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GOVERNOR

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

David Bernhardt
COMMISSIONER

January 30, 2015
Subject: **Bridge**
State WIN: 016705.00
Location: **Howland**
Amendment No. 2

Dear Sir/Ms:

Make the following changes to the Bid Documents:

In Amendment No. 1:

On page 1, the last edit:

REMOVE, page 78, "*SPECIAL PROVISION, SECTION 107, Time (Limitation of Operations), (Supplemental Liquidated Damages)*" dated December 23, 2014 and **REPLACE** with the attached revised "*SPECIAL PROVISION, SECTION 107, Time (Limitation of Operation), (Supplemental Liquidated Damages)*" dated January 9, 2015.

"**January 9, 2015**" needs to be changed to "**January 23, 2015**", make this change in pen and ink.

On page 2, the eighth edit:

REMOVE the third paragraph on page 98, "*SPECIAL PROVISION, SECTION 502, STRUCTURAL CONCRETE, (Fiber Reinforced Polymer Bride Drains)*" page 3 of 14 dated December 15, 2014, with the heading "General" and **REPLACE** with the following:

"**December 15, 2014**" needs to be changed to "**December 22, 2014**", make this change in pen and ink.



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In the Contract Book:

REMOVE in the “SPECIAL PROVISIONS, SECTION 104, Utilities”, on page 62, in the paragraph with the heading “NOTE:” the words “**water main**” and **REPLACE** with “**conduit work**” so the sentence reads as follows:

“Coordination of the above work will occur between the parties before the installation of the conduit work begins.”

Make this change in pen and ink.

ADD the attached “SPECIAL PROVISION, SECTION 910, SPECIAL WORK, (Utility Conduit – Mid-Maine Telecom, LLC and Time Warner Cable-Approaches Only)”, 3 pages.

REMOVE the fifth paragraph on page 84, SPECIAL PROVISION, SECTION 202, (Removing Existing Bridges) page 1 of 2 dated December 15, 2014 and **REPLACE** with the following:

The Contractor shall dismantle the existing bridge structure in a manner that will not cause damage to persons or property. Removal shall be done in accordance with Standard Specification section 656 and other precautions, including protective structures as required or ordered, shall be taken to insure that no debris is allowed to fall into the river below.

In the Plan Set:

On plan Sheet 59 titled “BRIDGE PLAN AND ELEVATION”, in the Elevation View on the right hand side at the bridge Abutment No. 2 the riprap bench dimension needs to be **CHANGED** from “**8'-0", Bench, (Typ.)**” to “**6'-0", Bench, (Typ.)**”, make this change in pen and ink.

The following questions have been received:

Question: Please provide Special Provision Section 656 that is referenced in Special Provision Section 202 (Removing Existing Bridge).

Response: There is no Special Provision 656 for this project. Please refer to the specification revision stated above.

Question: The installation and removal of cofferdams are included under method of measurement in Special Provision Section 202 (Removing Existing Bridge). Are cofferdams required for the removal of the existing piers?

Response: No cofferdams are required for pier removal however debris must be contained in accordance with Special Provision Section 202 (Removing Existing Bridge) and Standard Specification Section 656.

Question: Is the Pile Anchor Detail shown on plan sheet 74, (Pier 2 Pile Layout Plan) typical for all the piles at each abutment and pier locations?

Response: The Pile Anchor Detail only applies to the piles marked with an “*” on Sheet 74, see Note 1 on Sheet 74.

Question: How is the pile anchors (7/8” diameter studs) paid?

Response: Payment for the pile anchors shall be considered incidental to related Steel H-Beam Pile pay items.

Question: There is a reference to the installation of a water main in Special Provision Section 104 Utilities, page 3 of 6, NOTE:. When and where will the water main be installed?

Response: See the aforementioned edits to the contract book particularly to SPECIAL PROVISIONS, SECTION 104, Utilities.

Question: Are the precast deck added bars in section C-C p. 502(11) GFRP?

Response: Transverse reinforcement in the top mat shall be GFRP bars in accordance with the contract drawings (#6 GFRP bars at 4 ½” oc). Added transverse #5 hooked bars in the top mat are not required. The #5 transverse bottom mat hooked bars at 6” oc in the CIP concrete overhang as shown in Section C-C Standard Detail 502(11) shall be replaced with similar #5 GFRP bars at 6” oc.

