

CALL NO. 340
CONTRACT ID. 221024
LEWIS COUNTY
FED/STATE PROJECT NUMBER FD05 068 0009 025-032
DESCRIPTION KY-9
WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB
PRIMARY COMPLETION DATE 10/15/2022

LETTING DATE: May 26,2022

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 26,2022. 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.

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### PART I SCOPE OF WORK

#### **ADMINISTRATIVE DISTRICT - 09**

CONTRACT ID - 221024 FD05 068 0009 025-032

**COUNTY - LEWIS** 

PCN - DE06800092224 FD05 068 0009 025-032

KY-9 (MP 31.152) ADDRESS PAVEMENT CONDITION OF KY-9 FROM MP 25.539 to MP 31.218 (MP 25.539), A DISTANCE OF 05.60 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 09-22354.00. GEOGRAPHIC COORDINATES LATITUDE 38:33:15.00 LONGITUDE 83:35:06.00 ADT 4,863

#### **COMPLETION DATE(S):**

COMPLETED BY 10/15/2022

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 <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

#### 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 <a href="mailtokytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. 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 (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). 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

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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

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#### 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.

#### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

#### DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

#### 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.

#### 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.

#### ASPHALT PAVEMENT RIDE QUALITY CATEGORY A

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category A.

#### **OPTION A**

Be advised that the Department will accept compaction of asphalt mixtures furnished for driving lanes and ramps, at 1 inch (25mm) or greater, on this project according to OPTION A in accordance with Section 402 and Section 403 of the current Standard Specifications. The Department will require joint cores as described in Section 402.03.02 for surface mixtures only. The Department will accept compaction of all other asphalt mixtures according to OPTION B.

# Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS **KY 9**

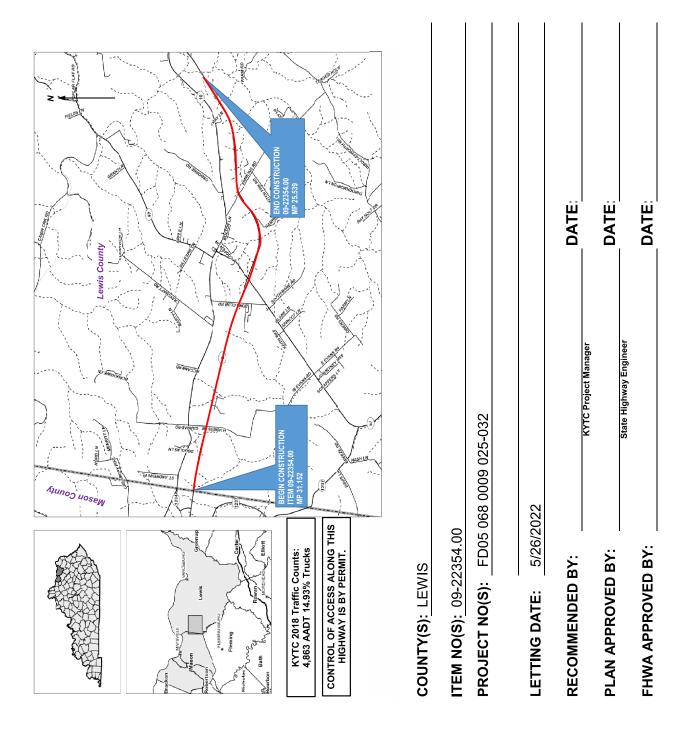
# ASPHALT PAVEMENT AND ROADWAY REHABILITATION

LEWIS COUNTY - MP 25.539 - MP 31.152 ITEM NO. 09-22354.00

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LAYOUT SHEET LIST OF STANDARD DRAWINGS **REFERENCES GENERAL NOTES GENERAL SUMMARY PAVEMENT AREAS** PAVEMENT SUMMARY PAVEMENT REPAIR SUMMARY **CURB & GRATE REPAIR SUMMARY GUARDRAIL SUMMARY** TYPICAL SECTIONS PLAN SHEETS PAVEMENT REPAIR DETAILS MISCELLEANEOUS DETAILS TRAFFIC CONTROL PLAN APPLICABLE SPECIAL NOTES

> Prepared By: WSP USA INC. 1792 ALYSHEBA WAY LEXINGTON, KY 40509 859-272-5400 April 8, 2022



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#### STANDARD DRAWINGS KY 9 - LEWIS COUNTY PAGE 1 OF 1

## APPLICABLE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD DRAWINGS - CURRENT EDITIONS:

RBI-001 RBI-002 RBI-004 RBR-001 RBR-010 RBR-018 RBR-015 RBR-020 RBR-055 RDB-105 RDB-106 RGS-001 RGX-001 RPM-110 TPM-175 TPR-100 TPR-110 TPR-115 TPR-125 TTC-100 TTC-135 TTD-120 TTD-125 TTD-130 TTS-135	TYPICAL GUARDRAIL INSTALLATIONS TYPICAL GUARDRAIL INSTALLATIONS INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1 STEEL BEAM GUARDRAIL ("W" BEAM) GUARDRAIL COMPONENTS GUARDRAIL TERMINAL SECTIONS GUARDRAIL TERMINAL SECTIONS GUARDRAIL SYSTEM TRANSITION STEEL GUARDRAIL POSTS GUARDRAIL END TREATMENT TYPE 1 DELINEATORS FOR GUARDRAIL SLOPED AND FLARED BOX INLET - OUTLET 18"-24"-30"-36" ALL SKEWS GRATES FOR SLOPED AND BLARED BOX INLET - OUTLET CURVE WIDENENING AND SUPERLEVATION TRANSITIONS MISCELLANEOUS DETAILS APPROACHES, ENTRANCES AND MAIL BOX TURNOUT PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS CENTERLINE RUMBLE STRIPS 6 INCH STRIPING SHOULDER & EDGLINE RUMBLE STRIP PLACEMENT DETAILS SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS LANE CLOSURE TWO-LANE HIGHWAY SHOULDER CLOSURE DOUBLE FINE ZONES SIGNS PAVEMENT CONDITION WARNING SIGNS SPEED ZONE WARNING SIGNS MOBILE OPERATION FOR DURABLE STRIPING CASE IV
APPLICABL	LE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD DRAWING SEPIAS:
006	INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
009	INLAID PAVEMENT MARKER ARRANGEMENTS TWO-LANE, TWO-WAY
010	ROADWAYS INLAID PAVEMENT MARKER ARRANGEMENT TWO-LANE TO FOUR-LANE
3.0	TRANSITIONS
017	PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS
019	INLAID PAVEMENT AMARKER ARRANGEMENT CHANNELIZED INTERSECTION
020	SECURITY PLATE ASSEMBLY

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#### REFERENCES KY 9 - LEWIS COUNTY PAGE 1 OF 1

- 1. KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
- 2. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
  - CURRENT EDITION WITH REVISIONS.
- 3. APPLICABLE KENTUCKY DEPARTMENT OF HIGHWAYS SUPPLEMENTAL SPECIFICATIONS:

SPCL. NOTE	ASPHALT MILLING AND TEXTURING
SPCL. NOTE	TYPICAL SECTION DIMENSIONS
SPCL. NOTE	BEFORE YOU DIG
SPCL. NOTE	FIXED COMPLETION DATE AND LIQUIDATED DAMAGES
SPCL. NOTE	SPRAY APPLIED THERMOPLASTIC PAVEMENT MARKING MATERIALS
SPCL. NOTE	NON-TRACKING TACK COAT
SPCL. NOTE	EXPERIMENTAL KYCT AND HAMBURG TESTING
SPCL. NOTE	GUARDRAIL DELIVERY VERIFICATION SHEET
SPCL. NOTE	PORTABLE CHANGEABLE MESSAGE SIGNS
SPCL. NOTE	PAVER MOUNTED TEMPERATURE PROFILES

#### GENERAL NOTES KY 9 – LEWIS COUNTY PAGE 1 OF 4

#### I. GENERAL

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Current Edition, Supplemental Specifications, any applicable Special Provisions, and applicable Standard and Sepia Drawings, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the work identified in the proposal.

#### II. MATERIALS

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

#### III. CONSTRUCTION METHODS

#### A. Maintain and Control Traffic

See Traffic Control Plan and Standard Specifications.

#### **B.** Site Preparation

Be responsible for all site preparation. Do not disturb existing signs unless noted on the plans. This item will include, but is 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; and all incidentals. Site preparation will be only as approved or directed by the Engineer. Other than the bid items listed, no direct payment will be made for site preparation, but will be incidental to the other items of work.

#### **B.** Disposal of Waste

Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The Contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits but will be incidental to the other items of the work.

#### C. Final Dressing, Clean Up, and Seeding and Protection

After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. 1. These items are incidental to other items in the contract.

#### D. Guardrail

Remove and replace guardrail and guardrail end treatments listed in this proposal and/or as directed by the Engineer. Guardrail, end treatments and terminal sections are listed by mile points and quantities are approximate only. Actual locations will be determined by the Engineer at the time of construction. Grade and reshape shoulders to proper template for new guardrail and end treatment. Utilize DGA for embankment when required for new end treatments. Remove any existing guardrail with a lane closure in place. Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. To minimize safety hazards, guardrail removal is to be performed at the latest practical time prior to initiating the paving operation in an area and re-installation is to begin within 5 calendar days from the time that the final base course is completed and shall be pursued until completion. If guardrail installation is not started within 5 calendar days after paving operations ends, liquated damages will be charged as outlined in Section 108 in the current edition of the Standard Specifications.

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#### GENERAL NOTES KY 9 – LEWIS COUNTY PAGE 2 OF 4

The Contractor shall deliver existing salvaged guardrail system materials to the Central Sign Shop and Recycle Center in Frankfort, KY (502-564-8187) between the hours of 8:00 AM and 3:00 PM, Monday through Friday, and shall be neatly stacked in accordance with section 719.03.07 of the standard specifications. There is a guardrail delivery verification sheet which must be completed. The Contractor, Engineer, and Central Sign/Guardrail Center representative must all sign off on this sheet before payment may be made.

#### E. Pavement Striping and Pavement Markers

Permanent striping will be in accordance with Section 714, except that:

- (1) Permanent or temporary striping will be in place before a lane is opened to traffic; and
- (2) Permanent striping will be Spray Thermoplastic Marking.

#### F. On-Site Inspection

Each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize themself 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.

#### G. Caution

Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw their own conclusions 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 above.

#### H. Utility Clearance

It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, if it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

#### IV. METHOD OF MEASUREMENT

#### 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 work.

#### C. Dense Graded Aggregate

DGA used for guardrail and guardrail end treatments will be measured for payment.

