

CALL NO. <u>309</u> CONTRACT ID. <u>232340</u> <u>HANCOCK COUNTY</u> FED/STATE PROJECT NUMBER <u>FD04 046 0060 002-010</u> DESCRIPTION <u>OWENSBORO ROAD (US 60)</u> WORK TYPE <u>JPC PAVEMENT REPAIRS - DIAMOND GRINDING</u> PRIMARY COMPLETION DATE <u>11/15/2023</u>

LETTING DATE: June 22,2023

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME June 22,2023. 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
- SURFACING AREAS
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- JPC PAVEMENT SMOOTHNESS
- JPC RIDE QUALITY
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION B
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- NON-TRACKING TACK COAT
- EDGE KEY (BY TON)
- ASPHALT MILLING AND TEXTURING
- MEDIAN CROSS-OVERS PAVEMENT TYPE
- TRAFFIC CONTROL PLAN
- DURABLE PAVEMENT EDGE DETAILS
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- DETAIL SHEET(S)
- BRIDGE DETAIL FOR PAVING PROJECT

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-11] PORTABLE CHANGEABLE SIGNS
- [SN-10Y] UNSEALED JPC PAVEMENT AND SHOULDER JOINTS
- [SN-11K] PARTIAL DEPTH CONCRETE PAVEMENT REPAIR
- 2020 STANDARD DRAWINGS THAT APPLY

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 FUNDED
- PART IV INSURANCE
- PART V BID ITEMS

PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 02

CONTRACT ID - 232340

FD04 046 0060 002-010

COUNTY - HANCOCK

PCN - MP04600602301 FD04 046 0060 002-010

OWENSBORO ROAD (US 60) (MP 2.30) BEGIN AT CONCRETE JOINT 0.367 MILES EAST OF KY 657 EXTENDING EAST TO 0.275 MILES WEST OF NUGENT RD (MP 9.070), A DISTANCE OF 06.77 MILES.JPC PAVEMENT REPAIRS - DIAMOND GRINDING

GEOGRAPHIC COORDINATES LATITUDE 37:55:37.06 LONGITUDE 86:49:10.00 ADT 10,443

COMPLETION DATE(S):

COMPLETED BY 11/15/2023 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 <u>KRS 14A.9-010</u> to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under <u>KRS 14A.9-030</u> unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in <u>KRS 14A.9-010</u>, the foreign entity should identify the applicable exception. Foreign entity is defined within <u>KRS 14A.1-070</u>.

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (<u>www.transportation.ky.gov/contract</u>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

BUILD AMERICA, BUY AMERICA ACT (BABA)

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA), Pub. L. No. 117-58, includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§70901-52. The Act strengthens the Buy America preference to include "construction materials." The current temporary waiver for <u>"construction materials"</u> will expire on November 10, 2022.

The Act will apply to construction materials as outlined in the guidance issued in OMB M-22-11.

Construction Materials – Includes an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives – that is or consists primarily of:

- Non-ferrous metals
- Plastic/polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Lumber; or
- Drywall.

Construction Materials only applies to items, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project.

Construction Materials does not apply to tools, equipment or supplies brought to the jobsite and removed before completion.

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to <u>KRS 45A.607</u>, they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

LOBBYING PROHIBITIONS

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in <u>KRS 11A.236</u> during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to <u>KRS 45A.328</u>, they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

February 1, 2023

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

SURFACING AREAS

The Department estimates the mainline JPC surfacing width to be varied 24 to 36 feet. The Department estimates the total mainline area to be JPC surfaced to be 113,140 square yards. The Department estimates the Asphalt shoulder width to be varied 0 to 10 feet on each side. The Department estimates the total Asphalt shoulder area to be surfaced to be 56,884 square yards.

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.

JPC PAVEMENT SMOOTHNESS

JPC Pavement Smoothness requirements shall apply on this project in accordance with Section 501 of the current Standard Specifications.

JPC RIDE QUALITY

The Department will apply JPC Ride Quality requirements on this project in accordance with Section 501.03.19(B).

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

FD05 046 0060 002 010 Notes

Project begins 0.34 miles east of intersection with KY657 in Lewisport, KY. Project ends 0.1 miles west of KY3101 near Hawesville, KY. Work is to be completed on the east bound lanes ONLY. Project may interfere with CID 221058 let Nov 17, 2022. Four new portable changeable message boards are included in this project. Portable changeable message boards are to become the property of KYTC at the end of the project. Contractor is required to coordinate with existing project in the area. Project involves the following:

Replacing transverse joints

Removing and replacing JPC pavement

Removing existing shoulder and replacing

Repair/Patching of JPC pavement

Sealing cracks in JPC pavement

Diamond grinding mainline JPC pavement

The contractor will be responsible for diverting and maintaining traffic. Traffic is to be transitioned at the initial split to 4 lanes at Lewisport. East bound traffic will be diverted to the left west bound lane. Allowing the contractor to work freely within the zone. East end crossover is considered a lump sum item. At east crossover an 18in pipe will be needed to drain the median. West end crossover will be covered under temporary striping. Shoulders are in very poor condition and are to be removed. Quantities of roadway excavation have been included for work on the shoulders. Shoulder material that is removed may be removed from the job site or graded into the slope. Shoulders are to be reconstructed with 4.25in of CL3 ASPH BASE 1.0D PG64-22 and 1.5in of CL3 ASPH SURF 0.5B PG64-22.

Removal and replacement of JPC pavement will be completed according to section 501 of the 2019 Standard Specifications. The cabinet has found 80 transverse joints that are to be removed and replaced. Quantities were calculated by full pavement width and allowing three feet on each side of the joint. Quantities for full depth removal and replacement were calculated based on the actual measurements. DGA base has been included to level areas where JPC pavement has been removed. A list of locations and sizes is attached.

Patching of locations where pavement markers have been removed are considered incidental to remove pavement marker bid item.

A diamond grind of all mainline and turn lanes is required. A ride quality must be completed.

Temporary striping has been included for the restripe of the west bound lanes. Water blasting has also been included for removing the temporary paint when the project is near completion.

Located at KY1957 (MM 4.67) is a 600ft turn lane. Three hundred feet of the turn lane is asphalt. The contractor is to mill out 1.25in of asphalt and replace with 1.0in of asphalt to match pavement after diamond grinding.

There are several access locations throughout the project crossing the median. These locations have asphalt surfacing. Contractor is to mill 1.25in at mainline and replace with 1.0in to match pavement after diamond grinding. Quantities and locations have been included in the milling summary. Milling at center of median is to be 1.0in. At KY1957 there is a 600ft turn lane is has 300ft of asphalt surface. Contractor is to mill 1.25in out of asphalt and replace with 1.0 inch to match concrete after diamond grind.

SPECIAL NOTE FOR JPC INTERSECTION PAVEMENT

I. DESCRIPTION

Except as specified herein, construct Jointed Plain Concrete (JPC) intersection pavement in accordance with the Department's Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. Furnish all materials, equipment, labor, and incidentals for:

(1) Removing asphalt and/or concrete pavement and replacing with JPC Pavement; (2) Maintaining and controlling traffic; and (3) All other work specified as part of this contract.

