

CALL NO. 312
CONTRACT ID. 185005
HARDIN COUNTY
FED/STATE PROJECT NUMBER FD04 047 2212 B00134N
DESCRIPTION KY 2212
WORK TYPE BRIDGE SUBSTRUCTURE REHAB
PRIMARY COMPLETION DATE 1/1/2019

LETTING DATE: October 26,2018

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

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- EXPEDITE WORK ORDER
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- BRIDGE DEMOLITION, RENOVATION
- ASBESTOS ABATEMENT REPORT
- RIGHT OF WAY NOTES
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- DEPT OF ARMY NATIONWIDE PERMIT

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- LABOR AND WAGE REQUIREMENTS
- EXECUTIVE BRANCH CODE OF ETHICS
- KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE
- PROJECT WAGE RATES / STATE

PART IV INSURANCE

PART V BID ITEMS

PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 04

CONTRACT ID - 185005 FD04 047 2212 B00134N

COUNTY - HARDIN

PCN - DE04722121805 FD04 047 2212 B00134N

KY 2212 (MP 2.705) ADDRESS DEFICIENCIES OF KY 2212 BRIDGE OVER PAWLEY CREEK (047B00134N) (MP 2.711), A DISTANCE OF 0.01 MILES.BRIDGE SUPERSTRUCTURE REHAB SYP NO. 04-10011.00.

GEOGRAPHIC COORDINATES LATITUDE 37:44:14.89 LONGITUDE 85:58:54.12

COMPLETION DATE(S):

COMPLETED BY 01/01/2019

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

HARDIN COUNTY FD04 047 2212 B00134N

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

HARDIN COUNTY FD04 047 2212 B00134N Contract ID: 185005 Page 9 of 77

EXPEDITE PROJECT WORK ORDER

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to "hand carry" all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

Division of Construction Procurement 200 Mero St. Frankfort, KY 40602

ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

Contract ID: 185005 Page 10 of 77

Commonwealth of Kentucky

DEPARTMENT OF HIGHWAYS

PLANS OF PROPOSED PROJECT

BRIDGE REHABILITATION CONTRACT NO. BK-011

INDEX OF SHEETS

SHEET NO. DESCRIPTION

> TITLE & LOCATION MAP GENERAL NOTES LAYOUT TYPICAL SECTION

BRID	
	tec
	\subseteq
) BY	Sta

& LOCATION MAP

PAWLEY CREEK

ROUTE **KY 2212** 9262018 3:12:45 PM

/ 24 / 18

80

DATE

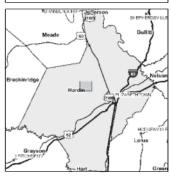
COUNTY HARDIN

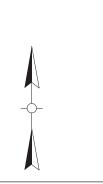
BRIDGE NUMBER 047B00134N

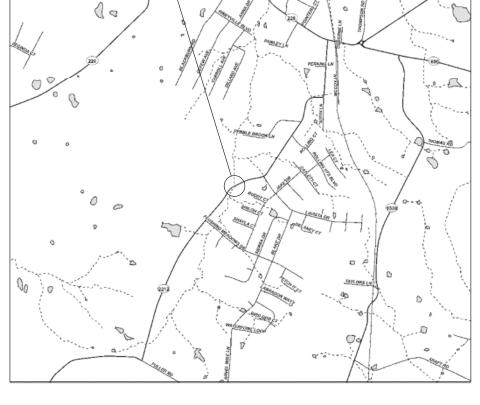
ESTIMATE OF QUANTITIES				
BID ITEM CODE	DESCRIPTION	QUANTITY	UNIT	
02483	CHANNEL LINING CLASS II	18	CY	
02569	DEMOBILIZATION	1	LS	
02599	FABRIC-GEOTEXTILE TYPE IV	85	SY	
02650	MAINTAIN & CONTROL TRAFFIC	1	LS	
03250	WATERPROOFING MEMBRANE	80	SY	
03304	BRIDGE OVERLAY APPROACH PAVEMENT	130	SY	
08003	FOUNDATION PREPARATION	1	LS	
08019	CYCLOPEAN STONE RIP RAP	100	TON	
08434	CLEAN & PAINT STRUCTURAL STEEL	1	LS	
08510	REMOVE EPOXY BIT FOREIGN OVERLAY	80	SY	
00301	CL 2 ASPH SURF .038D PG64-22	20	TON	
22146EN	CONCRETE PATCHING REPAIR	214	SF	
02383	REMOVE & RESET GUARDRAIL	200	LF	
23378EC	CONCRETE SEALING	1000	SF	
23744EC	EPOXY INJECTION CRACK REPAIR	8	LF	

047B00134N KY 2212 OVER PAWLEY CREEK 37.737469362, -85.98165914









LOCATION MAP

Contract ID: 185005 Page 11 of 77

SPECIFICATIONS: REFERENCES TO THE SPECIFICATIONS ARE TO THE CURRENT EDITION OF THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION INCLUDING ANY CURRENT SUPPLEMENTAL SPECIFICATIONS. ALL REFERENCES TO THE AASHTO SPECIFICATIONS ARE TO THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17+h EDITION.

<u>DESIGN LOAD</u>: PROPOSED SUPERSTRUCTURE IS DESIGNED FOR AN INVENTORY LIVE LOAD OF AASHTO HS-20 AND OPERATIONAL LIVE LOAD OF FHWA EV-3.

FUTURE WEARING SURFACE: THIS STRUCTURE IS DESIGNED FOR A 15 PSF FUTURE WEARING SURFACE LOAD.

<u>DIMENSIONS</u>: DIMENSIONS ARE FOR A NORMAL TEMPERATURE OF 60 DEGREES FAHRENHEIT. LAYOUT DIMENSIONS ARE HORIZONTAL DIMENSIONS.

COMPLETION OF THE STRUCTURE: THE CONTRACTOR IS REQUIRED TO COMPLETE THE STRUCTURE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. MATERIAL, LABOR OR CONSTRUCTION OPERATIONS, NOT OTHERWISE SPECIFIED, ARE TO BE INCLUDED IN THE BID ITEM MOST APPROPRIATE TO THE WORK INVOLVED. THIS MAY INCLUDE COFFERDAMS, SHORING, EXCAVATIONS, BACK FILLING, REMOVAL OF ALL OR PARTS OF THE EXISTING STRUCTURES, PHASE CONSTRUCTION, INCIDENTAL MATERIALS, LABOR, OR ANYTHING ELSE REQUIRED TO COMPLETE THE STRUCTURE.

ON-SITE INSPECTION: EACH CONTRACTOR SUBMITTING A BID FOR THIS WORK SHALL MAKE A THOROUGH INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS SO THAT 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 OF HIGHWAYS.

