrete (or fraction thereof) placed in one day.
- e. Compressive-Strength Tests: ASTM C 39; for each set two specimens will be tested at seven days, two specimens will be tested at 28 days, and one specimen will be retained in reserve for later testing if required.
- 2. When frequency of testing will provide fewer than five strength tests for a given class of concrete, testing will be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
- 3. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing in-place concrete.
- 4. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength and no individual strength test result falls between specified compressive strength by more than 500 psi.
- 5. Test results will be reported in writing to Engineer, concrete manufacturer, and Contractor within 24 hours of testing. Reports of compressive-strength tests will contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, concrete type and class, pile locations of concrete batch, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both seven-and 28-day tests.
- 6. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as sole basis for acceptance or rejection.
- 7. Additional Tests: Testing and inspecting agency will make additional tests of concrete when test results indicate concrete strengths or other requirements have not been met.

3.6 TOUCHUP PAINTING

- A. Clean field welds, splices, and abraded painted areas and field-apply paint according to SSPC-SP-3. Remove all surface contaminants by SSPC-1 solvent cleaning for 4-inches back from bare area. Use same paint and apply same number of coats as specified for shop painting.
 - 1. Apply touchup paint before driving piles to surfaces that will be immersed or inaccessible after driving. Allow for curing time of paint per manufacturer recommendation prior to immersion.

3.7 PILE AS-BUILT SURVEY

A. Contractor shall submit a drawing indicating the survey location of all piles in plan and elevation and further indicating any deviations from locations shown on the Contract Documents. The as-built survey shall be tied to the project horizontal and vertical survey points. The Drawings shall indicate the offset (deviation) dimensions the pile is from the location shown on the Contract Drawings. The survey shall indicate "as-built" pile cut off elevation. The cost of the survey is the responsibility of the Contractor.

3.8 ACCEPTABLE PILE

A. Contractor shall not remove pile driving equipment from the site until the results of all pile driving has been reviewed by the Geotechnical Engineer and the location for all piles has been surveyed and accepted by the Structural Engineer.

3.9 DISPOSAL

A. Remove withdrawn piles and cutoff sections of piles from the site and legally dispose of them off Owner's property.

PART 4 - COMPENSATION

4.1 METHOD OF PAYMENT

- A. Core Drill and Sleeve Install 14" Diameter Hole shall be paid on a per each basis. This price shall include all equipment rental, containment and collection of all demolition debris and run off from core drilling operation, and any other items necessary to complete the work.
- B. Sleeve Install 15.25" Diameter Hole shall be paid on a per each basis. This price shall include all equipment rental, pile casing, excavation, drilling, and any other items necessary to complete the work.
- C. Furnish, Handle & Drive 12.75" Dia. X 0.5" Steel Pipe Piles shall be paid on a per linear foot basis. This price shall include furnishing, handling, coating, and driving the steel pipe piles to the estimated tip elevation, cleaning out the pile and filling with concrete to 10 feet below the mudline, and constructing the concrete pile cap. Adjustment to the bid price will be by unit prices provided on the bid form.
- D. Furnish, Handle & Drive 14" Dia. X 0.5" Steel Pipe Piles shall be paid on a per linear foot basis. This price shall include furnishing, handling, coating, and driving the steel pipe piles to the estimated tip elevation, cleaning out the pile and filling with concrete to 10 feet below the mudline, and constructing the concrete pile cap. Adjustment to the bid price will be by unit prices provided on the bid form.

END OF SECTION

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SCOPE

- A. This section includes all Cast-In-Place Concrete as indicated on drawings or as specified herein.
 - 1. The Contractor shall provide all labor, materials, equipment and services reasonably incidental to furnishing and installing complete all form work, reinforcement and cast-in-place concrete as indicated on the Drawings and/or specified herein.
- B. Related Work Specified Elsewhere:
 - 1. Section 024560 "Concrete-Filled Steel Pipe Piles"
 - 2. Section 055000 "Metal Fabrication"
- C. Restrictions on placement of concrete: Concrete placement shall be coordinated with the sequence of pile driving. Do not place concrete while pile driven operations are taking place in the vicinity of the pour unless approved by the Engineer.
- D. Refer to RFP Part 1, General Description of Work and Special Provisions, Section 6.0 for description of other work restrictions.

E. Work Plan

- 1. Transportation of concrete to Pier 84 South will be restricted and must be such that is does not interfere with or disrupt PhilaPort operations. If the Contractor is utilizing the existing pier to transport and place concrete, he must spread the construction loads so the existing pier does not carry any more than 600psf.
- 2. Contractor must submit a work plan listing construction equipment, equipment set-up and bearing pressures of the equipment being imposed on the slab deck.
- 3. Submit back-up calculations for the bearing pressures.
- F. Removal of form work that is in the tidal zone of the Delaware River.
 - 1. Form work in the tidal zone must remain in place to protect the concrete during curing.
 - a. Forms to remain in place seven (7) days when the Delaware River temperature is above 40 degrees F.
 - b. Forms to remain in place 14 days when the Delaware River temperature is 40 degrees and below.
- G. The concrete placed for Pier 84 South must cure a minimum of 10 days and achieve 5000 psi 28-day design strength before any vessel may impact the fenders or mooring lines hooked to a bollard. The Contractor must provide a mix design, so the concrete achieves its 28-day design strength of 5000 psi in ten (10) days.

1.2 QUALITY ASSURANCE

A. Qualifications:

1. The Contractor shall employ a competent and acceptable foreman for all concrete work. This foreman shall be thoroughly familiar with all phases of concrete construction including materials, formwork, reinforcing, mixing, and placing and protection during the initial period of curing.

B. Testing Agency:

- 1. An inspection and testing agency, satisfactory to the Engineer, shall be employed to inspect and test all concrete as to mix, strength, and other matters pertaining thereto as directed by the Engineer and noted herein.
- 2. The duties, responsibilities and minimum requirements of the inspection and testing agency shall be in accordance with ASTM E 329.
- 3. Inspection and testing services shall be paid for by the Contractor.

C. Reference Standards:

- 1. Concrete shall conform to all provisions of the "Specifications for Structural Concrete for Buildings" (A.C.I. 301) as published by the American Concrete Institute, except as modified by the Supplemental Requirements contained herein.
- 2. Additionally, the concrete shall conform to all provisions of the latest edition of the following publications which shall be incorporated as part of these Specifications:

a.	ACI 305	Recommended Practice for Hot Weather Concreting.
b.	ACI 306	Recommended Practice for Cold Weather Concreting.
c.	ACI 315	Manual of Standard Practice for Detailing Reinforced
d.		Concrete Structures
e.	ACI 318	Building Code Requirements for Reinforced Concrete.
f.	ACI 347	Recommended Practice for Concrete Formwork.
g.	CRSI 63	Recommended Practice for Placing Reinforcing Bars.
h.	CRSI 65	Recommended Practice for Placing Bar Support.

- i. Pennsylvania State Department of Transportation Standard Specification, Latest Edition.
- j. In the case of conflict between standards, the stricter standards will apply unless previously referenced to the engineer for a written variance.
- 3. The Contractor shall furnish and have on the job site for the Engineer's use one (1) copy of each of the above publications:
- 4. ACI publications are available through the American Concrete Institute, P.O. Box 4754, Redford Station, Detroit, Michigan 48219.

D. Compliance with Standard and Industry Specifications:

1. Any material or operation specified by reference to the published specifications of a manufacturer, The American Society for Testing and Materials (ASTM), The American Concrete Institute (ACI), The American Standard Association (ASA), or other published standard, shall comply with the requirements of the standard listed. In case of a conflict between the referenced specification and the project specifications, the project specification shall govern.

- E. Install of Chemical Structural Anchors into hardened concrete.
 - 1. Prior to installation of anchors into hardened concrete, it is required that the installer receive hands-on adhesive training from Manufacturer or approved training agency. Only workers who have completed the training will be allowed to install the anchors.

1.3 SUBMITTALS

- A. General: Submit the following in accordance with the "Special Provisions" section of the RFP.
- B. Product Data: For each type of manufactured material and product indicated.
- C. Design Mixtures: For each concrete mixture.
- D. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, and grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- E. Qualification Data: For testing agency.
- F. Welding certificates.
- G. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Cementitious materials.
 - 2. Admixtures.
 - 3. Form materials and form-release agents.
 - 4. Steel reinforcement and accessories.
 - 5. Curing compounds.
 - 6. Bonding agents.
 - 7. Adhesives.
 - 8. Repair materials.
 - 9. Compression seals at expansion joints.
- H. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
 - 1. Aggregates. Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
 - 2. Concrete Compressive Strength.
- I. Shop Drawings and Product Data:
 - 1. Shop Drawings covering fabrication and setting of all reinforcing steel shall be submitted to the Engineer for approval before proceeding with the fabrication of any reinforcement. Submit Drawings in accordance with requirements described in the Special Provisions.
 - 2. Shop and Erection Drawings shall not be reprints of the Contract Drawings. They shall, in the opinion of the Engineer, be complete in all details and shall accurately indicated the location of all cast-in-place work and clearly indicate all dimensions, reinforcing details, and all appurtenances and details in conjunction

- with this work. Only Shop Drawings bearing the stamp of approval of the Engineer shall be used by the Contractor.
- a. All corrections to the shop drawings as a result of the shop drawing review process, shall be made by the Steel Fabricator at no additional cost to the Owner.
- 3. Indicate bending diagrams; assembly diagrams; splicing and laps of rods; shapes, dimensions and details of bar reinforcing and accessories. Prepare Drawings in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures, ACI 315.
- 4. Figured dimensions only shall be used; scaling drawings is not permitted. The Contractor shall verify all dimensions and be responsible for coordinating same. Any conflict in the Contract Drawings shall be referred to the Engineer for decision prior to proceeding with fabrication of the work affected.
- 5. Drawings showing the location and type of construction and control joints in beams, walls and slabs shall be submitted for review by the Engineer.
 - a. Location of construction joints and pour sequences for beams and slabs shall be submitted for review prior to placement of concrete.
- 6. All changes and additions made on resubmittals must be clearly flagged and noted. The purpose of the resubmittal must be clearly noted. The review of the resubmittal will be limited to those items causing the resubmission.
- J. Submit work plan and procedures for transporting of concrete to dock area. Include designation point from land travel distance to reach the project site.

K. Certificates:

1. The Contractor shall furnish an affidavit from the manufacturer or fabricator, certifying that the materials or products delivered to the job meets the requirements specified. However, such certification shall not relieve the Contractor from the responsibility of complying with any added requirements specified herein.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery of Concrete:

1. All concrete shall be ready mixed and transported in accordance with ASTM C 94.

B. Storage of Materials:

 Store bagged cement on platforms off ground, protect stored cement against the elements. Handle and store fine and coarse aggregates separately in manner to prevent intrusion of foreign material. Protect all reinforcement until used. Do not use any frozen materials or any hardened cement.

1.5. PUMPING CONCRETE

- A. Pumping of concrete shall conform to the requirements of ACI 304R and ACI 304.2R.
- B. Pumping shall not result in separation or loss of materials nor cause interruptions sufficient to permit loss of plasticity between successive increments. Loss of slump in pumping equipment shall not exceed 2 inches. Concrete shall not be conveyed through

pipe made of aluminum or aluminum alloy. Rapid changes in pipe sizes shall be avoided. Maximum size of course aggregate shall be limited to 33% of the diameter of the pipe. Maximum size of well-rounded aggregate shall be limited to 40% of the pipe diameter. Samples for testing shall be taken at both the point of delivery to the pump and at the discharge end.

1.6 JOB CONDITION

A. Environmental Requirements:

- 1. Concrete placed in hot weather shall be given extra protection against moisture loss by keeping all exposed concrete surfaces constantly wet as specified and by keeping the forms continuously wet for the entire curing period.
- 2. Hot weather concreting: ACI 305. Concrete temperature at placement shall not exceed 90 degrees.
- 3. Cold weather concreting: ACI 306. Concrete temperature at placement shall not be below 50 degrees. Ambient temperature at time of placement shall be at least 55 degrees.

B. Protection:

- 1. All freshly placed concrete shall be protected from the elements and from all defacement due to construction operations.
- 2. No aluminum shall come in contact with concrete at any time during batching, transporting, placing, finishing or curing operations.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cement:

- 1. Cement shall be Portland Gray Cement conforming to ASTM C 150 Type II or IIA, unless otherwise approved by the Structural Engineer. Only one brand of any one type shall be used for exposed surfaces.
- 2. The blended cement shall consist of a mixture of ASTM C 150 Type II cement and ground iron blast-furnace slag. Type I, Type III, and Type V cements shall not be accepted.
- 3. Ground Iron Blast-Furnace Slag: ASTM C 989, Grade 120. Testing shall be performed no more than six months prior to submittal date.
- 4. The ground iron blast-furnace slag shall comprise 40% by weight of total cementitious material, as specified for each application.
- 5. For exposed concrete, use one manufacturer for each type of cement and ground slag.
- 6. The tricalcium aluminate content of the blended cement shall be less than 8% by weight.
- 7. Use materials that result in concrete with maximum water-soluble chloride-ion content of 0.06 percent by weight of cementitious material.

B. Aggregates:

1. Fine aggregate shall be clean, hard, natural sand conforming to ASTM C 33.

- 2. Coarse aggregate shall be hard, durable, uncoated, crushed stone or gravel conforming to ASTM C 33. Maximum size of aggregate shall not exceed 3/4 inch.
- 3. Aggregates shall not contain any substance that may be deleteriously reactive with the alkalis in the cement in an amount sufficient to cause excessive expansion of the concrete.
- 4. Aggregate, when subjected to five cycles of the soundness test in accordance with ASTM C 88, shall not have a loss greater than 10% when sodium sulfate is used.
- For all aggregate sources, submit ASTM C1260 (or 12-month C1293, as 5. stipulated below) test results dated within the last 6 months. Aggregates shall show expansions less than 0.10% at 16 days when tested in accordance with ASTM C 1260. Aggregate suppliers certified by and listed in the MDOT's Qualified Materials Database are preapproved and require only submittal of MDOT test results, current ASTM C1260 mortar bar (or C1293 prism) test results, and certification of the stipulated gradation for each mix design. Aggregates demonstrating expansions in excess of this limit shall not be accepted, regardless of inclusion in the MDOT's Qualified Materials Database, unless 12-month C1293 expansions yield an innocuous result. These C1293 prisms shall not include pozzolans or slag in the mix and results shall be dated within the last 6 months. At the Engineer's discretion, consideration may be given for aggregates demonstrating non-innocuous C1260 results if successfully mitigated for aggregate reactivity in accordance with C1260 or C1567 in nonstructural or non-marine applications only and as stipulated herein.
- 6. Furnish aggregates for exposed concrete surfaces from one source.
- 7. Uniformity of grading and moisture content shall be obtained by methods recommended in ACI 304.

C. Admixtures:

- 1. Calcium Chloride will not be permitted as an admixture. All admixtures will be subject to approval of the Engineer.
- 2. Admixture for air entrainment shall conform to ASTM C 260 and shall be "AER" manufactured by SIKA Chemical Corporation, "MBVR" manufactured by Master Builders or approved equivalent.
- 3. Densifying/Water Reducing Admixtures shall conform to ASTM C 494, latest edition, and shall be Plastiment manufactured by SIKA Chemical Corporation, Pozzolith manufactured by Master Builders or approved equivalent.
- 4. High Range Water Reducing (Superplasticizer): ASTM C 494, Type F or G. The admixture shall contain no chlorides, amines, sugar, urea, foaming agents, or air entraining agents and shall meet the requirements of AASHTO M194.
- 5. Retarding: ASTM C 494, Type D
- 6. Water Reducing: ASTM C 494, Type A.
- 7. Corrosion Inhibitor: admixture shall conform to ASTM C 494, latest edition and shall be either Rheocrate 222+ as manufactured by Master Builders or Hycrete X1000 as manufactured by Hycrete, Inc. or approved equivalent.

