

CALL NO. <u>323</u> CONTRACT ID. <u>252112</u> <u>MADISON COUNTY</u> FED/STATE PROJECT NUMBER <u>FD05 076 0025 016-021</u> DESCRIPTION <u>DR. ROBERT R. MARTIN BYPASS / LEXINGTON ROAD (US 25)</u> WORK TYPE <u>ASPHALT RESURFACING</u> PRIMARY COMPLETION DATE <u>6/30/2026</u>

LETTING DATE: July 24,2025

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 24,2025. 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
- NATIONAL HIGHWAY
- SURFACING AREAS
- ASPHALT MIXTURE
- INCIDENTAL SURFACING
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- ELECTRONIC DELIVERY MANAGEMENT SYSTEM (E-TICKETING) ASPHALT
- ELECTRONIC DELIVERY MANAGEMENT SYSTEM (E-TICKETING) AGGREGATE
- EXPERIMENTAL KYCT AND HAMBURG TESTING
- DOLOMITIC POLISH-RESISTANT AGGREGATE CLASS A 0.38-IN AND 0.50-IN NOMINAL ASPHALT MIXTURES
- RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT
- DOUBLE ASPHALT SEAL COAT
- ASPHALT MIX PAVEMENT WEDGE MONOLITHIC OPERATION
- EDGE KEY (BY TON)
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- TRAFFIC CONTROL PLAN
- DURABLE PAVEMENT EDGE DETAILS
- INSTALL RADAR PRESENCE DETECTOR TYPE A
- INSTALL RADAR ADVANCE DETECTOR TYPE B
- SKETCH MAP(S)
- SUMMARY SHEET(S)
- TYPICAL SECTION(S)
- DETAIL SHEET(S)
- BRIDGE DETAIL FOR PAVING PROJECT

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- 2020 STANDARD DRAWINGS THAT APPLY
- EDGELINE RUMBLE STRIPS PLACEMENT DETAILS
- RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS

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 BID ITEMS

PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 07

CONTRACT ID - 252112

FD05 076 0025 016-021

COUNTY - MADISON

PCN - MP07600252501 FD05 076 0025 016-021

DR. ROBERT R. MARTIN BYPASS / LEXINGTON ROAD (US 25) (MP 16.199) BEGIN AT KY 52 EXTENDING NORTH TO PAVEMENT JOINT 840 FEET SOUTH OF KY 1156 (MP 20.841), A DISTANCE OF 04.64 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 37:46:17.37 LONGITUDE 84:17:05.22 ADT 27,589

COMPLETION DATE(S):

COMPLETED BY 06/30/2026 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

INSURANCE

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

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

foreign entity is not required to obtain a certificate as provided in <u>KRS 14A.9-010</u>, the foreign entity should identify the applicable exception. Foreign entity is defined within <u>KRS 14A.1-070</u>.

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

The state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, 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 agreement for the purpose of financial audit or program review. 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. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

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.

Revised: 1/1/2025

05/05/2025

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

Follow the "Buy America" provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent

of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

2.0 - BUILD AMERICA, BUY AMERICA (BABA)

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or \$2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all "construction materials" as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

3.0 FINAL RULE – FHWA'S BUY AMERICA REGULATION TO TERMINATE GENERAL APPLICABILITY WAIVER FOR MANUFACTURED PRODUCTS

- March 17, 2025 (effective date): For all Federal-aid projects obligated on or after March 15, 2025, all iron or steel products, as defined in § 635.410(c)(1)(iii), must comply with FHWA's Buy America requirements for steel and iron in § 635.410(b). In addition, for all Federal-aid projects obligated on or after March 15, 2025, per § 635.410(c)(2), articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include "excluded materials" and "construction materials"); an article, material, or supply must not be considered to fall into multiple categories.
- October 1, 2025: The final assembly requirement will become effective for Federal-aid projects obligated on or after October 1, 2025. This means that, for manufactured product to be Buy America compliant, for Federal-aid projects obligated on or after October 1, 2025, final assembly of the manufactured product must occur in the United States.
- October 1, 2026: The 55 percent requirement will become effective for Federal-aid projects obligated on or after October 1, 2026. This means that, for manufactured product to be Buy America-compliant, for Federal-aid projects obligated on or after October 1, 2026, all manufactured products permanently incorporated into the project must both be manufactured in the United States (satisfy the final assembly requirement) and have the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States be greater than 55 percent of the total cost of all components of the manufactured product (satisfy the 55 percent requirement).

4.0 – ADDITIONAL REQUIREMENTS

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/ Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it's in compliance.

At the Contractor's request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration's Buy America webpage for more information.

<u>Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway</u> <u>Administration (dot.gov)</u>

Effective - June 26, 2025, Letting

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

05/05/2025

BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

Date Submitted:

Contractor:_____

Signature:_____

Printed Name:_____

Title:_____

NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.

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

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

SURFACING AREAS

The Department estimates the mainline surfacing width varies 24 - 92 feet. The Department estimates the total mainline area to be surfaced to be 188,555 square yards. The Department estimates the shoulder width to be 0 - 10 feet on each side. The Department estimates the total shoulder area to be surfaced to be 73,021 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.

SPECIAL NOTE FOR THERMO STRIPING

Contrary to Section 714.02.05 of the *Standard Specifications for Road and Bridge Construction*, thermoplastic application will be required to be by ribbon gun at all locations that are to be applied over milled rumble strips in lieu of an extrusion application.

SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) ASPHALT

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

1.0 DESCRIPTION. Incorporate an e-Ticketing Delivery Software for weighed asphalt material delivered to the project to report loads and provide daily running totals of weighed asphalt material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

2.0 MATERIALS AND EQUIPMENT. Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

- 1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor's Load Read-Out scale system at the material source location.
- 2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.
- 3. Transmit any updates to the ticket data within 5 minutes of a change.

3.0 CONSTRUCTION. Provide the Engineer with the manufacturer's specifications and all required documentation for data access at the pre-construction conference.

A. Construction Requirements

- 1. Install and operate software in accordance with the manufacturer's specifications.
- 2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

B. Data Deliverables

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

1. Asphalt Material

a. Real-time Continuous Data Items

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC's e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
 - Supplier Name
 - o Supplier Address
 - Supplier Phone
 - Plant location
 - o Date
 - Time at source
 - Project Location

- Contract ID#
- o Carrier Name
- o Unique Truck ID
- Description of Material
- Mix Design Number
- Gross, Tare and Net Weight
- o Weighmaster

4.0 MEASUREMENT. The Department will not measure the electronic delivery management system.

5.0 PAYMENT. The Department will not measure this work for payment and will consider all items contained in this note to be incidental to the asphalt mixtures on the project, as applicable.

May 5, 2025

SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) AGGREGATE

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

1.0 DESCRIPTION. Incorporate an e-Ticketing Delivery Software for weighed aggregate material delivered to the project to report loads and provide daily running totals of weighed aggregate material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

2.0 MATERIALS AND EQUIPMENT. Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

- 1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor's Load Read-Out scale system at the material source location.
- 2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.
- 3. Transmit any updates to the ticket data within 5 minutes of a change.

3.0 CONSTRUCTION. Provide the Engineer with the manufacturer's specifications and all required documentation for data access at the pre-construction conference.

A. Construction Requirements

- 1. Install and operate software in accordance with the manufacturer's specifications.
- 2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

B. Data Deliverables

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

1. Aggregate Material

a. Real-time Continuous Data Items

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC's e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
 - Supplier Name
 - Supplier Address
 - Supplier Phone
 - Plant location
 - o Date
 - Time at source
 - Project Location

- Contract ID#
- Carrier Name
- o Unique Truck ID
- Description of Material
- o Load Number
- Gross, Tare and Net Weight
- o Weighmaster

4.0 MEASUREMENT. The Department will measure the electronic delivery management system as a lump sum item.

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

- 1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
- 2. Payment will be full compensation for costs related to providing the e-Ticketing Delivery Software, including integration with plant load-out systems, and report viewing/exporting process. All quality control procedures including the software representative's technical support and on-site training shall be included in the Contract lump sum price.

| Code | Pay Item | <u>Pay Unit</u> |
|---------|-------------------------------------|-----------------|
| 26248EC | ELECTRONIC DELIVERY MGMT SYSTEM-AGG | LS |

May 5, 2025

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND FIELD RUT TESTING June 2025 Update

1.0 General

1.1 Description. The KYCT (Kentucky Method for Cracking Test) and the IDEAL-RT/IDT-HT 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 and stability of the bituminous mixes. Additionally, the data will help the Department to create future performance-based specifications which will include the KYCT and field rutting test methods.

2.0 Equipment

2.1 KYCT Testing Equipment. The Department will require a Marshall Test Press with digital recording 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 Field Rutting Tests. If the contractor elects to perform the IDEAL-RT test, in conformance with ASTM D8360-22, the acquisition of the "Option A" or "Option B" test fixture is required. If the IDT-HT is desired, the test press utilized for the KYTC is sufficient. The Department shall approve all test configurations at their discretion.

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.

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 plant production of all surface mixtures. Conform to KYTC Specifications for Mix Design approvals. All production testing is currently informational.

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 after the specified amount of oven conditioning, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens 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 three replicates for cracking resistance analyses and three replicates for rutting resistance analyses. The specimens shall be compacted at the 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.

While the fabricated specimens are allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes, find the bulk specific gravity of each specimen according to AASHTO T166. Next, condition the replicates 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 Field Rut testing, reheating of the asphalt mixture is prohibited.

3.2.3 Long Term Aging CT's. For long-term aging and cracking resistance considerations in mix design, mix and condition 3 specimens uncovered for 20 hours at compaction temperature in accordance with KM 64-411. Perform KYCT testing in accordance with KM 64-450 and record the results on the Long-Term KYCT tab of the latest version of the MixPack.

3.2.4 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.

3.2.5 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 Field Rut Testing. Perform the rut resistance analysis (IDEAL-RT or IDT-HT) in accordance with ASTM D8360-22 or ALDOT458, respectively. Contrary to ASTM D8360 & ALDOT458, precondition the test specimens in a water bath or forced draft oven at 50 °C +/- 1 °C for 60 +/- 5 min before completing the test.

3.3.1 Field Rut Testing Frequency. Perform one test per lot of mixture produced. The plant produced bituminous material sampled for the field rut test does not have to be obtained at the same time as the acceptance and KYCT sample. If the field rut 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 test specimens.

3.3.2 Number of Specimens and Conditioning. Fabricate in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, for field specimens, fabricate three

replicates for rutting resistance analyses. The specimens shall be compacted at the 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.

3.3.3 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. All times shall be recorded on the AMAW.

3.3.4 File Name. Record all field rut data in the latest version of the AMAW.

4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and field rut 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 field rut specimens shall be considered incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and field rut specimens if a producer does not possess the proper equipment.

