INVITATION TO BID #2018-119
Bridge Approach Repair:
Clackamas River Bridge and Clear Creek Bridge
ADDENDUM NUMBER 2
January 3, 2019

On November 27, 2018, Clackamas County ("County") published Invitation to Bid #2018-119 ("BID") and amended with Addendum #1 on December 31, 2018. The County has found that it is in its interest to amend the BID through the issuance of this Addendum #2. Except as expressly amended below, all other terms and conditions of the original BID and subsequent Addenda shall remain unchanged.

1. **Remove and replace BID SCHEDULE 'A' CLACKAMAS RIVER (SPRINGWATER ROAD) CARVER BRIDGE APPROACHES with the attached BID SCHEDULE 'A' titled CLACKAMAS RIVER (SPRINGWATER ROAD) CARVER BRIDGE APPROACHES, January 3, 2019, Addendum #2.**

***Note the following changes and additions are made to the Bid Schedule:**
(Bid Items were placed in the section that corresponds with the Bid Item Spec. No. 00587 "Bridge Rails" and three bid items were created from one bid item for clarification.)

The following changes are made to the Project Bid Items:

a. **Added items:**

| Number | Item | Unit | Quantity |
|---|---|---|---|
| 29. | Concrete Rail Cleaning Refinishing and Repainting. | LS | ALL |
| 30. | Galvanized dual Railing Cleaning Refinishing | LF | 600 |
| 31. | Complete Bolting as Needed | LS | ALL |

2. **Remove and replace BID SCHEDULE 'B' CLEAR CREEK (SPRINGWATER ROAD) BRIDGE APPROACHES with the attached BID SCHEDULE 'B' titled CLEAR CREEK (SPRINGWATER ROAD) BRIDGE APPROACHES, January 3, 2019, Addendum #2.**

The following changes are made to the Project Bid Items:

a. **Added item:**

| Number | Item | Unit | Quantity |
|---|---|---|---|
| 10. | Removal of Structures and Obstructions | LS | 1 |

A Bid **not** including these new Bid Sheets **will be rejected as non-responsive**.

3. **Remove and replace SECTION 00587- BRIDGE RAILS of the Special Provisions for Highway Construction with the attached Section 00587 titled Addendum #2, January 3, 2019 Clackamas River (S Springwater Rd) Bridge and Clear Creek (S Springwater Rd) Bridge Approach Repair Construction, Page 51.**

4. **Remove and replace SECTION 02010 – PORTLAND CEMENT, SECTION 02050- CURING MATERIALS, SECTION 02190- PRESERVATIVE TREATMENT OF LUMBER, SECTION 02210- COATING MATERIALS FOR TIMBER AND CONCRETE, SECTION**

**02320- GEOSYNTHETICS, SECTION 02440- JOINT MATERIALS, of the Special Provisions for Highway Construction with the attached Sections 02010, 02050, 02190, 02210, 02320, and 02440, titled Addendum #2, January 3, 2019 Clackamas River (S Springwater Rd) Bridge and Clear Creek (S Springwater Rd) Bridge Approach Repair Construction, Page 62, and 63.**

A Bid not including these new pages will be rejected as non-responsive.
These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.

Attachments:
New BID SCHEDULE 'A' titled CLACKAMAS RIVER (SPRINGWATER ROAD) CARVER BRIDGE APPROACHES, January 3, 2019, Addendum #2.

New BID SCHEDULE 'B' titled CLEAR CREEK (SPRINGWATER ROAD) BRIDGE APPROACHES, January 3, 2019, Addendum #2.

Special Provisions for Highway Construction- Clackamas River (S Springwater Rd) Bridge and Clear Creek (S Springwater Rd) Bridge Approach Repair Construction Pages 51, 62, and 63, Addendum #2, January 3, 2019.

