



CALL NO. 309

CONTRACT ID. 232312

SIMPSON COUNTY

FED/STATE PROJECT NUMBER FD04 107 0100 009-010

DESCRIPTION SCOTTSVILLE ROAD (KY 100)

WORK TYPE JPC PAVEMENT REPAIRS - DIAMOND GRINDING

PRIMARY COMPLETION DATE 6/30/2024

LETTING DATE: October 26,2023

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME October 26,2023. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 03

CONTRACT ID - 232312
FD04 107 0100 009-010
COUNTY - SIMPSON
PCN - MP10701002302
FD04 107 0100 009-010

SCOTTSVILLE ROAD (KY 100) (MP 9.742) BEGIN AT US 31W EXTENDING EAST TO THE WESTERN END OF CSX
RAILROAD BRIDGE (MP 9.959), A DISTANCE OF 0.21 MILES.JPC PAVEMENT REPAIRS - DIAMOND GRINDING
GEOGRAPHIC COORDINATES LATITUDE 36:43:05.86 LONGITUDE 86:34:36.18
ADT 3,803

COMPLETION DATE(S):
COMPLETED BY 06/30/2024 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to [KRS 45A.607](#), 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 [KRS 11A.236](#) 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 [KRS 45A.328](#), 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.

October 4, 2023

1.0 BUY AMERICA REQUIREMENT.

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

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT10/26/2023

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 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.

Finally, BABA permits the continuation of FHWA’s current general applicability waivers for manufactured products, raw materials, and ferryboat parts, but these waivers are subject to reevaluation, specifically the general applicability waiver for manufactured products.

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 is 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.

[Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration \(dot.gov\)](#)

October 26, 2023 Letting

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

SURFACING AREAS

The Department estimates the mainline PCC surfacing width to be varied 25 to 37 feet.

The Department estimates the total mainline area to receive JPC repairs to be 904 square yards.

The Department estimates the shoulder width to be N/A foot on each side.

The Department estimates the total shoulder area to be surfaced to be N/A 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.

DGA BASE

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

INCIDENTAL SURFACING

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

JPC PAVEMENT SMOOTHNESS

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

JPC PAVEMENT THICKNESS

Contrary to Sections 501.03.21, 501.05.01, 502.03, and 502.05, the Department will accept JPC Pavement and JPC Pavement 24/48/72 pavement thickness according to Special note for Acceptance of JPC Pavement Thickness [10T].

OPTION B

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

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.

SPECIAL NOTES FOR PCC PATCHING & DIAMOND GRINDING

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard Specifications, and applicable interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Take note that Special Provision 76 is not applicable to this project. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control Traffic; (2) Diamond Grinding and (3) All other work specified as part of this contract.

II. MATERIALS

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

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- D. Pavement Markings.** See Traffic Control Plan.
- E. Joint and Crack Sealing.** See Special Note for Full Depth Concrete Pavement Repair. Use hot poured elastic, no alternates.

III. CONSTRUCTION METHODS

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

B. Site Preparation. Be responsible for all site preparation, including but not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of waste materials, sweeping and removal of debris; temporary and permanent erosion and water pollution control; restoration; and any other incidentals. Perform all site preparation operations only as approved or directed by the Engineer.

C. Concrete Pavement Removal and Replacement. Except as specified in these notes, remove and replace full depth concrete pavement in accordance with Special Note for Full Depth Concrete Pavement Repair. Removal locations and dimensions listed in the summaries are approximate only; the Engineer will determine actual locations and dimensions at the time of construction. The Engineer may add additional locations within the project limits at any time prior to completion. Contrary to the Special Note for Full Depth Concrete Pavement Repair, the Engineer may designate non-standard distances from the joint to be used. Remove pavement according to Special Note for Full Depth Concrete Pavement Repair by a saw cut and lift method without unnecessarily disturbing the underlying base. Double sawing of large slab removal limits will be allowed to facilitate removal. Place PCC Pavement with nominal depth of 9 inches; however, transition the finished grade of the PCC Pavement to match the adjacent pavement that is to remain in place; therefore, the actual thickness of the pavement may be greater than existing in some areas. Install tie and dowel bars according to Special Note for Full Depth Concrete Pavement Repair using gang drills, capable of drilling a minimum of four holes at a time.

Perform concrete pavement removal and replacement in such a manner that removal and replacement are accomplished on the same day at each location. Once the removal of pavement has begun, work continuously until the new PCC Pavement is placed to eliminate the hole. The Engineer will allow hand finishing; however, perform initial strike-off with a rotary drum screed. Contrary to Section 501.03.13, do not texture by the formation of transverse grooves. All other applicable sections of Special Note for Full Depth Concrete Pavement Repair shall apply except as specified herein.

