

APRIL 27, 2018
REHABILITATION OF BRIDGE NOS. 03350 & 03351
ROUTE 8 NB & SB OVER NAUGATUCK RIVER AND RAILROAD
FEDERAL AID PROJECT NO. N/A
STATE PROJECT NO. 0140-0172
TOWN OF THOMASTON

ADDENDUM NO. 1

QUESTIONS AND ANSWERS

This Addendum addresses the following questions and answers contained on the CT DOT Questions and Answers Website for Advertised Construction Projects:

Question and Answer No. 15

SPECIAL PROVISIONS
NEW SPECIAL PROVISION

The following Special Provision is hereby added to the Contract:

- ITEM NO. 0603050A – REPAIR DEFECTIVE WELDS

REVISED SPECIAL PROVISION

The following Special Provision is hereby deleted in its entirety and replaced with the attached like-named Special Provision:

- ITEM NO. 0603726A – EMBEDDED GALVANIC ANODES

DELETED SPECIAL PROVISION

The following Special Provision is hereby deleted in its entirety:

- ITEM NO.1806201A-TYPE D PORTABLE IMPACT ATTENUATION SYSTEM

CONTRACT ITEMS
NEW CONTRACT ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
0603050A	REPAIR DEFECTIVE WELDS	L.F.	2 L.F.
1806202	TRUCK-MOUNTED OR TRAILER-MOUNTED IMPACT ATTENUATOR	HR	160 HR

DELETED CONTRACT ITEM

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ORIGINAL QUANTITY</u>	<u>REVISED QUANTITY</u>
<u>1806201A</u>	<u>TYPE D PORTABLE IMPACT ATTENUATION SYSTEM</u>	<u>160 HR</u>	<u>0 HR</u>

PLANS

REVISED PLANS

The following Plan Sheets are hereby deleted and replaced with the like-numbered Plan Sheets:

02.01.A1

05.44.A1

The Detailed Estimate Sheets do not reflect these changes.

The Bid Proposal Form has been revised to reflect these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

ITEM #0603050A – REPAIR DEFECTIVE WELDS

Description: Work under this item shall consist of removing and replacing defective welds at the locations indicated on the plans or as directed by the Engineer.

Construction Methods: Before the Contractor is permitted to repair defective welds the Engineer will conduct a survey of the existing welds at the locations indicated on the plans to determine the exact locations and lengths of defective welds. The Contractor shall provide access to these locations.

Paint Removal: The contractor shall remove localized paint, debris, and rust from suspected areas of weld repair, as directed by the Engineer, for the Engineer's observation. Existing paint shall first be removed because of the possible presence of lead in the existing paint, or as necessary for local surface preparation prior to painting. Prior to applying the heat of welding equipment to localized areas of steel superstructures, the existing paint shall be removed to a minimum of 6 inches from wherever the heat will be applied, and as directed by the Engineer.

Method of Paint Removal: Depending on location within a given span, existing paint shall either be removed in accordance with the "Abrasive Blast Cleaning and Field Painting of Beam Ends (Site No. 1)" item or in accordance with the "Localized Paint Removal and Field Painting of Existing Steel" item. See plans for applicable limits of each item.

Welding details, procedures and testing methods shall conform to the latest ANSI/AASHTO/AWS D1.5: Bridge Welding Code, unless otherwise noted.

The defective welds shall be removed at least 2" beyond the end of the crack as designated by the Engineer. The Contractor shall remove the welds by grinding or "arc" gouging without damaging the base metal that is to remain. A minimum of 1/8" of weld metal shall be left in place if arc gouging is the selected removal method and the remaining weld metal shall be removed by grinding. Welders who perform arc gouging shall be SMAW certified. Fire resistant tarps shall be used as required to protect property below.

The Contractor shall then proceed with the re-welding of the arc gouged areas in accordance with the plans. The Contractor is responsible for the stability of the structure and shall take the necessary precautions to ensure the structure remains stable during and after the arc gouging and welding process.