D. Water:

1. Water shall be drinkable, clean and free of oil, acid, salt, alkali, vegetable matter or other deleterious substance.

E. Metal Reinforcement:

- 1. All reinforcing steel shall be black bar in accordance to ASTM A 615, Grade 60. Bars shall be free of loose scale, rust or other coatings that will reduce bond.
- 2. Epoxy-coated Reinforcing Bars: ASTM A 775, Grade 60.
- 3. Reinforcing bars indicated for welding shall conform to ASTM A706, Grade 60.
- 4. All Thread Rebar shall meet the requirements of ASTM A-615 with yield stress of 75 KSI. Provide Skyline All-Thread Rebar and accessories or approved equivalent.
 - a. Provide all bearing plates, coupler and nuts for the All-Thread Rebar.
- 5. Welded wire fabric shall be wire mesh conforming to ASTM A 185.

F. Accessories:

1. Include all spacers, chairs, bolsters, ties, other devices necessary for properly placing, spacing, supporting and fastening reinforcement in place. Metal accessories shall be galvanized after fabrication or plastic protected where legs will be exposed in finished concrete surfaces. Accessories shall conform to requirements of The Concrete Reinforcing Steel Institute "Manual of Standard Practice for Reinforced Concrete Construction."

G. Forms:

- 1. For Concrete Exposed to View: Use plywood with DFPA stamp of "B-B Plyform." Plyform shall be 5/8" thick for supports 12" on center maximum or 3/4" thick for supports 16" on center maximum. Use in as large sheets as practical to keep joints to a minimum.
- 2. For Concrete Not Exposed to View: Clean, straight lumber, plywood or metal.
- 3. Design of all form work, support of, ties etc. shall be the responsibility of the Contractor and falls under his means and methods of construction. All form work shall be designed and reviewed by a professional Structural Engineer registered in the State of Pennsylvania. The Engineer reserves the right and upon his request to have Shop Drawings and back-up calculations signed, sealed and submitted for his review. Shop drawings and calculations must be sealed by a registered engineer in the State of Pennsylvania.
- 4. Provide all form work with lateral support to resist lateral movement during placement of concrete.
- 5. Form ties used for exposed concrete surfaces. Ties shall be adjustable in length as to permit complete tightening of forms and of such type as to leave no metal closer than 1-1/2" to the surface. Ties shall be factory fabricated, removable or snap-off ties that will not allow form deflection and will not spall concrete upon removal, fitted with devices that will leave holes in the concrete surface not less than 1/2 inch or more than one inch in diameter and of depth not greater than diameter at the exposed surface. Use "Tyscrus" manufactured by Richmond Screw Anchor, or equivalent.
- 6. Form Oil shall be colorless, non-staining, Sinclair No. 1 form oil, or equivalent. Use for exposed work.

H. Joints:

- 1. Expansion joint material shall be Dylite as manufactured by Cooper Scorbord of Dow Chemical Company and shall conform to ASTM D-1752 Type II.
- I. Non-Shrink Grout: Grout shall be high strength, non-shrink and nonmetallic.

- 1. CRD C-588, factory pre-mixed non-metallic grout, subject to compliance with requirements. Provide one of the following:
 - a. "Masterflow 713"; Master Builders
 - b. "Sonogrout"; Sonneborn-Contech
 - c. "Euco-NS"; Euclid Chemical Co.
 - d. "Five Star Grout"; U.S. Grout Co.
 - e. "Duragrout"; L & M Const. Chemical Co.
 - f. "Supreme"; Gifford Hill

J. Curing Compound:

- 1. Curing and sealing compounds shall conform to ASTM C309, Type I, Class A.
- 2. The curing and sealing compound must be compatible with subsequent finishes. Adhere to manufacturer's recommendations.
- 3. Use the following or equivalent products:
 - a. "Kure-N-Seal" manufactured by Sonneborne-Contech, Building Products Division.
 - b. "Masterkure" manufactured by Master Builders.
- 4. Location: All concrete prior to and immediately after removal of forms.
- K. Bonding Agent: Polyvinyl acetate or acrylic base.
 - 1. Bonding agent shall be two components 100% solid epoxy resin system designed to bond new concrete to old concrete. Bonding agent shall meet the requirements of ASTM C-881-02, Type II, Grade 2, Class "C" and "F".
 - 2. Available products or approved equivalent:
 - a. Simpson Strong-tie FX-752 Hydro-Ester All Purpose Bonding Agent.
 - b. Simpson Strong-tie FX-792 LP Long Pot Life Epoxy Bonding Agent.
- L. Chemical Structural Anchors: Where noted on drawings, concrete reinforcement and anchor bolts are to be installed in harden concrete.
 - 1. Vertical and horizontal drilled holes: Provide HIT-RE500-V3 Epoxy adhesive Anchoring System as manufactured by Hilti or approved equivalent.
 - 2. Anchor Rods and Bolts: Unless otherwise noted, provide standard HAS-E Rods or approved equivalent.
 - 3. Anchors should only be installed by workers who have completed the training program

2.2 MIXES

A. Proportions:

- 1. Proportioning shall be by the procedures described in ACI 301, Chapter 3 and conform to ACI 211.
- 2. Proportions shall provide proper strength, placability, and durability.
- 3. All concrete shall receive a densifying / water reducer admixture.
- 4. Incorporate admixtures as hereinbefore specified and according to manufacturer's instructions.
- 5. All concrete shall contain 5% to 7% entrained air as indicated in Chapter 3, ACI 301. Use an air entraining admixture and normal Portland cement or an air entraining Portland cement as hereinbefore specified. Measure air content at point of discharge at job site.

- 6. Concrete exposed shall be made with not more than 6 gallons of water per bag of cement, including the free moisture in the aggregates and/or the corrosion-inhibitor.
- 7. All concrete shall be provided with a corrosion-inhibitor at the rate of 3 gallons per cu. yd.
- 8. Slump: Chapter 3, ACI 301.
 - a. Proportion and design mixes to result in concrete slump at point of placement as follows:
 - 1) Ramps, slabs and sloping surfaces: Not more than 3".
 - 2) All other concrete: Not less than 1" and not more than 3".
 - 3) Concrete containing HRWR admixture (super plasticizer): Not more than 8" after addition of HRWR to verified 2" 3" slump concrete.
 - b. Dry Density:
 - 1) Structural Normal Weight Concrete: 148 lbs./c.f. maximum.
- B. Design Strengths:
 - 1. Minimum 28 days compressive strength shall be as follows:
 - a. All concrete, unless otherwise noted, f'c = 5000 psi.

2.3 PRODUCTION OF CONCRETE

- A. Compressive Strengths: Minimum concrete compressive strengths are as follows:
 - 1. General Concrete Mix: 5000 psi; 28-day compressive strength, 635 lbs. cement per c.yd. minimum; W/C ratio 0.35 maximum.
 - a. All concrete shall be provided with Portland Blast Furnace Slag Cement. Provide concrete with 40% granulated blast furnace slag cement volume to total volume of cementitious materials.
 - b. Provide corrosion-inhibitor for the concrete as noted under paragraph mixes 2.2.A.7.
 - c. The amount of water provided in the corrosion inhibitor admixture shall be compensated for in the mix design. Water cement ratio after the corrosion inhibitor is added shall not exceed .35.
 - d. Maximum Coarse Aggregate Size = $\frac{3}{4}$ ".
 - 2. Pier 84 South Deck Concrete: 5000 psi; 28-day compressive strength, 635 lbs. cement per c.y. minimum; W/C ratio 0.35 maximum.
 - a. All concrete shall be provided with Portland Blast Furnace Slag Cement. Provide concrete with 40% granulated blast furnace slag cement volume to total volume of cementitious materials.
 - b. Provide corrosion-inhibitor for the concrete as noted under paragraph mixes 2.2.A.7.
 - c. The amount of water provided in the corrosion inhibitor admixture shall be compensated for in the mix design. Water cement ratio after the corrosion inhibitor is added shall not exceed .35.
 - d. Maximum Coarse Aggregate Size = 3/8".
- B. Mixing:
 - 1. Mixing shall be in accordance with Chapter 7, ACI 301.

- 2. After introduction of water to the cement and aggregates, concrete, which has been mixed longer than 1-1/2 hours or 300 revolutions, shall not be placed. In no case shall concrete be used that has been mixed so long that the initial set of the concrete shall occur sooner than 15 minutes after the placement.
 - a. Truck mixing: Trucks must be equipped with water gauges and revolution counters. Defer addition of water to latest possible time.
 When temperatures or other conditions cause a deviation in slump or setting characteristics, provide approved measures to maintain normal conditions.
 - b. Concrete temperature while in the mixer shall not exceed 90 degrees F and at the point of placement.

C. Ready Mixed Concrete:

- 1. Ready mixed concrete shall be mixed and transported in accordance with ASTM C-94.
- 2. Concrete producer shall furnish duplicate delivery tickets with each load of concrete. They shall give producers name, delivery date, time dispatched, time delivered, truck number, number and type of admixture, proportioning of mix and water content including aggregate moisture.
- D. Responsibility: The Contractor is solely responsible for creating and paying for all concrete design mixes fully workable, of required strengths that produce finishes acceptable to the Engineer. All mixes shall be purchased from the same supplier throughout the work. Contractor shall assure adequate supply of materials and delivery of concrete. Contractor will wash out trucks at a PhilaPort designated area. Contractor is responsible for the cost of any trucks turned away due to work execution delays and scheduling.

2.4 FABRICATION

- A. Reinforcing Steel:
 - 1. Reinforcing steel shall be detailed and fabricated in accordance with ACI 315.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Formwork shall be in accordance with Chapter 4, ACI 301.
- B. Reinforcement shall be in accordance with Chapter 5, ACI 301.
 - 1. Minimum coverage shall be as follows:
 - a. Concrete exposed to the Delaware River water and/or poured against earth 3",
 - b. Other locations -2".
- C. Joints and embedded items shall be in accordance with Chapter 6, ACI 301.
 - 1. At control and construction joints, erect a temporary wood bulkhead so that the jointing will follow a vertical plane at right angles with the direction of the main

reinforcement. To this bulkhead fasten a wood strip 2" thick and of width equal to one-third the depth of the concrete slab to form a tongue and grooved joint.

- a. Construction joint details for pile caps, beams and control joints are noted on Drawings.
- D. Concrete shall be placed in accordance with Chapter 8, ACI 301.
 - 1. Do not place concrete until forms and reinforcement are inspected by the Owner's on-site representative. Contractor shall notify both Engineer and Owner's on-site representative of all concrete pours at least 24 hours prior to pouring concrete.
- E. No aluminum inserts or aluminum conduit will be permitted to be encased by concrete.
- F. Finishing of formed surfaces shall be in accordance with Chapter 10 or ACI 301.
 - 1. Provide smooth rubbed finish at all concrete exposed to view.
 - 2. Provide rough or board form finish at concrete not exposed to view.
 - 3. Clean exposed concrete. Remove blemishes, form oil stain, and other discolorations. Clean surfaces by brushing with a mild detergent and water.
 - 4. Exposed formed surfaces shall receive sealant unless otherwise noted.
- G. Finishing of slabs shall be in accordance with Chapter 11 of ACI 301.
 - 1. Concrete shall be monolithically finished. No dry cement or mixtures of dry cement and sand shall be sprinkled directly on the surface of the wearing course to absorb moisture or to stiffen the mix. Steel trowel finish, where specified, shall be done after sheen has disappeared from the surface. Keep the concrete moist during the first 48 hours after placing. All high places, bumps, and other irregularities shall be ground down, and low places filled up to leave a level and smooth surface.
 - 2. Slabs shall have a sufficient pitch to shed water and shall have a light broom finish after steel troweling.
- H. Curing and Protection shall be in accordance with Chapter 12, ACI 301 and ACI 308 unless otherwise specified.
 - 1. Wet / Moist Curing: Remove water without erosion or damage to the structure.
 - Ponding or Immersion: Continually immerse the concrete throughout the curing period. Water shall not be more than 20 degrees F less than the temperature of the concrete. For temperatures between 40- and 50-degrees F, increase the curing period by 50%.
 - b. Fog Spraying or Sprinkling: Apply water uniformly and continuously throughout the curing period. For temperatures between 40- and 50-degrees F, increase the curing period by 50%.
 - c. Pervious Sheeting: Completely cover surface and edges of the concrete with two thicknesses of wet sheeting. Overlap sheeting 6 inches over adjacent sheeting. Sheeting shall be at least as long as the width of the surface to be cured. During application, do not drag the sheeting over the finished concrete or over sheeting already placed. Wet sheeting thoroughly and keep continuously wet throughout the curing period.
 - d. Protection of Treated Surfaces: Prohibit pedestrian and vehicular traffic and other sources of abrasion at least 72 hours

- 2. High air content and low water-to-cementitious ratio used in corrosion inhibitor concrete will result in less bleed water than in normal concrete. To reduce plastic or drying shrinkage cracks, comply with ACI 302.1R, ACI 308, and ACI 305R.
 - a. Use wet / moist curing for corrosion inhibitor treated concrete. When weather conditions are dry and windy, continue fogging above surface of concrete after the finishing operation until prewetted burlap can be placed over the flatwork surface. Use prewetted burlap to cover all flatwork and keep wet for a minimum of seven days or until the time necessary to attain 85% of the specified compressive strength, as recommended by ACI 308 Section 3.1.3.
- 3. Membrane Curing Compound: Do not use membrane curing compounds on surfaces exposed to public view, corrosion inhibitor treated concrete, on any surface to be painted, where coverings are to be bonded to the concrete, or on concrete to which other concrete is to be bonded.
 - a. Apply curing compound at the rate of 300 square feet per gallon.
 - b. Apply compound with lamb's wool applicator not later than one-half
 - c. hour after concrete finishing has been completed. Apply in two coats, with second coat at right angles to the first.
 - d. Apply in strict accordance with the manufacturer's instructions.
 - e. Apply compound undiluted directly from labeled containers.
 - f. The curing compound shall in no way adversely affect the installation of any finish materials.
 - g. In lieu of compound curing during cold weather concreting, the Contractor shall cover the slab, immediately after the surface work is completed with a 4-mil black polyethylene film, lapped 6 inches at edges and weighted down to prevent movement. This film shall be covered with a 4-inch minimum thickness of straw or other approved insulating material, which in turn shall be covered with a weighted polyethylene film, tarp or other approved protective covering. This covering shall remain in place a minimum of seven (7) days.
- 4. Surface Curing Application: Apply liquid-type combination curing compound as soon as new concrete is hard enough to support applicator's weight and as soon after final troweling as possible, in such a manner as to prevent marring or damaging troweled surface. Apply in strict accordance with the manufacturer's recommendations, and with the initial application done under the direct supervision of the manufacturer's representative.
- 5. Surface Sealing Compound Application: The sealing application should be applied when all trades are completed, and structure is ready for occupancy. Surface must be free of any dust, dirt, and other foreign matter. Use power tools and/or strippers to remove any incompatible sealers or coatings. Cleanse as required. Apply two coats, both at full strength to seal and dust-proof the concrete. Allow first coat to dry overnight prior to application of second coat.
- 6. Curing Periods: ACI 301 except 10 days for retaining walls or slabs on grade. Begin curing immediately after placement. Protect concrete from premature drying, excessively hot temperatures, and mechanical injury; and maintain minimal moisture

loss at a relatively constant temperature for the period necessary for hydration of the cement and hardening of the concrete. The materials and methods of curing shall be subject to approval by the Engineer.

