

CALL NO. 318

CONTRACT ID. 232315

WAYNE COUNTY

FED/STATE PROJECT NUMBER FD04 116 0090 001-005

DESCRIPTION MONTICELLO - ALBANY ROAD (KY 90)

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 6/30/2024

LETTING DATE: August 24,2023

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 24,2023. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- SURFACING AREAS
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- MATERIAL TRANSFER VEHICLE (MTV)
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- WASTE AND BORROW SITES
- EXPERIMENTAL KYCT AND HAMBURG TESTING
- DOUBLE ASPHALT SEAL COAT
- ASPHALT MIXTURE FOR PAVEMENT WEDGE
- SHOULDER FAILURE REPAIR
- EDGE KEY (BY TON)
- GUARDRAIL
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- TRAFFIC CONTROL PLAN 4 LANE
- DURABLE PAVEMENT EDGE DETAILS
- TRENCHING
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- GUARDRAIL DELIVERY VERIFICATION SHEET
- BRIDGE DETAIL FOR PAVING PROJECT

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-11] PORTABLE CHANGEABLE SIGNS
- 2020 STANDARD DRAWINGS THAT APPLY

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

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

PART IV INSURANCE

PART V BID ITEMS

PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 08

CONTRACT ID - 232315 FD04 116 0090 001-005

COUNTY - WAYNE

PCN - MP11600902301 FD04 116 0090 001-005

MONTICELLO - ALBANY ROAD (KY 90) (MP 1.955) FROM EAST END OF OTTER CREEK BRIDGE EXTENDING EAST TO 1,775 FEET WEST OF KY 858 (MP 4.650), A DISTANCE OF 02.69 MILES.ASPHALT PAVEMENT & ROADWAY REHAB

GEOGRAPHIC COORDINATES LATITUDE 36:46:26.00 LONGITUDE 84:57:30.00 ADT 8,392

COMPLETION DATE(S):

COMPLETED BY 06/30/2024 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

BUILD AMERICA, BUY AMERICA ACT (BABA)

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

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

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

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

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

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

BOYCOTT PROVISIONS

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

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

LOBBYING PROHIBITIONS

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

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

February 1, 2023

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

April 30, 2018

Contract ID: 232315 Page 10 of 69

SURFACING AREAS

The Department estimates the mainline surfacing width to be varied 24-36 feet.

The Department estimates the total mainline area to be surfaced to be 53,976 square yards.

The Department estimates the shoulder width to be 10 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 31,622 square yards.

ASPHALT MIXTURE

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

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION 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.

MATERIAL TRANSFER VEHICLE (MTV)

Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05.

SPECIAL NOTES FOR PIPE EXTENSIONS FD04 116 0090 001-005

Except as provided herein, perform all work in accordance with the Department's 2012 Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, 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) Maintaining and Controlling Traffic; (2) Constructing pipe extensions; (3) Embankment; (4) Erosion Control; and (5) any other work as specified by this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make 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.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Culvert Pipe. Furnish pipe meeting the requirements of Section 810. Select pipe for Ph range Medium and minimum fill cover height according to Standard Drawings RDI-001-009 and RDI-035-01.
- C. Flowable Fill. Use flowable fill for pipe backfill according to Section 601.03.03(B).
- **D. Erosion Control.** See Special Note for Erosion Control.
- **E. Embankment.** Use suitable excavated earth materials, approved by the Engineer, aerated to proper moisture content prior to use. Obtain additional embankment from borrow sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department.
- **F. Pavement.** Use Class 2 Asphalt Binder 0.50D PG64-22.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation. Be responsible for all site preparation, including but not limited to saw cutting and removing pavement; clearing and grubbing, and incidental excavation

Contract ID: 232315 Page 12 of 69

Culvert Extensions CB06 1785 000-005 Page 2 of 5

and backfilling; removal of existing pipe, headwalls, and any obstructions or items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Clear and grub only the minimum areas required to perform the other items of work; the Department has not determined the acreage of clearing and grubbing and the bidder must draw his own conclusions. Remove and replace existing fence, if present, the minimum amount required for construction as approved by the Engineer and replace upon completion of construction in like kind materials and design. Perform all site preparation only as approved or directed by the Engineer. Limit staging areas within the right of way to sites permitted by the Engineer.

Immediately prior to completion, clean all listed existing and new culvert pipe and clean ditches as designated by the Engineer. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction.

- **D. Removing Pipe and Excavation**. Remove existing culvert pipe at the approximate locations noted on the summary. The Engineer will determine the actual location at the time of construction. Saw cut the existing asphalt pavement, PCC pavement if present, and base to a neat edge prior to excavation and removal of the existing pipe. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities. Deliver pipe determined by the Engineer to be reusable to the Department's Todd County Maintenance Facility. Waste excavated materials not suitable for embankment, excess excavation, and unusable removed pipe at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).
- **E. Culvert Pipe**. Construct culvert pipe extensions at the locations designated by the Engineer. Obtain the Engineer's approval of final lengths, centerline, flow lines and skew to obtain the best fit of the existing ditches and channels and proposed slopes. Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings. Use approved connecting bands, sleeves, and/or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.
- **F. Pipe Backfill.** Backfill the pipe with according to Section 701.03.06.
- **G. Channel Lining.** Place channel lining as directed by the Engineer. In addition to the requirements of section 703, additional hand placement may be required.
- **H. Embankments.** After backfilling pipe extensions, construct embankment over pipe and widened shoulder embankments according to Section 206 as shown on the drawings or as directed by the Engineer. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