II. MATERIALS

The Department will sample and test all materials according to the Department's sampling Manual. Make the materials available for sampling a sufficient time in advance of their use, to allow for the necessary time for testing, unless otherwise specified in these notes.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Dense Graded Aggregate. Do not furnish Crushed Stone Base in lieu of DGA.

C. Jointed Plain Cement Concrete Pavement. Use JPC Pavement 8 IN. At Contractor's request and at no additional cost to the Department, the Engineer may approve other high early strength rapid setting concrete. The Department will allow either central mixing or truck mixing.

D. Joint Sealant. Use hot poured elastic, no alternates.

E. Traffic Signal Loops. See Special Notes for Traffic Signal Preformed Loop Replacement. (IF APPLICABLE)

III. CONSTRUCTION METHODS

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation, including but not limited to, incidental excavation and backfilling; removal of all obstructions or any other items;

disposal of materials; sweeping and removal of debris; shoulder preparation and restoration; temporary and permanent erosion and pollution control; final dressing, clean up, and seeding; and all incidentals. Perform all Site Preparation only as approved or directed by the Engineer.

C. Pavement Removal. Consider pavement removal locations and dimensions shown on the drawings to be approximate only; the Engineer will determine exact locations and dimensions at the time of construction. Prior to removal, saw-cut existing asphalt and/or concrete pavement at locations directed by the Engineer to provide a neat edge where new concrete will adjoin existing pavement. Remove existing asphalt and/or concrete pavement, underlying stone base if necessary to provide for the specified thickness of the replacement JPC Pavement.

D. Concrete Pavement Replacement. Prior to pavement removal and placing JPC Pavement, obtain the Engineer's approval of proposed method of construction for ensuring and establishing a smooth profile. Immediately after removing asphalt pavement, stabilize the base as directed by the Engineer with crushed stone base and place the replacement JPC in a continuous operation in accordance with the Traffic Control Plan Phasing and as directed by the Engineer. Construct the replacement JPC Pavement with a minimum depth of 8 inches; however, transition the finished grade to match adjacent pavement that is to remain in place; therefore, the actual thickness of the pavement may be greater than 8 inches in some areas. Consolidate the concrete, strike off, machine finish with a vibrating or roller screed, and straightedge the plastic concrete with a straightedge conforming to Section 501.02.18. Test the profile of the finished pavement with a 12 foot straight edge according to Section 501.03.19. Provide positive drainage upon completion of construction.

E. Joint Sealing. Saw, clean, and seal transverse and longitudinal joints as shown on the standard drawings and as directed the Engineer.

F. Traffic Signal Loops. See Special Notes for Traffic Signal Preformed Loop Replacement. Protect lead wires from each loop to the junction box during each phase of the construction sequence at no additional cost to the Department.

G. Disposal of Waste. Dispose of all cuttings, debris, and other waste off the right-ofway at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

H. Pavement Markings. See traffic Control Plan.

I. On-Site Inspection. Prior to submitting a bid, make a thorough inspection of the site and become thoroughly familiar with the existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.

J. Property Damage and Restoration. Be responsible for all damage to public and/or private property resulting from the work. Repair or replace all damaged roadway features in like kind materials and design at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner.

K. Caution. Consider information shown on the drawings and in this proposal and the types and quantities of work listed are approximate only, and not as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

L. Utility Clearance. Determine the location of all underground and overhead utilities prior to construction. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that work does require relocation and/or adjustment, the utility companies will work concurrently with the Contractor while relocating their facilities.

M. Final Dressing, Clean Up, and Seeding and Protection. After all work is completed, remove all waste and debris from the construction sites. Remove all temporary shoulder widening and restore disturbed shoulders. Perform Class A final dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. 1.

N. Coordination of Work. Be advised that other projects may be in progress within or in the near vicinity of this project. Take into consideration that the traffic control of those projects may affect this project and the traffic control of this project may affect those projects. Coordinate the work on this project with the work of the other contractors. In case of a conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed. All other items required to complete the construction shall be incidental to the listed bid items.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of the work.

C. Remove Pavement. The Department will measure removed asphalt pavement in square yards.

D. JPC Pavement-8 IN. See Section 502.04.01 and Section 501.04.01.

E. Joint Sealing. The Department will not measure Joint Sealing for payment, but shall be incidental to the bid item JPC Pavement-8 IN.

F. Signal Loops. See Special Notes for Traffic Signal Preformed Loop Replacement.

G. Smooth Dowels, Deformed Tie Bars, and Hook Bolts. The Department will not measure smooth dowels, deformed tie bars and hook bolts, but will be incidental to JPC Pavement-8 IN.

IV. BASIS OF PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Remove Pavement. Payment at the contract unit price per square yard shall be full compensation for saw cutting, milling and texturing, and removing existing pavement (asphalt and/or concrete); disposing of waste and debris.

C. JPC Pavement-8 IN. See Section 502.05.

D. Signal Loops. See Special Notes for Traffic Signal Preformed Loop Replacement.

SPECIAL NOTE FOR STAKING

In addition to the requirements of Section 201, perform the following:

- 1. Contrary to Section 201.03.01, perform items 1-3 usually performed by the Engineer; and
- 2. Field survey the existing pavement in order to establish the existing cross slopes, transitions and profile. Irregularities in the existing pavement are to be eliminated with the construction of a smooth line and grade of the new JPC pavement to ensure the best rideability possible.
- 3. Verify intersection and lane profile and alignment and prepare a Drainage Development Worksheet to provide for positive drainage upon completion of construction; and
- 4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
- 5. Produce and furnish to the Engineer "As Built" plans; and
- 6. Perform any and all other staking operations required to control and construct the work.
- 7. No direct payment will be made for staking. Staking will be incidental to other items of work.

SPECIAL NOTE FOR FOLD AND FORM PVC PIPE LINERS PIPE REHABILITATION BY THERMOFORMED (FOLD AND FORM) PIPE METHOD

DESCRIPTION OF WORK

The work specified under this section provides for the rehabilitation of an existing culvert pipe using PVC Fold and Form trenchless technology. The process consists of installing a thermoformed PVC pipe liner inside an existing culvert (Host Pipe) from inlet to outlet as described in the following sections. When installed the liner will be a seamless, joint-less, solid wall PVC pipe liner that tightly conformed to the interior contours of the original host pipe. The liner shall be continuous from inlet to outlet with no seams or joints. In most cases required service connections will be reconnected using closed circuit television and remotely controlled cutters.

REFERENCED DOCUMENTS

This specification references ASTM standards and other related standards, which are made a part hereof by reference and shall be the latest edition thereof.

ASTM-F1504

ASTM-E831: Coefficient of Linear Thermal Expansion

ASTM-D638: Tensile Strength and Tensile Modulus

ASTM-D790: Flexural Strength and Flexural Modulus

ASTM-D792: Specific Gravity

ASTM-D256: IZOD Impact

CONSTRUCTION

PRE-INSTALLATION Host Pipe Preparation

The host pipe shall be inspected and cleaned prior to culvert lining. Any cleaning or clearing of pipes shall be included in the item "Ditching and Shouldering" or "Clean Pipe Structure". Prior to inserting the PVC liner, each pipe should be inspected to verify any connecting pipes and also to determine if additional work will be needed to prepare the host pipe for the PVC liner. Any work necessary to prepare the host pipe shall be incidental to PVC pipe liners.

