



**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET**

Frankfort, Kentucky 40622
www.transportation.ky.gov/

Matthew G. Bevin
Governor

Greg Thomas
Secretary

July 10, 2017

CALL NO. 202
CONTRACT ID NO. 172959
ADDENDUM # 1

Subject: Bath County, 006GR17M0052-NHPP IM 0646(065)
Letting July 28, 2017

- (1) Revised - Page 4 of 61
- (2) Added - Special Notes - Pages 1-43 of 43

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in black ink that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ks
Enclosures



An Equal Opportunity Employer M/F/D

ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 172959

006GR17M0052 - NHPP IM 0646 (065)

COUNTY - BATH

PCN - MB00600641701

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00053L LEXINGTON-ASHLAND ROAD
I-64 OVER SLATE CREEK-MP 118.39.BRIDGE PAINTING & CLEANING SYP NO. 09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:07:05.00 LONGITUDE 83:47:57.00

PCN - MB00600641702

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00053R LEXINGTON-ASHLAND ROAD
I-64 OVER SLATE CREEK-MP 118.39.BRIDGE PAINTING & CLEANING SYP NO. 09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:07:07.00 LONGITUDE 83:47:53.00

PCN - MB00600641703

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00048L LEXINGTON-ASHLAND ROAD
I-64 WB OVER KENDALL SPRINGS ROAD AND SLATE CREEK-MP 120.04.BRIDGE PAINTING & CLEANING SYP
NO. 09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:07:25.00 LONGITUDE 83:46:17.00

PCN - MB00600641704

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00048R LEXINGTON-ASHLAND ROAD
I-64 EB OVER KENDALL SPRINGS ROAD AND SLATE CREEK-MP 120.04.BRIDGE PAINTING & CLEANING SYP NO.
09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:07:24.00 LONGITUDE 83:46:17.00

PCN - MB00600641705

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00056L LEXINGTON-ASHLAND ROAD
I-64 EB OVER LICKING RIVER-MP 128.84.BRIDGE PAINTING & CLEANING SYP NO. 09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:09:21.00 LONGITUDE 83:37:07.00

PCN - MB00600641706

NHPP IM 0646 (065)

BATH COUNTY I-64 006B00056R LEXINGTON-ASHLAND ROAD
I-64 EB OVER LICKING RIVER-MP 128.84.BRIDGE PAINTING & CLEANING SYP NO. 09-01097.00.
GEOGRAPHIC COORDINATES LATITUDE 38:09:20.00 LONGITUDE 83:37:07.00

COMPLETION DATE(S):

COMPLETED BY 07/31/2018

APPLIES TO ENTIRE CONTRACT

**SPECIAL NOTES
DISTRICT NO. 9
BRIDGE CLEANING AND PAINTING
BATH COUNTY
CID 172959 NHPP IM 0646 (065)**

FD52 006 0064 B00053L 118.39

Bath County I-64 over Slate Creek

Geographic Coordinates

Latitude – 38° 07' 05.00''

Longitude – 083° 47' 57.00''

Description

100' ~ 140' ~100' Continuous Welded Steel Plate Girder Spans

FD52 006 0064 B00053R 118.39

Bath County I-64 over Slate Creek

Geographic Coordinates

Latitude – 38° 07' 07.00''

Longitude – 083° 47' 53.00''

Description

100' ~ 140' ~100' Continuous Welded Steel Plate Girder Spans

FD52 006 0064 B00048L 120.04

Bath County I-64 over Kendall Springs Road and Slate Creek

Geographic Coordinates

Latitude – 38° 07' 25.00''

Longitude – 083° 46' 17.00''

Description

50' RCDG Span ~ 100' ~ 140' ~100' Continuous Welded Steel Plate Girder Spans

FD52 006 0064 B00048R 120.04

Bath County I-64 over Kendall Springs Road and Slate Creek

Geographic Coordinates

Latitude – 38° 07' 24.00''

Longitude – 083° 46' 17.00''

Description

50' RCDG Span ~ 100' ~ 140' ~100' Continuous Welded Steel Plate Girder Spans

FD52 006 0064 B00056L 128.84

Bath County I-64 over Licking River

Geographic Coordinates

Latitude – 38° 09' 21.00''

Longitude – 083° 37' 07.00''

Description

90' ~ 120' ~ 90' Continuous Welded Steel Plate Girder Spans

FD52 006 0064 B00056R 128.84

Bath County I-64 over Licking River

Geographic Coordinates

Latitude – 38° 09' 20.00''

Longitude – 083° 37' 07.00''

Description

90' ~ 120' ~ 90' Continuous Welded Steel Plate Girder Spans

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 PRE-BID CONFERENCE

SPECIAL NOTE FOR PAYMENT

SPECIAL NOTE FOR STENCILING

SPECIAL NOTE FOR UTILITIES AND SIGNS

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

SPECIAL NOTE FOR BEARING REPLACEMENT

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

SPECIAL NOTE FOR RESEALING JOINTS

SPECIAL NOTE FOR WEIGHT LIMITS ON STRUCTURE

GENERAL 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 repair 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 will meet the following values.

	L*	a*	b*
Gray	48.17	- 3.54	0.87

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. 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.

F. 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° illumination and 0° viewing with a 2° 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.

G. BRIDGE CLEANING AND PREVENTIVE MAINTENANCE

Surface Preparation: Remove all debris and clean all end bent caps, pier caps, pedestals, end bent back walls, all faces of parapet walls including end bent wing walls, all deck drains and gutters 2'-0" each side of the bridge deck. Cleaning shall be done with pressure washing equipment. Equip the pressure washer(s) with calibrated gage(s) and pressure regulators to ascertain and regulate water pressure. All equipment for pressure washing shall be operated at a minimum pressure 4,000 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 disturb intact existing coatings. Pressure and flow rates shall be reduced or increased to a level satisfactory to the Engineer should any existing intact coating is disturbed 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: Apply concrete coatings to all end bent caps, pier caps, pedestals, end bent and back after all debris are removed and power washing is complete. Use compressed air to remove any loose debris from the concrete surfaces that are to be coated after power washing. See concrete coating diagram. All coatings shall be applied within manufacturers recommended dry film thickness range. Comply with KYTC "Standard Specifications for Road and Bridge Construction" Section 614.03.02 and coatings supplier recommended conditions for application. Allow the surfaces to be coated to dry before any coating is applied. The coating must be applied to a clean and dry surface. All coating application shall be executed using brushes, rollers, etc. 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 samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance testing.

<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 will meet the following values.

	L*	a*	b*
Gray	74.94	- 1.54	3.92

See attached detailed drawings for concrete coating diagram for additional details.

