

# CALL NO. <u>408</u> CONTRACT ID. <u>252973</u> <u>SPENCER - JEFFERSON COUNTIES</u> FED/STATE PROJECT NUMBER <u>121GR25M049</u> DESCRIPTION <u>VARIOUS ROUTES IN DISTRICT 5 ~ 3 LOCATIONS</u> WORK TYPE <u>BRIDGE REPAIR MISCELLANEOUS WORK</u> PRIMARY COMPLETION DATE <u>11/15/2025</u>

### LETTING DATE: <u>April 24,2025</u>

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 24,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

### NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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# PART I

# **SCOPE OF WORK**

### **ADMINISTRATIVE DISTRICT - 05**

#### CONTRACT ID - 252973

#### 121GR25M049

**COUNTY - JEFFERSON** 

#### PCN - MB05600602501 FE02 056 0060 B00138N

EASTERN PARKWAY (US 60) BRIDGE 056B00138N OVER CSX RR, FLOYD AND BROOK STREETS AT MP 03.72BRIDGE REPAIR MISCELLANEOUS WORK GEOGRAPHIC COORDINATES LATITUDE 38:12:48.00 LONGITUDE 85:45:24.00 ADT

#### PCN - MB05602642501 FE02 056 0264 B00229N

SHAWNEE PARKWAY (I-264) BRIDGE 056B00229N OVER GARRS LANE AT MP 06.37BRIDGE REPAIR MISCELLANEOUS WORK GEOGRAPHIC COORDINATES LATITUDE 38:11:25.00 LONGITUDE 85:49:49.00 ADT

#### **COUNTY - SPENCER**

#### PCN - MB10802482501 FE02 108 0248 B00033N

BRIAR RIDGE ROAD (KY 248) BRIDGE 108B00033N OVER KY LITTLE BEACH CREEK AT MP 02.62BRIDGE REPAIR MISCELLANEOUS WORK GEOGRAPHIC COORDINATES LATITUDE 38:01:28.00 LONGITUDE 85:13:39.00

ADT

#### COMPLETION DATE(S):

COMPLETED BY 11/15/2025	APPLIES TO ENTIRE CONCTRACT (SEE SPECIAL NOTES)
45 CALENDAR Days	APPLIES TO 108B00033N (SEE SPECIAL NOTE)
30 CALENDAR Days	APPLIES TO 056B00138N (SEE SPECIAL NOTE)
30 CALENDAR Days	APPLIES TO 056B00229N (SEE SPECIAL NOTE)

### **CONTRACT NOTES**

#### **INSURANCE**

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

### 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) 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 <u>KRS 14A.9-010</u> to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under <u>KRS 14A.9-030</u> 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 <u>KRS 14A.9-010</u>, the foreign entity should identify the applicable exception. Foreign entity is defined within <u>KRS 14A.1-070</u>.

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 <u>https://secure.kentucky.gov/sos/ftbr/welcome.aspx</u>.

### 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 <u>kytc.projectquestions@ky.gov</u>. 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 (<u>www.transportation.ky.gov/construction-procurement</u>). 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 <u>KRS 45A.607</u>, 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 <u>KRS 11A.236</u> 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 <u>KRS 45A.328</u>, 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: 1/1/2025

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

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

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.

<u>Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway</u> <u>Administration (dot.gov)</u>

October 26, 2023 Letting

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

#### **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:\_\_\_\_\_

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.

Contract ID: 252973

### 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. 5 JEFFERSON AND SPENCER COUNTIES BRIDGE REPAIRS MISCELLANEOUS WORK CID 252973 ~ 121GR25M049

#### FE02 056 0060 B00138N 03.72

Jefferson County  $\sim$  US 60A (Eastern Parkway) over CSX Rail Road, Floyd and Brook Streets

### **Geographic Coordinates**

Latitude 38° 12' 48.00" (38.2132) Longitude -85° 45' 24.00" (-85.7566)

### **Description:**

794' 15 Span RCDG, Drawing No. 11260

<u>FE02 056 0264 B00229N 06.37</u> Jefferson County ~ I-264 (Shawnee Parkway) over Garr's Lane

## **Geographic Coordinates**

Latitude 38° 11' 25.00" (38.1903) Longitude -85° 49' 49.00" (-85.8304)

### **Description:**

43'-64'-43' RCDG Spans, Drawing Nos. 16691 and 25189.

### FE02 108 0248 B00033N 02.62

Spencer County ~ KY 248 (Briar Ridge Road) over Little Beach Creek

## **Geographic Coordinates**

Latitude 38° 01' 28.00" (38.0246) Longitude -85° 13' 39.00" (-85.2275)

**Description:** 80'-5~101'-80' PCIB Spans.

### SPECIAL NOTES FOR BRIDGE REPAIRS

SPECIAL NOTE FOR CONCRETE PATCHING

SPECIAL NOTE FOR CARBON FIBER WRAP

SPECIAL NOTE FOR BEARING REPLACMENT

SPECIAL NOTE FOR JOINT SEAL REPLACEMENT

SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

SPECIAL NOTE FOR PREVENTIVE MAINTENANCE

SPECIAL NOTE FOR WORK NEAR RAILROAD

SPECIAL NOTE FOR UTILITIES AND SIGNS

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

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

SPECIAL NOTE FOR PORTABLE QUEUE WARNING ALERT SYSTEM

SPECIAL NOTE FOR TRAFFIC QUEUE PROTECTION VEHICLE

### SPECIAL NOTE FOR CONCRETE PATCHING

#### **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 the attached detailed drawings for Steel Repairs. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment, (2) Concrete Patching Repair (3) Any other work specified as part of this contract.

#### 2. MATERIALS.

- A. Epoxy Resin. Conform to Section 826.
- B. Mortar Sand. Conform to Section 804.
- C. Sand for Epoxy Seal Coats. Conform to Section 804.
- D. Epoxy Bond Coat. See Section 511.
- E. Class "M" Concrete. Use Class "M1". See Section 601.

### 3. CONSTRUCTION.

A. Remove Deteriorated Concrete. Prior to beginning the concrete repairs, provide safe access to the areas requiring concrete patching in accordance with Section 107.01.01, for the Engineer to sound possible repair areas. The Engineer will sound the concrete with a hammer and mark the areas of concrete to be removed and patched. All areas of deteriorated concrete found should be repaired as part of this work. Final payment for "Concrete Patching" and Concrete – Class M1 will be field-measured quantity of patching completed in accordance with the Note and as designated by the Engineer.

Remove specific areas of deteriorated concrete as shown on the as directed by the Engineer. The removal of the unsound material shall be accomplish with hand tools or pneumatic hammers that do not exceed twenty (20) pounds. Precaution shall be exercised toe protect the underlying sound material. Saw, route or otherwise manipulate the sides of the patch so that the interface between the old concrete and the epoxy mortar or Class M1 Concrete are perpendicular. Remove all deteriorated loose concrete to at least three-quarters (3/4) inch beyond and steel reinforcement. More the 50 percent exposed. Dispose of all removed material entirely away for the job site or as directed by the Engineer.

Extreme care shall be taken when removing the existing spalled or delaminated concrete so as not to damage the existing reinforcing steel. Completely clean all existing steel reinforcement encounter fee of rust and leave in place. Wire brushing may be required to thoroughly clean the exposed reinforcement. Repair or replace any damaged steel reinforcement as directed by the Engineer at no additional cost to the Department. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04. The Contractor must consult the Engineer before removing any concrete that is directly below the beam bearings.

- **B.** Prepare Concrete Surfaces for Patching. Prepare concrete surfaces to be patched in accordance with Section 510.03.01. Final blast cleaning shall be completed withing twelve (12) hours prior to placement of the epoxy mortar patch or Class M1 Concrete. Verify all cleaning methods with the epoxy resin manufacturer's recommendations. Concrete must be sound, dry and clean prior to placement of epoxy resin prime coat.
- **C. Apply Epoxy Mortar for Patching.** For areas to be patched with epoxy mortar, place the epoxy resin prime coat and the epoxy mortar in accordance with Section 510.03.04. Any material used must be approved by the Engineer. Refer to the Kentucky Transportation Cabinet, Division of Materials' List of Approved Materials for currently approved material for vertical and overhead patching. Place epoxy mortar in accordance with the manufacturer's specification to restore the deteriorated areas to their original dimension as shown on the detailed drawings or as directed by the Engineer.
- **D. Apply Class M Concrete for Patching.** For areas to be patched with Class M1 Concrete, place the concrete in accordance with the standard specifications to restore the deteriorated areas to their original dimensions as shown on the detailed drawings or as directed by the Engineer. The surface areas of existing concrete to come in contact with the new Class M1 Concrete are to be coated with an epoxy bond coat immediately prior to placing the new concrete in accordance with Section 511. The interfaces of the new an old concrete shall be as nearly vertical and horizontal as possible.
- **E. Finish the Repaired Surface.** Rough the surface of the repaired areas to achieve uniformed surface texture. Remove any patch runs or spills from concrete surface.
- **F.** Apply Epoxy Resin Seal Coat. After the epoxy mortar or Class M1 Concrete has hardened for the amount of time specified by the manufacturer for curing, apply an additional coat of epoxy resin over the entire patch and on the adjacent old concrete a minimum of two (2) inches. Be sure to work the epoxy seal coat thoroughly into any cracks that may have developed in the patch or in the interface of the patch and the old concrete. Place masking tap on the old concrete prior to applying this sealing coat of epoxy resin to insure a neat line. Remove tape after the sealing coat has cured adequately.

### 4. MEASUREMENT.

A. Concrete Patching Repair. The Department will measure the quantity in square feet.

Double Payment will not be made on both faces of corner repairs.

### 5. PAYMENT.

A. Concrete Patching Repair (22146EN). Payment at the contract unit price per square feet is full compensation for the following: (1) Furnish all labor, materials, tools, equipment; (2) preparation of specified areas including removing and disposing of specified existing materials; (3) place, finish and cure new concrete patches; and (4) all incidentals necessary to complete the work as specified by this note and as shown on the attached detail drawings.

#### SPECIAL NOTE FOR CARBON FIBER REINFORCE POLYMER WRAP

#### **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 the attached detailed drawings for Steel Repairs. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment, (2) Fiber Reinforce Polymer Wrap (3) Any other work specified as part of this contract.