CLEANING AND PAINTING: THE BEAMS SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE 'SPECIAL NOTES FOR CLEANING AND PAINTING'. ALL COSTS ASSOCIATED SHALL BE PART OF THE BID ITEM 'CLEANING AND PAINTING STRUCTURAL STEEL'. ALL WORK FOR REMOVE AND RESET GUARDRAIL SHALL BE COMPLETED PRIOR TO CLEANING AND PAINTING.

LEAD PAINT: THE CONTRACTOR IS ADVISED TO TAKE ALL NECESSARY PROTECTIVE MEASURE INCLUDING WORKER SAFETY AND ENVIRONMENTAL REGULATIONS WHEN PERFORMING ANY ACTION ON THE EXISTING STEEL. THE DEPARTMENT WILL NOT CONSIDER ANY CLAIMS BASED ON RESIDUAL LEAD PAINT.

STREAM PROTECTION: NO EQUIPMENT WILL BE ALLOWED IN THE STREAM. THE STREAM IS NOT TO BE DISTURBED.

VERIFYING FIELD CONDITIONS: THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BEFORE YOU DIG: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIREMENTS AND CONFORMATION WITH THE UNDERGROUND FACILITY DAMAGE PREVENTION ACT OF 1994. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ANY UTILITIES ON THIS PROJECT. ALL UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO CONSTRUCTION, ANY UTILITIES DISTURBED OR DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS WILL BE REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS ADVISED TO CALL (800) 752-6007 A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION FOR INFORMATION ON THE LOCATION OF SOME BUT NOT NECESSARILY ALL UNDERGROUND UTILITIES.

WATERPROOFING MEMBRANE: USE A SPRAYABLE/ROLLABLE ELASTOMERIC POLYURETHANE WATERPROOFING MEMBRANE MASTERSEAL HLM 5000 OR APPROVED EQUIVALENT.

<u>DISPOSAL OF MATERIALS</u>: ALL MATERIALS AND DEBRIS REMOVED FROM THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE RIGHT-OF-WAY.

DATE

08 / 24 / 18

SHEET NO.
2 OF 4



PREPARED BY:

Stantec

GENERAL NOTES

SHEE I I LE

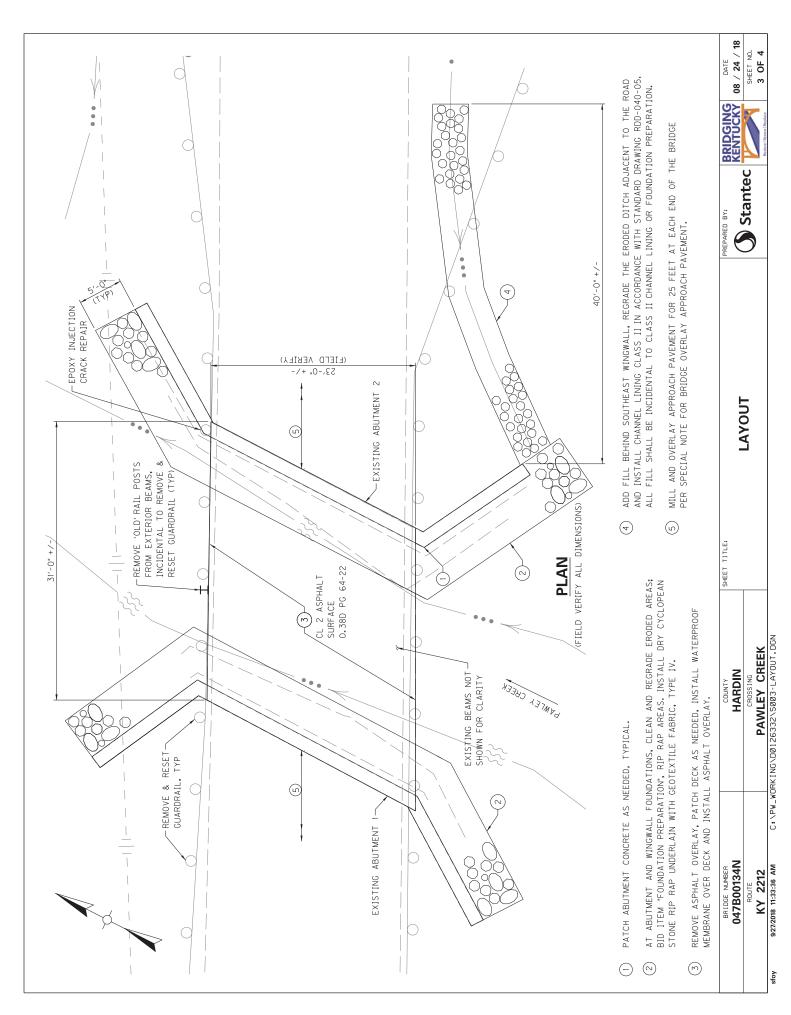
HARDIN
CROSSING
PAWLEY CREEK

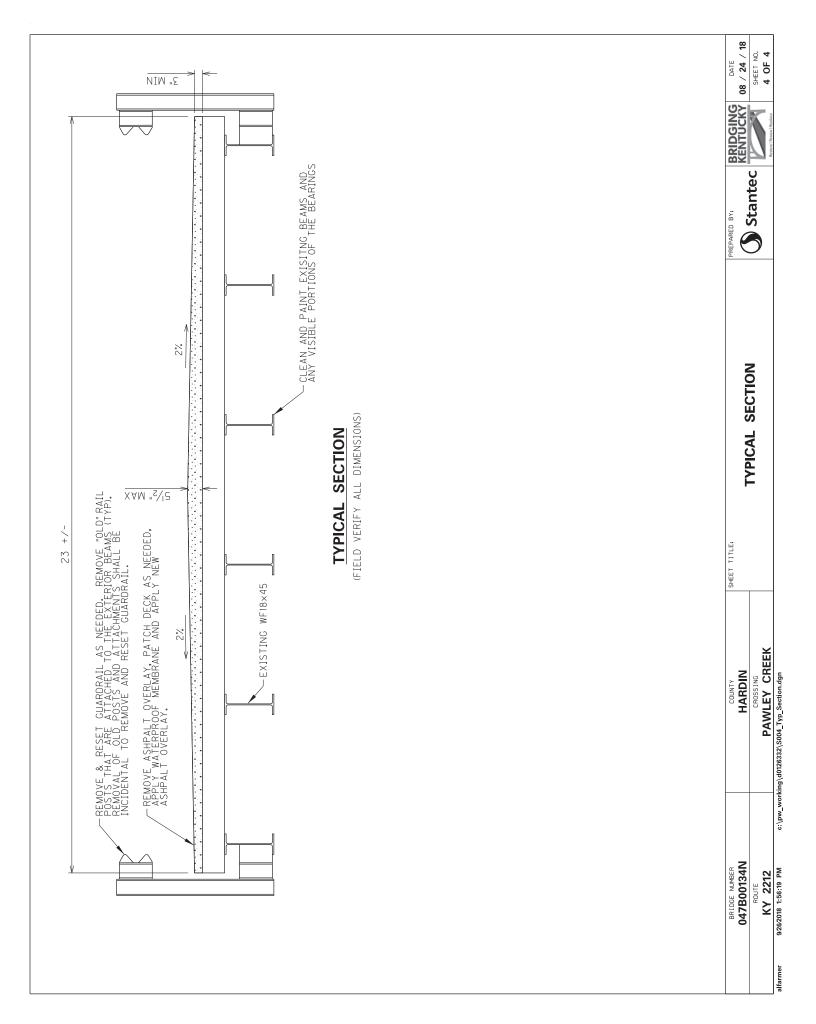
PAWLE

c:\pw_working\d0126332\S002-General

8RIDGE NUMBER
047B00134N
ROUTE
KY 2212
827/2018 11:11:17 AM

sfoy





SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS 047B00134N Hardin County

I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 10 calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