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. 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 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 MAINTENANCE

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 ft² per application method per coating plus 20 ft² 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 ft² of the prepared surface. The contractor will then apply coating to the remainder (at least 20-ft²) 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 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 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%

Bridge Cleaning and Preventive Maintenance payment will be based on acceptance of the work upon completion.

Bearing Replacement payment will be based on acceptance of the work upon completion.

Joint Seal Replacement payment will be based on acceptance of the work upon completion.

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 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

006B00053L is rated at **57** tons.

006B00053R is rated at **57** tons.

006B00048L is rated at **51** tons.

006B00048R is rated at **60** tons.

006B00056L is rated at **70** tons.

006B00056R is rated at **70** 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 BEARING REPLACEMENT
(006B00053R)**

- 1. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings (current editions), this note, and the attached detailed drawings for Bearing Replacement. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment. (2) Bearing Replacement. (3) Maintain and control traffic. (4) Any other work specified as part of this contract.

- 2. MATERIALS.**
 - A. Structural Steel**

ASTM Material, A709 Grade 50 Structural Steel Plates and Shapes. Minimum structural steel strength ~ 50,000 psi.
 - B. Elastomeric Bearings Pads**

Type 2E Elastomeric Bearing Pad see Standard Drawing BBP-001 C.E. and attached detailed drawings.
 - C. Expansion Anchors**

Expansion anchors shall be 3/4" diameter HILTI KWIK Bolt 3 SS or equal with a working shear capacity of 5.5 K minimum.
 - D. Cleaning and Painting**

See Special Note for Paint Application and Surface Preparation.

- 3. CONSTRUCTION.**
 - A. Bearing Replacement.**

Complete bearing replacement as specified in this special note and shown in the attached detailed drawings. Each bearing shall be replaced one at a time with the no traffic on the lane above.
 - B. Removal.**

Remove existing bearings as shown on the attached detailed drawings. Dispose of all removed material entirely away from the job site. This work shall be incidental to the unit price bid "Each" for "Bearing Replacement".
 - C. Anchor Bolts.**

See attached detailed drawings.
 - D. Bearing Pads.**

Set bearing pads in accordance with Section 607.03.17 of the Standard Specification.
 - E. Jack and Support.**

Jack and Support the beams under full dead and live loads while replacing the bearings. Reaction Loads = 25 Tons Dead Load and 35 tons Live Load per beam line. A Jack capacity of 100 Tons or greater per beam line shall be required. The Contractor shall submit his jack and support plan to the Engineer for approval. This plan must be prepared, signed and stamped by a by a licensed Kentucky professional engineer.

F. Cleaning and Painting.

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

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

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

G. Verifying Field Conditions.

The Contractor shall field verify all plate and shape dimensions, bolt patterns and locations before ordering any material. New material that is unsuitable due to variation in existing structure shall be replaced at the Contractors expense.

H. Damage to the structure.

The Contractor shall bear all responsibility and expense for any and all damage to the structure during the repair work, even to the removal and replacement of a fallen span, should the fallen span result from the Contractors actions.

I. Field Welding.

Section 106.10 applies to all field welding.

4. MEASUREMENT.

A. Bearing Replacement. The Department will measure the quantity as "Each" for Bearing Replacement"

B. Jack and Support Bridge Span. The Department will measure the quantity as "Lump Sum" for Jack and Support Bridge Span

5. PAYMENT.

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

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

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

**SPECIAL NOTE FOR CONCRETE PATCHING REPAIR
(006B00048L&R)**

1. DESCRIPTION.

Perform all work in accordance with the Department's Standard Specifications Current Edition, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications. This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing spalled/delaminated concrete; (3) Prepare the existing surface for concrete patching; (4) Apply concrete patching as specified by this note and as shown on the attached detail drawings; (6) Finish and cure the new Concrete Patches; (7) Maintain & control traffic; and, (8) Any other work specified as part of this contract. See attachment detailed drawing "Layout Sheet" for locations.

2. MATERIALS.

- A. Concrete. "M" Concrete.** Use either "M1" or "M2". See Section 601.
- B. Steel Reinforcement.** Use Grade 60. See Section 602.
- C. Epoxy Bond Coat.** See Section 511.
- D. Welded Steel Wire Fabric (WWF).** Conform to Section 811.
- E. Hook Fasteners.** Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.

3. CONSTRUCTION.

- A. Concrete Removal and Preparation.** The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 4 inches. Concrete removal shall be in accordance with a sequence approved by the Engineer. Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 35 lbs.). If sound concrete is encountered before existing reinforcing steel is exposed, the surface shall be prepared and repaired without further removal of the concrete. When corroded reinforcing steel is exposed, concrete removal shall continue until there is a minimum 3/4 inch clearance around the exposed, corroded reinforcing bar. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by blast cleaning. Blast cleaning shall remove all fractured surface concrete and all traces of any unsound material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete. The Contractor shall dispose all removed material off State Right Of Way in an approved site.

- B. Steel Reinforcement.** All corroded reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive blasting or wire brush whichever is more appropriate. If required, furnish for replacement, as directed by the Engineer, adequate quantity of steel reinforcing bars ½” diameter. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted.
- C. Concrete Patching.** Place and finish the new concrete for the patching area in accordance with the manufacturer’s recommendations, as shown on the attached detail drawings, or as directed by the Engineer. The Engineer shall approve the Contractor’s method of placing and consolidating the concrete prior to the beginning of this operation.
- D. Curing.** On completion of finishing operation, patching concrete shall immediately be prevented from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. Curing shall continue for duration recommended by the product manufacturer.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department. Quantities given are approximate. The quantity for “Concrete Repair” shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for “Pier Repair”.

4. MEASUREMENT

- A. Concrete Patching Repair.** The Department will measure the quantity per square feet of each area restored.
- B. Steel Reinforcement, Welded Wire Fabric & Hook Fasteners.** Steel Reinforcement, Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to “Concrete Patching Repair”.

5. PAYMENT

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

SPECIAL NOTE FOR JOINT SEAL REPLACEMENT

- 1. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications (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. EMSEAL BEJS BEJS-ON-A-Reel, SSI SILSPEC SES-100 or Watson Bowman Acme 25EH.**
- 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 MAINTAIN AND CONTROL TRAFFIC

All lane closures on this project shall be in accordance with Kentucky Department of Highways Standard Drawings No. **TTC-115, TTC-135 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.