#### 2. MATERIALS.

One manufacture shall supply all material required for the Carbon Fiber Reinforced Polymer (CFRP) system. The manufacture shall be one of four listed below or approved equal for the CFRP strengthening and protection system.

Tyfo Fiber Wrap System Fyfe Company, LLC 4995 Murphy Canyon Road Suite 110 San Diego, CA 92123

Master Brace System BASF Corporation 889 Valley Park Drive Shakopee, MN 553379

Quake Wrap 6840 S Tucson Blvd. Tucson, AZ 85756

Polyester or other resins will not be permitted as a substitute to epoxy. Glass composite systems will not be permitted as a substitute to carbon composite systems

### **3.** CONSTRUCTION.

#### A. Design CRFP System.

The CRFP system shall be designed by a Professional Engineer licensed in the State of Kentucky and must be submitted and approved by the Engineer prior to installation. Submittal information shall include

- 1. Manufacture's product data sheets and material test data.
- 2. Installation and maintenance instructions.
- 3. Drawings detailing the type, locations, dimension, number of layers, and orientations of all CFRP material to be installed.
- 4. The layout of the CFRP material to be installed.
- 5. Quality Control Plan.

## **B.** Surface Preparation.

Concrete coatings and/or sealers are to be removed from the existing surfaces to the installer's satisfaction prior to the concrete cleaning and spall repair. Any deteriorated concrete is to be patched per Special Note for Concrete Patching, then cleaned and prepared to the installer's satisfaction prior to the installation of the CFRP system. The repaired concrete surfaces shall be allowed to cure a minimum of 14 days. The surfaces shall be cleaned and free of fins, depression or other conditions that affect the intended performance of the CFRP system. Corners perpendicular to the strong fiber direction shall be rounded to a minimum radius of <sup>3</sup>/<sub>4</sub>". The certified and experienced installer responsible shall verify that all required surface preparation has be completed properly and that the CFRP system is cleared for installation.

### C. Composite Application.

The CFRP system shall only be installed by individuals certified in writing by the material supplier. To be an approved installer for the CFRP material, the installer must provide a history of a minimum of 15 installations completed in the last 2 years using the proposed CFRP material or an approved equal. The manufacture shall be required to provide training to the crew that does the actual installation as well as construction oversight throughout the duration of the CFRP installation to ensure the material are applied according to their design and specific material requirements. The manufacture must submit the name of the installer's company and provide a certification the installer meets the quality and experience requirements to perform the work with the bid documents. Reference of the installations including descriptions and contact information will be reviewed by the Engineer. Installers without the proper certifications, experience will not be permitted to complete this work.

Temperatures of the substrate to receive the composite, ambient temperatures and the temperature of the CFRP materials shall be between 50 degrees F and 95 degrees F at the time of mixing the epoxy. The CFRP system shall be applied when the relative humidity is less than 85% and the sub-straight temperature is more 5 degrees F above the dew point.

The manufacturer shall designate the proper mixing procedure for the epoxy resins. Apply a primer coating of epoxy to surfaces of the sub-straight to receive the CFRP system. Saturate the carbon fiber in a documented successful manner that ensures full saturation of the carbon fiber prior to the installation of the CFRP. Saturation of the carbon fiber in place is note permitted. Apply the CFRP to the prepared and primed sub-straight using method that proved a uniform tensile force over the width of the saturated carbon fabric. Strong fiber shall not deviate from the intended fiber direction more the 1/2" per 12" length of composite. Inspection of the installed composite shall be completed prior to the curing of the CFRP to ensure all edges, seams and other areas are properly adhered. During this inspection process, releasing of entrapped air and other identified deficiencies shall be addressed.

After the CFRP system has been installed, use the thickened epoxy to detail all edges and seams to provide a smooth finish. Apply a final layer of thickened epoxy to the installed CFRP system for protection.

### **D.** Coating System Application.

After the epoxy sets, yet prior to the application of the urethane top cot, all defects (including bubble, delamination and fabric tears) more the 1 square inch of the surface area, or as specified by the Engineer shall be repaired as such:

- 1. Small defects (on the order of 6" diameter) shall be injected of back filled with epoxy.
- 2. Bubbles less than 12" in diameter shall be repaired by injecting the epoxy. Two holes shall be drilled into the bubble to allow injection of the epoxy and escape of the entrapped air.
- 3. Bubbles, delamination and fabric tears greater than 12" in diameter shall be repaired by removing and reapplying the required number of layers of the composite and the required finish coatings. All repairs shall be approved by the Engineer.
- 4. The urethane top coat shall then be applied to the final epoxy coat, as determined by the manufacture.

### E. Quality Control.

Installer must follow the quality control manual for the installation of the CFRP systems, produced by the manufacturer.

### 4. MEASUREMENT.

**A. FRP Wrap.** The Department will measure the quantity by square footage covered. The number of layers will not be counted.

### 5. PAYMENT.

A. FRP Wrap (25015EC). Payment at the contract unit price per square feet is full compensation CFRP design, materials, installation and all incidental items necessary to complete the work accordance with this Special Note attached Detail Drawings.

#### SPECIAL NOTE FOR BEARING REPLACEMENT

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 the attached detailed drawings for Bearing Replacement. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment. (2) Bearing Replacement. (3) Any other work specified as part of this contract.

#### 2. MATERIALS.

- **A. Structural Steel.** ASTM Material, A709 Grade 50 Structural Steel Plates and Shapes. Minimum structural steel yield strength Fy ~ 50,000 psi.
- **B. Elastomeric Bearings Pads.** See Standard Drawing BBP-001 C.E. and the attached detailed drawings.
- **C. Expansion Anchors.** Expansion anchors shall be 3/4" diameter HILTI KWIK Bolt 3 SS or equal with a working shear capacity of 5.5 K minimum.
- **D. Non-Shrink Grout.** See Section 601.03.03
- **E.** Cleaning and Painting. See Section 607.03.23

#### **3.** CONSTRUCTION.

- **A. Bearing Replacement.** Complete bearing replacement as specified in this special note and shown in the attached detailed drawings. Each bearing shall be replaced one at a time with the no traffic on the lane above.
- **B. Removal.** Remove existing bearings as shown on the attached detailed drawings. Dispose of all removed material entirely away from the job site. This work shall be incidental to the unit price bid "Each" for "Bearing Replacement".
- C. Expansion Anchors. See attached detailed drawings.
- **D. Bearing Pads.** Set bearing pads in accordance with Section 607.03.17 of the Standard Specification.
- E. Cleaning and Painting. Remaining Embedded Plate shall be field cleaned and receive the coatings as specified. Faying surfaces shall receive only the prime coat specified. 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.

**New structural steel** shall receive shop surface preparation and shop applied prime coating as specified. Faying surfaces shall receive only the prime coat specified. Necessary touch up/repair of the shop applied prime coat on the new steel may be performed in the field. Finish coatings shall be field applied as specified.

**Payment.** All items necessary to complete cleaning and painting as specified in this note shall be considered incidental to the unit price bid "Each" for Bearing Replacement.

- **F. Verifying Field Conditions.** The Contractor shall field verify all plate and shape dimensions, bolt patterns and locations before ordering any material. New material that is unsuitable due to variation in existing structure shall be replaced at the Contractors expense.
- **G. 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.
- **H. Field Welding.** Section 106.10 applies to all field welding. Field welds not permitted except as shown on the detail drawings or as directed by the Engineer.
- I. 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. Bearing Replacement.** The Department will measure the quantity as Each, completed and accepted.

### 5. PAYMENT.

**A. Bearing Replacement (21969NN).** Payment at the contract unit price for "Each" is full compensation for furnishing and installing all material as specified,

#### SPECIAL NOTE FOR JACK AND SUPPORT BRIDGE SPAN

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) and this note. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment. (2) Jack and Support Bridge Span. (3) Any other work specified as part of this contract.

#### 2. CONSTRUCTION.

**A. Jack and Support.** Jack and Support the beams under full dead and live loads for the specified repairs.

BRIDGE	SERVICE LOAD	JACKING CAPACITY		
056B00138N	62 Tons	124 Tons		
056B00229N	39 Tons	78 Tons		
108B00033N	72 Tons	144 Tons		

Jack capacity is per beam line and safety factor of 1.5 per beam line shall be required. Jacks shall be locked during bearing replacement. The Contractor shall submit his jack and support plan to the Engineer for approval. This plan must be prepared, signed and stamped by a licensed Kentucky professional engineer.

**B. 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.

### **3. MEASUREMENT.**

**A. Jack and Support Bridge Span.** The Department will measure the quantity as Lump Sum, completed and accepted.

#### 4. PAYMENT.

A. Jack and Support Bridge Span (08435). Payment at the contact "Lump Sum" includes all items necessary to jack and support bridge span as specified.

#### SPECIAL NOTE FOR JOINT SEAL REPLACEMENT

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) Remove existing joint seal; (3) Install joint seal as specified and (4) Any other work specified as part of this contract.

#### 2. MATERIALS.

#### A. Expansion Joint Seals.

See The Division of Material's list of approved materials and Standard Drawing BJE-005 C.E.

#### **3.** CONSTRUCTION.

### A. Remove Existing Materials.

Remove the existing joint seal. Armored edges to remain.

- **B.** New Joint Material. Use a system listed in 2. Materials to reseal joints. Install as recommended from the manufacture. Provide the engineer with the manufacture's documents for installation
- **C. Verifying Field Conditions.** The Contractor shall field verify all joint openings, locations and manufacture before ordering any material. New material that is unsuitable due to variation in existing structure shall be replaced at the Contractors expense.

#### 4. MEASUREMENT.

A. JOINT SEAL REPLACEMENT. The Department will measure the quantity in linear feet from gutter line to gutter line along the centerline of the joint. The Department will not measure the portion of the new seal extending through the barrier. The portion of the joint seal extending through the barriers will be considered incidental.

#### 5. PAYMENT.

A. JOINT SEAL REPLACEMENT (23386EC) - Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new specified system, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and the standard specification.

#### SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

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 the 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) Remove existing concrete and expansion device(s), (3) Eliminate Transvers Joint and (4) Any other work specified as part of this contract.

