



**CALL NO. 411**

**CONTRACT ID. 182950**

**MCCRACKEN COUNTY**

**FED/STATE PROJECT NUMBER 073GR18M011 - FE02**

**DESCRIPTION MCCRACKEN COUNTY VARIOUS BRIDGES**

**WORK TYPE BRIDGE PAINTING & CLEANING**

**PRIMARY COMPLETION DATE 11/15/2018**

**LETTING DATE: January 26,2018**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME January 26,2018. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

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

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

## ADMINISTRATIVE DISTRICT - 01

**CONTRACT ID - 182950**

**073GR18M011 - FE02**

**COUNTY - MCCRACKEN**

**PCN - MB07300601801**

**FE02 073 0060 B0005L 18.63**

MCCRACKEN COUNTY 073B00005L IRVIN COBB DRIVE MP 18.63  
US 60 WB OVER CLARKS RIVERBRIDGE PAINTING & CLEANING  
GEOGRAPHIC COORDINATES LATITUDE 37:02:36.00 LONGITUDE 88:32:51.00

**PCN - MB07300601802**

**FE02 073 0060 B00128R 18.62**

MCCRACKEN COUNTY 073B00128R IRVIN COBB DRIVE MP 18.62  
US 60 EB OVER CLARKS RIVERBRIDGE PAINTING & CLEANING  
GEOGRAPHIC COORDINATES LATITUDE 37:02:37.00 LONGITUDE 88:32:51.00

**PCN - MB07301311801**

**FE02 073 0131 B00010N 02.29**

MCCRACKEN COUNTY 073B00010N SAID ROAD MP 02.29  
KY 131 OVER EAST FORK CLARKS RIVERBRIDGE PAINTING & CLEANING  
GEOGRAPHIC COORDINATES LATITUDE 36:58:18.00 LONGITUDE 88:30:54.00

**COMPLETION DATE(S):**

COMPLETED BY 11/15/2018

APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. ([www.transportation.ky.gov/construction-procurement](http://www.transportation.ky.gov/construction-procurement))

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

### **JOINT VENTURE BIDDING**

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

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

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

### **SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS**

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

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

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

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

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

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

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to [kytc.projectquestions@ky.gov](mailto:kytc.projectquestions@ky.gov). The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

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

The questions and answers will be posted for each Letting under the heading “Questions & Answers” on the Construction Procurement website ([www.transportation.ky.gov/contract](http://www.transportation.ky.gov/contract)). 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 contractor, as defined in KRS 45A.030 (9) 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 contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). 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.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

06/01/16

**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 Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.**

03/01/2011



**SPECIAL NOTES  
DISTRICT NO. 1  
BRIDGE CLEANING AND PAINTING  
Mc CRACKEN COUNTY  
CID 182950 ~ 073GR18M011**

**FE02 073 0060 B00005L 18.63**

McCracken County ~ US 60 over Clarks River

Geographic Coordinates

Latitude – 37° 02' 36.00''

Longitude – 88° 32' 51.00''

Description

75'-120'-170'-120' Steel Girder Spans, Existing Drawing No. 13408

**FE02 073 0060 B00128R 18.62**

McCracken County ~ US 60 over Clarks River

Geographic Coordinates

Latitude – 37° 02' 37.00''

Longitude – 88° 32' 51.00''

Description

75'-127'-163'-120' Steel Girder Spans, Existing Drawing No. 19909

**FE02 073 0131 B00010N 02.29**

McCracken County ~ KY 131 over East Fork of Clarks River

Geographic Coordinates

Latitude – 36° 58' 18.00''

Longitude – 88° 30' 54.00''

Description

72'-75'-90'-75'-72' Steel Girder Spans, Existing Drawing No. 15634

## **SPECIAL NOTES FOR CLEANING AND PAINTING**

SPECIAL NOTE FOR BIDDING PREQUALIFICATION AND STAFFING

SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION

SPECIAL NOTE FOR WASTE MANAGEMENT

SPECIAL NOTE FOR RECYCLABLE SURFACE PREPARATION RESIDUE  
MANAGEMENT

SPECIAL NOTE FOR QUALITY CONTROL

SPECIAL NOTE FOR PAINT

SPECIAL NOTE FOR ENVIRONMENTAL AND WORKER SAFETY REGULATIONS

SPECIAL NOTE FOR PAYMENT

SPECIAL NOTE FOR STENCILING

SPECIAL NOTE FOR UTILITIES AND SIGNS

SPECIAL NOTE FOR WEIGHT LIMITS ON STRUCTURE

SPECIAL NOTE FOR JOINT SEAL REPLACEMENT

SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR INSTALLING  
ARMORED EDGES FOR CONCRETE ON BRIDGES

SPECIAL NOTE FOR END BENT ENCASEMENT

SPECIAL NOTE FOR MAINTAINING AND CONTROLLING TRAFFIC

### **SPECIAL NOTE FOR BIDDING PREQUALIFICATION AND STAFFING**

Bidders shall be Pre-qualified under **I18B** – Bridge Painting to have a bid opened and read.

The contractor(s) and or subcontractor(s) performing painting operations shall retain staff meeting the requirements listed below for the duration of this contract. Any production work conducted while not meeting these requirements shall not be eligible for payment. The contractor(s) and or subcontractor(s) performing painting operations personnel shall have been directly responsible for field operations of a structure painting project containing the requirements listed below.

1. A structure over a river or having multiple structures (more than three)
2. Having specific containment requirements
3. Maintaining vehicular traffic.

The projects shall have been completed to the facility owners' satisfaction.

The Contractor(s) and or Subcontractor(s) performing the Joint Replacement operations required in this contract (not paint related) shall be Pre-qualified for appropriate work items.

## **SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION**

All structural steel shall be cleaned and painted in accordance with the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction (current edition), and the following requirements:

### **A. SUBMITTALS**

The Contractor shall comply with the submittal requirements detailed in Section 108 of the 2012 Standard Specifications for Road and Bridge Construction and submit the following **written** items to the Project Engineer **14 days** prior to the Pre-Construction Conference:

1. A detailed Progress of Work Schedule. The Progress of Work Schedule will be reviewed and approved by the KYTC Engineer.
2. Traffic Control Plan. The Traffic Control Plan will be reviewed and approved by the KYTC Engineer.
3. Worker Protection Plan. The Worker Protection Plan will be reviewed by the KYTC Engineer.
4. Environmental Compliance Plan, including a Waste Management and a Ground Water and Surface Water Protection Plan. The Environmental Compliance Plans will be reviewed by the KYTC Engineer.
5. Manufacturers' recommended Film Thickness and application conditions for the coating system to be used.
6. Rigging and Containment Plan, Design for rigging and containment shall be signed and stamped by a licensed Kentucky professional engineer. The design for containment will be reviewed by the KYTC engineer.

**All submittals must be received, accepted and/or approved prior to beginning any work.**

### **B. CONTAINMENT**

All structural steel shall be totally enclosed during all phases of the work. All containment shall meet the criteria for **SSPC Guide 6 – Containment Classification Class 2A** for cleaning and painting of structural steel bridges.

Air Pressure- Negative air pressure meeting the requirements for **Type H2** shall be maintained.

Air Movement- A minimum air movement in containment is not specified but the contractor shall demonstrate that the air movement in the containment will provide the necessary engineering control to comply with OSHA worker safety requirements (i.e., lead standards as required by **29 CFR 1926**).

Emissions - Quantity of emissions from containment for structural steel bridges shall be assessed using Method A – Visible Emissions of **SSPC Guide 6** - Level 1 Emissions. Emissions shall be monitored for at least 15 minutes and reported in the logbook (**SEE SPECIAL NOTE FOR QUALITY CONTROL**) at least once for every four (4) hours of cleaning and painting.

Quantity of emissions from containment shall be assessed using **Method G** – Visual Assessment of Site Cleanliness. Results of the Method G assessment shall be reported in the logbook (**SEE SPECIAL NOTE FOR QUALITY CONTROL**).

Observance of emissions at any time may require (at the discretion of the Engineer) that cleaning and painting cease until the containment is sufficient to prevent emissions.

Provide proper (OSHA COMPLIANT) lighting on all operations (i.e. surface preparation, painting and inspection). Lighting for QA inspection shall meet the criteria described in **SSPC Guide 12** (Guide for Illumination of Industrial Painting Projects) for inspection.

The Contractor shall conduct EPA Ambient Air Monitoring for Toxic Metals (TSP-Lead) in accordance with 40 CFR 50 throughout all cleaning and painting operations. Background monitoring shall be conducted for a minimum of 3 days prior to mobilization of equipment and installation of containment materials. Additional monitoring may be requested at the discretion of the Engineer. Select an analytical laboratory which is approved to perform TSP-Lead analyses through the National Environmental Laboratories Accreditation Program (NELAP). Submit certified analytical results for each sample to the Engineer within 5 days of obtaining the sample. Emissions monitored by this method shall not exceed 1.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) as a 90 day average as defined in the National Ambient Air Quality Standard (NAAQS) for Lead. Calculations to determine adjusted acceptable allowances based on NAAQS and site specific schedules are detailed in SSPC Technology Guide No. 6 and SSPC Technology Update No. 7.

The contractor shall provide OSHA compliant safe access for all cleaning, painting, and inspections.

Wastes and residue deposited on the containment materials shall be collected daily. In addition, containment materials shall be cleaned prior to moving/dismantling. The Engineer may direct additional cleaning as conditions warrant.

## **C. SURFACE PREPARATION**

### **Solvent Cleaning**

All visible grease and oil shall be removed from the surface prior to abrasive blast cleaning. The surface shall be cleaned in accordance with **SSPC-SP 1** to remove oil, grease, and any other surface contaminants. Only solvents or detergents that are acceptable to the coating manufacturer and the Department shall be used. A clean cloth shall be used for the final wiping of the cleaned surface. All solvent cleaning materials shall be collected, handled, stored, and disposed of as hazardous waste.

### **Compressed Air**

Compressed air used for any work shall be free from oil and/or water. The cleanliness of the compressed air shall be in accordance with **ASTM D 4285 (blotter test)**. The cleanliness of the compressed air shall be verified at least once per shift per compressor or as directed by the Engineer.

**Abrasive Blast**

All structural steel shall be abrasive blast cleaned to an **SSPC-SP 10/NACE NO. 2** “Near White Metal Blast Cleaning” standard as described in the current SSPC documents. After blast cleaning all surface imperfections that remain (e.g. sharp fins, sharp edges, weld splatter, burning slag, scabs, slivers, etc.) shall be removed. The abrasive blast profile shall be **angular, 1.5 to 4.5 mils** as measured in accordance with **ASTM D 4417 Method B**.

**Abrasive Media**

Clean, dry, uniformly graded recyclable steel grit or grit/shot abrasive mix shall be used to produce an angular profile for blast cleaning that is free of oil, soluble salts and other similar substances which could contaminate the blasted surface. The abrasive shall meet the **SSPC-AB 2** “Cleanliness of Recycled Ferrous Metallic Abrasive” standard.

**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.

**D. PAINT APPLICATION**

Areas shall not be painted until they have been inspected and approved by the Engineer. Paint shall be applied only to clean, dry surfaces. Ensure that the appropriate surface condition, as described in the Abrasive Blast Cleaning section, is present at the time of primer application (i.e. re-treat if rust-back occurs). Apply a **Class II (Type I or Type II)** system from the approved list referenced in the **SPECIAL NOTE FOR PAINT**.

All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC “Standard Specifications for Road and Bridge Construction” Section 614.03.02 and coatings supplier recommended conditions for application.

**The finish coat shall be gray and meet the following values.**

	<b>L*</b>	<b>a*</b>	<b>b*</b>
<b>Gray</b>	<b>48.17</b>	<b>- 3.54</b>	<b>0.87</b>

**Damages** - All steps necessary to preclude damage to public property from paint overspray shall be taken. These steps shall include changes in the type of containment or cessation of spraying operations. The contractor shall be solely responsible for any damages arising from the painting operations.

**Repair of paint defects** - All defects in the new paint shall be repaired

**E. BRIDGE CLEANING AND PREVENTIVE MAINTENANCE:**

**SURFACE PREPARATION:** All abutment/end bent caps and back walls, pier caps, pedestals, shear keys, all faces of parapet walls including abutment/end bent wing walls and all deck drains and gutters to 2'-0" each side of the bridge deck shall have debris removed and pressure washed. All equipment for pressure washing shall be operated at a minimum pressure of 4000 psi with fan tips and or 0 degree spinner 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 or increased to a level satisfactory to the Engineer should any damage occur due to power washing procedures. The washing wand must be approximately perpendicular to the washed surface and within a maximum 12 inches of the surface. Wand extensions greater than 36 inches will be subject to Central Office Division of Construction approval. Use clean potable water for all pressure washing.

**CONCRETE COATINGS:** All abutment/end bent caps and back walls, pier caps, pedestals, shear keys, all faces of parapet walls including abutment/end bent wing walls shall have concrete coating applied after all debris are removed and power washing is complete. The coating must be applied to a clean and dry surface. All coating application shall be executed using brushes, rollers, etc. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Spray application will be permitted if containment is in place for structural steel paint application. Use one of the following coating systems from the manufacture listed below shall be used. The Department requires acceptance testing of paint, see special note for paint.

<u>Manufacture</u>	<u>Prime Coat</u>	<u>Finish Coat</u>
Sherwin Williams	Macropoxy 646	Acrolon 218 HS
PPG	Amberlock 2	Devoe Devflex HP
Carboline -	Carboguard 890	Carbothane 133 HB
Tnemec -	Elastogrip 151	EnviroCrete 156

The finish coat shall be gray and meet the following values.

