

January 10, 2019

SUBJECT: FAP Route 404 (IL 40) Project NHPP-HK6S (511) Section (50B-4) BR;12 [(HVB, HB) BR] BR Tazewell County Contract No. 68D59 Item No. 18, January 18, 2019 Letting Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Revised the Schedule of Prices
- 2. Revised the Table of Contents to the Special Provisions
- 3. Revised pages 6-9 and 161-163 of the Special Provisions
- 4. Revised sheets 4,32 and 33 of the Plans

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.

Very truly yours,

Jack A. Elston, P.E. Bureau Chief, Design and Environment

Tet aluchtyon A.E.

By: Ted B. Walschleger, P. E. Engineer of Project Management

JW/al

TABLE OF CONTENTS

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT	1
DATE OF COMPLETION	2
LOCATION OF UNDERGROUND STATE MAINTAINED FACILITIES	2
SUBGRADE TREATMENT	3
TRAFFIC CONTROL PLAN	3
MEMBRANE CURING METHOD	5
PCC QC/QA ELECTRONIC REPORTS SUBMITTAL	5
PCC AUTOMATIC BATCHING EQUIPMENT	6
REMOVAL OF EXISTING BEARINGS	6
TEMPORARY SHORING AND CRIBBING	6
JOINT REPAIR	7
STRUCTURAL STEEL REPAIR	9
PAVEMENT MARKING BLACKOUT TAPE	10
WIDTH RESTRICTION SIGNING	11
TEMPORARY CONCRETE BARRIER REFLECTORS	13
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (TEMPORARY)	13
TEMPORARY PAVEMENT	14
CONCRETE MEDIAN SURFACE REMOVAL	14
MANHOLES TO BE ADJUSTED	14
INLETS TO BE ADJUSTED	15
INTERIM COMPLETION DATES	15
COORDINATION WITH OTHER CONTRACTORS	15
JACK AND REMOVE EXISTING BEARINGS	16
CLEANING AND PAINTING EXISTING STEEL STRUCTURES	17
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	44
DECK SLAB REPAIR	70
SILICONE BRIDGE JOINT SEALER	76
STRUCTURAL REPAIR OF CONCRETE	80
CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	93
HOT DIP GALVANIZING FOR STRUCTURAL STEEL	109
PREFORMED BRIDGE JOINT SEAL	114
_	

COMPENSABLE DELAY COSTS (BDE)	120
CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)	124
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)	125
DISPOSAL FEES (BDE)	137
ELASTOMERIC BEARINGS (BDE)	138
EQUIPMENT PARKING AND STORAGE (BDE)	139
LIGHTS ON BARRICADES (BDE)	
PAYMENTS TO SUBCONTRACTORS (BDE)	
PORTLAND CEMENT CONCRETE (BDE)	141
PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)	142
PROGRESS PAYMENTS (BDE)	144
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)	145
SPEED DISPLAY TRAILER (BDE)	158
SUBCONTRACTOR AND DBE PAYMENT REPORTING (BDE)	160
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	160
TEMPORARY PAVEMENT MARKING	161
TRAFFIC CONTROL DEVICES - CONES (BDE)	164
WEEKLY DBE TRUCKING REPORTS (BDE)	164

PCC AUTOMATIC BATCHING EQUIPMENT

Effective: April 23, 2010

Revised: November 7, 2014

Portland cement concrete provided shall be produced from batch plants that conform to the requirements of Article 1103.03 (a) and (b) of the Standard Specifications for Road and Bridge Construction. Semi-automatic batching will not be allowed.

In addition, the batching plant shall be a computerized plant interfaced with a printer and shall print actual batch weights and aggregate mixtures, all water added, amount of each admixture or additive per batch, and percentage variance from design. The ticket shall also state the actual water-cement ratio as batched, and the amount of water that can be added to the batch without exceeding the maximum water-cement ratio. Truck delivery tickets will still be required as per Article 1020.11 (a)(7) of the Standard Specifications.

REMOVAL OF EXISTING BEARINGS

<u>Description</u>: This work shall consist of removal and proper disposal of the existing bearings at locations shown in the plans according to Article 501.05 of the Standard Specifications.

<u>Method of Measurement</u>: This work shall be measured at each individual location as indicated in the plans.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price each for REMOVAL OF EXISTING BEARINGS, which price shall include all equipment, materials and labor required to satisfactorily complete the work. The jacking and cribbing required to removing the load from the existing bearings is not included as part of this work.

TEMPORARY SHORING AND CRIBBING

Rev. 01/02/2019

This item shall consist of furnishing all material, equipment and labor to support the effected beam(s) during the substructure repairs and removal of existing bearings as shown on the plans, as herein specified and as directed by the Engineer.