- 2. MATERIALS.
  - A. Class "M" Concrete. Use either "M1" or "M2". See Section 601.
  - **B.** Armored Edge for Concrete. See Standard Drawing BJE-001 C.E.
  - C. Steel Reinforcement. Use Grade 60. See Section 602.
  - **D. Epoxy Bond Coat.** See Section 511.

#### **3. EQUIPMENT.**

- A. Hammer. See Section 606.02.10 B.
- B. Sawing Equipment. See Section 606.02.10 C.
- C. Hydraulic Impact Equipment. See Section 606.02.10 D.

#### 4. CONSTRUCTION.

- A. Remove Existing Materials. Remove the existing transverse joints, joint filler, and specified areas of concrete as shown in the detailed drawings or as directed by the Engineer. Care shall be taken not to damage the existing steel reinforcement. Dispose of all removed material entirely away from the job site.
- **B.** Steel Reinforcement. Furnish and install new steel reinforcement as shown in the attached detailed drawings. Splice new steel reinforcement to the existing longitudinal reinforcement in the deck and curb/sidewalk in the areas of removed concrete to tie the slabs together as shown on the plans. Clean, straighten and cut existing steel reinforcement to accommodate new construction. Repair or replace any damaged existing steel reinforcement as directed by the Engineer at no additional cost to the Department. Ensure that all steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new concrete.
- **C. Placing Concrete Class "M" and Armored Edges.** Blast-clean all areas of existing concrete to come in contact with new concrete until free of all laitance and deleterious substances and apply an epoxy bond coat to surface areas of the existing concrete to come in contact with the new concrete in accordance with Section 511 immediately prior to the placement of the new concrete. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible Place new concrete and armored edges to the existing grade as directed by the Engineer. Provide blocking to prevent concrete from falling between the end wall and the end of beams.
- **D. Mastic Tap.** Mastic tap shall cover the joint between the top of abutment cap and slab be looped 1 <sup>1</sup>/<sub>2</sub>" to allow for movement as shown in the detailed drawings. Splicing shall be in accordance with manufacturer's specifications.

- **E.** Tar Paper. Tar paper shall be placed between the new cap concrete and the slab concrete to provide a bond breaker.
- **F.** Approach Pavement Repair. The Contractor shall repair all damage to the approach pavement due to this construction. A new asphalt surface wedge for each approach shall be placed and compacted to the satisfaction of the Engineer prior to allowing traffic back onto the structure after each section of the joint is replaced. No additional payment will be allowed for this work, as it will be considered incidental to the pay item "Armored Edge for Concrete".
- **G. Stage Construction.** Installation of concrete in two (or more if specified) stages is necessary.
- **H. Shop Plans.** Shop plans <u>will not</u> be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
- I. Residual Lead. 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. The Department will not consider any claims based on residual lead paint.
- J. Verifying Field Conditions. The Contractor shall field verify all dimensions before ordering any material. New material that is unsuitable due to variation in existing structure shall be replaced at the Contractors expense.
- **K. 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 removal and replacement of a fallen span, should the fallen span result from the Contractor's actions.

### 5. MEASUREMENT.

- **A. Eliminate Transverse Joint.** The Department will measure the quantity in linear feet from plinth to plinth along the centerline of the abutment or pier.
- **B.** Armored Edge for Concrete. The Department will measure the quantity in linear feet from gutter line to gutter line along the bridge end.
- **C. Steel Reinforcement.** The Department will measure the quantity in pounds for Steel Reinforcement.

### 6. PAYMENT.

- A. Eliminate Transverse Joint (03300). Payment at the contract unit price per Lineal Feet is full compensation for eliminate transverse joint and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detailed drawings.
- **B.** Armored Edge for Concrete (03299). Payment at the contract unit price per linear foot is full compensation for placing new armored edge and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detailed drawings.
- C. Steel Reinforcement (08150). Payment at the contract unit price per pound is full compensation for installing all new steel reinforcement and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown on the attached detailed drawings.

#### **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) 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. Contrary to Section 821 closely match the existing color with the values from the University of Louisville link: https://teamcolorcodes.com/louisville-cardinalscolor-codes/#:~:text=The%20red%20color%20code%20for,4%2C%20PANTO NE%3A%20PMS%201797

### **3. CONSTRUCTION.**

#### A. Bridge Cleaning.

All debris shall be removed from the bridge components. See attached detailed drawings addressing components having debris removal. 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. А 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 at areas of the bridge that are to be addressed in this proposal shall be removed as determined by the Engineer.

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

## **B.** 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. Preform 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 Lump Sum price for "Bridge Cleaning".

### C. 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 diagram. 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 pershipment. The Division of Materials will perform acceptance testing. See The finish coat shall be Light Gray for Concrete. See Section 821.04. Section 821.02. All cost to complete Concrete Coating Application as specified shall be included in the Lump Sum price for "Concrete Coatings".

### D. Sequence of Work.

Complete work in the sequence listed below:

- 1. Debris Removal
- 2. Pressure Washing
- 3. Concrete Coating Application

## E. 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. Pressure Washing: Visual Inspection.

### 3. 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.

### F. 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.

### G. Residual Lead.

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. The Department will not consider any claims based on residual lead paint.

### H. 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 Contractor's actions.

## 4. **MEASUREMENT.**

### A. Bridge Cleaning.

The Cabinet will measure this item by Lump Sum, completed and accepted.

### **B.** Concrete Coating.

The Cabinet will measure this item by Lump Sum, completed and accepted.

### 5. PAYMENT.

### A. Bridge Cleaning (24981EC).

Payment at the contract unit price for "Lump Sum" is full compensation for Debris Removal, Deck Drain Cleaning, Pressure Washing and all incidental items required to complete this with as specified in this note and attached detailed drawings.

### B. Concrete Coating (24982EC).

Payment at the contract unit price for "Lump Sum" is full compensation for applying the concreate coatings and all incidental items required to complete this work as specified in this note and attached detailed drawings.

#### SPECIAL NOTE FOR WORK NEAR RAILROAD

Special care shall be taken to ensure no impact to the railroad or its right of way. All work and equipment must be kept off the railroad's right of way. At no point shall the Contractor enter the railroad's right of way.

In the case that anything happens to impact the railroad right of way or foul the tracks, please immediately call the emergency contact listed below. When referring to the location, be sure to mention the DOT number and railroad mile post. Any costs associated with such an incident, including but not limited to removal of the obstruction and/or repairs to the railroad facilities shall be the responsibility of the Contractor.

Crossing: Bridge 056B00138N CSX Transportation, Inc. DOT # 343 942A Railroad mile post: 0TR 1.120 Emergency contact: 1-800-232-0144

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

1. **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 the date listed below. An allotted number of Calendar days are assigned to the structure in this contract as shown below.

<u>STRUCTURE</u>	NO. OF CALENDAR DAYS	COMPLETION DATE	
056B000138N	30	November 15, 2025	
056B000229N	30	November 15, 2025	
108B000033N	45	November 15, 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 \$500.00 per day** will be assessed when the allotted number of calendar days is exceeded for each structure.

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 TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

#### **1. TRAFFIC CONTROL GENERAL.**

Except as provided herein, traffic shall be maintained in accordance with the Standard Specifications (current edition), Section 112. 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 new condition, at the beginning of the work and maintained in like new condition until completion of the work.

### 2. TRAFFIC COORDINATOR.

Furnish a 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 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.

### 3. SIGNS.

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.

### 4. NARRITIVES.

#### 056B00138N:

The Contractor shall close Old Eastern Pkwy from Brook Street to Floyd Street using Type III Barricades under the bridge during the construction operation.

### 056B00229N:

**I-264 (Route Above)** Maintain one usable 12' lane each direction at all times. Single Lane, Double Lane and Shoulder Closures will be permitted between the hours 7:00 PM and 5:00 AM for the Reseal Joint procedure of this proposal. Maintain one lane of traffic on each bridge at all times in accordance with Standard Drawing Nos. TTC-115, TTC-125 and TTC-135 C.E. all lane and shoulder closures must be removed when not working.

**Garrs Lane (Route Below)** Maintain one usable 12-foot minimum lane shall be used in accordance with Standard Drawing TTC-100. All lane closures must be removed when not working.

#### 108B00033N:

Maintain one usable 12-foot minimum lane. Flagging or traffic signals shall be used in accordance with Standard Drawings TTC-100 and TTC-110 C.E.

### **5. MEASUREMENT.**

A. Temporary Signs: The Department will measure this item by "Square Feet".B. Maintain and Control Traffic: The Cabinet will measure this item by "Lump Sum".

**C. Barricade-Type III, Lane Closure, Truck Mounted Attenuator, Arrow Panel and Temp Signal 2 Phase:** The Cabinet will measure this item by "Each".

#### 6. PAYMENT.

**A. Temporary Signs (02562):** Payment at the contract unit price for "Square Feet" is full compensation for all items to complete this work as specified.

**B.** Maintain and Control Traffic (02650): Payment at the contract unit price for "Lump Sum" is full compensation for all items to complete this work as specified.

C. Barricade-Type III (02014). Lane Closure (02653), Truck Mounted Attenuator (02654), Arrow Panel (02775) and Temp Signal 2 Phase (04933): Payment at the contract unit price "Each" is full compensation for all items to complete this work as specified.

# 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 E n g i n e e r. 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

## **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.

### 6.0 Payment.

Code	Pay Item	<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 Traffic Queue Protection Vehicle**

- **1.0 DESCRIPTION**. Furnish, Operate, and Maintain Traffic Queue Protection Vehicle at locations and times described herein. The Queue Protection Vehicle is expected to alert motorists (inside and outside of project limits) of all stopped traffic caused by construction activities or incidents within the project limits.
- **2.0 MATERIALS.** The contractor shall provide a minimum of one (1) queue protection vehicle for each traveling direction where traffic flow is reduced or modified in a manner where a queue could occur. One (1) additional queue protection vehicle shall be onsite in reserve. The Traffic Queue Protection Vehicle must fulfill the following minimum requirements:
  - 1. A truck mounted attenuators that meets or exceeds NCHRP TL-3 requirements.
  - 2. Four (4) round yellow strobe lights (with auto-dimmers) positioned rear facing
    - Two (2) mounted under rear bumper
    - Two (2) mounted at cab level
    - Visibility of strobe lights can not be deterred by attenuator
  - **3.** One (1) standard cab mounted light bar.
  - **4.** A truck mounted message board with a minimum of 3 Lines and 8 Characters per line.
  - **5.** Four Hour National Traffic Incident Management (TIM) Responder Training for Queue Truck Operators.