The Contractor shall perform magnetic particle testing to verify that all cracks have been removed and report the results to the Engineer. If directed by the Engineer, additional arc gouging shall be done.

After completion of the welding, the Engineer will inspect the new welds to verify their integrity. Any welds found to be defective as a result of the Engineer's inspection shall be removed and re-welded at the Contractor's expense.

The Contractor shall take measures to keep the areas under the bridges clean and free of debris, and to protect pedestrians from the work operations. The Contractor is responsible for any damage caused to any part of the structure, utilities, pavement below, or vehicular traffic as a result of the work required by this special provision. The Contractor shall repair and/or replace any such damage to the satisfaction of the Engineer at no cost to the State.

Method of Measurement: This work will be measured for payment by the number of linear feet of defective welds repaired to the satisfaction of the Engineer. New welds judged defective by the Engineer, and which require re-welding by the Contractor, will not be measured for payment.

Basis of Payment: This work will be paid for at the contract unit price per linear foot for "Repair Defective Welds", complete in place, which price includes all work described herein, allowing inspection of the ongoing work by the Engineer's representatives, furnishing proper lighting, fire resistant tarps, and all materials, equipment, tools, labor and work incidental thereto.

<u>Pay Item</u>	<u>Pay Unit</u>
Repair Defective Welds	l.f.

ITEM #0603726A - EMBEDDED GALVANIC ANODES

Description: Work under this item shall consist of furnishing and installing alkali-activated, galvanic anodes within concrete repairs or within new concrete at locations noted within the plans and as directed by the Engineer.

Materials: The galvanic anodes shall be Galvashield XP4, available through the following supplier:

Vector Corrosion Technologies, Inc.
3822 Turman Loop, Suite 102
Wesley Chapel, FL 33544
(813) 830-7566
info@vector-corrosion.com

Anodes shall consist of a minimum 5.6 oz (160 grams) of zinc in compliance with ASTM B418 Type II (Z13000) and ASTM B6 Special High Grade (Z13001) with iron content of 15 ppm or less cast around a pair of heat treated, uncoated steel tie wires and encased in a highly alkaline cementitious shell with a pH of 14 or greater. The anode shall contain no added sulfate nor shall it contain chloride, bromide or other constituents that are corrosive to reinforcing steel. Anode units shall be supplied with integral un-spliced wires with loop ties for directly tying to the reinforcing steel.

Each anode unit shall have a volume no less than 12.5 in³

Repair mortars, concrete and bonding agents shall be Portland cement-based materials.

All concrete used for anode installation may not contain fly ash or pozzolan admixtures.

Construction Methods: A technical representative of the manufacturer shall be notified of the scheduled installation of the anodes a minimum of 2 weeks in advance and be present to provide direction and assistance for the initial installations of anodes in concrete patches and succeeding anode installations until the Contractor becomes proficient in the work and to the satisfaction of the Engineer. Tools, equipment, and techniques used to prepare the patch locations for installation of the anodes shall be approved by the Engineer and the manufacturer's technical representative prior to the start of construction. Reinforcing steel shall be clean and securely fastened together with tie wire to provide good electrical conductivity.

The work for this item shall be performed in accordance with the manufacturer's product specification and installed per the project details and as recommended by the technical representative of the manufacturer. The Contractor shall supply a multimeter and shall test the connections between anodes and reinforcing steel or electrical continuity as directed by the technical representative. The Contractor shall place additional tie wires or re-tie connections as directed to provide continuity.

Care shall be taken when handling anodes to prevent damage to the anodes and to the wire connections.

Method of Measurement: This work will be measured for payment by the actual number each of “Embedded Galvanic Anodes” installed and accepted.

Basis of Payment: This item will be paid for at the contract unit price each for “Embedded Galvanic Anodes”, complete in place, which price shall include all applicable technical representation and/or material application training, and all materials, equipment, tools, and labor incidental thereto.

Pay Item

Embedded Galvanic Anodes

Pay Unit

E.A.