	<b>L*</b>	<b>a*</b>	<b>b*</b>
Grey	74.94	- 1.54	3.92

See concrete coating diagram for addition details.

#### F. PAINT STORAGE, HANDLING, SAMPLING, MIXING AND THINNING

A paint storage site for receiving and storing paint delivered for use on the project shall be established. The paint storage site shall be located separate from the job site. All new paint shall be received at the storage site for inventory and acceptance testing. At that time, have the Contractor's QC inspector (**SEE SPECIAL NOTE FOR QUALITY CONTROL**) and the Department's inspectors independently inventory the supplied paint by batch number and quantities delivered. Their tallies shall be compared and any differences resolved. The Department's inspector examines all paint containers delivered and rejects those with 1) broken seals, 2) rust, 3) and altered, missing or illegible batch numbers or labels. The Department's inspector numbers and initials each container with an indelible marker. A representative of the Department samples each lot of material (**SEE SPECIAL NOTE FOR PAINT**). Rejected paint containers shall be labeled "REJECTED" and dispose of them promptly. The unapproved and/or rejected containers of paint shall be stored separately from those that have been approved. No paint shall be permitted at the actual job site until the Division of Materials has approved it.

Both the Contractor's QC inspector and the Department's inspector shall conduct a daily start-up inventory of containers of approved paint brought to the job site noting batch numbers and the Department inspector's container number. At the end of the work day, the QC inspector and the Department's inspector shall conduct another inventory noting the number of paint containers expended, Department inspector's inventory numbers, and types of paint. Paint containers brought on the job site and not used shall be inventoried. Re-inventory those when they are taken back to the job site to be used.

The addition of solvents to paint shall be permitted **only** by written approval from the Engineer. Use only new solvents supplied by the paint manufacturer. Solvents shall only be used at the job site in the presence of the Department inspector. Solvents from new, unopened containers with the solvent manufacturer's labeling intact shall be used. The QC inspector shall record locations where solvent-thinned paint was used.

Solvents used for cleaning at the job site shall be kept in sealed containers away from mixing operations. Solvents used to clean brushes, rollers, or spray equipment shall be collected in sealed containers and stored as a hazardous waste.

The paint manufacturer shall be required to provide a technical representative at the job site when requested by the contractor or the Department at no additional cost to the Department.

#### G. WORKMANSHIP

All structural steel surfaces shall be properly cleaned and painted to the satisfaction of the Engineer. There shall be no provision for missed areas or substandard work regardless of size of the area in question. **All improperly prepared or painted surfaces shall be repaired to meet the provisions of this specification.**

Allowable field variation of the color of all cured finish coats on structural steel shall be  $2.0\Delta E^*$ . These values shall be obtained from a spectrophotometer utilizing a D65 illuminant at  $45^\circ$  illumination and  $0^\circ$  viewing with a  $2^\circ$  observer. The reference for this test shall be readings obtained on the initial test patch (**SEE SPECIAL NOTE FOR QUALITY CONTROL**). Surfaces with finish coats with color variations exceeding the  $2.0\Delta E^*$  value shall be repainted at the option of the Engineer.



## **H. MEASUREMENT.**

**Clean and Paint Structural Steel:** The Department will measure the quantity as “Lump Sum”.

**Bridge Cleaning and Preventive Maintenance:** The Department will measure the quantity as “Lump Sum”.

## **I. PAYMENT.**

**Clean and Paint Structural Steel (08434):** Payment at the contract lump sum price includes all labor, materials, rigging, containment, and all incidental items necessary to complete this work in accordance with these Notes, Plans, the Standard Specifications or as directed by the Engineer for all structural steel.

**Bridge Cleaning and Preventive Maintenance (23949EC):** Payment at the contract lump sum price includes all labor, all materials and all incidental items necessary to complete this work in accordance with these Notes, Plans, the Standard Specifications or as directed by the Engineer for all structural steel.

## SPECIAL NOTE FOR WASTE MANAGEMENT

All wastes shall be collected and placed in appropriate containers on a daily basis. (**SEE SPECIAL NOTE FOR ENVIRONMENTAL AND WORKER SAFETY REGULATIONS**).

### **Industrial waste**

Dispose of industrial wastes (non-hazardous wastes) such as paint buckets, paint-contaminated rags, rollers, clogged spray hoses and brushes. Store industrial waste in appropriate containers, and appropriately labeled, prior to disposal. Industrial waste containers not covered or designed to prohibit entry of water, must be included in and comply with Ground Water and Surface water Protection requirements (**SEE SPECIAL NOTE FOR ENVIRONMENTAL AND WORKER SAFETY REGULATIONS - D. Groundwater and Surface water Protection**).

### **Hazardous Waste**

Hazardous materials shall be stored separate from paint debris. All non-reusable solvents used in cleaning shall be considered hazardous waste. Store solvent wastes in separate containers (i.e. not with the paint debris).

The Department will provide a site on its property for the Contractor to erect a temporary storage facility. Store surface preparation debris and hazardous wastes at that site, in a secured six-foot high chain-link fence enclosure. The enclosure shall be built in accordance with **Standard Drawing No. RFC-001-07** of the Kentucky Department of Highways Standard Drawings Book, with the **exception that concrete is not required for installation of posts**. The fence of the storage area must be firmly attached to metal posts and have a locked gate. The gate shall be secured to the fence post by a chain and a lock. Each side of the enclosure shall have appropriate placards forbidding unauthorized entrance and announcing that the area is a storage site for lead and hazardous wastes. Cover the ground where the containers will be stored with a waterproof tarpaulin. The contractor shall maintain the tarpaulin to avoid tears or punctures. Drums shall be set on skids that are placed on the tarpaulin. There shall be an adequate aisle space between the rows of stored drums so that the drums and labels can be inspected at any time. Areas around roll off containers shall be covered with tarpaulins. Tarpaulins shall be cleaned daily to remove collected lead bearing debris. The storage area shall be maintained / operated to prevent releases. The storage area shall have a spill clean-up kit. The kit shall include, but not be limited to shovel, broom, dustpan and absorbent material for solvents. There shall be access to communications or alarms whenever authorized personnel are in the storage compound.

The designated temporary storage facility shall be constructed and accepted by the Engineer prior to the onset of operations at the job site. The temporary storage facility shall be maintained during the active cleaning and painting of the bridge and return the site to its original state when the work is completed.

The Contractor shall be solely responsible for the management and the disposal of all hazardous waste generated during the cleaning and painting operations in accordance with the Kentucky Revised Statutes, Chapter 224, Subchapter 46, and the Kentucky Administrative Regulations promulgated pursuant thereto.

The Kentucky Transportation Cabinet will file a Notification of Hazardous Waste Activity with the Kentucky Division of Waste Management to obtain an EPA Identification Number in accordance with **401 KAR 32:010, Section 3**. The Cabinet will provide the Contractor with this EPA ID number to be used in hazardous waste management in compliance with **401 KAR 32:010, Section 3 (1)**.

The Contractor shall be responsible for furnishing appropriate U.S. DOT containers that are made or lined with materials which are compatible with the hazardous waste to be stored in accordance with **401 KAR 35:180, Section 3**. All hazardous wastes collected at the job site shall be placed in those containers for transport to the storage site. The containers shall be used and managed at the job site and at the storage site in accordance with **401 KAR 35:180**. Prior to the transfer of the containers of hazardous waste from the job site to the storage area, the containers shall be correctly sealed, labeled, marked and placarded as defined in the pre-transport requirements of **401 KAR 32:030**.

Each container shall be labeled "Hazardous Waste" and the date clearly marked when the hazardous waste is *first* added to the container in compliance with **401KAR 35:180, Section 4(3)**. That date marked is the *start date* of the **seventy-five (75)** day storage period

The generator for the waste under this contract is the Kentucky Transportation Cabinet. All records including the labels on the waste containers and the manifests shall be completed using the Transportation Cabinet as the generator.

The Department requires that all hazardous waste shall be removed within seventy-five (75) days of the accumulation start date. The Contractor shall select a registered hazardous waste transporter to transport the containers of hazardous waste generated during the painting operations to a permitted hazardous waste treatment, storage or disposal facility. The hazardous waste must be manifested with a Uniform Hazardous Waste Manifest that is to be completed, in entirety, as per the regulations of **401 KAR 32:020** and **401 KAR 32:100**. Copies of all manifests with the Land Disposal Restriction Notice must be provided to the Project Manager and the Central Office, Division of Construction. **Final partial payment of 15% for the project will not be released until the Department receives all copies of the manifests.**

Failure to remove the hazardous waste within **Seventy-Five (75) days** shall result in a performance penalty of **Two Thousand Dollars (\$2,000.00)** per drum per day or **Eight Thousand Dollars (\$8,000.00)** per cubic yard per day that the containers are left in storage. This penalty is in addition to any fines that may be assessed by regulatory agencies other than the Transportation Cabinet.

## **PAYMENT**

All cost for Industrial and Hazardous waste disposal shall be considered incidental to the lump sum bid for: **Clean and Paint Structural Steel (08434)**.

## **SPECIAL NOTE FOR RECYCLABLE SURFACE PREPARATION RESIDUE MANAGEMENT**

The surface preparation debris generated at structural steel bridges shall be transported and recycled as a commercial substitute material in a recycling effort. All waste/debris collection, handling, storage, transportation, and disposal shall be the responsibility of the contractor.

### **Abrasive Media**

Clean, dry, uniformly graded recyclable steel grit or grit/shot abrasive mix shall be used to produce an angular profile for blast cleaning that is free of oil, soluble salts and other similar substances which could contaminate the blasted surface. The abrasive shall meet the **SSP-AB 2** "Cleanliness of Recycled Ferrous Metallic Abrasive" standard.

### **Collection, Handling, and Storage of Wastes and Surface Preparation Debris**

A "Competent Person for lead abatement" as defined by OSHA 1926.62 shall be on site during any operations which disturb lead. The "competent person" shall have successfully completed the **SSPC C3** "Supervisor/Competent Person Training for De-leading of Industrial Structures" or equivalent training.

All surface preparation debris shall be collected separate from waste materials and placed in appropriate containers on a daily basis. **(See Special Note for Environment and Employee Safety Regulations)**

### **Surface preparation debris**

Surface preparation debris shall be separated from all wastes. While on-site, the surface preparation debris shall be managed as lead containing material. Precautions shall be taken to protect employees and the public from exposure to lead. Handling and storage of surface preparation debris shall be accomplished to prevent releases to the environment.

The Department will provide a site on its property for the Contractor to erect a temporary storage facility. Store surface preparation debris and hazardous wastes at that site, in a secured six-foot high chain-link fence enclosure. The enclosure shall be built in accordance with Standard **Drawing No. RFC-001-07** of the Kentucky Department of Highways Standard Drawings Book, with the **exception that concrete is not required for installation of posts**. The fence of the storage area shall be firmly attached to metal posts and have a locked gate. The gate shall be secured to the fence post by a chain and a lock. Each side of the enclosure shall have appropriate placards forbidding unauthorized entrance and announcing that the area is a storage site for lead and hazardous wastes. The ground where the containers will be stored shall be covered with a waterproof tarpaulin. The contractor shall maintain the tarpaulin to avoid tears or punctures. Drums shall be set on skids that are placed on the tarpaulin. There shall be an adequate aisle space between the rows of stored drums so that the drums and labels can be inspected at any time. Areas around roll off containers shall be covered with tarpaulins. Tarpaulins shall be cleaned daily to remove collected lead bearing debris. The storage area shall be maintained / operated to prevent releases. The storage area shall have a spill clean-up kit. The kit shall include, but not be limited to shovel, broom, dustpan and absorbent material for solvents. There shall be access to communications or alarms whenever authorized personnel are in the storage compound.

The designated temporary storage facility shall be constructed and accepted by the Engineer prior to the onset of operations at the job site. The temporary storage facility shall be maintained during the active cleaning and painting of the bridge and return the site to its original state when the work is completed.

The Contractor shall be solely responsible for the management and the disposal of all surface preparation debris and hazardous waste generated during the cleaning and painting operations. Hazardous wastes shall be managed in accordance with the Kentucky Revised Statutes, Chapter 224, Subchapter 46, and the Kentucky Administrative Regulations.

The Contractor shall be responsible for furnishing appropriate U.S. DOT-specified containers that are made or lined with materials that are compatible with the surface preparation debris per 49CFR173.213 (non-bulk containers) or 49CFR173.240 (bulk containers). All surface preparation debris collected at the job site shall be placed in those containers for transport to the storage site. Prior to the transfer of the containers of surface preparation debris from the job site to the storage area, the containers shall be correctly sealed, labeled, marked and placarded as defined in the pre-transport requirements of 49CFR172.301 (non-bulk containers) or 49CFR172.302 (bulk containers). The Contractor shall check with the recycler and the transporter to insure that containers acceptable to both parties are employed.

The Contractor shall be responsible for the quality of the surface preparation debris placed in disposal containers. Under NO circumstances shall the debris become wet or be co-mingled with miscellaneous wastes.

### **Transportation and recycling**

All surface preparation debris shall be transported for recycling within 90 days of initial container filling operations. The contractor shall contact the recycler to arrange for the delivery of the surface preparation debris. The recycler is: The Doe Run Company: Resource Recycling Division, HC1 Box 1395, HWY 10K, Boss, MO 65440, phone (573) 626-4813, fax (573) 626-3304, email [www.doerun.com](http://www.doerun.com). The contractor will complete the Doe Run Supplier Profile Form and provide copies of it to both Doe Run and the Engineer prior to transporting the surface preparation debris.

