



**CALL NO. 330**

**CONTRACT ID. 242941**

**MUHLENBERG COUNTY**

**FED/STATE PROJECT NUMBER FE02 089 9001 B000093L&R**

**DESCRIPTION WESTERN KENTUCKY PARKWAY (PW 9001)**

**WORK TYPE BRIDGE REPAIRS**

**PRIMARY COMPLETION DATE 9/5/2025**

**LETTING DATE: December 12,2024**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 12,2024. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**REQUIRED BID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

## TABLE OF CONTENTS

|          |   |
|----------|---|
| PART I   | SCOPE OF WORK   |
|          | <ul style="list-style-type: none"><li>• PROJECT(S), COMPLETION DATE(S), &amp; LIQUIDATED DAMAGES</li><li>• CONTRACT NOTES</li><li>• STATE CONTRACT NOTES</li><li>• SPECIAL NOTE(S) APPLICABLE TO PROJECT</li><li>• BRIDGE DEMOLITION, RENOVATION AND ASBESTOS ABATEMENT</li><li>• ASBESTOS ABATEMENT REPORT</li></ul> |
| PART II  | SPECIFICATIONS AND STANDARD DRAWINGS  |
|          | <ul style="list-style-type: none"><li>• STANDARD AND SUPPLEMENTAL SPECIFICATIONS</li></ul>  |
| PART III | EMPLOYMENT, WAGE AND RECORD REQUIREMENTS  |
|          | <ul style="list-style-type: none"><li>• LABOR AND WAGE REQUIREMENTS</li><li>• EXECUTIVE BRANCH CODE OF ETHICS</li><li>• KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978<br/>LOCALITY / STATE</li><li>• PROJECT WAGE RATES / STATE FUNDED</li></ul>  |
| PART IV  | INSURANCE   |
| PART V   | BID ITEMS   |

**PART I**  
**SCOPE OF WORK**

## ADMINISTRATIVE DISTRICT - 02

**CONTRACT ID - 242941**

**FE02 089 9001 B000093L&R**

**COUNTY - MUHLENBERG**

**PCN - MB08990012301**

**FE02 089 9001 B000093L&R**

WESTERN KENTUCKY PARKWAY (PW 9001) BRIDGE 089B00093L&R OVER GREEN RIVER AT MP 65.5BRIDGE  
REPAIRS

GEOGRAPHIC COORDINATES LATITUDE 37:13:28.00 LONGITUDE 87:10:31.00

ADT

**COMPLETION DATE(S):**

COMPLETED BY 09/05/2025

APPLIES TO ENIRE CONTRACT

80 CALENDAR Days

APPLIES TO 089B00093L

80 CALENDAR Days

APPLIES TO 089B00093R

## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

### **BID SUBMITTAL**

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website ([www.bidx.com](http://www.bidx.com)) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

### **JOINT VENTURE BIDDING**

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

### **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

**For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.**

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

### **SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT**

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by email to [kytc.projectquestions@ky.gov](mailto:kytc.projectquestions@ky.gov). The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website ([www.transportation.ky.gov/construction-procurement](http://www.transportation.ky.gov/construction-procurement)). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

### **HARDWOOD REMOVAL RESTRICTIONS**

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

### **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

### **ACCESS TO RECORDS**

The state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this agreement for

the purpose of financial audit or program review. The Contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

### **BOYCOTT PROVISIONS**

If applicable, the contractor represents that, pursuant to [KRS 45A.607](#), they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

### **LOBBYING PROHIBITIONS**

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in [KRS 11A.236](#) during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to [KRS 45A.328](#), they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

Revised: 9/1/2024

## **1.0 BUY AMERICA REQUIREMENT.**

Follow the “Buy America” provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

## **2.0 – BUILD AMERICA, BUY AMERICA (BABA)**

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or \$2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all “construction materials” as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials



SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD  
AMERICA, BUY AMERICA (BABA) ACT

10/26/2023

incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

Finally, BABA permits the continuation of FHWA's current general applicability waivers for manufactured products, raw materials, and ferryboat parts, but these waivers are subject to reevaluation, specifically the general applicability waiver for manufactured products.

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it is in compliance.

At the Contractor's request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration's Buy America webpage for more information.

[Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration \(dot.gov\)](#)

October 26, 2023 Letting

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT 10/26/2023

**BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE**

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

Date Submitted: \_\_\_\_\_

Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

**NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.**

## **SPECIAL NOTE FOR RECIPROCAL PREFERENCE**

### **RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS**

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

**SPECIAL NOTES  
DISTRICT NO. 2  
MUHLENBERG COUNTY  
BRIDGE REPAIRS  
CID 242941**

**FE02 089 9001 B00093L 65.54**

Muhlenberg County ~ PW 9001 WB (Western Kentucky Parkway) over Green River

***Geographic Coordinates***

Latitude: 37° 19' 28.00'' (37.3244)

Longitude: -86° 59' 32.00'' (-86.9922)

**FE02 089 9001 B00093R 65.55**

Muhlenberg County ~ PW 9001 EB (Western Kentucky Parkway) over Green River

***Geographic Coordinates***

Latitude: 37° 19' 28.00'' (37.3244)

Longitude: -86° 59' 28.00'' (-86.9911)

**Description**

9 ~ Continuous Welded Steel Plate Two-Girder Spans, Drawing No. 28704

**SPECIAL NOTES FOR BRIDGE REPAIRS  
089B00093L&R**

SPECIAL NOTE FOR BEARING STIFFENER REPAIR

SPECIAL NOTE FOR BRIDGE JOINT SEAL REPLACEMENT

SPECIAL NOTE FOR BRIDGE RAILING RETROFIT

SPECIAL NOTE FOR CONSTRAINT-INDUCED FRACTURE RETROFIT

SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND PENALTIES

SPECIAL NOTE FOR FLOORBEAM CRACK REPAIR

SPECIAL NOTE FOR MOVEABLE BEARING RETROFITS

SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL REPAIRS

SPECIAL NOTE FOR PORTABLE QUEUE WARNING ALERT SYSTEM

SPECIAL NOTE FOR PREVENTIVE MAINTENANCE

SPECIAL NOTE FOR STRINGER END REPAIR

SPECIAL NOTE FOR TRAFFIC CONTROL

SPECIAL NOTE FOR BRIDGE PLANS

## SPECIAL NOTE FOR BEARING STIFFENER REPAIR

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove the indicated portion of the existing weld material between the girder top flange and the bearing stiffener for the entire length of the weld via grinding; (3) Prepare surface and paint steel per the Special Note for Painting Structural Steel Repairs; and (4) Any other work specified as part of this contract. The locations of the repairs and repair details are shown on Sheets M4 and M6.

2. **MATERIALS.**

- A. **Paint.** See Special Note for Painting Structural Steel Repairs.

3. **CONSTRUCTION.**

- A. **Bearing stiffener weld removal procedure.**

- i. **Removal.** For the locations indicated on Sheet M4, remove the portion of the bearing stiffener weld shown on Sheet M6. The weld shall be removed via grinding for the entire length of the weld. Existing cracks are to be inspected prior to weld removal to verify that the crack arrests in the weld and has not propagated into the bearing stiffener, girder flange, or girder web prior to grinding.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Bearing Stiffener Repair)".

Note: Crack measurements were taken in March 2022. Cracks may have grown subsequent to that inspection. Cracks shall be verified via non-destructive testing methods to verify that cracks have not propagated into the bearing stiffener or girder.

- ii. **Preparation.** Clean and coat the affected portions of the bearing stiffener and girder web and top flange per the paint notes below.

iii. **Painting.** Once the welds have been ground off, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

4. **MEASUREMENT.**

A. **Steel Repair (Bearing Stiffener Repair).** The Department will measure the quantity of individual bearing stiffener cracks repaired as each. This includes furnishing all material, labor, and equipment necessary for removal of a portion of the bearing stiffener weld via grinding and painting as described in this Note and shown in the attached detail drawings.

5. **PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u> | <u>Supplemental Description</u> | <u>Pay Unit</u> |
|-------------|-----------------|---------------------------------|-----------------|
| 24879EC     | STEEL REPAIR    | BEARING STIFFENER REPAIR        | EACH            |

The Department will consider payment as full compensation for all work required in this provision.

## SPECIAL NOTE FOR BRIDGE JOINT SEAL REPLACEMENT

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, equipment, and all necessary incidental items; (2) Remove debris from the strip seal glands and modular joints that are to remain on 089B00093L and 089B00093R; (3) Remove existing bridge compression seals on 089B00093L and 089B00093R; (4) Prepare the existing armored edges; (5) Install new pre-compressed horizontal expansion joint system seals; and (6) Any other work specified as part of this contract.

All construction will be in accordance with Section 606 unless otherwise specified.

### II. MATERIALS.

- A. Pre-compressed Horizontal Expansion Joint System.** It shall have a cellular, or micro-cell, polyurethane foam impregnated with a hydrophobic acrylic emulsion, or a hydrophobic polymer. The polyurethane foam external facing shall be factory coated and cured with highway-grade, fuel resistant silicone or a highway-grade elastomeric coating at a width greater than the maximum joint expansion. See attached detail drawings and Section 807.
- B. Wash water.** Use clean potable water for all pressure washing.