LINER INSTALLATION

Pre Heating

Prior to insertion of the liner into the host pipe the Contractor shall pre-heat the liner in the manner prescribed by the manufacturer's installation instructions. The heated liner must be pliable enough to be pulled into the host pipe with as little resistance as possible.

Pipe Liner Insertion

The liner pipe shall be inserted into the culvert through existing catch basins or culvert inlet or outlets. Insertion of the liner into the host pipe will be accomplished by pulling the liner into the host pipe according to the manufacturer's recommendations.

Stress Relief

After the liner has been inserted into the host pipe, the Contractor shall relieve any stress imparted to the liner during the insertion in a manner prescribed in the manufacturer's installation instructions.

Processing

The Contractor shall supply suitable heat source equipment. The equipment shall be capable of delivering steam through the lining section to uniformly raise the temperature of the PVC material to effect forming of the liner pipe.

Suitable monitors shall be installed to gauge steam temperatures and temperatures at the input and exhaust ends of the liner. Steam monitoring methods and forming period shall be recommended by the liner manufacturer.

After forming the liner shall be cooled using compressed air or a mixture of compressed air and water. Cooling shall be deemed complete when the temperature of the exhaust air or air water mixture has remained constantly below 110°F for a minimum of 20 minutes.

Pipe Liner Trimming

After installation the ends of the PVC liner shall be cut off and the ends folded over the host pipe or pressed flush against the headwall.

Connecting pipes

The exact number and location of pipe connections shall be determined from the pre-lining inspection. It shall be the Contractor's responsibility to accurately locate all existing pipe connections. The Contractor shall reconnect all pipe connections to the pipe liner.

All existing service connections shall be reinstated by remotely controlled robotic device or other methods approved by the Engineer.

Pipe reconnections shall be smooth and circular in nature. The opening shall be smooth and conform to the inside shape and size of the original connection. Trial cuts should be repaired per the pipe liner manufacturer's recommendations not be at no cost to the Department.

DEFECT REPAIR OR REPLACEMENT

Any defects, which in the judgment of the Department and the pipe liner manufacturer that will affect the integrity or strength of the liner, shall be repaired or the pipe liner replaced at the Contractor's expense per the pipe liner manufacturers recommendations. All repairs or replacement of defective work shall be completed to the full satisfaction of the Department.

PAYMENT

Payment for the work included in this section will be paid by the linear foot of pipe lined. Work incidental to the lining process such as, by-pass pumping, traffic control, pipe preparation, and other activities necessary to line the pipe shall not be paid for directly but shall be considered incidental.

SPECIAL NOTE FOR NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can "break" within 15 minutes under conditions listed in 3.2.

2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.

2.1.1	Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 - 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue ¹ , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

¹Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14" and 18" from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

Surface Preparation. Prior to the application of the non-tracking tack, ensure the 3.1 pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 - 180 °F. After the initial heating, between 170 - 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.

3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.

- 4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
- 5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

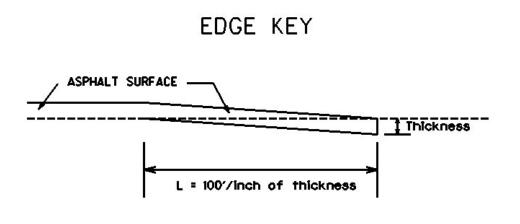
Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20-100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 - 48.9	48.0 - 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 - 0.94	0.90 - 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 - 96.9	96.6 - 96.7	96.4 - 96.5	≤ 96.3

<u>Code</u> 24970EC Pay Item Asphalt Material for Tack Non-Tracking <u>Pay Unit</u> Ton

Revised: May 23, 2022

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.



Thickness = 1.25 Inches

L = 125 LF

1-3309 Edge key by Ton 01/02//2012

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within <u>48 hours</u> of commencement of the milling operation. Continue paving operations continuously until completed. If paving operations are not begun within this time period, the Department will assess liquidated damages at the rate prescribed by Section 108.09 until such time as paving operations are begun.

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver this material to the State Maintenance facility in Hancock County.

NOTICE TO CONTRACTOR: The Department considers transfer of millings to the state maintenance facility to be a part of the construction project.

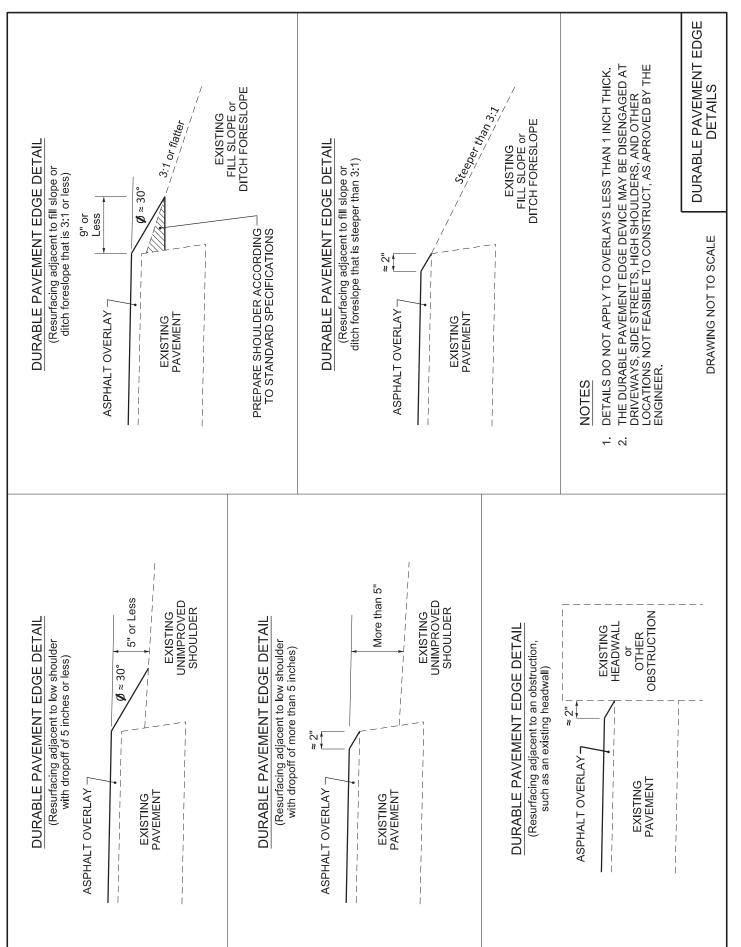
1-3530 48 hours State keeps millings 01/2/2012