D. PCC Pavement Diamond Grinding. Diamond grind the entire length of the project both eastbound and westbound and at repair locations in the center turn lane or as directed by the Engineer. Begin Diamond Grinding within seven (7) calendar days after the placement of the last full depth patch. Grind the mainline lanes and the turn lanes. Complete diamond grinding according to Section 503 of the Standard Specifications. Ride quality will be according to Section 501 for Category B projects.

E. Joint and Crack Sealing. Seal joints in the new PCC pavement according to Special Note for Full Depth Concrete Pavement Repair. For other joints saw-cut, clean, and seal all transverse and longitudinal joints and the pavement shoulder joints according to Section 501.03.17.

F. Disposal of Waste. Dispose of all removed concrete, asphalt materials, debris, excess excavation, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.

G. Final Dressing, Clean Up, and Seeding and Protection. See Special Note for Erosion Control.

H. Restoration. Restore any roadway features or private property disturbed by the work or the Contractor's operations in like kind materials and design as directed by the Engineer at no additional cost to the Department or the owner.

I. Pavement Striping and Pavement Markers. See Traffic Control Plan.

J. On-Site Inspection. Make a thorough inspection of the site prior to submitting a bid and become thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not consider any claims for money or grant time extension resulting from site conditions.

IV. METHOD OF MEASUREMENT

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

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

C. Erosion Control. See Special Note for Erosion Control.

D. Remove PCC Pavement. See Special Note for Full Depth Concrete Pavement Repair.

E. JPC Pavement. See Special Note for Full Depth Concrete Pavement Repair.

F. Smooth Dowels and Deformed Tie Bars. See Special Note for Full Depth Concrete Pavement Repair.

G. Joint Sealing and Saw-Clean-Seal Joints. For joints in new pavement joint sealing payment will be incidental, see Special Note for Full Depth Concrete Pavement Repair. For other longitudinal and transverse joints, the Department will measure saw-clean-seal joints in existing pavement in linear feet.

H. PCC Pavement Diamond Grinding. See Special Note For Diamond Grinding Ride Quality.

I. Pavement Striping and Pavement markings. See Traffic Control Plan.

V. BASIS OF PAYMENT

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

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

B. Remove Cement Concrete Pavement. See Special Note for Full Depth Concrete Pavement Repair.

C. JPC Pavement. See Special Note for Full Depth Concrete Pavement Repair.

D. PCC Pavement Diamond Grinding. See Special Note For Diamond Grinding Ride Quality.

Special Note For Liquidated Damages

Contrary to Section 108.09, Liquidated Damages of \$5,000 for the first hour and \$10,000 for each hour after, will be assessed for every hour all lanes are not open as dictated by the traffic control notes.

If work is delayed by inclement weather, the minimum work required to allow removal of the lane closure, as directed by the Engineer, shall be resumed immediately as soon as weather permits or the Department will begin to assess Liquidated Damages as specified herein.

All liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

SPECIAL NOTE FOR NON-TRACKING TACK COAT

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

- 2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.
- 2.1.1 Provide a tack conforming to the following material requirements:

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

- ¹ Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.
- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

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

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

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

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

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

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

Code
24970EC

Pay Item
Asphalt Material for Tack Non-Tracking

Pay Unit
Ton

Revised: May 23, 2022

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

Begin paving operations within **48 hours** 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 Right-of-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 NOTES FOR TRAFFIC ISLAND REMOVAL

Remove existing traffic islands as shown on the drawings, listed in the summary, or as directed by the Engineer. Saw cut the existing pavement, asphalt surface, base, DGA and PCC pavement (if present). Excavate to an approximate depth of 6 inches below the bottom of the existing adjacent pavement level. Remove and dispose of all materials off the Right-ofWay at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow). Do not damage existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department.

Backfill the excavated area with Class 2 Asphalt Base 1.00D PG64-22 in 3 inch maximum courses up to the existing pavement surface. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all traffic island removal operations in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

Accept payment at the Contract unit price per square yard for Remove Traffic Island as full compensation for all labor, materials, equipment, and incidentals for removing traffic island and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3640 removetrafficisland
01/02/2012

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

SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

GENERAL

Unless otherwise stated in the contract, or as directed by or with prior approval from the Engineer, construct Sidewalk Ramps and Detectable Warnings in accordance with Sections 505 and 720; Supplemental Specifications; Standard Drawings RGX-040-03, RPM-150-08, RPM-152-08, RPM-170-09, and RPM-172-07; current editions, as applicable. In lieu of the Detectable Warnings shown on Standard Drawing RGX-040-03, the Department will also allow the use of any Detectable Warnings listed as Phase XI on the [Kentucky Product Evaluation List](http://www.ktc.uky.edu/kytc/kypel/allevvaluations.php) (<http://www.ktc.uky.edu/kytc/kypel/allevvaluations.php>). For Detectable Warnings as shown on Standard Drawing RGX-040-03, saw cut existing sidewalks, curb and gutter, and pavement, if present, as shown on the detail and reconstruct sidewalk ramps with detectable warnings as directed or approved by the Engineer. For Detectable Warnings from the Kentucky Product Evaluation List, install according to the manufacturer's recommendations. Unless specified otherwise in the Contract, construct sidewalk with 4" nominal minimum required thickness; however, if the existing sidewalk thickness is found to be greater or less than the thickness specified, transition the thickness as directed by the Engineer.