### III. CONSTRUCTION.

- A. Remove Debris.** Remove debris from the existing strip seal glands at End Bent 1 and Abutment 10, and the modular joints at Piers 4 and 7 on bridges 089B00093L and 089B00093R. Equipment for removing debris shall be determined by the Contractor, subject to the approval of the Engineer. The Contractor shall prevent any debris from entering any body of water, bridge drainage system, or lanes carrying traffic. All debris removed shall be disposed of in a suitable off-site disposal facility. Strip seal glands or modular joints damaged by debris removal operations shall be repaired or replaced by the Contractor at no additional cost to the Department. No separate payment will be made for removing debris from compression joint seals that are being replaced.
- B. Remove Existing Materials.** Remove existing neoprene compression seals where indicated on the detail drawings, including any debris present on the compression seals. The joint seals are to be removed shortly before replacement. Clean and leave all steel armored edges in place. Remove and discard the 3/16" x 1" plates welded to the armored edges that the existing compression seal rests on.



Damaged steel armored edges will be repaired or replaced as directed by the Engineer at no additional cost to the Department.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Joint Seal Replacement".

- C. **Joint Preparation.** Prepare the existing armored edges per Section 606.03.11.
- D. **Pre-Compressed Horizontal Expansion Joint Seal System.** System shall be supplied in pre-compressed sticks for easy installation. System shall be installed in accordance with manufacturer's recommendations concerning approved adhesives, welds between sticks and appurtenances, and adhesion to concrete deck or armored edges. Joint seal is to be installed 3/4" recessed from the surface.

IV. **MEASUREMENT.** See Section 606 and the following:

- A. **Joint Seal Replacement.** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint. The length of pre-compressed horizontal expansion joint system seal installed within the concrete railings shall be incidental to this bid item.
- B. **Debris Removal.** The Department will measure the quantity in linear feet of strip seal gland or modular joint from gutterline to gutterline along the centerline of the joint. Debris removed on the strip seal glands and modular joints within the concrete railings is incidental to this bid item. No separate payment shall be made for removing debris from the compression seals that are being replaced.

V. **PAYMENT.** The Department will make payment for the completed and accepted quantities per Section 606 and under the following bid items:

| <u>Code</u> | <u>Pay Item</u>        | <u>Pay Unit</u> |
|-------------|------------------------|-----------------|
| 23386EC     | JOINT SEAL REPLACEMENT | Lin. Ft.        |
| 24543EC     | CLEAN                  | Lin. Ft.        |

The Department will consider payment as full compensation for all work required in this provision.

## SPECIAL NOTE FOR BRIDGE RAILING RETROFIT

### 1. DESCRIPTION.

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove loose and unsound concrete and any debris from the applicable portions of the curbs and plinths; (3) Remove and salvage the aluminum tubular railing, railing posts, and nuts; (4) Drill and epoxy reinforcing steel and tie the remainder of the reinforcing steel; (5) Place an epoxy bond coat; (6) Place concrete; and (7) Any other work specified as part of this contract. The locations of the retrofits and retrofit details are shown on Sheet M11.

### 2. MATERIALS.

**A. Concrete.** See Section 601. Concrete shall be Class AA.

**B. Steel Reinforcement.** Use Grade 60 epoxy coated. See Section 602.

**C. Epoxy Bond Coat.** See Section 511.

### 3. CONSTRUCTION.

**A. Remove Existing Materials.** Remove loose or unsound concrete, if any, and any debris from the inboard faces and tops of the curbs and from the inboard faces of the plinths. This work shall be incidental to the contract price for "CONCRETE-CLASS AA".

**B. Remove and Salvage Aluminum Tubular Railing.** Remove the aluminum tubular railing and railing posts. Salvage the tubular railing, railing posts, and nuts. Any components deemed unsuitable for salvaging by the Engineer shall be properly disposed of offsite. Deliver salvaged materials to the Bailey Bridge Lot in Frankfort per Section 719.03.07. Coordinate bundling components with the Engineer.

**C. Place Reinforcing Steel.** Drill and epoxy grout reinforcement to depths shown. Use manufacturer recommendations for epoxy material chosen. All steel to be Grade 60 and spaced as shown in Standard Drawing BHS-010 except as noted above. Tie longitudinal bars to the bars that have been drilled and epoxied. No reinforcing steel shall extend across deck joints.

**D. Shape Curb Face.** Prior to or following placement of the new railings, grind the face of the curbs as necessary to match the required slope of the face of the railing.

**E. Place New Concrete.** Place concrete per the details on Sheet M11 and Standard Drawing BHS-010. The extents of the new railings shall match the extents of the existing plinths, including matching the gaps at deck joints. Construct new railing from the ends of the bridge to the concrete blocks to which the approach guardrail transitions connect at the locations indicated on Sheet M11. Patch any spalls on the face of the curbs to provide a smooth inside face from the base of the existing curb to the top of the new railing.

**4. MEASUREMENT.**

**A. Concrete-Class AA.** See Section 608. The Department will measure the quantity of concrete placed in cubic yards. Removing loose and unsound concrete, if any, and any debris, grinding and patching the faces of the curbs, and placing an epoxy bond coat will be incidental to this pay item.

**B. Steel Reinforcement-Epoxy Coated.** See Section 811. The Department will measure the quantity steel reinforcement-epoxy coated per pound. No separate payment will be made for drilling and epoxying reinforcing steel into the existing curbs.

**C. Remove Bridge Rail.** The Department will measure the quantity of bridge railing removed in linear feet. Salvaging the existing tubular railing, railing posts, and nuts, delivering salvaged materials to the Bailey Bridge Lot in Frankfort, and disposing of any components deem unsuitable for salvage by the Engineer shall be incidental to this pay item.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u>                  | <u>Pay Unit</u> |
|-------------|----------------------------------|-----------------|
| 08104       | CONCRETE-CLASS AA                | CY              |
| 08151       | STEEL REINFORCEMENT-EPOXY COATED | LB              |
| 08811       | REMOVE BRIDGE RAIL               | LF              |

The Department will consider payment as full compensation for all work required in this provision.

## **SPECIAL NOTE FOR CONSTRAINT-INDUCED FRACTURE RETROFIT**

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Retrofit constraint-induced fracture details in steel using the longitudinal stiffener constraint-induced fracture retrofit or the bearing stiffener constraint-induced-fracture retrofit methods; (3) Prepare surface and paint steel per the Special Note for Painting Structural Steel Repairs; and (4) Any other work specified as part of this contract. The locations of the retrofits and retrofit details are shown on Sheets M4 and M10.

2. **MATERIALS.**

- A. **Paint.** See Special Note for Painting Structural Steel Repairs.
- B. **Sandpaper.** 60, 80, and 100 Grit paper.

3. **CONSTRUCTION.**

- A. **Longitudinal Stiffener Constraint-Induced Fracture Retrofit**

- i. **Removal.** For the locations indicated on Sheet M10, use a tungsten carbide tipped annular cutter or die grinder with tungsten carbide rotary burr bit to remove portions of the longitudinal stiffener to expose the longitudinal stiffener weld.

Use a die grinder with tungsten carbide rotary burr bit, with tip radius of 3/16" to 1/2", to remove welds connecting the longitudinal stiffener to the girder web adjacent to the vertical stiffener. The Contractor shall not use a disc grinder. The minimum gap between the weld toe of the vertical stiffener and longitudinal stiffener welds shall be 1/2".

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Long. Stiffener CIF Retrofit).

- ii. **Sanding.** Sand the edges of the cope and exposed girder web. The Contractor shall progress from 60, 80, and 100 grit. Surfaces shall be smooth and free of cutting marks and gouges. The transition from the girder web to the longitudinal stiffener and weld shall be smooth with no blunt edges.

- iii. **Preparation.** Clean and paint the affected portions of the girder web, longitudinal stiffener, and vertical stiffener per the paint notes below.
- iv. **Painting.** Once the steel removal and grinding are complete, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

**B. Bearing Stiffener Constraint-Induced Fracture Retrofit**

- i. **Removal.** For the locations indicated on Sheets M4 and M10, place a tungsten carbide tipped annular cutter into the corner at the intersection of the girder top flange and bearing stiffener plates. Adjust the drill such that the drilled hole will intercept the toes of the bearing stiffener-to-girder web (vertical) weld and girder flange-to-girder web (horizontal) weld by approximately 1/8". Drill the hole through the girder web.

Inspect the hole placement to confirm that it intercepts both the vertical and horizontal welds by 1/8". If the hole misses either weld toe, use a tungsten carbide rotary burr bit with a die grinder to widen the hole toward the missed weld toe. Grind until the weld toe has been sufficiently disconnected and there is no longer a continuous path for a fracture to bypass the hold and continue through the girder web.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Bearing Stiffener CIF Retrofit).

- ii. **Sanding.** Sand the edges of the drilled holes. The Contractor shall progress from 60, 80, and 100 grit. Surfaces shall be smooth and free of cutting marks and gouges. The transition from the girder web to the welds shall be smooth with no blunt edges.
- iii. **Preparation.** Clean and paint the affected portions of the bearing stiffener, girder web, and girder top flange per the paint notes below.
- iv. **Painting.** Once the new arrest holes are drilled, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

**4. MEASUREMENT.**

- A. Steel Repair (Longitudinal Stiffener Constraint-Induced Fracture Retrofit).**  
 The Department will measure the quantity of individual longitudinal stiffener constraint-induced-fracture details retrofitted as each. This includes furnishing all material, labor, and equipment necessary for removal of the existing longitudinal stiffener and longitudinal stiffener weld and painting as described in this Note and shown in the attached detail drawings.
  