June 12th, 2025

SPECIAL NOTE FOR DOLOMITIC POLISH-RESISTANT AGGREGATE IN CLASS A 0.38-IN. AND 0.50-IN. NOMINAL ASPHALT MIXTURES

Contrary to Subsection 403.03.03, when utilizing a dolomitic polish-resistant aggregate as the coarse portion of the Class A 0.38-in. or 0.50-in.-nominal asphalt surface mixture, provide an asphalt mixture conforming to the following requirements:

- 70 percent of total combined aggregate is Class A polish-resistant aggregate.
- Any coarse aggregate utilized in the mixture shall be classified as Class A polish-resistant.
- Non-dolomitic substitutes from other Class A sources may be used as direct substitutes
- All mixes must have DFT testing/results submitted to Division of Materials with any supporting documentation prior to completion of the project.

Dynamic Friction Testing Procedure. Prepare samples for DFT analysis in accordance with PP 104. Friction testing shall be conducted by an AASHTO-accredited facility and data shall be provided in accordance with ASTM E1911 conforming to the following three-wheel polishing schedule. Variations to the testing frequency or methodology shall be coordinated with Division of Materials prior to testing.

| Polishing Cycles | | | |
|------------------|--|--|--|
| 5,000 | | | |
| 25,000 | | | |
| 75,000 | | | |
| 150,000 | | | |

SPECIAL NOTE FOR RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT

I. GENERAL

The use of reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) shall be subject to stockpile management and handling of material as described in this section.

The Department approves RAP on a stockpile basis, following the process set forth in this method. The contractor's responsibilities in the process are as follows:

- To obtain the Department's approval of all RAP prior to its use on a Department project and to deliver test data and samples as required
- To monitor and preserve the quality and uniformity of the approved material during storage and handling, adding no unapproved material to the existing stockpile
- To comply with the Department's requirements regarding replenishment of approved stockpiles

The Department will approve RAP based on its composition and variability in gradation and asphalt content, and on visual inspections of the stockpile, which the Department may conduct at its discretion. The Department may withdraw approval of a stockpile if the requirements of this specification are not followed in good faith.

The Maximum Percentage Allowed in a mix design will be based on these criteria and on the category of RAP source, as defined in this document.

II. APPROVAL PROCESS

Qualified asphalt producers (listed in List of Approved Materials-Asphalt Mixing Plants) may submit requests for RAP stockpile approval to the Asphalt Branch, Division of Materials, in the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment. The requester shall provide test results as prescribed in Part IID. The Division of Materials may, at their discretion, collect samples or inspect a RAP stockpile consistent with Section IIE.

Upon completion of the review of testing results and, if applicable, visual inspection, the Division of Materials, Asphalt Branch will approve or disapprove the material by letter and will assign a Stockpile Identification Number for each approved RAP stockpile. Note: The contractor's average gradation and asphalt content, as listed in the approval letter, shall be the gradation used in subsequent mix designs. The approval letter will state the applicable limits on the use of the material in mix designs and will summarize the Department's findings, listing the average gradation and asphalt content from the contractor's tests and the corresponding values found by the Department. Where the Maximum Percentage Allowed is low due to variability, the contractor may elect to improve the uniformity of the material by further processing and may again sample, test, and request approval for the material.

No material shall be added to a stockpile after it has been approved, except as provided in Parts V, VI, and VII below.

IIA. RAP Quality Management Plan

For a contractor to receive approval to use RAP on any department project, a RAP Quality Management Plan must first be approved by the department. The RAP Quality Management Plan shall be submitted to the

Division of Materials annually for approval as part of the Contractor's Quality Control Plan/Checklist. The Quality Management Plan is required to demonstrate how the Contractor will provide consistency and quality of material utilized in all asphalt mixes produced for use on Department projects. The Quality Management Plan shall include:

- Unprocessed RAP Stockpiles
 - Designation of stockpile(s) as single or multiple source
 - o Designation of stockpile(s) as classified or unclassified
 - Designation of stockpile(s) as captive or continuously replenishing
 - Plan for how stockpile(s) is built (layers, slope, etc.)
 - Plan to minimize stockpile(s) contamination
- Processing and Crushing
 - Equipment used to feed screener or crusher
 - Excavation process based on equipment type
- Processing Millings
 - Single Project or Source
 - Screening, Fractionation, or Crushing plan
 - o Multiple Source
 - Process to achieve uniform material from stockpile
 - Screening, Fractionation, or Crushing plan
- Processed RAP Stockpiles
 - Minimization of segregation
 - Minimization of moisture

IIB. RAP Stockpile Placement

All processed RAP stockpiles shall be placed on a sloped, paved surface. The requirement for a paved surface may be waived by the Cabinet if the Contractor's RAP Quality Management Plan demonstrates effective material handling that will minimize deleterious material from beneath the processed stockpile entering the plant. *No processed stockpile will be placed directly on grass or dirt.*

IIC. Stockpile Identification Signs

RAP stockpiles shall be identified with posted signs displaying the gradation of material in the stockpile (course, intermediate, or fine). These signs shall be made of weatherproof material and shall be highly visible. Numerals shall be easily readable from outside the stockpile area. If a stockpile exists in two or more parts, each part must have its own sign.

IID. Standard Approval Procedure

The Contractor shall obtain random samples representative of the entire stockpile and shall have each sample tested for gradation and asphalt content according to <u>KM 64-426</u>, <u>KM 64-427</u>, and AASHTO T308. The material samples must be in its final condition after all crushing and screening. At least one sample shall be obtained for each 1,000 tons of processed RAP, with a minimum of five samples per stockpile. Sampling shall be performed according to the method prescribed for asphalt mix aggregates in the Department's Materials Field Testing and Sampling Manual and KM 64-601. The minimum sampling size (after quartering) for tests of RAP samples is 1,500 g. except for samples containing particles more than one inch in diameter, for which the minimum is 2,000 g.

To request approval of a RAP stockpile, submit the following documents to the Division of Materials. It is the requester's responsibility to correctly address, label, and deliver these submittals:

• Submit request for approval at beginning of the paving season as part of the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment.

• If requesting approval after paving season begins, submit memo, including stockpile portion of the inspection list for Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment, to Division of Materials.

• Reports of the tests prescribed above using the Stockpile <INSERT NAME> document.

• A drawing of the plant site showing the location of the stockpile to be approved *and all other stockpiles on the premises*

Mail, deliver or email the request form, with test reports and site drawing, to:

Kentucky Transportation Cabinet Division of Materials ATTN: Asphalt Branch Manager 1227 Wilkinson Boulevard Frankfort, Kentucky 40601

Robert.Semones@ky.gov

IIE. Tests and inspections by the Department

The Department shall have the right to observe the collection of samples, or to perform the sampling and testing as a verification of contractor submittal. As a condition of approval, the Department may at any time inspect and sample RAP stockpiles for which approval has been requested and may perform additional quality control tests to determine the consistency and quality of the material.

The approval letter issued by the Department will include any results of verification testing performed by the Cabinet. The approved contractor results should be used by mix design technicians in the design calculations.

III. RAP STOCKPILE TIERED MANAGEMENT AND EFFECTIVE BINDER CONTENT

The stockpile management and approval requirements will be tiered based on the maximum cold feed percentages as defined in this section and Table 1. below.

| Mix Type | <u>0-≤</u> 12% | 12- <u><</u> 20% | 20- <u><</u> 35% |
|----------|----------------|---------------------|---------------------|
| Surface | Tier 1 | Tier 2 | Tier 3 |
| Base | Tier 1 | Tier 2 | Tier 3 |

Table 1. Tiered Testing Requirements

NOTE: All asphalt mixes and binder selection will be subject to Section 409 of the current Standard Specifications.

The following requirements will apply based on the percentage of RAP in the mix.

Tier 1

Tier 1 mixes (less than or equal to 12% RAP) will be subject to the requirements of sections IIA, IIB, and IIC.

Tier 2

Tier 2 mixes (12% to less than 20% RAP) will be subject to the requirements of Section II in its entirety and Table 2 requirements.

Tier 3

Tier 3 Asphalt Base mixes with 20% to less than 35% RAP, Tier 3 Asphalt Surface mixes with 20% to less than 30% RAP will be subject to Section II in its entirety and Table 2 requirements.

IV. MAXIMUM PERCENTAGE OF RAP ALLOWED

The Maximum Percent of RAP allowed in mix designs shall be the lowest percentage determined by the gradation and asphalt content of the RAP, as established under the criteria below, and requirements listed in Section III.

Limits according to range in gradation and bitumen content

The Maximum Percent of RAP Allowed, based on gradation and asphalt content, shall be determined by the Department using the standard deviation of these values. This standard deviation will be calculated using data provided by the contractor from at least five samples. While the contractor is required to provide the data from these tested samples, the Department retains the discretion to perform its own sampling and testing to support or verify its findings. An apparent outlier shall not be considered in determining these ranges. Where one result appears to be unrepresentative of the whole, two or more additional samples shall be tested. The outlying value of all tests shall then be excluded from the range. The maximum percentage of RAP allowable shall be the lowest percentage determined according to Table 2 below.

| | Standard Deviation as calculated above: | | | | | | |
|-------------------------|---|---------------------------|-----------------|--|--|--|--|
| Surface | | | | | | | |
| % asphalt content | < 0.4 | < 0.5 | | | | | |
| % passing No. 200 sieve | < 1.25 | < 1.5 | | | | | |
| % passing Median Sieve | < 4.0 | < 5.0 | | | | | |
| | Alle | Allowable RAP Cold Feed % | | | | | |
| | Tier 3 - 20%-30% | Tier 2 - 12%-20% | Tier 1 - 0%-12% | | | | |
| | Base | | | | | | |
| % asphalt content | < 0.5 | < 0.75 | | | | | |
| % passing No. 200 sieve | < 1.5 | < 2.25 | | | | | |
| % passing Median sieve | < 5.0 | < 7.0 | | | | | |
| | Alle | Allowable RAP Cold Feed % | | | | | |
| | Tier 3 - 20%-35% | Tier 2 - 12%-20% | Tier 1 - 0%-12% | | | | |

NOTE: These allowances notwithstanding, the Contractor is required to maintain the mixture within the Mixture Control Tolerances of Kentucky Method 443.

The percentage allowable in mix designs shall be limited to meet the design criteria for viscosity established in the Standard Specifications.

V. GENERAL STOCKPILE REQUIREMENTS AND REPLENISHMENT

V.A. Single Pavement Source

Early approval of material from a single pavement source. When a new stockpile is to consist entirely of millings removed from a single existing pavement, the stockpile may be approved based on samples taken during the milling and processing operations, prior to completion of milling. The initial stockpile may be approved as either a new stockpile or a new stockpile in continual replenishment status.

For continual replenishment status, samples shall be taken from the processed stockpile after it reaches 1,000 tons. A total of five initial samples, plus one additional sample for every 1,000 tons, is required. As prescribed in Part II above, the contractor shall test all samples and deliver the test results, together with a letter request for approval in Continual Replenishment status, to the address indicated. The stockpile shall be subject to initial approval as prescribed above in Part II. Once approved, it may be replenished without further approvals as provided in Part VII below.