- I. Repair of surface defects shall be in accordance with Chapter 9, ACI 301.
 - 1. Patching Defective Areas:
 - a. Repair and patch defective areas with repair mortar such as Sikatop 122 or InnerBond Rapid Patch immediately after removal of forms, when acceptable to the Engineer.
 - b. Honeycomb, rock pockets, voids over 1/4" in any dimension, and holes left by tie rods and bolts, down to solid concrete, but, in no case to a depth of less than 1". Make edges of cuts perpendicular to the concrete surface. Thoroughly clean, dampen with water, and install repair mortar in strict accordance with the manufacturer's specifications.
 - 2. For exposed-to-view surfaces, blend white Portland cement and standard Portland cement so that, when dry, patching mortar will match color surrounding. Provide test areas at inconspicuous location to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.
 - 3. Repair of Formed Surfaces: Remove and replace concrete having defective surfaces if defects cannot be repaired to the satisfaction of the Engineer. Surface defects, as such, include air bubbles, honeycomb, rock pockets; fins and other projections on surface; and stains and other discolorations that cannot be removed by cleaning. Flush out form tie holes, fill with dry pack mortar, or precast cement cone plugs secured in place with bonding agent.
 - 4. Repair concealed formed surfaces, where possible, that contain defects that affect the durability of concrete. If defects cannot be repaired, remove and replace concrete.
 - 5. Repair of Unformed Surfaces: Test unformed surfaces, such as monolithic slabs, for smoothness, and verify surface plans to tolerances specified for each surface and finish. Correct low and high areas as herein specified. Test unformed surfaces sloped to drain for trueness of slope, in addition to smoothness, using a template having required slope.
 - 6. Repair finished unformed surfaces that contain defects, which affect durability of concrete. Surface defects, as such, including crazing, cracks in excess of 0.01" wide or which penetrate to reinforcement or completely through non-reinforced sections, regardless of width, spalling, pop-outs, honeycomb, rock pockets, and other objectionable conditions.
 - 7. Correct high areas in unformed surfaces by grinding, after concrete has cured at least fourteen days.
 - 8. Correct low areas in unformed surfaces during, or immediately after completion of surface finishing operations by cutting out low areas and replacing with fresh concrete. Finish repaired areas to blend into adjacent concrete. Proprietary patching compounds may be used when acceptable to the Engineer.
 - 9. Repair defective areas, except random cracks and single holes not exceeding 1" diameter, by cutting out and replacing with fresh concrete. Remove defective areas to sound concrete with clean, square cuts, and expose reinforcing steel with at least 1/4" clearance all around. Dampen concrete surface sin contact with patching concrete and apply bonding compound. Mix patching concrete of same materials to provide concrete of same type or class as original concrete.

- Place, compact, and finish to blend with adjacent finished concrete. Cure in the same manner as adjacent concrete.
- 10. Repair isolated random cracks and single holes not over 1" in diameter by drypack method. Groove top of cracks and cut-out holes to sound concrete and clean of dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding compound. Mix dry-pack, consisting of one part Portland cement to 2-1/2 parts fine aggregate passing a No. 16 mesh sieve, using only enough water as required for handling and placing. Place dry-pack after bonding compound has dried. Compact dry-pack mixture in place and finish to match adjacent concrete. Keep patched area continuously moist for not less than 72 hours.
- 11. Perform structural repairs with prior approval of the Engineer for method and procedure, using specified epoxy adhesive mortar.
- 12. Repair methods not specified above may be used, subject to acceptance of the Engineer.
- J. Installation of Chemical Structural Anchors:
 - 1. Follow manufacturer's installation instructions, guidelines and recommendations.

3.2 FIELD QUALITY CONTROL

- A. Contractor will be responsible to hire a third-party inspection agency to perform material testing and sampling of the concrete.
- B. Inspection:
 - 1. When all the provisions of this section are met and the Contractor is ready to place concrete, the Owner's on-site representative shall be notified. No concrete shall be deposited before the Owner's on-site representative has reviewed the reinforcing and given permission to proceed. Such inspection and permission to proceed shall in no way release the Contractor of the responsibility for proper placement of reinforcing and placement of concrete, and the responsibility for adherence to the requirements of the Contract Documents.
 - 2. Contractor shall notify the Owner's on-site representative and Inspection Agency of concrete pour at least 24 hours in advance.
 - 3. The Contractor shall provide unobstructed access to work areas for the inspector/technician, furnish a wheelbarrow for concrete sampling and a suitable storage box for initial curing of cylinders, as specified in ASTM C31. He shall also make running water available at the testing site.

C. Sampling:

- 1. Contractor shall furnish concrete samples for testing.
- 2. Samples will be taken by the testing agency in accordance with ASTM C 172 and cylinders molded in accordance with ASTM C31.
- 3. A minimum of seven test cylinders shall be made for every fifty (50) cubic yards of concrete (or fraction thereof) placed in one day for 5000 psi concrete.
- 4. Test cylinders will be cured in accordance with ASTM C31.

D. Tests:

1. All tests shall be performed by the Inspection Agency or their representative.

- 2. Slump tests in accordance with ASTM C143. Make tests periodically, when cylinders are made and when a change in consistency of concrete is noted. Unless otherwise noted the slump shall be 1" minimum and 3" minimum.
- 3. Test for air content in accordance with ASTM C231, C173 or C138.
- 4. Compression and strength tests: Each test will consist of seven (7) standard 6"x12" cylinders; 1 cylinder on reserve and 2 cylinders to be tested at the age of 7 days, 2 cylinders at the age of 28 days, 2 field cure cylinders tested as directed by the Engineer. Specimens made to check the adequacy of the design for strength of concrete or as a basis for acceptance of concrete will be made and laboratory cured in accordance with ASTM C31. Additional tests of specimens cured entirely under field conditions will be utilized to check the adequacy of curing and protection of the concrete as directed. Make strength tests in accordance with ASTM C39.
- 5. The average of five consecutive strength tests shall be equal to or greater than the specified strength, and not more than one test in ten shall have an average value less than 90% of the specified value. When the average of compressive tests for 5 consecutive cylinders falls below the specified strength adjust the design mix and water content to produce the specified strength or concrete that is subsequently place. In addition, the Engineer may order additional curing for that portion of the structure where the questionable concrete has been placed. In the event that such additional curing does not give the strength required as determined by load tests made in accordance with ACI 318 or cored cylinder tests, the Engineer may order defective parts removed and replaced, or reinforced, all at expense of Contractor.
- 6. The expense of any and all re-inspection and/or retesting required due to failure of concrete to meet requirements shall be borne by the Contractor.

E. Reports:

- 1. Test Reports shall be completed by the Inspection/Testing Agency and shall include the following:
 - a. Exact mix, including quantities of admixture, etc.
 - b. Date of pour.
 - c. Exact location of pour in building.
 - d. Slump.
 - e. Truck number.
 - f. Type of break.
 - g. Air Entrainment.
 - h. Water content including aggregate moisture.
- 2. Owner's on-site representative will provide field inspection reports, which include the following:
 - a. Extent of reinforcement and formwork inspected.
 - b. Date of inspection.
 - c. Any problems encountered or instructions given to the Contractor.
- F. Inspection for drilled in reinforcement/anchor bolts in hardened concrete:
 - 1. The reinforcement or anchor bolts that are installed in hardened concrete, the Owner's on-site representative shall inspect the drilled hole.
 - a. Inspect the hole depth, size and that the holes are cleaned per manufacturer's recommendations.

- b. Verify that the rods and bolts are pushed to the bottom of the holes and rotated to assure total wetting.
- c. Confirm that the proper bolt is being used by the manufacturer's marking on the bolt and or color codes.

END OF SECTION

SECTION 05100

METAL FABRICATIONS

PART 1 – GENERAL

1.1 SCOPE

- A. The work covered by this Section includes the furnishing of all material as noted herein and equipment and the performing of all labor to complete fabrication and installation of structural steel and miscellaneous metal as shown on the Contract Drawings and as herein specified or directed by the Engineer.
- B. This work shall include but is not limited to:
 - 1. Furnish all labor, equipment, and services necessary for and reasonably incidental to furnishing and erecting all structural and miscellaneous steel as indicated on the drawings and/or as specified herein.
 - a. The work under this section shall include, but is not limited to the following: embedded plates, anchor bolts, bearing plates, beams, struts, channels, angles, bolts, welding, hot dipped galvanize or protective paint coatings, together with such other required items as are called for under the Code of Standard Practice of the American Institute of Steel Construction, work as shown on the drawings and/or called for in the specifications. All miscellaneous steel and hardware shall be provided by the Contractor.
 - b. All fabrication of members and pieces to fit shall be the responsibility of the Contractor.
 - c. All steel unless otherwise noted shall be provided with a hot dipped galvanize coating for application in a marine-industrial environment.

C. Related Work

- 1. Section 033000 "Cast-in-Place Concrete"
- 2. Section 099700 "Coating of Steel Pipe Piling and Steel Framing"

D. Work Area and Restrictions

- 1. Delivery of all work and erection of steel framing for the repair of Pier 84 South, unless otherwise approved by the Owner, shall be performed from work boats, barges, etc., out on the Delaware River. Pier 84 South operations shall not be interrupted or interfered with.
- 2. Refer also to RFP Part 1, General Description of the Work and Special Provisions, Section 6.0 for Description of Work Restrictions.

E. Beam Fabrications

- 1. Beams framing between pile bents shall be fabricated after a pile bents As-Built Survey is completed, submitted and reviewed by the Engineer. Beams shall be fabricated to the as-built dimensions.
- 2. Contractor shall provide the steel detailer a copy of the As-Built Survey.

1.2 SUBMITTALS

A. Submit the following in accordance with the Special Provisions section of the RFP.

B. Shop Drawings and Product Data

- 1. Shop Drawings for all structural and miscellaneous work included in this section shall be prepared by the steel fabricator and copies submitted to the Engineer for approval. Obtain approval of drawings prior to fabricating any material or proceeding with any of the work.
- 2. Shop Drawings shall include all information necessary for the fabrication of the component parts of the structure. They shall indicate size and weight of members, type and location of shop, field, and erection connections, the type, size and extent of all welds. The welding symbols used on the shop drawings shall be as adopted by the American Welding Society.
- 3. The approval of shop drawings will be for size and arrangement of principal and auxiliary members and strength of connections. Any errors in dimensions shown on the shop drawings will be the responsibility of the Contractor.
- 4. Shop and erection drawings shall not be reprints of the Contract Drawings.
- 5. Figured dimensions only shall be used. Scaling drawings is not permitted. The Contractor shall verify all dimensions and be responsible for coordinating same. All dimensions are not shown on the structural drawings. The Contractor shall use the complete set of contract drawings to determine all dimensions and elevations. Any conflict in the Contract Drawings shall be referred to the Engineer for decision prior to proceeding with fabrication of the work affected.
- a. Deck beams framing between pile bents shall be fabricated to As-Built Survey dimensions locating the center lines of the pile bents.
- 6. Shop Drawings shall show all holes for the attachment and passage of the work of all sections of these Specifications, and, show such reinforcing of any affected members as may be necessary to maintain the members design strength, as shown on the drawings or as approved by the Engineer.
- 7. Shop Drawings shall show the details of all connections.
- 8. Submit setting plans for anchor bolts. Furnish templates as required for proper installation of anchor bolts. Furnish instructions for setting anchor bolts.
- 9. Welded connections shall be completed as detailed on the shop drawings. Field welds shall be shown on the Erection Plans. Size, length and type of all welds must be shown on the drawings. In general, welded connections shall be the recommended standard details as shown in the Steel Construction Manual of the American Institute of Steel Construction.
- 10. Submit metal grating shop drawings indicating metal grating, size, connection, detail, etc.
- 11. All corrections to the shop drawings as a result of the shop drawing review process shall be made by the steel fabricator at no additional cost to the Owner.
- 12. All changes and additions made on re-submittals must be clearly flagged and noted. The purpose of the re-submittals must be clearly noted on the letter of transmittal. The review of the re-submittal will be limited to those items causing the resubmission.

C. Statements

1. Welding procedure qualifications.

- D. Welding Procedures and Qualifications
 - 1. Specifications and Test Results: Submit copies of the welding procedure specifications and procedure qualification test results for each type of welding required. Approval of any procedure does not relieve the Contractor of the responsibility for producing acceptable welds.
 - 2. Certification: Before assigning welders or welding operators to the work, submit their names, together with certification that each individual is performance qualified as specified. Do not start welding work prior to procedure qualification. The certification shall state the type of welding and positions for which each is qualified, the code and procedure under which each is qualified, date qualified, and the firm and individual certifying the qualification tests.

E. Test Reports

- 1. Furnish certified Mill Test reports
- 2. Shop and Field Inspection Reports

F. Certificates

- 1. Structural carbon steel
- G. Certifications, test procedures, and other submittals shall show the appropriate ASTM test(s) for each material.

H. Records

1. Weld Identifications: Submit a list of the welder's names and symbol for each welder. To identify welds, submit written records indicating the location of welds made by each welder or welding operator.

1.3 QUALIFICATION OF WELDERS

A. Qualify welders in accordance with AWS D1.1 using procedures, materials, and equipment of the type required for the work.

1.4 QUALITY ASSURANCE

- A. Procedures: Develop and qualify procedures for welding metals included in the work. Do not start welding until welding procedures, welders, and welding operators have been qualified. Perform qualification testing by a testing laboratory approved by the Engineer. Notify the Engineer at least 24 hours in advance of the time and place of the tests. When practicable, perform the qualification tests at or near the work site. Maintain current records of the test results obtained in welding procedure, welding operator/welder performance qualifications, and nondestructive examination (NDE) procedures. These records shall be readily available at the site for examination by the Engineer. Qualify the procedures for making transition welds between different materials or between plates or pipes of different wall thicknesses. The choice of welding process shall be the responsibility of the Contractor.
- B. Previous Qualifications: Welders holding current Pennsylvania DOT welder certification will be accepted for the work without requalification testing. Welding

procedures, welders, and welding operators previously qualified by other testing may be accepted for the work without requalification provided that the following conditions are fulfilled:

- 1. Copies of welding procedures, procedures qualification test records, and welder and welding operator performance qualification test records are submitted and approved in accordance with the paragraph entitled "Submittals".
- 2. Testing was performed by an approved testing laboratory or technical consultant or by the Contractor's approved quality control organization. The welding procedures, welders, and welding operators were qualified in accordance with AWS D1.1, and base materials, filler materials, electrodes, equipment, and processes conformed to the applicable requirements of this specification.
- 3. The requirements of paragraph entitled "Welder and Welding Operator Performance Qualification for renewal of qualification were met, and records showing name of employer and period of employment using the process for which qualified are submitted as evidence of conformance.
- C. Performance: The Contractor shall be responsible for the quality of joint preparation, welding, and examination. Clearly identify and record materials used in the welding operations. The examination and testing defined in this specification area minimum requirements. Provide additional examination and testing as necessary to achieve the quality required.
 - 1. Welding Procedures Qualification: Qualification of the welding procedures for each group of materials to be welded is required as indicated in AWS D1.1. Record in detail and qualify the "Welding Procedure Specification" for every welding procedure proposed. Qualification for each welding procedure shall conform to the requirements of AWS Standards and to this specification. The welding procedures shall specify end preparation for weld, including cleaning, alignments, and root openings. Preheat, interpass temperature control, and post heat treatment of welds shall be as required by AWS, unless otherwise indicated or specified. Welding procedure qualifications shall be identified individually and referenced on the shop drawings or suitably keyed to the contract drawings.
 - 2. Welder and Welding Operator Performance Qualification: Qualify each welder and welding operator assigned to work covered by this specification by performance tests using equipment, positions, procedures, base metals, and electrodes or bare filler wires from the same specification, classification, or group number that will be encountered on his assignment. Welders or welding operators who make acceptable procedure qualification tests will be considered performance-qualified for the welding procedure used. Determine performance qualification in accordance with AWS D1.1 and as specified.
 - 3. Renewal of Qualification: Requalification of a welder or welding operator shall be required under one or any combination of the following conditions:
 - a. When a welder or welding operator has not used the specific welding process for a period of three (3) months. The period may be extended to six (6) months if the welder has been employed on another welding process.
 - b. There is specific reason to question the welder's ability to make welds that will meet the requirements of the specifications.
 - c. The welder or welding operator was qualified by an employer other than those firms performing work under this contract and a qualification test has not been taken within the preceding 12 months. Renewal of qualification

under this condition need be made on only a single test joint of any thickness, position, or material to reestablish qualification for any thickness, position, or material for which the welder or welding operator had qualified previously.

- 4. Qualification of Inspection and Nondestructive Examination (NDE) Personnel: Qualify Inspection and nondestructive examination personnel in accordance with the following requirements
 - a. Inspector Certification: Qualify welding inspectors in accordance with AWS OC1.
 - b. NDE Personnel Certification Procedures: Certify NDE personnel and establish a written procedure for the control and administration of NDE personnel training, examination, and certification. Base procedures on appropriate specific and general guidelines of training and experience recommended by ASNT SNT-TC-1A, Supplement C-Ultrasonic.
- D. Testing Agency: Owner's on-site representative will perform visual welding and field quality control inspection.
 - 1. Contractor shall hire and be responsible for the cost to perform third party inspection of non-destructive testing of welding, as noted under 3.10 "Field Quality Control."

