



CALL NO. 312

CONTRACT ID. 192961

MCCRACKEN COUNTY

FED/STATE PROJECT NUMBER FD04 SPP 073 0045 013-014

DESCRIPTION McCRACKEN COUNTY BRIDGE 073B00001N

WORK TYPE BRIDGE REPAIR MISCELLANEOUS WORK

PRIMARY COMPLETION DATE 7/31/2019

LETTING DATE: February 22,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME February 22,2019. 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 - 192961

FD04 SPP 073 0045 013-014

COUNTY - MCCRACKEN

PCN - MB07300451901

FD04 SPP 073 0045 013-014

McCRACKEN COUNTY BRIDGE 073B00001N PADUCAH - BROOKPORT ROAD MP 13.43
US 45 OVER OHIO RIVER BRIDGE REPAIR MISCELLANEOUS WORK SYP NO. 1--10013.00.
GEOGRAPHIC COORDINATES LATITUDE 37:06:54.00 LONGITUDE 88:37:45.00

COMPLETION DATE(S):

COMPLETED BY 07/31/2019

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [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. 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). 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.

April 30, 2018

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

April 30, 2018

**SPECIAL NOTES
DISTRICT NO. 1
BRIDGE REPAIR MISCELLANEOUS WORK
Mc CRACKEN COUNTY
CID 192961 ~ FD04 SSP 073 0045 013-014**

FD04 SSP 073 0045 B00001N 13.43

US 45 over Ohio River

Latitude 37° 06' 54.00''

Longitude -88° 37' 45.00''

Description

5340' 10 Steel Truss Spans, Existing Drawing Nos. 17683, 18768, 22686

SPECIAL NOTES FOR CLEANING AND PREVENTATIVE MAINTENANCE

SPECIAL NOTE BRIDGE CLEANIN AND PREVENTIVE MAINTENANCE

SPECIAL NOTE STEEL RETROFITS

SPECIAL NOTE FOR HEAT STRAIGHTENING

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

SPECIAL NOTE FOR MAINTAINING AND CONTROLLING TRAFFIC

SPECIAL NOTE FOR BRIDGE CLEANING AND PREVENTIVE MAINTENACE

1. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specification for Road and Bridge Construction applicable Supplemental Specifications, Standard Drawings, 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) Debris removal; (3) Stratified and pack rust removal; (4) Pressure washing; (5) Apply concrete coating; (6) Lubricate bearing devices. (7) Maintain and control traffic; (8) All other work required for this contract.

2. MATERIALS.

A. Wash Water

Use clean potable water for all pressure washing.

B. Concrete Coatings

Use one of the coatings from the following manufactures:

Manufacture	Prime Coat	Finish Coat
Sherwin Williams	Macropoxy 646	Acrolon 218 HS
PPG	Amberlock 2	Devoe Devflex
Carboline	Carboguard 890	Carbothane 133 HB
Tnemec	Elastogrip 151	EnviroCrete 15

C. Bearing Lubricant

Use one of the lubricants from the following manufactures:

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

3. CONSTRUCTION.

A. Debris Removal.

All debris shall be removed from the bridge components. See attached detailed drawings for each bridge addressing components having debris removal. Equipment for removing debris from the bridge components shall be determined by the Contractor, subject to the approval of the Engineer. The Contractor shall prevent any debris from entering any body of water, bridge drainage system, or traffic lanes. All debris removed shall be disposed of in a suitable off-site disposal facility. All vegetation present at areas of the bridge that are to be addressed in this proposal shall be removed as determined by the Engineer. **All cost to complete Debris Removal, Clean Deck Drains and Remove Vegetation shall be included in the Lump Sum price for "Bridge Cleaning"**

B. Stratified and Pack Rust Removal

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

C. Pressure Washing.

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

D. Concrete Coatings Application.

All abutment, end bent and pier caps, pedestals, end bent back walls and parapet walls including the abutment and end bent wing walls shall have concrete coating applied to as specified after debris removal and power washing. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. See concrete coating diagram. All coatings shall be applied within manufacturers recommended dry film thickness range. 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. No spray application will be permitted. The Department requires acceptance testing of samples obtained on a per-lot basis per-shipment. The Division of Materials shall perform acceptance 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. 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. Perform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

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

	L*	a*	b*
Grey	74.94	- 1.54	3.92

All cost to complete Concrete Coating Application as specified shall be included in the Lump Sum price for “Concrete Coatings”.

Approximate square footage of concrete to have concrete coatings applied is 5000 Square Feet. This figure is for informational purposes only.

D. Bearing Lubrication.

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

E. Sequence of Work.

Complete work in the sequence listed below:

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

F. Access.

The Contractor shall provide OSHA compliant safe access for all bridge cleaning and preventive maintenance operations and inspection. Cost to furnish all items for access shall be considered incidental to the contract.

G. Inspection.

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

- 1. Debris Removal:** Visual Inspection
- 2. Stratified Rust or Pack Rust Removal:** Visual Inspection and Scraper
Test any surface cleaned to SSPC SP2 will be inspected by a dull scraper test to ascertain adherence of existing coating and a hammer test for tightness of pack rust.
- 3. Power Washing:** Visual Inspection.

4. Concrete Coating:

Prime Coat Application Check for dry film thickness*, and defects in paint
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.

5. Bearing Lubrication: Visual Inspection.

H. Verifying Field Conditions.

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

I. Residual Lead.

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

J. Damage to the structure.

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

4. MEASUREMENT.

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

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

Bearing Lubrication: The Cabinet will measure this item by each, completed and accepted.

5. PAYMENT.

Bridge Cleaning (24981EC): Payment at the contract unit price for “Lump Sum” is full compensation for Debris Removal, Deck Drain Cleaning, Pressure Washing and all incidental items required to complete this with as specified in this note and attached detailed drawings.