- B. Steel Repair (Bearing Stiffener Constraint-Induced Fracture Retrofit).** The Department will measure the quantity of individual bearing stiffener constraint-induced-fracture details retrofitted as each. This includes furnishing all material, labor, and equipment necessary for drilling holes at retrofit locations and painting as described in this Note and shown in the attached detail drawings.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u> | <u>Supplemental Description</u>   | <u>Pay Unit</u> |
|-------------|-----------------|-----------------------------------|-----------------|
| 24879EC     | STEEL REPAIR    | LONG. STIFFENER<br>CIF RETROFIT   | EACH            |
| 24879EC     | STEEL REPAIR    | BEARING STIFFENER<br>CIF RETROFIT | EACH            |

The Department will consider payment as full compensation for all work required in this provision.

**SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND  
PENALTIES ON BRIDGE REPAIR CONTRACTS**

- I. COMPLETION DATE.** The Contractor has the option of selecting the starting date for this Contract. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work. All work is to be completed by September 5, 2025. An allotted amount of time is assigned to each structure in this contract as shown below.

| <u>STRUCTURE</u> | <u>ALLOTTED<br/>CALENDAR DAYS</u> | <u>COMPLETION<br/>DATE</u> |
|------------------|-----------------------------------|----------------------------|
| 089B00093L       | 80                                | September 5, 2025          |
| 089B00093R       | 80                                | September 5, 2025          |

Contrary to Section 108.07.03, the Engineer will begin charging calendar days for a structure on the day the Contractor starts work or sets up traffic control on that particular structure. A penalty of \$2,400.00 per day will be assessed when the allotted number of calendar days is exceeded for each structure or the completion date is exceeded.

All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

## SPECIAL NOTE FOR FLOORBEAM CRACK REPAIR

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove the indicated portion of the existing floorbeam web at the tip of the crack or cut at the top flange cope and at the radial stiffeners via drilling; (3) Prepare surface and paint steel per the Special Note for Painting Structural Steel Repair; and (4) Any other work specified as part of this contract. The locations of the repairs and repair details are shown on Sheets M4 and M7 through M8.

2. **MATERIALS.**

A. **Paint.** See Special Note for Painting Structural Steel Repair.

3. **CONSTRUCTION.**

A. **Floorbeam web at top flange cope and at radial stiffeners removal procedure.**

- i. **Locate cracks, cuts, and indications.** The ends of cracks, cuts, and/or indications to be drilled shall be verified by magnetic particle testing performed by certified personnel.
- ii. **Removal.** For the locations indicated on Sheet M4, remove the portion of the floorbeam web at the top flange cope and at the radial stiffeners shown on Sheet M7. The web shall be removed via drilling at the tip of the crack or cut.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Floorbeam Crack Repair)".

Note: Crack and cut measurements were taken in March 2022. Cracks may have grown subsequent to that inspection.

- iii. **Verify removal.** The Contractor shall use ultrasonic testing, conducted by certified personnel, to verify that the end of the cracks, cuts, and/or indications have been removed.



- iv. **Preparation.** Clean and paint the affected portions of the floorbeam web, flanges, and radial stiffeners per the paint notes below.
  
- v. **Painting.** Once the new arrest holes are drilled, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repair.

**4. MEASUREMENT.**

**A. Steel Repair (Floorbeam Crack Repair).** The Department will measure the quantity of individual floorbeam cracks, cuts, and/or indications drilled as each. This includes furnishing all material, labor, and equipment necessary for removal of a portion of the web at the top flange cope and at the radial stiffeners via drilling and painting as described in this Note and shown in the attached detail drawings.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u> | <u>Supplemental Description</u> | <u>Pay Unit</u> |
|-------------|-----------------|---------------------------------|-----------------|
| 24879EC     | STEEL REPAIR    | FLOORBEAM CRACK REPAIR          | EACH            |

The Department will consider payment as full compensation for all work required in this provision.

**SPECIAL NOTE FOR MOVEABLE BEARING RETROFITS**

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway’s 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Drill and install anchor rods; (3) Install retrofits (moveable bearing or large moveable bearing); and (4) Any other work specified as part of this contract. The locations of the retrofits and retrofit details are shown on Sheets M4 and M12.

2. **MATERIALS.**

- A. **Steel.** Use ASTM A709 Grade 50 or 50W Galvanized.
- B. **Anchor Rods.** Use ASTM F1554 Grade 105 Galvanized.
- C. **Heavy Hex Nuts.** Use ASTM A563, Grade DH or DH3 Galvanized, and lubricated with a lubricant containing a visible dye.
- D. **Washers.** Use ASTM A709 Grade 50 or 50W Galvanized.
- E. **Grout.** Non-shrink, non-metallic grout shall meet material specifications shown in the table below.

| PROPERTY                                | VALUE                      | ASTM/OTHER    |
|---|----------------------------|---------------|
| Bond strength                           |                            |               |
| 2 day cure                              | 1,560 psi                  |               |
| 14 day cure                             | 1,690 psi                  | ASTM C882-13A |
| Compressive Strength                    | 12,000 psi                 | ASTM D695-10  |
| Compressive Modulus                     | 0.36 x 10 <sup>6</sup> psi | ASTM D695-10  |
| Tensile Strength 7 day                  | 7,150 psi                  | ASTM D638-14  |
| Elongation at break                     | 1.10%                      | ASTM D638-14  |
| Heat Deflection Temperature             | 122°F                      | SATM D648-07  |
| Absorption                              | 0.18%                      | ASTM D570-98  |
| Linear Coefficient of Shrinkage on Cure | 0.008                      | ASTM D2566-86 |

- F. **PTFE Sheet.** Use ASTM D3294.
- G. **PTFE Sheet Lubricant.** Use silicone grease which satisfies Society of Automotive Engineers Specification SAE-AS8660.
- H. **Paint.** See Special Note for Painting Structural Steel Repairs.

### 3. CONSTRUCTION.

#### A. Moveable Bearing Retrofit

- i. **Field verification of existing reinforcement.** For the locations indicated on Sheet M4, Contractor shall verify existing steel reinforcement locations prior to drilling using non-destructive equipment. If hole locations must be moved more than six (6) inches, the Engineer shall be notified for approval prior to drilling.
- ii. **Drilling and installation of anchor rods.** Anchor rods must be installed in accordance with the manufacturer's printed installation instructions. Contractor shall drill holes with a hammer drill and carbide bit. Holes shall be cleaned per manufacturer's instructions.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Moveable Bearing Retrofit)".

- iii. **Installation.** Contractor shall mark all moveable bearing retrofits prior to shipping. The marks shall include the bearing location (pier number and upstream or downstream side) and a direction arrow that points up station. All marks shall be permanent and be visible after the retrofit is installed.

For the locations indicated on Sheet M4, Contractor shall install moveable bearing retrofits per Sheet M12.

A PTFE sheet shall be installed between the retrofit and the moveable bearing per Sheet M12. Contractor shall attach the sheet by at least two of the following three methods: mechanical fastening, bond, and mechanical interlocking with a metal substrate. The finished unfilled PTFE sheet shall be made from 100 percent virgin PTFE resin conforming to section 18.8.2.5 of the AASHTO LRFD Bridge Construction Specifications. The PTFE sheet and method of attachment shall be approved by the Engineer. This work is incidental to the contract unit price for "Steel Repair (Moveable Bearing Retrofit)".

- iv. **Painting.** Once the installation of the moveable bearing retrofit is complete, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

**B. Large Moveable Bearing Retrofit**

- i. **Field verification of existing steel reinforcement.** For the location indicated on Sheet M4, Contractor shall verify existing steel reinforcement locations prior to drilling using non-destructive equipment. If hole locations must be moved more than six (6) inches, the Engineer shall be notified for approval prior to drilling.
- ii. **Drilling and installation of anchor rods.** Anchor rods must be installed in accordance with the manufacturer's printed installation instructions. Contractor shall drill holes with a hammer drill and carbide bit. Holes shall be cleaned per manufacturer's instructions.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Large Moveable Bearing Retrofit)".

- iii. **Installation.** Contractor shall mark the large moveable bearing retrofit prior to shipping. The marks shall include the bearing location (pier number and upstream or downstream side) and a direction arrow that points up station. All marks shall be permanent and be visible after the retrofit is installed.

For the locations indicated on Sheet M4, Contractor shall install the large moveable bearing retrofit per Sheet M12.

A PTFE sheet shall be installed between the retrofit and the moveable bearing per Sheet M12. Contractor shall attach the sheet by at least two of the following three methods: mechanical fastening, bond, and mechanical interlocking with a metal substrate. The finished unfilled PTFE sheet shall be made from 100 percent virgin PTFE resin conforming to section 18.8.2.5 of the AASHTO LRFD Bridge Construction Specifications. The PTFE sheet and method of attachment shall be approved by the Engineer. This work is incidental to the contract unit price for "Steel Repair (Large Moveable Bearing Retrofit)".

- iv. **Painting.** Once the installation of the large moveable bearing retrofit is complete, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

**4. MEASUREMENT.**

**A. Moveable Bearing Retrofit.** The Department will measure the quantity of individual moveable bearing retrofits as each. This includes furnishing all material, labor, and equipment necessary for drilling, installing, and painting as described in this Note and shown in the attached detail drawings at the location of each bearing being retrofit, including installing guide angle assemblies on both sides of the bearing as shown in the plans.