Traffic shall be removed from the structure to be jacked prior to commencing jacking operations. Traffic shall be kept off the structure during the jacking operations and until the structure is fully cribbed. Traffic shall be controlled on Washington Street by flaggers during this operation. The cost of this traffic control shall be included in the cost of Traffic Control and Protection (Special).

The superstructure shall be raised in such a manner as to avoid distortion or damage to any of the members. Differential jacking height shall not exceed 1/8 inch (4 mm) transversely between adjacent beams or 1/4 inch (7 mm) longitudinally between adjacent supports. The actual raising of the superstructure shall be kept to the minimum height required to complete the repairs as shown on the plans.

The Contractor shall submit details and calculations, prepared and sealed by an Illinois Licensed Structural Engineer, of the support system he/she proposes to use for approval of the Engineer prior to ordering of material and implementation. The Engineer shall be present during the jacking operation and the jacking sequence shall meet the Engineers approval. Such approval shall in no way relieve the Contractor of responsibility for the safety of the operation or damage to the structure. The supports used shall be such that vertical adjustments may be made in order to maintain the existing beam profile. Prior to starting substructure repairs, the temporary supports shall be used to place an upward reaction on the effected beams designated in the plans, equal to but not larger than the dead load reactions given in the plans, thus relieving the superstructure dead load reaction from the substructure unit to be repaired. It is not the intention to raise the effected beams. As the vertical load is incrementally increased to the specified load, if vertical movement is detected the load shall not be increased further.

Because work is to be completed with traffic directly over the beams being shored the Temporary Shoring and Cribbing shall be designed to carry the Dead Load plus full (Live Load + Imp) as shown in the plans. In addition, the support system shall be capable of resisting all lateral loads as specified in the 17th Edition of the AASHTO Standard Specifications for Highway Bridges. Installation of the Temporary Shoring and Cribbing at structure S.N. 090-0046 shall take priority over any other work on this contract.

At any time during the bridge shoring and cribbing operations, the Engineer may require the Contractor to provide additional supports or measures in order to furnish an added degree of safety. The Contractor shall provide such additional supports or measures at no extra cost to the Department.

The Contractor shall be responsible for restoring to their original condition, prior to construction, the pavement, or slopewall disturbed by the cribbing footings.

The Contractor shall assume all responsibility and be liable for any damage caused by improper supports for shoring in all cases. Neither added precautions nor the failure of the Engineer to order additional protection will in any way relieve the Contractor of sole responsibility for the safety of lives, equipment and the structures.

The work specified herein, as shown on the plans and as directed by the Engineer, shall be paid for at the contract unit price each for TEMPORARY SHORING AND CRIBBING for each beam support location required.

JOINT REPAIR

This item shall consist of cleaning and caulking the existing bridge expansion joints on Structure Nos. 090-0044 and 090-0046. The intent is to seal the existing joints where they intersect with the concrete parapet wall and concrete median on the downhill ends of the joints (the north parapets) as shown in the plans. On Structure No. 090-0046 there are three (3) locations: the two Preformed Joint Seals (PJS) at Piers 1 and 2 where they intersect the north parapet and also at Pier 2 on the south side of the concrete median. On Structure No. 090-0044, there are eleven (11) locations along the north parapets; there are six (6) locations of PJS joints and five (5) locations of Neoprene joints.

The existing joints shall be cleaned and caulked for a distance of two (2') feet out from the face of the parapet and a vertical distance of four (4") inches up the face of the parapet (or concrete median as applicable).

Cleaning shall consist of mechanical scraping, wire brushing, and pressure washing to remove all debris, dirt, rust scale, and other foreign materials. Immediately prior to applying the caulk, the area shall be blown free of all visible water from the cleaning operation.

Caulking shall entail the application of a liberal bead between the rubber joint and the concrete deck on Neoprene joints. On PJS joints, beads of caulk shall be applied between the rubber joint material and the steel plates, and also between the steel plates and the concrete deck. In addition, any obvious cuts or holes in any existing rubber joint material shall also be sealed with caulk.

There may be some PJS joint locations where the preformed joint compression seal does not properly turn up in the base of the parapet. It is important for the joint to extend up into the parapet at least three to four (3" - 4") inches in order to prevent water from running thru the parapet and over the side of the bridge deck. In these case(s), the existing joint material should be pulled back up to the proper position and caulked thoroughly, or if that is not feasible, the contractor should install a backer rod and seal with caulk.

The caulk material to be used shall be a professional-grade elastomeric flashing and repair product that can be used in wet or dry conditions. BLACK JACK Neoprene Super Flash Cement or equivalent meets these requirements. The material can be applied with a standard caulk gun and hand tooled smooth if necessary.