The Contractor shall stage equipment in the median on either end of the bridges. The Contractor shall be responsible for any base material to park equipment on. This material must be removed and site restored to original condition as directed by the Engineer upon completion of the project. Temporary Concrete Barriers 9t (**NO ALTERNATIVES ALLOWED**) shall be used to protect work area in the median clear zones. Temporary Concrete Barriers shall remain the Contractor's property and shall be removed from the construction site upon completion of construction. Cost of temporary concrete barrier 9t shall be considered incidental to the "Lump Sum Bid for Maintain and Control Traffic. Temporary single lane closures maintaining a 12' driving lane in each direction will be permitted for joint seal replacement, bearing replacement, preventive maintenance operations, rigging and containment installation and equipment staging in the median. All lane closures must be removed when not working.

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 for all items necessary to maintain and control traffic as specified for this project. 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 message signs as specified.

**INTERSTATE 64 BRIDGES PAINTING – BATH COUNTY
HIGHWAY DISTRICT 9
ITEM # 9-1097 (I-64 Bath County) CID 172959
PUBLIC INFORMATION PLAN**

The primary goal of the Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) plans as well as road, lane or ramp closures. The KYTC District 9 Public Information Officer (PIO) will assist Project Development, Delivery and Construction staff disseminate this information and other materials to stakeholders and the media.

LOCAL STAKEHOLDERS

- Local Elected Officials
 - Bath County Judge-Executive Bobby Rogers – (606) 675-6346
 - Owingsville Mayor Gary Hunt – (606) 674-6361, owingsville@windstream.net
 - State Rep. Sannie Overly, sannie.overly@lrc.ky.gov, (502) 564-8100 Ext. 661
 - State Sen. Albert Robinson, (502) 564-8100 Ext. 604

- Local Agencies
 - Bath County EMS: 606-674-8158; http://bathems.com/contact_us
 - Owingsville Police Chief Todd Tout, (606) 674-6361
 - KSP Morehead Post PAO Joe Veeneman – (606) 784-4127
 - Bath County Schools: (606) 674-6314; Transportation Director Tony Roth, Tony.Roth@bath.kyschools.us
 - Transit Services: Federated Transportation Service of the Bluegrass, Inc., (888) 848-0989
 - Morehead State University (606) 783-2022; Jason Blanton, communications, jblanton@moreheadstate.edu
 - St. Claire Regional Medical Center, Morehead – (606) 783-6500, publicrelations@st-claire.org
 - Other agencies/resources available via the Bath County chamber at <http://www.bathchamber.com/resources.html>

- Utility Companies
 - Local utility companies – other than city utilities, which may be contacted via government information above – are kept apprised by project engineers and at any project meetings. Utility companies serving Bath County are available via the Chamber listing at <http://www.bathchamber.com/resources.html>

- Industry/Other
 - Daniel Boone National Forest, Cumberland Ranger District, Morehead Ky., (606) 784-6428

- Grayson Lake State Park: (606) 474-9727
- Carter Caves State Resort Park: (606) 286-4411
- US Army Corps of Engineers Cave Run Lake, (606) 784-9709
- Owingsville-Bath County Chamber of Commerce: (606) 674-8830

TRUCKING FIRMS AND OUT-OF-STATE STAKEHOLDERS

Information on traffic restrictions will be distributed electronically to trucking firms via the Department of Vehicle Regulation (502-564-4540) and KYTC's overweight-overdimensional office. Information will also be posted on the Transportation Cabinet's public <http://GoKY.ky.gov> traffic info web site and other electronic traffic alert systems in the district, as well as appropriate web-based social media resources. If necessary, the PIO will assist Transportation Operations Center in sending text alerts through various commercial trucking agency systems.

PRESENTATIONS

A project description including anticipated schedule will be provided to the media, stakeholders, emergency service agencies and tourist destinations (state parks in Carter County, as well as the nearby national forest and Cave Run lake) prior to and during construction. Information will be provided to these groups via traffic advisories, press releases, and District 9/KYTC web sites and social media. Direct information to local trip generators and/or road users – such as flyers, maps and other materials – will be provided if necessary. Variable message boards may be placed at key locations prior to project site to warn incoming motorists. Signed detours may also be provided, if warranted.

MEDIA RELATIONS

The District PIO will initiate a media campaign involving local newspapers, radio, television, and local travel/recreation agencies if applicable. The PIO will prepare an initial news release regarding the contract award for the project, and a subsequent release at start of construction. The PIO will conduct media interviews as requested throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. To provide adequate communication to travel reporters in the Ashland-Huntington and Lexington radio and TV market, and local Bath County/Morehead media, the contractor should provide to the PIO via project engineers notification of any change in the MOT at least seven (7) days prior to the change.

- PIO Contact Information
 - Allen Blair – (606) 845-2551, (606) 748-3716 (cell); email allen.blair@ky.gov

PIP INFORMATION

The following information has been gathered for use in the Public Involvement Plan and/or for use in traffic management planning regarding this project:

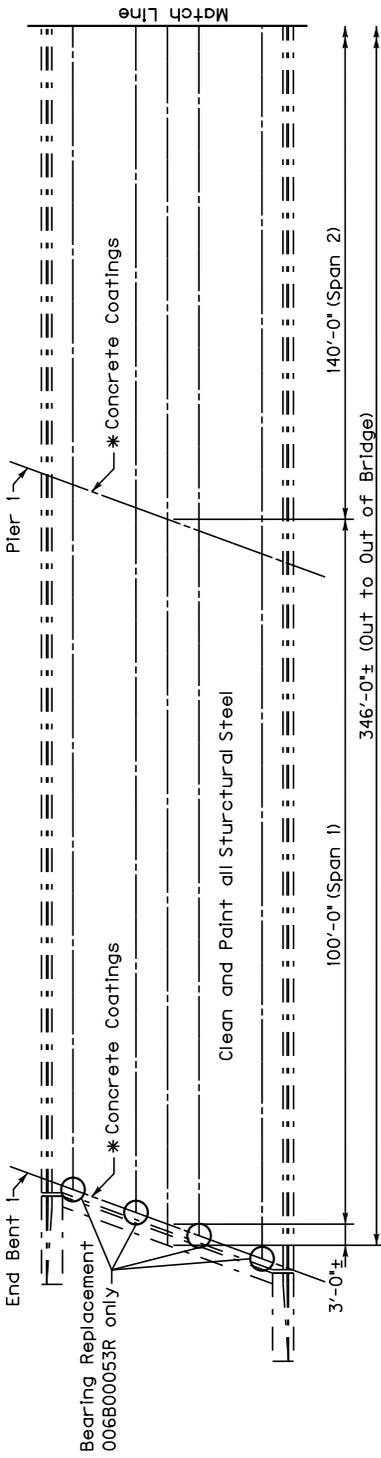
A: Trip Generators – Destinations relying on the project corridor include the nearby cities of Owingsville, Mt. Sterling and Morehead; as well as Grayson Lake and Carter Caves state parks, the nearby Daniel Boone National Forest and Cave Run Lake, Morehead State University, medical centers in Lexington and Morehead, and Bath County Schools (bus route), and major connecting highways such as US 60, KY 36, etc.