Concrete Coating (24982EC): Payment at the contract unit price for “Lump Sum” is full compensation for applying the concrete coatings and all incidental items required to complete this work as specified in this note and attached detailed drawings.

Bearing Lubrication (24983EC): Payment at the contract unit price “Each” is full compensation for applying bearing lubrication and all incidental items required to complete this work as specified in this note and attached detailed drawings.

SPECIAL NOTE FOR STEEL RETROFITS

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 Beam Repair. Section references are to the Standard Specifications. This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Maintain and control traffic; and (3) Steel Retrofits; (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. Welds

See Section 607.03.07

3. CONSTRUCTION.

A. Stringer End Retrofit and Steel Grid Deck Retrofit. Complete each retrofit as specified in this special note and as shown in the attached detailed drawings.

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

C. 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.

D. Shop Drawings. Shop drawings will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

4. MEASUREMENT.

A. Stinger End Retrofit. The Department will measure the quantity for "Each".

B. Steel Grid Deck Retrofit. The Department will measure the quantity in Linear Feet. The measurement will be based on 3/16"x5"x1'-0" of steel plate including all cutting and welding.

5. PAYMENT.

A. Stinger End Retrofit (23236EC). Payment at the contract unit price for "Each" is full compensation for furnishing and installing all new specified materials and all incidental items as specified in this note and the attached detail drawings.

B. Steel Grid Deck Retrofit. Payment at the contract unit price in Linear Feet is full compensation for furnishing and installing all new specified materials and all incidental items as specified in this note and the attached detail drawings.

SPECIAL NOTE FOR HEAT STRAIGHTENING

These Notes or designated portions thereof, apply where so indicated on the plans, proposals or bidding instruction.

1. DESCRIPTION

Perform all work in accordance with the Department's current Standard Specifications, except as hereafter specified. Section references are to the Standard Specifications. This work consists of: (1) Furnishing all labor, materials, tools, and equipment; (2) Heat straighten damaged steel member(s) as specified herein; (3) Remove & re-install/replace damaged structural steel as outlined in the plans; (4) Maintain & control traffic; and, (5) Any other work specified as part of this contract. Heat straightening of the damaged steel bridge member(s) shall be performed by the carefully planned and supervised application of a limited amount of localized heat to the damaged member(s). Mechanical means may be used to supplement the straightening of the material in conjunction with the application of the heat.

2. CONSTRUCTION METHODS

A. Field Inspection: Prior to beginning any work, the damaged member(s) shall be carefully inspected by the Engineer and Contractor for gouges, sharp dents, cracks, or other defects. The steel shall be checked for fine cracks using magnetic particle testing (ASTM E-709). Defects found shall be repaired to the satisfaction of the Engineer. Cost of inspections and repairs is to be considered incidental to the lump sum bid for 'Heat Straightening'. All web defects and minor flange defects shall be remediated by grinding smooth or other means prior to heat straightening to eliminate stress concentrations. The Contractor shall grind out remaining isolated cracks in a dish like shape whose sides shall taper approximately 3h:1v. If the crack is not removed after grinding, a 1½ " dia. crack arrest hole shall be drilled to just intersect the crack tip. Flange cracks and major defects if encountered shall be repaired as directed by the Engineer. Broken welds will be fixed by torching welds to a half moon shape to relieve stress. This may include drilling of member to expose the entire weld. In no case, shall the cracks be "v" grooved and filled with welding material. Lead-containing paint may be encountered in some repair areas. The Contractor shall make all provisions necessary to ensure the safety of the workers, inspectors, and travelling public. No claims will be entertained by the Department due to Lead-based paint on the structure. The cost for all materials, labor, and equipment required for the inspection of the steel and/or the removal/remediation of defects shall be considered incidental to and included in the Lump Sum Bid for "Heat Straightening".

B. Heat Straightening Work Proposal: Upon completion of the inspection and crack remediation of the damaged member(s), the Contractor shall submit in writing for the Engineer's review and approval:

1. Maintenance of Traffic and Lighting Plan.
2. 'Heat Straightening Plan' with typical or expected procedures for heat straightening including but not limited to maximum heating temperatures, points of heat application, and proposed jacking or strutting forces which conform to the latest edition of the FHWA 'Guide for Heat-Straightening of Damaged Steel Bridge Members'

No heat straightening operations shall occur prior to the Engineer's review and approval of the 'Heat Straightening Plan'.

C. Application of Jacking Forces: Jacks or "come-alongs", not exceeding 25 ton capacity, may be used to bring stretched steel surfaces into limited compression as a means of mechanically augmenting the heat straightening process. The load shall be carefully applied prior to the application of heat. The load shall not be increased during the heat cycle. After a number of heat cycles, the load may be adjusted to compensate for the effects of the heat cycles. Any section of the beam that becomes distorted, cracked, or permanently deformed due to methods of handling, supporting, and loading or by any other means shall be replaced or repaired as directed by the Engineer. The cost of the replacement beam or repair shall be borne solely by the Contractor.

D. Field Supervision of Repairs: The Engineer and Contractor shall periodically and routinely monitor heating temperatures and jacking forces to insure compliance with the limits approved in the 'Heat Straightening Plan'.

The Contractor shall provide and use one or more of the following methods for verifying temperatures during heat straightening:

1. Temperature sensitive Crayons
2. Pyrometer
3. Infrared non-contact thermometer.

There shall be no heat straightening work performed unless one of these listed devices is on hand to monitor the steel temperature. Heating patterns and sequences shall be selected to match the type of damage and cross section shape.

E. Tolerances: The acceptable local tolerances for straightness in damaged area are:

1. Horizontal sweep: 1/2 – inch per 20 feet of length, At the point of impact: 3/8 - inch per 5 feet or 1/2 inch per 8 feet.
2. Vertical Deflection: 1/4 – inch maximum,
3. Deflection of Web (out of plane of web): 1/4 inch vertical or horizontal maximum.

