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October 6, 2015

TO: PLANHOLDERS

SUBJECT: RAIL TAMPING PROJECT PORTWIDE
PROJECT NO. 091512
CONTRACT NO. 070127

ADDENDUM NUMBER TWO

This addendum is issued to amend the following:

BIDDING DOCUMENTS

A. SECTION 00 11 13 - ADVERTISEMENT FOR BIDS

1. **DELETE** and **REPLACE** the issued Section 00 11 13 - Advertisement for Bids with the attached, revised Section 00 11 13 - Advertisement for Bids (Attachment A). (Revises the Bid Opening Date)

B. SECTION 00 41 00 - BID FORM

1. **DELETE** and **REPLACE** the issued Section 00 41 00 - Bid Form with the attached, revised Section 00 41 00 - Bid Form (Attachment B). (Adding Bid Item 6)

SPECIFICATIONS

A. SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES

1. **DELETE** and **REPLACE** the issued Section 01 20 00 - Price and Payment Procedures with the attached, revised Section 01 20 00 - Price and Payment Procedures (Attachment C). (For new Bid Item 6)

B. SECTION 34 11 26.13 - TRACK RAIL BALLAST

1. **DELETE** and **REPLACE** the issued Section 34 11 26.13 - Track Rail Ballast with the attached, revised Section 34 11 26.13 - Track Rail Ballast (Attachment D). (To change the specification to a No. 5 gradation)

Receipt for this addendum shall be indicated in the space provided in Section 00 41 00, Bid Form.

END OF SECTION

ATTACHMENT A – Revised Section 00 11 13 - Advertisement for Bids

ATTACHMENT B – Revised Section 00 41 00 - Bid Form

ATTACHMENT C – Revised Section 01 20 00 - Price and Payment Procedures

ATTACHMENT D – Revised Section 34 11 26.13 - Track Rail Ballast

**THE PORT OF TACOMA IS CURRENTLY ACCEPTING SEALED BIDS FOR CONSTRUCTION OF
THE FOLLOWING:**

**RAIL TAMPING PROJECT PORTWIDE
PROJECT NO. 091512 | CONTRACT NO. 070127**

- Scope of Work:** The work required for this project includes restoring track geometry to original lines for approximately 38,000 linear feet of trackwork with 92 turnouts by performing minor track raising and shifting to restore original line and grade, placing ballast as required for minor track raising, stabilizing track, tamping and regulating ballast, and correcting any crosslevel and longitudinal level defects from settling of the track.
- Bid Estimate:** Estimated cost range is \$190,000 to \$215,000, plus Washington State Sales Tax (WSST).
- Sealed Bid Date/Time/ Location:** Bids will be received at the Front Reception Desk, Port Administration Office, One Sitcum Plaza, Tacoma, Washington until **2:00 P.M. 2:30 P.M. on October 15, 2015 October 20, 2015**, at which time they will be publicly opened and read aloud.
- Pre-bid Conference & Site Visit:** A pre-bid conference and site visit has been set for **October 7, 2015 at 2:00 P.M.** The conference is being held at the Fabulich Center, located at 3600 Port of Tacoma Road, Conference Room 110C..
- Contact Information:** All questions are to be put into writing to procurement@portoftacoma.com. No oral answers will be binding by the Port.
- Bidding Documents:** Plans, Specifications, Addenda, and Plan Holders List for this project are available on-line through The Port of Tacoma's Website www.portoftacoma.com. Click on "Contracts"; "Procurement", and then the Procurement Number **(070127)**. Bidders must subscribe to the Holder's List on the right hand side of the screen in order to receive automatic email notification of future addenda and to be placed on the Holder's List.
- Contact Jana Prince at procurement@portoftacoma.com with questions. Holder's Lists will be updated regularly. Additional Instructions available in 00 21 00 - Instructions to Bidders.

END OF SECTION

BIDDER'S NAME: _____

PROJECT TITLE: RAIL TAMPING PROJECT PORTWIDE

The undersigned Bidder declares that it has read the specifications, understands the conditions, has examined the site, and has determined for itself all situations affecting the work herein bid upon. Bidder proposes and agrees, if this bid is accepted, to provide at Bidder's own expense, all labor, machinery, tools, materials, etc., including all work incidental to, or described or implied as incidental to such items, according to the bidding documents, and that the Bidder will complete the work within the time stated, and that Bidder will accept in full payment therefore the lump sums and unit prices set forth below.