1.5 DELIVERY, STORAGE, AND PROTECTION

- A. Protect from corrosion, deformation, and other types of damage. Store items in an enclosed area free from contact with soil and weather. Remove and replace damaged items with new items.
- B. Weld Material: Deliver filler metals, electrodes, fluxes and other welding materials to the site in manufacturer's original packages and store in a dry space until used. Label and design packages properly to give maximum protection from moisture and to assure safe handling.

1.6 ENVIRONMENTAL

A. Do not perform welding when the quality of the completed weld could be impaired by the prevailing work or weather conditions. The Engineer will determine when the weather or working conditions are unsuitable for welding.

1.7 SAFETY

A. All safety railing, ladders, etc. shall be detailed and fabricated in accordance with OSHA guidelines.

1.8 HOT WORK RESTRICTIONS (N/A)

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Anchor Bolts, Nuts and Washers
 - 1. Anchor bolts shall conform to ASTM F 1554 Grade 36, unless otherwise noted on drawings. Where exposed, shall be of the same material, color, and finish as the metal to which applied.
 - a. Nuts shall conform to ASTM A 563, Grade DH.
 - b. Washers shall conform to ASTM A 436.
 - 2. Bolts, Nuts, Studs and Rivets: ASMC/ANSI B18.2.2 and ASTM A 687 or ASTM A 325, as noted.
 - 3. Washers: Provide plain washers to conform to ANSI B18.22.1. Provide beveled washers for American Standard beams and channels, square or rectangular, tapered in thickness, and smooth. Provide lock washers to conform to ANSI B18.21.1.
- B. Steel Pipe: ASTM A 53, Type E or S, Grade B and AWS D1.1
- C. Structural and Miscellaneous Carbon Steel: ASTM A 36 Unless otherwise noted
 - 1. All W-shapes shall conform to ASTM A-992 having a minimum yield strength of 50 KSI.
 - 2. HP shapes shall conform to ASTM A572 having a minimum yield strength of 50 KSI.
 - 3. Steel tubes shall conform to ASTM A500 Grade B, Fy 46 KSI.
- D. Welded Studs: AWS D1.1, Section 7 and AWS D1.5

2.2 FABRICATION FINISHES

A. Protective Coating:

- 1. All structural or miscellaneous steel, unless otherwise noted, including the steel for the repair of Pier 84 South shall be provided with a hot dipped galvanized coating. Steel beam framing, struts, bearing plates etc. and bolts, nuts, washers and hardware shall be provided with a hot dipped galvanized coating as indicated and within.
- 2. Galvanized steel members, fabrications and assemblies after fabrication by hotdipped process in accordance with ASTM A123.
- 3. Galvanizing coating applicator shall be a member of the American Galvanizers Association.
- 4. Hot dip galvanized all steel unless otherwise noted on drawings to be coated with cold tar epoxy coating.

B. Galvanizing

- 1. Bolts, Nuts, and Washers: ASTM A 153, Class C or D as applicable.
- 2. Plates and Structural Shapes: ASTM A 123, Thickness Grade 100 (4.0 mils min.).
- 3. Steel Sheet: ASTM A 653, Coating Designation G210.
- 4. Hot-dip galvanize items specified to be zinc-coated, after fabrication where practicable.
- 5. Safeguard products against steel embrittlement in conformance with ASTM A143.

C. Surface Preparation:

- 1. Degreasing, pickling, fluxing so surfaces of the steel is a near white clean and completely free of any oxides or other contaminants that might inhibit the reaction of the iron and molten zinc in the galvanizing kettle. Avoid unsuitable marking paints, consult with the galvanizer about removal of grease, oil, paint and other material prior to fabrication. Clean surfaces which become contaminated with rust, dirt, oil, grease, or other contaminants with solvents in accordance with SSPC-SP1. Remove by blasting SSPC-SP6, or other methods surface contaminants and coating that are not removable by normal chemical cleaning process in the galvanizing operation.
- 2. Steel to be embedded in concrete shall be free of dirt and grease. Do not galvanize bearing surfaces within friction-type joints, but coat with rust preventative applied in the shop.
- 3. Steel noted to be coated with coal tar epoxy coating shall be prepared as specified under Section 099700, "Coating of Steel Pipe Piles and Steel Framing.

D. Coating Finish:

1. Galvanize Coating finish shall be continuous, reasonable smooth and uniform.

E. Repair of Zinc-Coated Surfaces:

- 1. Repair damaged surfaces with galvanizing repair methods and paint conforming to ASTM A 780.
- 2. Before shipping of the galvanized members from the galvanizer facility the steel shall be inspected and damage surfaces or surfaces that did not receive the proper galvanizing be repaired by the Zinc Base Solder method. Heat surfaces to which stick or paste material is applied, with a torch to a temperature sufficient to melt the metallic in stick or paste; spread the molten material uniformly over surfaces to be coated and wipe the excess material off.
- 3. Repairs of galvanizing in the field. Repair minor damage surfaces due to handling and repairs resulting from welding and cutting by applying Zinc Rich Paint conforming to ASTM A780 specifically designed for repair of galvanizing, as approved by the Engineer. Clean areas to be repaired and remove the slag from the welds. Repair of galvanize protective coating that becomes damaged due to welding, cutting, etc., as follows: coat with ZRC Galvilite as manufactured by ZRC Worldwide. Apply ZRC Galvilite in a liquid form with a brush application. Provide two (2) coats at 2.0 mils dry film thickness. The coating shall extend at least two inches beyond the area being repaired. Thoroughly remove all splatter with a power wire brushing or equivalent.
 - a. Surfaces other than minor damage surfaces, welding and cutting shall be repaired by the Zinc Base Solder method.
- F. Nonferrous Metal Surfaces: Protect by plating, anodic, or organic coatings.

G. Catwalk Grating

- 1. Provide grating with hot dipped galvanized coating after fabrication ASTM A123, thickness Grade 100.
- 2. Provide grating walking surface serrated.
- 3. Edge-Band openings in grating that interrupt four or more bearing bars with the same size and material as bearing bars.

- 4. Edge-Band any grating that are exposed at edge of grating, without toe-plate protection.
- 5. Refer to drawing for loading requirements and additional information.

2.3 PAINTING GALVANIZED STEEL

A. Materials

- 1. All paint shall be delivered to the work site in the original containers, with labels intact and seals unbroken. All paint materials shall contain no lead and shall be USDA approved.
- 2. Prime Coat: Devran 201H (Epoxy Primer) or Devran 203 (Waterborne Epoxy Primer @ 3.0 mils DFT. Follow manufacturer's application instructions.
- 3. Intermediate coat: BarRust 235 @ 4.0 to 6.0 mils DFT
- 4. Finish coat: Devthane 379 (Polyurethane) @ 2.0 to 3.0 mils DFT. Color shall be safety yellow.
- 5. All paint material used on the job site shall be stored in the Contractor's storage trailer. The storage place shall be kept neat and clean. Any soiled or used rags, waste and trash must be removed from the storage area at the end of each working day and every precaution shall be taken to avoid the danger of fire.

2.4 MISCELLANEOUS PLATES AND SHAPES

A. Provide for items that do not form a part of the structural steel framework, such as miscellaneous mountings, frames and connections. Provide with connections and fastener welds as indicated.

2.5 WELDING MATERIALS

A. Welding equipment, electrodes, welding wire, and fluxes shall be capable of producing satisfactory welds when used by a qualified welder or welding operator using qualified welding procedures.

2.6 ANCHORS INSTALLED IN HARDEN CONCRETE

A. Refer to Specification Section 03300 "Cast-in-Place Concrete" under Chemical Structural Anchors.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Install items at locations indicated, according to manufacturer's instructions. Items listed below require additional procedures.

3.2 ANCHORAGE, FASTENINGS, AND CONNECTIONS

- A. Provide anchorage where necessary for fastening miscellaneous metal items securely in place. Include for anchorage not otherwise specified or indicated, expansion shields or adhesive anchors for concrete, machine and carriage bolts for steel. Do not use wood plugs in any material. Provide non-ferrous attachments for non-ferrous metal. Make exposed fastenings of compatible materials, generally matching in color and finish, to which fastenings are applied.
- B. All welded connections shall be done with E70XX Electrodes. All bolted connections shall use ¾" diameter ASTM A325N high strength bolts. Anchor bolts shall be size as indicated on drawing and unless otherwise noted elsewhere meeting anchor bolt requirements above. All beam connections shall develop the full uniform load capacity the member can carry with due consideration to concentrated loads at the ends of the member. No connection shall be made using less than two bolts.
 - 1. Bolted connections shall be made with ASTM A325 high strength bolts.
- C. Shop and field welds shall be made by approved certified welders and shall conform to the American Welding Society for Buildings AWS D1.1. Welds shall develop the full strength of materials being welded, unless code otherwise noted.
- D. Fabricate steel and crop corners of gussets, stiffeners, bracing, etc. to promote unrestricted free flow of zinc and the cleaning solutions during the galvanizing operation. Refer to American Galvanizers Association Recommended Details for Hot-Dip Galvanize Structures.

3.3 BUILT-IN-WORK

A. Form for anchorage metal work built-in with concrete or provide with suitable anchoring devices as indicated or as required. Furnish metal work in ample time for securing in place as the work progresses.

3.4 FINISHES

A. Dissimilar Materials: Where dissimilar metals are in contact, protect surfaces with a coat conforming to FS TT-P-664 to prevent galvanic or corrosive action. Where aluminum is in contact with concrete, mortar, masonry, wood, or absorptive materials subject to wetting, protect with ASTM D 1187, asphalt-base emulsion.

3.5 PAINTING

- A. Painting of Galvanized Metal
 - 1. Surface Preparation: Prepare and clean the galvanized surfaces per the paint manufacture's application instructions and guidelines for applying paint on galvanized surface.
 - 2. The Prime and Intermediate Coats shall be applied in the shop before the railing are delivered to the job. The Finish Coat may be applied in the shop or at the job site before erection. Before the Finish Coat is applied, areas where the shop coats have been damaged shall be hand tool cleaned in accordance with SSPC-SP2 and touched up with a prime, intermediate and finish coat of paint.

3. If the dry film thickness is not achieved initially, additional coats shall be applied until the required dry film thickness is obtained.

3.6 BOLTED CONSTRUCTION

A. Field treat damaged galvanized finish with two coats of high zinc dust oxide paint, cold galvanizing compounds or approved equal conforming to the requirements of ASTM A 780. In addition, all exposed threaded surfaces shall be painted with two coats of high zinc dust oxide paint after installation of unit.

3.7 WELDING

- A. Perform welding, welding inspection, and corrective welding, in accordance with AWS D1.1 unless noted below. Use continuous welds on all exposed connections.
- B. Welding: Do not deviate from applicable codes, approved procedures and approved shop drawings without prior written approval from the Engineer. Materials or components with welds made off the site will not be accepted if the welding does not conform to the requirements of this specification unless otherwise specified. Assign each welder or welding operator an identifying number, letter, or symbol that shall be used to identify his welds. Each welder or welding operator shall apply his mark adjacent to his weld using an approved rubber stamp or felt-tipped marker with permanent, weatherproof ink or other approved methods that do not deform the metal. For seam welds, place identification marks adjacent to the welds at 3-foot intervals. Confine identification by die stamps or electric etchers to the weld reinforcing crown, preferably in the finished crater.
- C. Welding Operators: Perform welding in accordance with qualified procedures using qualified welders and welding operators.

3.8 EXAMINATIONS AND TESTS

- A. Visual inspection of welds shall be performed by the Owner's on-site representative.
- B. Nondestructive examinations shall be performed by the Contractor to detect surface and internal discontinuities in completed welds. The services of a qualified commercial inspection or testing laboratory or technical consultant shall be approved by the Engineer. Ultrasonic examination shall be required as specified. When examination and testing indicate defects in a weld joint, a qualified welder shall repair the weld in accordance with the Paragraph 3.9 of this Section.
- C. Visual Examination: Visually examine welds as follows:
 - 1. Before Welding for compliance with requirements for joint preparation, placement of backing rings or consumable inserts, alignment and fit-up and cleanliness.
 - 2. During Welding for conformance to the qualified welding procedure.
 - 3. After Welding for cracks, contour and finish, bead reinforcement, undercutting, overlap, and size of filet welds.

D. Nondestructive Examination: NDE shall be in accordance with written procedures.

Procedures for ultrasonic tests and methods shall conform to AWS D1.1. The approved procedure shall be demonstrated to the satisfaction of the Engineer's QA personnel. In addition to the information required in AWS, the written procedures shall include:

- 1. Timing of the nondestructive examination in relation to the welding operations.
- 2. Safety precautions.
- E. NDE Testing: Complete penetration welds shall be subject to NDE testing. Of the welds, 10 percent shall be NDE inspected. Additional testing may be required if unsatisfactory results are obtained.

3.9 ACCEPTABLE STANDARDS

- A. Visual: The following indications are unacceptable:
 - 1. Cracks external surface
 - 2. Undercut on surface which is greater than 1/32 inch deep.
 - 3. Lack of fusion on surface.
 - 4. Convexity of filet weld surface greater than 10 percent of longest leg plus 0.03 inch.
 - 5. Concavity in fillet welds greater than 1/16 inch.
 - 6. Fillet weld size less than indicated or greater than 1-1/4 times the minimum specified filet leg length.
- B. Ultrasonic Examination: Linear type discontinuities are unacceptable if the amplitude exceeds the reference level and discontinuities have lengths which exceed the following:
 - 1. ³/₄-inch.
 - 2. Discontinuities are interpreted to be cracks, lack of fusion, and incomplete penetration are unacceptable regardless of length.

3.10 CORRECTIONS AND REPAIRS

A. Remove defects and replace welds as specified. Repair defects discovered between weld passes before additional weld material is deposited. Wherever a defect is removed, a repair by welding is not required, the affected area shall be blended into the surrounding surface eliminating sharp notches, crevices, or corners. After defect removal is complete and before rewelding, re-examine the area by the same test methods which first revealed the defect to ensure that the defect has been eliminated. After rewelding, reexamine the repaired area by the same test methods originally used for that area. For repairs to base material, the minimum examination shall be the same as required for but welds. Indication of a defect shall be regarded as a defect unless reevaluation by NDE or by surface conditioning shows that no unacceptable indications are present. The use of foreign material to mask, fill in, seal or disguise welding defects will not be permitted.

3.11 FIELD QUALITY CONTROL

A. Owner's on-site representative will perform visual welding inspections of all welding.

- B. If Owner finds the Contractor's welding performance to be suspect, then the Contractor must hire a third-party inspection agency to perform non-destructive testing of welding.
- C. Perform field tests, and provide labor, equipment, and incidentals required for testing. The Engineer shall be notified in writing of defective welds, within three (3) working days of the date of the weld inspection.

D. Welds

- 1. Visual Inspection: AWS D1.1. Furnish the services of AWS-certified welding inspectors for fabrication and erection inspection and testing and verification inspections. Welding inspectors shall visually inspect and mark welds, including fillet weld and returns.
- 2. Non-Destructive Testing: AWS D1.1. If more than 20 percent of welds made by a welder contain defects identified by testing, then all welds made by that welder shall be tested by radiographic or ultrasonic testing, as approved by the Engineer. When all welds made by an individual welder are required to be tested, magnetic particle testing shall be used only in areas inaccessible to either radiographic or ultrasonic testing. Retest defective areas after repair. All costs associated with repair or rewelding as a result of the Contractors fault will be the contractors' responsibility.

PART 4 - COMPENSATION

4.1 METHOD OF PAYMENT

A. Pipe Collar Type 1 and Pipe Collar Type 2 will be paid on a per each basis. This price shall include furnishing, fabrication, handling, and installing the steel collars, steel channels and associated hardware. Adjustment to the bid price will be by unit prices provided on the bid form.

END OF SECTION

SECTION 099700

COATING OF STEEL PIPE PILING AND STEEL FRAMING

PART 1 – GENERAL

1.1 SCOPE

- A. Work covered in this section includes the application of corrosion protection coatings as noted herein:
 - 1. Coating on the pipe piling.
 - 2. Coating on steel pieces noted on drawings to receive coal tar epoxy coating.