Except as required by the work, do not disturb drainage pipe, catch basins, and other roadway features, appurtenances and installations. Restore any roadway features, appurtenances, and installations damaged by the work in like kind materials and design at no additional cost to the Department. Dispose of all waste off the right of way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

MEASUREMENT & PAYMENT

SIDEWALK RAMPS – The Department will measure Sidewalk Ramps in accordance with Section 505.04.01 and Standard Drawing RPM-170-09, current editions; however, contrary to Sections 505.04.05 and 505.04.06, the Department will not measure Roadway Excavation or Embankment in Place, but shall be incidental to the Sidewalk. Accept payment at the Contract unit price per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk and curb and gutter, excavation and embankment, construction of the sidewalk ramps, reconstruction of the adjacent curb and/or sidewalk as necessary to install the sidewalk ramps, and restoration of disturbed features in accordance with these notes or as directed by the Engineer.

DETECTABLE WARNINGS – The Department will measure Detectable Warnings in accordance with Section 505.04.04 and Standard Drawings RGX-040-03 and RPM-170-09, current editions. The Department will make payment according to Section 505.05.

HANDRAIL – The Department will measure and make payment for Handrail in accordance with Section 720.05 and Standard Drawing RPM-172-07, current editions.

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

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

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

PROJECT PHASING & CONSTRUCTION PROCEDURES

At the discretion of the Engineer, the Department may specify days and hours when lane/road closures will not be allowed. Prior to beginning work, provide a proposed road closure and work schedule for the approval of the Engineer. The Contractor shall close road to through traffic during construction.

The Department will provide public notification except for the school and emergency services as provided for Phase I. Notify the Engineer immediately and obtain prior approval of any proposed deviations from the approved schedule.

PHASE I: - Notify the US Postal Service, Simpson County Schools, and Emergency Services 2 weeks in advance of any road closures. Install detour signs as detailed in detour plan for phase I.

PHASE II: - Road closures will only be allowed during construction of JPC pavement and diamond grinding operations. Obtain engineers approval for allowed closure dates.

Close KY 100 9.742 – 10.715 mile points for JPC pavement rehabilitation and diamond grinding applications. Complete JPC pavement repairs and diamond grinding and reopen the road to a minimum one lane (each side of median) 2-way traffic within 21 working days. When curing time of JPC pavement has been reached and all diamond grinding applications have been performed, the closure can be opened and lane closures can be put into place to perform all other applications.

All work necessary for installing and maintaining all closures road/lane shall be incidental to Maintain control traffic.

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SIGNS

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

CHANGEABLE MESSAGE SIGNS

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

ARROW PANELS

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

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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 for road closures and 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 construction.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

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

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

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or

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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.

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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)

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Messages

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

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

Placement

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

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear 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
-

Standard Abbreviations

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

| <u>Word</u> | <u>Abbrev.</u> | <u>Example</u> |
|---------------------|----------------|--|
| Access | ACCS | ACCIDENT AHEAD/USE ACCS RD NEXT RIGHT |
| Alternate | ALT | ACCIDENT AHEAD/USE ALT RTE NEXT RIGHT |
| Avenue | AVE | FIFTH AVE CLOSED/DETOUR NEXT LEFT |
| Blocked | BLKD | FIFTH AVE BLKD/MERGE LEFT |
| Boulevard | BLVD | MAIN BLVD CLOSED/USE ALT RTE |
| Bridge | BRDG | SMITH BRDG CLOSED/USE ALT RTE |
| Cardinal Directions | N, S, E, W | N I75 CLOSED/ DETOUR EXIT 30 |
| Center | CNTR | CNTR LANE CLOSED/MERGE LEFT |
| Commercial | COMM | OVRSZ COMM VEH/USE I275 |
| Condition | COND | ICY COND POSSIBLE |
| Congested | CONG | HVY CONG NEXT 3 MI |
| Construction | CONST | CONST WORK AHEAD/EXPECT DELAYS |
| Downtown | DWNTN | DWNTN TRAF USE EX 40 |
| Eastbound | E-BND | E-BND I64 CLOSED/DETOUR EXIT 20 |
| Emergency | EMER | EMER VEH AHEAD/PREPARE TO STOP |
| Entrance, Enter | EX, EXT | DWNTN TRAF USE EX 40 |
| Expressway | EXPWY | WTRSN EXPWY CLOSED/DETOUR EXIT 10 |
| Freeway | FRWY, FWY | GN SYNDR FWY CLOSED/DETOUR EXIT 15 |
| Hazardous Materials | HAZMAT | HAZMAT IN ROADWAY/ALL TRAF 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 | I | 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 |
| Mile | MI | ACCIDENT 3 MI AHEAD/ USE |