The contractor shall select a registered hazardous material (HAZMAT) transporter for transportation of the surface preparation debris. The contractor shall provide the necessary waste storage/transportation containers. The contractor shall arrange for the pick-up of the containers and delivery to the recycler.

**NOTE: The contractor shall be responsible for the condition of the surface preparation debris provided to the recycler. Surface preparation debris that is wet debris or that is co-mingled with other waste will be rejected by the recycler. If that occurs, the contractor must dispose of the debris as a hazardous waste. The contractor must promptly inform the Engineer in that event so that KYTC can obtain the proper permitting from the Kentucky Environmental and Public Protection Cabinet. Additionally, the contractor shall be responsible for all transportation costs, hazardous waste disposal costs and fines that are incurred.**

The contractor shall supply the Engineer with all weight tickets for the commercial substitute material transported and delivered to the recycler and all Certificates of Recycling issued by the recycler for material deliveries related to this project. **Final partial payment of 15% for the project shall not be released until the Engineer has received these documents.**

**PAYMENT**

All cost for the management and the disposal of all surface preparation debris and hazardous waste generated during the cleaning and painting operations shall be considered incidental to the lump sum bid for **Clean and Paint Structural Steel (08434)**.

### **SPECIAL NOTE FOR PAINT**

Use a coatings system from an approved supplier. A list of approved suppliers shall be found in the Department's List of Approved Materials maintained by the Division of Materials. All paint supplied shall conform to the applicable Special Notes contained in this proposal. The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing. At his option, the Engineer may elect to conduct more frequent sampling and testing. Test samples shall be taken at the Contractor's paint storage site. Department personnel shall perform sampling. Allow (10) working days for testing and approval of the sampled paint.

**Note: It is the Contractor's responsibility to maintain an adequate inventory of approved paint. The Department shall assume no responsibility for lost work due to rejection of paint or approved paint subsequently found to be defective during the application process.**

### SPECIAL NOTE FOR QUALITY CONTROL

The contractor shall provide QC inspectors to monitor all work, insure that all work is completed in accordance with the Special Notes and Standard Specifications, and record inspection results. All QC inspectors shall possess at a minimum one of the following certifications: **SSPC-BCI level 1 or NACE CIP level 1 & CIP One Day Bridge Course**. The QC inspector(s) shall not perform production work that requires QC/QA inspection. The Department's (QA) inspector shall conduct in-progress reviews of the Contractor's operations and perform follow-up quality assurance (QA) inspections after the QC inspector has certified that a portion of work is complete.

**Progress of Work** - Work shall proceed by sections, bays or other readily identifiable parts of the structure. All work shall proceed from top to bottom of the structure. The work shall be broken down into adjacent sections (control areas) separated by bulkheads. Bulkheads shall be sealed to the containment and meet all **SSPC Guide 6 – Containment Classification Class 2A** requirements. Only one phase of work shall be permitted in a given control area at any time.

In any control area, Quality Control Point inspection and approval shall precede the start of succeeding phases of work. Quality Control Points are progress milestones that occur when one phase of work is complete and ready for inspection prior to continuing with the next operational step. At those points, the Contractor shall provide the Departments QA inspectors with OSHA compliant access to inspect all pertinent surfaces. If QA inspection indicates a deficiency, that phase of the work shall be corrected and re-inspected prior to beginning the next phase of work.

#### A. CLEAN AND PAINT STRUCTURAL STEEL

<i>Quality Control Point</i>	<i>QC Inspection Function</i>
1. Surface Preparation	
A. Solvent Cleaning	Visually inspect.
B. Abrasive Blast Cleaning	Measure profile Visually inspect for cleanliness.
2. Full Prime Coat Application	Check for dry film thickness, and defects in paint
3. Full Intermediate Coat (if applicable)	Check for dry film thickness, and defects in paint
4. Finish Coat Application	Check for dry film thickness, paint appearance, color and quality of application

The surface profile shall be verified with a minimum of 3 measurements per nozzle per shift. Each measurement shall be the average of 3 individual readings. Individual gage readings and averages shall be recorded in the log book. The Engineer may request additional measurements at any time.



The QC Inspector shall inspect prepared surfaces to determine whether those conform to the specification (see **SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION**). Inspect each individual coat of paint using **KM 64-258-08 Procedure C**. Inspect for areas of incomplete coating coverage and coating defects. The Engineer may request tests, including destructive DFT tests, at additional sites or he may elect to perform additional tests.

**B. BRIDGE CLEANING AND PREVENTIVE MAINENANCE**

*Quality Control Point*

*QC Inspection Function*

- |                            |  |
|----------------------------|--|
| 1. Surface Preparation     | Visual   |
| 2. Prime Coat Application  | Check for dry film thickness, and defects in paint *                               |
| 3. Finish Coat Application | Check for dry film thickness*, paint appearance, color and quality of application. |

\*Destructive DFTs shall be used. Contractor shall repair all test locations, cost will be considered incidental to the contract.

**C. INSPECTION RECORDS**

The QC inspector shall maintain a handwritten record of all-painting activities, operations and inspections in the log book(s). At a minimum, the following information must be recorded:

1. all paint inventory and approval information,
2. daily records of ambient conditions (including all measurements taken),
3. daily progress of work information including start-up/shut-down times, bridge locations by control numbers, structural steel components by proper terminology and pertinent operations by control points, and
4. QC inspection information including evaluations at control points, rework comments, or approvals.

Make entries on consecutive pages of the logbook (in indelible ink) and make corrections by marking through mistakes with a single line. Do not remove pages or erase or obliterate entries in the logbook.

The QC inspector and QA inspector shall jointly assign adjacent control areas consecutive numbers and a short description defining their location. After completion of a phase of work in a control area, the QC inspector shall perform an inspection and shall determine whether the area has been satisfactorily prepared. If work in a control area is unsatisfactory, the QC inspector shall require the contractor to make the necessary corrections. That process shall be repeated as necessary until suitable corrections have been made. Once a control area is approved by the QC, the QA will be requested to inspect that control area. The QA will note acceptance or rework comments in log book. Repeat until approved by the QA.

All logbooks shall be maintained at the job site at all times during the project, made available, upon request, to the Department's representatives and submitted to the Engineer at the end of the project for his review and records.

**Test Patch** - Prior to initiation of painting, prepare at least one test patch in each Section of work to serve as a standard for reference during the balance of the painting operations. The test patch shall be located at an accessible area incorporating surface types of the project. Use the specified surface preparation on a surface with at least 20 ft<sup>2</sup> per application method per coating plus 20 ft<sup>2</sup> for surface preparation. When Central office personnel, the Engineer, QC inspector, and the QA inspector, agree that the appropriate level of cleanliness and surface preparation have been achieved, the contractor shall apply a clear sealer, supplied by the coatings manufacturer, to at least 20 ft<sup>2</sup> of the prepared surface. The contractor will then apply coating to the remainder (at least 20-ft<sup>2</sup>) of the test patch. Set aside the test patch area as a standard for proper application and appearance. Do not paint the reference areas until the balance of the project is completed. After the project is complete, re-blast the area of the test patch with clear sealer, and apply all specified coatings. Apply all coatings, including the clear sealer, in the presence of Central Office personnel, the Engineer, the QA inspector, QC inspector, and a technical representative of the paint manufacturer. If QC and QA inspectors agree, clear coat preservation of the test patch may be replaced with pictorial records.

#### **PAYMENT**

All cost to provide QC inspectors shall be considered incidental to the lump sum bid for:  
**Clean and Paint Structural Steel (08434). All Structural Steel Items.**  
**Bridge Cleaning and Preventive Maintenance (23494EC): All Bridge Cleaning and Preventive Maintenance Items.**

## **SPECIAL NOTE FOR ENVIRONMENTAL AND WORKER SAFETY REGULATIONS**

### **(A) Governing regulations**

The existing paint in this project may contain lead, which is classified as a hazardous (toxic) material. Be knowledgeable of and comply with, all **lead-related** environmental and health regulations governing the Contractor's operations. Comply with regulations current at the time the work is performed and all requirements herein. Collect, transport to waste storage sites, and store hazardous wastes in accordance with applicable environmental and health regulations. The contractor is solely responsible for collection, transport, storage and disposal of all industrial wastes.

### **(B) Liabilities and Obligations**

The contractor shall be solely responsible for compliance with all applicable environmental and health and safety regulations to the satisfaction of the applicable government regulatory agencies and the Department. The Department assumes no obligations or liabilities for work stoppages or fines due to enforcement actions by government regulatory agencies or to related delays that the Department deems necessary.

### **(C) State and Local Regulatory Agencies**

State and local regulatory agencies charged with enforcing **most** regulations affecting the generation of hazardous wastes and worker safety issues are:

Kentucky Occupational Safety and Health Program, Labor Cabinet, Commonwealth of Kentucky, Frankfort, Kentucky

Environmental and Public Protection Cabinet, Commonwealth of Kentucky, Frankfort, Kentucky

### **(D) Groundwater and Surface water Protection**

The contractor shall prepare and implement a groundwater and surface water protection plan in accordance with **401 KAR 5:037 (Ground Water), KRS 224.70-110 and 401 KAR 10:031 (Surface water)** with the exception that hazardous waste or hazardous materials container volume is not limited to greater than 55 gallons or weight to 100 pounds.

### **SPECIAL NOTE FOR PAYMENT**

Payment for cleaning and painting structural steel shall be according to Standard Specifications for Road and Bridge Construction (Current Edition) Section 614.05 with the following modification to Section 614.05.

Three-Coat Field Applied System. Partial payments will be based on acceptance of the following:

Surface Preparation	25%
Prime Coat	20%
Intermediate Coat	20%
Finish Coat	20%
De-rigging, touch-up of de-rigging marks and damage, and Environmental documentation	15%

### **SPECIAL NOTE FOR STENCILING**

The Bridge Number, the Month and year of the completion date, and any existing panel number system or panel number system set forth in the contract shall be stenciled on the structure at locations determined by the Engineer. Make the legend in letters and numerals at a minimum of 3 inches and maximum of 6 inches tall, and use a paint color that contrasts with the background.

### **SPECIAL NOTE FOR UTILITIES AND SIGNS**

All utilities, traffic lighting, navigational lighting and traffic signs shall be maintain and protected from damage.

All electric power that may on the structure shall be de-energized. The Contractor shall coordinate with the Department to have the power de-energized.

### **SPECIAL NOTE FOR WEIGHT LIMITS ON STRUCTURE**

**073B00005L** is rated at **47** tons.

**073B00128R** is rated at **61** tons

**073B00010N** is rated at **41** tons

No equipment, materials, vehicles, trailers nor combination of thereof exceeding the load rating of each structure listed above shall be placed on or drive across the structure. If the Contractor chooses to stage from the bridge deck he must submit a plan for approval by the KYTC Engineer showing placement and weight of all equipment.

**SPECIAL NOTE FOR JOINT SEAL REPLACEMENT  
(073B00005L)**

- 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 (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 (4) Maintain and control traffic; and (5) Any other work specified as part of this contract.
  
- 2. MATERIALS.**
  - A. BEJS EMSEAL (2"), SSI SILSPEC SES-200 or Watson Bowman Acme 40EH.**
  
- 3. CONSTRUCTION.**
  - A. Remove Existing Materials.** Remove the existing seal and clean according to section 606.03.11 and as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "JOINT SEALING".
  - 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 manufactures 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.
  - D. Order of Work.** All Joint Sealing work must be completed before any cleaning and painting production operations in the adjacent area.
  
- 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.

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



**SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR  
INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES  
(073B00128L and 073B00010N)**

**1. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion joint(s) and/or bridge ends; (3) Install armored edges, modular expansion joint assembly and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

**2. MATERIALS.**

- A. Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
- B. Structural Steel.** Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. See attach detailed drawings
- C. Stud Anchors.** The armored edge stud anchors are  $\frac{3}{4}$ " x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015
- D. Steel Reinforcement.** Use Grade 60. See Section 602.
- E. Epoxy Bond Coat.** See Section 511.
- F. 4" Neoprene Strip Seals. (073B00010N, Bridge Deck)** See attached detail drawings and Section 807.03.03.
- G. 4" Pre-compressed Silicone and Foam Hybrid Seals. (073B00010N, Parapet)** Use SSI SILSPEC SES-400, Watson Bowman Acme 100EH or EMSEAL BEJS System 4". See attached detailed drawings.
- H. 2" Strip Seals. (073B00128R).** Use SSI SILSPEC SES-200, Watson Bowman Acme 50EH or BEJS EMSEAL System 2". See attached detailed drawings.
- I. Modular Expansion Joint Assembly (073B00128R).** Use WABOFLEX MODEL SR 6.5A, or approved equal.

**3. EQUIPMENT.**

- A. Hammer.** Provide Power driven hammers lighter than nominal 45 lb. class.
- B. Sawing Equipment.** Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.

4. **CONSTRUCTION.**

- A. Remove Existing Materials.** Remove existing expansion joints, existing modular expansion joint assembly, bridge end armored edges and specified areas of concrete as shown on the attached detailed drawings. Remove debris and/or expansion joint filler as directed by the Engineer. Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".
- B. Place New Concrete and Armored Edges.** After all specified existing materials have been removed; place new armored edges to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb. All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete are not to be painted. Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible. Shop drawings will not be required.
- C. Place New Concrete and Modular Expansion Joint Assembly.** After all specified existing materials have been removed; place new modular expansion joint assembly to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb. Blast clean all areas of existing concrete to come in contact with the modular expansion dam until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.
- Shop plans will be required.** The Contractor is responsible for obtaining field measurements and supplying properly sized materials to install modular expansion joint assembly as recommended by the manufacture, these notes and the attached detailed drawings.
- D. Additional Steel Reinforcement.** Furnish for replacement, as directed by the Engineer, 1000 linear feet (200 linear feet each joint) of #4 steel reinforcing bars in 20' lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.