It is intended that all work be completed during this 10 day closure. However, if due to weather limitations, painting cannot be completed within this 10 day time, the contractor is allotted a completion date until April 30th, 2019 to complete the painting. This additional time for painting will only be granted if weather limitations prevent painting. If conditions allow for painting to occur, and the Contractor does not utilize these days, then no additional time will be granted beyond the January 1, 2019 completion requirement. Additional Lane closures will be allowed to complete this work at the discretion of the Engineer to minimize impacts to the public. Closure dates and times must be part of a revised traffic control plan if this is encountered. All other work items are to be completed by January 1, 2019

II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction, Section 112.03.15A, when the bridge remains closed beyond the allotted number of calendar days. Liquidated Damages will be assessed per the Standard Specification Section 108.09 when the contract time extends beyond the contract date but the bridge closure is removed and the roadway has reopened to the public.

Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to

HARDIN COUNTY FD04 047 2212 B00134N Contract ID: 185005 Page 15 of 77

inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the 10 day maximum bridge closure. In the event the closure duration lasts longer than 10 calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

Contract ID: 185005 Page 16 of 77

SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the 2012 standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note, however this note does not relieve the contractor of other items that may be necessary to comply with current standards. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

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

The contractor is allowed to close the bridge to traffic in order to complete the work for a total of 10 consecutive calendar days. The contractor must notify the engineer and public information officer at least 14 calendar days prior to the planned closure.

It is intended that all work be completed during this time. However, if due to weather limitations, painting cannot be completed within this 30 day time, the contractor is allotted a completion date until April 30th to complete the painting. This additional time for painting will only be granted if weather limitations prevent painting. If conditions allow for painting to occur, and the contractor does not utilize these days, then no additional time will be granted beyond the January 1, 2019 completion requirement. Additional lane closures will be allowed to complete this work at the discretion of the engineer to minimize impacts to the public. Closure dates and times must be part of a revised traffic control plan if this is encountered. All other work items are to be completed by January 1, 2019

II. TRAFFIC COORDINATOR

FURNISH A TRAFFIC COORDINATOR AS PER SECTION 112. THE TRAFFIC COORDINATOR SHALL INSPECT THE PROJECT MAINTENANCE OF TRAFFIC, AT LEAST THREE TIMES DAILY, OR AS DIRECTED BY THE ENGINEER, DURING THE CONTRACTOR'S OPERATIONS AND AT ANY TIME A LANE CLOSURE IS IN PLACE. THE PERSONNEL SHALLH AVE ACCESS ON THE PROJECT TO A RADIO OR TELEPHONE TO BE USED IN CASE OF EMERGENCIES OR ACCIDENTS. THE TRAFFIC COORDINATOR SHALL REPORT ALL INCIDENTS THROUGHOUT THE WORKZONE TO THE ENGINEER ON THE PROJECT. THE CONTRACTOR SHALL FURNISH THE NAME AND TELEPHONE NUMBER WHERE THE TRAFFIC COORDINATOR CAN BE CONTACTED AT ALL TIMES.

III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in

Contract ID: 185005 Page 17 of 77

liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing and construction signing needed for the bridge closure. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs and detour signs should be placed no sooner than two weeks prior to the closing of the bridge and covered until the bridge is closed. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

IV. PROJECT PHASING & CONSTRUCTION PROCEDURES

Maintain traffic over the bridge as long as possible. Once the structure is closed ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made so that delivery does not delay the reopening. If the bridge is reopened prior to safety devices being in place, temporary barrier wall shall be placed in accordance to the standard drawings. Contrary to standard specifications, no direct payment would be made for the barrier wall and will be considered incidental to "Maintain and Control Traffic".

V. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed In advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

Greater than four inches - positive separation or wedge with 3:1 or flatter slope needed. If there is five feet or more distance between the edge of the pavement and the drop-off, then drums, panel, or barricades may be used. If the drop-off is greater than 12 inches, positive separation is strongly encouraged. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations.

For temporary conditions, drop-offs greater than four inches may be protected With plastic drums, vertical panels or barricades for short distances during daylight Hours while work is being done in the drop-off area.

VI. VARIABLE MESSAGE SIGNS

The contractor is expected to provide up to two (2) message boards for use at locations determined by the engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. Contrary to the standard specification, no direct payment will be made for variable message signs. These signs will be considered incidental to the lump sum bid item "Maintain and Control Traffic".

VII. BARRICADES AND BARRIER WALL

During closure of the bridge, ensure a minimum of (4) type III barricades are used at each end of the bridge for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades but they will be included in the lump sum price for "Maintain and Control Traffic".

VIII. DETOUR

The traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer at the pre-construction meeting. The proposed detour route shall meet the following requirements:

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route in order to avoid ongoing construction projects along those routes.
- 3) Signed detour routes must be on roadways with similar roadway characteristics, i.e. pavement widths and roadway striping.
- 4) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

SPECIAL NOTE FOR PLACING BRIDGE OVERLAY APPROACH PAVEMENT

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, and equipment.
- 2. Mill the existing approach pavement.
- 3. Place new asphalt surface.
- 4. Repair the roadway shoulders, if needed.
- 5. Any other work specified as part of this contract.

II. MATERIALS

- **A. CL2 ASPH SURF 0.38D PG 64-22.** This material shall be in accordance with the Standard Specifications.
- **B.** Tack Coat. This material shall be in accordance with the Standard Specifications.
- C. DGA. See Section 302.
- **D.** CL2 ASPH BASE 1.0D PG 64-22. See Standard Specifications.