Culvert Extensions CB06 1785 000-005 Page 3 of 5

- **I. Pavement Restoration.** Construct Asphalt Binder the full depth of existing base and surface. Final surface course will be by others and is not part of this Contract.
- **J. Guardrail.** Guard rail, if required, will be by others and is not part of this Contract.
- **K. Final Dressing, Clean Up, Seeding and Protection, and Restoration.** After all work is completed, remove all waste and debris from the job site (see Special Note for Waste and Borrow). Grade all disturbed areas to blend with the adjacent roadway features and to provide a suitable seed bed. Perform Class A Final dressing on all disturbed areas. Seed and protect all disturbed earthen areas according to the Special Notes for Erosion Control.
- **L. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.
- **M. Disposal of Waste.** Dispose of all removed pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).
- **N. On-Site Inspection.** Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.
- **O. Right-of-Way Limits.** The Department has not determined exact Right-of-Way limits. Limit work activities and operations to obvious existing Right-of-Way and Permanent Easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for encroachments onto private lands. Secure staging areas off the Right-of-Way, if required, at no additional cost to the Department.
- **P.** Utility Clearance. Work around and do not disturb existing utilities. The Department does not anticipate that utilities will require relocation; however, if utility relocation is required, the utility companies will work concurrently with the Contractor while relocating their facilities.
- **Q. Caution**. Consider the information in this proposal, shown on the plans, and the type of work listed herein to be approximate only and not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his own conclusions. The Department does not give any guarantee as to the accuracy of the

Contract ID: 232315 Page 14 of 69

Culvert Extensions CB06 1785 000-005 Page 4 of 5

data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

R. Control. Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

S. Staking. See Special Note for Staking.

IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed for payment. The Department will consider all other items required to complete the work incidental to the listed items.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, the Department will not measure site preparation for separate payment, but shall be incidental to culvert pipe.
- C. Erosion Control. See Special Note for erosion Control.
- **D. Embankment.** Contrary to Sections 205 and 206 the Department will measure embankment as load counts converted to cubic yards for materials deposited and compacted to the plan typical sections.

Contract ID: 232315 Page 15 of 69

Culvert Extensions CB06 1785 000-005 Page 5 of 5

V. BASIS OF PAYMENT

The department will not make direct payment other than for the bid items listed. The Department will consider payment for all other items required to complete the work incidental to the listed items

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Culvert Pipe. Accept payment at the Contract unit price per linear foot as full compensation for furnishing all labor, materials, equipment and incidentals for Site Preparation, Staking, furnishing and installing new Culvert Pipe, and furnishing and placing Flowable Fill.
- **C. Erosion Control.** See Special Note for erosion Control.

DOUBLE CHIP SEAL LOCATION NOTE

Asphalt Seal Coat is required at all guardrail locations from edge of paved shoulder to a point 2 ft. down the fill slope. Asphalt seal coat is to be applied in 2 applications at a rate for each application of 2.4 Lb/Sqyd for the asphalt seal coat and 20 Lb/Sqyd for the asphalt seal aggregate.

Contract ID: 232315 Page 17 of 69

SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites 01/02/2012

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 verification.

- **3.2.1 KYCT Frequency.** Obtain an adequate sample of hot mix asphalt to ensure 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, for field specimens, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance with KM 64-411. KYCT mix design specimens shall be short-term conditioned uncovered for four hours at compaction temperature in accordance with KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with 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 ensure 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 with 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 with 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 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered 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.

June 15th, 2022

SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to "Asphalt Material for Asphalt Seal Coat".

1-3215 Double Asphalt Seal Coat 01/02/2012

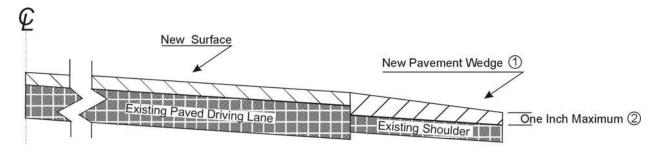
SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER SEPARATE OPERATION

- **1.0 MATERIALS.** Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.
- **2.0 CONSTRUCTION.** Place the Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03 and 403.03 as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the driving lanes. Where existing site conditions permit, limit the outside edge thickness of the new paving limits to one inch above the existing shoulder wedge elevation. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



- ① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.
- ② Where existing site conditions permit.
- **3.0 MEASUREMENT.** The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Sections 403 and 407 as applicable.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures placed as pavement wedge according to Section 403. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

SPECIAL NOTES FOR SHOULDER FAILURE REPAIR

Shoulder Failure Repair is an estimated quantity to be used for soft spots found after trenching. The Engineer will determine actual shoulder failure repair locations at the time of construction. Excavate to an approximate depth of 18 inches below the bottom of the trenching. Remove and dispose of all materials. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Waste all removed materials off the Right of Way at sites obtained by the Contractor at no additional cost to the Department(see Special Note for Waste and Borrow)

Backfill the excavated area with 18 inches of #23 Stone wrapped in Fabric-Geotextile Class 2 (Separation), up to the bottom of the trenching. Cut and backfill in like manner, a 2 ft wide bleeder at the lowest point of the Failure Repair. Perform all shoulder failure repairs in such a manner that removal and replacement are completed on the same day. Prior to constructing new asphalt shoulder surfacing, level and wedge any settlement of the repair areas.

The bidder must draw his 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 of the materials encountered that are not in accord with the classification shown.

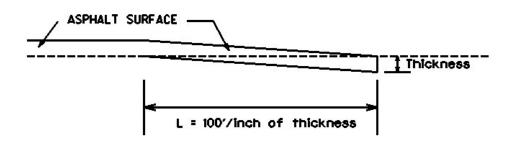
Payment at the Contract unit prices per square yard for "Shoulder Failure Repair" and per ton for "Leveling and Wedging" shall be full compensation for all labor, materials, equipment, and incidentals for excavating and disposing of all materials, furnishing and placing #23s and fabric backfilling the trench up to the top pavement boundary, sealing the repaired area with Leveling and Wedging, and all other items necessary to complete the work to the satisfaction of the Engineer.