1.2 RELATED SECTIONS

- A. Section 024560, "Concrete-Filled Steel Piles"
- B. Section 051000, "Metal Fabrication"

1.3 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM)

ASTM D 1186	Nondestructive Measurement of Dry Film Thickness of
	Nonmagnetic Coatings Applied to a Ferrous Base
ASTM E 376	Measuring Coating Thickness by Magnetic-Field or Eddy-
	Current (Electromagnetic) Test Methods

C. National Association of Corrosion Engineers (NACE)

NACE RP0188	Holiday Testing
ASTM D 5162-9	

D. Steel Structures Painting Council (SSPC)

SSPC PS 11.01	Black (or Dark Red) Coal Tar Epoxy-Polyamide Painting
	System
SSPC SP 1	Solvent Cleaning
SSPC SP 10	Near-White Blast Cleaning
SSPC Paint 16	Coal Tar Epoxy-Polyamide Black Paint

1.4 SUBMITTALS

A. Coating Materials

- B. Manufacturer's Application Instructions
- C. Third party testing and inspection agency qualifications

1.5 QUALITY ASSURANCE

- A. Coating Control: Application of coating in the shop will be done under the supervision of an experienced third-party coating inspector. Low voltage electrical inspection of piles shall be performed prior to installation by an engineer experienced in holiday testing of coatings.
- B. Coating Control: Application of coating in the shop and in the field will be done under the supervision of an experienced coating inspector provided by the Contractor.
 Inspection of coatings for holidays shall be performed in accordance with NACE RP0188 by an engineer experienced with this testing prior to installation.
- C. Third Party Testing and Inspection Agency:
 - 1. An inspection and testing agency, satisfactory to the engineer, shall be employed by the pipe and steel supplier to inspect the coal tar epoxy paint system application.
 - 2. Coating Control: Application of coating in the shop and in the field will be done under the supervision of an experienced coating inspector provided by the Contractor.
 - 3. Provide a minimum of 48 hours advance notice to the third-party inspection agency of inspection and testing.
 - 4. Conduct the following in the presence of the third-party inspection agency:
 - a. Inspect Cleaning and Preparation of Surfaces prior to applying of coating.
 - 1) Perform periodic inspection is of the surface preparation and that the specified surface profile is achieved.
 - 2) Prior to any pile being coated, the inspector shall review the coaters cleaning and surface preparation procedures.
 - b. Holiday Testing: Prior to shipping from coating facility, test 100% of coated surfaces for holidays in total coating system in accordance with NACE SP0188. Low voltage procedures shall be used for dry film thicknesses less than or equal to 20 mils. High voltage procedures shall be used for dry film thicknesses greater than 20 mils. All piles shall be holiday-free.
 - c. Dry Film Thickness: after repair of holidays, measure coating thickness for all coated piles with a magnetic-type dry film thickness gage in accordance with ASTM D 1186 and ASTM E 376. If any region of a pile has insufficient coating thickness or holidays, the coating on that region shall be repaired with Bitumastic 300M coal tar epoxy. Re-measure after an additional coat is applied, if required to meet minimum coating thickness requirements.
 - 5. Field touch up all damaged surfaces following manufacturer's specification for Bitumastic 300 M.

- 6. Quality control testing reports by third party inspection agency shall be submitted and reviewed by the engineer prior to shipment of the piling and steel framing from the coater's facility.
- 7. Prior to final payment, a written report by the inspection agency evaluating work performed and stating any deviations from the contract documents and specifications related to his scope of services shall be received.

1.7 HEALTH AND SAFETY PRECAUTIONS

A. Materials listed in this section contain coal tar pitch volatiles, which are toxic. Follow safety procedures as recommended by manufacturer. Work in a well-ventilated area. Provide, and require workers to use, impervious clothing, gloves, face shields 8-inch minimum), and other appropriate protective clothing necessary to prevent eye and skin contact with coating materials. Keep coatings away from heat, sparks and flame.

1.8 ENVIRONMENTAL CONDITIONS

A. Start work only when ambient and curing temperatures and humidity are within limits of coating manufacturer's recommendations and at least 5 degrees F above dew point temperature.

PART 2 – PRODUCTS

2.1 COATING SYSTEM

A. Coal Tar Epoxy-Polyamide Coating

1. System: SSPC PS 11.01

2. Paint: SSPC Paint 16 Black

PART 3 – EXECUTION

3.1 CLEANING AND PREPARATION OF SURFACES

- A. Solvent Cleaning: SSPC SP 1. Remove visible oil, grease, and drawing and cutting compounds by solvent cleaning.
- B. Blast Cleaning: SSPC SP 10. After solvent cleaning, complete surface preparation by near-white blast cleaning. Remove residual dust from blasted surface by blowing with dry, oil-free air, vacuuming, or sweeping. Provide surface profile of at least 2-mil thickness. After blast clean remove visible oil, grease, and drawing and cutting compounds by solvent cleaning.

3.2 PROPORTIONING AND MIXING OF COATING SYSTEM

A. Proportioning of Coal Tar Epoxy-Polyamide System: Coal tar epoxy-polyamide consists of a two-component system. Component A contains a refined coal tar pitch, polyamide

resin, and a polyamine promoter to accelerate curing rate. Component B is an epoxy resin. Mix both components in a ratio of 4 parts of Component A to 1 part of Component B by volume. Do not thin coatings when doing so will result in total volatile organic compounds exceeding limits enacted by local air pollution control districts. When thinning is allowed and is necessary for proper application, use xylene or the coating manufacturer's recommended thinner, to a maximum of 1/2 gallon to a 5-gallon batch.

- 1. Provide Bituminous No. 300M as manufactured by Carboline or approved equal.
- B. Mixing of Coal Tar Epoxy-Polyamide System: Power stir components to a smooth, uniform consistency. Stir coating periodically during induction period. Follow coating manufacturer's requirements for induction time and pot life of mixed batches.

3.3 COATING APPLICATION

- A. General: Apply primer coating to dry surfaces not more than 4 hours after near-white blast cleaning. Apply coats of each system so that finished surfaces are free from runs, sags, brush marks and variations in color.
 - 1. Application Method for Coal Tar Epoxy-Polyamide System: Unless otherwise specified by manufacturer's recommendations, do not allow drying time between coats to exceed 72 hours. Under conditions of direct sunlight or elevated ambient temperatures of 90 degrees F or greater, limit intercoat drying period to a maximum of 24 hours.
- B. Repair of Defects: Repair detected coating holidays, thin areas, and exposed areas damaged prior to or during installation by surface treatment and application of additional coating or by manufacturer's recommendations. Allow a period of at least 72 hours to pass following final coat before placing in immersion service.
- C. Coal Tar Epoxy-Polyamide System:
 - 1. Steel Pipe Piles: Apply a minimum of two (2) coats, each coat at a dry film thickness of not less than 9 mils.
 - 2. Coating on steel pieces noted on drawings to receive cold tar epoxy: Apply a minimum of two (2) coats, each coat at a dry film thickness of not less than 9 mils.
- D. Dry Film Thickness:
 - 1. Steel Pipe Piles: Provide total system minimum dry film thickness of 18 mils. Measure using a magnetic gage.
 - 2. Coating on steel pieces noted on drawings to receive cold tar epoxy: Apply a minimum of two (2) coats, each coat at a dry film thickness of not less than 9 mils.

3.4 PILE SURFACES TO BE COATED

A. Steel Pipe Piling from pile cut-off elevation down to 10 feet below the mudline.

3.5 FIELD QUALITY CONTROL

A. Testing: The Contractor shall engage the services of a qualified testing and inspection agency to inspect and test coatings for holidays and dry film thickness.

- 1. Provide a minimum of 48 hours advance notice to the third-party inspection agency of testing.
- 2. Conduct the following in the presence of the third-party inspection agency:
 - a. Holiday Testing: Prior to installation, test 100% of coated surfaces for holidays in total coating system in accordance with NACE RP0274. All piles shall be holiday-free immediately prior to installation.
 - b. Dry Film Thickness: After repair of holidays, measurer coating thickness for all coated piles with a magnetic-type dry film thickness gage in accordance with ASTM D1186 and ASTM E376. If any region of a pile has insufficient coating thickness or holidays, the coating on that region shall be repaired with Bitumastic 300 M coal tar epoxy. Re-measure after an additional coat is applied, if required to meet minimum coating thickness requirements.

3.5 FIELD TOUCH UP

A. Field touch up all damaged surfaces following coating manufacturer's specifications.

END OF SECTION

SECTION 09 97 13.28

PROTECTION OF STEEL PIPING

PART 1 – GENERAL

1.1 References

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.
 - 1. American Water Works Association
 - a.) AWWA C209 (2013) Cold-Applied Tape Coatings for the Exterior of Special Sections, Connections and Fitting for Steel Water Pipelines.
 - b.) AWWA C213 (2015) Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines
 - c.) AWWA C214 (2014) Tape Coating Systems for the Exterior of Steel Water Pipelines
 - d.) AWWA C215 (2016) Extruded Polyolefin Coatings for Steel Water Pipe
 - 2. NACE International (NACE)
 - a.) NACE SP0274 (1974; R 2011) High Voltage Electrical Inspection of Pipeline Coatings
 - 3. U.S. Department of Defense (DOD)
 - a.) MIL-I-631 (1961, Rev D; Am 6 1987) Insulation, Electrical, Synthetic-Resin Composition, Nonrigid

1.2 Definitions

- A. Coating: A continuous, uniformly thick layer formed on a surface by the mechanical application of a liquid, mastic, powdered, or extruded film material. Some types of application require elevated temperatures.
- B. Coating System: One or more coatings applied to a properly prepared steel surface. If only one coating, that coating is applied directly to the steel surface; if more than one coating, each coating is applied in one operation over the previously applied and cured coating. For some applications, the first coating is a primer. Coatings of a particular system function together as a collective entity to protect the steel surface from corrosion. Coating system may be liquid of tape applied.
- C. Tape: Prefabricated laminate of plastic film backing with a homogeneous sealant layer, or a pressure-sensitive adhesive layer produced in sheets, pads, or rolls wound on hollow cores. Tape applications do not require elevated temperatures.
- D. Tape Coating System: One or more layers of tape applied cold over a properly prepared and primed steel surface. Tape on the primed surface protects the steel surface from corrosion.

1.3 Submittals

A. Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.] [for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submittals with an "S" are for inclusion in the Sustainability notebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

- 1. SD-03 Product Data
 - a.) Factory-applied coating system
 - b.) Field-applied epoxy coating system
 - c.) Thermosetting epoxy coating system
 - d.) Polyethylene-Butyl Adhesive Coating System
 - e.) Adhesive Thermoplastic Resin Coating System
 - f.) Tape Coating System
 - g.) Electrical-flaw Detector
 - h.) Mastics
 - i.) Rock Shield
- 2. SD-06 Test Reports
 - a.) Inspector's Certificate
 - 1.) Submit for each inspection and test
 - b.) Field-applied epoxy coating
- 3. SD-08 Manufacturer's Instructions
 - a.) Field-applied epoxy coating system
 - b.) Thermosetting epoxy coating system
 - c.) Electrical-flaw detector
 - d.) Mastics
 - e.) Rock Shield

PART 2 – PRODUCTS

2.1 Materials

- A. Tape Coating System (TCS)
 - 1. Prefabricated tape with adhesive primer. The tape wrapping system shall conform to AWWA C209 and to MIL-I-631, Class I for fungus resistance, except that the fungus rating shall lie between zero and one for all specimens. The overall thickness of the tape wrap protection shall be not less than 51 mils. The tape system shall be suitable to be applied at temperatures below 10 degrees C (50 degrees F) and above minus 12 degrees C (10 degrees F).
- B. Adhesive Thermoplastic Resin Coating System (ATRCS)
 - 1. Steel pipe factory-applied coating system conforming to AWWA C215 and to the coating manufacturer's instructions shall consist of a continuously extruded polyethylene coating, capable of withstanding operating temperatures up to 88 degrees C (190 degrees F) applied on an adhesive undercoat.

C. Thermosetting Epoxy Coating System (TECS)

1. Factory-applied steel pipe system conforming to AWWA C213. Provide field-applied epoxy coating in accordance with manufacturer's recommendations and AWWA C213.

D. Polyethylene-Butyl Adhesive Coating System (PBACS)

1. Factory-applied steel pipe system of extruded butyl adhesive compound, 0.18 mm 7 mils minimum thickness, covered with overlapping layers of extruded polyethylene wrapping, one mm 38 mils minimum thickness, in accordance with AWWA C214.

E. Mastics

Apply a coating of manufacturer approved mastic protection to irregular surfaces.
 Mastic shall be compatible with coating system. [Apply the tape system over
 mastic.] Mastic layer thickness shall conform to coating manufacturer's
 recommendation.

F. Rock Shield

1. Provide rock shield over completed coating system as recommended by coating manufacturer.

PART 3 – EXECUTION

3.1 Installation

A. TCS

- 1. Surface Preparation: Surfaces shall be clean and dry. Wire brush weld beads and remove weld spatters. Remove heavy rust of mill scale with wire brush.
- 2. Application: Remove paper from Kraft paper-protected material before placing in final position. Reinforce coating at sling points with roofing felt or other approved heavy shielding material or handle with nylon or canvas slings. Apply polyvinylchloride-butyl rubber laminated tape or pressure-sensitive organic plastic tape and its adhesive primer by single machine operation.
 - a.) Pipe: Spirally wrap straight runs in one layer, lapping the tape as applied. Overlap shall conform to recommendations of the tape manufacturer. When an outer wrap is used, overlap of outer wrap shall bridge joints of the tape. Apply at each end of straight runs a double wrap of one full width of tape at right angles to the axis in such a manner to seal ends of spiral wrapping.
 - b.) Pipe Joints, Couplings and Damaged Areas of Coatings: Clean joint area which are to be taped, of burrs and rust. Smooth down or cut away damaged coating when not firmly bonded to pipe. Spirally wrap with a two-layer wrapping system, overlapping coating surface at least 75 mm 3 inches. Initially stretch tape sufficiently to conform to the surface to which it is applied, using one layer half-lapped for tape 50 mm 2 inches or less in width or one layer lapped at least 25 mm one inch for tape

- more than 50 mm 2 inches wide. Apply a second layer, lapped as above, with tension as tape comes off roll, and press to conform to shape of component. For other irregular surfaces such as bolted flanges valve bodies where tape coating system containing mastics is to be provided, apply with brush.
- c.) Tie Rods and Tie Rod Fittings: Spirally wrap with a two-layer coating system. Apply tape to tie rods by lapping each layer of tape using a half-lap for tape 50 mm (2 inches) or less in width or at least a 25 mm (one inch) for tape more than 50 mm (2 inches wide). For tie rod fittings, initially stretch tape sufficiently to conform to the surface to which it is applied, using one layer half-lapped for tape 50 mm (2 inches) or less in width or one layer lapped at least 25 mm (one inch) for tape more than 50 mm (2 inches) wide. Apply a second layer, lapped as before, with a tension as tape comes off the roll, and press to conform to the shape of component.

B. Joints, and Other Irregular Surfaces for ATRCS

- 1. Prepare surface as described in paragraph entitled "TCS". Wrap tape as specified in paragraph entitled "TCS"; except, apply the tape half-lapped, and prime extruded polyethylene coating and adhesive undercoat surfaces to be tape wrapped with a compatible primer as recommended by the tape manufacturer and approved by the extruded polyethylene coating applicator for use on the polyethylene coating.
- 2. Damaged Areas: Repair damaged areas of the extruded polyethylene coating by tape wrapping as specified under the paragraph entitled "Tape Coating System", except press residual material from the extruded polyethylene coating into the break or trim off. Prime areas to be taped prior to applying half-lapped tape.

C. TECS

- 1. Install in accordance with the manufacturer's instructions and AWWA C213.
 - a.) Joints: Clean both sides of weld area by wire brushing, and remove dust, moisture, and other contaminants. Apply primer recommended by coating manufacturer after cleaning of joints.
 - b.) Damaged areas: Remove damaged coating by abrading, filing, or wire brushing. Clean area to be repaired free of dust, moisture, and other contaminants. Cover with a primer and a coating recommended by coating manufacturer. Apply coating over cleaned surface and extend approximately 75 mm (3 inches) beyond damaged area.