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| | | |
|------------------------------------|-------------------------------|--|
| Minor Minutes Northbound | MNR MIN N-BND | ALT RTE ACCIDENT 3 MI MNR DELAY ACCIDENT 3 MI/30 MIN DELAY N-BND I75 CLOSED/ DETOUR EXIT 50 |
| Oversized | OVRSZ | OVRSZ COMM VEH/USE I275 NEXT RIGHT |
| Parking Parkway | PKING PKWY | EVENT PKING NEXT RGT CUM PKWAY TRAF/DETOUR EXIT 60 |
| Prepare Right Road Roadwork | PREP RGT RD RDWK | ACCIDENT 3 MIL/PREP TO STOP EVENT PKING NEXT RGT HAZMAT IN RD/ALL TRAF EXIT 25 RDWK NEXT 4 MI/POSSIBLE DELAYS |
| Route Shoulder Slippery Southbound | RTE SHLDR SLIP S-BND | MAJ DELAYS I75/USE ALT RTE SHLDR CLOSED NEXT 5 MI SLIP COND POSSIBLE/ SLOW SPD S-BND I75 CLOSED/DETOUR EXIT 50 |
| Speed Street Traffic | SPD ST TRAF | SLIP COND POSSIBLE/ SLOW SPD MAIN ST CLOSED/USE ALT RTE 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> | <u>Word Erroneously Given</u> |
|----------------|----------------------|-------------------------------|
| 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 |
| TEMP | Temporary | Temperature |
| WRNG | Warning | Wrong |

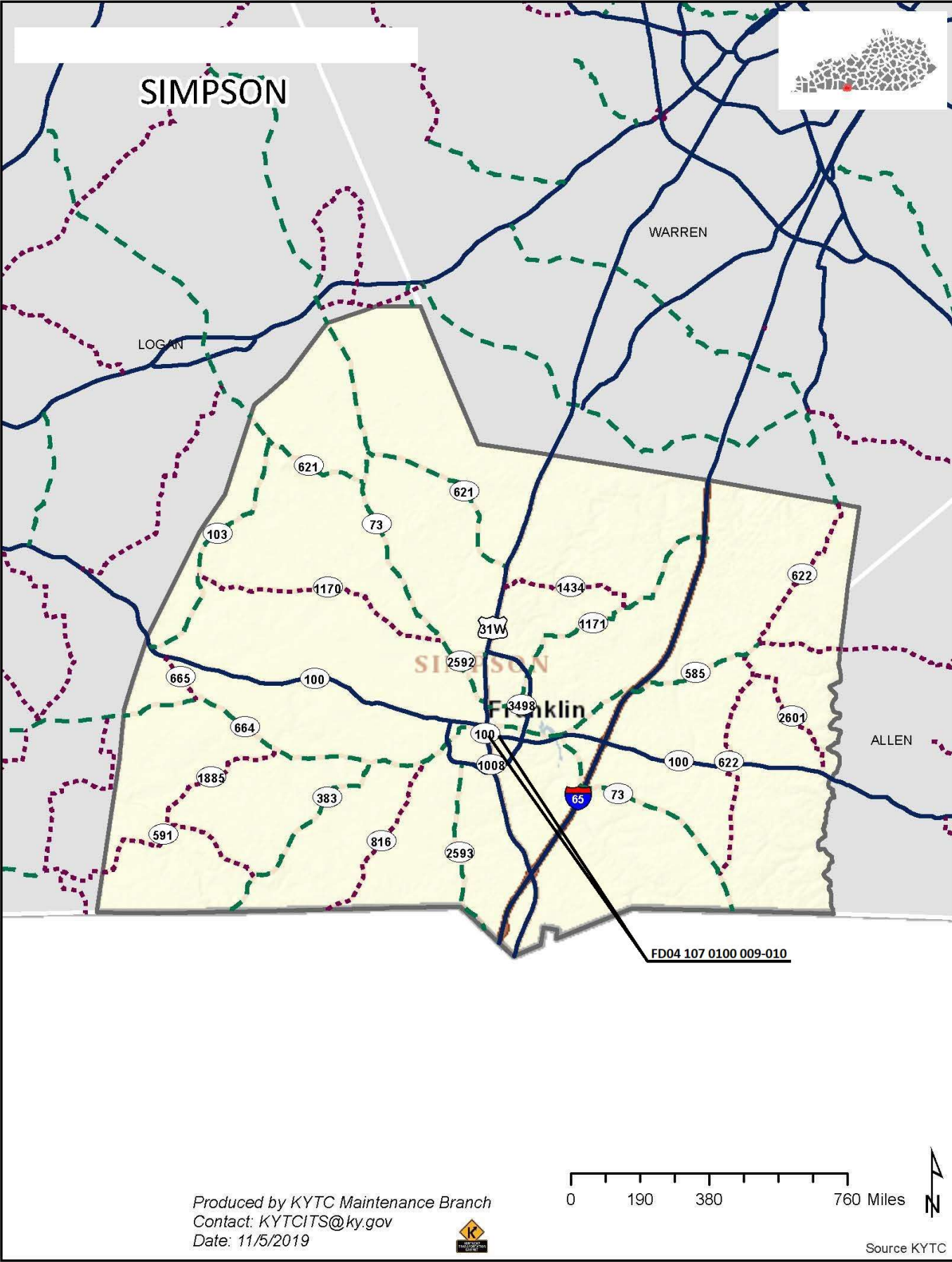
TYPICAL MESSAGES

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.