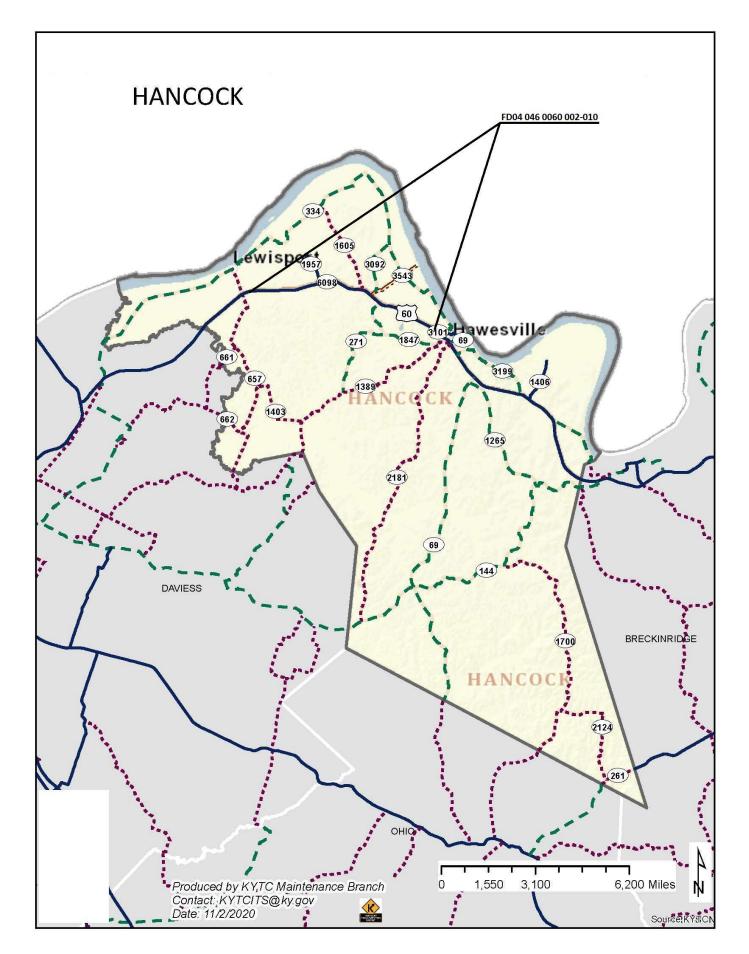
SPECIAL NOTE FOR MEDIAN CROSS-OVERS

Resurface median cross-overs with the same asphalt material as specified for the outside shoulders. Except as specified herein, resurface the median crossovers according to Sections 402 and 403.

1-3710 Median Crossovers 01/02/2012

	OUNTY 5555 USER: 5555USER5555 10 002-010				ct ID: 232340
	0002-010	ن د .	Ņ		age 27 of 59
COMMONWEALTH OF KENTUCKY K HANCOCK COUNTY - US 60 DEPARTMENT OF HIGHWAYS MP 2.2 TO MP 9.4	TEMPORARY MEDIAN CROSSOVER PAVEMENT 1 1/2" CL3 ASPH. SURF. 0.50B PG64-22 3" CL3 ASPH. BASE 1.00D PG64-22 8" CRUSHED STONE BASE	Less Than should be 2 to 4 inc 2 sould be barricades per plastic drum flatter slo between t barricades rary condition ic drums, v ours while atments th ts. ril be allow ril be allow ril be allow ril be allow the Manue	Pavement Drop-Off Pavement edges that traffic is not expected to cross, except accidentally, should be treated as follows:	RAFFIC CONTROL SPECIAL NOTES The Contractor shall maintain a one lane traveled way with a minimum lane width of 10 feet, unless noted otherwise.	MAINTENANCE
NS' NS' NS NS' NS NOT NOTES	4-IN SINGLE WHITE TEMPORARY PAINT TYPICAL SECTION WESTBOUND LANES PHASE 1 MOT	CONSTRUCT ALL CROSS DRAINS AND CULVERT EXTENSION, BEGINNING AT THE DRAINTAIN POSITIVE DRAINAGE AT ALL TIMES. PROVIDE TEMPORARY ACCESS TO ALL PARCELS DURING CONSTRUCTION. CONSTRUCT ALL PAVEMENT COURSES THROUGH FINAL SURFACE. PHASE 2 SHIFT ALL EASTBOUND TRAFFIC TO THE NEWLY CONSTRUCTED LANES.	THE WESTBOUND LANES. OF 10 FEET, UNLESS NOTED OTHERW	PHASE 1	E OF TRAFFIC





HANCOCK COUNTY FD04 04<mark>6 0060 002-010</mark>

Milling Summary Sheet

Contract ID: 232340 Page 30 of 59

Project: FD05 046 0060 002 010

County: Hancock

Mile Point	Notes	Length	Width	Avg Depth	Tons
2.400	Grace Ct.	31	118	1.25	27.9
2.870	Skyline	32	43	1.25	10.5
3.290	Pleasant	60	50	1.25	22.9
3.670	Scenic	53	72	1.25	29.2
4.050	Frank	31	31	1.25	7.3
4.373	John Pate/ Honeywell	31	31	1.25	7.3
4.670		300	12	1.25	27.5
4.790	KY1957	31	31	1.25	7.3
5.180	KY6098	50	80	1.25	30.6
5.490	Access	63	60	1.25	28.9
5.780	Access Rd.	70	50	1.25	26.7
6.080	Access	77	60	1.25	35.3
6.410	Fred Hodge	50	50	1.25	19.1
6.840	Windward	38	37	1.25	10.7
7.250	KY271	33	45	1.25	11.3
7.760	Log Cabin	80	40	1.25	24.4
8.122	Vastwood	80	47	1.25	28.7
8.680	Bruner Ln	82	45	1.25	28.2
9.300	Nugent	74	34	1.25	19.2
				Total:	403

Project: FD05 046 0060 002 010

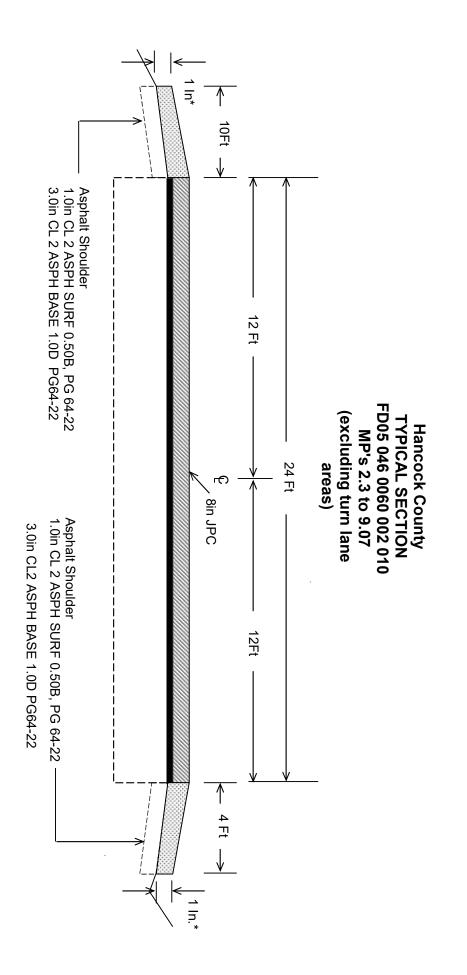
County: Hancock

District: D2 - Madisonville

Milepoint	Location	Notes	PAVE MARKIN G- THERMO CURV ARROW	PAVE MARKIN G- THERMO STOP BAR-24IN
2.800	Skyline Trailer	Arrows/ Stop Bar	3	0
3.990	Frank Luttrell/ Roberts	Arrow/Stop Bar/ X- Walk	6	12
4.300	John Pate/ Honeysuckle		3	14
4.670	KY1957		5	14
6.350	Fred Hodge		3	14
7.250	KY271		3	14
<u> </u>		Total:	23	68