Proposed Bid Price. (Note: Show prices in figures only.) Complete Installation:

ITEM NO.	DESCRIPTION OF ITEM	QTY	UOM	UNIT PRICE	EXTENDED PRICE
1	Mobilization/Demobilization	1	LS		
2	Rail Switch - Manual	68	EA		
3	Rail Switch - Electric	24	EA		
4	Lining, Surfacing And Tamping	38,000	TF		
5	Standby Time - Coordinated Work	5	EA		
6	NO. 5 BALLAST	1,800	TON		
BASE BID SUBTOTAL					

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

Addenda. Bidder acknowledges review of all Addenda through No. _____

[Remainder of Page Left Intentionally Blank; Signature Page Immediately Follows]

Noncollusion. The undersigned declares under penalty of perjury that the bid submitted is a genuine and not a sham or collusive bid, or made in the interest or on behalf of any person or firm not therein named; and further says that the said bidder has not directly or indirectly induced or solicited any bidder on the above work or supplies to put in a sham bid, or any other person or corporation to refrain from bidding; and that said bidder has not in any manner sought by collusion to secure to the bidder an advantage over any other bidder or bidder.

Name of Firm

Date

Signature

Print Name, Title

Mailing Address

City, State, Zip Code

Telephone Number

Email Address

WA State Contractor's License No.

Date of Issue

Expiration Date

Unified Business Identifier (UBI) No.

Employment Security Department No.

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

END OF SECTION

PART 1 - GENERAL

1.01 RELATED WORK DESCRIBED ELSEWHERE

- A. The provisions and intent of the Contract, including the General and Supplemental Conditions apply to this work as if specified in this section. Work related to this section is described throughout these Specifications.
- B. Individual submittals are required in accordance with the pertinent sections of these Specifications

1.02 PAYMENT PROCEDURES

- A. Monthly pay estimates shall clearly identify the work performed for the given time period based on the approved Schedule of Values.
 - 1. At the Pre-construction meeting, the Engineer and the Contractor shall agree upon a date each month when payment applications shall be submitted.
- B. Prior to submitting a payment application, the Contractor and Engineer shall meet each month to review the work accomplished to determine the actual quantities including labor, materials and equipment charges to be billed.
 - 1. Prior to the payment application meeting, the Contractor shall submit to the Engineer all measurement documentation as referenced in these contract documents; to include all measurement by weight, volume or field.
 - 2. For all change work being done on a force account basis, the Contractor shall submit prior to meeting with Engineer all Force Account back-up documentation as required to process the payment application where Force Account work is being billed. The Engineer and the Contractor shall review the documentation at the payment application meeting to verify quantities and review the work accomplished.
 - 3. The Contractor shall bring a copy of all documentation to the pay application meeting with the Engineer.
- C. Following the Engineers' review, the Contractor shall prepare an original pay estimate with complete supporting documentation attached and submit it electronically using Adobe PDF file format to cpinvoices@portoftacoma.com
- D. An estimated cashflow statement projecting the Contractor's monthly billings on the project shall be submitted with each payment application.

1.03 PAYMENT PRICING

- A. Pricing for the various lump sum or unit prices in the Bid Form, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents.
- B. Pricing also includes all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- C. No separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore shall be included in the prices named in the Bid Form for the various appurtenant items of work.

- D. All other work not specifically mentioned in the measurement and payment sections identified below shall be considered incidental to the work performed and merged into the various unit and lump sum prices bid. Payment for work under one item will not be paid for under any other item.
- E. The Port of Tacoma reserves the right to make changes should unforeseen conditions necessitate such changes. Where work is on a unit price basis, the actual quantities occasioned by such changes shall govern the compensation.