III. CONSTRUCTION

- **A. Remove Existing Materials.** Remove the existing pavement material to provide for a minimum of 1½" new pavement surface from the bridge end extending approximately 25 feet into the approach pavement and across the width of the approach pavement. The Engineer shall determine the actual length and width of the milling depending on site conditions at each bridge approach. Mill the existing surface so that the new asphalt surface will tie into the new armored edge on the newly constructed backwall and matches the elevation of the bridge end. The Engineer shall approve the Contractor's plan for restoring the approach grade prior to the removal of the existing surface. Dispose of all removed material entirely away from the job site or as directed by the Engineer.
- **B. Shoulder Reconstruction.** Replace shoulders in kind at the approaches to match the width and new elevation of the riding surface on the bridge and to receive New Asphalt Surface Overlay. Shoulders shall receive identical treatment to the mainline pavement.
- C. Produce and Place New Asphalt Surface. Apply an asphalt tack coat in accordance with Section 406. Produce and place the new 1 ¼" asphalt surface in accordance with Section 403 and compact under Option B. The new asphalt surface mixture required for this project shall be "CL2 ASPH SURF 0.38D PG64-22". Place the new asphalt surface to smoothly connect the existing roadway grade at the end of the project, and the new abutment backwall.

D. Pavement Markings. Pavement striping will be required to match the existing pavement striping. Pavement striping shall be in accordance with applicable sections of the Standard Specifications and shall be paid accordingly. Raised pavement markers within the limits of the "Bridge Overlay Approach Pavement" shall be removed prior to the milling operation. The marker castings shall be cleaned and returned to the Engineer.

IV. MEASUREMENT

The Department will measure the quantity in square yards. The Department will measure along the centerline from each end of the structure to the point where the new pavement ties into the exiting pavement and across the width of the new pavement perpendicular to the centerline of the roadway.

V. PAYMENT

Payment at the contract unit price per square yard is full compensation for backfilling, removing existing pavement markers, mobilization of milling equipment, removing specified existing pavement material, reconstruct shoulders as needed, furnishing and installing the asphalt tack coat, producing and placing the new asphalt surface, and all incidental items necessary to complete the work within the specified pay limits as specified by this note and as shown in the Contract Documents.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
03304	Bridge Overlay Approach Payement	Square Yards

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

SPECIAL NOTE FOR CONCRETE SEALING

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Repair cracks as applicable in accordance with the Special Note for Epoxy Injection Crack Repair.
- 4. Repair delaminated or spalled areas as applicable in accordance with the Special Note for Concrete Patching.
- 5. Apply Ordinary Surface Finish
- 6. Prepare the surfaces to receive coating.
- 7. Apply concrete coating.
- 8. Any other work as specified as part of this contract.

II. MATERIALS

One of the following coating systems shall be used:

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

The coating shall be tinted and the color shall closely match the existing concrete. The finish product shall be opaque and satin or semi-gloss. The contractor must apply sufficient coats as required to achieve this goal.

Furnish to the Engineer copies of the manufacturer's technical data sheets, installation guidelines, material safety data sheets, and other pertinent data at least two (2) days prior to beginning the work.

III. CONSTRUCTION

A. Perform Concrete Repairs. Repair concrete surface in accordance with the Special Note for Epoxy Injection Crack Repair and/or the Special Note for Concrete Patching Repair as applicable.

B. Apply Ordinary Surface Finish. Areas receiving epoxy injection, concrete patching, and other surface imperfections, including areas of minor cracking, should receive Ordinary Surface Finish in accordance with Section 601.03.18 of the Standard Specifications. Use mortar of the same cement and fine aggregate as the concrete patching, or as directed by the Engineer. Payment will be incidental to Concrete Sealing.

C. Areas to Receive Concrete Sealing:

- a. All exposed concrete on abutments and wingwalls.
- b. All exposed concrete on piers, including caps.
- D. Prepare Concrete Surfaces for Repair. All areas specified shall be pressure washed. All equipment for pressure washing shall be operated at a minimum pressure of up 4,000 psi with 0 degree spinner tip and/or fan tips as determined by the engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. Pressure washing shall be operated at distance of approximately six inches from and perpendicular to the surface. All pressure washing wands shall be equipped with a gauge to accurately determine the amount pressure used. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Wash water will not be released to a bridge element previously washed. Preform all pressure washing at temperatures above 40 degrees Fahrenheit.
- **E. Apply Concrete Coating.** All areas specified shall have concrete coating applied to as specified after debris removal and power washing. New concrete shall be allowed to properly cure in accordance with the manufacturer's recommendations prior to application. Use compressed air to remove any loose debris from the surfaces that are to be coated after power washing. 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. Preform all concrete coating application at temperatures above 40 degrees Fahrenheit or in accordance with manufactures specifications.

IV. MEASUREMENT

The Department will measure the quantity as lump sum. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of coatings that do not satisfy the Engineer's approval for payment and will consider them incidental to "Concrete Sealing".

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete sealing under the following:

CodePay ItemPay Unit23378ECConcrete SealingSquare Foot

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

SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

- 1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
- 2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
- 3. Drill injection port holes.
- 4. Epoxy injection.
- 5. Finish the repaired surface.
- 6. Obtain core samples for the Engineer's visual inspection.
- 7. Repair core holes.
- 8. Any other work specified as part of this contract.

II. MATERIALS, EQUIPMENT, PERSONNEL

- **A. Type IV Epoxy Resin.** Use either Category I or II suitable for epoxy injection applications. See Section 826. All cracks shall be injected using an adhesive suitable for the field conditions (crack width, temperature, humidity, etc.) recommended by the adhesive manufacture as shown on material data sheets.
- **B. Equipment.** Equipment used to inject the epoxy shall meet the recommendations of the epoxy injection material manufacturer.
- **C. Personnel.** Arrange to have a manufacturer's representative at the job site to familiarize him and the Engineer with the epoxy materials, application procedures and recommended pressure practice. The representative shall direct at least one complete crack or area injection and be assured prior to his departure from the project that the personnel are adequately informed to satisfactorily perform the remaining repairs.

Furnish the Engineer a copy of the manufacturer's comprehensive preparation, mixing and application instructions which have been developed especially for use with the proposed epoxy injection system. Ensure that any significant changes to these instructions which are recommended by the representative for an unanticipated situation have been approved by the Engineer prior to the adoption of such changes.

III. CONSTRUCTION

- A. Investigate Remedial Action. If the crack is larger than or equal to 0.025" wide or has rust stains, repair the crack by epoxy injection. If the crack is less than 0.025" wide, the crack shall be sealed in accordance with the Special Note for Concrete Sealing. Areas of map cracking are to be sounded by the Engineer with a hammer. If the areas are delaminated or spalled, they shall be repaired in accordance with the Special Note for Concrete Patching. Otherwise, the cracks shall be repaired in accordance with this Note.
- **B.** Drill Injection Port Holes. Install injection ports or tees in cracks to be injected. Space injection ports or tees at 6 to 12 inches vertically and 6 to 18 inches horizontally but in no case closer together than the thickness of the concrete member if full depth penetration is desired unless otherwise specified or directed. Set ports or tees in dust free holes made either with vacuum drills or chipping hammers.
- C. Epoxy Injection. Seal all surface cracks in the area to be repaired, after injection ports or tees have been inserted into the holes, with paste epoxy between ports to insure retention of the pressure injection within the confines of the member. An alternate procedure of sealing the cracks before the injection holes have been made can be submitted to the Engineer for approval. Limit the application of paste epoxy to clean and dry surfaces. Limit substrate temperatures to not less than 45°F during epoxy applications.