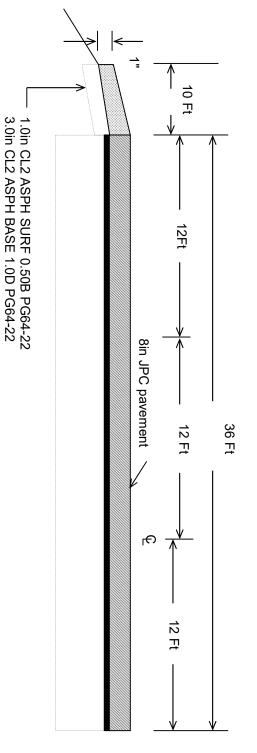
Hancock County FD04 046 0060 002-010 PVC Fold/Form Pipe Summary

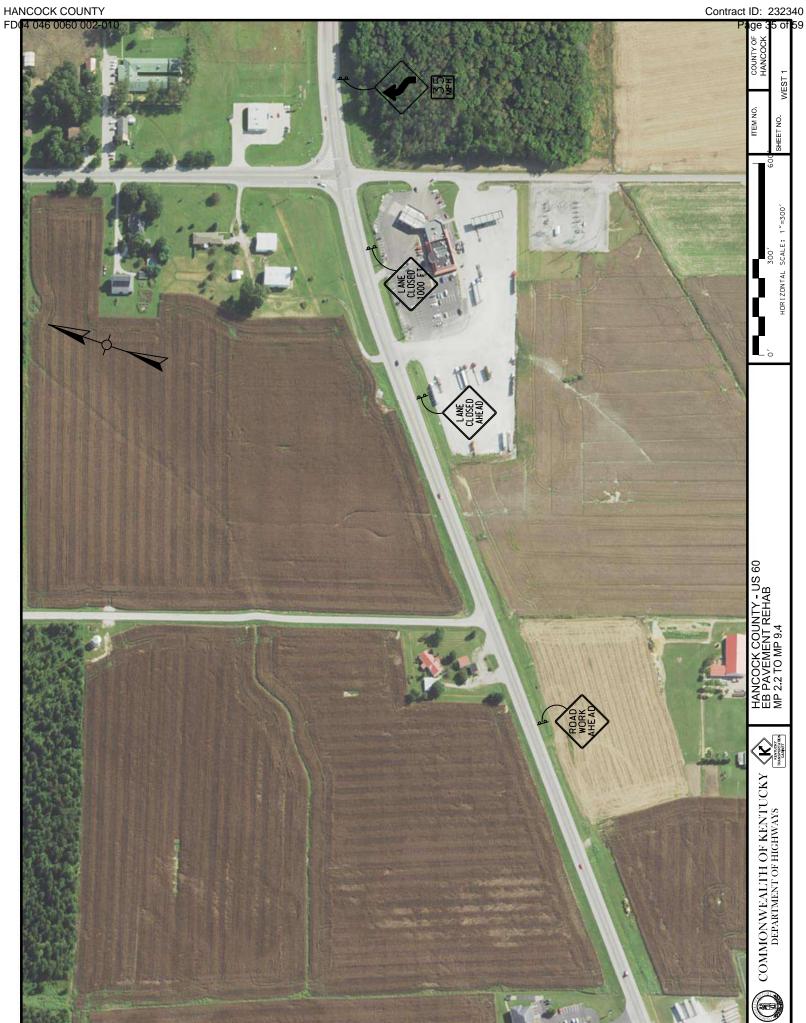
Mile marker	Size (in)	Length (ft)	Notes
3.01	36	97	
3.06	30	106	
3.1	18	110	
3.26	30	120	
3.53	24	123	
3.72	24	110	Needs to be cleaned to verify size
3.74	32	142	
3.84	24	151	
3.99	24	111	
4.09	32	97	
4.15	18	94	
4.22	18	98	
4.3	30	98	
4.35	24	122	
4.45	24	130	
4.7	24	122	Outlet on other side of ROW fence
4.73	32	147	Outlet on other side of ROW fence
5.52	24	111	
5.56	30	113	
5.89	30	128	
5.97	24	130	Outlet on other side of ROW fence
6.1	36	130	Outlet on other side of ROW fence
6.84	24	106	
7.12	36	139	
7.16	24	144	
8.1	18	50	
8.37	18	60	
8.44	18	60	
8.48	18	60	
8.65	18	70	
8.8	36	50	
9	24	70	



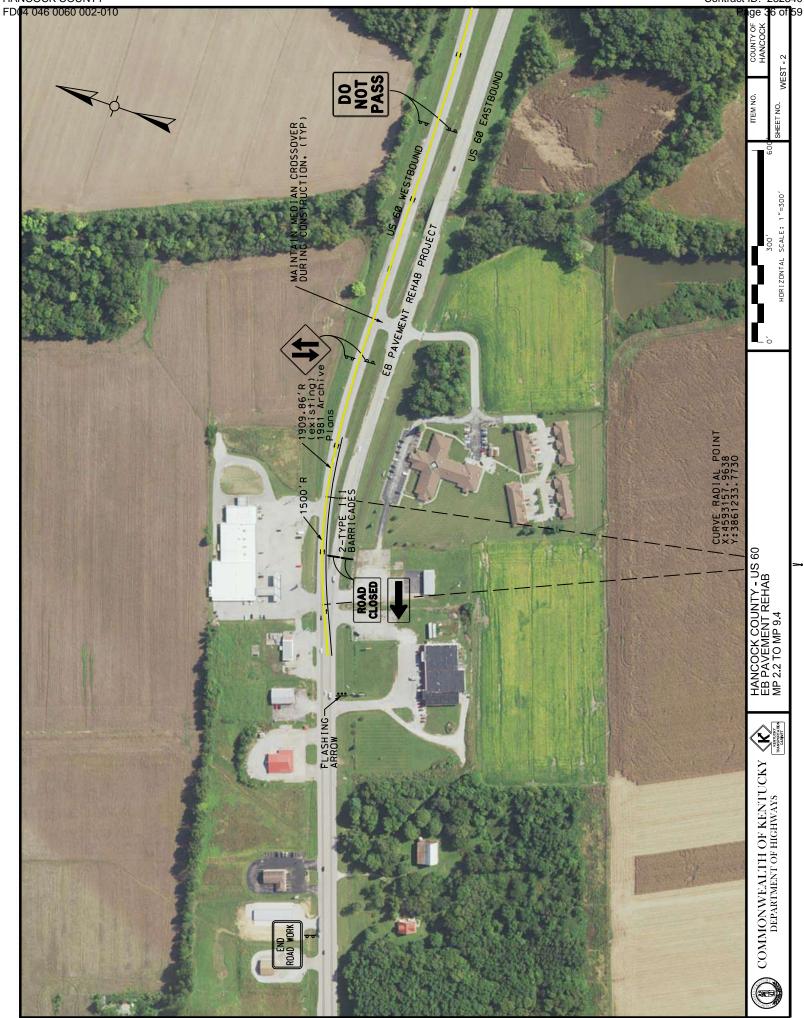
*Where Existing Site Conditions Permit

Hancock County TYPICAL SECTION (Turn Lane Sections) FD05 046 0060 002 010 MP's 2.8 to 2.89 3.97 to 4.05 3.99 to 4.05