1-3240 Shoulder Failure 01/02/1/2012

SPECIAL NOTE FOR EDGE KEY

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

EDGE KEY



Thickness = 1.25 Inches

L = 125 LF

L= Length of Edge Key

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

SPECIAL NOTES FOR GUARDRAIL

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and control traffic; and (6) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

- A Maintain and Control Traffic. See Traffic Control Plan.
- **B. Guardrail.** Furnish guardrail system components according to section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.
- **C. Delineators for Guardrail. Delineators for Guardrail.** Furnish Delineators for Guardrail according to the Sepia Drawings.
- **D. Erosion Control.** See Special Notes for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Remove existing guardrail system including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system according to Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way at sites obtained by the Contractor at no additional cost to the Department. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the

Guardrail Page 2 of 3

existing shoulders to provide proper template or foundation for the guardrail; filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the Engineer.

C. Guardrail. Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on current Standard and Sepia Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags. Support cantilevered terminal sections with an additional post.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- **D. Delineators for Guardrail.** Install delineators for guardrail according to the Standard and Sepia Drawings.
- **E. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- **F. Coordination with Utility Companies.** Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that 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. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.
- **G. Right of Way Limits**. The Department has not established exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements,

Contract ID: 232315 Page 27 of 69

Guardrail Page 3 of 3

and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

- **H. Disposal of Waste.** Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See Special; Note for Waste and Borrow.
- **I. Final Dressing, Clean Up, and Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas according to the Special Notes for Erosion Control.
- **J. Erosion Control.** See Special Notes for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site preparation.** Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections as applicable.
- C. Guardrail. See Section 719.04.
- **D. Delineators for Guardrail.** See the Sepia Drawing.
- **E. Erosion Control.** See Special Notes for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Guardrail.** See Section 719.05.
- **C. Delineators for Guardrail.** See the Sepia Drawing.
- **D. Erosion Control.** See Special Notes for Erosion Control.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

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

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver this material to the State Maintenance facility in Wayne County (50%) and Clinton County (50%).

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

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

Contract ID: 232315 Page 29 of 69

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions 01/02/2012

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not erect lane closures on the following days:

Friday, June 30, 2023 – Tuesday, July 4, 2023 – Independence Day Weekend Friday, September 1, 2023 – Monday, September 4, 2023 – Labor Day Weekend

The Engineer may specify additional days and hours when lane closures will not be allowed. At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. 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 on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

Do not leave lane closures in place during non-working hours.

SIGNS

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Traffic Control Plan Page 2 of 11

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place 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 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 Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign within 24 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure for payment the maximum number of Arrow Panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

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

Contract ID: 232315 Page 32 of 69

Traffic Control Plan Page 3 of 11

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.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

TRAFFIC SIGNAL LOOPS

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement. Coordinate the placement of the loops with the Engineer.

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of the work.

Traffic Control Plan Page 4 of 11

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exceptions:

- 1. Include edge lines in Temporary Striping; and
- 2. Place Temporary or Permanent Striping before opening a lane to traffic; and
- 3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Contract ID: 232315 Page 34 of 69

Traffic Control Plan Page 5 of 11

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

Traffic Control Plan Page 6 of 11

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related

Traffic Control Plan Page 7 of 11

Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- Nor more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the signs is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent thief (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

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Traffic Control Plan Page 8 of 11

Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS.

Word	Abbrev.	Example
Access	ACCS	ACCIDENT AHEAD/USE ACCS RD
		NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/USE ALT RTE
		NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/DETOUR
		NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/EXPECT
		DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/DETOUR
		EXIT 20
Emergency	EMER	EMER VEH AHEAD/PREPARE TO
		STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/DETOUR
_		EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/DETOUR
		EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ALL TRAF
*** 1	****	EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/EXPECT
**	IID	DELAYS
Hour	HR	ACCIDENT ON AA HWY/2 HR
T 0	DIE O	DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/DETOUR
*	TAI	EXIT 20
Lane	LN	LN CLOSED/MERGE LEFT
Left	LFT	LANE CLOSED/MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/SLOW
Major	MAJ	MAJ DELWAYS I75/USE ALT RTE

Traffic Control Plan Page 9 of 11

Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR
Northbound	ווים ווע-ווים	EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/USE 1275
Oversizeu	OVKSZ	NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/DETOUR
Faikway	T K W I	EXIT 60
Droporo	PREP	ACCIDENT 3 MIL/PREP TO STOP
Prepare	RGT	EVENT PKING NEXT RGT
Right Road	RD	HAZMAT IN RD/ALL TRAF EXIT 25
		-
Roadwork	RDWK	RDWK NEXT 4 MI/POSSIBLE
D	DEE	DELAYS
Route	RTE	MAJ DELAYS 175/USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/DETOUR
		EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD
Street	ST	MAIN ST CLOSED/USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/DETOUR
		EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275
		NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR
		EXIT 50
Work	WRK	CONST WRK 2MI/POSSIBLE
		DELAYS

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS.

Abbrev.	Intended Word	Word Erroneously Given
ACC	Accident	Access (Road)
CLRS	Clears	Colors
DLY	Delay	Daily
FDR	Feeder	Federal
L	Left	Lane (merge)
LOC	Local	Location
LT	Light (traffic)	Left
PARK	Parking	Park
POLL	Pollution (index)	Poll
RED	Reduce	Red
STAD	Stadium	Standard

Traffic Control Plan Page 10 of 11

> TEMP WRNG

Temporary Warning

Temperature Wrong

TYPICAL MESSAGES

The following is a list of typical messages used on CMS. The list consists of the reason or problem that you want the driver to be aware of and the action that you want the driver to take.