Begin the epoxy injection at the bottom of the fractured area and progress upward using a port or tee filling sequence that will ensure the filling of the lowermost injection ports or tees first.

Establish injection procedures and the depths and spacings of holes at injection ports or tees. Use epoxy with flow characteristics and injection pressure that ensure no further damage will be done to the member being repaired. Ensure that the epoxy will first fill the innermost portion of the cracked concrete and that the potential for creating voids within the crack or epoxy will be minimized.

- **D. Finish the Repaired Surface.** Remove the injection ports or tees flush with the concrete surface after the fractured area has been filled and the epoxy has partially cured (24 hours at ambient temperature not less than 60°F, otherwise not less than 48 hours). Roughen the surfaces of the repaired areas to achieve uniform surface texture. Remove any injection epoxy runs or spills from concrete surfaces.
- **E. Obtain Core Samples.** Obtain two 4-inch diameter core samples in the first 25 linear feet of crack repaired and one core for each 25 linear feet thereafter. Take the core samples from locations determined by the Engineer and for the full crack depth. Cores will be visibly examined by the Engineer to determine the extent of epoxy penetration.
- **F. Repair Core Holes.** Repair core holes in the concrete with non-shrink grout in accordance with Section 601.03.03(B) within 24 hours.

IV. MEASUREMENT

The Department will measure the quantity in linear feet along the centerline of the cracks. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of repairs that do not satisfy the Engineer's approval for payment and will consider them incidental to "Epoxy Injection Crack Repair".

V. PAYMENT.

The Department will make payment for the completed and accepted quantities of concrete cracks repaired with epoxy injection under the following:

<u>Code</u>	Pay Item	<u>Pay Unit</u>
23744EC	Epoxy Injection Crack Repair	Linear Feet

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

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

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

I. DESCRIPTION. Perform all work in accordance with the Department's 2012 Standard Specifications, 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) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (5) 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.

II. MATERIALS.

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

III. CONSTRUCTION.

A. Concrete Removal and Preparation. The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. 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 15 lbs.). Except for the existing railing, remove all deteriorated loose concrete to a minimum depth of 4". When reinforcing steel is exposed, concrete removal shall continue until there is a minimum ¾ inch clearance around the exposed reinforcing bar. For railing patches, remove to the deeper of sound concrete, a minimum of 2" or a minimum ¾ inch clear beyond and around exposed reinforcing bars. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 6 inches. This removal depth limit does not apply to portions of the rail indicated for complete element replacement.

The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of 1 inch to prevent featheredging unless otherwise approved by the Engineer.

After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Abrasive 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 grit blasting or wire brush whichever is more appropriate. Furnish for replacement, as directed by the Engineer, additional linear feet of steel reinforcing bars ½" diameter by 20-foot lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Deliver unused bars to the nearest County Maintenance Barn.

Reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Such bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. In particular, bars shall not be bundled in lapped splices, but shall be placed such that the minimum spacing around each bar is three times the maximum aggregate size to allow for proper encapsulation with concrete patching.

Intersecting reinforcing bars shall be tightly secured to each other using tie wire and adequately supported to minimize movement during concrete placement.

Welded wire fabric (WWF) shall be provided when shown on the attached sketches and at each repair area larger than 1 square foot if the depth of the repair exceeds 3 inches from the original dimension of the repaired member. Sheets of adjoining WWF shall be lapped by at least one and one-half spaces at all intersections, in both directions, and be securely fastened. WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1.5 inches.

WWF shall be fastened to preset anchors on a grid not more than 12 inches square. Large knots of tie wire which could result in sand pockets and voids during patching shall be avoided.

C. Hook Fasteners. Hook fasteners shall be positioned at the spacing as stated above or as directed by the Engineer. Any given area shall have a minimum of four anchors. The WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 2 feet on a grid pattern over the entire repair area.

Hook fasteners shall be of commercial grade galvanized steel with a minimum diameter of 3/16". They may be mechanically set or grouted, as approved by the Engineer.

The Department will randomly select hook fasteners to be tested to verify pullout force is sufficient. If any anchors fail to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- **D.** Class M Concrete. Place and finish the new concrete for the patching area 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.
- **E. 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. See Section 501.03.15.

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 Patching 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 "Concrete Patching Repair".

IV. MEASUREMENT

- **A.** Concrete Patching Repair. The Department will measure the quantity per cubic feet of each area restored. Double payment will not be made on both faces of corner repairs.
- **B.** Steel Reinforcement. Contrary to Section 602 Steel Reinforcement will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".
- C. Welded Wire Fabric & Hook Fasteners. Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- A. Concrete Patching Repair. Payment at the contract unit price per cubic 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.
- **B. Steel Reinforcement.** Contrary to Section 602 Steel Reinforcement will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

The Department will consider payment as full compensation for all work required by these notes and detail drawings.

SPECIAL NOTES FOR CLEANING AND PAINTING

SPECIAL NOTE FOR SURFACE PREPARATION AND PAINT APPLICATION

SPECIAL NOTE FOR WASTE MANAGEMENT

SPECIAL NOTE FOR RECYCLABLE SURFACE PREPARATION RESIDUE MANAGEMENT

SPECIAL NOTE FOR QUALITY CONTROL

SPECIAL NOTE FOR PAINT

SPECIAL NOTE FOR ENVIRONMENTAL AND WORKER SAFETY REGULATIONS

SPECIAL NOTE FOR PAYMENT

SPECIAL NOTE FOR STENCILING

SPECIAL NOTE FOR 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 2008 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.

<u>Air Movement</u>- 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**).

<u>Emissions -</u> 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 (μ g/m³) 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-SP1** 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 match existing.

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 <u>only</u> 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. MEASUREMENT.

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

H. 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.

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 comingled 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

Contract ID: 185005 Page 39 of 77

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.

QC Inspection Function

A. CLEAN AND PAINT STRUCTURAL STEEL

Quality Control Point

Surface Preparation

A. Solvent CleaningB. Abrasive Blast CleaningWisually inspect.Measure profile

Visually inspect for cleanliness.

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

3. Full Intermediate Check for dry film thickness, Coat (if applicable) 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 reading. 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 these 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. 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

Contract ID: 185005 Page 42 of 77

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.