1.04 LUMP-SUM MEASUREMENT

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

1.05 REJECTED, EXCESS, OR WASTED MATERIALS

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

1.06 MEASUREMENT AND PAYMENT

- A. Item #1: Mobilization and Demobilization
 - 1. Payment for MOBILIZATION AND DEMOBILIZATION shall be for preparatory work and operations performed by the Contractor including, but not limited to completion and submittal and approval of the following:
 - a. All bonds and insurance certificates
 - b. Construction Site Safety and Security Plan (CSSP)
 - c. Initial Submittal Schedule
 - d. Schedule of Values
 - e. Detailed CPM progress schedule
 - f. Submittal of Inspection and Test Plan
 - g. Erosion and Sediment Control Plan
 - h. Hazardous and Contaminated Substance Health and Safety Plan
 - i. Establishing Contractor's Project Manager, Superintendent, and other required specified personnel on the Work site full time.

- j. Furnishing and installing all temporary facilities and controls as needed for the safe and proper completion of the work, including utilities, sanitary facilities, barriers and enclosures, fences, staging and entrance areas, and field offices, as specified.
 - k. Mobilization onto the site required in support of the Contractor's first 30 days of operations.
 - 2. Mobilization and Demobilization shall be paid at the lump sum price listed in the Contractor's submitted bid. Incremental payment shall be made for each location as follows:
 - a. 40% after completion of 5% of the total contract amount of other bid items have been earned.
 - b. 40% after completion of 20% of the total contract amount of other bid items have been earned.
 - c. 20% after completion of all work on the project has been completed, including cleanup and acceptance of the project by the Port.
- B. Item #2: RAIL SWITCH TAMPING - MANUAL
- 1. Item Description: The Work of this item includes additional work at the manually controlled switch and turnout assembly associated with minor track raising and shifting to restore original line and grade, placing ballast as required for minor track raising, stabilizing track, tamping and regulating ballast, and while correcting for cross level and longitudinal level of the rails and other components .The length of each installation is included in the total length indicated on the bid form for Bid Item #4.
 - 2. Measurement: This item will be measured based on a per each basis. The length of each installation is included in the total length indicated on the bid form for Bid Item #4.
 - 3. Payment: This item will be paid for at the Contract unit price as specified in the Contractor's submitted bid.
- C. Item #3: RAIL SWITCH TAMPING - ELECTRIC.
- 1. Item Description: The Work of this item includes additional work at the electrically controlled switch and turnout assembly associated with minor track raising and shifting to restore original line and grade, placing ballast as required for minor track raising, stabilizing track, tamping and regulating ballast, and while correcting for cross level and longitudinal level of the rails and other components. The length of each installation is included in the total length indicated on the bid form for Bid Item #4.
 - 2. Measurement: This item will be measured on a per each basis.
 - 3. Payment: This item will be paid for at the Contract unit price as specified in the Contractor's submitted bid.
- D. Item #4: LINING, SURFACING AND TAMPING
- 1. Item Description: The Work includes minor track raising and shifting to restore original line and grade, placing ballast as required for minor track raising, stabilizing track, tamping and regulating ballast, and while correcting for cross level and longitudinal level of the rails and other components, including flaggers and other traffic control needed for public safety when impeding at-grade public roadways.
 - 2. Measurement: This item will be measured as track foot determined by the Engineer.

3. Payment: This item will be paid for at the Contract unit price as specified in the Contractor's submitted bid.

E. Item #[5]: STANDBY TIME - COORDINATED WORK

1. Item Description: The Cost associated with this item shall include all mobilized but idle equipment time, idle worker time and associated overhead for forces temporarily unable to perform work scheduled for a specific location because access to work area is prevented by the Rail Owner or Engineer and there is no alternative location for work.
2. Measurement: This item will be measured on a per unit basis. Units are established in increments of 4 hours.
3. Payment: This item will be paid for using portions of or multiples of the Contract unit price as specified in the Contractor's submitted bid.