V.B. Heterogeneous or contaminated material

Asphalt pavement millings containing traffic detection loops, raised pavement markers, or other debris must be separated and excluded before stockpiling RAP for approval for use in KYTC asphaltic concrete mixtures.

No material other than RAP from an approved stockpile shall be included in mixtures for State projects. The following materials are specifically excluded:

• Material contaminated with foreign matter such as liquids, soil, concrete, or debris

• Plant waste, especially waste containing abnormal concentrations of bitumen, drum build-up, or material from spills or plant clean-up operations

The following materials shall not be added to or placed in proximity to an approved stockpile but may be accumulated in a separate stockpile and submitted for approval according to Part III:

- Production mixtures returned to the plant for any reason.
- Mis-proportioned mixtures, especially those generated at start-up.

VI. REPLENISHMENT OF STOCKPILES

An approved RAP stockpile may be replenished with Department approval, provided the replenishment material meets all necessary requirements for approval and maintains uniformity in gradation and asphalt content as outlined in this document.

VI.A. Procedure and approval criteria

The procedure for requesting approval of a stockpile replenishment, that is not in continual replenishment status, shall be the same as for approval of an original stockpile, and the material for the replenishment shall meet all criteria for approval as a new stockpile. RAP proposed for replenishment shall be sampled and tested by the Contractor for gradation and asphalt cement as prescribed in Section II above. The Laboratory shall

review these results and provide approval for use in Department asphalt mix designs, according to Table 2 above.

VI.B. Effect of replenishment on existing approved mix designs

Replenishment of a stockpile may render certain mix designs invalid, depending on the percent RAP allowed in the design and on the difference in average properties between the old and new stockpiles. A replenished stockpile may be used as the RAP ingredient in an existing approved design provided that:

1. The Maximum Percent Allowed for the replenishment stockpile equals or exceeds the percent RAP called for in the mix design. In no case may the Maximum Percent Allowed be exceeded.

However, if a mix design calls for up to 5.0 percent more than the Maximum Percent Allowed for the replenishment, the *design* may be adjusted, with approval, to use the lower percent allowed, provided that the production mixture continues to meet all acceptance criteria. For example, a design which calls for 20 percent RAP may be adjusted and produced with 15 percent if it continues to meet for acceptance.

VII. CONTINUAL REPLENISHMENT WITHOUT RE-APPROVAL

At the request of the contractor, a previously approved stockpile may be placed in Continual Replenishment Status and may be replenished any number of times without re-approval provided that:

- 1. Replenishment is within six months of the last stockpile addition.
- 2. The contractor shall continue to monitor and test the materials added to the stockpile and shall forward these results to the Division of Materials for every 1,000 tons of RAP added to the stockpile.
- 3. The contractor must certify that replenishment materials are free of contaminants.
- 4. The Department shall be notified by letter to the Director of the Division of Materials that the stockpile is being replenished on a continual basis.
- 5. The RAP Maximum Percent Allowed for continual replenishment shall be limited by Sections III and IV.

Note: Upon request, one 20-pound sample bag of RAP for each Continual Replenishment Stockpile shall be submitted to the Division of Materials for petrographic analysis every 12 months.

The Department may inspect, sample, and test such stockpiles at its discretion and may, upon determining that the stockpile is unsuitable, withdraw approval of the material and all mix designs which include it. Approval of the stockpile may be withdrawn at any time based upon extreme or erratic ingredient proportions, unsuitable ingredients, or poor performance, as determined by the Division of Materials, Asphalt Branch. The Department will conduct periodic comparison testing on the opposite quarters of samples submitted by the Contractor for special replenishment approval category. The approval of the stockpile may be withdrawn if

erroneous information was found on the contractor's testing and/or improper sampling procedures were involved after a thorough investigation.

VIII. DEPLETION OF STOCKPILE AND EXPIRATION OF APPROVAL

When a stockpile has been fully depleted, the Contractor may replenish it within 24 months after the date of depletion; a depleted stockpile not replenished after 24 months will be removed from the approved list and may not be replenished.

Approval of a stockpile may be withdrawn if, in the finding of the Division of Materials, Asphalt Branch, the total amount of material used in new mixtures equals the total tonnage of the original stockpile plus all approved replenishments. Six years from the original approval of a stockpile or from its most recent replenishment, a stockpile shall be presumed to be depleted, and its approval shall expire. This shall apply to all stockpiles, regardless of status or history of use.

IX. RECORDS

The Contractor shall maintain records at the plant site on all RAP stockpiles. These records shall be available for inspection by representatives of the Department and shall include the following:

• All test results.

• The Department's approval letter for each stockpile and replenishment, together with the Contractor's requests for approval and all data submitted therewith.

• A current drawing of all stockpile locations at the plant site, including unapproved stockpiles, showing stockpile numbers of all stockpiles approved for State work.

X. RELOCATION OF STOCKPILE

If material from an approved RAP stockpile is to be moved to another location, the contractor shall seek approval from the Department prior to its further use on State projects. A letter request shall be submitted to the Division of Materials indicating the current stockpile location, the total quantity of material to be moved, and the amount, if any, to remain in the current location. The Division of Materials will issue an approval letter applicable to the new location.

June 18, 2025

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 MONOLITHIC OPERATION

1.0 MATERIALS. Provide 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 specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

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 milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

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.



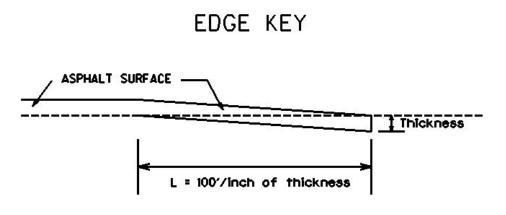
3.0 MEASUREMENT. The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

1-3232-DS Pavement Wedge Monolithic 01/02/2012

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.



Thickness = 1.25 Inches

L = 125 LF

L = Length of Edge Key

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.

Take possession of the millings and recycle the millings or dispose of the millings off the Rightof-Way at sites obtained by the Contractor at no additional cost to the Department.

1-3520 48 hours Contractor keeps millings 01/2/2012

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 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

Maintain all lanes open to traffic and perform no work during the following hours:

6:00 a.m. – 8:00 p.m. Monday through Sunday

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 11.0 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.

The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Take these restrictions into account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor as a result of these restrictions.

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

Traffic Control Plan Page 2 of 11

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.

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 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 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,

Traffic Control Plan Page 3 of 11

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

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

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.

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.

PAVEMENT MARKINGS

Traffic Control Plan Page 4 of 11

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 $1\frac{1}{2}$ ". 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

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

Traffic Control Plan Page 5 of 11

01/02/2012

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 1/2 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

<u>Placement</u>

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 zone
- 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
- •

Traffic Control Plan Page 8 of 11

Standard Abbreviations

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

| <u>Word</u> | 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 |
| 1 | | EXIT 10 |
| Freeway | FRWY, FWY | GN SYNDR FWY CLOSED/DETOUR |
| | | EXIT 15 |
| Hazardous Materials | HAZMAT | HAZMAT IN ROADWAY/ALL TRAF |
| | | EXIT 25 |
| Highway | HWY | ACCIDENT ON AA HWY/EXPECT |
| | | DELAYS |
| Hour | HR | ACCIDENT ON AA HWY/2 HR |
| | | DELAY |
| Information | INFO | TRAF INFO TUNE TO 1240 AM |
| Interstate | Ι | E-BND I64 CLOSED/DETOUR |
| | | 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 |
| | | EXIT 50 |
| Oversized | OVRSZ | OVRSZ COMM VEH/USE I275 |
| | | NEXT RIGHT |
| Parking | PKING | EVENT PKING NEXT RGT |
| Parkway | PKWY | CUM PKWAY TRAF/DETOUR |
| - | | EXIT 60 |
| Prepare | PREP | ACCIDENT 3 MIL/PREP TO STOP |
| Right | RGT | EVENT PKING NEXT RGT |
| Road | RD | HAZMAT IN RD/ALL TRAF EXIT 25 |
| Roadwork | RDWK | RDWK NEXT 4 MI/POSSIBLE |
| | | DELAYS |
| Route | RTE | MAJ DELAYS I75/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.

| <u>Abbrev.</u> | <u>Intended Word</u> | 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