Contract ID: 185005 Page 43 of 77

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%

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 PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

/KEEP/RIGHT/⇒⇒⇒/ /MIN/SPEED/**MPH/ /KEEP/LEFT/**⇐⇐** /ICY/BRIDGE/AHEAD/ /ONE LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /BRIDGE/WORK/***0 FT/ /SPEED/LIMIT/**MPH/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

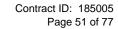
the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will not make direct payment for Variable Message Sign. Variable Message Signs will be considered incidental to Maintain and Control Traffic.

Special Note for Bridge Demolition, Renovation and Asbestos Abatement

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

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





Asbestos Inspection Report

To: Tom Springer, QK4, Inc.

Date: August 31, 2018

Conducted By: Jeffrey Lee, Lee Engineering, Ilc

Kentucky Accredited Asbestos Inspector # I11-05-8973

Project and Structure Identification

Project: Hardin County: Item No. 4-10011

Structure ID: # 047B00134N

Structure Location: Rineyville School Rd S of Lavista Drive, Hardin County, Kentucky

Sample Description: No Suspect ACM Observed.

Inspection Date: August 9, 2018

Results and Recommendations

The asbestos inspection was performed in accordance with current United States Environmental Protection Agency (US EPA) regulations, specifically 40 CFR Part 61, Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) revision, final rule effective November 20, 1990.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition (<u>DEP7036 Form</u>) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.

No suspect asbestos containing materials (ACM) were observed.

Contract ID: 185005 Page 52 of 77



KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226 Rev. 01/2016 Page 1 of 1

RIGHT OF WAY CERTIFICATION

	Original		Re-C	ertificatio	n	RIGHT	F WAY CERTIFICATI	ON		
10.0	ITEM	Ĥ		Maria Contract	COUNTY	PROJE	CT # (STATE)	PROJECT # (FEDERAL)		
04-3	10011.00			Hardin		FD04 047 22	12 B00134N			
PRO	JECT DESC	RIPTIO	N					·		
ADD	RESS DEFI	IENCII	ES OF R	Y 2212 B	RIDGE OVER PAWLEY	CREEK. (0478001	34N)			
							Open and the plants of	THE PARTS IN WORLD STREET		
Cons					The second secon	. The right of way w	as acquired in accord	ance to FHWA regulations		
unde	er the Unifor	m Relo	cation .	Assistance	and Real Property Acq	uisitions Policy Act o	of 1970, as amended. I	No additional right of way or		
reloc	cation assist	ance w	ere req	uired for ti	nis project.					
All n	ecessary rigi	nt of wa	ay, inclu	iding cont	rol of access rights whe	n applicable, have b	een acquired includin	g legal and physical		
poss	ession. Trial	or app	eal of c	ases may b	pe pending in court but	legal possession has	s been obtained. Ther	e may be some improvements		
rema	remaining on the right-or-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the									
right	t All colocat	, saivag	e, or a	emolish ali	improvements and ent	er on all land. Just (ompensation has bee	n paid or deposited with the		
adeo	u All relocat	ment l	ve beer	in accord	a to decent, sare, and sa	anitary nousing or tr	nat KYIC has made ava	allable to displaced persons		
1							VA directive.			
The										
proie	project has been acquired. Some narcels may be pending in court and on other parcels full legal possession has not been abtained, but									
right	of entry has	been i	btaine	d, the occ	upants of all lands and i	mprovements have	vacated, and KYTC ha	s physical possession and right		
to re	move, salva	ge, or d	lemolisi	h all impro	vements. Just Compens	sation has been paid	d or deposited with th	e court for most parcels. Just		
Com	pensation fo	r all pe	nding p	arcels will	be paid or deposited w	ith the court prior t	o AWARD of construc	tion contract		
							NE SAME SAFERY	Company of the second s		
The a							nplete and/or some pa	arcels still have occupants. All		
rema	aining occup	ants ha	ve had	replaceme	ent housing made availa	ble to them in acco	rdance with 49 CFR 24	1.204. KYTC is hereby		
requ	esting autho	rizatio	n to adv	ertise this	project for bids and to	proceed with bid le	tting even though the	necessary right of way will not		
be fu	illy acquired	, and/o	r some	occupants	will not be relocated, a	and/or the just com	pensation will not be p	paid or deposited with the		
court	t for some p	arcels u	intil aft	er bid letti	ng. KYTC will fully meet	all the requiremen	ts outlined in 23 CFR 6	35.309(c)(3) and 49 CFR		
24.10	02(j) and wil	exped	ite com	pletion of	all acquisitions, relocat	ions, and full payme	ents after bid letting a	nd prior to		
				tract or fo						
				0	EXCEPTION (5) Parcel #	ANTICI	PATED DATE OF POSSESSIC	N WITH EXPLANATION		
		iat nave	Been Ac	` 						
				_						
				0						
Notes	s/ Comments	(Use Ac	ditiona	Sheet if no	ecessary)					
	ROJECT DESCRIPTION DDRESS DEFICIENCIES OF KY 2212 BRIDGE OVER PAWLEY CREEK. (047800134N) No Additional Right of Way Required or construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations or other the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or obscation assistance were required for this project. Condition #1 (Additional Right of Way Required and Cleared) In eccessary right of way, including control of access rights when applicable, have been acquired including legal and physical ossession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements maining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the plants to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the purt. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons dequate replacement housing in accordance with the provisions of the current FHWA directive. Condition #2 (Additional Right of Way Required with Exception) The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the oject has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but offer thy has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just properties a part of the proper execution of the oject has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right remove, salvage, o									
Print	ted Name		(Chad Bou	rke, P.E.	Printed Name				
Sig	gnature		1	600		Signature	///	Mus		
	Date		-	7-14	-18	Date	000	174-18		
	_	Righ	t of W	ay Direct	or		FHWA			
Print	ted Name	_		Dean N	Pigitally signed by DM	Printed Name				
Sig	gnature	M	$\sqrt{1}$	OW	Loy					
	Date		* _ 							
	William Co.			U	100 FU" FF. / C.C.	Date				

UTILITIES AND RAIL CERTIFICATION NOTE

HARDIN COUNTY, FD04 047 2212 B00134N RINEYVILLE SCHOOL ROAD (KY 2212)/BRIDGE REHABILITATION SYP 04-10011

Utility coordination efforts conducted by the project sponsor have determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

, ,		
THE FOLLOWING RAI	L COMPANIES HAVE FACILITIES IN CONJUNC	TION WITH THIS PROJECT AS NOTED
☑ No Rail Involved	☐ Minimal Rail Involved (See Below)	☐ Rail Involved (See Below)

UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The

Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

UTILITIES AND RAIL CERTIFICATION NOTE

HARDIN COUNTY, FD04 047 2212 B00134N RINEYVILLE SCHOOL ROAD (KY 2212)/BRIDGE REHABILITATION SYP 04-10011

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

Utility Company/Agency	Contact Name	Contact Information
Nolin RECC	Greg Lee	<u> 270-766-7206</u>
Brandenburg Telephone	Kyle Dalton	<u>270-766-7531</u>
Windstream	Bruce Babbitt	270-765-1803
Comcast	Steve Gaddie	270-706-032 <u>6</u>

Kentucky Transportation Cabinet Project: 4-10011

NOTICE

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS NATIONWIDE SECTION 404 PERMIT AUTHORIZATION

DEPARTMENT FOR ENVIRONMENTAL PROTECTION KENTUCKY DIVISION OF WATER SECTION 401 WATER QUALITY CERTIFICATION

PROJECT DESCRIPTION: Bridge Rehabilitation on KY 2212 over Pawley Creek.