- E. Stage Construction.** Installation of concrete, armored edges and modular expansion joint assembly in two (or more if specified) stages is necessary. Join the armored edges and modular expansion joint assembly at or near the centerline of the roadway or lane line, field weld and grind smooth.
  - F. Preformed Neoprene Joint Seal.** Place the preformed joint seal in one continuous, unbroken length. Place neoprene strip seals as recommended by the manufacturer and in accordance with Section 609.03.04 except that shop drawings will not be required.
  - G. Pre-compressed Silicone and Foam Hybrid Seals.** Place pre-compressed silicone and foam Hybrid seals as recommended by the manufacturer. Shop drawings will not be required.
  - H. Approach Pavement Repair.** The Contractor shall repair any and all damage to the approach pavement due to this construction. A new asphalt surface wedge for all approaches to each structure in this project 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".
  - I. Order of Work.** All joint replacement work must be completed before any cleaning and painting production operations in the adjacent area.
- 5. MEASUREMENT.**

  - A. Expansion Joint Replace 4 In.** The Department will measure the quantity in linear feet from gutter line to gutter line along the centerline of the joint.
  - B. Expansion Joint Replace 2 In.** The Department will measure the quantity in linear feet from gutter line to gutter line along the centerline of the joint.
  - C. Expansion Joint Replace 5 In.** The Department will measure the quantity in linear feet from gutter line to gutter line along the centerline of the joint.
  - D. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutter line to gutter line along the face of the bridge end.
  - E. Steel Reinforcement.** See Section 602.
- 6. PAYMENT.**

  - A. Expansion Joint Replace 4 In. (03298)** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, neoprene strip seal, Pre-compressed Silicone and Foam Hybrid Seals 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 detail drawings.
  - B. Expansion Joint Replace 2 In. (03295)** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, joint seal, 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 detail drawings.
  - C. Expansion Joint Replace 5 In. (23024EN)** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the modular expansion joint assembly, concrete 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 detail drawings.

- D. Armored Edge for Concrete (03299).** Payment at the contract unit price per linear foot is full compensation for placing new armored edge and any approach pavement repair, traffic striping repair 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.
- E. Steel Reinforcement.** See Section 602.

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

**SPECIAL NOTE FOR END BENT ENCASEMENT  
(073B00010N)**

- 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) and/or bridge ends; (3) Install New concrete, steel reinforcement and armored edges for concrete as specified in this note and the attached detailed drawings; (3) Maintain and control traffic; and (5) Any other work specified as part of this contract.
- 2. MATERIALS.**

  - A. Class "AA" Concrete.** See Section 601.
  - B. Steel Reinforcement.** Use Grade 60. See Section 602.
  - C. Structural Steel.** Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection.
  - D. Stud Anchors.** The armored edge stud anchors are  $\frac{3}{4}$ " x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).
  - E. Epoxy Bond Coat.** See Section 511.
- 3. EQUIPMENT.**

  - A. Hammer.** Provide Power driven hammers lighter than nominal 45 lb. class.
  - B. Sawing Equipment.** Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
  - C. Hydraulic Impact Equipment.** Hydraulic Impact/Skid Steer Type Equipment with a maximum rated striking Energy of 360 ft-lbs are permitted only in areas of concrete removal more than 6 inches away from boundaries of surface areas to remain in service. The Contractor is to provide data information to the engineer on the equipment they wish to utilize to ensure compliance with this note.
- 4. CONSTRUCTION.**

  - A. Remove Existing Materials.** Remove existing expansion material and specified areas of concrete as shown on the attached detailed drawings. Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department. Dispose of all removed material entirely away from the job site.

- B. Placing Class AA Concrete and Armored Edges.** After all specified existing materials have been removed; place new armored edges to match the grade of the existing bridge deck. (See attached detail drawings). Place the new Class "AA" concrete to match the grade of the existing bridge deck or and finish with broom strokes drawn transversely from curb to curb (See attached detail drawings). All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete are not to be painted. Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "AA" Concrete. The surface areas of existing concrete to come in contact with the new Class "AA" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.
- D. Steel Reinforcement.** Place all steel reinforcement as specified in this note, the attached detailed drawings and section 602 of the standard specification.
- C. Stage Construction.** Installation of concrete and armored edges in two (or more if specified) stages is necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld and grind smooth.
- D. 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.
- E. 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 fall span, should the fallen span result from the Contractor's actions.
- F. Approach Pavement Repair.** The Contractor shall repair any and all damage to the approach pavement and traffic striping due to this construction. A new asphalt surface wedge for all approaches to each structure in this project 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. Shop Plans.** Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.
- H. Order of Work.** All end bent encasement work must be completed before any cleaning and painting production operations in the adjacent area.
- 5. MEASUREMENT.**
- A. Remove Concrete Masonry.** The Department will measure the quantity in Cubic Yards
- B. Concrete Class AA.** The Department will measure the quantity in Cubic Yards.
- C. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutter line to gutter line along the face of the bridge end.
- D. Steel Reinforcement.** See Section 602.

**6. PAYMENT.**

- A. Remove Concrete Masonry (02403).** Payment at the contract unit price per Cubic Yard is full compensation for removing specified materials including expansion devices as specified pay limits as specified by this note and as shown on the attached detailed drawings.
- B. Concrete Class AA (08104).** Payment at the contract unit price per Cubic Yard is full compensation for placing all new Class AA Concrete 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. Armored Edge for Concrete (03299).** Payment at the contract unit price per linear foot is full compensation for placing new armored edge and any approach pavement repair, traffic striping repair 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.
- D. Epoxy Coated Steel Reinforcement (08150).** See Section 602.

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

## **SPECIAL NOTE FOR MAINTAIN AND CONTROL TRAFFIC**

All lane closures on this project shall be in accordance with Kentucky Department of Highways Standard Drawings No. **TTC-100, TTC-110, TTC-115 and the FHWA Manual for Uniform Traffic Control Devices (Current Editions) unless otherwise specified.** Lane closures should be used only when absolutely necessary and kept to the shortest duration possible in order to minimize disruption to the traveling public. No work will be conducted over unprotected traffic at any location. At the discretion of the Engineer, lane closures may be restricted on holiday weekends.

The contractor shall be required to submit in writing, to the department, his complete work schedule 14 days prior to the Pre-Construction Conference. The contractor shall be required to coordinate his efforts with those of any other contractor in the construction area so as to eliminate any lane closures which conflict with this traffic note.

In the event it becomes necessary to make emergency repairs at this project by state forces or by other outside contractors, the (painting) contractor shall agree to alter his work pattern as directed by the engineer so as not to interfere with the emergency work.

The contractor shall be required to furnish all traffic control devices whenever his operations endanger or interfere with vehicular traffic as determined by the engineer. The contractor shall furnish any additional traffic control devices necessary to protect traffic and his workmen. Any costs associated with the added traffic control devices (including arrow boards) shall be incidental to the contract lump sum amount for "maintain and control traffic."

Placement of all devices for lane closures shall start and proceed in the direction of flow of traffic. Removal of devices shall start at the end of the construction area and proceed toward oncoming traffic. The contractor shall provide for the installation of all necessary traffic control devices before beginning work and their immediate removal as soon as work is suspended or completed. During the fully operational periods, when no lane closures are permitted, all equipment shall be totally removed from the job site. Traffic control signs shall be removed or covered (if left in a curb lane).

The contractor's vehicles shall always move with and not across or against the flow of traffic. Vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with normal roadway traffic. Vehicles shall not park or stop except within designated work areas.

Personal vehicles shall not be permitted to park within the state right-of-way. The contractor's vehicles shall be prohibited from crossing the roadway and all pedestrian movement of the contractor's personnel on the roadway shall be limited to within the closed work area.

Any lane or shoulder closure shall include the use of a TMA placed between oncoming traffic and equipment or vehicles.

**The Engineer may elect to use Variable Message Boards when necessary.**



## **MEASUREMENT.**

**A. Maintain and Control Traffic:** The Department will measure the quantity as “Lump Sum”.

**B. Portable Changeable Message Sign:** The Department will measure the quantity for “Each”.

## **PAYMENT.**

**A. Maintain and Control Traffic (02650):** Payment of the contract lump sum amount for "maintain and control traffic" shall be full compensation to furnish, install, maintain and remove all items necessary to maintain and control traffic as specified for this contract. All traffic control items shall remain the property of the contractor when the work is complete.

**B. Portable Changeable Message Sign (02671):** Payment at “each” shall be full compensation to furnish, install, maintain and remove all portable changeable message signs as specified.

### **073B00005L and 073B00128R**

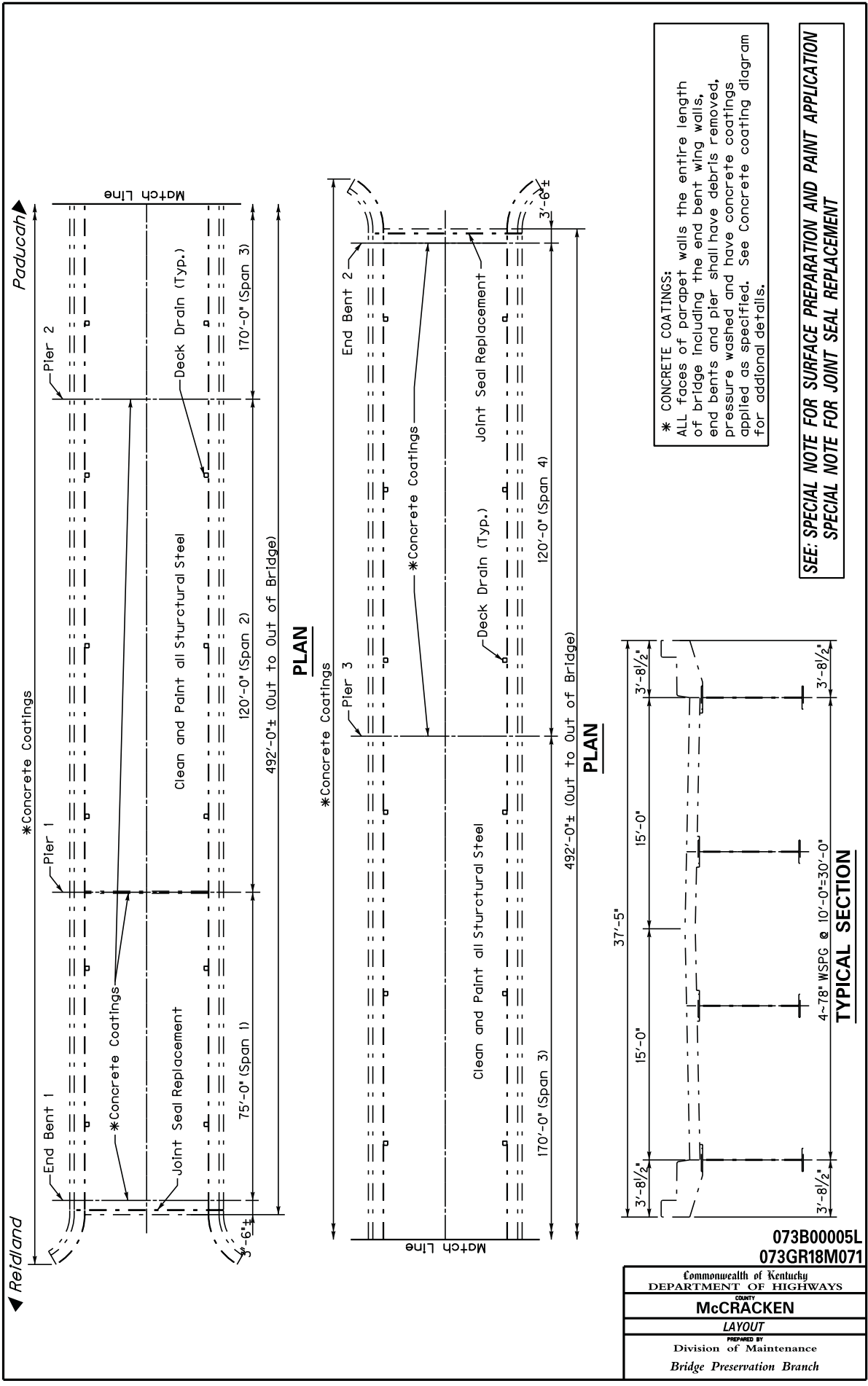
Single lane closures and shoulder closures will be permitted.

All cleaning painting work requiring single lane closures shall be done during the hours of 7:00 PM and 6:00 AM. Equipment staging will be permitted in the boat ramp parking area below the east end of the bridges.

All joint replacement work requiring single lane closures shall be completed in 45 calendar days from the date the lane closure is installed. When performing joint replacement portions of this contract, the contractor will provide steel plating to cover the opening in the bridge deck when not working. The plate shall be a minimum of 4 feet wide from the edge of the open lane of traffic over the opening and at length to support and cover the opening. The specified 4 feet width may be placed in multiple sections for ease of handling. The Contractor shall secure the steel plating while in place. All cost to furnish and place the steel plating shall be considered incidental to the lump sum bid item for Maintain and Control Traffic.