**3.0. CONSTRUCTION.** A queue will be defined as anytime that traffic traveling through the project is reduced to a speed of twenty (20) miles per hour or less. The following procedures will be followed when a traffic queue occurs until free flow traffic conditions are present:

- The queue protection vehicle shall be positioned no further than ½ mile upstream from the back of the slow moving traffic.
- The queue protection vehicle shall be positioned on the shoulder and clear of the traveled way so as not to impede traffic.
- The queue protection vehicle shall relocate as needed to maintain approximately ½ mile distance from the back of the slow moving traffic.
- The 2<sup>nd</sup> queue protection vehicle shall be held in reserve, on site, and support the primary vehicle if conditions prevent repositioning by reverse. This vehicle shall not be paid for idle time.
- Queue Protection Vehicles shall be kept in project limits during planned lane closures and other project activities expected to cause a queue. One Queue Protection Vehicle shall remain on the project at all times available to respond to incidents within the project limits in a timely manner.
- Queue length estimates and traffic conditions shall be reported to the KYTC project engineer or designee at the following periods:
  - 1. At 30 minute intervals
  - 2. At significant changes
  - 3. When free flow traffic is achieved
- The KYTC project engineer or designee will document all daily queue reports and provide these logs to the Director of Maintenance and Director of Construction at the end of each month.

The Queue Protection Vehicle shall be mobilized by the Project Engineer or designee for planned construction activities. For unplanned incidents mobilization should be initiated by the first person (KYTC's or Contractor's project staff) receiving notification of the queue.

#### 4. MEASUREMENT.

**4.01 Queue Protection Vehicle.** The Department will measure the time from when the vehicle is in position protecting the queue until either free flow traffic is achieved or the vehicle is no longer protecting the queue, whichever occurs first. Idle time will not be paid. The Department will not measure mobilization, removal, maintenance, labor, fuel, or any additional items but will consider them all incidental to this item of work.

**4.02 Furnish Queue Protection Vehicles.** The Department will measure the quantity by each month the Engineer requires to have the Contractor furnish vehicles as defined in '2.0 Materials' of this Special Note. The Department will not measure mobilization, removal, labor, fuel, or any additional items but will consider them all incidental to this item of work. Partial Months will be calculated as shown in the table below.

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. PAYMENT.

<u>Code</u>	Pay Item	<u>Pay Unit</u>
25075EC	Queue Protection Vehicle	Hour
25117EC	Furnish Queue Protection Vehicles	Month

#### STANDARD DRAWINGS THAT APPLY DISTRICT NO. 5 JEFFERSON AND SPENCER COUNTIES BRIDGE REPAIRS MISCELLANEOUS WORK CID 252973 ~ 121GR25M049

#### **TRAFFIC** ~ *TEMPORARY* ~ <u>TRAFFIC CONTROL</u>

LANE CLOSURE TWO LANE HIGHWAY LANE CLOSURE USING TRAFFIC SIGNALS LANE CLOSURE MULTI-LANE HIGHWAY CASE I DOUBLE LANE CLOSURE SHOULDER CLOSURE

TTC-100 C.E. TTC-110 C.E. TTC-115 C.E. TTC-125 C.E. TTC-135 C.E.

#### BRIDGES STANDARDS

AMORED EDGES

BJE-001 C.E.

#### 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: March 13, 2025

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

## **Project and Structure Identification**

Project Number: CID 252973

Structure ID: Jefferson 056B00229N

Structure Location: I-264 (Shawnee Parkway) over Garr's Lane

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

Inspection Date: March 3, 2025

## **Results and Recommendations**

This asbestos survey was performed in accordance with the current USEPA regulations, specifically <u>40 CFR Part 61</u>, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

The results of the samples collected were negative for the presence of asbestos above 1%. <u>No</u> <u>abatement is required at this time</u>. However, the <u>OSHA Standard 1926.1101</u> applies if any level of asbestos is present in the samples collected.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>Notification Form DEP 7036</u>) 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. This form can be submitted electronically at the <u>EEC Forms Homepage</u>



# MRS, INC.

MRS, Inc. Analytical Laboratory Division

(502) 568 - 2088 or (502) 495 - 1212

332 West Broadway / Suite # 902 Louisville, Kentucky - 40202 - 2133

Fax: (502) 495 - 0566

## **BULK SAMPLE ASBESTOS ANALYSIS**

Analysis N#	# 3503125 C	Address:	Jefferson County 056B00229N
Client Name:	КҮТС		
Sampled By:	O'Dail Lawson		

				% FIBROUS ASBESTOS				% NON-ASBESTOS FIBERS			
Sample ID	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
# 229-1	Black	Yes	No				None				100%
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Methodology : EPA Method 600/R-93-116

Date Analyzed :

12-Mar-25 Analyst Winterford Mensah :

Reviewed By:

Wintegers Mencals

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AJHA #1 02459

121GR25M049	Received at Lab By:	Relinquished By:	Received By:	Relinquished By:				1-326-1	Sample II	Project ID	Phone: PO#:	1 1001 000.	Address.	T
	at Lab By: His higher Me	ied By:	By:	ed By:				Join Consonn.	Sample ID Sample Description	Jefferson 056 B 00229N	Fax: 502-564-56	КҮ	O'Dail Lawson <u>o'dail.lawson@ky.gov</u> W4-06-06 200 Mero Street	KENTUC
	Ŕ				,			3/3/25	Date	129N	55 N/A = N			<b>ICKY</b>
	Date/Time:	Date/Time:	Date/Time:	Date/Time:				12:35	Collected te Time		502-564-5655 N/A = Not Applicable		<b>Client Information</b> Area Square footage:	$\prec$
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Page 1								2.1.	r Cont. Type Preservative					

Contract ID: 252973 Page 43 of 75

Kentucky Transportation Cabinet

Chain of Custody Record

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: March 13, 2025

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

## **Project and Structure Identification**

Project Number: CID252973

Structure ID: Spencer 108B00033N

Structure Location: KY-248 (Briar Ridge Road) over Little Beach Creek

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

Inspection Date: March 3, 2025

### **Results and Recommendations**

This asbestos survey was performed in accordance with the current USEPA regulations, specifically <u>40 CFR Part 61</u>, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

The results of the samples collected were negative for the presence of asbestos above 1%. <u>No</u> <u>abatement is required at this time</u>. However, the <u>OSHA Standard 1926.1101</u> applies if any level of asbestos is present in the samples collected.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>Notification Form DEP 7036</u>) 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. This form can be submitted electronically at the <u>EEC Forms Homepage</u>



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MRS, Inc. Analytical Laboratory Division

(502) 568 - 2088 or (502) 495 - 1212

332 West Broadway / Suite # 902 Louisville, Kentucky - 40202 - 2133

(502) 495 - 0566 Fax:

## **BULK SAMPLE ASBESTOS ANALYSIS**

Analysis N#	# 3503125 D	Address:	Spencer County 108B00033N
Client Name:	КҮТС		
Sampled By:	O'Dail Lawson		

				%	FIBROUS	ASBESTOS		% NON-ASBESTOS FIBERS			
Sample ID	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
# 33-1	Black	Yes	No				None				100%
	<u> </u>										

Methodology : EPA Method 600/R-93-116

Date Analyzed : Analyst

12-Mar-25 Winterford Mensah :

Reviewed By:

Mintegers Mencals

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government. Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AJHA #1 02459

121GR25M049       O'Dail Lawson <u>o'dail.lawson@ky.gov</u> W4-06-06       Address: 200 Mero Street         Frankfort       KY         Phone:       Frankfort         Frankfort       KY         Poj::       Frankfort         Sample ID       Sample Description         3.31       Jaint         Sample Description       Coco33,         Received By:       Received By:         Received at Lab By:       Keney	
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(502) 564-7250 fax (502) 564-5655 KY TRANSPORTATION CABINE KY TRANSPORTATION CABINE KY TRANSPORTATION CABINE KYTC Asbestos COC 3.3.23	Kentucky Transportation Cabinet 200 Mero Street, 4th Floor West Frankfort, Kentucky 40622
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Contract ID: 252973 Page 46 of 75

Chain of Custody Record Kentucky Transportation Cabinet

Signal Provide Action of the second s	Conducted at: 1520 Alliant Ave., Louisville, KY Name Training Manager	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).	ASBESTOS INSPECTOR REFRESHER	has on 03-13-2024 attended and successfully completed the requirements and passed the examination with a score of 70% or better on the entitled course.	O'Dail Lawson	Certification Number: ETC-AIR-031324-00278	ENVIRONMENTAL TRAINING CONCEPTS, INC P.O Box 99603 Louisville, KY 40269 (502)640-2951	OR CONTRACTOR
	Expiration303-13-2025 Mame - Instructor	nmonwealth of Kentucky, the Indiana nment & Conservation and The equisite training for Asbestos	R				PTS, INC	

# MATERIAL SUMMARY

#### CONTRACT ID: 252973

121GR25M049

MB05600602501

EASTERN PARKWAY (US 60) BRIDGE 056B00138N OVER CSX RR, FLOYD AND BROOK STREETS AT MP 03.72 BRIDGE REPAIR MISCELLANEOUS WORK.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0165	08435	JACK & SUPPORT BRIDGE SPAN	1.00	LS
0170	22146EN	CONCRETE PATCHING REPAIR	10.00	SQFT
0175	24981EC	BRIDGE CLEANING	1.00	LS
0180	24982EC	CONCRETE COATING	1.00	LS
0185	25015EC	FRP WRAP	106.00	SQFT
0190	02014	BARRICADE-TYPE III	4.00	EACH
0195	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 252973