Tolerances shall be met before any cross frames or other lateral restraint devices are attached. In no case, shall the beams(s) be forced into position and then welded or bolted to the cross frames or diaphragms to hold them in position.

F. Post Heating Inspection: After heat straightening work is complete, the straightened and repaired member(s) shall be inspected by the Engineer and Contractor for any gouges, sharp dents, cracks, or other defects. This testing and inspection will be made using methods and procedures as listed in the pre-straightening inspection. Defects found shall be repaired to the satisfaction of the Engineer using procedures outlined in A. above. Cost of inspections and repairs is to be considered incidental to the lump sum bid for 'Heat Straightening'.

4. MEASUREMENT

A. Heat Straightening: The Department will not measure the quantity.

5. PAYMENT

A. Heat Straightening (23594EC): Payment at the contract lump sum bid shall be full compensation for furnishing all labor, materials, equipment, tools, and incidentals necessary to heat straighten all damaged steel beams in accordance with this Special Note, the Standard Specifications, and the Contract Documents as outlined herein.

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

1. DESCRIPTION.

Perform all work in accordance with the Department's Standard Specifications and applicable Supplemental Specifications (current editions), this note and the attached detailed drawings. 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.
- A. **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 $\frac{3}{4}$ 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 for the patch in curb areas. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted.
- C. Concrete Patching Repair.** 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”.

2. MEASUREMENT

- A. Concrete Patching Repair.** The Department will measure the quantity per square feet of each area restored, completed and accepted.
- 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 ~ Type A and Type B (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 UTILITIES AND SIGNS

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

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

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 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, 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.

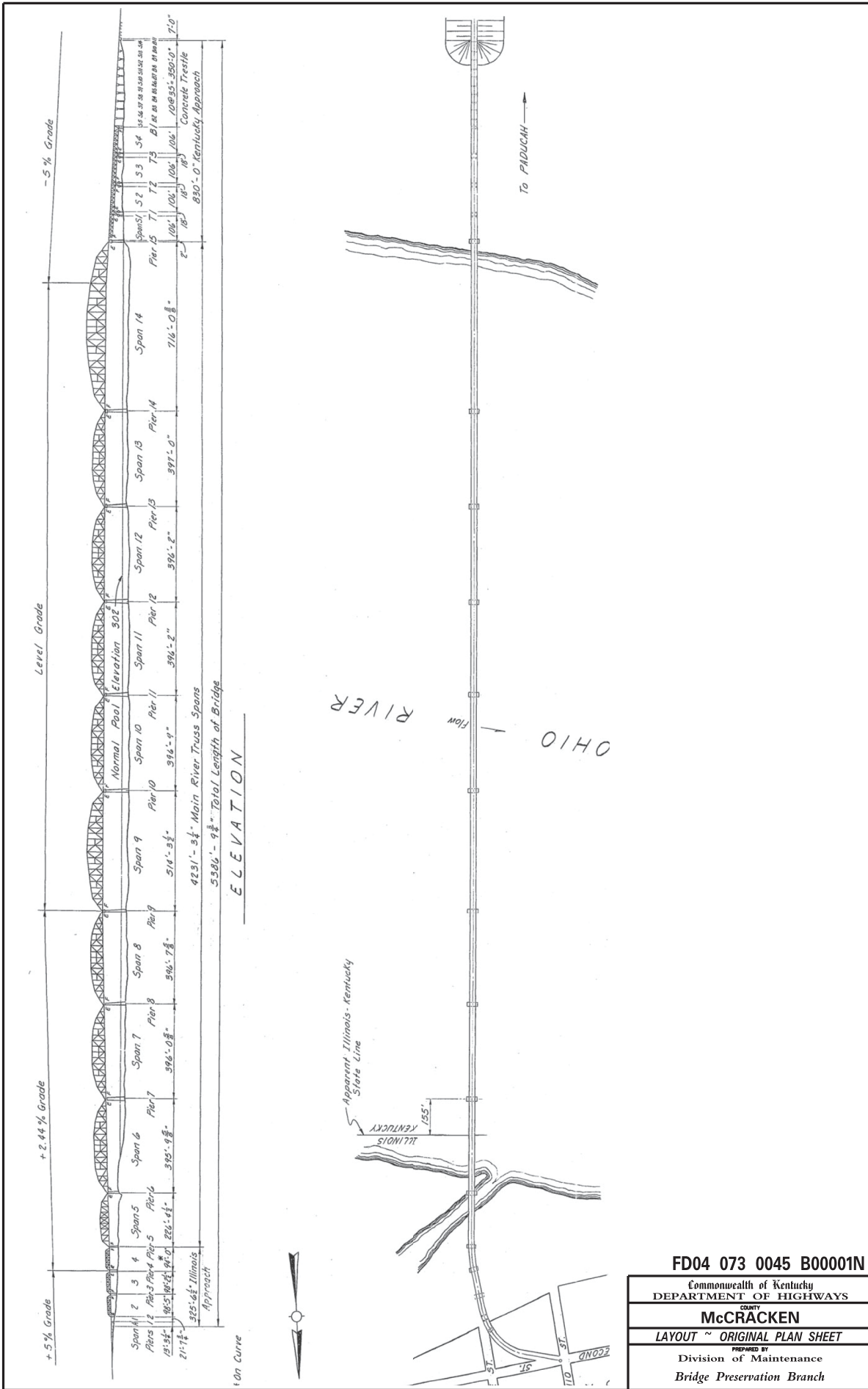
Maintain a minimum 12' foot lane on bridge carrying route. Maintain one 10'-0" usable lane each direction. All lane closures and shoulder closures must be removed when not working.

MEASUREMENT.

A. Maintain and Control Traffic: The Department will measure the quantity by Lump Sum, completed and accepted.

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.