Reason/Problem

ACCIDENT ACCIDENT/XX MILES XX ROAD CLOSED XX EXIT CLOSED BRIDGE CLOSED

BRIDGE/(SLIPPERY, ICE, ETC.) CENTER/LANE/CLOSED DELAY(S), MAJOR/DELAYS

DEBRIS AHEAD DENSE FOG

DISABLED/VEHICLE
EMER/VEHICLES/ONLY
EVENT PARKING
EXIT XX CLOSED
FLAGGER XX MILES
FOG XX MILES
FREEWAY CLOSED

FRESH OIL HAZMAT SPILL

ICE

INCIDENT AHEAD

LANES (NARROW, SHIFT, MERGE, ETC.)

LEFT LANE CLOSED LEFT LANE NARROWS LEFT 2 LANES CLOSED LEFT SHOULDER CLOSED

LOOSE GRAVEL

MEDIAN WORK XX MILES

MOVING WORK ZONE, WORKERS IN ROADWAY

NEXT EXIT CLOSED NO OVERSIZED LOADS

NO PASSING NO SHOULDER ONE LANE BRIDGE Action

ALL TRAFFIC EXIT RT AVOID DELAY USE XX CONSIDER ALT ROUTE

DETOUR

DETOUR XX MILES DO NOT PASS EXPECT DELAYS FOLLOW ALT ROUTE

KEEP LEFT
KEEP RIGHT
MERGE XX MILES
MERGE LEFT
MERGE RIGHT
ONE-WAY TRAFFIC
PASS TO LEFT
PASS TO RIGHT
PREPARE TO STOP
REDUCE SPEED

SLOW

SLOW DOWN
STAY IN LANE
STOP AHEAD
STOP XX MILES
TUNE RADIO 1610 AM
USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE
USE NEXT EXIT
USE RIGHT LANE

WATCH FOR FLAGGER

Traffic Control Plan Page 11 of 11

PEOPLE CROSSING

RAMP CLOSED

RAMP (SLIPPERY, ICE, ETC.)

RIGHT LANE CLOSED

RIGHT LANE NARROWS

RIGHT SHOULDER CLOSED

ROAD CLOSED

ROAD CLOSED XX MILES

ROAD (SLIPPERY, ICE, ETC.)

ROAD WORK

ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)

ROAD WORK XX MILES

SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)

NEW SIGNAL XX MILES

SLOW 1 (OR 2) - WAY TRAFFIC

SOFT SHOULDER

STALLED VEHICLES AHEAD

TRAFFIC BACKUP

TRAFFIC SLOWS

TRUCK CROSSING

TRUCKS ENTERING

TOW TRUCK AHEAD

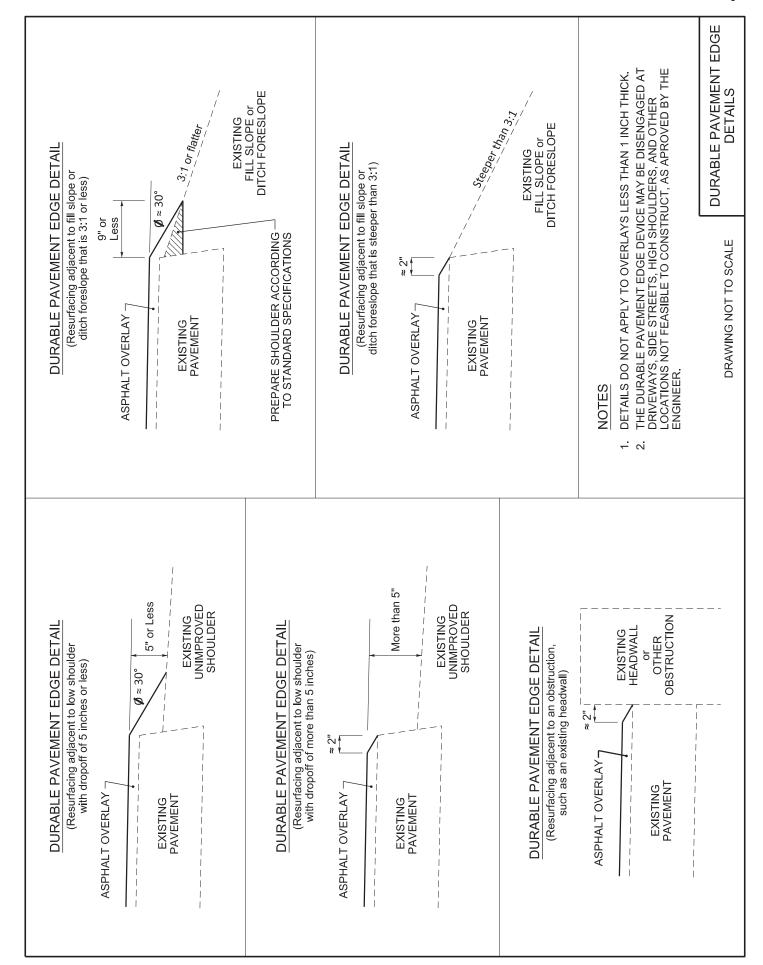
UNEVEN LANES

WATER ON ROAD

WET PAINT

WORK ZONE XX MILES

WORKERS AHEAD



WAYNE COUNTY FD04 116 0090 001-005

SPECIAL NOTE FOR TRENCHING

Trench shoulders as shown on the typical section. Reshape and compact excavated material from the trench on the outside edge of the paved shoulder as shown on the typical section. The Department will retain ownership of excess material the Engineer deems suitable for reuse as aggregate and not used to construct the shoulder wedge Deliver this material to the State Maintenance facility in Wayne County (50%) and Clinton County (50%).