121GR25M049

MB05602642501

SHAWNEE PARKWAY (I-264) BRIDGE 056B00229N OVER GARRS LANE AT MP 06.37 BRIDGE REPAIR MISCELLANEOUS WORK.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	08435	JACK & SUPPORT BRIDGE SPAN	1.00	LS
0010	21969NN	BEARING REPLACEMENT	6.00	EACH
0015	22146EN	CONCRETE PATCHING REPAIR	36.00	SQFT
0020	23386EC	JOINT SEAL REPLACEMENT	216.40	LF
0025	25015EC	FRP WRAP	180.00	SQFT
0030	02562	TEMPORARY SIGNS	268.00	SQFT
0035	02650	MAINTAIN & CONTROL TRAFFIC - APPLIES TO 056B00229N	1.00	LS
0040	02653	LANE CLOSURE	7.00	EACH
0045	02654	TRUCK MOUNTED ATTENUATOR	2.00	EACH
0050	02775	ARROW PANEL	2.00	EACH
0055	25075EC	QUEUE PROTECTION VEHICLE	40.00	HOUR
0060	25117EC	FURNISH QUEUE PROTECTION VEHICLES	.50	MONT
0065	26136EC	PORTABLE QUEUE WARNING ALERT SYSTEM	.25	MONT
0070	26137EC	QUEUE WARNING PCMS	.75	MONT
0075	26138EC	QUEUE WARNING PORTABLE RADAR SENSORS	.75	MONT
0080	02569	DEMOBILIZATION	1.00	LS

# MATERIAL SUMMARY

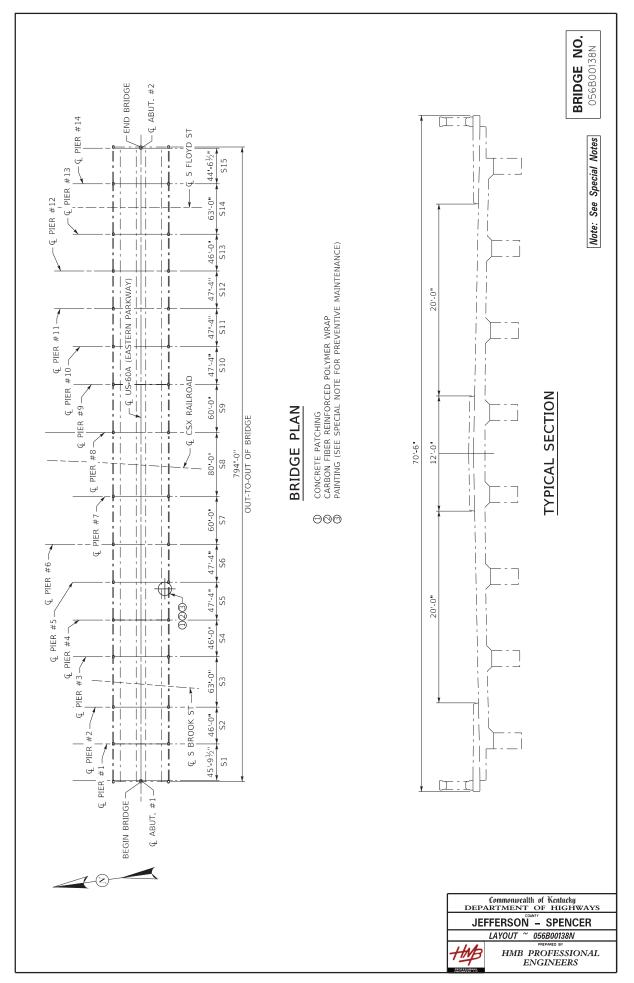
#### CONTRACT ID: 252973

121GR25M049

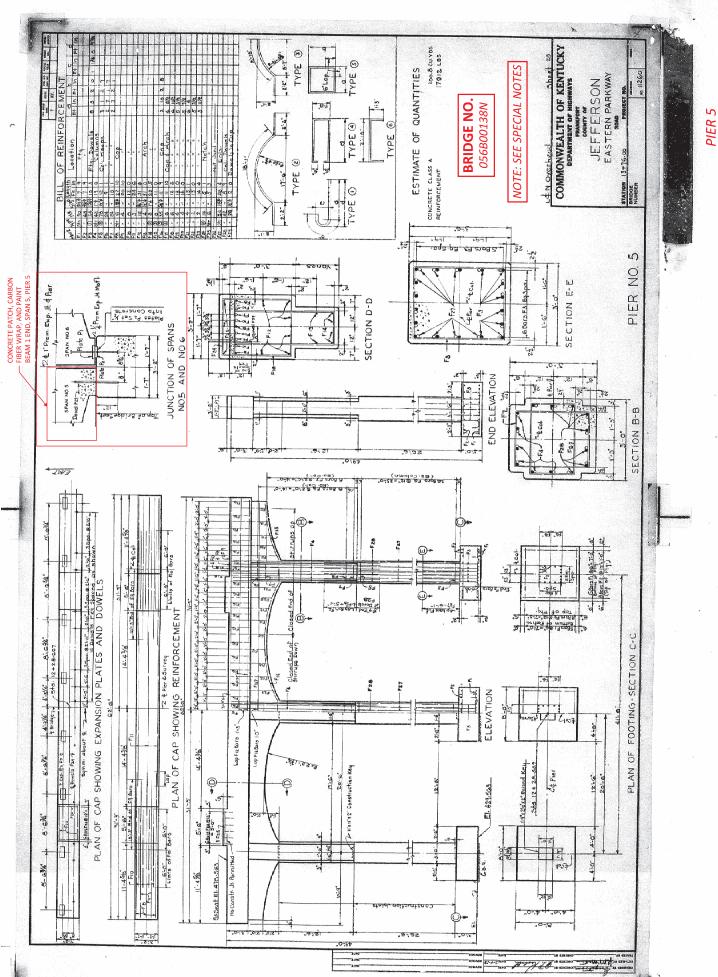
MB10802482501

BRIAR RIDGE ROAD (KY 248) BRIDGE 108B00033N OVER KY LITTLE BEACH CREEK AT MP 02.62 BRIDGE REPAIR MISCELLANEOUS WORK.

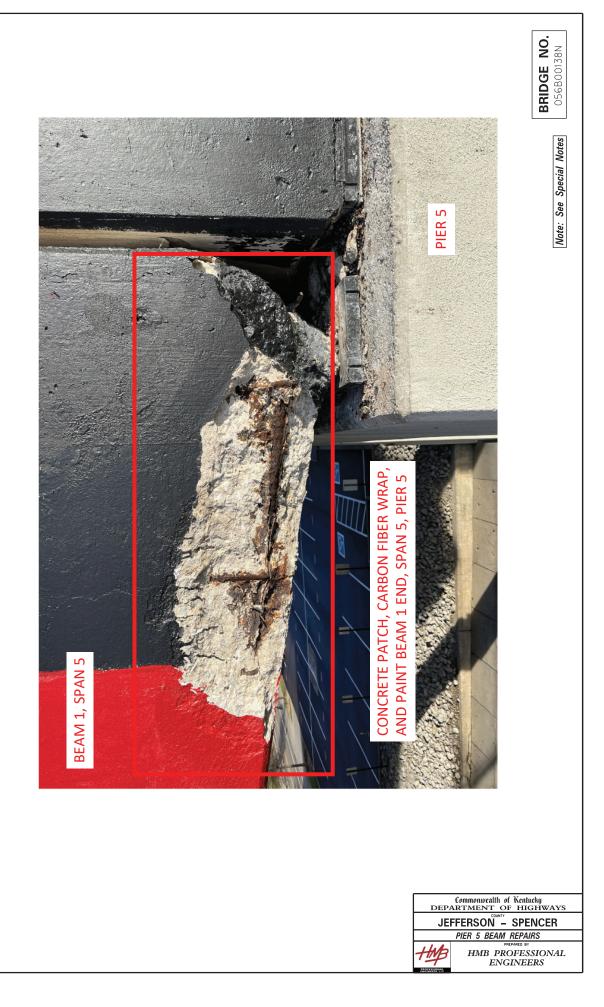
Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0085	03299	ARMORED EDGE FOR CONCRETE	90.40	LF
0090	03300	ELIMINATE TRANSVERSE JOINT	90.40	LF
0095	06514	PAVE STRIPING-PERM PAINT-4 IN	12.00	LF
0100	08150	STEEL REINFORCEMENT	1,200.00	LB
0105	08435	JACK & SUPPORT BRIDGE SPAN	1.00	LS
0110	21969NN	BEARING REPLACEMENT	14.00	EACH
0115	22146EN	CONCRETE PATCHING REPAIR	378.00	SQFT
0120	25015EC	FRP WRAP	1,820.00	SQFT
0125	02562	TEMPORARY SIGNS	149.00	SQFT
0130	02650	MAINTAIN & CONTROL TRAFFIC - APPLIES TO 108B00033N	1.00	LS
0135	02653	LANE CLOSURE	2.00	EACH
0140	04933	TEMP SIGNAL 2 PHASE	1.00	EACH
0145	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF
0150	06550	PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF
0155	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF
0160	02569	DEMOBILIZATION	1.00	LS