#### D. Pavement Repairs

Pavement repairs and shoulder failure repairs will be measured per square yard.

#### E. Inlaid Pavement Markers and Permanent Striping

Permanent striping is measured per linear foot. Inlaid Pavement Markers are measured as each.

#### V. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs (not to be disturbed) that are damaged by the Contractor will be replaced by the Contractor at his expense.

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# GENERAL NOTES KY 9 – LEWIS COUNTY PAGE 3 OF 4

#### A. Maintain and Control Traffic

See Traffic Control Plan.

#### B. Site Preparation

Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.

#### C. Dense Grade Aggregate

See Section 302 of the Standard Specifications.

#### D. Pavement Repairs

Pavement repairs will be paid for by square yard. The bid items "Pavement Repair" for minor repairs and "Shoulder Failure Repairs" for shoulder repairs include all materials and work need to complete each repair as directed by the Engineer.

#### E. Lane Closures

Contrary to Section 112, lane closures will not be measured for payment but will be incidental to the bid item "Maintain and Control Traffic". Arrow boards, portable message boards, and signs shall be paid for one time regardless of how many times they are moved.

#### **VI. MISCELLANEOUS**

- A. The dimensions shown on the typical sections for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified in the Proposal.
- B. The Contractor is advised that locations of low wires crossing the roadway exist. These and all other utilities should be avoided on this project. If any utility is impacted, it will be the Contractor's responsibility to contact the affected utility and cover any costs associated with the impact.
- C. Guardrail, End Treatments, and Terminal Sections to be replaced are listed by mileposts. Exact placement to be approved by the Engineer on construction.
- D. Any signs (not to be replaced) and any light poles that are damaged during Construction are to be replaced at the Contractor's expense.
- E. Any existing edge drain system is to be preserved. Care should be taken when the asphalt is removed and replaced. Any edge drains damaged during these activities will be replaced at the Contractor's expense. Record plans do not indicate that there is an existing edge drain system.
- F. Pavement rideability requirements in accordance with Section 410 Category A of the standard specifications shall apply on this project.
- G. The Department will accept the compaction of asphalt mixtures furnished for the driving lanes at one inch or greater on this project by Option A according to subsections 402 and 403 of the Standard Specifications. The Department will accept the compaction of all other mixtures by Option B.
- H. The Contractor shall be responsible for the repair of any asphalt in the travelled lanes that becomes detrimental or hazardous to the travelling public during construction. Areas needing repair will be at the discretion of the Engineer.
- I. No tree cutting is allowed nor should it be necessary. If cutting of trees is absolutely necessary for a specific area, then Engineer will determine if the work in that specific area can be eliminated from the contract.
- J. Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications. Delineators shall be placed in accordance with Section 3F of the M.U.T.C.D., current edition and Kentucky Standard Drawings, current edition.

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# GENERAL NOTES KY 9 – LEWIS COUNTY PAGE 4 OF 4

- K. Quantities have been included in the General Summary for Shoulder Failure Repairs and Pavement Repairs. The Engineer will determine the actual locations that will be repaired based upon the condition of the pavement at the time the repairs are accomplished. The Engineer shall determine the extent of the repairs.
- L. Non tracking tack material shall be used.
- M. Allowing traffic to travel on milled surface is not allowed unless approved by the Engineer.
- N. A vacuum truck shall be required during all milling operations.
- O. All existing stop bars at approach roads shall be restriped. Locations and any additional stop bars needed and other striping on the crossroad shall be determined by the Engineer.
- P. The limits of the milling of the approach roads are shown in the plans. These limits may be adjusted by the Engineer. These areas shall be milled 1.5" and refilled with same surface course used for the mainline.
- Q. A Material Transfer Vehicle (MTV) shall be required. No payment shall be made for this and will be considered incidental to asphalt bid items.

GENERAL SUMMARY												
	KY 9 - LEWIS COUNTY - ITEM NO. 09-	22354.00										
				QUANTITIES								
BID CODE	ITEM	UNIT	NOTES	TOTALS								
00001	DGA BASE	TON		412								
00100	ASPHALT SEAL AGGREGATE	TON		70								
00103	ASPHALT SEAL COAT	TON		8								
00190	LEVELING & WEDGING PG64-22	TON		636								
00388	CL3 ASPH SURF 0.38B PG64-22	TON		9,542								
01987	DELINEATOR FOR GUARDRAIL B/W	EACH		111								
02351	GUARDRAIL-STEEL W BEAM-S FACE	LF		6,365								
02360	GUARDRAIL TERMINAL END SECTION NO 1	EACH		4								
02367	GUARDRAIL END TREATMENT TYPE 1	EACH		30								
02381	REMOVE GUARDRAIL	LF		6,365								
02396	REMOVE GUARDRAIL END TREATMENT	EACH		30								
02562	TEMPORARY SIGNS	SQFT	3	1,000								
02568	MOBILIZATION	LS		1								
02569	DEMOBILIZATION	LS		1								
02650	MAINTAIN AND CONTROL TRAFFIC	LS		1								
02671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	3	2								
02676	MOBILIZATION FOR MILL & TEXT	LS		1								
02677	ASPHALT PAVE MILLING AND TEXTURING	TON		9,542								
02696	SHOULDER RUMBLE STRIPS	LF		29,169								
02726	STAKING	LS		1								
02775	ARROW PANEL	EACH	3	2								
06510	PAVE STRIPING-TEMP PAINT-4 IN	LF	3	59,970								
06549	PAVE STRIPING-TEMP REM TAPE-B	LF	2,3	1,000								
06550	PAVE STRIPING-TEMP REM TAPE-W	LF	2,3	500								
06551	PAVE STRIPING-TEMP REM TAPE-Y	LF	2,3	500								
06568	PAVE MARKING-THERMO STOP BAR-24IN	LF		168								
06569	PAVE MARKING-THERMO CROSS-HATCH	SQFT		12,026								
06573	PAVE MARKING-THERMO STR ARROW	EACH		8								
06574	PAVE MARKING-THERMO CURV ARROW	EACH		9								
06610	INLAID PAVEMENT MARKERS MW	EACH		68								
06612	INLAID PAVEMENT MARKERS BY	EACH		438								

	GENERAL SUMMARY			
	KY 9 - LEWIS COUNTY - ITEM NO. 09-22	2354.00		
				QUANTITIES
BID CODE	ITEM	UNIT	NOTES	TOTALS
10020NS	FUEL ADJUSTMENT	DOLL		15,843
10030NS	ASPHALT ADJUSTMENT	DOLL		39,792
20191ED	OBJECT MARKER TYPE 3	EACH		30
20366NN	REPLACE GRATE	EACH		3
20458ES403	CENTERLINE RUMBLE STRIPS	LF		29,649
20757ED	PAVEMENT REPAIR	SQYD		54
22883EN	CONCRETE WEDGE CURB	LF		5,101
23593EC	SHOULDER FAILURE REPAIR	SQYD		42
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT		774,394
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON		40
24995EC	PAVE STRIPING-SPRAY THERMO-6 IN W	LF		62,308
24996EC	PAVE STRIPING-SPRAY THERMO-6 IN Y	LF		34,548
26119EC	INSTALL RADAR PRESENCE DETECTR TYPE A	EACH	4	4

- 1. Quantities from all other summary sheets have been carried over and included in this General Summary Sheet.
- 2. For traffic tapers at the ends of project.
- 3. For maintenance of traffic.
- 4. For KY 57 Intersection.

	PAVING AREAS	3							
	KY 9 - LEWIS COUNTY - ITEM I	NO. (	9-223	54.00					
				SQYD					
BID CODE	ITEM	NOTES	<b>DEPTH</b> (inches)	KY 9	APPROACH ROADS	TOTALS			
00100	ASPHALT SEAL AGGREGATE	1		3,496		3,496			
00103	ASPHALT SEAL COAT	1		3,496		3,496			
00190	LEVELING & WEDGING PG64-22	2	0.50	22,343	789	23,133			
00388	CL3 ASPH SURF 0.38B PG64-22		1.50	111,717	3,946	115,663			
02677	ASPHALT MILLING AND TEXTURING		1.50	111,717	3,946	115,663			
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT			86,044		86,044			
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING			111,717	3,946	115,663			

- 1. For shoulders where guardrail is being replaced.
- 2. For areas that experience scabbing after pavement is milled, and for any settlement of pavement and shoulder failure repairs. It is assumed to be 20% of area being milled.

	PAVING SUMMARY													
	PAVING SUMMARY													
	KY 9 - LEWIS COUNTY - ITEM NO. 09-22354.00													
BID CODE	ITEM	NOTES	UNIT	KY 9	APPROACH ROADS	TOTALS								
00100	ASPHALT SEAL AGGREGATE	3,6	TON	70		70								
00103	ASPHALT SEAL COAT	4,6	TON	8		8								
00190	LEVELING & WEDGING PG64-22	2	TON	614	22	636								
00388	CL3 ASPH SURF 0.38B PG64-22	2	TON	9,217	326	9,542								
02677	ASPHALT MILLING & TEXTURING	2	TON	9,217	326	9,542								
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT		SQFT	774,394		774,394								
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	5	TON	39	1	40								

- 1. Quantities are carried over and included in General Summary.
- 2. Estimated at 110 lbs. per sq. yd. per inch of depth.
- 3. Estimated at 20 lbs. per sq. yd. (two applications). Use No.8 or 9M aggregates.
- 4. Estimated at 2.4 lbs. per sq. yd. (two applications).
- 5. Estimated at 0.70 lbs. per sq. yd.
- 6. For shoulders where guardrail is being replaced.

		SCHED	ULE AND S	UMMARY	OF PAVEM	ENT REPAIR	RS	
		KY 9	- LEWIS (	COUNTY -	ITEM NO. 09	9-22354.00		
		APPRO	OXIMATE LO	DCATION				SHOULDER
KY 9	KY 57	SIMMONS	DIRECTION	NOTES	STATION	MILEPOINT	PAVEMENT REPAIR (SQ. YD.)	FAILURE REPAIR (SQ. YD.)
		0,					20757ED	23593EC
Х			EB		1397+27	30.285	10.7	
Х			WB		1453+39	29.222	10.7	
Х			WB		1480+37	28.710	10.7	
Х			WB		1489+62	28.536	10.7	
Х			EB		1489+62	28.536	10.7	
	Х		NB		1498+80	28.362		32.0
		Х	SB		1561+21	27.179		10.0
	-				K	Y 9 TOTALS:	53.5	0.0
		AD TOTALS:	0.0	42.0				
					CT TOTALS:	53.5	42.0	

- 1. Locations and quantities of repairs are approximate. Actual locations and quantity will be determined by the Engineer.
- 2. Repair quantities are carried over and included in the General Summary.
- 3. All stationing and milepoints are based on KY 9.