| <u>Reason/Problem</u> | 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 | |
| PEOPLE CROSSING | |
| RAMP CLOSED | |
| RAMP (SLIPPERY, ICE, ETC.) | |

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- 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



SIMPSON COUNTY
FD04 107 0100 009-010

Drainage DBI Type 13 (G) inlet Repair and other modifications

| #, Bound | MP | Item | Each |
|----------|-------|-----------------|------|
| 1 EB | 9.809 | DBI Top Replace | 1 |
| 2 EB | 9.837 | DBI Top Replace | 1 |
| 3 EB | 9.913 | DBI Top Replace | 1 |
| | | | 3 |

Drainage CBI Type A Repair and other modifications

| #, Bound | MP | Item | Each |
|----------|-------|-----------------|------|
| 1 EB | 9.742 | CBI Top Replace | 1 |
| 2 WB | 9.742 | CBI Top Replace | 1 |
| 3 WB | 9.750 | CBI Top Replace | 1 |
| 4 EB | 9.762 | CBI Top Replace | 1 |
| 5 EB | 9.780 | CBI Top Replace | 1 |
| 6 WB | 9.780 | CBI Top Replace | 1 |
| 7 WB | 9.837 | CBI Top Replace | 1 |
| 8 EB | 9.945 | CBI Top Replace | 1 |
| 9 WB | 9.915 | CBI Top Replace | 1 |
| | | | 9 |

* Removal, cleaning, prep and other items necessary for replacement of the Drop Box inlet 13's will be incidental to the Drop Box Inlet Type 13 G(MOD)Item.
* Removal, cleaning, prep and other items necessary for replacement of the Curb Box inlet A's will be incidental to the Curb Box Inlet Type A (MOD)Item.