B: Road Users – Traffic utilizing the project corridor include residents, health care providers/recipients, university students, work and recreation commuters, long-haul truckers, local and regional commercial companies. In addition, this section of I-64 serves many campers, boaters and recreational site users traveling to the Daniel Boone National Forest and Cave Run Lake as well as Carter Caves state park.

C: Media market – This area is in the East Kentucky and central Kentucky media markets, which has an offering of daily and weekly newspaper, radio and television, including but not limited to:

- The Bath County News Outlook
- Mt. Sterling Advocate
- Carlisle Mercury
- WSAZ-TV/WOWK-TV/WCHS-TV Huntington
- WLEX/WKYT/WTVQ TV Lexington
- WGOH Go Radio Grayson
- WMKY Morehead Public Radio
- The Morehead News
- Gateway Radio News (WMST)

D: Public information message – Project is an important bridge painting project to improve and sustain existing interstate corridor that serves regional travelers, local commuters, tourists, university, school and hospital visitors. Rehabilitation will provide improved travel conditions and increased highway safety to promote longevity for state transportation network. To accomplish the work with least amount of disruption and most cost efficiency, lane closures and other minimal traffic disruptions are necessary. Primary communications will involve three basic traffic messages – effects on local and regional travel, delays, and possible alternate routes – for the duration of the project.

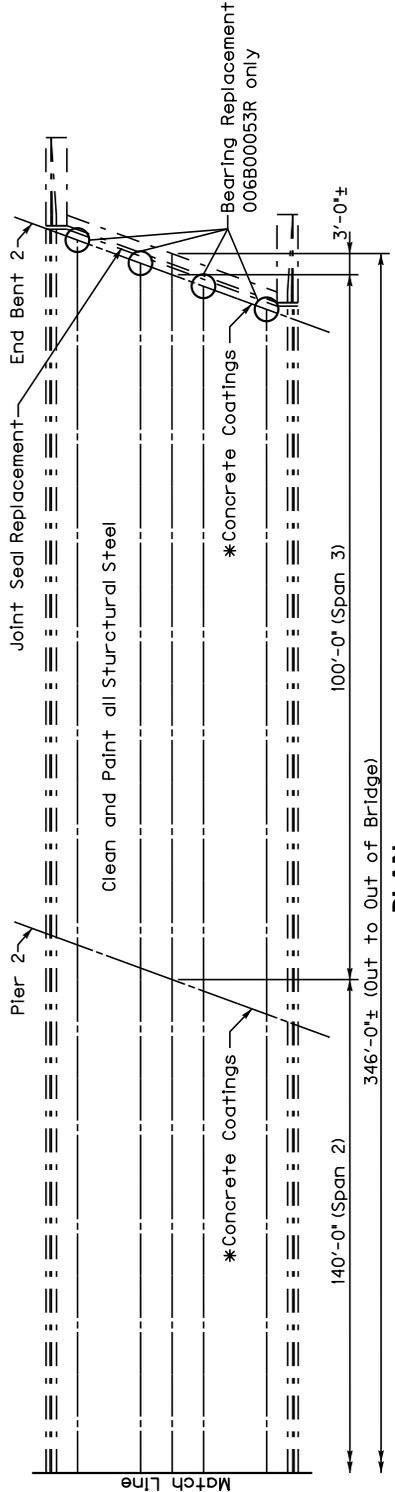


PLAN
(Typical Each Bridge)

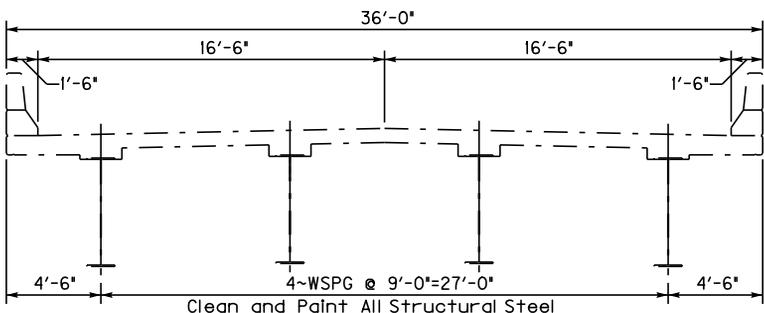
◀ *Mt Sterling*

Owingsville ▶

* See Concrete Coating Diagram



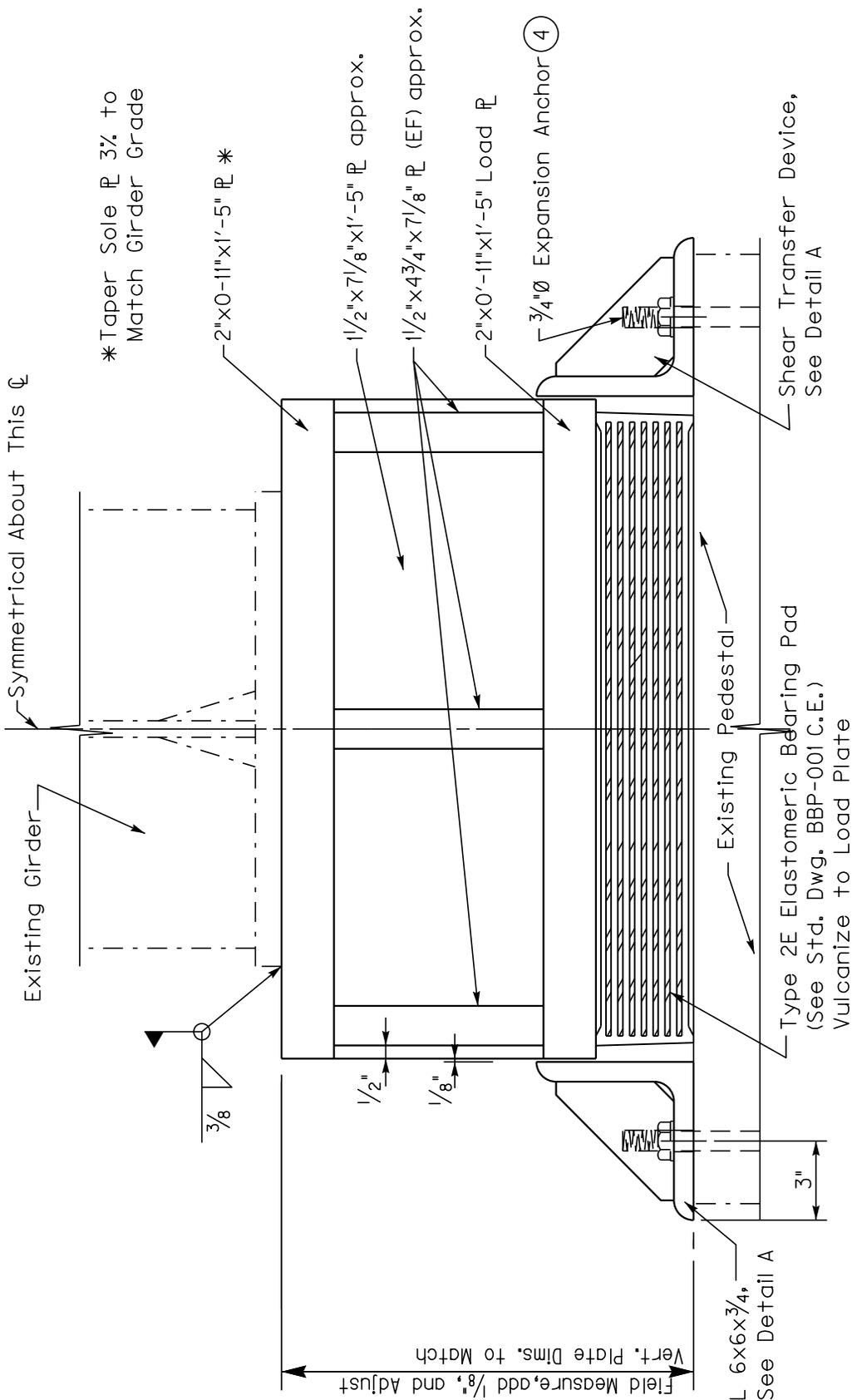
PLAN
(Typical Each Bridge)