Question: Are the bars to be #5's @ 6" as noted or do they match the transverse bars, #6's @ 4 1/2" oc top & #5's @ 4 1/2" oc bottom?

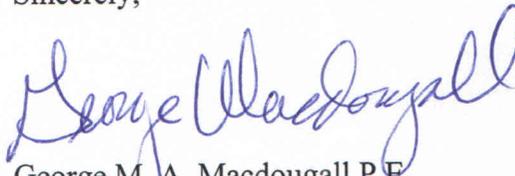
Response: See the response above. In addition, if the Contractor decides to use precast deck panels, the Welded Wire Fabric 6x6 – D6xD6 as shown in Standard Detail 502(09) shall be replaced with #4 GFRP Bars at 10” max. in each direction. The top mat of GFRP reinforcement in the CIP deck section shall be as shown on the contract drawings, except the area of longitudinal GFRP reinforcement to be provided in the top mat of the CIP portion of the deck between Station 17+50 and Station 25+25 shall be equivalent to the sum of the areas of both the top and bottom mat of longitudinal GFRP reinforcement as shown in the contract drawings (Sheets 103 – 107). The spacing of the revised longitudinal GFRP bars in the top mat shall meet the requirements of Article 2.11.2 of the AASHTO LRFD Bridge Design Guide Specifications for GFRP-Reinforced Concrete Bridge Decks and Traffic Railings, First Edition Further, the sidewalk bars S557E and S558E shall be modified to anchor within the CIP deck. The Contractor is responsible for creating and submitting for review and approval a new rebar schedule and slab reinforcing plans sufficiently detailed for review and approval for the cast in place portion of the superstructure.

Question: We cannot find the Special Provision 910.301 Special Work Utility Conduit OTT and TWC – Approaches Only, that describes in detail the work to be included in that item. Please provide?

Response: See the aforementioned edits to the contract book particularly to SPECIAL PROVISION, SECTION 910, SPECIAL WORK, (Utility Conduit – Mid-Maine Telecom, LLC and Time Warner Cable-Approaches Only).

Consider these changes and information prior to submitting your bid on **February 4, 2015**.

Sincerely,



George M. A. Macdougall P.E.
Contracts & Specifications Engineer

APPENDIX B - SPECIFICATIONS

SPECIAL PROVISION

SECTION 910 SPECIAL WORK

(Utility Conduit – Mid-Maine Telecom, LLC and Time Warner Cable– Approaches Only)

Description This item shall consist of all work shown in the Plans, as referenced in Special Provision 104 – Mid-Maine Telecom, LLC (MMT) and Time Warner Cable (TWC) – Approaches Only), and described in this special provision. This special provision is limited to the work from the tie-in points identified by MMT and TWC and shown on the plans inward towards the bridge to ten (10) feet beyond the end of each at-grade approach slab. Work related to the bridge between these two points is addressed in a separate special provision that includes all telecommunication utilities (Mid-Maine Telecom, LLC and Time Warner Cable) within the bridge limits.

The Bridge approach work shall consist of furnishing and installing all materials and labor for the installation of four (4) 4-inch schedule 80 PVC conduit, all trenching and backfilling, sand bed, traffic rated electrical vaults, crushed stone bases, bricks, mortar, any gradual sweeps (36-inch minimum if necessary), pull string, tracer wire, warning tape, and all associated hardware and incidentals related to these items necessary to complete the work to bring conduits to the specific riser poles per plan. The utility owners' name (MMT & TWC) shall be clearly labeled and visible at each terminus on their respective conduit to differentiate it from conduits intended for other utility owners.

CONSTRUCTION REQUIREMENTS

Materials The Contractor shall be responsible for the furnishing and fabrication of all material and associated hardware as shown in the Plans and described in this specification.