SPENCER - JEFFERSON COUNTIES 121GR25M049

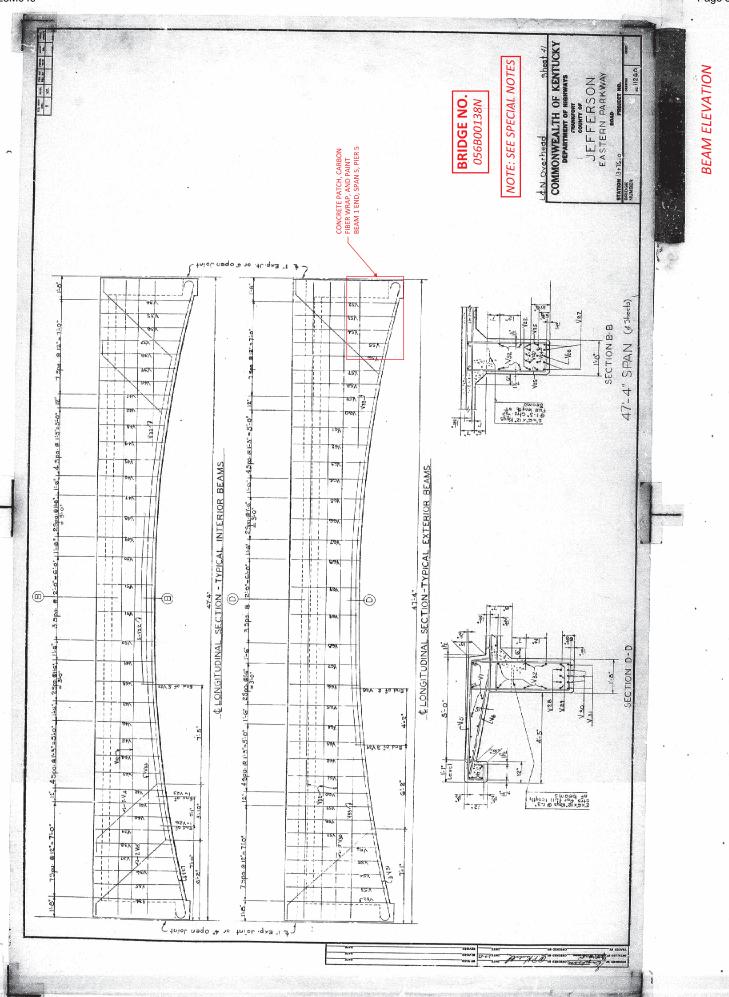


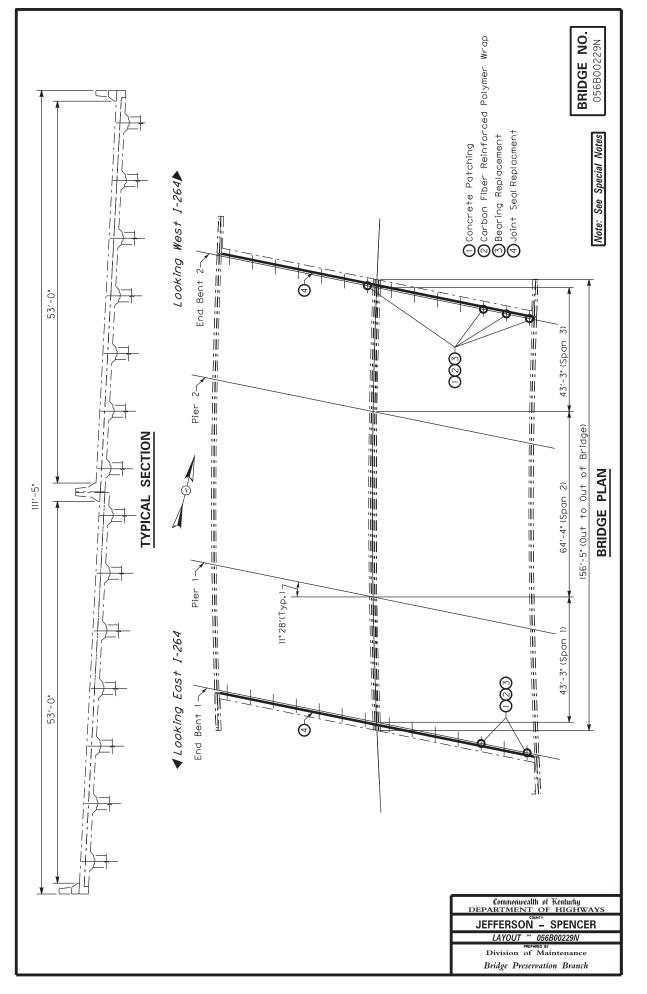
Contract ID: 252973 Page 51 of 75



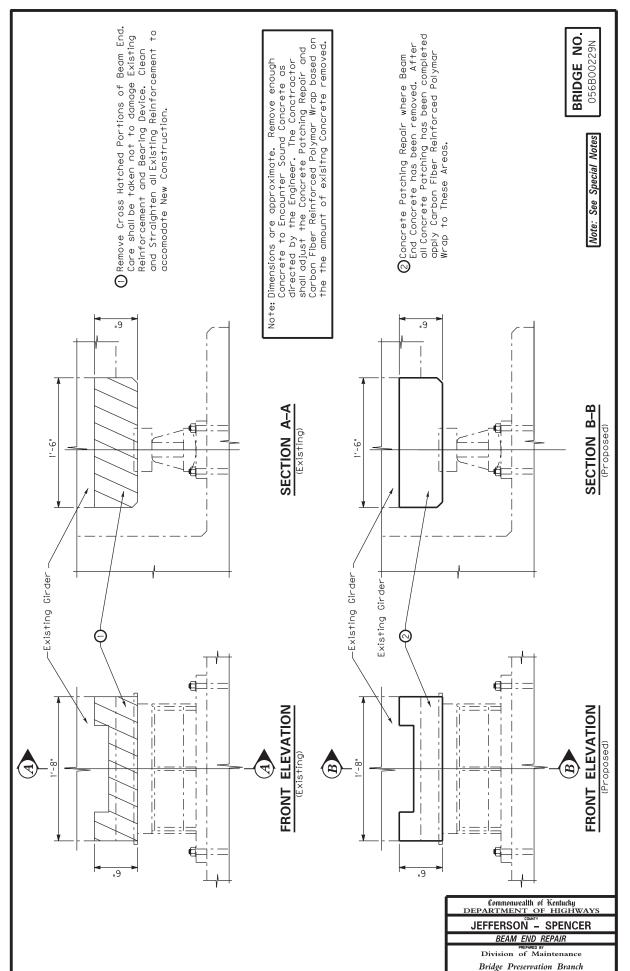
SPENCER - JEFFERSON COUNTIES 121GR25M049