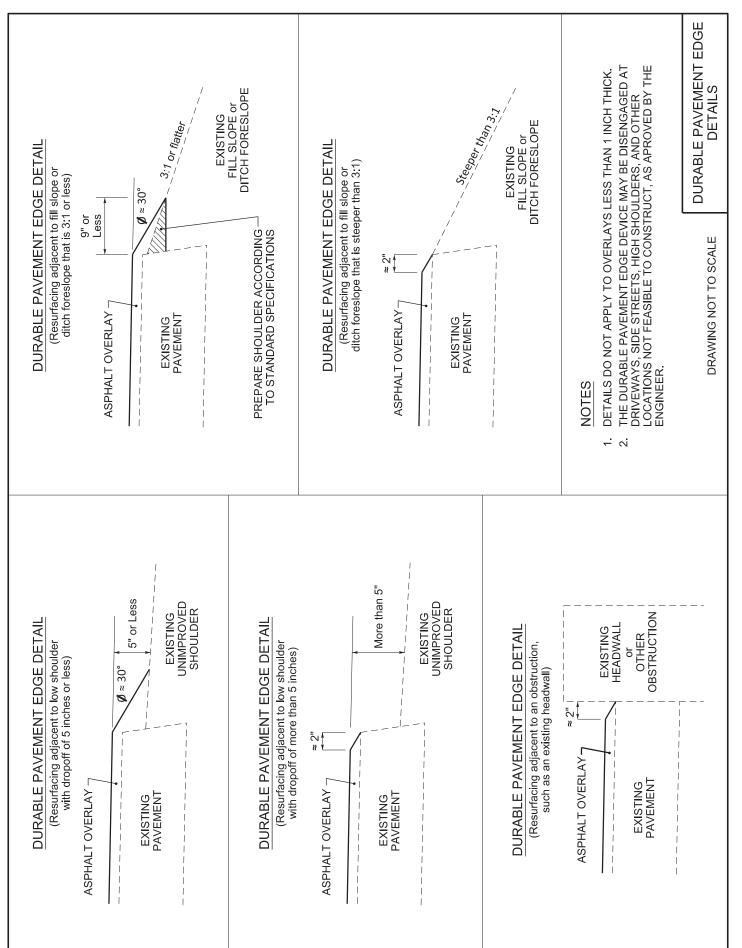
TYPICAL MESSAGES

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 | Action |
|--------------------------------------|---------------------|
| ACCIDENT | ALL TRAFFIC EXIT RT |
| ACCIDENT/XX MILES | AVOID DELAY USE XX |
| XX ROAD CLOSED | CONSIDER ALT ROUTE |
| XX EXIT CLOSED | DETOUR |
| BRIDGE CLOSED | DETOUR XX MILES |
| BRIDGE/(SLIPPERY, ICE, ETC.) | DO NOT PASS |
| CENTER/LANE/CLOSED | EXPECT DELAYS |
| DELAY(S), MAJOR/DELAYS | FOLLOW ALT ROUTE |
| DEBRIS AHEAD | KEEP LEFT |
| DENSE FOG | KEEP RIGHT |
| DISABLED/VEHICLE | MERGE XX MILES |
| EMER/VEHICLES/ONLY | MERGE LEFT |
| EVENT PARKING | MERGE RIGHT |
| EXIT XX CLOSED | ONE-WAY TRAFFIC |
| FLAGGER XX MILES | PASS TO LEFT |
| FOG XX MILES | PASS TO RIGHT |
| FREEWAY CLOSED | PREPARE TO STOP |
| FRESH OIL | REDUCE SPEED |
| HAZMAT SPILL | SLOW |
| ICE | SLOW DOWN |
| INCIDENT AHEAD | STAY IN LANE |
| LANES (NARROW, SHIFT, MERGE, ETC.) | STOP AHEAD |
| LEFT LANE CLOSED | STOP XX MILES |
| LEFT LANE NARROWS | TUNE RADIO 1610 AM |
| LEFT 2 LANES CLOSED | USE NN ROAD |
| LEFT SHOULDER CLOSED | USE CENTER LANE |
| LOOSE GRAVEL | USE DETOUR ROUTE |
| MEDIAN WORK XX MILES | USE LEFT TURN LANE |
| MOVING WORK ZONE, WORKERS IN ROADWAY | USE NEXT EXIT |
| NEXT EXIT CLOSED | USE RIGHT LANE |
| NO OVERSIZED LOADS | WATCH FOR FLAGGER |
| NO PASSING | |
| NO SHOULDER | |
| ONE LANE BRIDGE | |
| | |

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



INSTALL RADAR PRESENCE DETECTOR TYPE A

Install Radar Presence Detector Type A shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by contractor), and controller interface assembly. Radar Presence Detector Type A bid item shall include all labor required to provide a functional detection system. Radar Presence Detector Type A shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others. This includes the removal of all existing loop lead-in cable, conduits, and junction boxes from cabinet, poles, spans, and the ground.

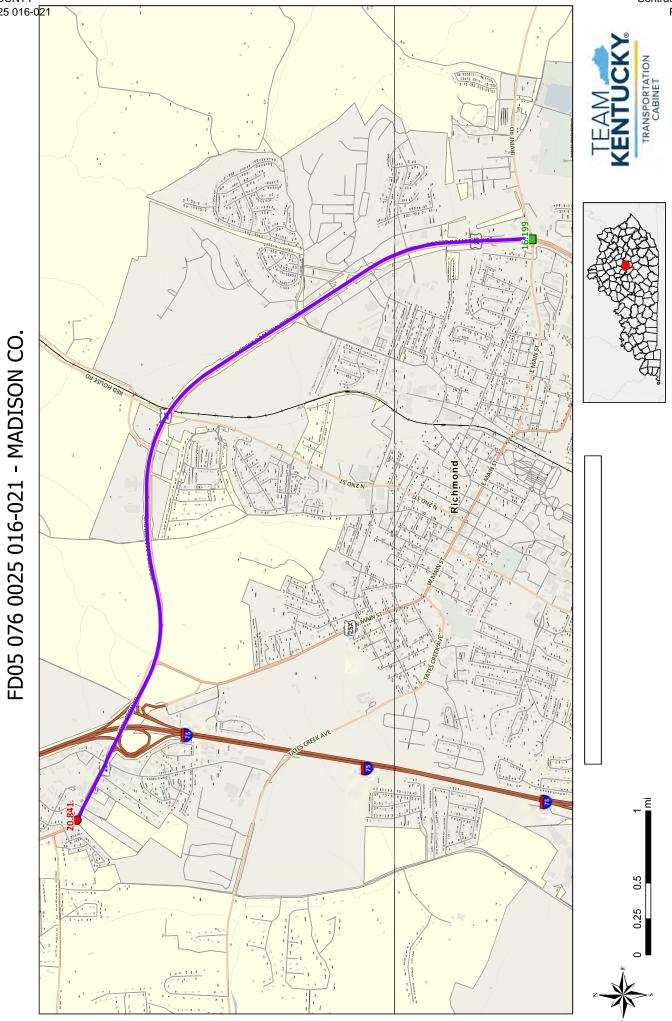
March 25, 2025

INSTALL RADAR ADVANCE DETECTOR TYPE B

Install Radar Advance Detector Type B shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by contractor), and controller interface assembly. Radar Advance Detector Type B bid item shall include all labor required to provide a functional detection system. Radar Advance Detector Type B shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others. This includes the removal of all existing loop lead-in cable, conduits, and junction boxes from cabinet, poles, spans, and the ground.

March 25, 2025





Milling Summary Sheet

Contract ID: 252112 Page 49 of 89

Project: FD05 076 0025 016-021

County: Madison

District: D7 - Lexington

| Mile Point | Notes | Length | Width | Avg Depth | Tons |
|------------|---|--------|-------|--------------|---------|
| 16.199 | Curb and Gutter MP 16.199-MP 16.4 | 1,060 | 165 | 1.25 | 1,336 |
| 16.420 | Professional Dr Edge Key | 55 | 45 | 0.63 | 9.5 |
| 16.886 | Merchant/Greathouse Edge Keys | 90 | 70 | 0.63 | 24.3 |
| 17.116 | Merrick Dr Edge Keys | 90 | 50 | 0.63 | 17.3 |
| 17.340 | Meridian Dr Edge Keys | 100 | 55 | 0.63 | 21.2 |
| 17.570 | Four Mile Edge Keys | 100 | 50 | 0.63 | 19.3 |
| 18.600 | Curb and Gutter Through KY 1986 intersection, correct drainage | 1,050 | 130 | 1.25 | 1,042.7 |
| 19.100 | Curb and Gutter Through Wilderness intersection, correct drainage | 1,050 | 130 | 1.25 | 1,042.7 |
| 19.700 | Curb and Gutter 19.7-20.841 | 6,000 | 80 | 1.25 | 3,666.7 |
| 19.874 | US 25X and McCord Lane Edge Key | 90 | 120 | 1.25 | 82.5 |
| 20.178 | Ramp Edge Keys | 200 | 40 | 1.25 | 61.1 |
| 20.400 | Ramp Edge Keys | 200 | 40 | 1.25 | 61.1 |
| 20.490 | Keeneland Dr Edge Keys | 120 | 70 | 1.25 | 64.2 |
| 20.565 | Brandy Lane | 30 | 40 | 1.25 | 9.2 |
| 20.634 | Industrial Dr | 20 | 30 | 1.25 | 4.6 |
| 20.640 | School Entrances | 60 | 45 | 1.25 | 20.6 |
| 20.764 | Keystone and Victory Lane | 50 | 50 | 1.25 | 19.1 |
| 18.510 | Bridge Edge Keys (4) | 500 | 42 | 0.63 | 81 |
| | | | | Total: | 7,585 |

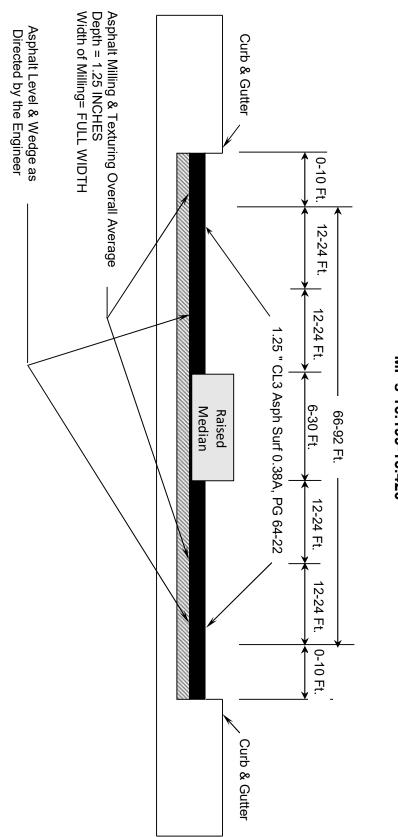
MADISON COUNTY FD05 076 0025 016-021

Thermo Summary Sheet

| | | | County: Ma | dison | | FD | 05 076 0025 01 | 6-021 | | | | | |
|-----------|----------------------------|---|---|---|---|---|--|--|--|---------------------------------------|---|---|---|
| Milepoint | Location | Notes | PAVE MARKIN G- THERMO COMB ARROW | PAVE MARKIN G- THERMO CROSS- HATCH | PAVE MARKIN G- THERMO CURV ARROW | PAVE MARKIN G- THERMO DOTTED LANE EXTEN | PAVE MARKIN G- THERMO ONLY | PAVE MARKIN G- THERMO STOP BAR-24IN | PAVE MARKIN G- THERMO STR ARROW | PAVE MARK THERMO CHEVRO N | PAVE MARK THERMO CONE CAP- SOLID YELLOW | PAVE STRIPIN G- THERMO -12 IN W | PAVE STRIPIN G- THERMO -12 IN Y |
| 16.199 | KY 52 | 144' Thermo 12" W is for 48' of Yield Lines 36" (22520EN) | | | 28 | 100 | | 144 | | 1,650 | | 144 | 60 |
| 16.420 | Professional Dr | | | | 9 | | | | | | | | 75 |
| 16.650 | Checkerboard | | | | 9 | | | | | | | | 60 |
| 16.886 | Greathouse/ Merchant Dr | | | | 16 | 112 | | 202 | | 3,000 | | | 60 |
| 17.116 | Merrick/ Atwood | | | | 18 | 100 | | 170 | | | | | 90 |
| 17.342 | Meridian/Ival James | | | | 18 | | | 64 | | | | | 76 |
| 17.570 | Four Mile | | | | 13 | | | 150 | | | | | 96 |
| 18.698 | KY 1986 | | | | 15 | 600 | | 174 | | 1,260 | | | 30 |
| 19.206 | Wilderness | | | | 20 | 600 | | 169 | | 1,000 | | | 30 |
| 19.874 | US 25X | US 25X joint will start at back of Chevrons. | 1 | 50 | 10 | 600 | 3 | 112 | | 800 | | 460 | 135 |
| 20.178 | I-75 North Ramps | | | | 5 | | | 84 | | | | | 180 |
| 20.400 | I-75 South Ramps | | | | 5 | | | | | 780 | | | 90 |
| 20.490 | Keeneland | | | 60 | 13 | | | 155 | 2 | | | | 30 |
| 20.764 | Victory Dr | | | | 2 | | | | | | | | |
| | Various | | | | | | | | | | 315 | | |
| | | Total: | 1 | 110 | 181 | 2,112 | 3 | 1,424 | 2 | 8,490 | 315 | 604 | 1,012 |