		KY 9	- LEWIS COU	NTY - ITEM	NO. 09-	22354.00			
		APPRO	OXIMATE LOCA	ΓΙΟΝ				EACH	TON
KY 9	DIRECTION	STATI	ONS	M	LEPOIN	TS	NOTES	REPLACE GRATE	CONCRETE WEDGE CURB
							20366NN	22883EN	
Χ	WB	1389+12 T0	1393+50	30.439	TO	30.356			439
Χ	EB	1390+13 T	1393+50	30.420	TO	30.356			336
Χ	WB	1412+56 TO	1424+64	29.995	TO	29.766			1209
Χ	EB	1412+60 TO	1424+43	29.995	ТО	29.770			1183
Х	EB	1445	+07		29.380		2,3	1	
Х	WB	1445	+31		29.375		2,3	1	
Х	WB	1509	+48		28.161		2,3	1	
Х	WB	1523+85 TO	) 1528+29	27.887	ТО	27.803			421
Х	WB	1544+45 TO	) 1548+74	27.497	TO	27.416			427
Χ	EB	1562+51 TO	) 1566+77	27.155	ТО	27.074			422
Х	EB	1585+17 TO	) 1591+81	26.726	ТО	26.600			664
					PR	OJECT TOT	 ALS:	3	5,101

- 1. Quantities are carried over and included in General Summary.
- 2. Size of grate at each location to be field verified by Contractor and approved by Engineer.
- 3. Securing new grates to existing drainage structure will be incidental to bid item "Replace Grates." See KYTC sepia sheet 020 for securing the replaced grates.

				I																
				OBJECT MARKER TY 3	20191ED	1	1	1	1			1			1	1	1	1	1	<b>~</b>
				REMOVE GUARDRAIL THAMTABAT GNB	02396	1	1	1	1			1			1	1	1	1	1	-
			ЕАСН	↑ TN∃MTA∃ЯT GN∃ ЯÐ	02367	1	1	1	1			1			1	1	1	1	1	-
		ITEM		GUARDRAIL TERMINAL F ON NOITSES DNE	02360								2	2						
RAIL	354.00			ЯОТ ЯОТАЭИ W\B JIAЯОЯАUЭ	01987	1	1	1	1	9	7	1	16	15	1	1	1	1	1	7
F GUARDRAIL	-ITEM NOS. 09-22354.00		LIN. FT.	GUARDRAIL - STEEL W BEAM - S FACE	02351					439	988		1517	1468						649
SCHEDULE AND SUMMARY OF	Y - ITEM N		LIN.	REMOVE GUARDRAIL	02381					439	988		1517	1468						649
E AND SU	- LEWIS COUNTY		NOT	DGA BASE	10000	ε	ε	ε	ε	77	۷١	7	82	22	ε	ε	ε	ε	ε	33
SCHEDUL	KY 9 - LEW			MILEPOINTS		31.013	30.981	30.475	30.455	30.439 TO 30.356	30.420 TO 30.356	30.338	30.027 TO 29.746	30.021 TO 29.749	29.180	29.179	29.017	28.999	28.435	28.341 TO 28.233
		LOCATION		STATIONS		1358+81	1360+48	1387+22	1387+97	1389+12 TO 1393+50	1390+13 TO 1393+50	1394+44	1410+86 TO 1425+68	1411+14 TO 1425+51	1455+60	1455+66	1464+21	1465+13	1464+91	1499+79 TO 1505+62
				DIRECTION		WB	EB	WB	EB	WB	EB	EB	WB	EB	WB	EB	EB	WB	WB	WB
			KA 6																	

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				OBJECT MARKER TY 3	20191ED	_	1		_	1	_		_	_	1		_	1	1	_
				REMOVE GUARDRAIL THE	02396	_	1		1	1	1		_	1	1		1	1	1	1
			ЕАСН	↑ TN∃MTA∃ЯT ŒNЭ ЯÐ	02367	_	1		1	1	1		1	1	1		1	1	1	-
		ITEM		GUARDRAIL TERMINAL F ON NOITSER GNE	02360															
SAIL	354.00			DELINEATOR FOR WA JIAЯGAAUD	01987	~	_	11	-	1	-	9	-	-	1	11	-	1	1	-
F GUARDE	- ITEM NOS. 09-22354.00		FT.	GUARDRAIL - STEEL W BEAM - S FACE	02351			144				430				421				
AND SUMMARY OF GUARDRAIL			TIN'	REMOVE GUARDRAIL	02381			144				430				421				
E AND SU	S COUNTY		TON	DGA BASE	00001	3	3	23	3	3	3	22	3	3	3	22	3	3	3	3
SCHEDULE	KY 9 - LEWIS			MILEPOINTS		27.924	27.908	27.887 27.803	27.798	27.764	27.534	27.496 27.415	27.401	27.385	27.223	27.155	27.063	26.919	26.824	26.775
		LOCATION		STATIONS		1521+92	1522+73	1523+85 TO 1528+30	1528+53	1530+35	1542+87	1544+45 TO 1548+77	1549+50	1550+37	1558+89	1562+51 TO 1556+77	1567+31	1574+98	1579+32	1582+89
				DIRECTION			EB	WB	EB	WB	WB	WB	EB	WB	WB	EB	EB	EB	EB	WB
	KA 9																			

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				OBJECT MARKER TY 3	20191ED	l	1		1	1	1	1	1	30
				REMOVE GUARDRAIL THE	02396	1	1		1	1	1	1	1	30
			ЕАСН	↑ TNEMTA∃ЯТ GNE ЯЭ	02367	1	1		1	1	1	1	1	30
		ITEM		GUARDRAIL TERMINAL END SECTION NO 1	02360									4
RAIL	54.00			DELINEATOR FOR GUARDRAIL B/W	01987	1	1	7	1	1	1	1	1	111
F GUARDE	COUNTY - ITEM NOS. 09-22354.00		FT.	GUARDRAIL - STEEL W BEAM - S FACE	02351			664						6,365
MMARY O	Y - ITEM N		LIN.	REMOVE GUARDRAIL	02381			664						6,365
E AND SU	S COUNT		TON	DGA BASE	00001	3	3	34	3	3	3	3	3	412
SCHEDULE AND SUMMARY OF GUARDRAIL	KY 9 - LEWIS			MILEPOINTS		26.765	26.765	26.726 TO 26.600	26.648	26.553	26.364	25.630	25.620	I-64 TOTALS:
		LOCATION		STATIONS		1583+09	1582+56	1585+17 TO 1591+89	1589+29	1593+87	1604+25	1643+04	1643+54	
				DIRECTION		EB	WB	EB	WB	EB	WB	EB	WB	
				KA 9										

NOTES:

1. Quantities are carried over and included in the General Summary.

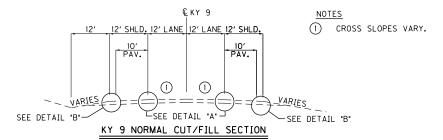
Contract ID: 221024

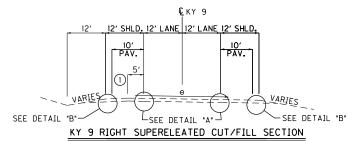
Page 27 of 90

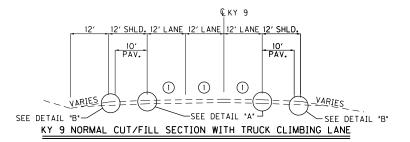
COUNTY OF ITEM NO.

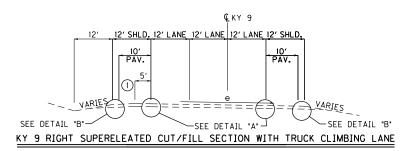
LEWIS 9-22354.00

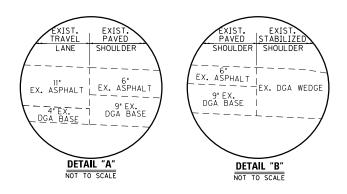
# EXISTING TYPICAL SECTIONS











LEWIS COUNTY FD05 068 000<del>9 025-032</del> Contract ID: 221024

Page 28 of 90 ITEM NO.

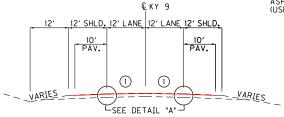
COUNTY OF THEM NO.

LEWIS 9-22354.00

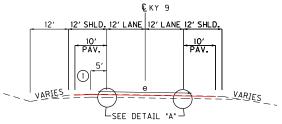
PROPOSED
TYPICAL SECTIONS

NOTES

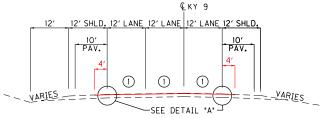
- MATCH EXISTING CROSS SLOPES.
- 2. IN LOCATIONS WHERE GUARDRAIL IS BEING REMOVED AND REPLACED, ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING: ASPHALT SEAL COAT @ 2.40 LBS. /SO. YD. (USE NO.8 OR 9M AGGREGATE @ 20 LBS. /SO. YD. (USE NO.8 OR 9M AGGREGATES.)