TYPICAL SECTION

006B00053L&R

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY BATH
PREPARED BY Division of Maintenance Bridge Preservation Branch

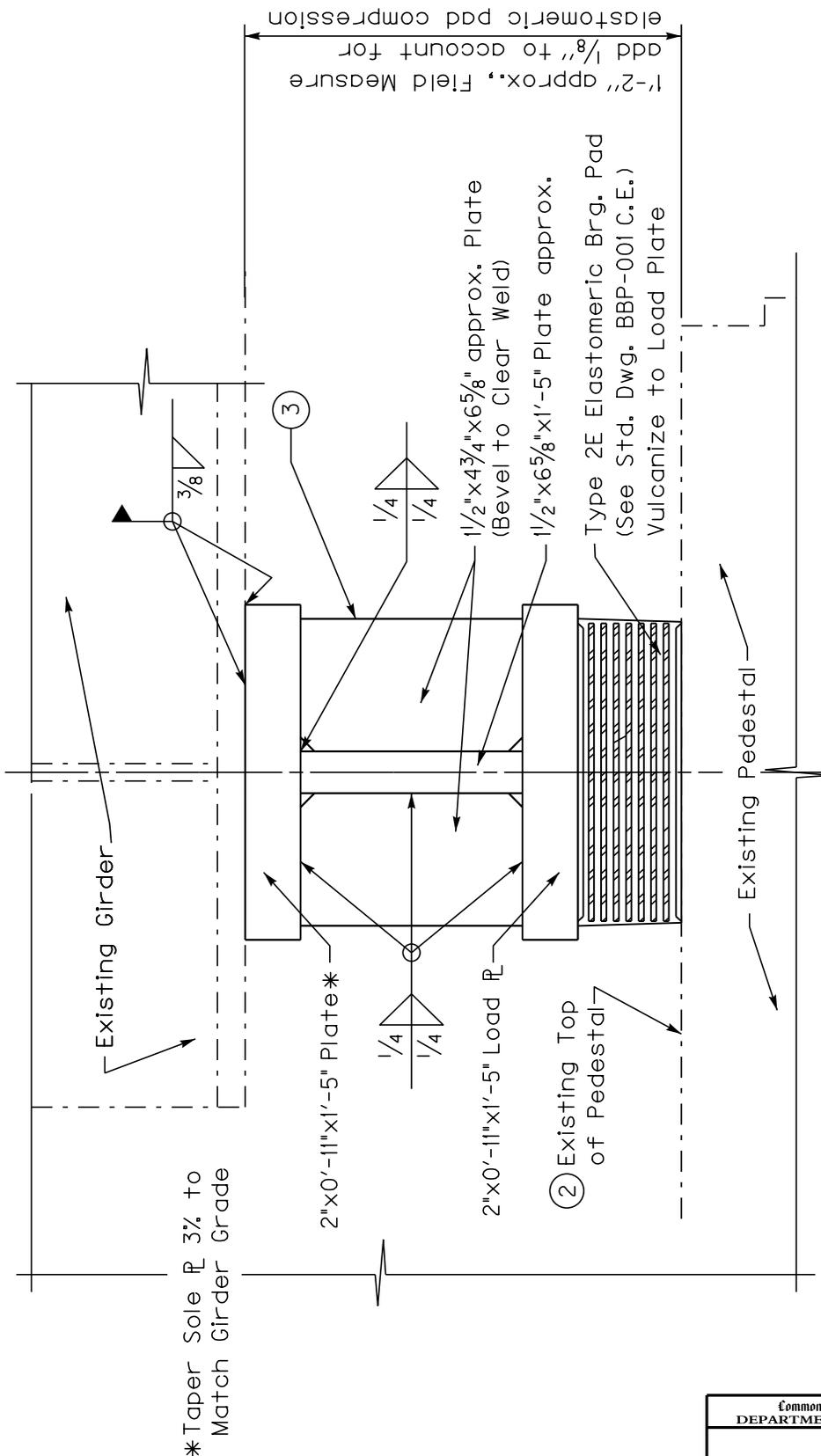


FRONT ELEVATION
BEARING REPLACEMENT

For Notes see Detail "A"

006B00053R

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Division of Maintenance Bridge Preservation Branch



For Notes see Detail "A"