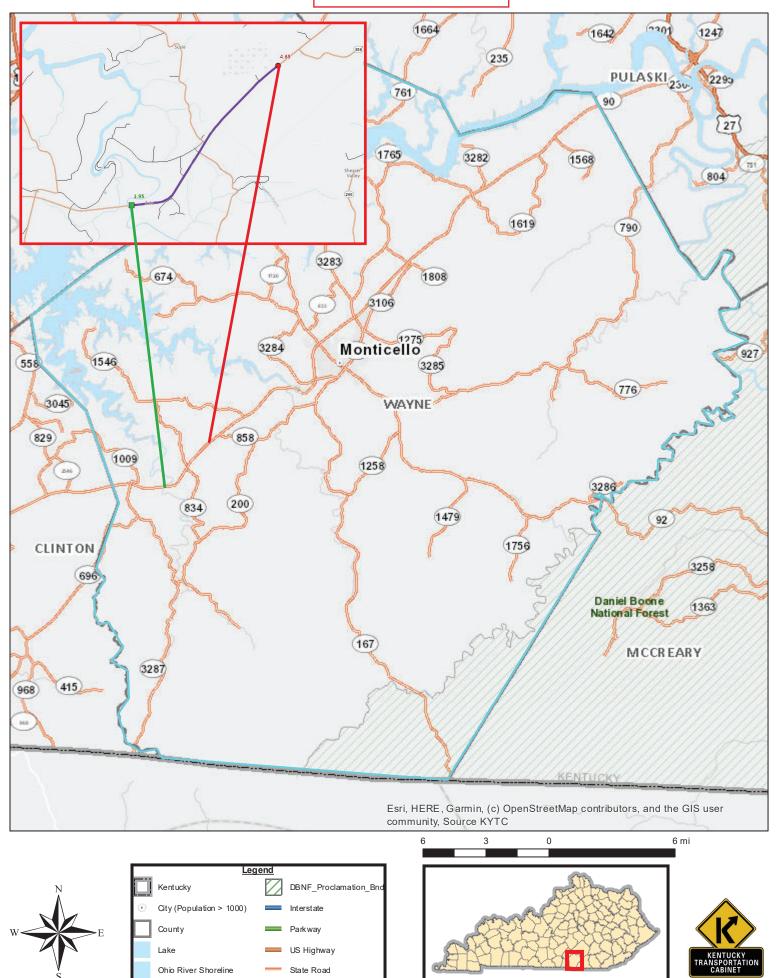
Retain possession of materials the Engineer deems unsuitable for reuse and waste the materials off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

The Department will measure "Trenching" in linear feet at the pavement/shoulder edge. Accept payment at the contract unit price per linear feet as full compensation for all labor, materials, equipment and incidentals for excavating the shoulder trench and reuse, delivery, and/or disposal of the material.

1-3905 Trenching Shoulder Department Excess Material 01/02/2012

Contract ID: 232315 Page 43 of 69

FD04 116 0090 001-005



Milling Summary FD04 116 0090 001-005

				Total	65
Milepoint	Comment	Length	Width	Avg Depth	Tons
1.955	Edge Key	125	44	0.625	21.0069444
3.140	Edge Key	30	30	0.625	3.4375
3.314	Edge Key	30	30	0.625	3.4375
4.65	Edge Key	125	44	0.625	21.0069444
					0
					0
	BRIDGE MILLING				15
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0

Shou	lde	r Failure S	Summary	<u>'</u>
FD04 1	16 0	090 002-00	5	
			TOTAL	200
MP		Length	Width	SQYD
2.44R		60	10	69
2.58R		50	10	58
2.90R	·	65	10	74

Contract ID: 232315 Page 46 of 69

Signing Summary

 County :
 Wayne

 Route :
 KY 90

 Milepoints:
 Various



Updated: 12/3/2020

IVII	lepoints:	Various				CABI	NET					
*Sample picture is only for illust Sample Picture	MUTCD Code	poses and may not represent ac	width	Height (in.)	QTY	0.08 Gauge (SQ FT)	0.125 Gauge (SQ FT)	Assembly Removal Quantity (EACH)	# of Posts	Estimated Post Length (LF) Use Type 1 Square Posts	Barcodes	Comments
	OM2-2V	Type 2 Object Marker	6	12	4	2.00			4	48	4	
Otter Creek	I-3	Otter Creek	36	18	1	4.50			1	12	1	Size estimated. Exact size TBD with design.
STOP	R1-1	Stop	36	36	5	45.00			5	60	2	Do not install barcodes on county road stop signs.
NO PASSING ZONE	W14-3	No Passing Zone	48	36	3		36.00		3	36	3	
SLOWER TRAFFIC KEEP RIGHT	R4-3	Slower Traffic Keep Right	24	30	1	5.00			1	12	1	
TRUCK LANE X X	D17-2	XX = 500 FEET	42	42	1		12.25		1	12	1	
	W11-10	Truck	36	36	2	18.00			2	24	2	
LEFT LANE ENDS	W9-1L	Left Lane Ends	36	36	2	18.00			2	24	2	
	W4-2L	Left Lane Ends (Sym)	36	36	2	18.00			2	24	2	
CENTER LANE ONLY	R3-9b	Two-Way Left Turn Only	24	36	6	36.00			6	72	6	
JCT	M2-1	Junction	21	15	2	4.38				0	2	
→	M6-1	Horizontal Arrow	21	15	8	17.50				0	8	
1,	M6-6R	Ahead and Right Arrow	21	15	2	4.38				0	2	
EAST	M3-2	"East" plaque	24	12	2	4.00				0	2	
WEST	M3-4	"West" plaque	24	12	2	4.00				0	2	
\bigotimes	M1-5	XX = KY 90	24	24	4	16.00			4	48	4	
XX	M1-5	XX = 834	30	24	8	40.00			8	96	8	
	W11-8	Emergency Vehicle - Fire Truck (sym)	36	36	2	18.00			2	24	2	