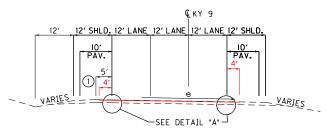
#### KY 9 NORMAL CUT/FILL SECTION



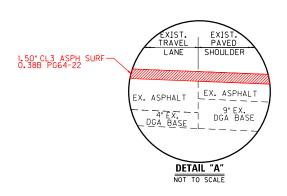
#### KY 9 RIGHT SUPERELEATED CUT/FILL SECTION



#### KY 9 NORMAL CUT/FILL SECTION WITH TRUCK CLIMBING LANE



#### KY 9 RIGHT SUPERELEATED CUT/FILL SECTION WITH TRUCK CLIMBING LANE



LEWIS COUNTY Contract ID: 221024 Page 30 of 90 FD05 068 000<del>9 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1370 + 00KY-9 1365+00 KY-9 LEWIS COUNTY PLAN SHEET 2 OF 15 SCALE: 1"=200"

SCALE: 1"=200"

LEWIS COUNTY Contract ID: 221024 Page 32 of 90 FD05 068 000<del>9 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1415+00 ROLLING HILLS ESTATE KY-9 LEWIS COUNTY PLAN SHEET 4 OF 15

LEWIS COUNTY Contract ID: 221024 Page 33 of 90 FD05 068 0009 025-032 COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED MP 29.40 1435 + 00MP 29.60 1430 + 00KY-9 LEWIS COUNTY PLAN SHEET 5 OF 15

LEWIS COUNTY Contract ID: 221024 Page 34 of 90 FD05 068 000<del>9 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE MP 29.00 EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1460+00 1455+00 1450+00 KY-9 LEWIS COUNTY PLAN SHEET 6 OF 15 SCALE: 1"=200"

LEWIS COUNTY Contract ID: 221024 Page 35 of 90 FD05 068 00<del>09 025-032</del> COUNTY OF 9-22354.00 LEWIS LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED IMITS OF LION'S CLUB ROAD 1480 + 00MP 28.80 FR

> KY-9 LEWIS COUNTY PLAN SHEET 7 OF 15

SCALE: 1"=200'

LEWIS COUNTY Contract ID: 221024 Page 36 of 90 FD05 068 000<del>9 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1505 + 001500+00 1490 + 00KY-9 LEWIS COUNTY PLAN SHEET 8 OF 15

SCALE: 1"=200"

SCALE: 1"=200'

LEWIS COUNTY Contract ID: 221024 Page 39 of 90 FD05 068 00<del>09 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1565+00 IMMONS ROAD MITS OF MILL OVERLAY 1560+00 1555+00

> KY-9 LEWIS COUNTY PLAN SHEET 11 OF 15

SCALE: 1"=200"

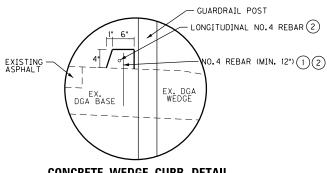
SCALE: 1"=200'

LEWIS COUNTY Contract ID: 221024 Page 41 of 90 FD05 068 0009 025-03 COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1600 + 001595+00 400′ KY-9 LEWIS COUNTY PLAN SHEET 13 OF 15

LEWIS COUNTY Contract ID: 221024 Page 42 of 90 FD05 068 00<del>09 025-032</del> COUNTY OF LEWIS 9-22354.00 LEGEND CONCRETE WEDGE CURB PAVEMENT REPAIR SHOULDER FAILURE REPAIR REPLACE GRATE EXISTING GUARDRAIL TO REMAIN EXISTING GUARDRAIL TO BE REPLACED EXISTING END TREATMENT TO BE REPLACED 1625+00 1620+00 1615+00 KY-9 LEWIS COUNTY PLAN SHEET 14 OF 15 SCALE: 1"=200"

Page 44 of 90 COUNTY OF

**LEWIS** 9-22354.00



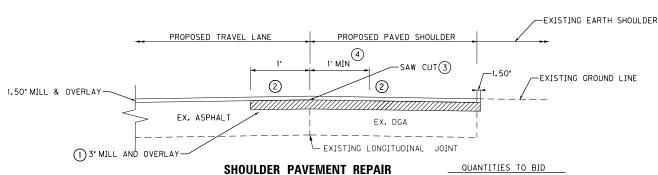
#### **CONCRETE WEDGE CURB DETAIL**

NOT TO SCALE

#### CONCRETE WEDGE CURB NOTES

- 1 NO.4 REBAR TO BE SPACED 2' 6" OC.
- (2) REBAR IS INCIDENTAL TO CONCRETE WEDGE CURB.

QUANTITIES TO BID 22883EN CONCRETE WEDGE CURB



#### NOT TO SCALE

QUANTITIES TO BID 23593EC SHOULDER FAILURE REPAIR

#### LONGITUDINAL JOINT REPAIR NOTES

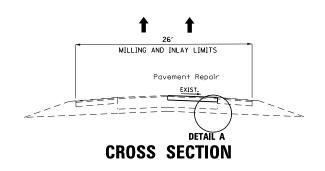
- AT THE LONGITUDINAL SHOULDER JOINT MILL AN ADDITIONAL 3° OF EXISTING ASPHALT. THEN OVERLAY WITH THE FOLLOWING ASPHALT BASE COURSES: 3° CL3 ASPH BASE PG64-22 1.00D
- 2 MATCH EXISTING CROSS SLOPES.
- $\ensuremath{ \mathfrak{J}}$  before milling for shoulder pavement repair, all shoulder asphalt to be removed must first be saw cut and removed.
- WIDTH OF SHOULDER AREA TO BE REMOVED SHALL BE DETERMINED BY THE ENGINEER, HOWEVER IT SHALL BE 1 FOOT MINIMUM.
- 5. THE BID ITEM 23593EC SHOULDER FAILURE REPAIR SHALL INCLUDE ALL MATERIALS AND WORK TO COMPLETE THE REPAIR AS DIRECTED BY THE ENGINEER. THIS INCLUDES SAW CUTS OF PAVEMENT, REMOVAL OF PAVEMENT, AND ASPHALT COURSES.

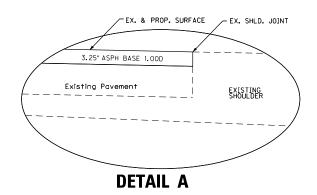
Contract ID: 221024

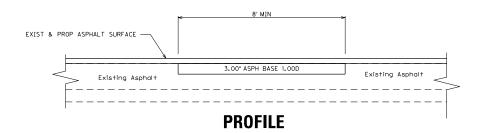
Page 45 of 90 ITEM NO.

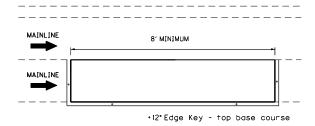
PAVEMENT REPAIR DETAIL

LEWIS 9-22354.00









# \* QUANTITIES TO BID 20757ED PAVEMENT REPAIR

SQ. YD.

• The bid item 20757ED PAVEMENT REPAIR shall include all materials and work to complete the repair as directed by the Engineer. This includes saw cuts of pavement, removal of pavement, and asphalt courses.

# PLAN VIEW

#### NOTES

- 1. (NOTE NOT USED)
- 2. Pavement repairs shall be performed at locations selected by and as directed by the Engineer. The Engineer will assess, select, and mark areas for treatment. The full lane width will be removed and replaced. The Engineer may elect to only remove and replace the top lift of base or may decide a Base Failure Repair is more appropriate (see Base Failure Repair Detail). An edge key 12" into existing pavement is required for the top course of base.
- Complete pavement repair operations in one continuous operation or protect with barrier wall. Do not leave an unprotected hole with no workers present. If barrier wall must be used for pavement repairs, it will be considered incidental to other items of work and not be considered for payment.
- Before resurfacing, open repaired area to traffic for a minimum of 14 days. Monitor pavement for settlement during this 14+ days and repair by leveling and wedging, as approved by the Engineer, until placement of final surface course.
- 5. (NOTE NOT USED)
- 6. Perform typical mill and inlay operations with resurfacing items subject to payment as part of the resurfacing operation.
- 7. Asphalt base courses shall be CL3 ASPH BASE PG64-22 1.00D.

#### TRAFFIC CONTROL PLAN KY 9 – LEWIS COUNTY PAGE 1 OF 5

#### TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all other items of work, described herein, necessary to maintain and control traffic, will be paid for with the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the project shall be in compliance with the appropriate Standard Drawings and MUTCD.

Contrary to Section 106.01, traffic control devices used on this project may be new or used in like-new condition at the beginning of the work and maintained in like-new condition until completion of the work. Traffic Control Devices will conform to current MUTCD.

Night work will not be allowed on this project.

#### PROJECT PHASING AND CONSTRUCTION PROCEDURES

The Contractor shall maintain along KY 9 a minimum of one 11-foot lane except as noted in this proposal. During lane closures, a minimum of two pilot cars and two flaggers shall be used. A flagger and pilot car shall be utilized on each end of the lane closure, and as directed and approved by the Engineer. Pilot cars and flaggers shall be incidental to "Maintain and Control Traffic".

Use a lane closure at all times when work is performed in the adjacent lane or adjacent shoulder. Traffic shall not be allowed to travel on milled surface. Shoulders shall not be used for traffic unless a situation requires and pilot car shall then lead the traffic along the pavement. This shall be as directed and approved by the Engineer. All removal of existing striping shall be by water blasting, unless otherwise directed by the Engineer, and this work shall be considered incidental to "Maintain and Control Traffic". Remove edge lines as necessary and approved by the Engineer throughout the project.

Provide a minimum clear lane width of 11 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

All pavement edge transitions must be smooth and level before opening lanes up to traffic. A lane closure must be in place during all times that pavement edge drop-offs are present (see Pavement Edge Drop-off note).

The Engineer will determine exact locations and limits of pavement failure repairs and shoulder failure repairs at the time of construction. Once removal of pavement at a repair location has begun, Contractor shall work continuously to eliminate the "hole". Place Type III Barricades immediately in front of pavement repair and shoulder repair areas. Type III Barricades shall be considered incidental to "Maintain and Control Traffic."

The Contractor must notify the Engineer at least fourteen (14) days prior to beginning construction in either direction.

#### **CONSTRUCTION PHASES**

#### PHASE 1

Close the northbound lane and shoulder. Both directions shall be maintained in the southbound lane, using flaggers and pilot cars. Complete milling and resurfacing on the northbound lane and shoulder. Complete pavement failure repairs and shoulder failure

#### Contract ID: 221024 Page 47 of 90

#### TRAFFIC CONTROL PLAN KY 9 – LEWIS COUNTY PAGE 2 OF 5

repairs on the northbound lane and shoulder concurrent with milling, as directed by the Engineer.

#### PHASE 2

Close the southbound lane and shoulder. Both directions shall be maintained in the northbound lane, using flaggers and pilot cars. Complete milling and resurfacing on the southbound lane and shoulder. Complete pavement failure repairs and shoulder failure repairs of southbound lane and shoulder concurrent with milling, as directed by the Engineer.

#### PHASE 3

Using shoulder closures, as directed by the Engineer, complete guardrail installation and erosion repairs. Complete rumble strips and place permanent striping using temporary lane closures, as directed by the Engineer.

#### LANE AND SHOULDER CLOSURES

Limit the lengths of lane and shoulder closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer.

Other than the holidays listed in the current Standard Specifications, the Engineer may specify additional days and hours when lane closures are not allowed.

Contrary to Section 112, lane and shoulder closures will NOT be measured for payment, but are considered incidental to "Maintain and Control Traffic."