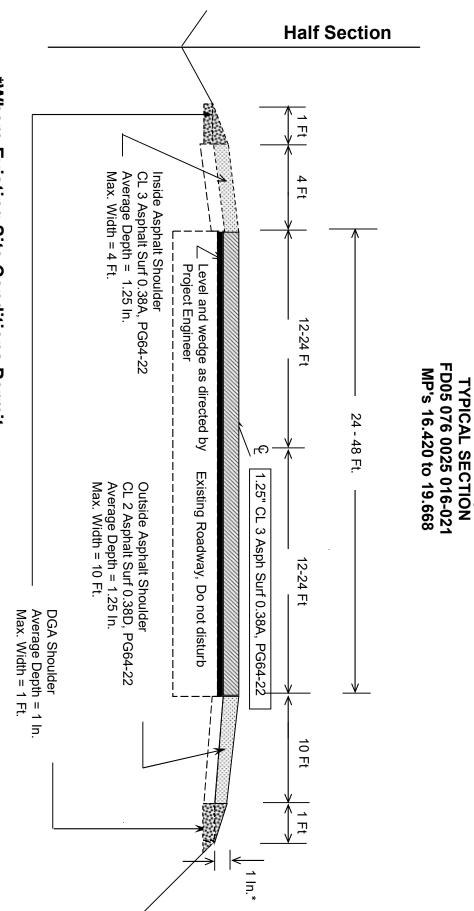
| NOTES | | | | | | | | | | | |
|---|---------|----------|------------|----------------|--------|-----------|----------------|--|--|--|-------|
| PRESENCE DETECTOR RADAR PRESENCE DETECTOR TYPE A TYPE B EA EA | 2 | 2 | 2 | 2 | 2 | | | | | | 10 |
| RADAR PRESENCE DETECTOR TYPE A EA | 4 | 4 | 4 | 4 | 4 | 3 | 4 | | | | 27 |
| INTERSECTION | Merrick | Fourmile | Union City | Old Wilderness | US 25X | I-75 Ramp | Keenland Drive | | | | |
| MPT. | 17.120 | 17.570 | 18.700 | 19.210 | 19.870 | 20.178 | 20.490 | | | | TOTAL |

NOTES:

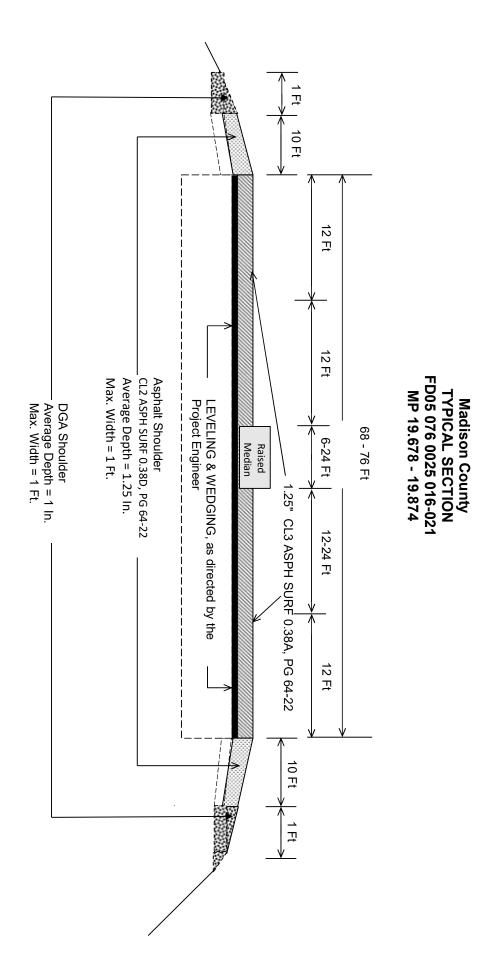


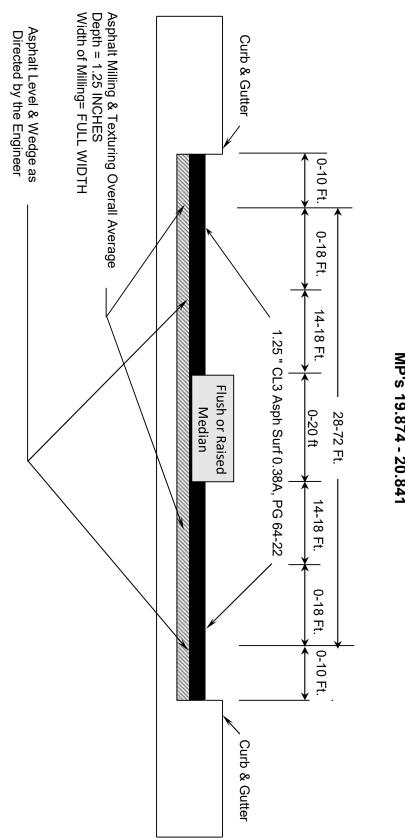
Madison County FD05 076 0025 016-021 TYPICAL SECTION MP's 16.199-16.420

Madison County



*Where Existing Site Conditions Permit





Madison County FD05 076 0025 016-021 TYPICAL SECTION MP's 19.874 - 20.841

Madison County - US 25 - MP's 16.199 - 20.841

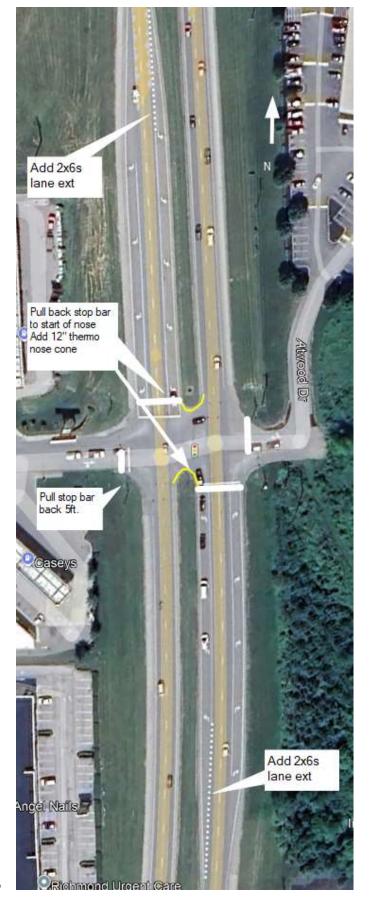
FD05 076 0025 016-021 - PAVEMENT STRIPING DETAIL

Put back striping as is existing in the field unless noted otherwise below.

- US 25 at KY 52 SIGNAL-SEE STRIPING CHANGE PLANS TO ADD DUAL LEFTS
 - Radar- has existing 4 matrix and 2 advance.
- US 25 at Professional Dr- unsignalized
 - $\circ~$ Put back the existing 12" thermo nose cone on NB island.
 - RTL needs 5 arrows, LTL needs 4 arrows spaced evenly per spec
- US 25 at checkerboard circle- unsignalized.
 - o NB LTL -put back 4 LT arrows
 - SB- extend median yellow, qty is the same, just pulling out from median. (see drawing below)
 - SB- add 12" thermo nose cone. ~60LF
 - SB RTL- put back the 5 RT arrows

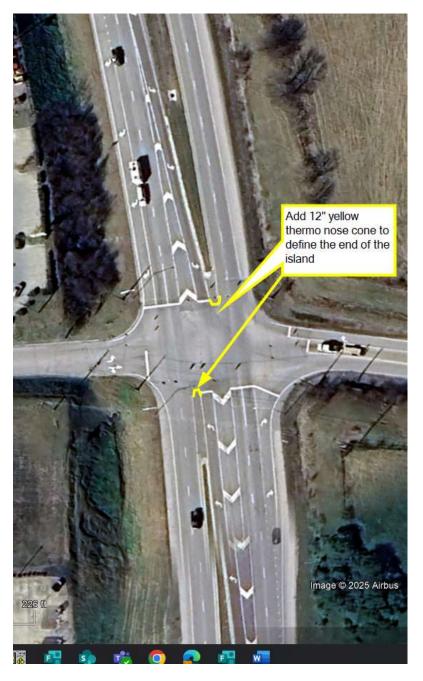


- US 25 at Greathouse Dr- NEW signal and offset lefts. Google does not show these changes yet.
 - Put back existing markings (see attachment permit plans for reference)
 - Add lane extension markings for the LTLs 6" white 2x6s. (added to permit plans for reference) ~112LF
 - Radar- has existing radar from permit.
 - No connection- need to establish connection (signal techs- check equipment, is it a click box? Advance? /Telma- check set up)
- US 25 at Merrick Dr-Signal- striping adjustments
 - Radar-ADD-see qty sheets attached.
 - Add 12" yellow nose cones to median noses
 - Add 6" white 2'x6' lane ext to LTL tapers. ~100LF
 - Move SBs as shown below (in preparation for potential future pedestrian crossing requests as this area develops)
 - Traffic- see if mainline can have reflective backplates added. Check if P/P phasing metwasn't this checked by consultant recently? If not, have peak hr counts done by student.

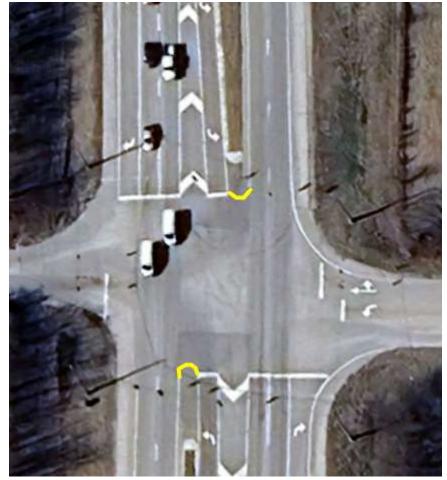


- US 25 at Ival James-unsignalized
 - $\circ~$ Add 12" yellow nose cones to raised medians. ~76LF
 - $\circ~$ Add SBs to side sts, 20ft back from edge of thru lane (~64LF of 24" white thermo)
 - \circ $\;$ Everything else back as is in the field
- US 25 at FourMile-Signal
 - Add 12" yellow nose cones to raised medians. ~96LF
 - \circ $\,$ SB RTL should have 3 arrows spaced per spec $\,$
 - \circ $\,$ SB LTL should have 4 arrows spaced per spec $\,$
 - Radar- ADD radar- see qty sheets

- US 25 at Union City-Signal
 - Recent HSIP project offset the LTLs. Put back the existing striping plus add 12" nose cones as shown below. ~30LF
 - Radar- ADD radar- see qty sheets