D. Joints and Other Irregular Surfaces for PBACS

- 1. Clean both sides of weld area by wire brushing, and remove dust, moisture, and other contaminants. Apply primer recommended by tape manufacturer and acceptable to coating manufacturer on cleaned area. Apply tape spirally with a 50-percent overlap in accordance with the tape manufacturer's instructions.
 - 2. Damaged Areas: Remove rough or protruding polyethylene from damaged area by abrading, filing, or cutting the material. Clean area to be repaired free of dust, moisture, and other contaminants. Cover with

tape recommended by coating manufacturer and primer recommended by tape manufacturer. Apply primer over cleaned surface and extend approximately 75 mm (3 inches) beyond damaged area. Apply tape over primer and extend 25 mm (one inch) beyond damaged area. Apply additional primer over tape patch. Spirally wrap additional tape around pipe with a 50-percent overlap to cover tape patch and extend a minimum of 50 mm (2 inches) beyond the edge of the patch.

3.2 Field Quality Control

A. Conform to AWWA C214 [and AWWA C213]. Inspection shall be performed by a National Association of Corrosion Engineers (NACE) certified inspector.

B. Field Inspection

1. Examine material surface preparation and application procedures performed in the field.

C. Field Test

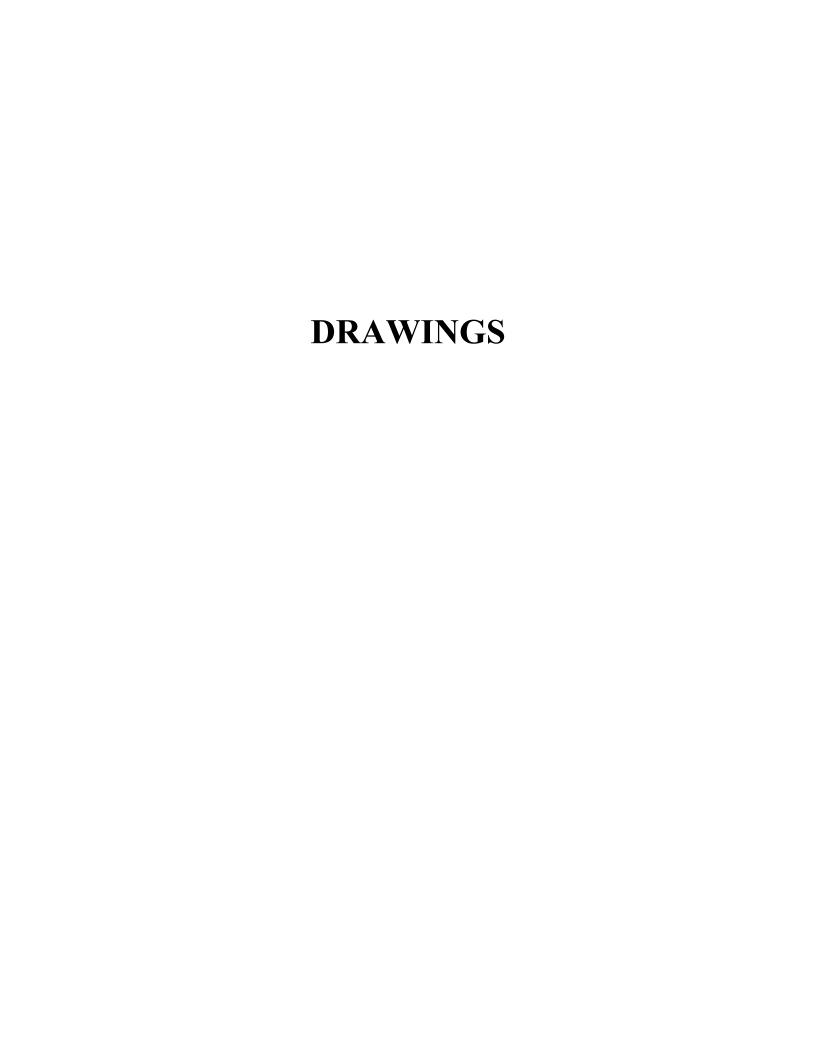
1. Test the protective system for holes, voids, cracks, and other visually undetectable damage that may occur during handling and installation in accordance with NACE Standard NACE SP0274. In critical applications no holidays will be permitted. In non-critical applications up to 10 holidays per meter 3 holidays per linear feet of the pipe may be accepted. Test with an approved electrical-flaw detector in accordance with the detector manufacturer's printed instructions. Prepare inspector's certificate for each inspection and test. Repair areas where arcing occurs and retest.

PART 4 - COMPENSATION

4.1 METHOD OF PAYMENT

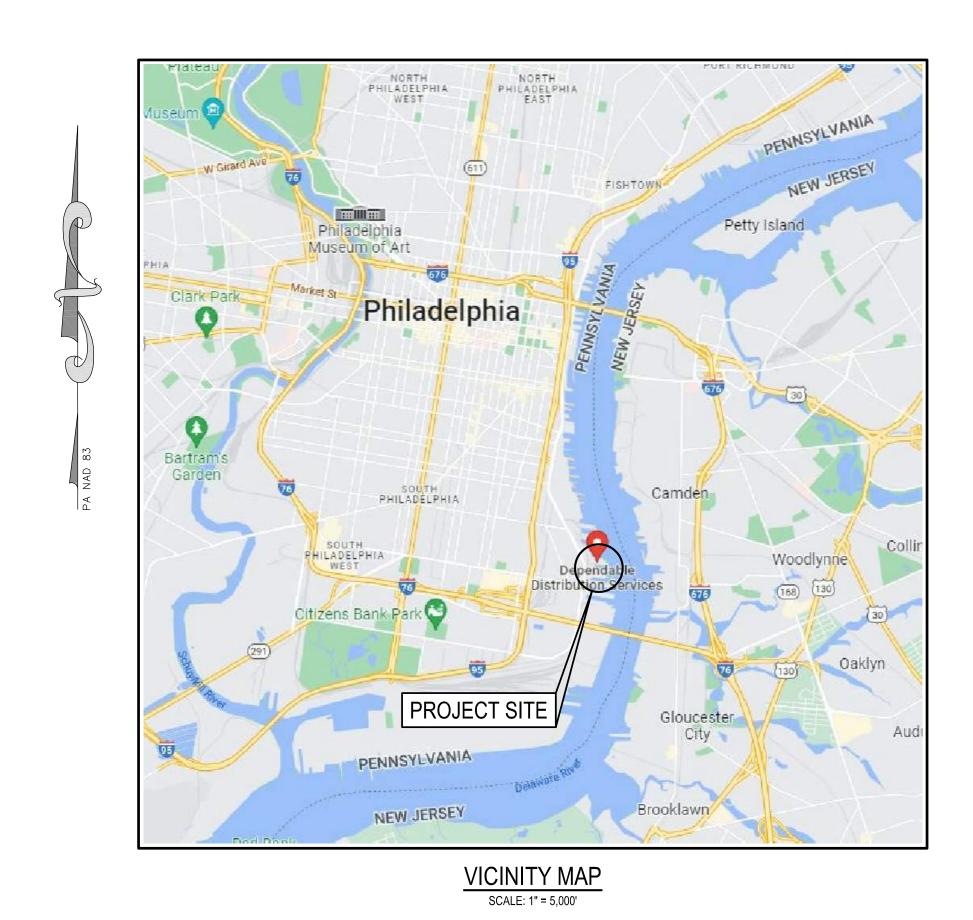
- A. Corrosion Protection Pile Wrap New Piles shall be paid on a linear foot basis. This price shall include furnishing the pile wrap, preparing the pile surface, and installing the pile wrap system. Adjustment to the bid price will be by unit prices provided on the bid form.
- B. Corrosion Protection Pile Wrap Existing Piles shall be paid on a linear foot basis. This price shall include furnishing the pile wrap, cleaning the piles, preparing the surface, and installing the pile wrap system. Adjustment to the bid price will be by unit prices provided on the bid form.

END OF SECTION



COMMONWEALTH OF PENNSYLVANIA THE PORT OF PHILADELPHIA PHILADELPHIA, PA

PIER 84 S PILE REPAIRS PROJECT #23-064.1





LOCATION MAP

SCALE: 1" = 1000'



REVISION				
NO. DATE				
NO.				



IIILE SMEET

ER 84 S PILE REPAIRS

THE PORT OF PHII ADEI PHIA

DESIGNED: R.J.W.

DRAWN: A.J.K.

CHECKED: C.F.

SCALE: AS NOTED

DATE: 05/05/2023

PROJECT: 2021.0280.00.0

DRAWING:

2)2024124020002) Decuis col 44 MII/24020002 C4 Title Cheet du

GENERAL NOTES:

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A. 2018 INTERNATIONAL BUILDING CODE (IBC), ITS SUPPLEMENTS, AND LOCAL AMENDMENTS.
    a. ACI 318-13. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
    b. ASCE 7-16. "MINIMUM DESIGN LOADS FOR STRUCTURAL STEEL BUILDINGS"
    c. AWS D1.1. "STRUCTURAL WELDING CODE - STEEL"
DESIGN CRITERIA
  A. ALL STRUCTURAL COMPONENTS HAVE BEEN DESIGNED FOR THE LOADS AND CRITERIA SHOWN BELOW AND ON THE
    CONTRACT DOCUMENTS. ANY INCREASE OF LOADS DUE TO CHANGE IN USAGE OR CONSTRUCTION MATERIALS, ETC.
     SHALL HAVE THE WRITTEN APPROVAL OF THE ENGINEER.
  B. DEAD LOAD = SELF WEIGHT
    LIVE LOAD = 600 PSF
3. FOUNDATIONS
  STEEL PILES
  A. MINIMUM PILE CAPACITY FOR PIER 84 SOUTH SHALL BE AS FOLLOWS:
    a. 12.75" DIAMETER X 0.5" PLUMB PILES = 90 TONS COMPRESSION
   b. 14" DIAMETER X 0.5" PLUMB PILES = 90 TONS COMPRESSION
  B. STEEL PIPES SHALL HAVE A MINIMUM FACTOR OF SAFETY OF 2.0 IN COMPRESSION
  C. STEEL PIPE PILES SHALL BE PROVIDED IN ACCORDANCE WITH ASTM A572 GRADE 50, Fy = 50,000 PSI
  D. PILES SHALL BE DRIVEN TO THE MINIMUM TIP ELEVATION NOTED.
  E. THE CONTRACTOR SHALL PROVIDE PILE LENGTHS 4' MINIMUM LONGER THAN REQUIRED BY TIP ELEVATION. ALL PILES TO
    BE NEW DRIVEN OPEN ENDED.
  F. ONE NEW STEEL PILE USED ON PIER 84 SOUTH SHALL BE TESTED WITH THE PILE DYNAMIC ANALYZER (PDA).
    CONTRACTOR SHALL HIRE TESTING AGENCY TO TEST AND MONITOR THE PILES TEST AND PILING INSTALLATION.
  F. AT THE ONSET OF PILE DRIVING, THE FIRST PRODUCTION PILE SHALL BE INSTRUMENTED FOR PILE DYNAMIC ANALYSIS
    (PDA) ON INITIAL DRIVE AND RESTRIKE TO ESTABLISH PILE DRIVING CRITERIA BASED ON HAMMER SELECTION.
  G. ADDITIONALLY, (2) PRODUCTION PILES SHALL BE PDA TESTED ON RESTRIKE TO CONFIRM PILE CAPACITIES.
  H. SUBMIT PILE DRIVING HAMMER DATA AND PILE DRIVING LOGS TO ENGINEER FOR REVIEW.
  I. CONTRACTOR SHALL KEEP PILE DRIVING LOGS AND MONITOR THE PILE INSTALLATION AS DIRECTED BY THE
   GEOTECHNICAL ENGINEER. CONTRACTOR IS RESPONSIBLE FOR:
   a. PILE INSTALLATION EQUIPMENT INSPECTION.
   b. KEEPING THE LOG OF MOVEMENT OF PREVIOUSLY INSTALLED ADJACENT PILES.
   c. KEEPING PILE DRIVING LOG.
  d. ADVISING THE ENGINEER OF ANY VARIATIONS AND DISCREPANCIES IN THE PILE DRIVING IMMEDIATELY ON OCCURRENCE.
  J. A PROJECT GEOTECHNICAL REPORT HAS BEEN PREPARED BY D.W. KOZERA INC. WHICH OUTLINES THE PILE CAPACITIES,
     MINIMUM AND ESTIMATED TIP ELEVATIONS, AND SUGGESTED PILE HAMMER SIZE. THE REPORT CAN BE FOUND IN THE
     PROJECT SPECIFICATIONS.
4. CAST IN PLACE CONCRETE
  A. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE
    FOLLOWING ACI AND ASTM DOCUMENTS:
      ACI 117 SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS
      ACI 211 PROPORTIONS OF CONCRETE
      ACI 214 COMPRESSION TESTS
      ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
      ACI 304 PLACING CONCRETE
      ACI 305 HOT WEATHER
      ACI 306 COLD WEATHER
      ACI 308 CURING CONCRETE
      ACI 315 DETAILING
      ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
      ACI 347 FORMWORK
      ACI 357 MARINE STRUCTURES
      ACI 546 CONCRETE REPAIR
      ACI 548 BONDING TO CONCRETE
      ASTM C94 READY-MIX CONCRETE
  B. ALL FIELD AND LAB TESTING OF CONCRETE SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT)
     EDITIONS OF ASTM:
      ASTM C172 SAMPLING FRESH CONCRETE
      ASTM C31 FIELD CYLINDER SPECIMENS
      ASTM C143 SLUMP TEST
      ASTM C231 AIR CONTENT (WHEN REQUIRED)
      ASTM C39 LAB TESTING CYLINDERS
      ASTM C42 HARDENED CORES (WHEN REQUIRED)
  C. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY AN AGENCY RETAINED BY THE CONTRACTOR. THE CONTRACTOR
     SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE POURING OF THE CONCRETE.
    a. SAMPLE AND TEST THE CONCRETE AND PROVIDE AT LEAST ONE SET OF 5 FIELD CYLINDER SPECIMENS FOR EVERY 50
      CUBIC YARDS PLACED, BUT NOT LESS THAN ONE SET PER HOUR OF POUR. BREAK SPECIMENS AT 7 AND 28 DAYS AND
      HOLD 1 FOR 56 DAYS
  D. ADMIXTURES
    a. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED.
    b. ADMIXTURES FOR CONCRETE SHALL BE IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATIONS AND SHALL
      CONFORM TO THE REQUIREMENTS OF ASTM C494.
  E. ALL CONCRETE MIX DESIGNS AND ADMIXTURES SHALL BE APPROVED BY THE ENGINEER 14 DAYS PRIOR TO INITIATION OF
     THE FIRST POUR.
  F. ALL CONCRETE, UNLESS OTHERWISE NOTED, SHALL BE STONE AGGREGATE CONCRETE.
    a. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 5,000 PSI
    b. MAXIMUM W/C RATIO (BY WEIGHT) = 0.40
    c CEMENT
       1.) PORTLAND CEMENT = ASTM C150, TYPE IIA
       2.) BLENDED HYDRAULIC CEMENT = ASTM C595, TYPE IS(MS)A
    d AGGREGATE:
        1.) NORMAL WEIGHT = ASTM C33
        2.) LIGHT WEIGHT = ASTM C330
        3.) MAXIMUM AGGREGATE SIZE = 3/4"
    e. SLUMP = 4 \pm 1"
    f. AIR ENTRAINMENT = 5\% \pm 1\%
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- 5. STRUCTURAL AND MISCELLANEOUS STEEL
- A. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO THE FOURTEENTH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND ALL ITS SUPPLEMENTS, AND TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."
- B. ALL WELDED CONNECTIONS SHALL BE PERFORMED WITH E70XX ELECTRODES. SHOP AND FIELD WELDS SHALL BE PERFORMED BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE NOTED.
- C. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
- D. ALL STEEL THREADED RODS, BOLTS, NUTS, AND WASHERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153
- E. ALL GALVANIZED COATING DAMAGE, FIELD WELDS AND THE SURROUNDING AREA SHALL BE CLEANED IN ACCORDANCE WITH SSPC-SP2 OR SP3 AND SHALL RECEIVE AN APPLICATION OF A ZINC RICH INORGANIC PAINT SUCH AS Z.R.C. COLD GALVANIZING COMPOUND, TNEMEC ZINC 90-97, TNEMEC ZINC 90E-92 OR EQUIVALENT WITH A MINIMUM ZINC CONTENT OF 95% BY WEIGHT IN DRY FILM. THE ZINC RICH PAINT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BUT NOT AT A RATE EXCEEDING 1.5 MILS OF DRY FILM THICKNESS PER COAT. MINIMUM FINAL DRY FILM
- F. ALL STRUCTURAL STEEL SHALL BE AS FOLLOWS UNLESS OTHERWISE STATED IN THE PLANS AND SPECIFICATIONS:

PLATES......................ASTM A36, FY = 36,000 PSI UNLESS OTHERWISE NOTED

ANCHOR BOLTS........ASTM F1554 GR. 55, FY = 55,000 PSI

BOLTS.......ASTM A325, FU=105,000 PSI

TIE-RODS.......ASTM A615 GR. 75, FY = 75,000 PSI

HEADED SHEAR STUDS......ASTM A108, FU = 65,000 PSI
CHANNELS.....ASTM A-36, FY = 36,000 PSI UNLESS OTHERWISE NOTED

MISCELLANEOUS STEEL.....ASTM A-36, FY = 36,000 PSI

THICKNESS SHALL NOT BE LESS THAN 3 MILS.