#### **SIGNS**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to Section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

A quantity of signs has been included for "Roadwork Ahead" signs on cross roads to be paid for only once no matter how many times they are moved or relocated.

#### **TEMPORARY ENTRANCES**

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties and apartments or apartment complexes of four or more units at all times.

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#### PORTABLE CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions provide additional portable changeable message signs. Place portable changeable message signs one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional portable changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The portable changeable message signs will be in operation always. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the Portable Changeable Message Sign immediately. Portable Changeable Message Signs will be paid for once, no matter how many times they are moved or relocated. The Department WILL NOT take possession of the signs upon completion of the work.

#### **BARRELS**

Barrels are to be used for channelization or delineation and will be incidental to "Maintain and Control Traffic" according to Section 112.04.01. Replacement of damaged barrels due to poor condition or reflectivity, as directed by the Engineer, will not be measured for payment.

#### TRUCK MOUNTED ATTENUATORS

Furnish and install MUTCD approved Truck Mounted Attenuators (TMAs) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. TMAs will not be measured for payment but are incidental to Maintain and Control Traffic. The Department WILL NOT take possession of the TMAs upon completion of the work.

#### **PAVEMENT MARKINGS**

Place temporary and permanent striping in accordance with Section 112, Section 714, and the special note for Spray Applied Thermoplastic Pavement Marking Materials except that:

- 1. Permanent striping will be 6" in width and as shown in standard drawings.
- If the Contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used;
- 3. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic; and
- 4. Permanent striping will be Spray Thermoplastic Marking.

The Contractor is to restripe the roadway back to its original configuration or as directed by the Engineer.

Removal of existing and temporary striping shall be incidental to "Maintain and Control Traffic."

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#### **BARRICADES**

Barricades used for channelization or delineation, and shoulder failure repairs and pavement repairs shall be incidental to "Maintain and Control Traffic". As directed by the Engineer replacements for damaged barrels to be replaced due to poor condition or reflectivity will not be measured for payment.

#### PAVEMENT EDGE DROP-OFFS

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with barrels, vertical panels, or barricades as shown on the Standard Drawings.

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1 ½". Place warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

- Less than 2" Protect with a lane closure.
- 2" to 4" Protect with a lane closure. Place barrels, vertical panels, or barricades every 50 feet. Traffic cones may not be used in place of barrels, panels, and barricades at any time. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.
- Guardrail Installation All areas from which guardrail is removed shall be protected by a shoulder closure or other method approved by the Engineer until the new guardrail is installed.

#### TRAFFIC COORDINATOR

Designate an employee to be Traffic Coordinator. The designated Traffic Coordinator must be certified by an agency qualified for training in this area. The Traffic Coordinator will inspect the project maintenance of traffic once every two hours during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted always.

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project always to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

#### **COORDINATION OF WORK**

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other Contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

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#### CONTRACTOR'S AND CONTRACTOR'S EMPLOYEES' VEHICLES

Do not allow contractors equipment or employees to park on private property or block access to any private or business entrances at any time.

#### INCIDENTAL TO MAINTENANCE OF TRAFFIC

As noted in above paragraphs the following items will not be measured but are considered incidental to "Maintain and Control Traffic."

- Lane and Shoulder Closures
- Barrels and Replacement of Damaged Barrels
- Type III Barricades
- Removal of Existing and Temporary Striping
- Relocations of Portable Changeable Message Signs
- Relocation or Covering of Signs
- Replacement of Damage Signs
- Maintenance of Shoulders to Maintain Traffic
- Truck Mounted Attenuators
- Pilot Cars
- Flaggers

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# SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations immediately after the commencement of the asphalt milling operation. Continue paving operations continuously until completed. Do not allow public traffic to drive on the milled surface. If paving operations are not begun within this time period, liquidated damages will be assessed at the rate prescribed by Section 108.09 of the current Standard Specifications until such time as paving operations are begun.

Removal of the existing pavement markers prior to the milling operation is considered incidental to the bid item "Asphalt Pavement Milling and Texturing".

#### SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed or diamond ground may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

#### SPECIAL NOTE FOR BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

## Special Note for Fixed Completion Date And Liquidated Damages

This project will have a fixed completion date of October 15, 2022 for completion of all work associated with this project.

Liquidated damages per the Standard Specifications will be charged for each calendar day for any work completed after October 15, 2022.

Contrary to Section 108.09 of the Standard Specifications, Liquidated Damages per the Standard Specifications will be charge during the months of December through March for all work that is not completed.

# SPECIAL NOTE FOR SPRAY APPLIED THERMOPLASTIC PAVEMENT MARKING MATERIALS

#### I. DESCRIPTION

Except as provided herein, all work shall be performed in accordance with the Department's Standard Specifications, Interim Supplemental Specifications, applicable Standard and Sepia Drawings, applicable Special Provisions and Special Notes, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials and incidentals for the following:

(1) Spray applied thermoplastic pavement marking materials with reflectorized glass beads for permanent applications

#### II. MATERIALS

- **A. DROP ON BEADS.** Use beads that will ensure the pavement marking material will meet retroreflectivity requirements. The Department will evaluate the beads as part of the marking system through retroreflectivity readings.
- **B.** APPROVAL. Select materials that conform to the composition and physical characteristic requirements below when evaluated in accordance with AASHTO T-250 or other test methods as cited. The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material from the date sampled.
- **C. Composition.** Use a maleic-modified glycerol ester resin (alkyd binder) to formulate the thermoplastic material. Ensure the pigment, pre-mix beads, and filler are uniformly dispersed in the resin. Use material that is free from all dirt and foreign material. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content.

COMPOSITION					
(Percentage by Weight)					
Component White Yellow					
Binder, (1)	26.0 min.	26.0 min.			
Glass Beads (Premixed)	30 - 40	30 - 40			
Titanium Dioxide (Rutile, Type II)	10.0 min.				
Calcium Carbonate & Inert Fillers (2)	42.0 max.	50.0 max.			
Heavy Metals Content	Comply with	Comply with			
	40 CFR 261	40 CFR 261			

<sup>(1)</sup> Use a binder that consists of a mixture of synthetic resins, at least one being solid at room temperature, and high boiling point plasticizers. Ensure that at least one-third of the binder composition is solid maleic-modified glycerol ester resin and is not less than 8 percent by weight of the entire material formulation. Do not use alkyd binder that contains petroleum based hydrocarbon resins.

<sup>(2)</sup> The manufacturer may choose the amount of calcium carbonate and inert fillers, providing all other requirements of this section are met.

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- **D.** Physical Characteristics. For thermoplastic material heated for 4 hours at 425°F under agitation, conform to the following requirements.
  - a) Color. As determined with a spectrophotometer using D65 illuminant with a 45 degree entrance angle and 0 degree observation angle geometry.

CIELAB Color Coordinates					
	Yellow	White			
Daytime Color (CIELAB)	L* 81.76	L* 93.51			
Spectrophotometer using	a* 19.79	a* -1.01			
illuminant D65 at 45°	b* 89.89	b* 0.70			
illumination and 0° viewing	Maximum allowable	Maximum allowable			
with a 2° observer	variation 6.0∆E*	variation 6.0∆E*			
Nighttime Color (CIELAB)	L* 86.90	L* 93.45			
Spectrophotometer using	a* 24.80	a* -0.79			
illuminant A at 45°	b* 95.45	b* 0.43			
illumination and 0° viewing	Maximum allowable	Maximum allowable			
with a 2° observer	variation 6.0∆E*	variation 6.0∆E*			

- b) Set Time. Use material that, when applied at a temperature range of  $375 \pm 25$  °F and thickness of  $60 \pm 10$  mils, sets to bear traffic in not more than 2 minutes when the air and road surface temperature is approximately  $\geq 50 \pm 3$  °F, and not more than 10 minutes when the air and road surface temperature is approximately  $\leq 50 \pm 3$  °F.
- c) Softening Point. Ensure that the thermoplastic material has a softening point of  $180 \pm 15$  °F.
- **Bond Strength.** Ensure that the bond strength of the thermoplastic material to concrete exceeds 180 psi.
- **e) Cracking Resistance at Low Temperature.** Ensure that the thermoplastic material shows no cracks when observed from a distance exceeding one foot.
- **f) Impact Resistance.** Ensure the impact resistance of the thermoplastic material is a minimum of 50 inch-pounds.
- g) Flash Point. Use thermoplastic material that has a flash point not less than 475 °F.
- **E. PACKAGING.** Package thermoplastic material in suitable 50 pound containers to which the material shall not adhere during shipment or storage. Include a label stating that the thermoplastic material is to be maintained with a temperature range of 350 400°F during application. Provide the thermoplastic material in granular form.
- **F. SHELF LIFE.** Ensure that the thermoplastic material conforms to this section for a period of one year. Replace any thermoplastic material not conforming to the above requirements.
- **G. MANUFACTURER'S TESTING.** Perform testing in accordance with AASHTO T-250 on a minimum of one composite sample per 10,000 pounds, or portion thereof, per lot of thermoplastic produced.
- **H. CERTIFICATION.** Submit manufacturer's certification stating conformance to the requirements of this section for each lot of extruded thermoplastic delivered for use on projects. Clearly state the manufacture, formulation identification, product name, color, date of manufacturer, total quantity of lot produced, actual quantity of thermoplastic material represented, sampling method utilized to obtain the samples, and required manufacturer's testing data for each composite sample tested to represent each lot produced.

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#### III. CONSTRUCTION METHODS

- **A. SURFACE PREPARATION.** The contractor will be required to sweep all pavement surfaces prior to striping and maintain the cleaning operation far enough in advance of the striping operation to prevent any dust from the cleaning operation from mixing with the paint. The sweeper must maintain contact with the roadway. When the Engineer determines abnormal amounts of debris or other material have accumulated beyond the capability of the required sweeping unit which will require shoveling or other means to remove, the Engineer will make arrangements, prior to painting, to have the material removed by the Department.
- **B. INSTALLATION.** Install thermoplastic materials in accordance with Section 714, Durable Pavement Striping, and the following exceptions:
  - Install the thermoplastic materials at a minimum thickness of 60 mils.
  - Ensure the material temperature is maintained between 350 and 400 °F.
  - Do not allow the material temperature to exceed 400°F.
  - Removal of existing stripe on asphalt surfaces is not required.
- **C. RETROREFLECTIVITY.** The Department will evaluate installed markings in accordance with Section 714.03.06, Proving Period for Durable Markings.