F. Item #[6]: NO. 5 BALLAST

1. Item Description: The Cost associated with this item shall include purchase and delivery of the ballast to multiple staging areas to support execution of the surfacing work. Additional Contractor handling and transportation costs for placement is covered under Bid Items 2, 3 and 4.
2. Measurement: This item will be measured by the net tonnage placed as supported by delivery tickets minus remaining unused material as estimated jointly by the Engineer and the Contractor.
3. Payment: This item will be paid for at the Contract unit price as specified in the Contractor's submitted bid for net material used.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Restoration of track geometry to original lines for approximately 38,000 linear feet of trackwork with 92 turnouts by performing minor track raising and shifting to restore original line and grade, placing ballast as required for minor track raising, stabilizing track, tamping and regulating ballast, and correcting any crosslevel and longitudinal level defects from settling of the track.

1.02 REFERENCED STANDARDS:

- A. American Railway Engineering and Maintenance-of-Way Association - Manual for Railway Engineering (AREMA) 2014

1.03 SUBMITTALS:

- A. Certification of Ballast
 - 1. The Contractor shall provide laboratory certification that the railroad ballast meets the Specifications for this Section.

1.04 QUALITY ASSURANCE

- A. The Contractor performing railroad work shall be regularly engaged in the furnishing and installation of railroad trackwork, and shall employ at least one (1) supervisory person who is thoroughly trained and experienced in construction. The supervisor shall be completely familiar with the application of the work described in this Section and shall direct all work performed under this Section.
- B. The Contractor shall own a copy of the American Railway Engineering and Maintenance-of-Way Association - Manual for Railway Engineering (AREMA) 2014, Chapters 1, 4, 5, and 30.

PART 2 - PRODUCTS

2.01 GENERAL:

- A. Furnish and install all materials and products to conform with FRA requirements.

2.02 RAILWAY BALLAST:

- A. Railway Ballast: Ballast shall be granite, traprock, or quartzite conforming to the material requirements and manufactured in accordance with AREMA Chapter 1, Part 2. Ballast shall be processed to conform to gradation size No. 4 in accordance with AREMA Chapter 1, Part 2.4, and be manufactured by mechanical crushing from ledge rock, talus, or gravel. ballast shall have at least 100% of the material with one fractured face and 95% of the material retained on a 3/4-inch screen with three (3) fractured faces. The material from which railway ballast is manufactured shall meet the following test requirements:
 - 1. Los Angeles, Wear, 500 Rev. 35% max.
 - 2. Railway Ballast shall meet the following requirements for grading and quality when sampled from stock pile to be loaded for shipment:

3. Gradation Number 5

<u>Sieve Size</u>	<u>Passing % by Weight</u>
<u>1 1/2 inch</u>	<u>100</u>
<u>1 inch</u>	<u>90-100</u>
<u>3/4 inch</u>	<u>40-75</u>
<u>1/2 inch</u>	<u>15-35</u>
<u>3/8 inch</u>	<u>0-15</u>
<u>No.4</u>	<u>0-5</u>

3. Gradation Number 4

Passing	Weight %
1 1/2" sq. sieve	90-100
1" sq. sieve	20-55
3/4" sq. sieve	0-15
1/2" sq. sieve	-
3/8" sq. sieve	0-5

4. Gradation test shall be determined in accordance to ASTM C-136 utilizing square opening sieves conforming to ASTM Specifications E-11.
5. Material Qualities shall be as follows:

Property Method	Minimum (%)	Maximum (%)	Test
Percent Material Passing No. 200	--	1.0	ASTM C 117
Bulk Specific Gravity - Rock	2.6	--	ASTM C 127
Absorbtion - Rock	--	1.3	ASTM C 127
Clay Lumps and Friable Particles	--	0.5	ASTM C 142
Degradation	--	35	ASTM C 535, ASTM C 131
Flat and Elongated Particles	--	5	ASTM D 4791 - Test C

(Length > 3 times Average Thickness)

6. Railway Ballast material shall not contain more than a total of 1% by weight of wood wastes, clay lumps, dust, or other extraneous material. Carbonate rock and slag is prohibited for use as ballast. No less than 85% of Railway Ballast material retained on a 3/8" sieve shall have at least one (1) fractured face.

PART 3 - EXECUTION

3.01 GENERAL:

- A. The track construction is timber ties with bolted rail.
- B. For the purpose of bidding; assume a nominal 1 inch depth of ballast through-out the entire length of track (including switches) identified as work area (38,000 TF).