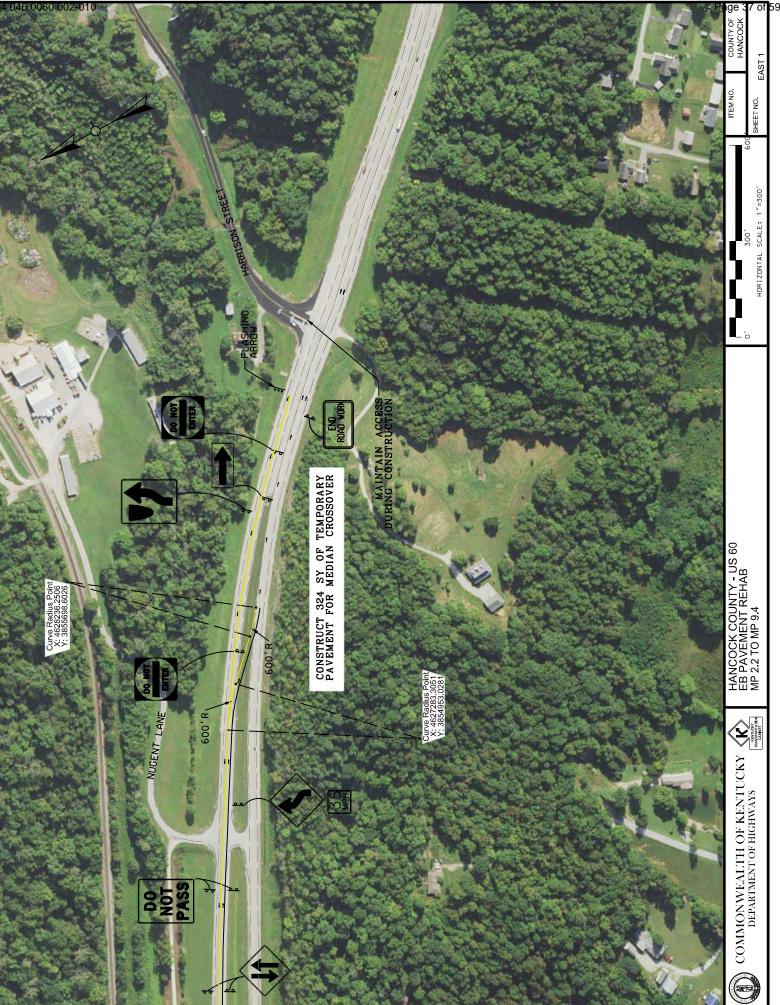




SSSSELVUSSSS :ELV NCER: \$\$\$\$UCER\$\$



DATE: \$\$\$\$DATE\$\$\$\$ USER: \$\$55DATE\$\$



DATE: \$\$\$\$DATE5555 USER: 5355USER:57



DATE: \$\$\$\$DATE\$\$\$\$ USER: \$\$\$\$DATE\$\$\$

TRAFFIC CONTROL SPECIAL NOTES

- The Contractor shall maintain a one lane traveled way with a minimum lane width of 10 feet, unless noted otherwise.
- Pavement Drop-Off

Pavement edges that traffic is not expected to cross, except accidentally, should be treated as follows:

- Less Than 2 inches No protection required. Warning signs should be placed in advance and throughout the drop-off area.
 - 2 to 4 inches Place plastic drums, vertical panels or barricades every 90 feet on tangent sections for speeds of 45 miles per hour or greater. Cones may be used in place of plastic drums, panels, and barricades during daylight hours.
- Greater Than 4 inches Positive separation or wedge with 3:1 or flatter slope needed. If there is 5 feet or more distance between the adge of pavement and drop-off, drums panels or barricades may be used.

For temporary conditions, drop-offs greater than 4 inches may be protected with plastic drums, vertical panels of barricades for short distances during daylight hours while work is being done in the drop-off area. Lesser treatments than those described above may be considered for low-volume local streets.

Payment wil be allowed for crushed stone base materials used for wedging.

- The contractor shall remove temporary facilities such as diversions and restore to original condition, as directed by the engineer, when the facilities are no longer needed.
- All traffic control devices and methods shall confrom to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

PHASING NOTES

PHASE 1

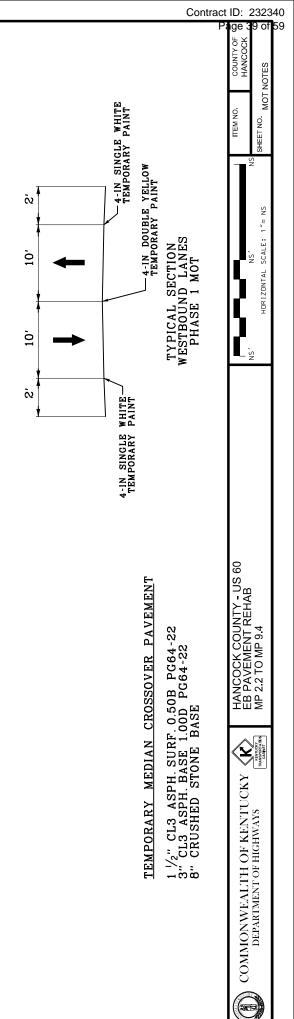
SHIFT ALL EASTBOUND TRAFFIC TO THE WESTBOUND LANES. Maintain a minimum lane width of 10 feet, unless noted otherwise. Construct all cross drains and culvert extension, beginning at the Døwnstream end. Maintain positive drainage at all times.

MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.

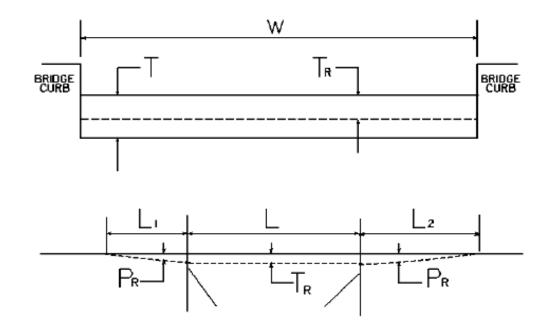
PROVIDE TEMPORARY ACCESS TO ALL PARCELS DURING CONSTRUCTION. CONSTRUCT ALL PAVEMENT COURSES THROUGH FINAL SURFACE.