Contract ID: 232315 Page 47 of 69

Signing Summary

 County:
 Wayne

 Route:
 KY 90

 Milepoints:
 Various



Updated: 12/3/2020

*Sample picture is only for illust Sample Picture	MUTCD Code	ooses and may not represent ac	width (in.)	Height (in.)	QTY	0.08 Gauge (SQ FT)	0.125 Gauge (SQ FT)	Assembly Removal Quantity (EACH)	# of Posts	Estimated Post Length (LF) Use Type 1 Square Posts	Barcodes	Comments
4	W11-3	Deer (sym)	36	36	1	9.00			1	12	1	
	\$3-1	School Bus Stop Ahead (sym)	36	36	1	9.00			1	12	1	
BRIDGE ICES BEFORE ROAD	W8-13	Bridge Ices Before Road	36	36	1	9.00			1	12	1	
MILE	D10-1	Reference Location 1 Digit, 2 Each (X = 2, 3, 4)	10	18	6	7.50			3	36	6	
										0		_
Notes: Removal of existing sign existing stop signs for the durat						289.25	48.25	0.00	47.00	564.00	63.00	

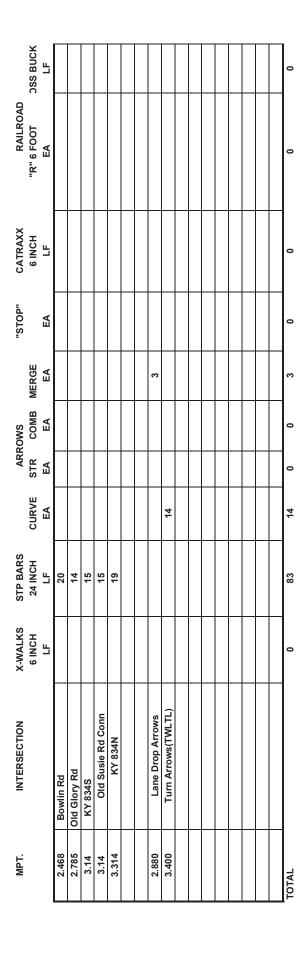
KYTC District 08

Sign/Assembly Description	Direction	Location	Approx. Milepoint	Notes	Install Date
MILE MARKER # 2	EB	RT	2.000		
NO PASSING ZONE	EB	П	2.089	Align with striping	
TRUCK LANE 500 FEET	EB	RT	2.122		
SLOWER TRAFFIC KEEP RIGHT	EB	RT	2.217		
TRUCK (SYM)	EB	RT	2.360		
STOP (Bowlin Rd)	EB	RT	2.490	Do Not install barcode.	
LEFT LANE ENDS (WORDS)	EB	RT	2.750		
LEFT LANE ENDS (WORDS)	EB	ΙΊ	2.750		
LEFT LANE ENDS (SYM)	EB	RT	2.798		
LEFT LANE ENDS (SYM)	EB	LT	2.798		
MILE MARKER # 3	EB	RT	3.000		
JCT 834	EB	RT	3.000		
Two-Way Left Turn Only	EB	RT	3.115		
KY 834 w/ Ahead & Right Arrow	EB	RT	3.144		
KY 834 w/ Horizonal Arrow (LT)	EB	RT	3.301		
Two-Way Left Turn Only	EB	RT	3.333		
Two-Way Left Turn Only	EB	RT	3.530		
Emergency Vehicle (Fire Truck Sym)	EB	RT	3.600		
MILE MARKER # 4	EB	RT	4.000		
Deer (sym)	EB	RT	4.060		
OTTER CREEK	WB	RT	1.933		
Type 2 Object Marker	WB	RT	1.955	At end of bridge.	
Type 2 Object Marker	WB	LT	1.955	At end of bridge.	
BRIDGE ICES BEFORE ROAD	WB	RT	2.211		
SCHOOL BUS STOP AHEAD (SYM)	WB	RT	2.389		
TRUCK (SYM)	WB	RT	2.425		
NO PASSING ZONE	WB	LT	2.617		
STOP (Old Glory Rd)	WB	RT	2.751	Do Not install barcode.	
Two-Way Left Turn Only	WB	RT	3.035		
STOP (County Rd on RT)	WB	RT	3.120	Do Not install barcode.	