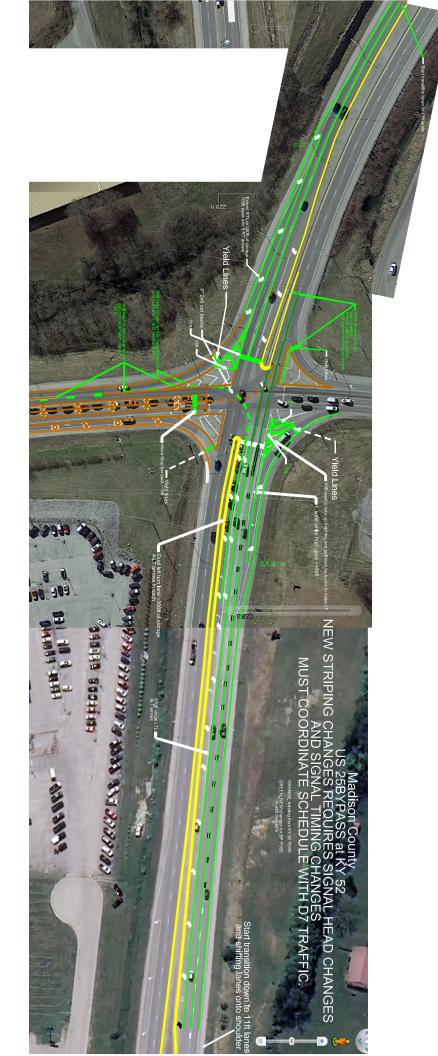


- US 25 at Old Wilderness-Signal MP
 - $\circ~$ Offset LTLs- add 12" yellow thermo nose cone extensions. As shown below. ~30LF
 - Radar- ADD radar- see qty sheets



0

- US 25 at Old 25X-Signal MP 19.87
 - $\circ~$ Add 12" yellow thermo nose cone to mainline raised islands ~30LF
 - Radar- ADD radar- see qty sheets
 - Traffic- replace 5 section with 4 section, update timing, EB head missing visor. Change mainline backplates to reflective.