Hardin County, KY KYTC Item No. 4-10011

The Sections 404 and 401 activities for this project have previously been permitted under the authority of the Department of the Army, Nationwide Section 404 Permit Number 14, *Linear Transportation Projects* (with additional *Kentucky Regional General Conditions*), and the Division of Section 401 Water General Water Quality Certification. For these authorized permits to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Number 14 permit and General Water Quality Certification in a conspicuous location at the project site, with unencumbered public access, for the duration of construction and comply with the general conditions required.

Locations Impacting Water Quality

Bridge ID: 047B00134N The project will involve rehabilitation on the existing KY 2212 bridge over Pawley Creek through: deck patching; asphalt overlay; clean and paint beams and bearings; correct runoff gulley at SE corner; tree removal; and other regular maintenance activities. All work will be performed from the roadbed/bridge/or from existing right-of-way. Contractor will work in stream. Project will not result in the loss of greater than 0.1 acre of waters	Station-Location	Description
of the U.S.; will not result in the loss of greater than 300 linear feet of ephemeral, intermittent, or perennial stream; and will not discharge to a special aquatic site.	Bridge ID:	The project will involve rehabilitation on the existing KY 2212 bridge over Pawley Creek through: deck patching; asphalt overlay; clean and paint beams and bearings; correct runoff gulley at SE corner; tree removal; and other regular maintenance activities. All work will be performed from the roadbed/bridge/or from existing right-of-way. Contractor will work in stream. Project will not result in the loss of greater than 0.1 acre of waters of the U.S.; will not result in the loss of greater than 300 linear feet of ephemeral, intermittent, or perennial stream; and will not discharge to a

Kentucky Transportation Cabinet Project: 4-10011

This project involves work near and/or within Jurisdictional Waters of the United States as defined by the U. S. Army Corps of Engineers; therefore, requiring a Nationwide Number 14 General Section 404 permit. The Division of Water conditionally certified this General Permit. Importantly, one of those conditions regards the use of heavy equipment in any stream channel, or streambed. If there is need to cross the stream channel with heavy equipment, or conduct work within the stream channel, a work platform or temporary crossing, is authorized. This should be constructed with clean rock (preferably sandstone or granite east of a line stretching from the McCreary-Wayne County line to the southwest, northeasterly to Lewis-Greenup County line), and sufficient pipe to allow stream flow to continue, unimpeded (refer to the attached standard drawing for low-water crossings at end of the document). Other conditions may be found under the heading, *General Certification—Nationwide Permit # 14 Linear Transportation Projects*.

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Number 14 Approval in a conspicuous location at the project site, for the duration of the construction, and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design, or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain written permission from the Division of Construction and the Kentucky Transportation Cabinet, Division of Environmental Analysis. If such changes necessitate further permitting, then the contractor will be responsible for applying to the U. S. Army Corps of Engineers and the Kentucky Division of Water. A copy of any request to the Corps of Engineers or Division of Water to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.



MATTHEW G. BEVIN

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT

300 Sower Boulevard FRANKFORT, KENTUCKY 40601

General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

- 1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
- 2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
- 3. The activity will impact less than 1/2 acre of wetland/marsh.



General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- 4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet and in-stream stormwater detention/retention basins are not covered under this general water quality certification.
- 5. For complete linear transportation projects, all impacts shall not exceed a cumulative length of 500 linear feet within each Hydrologic Unit Code (HUC) 14.
- 6. Any crossings must be constructed in a manner that does not impede natural water flow.
- 7. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
- 8. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 9. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
- 10. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed
 of any material, silt fencing, hay bales, etc., shall not be placed within
 surface waters of the Commonwealth, either temporarily or permanently,
 without prior approval by the Kentucky Division of Water's Water Quality
 Certification Section. If placement of sediment and erosion control
 measures in surface waters is unavoidable, design and placement of
 temporary erosion control measures shall not be conducted in such a
 manner that may result in instability of streams that are adjacent to,

General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 3

upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.

- Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
- To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on vigation.
- (b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
 - 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
 - 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. <u>Shellfish Beds.</u> No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
 - 6. <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
 - 8. Adverse Éffects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. <u>Management of Water Flows</u>. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may after the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or
- Fills Within 100-Year Floodplains. The activity must comply with applicable FEMAapproved state or local floodplain management requirements.
 - 11 Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

- 12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
 - 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- Single and Complete Project. The activity must be a single and complete project.
 The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. (a) No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a preconstruction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.
 - (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/
 - Tribal Rights. No activity may impair tribal rights (including treaty rights), protected tribal resources, or tribal lands.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species or (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.
 - (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the responsible for fulfilling its obligation under section 7 of the

Contract ID: 185005

Page 60 of 77

Contract ID: 185005 Page 61 of 77

name(s) of the endangered or threatened species that might be affected by the proposed activity Federal applicant has identified listed species or critical habitat that might be affected or is in the district engineer will determine whether the proposed activity "may affect" or will have "no effect" vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant been satisfied and that the activity is authorized. For activities that might affect Federally-listed district engineer if any listed species or designated critical habitat might be affected or is in the work on the activity until notified by the district engineer that the requirements of the ESA have Corps has provided notification the proposed activities will have "no effect" on listed species or to listed species and designated critical habitat and will notify the non-Federal applicant of the has not heard back from the Corps within 45 days, the applicant must still wait for notification (c) Non-federal permittees must submit a pre-construction notification (PCN) to the or that utilize the designated critical habitat that might be affected by the proposed work. The Corps' determination within 45 days of receipt of a complete PCN. In cases where the nonendangered or threatened species or designated critical habitat, the PCN must include the rom Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) if the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa_respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

history interviews, sample field investigation, and field survey. Based on the information submitted proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, or designated tribal Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out consultation is not required when the district engineer determines that the activity does not have properties on which the activity might have the potential to cause effects and notified the Corps, that the activity has no potential to cause effects to historic properties or that NHPA section 106 Register of Historic Places, including previously unidentified properties. For such activities, the determinations for the purposes of section 106 of the NHPA: no historic properties affected, no the non-Federal applicant shall not begin the activity until notified by the district engineer either engineer if the NWP activity might have the potential to cause effects to any historic properties isted on, determined to be eligible for listing on, or potentially eligible for listing on the National pre-construction notification must state which historic properties might have the potential to be 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the affected by the proposed activity or include a vicinity map indicating the location of the historic (c) Non-federal permittees must submit a pre-construction notification to the district appropriate identification efforts, which may include background research, consultation, oral in the PCN and these identification efforts, the district engineer shall determine whether the current procedures for addressing the requirements of Section 106 of the National Historic adverse effect, and adverse effect. Where the non-Federal applicant has identified historic parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect representative, as appropriate, and the National Register of Historic Places (see 33 CFR the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required. If NHPA section 106 consultation is required applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Contract ID: 185005 Page 62 of 77