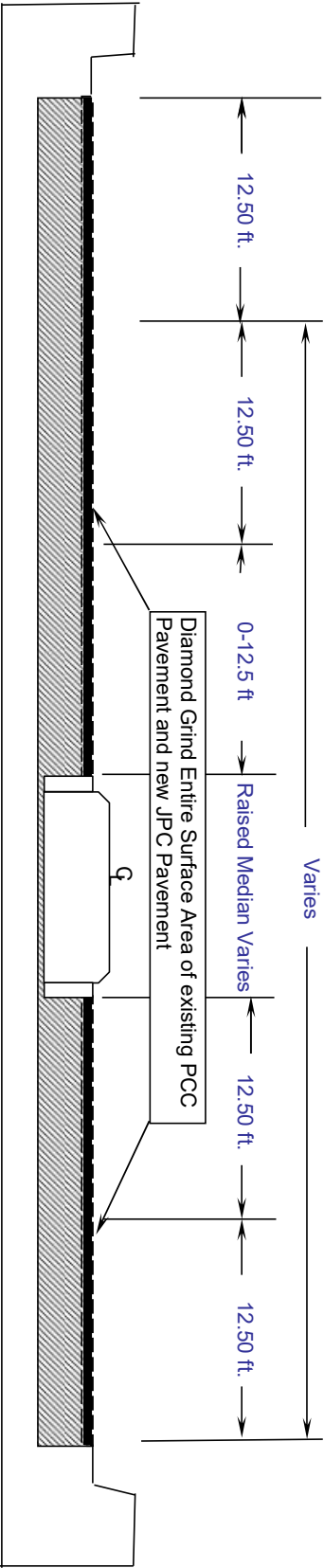
SIMPSON COUNTY
FD04 107 0100 009-010

TYPICAL SECTION

SIMPSON COUNTY

FD04 107 0100 009-010

Milepoints:
9.742-9.823

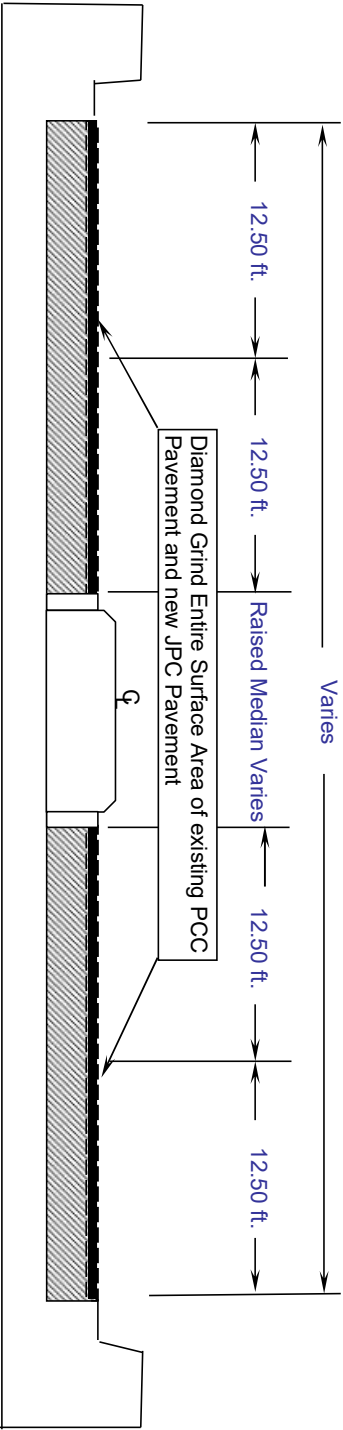


TYPICAL SECTION

