July 17, 2019

## STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION DEPARTMENT OF ADMINISTRATION

#### DIVISION OF PURCHASES BID NO. 7598869

### RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2019-CB-071

FEDERAL-AID PROJECT NO. FAP Nos: 405-421-973

#### **Bridge Group 40A - Hawkins**

0+90 to 4+75
CITY/TOWN OF Providence
COUNTY OF PROVIDENCE

### NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 1 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

### A. General Provisions - Contract Specific

1. Page CS-7

Remove and replace page CS-7 in its entirety with revised page CS-7 (R-1) attached to this Addendum No. 1. Contract Field Completion has been removed in its Entirety and Bullet Number 3 "Milestone 3" has been removed in its Entirety.

### **B.** Specifications - Job Specific

1. Page JS-3

Remove and replace page JS-3 in its entirety with revised page JS-3 (R-1) attached to this Addendum No. 1. The 9/30/2020 date has been removed from Item #2.

#### C. Plans

1. VOLUME 2 SHEET 4 - BRIDGE GENERAL NOTES 2 OF 3

Delete Sheet 4 in its entirety and replace it with Sheet 4 (R-1) attached to this addendum No. 1. This sheet has been revised.

### D. Clarification

1. Existing Girder C & D Condition

The existing girders C&D do not exhibit section loss or rust holes per the latest inspection report. A PDF containing rough dimensions of the girder is attached to this Addendum No. 1.

RI Department of Transportation

Administrator, Division of Project Management

- Submittal, review and approval of all structural steel elements including restoration of the existing steel beams to be reused.
- Critical submittals are flagged as Bridge Demolition, Temporary Protective Shielding, Reinforcing Steel, Temporary Utility Bridge, Structural Steel, Erections plans, bearing assemblies and concrete mix.
- Critical submittals will be reviewed by the engineer and returned to the Contractor for appropriate action within twenty eight (28) calendar days of submission.
- 2. The contractor <u>shall not</u> be permitted to begin demolition prior to complete installation of the temporary utility bridge and relocation of the water main and overhead utilities.
- 3. The Contractor shall provide a storage/laydown site at the Contractor's own expense. The Contractor shall submit the location of the storage/laydown site for review and approval to the Department prior to the commencement of work.
- 4. The Contractor's attention is directed to the following contract milestones;

#### Milestone

- #1 Interim Completion Date (333 Days from NTP) Full Bridge Open to Traffic
- #2 Substantial Completion (570 Days from NTP)
  - Milestone #1 is defined as the completed bridge structure with all lanes on Hawkins Street open to all traffic.
  - Milestone #2 is defined as Substantial Completion per specification 101.71 and including all the Works of the Bridge, final striping as well as Hawkins Street work.
- 5. The Contractor shall submit duplicate Shop Drawings (two copies per submittal) and a PDF copy of the shop drawings to the design consultant along with design computations, cuts from manufacturers' catalogs, and/or supporting technical bulletins directly to the attention of the Consulting Engineer (WSP, 2374 Suite 202 Post Road, Warwick, RI 02886, Attn: Richard Lenox, P.E.) simultaneously with each of his official submittals to the Department. Electronic copies shall be emailed to the Design Consultant (Richard.lenox@wsp.com).

# CODE 108.1000 PROSECUTION AND PROGRESS

In accordance with Section 108.08, Failure to Complete on Time, Para. A., Phased Completion, Interim Completion, and Substantial Completion the following defines the Phased and Interim Completion Dates and Associated Liquidated Damages.

### 1. Interim Completion Date #1 – Full Bridge Open to all Traffic:

Liquidated Damages: **\$1950.00** per calendar day.

### 2. Substantial Completion:

Liquidated Damages: \$1950.00 per calendar day.

## **MATERIALS:**

## STRUCTURAL STEEL:

• AASHTO DESIGNATION M 270. GRADE 50

### REINFORCING STEEL:

• AASHTO DESIGNATION M 31, GRADE 60

## **CONCRETE STRENGTHS:**

- CLASS HP 3/4" f'c=5.000 PSI
  - BRIDGE DECK
  - BRIDGE SIDEWALK
  - WINGWALL STEMS BACKWALLS
  - ABUTMENT CAPS
  - KEEPER BLOCKS
- CLASS XX 3/4" f'c=4,000 PSI

MOMENT SLAB STEMS

- WINGWALL FOOTINGS - APPROACH SLABS
- MOMENT SLAB FOOTINGS
- TEMPORARY BRIDGE ABUTMENTS
- CLASS A 3/4" f'c=3,000 PSI
  - APPROACH SIDEWALKS