KYTC District 08

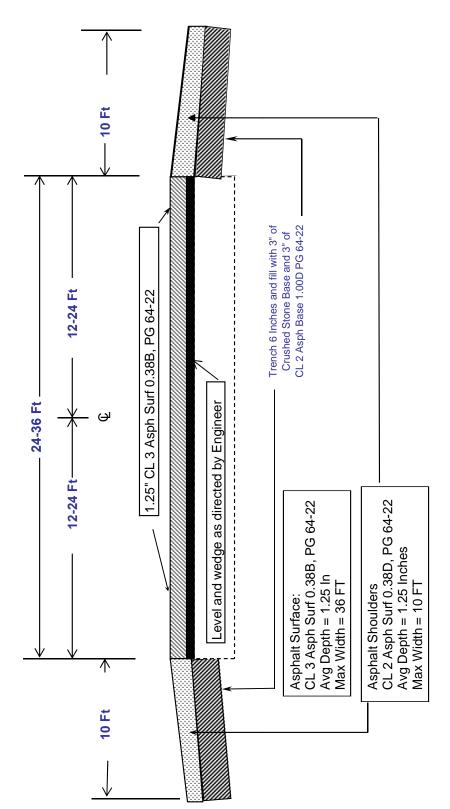
KY 834 w/ Horizonal Arrow (LT)	WB	RT	3.120	
Two-Way Left Turn Only	WB	RT	3.170	
KY 834 w/ Ahead & Right Arrow	WB	RT	3.261	
JCT 834	WB	RT	3.372	
Emergency Vehicle (Fire Truck Sym)	WB	RT	3.530	
Two-Way Left Turn Only	WB	RT	3.628	
NO PASSING ZONE	WB	LT	3.850	
Stop			3.140	South KY 834 Approach
KY 834 w/ Horizonal Arrow			3.140	South KY 834 Approach
East KY 90 w/ Horizontal Arrow			3.140	South KY 834 Approach
West KY 90 w/Horizontal Arrow			3.140	South KY 834 Approach
Stop			3.314	North KY 834 Approach
KY 834 w/ Horizonal Arrow			3.314	North KY 834 Approach
East KY 90 w/ Horizontal Arrow			3.314	North KY 834 Approach - Across the Rd
West KY 90 w/Horizontal Arrow			3.314	North KY 834 Approach - Across the Rd

Wayne County THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY FD04 116 0090 001-005



						200-100 0600 011 +001	200-100 02						SHEEL 1 OT 1
	COUNTY: Wayne	Wayne		ROAD NAME:	VAME:	Albany -	Albany - Monticello Road (KY 90)	d (KY 90)					
						9.00						•	
	PLAN	z				Project item Number	n Number						
	LOCATION - MP	A M	Remove Guardrail	Guardrail - Steel W Beam - S Face	Delineator for Guardrail Bi- Directional White	Guardrail Terminal Section No. 1	Guardrail End Treatment Type 1	Guardrail End Guardrail End Treatment Treatment Type 1 Type 2A	Thrie-Beam Guardrail Transition (TL-	18" Culvert Pipe	18" Metal End Channel Section Type 1 Lining Class II	Channel Lining Class II	Notes
Line	Begin	End	T.F	17	Each	Each	Each	Each	6				
-	1.958	2.008	275	275	4			-	1	100	1	15	
2	2.194	2.277	450	525	7	2							
3	3.099	3.156	200	200	7	1							Tie to Existing on the East End
4	3.165	3.206	350	350	5	1							Tie to Existing on the West End
2	1.958	2.008	250	250	3			_	1	100	1	15	
9	2.186	2.287	220	575	80	2							
7	2.736	2.782	300	300	4			-		100	1	15	Tie to Existing on the East End
8	2.796	2.882	350	350	5	1							Tie to Existing on the West End
6	3.153	3.193	325	325	4	1							Tie to Existing on the West End
Pl	Plan Quantity		3350	3450	47	8	0	3	2	300	3	45	
EN I	COMMENTS: 7 ft posts	φ.											

TYPICAL SECTION
WAYNE COUNTY
FD04 116 0090 001-005
MP 1.955 - 4.650



THIS TYPICAL APPLIES TO SEGMENTS WITH EXISTING PAVEMENT WEDGE

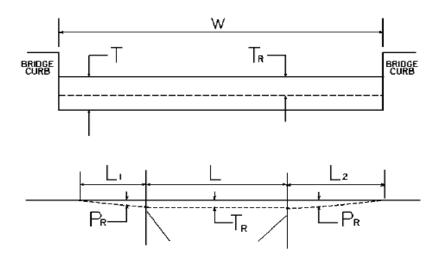
WAYNE COUNTY FD04 116 0090 001-005

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract ID: 232315 Page 53 of 69

Contract Id:		Con	ntractor:	
Section Engineer:		_ District & County: _		
<u>DESCRIPTION</u>	<u>UNIT</u>	OTY 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			
*Required Signatures before	e Leaving Proje	ect Site		
Printed Section Engineer's Ro	epresentative_		_ & Date	
Signature Section Engineer's	Representativ	e	& Date	
Printed Contractor's Represe	entative		& Date	
Signature Contractor's Repre	esentative		& Date	
*Required Signatures after A	<u>Arrival at Baile</u>	y Bridge Yard (All material	on truck must be counted & the	
quantity received column co	mpleted befor	<u>re signatures)</u>		
Printed Bailey Bridge Yard Re	epresentative_		_ & Date	
Signature Bailey Bridge Yard	Representative	2	& Date	
Printed Contractor's Represe	entative		& Date	
Signature Contractor's Repre	esentative		& Date	
•	ent will not be	made for guardrail remova	uantities shown in the Bailey Brid I until the guardrail verification sh ge Yard Representative.	_
Completed Form Submitted to	Section Enginee	r Date:	By:	

CONSTRUCTION DETAIL FOR BRIDGE WITHIN LIMITS OF PAVING PROJECT FD04 116 0090 001-005



W = bridge width curb to curb

T = thickness of existing bituminous overlay

L = length of bridge

 L_1 & L_2 = length of approach pavement to be removed

 T_R = thickness to be removed and replaced on bridge

 P_R = thickness to be removed and replaced on pavement

Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft / inch of thickness

BRIDGE NO	MP	W (ft)	T (in)	L ₁ (ft)	L ₂ (ft)	T _R (in)	L (ft)	P _R (in)
B00036N	1.910	24.00	0.00	0.00	125.00	0.00	526.60	1.25

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

SUPPLEMENTAL SPECIFICATIONS

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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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