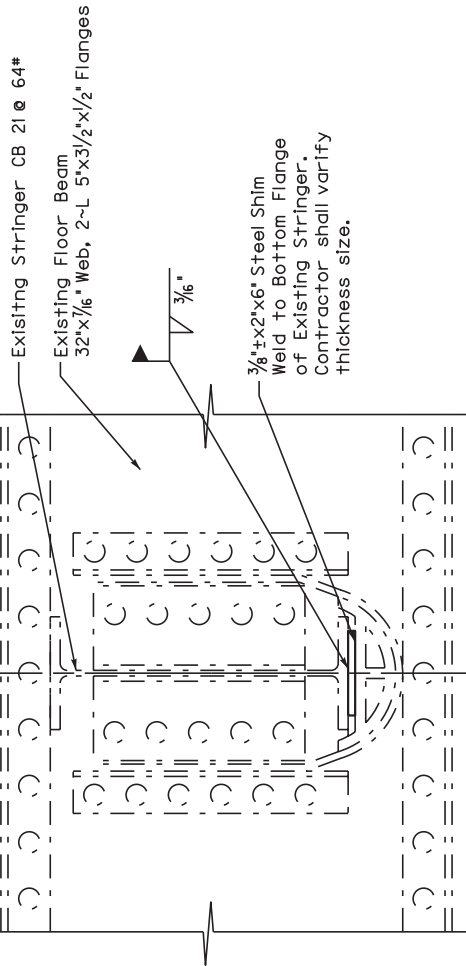




HEAT STRAIGHTENING

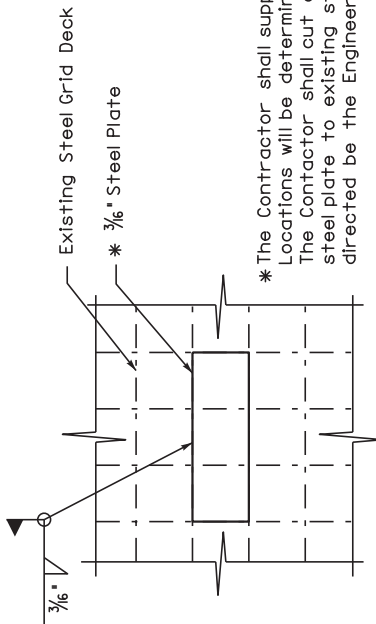
(Span 5, Upstream Truss, Member L4-M4)

Notes:
See Special Note For Heat Straightening
See Special Note for Steel Repairs



STRINGER END RETROFIT

(Span 14, Floor Beam 6, Stringers 1 and 3)



* The Contractor shall supply $\frac{3}{16}$ " steel plate
Locations will be determined by the Engineer.
The Contractor shall cut and weld the new
steel plate to existing steel grid deck as
directed by the Engineer.