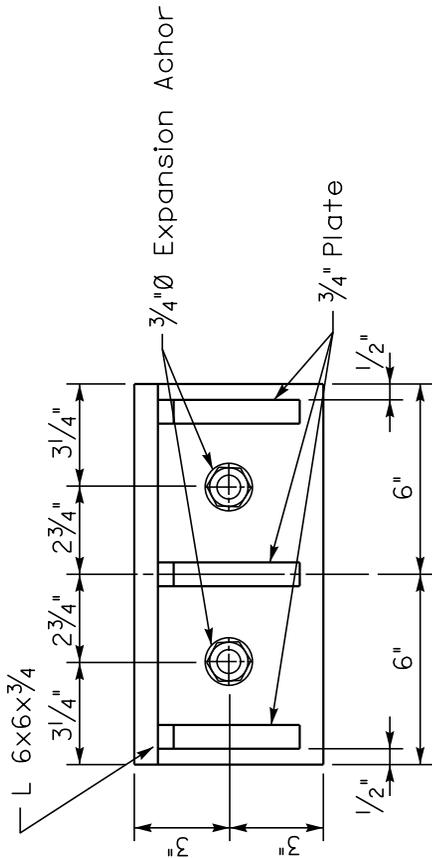
END ELEVATION

(Shear Transfer Device Not Shown)

BEARING REPLACEMENT

006B00053R

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DETAIL A

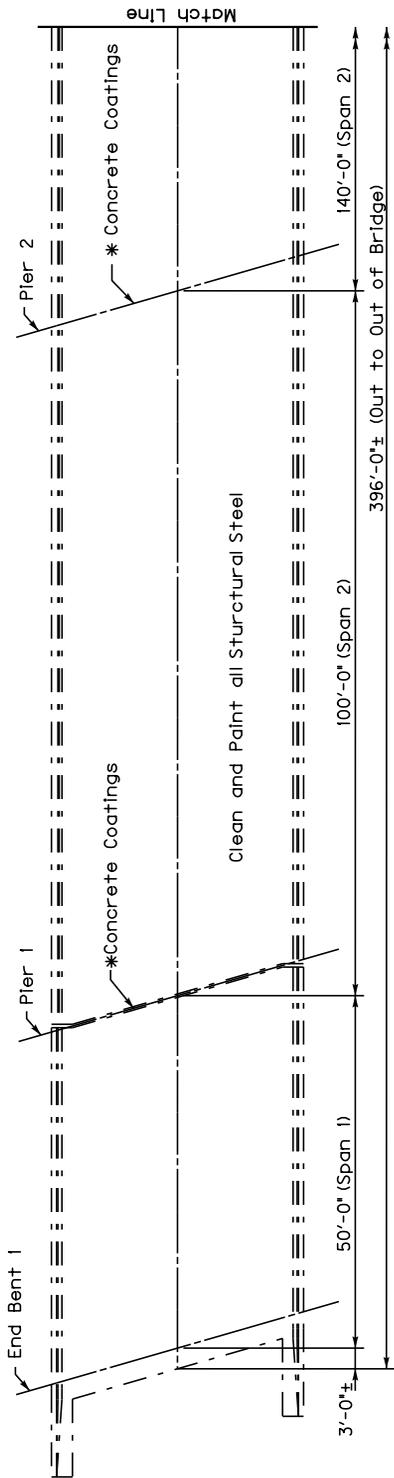
(Plan ~ Shear Transfer Device)

BEARING REPLACEMENT GENERAL NOTES

- 1.) Jack and support all beams while replacing bearings. Submit jacking plan for prior approval.
- 2.) Remove existing bearing and cut existing anchor bolts flush and clean bridge seat.
- 3.) 3/4" Expansion anchor shall be HILTI KWIK Bolt 3 SS or equal with working shear capacity of 5.5 K min., 6" min. embed. into concrete or as recommended by manufacturer. Holes in assembly shall be 3/16" Ø.
- 4.) See Drawing 16038 for Existing Bridge Details.

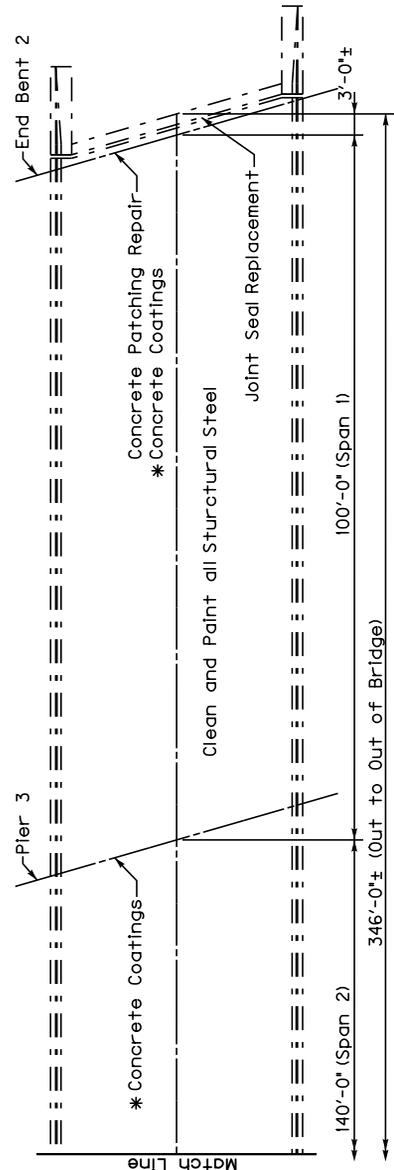
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Division of Maintenance Bridge Preservation Branch

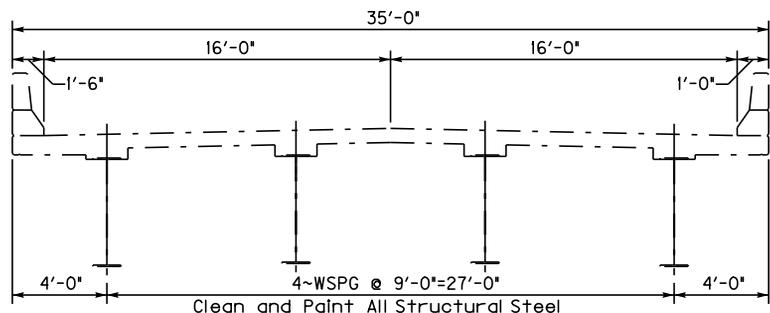


PLAN
(Typical Each Bridge)

* See Concrete Coating Diagram



PLAN
(Typical Each Bridge)