**B. Large Moveable Bearing Retrofit.** The Department will measure the quantity of individual large moveable bearing retrofits as each. This includes furnishing all material, labor, and equipment necessary for drilling, installing, and painting as described in this Note and shown in the attached detail drawings at the location of each bearing being retrofit, including installing guide angle assemblies on both sides of the bearing as shown in the plans.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u> | <u>Supplemental Description</u>    | <u>Pay Unit</u> |
|-------------|-----------------|------------------------------------|-----------------|
| 24879EC     | STEEL REPAIR    | MOVEABLE BEARING<br>RETROFIT       | EACH            |
| 24879EC     | STEEL REPAIR    | LARGE MOVEABLE<br>BEARING RETROFIT | EACH            |

The Department will consider payment as full compensation for all work required in this provision.

## SPECIAL NOTE FOR PAINTING STRUCTURAL STEEL REPAIRS

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Provide safe access to the bridge, in accordance with Section 107.01.01; (3) Clean and prime the existing structural steel in accordance with this note and the attached detail drawings; (4) Prepare and prime the new structural steel in accordance with this note and the attached detail drawings; and (5) Any other work specified as part of this contract.

2. **MATERIALS.**

- A. **Paint.** Conform to Section 607.

3. **CONSTRUCTION.**

- A. **Clean and Prime Existing Structural Steel.** All faying surfaces of existing steel where new steel is to be installed shall be cleaned and receive the prime coat as specified in accordance with Section 607 before any new steel is installed. Level of cleaning shall be to an SSPC-SP 15 (Commercial Grade Power Tool Cleaning). All Power tools shall be equipped with vacuum shrouds and fitted with HEPA filters at their air exhausts. Maintain and operate all vacuum shrouded power tools to collect generated debris.

- B. **Prepare and Prime New Structural Steel.** All new structural steel and bare metal left by construction activities shall be cleaned and have the prime coating applied in accordance with Section 607.03.23. All new steel installed shall be hot dip galvanized. Paint all damaged galvanizing with 2 coats of zinc dust-zinc oxide paint conforming to Federal Specification TT-P-641.

- C. **Lead Paint.** Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing surface preparation and other work. The Department will not consider any claims based on residual lead paint.

4. **MEASUREMENT**

- A. **Painting Structural Steep Repairs.** All items of work necessary to complete cleaning and painting as specified in this Note shall be considered incidental to the unit prices bid for the repairs being completed.

**5. PAYMENT.**

The Department will make payment for the completed and accepted quantities of cleaning and painting structural steel repairs as part of the unit prices for the repairs being completed. The Department will consider payment as full compensation for all work required.

## Special Note for Portable Queue Warning Alert System

### 1.0 Description

This item shall consist of furnishing, installing, relocating, operating, servicing, and removing various components of a portable, quickly deployable, real-time automated ITS queue warning alert system (PQWAS), in accordance with the standard specifications and this special provision. The Contractor shall also provide the maintenance of the complete system for the duration of the project or as directed by the Project Engineer. The Department is willing to look at different technologies (i.e. allow the use of crowd sourcing data to be used in lieu of the portable radar sensors). Any changes to the below requirements must be submitted and approved by the Engineer.

### 2.0 Materials

Materials shall be in accordance as follows:

All materials used shall meet the manufacturer's specifications and recommendations.

All PQWAS materials installed on the project shall be provided by the Contractor in excellent quality condition, shall be corrosion resistant and in strict accordance with all of the details shown within Contractor's Plans approved by KYTC. The Contractor shall maintain an adequate inventory of parts and replacement units to support maintenance and repair of the PQWAS. Pre-deployment is a condition of the system's acceptance and is based on the successful performance demonstration for a (5) day continuous period in accordance to this specification and as set forth in the plans. Ensure compliance to all FCC and Department specifications.

The Contractor shall maintain this system and shall be locally available to service and maintain system components, move portable devices as necessary and respond to emergency situations. The Contractor has oversight responsibility for directing placement of devices in the project area. The Contractor is to be accessible seven (7) days a week and twenty-four (24) hours a day while the system is deployed. The Contractor shall provide contact information for the system's coordinator and others responsible for maintenance of the system prior to installation of the system. Furnish a System Coordinator for monitoring the PQWAS throughout all periods of deployment.

#### A. General Capabilities and Performance Requirements

1. Overall PQWAS capabilities and performance requirements include the following:
  - a. Furnish a system capable of providing advance traffic information to motorists when there is a queueing of traffic due to congestion resulting from lane reductions, emergency events or other conditions. The condition-responsive notification to the motorist occurs with the use of Portable Changeable Message Signs (PCMS) in accordance to the below capabilities and performance requirements, activated through real-time traffic data collected downstream of the PCMS locations. This equipment must



be a packaged system, pre-programmed and operates as a stand-alone PQWAS meeting this specification. Conditions might exist that require relocation of the portable sensors at any given time, the sensors shall be portable and shall not require re-calibration in the field for fast deployments. Due to the potential need to replace damaged sensors or to change the position of one or more sensors at any given time, sensors must be interchangeable and relocatable by an unskilled laborer. The system must continue to function if as many as half the sensors fail to function.

- b. Provide a PQWAS that consists of the following field equipment: portable radar sensors and portable changeable message signs (PCMS). Provide a system capable of withstanding inclement weather conditions while continuing to provide adequate battery power. The portable radar sensor battery, in a stand-alone state and without a solar panel for recharging, shall be capable of keeping power and capable of sending data for (10) consecutive days or longer. The system shall notify drivers of real-time queue events via specifically placed PCMS units up stream of the work zone. All predetermined/preprogrammed messages are to be approved by KYTC. The number and location of portable radar sensors and PCMS units shall be as directed by the Project Engineer. The decision to deploy or relocate field equipment is made by the Project Engineer and instrumented through the System Coordinator. The decision for equipment removal is made by the Project Engineer after work is complete. The sensors and PCMS units shall be identifiable via global positioning system (GPS) and shall contain an accelerometer to detect and alert of unauthorized movement.
- c. The portable radar sensor shall be capable of collecting traffic speed data. The processed data is used to remotely control PCMS units to display user definable, Engineer approved and locally stored messages. The message trigger state thresholds for slow and stopped speeds shall be user configurable and revisable in less than {1} hour from the Project Engineer's request. Weekly Traffic Data Reports shall be presented to the Project Engineer and shall include speed data per sensor location, travel times, and queue lengths in graphical and numerical formats. In the event the Project Engineer requires a report, other than a weekly report, for any reason; then the Contractor shall provide report within (48) hours of request. Unlimited data reports shall be included within price of system. Sensors shall require no calibration adjustments in the field. Sensor should begin transmitting data within (30) seconds of being turned on. Satellite (SAT) communications will be required when cellular service does not provide continuous communications. Contractor shall identify the most trustworthy cellular provider within the project area.
- d. Data shall be accessible through a website and the Contractor shall provide a username and password for protection. The website shall be accessible seven (7) days a week and twenty - four (24) hours a day. The website shall provide historical & real-time data in graphical and numerical formats and shall have the capability of being integrated within the Department's Traffic Management Center (if requested). The website should be compatible to most hand held devices. Data shall be saved on the manufacturer's network for up to (5) years from the deployment date of system and shall be provided at the request

of the Department at any time within the (5) year window. The use of the website shall be included within the price of system.

- e. Warning Alerts: queue events, low battery voltage warnings, sensor movement alerts, high and low speed alerts shall be provided via cellular text messaging and/or via email messaging at the request of select Contractor personnel and KYTC officials.
- f. The PQWAS system shall have the capabilities to provide alternate route messaging on specifically placed portable changeable message units and/or fixed Variable Message Systems (VMS). The intent of this service is to provide alternate route messaging to motorists before entering the project limits from all directions and giving them appropriate time to adjust their routes. Alternative routes shall be predefined and approved by KYTC. Additional PCMS units may be required for alternate route messaging and will be as per Section 5.0 of this note. KYTC's Traffic Management Center will provide detour messages via fixed VMS units during the term of the project.

#### **B. Portable Radar Sensor Capabilities and Performance Requirements**

The PQWAS shall include portable radar sensors (PRD) to monitor and detect queue events.

1. The Radar Sensor shall be FHWA accepted to meet NCHRP 350 test requirements
2. The Radar Sensor shall be locatable at all times via an internal Global Positioning System (GPS) and shall be capable of Cellular or SAT Communications.
3. The Radar Sensor shall have a dry-cell battery capable of powering the system for (10) consecutive days or longer
4. The Radar sensor shall be K-Band technology and have a line of sight up to 200 linear feet without obstruction
5. The Radar sensor shall have the ability to be charged in the field through adaptable solar recharging technology in the case the sensor is utilized for more than 10 consecutive days

#### **C. PCMS Capabilities and Performance Requirements**

The PQWAS shall include portable changeable message signs (PCMS) designated to relay automated messaging of queue events, alternate route messages, and caution for the work area defined by the project limits. PCMS placements shall meet the requirements set forth by the Cabinet in each direction of the National Highway System (NHS).

1. The PCMS unit shall be a Full Matrix 24 rows x 50 columns and shall be capable of 1 line, 2line or 3 line messages
2. The PCMS unit shall be legible from a distance over twelve hundred feet (1200')
3. The height and size of characters shall be 18" to 58"
4. The PCMS shall be capable of storing up to 199 pre-programmed messages and up to 199 user-defined messages
5. The PCMS shall have a weather tight control cabinet with back lit LCD handheld controller.
6. The PCMS shall utilize a hydraulic lift to raise the unit to display height
7. The PCMS unit shall include solar recharging ports to allow for recharging of the portable radar sensors when they are not deployed.
8. The PCMS shall be NTCIP compliant and shall have an active Modem with active cellular service.