PHASE 2

SHIFT ALL EASTBOUND TRAFFIC TO THE NEWLY CONSTRUCTED LANES.



															ct ID: 23234
PAVING AREAS PAVING AREAS A D A D A D A D A D A D A D A D			ESTIMATED AT 115 LBS. PER PER INCH OF DEPTH.				TOTAL PROJECT		84						ITEM NO. COUNTY OF NS NS HEET NO. PAV SUMMARY
		TOTAL PROJECT	ARE YARD	324 324 504 7016		PAVING SUMMARY		-	àċ	++					ANCOCK COUNTY - US 60 3 PAVEMENT REHAB 9 2.2 TO MP 9.4
OMMON DEP	PAVING AREAS							CRUSHED STONE BASE							



BRIDGE DETAIL FOR PAVING PROJECT

W = bridge width curb to curb

T = thickness of existing asphalt overlay

L = length of bridge

 $L_1 \& L_2 =$ length of approach pavement to be removed

 $T_R =$ thickness to be removed and replaced on bridge $P_R =$ thickness to be removed and replaced on pavement Note: $L_1 \& L_2$ lengths shall be determined by using a transition rate of 100 ft/in of thickness

Route	Bridge No.	MP	W (ft)	T (in)	L_1 (ft)	$L_{2}(ft)$	T _R (in)	L (ft)	$P_{R}(in)$
US 60	B00034R	2.510	25.00				0.000	104.00	1.25
US 60	B00034L	2.510	25.00				0.000	104.00	1.25
US 60	B00035R	7.518	25.00				0.000	146.00	1.25
US 60	B00035L	7.518	25.00				0.000	146.00	1.25

01/01/2009

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link: http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx

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:

- 1) 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.
- 6) 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/⇒⇒⇒/ /KEEP/LEFT/⇐⇐⇐/ /LOOSE/GRAVEL/AHEAD/ /RD WORK/NEXT/**MILES/ /TWO WAY/TRAFFIC/AHEAD/ /PAINT/CREW/AHEAD/ /REDUCE/SPEED/**MPH/ /BRIDGE/WORK/***0 FT/ /MAX/SPEED/**MPH/ /SURVEY/PARTY/AHEAD/ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE LANE/BRIDGE/AHEAD/ /ROUGH/ROAD/AHEAD/ /MERGING/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /HEAVY/TRAFFIC/AHEAD/ /SPEED/LIMIT/**MPH/ /BUMP/AHEAD/ /TWO/WAY/TRAFFIC/

*Insert numerals as directed by the Engineer. Add other messages during the project when required by the Engineer.

- 2.3 Power.
- 1) 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

1I

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 pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay Item02671Portable Changeable Message Sign

Pay Unit

Each

Effective June 15, 2012

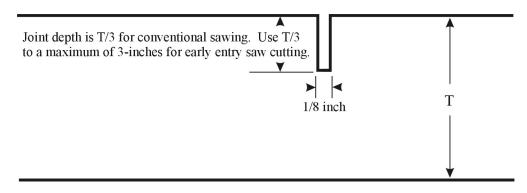
10Y

SPECIAL NOTE FOR UNSEALED JPC PAVEMENT AND SHOULDER JOINTS

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

1.0 DESCRIPTION. This Special Note will only apply to concrete pavements placed on a drainage blanket. The Department will allow contraction and construction joints with a joint width of 1/8-inch to be left unsealed. Construct all other pavement joints according to the standard specifications. Seal expansion joints according to the standard specifications.

2.0 CONSTRUCTION. Saw the joints in a timely manner in order to control cracking. When using a conventional saw, cut joints to a depth equal to 1/3 of the pavement thickness (T). When using an early entry saw, cut joints to a depth equal to 1/3 of the pavement thickness (T) to a maximum of 3-inches. Do not bevel the edge of the sawed joint. Keep joints clean and free of saw cuttings.



3.0 MEASUREMENT AND PAYMENT. The Department will not measure for payment any work associated with this Special Note and will consider it incidental to the bid item(s) JPC Pavement and JPC Shoulders.

June 15, 2012

11K

SPECIAL NOTE FOR PARTIAL DEPTH CONCRETE PAVEMENT REPAIR

This Special Note applies to partial depth repairs of concrete pavement. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

1.0 DESCRIPTION. Remove and replace small, shallow areas of deteriorated concrete that extend no deeper than one-third of the slab thickness. Comply with the applicable Standard Drawings and the Standard Specifications except as specifically superseded herein.

2.0 MATERIALS AND EQUIPMENT.

2.1 JPC Pavement 24/48/72. Conform to Section 502.

2.2 Latex Materials. Conform to Section 606.

2.3 Rapid Set Concrete Patching Materials. See the List of Approved Materials for Rapid and Very Rapid hardening materials from the Division of Materials.

2.4 Hot-Poured Elastic and Silicone Rubber Sealant. Conform to Subsection 807.03.01 or 807.03.05.

2.5 Hammers. Only use chisel point hammers weighing less than 15 pounds to remove deteriorated concrete.

3.0 CONSTRUCTION.

3.1 Repair Dimension Selection. The locations for partial-depth repair will be identified in the plans or proposal or as specified by the Engineer during construction. Identify the repair boundaries by sounding the concrete with a solid steel rod, a heavy chain, or a ball peen hammer. Repair boundaries should extend a minimum of 3 inches outside unsound areas.

3.2 Concrete Removal. Saw the hole to be patched with a vertical face, to a 2-inch minimum depth and to the configuration the Contract specifies or the Engineer directs. After sawing, keep exposure to traffic to a minimum until patching.

If the area to be patched is deeper than 1/3 the slab depth, construct full depth patches according to the "Special Note for Full-Depth Concrete Pavement Repair". Partial depth patches that become full depth repairs will be paid forty (40) percent of the unit price for Partial Depth Patching.

Keep overcutting beyond the limits of the removed area to a minimum. Prevent saw slurry from entering existing joints and cracks. Clean all saw slurry and other contaminants from overcutting. Repair the overcut area with a low viscosity epoxy compound.

3.3 Repair Area Preparation. Following the removal of the concrete, the surface of the repair area must be prepared to provide a clean, irregular surface for the development of a good bond between the repair material and the

11K

existing slab. Clean the repair area by sandblasting followed by compressed airblasting to remove dirt, oil, thin layers of unsound concrete, and laitance. The compressed air used in the final cleaning must be free of oil. This should be checked by placing a cloth over the air compressor nozzle and visually inspecting for oil.

3.4 Joint Preparation. Partial-depth repairs placed against transverse joints require the use of an insert to act as a bondbreaker or joint reformer. Place the insert so that it prevents intrusion of repair material into the joint opening. Insure the compressible insert extends 1 inch below and 3 inches beyond the repair boundaries. Prior to placement, score the insert at the appropriate depth to accommodate the joint sealant material to be used. Once the patch has cured or set, remove the scored top strip to allow for the joint sealant to be placed.

3.5 Patching Material and Placement.

3.5.1 Portland Cement Patch. Use a mixture conforming to Section 502 except use No. 8 or 9M coarse aggregate. Submit a mix design for the Engineer's approval. Vigorously scrub a grout bond coat into the repair area. Use a grout consisting of a slurry made of water mixed with equal parts of Portland cement and mortar sand.

Place the patch before the grout shows any sign of drying. Cure according to Subsection 502.03. Two applications of curing compound will be required. Remove and replace all areas of the patches that display cracks or are not bonded to the underlying pavement.