TYPICAL SECTION

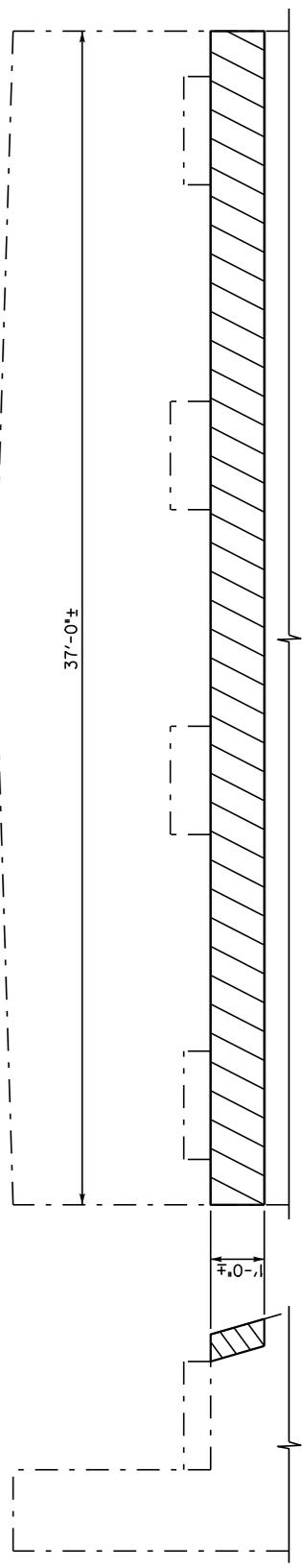
006B00048L&R

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COUNTY
BATH

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Bridge Preservation Branch

Remove all loose, spalled, deteriorated and delaminated concrete, place and finish new concrete as shown in cross hatched areas. Dimensions are approximate.

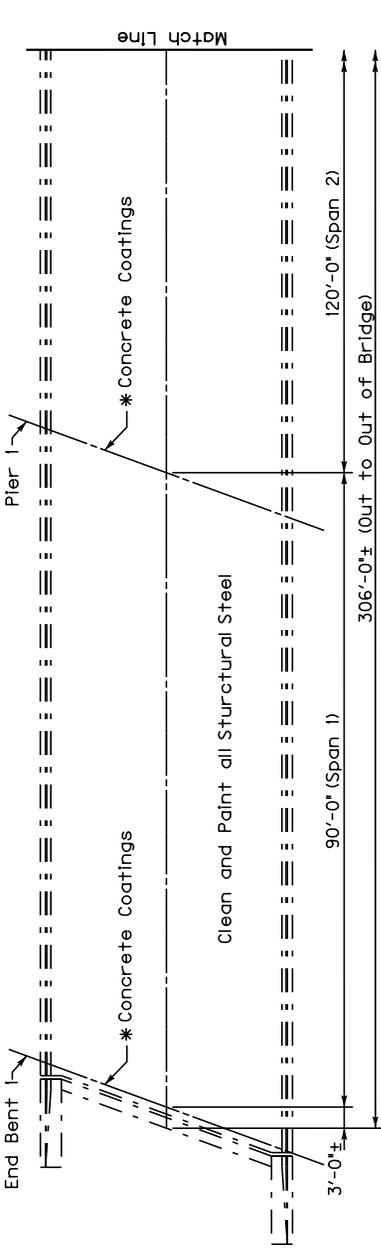


CONCRETE PATCHING REPAIR @ END BENT 2

(Typ. Each Bridge)

006B00048L&R

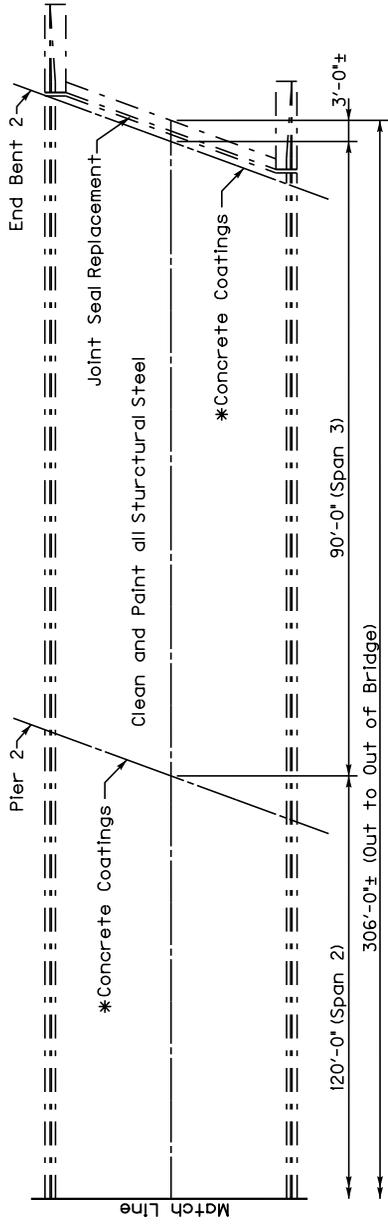
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY BATH
LAYOUT
PREPARED BY Division of Maintenance Bridge Preservation Branch



PLAN
(Typical Each Bridge)

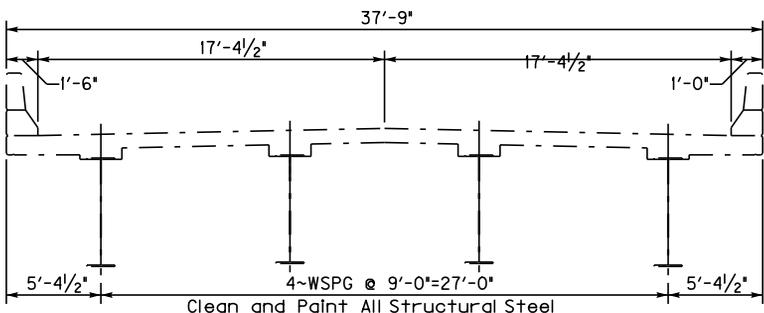
◀ Mt Sterling

* See Concrete Coating Diagram



PLAN
(Typical Each Bridge)

Owingsville ▶



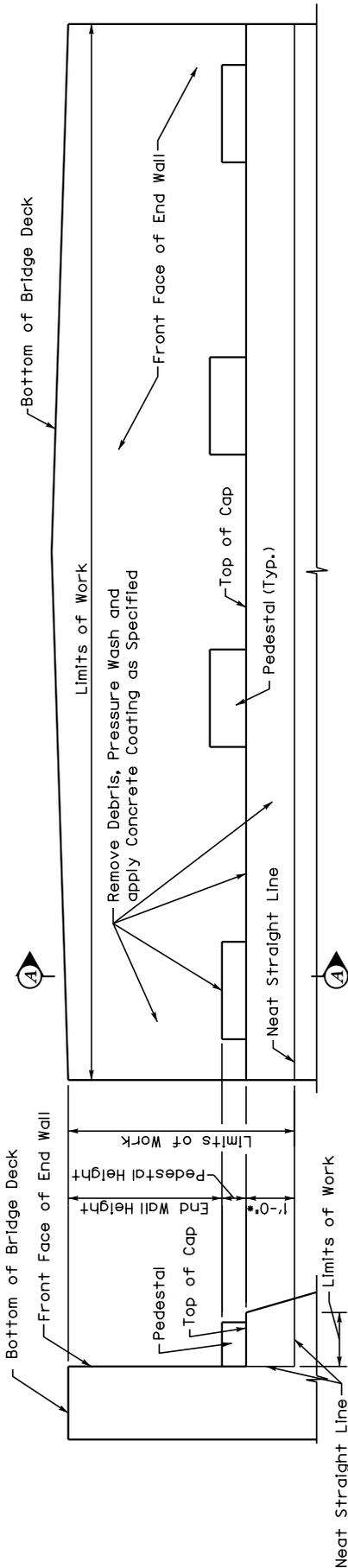
TYPICAL SECTION

006B00056L&R

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COUNTY BATH
PREPARED BY LAYOUT
DIVISION OF MAINTENANCE Bridge Preservation Branch

END BENTS/ABUTMENTS:

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 or to the ground line whichever is the least including ALL pedestals and the front face end wall.