## OVERLAY:

- BRIDGE DECK
  - MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS

## **FOUNDATIONS:**

1. A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT AND IS INCLUDED AS A PART OF THE CONTRACT DOCUMENTS.

## **CONCRETE NOTES:**

- 1. CLASSES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP, CLASS XX AND CLASS A. AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS OF THE SPECIFICATIONS. REFER TO THE "MATERIAL" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR VARIOUS COMPONENTS.
- 2. THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENGINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROJECT. SECTION 606 "SELF CONSOLIDATING CONCRETE (SCC)", CONTAINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR SELF-CONSOLIDATING APPLICATIONS.
- 3. ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED
- 4. EXCEPT FOR FOOTINGS CAST BELOW GRADE AND UTILITY BRIDGE ABUTMENTS, ALL REINFORCING STEEL SHALL BE GALVANIZED. ALL WIRE TIES AND MISCELLANEOUS HARDWARE USED FOR PLACEMENT OF GALVANIZED REINFORCING SHALL ALSO BE GALVANIZED. GALVANIZED COATING FOR REINFORCING STEEL SHALL CONFORM TO ASTM A767 CLASS 1.
- 5. ALL CRITICAL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS. ALL SPLICES NOT SHOWN ON THE PLANS SHALL BE LAPPED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR CLASS C LAP SPLICES.
- 6. THE TOP BARS IN THE DECK SLABS SHALL BE SPLICED AT THE CENTER OF SPANS BETWEEN GIRDERS. THE BOTTOM BARS SHALL BE SPLICED OVER THE GIRDERS.
- 7. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTMENT AND WALL FACES, BACKWALLS)

2" (+1/4", -0") $1\frac{1}{2}$ " (+1/8", -0")

ALL OTHER BARS

DECK SLABS (WITH WEARING SURFACE)

2"

BOTTOM

COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.

## **CONCRETE NOTES (CONT.):**

- 8. ALL ANCHOR BOLTS SHALL BE ASTM DESIGNATION A 307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232 OR METALIZED IN ACCORDANCE WITH SECTION M.05. SWEDGED RODS SHALL BE AASHTO DESIGNATION M 270 GRADE 36 AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.
- 9. ALL ANCHOR BOLTS SHALL BE SET BY TEMPLATE PRIOR TO PLACEMENT OF CONCRETE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- 10. HORIZONTAL CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.
- 11. UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CONCRETE SURFACES VISIBLE IN ELEVATION TO ONE FOOT BELOW FINAL GROUND LINE (AND THE UNDERSIDE OF ALL CONCRETE DECK SLABS OUTSIDE OF THE FASCIA BEAMS), SHALL RECEIVE A CONCRETE SURFACE RUBBED FINISH IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS.
- 12. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT BEAM SEATS, AND VERTICAL FACES OF BACKWALLS SHALL BE PROVIDED WITH A FILM-FORMING SEALER (M12.03.1) CONCRETE SURFACE TREATMENT-PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.
- 13. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM 34" CHAMFER.
- 14. ALL JOINT SEALANT SHALL BE POLYURETHANE, POLYURETHANE ELASTOMERIC, OR SILICONE SEALANT AS DESIGNATED ON THE PLANS. THE COLOR OF THE JOINT SEALANT, WHERE EXPOSED, SHALL BE NEUTRAL (LIGHT GRAY OR TAN). THE COLOR OF THE SEALANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATIONS DURING CONSTRUCTION UNTIL SUCH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED. ANY CONCRETE STAINS OR DISCOLORATIONS OCCURRING PRIOR TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- 16. UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE A PREFORMED. NON-EXPANSIVE, NON-EXTRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
- 17. PLACEMENT, FINISHING AND CURING OF BRIDGE DECK CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 814 OF THE RI STANDARD SPECIFICATIONS.

SUPPORT RAILS FOR THE FINISHING MACHINE(S) SHALL BE LOCATED BEYOND THE CURB LINE SUCH THAT THE ENTIRE BRIDGE DECK SHALL RECEIVE A MACHINE FINISH. THE CONTRACTOR SHALL INCLUDE THE LOADING OF THE FINISHING MACHINE(S) AND THE SUPPORT RAIL SYSTEM IN THE DESIGN OF THE CANTILEVER DECK SUPPORT SYSTEM THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST AND DESIGN OF THIS SUPPORT SYSTEM WHICH MAY REQUIRE THE ADDITION OF TEMPORARY DIAPHRAGMS OR BRACES TO PREVENT FASCIA STRINGER ROTATION. THE EXISTING HISTORIC GIRDERS SHALL NOT BE USED TO SUPPORT THE FINISHING MACHINE.

- 18. IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, ALL METAL TIES, NON-METALLIC TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST ONE INCH BELOW THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF THE CONTRACTOR PROPOSES TO USE THEM, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR MEETING THE REQUIREMENTS OF ASTM C 928.
- 19. ALL DECK FORMS IN BAYS BETWEEN BEAMS S-1 THRU S-7 SHALL BE STAY-IN-PLACE FORMS AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL DESIGN THE STAY-IN-PLACE FORMS FOR WEIGHT OF WET CONCRETE AND ALL OTHER LOADING THE FORMS WILL BE SUBJECTED TO PRIOR TO DECK SLAB REACHING 28 DAY DESIGN STRENGTH. THE DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN RI OF THE APPROPRIATE DISCIPLINE. REMOVABLE FORMS SHALL BE USED FOR ALL OVERHANGS.