A. COAL TAR EPOXY COATING:

6. PROTECTIVE COATINGS

- a. ALL STRUCTURAL STEEL PIPE PILES SHALL RECEIVE A COAL TAR EPOXY COATING WITH A MINIMUM DRY FILM THICKNESS OF 20 MILS FROM PILE CUT-OFF ELEVATION TO 10 FEET BELOW THE MUD LINE.
- b. THE COATING SHALL BE APPLIED IN A MINIMUM OF (2) COATS. EACH COAT SHALL HAVE A MINIMUM DRY FILM THICKNESS OF 10 MILS.
- c. COAL TAR EPOXY SHALL BE IN CONFORMANCE WITH SSPC-PAINT 16 "COAL TAR EPOXY POLYAMIDE, BLACK" SUCH AS SHERWIN WILLIAMS TARGUARD, CARBOLINE BITUMINOUS NO. 300M, BLP MOBILE PAINT MOTAR C-200, OR APPROVED EQUAL THAT HAS A DESIGN LIFE OF 20 YEARS.
- d. STEEL SHALL BE CLEANED TO WHITE METAL IN CONFORMANCE WITH SSPC-SP10.
- e. COATING SHALL BE SHOP-APPLIED BY AN APPROVED APPLICATOR.
- f. ALL SCRATCHES OR NICKS IN THE COATING AS A RESULT OF HANDLING, WELDING OR CUTTING SHALL BE FIELD REPAIRED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMEND.

B. PILE WRAP.

- a. PILE PROTECTION TO BE PROVIDED ON ALL EXISTING STEEL PILES. PILES TO BE COATED WITH PETROLATUM BASED PRIMER AND WRAPPED WITH PETROLATUM BASED WRAP. PROTECTIVE FIBER GLASS OUTER WRAP TO BE INSTALLED WHEN IN SPLASH ZONE OR UNLESS NOTED OTHERWISE ON DRAWINGS.
- b. ALL PILE PROTECTION MUST BE DONE BY CONTRACTOR WITH 5+ YEARS OF EXPERIENCE.
- c. MANUFACTURER PROVIDING PILE PROTECTION SHALL HAVE 10+ YEARS OF EXPERIENCE WORKING WITH THE PREVENTION OF UNDERWATER STEEL PROTECTION SYSTEMS.

7. INSPECTIONS

- A. ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE AND ALL LOCAL ORDINANCES. THE CONTRACTOR SHALL HIRE AN EXPERIENCED, QUALIFIED THIRD-PARTY INSPECTOR TO PERFORM ALL REQUIRED INSPECTION WORK WHERE EACH IS REQUIRED BY THE ADOPTED CODES.
- B. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTIONS AS A PART OF THEIR DESIGN SERVICES.
- a. THE ENGINEER MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. SUCH SITE VISITS ARE NOT TO BE CONSTRUED AS MEETING ANY INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY STATES SO IN WRITING.
- b. THE CONTRACTOR MAY RETAIN THE SERVICES OF THE ENGINEER FOR PERFORMING SPECIAL INSPECTIONS.C. A DAILY REPORT SHALL BE PREPARED FOR EACH DAY THE INSPECTOR WAS ON SITE. DAILY REPORTS SHALL BE
- SUBMITTED TO THE ENGINEER WITHIN 2 BUSINESS DAYS FOLLOWING THE INSPECTION. DAILY REPORTS SHALL INCLUDE THE FOLLOWING:
- a. DATE AND TIME PRESENT.
- b. WEATHER CONDITIONS WHILE PRESENT.
- c. WORK COMPLECTED AND REVIEWED WHILE PRESENT.
- d. WORK CREW AND EQUIPMENT ON SITE.
- e. INSTRUCTION OR DEFICIENCIES NOTED TO THE CONTRACTOR OR OWNER.
- f. SIGNATURE OF INSPECTOR.
- D. THE TESTING AGENCY SHALL INSPECT THE WORK AT THE FREQUENCY SPECIFIED HEREIN.
- a. THE SPECIAL INSPECTOR SHALL BE PRESENT WHEN AND WHERE THE WORK TO BE CONTINUOUSLY INSPECTED IS BEING PERFORMED.
- b. THE SPECIAL INSPECTOR SHALL INSPECT THE WORK TO BE INSPECTED PRIOR TO ACCEPTANCE AT LEAST ONCE PRIOR TO CLOSING IN OR ACCEPTING THE WORK TO BE INSPECTED.
- E. THE FOLLOWING SPECIAL INSPECTIONS SHALL BE PERFORMED BY THE SPECIAL INSPECTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE IBC AND ITS SUPPLEMENTS ADOPTED BY REFERENCE.
- a. FABRICATORS SHALL BE CONTINUOUSLY INSPECTED (IBC, AISC 360).
- 1.) IF THE FABRICATOR IS APPROVED BY THE AUTHORITY HAVING JURISDICTION TO PERFORM THE WORK WITHOUT SPECIAL INSPECTIONS, INSPECTION AT THE FABRICATOR'S SHOP IS NOT REQUIRED BUT A CERTIFICATE OF COMPLETION MUST BE PROVIDED TO THE BUILDING OFFICIAL.
- b. DRIVEN DEEP FOUNDATION ELEMENTS (IBC)
- 1.) INSPECT ELEMENT MATERIALS, SIZES, AND LENGTHS PRIOR TO ACCEPTANCE.
- 2.) INSPECT DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT CONTINUOUSLY.
- 3.) INSPECT PLACEMENT LOCATIONS AND PLUMBNESS, TYPE AND SIZE OF HAMMER, AND DRIVING OPERATIONS CONTINUOUSLY. RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, REQUIRED PENETRATION TO ACHIEVE

REVISION				
DATE				
ÖN Ö				

WHITNEY BAILEY COX & MAGNAN 300 East Joppa Road Su Baltimore, MD 410.512.4500 www.wbcr

GENERAL NOTES
PIER 84 S PILE REPAIRS

DESIGNED: R.J.W.

A.J.K.

2021.0280.00.0

C.F.

DRAWN:

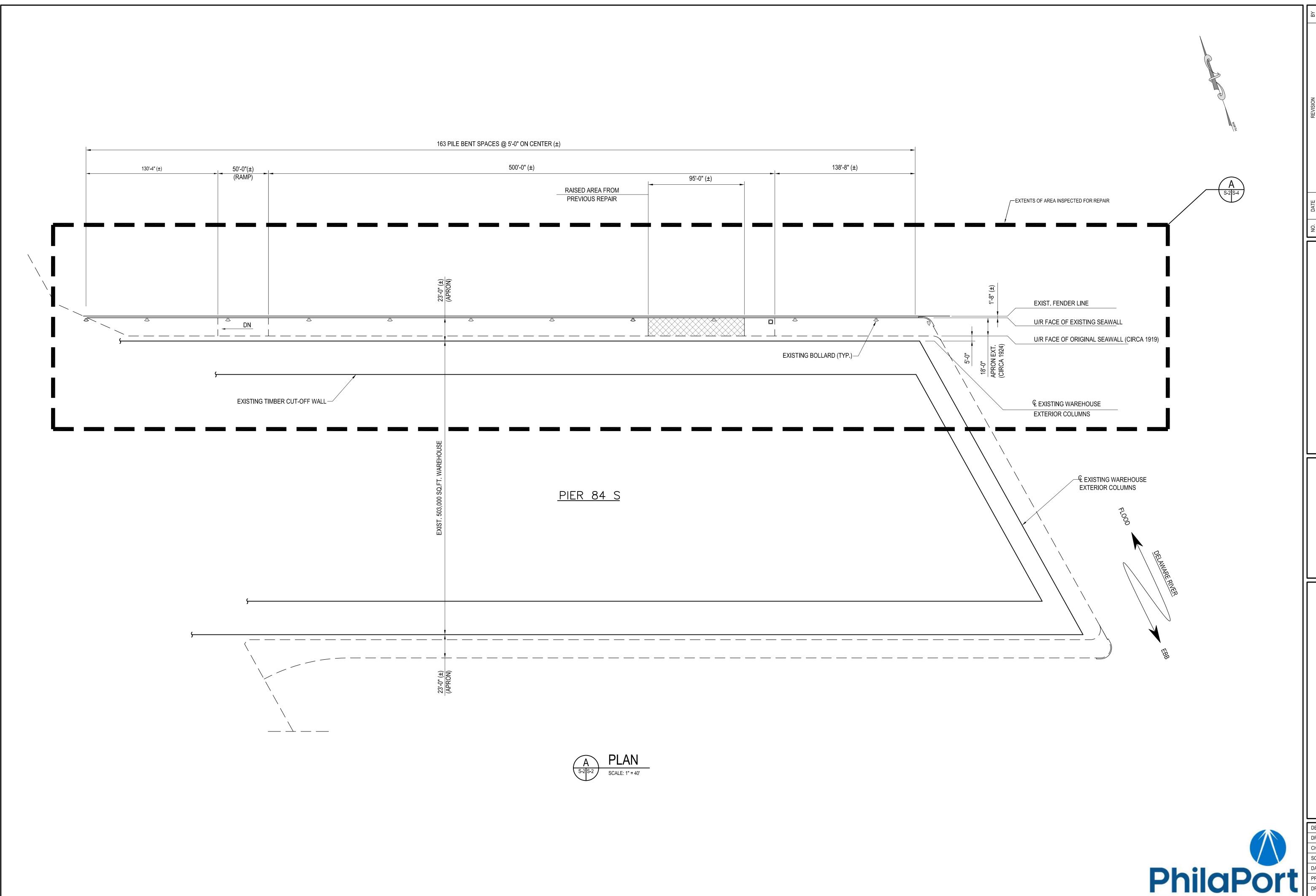
CHECKED:

PROJECT:

SCALE:

PhilaPort
THE PORT OF PHILADELPHIA

100% DESIGN SUBMISSION
05/05/2023



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SITE PLAN

DESIGNED: R.J.W.

DRAWN: A.J.K.

CHECKED: C.F.

SCALE: 1" = 40'

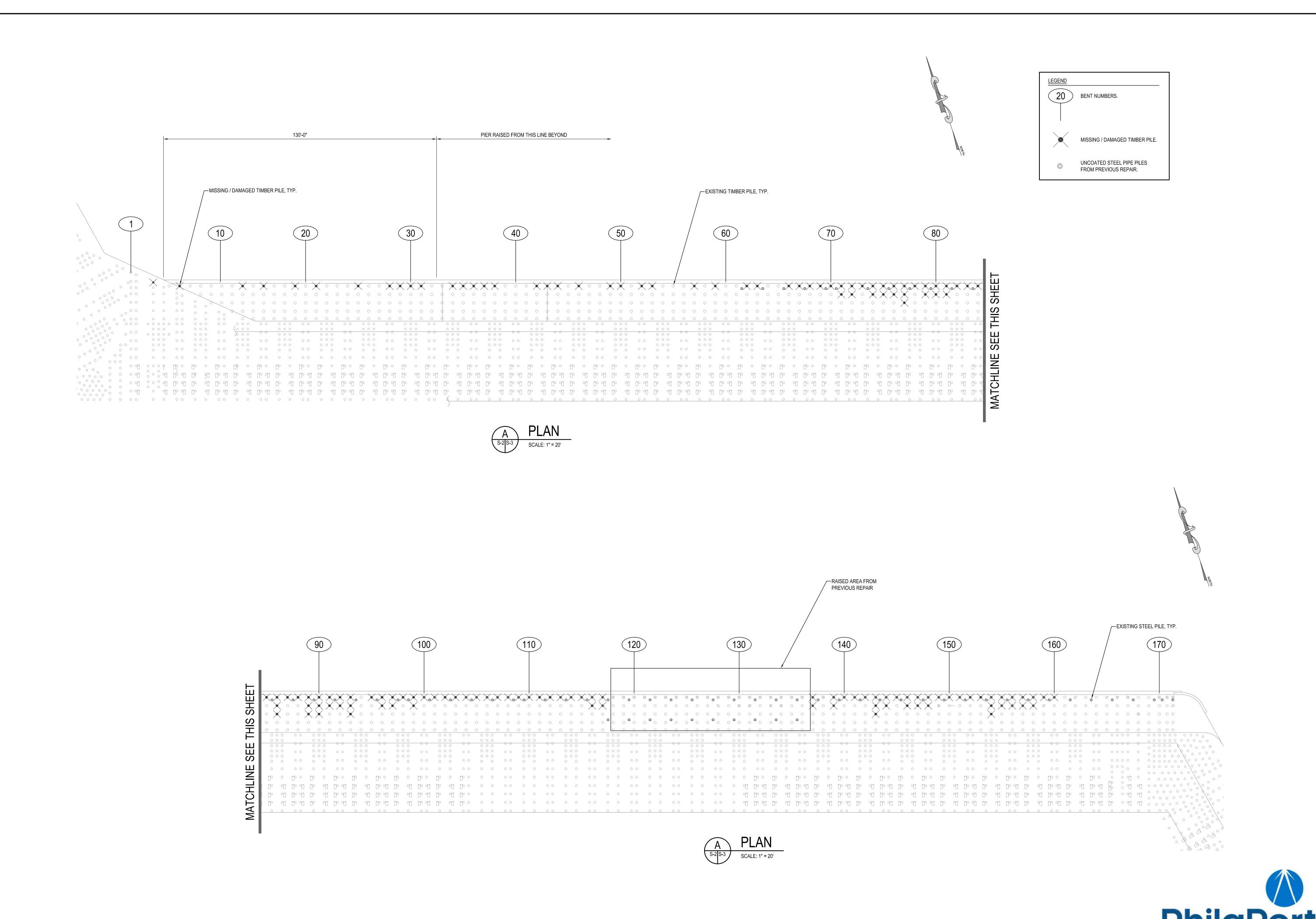
DATE: 05/05/2023

PROJECT: 2021.0280.00.0

S-2

100% DESIGN SUBMISSION 05/05/2023

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NO. DATE REVISION

WHITNEY BAILEY COX & MAGNANI, LLC 300 East Joppa Road Suite 200 Baltimore, MD 21286 410.512.4500 www.wbcm.com

EXISTING WHARF PILING PLAN
PIER 84 S PILE REPAIRS

R.J.W. A.J.K.

DESIGNED: R.J.W.

DRAWN: A.J.K.

CHECKED: C.F.