9. The user shall have the ability to communicate and override the PCMS remotely in the event of an emergency, Amber Alert, etc.
10. The PCMS unit shall have a docking station to include safety rails that allow a commercial safety strap to tie down the portable radar sensors while in transport. The docking station shall hold-up to (4) sensors safely and securely at all times.
11. Two PCMS units shall be in place in locations directed by the Engineer in each direction while traffic control is in place.

### **3.0 Construction Requirements**

All communication costs include cellular telephone services, FCC licensing, wireless data networks, satellite and internet subscription charges, and battery charging and maintenance. Additional to these requirements, the Contractor shall assume all responsibility for any and all damaged equipment due to crashes, vandalism, and adverse weather that may occur during the contract period.

The PQWAS shall operate continuously (24 hours/ 7 Days) when deployed on the project. The system is in a constant "data collection" mode when deployed. The Contractor shall provide technical support for the PQWAS for all periods of operation.

In the event communication is lost with any component of the PQWAS, provide a means and staff to manually program a PCMS message. If communication is lost for more the 10 consecutive minutes, the system shall revert to a fail-safe ROADWORK/# MILES/AHEAD message displayed on the PCMS units until communication is restored.

System Operator, local control function and remote management operation must be password protected.

The PQWAS shall be capable of acquiring traffic information and selecting messages automatically without operator intervention after system utilization. The lag time between changes in threshold ranges and the posting of the appropriate PCMS message(s) shall be no greater than (60) seconds. The system operation and accuracy must not be appreciably degraded by inclement weather or degraded visibility conditions including precipitation, fog, darkness, excessive dust, and road debris.

The system shall be capable of storing ad-hoc messages created by the System Coordinator and logging this action when overriding any default or automatic advisory message.

The PQWAS communication system shall incorporate an error detection/correction mechanism to insure the integrity of all traffic conditions data and motorists information messages. Any required configuration of the PQWAS communication system shall be performed automatically during system initialization.

The system's acceptance is based on the successful performance demonstration of PQWAS for a (5) day continuous period in accordance to this specification and as set forth in the plans. Ensure compliance to all FCC and Department specifications.

**4.0 Equipment Maintenance.**

Maintain system components in good working condition at all times. Repair or replace damaged or malfunctioning components, at no cost to the Department, as soon as possible and within (12) hours of notification by the Engineer. Periodically clean PCMS units if necessary.

**5.0 Measurement.** The Department will measure each item below in Months. For partial months the Department will pay in 0.25 increments based on the number of calendar days in the below table.

Partial Month Payment Schedule

| Days       | Increment |
|------------|-----------|
| 0-7 days   | 0.25      |
| 8-14 days  | 0.50      |
| 15-21 days | 0.75      |
| 22-31 days | 1.00      |

**5.1 Portable Queue Warning Alert System** includes cellular (SAT communications will be required if cellular is not available), all supporting field equipment, website, and unlimited data reports accessible by the Engineer. It will be measured by the number of months authorized by the Engineer for use on the project.

**5.2 Queue Warning PCMS** will be measured by each individual unit multiplied by the number of months authorized by the Engineer for use on the project.

**5.3 Queue Warning Portable Radar Sensors** will be measured by each individual unit multiplied by the number of months authorized by the Engineer for use on the project. Queue Warning Portable Radar Sensors will not be measured for payment if the Contractor utilizes a system operating on crowd sourcing data. Crowd sourcing data systems will only be allowed as approved by the engineer and will be considered incidental to Portable Queue Warning Alert System. It is the intention of this project to utilize crowd sourcing data.

**6.0 Payment.**

| <u>Code</u> | <u>Pay Item</u>                      | <u>Pay Unit</u> |
|-------------|--------------------------------------|-----------------|
| 26136EC     | Portable Queue Warning Alert System  | Month           |
| 26137EC     | Queue Warning PCMS                   | Month           |
| 26138EC     | Queue Warning Portable Radar Sensors | Month           |

## SPECIAL NOTE FOR PREVENTIVE MAINTENANCE

### 1. DESCRIPTION.

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, (current editions), this Note and Attached Detailed Drawings. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment, (2) Bridge Cleaning, (3) Concrete Coatings (4) Bearing Lubrication (5) Any other work specified as part of this contract.

### 2. MATERIALS.

#### A. Wash Water

Use clean potable water for all pressure washing.

#### B. Concrete Coatings

See The Division of Material's list of approved materials for concrete coatings and Section 821.

#### C. Bearing Lubricant

Use one of the lubricants from the following manufactures:

| <b>Manufacture</b> | <b>Lubricant</b>                      |
|--------------------|---------------------------------------|
| Bostik Inc.        | Never Seez - Mariner's Choice         |
| Mobil Oil          | Mobil Centaur Moly NLGI Grades 1 or 2 |
| Certified Labs     | Premalube #1 WG                       |

### 3. CONSTRUCTION.

#### A. Bridge Cleaning.

All debris shall be removed from the abutment seats, pier caps, bearings, and beam ends per the details on Sheet M3 of the attached detailed drawings as well as deck drains and associated downspouts and/or drain pipes when present. Equipment for removing debris from the bridge components shall be determined by the Contractor, subject to the approval of the Engineer. The Contractor shall prevent any debris from entering any body of water, bridge drainage system, or traffic lanes. All debris removed shall be disposed of in a suitable off-site disposal facility. Prior to all cleaning work, the Contractor shall confirm that any bridge drainage system is not blocked by un-removable debris. A blocked drainage system is considered to be one from which debris cannot be removed using the means specified in this note. If the Engineer has been notified, and concurs that the drainage system is blocked prior to performing other cleaning work, then proceed at the direction of the Engineer. If the Contractor does not inspect the bridge drainage system and notify the Engineer prior to beginning work any blocked drains will be considered to be the result of the Contractor's operations, and all clearing and cleaning of the drainage system shall be done as part of the work of the specification. All vegetation present in areas to be cleaned and coated shall be removed as determined by the Engineer.

**All cost to complete Debris Removal, Clean Deck Drains, and Remove Vegetation as specified shall be included in the Lump Sum price for "Bridge Cleaning".**

**B. Stratified and Pack Rust Removal.**

Stratified and pack rust shall be removed from all steel bearing devices and specified limits of beams. Any existing bearing lubrication shall be removed. See attached detailed drawings for each bridge showing location and quantity of the bearing devices. Hand tools including wire brushes, scrapers, or impact devices (hand hammers or power chisels) are to be used for removing stratified and pack rust. All surfaces to have stratified and pack rust removed shall be cleaned to an SSPC SP-2 level. All debris collected shall be disposed of in a suitable off-site disposal facility. **All cost to complete Stratified and Pack Rust Removal and removal of existing bearing lubricant shall be considered incidental to the unit price bid for "Lubricate Bearing".**

**C. Pressure Washing.**

Specified bridge components shall be pressure washed. See attached detailed drawings addressing components to be pressure washed. All equipment for pressure washing shall be operated at a minimum pressure of up 4,000 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. Pressure washing shall be operated at distance of approximately six inches from and perpendicular to the surface. All pressure washing wands shall be equipped with a gauge to accurately determine the amount pressure used. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Wash water will not be released to a bridge element previously washed. Perform all pressure washing at temperatures above 40 degrees Fahrenheit. **All cost to complete Pressure Washing as specified shall be included in the Lump Sum price for "Bridge Cleaning".**

**D. Concrete Coatings Application.**

Specified bridge components shall have concrete coating applied to as specified after bridge cleaning. See attached detailed drawings for addressing the bridge components. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. See concrete coating detail on Sheet M3. All coatings shall be applied within manufacturers recommended dry film thickness range. For recommended conditions for application, see Section 614.03.02 and coatings supplier specifications. Allow the surfaces to be coated to dry before any coating is applied. The coating must be applied to a clean and dry surface. All coating application shall be executed using brushes, rollers, etc. No spray application will be permitted. The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials will perform acceptance testing. See Section 821.04. The finish coat shall be Light Gray for Concrete. See Section 821.02. **All cost to complete Concrete Coating Application as specified shall be included in the Lump Sum price for "Concrete Coatings".**

**E. Bearing Lubrication Application.**

Steel bearing devices shall be lubricated as specified after all stratified rust and pack rust is removed and power washing is complete. Steel bearing devices shall have lubricant applied to all surfaces of the bearing including bearing plates and points of movement. See attached detailed drawings for each bridge showing location and quantity of the bearing devices. Allow bearing devices to dry before lubricant is applied. Perform all bearing lubrication application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications. **All cost to complete Bearing Lubrication Application as specified shall be included in the unit price Each for "Lubricate Bearing"**.

**F. Sequence of Work.**

Complete work in the sequence listed below:

1. Debris Removal
2. Stratified Rust Removal
3. Pressure Washing
4. Concrete Coating Application
5. Bearing Lubrication Application

**G. Inspection.**

The Cabinet will provide inspection for all items required in this contract. Visual inspection will be required upon completion of each work item for each structure component or at the discretion of the Engineer at any time. All visual inspection shall be performed within arm's length distance.

1. **Debris Removal:** Visual Inspection.
2. **Stratified Rust or Pack Rust Removal:** Visual Inspection and Scraper  
Test any surface cleaned to SSPC SP2 will be inspected by a dull scraper test to ascertain adherence of existing coating and a hammer test for tightness of pack rust.
3. **Power Washing:** Visual Inspection.
4. **Concrete Coating:**  
Prime Coat Application Check for wet film thickness, and defects in the Paint.  
Finish Coat Application Check for wet film thickness, paint appearance color and quality of application.
5. **Bearing Lubrication.** Visual Inspection.