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End of Addendum #2

## BID SCHEDULE 'A' CLACKAMAS RIVER (SPRINGWATER ROAD) CARVER BRIDGE APPROACHES

| SPRINGWATER RD AT CLACKAMAS RIVER BRIDGE AND CLEAR CREEK BRIDGE APPROACH CONSTRUCTION | | | | | | |
|---|---|---|---|---|---|---|
| **Spec No.** | **Item No.** | **ITEM DESCRIPTION** | **UNIT** | **AMOUNT** | **UNIT PRICE** | **TOTAL PRICE** |
| **MOBILIZATION AND TRAFFIC CONTROL** | | | | | | |
| 0196 | 1 | EARLY COMPENSATION BONUS FOR WORKSITE ZONE A (MAX POSSIBLE) | FA | 1 | - | $60,000.00 |
| 0196 | 2 | EXTRA WORK AS AUTHORIZED | FA | 1 | - | $35,000.00 |
| 0210 | 3 | MOBILIZATION | LS | ALL | | |
| **TRAFFIC CONTROL** | | | | | | |
| 0225 | 4 | TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE | LS | ALL | | |
| 0225 | 5 | STRIPE REMOVAL | FOOT | 1200 | | |
| 0225 | 6 | PORTABLE CHANGEABLE MESSAGE SIGNS (To be used for both work sites throughout the project) | EACH | 3 | | |
| 0225 | 7 | FLAGGERS STATION LIGHTING | EACH | 3 | | |
| **EROSION CONTROL** | | | | | | |
| 0280 | 8 | EROSION CONTROL | LS | ALL | | |
| 0280 | 9 | MATTING, TYPE C | SQYD | 100 | | |
| 0280 | 10 | CHECK DAM, TYPE 1 | EACH | 10 | | |
| 0280 | 11 | INLET PROTECTION, TYPE 3 | EACH | 7 | | |
| 0280 | 12 | SEDIMENT BARRIER, TYPE 8 | FOOT | 100 | | |
| 0290 | 13 | POLLUTION CONTROL PLAN | LS | ALL | | |
| **ROADWORK** | | | | | | |
| 0305 | 14 | CONSTRUCTION SURVEY WORK | LS | ALL | | |
| 0310 | 15 | REMOVAL OF PIPES | FOOT | 40 | | |
| 0310 | 16 | REMOVAL OF SURFACINGS | LS | ALL | | |
| 0310 | 17 | ASPHALT PAVEMENT SAW CUTTING | FOOT | 75 | | |
| 0310 | 18 | REMOVAL AND DISPOSAL OF EXISTING SILT/WORK FENCING | LS | ALL | | |
| 0320 | 19 | CLEARING AND GRUBBING | LS | ALL | | |
| 0330 | 20 | GENERAL EXCAVATION (STA14+67 - 17+90) | CUYD | 850 | | |
| 0330 | 21 | GENERAL EXCAVATION (Existing Staging Area) | CUYD | 400 | | |
| 0330 | 22 | GENERAL EXCAVATION (Asphalt Surfacings & Agg Sta 7+85 - 10+00) | CUYD | 100 | | |
| 0350 | 23 | SUBGRADE GEOTEXTILE (TYPE II GEOGRID) | SY | 900 | | |
| **DRAINAGE AND SEWERS** | | | | | | |
| 0445 | 24 | 12 INCH STORM SEWER PIPE, 5 FT DEPTH | FOOT | 30 | | |
| 0470 | 25 | CONCRETE INLETS, TYPE GB-2 | EACH | 1 | | |
| 0470 | 26 | REPLACEMENT AND ADJUSTMENT OF EXISTING CATCH BASIN TOP / RIM | EACH | 3 | | |
| 0490 | 27 | ADJUSTING CATCH BASINS | EACH | 1 | | |
| 0490 | 28 | CONNECTION TO EXISTING STRUCTURES | EACH | 1 | | |
| **STRUCTURES** | | | | | | |
| 0587 | 29 | CONCRETE RAIL CLEANING REFINISHING AND REPAINTING (4,400' APPROX) | LS | ALL | | |
| 0587 | 30 | GALVANIZED DUAL RAILING CLEANING REFINISHING | LF | 600 | | |
| 0587 | 31 | COMPLETE BOLTING AS NEEDED | LS | ALL | | |