#### IV. METHOD OF MEASUREMENT

**A. ACCEPTANCE AND PAYMENT.** The Department will accept spray applied thermoplastic materials based on compliance of the manufacturer's certification and conformance of test results obtained by the Department to the requirements of this special note.

Contrary to Section 714.03.08, Acceptance of Non-Specification Thermoplastic Markings, the Department will not accept non-specification compliant markings. Remove non-specification compliant markings by water blasting. The Department will perform random thickness tests on applied markings to determine compliance to thickness requirements

#### IV. BASIS OF PAYMENT

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

<b>Code</b>	Pay Item	Pay Unit
24995EC	PAVE STRIPING-SPRAY THERMO-6 IN W	LF
24996EC	PAVE STRIPING-SPRAY THERMO-6 IN Y	LF

The Department will consider payment as full compensation for furnishing all labor, materials, equipment, and incidentals required to construct spray applied thermoplastic pavement markings.

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SPECIAL NOTE FOR PAVER MOUNTED TEMPERATURE PROFILES

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.** Provide a paver mounted infrared temperature equipment to continually monitor the temperature of the asphalt mat immediately behind all paver(s) during the placement operations for all mainline pavements (including ramps for Interstates and Parkways) within the project limits. Provide thermal profiles that include material temperature and measurement locations.
- 2.0 MATERIALS AND EQUIPMENT. In addition to the equipment specified in Subsection 403.02 Utilize a thermal equipment supplier that can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verification, and data management and processing as needed during the Project to maintain equipment within specifications and requirements.

Provide operator settings, user manuals, required viewing/export software for analysis. Ensure the temperature equipment will meet the following:

- (A) A device with one or more infrared sensors that is capable of measuring in at least 1 foot intervals across the paving width, with a minimum width of 12 feet, or extending to the recording limits of the equipment, whichever is greater. A **Maximum of two (2)** brackets are allowed in the influence area under the sensors. A temperature profile must be made on at least 1 foot intervals longitudinally down the road:
- (B) Infrared sensor(s):
  - (1) Measuring from 32°F to 400°F with an accuracy of ± 2.0% of the sensor reading.
- (C) Ability to measure the following:
- (1) The placement distance using a Global Positioning System (GPS) or a Distance Measuring Instrument (DMI) and a Global Positioning System (GPS).
  - (2) Stationing
- (D) GPS: Accuracy ± 4 feet in the X and Y Direction
- (E) Latest version of software to collect, display, retain and analyze the mat temperature readings during placement. The software must have the ability to create and analyze:
  - (1) Full collected width of the thermal profiles,
  - (2) Paver speed and
  - (3) Paver stops and duration for the entire Project.
- (F) Ability to export data automatically to a remote data server ("the cloud").

At the preconstruction meeting, provide the Cabinet with rights to allow for web access to the data file location. Access to the data is not to be hindered in any way. The Contractor will provide the Cabinet with any vendor specific software, user id, passwords, etc. needed to access the data through this service, cost of this access is incidental to the thermal profile bid item. The Cabinet is to have access to all data as it is being collected. If a third party is used for collecting and distributing the data the Cabinet is to have the same access rights and time as the Contractor.

This web-based software must also provide the Department with the ability to download the raw files and software and to convert them into the correct format.

- (G) The thermal profile data files must provide the following data in a neat easy to read table format.
  - (1) Project information including Road Name and Number, PCN, Beginning and Ending MPs.
  - (2) IR Bar Manufacturer and Model number
  - (3) Number of Temperature Sensors (N)
  - (4) Spacing between sensors and height of sensors above the asphalt mat
  - (5) Total number of individual records taken each day (DATA BLOCK)

- (a) Date and Time reading taken
- (b) Latitude and Longitude
- (c) Distance paver has moved from last test location
- (d) Direction and speed of the paver
- (e) Surface temperature of each of the sensors
- 3.0 CONSTRUCTION. Provide the Engineer with all required documentation at the pre-construction conference.
  - (A) Install and operate equipment in accordance with the manufacturer's specifications.
  - (B) Verify that the temperature sensors are within  $\pm$  2.0% using an independent temperature device on a material of known temperature. Collect and compare the GPS coordinates from the equipment with an independent measuring device.
  - (1) Ensure the independent survey grade GPS measurement device is calibrated to the correct coordinate system (using a control point), prior to using these coordinates to validate the equipment GPS.
  - (2) The comparison is considered acceptable if the coordinates are within 4 feet of each other in the X and Y direction.
  - (C) Collect thermal profiles on all Driving Lanes during the paving operation and transfer the data to the "cloud" network or if automatic data transmission is not available, transfer the data to the Engineer at the end of daily paving.
  - (D) Contact the Department immediately when System Failure occurs. Daily Percent Coverage will be considered zero when the repairs are not completed within two (2) working days of System Failure. The start of this two (2) working day period begins the next working day after System Failure.
  - (E) Evaluate thermal profile segments, every 150 feet, and summarize the segregation of temperature results. Results are to be labeled as Minimal 0°-25°F, Moderate 25.1°-50°F and Severe >50°. Severe readings over 3 consecutive segments or over 4 or more segments in a day warrant investigation on the cause of the differential temperature distribution.
- **4.0 MEASUREMENT.** The Department will measure the total area of the pavement lanes mapped by the infrared scanners. Full payment will be provided for all lanes with greater than 85% coverage. Partial payment will be made for all areas covered from 50% coverage to 85% coverage at the following rate Coverage area percentage X Total bid amount. And area with less than 50% coverage will not be measured for payment.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:
  - 1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
  - 2. Delays due to GPS satellite reception of signals or equipment breakdowns will not be considered justification for contract modifications or contract extensions.

<u>Code</u>	Pay Item	Pay Unit
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT

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#### 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 <sup>1</sup> , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	20 max.	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

<sup>&</sup>lt;sup>1</sup> Bring 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.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the 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.

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- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1<sup>st</sup> to May 15<sup>th</sup>. 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 1<sup>st</sup> to May 15<sup>th</sup>. From September 1<sup>st</sup> to June 1<sup>st</sup>, 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.

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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	20 max.	≤ 21	22 - 23	24 - 25	26 - 27	≥ 28
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

Code<br/>24970ECPay Item<br/>Asphalt Material for Tack Non-TrackingPay Unit<br/>Ton

#### SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

#### 1.0 General

**1.1 Description.** The KYCT (Kentucky Method for Cracking Test) and the Hamburg test results will help determine if the mixture is susceptible to cracking and rutting. During the experimental phase, data will be gathered and analyzed by the Department to determine the durability of the bituminous mixes. Additionally, the data will help the Department to create future performance based specifications which will include the KYCT and Hamburg test methods.

#### 2.0 Equipment

- **2.1 KYCT Testing Equipment.** The Department will require a Marshall Test Press with digital recordation capabilities. Other CT testing equipment may be used for testing with prior approval by the Department.
- **2.2 Water Baths.** One or more water baths will be required that can maintain a temperature of 77° +/- 1.8° F with a digital thermometer showing the water bath temperature. Also, one water bath shall have the ability to suspend gyratory specimen fully submerged in water in accordance with AASHTO T-166, current edition.
- **2.3** Hamburg Wheel Track Testing. The department encourages the use of the PTI APA/Hamburg Jr. test equipment to perform the loaded wheel testing. The Department will allow different equipment for the Hamburg testing, but the testing device must be approved by the Department prior to testing.
- **2.4 Gyratory Molds.** Gyratory molds will be required to assist in the production of gyratory specimens in accordance with AASHTO T-312, current edition.
- **2.5 Ovens.** Adequate (minimum of two ovens) will be required to accommodate the additional molds and asphalt mixture necessary to perform the acceptance testing as outlined in Section 402 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.
- **2.6 Department Equipment.** The Department will provide gyratory molds, PINE 850 Test Press with digital recordation, and CT testing equipment to assist during this experimental phase so data can be gathered. Hamburg test specimens will be submitted to the Division of Materials for testing on the PTI APA/Hamburg Jr if the asphalt contractor or district materials office does not have an approved Hamburg testing device.

#### 3.0 Testing Requirements

- **3.1 Acceptance Testing.** Perform all acceptance testing and aggregate gradation as according with Section 402 and Section 403 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.
- **3.2 KYCT Testing.** Perform crack resistance analysis (KYCT) in accordance with the current Kentucky Method for KYCT Index Testing during the mix design phase and during the plant production of all surface mixtures. For mix design approvals, submit KYCT results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.

- **3.2.1 KYCT Frequency.** Obtain an adequate sample of hot mix asphalt to insure the acceptance testing, gradation, and KYCT gyratory samples can be fabricated and is representative of the bituminous mixture. Acceptance specimens shall be fabricated first, then immediately after, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens and gradation will be required one per sublot produced from the same asphalt material and at the same time as the acceptance specimen is sampled and tested.
- **3.2.2 Number of Specimens and Conditioning.** Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance to KM 64-411. KYCT mix design specimens shall be short-term conditioned for four hours at compaction temperature in accordance to KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours at compaction temperature in accordance to KM 64-411. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned in a 77 °F water bath for 30 minutes +/- 5 minutes. To insure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is prohibited.
- **3.2.3 Record Times.** For each sublot, record the time required between drying aggregates in the plant to KYCT specimen fabrication. The production time may vary due to the time that the bituminous material is held in the silo. Record the preconditioning time when the time exceeds the one hour specimen cool down time as required in accordance to The Kentucky Method for KYCT Index Testing. The preconditioning time may exceed an hour if the technician is unable to complete the test on the same day or within the specified times as outlined in The Kentucky Method for KYCT Index Testing. The production time and the preconditioning time shall be recorded on the AMAW.
- **3.2.4 File Name.** As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format; "CID\_Approved Mix Number\_Lot Number\_Sublot Number\_Date"
- **3.3 Hamburg Testing.** Perform the rut resistance analysis (Hamburg) in accordance to AASTHO T-324, not to exceed 20,000 passes for all bituminous mixtures during the mix design phase and production. For mix design approvals, submit Hamburg results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.
- **3.3.1 Hamburg Testing Frequency.** Perform testing and analysis per lot of material. The plant produced bituminous material sampled for the Hamburg test does not have to be obtained at the same time as the acceptance and KYCT sample. If the Hamburg test sample is not obtained at the same time as the KYCT sample, determine the Maximum Specific Gravity of the KYCT sample in accordance with AASHTO T-209 coinciding with the Hamburg specimens.
- **3.3.2 Record Times.** Record the production time as according to section 3.2.3 in this special note. Also record the time that the specimens were fabricated and the time the Hamburg testing was started. All times shall be recorded on the AMAW.