### **073B00010N**

Maintain one usable 12 foot minimum lane. Flagging or traffic signals shall be used. If traffic signals are used the Contractor shall use flagging to minimize impact on school bus traffic when school is in session. The Contractor shall be responsible for establishing the dates and times when school bus traffic will impact the job site. The Contractor will be permitted to briefly close the structure to traffic using flagging to move any equipment that exceeds load rating (See Special Note for Weight Limits on Structure) across the structure as directed by the Engineer. The equipment must be centered on the structure and shall not exceed 2 times the load rating for the each structure. When performing end bent encasement and joint replacement portions of this contract, the contractor shall provide steel plating to cover the opening in the bridge deck when not working. The plate shall be a minimum of 4 feet wide from the edge of the open lane of traffic over the opening and at length to support and cover the opening. The specified 4 feet width may be placed in multiple sections for ease of handling. The Contractor shall secure the steel plating while in place. All cost to furnish and place the steel plating shall be considered incidental to the lump sum bid item for Maintain and Control Traffic.



**\* CONCRETE COATINGS:**  
ALL faces of parapet walls the entire length of bridge including the end bent wing walls, end bents and pier shall have debris removed, pressure washed and have concrete coatings applied as specified. See Concrete coating diagram for additional details.

**SEE: SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION  
SPECIAL NOTE FOR JOINT SEAL REPLACEMENT**

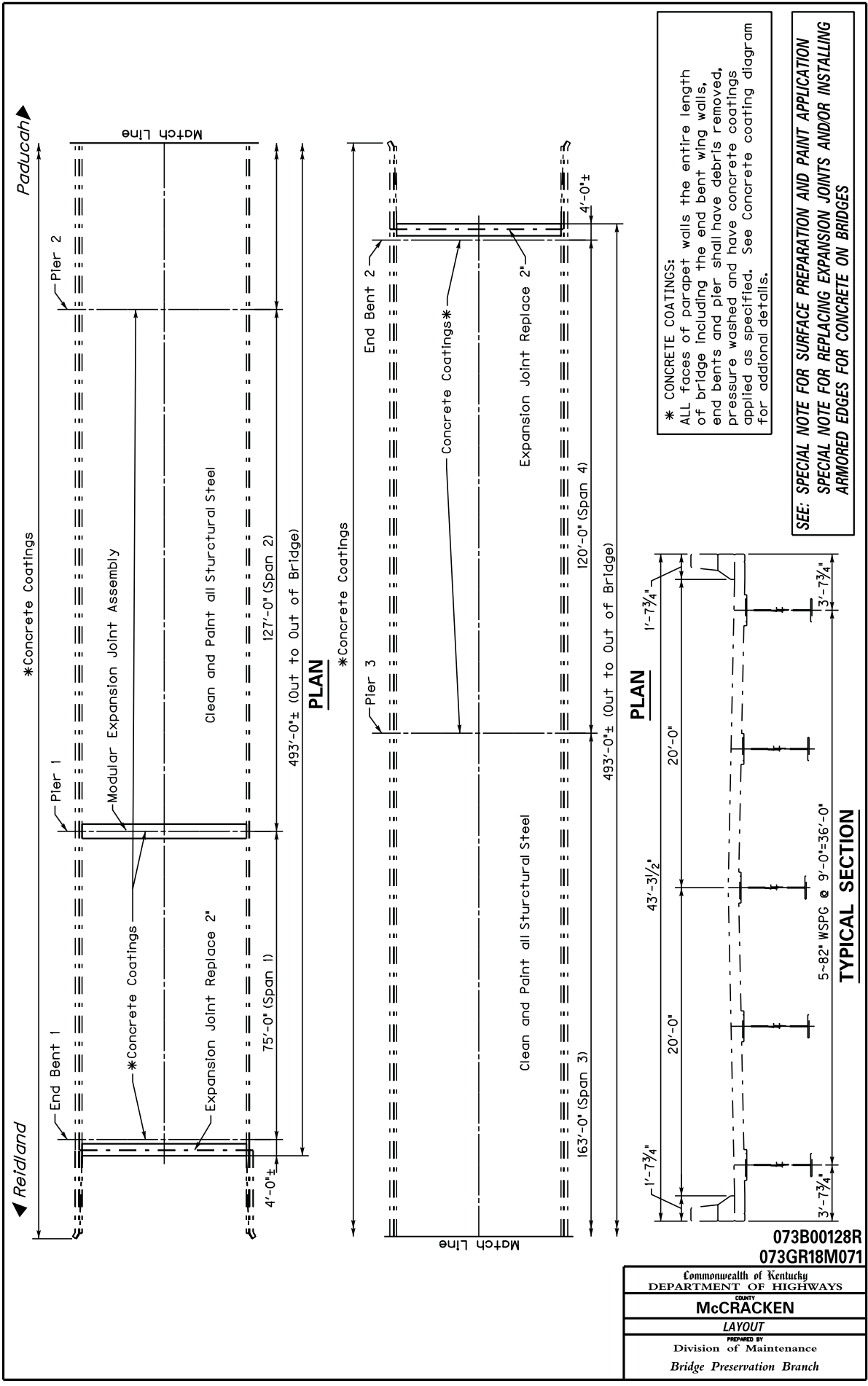
073B00005L  
073GR18M071

Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS

COUNTY  
**MCCRACKEN**

LAYOUT

PREPARED BY  
Division of Maintenance  
Bridge Preservation Branch

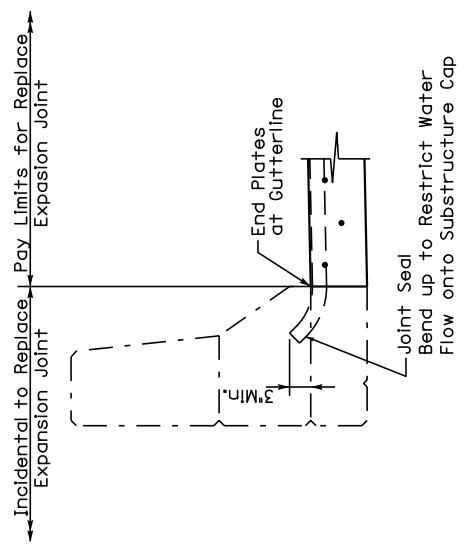


**\* CONCRETE COATINGS:**  
ALL faces of parapet walls the entire length of bridge including the end bent wing walls, end bents and pier shall have debris removed, pressure washed and have concrete coatings applied as specified. See Concrete coating diagram for additional details.

**SEE: SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION**  
**SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**

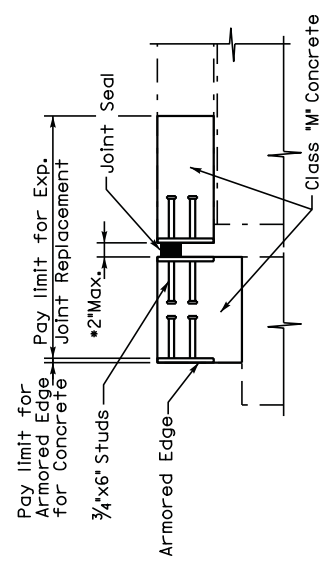
073B00128R  
073GR18M071

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY <b>MCCRACKEN</b>
LAYOUT
REVIEWED BY Division of Maintenance Bridge Preservation Branch



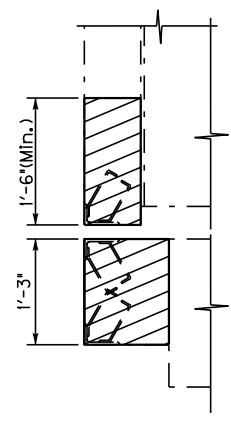
**SECTION THROUGH PAPERET**

Joint Seal  
Bend up to Restrict Water  
Flow onto Substructure Cap



**End Bents 1 & 2**

\* The Joint Supplied must accommodate the required movement shown.

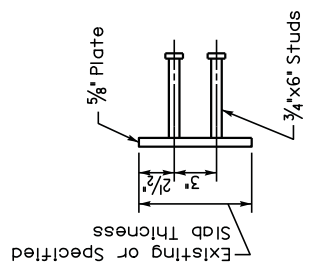


**End Bents 1 & 2**

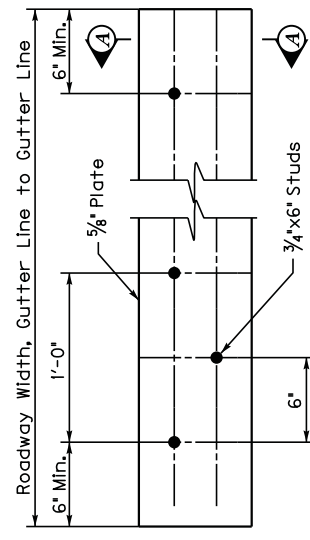
Note: Remove X-Hatched Areas of Concrete & Expansion Device.

**SECTION THROUGH JOINT**  
Existing

**SECTION THROUGH JOINT**  
Proposed



**SECTION A-A**

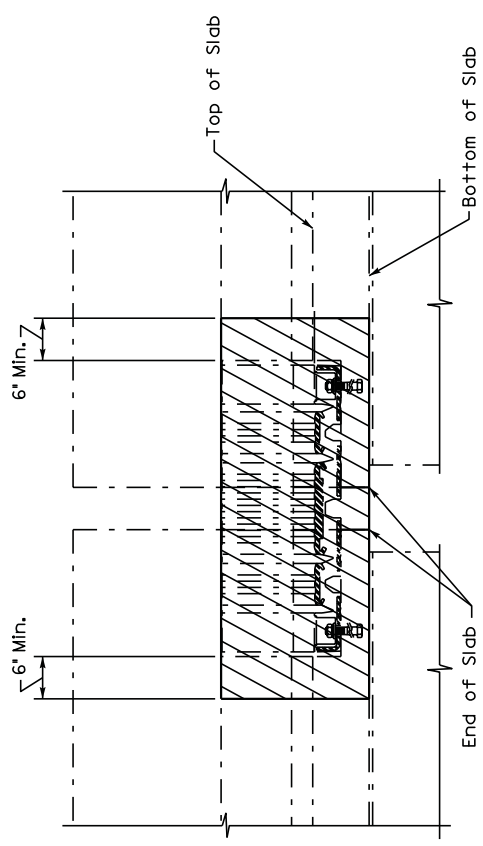


**ARMORED EDGE**

**NOTE: SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**

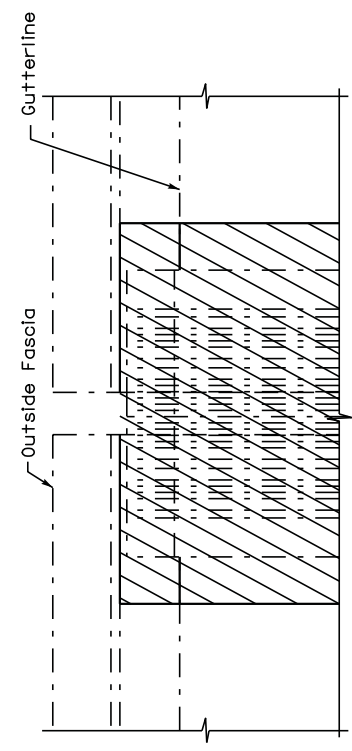
**073B00128R**  
**073GR18M071**

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
<b>McCRACKEN</b>
<i>REPLACE EXPANSION JOINT 2 IN.</i>
Division of Maintenance Bridge Preservation Branch



**ELEVATION VIEW AT GUTTER**  
Existing

Note: Remove X-Hatched Areas of Concrete & Expansion Device.