| Spec No. | Item No. | ITEM DESCRIPTION | UNIT | AMOUNT | UNIT PRICE | TOTAL PRICE |
|---|---|---|---|---|---|---|
| **BASES** | | | | | | |
| 0620 | 32 | COLD PLANE PAVEMENT REMOVAL, 0 - 3 INCH DEEP | SQYD | 1,050 | | |
| 0620 | 33 | COLD PLANE PAVEMENT REMOVAL, 3 - 6 INCH DEEP | SQYD | 400 | | |
| 0640 | 34 | AGGREGATE BASE | TON | 520 | | |
| **WEARING SURFACES** | | | | | | |
| 0744 | 35 | LEVEL 3, 1/2 INCH DENSE HMAC MIXTURE (Base /Leveling) | TON | 650 | | |
| 0744 | 36 | LEVEL 3, 1/2 INCH DENSE HMAC MIXTURE (Wearing Course) | TON | 875 | | |
| 0749 | 37 | EXTRA FOR ASPHALT APPROACHES | EACH | 1 | | |
| 0749 | 38 | EXTRA FOR ASPHALT WALKS | SQFT | 120 | | |
| 0749 | 39 | EXTRA FOR PEDESTRIAN LANDINGS | EACH | 1 | | |
| 0759 | 40 | CONCRETE CURBS, STANDARD CURB | LF | 90 | | |
| 0759 | 41 | CONCRETE WALKS | SQFT | 680 | | |
| 0759 | 42 | RETROFIT CONCRETE SIDEWALK RAMPS | EACH | 1 | | |
| 0759 | 43 | TRUNCATED DOMES ON NEW SURFACES | EACH | 4 | | |
| 0759 | 44 | EXTRA FOR NEW SIDEWALK RAMPS | EACH | 4 | | |
| **PERMANENT TRAFFIC CONTROL AND GUIDANCE DEVICES** | | | | | | |
| 0851 | 45 | STRIPE REMOVAL | FOOT | 2400 | | |
| 865 | 46 | THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED | FOOT | 7,100 | | |
| 0867 | 47 | PAVEMENT LEGEND, TYPE AB: ARROWS | EACH | 4 | | |
| 0867 | 48 | PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL | EACH | 4 | | |
| 0867 | 49 | PAVEMENT BAR, TYPE AB | SQFT | 26 | | |
| 0905 | 50 | REMOVE AND REINSTALL EXISTING SIGNS | LS | ALL | | |
| 0910 | 51 | WOOD SIGN POSTS | FBM | 10 | | |
| 0930 | 52 | PERFORATED STEEL SQUARE TUBE SIGN SUPPORTS | LS | ALL | | |
| 0940 | 53 | TYPE "R" SIGNS IN PLACE | SQFT | 13 | | |
| 0940 | 54 | TYPE "G2" SIGNS IN PLACE | SQFT | 14 | | |
| 0990 | 55 | DETECTOR LOOP INSTALLATION, SPRINGWATER RD @ HWY 224 | LS | ALL | | |
| **RIGHT-OF-WAY DEVELOPMENT AND CONTROL** | | | | | | |
| 1030 | 56 | PERMANENT SEEDING, NATIVE (HYDROSEEDING) | ACRE | 0.4 | | |
| 1030 | 57 | PERMANENT SEEDING, LAWN (HYDROSEEDING) | ACRE | 0.2 | | |
| 1040 | 58 | TOP SOIL | CY | 140 | | |

PROPOSED COST BID SCHEDULE 'A'_____

(Numerically)

PROPOSED COST BID SCHEDULE 'A' _____

(Written in Words)