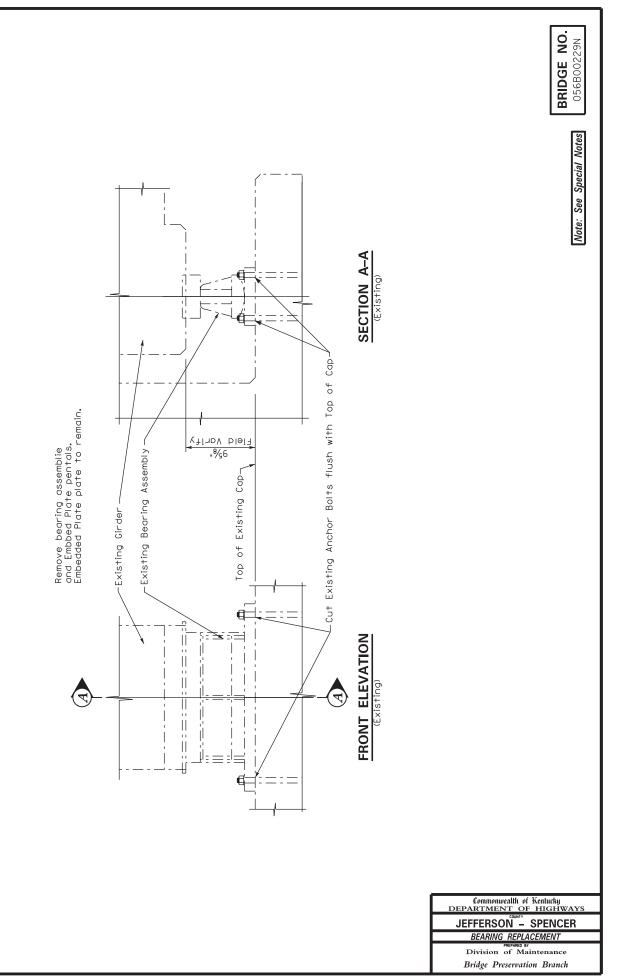
#### Contract ID: 252973 Page 53 of 75

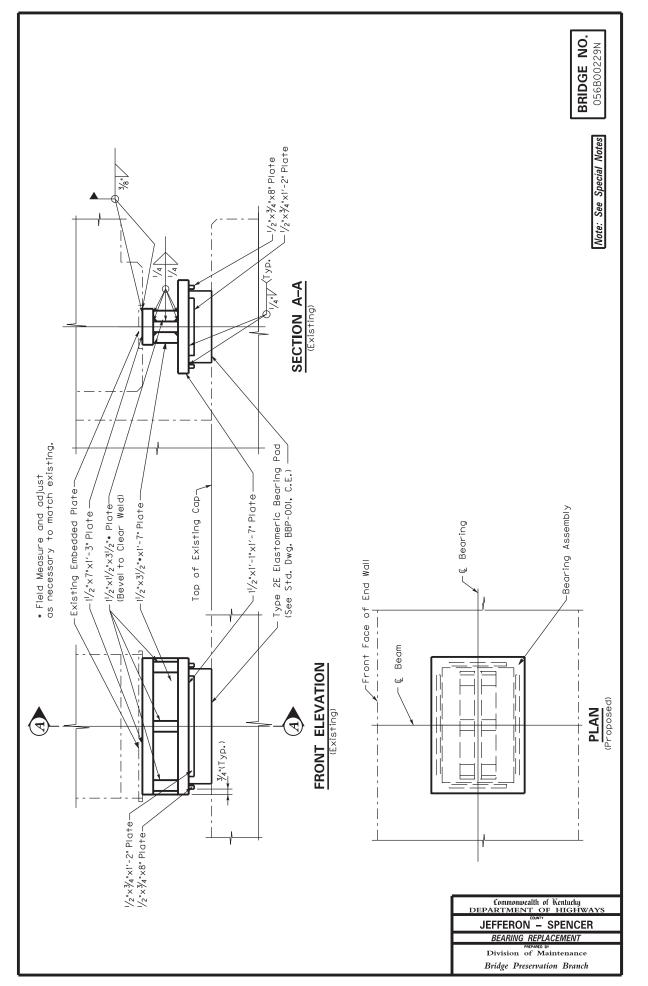


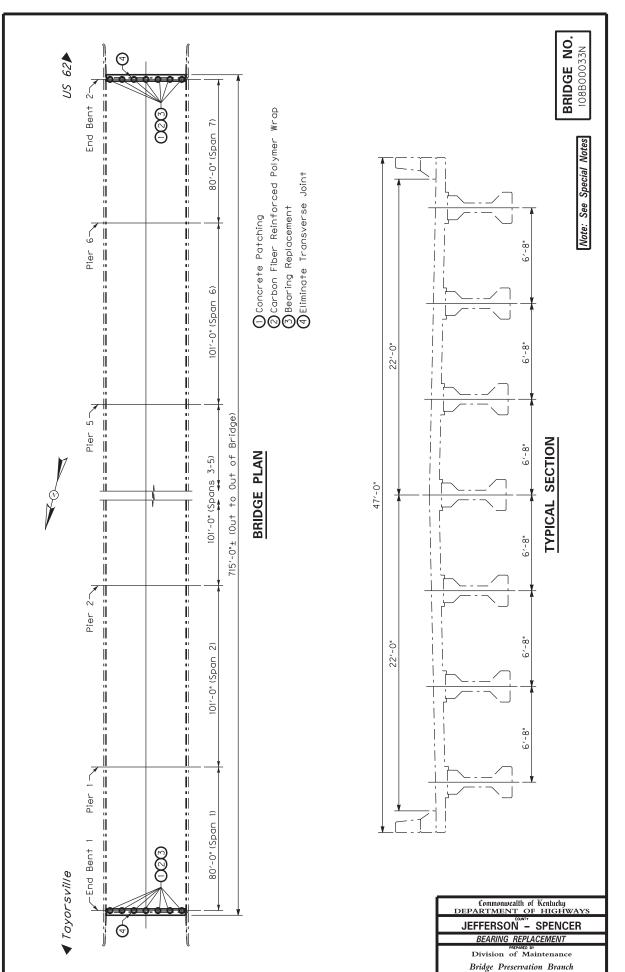


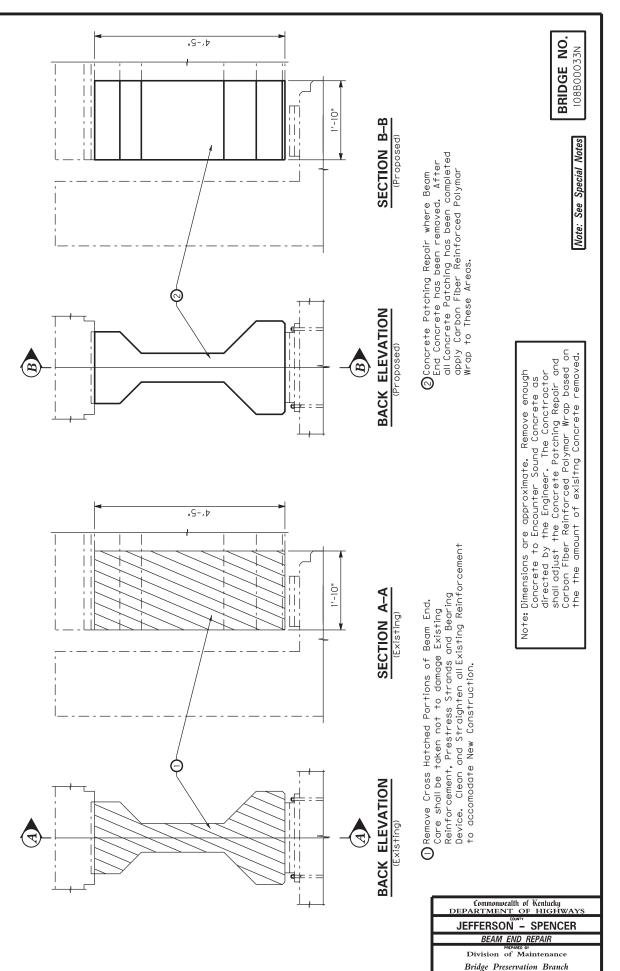
SPENCER - JEFFERSON COUNTIES 121GR25M049