STEEL GRID DECK RETROFIT

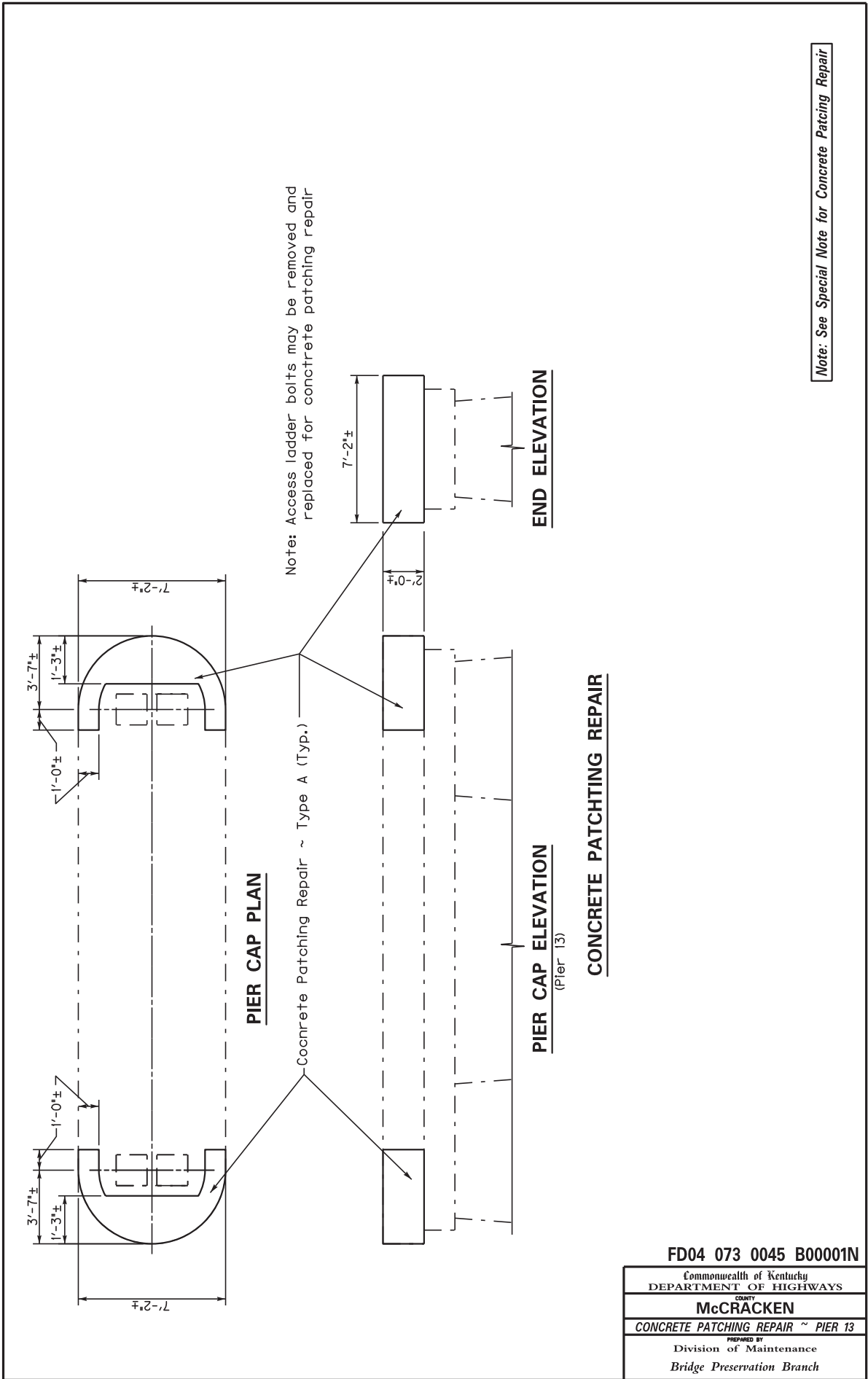
FD04 073 0045 B00001N

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY
MCCRACKEN

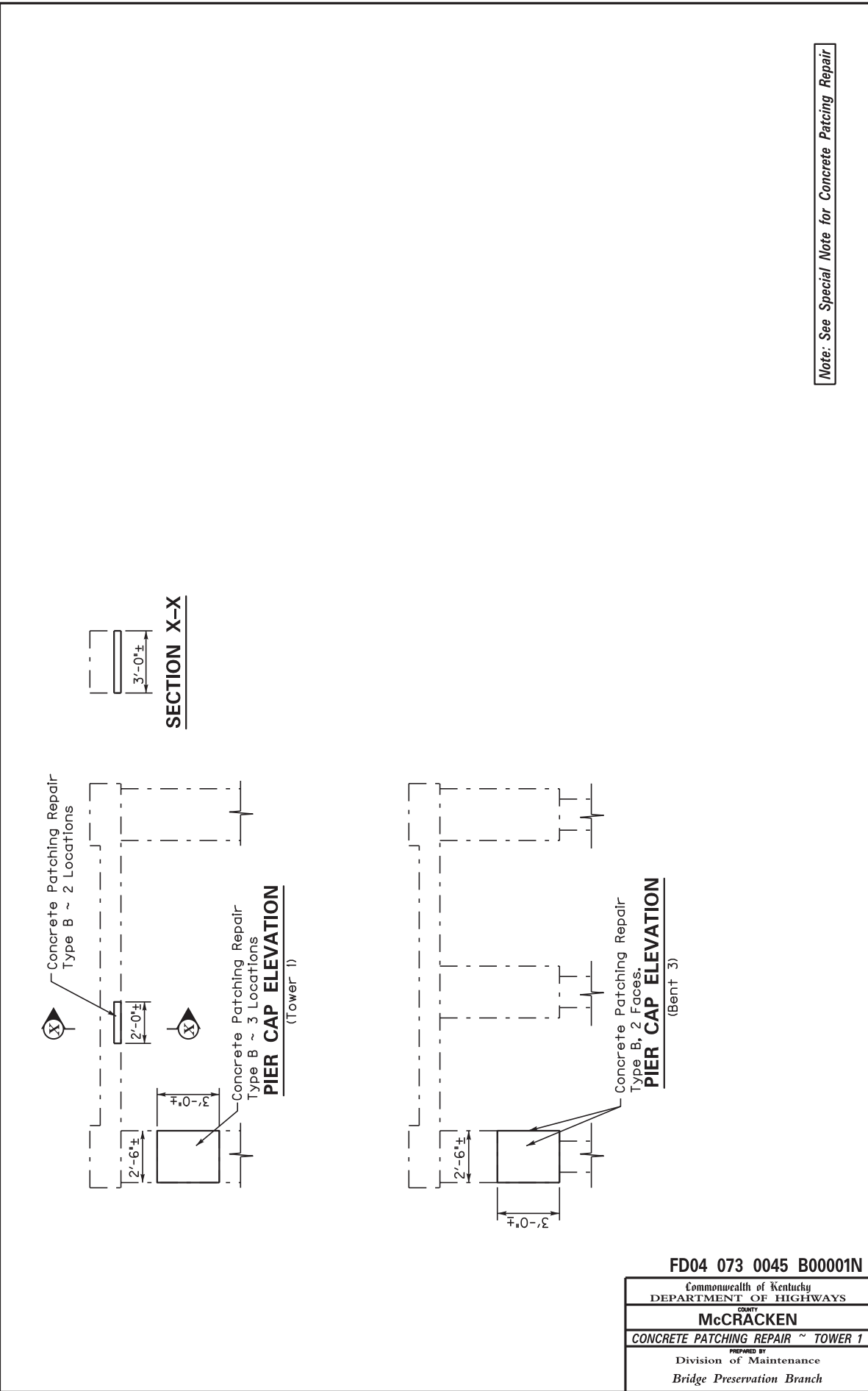
HEAT STRAIGHTENING AND STEEL RETROFITS

PREPARED BY
Division of Maintenance
Bridge Preservation Branch



Note: See Special Note for Concrete Patching Repair

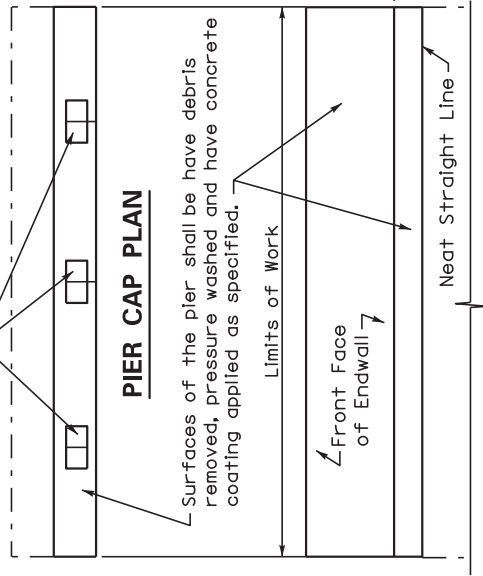
FD04 073 0045 B00001N
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY MCCRACKEN
CONCRETE PATCHING REPAIR ~ PIER 13
PREPARED BY Division of Maintenance Bridge Preservation Branch



Note: See Special Note for Concrete Patching Repair

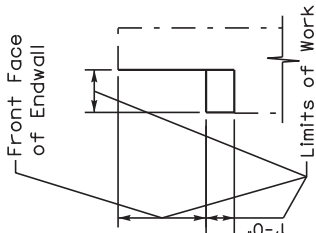
FD04 073 0045 B00001N
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY MCCRACKEN
PREPARED BY CONCRETE PATCHING REPAIR ~ TOWER 1
Division of Maintenance Bridge Preservation Branch

Bearing device. Remove debris, stratified and pack rust, pressure wash and apply lubricant. 3 each. Bearings with with existing lubricant apply shall be cleaned and re-lubricated.