The materials furnished by the Contractor shall be new. All materials shall conform to NEMA or UL standards as applicable. Non-metallic conduit shall be un-plasticized Schedule 80 polyvinylchloride (PVC) plastic as shown on the plans. Pull line shall be polypropylene rope a minimum of ¼ inch diameter extending through the entire run to north and south tie-in points as located on the Plans. The proposed vaults shall be located on each side of the bridge after the approaches and have (2) two 3' vaults stacked on top of each other and be standard precast traffic rated electric manhole 3' round x 3'H constructed of 4000 psi concrete (min.) and rated for H-20 traffic loading and core drilled with one (1) entrance and (1) exit hole for each 4-inch conduit on the bottom vault and to be sealed with grout and will require 18" of crushed rock as a base for bottom vault to sit on. The vault shall have a manhole and cover as shown on the Plans. MMT & TWC shall be notified while conduit and manhole work is in progress in the event they would like to provide an inspector.

The Contractor shall within 60 days following execution of the contract, submit a list of materials which are to be installed. The list shall include the manufacturer, size, and identifying number of each item. The list shall be supplemented by such data as may be required, including detailed scale drawings of proposed minor deviations from the plans. The Contractor shall submit for review, design data and sample articles of the material proposed for use. All of the data shall be submitted in duplicate.

APPENDIX B - SPECIFICATIONS

Workmanship shall conform to the requirements of: NEC, NESC, ASTM Standards, and the ANSI, the local Utility Companies, the State of Maine, Manufactures Specifications and any local ordinances that may apply except when otherwise noted on the Plans or in the Special Provisions.

Conduits shall be of the sizes noted on the Plans, which are indicated as the nominal inside diameter.

The Contractor shall be responsible for and shall repair all damage caused to underground drainage structures, utilities, or lighting conduit, which are encountered during construction.

Trenches for conduits shall be excavated to a width that will permit proper installation of the conduit to the depth shown on the Plans or as directed. After the trench has been excavated as specified, the bottom of the trench shall be prepared with a bedding sand material. Minimum cover shall be 36 inches over the top of the conduits. After placing the conduit which will be placed 2 over 2 over to riser poles, sand shall be placed around the sides. The entire trench shall be backfilled with an approved material, placed in layers not exceeding eight inches (8"), and thoroughly tamped.

All underground conduits shall be placed to at least the depth shown on the plans and shall not interfere with poles, guardrail posts, approach rail anchor block, sign foundations or other objects. Conduits shall be made watertight by joining with solvent or in accordance with the manufacturer's specifications. If necessary, PVC conduit shall be bent (36-inch minimum radius) carefully to avoid damage and without the use of an open flame. Bends sharper than 45 degrees will not be permitted. The total angle of all bends in one run and the radius of bends shall conform to the NEC requirements.

Where conduit runs are placed parallel to other conduits, they shall be separated by a minimum of 2" of sand or soil cushion. The bottom of trenches shall be lined with a 3" bedding material of tamped sand before laying the conduit. Backfill to a compacted depth of 6" above the top of the conduit shall be sand, free from rocks or hard lumps.

The Contractor shall install pull-string in all MMT & TWC conduits. The ends of the lines shall be secured in such manner as to prevent accidental withdrawal of the wire. All conduit ends shall be capped with watertight conduit caps.

The Contractor shall provide a metal tracer wire and a 2" wide "buried cable" plastic warning tape located 12" below grade at all underground conduits.

Basis of Payment: Payment for Special Work – Utility Conduit (Mid-Maine Telecom, LLC and Time Warner Cable - Approaches Only) shall be full compensation for all materials, flagging, equipment, labor, and hardware necessary to install the utility conduits. Payment for work shall include furnishing and installing PVC conduits and pull-line for conduit, installation of utility vault in the bridge approaches, the required excavation and backfill with granular borrow, and connections to existing manholes and service connections. The steel utility support channel embedded in the concrete bridge deck shall be supplied, installed, and paid for under a separate item.

Method of Measurement

No measurement shall be made

APPENDIX B - SPECIFICATIONS

<u>Pay Item</u>	<u>Description</u>	<u>Pay Unit</u>
910.301	Special Work – Utility Conduit (MMT and TWC - Approaches Only)	Lump Sum

Required Pre-Installation Meeting: Before beginning any utility installation work a utility meeting shall be held with all utilities, the MaineDOT Resident, and MaineDOT Utility Coordinator (Calvin Seeley or Denver Small).