**3.3.3 File Name.** Save the Excel spreadsheet with the following file name; "Hamburg\_CID\_Approved Mix Number\_Lot Number\_Sublot Number\_Date" and upload the file into the AMAW.

#### 4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and Hamburg testing within five working days once all testing has been completed for a lot to Central Materials Lab and the District Materials Engineer. Also, any data and or comments that the asphalt contractor or district personnel deem informational during this experimental phase, shall also be submitted to the Central Materials Lab and the District Materials Engineer. Any questions or comments regarding any item in this Special Note can be directed to the Central Office, Division of Materials, Asphalt Branch.

#### **5.0 KYCT Video Demonstration**

https://youtu.be/84j0bM45-hg

#### 6.0 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered to be incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

October 8, 2020

 LEWIS COUNTY
 Contract ID: 221024

 FD05 068 0009 025-032
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Printed Name

Signature

Date

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

**RIGHT OF WAY CERTIFICATION** 

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

	Re-C	ertification		RIGHT O	F WAY CERTIFICATI	ON	
ITEM #		C	COUNTY	PROJE	CT # (STATE)	PROJECT # (FEDERAL)	
09-22354.00		Lewis	FD05 068 0009 025-032				
PROJECT DESCRIPTI	ON						
ADDRESS CONDITION OF KY-9 FROM MILEPOINT 25.539 TO MILEPOINT 31.218							
No Additional	No Additional Right of Way Required						
Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations						ance to FHWA regulations	
under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or							
relocation assistance		-	-				
_			Vay Required and	•			
All necessary right of	-	_	_	• •	•		
1 7	-		_			e may be some improvements	
	-	-		-		physical possession and the n paid or deposited with the	
_	_	-				ailable to displaced persons	
adequate replacemen						andble to displaced persons	
			Vay Required wit				
	-		<u> </u>	•	of-way required for t	the proper execution of the	
project has been acqu	ired. Son	ne parcels may	be pending in cour	t and on other parce	els full legal possessio	n has not been obtained, but	
right of entry has been	n obtaine	ed, the occupan	ts of all lands and in	mprovements have	vacated, and KYTC ha	s physical possession and right	
		-	•	•	-	e court for most parcels. Just	
Compensation for all					o AWARD of construc	tion contract	
	-		Vay Required wit	•			
-			_	•	· ·	arcels still have occupants. All	
remaining occupants I		-	_				
_		-		•		necessary right of way will not	
-		•		-		paid or deposited with the 535.309(c)(3) and 49 CFR	
24.102(j) and will expe							
AWARD of the constru		•	•		into arter blu letting a	na prior to	
Total Number of Parcels on			EPTION (S) Parcel #		PATED DATE OF POSSESSIO	ON WITH EXPLANATION	
Number of Parcels That Ha	ve Been Ac	· ·					
Signed Deed							
Condemnation							
Signed ROE	A -1 -1's '	I Charatif a second					
Notes/ Comments (Use	Additiona	ii Sneet it necessa	ary)				
LPA RW Project Manager Right of Way Supervisor							
Printed Name	NVV PIO	ject ivialiager		Right of Way Supervisor  Printed Name  Iames R. Mason			
Signature				Signature	Jar	nes R. Mason	
Date				Date			
	tht of M	/av Director		2410	FHWΔ		

Printed Name

Signature

Date

#### UTILITIES AND RAIL CERTIFICATION NOTE

Lewis County
FD05 068 0009 025-032
Mile point: 25.539-31.218
ADDRESS CONDITION OF KY-9 FROM MILEPOINT 25.539 TO MILEPOINT 31.218
ITEM NUMBER: 09-22354.00

#### **PROJECT NOTES ON UTILITIES**

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

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. 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.

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.

LEWIS COUNTY FD05 068 0009 025-032

#### Contract ID: 221024 Page 68 of 90

#### **UTILITIES AND RAIL CERTIFICATION NOTE**

Lewis County
FD05 068 0009 025-032
Mile point: 25.539-31.218
ADDRESS CONDITION OF KY-9 FROM MILEPOINT 25.539 TO MILEPOINT 31.218
ITEM NUMBER: 09-22354.00

#### NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

AT&T Distribution – Fiber Optic

Fleming Mason Energy – Electric

Windstream Kentucky - Telephone

Western Lewis Rectorville Water - Water/Gas

Spectrum - CATV

\*The Contractor is fully responsible for protection of all utilities listed above\*

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

LEWIS COUNTY FD05 068 0009 025-032 Contract ID: 221024 Page 69 of 90

### **UTILITIES AND RAIL CERTIFICATION NOTE**

Lewis County
FD05 068 0009 025-032
Mile point: 25.539-31.218
ADDRESS CONDITION OF KY-9 FROM MILEPOINT 25.539 TO MILEPOINT 31.218
ITEM NUMBER: 09-22354.00

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD
CONTRACTOR AS INCLUDED IN THIS CONTRACT

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

oximes No Rail Involvement oximes Rail Involved oximes Rail Adjacent

#### Contract ID: 221024 Page 70 of 90

### **UTILITIES AND RAIL CERTIFICATION NOTE**

Lewis County
FD05 068 0009 025-032
Mile point: 25.539-31.218
ADDRESS CONDITION OF KY-9 FROM MILEPOINT 25.539 TO MILEPOINT 31.218
ITEM NUMBER: 09-22354.00

# **AREA FACILITY OWNER CONTACT LIST**

Facility Owner	Address	Contact Name	Phone	Email
AT&T Distribution	1340 E JOHN ROWAN BLVD	Austin, Sara	502-939-7032	sara.austin@att.com
	BARDSTOWN, KY 40004			
Fleming Mason Energy	PO Box 328	Hunt, Brandon	606-845-2661	bhunt@fme.coop
	1449 Elizaville Road			
	Flemingsburg, KY 41041			
Windstream Kentucky	130 West New Circle Road	Johnson, Steve	859-357-6209	Steve.Johnson@windstream.com
	Suite 170			
	Lexington, KY 40505			
Western Lewis	8044 KY 3161	Clark, Chad	606-742-0014	wlrwaterandgas2@yahoo.com
Rectorville Water	Maysville, KY 41056			
Spectrum	1617 Foxhaven Dr	Smith, Steven	859-626-4809	rsteven.smith@charter.com
	Richmond, KY 40475			

LEWIS COUNTY FD05 068 0009 025-032

## **GUARDRAIL DELIVERY VERIFICATION SHEET**

Contract ID: 221024 Page 71 of 90

Contract Id:		Contractor:				
Section Engineer:		_ District & County: _				
<u>DESCRIPTION</u>	<u>UNIT</u>	QTY LEAVING PROJECT	QTY RECEIVED@BB YARD			
GUARDRAIL (Includes End treatments & crash cushions)	LF					
STEEL POSTS	EACH					
STEEL BLOCKS	EACH					
WOOD OFFSET BLOCKS	EACH					
BACK UP PLATES	EACH					
CRASH CUSHION	EACH					
NUTS, BOLTS, WASHERS	BAG/BCKT					
DAMAGED RAIL TO MAINT. FACILI	TY LF					
DAMAGED POSTS TO MAINT. FACI	LITY EACH					
* <u>Required Signatures before</u>	<u> Leaving Proje</u>	<u>ect Site</u>				
Printed Section Engineer's R	epresentative_		_ & Date			
Signature Section Engineer's	Representativ	/e	_& Date			
Printed Contractor's Represe	entative		& Date			
Signature Contractor's Repre	esentative		& Date			
			on truck must be counted & the			
quantity received column co			on track mast be counted & the			
Printed Bailey Bridge Yard Re	epresentative_		_& Date			
Signature Bailey Bridge Yard	Representativ	e	_& Date			
			& Date			
			& Date			
<u> </u>						
**Payment for the hid item	remove guardi	rail will he hased upon the o	uantities shown in the Bailey Bridge			
•	_	•	until the guardrail verification she			
are electronically submitted	to the Section	Engineer by the Bailey Bridg	ge Yard Representative.			

Date: \_\_\_\_\_

By: \_\_\_\_\_

Completed Form Submitted to Section Engineer

# 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 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:

 $\underline{http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx}$ 

1**I** 

### 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.
  - 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.
- 9) 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.

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- 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:

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/\*\*MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< 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/ /SPEED/LIMIT/\*\*MPH/ /BRIDGE/WORK/\*\*\*0 FT/ /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

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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 ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

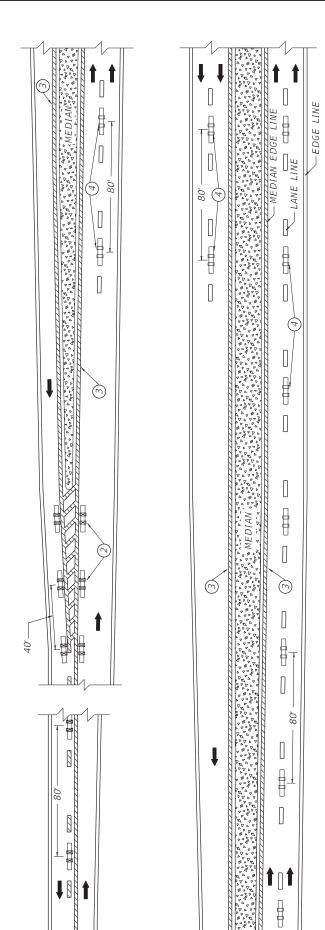
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4.

1. 2. 2.