PIER CAP ELEVATION

(Abutment 1, Bents 1, 3, 5, 7, 9 & 11)



Note: See Special Note for Bridge Cleaning and Preventive Maintenance

FD04 073 0045 B00001N

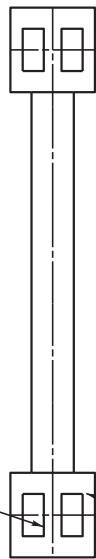
Commonwealth of Kentucky
 DEPARTMENT OF HIGHWAYS

COUNTY
McCRACKEN

PREPARED BY
 Division of Maintenance
 Bridge Preservation Branch

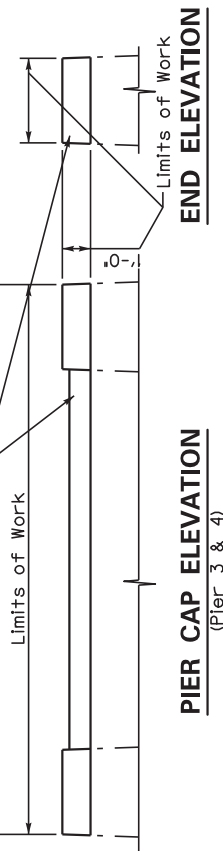
CONCRETE COATING DIAGRAM ~ PIERS 5-14

Bearing device. Remove debris, stratified and pack rust, pressure wash and apply lubricant. 4 each pier. Bearings with with existing lubricant apply shall be cleaned and re-lubricated.



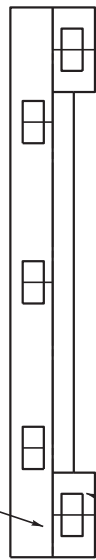
PIER CAP PLAN

Surfaces of the pier shall be have debris removed, pressure washed and have concrete coating applied as specified.



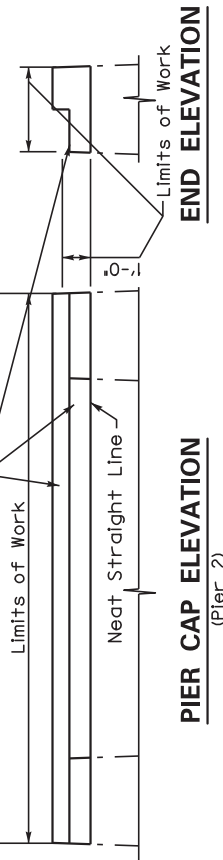
PIER CAP ELEVATION
 (Pier 3 & 4)

Bearing device. Remove debris, stratified and pack rust, pressure wash and apply lubricant. 5 each pier. Bearings with with existing lubricant apply shall be cleaned and re-lubricated.



PIER CAP PLAN

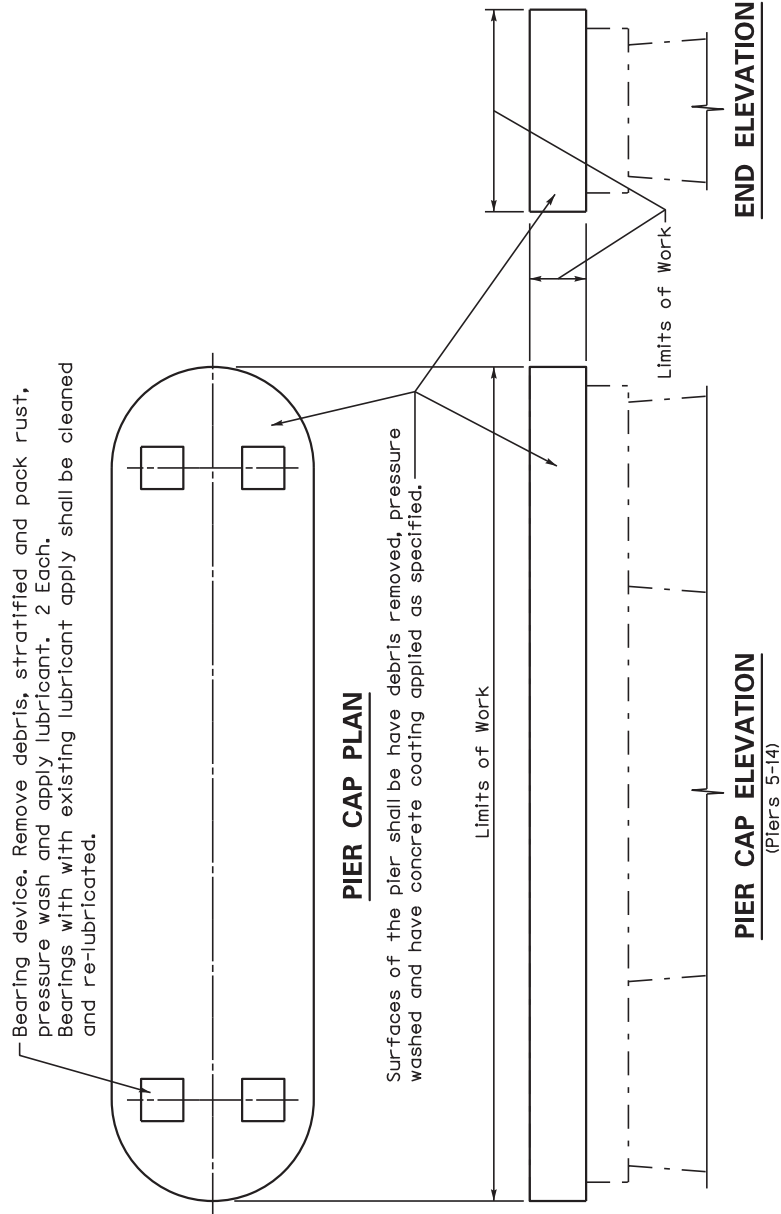
Surfaces of the pier shall be have debris removed, pressure washed and have concrete coating applied as specified.