3.02 TRACK CRITERIA AND TOLERANCES

- A. Track shall be adjusted to alignment and grade prescribed. Gage shall be 4 feet 8 1/2 inches. Track shall meet the following tolerances as well as standards for FRA class 3 track.
 - 1. Deviation from correct gage +/- 1/8 inch.
 - 2. Track Surface
 - a. Runoff in any 31 feet of rail at the end of a raise may not be more than 1/4 inch.
 - b. Deviation from uniform profile on either rail at the midordinate of 62-foot chord may not be more than 1/2 inch.
 - c. Deviation from zero cross level at point on tangent or from designated elevation on curves may not be more than 1/4 inch.
 - d. Difference in cross level between two points less than 62 feet apart on tangents and curves may not be more than 1/2 inch.
 - 3. Alignment: Maximum deviation from uniformity measured in conformance with FRA Safety Standards Section 213.55.
 - a. Tangent Track 3/8 inch - at mid offset on a 62-foot chord.
 - b. Curved Track 1/4 inch - from correct mid-ordinate on a 62-foot chord.
- B. Super-elevation and runoffs shall be provided on all curves unless otherwise specified. Inside rail of track on curves shall be maintained at prescribed grade, and proper super-elevation shall be provided by raising outer rail.

3.03 SURFACE, ALIGN AND DRESS

- A. Contractor shall perform all surfacing within the stated project limits as specified to bring line and surface into compliance within track geometry tolerances specified in this section.
- B. Contractor shall surface track to zero crosslevel on tangent and curved track.
- C. Ballast shall be spread and track raised in a series of lifts with no single lift being greater than 2 inches except in crossings and turnouts. In raising track, jacks and equipment shall be regulated to avoid bending of angle bars or straining of joints. When jacks are used they shall be simultaneously used and properly spaced at not more than quarter points of rail to avoid breaks or bends in rail when track is raised. Both rails shall be raised simultaneously and to proper crosslevel by raising jacks. Each tie shall be tamped from 15 inches inside rail to end of tie. Tamping shall not be permitted at the middle of the tie. Both ends of a tie shall be tamped simultaneously and tamping inside and outside rail shall be done at the same time. Tampers shall be started from a nearly vertical position and worked downward to bottom of the tie, after which the tool should be slanted inward to force ballast under the tie. Equipment used for surfacing truck shall be subject to approval by the Engineer.
- D. Ties that become loose during raising shall be unfastened, realigned, and re-fastened before tamping. During each track raise, track is to be uniformly tamped.

- E. After ballasting is completed and track is surfaced and lined, according to tolerances, ballast shall be trimmed neatly and surplus material shall be spread evenly along ballast shoulder.
- F. Contractor shall perform necessary operations to assure that all ties are at right angles to track.
- G. Contractor shall perform two tamping squeezes per tie up to 1-1/2 inches of raise with one additional insertion and squeeze for additional 1 inch of raise. Joint ties shall be given one additional squeeze than other ties. The maximum allowable raise per surfacing pass shall be 2 inches.
- H. In locations where squeeze tampers cannot fill and compact ballast, such as at frogs, guard rails, switch portions of turnouts and headblocks, etc., mechanically tamp with air tools or other hand-held power tamping tools. Tamping with shovels or picks will not be permitted.
- I. On curves, high rail shall be used as line rail and low rail shall be used as grade rail.
- J. When surfacing turnouts, the straight side of turnout shall be used as the line rail.
- K. After ballast regulating in turnouts, Contractor shall immediately clean excess ballast from switch point area, including switch points, switch rods, connecting rods, and guardrail and frog area.
- L. After ballast is regulated and dressed, Contractor shall ensure that resilient fasteners, track bolts and rail anchors are tight and in proper alignment.
- M. Contractor caused damage to signal equipment, shall be repaired at Contractor's sole expense.

3.04 TESTING:

- A. Before final acceptance of trackwork, the Port will provide for a suitable test locomotive to be run over the entire length of the new trackage in the presence of the Engineer. There shall be no noticeable settlement or deflection of ties and rail during the test. The Contractor shall re-line, surface, tamp, or otherwise correct any and all deficiencies as directed by the Engineer.

END OF SECTION