INLAID PAVEMENT MARKER DEPARTMENT OF HIGHWAYS

DRAWING NOT TO SCALE USE WITH CUR. STD. DW TPM-100 TPM-105 TPM-1 KENTUCKY



TWO LANE TO FOUR LANE PAVEMENT TRANSITIONS

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE) BI-DIRECTIONAL PAVEMENT MARKER (YELLOW) LEGEND MARKINGS (YELLOW) MARKINGS (WHITE) **X** 77777

~ NOTES

- MARKERS INSTALLED ALONG LANE LINES OR DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE DASHES.
- MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE. ~. √√
- MARKERS MAY BE REQUIRED ALONG THE MEDIAN EDGE LINES DEPENDING ON TYPE AND WIDTH OF MEDIAN. SEETPM-100,TPM-105, AND TPM-110 FOR GUIDANCE. IF MEDIAN WIDTH IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.  $\odot$ 4
- MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS 06610 - INLAID PAVEMENT MARKER - MW 06612 - INLAID PAVEMENT MARKER - BY

UNIT TO BID EACH EACH

Page 80 of 90 06-09-21 ARRANGEMENT
TWO-LANE TO FOUR-LANE
TRANSITIONS (3)

DEPARTMENT OF HIGHWAYS

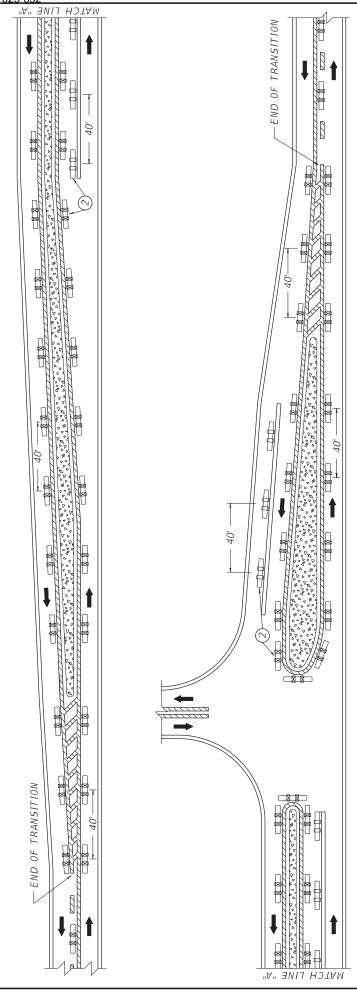
KENTUCKY

DRAWING NOT TO SCALE

DWG.

USE WITH CUR. STD.

TPM-205



# CHANNELIZED INTERSECTION ON A TWO DIRECTIONAL TWO LANE FACILITY

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE) BI-DIRECTIONAL PAVEMENT MARKER (YELLOW) CURBED OR FLUSH MEDIAN LEGEND MARKINGS (YELLOW) MARKINGS (WHITE) D D D D O

~ NOTES

- MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS. <u>~</u> (~)
- MARKERS INSTALLED ALONG EDGE LINES OR CHANNELIZING LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
- MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS 06610 - INLAID PAVEMENT MARKER - MW 06612 - INLAID PAVEMENT MARKER - BY

UNIT TO BID EACH EACH

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## TWO LANE ROADWAY PAVEMENT CROSS-SECTION

011111111111111111111111111111111111111	TYPE OF	ION	VON-STATE PRIMARY ROUTES	IMARY RO	UTES	71S	STATE PRIMARY ROUTES
NAY WAY	PAVEMENT STRIPING	< 10	< 1000 ADT	>= 1(	>= 1000 ADT		ANY ADT
0		WIDTH	MATERIAL	WIDTH	WIDTH MATERIAL WIDTH MATERIAL WIDTH	WIDTH	MATERIAL*
< 16' @	< 16'	4"	PAINT	4".	PAINT	,.9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)
16' 70 < 20'	EDGELINE STRIPES ONLY OR CENTERLINE STRIPE ONLY	4"	PAINT	4".	PAINT	9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)
>=20' ③	CENTERLINE AND EDGELINE STRIPES	4" 5	4" S PAINT	9	PAINT	,,9	THERMO (ASHPALT) TYPE I TAPE (CONCRETE)

OTHER DURABLE NON-WATERBORNE MARKINGS MAY BE USED WITH APPROVAL FROM THE DIVISION OF TRAFFIC OPERATIONS.

~ NOTES ~

INSTALL PAVEMENT STRIPING ON TWO LANE, TWO WAY ROADWAYS AS DETAILED IN THE ABOVE TABLE AND IN ACCORDANCE WITH THE PAVEMENT MARKINGS AND DELINEATION CHAPTER OF THE TRAFFIC OPERATIONS GUIDANCE MANUAL. CONTACT THE DIVISION OF TRAFFIC OPERATIONS FOR ADDITIONAL GUIDANCE IF NECESSARY.

THE TRAVELED WAY IS THE PORTION OF ROADWAY FOR THE MOVEMENT OF VEHICLES, EXCLUSIVE OF THE SHOULDERS  $\bigcirc$ 

IS ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 20 FT OR GREATER, BUT LESS THAN 22 FT, EDGELINE RUMBLE STRIPS ARE NOT A STANDARD APPLICATION, BUT THEY MAY BE INSTALLED. THE DIVISION OF TRAFFIC OPERATIONS AVAILABLE TO ASSIST WITH THE DETERMINATION OF WHETHER OR NOT TO INSTALL EDGELINE RUMBLE STRIPS ON PAVEMENT WIDTHS LESS THAN 22 FT, AS WELL AS THE DIMENSION AND PLACEMENT DETAILS OF THE RUMBLE STRIPS AND PAVEMENT STRIPING.  $\odot$ 

STRIPS ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 22 FT OR GREATER, BUT LESS THAN 34 FT, INSTALL PAVEMENT STRIPING AS DETAILED IN THE ABOVE TABLE AND IN CONJUNCTION WITH CENTERLINE AND EDGELINE RUMBLE AS DETAILED ON TPR-120

EDGELINES MAY BE OMITTED FROM ROADWAYS WITH A TRAVELED WAY WIDTH LESS THAN 16 FEET WITH THE APPROVAL OF THE DIVISION ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 34 FT OR GREATER, INSTALL PAVEMENT STRIPING AS DETAILED IN THE ABOVE TABLE AND IN CONJUCTION WITH CENTERLINE AND SHOULDER RUMBLE STRIPS AS DETAILED ON TPR-125.

OF TRAFFIC OPERATIONS.

(4)

EDGELINES MAY BE OMITTED ON NON-STATE PRIMARY ROUTES WITH A TRAVELED WAY WIDTH GREATER THAN OR EQUAL TO 20 FEET AND AN ADT LESS THAN 1,000. (2)

EDGELINES MAY BE OMITTED, BASED ON ENGINEERING JUDGMENT, IN AREAS WHERE THE PAVEMENT EDGE IS DELINEATED BY PHYSICAL OBJECTS SUCH AS CURBS, PARKING SPACES, OR OTHER MARKINGS. EDGELINES SHOULD BE INSTALLED ON ROADWAYS WITH CURB AND GUTTER IF THE POSTED SPEED LIMIT IS 45 MPH OR GREATER. 9

USE WITH CUR. STD. DWGS.

## USE WITH CUR, STD. DWGS. TPR-120 & TPR-125 KENTUCKY DEPARTMENT OF HIGHWAYS

PAVEMENT STRIPING
DETAILS FOR TWO LANE
TWO WAY ROADWAYS



### **PART III**

### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

LEWIS COUNTY FD05 068 0009 025-032

### Contract ID: 221024 Page 85 of 90

### 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 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: <a href="https://www.eProcurement.ky.gov">https://www.eProcurement.ky.gov</a>.

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.

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### 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: 221024

### **PROPOSAL BID ITEMS**

221024

Report Date 4/22/22

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0010	00100		ASPHALT SEAL AGGREGATE	70.00	TON		\$	
0020	00103		ASPHALT SEAL COAT	8.00	TON		\$	
0030	00190		LEVELING & WEDGING PG64-22	636.00	TON		\$	
0040	00388		CL3 ASPH SURF 0.38B PG64-22	9,542.00	TON		\$	
0050	02677		ASPHALT PAVE MILLING & TEXTURING	9,542.00	TON		\$	
0060	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	774,394.00	SF		\$	
0070	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	40.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
080	00001	DGA BASE	412.00	TON		\$	
090	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	111.00	EACH		\$	
100	02351	<b>GUARDRAIL-STEEL W BEAM-S FACE</b>	6,365.00	LF		\$	
0110	02360	<b>GUARDRAIL TERMINAL SECTION NO 1</b>	4.00	EACH		\$	
0120	02367	<b>GUARDRAIL END TREATMENT TYPE 1</b>	30.00	EACH		\$	
0130	02381	REMOVE GUARDRAIL	6,365.00	LF		\$	
0140	02396	REMOVE GUARDRAIL END TREATMENT	30.00	EACH		\$	
0150	02562	TEMPORARY SIGNS	1,000.00	SQFT		\$	
0160	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0170	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0180	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0190	02696	SHOULDER RUMBLE STRIPS	29,169.00	LF		\$	
0200	02726	STAKING	1.00	LS		\$	
0210	02775	ARROW PANEL	2.00	EACH		\$	
0220	06510	PAVE STRIPING-TEMP PAINT-4 IN	59,970.00	LF		\$	
0230	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF		\$	
0240	06550	PAVE STRIPING-TEMP REM TAPE-W	500.00	LF		\$	
0250	06551	PAVE STRIPING-TEMP REM TAPE-Y	500.00	LF		\$	
0260	06568	PAVE MARKING-THERMO STOP BAR-24IN	168.00	LF		\$	
0270	06569	PAVE MARKING-THERMO CROSS-HATCH	12,026.00	SQFT		\$	
0280	06573	PAVE MARKING-THERMO STR ARROW	8.00	EACH		\$	
0290	06574	PAVE MARKING-THERMO CURV ARROW	9.00	EACH		\$	
0300	06610	INLAID PAVEMENT MARKER-MW	68.00	EACH		\$	
0310	06612	INLAID PAVEMENT MARKER-BY	438.00	EACH		\$	
0320	10020NS	FUEL ADJUSTMENT	15,843.00	DOLL	\$1.00	\$	\$15,843.00
0330	10030NS	ASPHALT ADJUSTMENT	39,792.00	DOLL	\$1.00	\$	\$39,792.00
0340	20191ED	OBJECT MARKER TY 3	30.00	EACH		\$	
0350	20366NN	REPLACE GRATE	3.00	EACH		\$	
0360	20458ES403	CENTERLINE RUMBLE STRIPS	29,649.00	LF		\$	
0370	20757ED	PAVEMENT REPAIR	54.00	SQYD		\$	
0380	22883EN	CONCRETE WEDGE CURB	5,101.00	LF		\$	
0390	23593EC	SHOULDER FAILURE REPAIR	42.00	SQYD		\$	
0400	24995EC	PAVE STRIPING-SPRAY THERMO-6 IN W	62,308.00	LF		\$	

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### **PROPOSAL BID ITEMS**

221024

Report Date 4/22/22

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0410	24996EC		PAVE STRIPING-SPRAY THERMO-6 IN Y	34,548.00	LF		\$	
0420	26119EC		INSTALL RADAR PRESENCE DETECTOR TYPE A	4.00	EACH		\$	

### Section: 0003 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FΡ	AMOUNT
0430	02568		MOBILIZATION	1.00	LS		\$	
0440	02569		DEMOBILIZATION	1.00	LS		\$	