The work will be paid for at the contract unit price Each for JOINT REPAIR at the locations specified in the plans or directed by the engineer, which price shall be payment for all work and materials required at each location.

STRUCTURAL STEEL REPAIR

Effective: December 15, 2000

Revised: January 1, 2007

Description. This work shall consist of furnishing all labor, equipment and materials necessary to furnish and install steel repair plates and members, according to Section 505 and removal and disposal of structural steel members as necessary according to Section 501 of the Standard Specifications, as indicated on the plans and in this special provision.

Construction Requirements. Existing members noted in the plans to have structural steel repair, that are also noted to be straightened, shall be straightened prior to the connection of any new steel repair plates or members. If beam straightening is required, it shall not be included in this item and shall be paid for separately.

Where required to align with existing holes, field drilling of holes in new members shall be accomplished using existing holes as a template unless field measurements are used to verify the plan dimensions. Burning of holes will not be permitted. All field drilling and grinding necessary to furnish and install the new steel plates and members shall be included in this item.

The removal and disposal of any existing members, bolts or rivets necessary for the installation of the new members as shown in the plans shall be included in this item. Burning of existing rivets will only be allowed near steel surfaces which are to be removed and discarded. Burning of existing rivets will not be allowed for members to remain in place or members that are to be removed and reinstalled. When burning of rivets is not allowed, the head of the rivet shall be sheared off and the shank driven or drilled out. Extreme care shall be taken while removing the rivets so as not to damage the existing structural steel which is to remain. All damage to existing members which are to remain shall be repaired or the member replaced to the satisfaction of the Engineer. Repair or replacement of damaged members shall be at the Contractor's expense.

Basis of Payment. This work shall be paid for at the contract unit price per Pound (Kilogram) for STRUCTURAL STEEL REPAIR.

TEMPORARY PAVEMENT MARKING

Revise Article 703.02 of the Standard Specifications to read:

"703.02 Materials. Materials shall be according to the following.

(a) Pavement Marking Tape, Type I and Type III	
(b) Paint Pavement Markings	
(c) Pavement Marking Tape, Type IV	

Add the following to Section 1095 of the Standard Specifications:

"1095.11 Pavement Marking Tape, Type IV. The temporary, preformed, patterned markings shall consist of a white or yellow tape with wet retroreflective media incorporated to provide immediate and continuing retroreflection during both wet and dry conditions. The tape shall be manufactured without the use of heavy metals including lead chromate pigments or other similar, lead-containing chemicals.

The white and yellow Type IV marking tape shall meet the Type III requirements of Article 1095.06 and the following.

- (a) Composition. The retroreflective pliant polymer pavement markings shall consist of a mixture of high-quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a layer of wet retroreflective media bonded to a durable polyurethane topcoat surface. The patterned surface shall have approximately 40% ±10% of the surface area raised and presenting a near vertical face to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles.
- (b) Retroreflectance. The white and yellow markings shall meet the following for initial dry and wet retroreflectance.
 - (1) Dry Retroreflectance. Dry retroreflectance shall be measured under dry conditions according to ASTM D 4061 and meet the values described in Article 1095.06 for Type III tape.
 - (2) Wet Retroreflectance. Wet retroreflectance shall be measured under wet conditions according to ASTM E 2177 and meet the values shown in the following table.

Color	R _L 1.05/88.76		
White	300		
Yellow	200		

Wet Retroreflectance, Initial F	₹∟
---------------------------------	----

(c) Color. The material shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degrees circumferential/zerodegree geometry, illuminant D65, and a two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

Color	Daylight Reflectance %Y
White	65 minimum
*Yellow	36-59

*Shall match Federal 595 Color No. 33538 and the chromaticity limits as follows.

Х	0.490	0.475	0.485	0.530
у	0.470	0.438	0.425	0.456

- (d) Skid Resistance. The surface of the markings shall provide an average minimum skid resistance of 50 BPN when tested according to ASTM E 303.
- (e) Sampling, Testing, Acceptance, and Certification. Prior to approval and use of the wet reflective, temporary, removable pavement marking tape, the manufacturer shall submit a notarized certification from an independent laboratory, together with the results of all tests, stating that the material meets the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, and date of manufacture.

After approval by the Department, samples and certification by the manufacturer shall be submitted for each batch used. The manufacturer shall submit a certification stating that the material meets the requirements as set forth herein and is essentially identical to the material sent for qualification. The certification shall state the lot tested, manufacturer's name, and date of manufacture.

All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer."

R

--This page is intentionally left blank.--