SECTION A-A

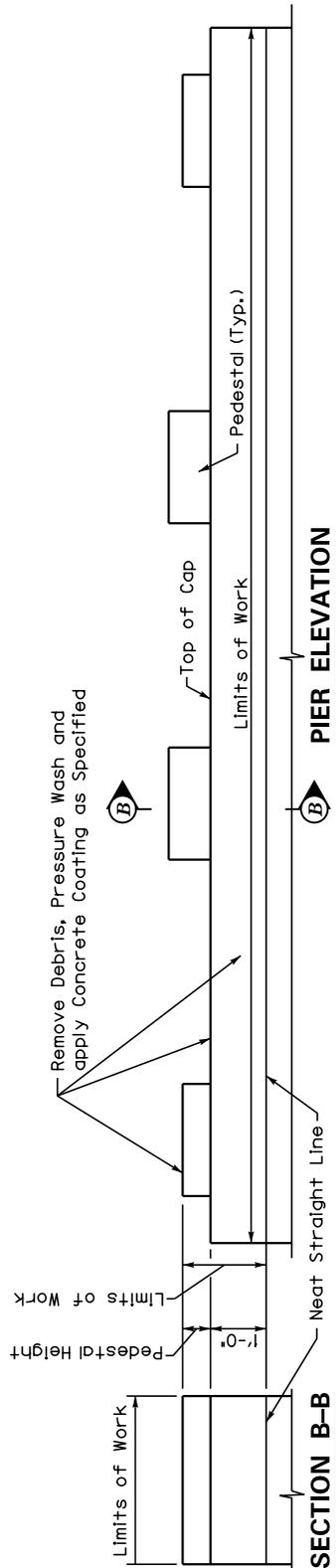
END BENT/ABUTMENT ELEVATION

*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.

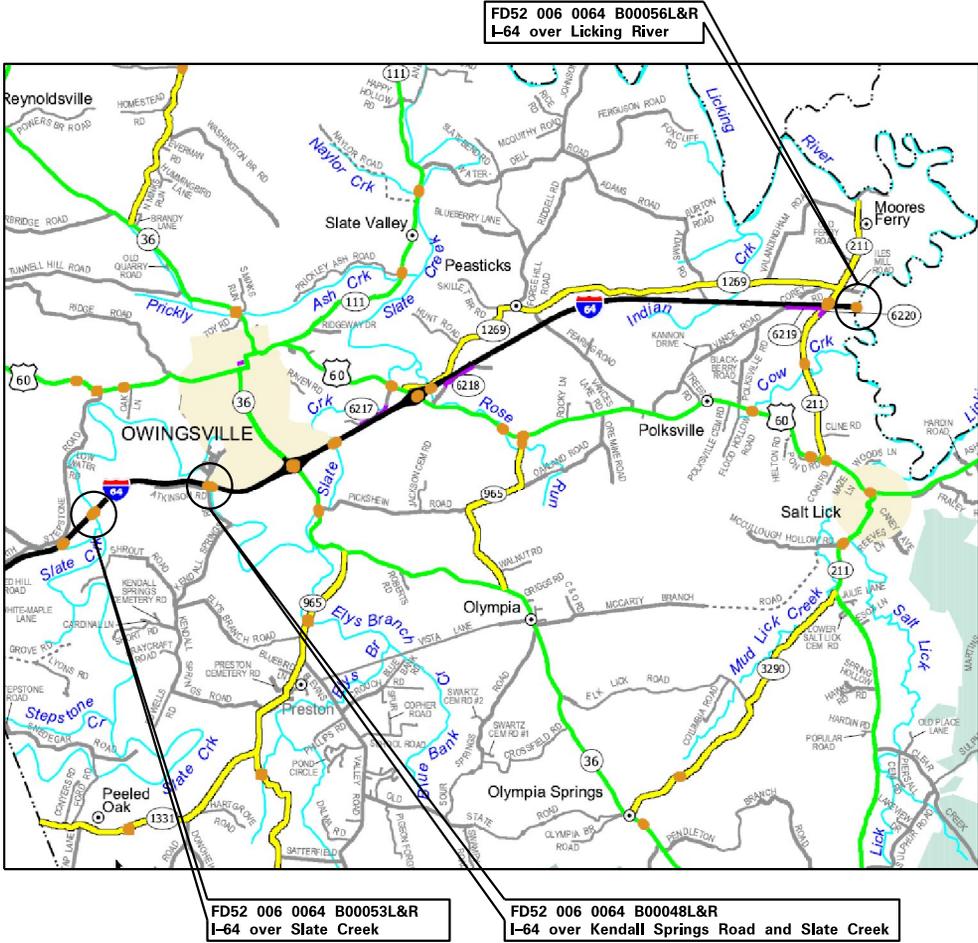


SECTION B-B

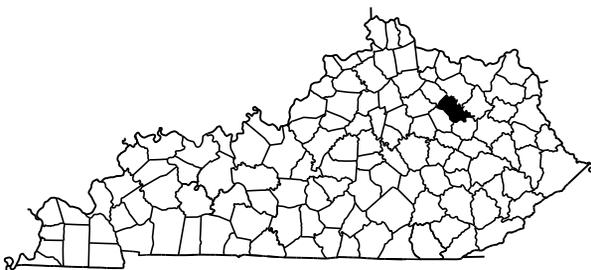
PIER ELEVATION

006B00053L&R
 006B00048L&R
 006B00056L&R

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY BATH
CONCRETE COATINGS DIAGRAM
PREPARED BY Division of Maintenance Bridge Preservation Branch



LOCATION MAP



006B00053L&R
006B00048L&R
006B00056L&R

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY BATH
LOCATION MAP
PREPARED BY Division of Maintenance Bridge Preservation Branch