PIER CAP ELEVATION
 (Pier 2)

Note: See Special Note for Bridge Cleaning and Preventive Maintenance

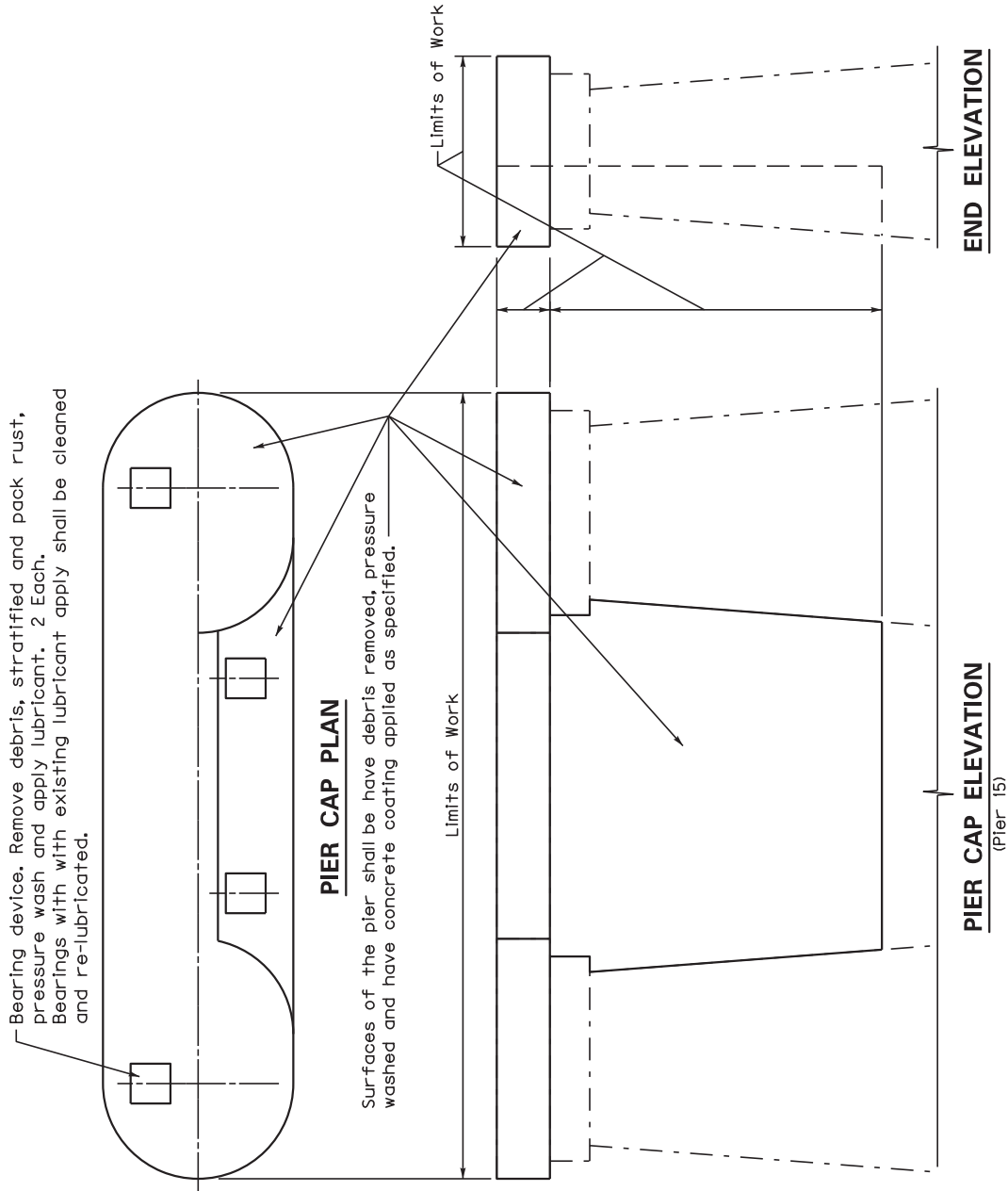
FD04 073 0045 B00001N Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY McCRACKEN CONCRETE COATING DIAGRAM ~ PIERS 5-14 PREPARED BY Division of Maintenance Bridge Preservation Branch	
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Note: See Special Note for Bridge Cleaning and Preventive Maintenance