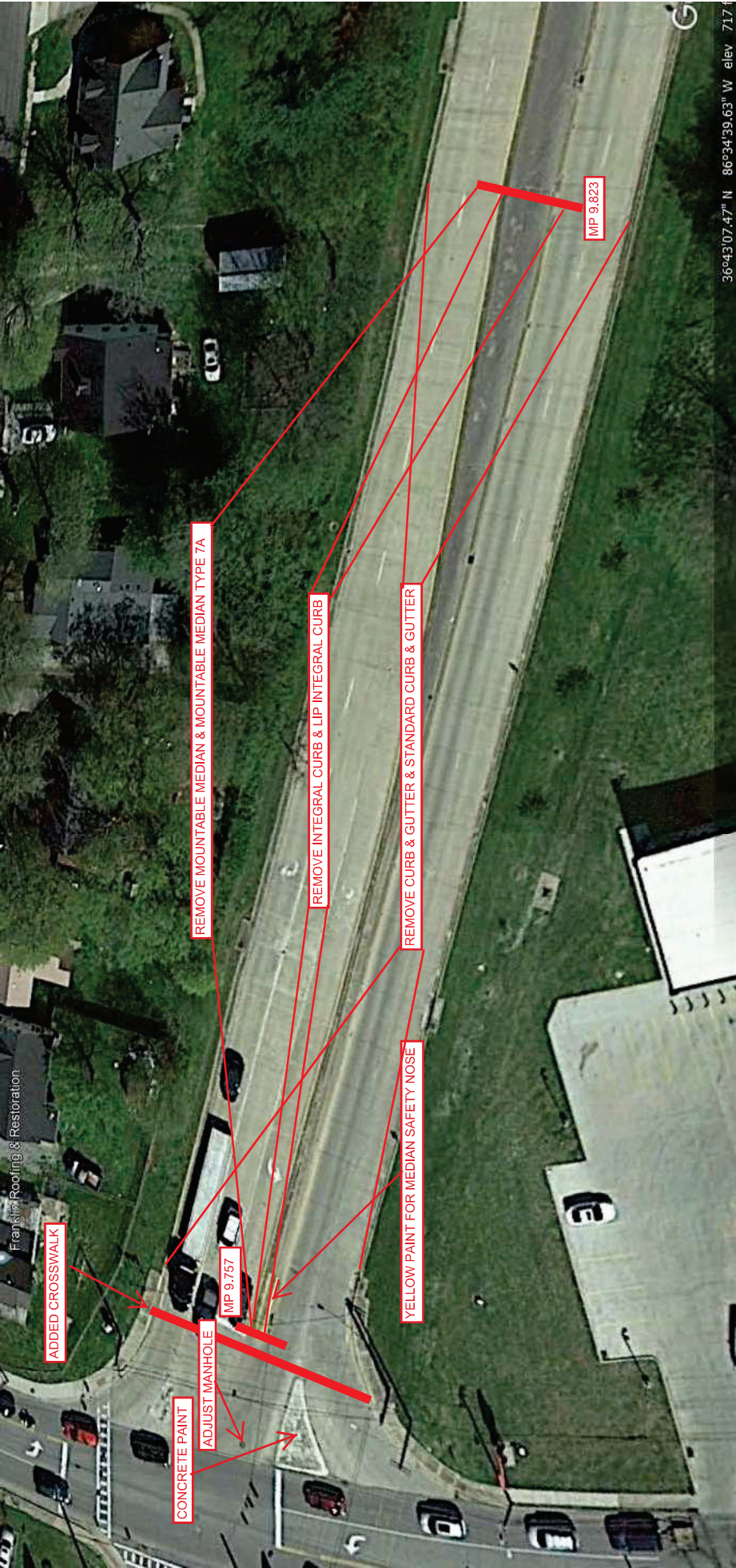
SIMPSON COUNTY

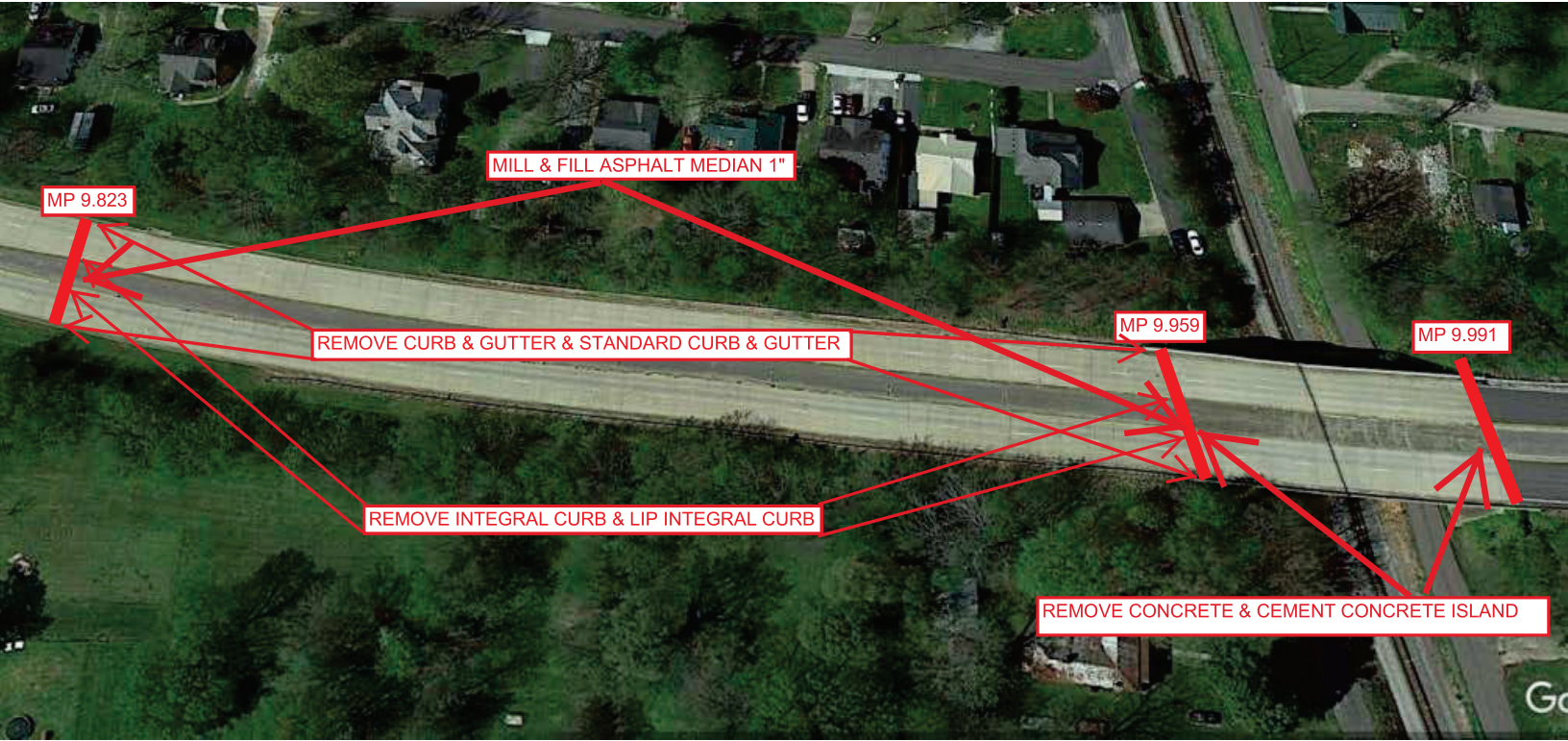
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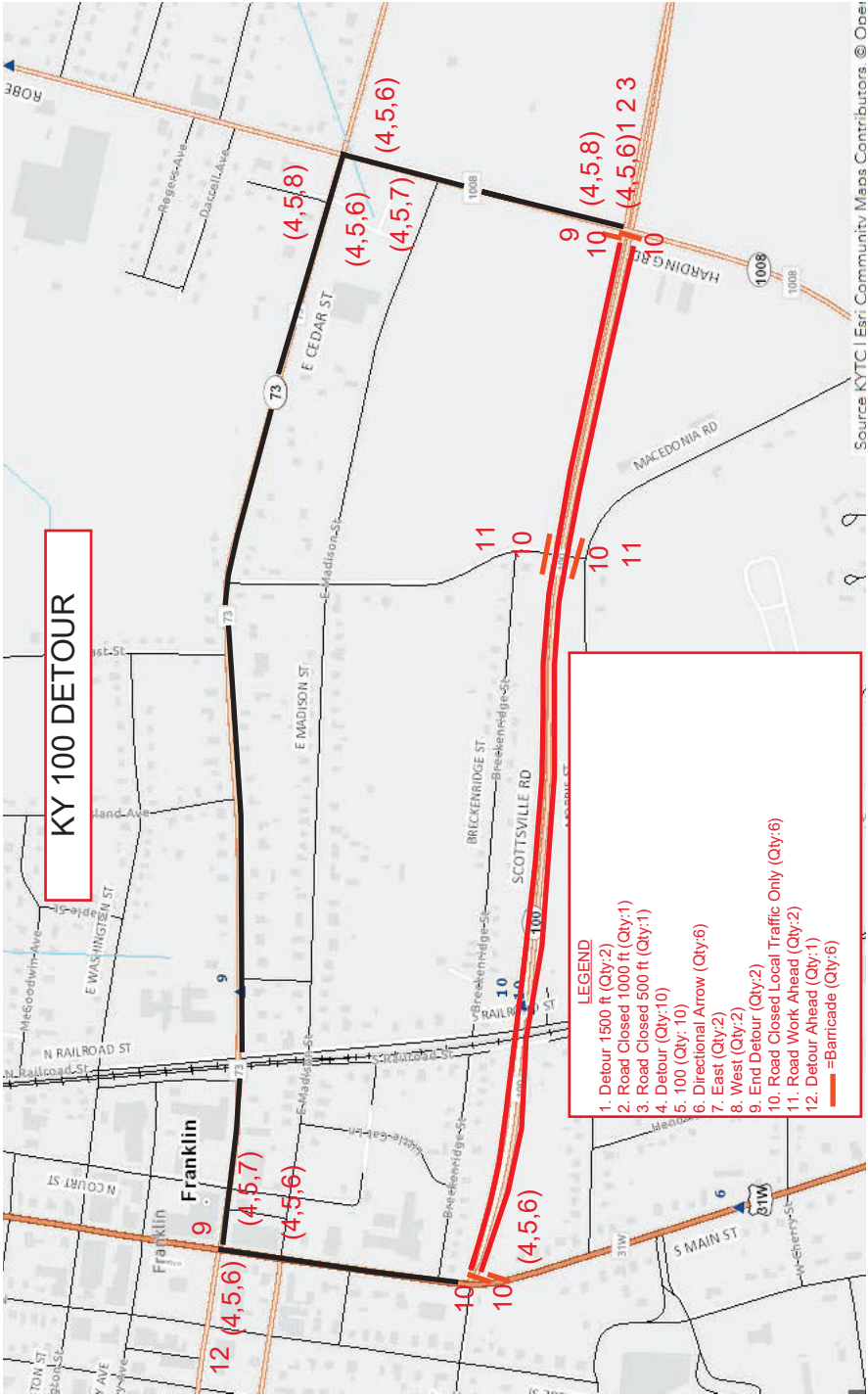
Milepoints:
9.823-9.959