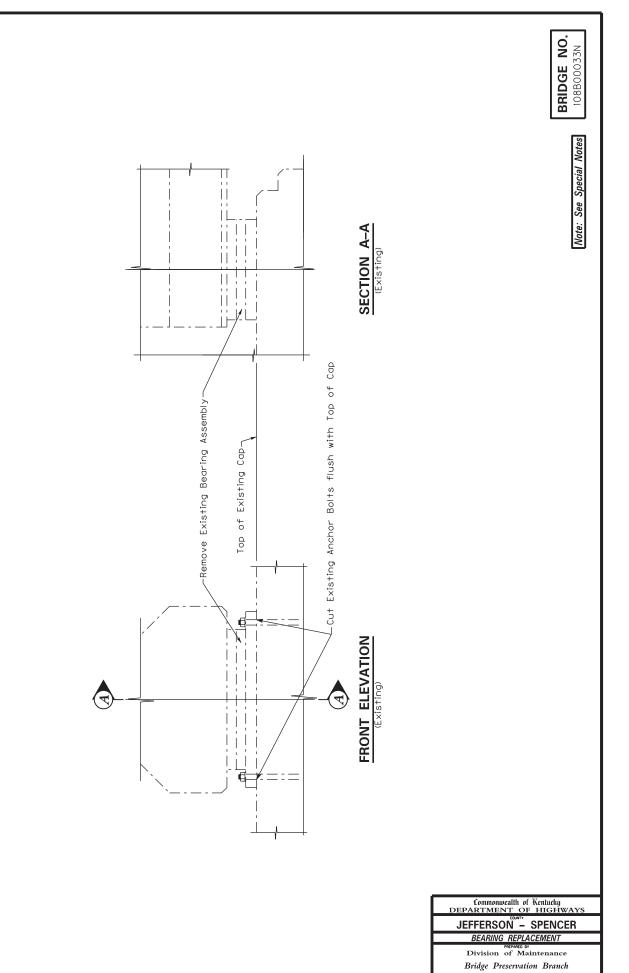


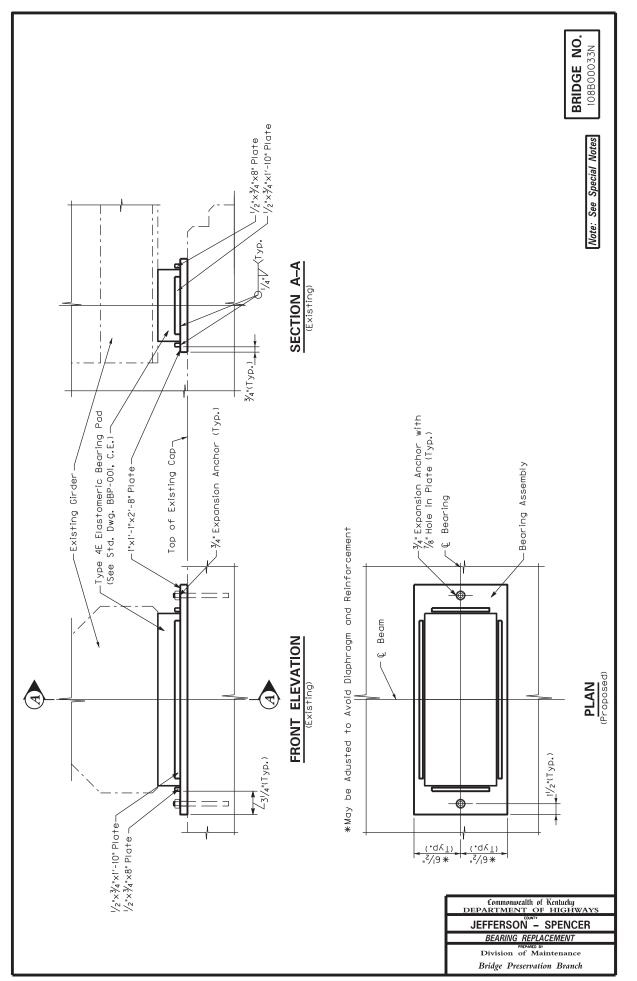




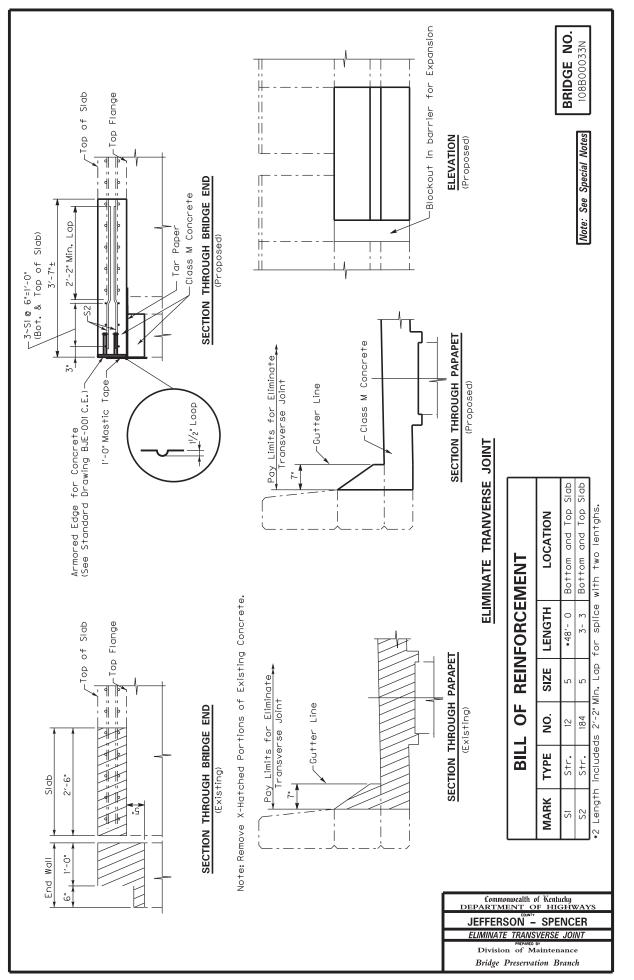


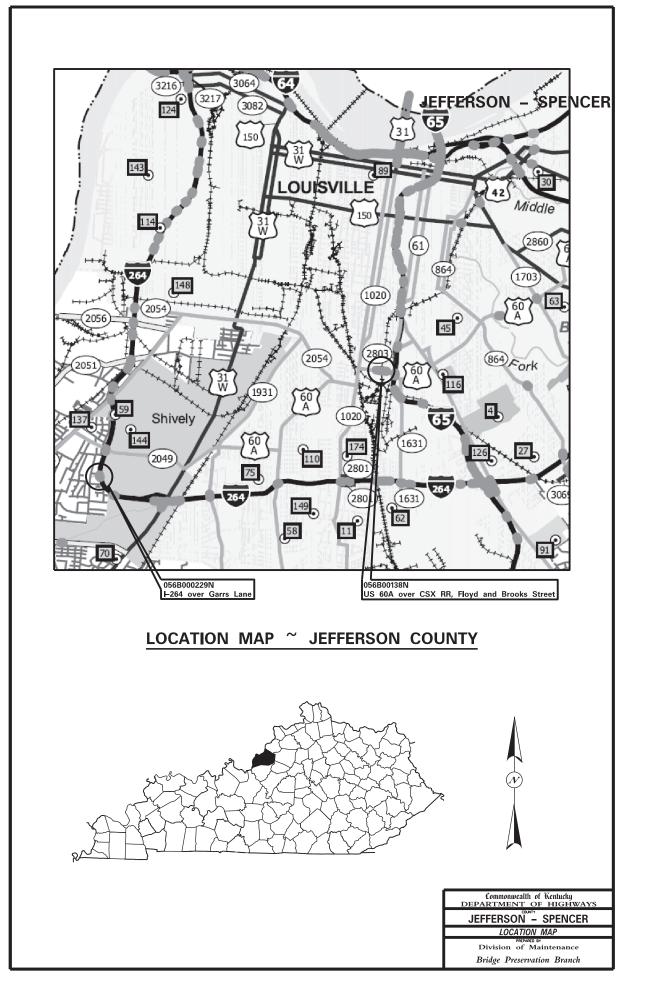
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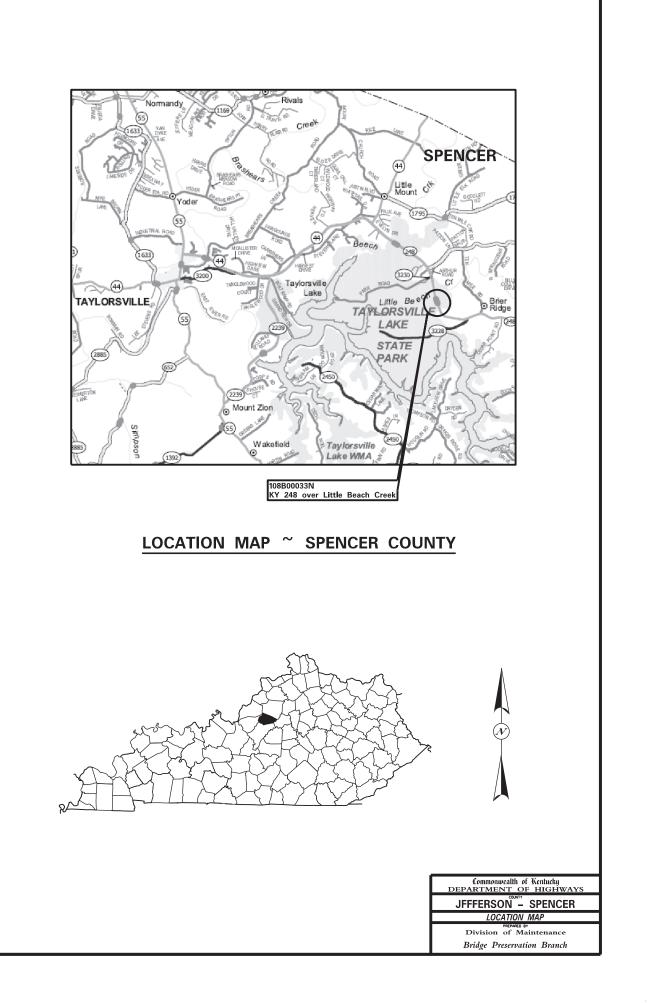




SPENCER - JEFFERSON COUNTIES 121GR25M049







# 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: <a href="http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx">http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx</a>

# 2020 STANDARD DRAWINGS THAT APPLY

## ROADWAY ~ *BARRIERS* ~

#### **ENERGY ABSORPTION DEVICES**

CRASH CUSHION TYPE VI-BT .....RBE-100-10

#### CONCRETE MEDIAN BARRIERS

DELINEATORS FOR CONCRETE BARRIERS	
CONCRETE BARRIER WALL TYPE 9T (TEMPORARY)	

#### TRAFFIC

### ~ TEMPORARY ~

#### TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
LANE CLOSURE USING TRAFFIC SIGNALS	
LANE CLOSURE MULTI-LANE HIGHWAY CASE I	TTC-115-03
LANE CLOSURE MULTI-LANE HIGHWAY CASE II	TTC-120-03

#### **DEVICES**

DOUBLE FINES ZONES SIGNS	TTD-120-02
PAVEMENT CONDITION WARNING SIGNS	TTD-125-02

### BRIDGES

MISCELLANEOUS STANDARDS

BRIDGE RESTORATION AND WATERPROOFING WITH CONCRETE OVERLAYS ......BGX-009-04

JOINTS

NEOPRENE EXPANSION DAMS AND ARMORED EDGES......BJE-001-13

# 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.

#### 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. 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 administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

#### **EXECUTIVE BRANCH CODE OF ETHICS**

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her 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 one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her 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 to obtain private benefits.

If you have worked for the executive branch of state government within the past year, 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 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

### 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: <u>https://www.eProcurement.ky.gov</u>.

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** or by phone at 502-564-2874.

	FEDERAL MINIMUM WAGE \$7.25 PER HOUR BEGINNING JULY 24, 2009
OVERTIME PAY	At least $1^{1}_{2}$ times your regular rate of pay for all hours worked over 40 in a workweek.
CHILD LABOR	An employee must be at least <b>16</b> years old to work in most non-farm jobs and at least <b>18</b> to work in non-farm jobs declared hazardous by the Secretary of Labor.
	Youths <b>14</b> and <b>15</b> years old may work outside school hours in various non-manufactur- ing, non-mining, non-hazardous jobs under the following conditions:
	<ul> <li>No more than</li> <li>3 hours on a school day or 18 hours in a school week;</li> <li>8 hours on a non-school day or 40 hours in a non-school week.</li> </ul>
	Also, work may not begin before <b>7 a.m.</b> or end after <b>7 p.m.</b> , except from June 1 through Labor Day, when evening hours are extended to <b>9 p.m.</b> Different rules apply in agricultural employment.
FIP 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 NFORMATION	<ul> <li>Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.</li> <li>Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.</li> <li>Some state laws provide greater employee protections; employers must comply with both.</li> <li>The law requires employers to display this poster where employees can readily see it.</li> <li>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.</li> <li>Certain full-time students, student learners, apprentices, and workers with disabilities</li> </ul>

U.S. Department of Labor | Wage and Hour Division

# PART IV

# **BID ITEMS**

**PROPOSAL BID ITEMS** 

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#### Section: 0001 - MAINTENANCE OF TRAFFIC - 108B00033N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02562		TEMPORARY SIGNS	149.00	SQFT		\$	
0020	02650		MAINTAIN & CONTROL TRAFFIC APPLIES TO 108B00033N	1.00	LS		\$	
0030	02653		LANE CLOSURE	2.00	EACH		\$	
0040	04933		TEMP SIGNAL 2 PHASE	1.00	EACH		\$	
0050	06549		PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF		\$	
0060	06550		PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF		\$	
0070	06551		PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF		\$	

#### Section: 0002 - MAINTENANCE OF TRAFFIC - 056B00138N

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	02014	BARRICADE-TYPE III	4.00	EACH		\$	

#### Section: 0003 - MAINTENANCE OF TRAFFIC - 056B00229N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0090	02562		TEMPORARY SIGNS	268.00	SQFT		\$	
0100	02650		MAINTAIN & CONTROL TRAFFIC APPLIES TO 056B00229N	1.00	LS		\$	
0110	02653		LANE CLOSURE	7.00	EACH		\$	
0120	02654		TRUCK MOUNTED ATTENUATOR	2.00	EACH		\$	
0130	02775		ARROW PANEL	2.00	EACH		\$	
0140	25075EC		QUEUE PROTECTION VEHICLE	40.00	HOUR		\$	
0150	25117EC		FURNISH QUEUE PROTECTION VEHICLES	.50	MONT		\$	
0160	26136EC		PORTABLE QUEUE WARNING ALERT SYSTEM	.25	MONT		\$	
0170	26137EC		QUEUE WARNING PCMS	.75	MONT		\$	
0180	26138EC		QUEUE WARNING PORTABLE RADAR SENSORS	.75	MONT		\$	

#### Section: 0004 - BRIDGES - 056B00138N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0190	08435		JACK & SUPPORT BRIDGE SPAN	1.00	LS		\$	
0200	22146EN		CONCRETE PATCHING REPAIR	10.00	SQFT		\$	
0210	24981EC		BRIDGE CLEANING -	1.00	LS		\$	
0220	24982EC		CONCRETE COATING -	1.00	LS		\$	
0230	25015EC		FRP WRAP	106.00	SQFT		\$	

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#### **PROPOSAL BID ITEMS**

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0240	08435		JACK & SUPPORT BRIDGE SPAN	1.00	LS		\$	
0250	21969NN		BEARING REPLACEMENT	6.00	EACH		\$	
0260	22146EN		CONCRETE PATCHING REPAIR	36.00	SQFT		\$	
0270	23386EC		JOINT SEAL REPLACEMENT	216.40	LF		\$	
0280	25015EC		FRP WRAP	180.00	SQFT	•	\$	

## Section: 0006 - BRIDGES - 108B00033N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0290	03299		ARMORED EDGE FOR CONCRETE	90.40	LF		\$	
0300	03300		ELIMINATE TRANSVERSE JOINT	90.40	LF		\$	
0310	06514		PAVE STRIPING-PERM PAINT-4 IN	12.00	LF		\$	
0320	08150		STEEL REINFORCEMENT	1,200.00	LB		\$	
0330	08435		JACK & SUPPORT BRIDGE SPAN	1.00	LS		\$	
0340	21969NN		BEARING REPLACEMENT	14.00	EACH		\$	
0350	22146EN		CONCRETE PATCHING REPAIR	378.00	SQFT		\$	
0360	25015EC		FRP WRAP	1,820.00	SQFT		\$	

### Section: 0007 - DEMOB

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0370	02569		DEMOBILIZATION	1.00		S	\$	