COMPANY NAME_____

AUTHORIZED SIGNATURE_____

## BID SCHEDULE 'B': CLEAR CREEK (SPRINGWATER ROAD) BRIDGE APPROACHES

| SPRINGWATER RD AT CLACKAMAS RIVER BRIDGE AND CLEAR CREEK BRIDGE APPROACH CONSTRUCTION | | | | | | |
|---|---|---|---|---|---|---|
| **Spec No.** | **Item No.** | **ITEM DESCRIPTION** | **UNIT** | **AMOUNT** | **UNIT PRICE** | **TOTAL PRICE** |
| **MOBILIZATION AND TRAFFIC CONTROL** | | | | | | |
| 0196 | 1 | EXTRA WORK AS AUTHORIZED | FA | 1 | - | $20,000.00 |
| 0210 | 2 | MOBILIZATION | LS | ALL | | |
| **TRAFFIC CONTROL** | | | | | | |
| 0225 | 3 | TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE | LS | 1 | | |
| 0225 | 4 | FLAGGERS STATION LIGHTING | EACH | 3 | | |
| **EROSION CONTROL** | | | | | | |
| 0280 | 5 | EROSION CONTROL | LS | 1 | | |
| 0280 | 6 | SEDIMENT BARRIER, TYPE 8 | FOOT | 640 | | |
| 0290 | 7 | POLLUTION CONTROL PLAN | LS | 1 | | |
| **ROADWORK** | | | | | | |
| 305 | 8 | CONSTRUCTION SURVEY WORK | LS | 1 | | |
| 0310 | 9 | ASPHALT PAVEMENT SAW CUTTING | FOOT | 290 | | |
| 0310 | 10 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | LS | 1 | | |
| 331 | 11 | 12 INCH SUBGRADE STABILIATION | SY | 50 | | |
| 334 | 12 | PREPARATION OF SHOULDERS | LS | 1 | | |
| 350 | 13 | SUBGRADE GEOTEXTILE (TYPE II GEOGRID) | SY | 620 | | |
| **BASES** | | | | | | |
| 0620 | 14 | COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP | SQYD | 1,400 | | |
| 0620 | 15 | COLD PLANE PAVEMENT REMOVAL, 4 INCH DEEP | SQYD | 500 | | |
| 0620 | 16 | COLD PLANE PAVEMENT REMOVAL AND/OR EXCAVATION, 9 - 23 INCH DEEP | SQYD | 65 | | |
| 0620 | 17 | COLD PLANE PAVEMENT REMOVAL AND/OR EXCAVATION, 26 INCH DEEP | SQYD | 65 | | |
| 0620 | 18 | COLD PLANE PAVEMENT REMOVAL AND/OR EXCAVATION, 23 - 31 INCH DEEP | SQYD | 230 | | |
| 0620 | 19 | COLD PLANE PAVEMENT REMOVAL AND/OR EXCAVATION, 26 - 34 INCH DEEP | SQYD | 275 | | |
| 0640 | 20 | AGGREGATE SHOULDERS | TON | 550 | | |
| 0640 | 21 | AGGREGATE BASE | TON | 450 | | |
| **WEARING SURFACES** | | | | | | |
| 0744 | 22 | LEVEL 3, 1/2 INCH DENSE HMAC MIXTURE @ 2" DEEP (Wearing Course) | TON | 630 | | |
| 0744 | 23 | LEVEL 3, 1/2 INCH DENSE HMAC MIXTURE @ 0-10" DEEP (Base/Leveling Course) | TON | 550 | | |
| **PERMANENT TRAFFIC CONTROL AND GUIDANCE DEVICES** | | | | | | |
| 810 | 24 | 31 INCH GUARDRAIL, TYPE 2A | FT | 312.5 | | |
| 810 | 25 | 31 INCH GUARDRAIL, TYPE 3 | FT | 38 | | |
| 810 | 26 | GUARDRAIL TERMINALS, NON-FLARED | EA | 2 | | |
| 810 | 27 | GUARDRAIL ANCHORS, TYPE 1 MODIFIED | EA | 2 | | |
| 810 | 28 | GUARDRAIL END PIECES, TYPE B | EA | 1 | | |
| 810 | 29 | EXTRA FOR 8 FOOT POSTS | EA | 40 | | |
| 810 | 30 | GUARDRAIL TRANSITION | EA | 3 | | |
| 810 | 31 | EXTRA FOR HAND DUG GUARDRAIL POST HOLES | EA | 12 | | |
| 820 | 32 | REMOVE AND REINSTALL CONCRETE BARRIER | LS | 1 | | |
| 865 | 33 | THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED | FOOT | 11,000 | | |

## BID SCHEDULE 'B': CLEAR CREEK (SPRINGWATER ROAD) BRIDGE APPROACHES

| SPRINGWATER RD AT CLACKAMAS RIVER BRIDGE AND CLEAR CREEK BRIDGE APPROACH CONSTRUCTION | | | | | | |
|---|---|---|---|---|---|---|
| **Spec No.** | **Item No.** | **ITEM DESCRIPTION** | **UNIT** | **AMOUNT** | **UNIT PRICE** | **TOTAL PRICE** |
| 867 | 34 | PAVEMENT BAR, TYPE AB | SQFT | 70 | | |

PROPOSED COST BID SCHEDULE 'B'_____

(Numerically)

PROPOSED COST BID SCHEDULE 'B' _____

(Written in Words)

PROPOSED COST BID SCHEDULES 'A' AND 'B'_____

(Numerically)

PROPOSED COST BID SCHEDULES 'A' AND 'B' _____

(Written in Words)

COMPANY NAME_____

AUTHORIZED SIGNATURE_____

## SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

Add the following subsection:

**00587.20 Working Drawings** – For metal rails the previous stamped drawings will be provided upon request.

**00587.42 Concrete Rails** – Modify this subsection as follows:

**Surface Finish –** Replace this paragraph with the following paragraph:

- Bridge concrete railing was finished and painted, however light surface /cosmetic damage has occurred and will need to be refinished to match. All of this concrete rail will need cleaning (pressure washing at a minimum) and repainting. (From the top outside edge to the bottom inside edge where it joins to the sidewalk). Use paint meeting the specifications of 02210.10.

- The existing galvanized railing will require adjustment and completion of bolting specifically at the four ends of railing where the railing joins the concrete rail ends. In addition supply missing bolts, washers and align and secure rail ends to concrete

- Existing Dual Galvanized rail will require removal of overspray paint, removal of surface rust and field clod re-galvanization. Use cold galvanization meeting specification 2530.71 and/or found in the QPLunder the same specification.