1I

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

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

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

2020 KENTUCKY STANDARD DRAWINGS

MISCELLANEOUS STANDARDS	RGX-001-06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS	
CENTERLINE RUMBLE STRIPS PLACEMENT DETAILS	TPR-100
CENTERLINE RUMBLE STRIPS 6 INCH STRIPING	TPR-110
SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS	TPR-115
SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS	TPR-125
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-05
LANE CLOSURE MULTI-LANE HIGHWAY CASE I	
LANE CLOSURE MULTI-LANE HIGHWAY CASE II	
SHOULDER CLOSURE	
PAVEMENT CONDITION WARNING SIGNS	
MOBILE OPERATION FOR DURABLE STRIPING CASE III	
MOBILE OPERATION FOR DURABLE STRIPING CASE IV	TTS-135-02
<u>GUARDRAIL HARDWARE</u>	
STEEL BEAM GUARDRAIL ("W"-BEAM)	RBR-001-13
GUARDRAIL TERMINAL SECTIONS	
GUARDRAIL END TREATMENT TYPE 1	
GUARDRAIL END TREATMENT TYPE 2A	RBR-025-06
DELINEATORS FOR GUARDRAIL	
STEEL BEAM GUARDRAIL (THRIE BEAM)	RBR-100-07
PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS	
CHANNEL LINING CLASS II AND III	RDD-040-05

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

WAYNE COUNTY FD04 116 0090 001-005

Contract ID: 232315 Page 62 of 69

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

Contract ID: 232315 Page 63 of 69

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

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

BEGINNING JULY 24, 2009

OVERTIME PAY

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

CHILD LABOR

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

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

No more than

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

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

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



Contract ID: 232315

Page 65 of 69

PART IV

INSURANCE

Refer to *Kentucky Standard Specifications for Road and Bridge Construction*,

current edition

PART V

BID ITEMS

FD04 116 0090 001-005

232315

PROPOSAL BID ITEMS

Contract ID: 232315 Page 68 of 69

Page 1 of 2

Report Date 7/21/23

Section: 0001 - ROADWAY

LINE	_	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	AMOUNT
010	00003		CRUSHED STONE BASE	5,400.00	TON		\$
020	00100		ASPHALT SEAL AGGREGATE	35.00	TON		\$
0030	00103		ASPHALT SEAL COAT	4.00	TON		\$
040	00190		LEVELING & WEDGING PG64-22	305.00	TON		\$
050	00212		CL2 ASPH BASE 1.00D PG64-22	5,400.00	TON		\$
0060	00301		CL2 ASPH SURF 0.38D PG64-22	2,175.00	TON		\$
070	00356		ASPHALT MATERIAL FOR TACK	40.00	TON		\$
080	00388		CL3 ASPH SURF 0.38B PG64-22	3,715.00	TON		\$
090	00462		CULVERT PIPE-18 IN	300.00	LF		\$
100	01371		METAL END SECTION TY 1-18 IN	3.00	EACH		\$
0110	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	47.00	EACH		\$
120	02351		GUARDRAIL-STEEL W BEAM-S FACE	3,450.00	LF		\$
130	02360		GUARDRAIL TERMINAL SECTION NO 1	8.00	EACH		\$
140	02369		GUARDRAIL END TREATMENT TYPE 2A	3.00	EACH		\$
150	02381		REMOVE GUARDRAIL	3,350.00	LF		\$
160	02483		CHANNEL LINING CLASS II	45.00	TON		\$
170	02562		TEMPORARY SIGNS	390.00	SQFT		\$
180	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$
190	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$
200	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$
210	02677		ASPHALT PAVE MILLING & TEXTURING	65.00	TON		\$
220	02696		SHOULDER RUMBLE STRIPS	28,460.00	LF		\$
230	02775		ARROW PANEL	1.00	EACH		\$
240	06406		SBM ALUM SHEET SIGNS .080 IN	289.25	SQFT		\$
250	06407		SBM ALUM SHEET SIGNS .125 IN	48.25			\$
260	06410		STEEL POST TYPE 1	564.00	LF		\$
270	06427		TRENCHING	29,000.00	LF		\$
280	06510		PAVE STRIPING-TEMP PAINT-4 IN	40,000.00	LF		\$
290	06514		PAVE STRIPING-PERM PAINT-4 IN	1,000.00	LF		\$
300	06542		PAVE STRIPING-THERMO-6 IN W	33,000.00			\$
310	06543		PAVE STRIPING-THERMO-6 IN Y	23,000.00			\$
320	06568		PAVE MARKING-THERMO STOP BAR-24IN	83.00			\$
330	06574		PAVE MARKING-THERMO CURV ARROW		EACH		\$
340	06578		PAVE MARKING-THERMO MERGE ARROW		EACH		\$
350	06600		REMOVE PAVEMENT MARKER TYPE V		EACH		\$
360	10020NS		FUEL ADJUSTMENT	17,994.00			\$ \$17,994.00
370	10020NS		ASPHALT ADJUSTMENT	45,195.00			\$ \$45,195.00
380	20071EC		JOINT ADHESIVE	22,600.00		7 1.00	\$ Ţ 10, 100100
390	20458ES403		CENTERLINE RUMBLE STRIPS	10,000.00			\$
400	23593EC		SHOULDER FAILURE REPAIR	•	SQYD		\$
410	24631EC		BARCODE SIGN INVENTORY		EACH		\$
420	25078ED		THRIE BEAM GUARDRAIL TRANSITION TL-3		EACH		\$

Section: 0002 - DEMOBILIZATION

WAYNE COUNTY FD04 116 0090 001-005

PROPOSAL BID ITEMS

Contract ID: 232315 Page 69 of 69

232315

Report Date 7/21/23

LINE	BID CODE	ALT DESCRIPTION	QUANTITY UNIT UNIT PRIC FP AMOU
0430	02569	DEMOBILIZATION	1.00 LS \$

Page 2 of 2