Contract ID: 252112 Page 63 of 89

Contract ID: 252112 Page 64 of 89

Pavement Striping Detail Sheet FD05 076 0025 016-021





Contract ID: 252112 Page 65 of 89

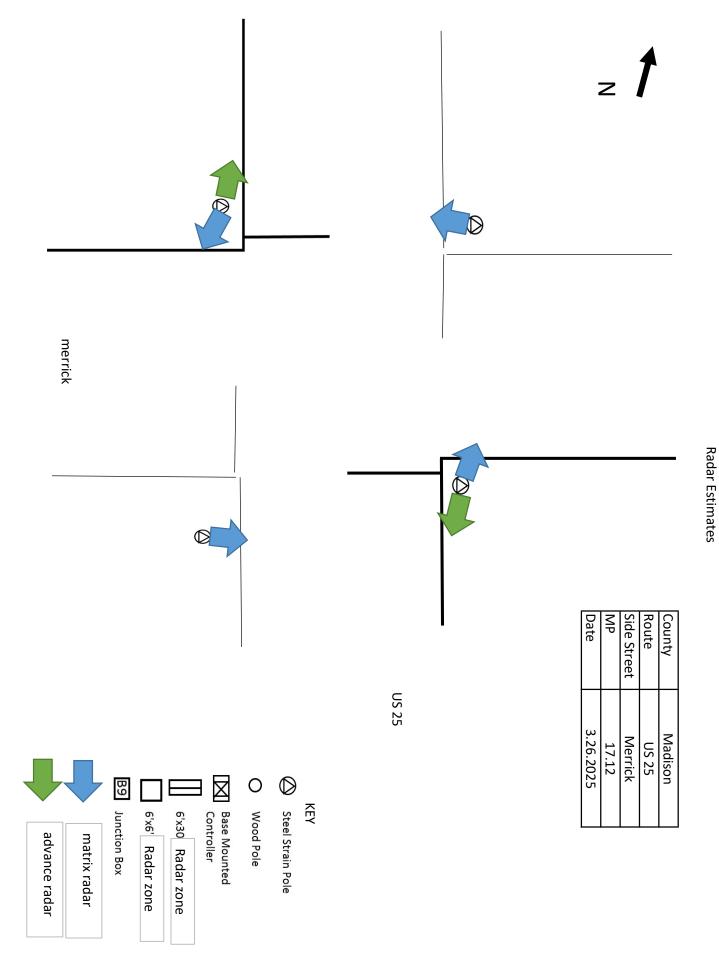


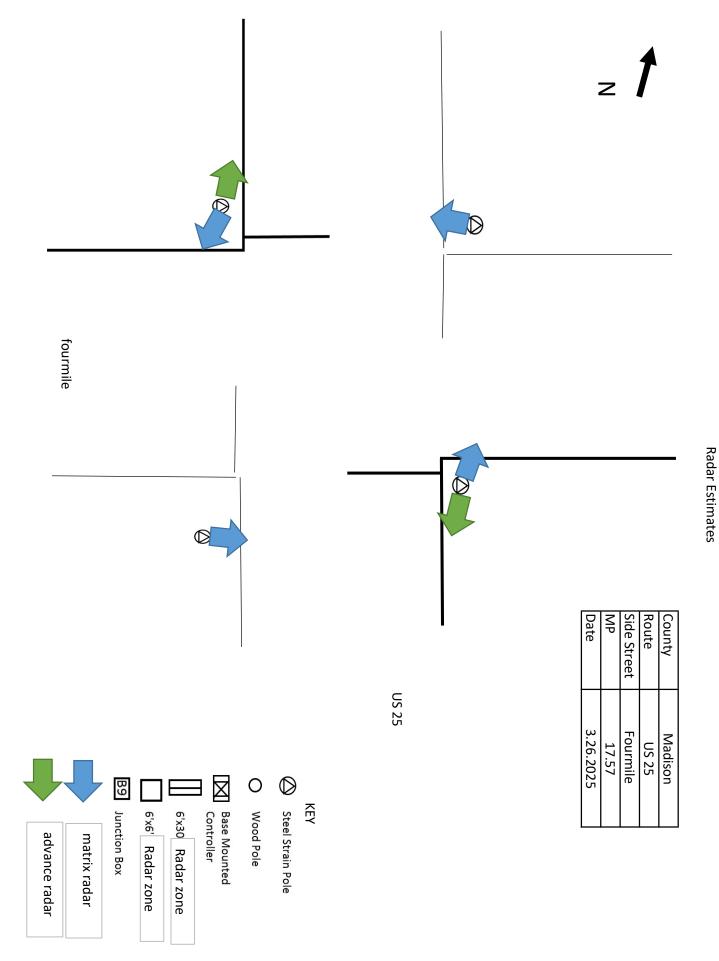
Contract ID: 252112 Page 66 of 89

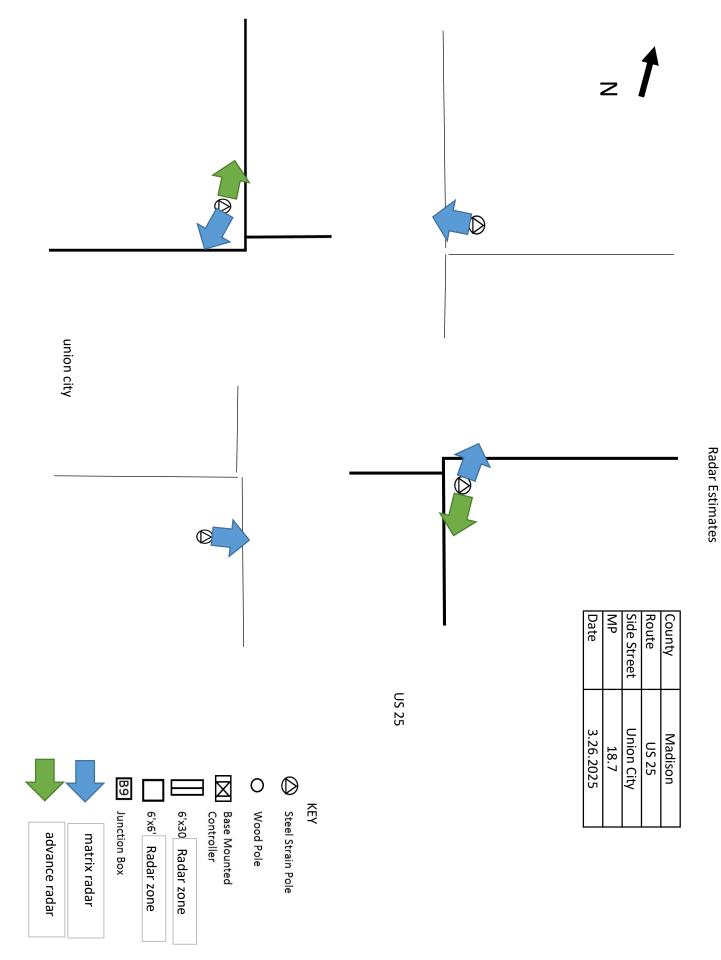


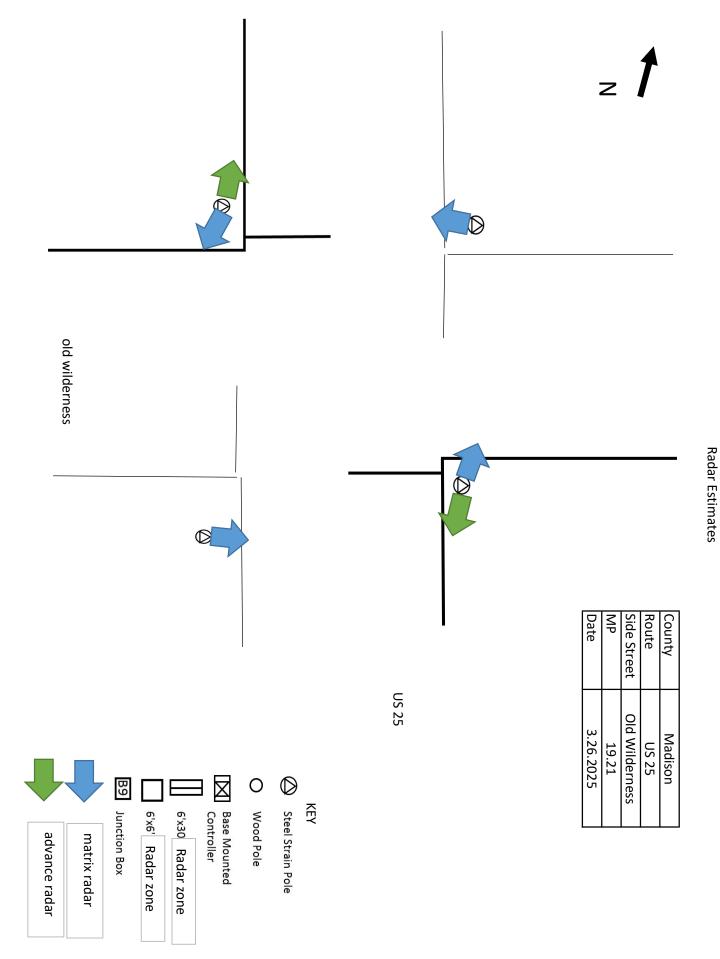


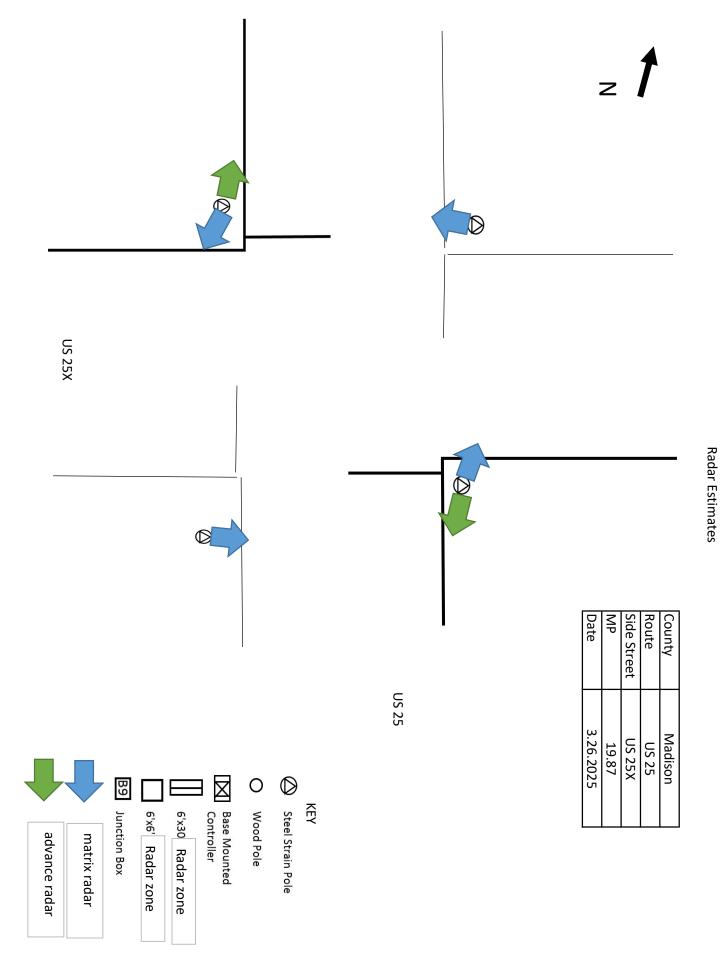
Contract ID: 252112 Page 68 of 89





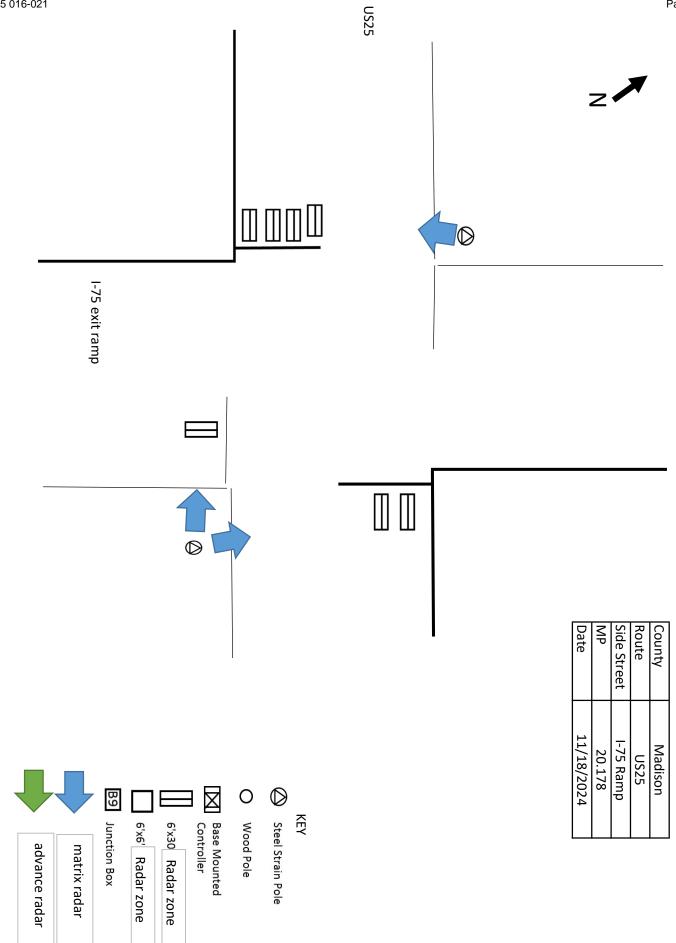


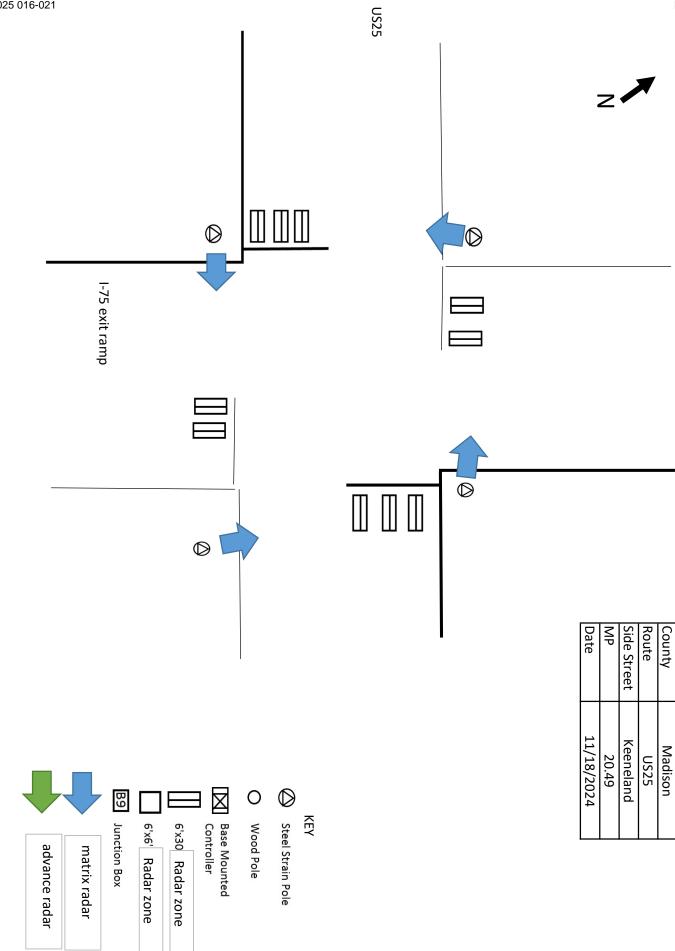


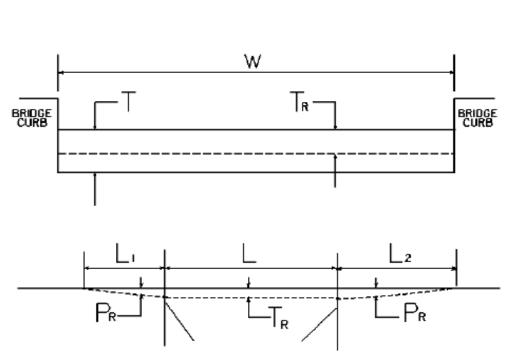




Radar Estimates







BRIDGE DETAIL FOR PAVING PROJECT FD05 076 0025 016-021

W = bridge width curb to curb

T = thickness of existing asphalt overlay

L = length of bridge

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

 $T_R =$ thickness to be removed and replaced on bridge $P_R =$ thickness to be removed and replaced on pavement Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft/in of thickness

| Route | Bridge No. | MP | W (ft) | T (in) | L_{1} (ft) | $L_{2}(ft)$ | T _R (in) | L (ft) | P_{R} (in) |
|-------|------------|--------|--------|--------|--------------|-------------|------------------------|--------|--------------|
| US 25 | 076B00092L | 18.510 | 42 | 0.0 | 125 | 125 | 0.0 | 530 | 1.25 |
| US 25 | 076B00092R | 18.510 | 42 | 0.0 | 125 | 125 | 0.0 | 530 | 1.25 |
| US 25 | 076B00093N | 20.277 | 100 | 0.0 | | | 0.0 | 308.5 | 1.25 |
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PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

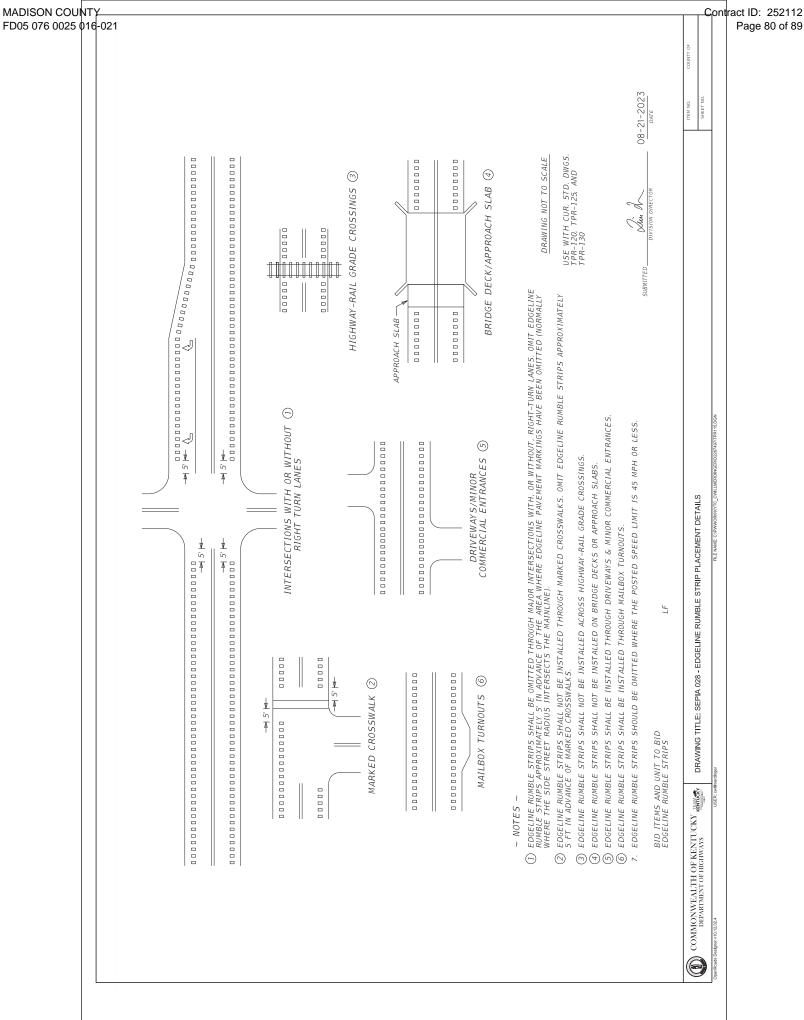
Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