**00587.90 Payment** - The accepted quantities of work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

| | Pay Item | Unit of Measurement |
|---|---|---|
| (a) | Concrete Rail Cleaning Refinishing and Repainting. | LS |
| (b) | Galvanized dual Railing Cleaning Refinishing | LF |
| (b) | Complete Bolting as Needed | LS |

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

## SECTION 02010 - PORTLAND CEMENT

Comply with Section 02010 of the Standard Specifications modified as follows:

**02010.10(b) Specifications** - Replace this subsection, except the subsection number and title, with the following:

Portland cement shall conform to the requirements of AASHTO M 85 or ASTM C150 for low alkali cement except as follows:

- Cement shall have a total alkali content (sodium and potassium oxide calculated as $Na_2O + 0.658\ K_2O$) not exceeding 0.60 percent.
- All cement types shall contain a maximum of 8 percent tricalcium aluminate($C_3A$).
- The time-of-setting tests will be by either the Gillmore test or the Vicat test.
- Types I and II maximum fineness (specific surface) as determined by AASHTO T153 air permeability test shall be 430 $m^2/kg$. If $C_3S + 4.75\ C_3A$ is less than or equal to 90, the fineness criteria does not apply.

**02010.20 Blended Hydraulic Cement** - Replace this subsection, except for the subsection number and title, with the following:

Blended hydraulic cement shall be either Type IS-portland blast-furnace slag cement, Type IP-portland-pozzolan cement, Type IL-portland-limestone cement, or Type IT-ternary blended cement according to AASHTO M 240.

Furnish blended hydraulic cement from the QPL.

## SECTION 02050 - CURING MATERIALS

Comply with Section 02050 of the Standard Specifications modified as follows:

**02050.00 Scope** - Replace this subsection, except for the subsection number and title, with the following:

This Section includes the requirements for liquid compounds, polyethylene films, and curing blankets used to cover concrete and other surfaces to retain moisture and to cure.

**02050.10 Liquid Compounds** - Replace this subsection, except for the subsection number and title, with the following:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309, except that testing will be done according to ODOT TM 721.

All compounds shall be Type 1-D or Type 2, Class A or B.

Only Type 2, Class B resins will be allowed for the following concrete pavement applications:

- Plain concrete pavement repair.
- Continuously reinforced concrete pavement.
- Plain concrete pavement.
- Reinforced concrete pavement repair.

Before using liquid compounds, submit one quart samples of each lot for testing, except samples are not required for commercial grade concrete.

**02050.40 Liquid Evaporation Reducer Compounds** - Delete this subsection.

## SECTION 02190 - PRESERVATIVE TREATMENT OF LUMBER

Comply with Section 02190 of the Standard Specifications modified as follows:

**02190.20 Drying Time** - Replace this subsection with the following subsection:

**02190.20 Drying After Treatment** - When using waterborne preservatives, as defined in AWPA P5, dry items according to AWPA T1, Section 7.

During the drying period and until the treated items are installed on the Project, separate each layer of treated items using spacers that are at least 1/2 inch thick.

The maximum moisture content shall be 19 percent prior to installation.

Collect all spacers and other treated wood waste from the construction site and dispose of them according to 00290.20.

## SECTION 02210 - COATING MATERIALS FOR TIMBER AND CONCRETE

Comply with Section 02210 of the Standard Specifications modified as follows:
**02210.10 Coating Materials for Concrete** - Replace the text of this subsection with the following:
Furnish coatings complying with the following:

**(a) System One Primer:**

| | |
|---|---|
| Generic Type: | Single-component, moisture-cured polyurethane |
| Vehicle Type: | Moisture-cured polyurethane |
| Solids: | 50% minimum by volume |
| Color: | Close conformance to ODOT Formula No. 300-74, concrete gray. |

Color chips are available from the ODOT Materials Laboratory.

**(b) System One Top Coating Material:**

| | |
|---|---|
| Generic Type | Single-component, moisture-cured, graffiti-resistant aliphatic polyurethane |
| Vehicle Type | Moisture-cured polyurethane |
| Solids | 52% minimum by volume |
| Density | 8.25 lb/gal minimum |
| Color | Clear |

## SECTION 02320 - GEOSYNTHETICS

Comply with Section 02320 of the Standard Specifications modified as follows:

**02320.10(A)(2) Geogrids** – Add the following –

- Geo grid materials shall meet or exceed the QPL requirements and specifications of TENSAR BX TYPE 2 GEOGRID - SUBGRADE REINFORCEMENT.

## SECTION 02440 – JOINT MATERIALS

Comply with Section 02440 of the Standard Specifications modified as follows:

**02440.15 Lubricant/Adhesive** - Replace this subsection, except for the subsection number and title, with the following:

Furnish a lubricant/adhesive conforming to ASTM D4070 and according to the recommendations of the seal manufacturer.