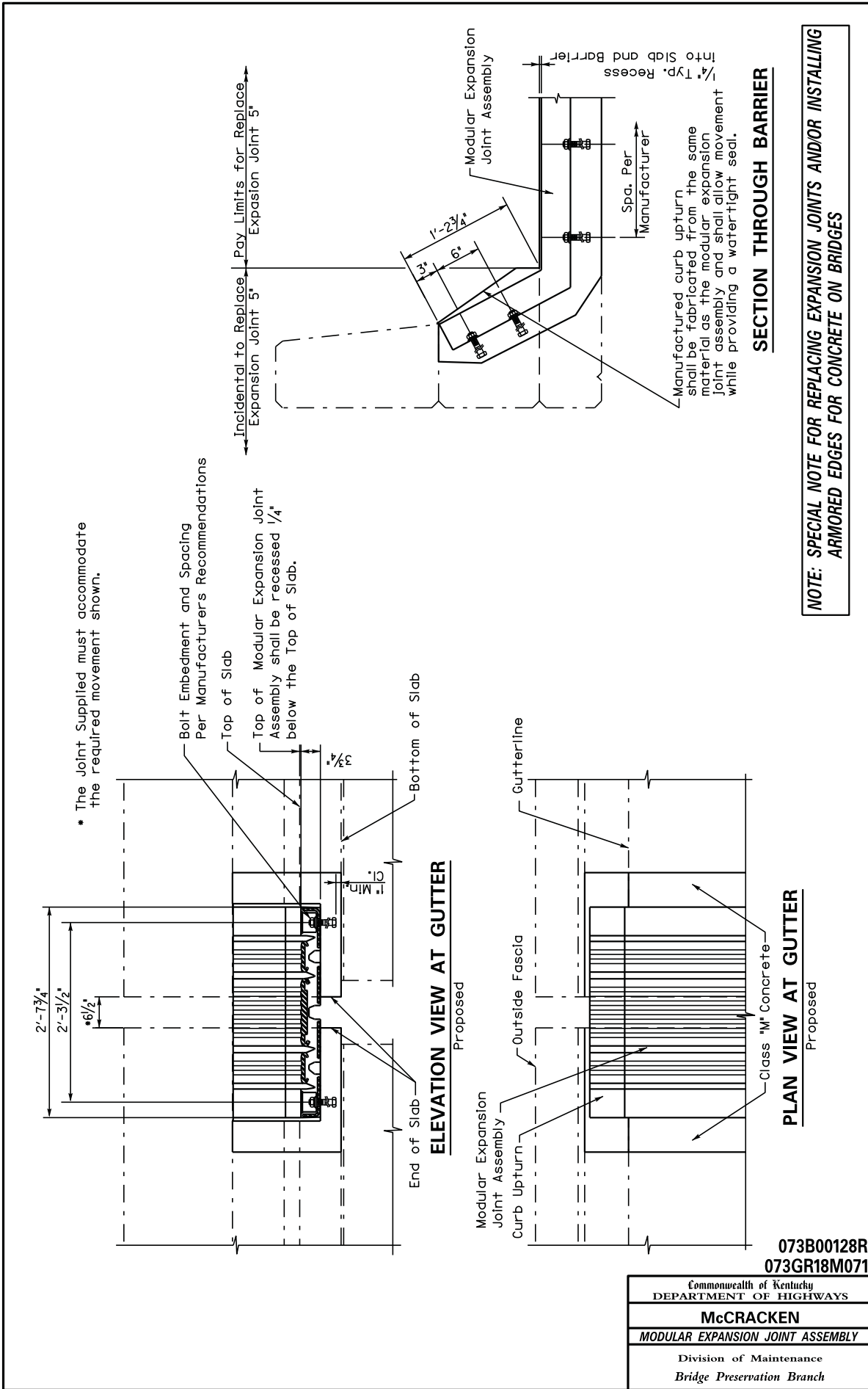


**PLAN VIEW AT GUTTER**  
Existing

**NOTE: SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**

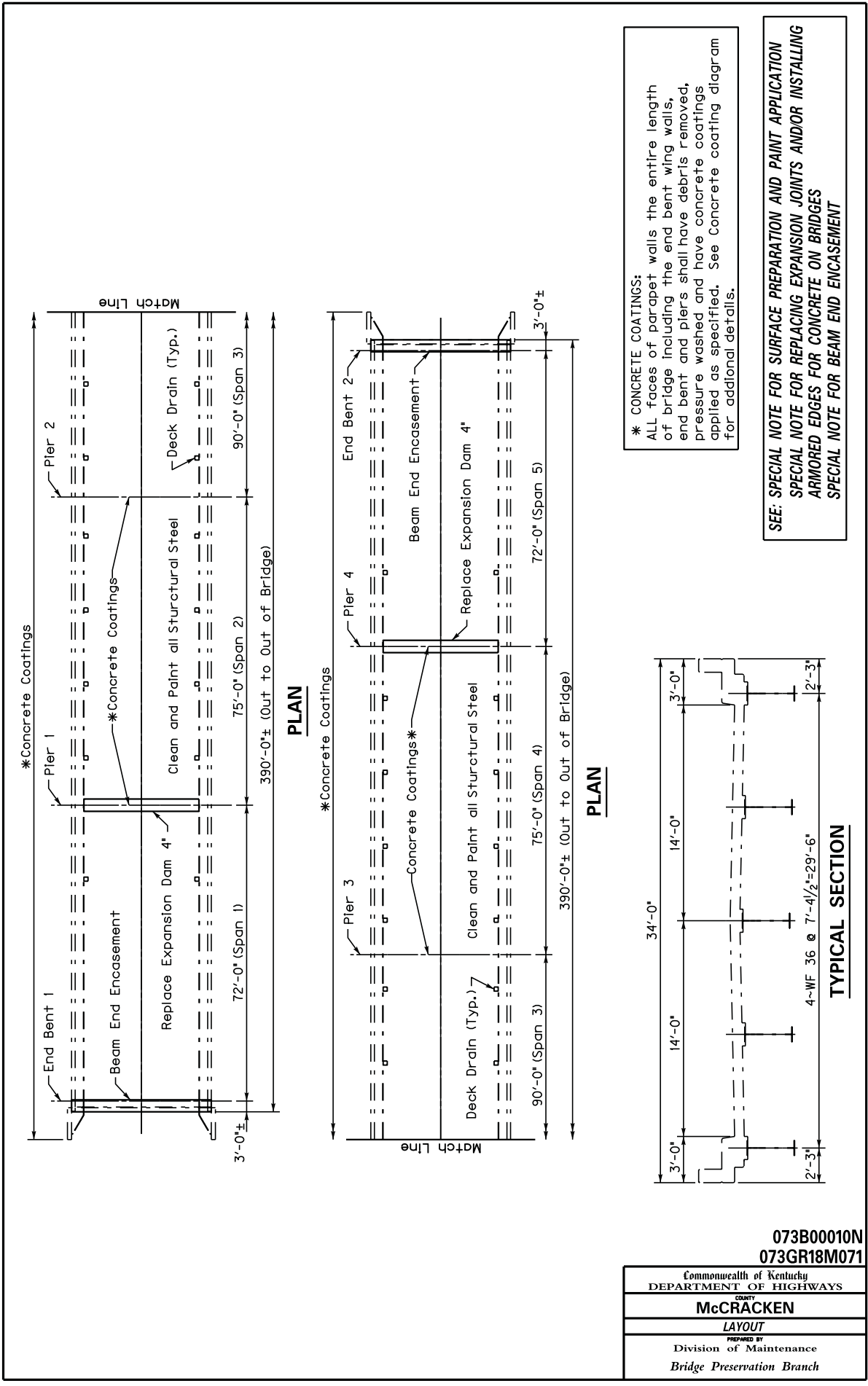
073B00128R  
073GR18M071

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
<b>McCRACKEN</b>
MODULAR EXPANSION JOINT ASSEMBLY
Division of Maintenance Bridge Preservation Branch



073B00128R  
073GR18M071

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
<b>McCRACKEN</b>
MODULAR EXPANSION JOINT ASSEMBLY
Division of Maintenance Bridge Preservation Branch

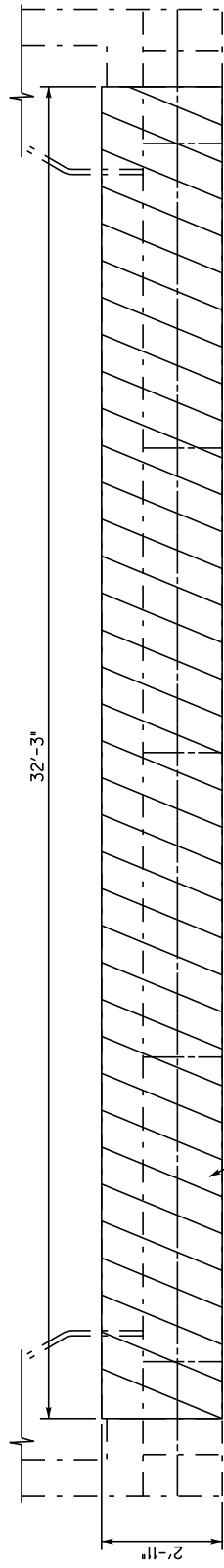


**\* CONCRETE COATINGS:**  
ALL faces of parapet walls the entire length of bridge including the end bent wing walls, end bent and piers shall have debris removed, pressure washed and have concrete coatings applied as specified. See concrete coating diagram for additional details.

**SEE: SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION**  
**SPECIAL NOTE FOR REPLACING EXPANSION JOINTS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**  
**SPECIAL NOTE FOR BEAM END ENCASMENT**

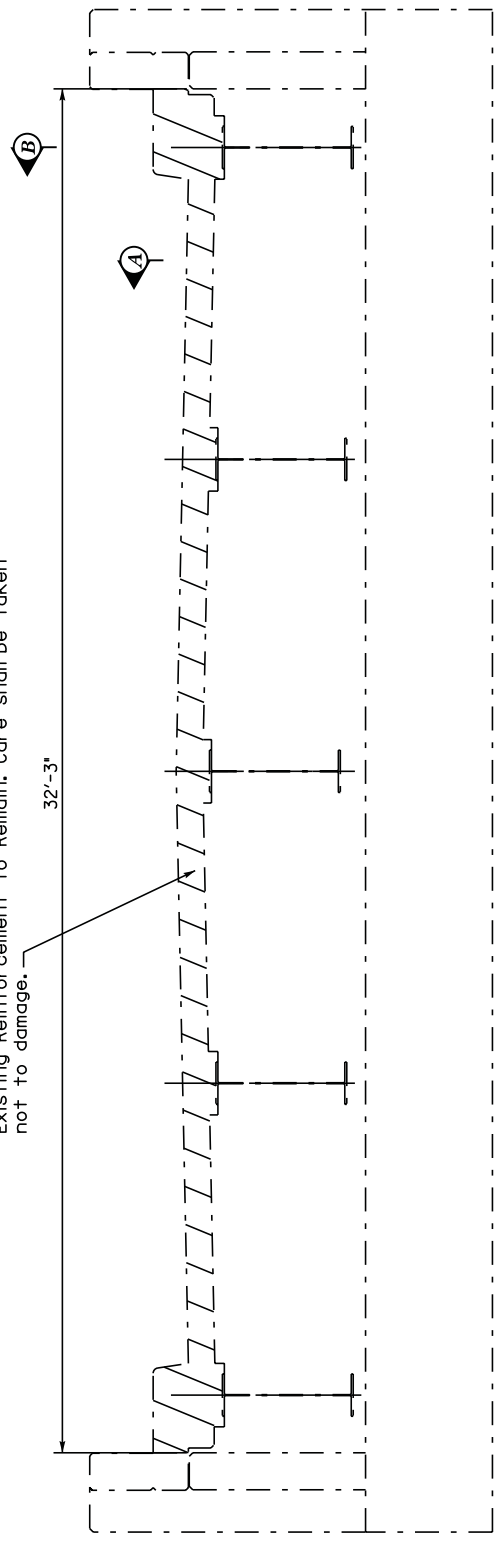
**073B00010N**  
**073GR18M071**

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY <b>MCCRACKEN</b>
LAYOUT PREPARED BY Division of Maintenance Bridge Preservation Branch



**PLAN**  
(Existing)

Remove Cross Hatch Portions of Existing Slab, Endwall and Plinth, this shall include all Expansion Joint Devices Existing Reinforcement to Remain. Care shall be taken not to damage.



**ELEVATION**  
(Existing)

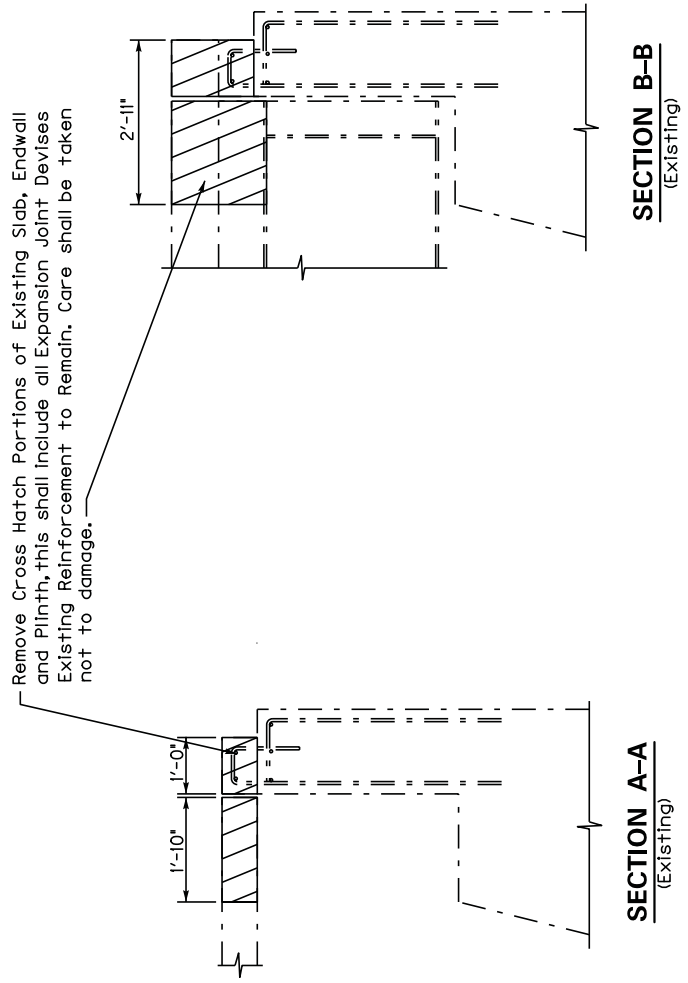
Note: See Special Note for End Bent Encasement

073B00010N  
073GR18M071

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY <b>McCRACKEN</b>
<b>END BENT ENCASEMENT</b>
PREPARED BY Division of Maintenance Bridge Preservation Branch