**H. Verifying Field Conditions.**

The Contractor shall be familiar with all conditions at each bridge site. The Cabinet will not consider any claims due to the Contractor having not familiarized themselves with requirements of this work.

**I. Residual Lead.**

Residual lead paint may still be on bridges. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing surface preparation. The Department will not consider any claims based on residual lead paint.

**J. Damage to the structure.**

The Contractor shall bear all responsibility and expense for any and all damage to the structure during the repair work, even to the removal and

replacement of a fallen span, should the fallen span result from the Contractors actions.

**4. MEASUREMENT.**

- A. Bridge Cleaning.** The Cabinet will measure this item by lump sum, completed and accepted. Payment at the contract unit price for lump sum is full compensation for debris removal, deck drain cleaning, pressure washing, vegetation removal, and all incidental items required to complete this with as specified in this note and attached detailed drawings.
- B. Concrete Coating.** The Cabinet will measure this item by lump sum, completed and accepted. Payment at the contract unit price for lump sum is full compensation for applying the concrete coatings and all incidental items required to complete this work as specified in this note and attached detailed drawings.
- C. Bearing Lubrication:** The Cabinet will measure this item by each, completed and accepted. Payment at the contract unit price each is full compensation for applying bearing lubrication and all incidental items required to complete this work as specified in this note and attached detailed drawings.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u>     | <u>Pay Unit</u> |
|-------------|---------------------|-----------------|
| 24981EC     | BRIDGE CLEANING     | Lump Sum        |
| 24982EC     | CONCRETE COATING    | Lump Sum        |
| 24983EC     | BEARING LUBRICATION | Each            |

The Department will consider payment as full compensation for all work required in this provision.



## SPECIAL NOTE FOR STRINGER END REPAIR

1. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2019 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing bolts in the bottom flange at the floorbeam connections and any previous bolted repairs if present at noted crack locations; (3) Install new angles and fill plates at indicated locations; (4) Prepare surface and paint steel per the Special Note for Painting Structural Steel Repairs; and (5) Any other work specified as part of this contract. The locations of the repairs and repair details are shown on Sheets M4 and M9.

2. **MATERIALS.**

- A. **Steel.** Use ASTM A572 Grade 50 Galvanized.
- B. **Bolts.** Use ASTM F3125 Grade A325 Type 1 Galvanized.
- C. **Washers.** Use ASTM F436 Galvanized everywhere except use neoprene for the washer at the connection to the floorbeam top flange.
- D. **Nuts.** Use ASTM A194 Grade 2H Galvanized.
- E. **Direct Tension Indicators (DTIs).** Use ASTM F959 Galvanized. See Section 607.
- F. **Paint.** See Special Note for Painting Structural Steel Repairs.

3. **CONSTRUCTION.**

- A. **Stringer end removal and replacement procedure.**

- i. **Removal.** Remove 2 existing bolts at the floorbeam connection and discard. If present, remove the previous bolted repair at noted crack location as shown on Sheet M4.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Steel Repair (Stringer End Repair)".

- ii. **Preparation.** Clean and paint the affected portions of the stringer web and bottom flange per the paint notes below. The new angles and fill plates shall be painted prior to installation.
- iii. **Field drill holes.** Holes in the retrofit plates may be shop drilled or field drilled. Plate and angle sizes and hole locations may need to be adjusted due to the slope of the stringers. Proposed adjustments must be approved

by the Engineer. The Contractor is responsible for verifying the geometry of the stringers prior to fabricating retrofit plates and angles. For the steel repairs, the Contractor shall utilize the hole pattern and dimensions shown on the attached detail drawings except if a hole would be within 1” of a crack (measured from the center of the hole to the crack); in that case, the hole shall be shifted laterally to maintain a minimum distance of 1” (measured from the center of the hole to the crack). The spacing of bolts shall not exceed 6 1/2” or be less than 2 1/4" (measured from the center to center of holes). Using the retrofit plates as a template, field drill holes in the existing stringers.

- iv. **Install new angles, and fill plates.** Use the new angles to mark the location of the 2 existing bolt holes and the 11 new bolt holes through the stringer web and the existing bottom flange. Drill the new holes and install the new angles, fill plates, the 8 bolts that extend through the new angles, fill plates, and existing bottom flange, and the 5 bolts that extend through the new angles and existing web. DTIs shall be installed on all new bolts.
- v. **Painting.** Once the new angles and fill plates are installed, paint any areas with paint damaged during the installation per the Special Note for Painting Structural Steel Repairs.

**4. MEASUREMENT.**

**A. Steel Repair (Stringer End Repair).** The Department will measure the quantity of individual stringer ends repaired as each. This includes furnishing all material, labor, and equipment necessary for removal of the existing bolts and existing retrofit, if present, installation of new angles and fill plates, and surface preparation and painting as described in this Note and shown in the attached detail drawings.

**5. PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

| <u>Code</u> | <u>Pay Item</u> | <u>Supplemental Description</u> | <u>Pay Unit</u> |
|-------------|-----------------|---------------------------------|-----------------|
| 24879EC     | STEEL REPAIR    | STRINGER END REPAIR             | EACH            |

The Department will consider payment as full compensation for all work required in this provision.

## SPECIAL NOTE FOR TRAFFIC CONTROL

**THIS PROJECT IS  
CONTROLLED ACCESS BY  
PERMIT HIGHWAY**

- 1. TRAFFIC CONTROL GENERAL.** Except as provided herein, maintain and control traffic in accordance with the 2019 Standard Specifications, the current edition of Standard Drawings, and the attached detail drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to “Maintain and Control Traffic”.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

Night work may be necessary on this project. The Contractor shall submit the method of lighting to the Engineer for approval prior to use.

- 2. SIGNS.** All signs used at night shall be either retroreflective with a material that has a smooth, sealed outer surface or illuminated to show the same shape and similar color both day and night. The requirement for sign illumination shall not be considered to be satisfied by street, highway, or strobe lighting. Just prior to erecting Traffic Control Devices, reduce the speed to 10 mph below the posted speed limit. Payment for the signs shall be at the square foot bid price for Signs. Setting, resetting, removing, covering, and relocating of the signs shall be incidental to the unit price bid for Signs.

Traffic control signs in addition to normal lane closure signing details in the drawings may be required by the Engineer. Signage for restricting width and reduced speed limit shall be furnished, relocated, and maintained by the Contractor. Setting, resetting, removing, covering, and relocating signs shall be incidental to the price bid for Signs.

Signs to be located along the bridge shall be clamped to the concrete bridge railing. No welding or drilling shall be permitted.

Contrary to Section 112.04.02, only long-term signs (sign intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to “Maintain and Control Traffic”.

The contractor is to install warning signs for wide loads in advance of the bridge under the direction of the Engineer. The Department will not measure installation, maintenance, or removal for payment, and will consider these incidentals to “Maintain and Control Traffic”.

- 3. TEMPORARY PAVEMENT STRIPING.** Permanent removal of all pavement striping for traffic control shall be considered incidental to Maintain and Control Traffic. Temporary pavement striping shall be paid only once per course in accordance with Section 112.04.07.

The Contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the Contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

4. **PROJECT PHASING & CONSTRUCTION PROCEDURES.** Portable Changeable Message Signs (PCMSs) are not anticipated on this project. The Department will provide and maintain PCMSs, if needed, at the time of construction.

The length of lane closures shall be only that needed for the diversion of traffic and shall be left in place only long enough to complete each phase of the work. Conform to the standard drawings for lane closures for signs, buffer zones, and taper lengths.

For 089B00093L (Western Kentucky Parkway Westbound) 80 days are allotted for all work. The contractor shall maintain a single lane of traffic, minimum 11'-0", and a 1'-0" minimum buffer between the temporary barrier and the temporary lane line, during construction in accordance with Standard Drawing No. TTC-115.

For 089B00093R (Western Kentucky Parkway Eastbound) 80 days are allotted for all work. The contractor shall maintain a single lane of traffic, minimum 11'-0", and a 1'-0" minimum buffer between the temporary barrier and the temporary lane line, during construction in accordance with Standard Drawing No. TTC-115.

For the full duration of the construction, the Contractor shall post at 10 miles per hour below the posted speed limit for the extents of the construction activities.

Lane closures will not be permitted on these days:  
Memorial Day Weekend (Friday-Monday)  
Independence Day  
Labor Day Weekend (Friday-Monday)

Work must be completed and bridge fully open to traffic no later than 11:59 PM on September 5, 2025.

Upon approval immediately notify the following of the scheduled lane closures:

Muhlenberg County Judge Executive  
US Postal Service  
Fire Department  
Ambulance Service  
Kentucky State Police Department  
Muhlenberg County, KY Police and Sheriff Departments

The Department will provide public notification.

5. **BARRICADES.** Contrary to Section 112.04.04 of the Standard Specifications, barricades used to close lanes will be incidental to "Maintain and Control Traffic".
6. **TRAFFIC COORDINATOR.** Designate an employee to be Traffic Coordinator as per Section 112. The Traffic Coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the Engineer, during the Contractor's operations and at any time a lane closure is in place. The project personnel shall have access on the project

to a radio or telephone to be used in case of emergencies or accidents. The Traffic Coordinator shall report all incidents throughout the work zone to the Engineer on the project. The Contractor shall furnish the name and telephone number where the Traffic Coordinator can be contacted at all times. The Department will consider the cost of the Traffic Coordinator incidental to the price bid for “Maintain and Control Traffic”.