3.5.2 Latex Concrete Patch. Prepare the patch area and apply a latex grout bond coat. Furnish, mix, place, and cure the latex concrete according to Section 606. Ensure the curing materials required by Subsection 606.03.17 A) 4) remain in place for the specified time. Remove and replace all areas of the patches that display cracks or are not bonded to the underlying pavement.

3.5.3 Rapid Set Concrete Patching Materials. Furnish a repair material specified as "Rapid" or "Very Rapid" hardening listed on the Division of Materials *List of Approved Materials* when the repair area is required to be opened to traffic in a short time frame. A substitute product may be allowed only after submittal and approval by the Division of Materials. Repair materials should be installed according to the manufacturer's recommendations. All materials used will be tested prior to the project beginning to insure that a minimum opening compressive strength of 3,000 psi can be obtained based on the time requirements listed in the maintenance of traffic notes for the project.

Remove and replace all areas of the patches that display cracks or are not bonded to the underlying pavement.

3.6 Joint Sealing. Seal all new or partially new joints with hot-poured elastic or silicone rubber sealant according to Subsection 501.03.18 D).

4.0 MEASUREMENT.

4.1 Partial Depth Patching. The Department will measure the quantity in cubic feet, either from field measurements or the metered quantity from the mixer, as the Engineer determines.

5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	<u>Pay Unit</u>
02110	Partial Depth Patching	Cubic Foot

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

June 15, 2012

2020 KENTUCKY STANDARD DRAWINGS

CURVE WIDENING AND SUPERELEVATION TRANSITIONS	DCS 001 07
SUPERELEVATION FOR MULTILANE PAVEMENT	
MISCELLANEOUS STANDARDS	
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	
LANE CLOSURE TWO-LANE HIGHWAY	
SHOULDER CLOSURE	
PAVEMENT CONDITION WARNING SIGNS	
MOBILE OPERATION FOR PAINT STRIPING CASE I	
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS	TPR-115
SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS	TPR-125
RUMBLE STRIP DETAILS MULTI LANE ROADWAYS & RAMPS	TPR-130
JOINTED PLAIN CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS	RPN-001-07
CONCRETE PAVEMENT JOINT DETAILS	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-030-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-031-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-032-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-033-07
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-035-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-036-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-037-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-038-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-039-06
MEDIAN CROSSOVER CASE I	TTC-140-04
MEDIAN CROSSOVER CASE I	TTC-141-04
MEDIAN CROSSOVER CASE II	
MEDIAN CROSSOVER CASE II	

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

I. Application

II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

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

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

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment. 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

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

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

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 thirtysix (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, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

	FEDERAL MINIMUM WAGE \$7,25 PER HOUR BEGINNING JULY 24, 2009
OVERTIME PAY	At least 1^{1}_{2} times your regular rate of pay for all hours worked over 40 in a workweek.
CHILD LABOR	An employee must be at least 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-manufactur- ing, non-mining, non-hazardous jobs under the following conditions:
	 No more than 3 hours on a school day or 18 hours in a school week; 8 hours on a non-school day or 40 hours in a non-school week.
	Also, work may not begin before 7 a.m. or end after 7 p.m. , except from June 1 through Labor Day, when evening hours are extended to 9 p.m. Different rules apply in agricultural employment.
TIP CREDIT	Employers of "tipped employees" must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee's tips combined with the employer's cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.
ENFORCEMENT	The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.
	Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act's child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.
ADDITIONAL INFORMATION	 Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions. Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands. Some state laws provide greater employee protections; employers must comply with both. The law requires employers to display this poster where employees can readily see it. Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer. Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the

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

PART IV

INSURANCE

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

PART V

BID ITEMS

232340

PROPOSAL BID ITEMS

Page 1 of 1

Report Date 5/31/23

Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001	DGA BASE	1,500.00	TON		\$	
0020	00190	LEVELING & WEDGING PG64-22	212.00	TON		\$	
0030	00212	CL2 ASPH BASE 1.00D PG64-22	10,000.00	TON		\$	
0040	02022	JPC PAVEMENT-8 IN/24	9,000.00	SQYD		\$	
0050	02058	REMOVE PCC PAVEMENT	9,000.00	SQYD		\$	
0060	02060	PCC PAVEMENT DIAMOND GRINDING	113,140.00	SQYD		\$	
0070	02115	SAW-CLEAN-RESEAL TVERSE JOINT	18,001.00	LF		\$	
0800	02116	SAW-CLEAN-RESEAL LONGIT JOINT	37,000.00	LF		\$	
0090	02200	ROADWAY EXCAVATION	19,000.00	CUYD		\$	
0100	02562	TEMPORARY SIGNS	1,500.00	SQFT		\$	
0110	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0120	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH		\$	
0130	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0140	02677	ASPHALT PAVE MILLING & TEXTURING	405.00	TON		\$	
0150	03225	TUBULAR MARKERS	550.00	EACH		\$	
0160	06510	PAVE STRIPING-TEMP PAINT-4 IN	10,500.00	LF		\$	
0170	06542	PAVE STRIPING-THERMO-6 IN W	132,000.00	LF		\$	
0180	06543	PAVE STRIPING-THERMO-6 IN Y	36,000.00	LF		\$	
0190	06568	PAVE MARKING-THERMO STOP BAR-24IN	68.00	LF		\$	
0200	06574	PAVE MARKING-THERMO CURV ARROW	23.00	EACH		\$	
0210	10020NS	FUEL ADJUSTMENT	13,900.00	DOLL	\$1.00	\$	\$13,900.00
0220	10030NS	ASPHALT ADJUSTMENT	1,500.00	DOLL	\$1.00	\$	\$1,500.00
0230	10060NS	RIDE QUALITY ADJUSTMENT JPC	1.00	DOLL		\$	
0240	20259ED	TEMPORARY MEDIAN CROSSOVER	1.00	EACH		\$	
0250	20362ES403	SHOULDER RUMBLE STRIPS-SAWED	75,000.00	LF		\$	
0260	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	2,000.00	LF		\$	
0270	22146EN	CONCRETE PATCHING REPAIR	8,000.00	SQFT		\$	
0280	22664EN	WATER BLASTING EXISTING STRIPE	90,000.00	LF		\$	
0290	23362ES403	CL2 ASPH SURF 0.50B PG64-22	3,900.00	TON		\$	
0300	24489EC	INLAID PAVEMENT MARKER	450.00	EACH		\$	
0310	24861EC	PVC FOLD AND FORM PIPE LINER-15 IN	72.00	LF		\$	
0320	24862EC	PVC FOLD AND FORM PIPE LINER-18 IN	608.00	LF		\$	
0330	24863EC	PVC FOLD AND FORM PIPE LINER-24 IN	1,436.00	LF		\$	
0340	24864EC	PVC FOLD AND FORM PIPE LINER-30 IN	472.00	LF		\$	
0350	24865EC	PVC FOLD AND FORM PIPE LINER-36 IN	428.00	LF		\$	
0360	24880EC	REMOVE PAVEMENT MARKER	450.00	EACH		\$	
0370	24970EC	ASPHALT MATERIAL FOR TACK NON- TRACKING	22.00	TON		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0380	02568	MOBILIZATION	1.00	LS		\$	
0390	02569	DEMOBILIZATION	1.00	LS		\$	