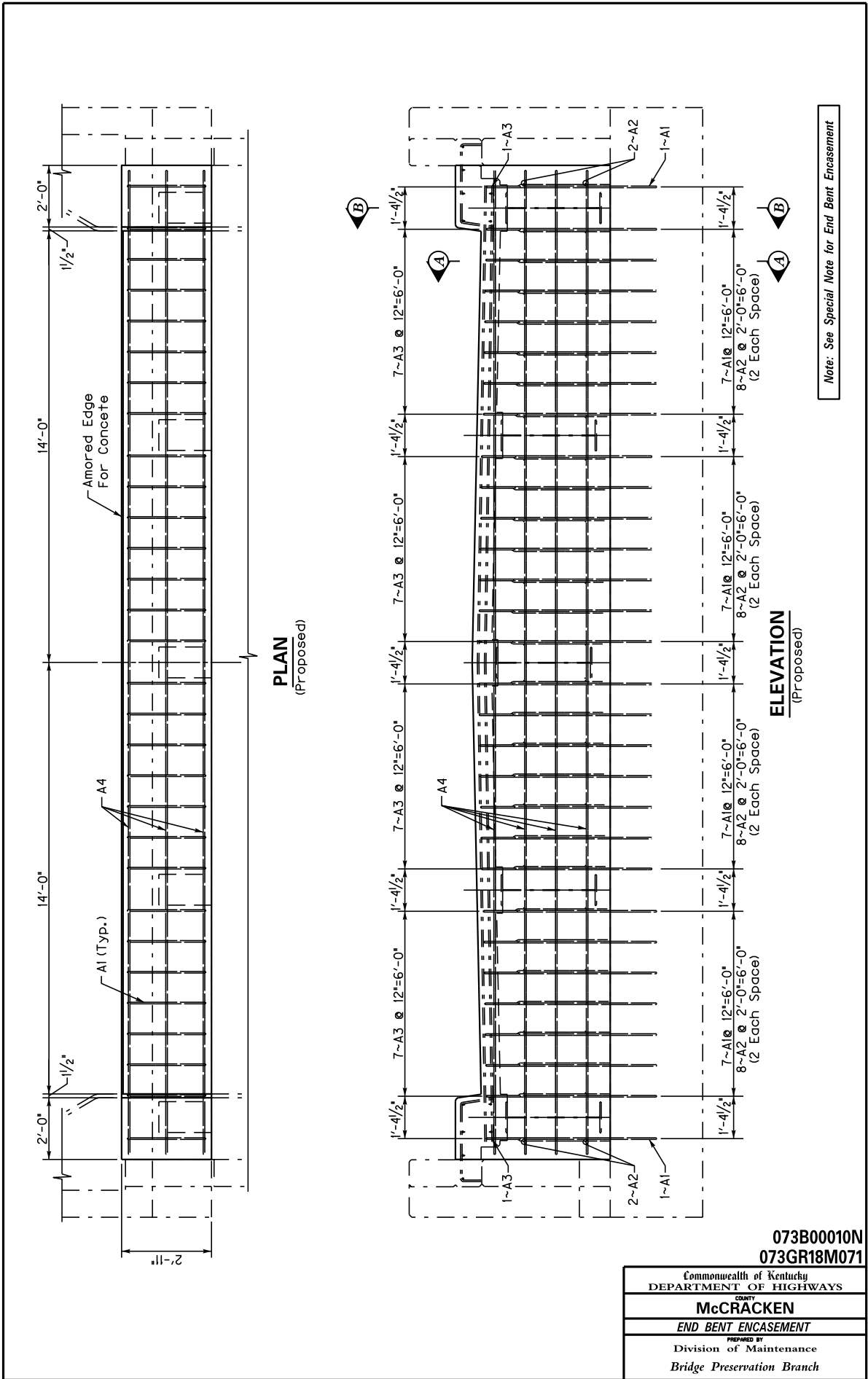


Note: See Special Note for End Bent Encasement



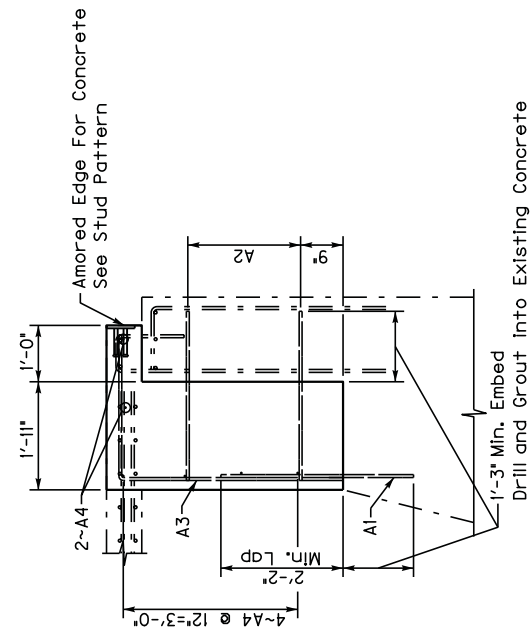
**073B00010N**  
**073GR18M071**

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY <b>McCRACKEN</b>
<b>END BENT ENCASEMENT</b>
PREPARED BY Division of Maintenance Bridge Preservation Branch

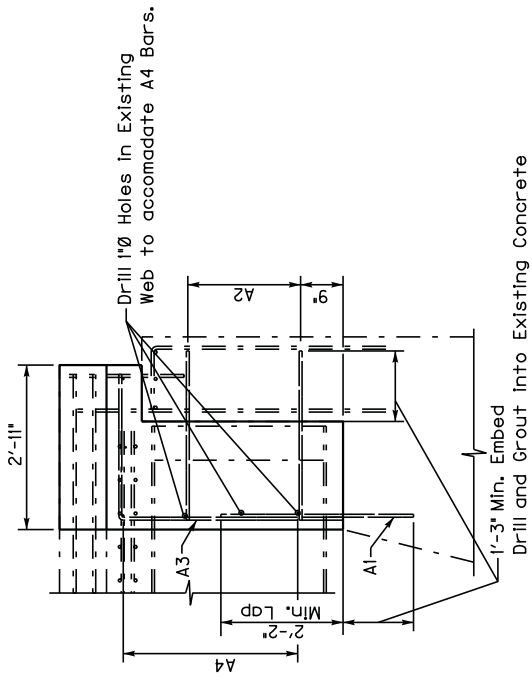


073B00010N  
073GR18M071

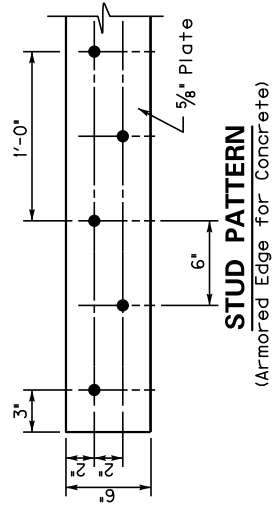
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
<b>McCRACKEN</b>
<b>END BENT ENCASUREMENT</b>
Division of Maintenance Bridge Preservation Branch



**SECTION A-A**  
(Proposed)



**SECTION B-B**  
(Proposed)

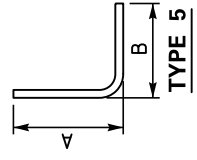


**STUD PATTERN**  
(Armored Edge for Concrete)

**BILL OF REINFORCEMENT**

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B
A1	Str.	30	5	3- 8	Encasement		
A2	Str.	36	5	3- 0	Encasement		
A3	5s	26	5	5- 5	Encasement	3- 11	2- 7
A4	Str.	12	5	*30- 2	Encasement		

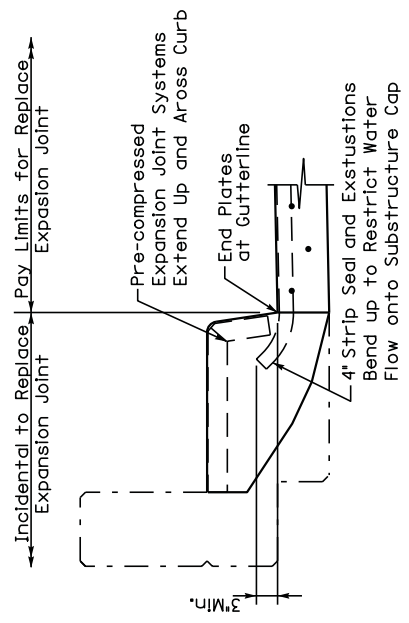
\* Length includes minimum lap splice 2'-2".  
See Special Note addressing staged construction.  
Note: Bill of Reinforcement is for One Encasement, 2 Required.



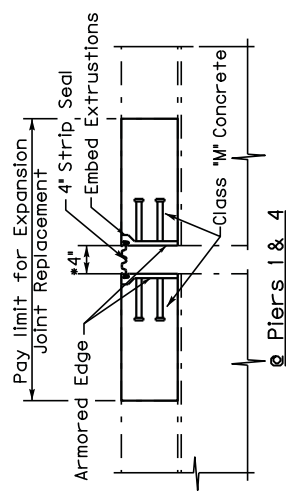
Note: See Special Note for End Bent Encasement

073B00010N  
073GR18M071

Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY  
**MCCRACKEN**  
**END BENT ENCASUREMENT**  
PREPARED BY  
Division of Maintenance  
Bridge Preservation Branch

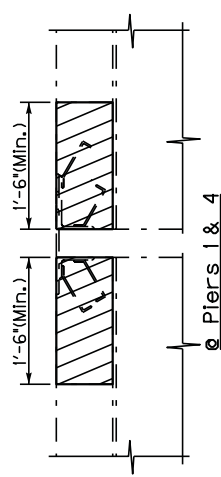


**SECTION THROUGH PAPAPET**



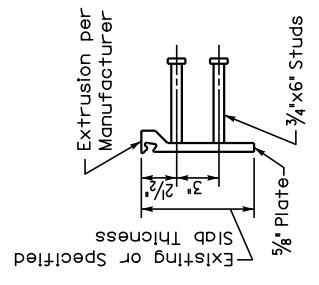
\* The Joint Supplied must accommodate the required movement shown.

**SECTION THROUGH JOINT**  
Proposed, Bridge Deck

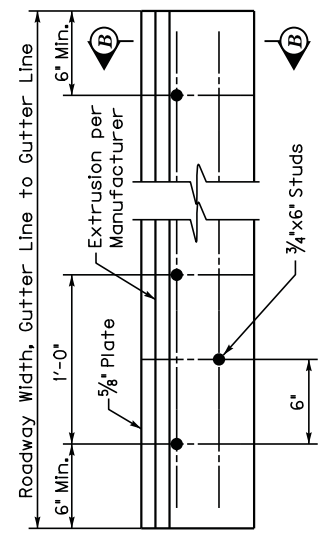


Note: Remove X-Hatched Areas of Concrete & Expansion Device.

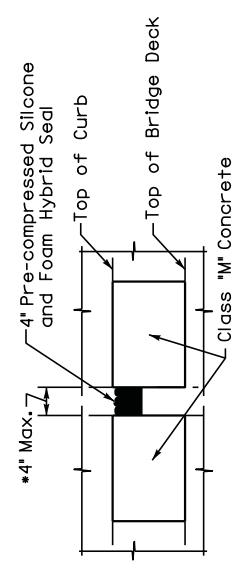
**SECTION THROUGH JOINT**  
Existing



**SECTION B-B**



**ARMORED EDGE**



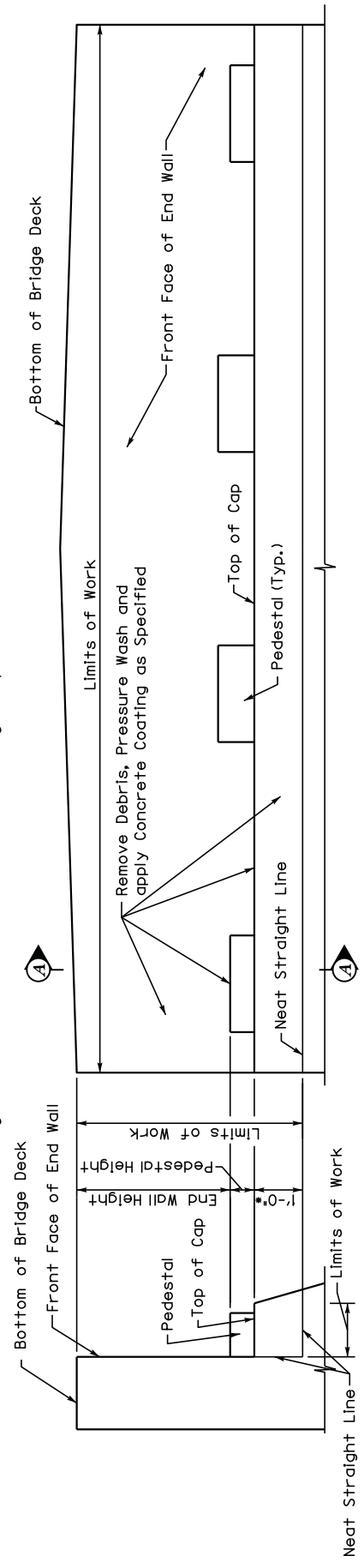
**SECTION THROUGH JOINT**  
Proposed, Parapet

**NOTE: SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**

073B00010N  
073GR18M071

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
<b>McCRACKEN</b>
REPLACE EXPANSION JOINT 4 IN.
Division of Maintenance Bridge Preservation Branch

**END BENTS/ABUTMENTS:**  
Surfaces of the end bents/abutments shall be have debris removed, pressure washed and have concrete coating applied as specified, this includes ALL horizontal surfaces of the cap and ALL vertical surfaces to 1 foot below the top of cap or to the ground line whichever is the least including ALL pedestals and the front face end wall.



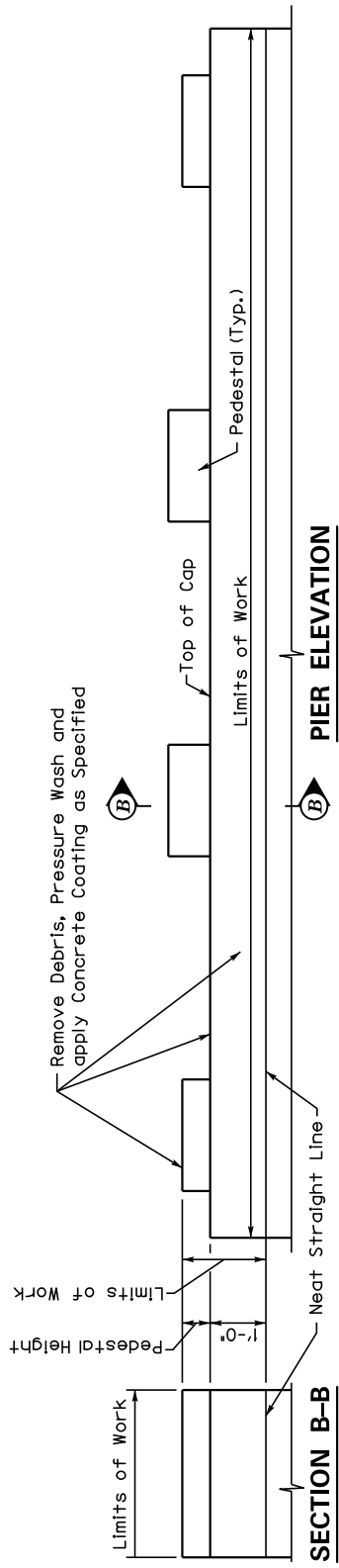
**SECTION A-A**

**END BENT/ABUTMENT ELEVATION**

\*1 foot below the top of cap or to the ground line whichever is the least.