FD04 073 0045 B00001N

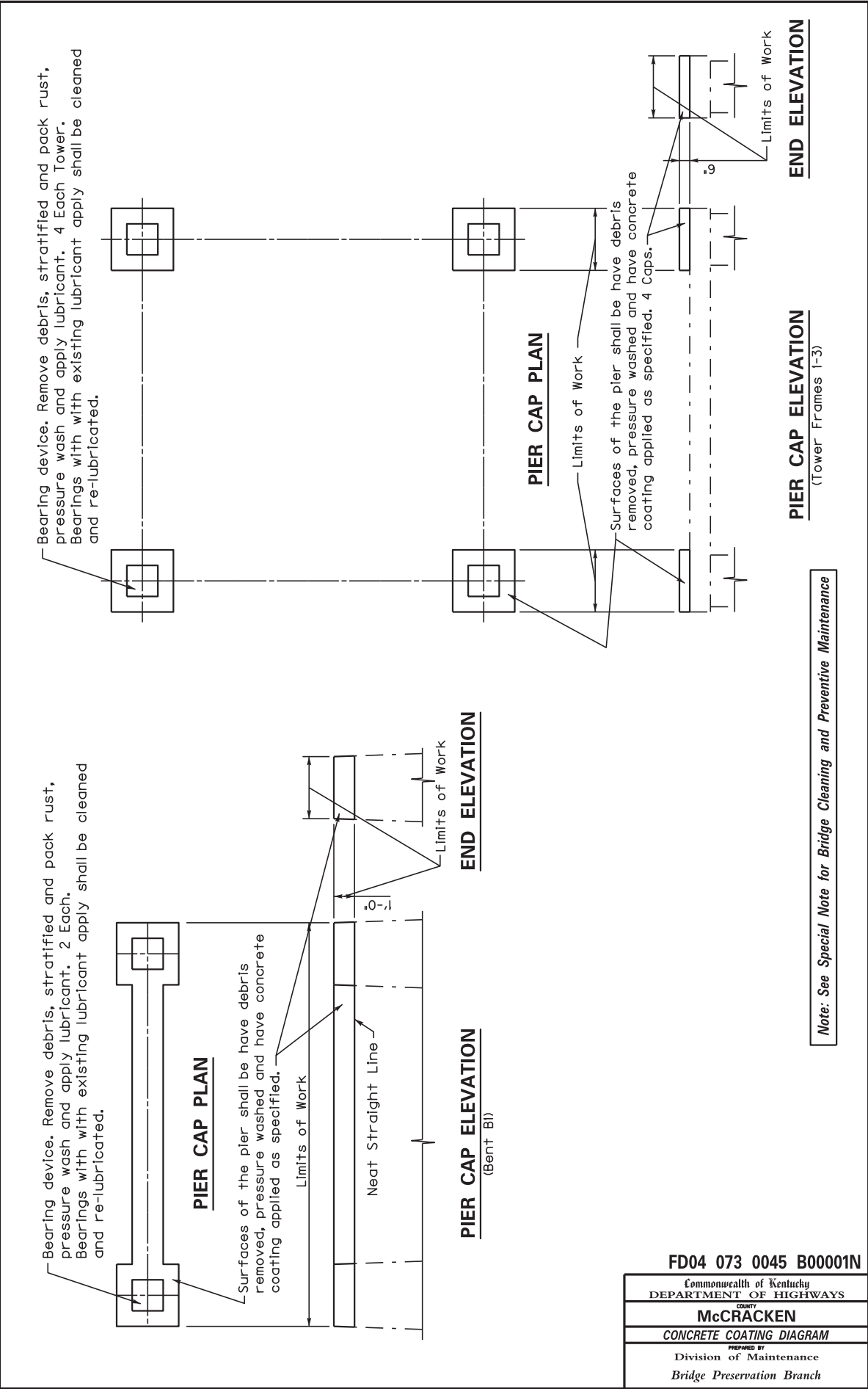
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
McCRACKEN
CONCRETE COATING DIAGRAM ~ PIERS 5-14
PREPARED BY Division of Maintenance Bridge Preservation Branch



Note: See Special Note for Bridge Cleaning and Preventive Maintenance

FD04 073 0045 B00001N

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS
COUNTY McCRACKEN
PREPARED BY CONCRETE COATING DIAGRAM ~ PIERS 5-14
Division of Maintenance Bridge Preservation Branch



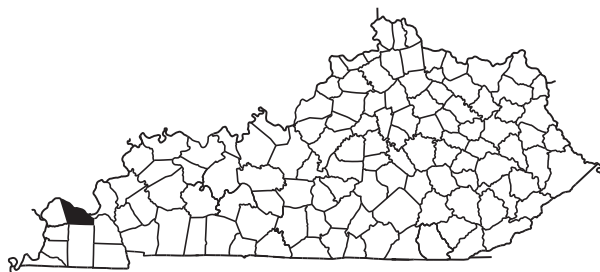
FD04 073 0045 B00001N

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

FD04 073 0045 B00001N
US 45 over Ohio River



LOCATION MAP ~ McCRACKEN COUNTY



FD04 073 0045 B00001N

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

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

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

 PER HOUR

BEGINNING JULY 24, 2009

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

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

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

No more than

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

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

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

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

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

ADDITIONAL INFORMATION

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

For additional information:



1-866-4-USWAGE

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



WWW.WAGEHOUR.DOL.GOV

PART IV
INSURANCE

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

192961

Page 1 of 1

Report Date 1/29/19

Section: 0001 - BRIDGES

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	02650		MAINTAIN & CONTROL TRAFFIC - 073B00001N	1.00	LS		\$	
0020	22146EN		CONCRETE PATCHING REPAIR - 073B00001N TYPE A	100.00	SQFT		\$	
0030	22146EN		CONCRETE PATCHING REPAIR - 073B00001N TYPE B	60.00	SQFT		\$	
0040	23236EC		STRINGER END RETROFIT - 073B00001N	2.00	EACH		\$	
0050	23594EC		HEAT STRAIGHTENING - 073B00001N	1.00	LS		\$	
0060	24981EC		BRIDGE CLEANING - 073B00001N	1.00	LS		\$	
0070	24982EC		CONCRETE COATING - 073B00001N	1.00	LS		\$	
0080	24983EC		BEARING LUBRICATION - 073B00001N	92.00	EACH		\$	
0090	25014EC		STEEL GRID DECK RETROFIT - 073B00001N	200.00	LF		\$	

Section: 0002 - DEMOB

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0100	02569		DEMOBILIZATION	1.00	LS		\$	