7. **PROTECTION BELOW THE STRUCTURE.** No material should be allowed to drop into the water below or onto the ground below the structure unless the area is blocked from public access, where applicable, and permission is given by the Engineer.

8. **MEASUREMENT**

A. **Signs.** The Department will measure the quantity of Temporary Signs per Section 112.04.02 of the Standard Specifications.

B. **Lane Closures.** The Department will measure the quantity of Long Term Lane Closures per Section 112.04.17 of the Standard Specifications. The Department will not measure water filled barriers, including installation, moving, and removal, barricades, or barrels in conjunction with Lane Closures and will consider them incidental to this work.

C. **Arrow Panels.** The Department will measure the quantity by each individual unit per Section 112.04.05 of the Standard Specifications.

D. **Pavement Striping.** The Department will measure the quantity of Permanent Pavement Striping per Section 713.04.01 of the Standard Specifications.

E. **Temporary Pavement Striping.** The Department will measure the quantity of Temporary Pavement Striping per Section 112.04.07 of the Standard Specifications.

F. **Maintain and Control Traffic.** The Department will measure the quantity by lump sum per Section 112.04.01 of the Standard Specifications. All materials and labor necessary to maintain and control traffic per this Note, the Standard Specifications, and the attached detail drawings that are not listed above shall be considered incidental to this item of work.

9. **PAYMENT.** The Department will make payment for the completed and accepted quantities under the following definitions:

| <u>Code</u> | <u>Pay Item</u>                   | <u>Pay Unit</u> |
|-------------|-----------------------------------|-----------------|
| 02562       | Temporary Signs                   | Square Foot     |
| 02650       | Maintain and Control Traffic      | Lump Sum        |
| 02653       | Lane Closure                      | Each            |
| 02775       | Arrow Panel                       | Each            |
| 06515       | Pave Striping – Perm Paint – 6 In | Linear Foot     |
| 06550       | Pave Striping – Temp Rem Tape – W | Linear Foot     |
| 06551       | Pave Striping – Temp Rem Tape – Y | Linear Foot     |

The Department will consider payment as full compensation for all work required in this provision.

**SPECIAL NOTE FOR BRIDGE PLANS**

See Project Related Information for Bridge Plans.  
Drawing Number 28704.

### **Special Note for Bridge Demolition, Renovation and Asbestos Abatement**

**If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 working days prior to commencement of any bridge demolition or renovation work.**

**Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.**



**Andy Beshear**  
GOVERNOR

## TRANSPORTATION CABINET

200 Mero Street  
Frankfort, Kentucky 406 01

**Jim Gray**  
SECRETARY

# Asbestos Inspection Survey

To: Tom Mathews

District: Central Office

Date: April 27, 2023

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

---

## Project and Structure Identification

Project Number: CID 232967

Structure ID: Muhlenberg 089B00093L

Structure Location: KY 9001 (Western Kentucky Parkway over Green River)

Sample Description: Any suspect materials collected were negative for asbestos.

Inspection Date: April 25<sup>th</sup>, 2023

## Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.  
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([Notification Form DEP 7036](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.





**MRS, INC.**

MRS, Inc. Analytical Laboratory Division

332 West Broadway, Suite # 902  
Louisville, Kentucky 40202

Phone # : (502) 495-1212  
E-Mail Address : CEOMRSInc@AOL.Com

|                 |                                  |                    |                                  |
|-----------------|----------------------------------|--------------------|----------------------------------|
| <b>Client:</b>  | <u>KYTC</u>                      | <b>Project No:</b> | <u># 3304255 B</u>               |
| <b>Address:</b> | <u>200 Mero Street</u>           | <b>Sample ID:</b>  | <u># M - 2</u>                   |
|                 | <u>Frankfort, KY</u>             | <b>Sampled:</b>    | <u>25-Apr-23</u>                 |
|                 | <u>40601</u>                     | <b>Received:</b>   | <u>25-Apr-23</u>                 |
|                 |                                  | <b>Analyzed:</b>   | <u>25-Apr-23 - Point Count -</u> |
|                 | <u>Attention : O'Dail Lawson</u> |                    |                                  |

**Bulk Sample Analysis**

**Sampled By :** O'Dail Lawson

**Facility/Location:** Muhlenberg County - Item # 089B00093L

**Field Description:** Guard Rail Mastic

**Laboratory Description:**

Very Thin Gray Material

**Asbestos Materials:**

Chrysotile = 1/400 = 0.25 % ( < 1 % ) Sample Is Negative

**Non-Asbestos Fibrous Materials :**

Cellulose 0.25 %

Binders 99.50 %

**Remarks:** The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

**Analyst:** Winterford Mensah

**Reviewed By:**   
Signature

# MRS, INC.

MRS, Inc. Analytical Laboratory Division

332 West Broadway, Suite # 902  
Louisville, Kentucky 40202

Phone # : (502) 495-1212  
E-Mail Address : CEOMRSInc@AOL.Com

|                                  |  |
|----------------------------------|--|
| <b>Client:</b> KYTC              | <b>Project No:</b> # 3304255 B             |
| <b>Address:</b> 200 Mero Street  | <b>Sample ID:</b> # M - 3                  |
| Frankfort, KY                    | <b>Sampled:</b> 25-Apr-23                  |
| 40601                            | <b>Received:</b> 25-Apr-23                 |
|                                  | <b>Analyzed:</b> 25-Apr-23 - Point Count - |
| <b>Attention :</b> O'Dail Lawson |  |

### Bulk Sample Analysis

**Sampled By :** O'Dail Lawson

**Facility/Location:** Muhlenberg County - Item # 089B00093L

**Field Description:** Trowel On Sealant

**Laboratory Description:**

Thick Brown Crunchy Material

**Asbestos Materials:**

Chrysotile = 1/400 = 0.25 % ( < 1 % ) Sample Is Negative

**Non-Asbestos Fibrous Materials :**

Cellulose 0.25 %

Binders 99.50 %

**Remarks:** The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

**Analyst:** Winterford Mensah

**Reviewed By:**   
Signature

# Chain of Custody Record

## Kentucky Transportation Cabinet

200 Mero Street, 4th Floor West  
 Frankfort, Kentucky 40622  
 (502) 564-7250 fax (502) 564-5655



| O'Dail Lawson <a href="mailto:o'dail.lawson@ky.gov">o'dail.lawson@ky.gov</a><br>W4-06-06<br>200 Mero Street<br>Frankfort KY |                    | Client Information KY TRANSPORTATION CABINET<br>Area Square footage: |                | Why Pkwy over Green River            |          |       |            |              |
|---|--------------------|--|----------------|--------------------------------------|----------|-------|------------|--------------|
| Phone: 502-564-5655<br>PO#:   |                    | Fax: 502-564-5655<br>N/A = Not Applicable                            |                | Samplers (signature): <i>Dorinda</i> |          |       |            |              |
| Project ID: <i>Muhlenberg 089B00093L</i>  |                    |  |                |                                      |          |       |            |              |
| Sample ID   | Sample Description | Collected Date   | Collected Time | Analysis Requested                   | Matrix   | Color | Cont. Type | Preservative |
| M1  | Joint Compound     | 4/25/23  | 11:45          | Asbestos bulk.                       | Negative | gray  |            | N/A          |
| M2  | Gummi Rail MASTIC  | ↓  | ↓              | ↓                                    | MASTIC   | gray  |            |              |
| M3  | Travel on Sealant  | ↓  | ↓              |                                      | Sealant  | brown |            |              |
|   |                    |  |                |                                      |          |       |            |              |
|   |                    |  |                |                                      |          |       |            |              |
|   |                    |  |                |                                      |          |       |            |              |
|   |                    |  |                |                                      |          |       |            |              |
|   |                    |  |                |                                      |          |       |            |              |
|   |                    |  |                |                                      |          |       |            |              |
| Relinquished By:  |                    | Date/Time:   |                |                                      |          |       |            |              |
| Received By: <i>Mirajana M...</i>   |                    | Date/Time: 4/25/23   |                |                                      |          |       |            |              |
| Relinquished By:  |                    | Date/Time:   |                |                                      |          |       |            |              |
| Received at Lab By:   |                    | Date/Time:   |                |                                      |          |       |            |              |

**ENVIRONMENTAL TRAINING CONCEPTS, INC**

P.O Box 99603 Louisville, KY 40269  
(502)640-2951

Certification Number: ETC-AIR-0322223-00200

# O'Dail Lawson

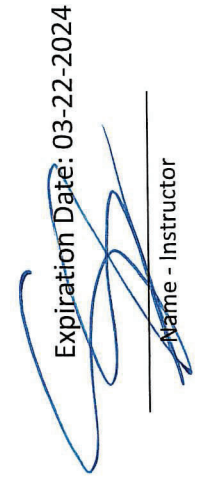
has on 03-22-2023 attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

## ASBESTOS INSPECTOR REFRESHER

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management, Tennessee Department of Environment & Conservation and The Arkansas Department of Environmental Quality. The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA).