**Note: See Special Note for Surface Preparation and Paint Application**

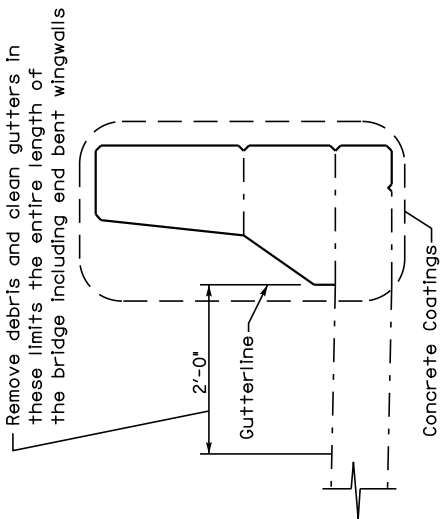
**PIERS:**  
Surfaces of the end bents/abutments shall have debris removed, pressure washed and have concrete coating applied as specified, this includes ALL horizontal surfaces of the cap and ALL vertical surfaces to 1 foot below the top of cap including ALL pedestals.



**SECTION B-B**

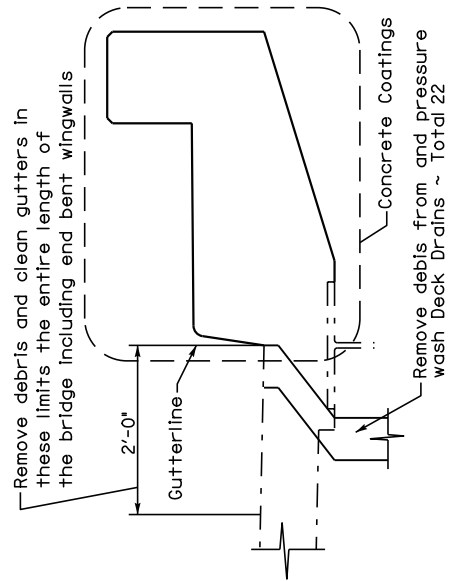
**PIER ELEVATION**

<b>073GR18M071</b>	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY <b>MCCRACKEN</b>	
<b>CONCRETE COATING DETAILS</b>	
PREPARED BY Division of Maintenance Bridge Preservation Branch	



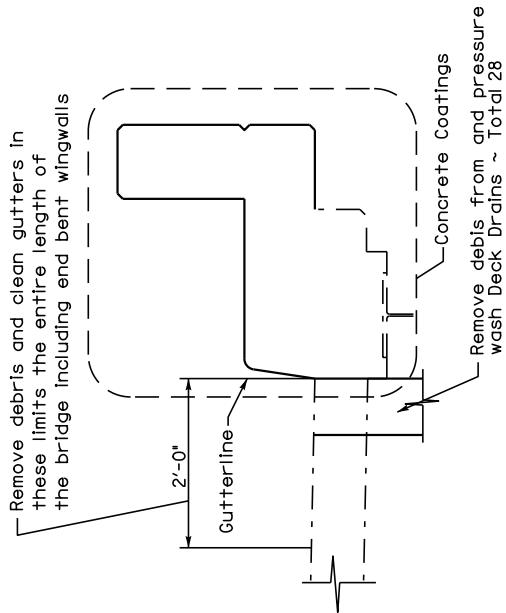
**SECTION THROUGH PAPAPET**

073B00128R



**SECTION THROUGH PAPAPET**

073B00005L



**SECTION THROUGH PAPAPET**

073B00010N

CONCRETE COATINGS for Parapet Walls  
ALL faces of parapet walls the entire length of bridge including the end bent wing walls shall have debris removed, cleaned and concrete coatings applied as specified.

**Note: See Special Note for Surface Preparation and Paint Application**

073GR18M071

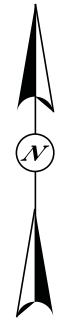
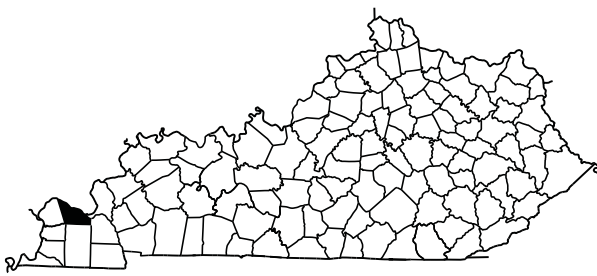
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
McCRACKEN
CONCRETE COATING DETAILS
Division of Maintenance Bridge Preservation Branch



FE02 073 0060 B00005L  
US 60 WB over Clarks River  
FE02 073 0060 B00128R  
US 60 EB over Clarks River

FE02 073 0131 B00010N  
KY 131 over East Fork of Clarks River

**LOCATION MAP**



**073GR18M071**  
Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
COUNTY  
**McCRACKEN**  
*LOCATION MAP*  
PREPARED BY  
Division of Maintenance  
Bridge Preservation Branch

# MATERIAL SUMMARY

**CONTRACT ID: 182950**

**073GR18M011 - FE02**

**MB07300601801**

MCCRACKEN COUNTY 073B00005L IRVIN COBB DRIVE MP 18.63  
US 60 WB OVER CLARKS RIVER BRIDGE PAINTING & CLEANING.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0060	02650	MAINTAIN & CONTROL TRAFFIC - - 073B00005L	1.00	LS
0065	02671	PORTABLE CHANGEABLE MESSAGE SIGN - - 073B00005L	2.00	EACH
0070	08434	CLEAN & PAINT STRUCTURAL STEEL - - 073B00005L	1.00	LS
0075	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE - - 073B00005L	1.00	LS
0080	02568	MOBILIZATION	1.00	LS
0085	02569	DEMOBILIZATION	1.00	LS
0090	23386EC	JOINT SEAL REPLACEMENT - - 073B00005L	60.00	LF

**CONTRACT ID: 182950**

**073GR18M011 - FE02**

**MB07300601802**

MCCRACKEN COUNTY 073B00128R IRVIN COBB DRIVE MP 18.62  
US 60 EB OVER CLARKS RIVER BRIDGE PAINTING & CLEANING.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0095	02650	MAINTAIN & CONTROL TRAFFIC - - 073B00128R	1.00	LS
0100	02671	PORTABLE CHANGEABLE MESSAGE SIGN - - 073B00128R	2.00	EACH
0105	08434	CLEAN & PAINT STRUCTURAL STEEL - - 073B00128R	1.00	LS
0110	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE - - 073B00128R	1.00	LS
0115	02568	MOBILIZATION	1.00	LS
0120	02569	DEMOBILIZATION	1.00	LS
0125	03295	EXPAN JOINT REPLACE 2 IN - - 073B00128R	80.00	LF
0130	23034EN	EXPANSION JOINT REPLACE-5 IN - - 073B00128R	40.00	LF
0135	03299	ARMORED EDGE FOR CONCRETE - - 073B00128R	80.00	LF
0140	08150	STEEL REINFORCEMENT - - 073B00128R	400.00	LB



# MATERIAL SUMMARY

**CONTRACT ID: 182950**

**073GR18M011 - FE02**

**MB07301311801**

MCCRACKEN COUNTY 073B00010N SAID ROAD MP 02.29  
KY 131 OVER EAST FORK CLARKS RIVER BRIDGE PAINTING & CLEANING.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02650	MAINTAIN & CONTROL TRAFFIC - - 073B00010N	1.00	LS
0010	02671	PORTABLE CHANGEABLE MESSAGE SIGN - - 073B00010N	2.00	EACH
0015	08434	CLEAN & PAINT STRUCTURAL STEEL - - 073B00010N	1.00	LS
0020	08104	CONCRETE-CLASS AA - - 073B00010N	24.00	CUYD
0025	02568	MOBILIZATION	1.00	LS
0030	02569	DEMOBILIZATION	1.00	LS
0035	08150	STEEL REINFORCEMENT - - 073B00010N	3,160.00	LB
0040	03299	ARMORED EDGE FOR CONCRETE - - 073B00010N	56.00	LF
0045	02403	REMOVE CONCRETE MASONRY - - 073B00010N	7.00	CUYD
0050	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE - - 073B00010N	1.00	LS
0055	03298	EXPAN JOINT REPLACE 4 IN - - 073B00010N	56.00	LF

**SPECIAL NOTE FOR PRE-BID CONFERENCE  
DISTRICT 1  
CID Number 182950**

The Department will conduct a Mandatory Pre-Bid Conference for the subject project on **Tuesday January 16, 2018 at 11:00 AM Central Time at;**

**Department of Highways, District 1 Office  
5501 Kentucky Dam Road  
Paducah, KY. 42003  
Phone: (270) 898-2431**

Any company that is interested in bidding on the subject project or being part of a joint venture shall be represented at the conference by at least **one person of sufficient authority to bind the company**. No individual can represent more than one company. At the conference a roster shall be taken of the representatives present. **Only companies represented at the conference will be eligible to have their bids opened at the date of letting.**

The purpose of the conference is to familiarize all prospective bidders with the contract requirements within the scope of the contract.

Department of Highways officials present at the conference will answer questions concerning the projects.

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

### **SPECIFICATIONS REFERENCE**

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 2012* and *Standard Drawings, Edition of 2016*.

## **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting.  
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

## **PART III**

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

**TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

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

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

**I. APPLICATION**

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

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

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

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

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

Revised: January 25, 2017

**II. NONDISCRIMINATION OF EMPLOYEES**

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

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

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

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

## EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017



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

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

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

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

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

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

# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

## FEDERAL MINIMUM WAGE

# \$7.25

 PER HOUR

BEGINNING JULY 24, 2009

### OVERTIME PAY

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

### CHILD LABOR

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

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

#### *No more than*

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

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

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### TIP CREDIT

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

### ENFORCEMENT

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

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

### ADDITIONAL INFORMATION

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

For additional information:



# 1-866-4-USWAGE

(1-866-487-9243)

TTY: 1-877-889-5627



# WWW.WAGEHOUR.DOL.GOV

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

**PART IV**  
**INSURANCE**

## INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) **KENTUCKY WORKMEN'S COMPENSATION INSURANCE.** The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

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

**PROPOSAL BID ITEMS**

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Report Date 1/3/18

**Section: 0001 - BRIDGES**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02650		MAINTAIN & CONTROL TRAFFIC - 073B00005L	1.00	LS		\$	
0020	02671		PORTABLE CHANGEABLE MESSAGE SIGN - 073B00005L	2.00	EACH		\$	
0030	08434		CLEAN & PAINT STRUCTURAL STEEL - 073B00005L	1.00	LS		\$	
0040	23386EC		JOINT SEAL REPLACEMENT - 073B00005L	60.00	LF		\$	
0050	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE - 073B00005L	1.00	LS		\$	

**Section: 0002 - BRIDGES**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0060	02650		MAINTAIN & CONTROL TRAFFIC - 073B00128R	1.00	LS		\$	
0070	02671		PORTABLE CHANGEABLE MESSAGE SIGN - 073B00128R	2.00	EACH		\$	
0080	03295		EXPAN JOINT REPLACE 2 IN - 073B00128R	80.00	LF		\$	
0090	03299		ARMORED EDGE FOR CONCRETE - 073B00128R	80.00	LF		\$	
0100	08150		STEEL REINFORCEMENT - 073B00128R	400.00	LB		\$	
0110	08434		CLEAN & PAINT STRUCTURAL STEEL - 073B00128R	1.00	LS		\$	
0120	23034EN		EXPANSION JOINT REPLACE-5 IN - 073B00128R	40.00	LF		\$	
0130	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE - 073B00128R	1.00	LS		\$	

**Section: 0003 - BRIDGES**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0140	02403		REMOVE CONCRETE MASONRY - 073B00010N	7.00	CUYD		\$	
0150	02650		MAINTAIN & CONTROL TRAFFIC - 073B00010N	1.00	LS		\$	
0160	02671		PORTABLE CHANGEABLE MESSAGE SIGN - 073B00010N	2.00	EACH		\$	
0170	03298		EXPAN JOINT REPLACE 4 IN - 073B00010N	56.00	LF		\$	
0180	03299		ARMORED EDGE FOR CONCRETE - 073B00010N	56.00	LF		\$	
0190	08104		CONCRETE-CLASS AA - 073B00010N	24.00	CUYD		\$	
0200	08150		STEEL REINFORCEMENT - 073B00010N	3,160.00	LB		\$	

### PROPOSAL BID ITEMS

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Report Date 1/3/18

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0210	08434		CLEAN & PAINT STRUCTURAL STEEL - 073B00010N	1.00	LS		\$	
0220	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE - 073B00010N	1.00	LS		\$	

#### Section: 0004 - DEMOB

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0230	02568		MOBILIZATION	1.00	LS		\$	
0240	02569		DEMOBILIZATION	1.00	LS		\$	