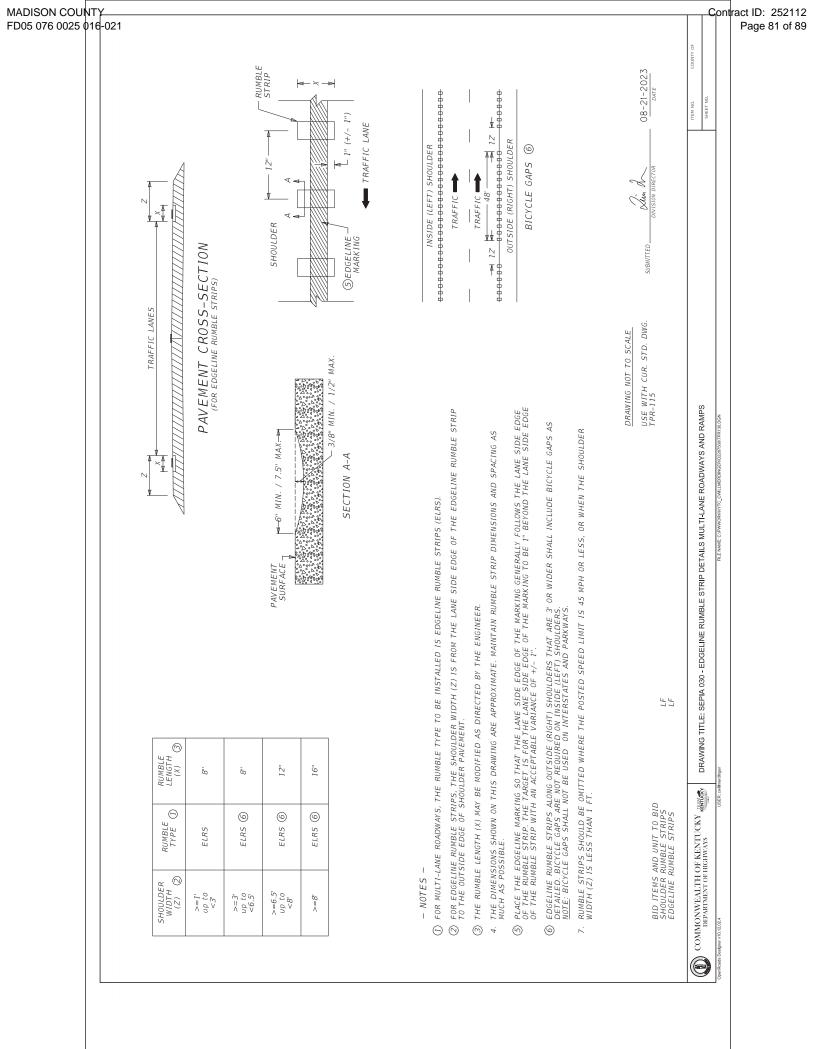
SUPPLEMENTAL SPECIFICATIONS

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

2020 KENTUCKY STANDARD DRAWINGS

| CURVE WIDENING AND SUPERELEVATION TRANSITIONS | RGS-001-07 |
|---|------------|
| SUPERELEVATION FOR MULTILANE PAVEMENT | |
| MISCELLANEOUS STANDARDS | |
| APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT | |
| LANE CLOSURE TWO-LANE HIGHWAY | TTC-100-05 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE I | TTC-115-04 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE II | TTC-120-04 |
| SHOULDER CLOSURE | TTC-135-03 |
| PAVEMENT CONDITION WARNING SIGNS | TTD-125-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE I | TTS-100-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE II | |
| MOBILE OPERATION FOR PAINT STRIPING CASE III | TTS-110-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE IV | TTS-115-02 |
| CURB AND GUTTER, CURBS AND VALLEY GUTTER | RPM-100-11 |





PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

I. Application

II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

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

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

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

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

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her 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 one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her 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 to obtain private benefits.

If you have worked for the executive branch of state government within the past year, 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 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

Kentucky Equal Employment Opportunity Act of 1978

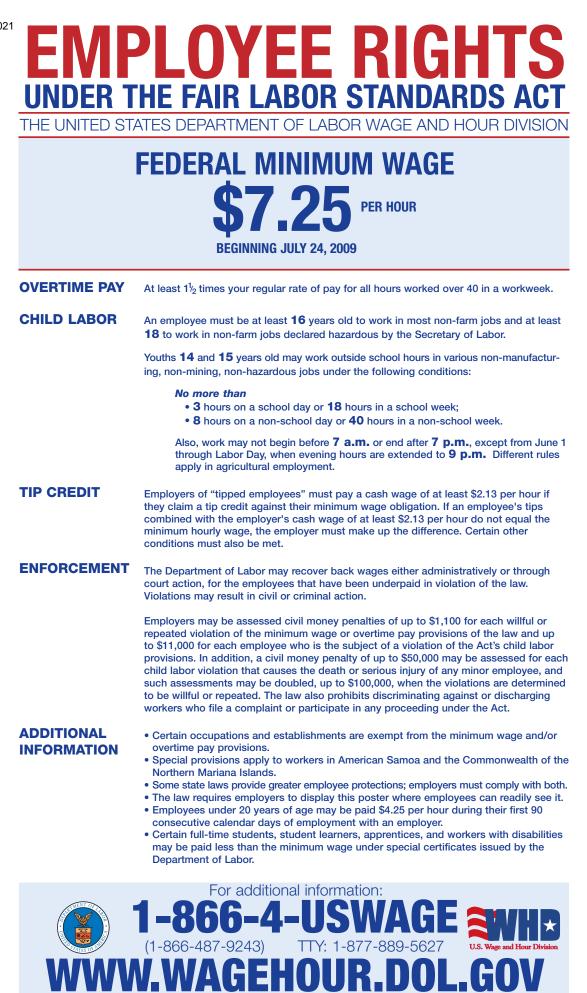
The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review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

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

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

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

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



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

PART IV

BID ITEMS

252112

PROPOSAL BID ITEMS

Page 1 of 2

Report Date 7/2/25

252112

Section: 0001 - PAVING

| LINE | BID CODE | ALT DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|------------|---|-----------|------|-----------|----|-------------|
| 010 | 00001 | DGA BASE | 700.00 | TON | | \$ | |
| 020 | 00100 | ASPHALT SEAL AGGREGATE | 250.00 | TON | | \$ | |
| 030 | 00103 | ASPHALT SEAL COAT | 30.00 | TON | | \$ | |
| 040 | 00190 | LEVELING & WEDGING PG64-22 | 375.00 | TON | | \$ | |
| 050 | 00301 | CL2 ASPH SURF 0.38D PG64-22 | 2,800.00 | TON | | \$ | |
| 060 | 00356 | ASPHALT MATERIAL FOR TACK | 110.00 | TON | | \$ | |
| 070 | 02562 | TEMPORARY SIGNS | 480.00 | SQFT | | \$ | |
| 080 | 02650 | MAINTAIN & CONTROL TRAFFIC | 1.00 | LS | | \$ | |
| 090 | 02671 | PORTABLE CHANGEABLE MESSAGE SIGN | 8.00 | EACH | | \$ | |
| 0100 | 02676 | MOBILIZATION FOR MILL & TEXT | 1.00 | LS | | \$ | |
|)110 | 02677 | ASPHALT PAVE MILLING & TEXTURING | 7,585.00 | TON | | \$ | |
|)120 | 02697 | EDGELINE RUMBLE STRIPS | 70,900.00 | LF | | \$ | |
| 130 | 02775 | ARROW PANEL | 2.00 | EACH | | \$ | |
| 140 | 06510 | PAVE STRIPING-TEMP PAINT-4 IN | 50,000.00 | LF | | \$ | |
| 150 | 06515 | PAVE STRIPING-PERM PAINT-6 IN | 15,000.00 | LF | | \$ | |
| 160 | 06542 | PAVE STRIPING-THERMO-6 IN W | 65,000.00 | LF | | \$ | |
|)170 | 06543 | PAVE STRIPING-THERMO-6 IN Y | 42,500.00 | LF | | \$ | |
| 180 | 06546 | PAVE STRIPING-THERMO-12 IN W | 604.00 | LF | | \$ | |
| 190 | 06547 | PAVE STRIPING-THERMO-12 IN Y | 1,012.00 | LF | | \$ | |
| 200 | 06556 | PAVE STRIPING-DUR TY 1-6 IN W | 1,350.00 | LF | | \$ | |
| 210 | 06557 | PAVE STRIPING-DUR TY 1-6 IN Y | 110.00 | LF | | \$ | |
| 220 | 06568 | PAVE MARKING-THERMO STOP BAR-24IN | 1,424.00 | LF | | \$ | |
| 230 | 06569 | PAVE MARKING-THERMO CROSS-HATCH | 110.00 | SQFT | | \$ | |
| 240 | 06573 | PAVE MARKING-THERMO STR ARROW | 2.00 | EACH | | \$ | |
| 250 | 06574 | PAVE MARKING-THERMO CURV ARROW | 181.00 | EACH | | \$ | |
| 260 | 06575 | PAVE MARKING-THERMO COMB ARROW | 1.00 | EACH | | \$ | |
| 270 | 06576 | PAVE MARKING-THERMO ONLY | 3.00 | EACH | | \$ | |
| 280 | 10020NS | FUEL ADJUSTMENT | 15,108.00 | DOLL | \$1.00 | \$ | \$15,108.00 |
| 290 | 10030NS | ASPHALT ADJUSTMENT | 37,630.00 | DOLL | \$1.00 | \$ | \$37,630.00 |
| 300 | 20411ED | LAW ENFORCEMENT OFFICER | 500.00 | HOUR | | \$ | |
| | | PAVE MARK THERMO CONE CAP-SOLID | | | | | |
| 0310 | 21417ES717 | YELLOW | | SQFT | | \$ | |
|)320 | 22906ES403 | CL3 ASPH SURF 0.38A PG64-22 | 15,200.00 | | | \$ | |
| 330 | 24679ED | PAVE MARK THERMO CHEVRON | 8,490.00 | SQFT | | \$ | |
| 340 | 24683ED | PAVE MARKING-THERMO DOTTED LANE EXTEN | 2,112.00 | LF | | \$ | |
| 350 | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | 27.00 | EACH | | \$ | |
| 0360 | 26120EC | INSTALL RADAR ADVANCE DETECTOR TYPE B | 10.00 | EACH | | \$ | |
|)370 | 26248EC | ELECTRONIC DELIVERY MGMT SYSTEM - AGG | 1.00 | LS | | \$ | |

252112

PROPOSAL BID ITEMS

Page 2 of 2

Report Date 7/2/25

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|-----------|----|--------|
| 0380 | 02569 | | DEMOBILIZATION | 1.00 |) LS | | \$ | |