Conducted at: 1520 Alliant Ave., Louisville, KY

  
Name: Training Manager

  
Expiration Date: 03-22-2024  
Name: Instructor

**PART II**  
**SPECIFICATIONS AND STANDARD DRAWINGS**

### **STANDARD SPECIFICATIONS**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020*.

### **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link:  
<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

## **PART III**

### **EMPLOYMENT, WAGE AND RECORD REQUIREMENTS**



**TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

**LABOR AND WAGE REQUIREMENTS  
APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS**

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

**I. APPLICATION**

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

**II. NONDISCRIMINATION OF EMPLOYEES**

**AN ACT OF THE KENTUCKY  
GENERAL ASSEMBLY TO PREVENT  
DISCRIMINATION IN EMPLOYMENT  
KRS CHAPTER 344  
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

## EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

### **Kentucky Equal Employment Opportunity Act of 1978**

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:  
**<https://www.eProcurement.ky.gov>**.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **[finance.contractcompliance@ky.gov](mailto:finance.contractcompliance@ky.gov)** or by phone at 502-564-2874.

# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

## FEDERAL MINIMUM WAGE

# \$7.25 PER HOUR

BEGINNING JULY 24, 2009

**OVERTIME PAY** At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.

**CHILD LABOR** An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

**No more than**

- **3** hours on a school day or **18** hours in a school week;
- **8** hours on a non-school day or **40** hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.

**TIP CREDIT** Employers of “tipped employees” must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee’s tips combined with the employer’s cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.

**ENFORCEMENT** The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act’s child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.

**ADDITIONAL INFORMATION**

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- Some state laws provide greater employee protections; employers must comply with both.
- The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.

For additional information:



# 1-866-4-USWAGE

(1-866-487-9243) TTY: 1-877-889-5627



# WWW.WAGEHOUR.DOL.GOV

**PART IV**  
**INSURANCE**

Refer to  
*Kentucky Standard Specifications for Road and Bridge Construction,*  
current edition

**PART V**  
**BID ITEMS**

### PROPOSAL BID ITEMS

242941

Page 1 of 2

Report Date 11/7/24

#### Section: 0001 - ROADWAY

| LINE | BID CODE | ALT | DESCRIPTION                          | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--------------------------------------|----------|------|-----------|----|--------|
| 0010 | 26136EC  |     | PORTABLE QUEUE WARNING ALERT SYSTEM  | 5.00     | MONT |           | \$ |        |
| 0020 | 26137EC  |     | QUEUE WARNING PCMS                   | 10.00    | MONT |           | \$ |        |
| 0030 | 26138EC  |     | QUEUE WARNING PORTABLE RADAR SENSORS | 10.00    | MONT |           | \$ |        |

#### Section: 0002 - BRIDGE - 089B00093L

| LINE | BID CODE | ALT | DESCRIPTION   | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|---|-----------|------|-----------|----|--------|
| 0040 | 02562    |     | TEMPORARY SIGNS                                     | 583.00    | SQFT |           | \$ |        |
| 0050 | 02650    |     | MAINTAIN & CONTROL TRAFFIC                          | 1.00      | LS   |           | \$ |        |
| 0060 | 02653    |     | LANE CLOSURE  | 2.00      | EACH |           | \$ |        |
| 0070 | 02671    |     | PORTABLE CHANGEABLE MESSAGE SIGN                    | 1.00      | EACH |           | \$ |        |
| 0080 | 02775    |     | ARROW PANEL   | 1.00      | EACH |           | \$ |        |
| 0090 | 06515    |     | PAVE STRIPING-PERM PAINT-6 IN                       | 235.00    | LF   |           | \$ |        |
| 0100 | 06550    |     | PAVE STRIPING-TEMP REM TAPE-W                       | 4,030.00  | LF   |           | \$ |        |
| 0110 | 06551    |     | PAVE STRIPING-TEMP REM TAPE-Y                       | 4,030.00  | LF   |           | \$ |        |
| 0120 | 08104    |     | CONCRETE-CLASS AA                                   | 389.70    | CUYD |           | \$ |        |
| 0130 | 08151    |     | STEEL REINFORCEMENT-EPOXY COATED                    | 56,764.00 | LB   |           | \$ |        |
| 0140 | 08811    |     | REMOVE BRIDGE RAIL                                  | 3,600.00  | LF   |           | \$ |        |
| 0150 | 23386EC  |     | JOINT SEAL REPLACEMENT                              | 600.00    | LF   |           | \$ |        |
| 0160 | 24543EC  |     | CLEAN<br>CLEAN JOINTS                               | 120.00    | LF   |           | \$ |        |
| 0170 | 24879EC  |     | STEEL REPAIR<br>BEARING STIFFENER                   | 1.00      | EACH |           | \$ |        |
| 0180 | 24879EC  |     | STEEL REPAIR<br>BEARING STIFFENER CIF RETROFIT      | 24.00     | EACH |           | \$ |        |
| 0190 | 24879EC  |     | STEEL REPAIR<br>FLOORBEAM CRACK REPAIR              | 117.00    | EACH |           | \$ |        |
| 0200 | 24879EC  |     | STEEL REPAIR<br>LARGE MOVEABLE BEARING RETROFIT     | 1.00      | EACH |           | \$ |        |
| 0210 | 24879EC  |     | STEEL REPAIR<br>LONGITUDINAL STIFFENER CIF RETROFIT | 544.00    | EACH |           | \$ |        |
| 0220 | 24879EC  |     | STEEL REPAIR<br>MOVEABLE BEARING RETROFIT           | 11.00     | EACH |           | \$ |        |
| 0230 | 24879EC  |     | STEEL REPAIR<br>STRINGER END REPAIR                 | 14.00     | EACH |           | \$ |        |
| 0240 | 24981EC  |     | BRIDGE CLEANING<br>089B00093L                       | 1.00      | LS   |           | \$ |        |
| 0250 | 24982EC  |     | CONCRETE COATING<br>089B00093L                      | 1.00      | LS   |           | \$ |        |
| 0260 | 24983EC  |     | BEARING LUBRICATION                                 | 8.00      | EACH |           | \$ |        |

#### Section: 0003 - BRIDGE - 089B00093R

| LINE | BID CODE | ALT | DESCRIPTION                | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------------------|----------|------|-----------|----|--------|
| 0270 | 02562    |     | TEMPORARY SIGNS            | 617.00   | SQFT |           | \$ |        |
| 0280 | 02650    |     | MAINTAIN & CONTROL TRAFFIC | 1.00     | LS   |           | \$ |        |

**PROPOSAL BID ITEMS**

242941

Page 2 of 2

Report Date 11/7/24

| LINE | BID CODE | ALT | DESCRIPTION   | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|---|-----------|------|-----------|----|--------|
| 0290 | 02653    |     | LANE CLOSURE  | 2.00      | EACH |           | \$ |        |
| 0300 | 02671    |     | PORTABLE CHANGEABLE MESSAGE SIGN                    | 1.00      | EACH |           | \$ |        |
| 0310 | 02775    |     | ARROW PANEL   | 1.00      | EACH |           | \$ |        |
| 0320 | 06515    |     | PAVE STRIPING-PERM PAINT-6 IN                       | 235.00    | LF   |           | \$ |        |
| 0330 | 06550    |     | PAVE STRIPING-TEMP REM TAPE-W                       | 4,030.00  | LF   |           | \$ |        |
| 0340 | 06551    |     | PAVE STRIPING-TEMP REM TAPE-Y                       | 4,030.00  | LF   |           | \$ |        |
| 0350 | 08104    |     | CONCRETE-CLASS AA                                   | 389.70    | CUYD |           | \$ |        |
| 0360 | 08151    |     | STEEL REINFORCEMENT-EPOXY COATED                    | 56,764.00 | LB   |           | \$ |        |
| 0370 | 08811    |     | REMOVE BRIDGE RAIL                                  | 3,600.00  | LF   |           | \$ |        |
| 0380 | 23386EC  |     | JOINT SEAL REPLACEMENT                              | 600.00    | LF   |           | \$ |        |
| 0390 | 24543EC  |     | CLEAN<br>CLEAN JOINTS                               | 120.00    | LF   |           | \$ |        |
| 0400 | 24879EC  |     | STEEL REPAIR<br>BEARING STIFFENER                   | 6.00      | EACH |           | \$ |        |
| 0410 | 24879EC  |     | STEEL REPAIR<br>BEARING STIFFENER CIF RETROFIT      | 24.00     | EACH |           | \$ |        |
| 0420 | 24879EC  |     | STEEL REPAIR<br>FLOORBEAM CRACK REPAIR              | 123.00    | EACH |           | \$ |        |
| 0430 | 24879EC  |     | STEEL REPAIR<br>LONGITUDINAL STIFFENER CIF RETROFIT | 544.00    | EACH |           | \$ |        |
| 0440 | 24879EC  |     | STEEL REPAIR<br>MOVEABLE BEARING RETROFIT           | 12.00     | EACH |           | \$ |        |
| 0450 | 24879EC  |     | STEEL REPAIR<br>STRINGER END REPAIR                 | 27.00     | EACH |           | \$ |        |
| 0460 | 24981EC  |     | BRIDGE CLEANING<br>089B00093R                       | 1.00      | LS   |           | \$ |        |
| 0470 | 24982EC  |     | CONCRETE COATING<br>089B00093R                      | 1.00      | LS   |           | \$ |        |
| 0480 | 24983EC  |     | BEARING LUBRICATION                                 | 8.00      | EACH |           | \$ |        |

**Section: 0004 - DEMOBILIZATION &/OR MOBILIZATION**

| LINE | BID CODE | ALT | DESCRIPTION    | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|-----------|----|--------|
| 0490 | 02568    |     | MOBILIZATION   | 1.00     | LS   |           | \$ |        |
| 0500 | 02569    |     | DEMOBILIZATION | 1.00     | LS   |           | \$ |        |