## STRUCTURAL STEEL NOTES:

- 1. FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF BEAMS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS. THE FABRICATOR IS RESPONSIBLE FOR INCORPORATING THE CAMBER, CROSS SLOPE, AND OTHER EFFECTS THAT MAY IMPACT THE OVERALL GIRDER LENGTHS. DIMENSIONS AND/OR THE DETAILING.
- 2. THE SHOPS FABRICATING THE STRUCTURAL STEEL (EXCEPT FOR RAILINGS AND BEARINGS), MUST BE CERTIFIED FOR "MAJOR STEEL BRIDGES (CBR)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM OR EQUIVALENT. SHOPS FABRICATING THE RAILINGS AND BEARINGS SHALL, AT A MINIMUM, BE CERTIFIED FOR "SIMPLE STEEL" BRIDGE STRUCTURES (SBR)". REHABILITATED HISTORIC GIRDERS ARE NOT SUBJECT TO THE MAJOR STEEL BRIDGES REQUIREMENT.

THE SHOPS SHALL ALSO BE CERTIFIED UNDER THE AISC "SOPHISTICATED PAINT ENDORSEMENT (SPE)" QUALITY PROGRAM OR THE SSPC-QP3 PAINT CERTIFICATION

THE FABRICATOR MUST SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED

- 3. THE STEEL ERECTOR/CONTRACTOR FOR THIS PROJECT SHALL BE CERTIFIED FOR "ADVANCED CERTIFIED STEEL ERECTOR (ASCE)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM. THE ERECTOR/CONTRACTOR OF THE STRUCTURAL STEEL SHALL BE REQUIRED TO SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED. THE ASCE CERTIFICATION IS REQUIRED FOR BEAMS S-1 THRU S-7 AND HISTORIC GIRDERS G-1 AND G-2.
- 4. SHOP DRAWINGS FOR ALL FABRICATED STEEL INCLUDING BEARINGS, HISTORIC GIRDERS, RAILINGS AND FALSEWORK SHALL BE SUBMITTED TO THE ENGINEER IN SUFFICIENT TIME TO PERMIT CAREFUL CHECKING PRIOR TO FABRICATION OR REHABILITATION.
- 5. INSPECTION OF WELDS INCLUDING RADIOGRAPHIC TESTING (RT) AND MAGNETIC PARTICLE TESTING (MT) SHALL BE IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS AND THE AASHTO/AWS BRIDGE WELDING CODE, EXCEPT THAT THE REMAINING PERCENTAGE OF ALL GROOVE WELDS NOT RT TESTED SHALL BE MT OR DYE-PENETRANT TESTED.
- 6. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270 GRADE 50 AS DESIGNATED ON THE PLANS.
- 7. ALL AASHTO M 270 STRUCTURAL STEEL USED IN BEAMS (INCLUDING CONNECTION PLATES AND STIFFENERS), SHALL MEET THE ZONE 2 CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENTS AS SPECIFIED IN TABLE 6.6.2-2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR "NONFRACTURE-CRITICAL" AND "FRACTURE-CRITICAL" COMPONENTS. THE ZONE 2 FRACTURE TOUGHNESS REQUIREMENTS ARE AS FOLLOWS:

## NONFRACTURE—CRITICAL

15 FT-LBS @ 40°F (UP TO AND INCLUDING 2 INCHES THICK) GRADE 50 20 FT-LBS @ 40°F (FROM 2 INCH THICK UP TO AND GRADE 50 INCLUDING 4 INCHES THICK)

SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T 243. THE FREQUENCY OF TESTING SHALL BE IN ACCORDANCE WITH THE AASHTO LRED BRIDGE DESIGN SPECIFICATIONS.

THE CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENT IS NOT MANDATORY FOR THE FOLLOWING STEEL COMPONENTS:

- BEARINGS. MASONRY PLATES AND SOLE PLATES
- DRAINAGE MATERIAL
- SUPPORT OF EXCAVATION COMPONENTS
- HISTORIC GIRDERS

REVISIONS RHODE ISLAND NO. DATE BY DEPARTMENT OF TRANSPORTATION PLANS FOR BRIDGE REPLACEMENT BRIDGE NO. 796 PROVIDENCE. RHODE ISLAND BRIDGE GENERAL NOTES 2 OF 3

CHECKED BY \_\_\_\_

2374 POST ROAD ADDENDUM NO. SUITE 202 WARWICK, RI 02886 TEL: +1 401.738.6600