- ananged marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
 - (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
 - 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
 - (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.
 - (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- waters will normally include a requirement for the restoration or enhancement, maintenance, and (e) Compensatory mitigation plans for NWP activities in or near streams or other open maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based but the district engineer may require slightly wider riparian areas to address documented water both wetlands and open waters exist on the project site, the district engineer will determine the legal protection (e.g. conservation easements) of riparian areas next to open waters. In some on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or on what is best for the aquatic environmental on a watershed basis. In cases where riparian compensatory mitigation required. Restored riparian areas should consist of native species. mitigation, the district engineer may waive or reduce the requirement to provide wetland areas are determined to be the most appropriate form of minimization or compensatory cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation for wetland losses.
 - (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.
 - (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
 - (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
 - (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
 - (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.
 - (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

 24. Safety of Impoundment Structures are
 - 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
 - erisure sarery. 25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

Contract ID: 185005 Page 63 of 77

Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
 - 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the work and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.
- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally

authorized Civil Works project (a "USACE project"), the prospective permittee must submit a preconstruction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the section 408 permission to altar, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

- 32. <u>Pre-Construction Notification (PCN)</u>. (a) <u>Timing.</u> Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
 - (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
 - (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
 - (1) Name, address and telephone numbers of the prospective permittee; (2) I ocation of the proposed activity:
- (2) Location of the proposed activity;(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an

Contract ID: 185005 Page 64 of 77

illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans)

especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on and other waters on the project site, but there may be a delay if the Corps does the delineation (5) The PCN must include a delineation of wetlands, other special aquatic sites, and the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites submitted to or completed by the Corps, as appropriate;

mitigation requirement will be satisfied, or explaining why the adverse environmental effects are (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. no more than minimal and why compensatory mitigation should not be required. As an

(7) For non-federal permittees, if any listed species or designated critical habitat might critical habitat that may be affected by the proposed activity. For any NWP activity that requires habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or pre-construction notification, Federal permittees must provide documentation demonstrating be affected or is in the vicinity of the project, or if the project is located in designated critical threatened species that might be affected by the proposed activity or utilize the designated compliance with the Endangered Species Act;

property might have the potential to be affected by the proposed activity or include a vicinity map eligible for listing on, the National Register of Historic Places, the PCN must state which historic (8) For non-federal permittees, if the NWP activity might have the potential to cause indicating the location of the historic property. Federal permittees must provide documentation effects to a historic property listed on, determined to be eligible for listing on, or potentially demonstrating compliance with Section 106 of the National Historic Preservation Act.

inclusion in the system while the river is in an official study status, the PCN must identify the (9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of 408 permission from the Corps office having jurisdiction over that USACE project.

this general condition. A letter containing the required information may also be used. Applicants NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of ENG 4345) may be used, but the completed application form must clearly indicate that it is an (c) Form of PCN Notification: The standard individual permit application form (Form may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal.

activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in (2) Agency coordination is required for: (i) all NWP activities that require water line or ordinary high water mark.

provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a (3) When agency coordination is required, the district engineer will immediately copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural

resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may engineer will wait an additional 15 calendar days before making a decision on the pre-construction adverse environmental effects will be more than minimal. If so contacted by an agency, the district notification. The district engineer will fully consider agency comments received within the specified proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of received to decide whether the NWP 37 authorization should be modified, suspended, or revoked proposed activity are no more than minimal. The district engineer will provide no response to the 37, these agencies will have 10 calendar days from the date the material is transmitted to notify time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the substantive, sites pecific comments. The comments must explain why the agency believes the the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide property or economic hardship will occur. The district engineer will consider any comments in accordance with the procedures at 33 CFR 330.5.

engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-(4) In cases of where the prospective permittee is not a Federal agency, the district

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple Stevens Fishery Conservation and Management Act.

copies of PCN notifications to expedite agency coordination.

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP. Further Information

2. NWPs do not obviate the need to obtain other federal, state, or local permits approvals, or authorizations required by law.

4. NWPs do not authorize any injury to the property or rights of others. 3. NWPs do not grant any property rights or exclusive privileges.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

Terms for Nationwide Permit No. 14 – Linear Transportation Projects

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

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

Contract ID: 185005 Page 70 of 77

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

- 1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.
- 2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.
- 3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

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

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

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.
- 4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Contract ID: 185005 Page 71 of 77

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

. _...

BEGINNING JULY 24, 2009

OVERTIME PAY

At least $1\frac{1}{2}$ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR

An employee must be at least **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.
- \bullet Some state laws provide greater employee protections; employers must comply with both.
- \bullet 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.



Contract ID: 185005

Page 73 of 77

PART IV

INSURANCE

Contract ID: 185005 Page 75 of 77

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

185005

FD04 047 2212 B00134N **PROPOSAL BID ITEMS** Contract ID: 185005 Page 77 of 77

Page 1 of 1

Report Date 10/9/18

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00301		CL2 ASPH SURF 0.38D PG64-22	20.00	TON		\$	
0020	03304		BRIDGE OVERLAY APPROACH PAVEMENT	130.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0030	02383		REMOVE & RESET GUARDRAIL	200.00	LF		\$	
0040	02483		CHANNEL LINING CLASS II	18.00	TON		\$	
0050	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	

Section: 0003 - BRIDGE - PAWLEY CREEK

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0060	02599		FABRIC-GEOTEXTILE TYPE IV	85.00	SQYD		\$	
0070	03250		WATERPROOFING MEMBRANE	80.00	SQYD		\$	
0800	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0090	08019		CYCLOPEAN STONE RIP RAP	100.00	TON		\$	
0100	08434		CLEAN & PAINT STRUCTURAL STEEL	1.00	LS		\$	
0110	08510		REM EPOXY BIT FOREIGN OVERLAY	80.00	SQYD		\$	
0120	22146EN		CONCRETE PATCHING REPAIR	214.00	SQFT		\$	
0130	23378EC		CONCRETE SEALING	1,000.00	SQFT		\$	
0140	23744EC		EPOXY INJECTION CRACK REPAIR	8.00	LF		\$	

Section: 0004 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0150	02569	DEMOBILIZATION	1.00	LS	3	\$	