SCALE: 1" = 20'

DATE: 05/05/2023

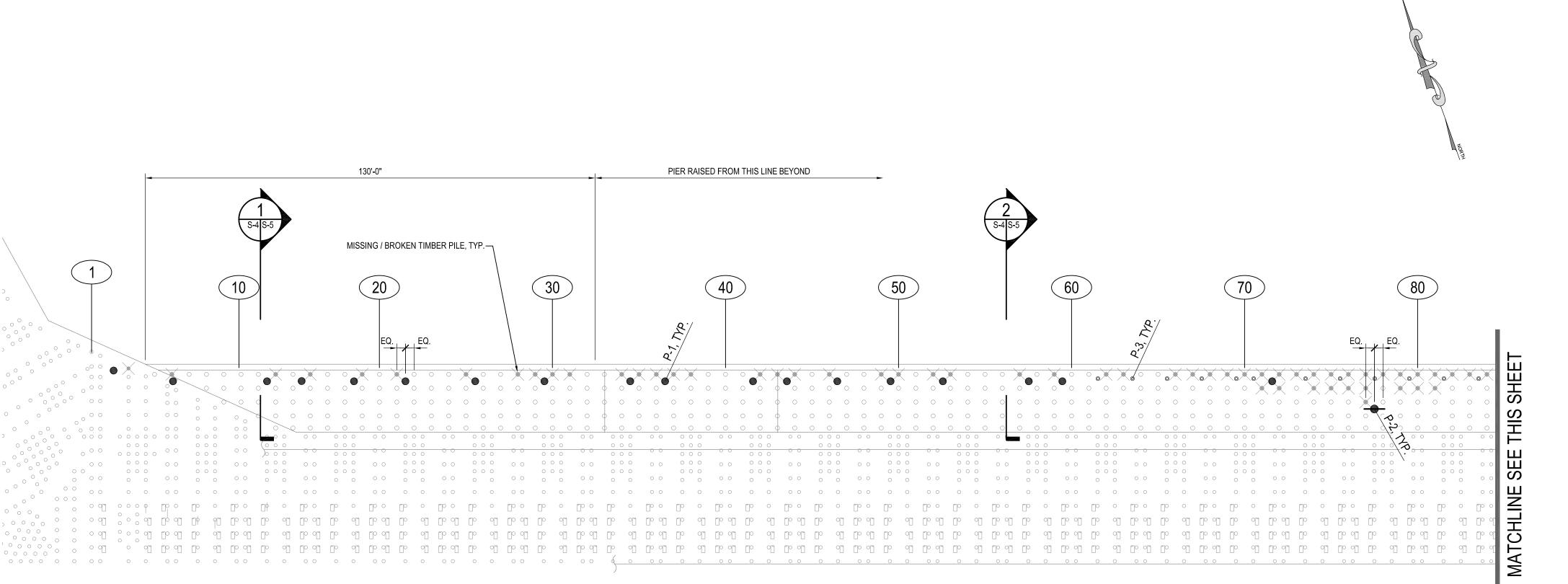
PROJECT: 2021.0280.00.0

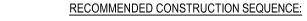
DRAWING:

100% DESIGN SUBMISSION

100% DESIGN SUBMISSION 05/05/2023

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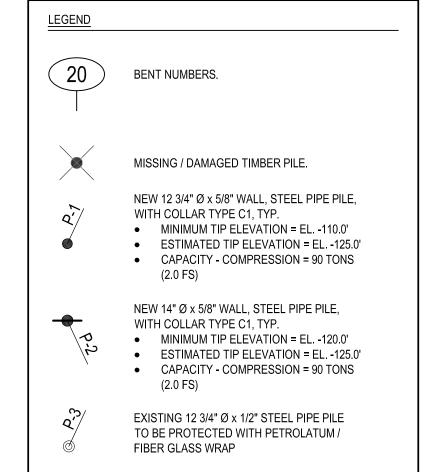


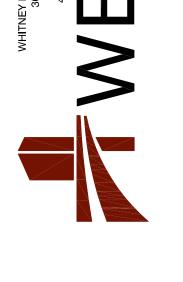


- 1. REMOVE ANY BROKEN TIMBER PILES AROUND PROPOSED LOCATION OF STEEL PILES.
- 2. INSTALL PIPE SLEEVE AT LOCATION OF PROPOSED STEEL PILE
- 3. USING CONTRACTORS MEANS AND METHODS, REMOVE FILL FROM SLEEVE AND CORE DRILL THOUGH CONCRETE SEA WALL WHEN NECESSARY.
- 4. REMOVE ANY TIMBER BENEATH PILE SLEEVE, ALLOWING FOR AN OPEN PASSAGEWAY FOR NEW STEEL PILE.
- 5. DRIVE NEW STEEL PILE AND PREFORM TEST WITH PILE DRIVING ANALYZER. SUBMIT PDA REPORT TO ENGINEER FOR REVIEW.
- 6. INSTALL COLLAR. ENSURING FACE OF PLATE IS IN FULL CONTACT WITH BEARING SURFACE BEFORE
- 7. DOWN TO 10 FEET BELOW MUDLINE, REMOVE ANY DEBRIS FROM INNER DIAMETER OF PILE THAT MAY HAVE OCCURRED DURING DRIVING PROCESS.
- 8. FILL PILE WITH CONCRETE TO 10 FEET BELOW MUDLINE.

INSTALLING PIN. SHIMS MAY BE USED IF NECESSARY.

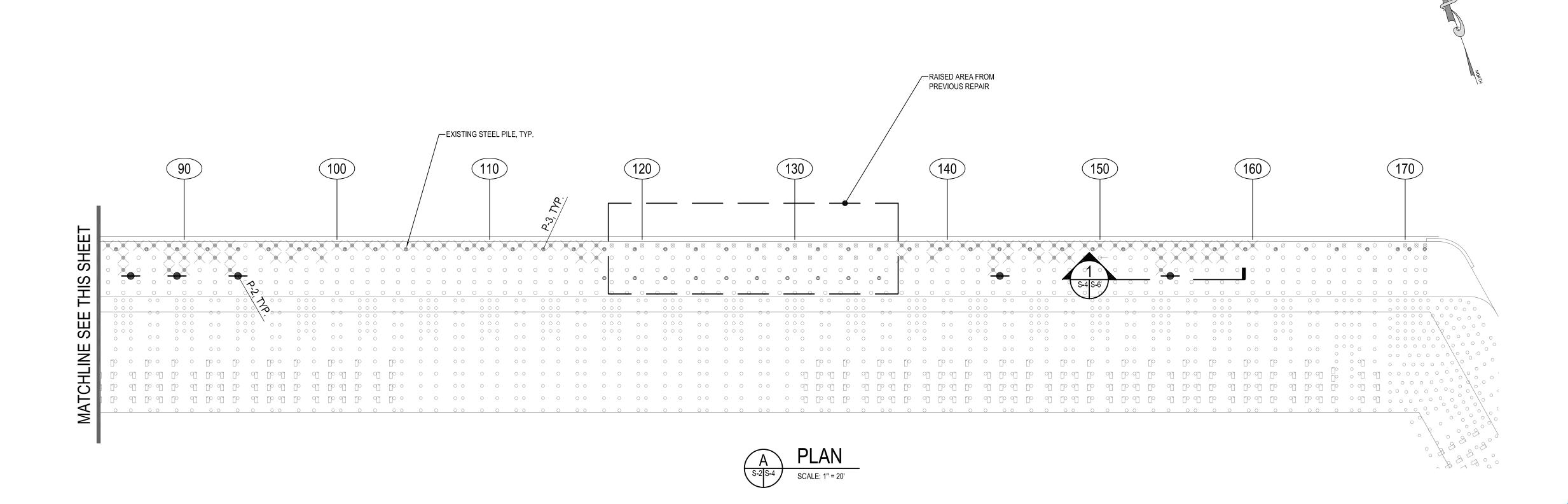
- 9. FILL SPACE BETWEEN PILE AND SOIL/SEAWALL WITH GROUT.
- REPAIR TOP SLAB.

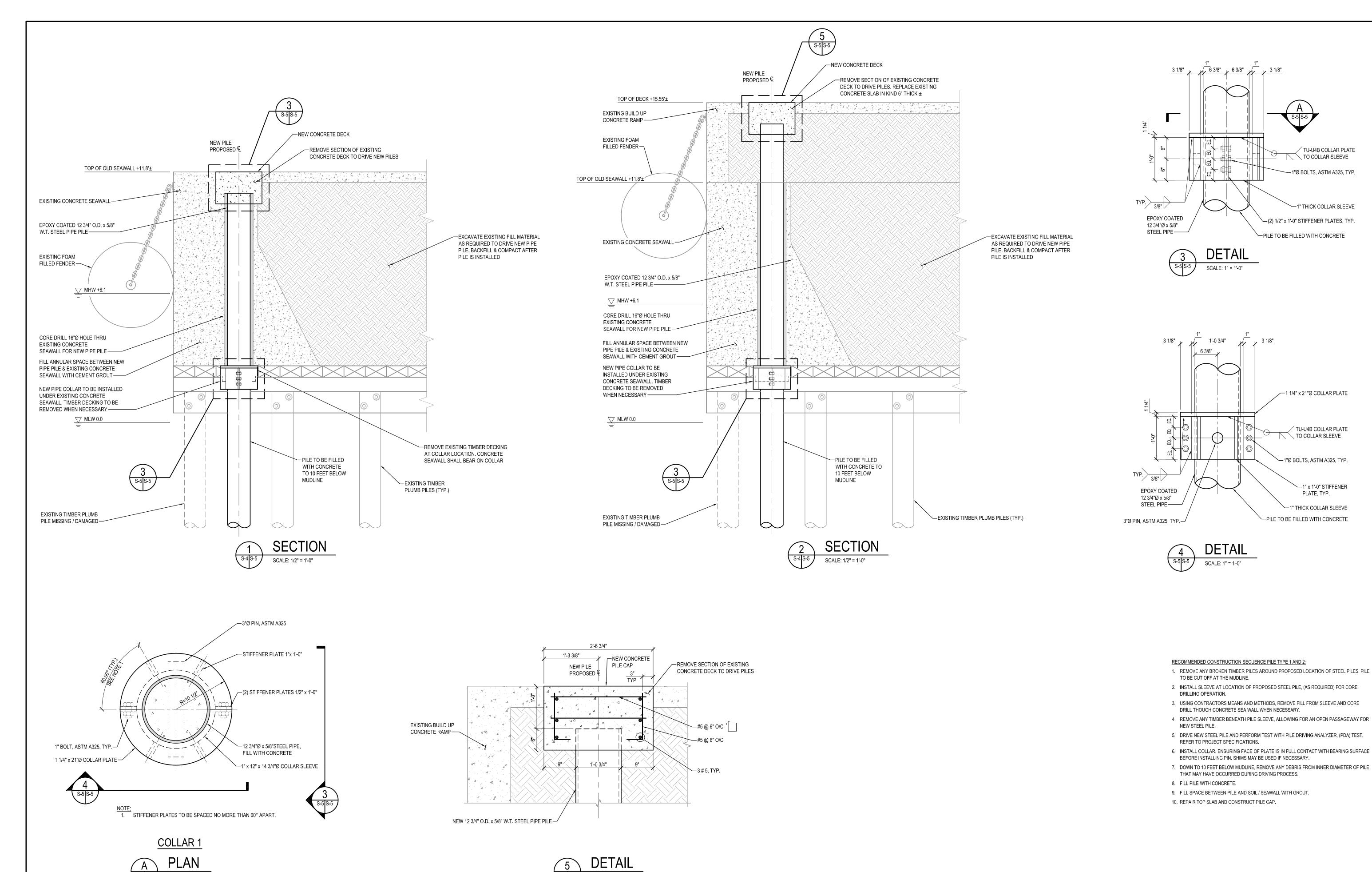




PILING PLAN PROPOSED WHARF

DESIGNED:	R.J.W.			
DRAWN:	A.J.K.			
CHECKED:	C.F.			
SCALE:	1" = 20'			
DATE:	05/05/2023			
PROJECT:	2021.0280.00.0			





05/05/2023

✓ TU-U4B COLLAR PLATE

TO COLLAR SLEEVE

—1"Ø BOLTS, ASTM A325, TYP.

1" THICK COLLAR SLEEVE

—1 1/4" x 21"Ø COLLAR PLATE

/ TU-U4B COLLAR PLATE

─1"Ø BOLTS, ASTM A325, TYP.

1" x 1'-0" STIFFENER

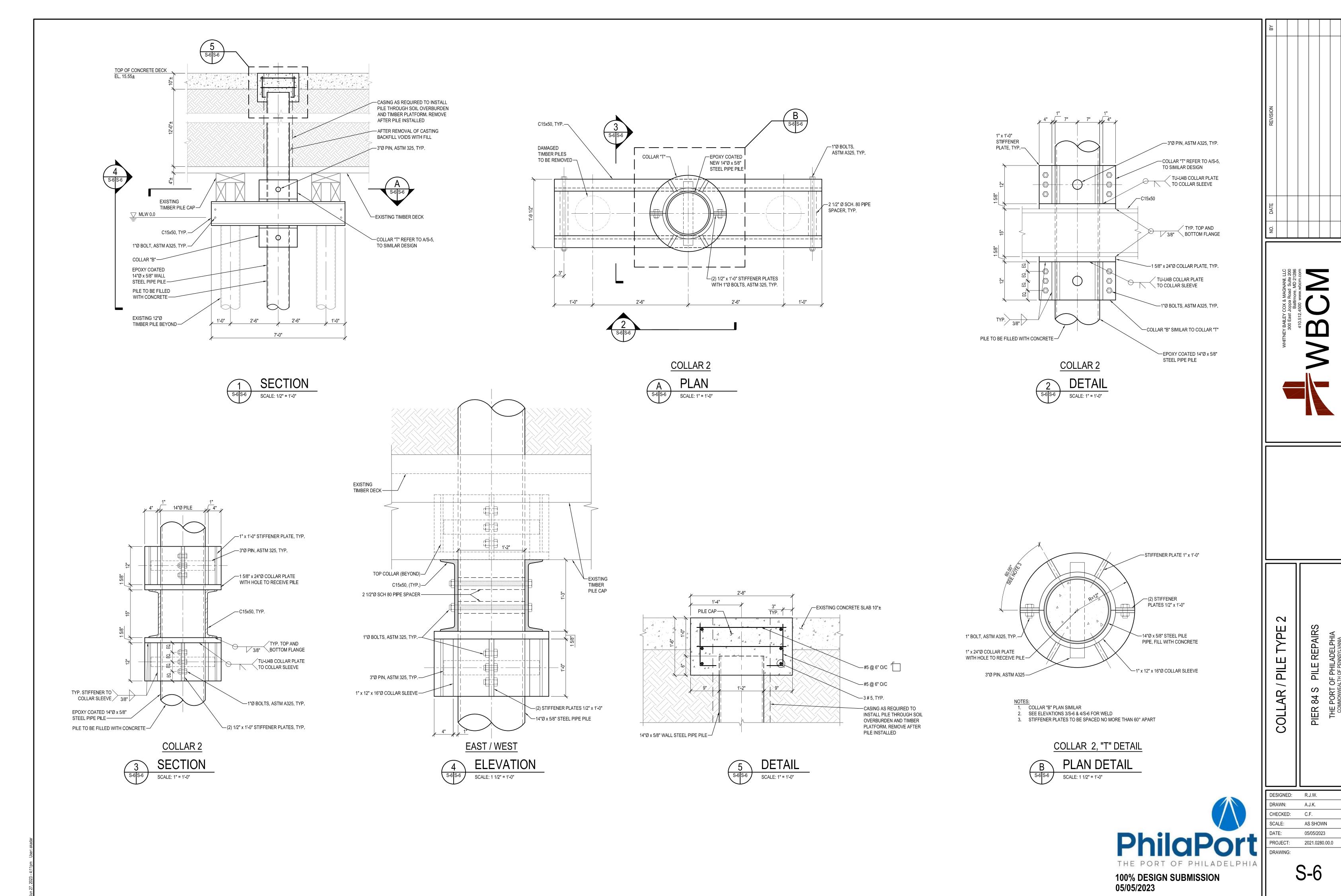
PLATE, TYP.

1" THICK COLLAR SLEEVE

DESIGNED: R.J.W. DRAWN: A.J.K. CHECKED: C.F. SCALE: AS SHOWN 05/05/2023 PROJECT: 2021.0280.00.0 S-5 100% DESIGN SUBMISSION

COLLAR

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