- 1) Mill Asphalt median 1" depth and fill with CL2 Asphalt Surface 0.38D PG64-22 MP 9.823~9.959
- 2) Remove asphalt/concrete median MP 9.794~9.823 and replace with concrete mountable median type 7A







PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

SUPPLEMENTAL SPECIFICATIONS

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

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

2.3 Power.

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

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

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

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

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

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

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

| <u>Code</u> | <u>Pay Item</u> | <u>Pay Unit</u> |
|-------------|----------------------------------|-----------------|
| 02671 | Portable Changeable Message Sign | Each |

Effective June 15, 2012

SPECIAL NOTE FOR FULL DEPTH CONCRETE PAVEMENT REPAIR

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

1.0 DESCRIPTION. Remove and replace concrete pavement. Comply with the applicable Standard Drawings and the Standard Specifications except as specifically superseded herein.

2.0 MATERIALS AND EQUIPMENT.

2.1 JPC Pavement. Test concrete materials according to section 601.03.03. Conform to 501, 502, and 601 except that the concrete must achieve 3000 psi in accordance with Section 4.4 of this note. The Engineer may allow pavement to be opened to traffic at less than 3,000 psi subject to the deductions described in Section 4.4 of this note.

2.2 Dowel Bars and Sleeves. Conform to 811.

2.3 Tie Bars. Conform to Section 811. Use epoxy coated tie bars in longitudinal and transverse joints.

2.4 Joint Sealants. Contrary to Section 807, only hot-poured elastic will be allowed for joint sealant.

2.5 Grout Adhesives and Epoxy Resin Systems. Conform to Section 826.

2.6 Dense Graded Aggregate (DGA) and Crushed Stone Base (CSB). Conform to Section 805.

2.7 Geotextile Fabric. Conform to Section 843.

2.8 Drills. Drill holes using a gang drill, capable of drilling a minimum of four simultaneously. Misalignment of holes shall not exceed 1/4 inch in the vertical or oblique plane.

2.9 Hammers. Only use chisel point hammers weighing less than 40 pounds to remove deteriorated concrete.

3.0 CONSTRUCTION.

3.1 Removal of Existing Pavement. Remove existing pavement to the extent the Contract specifies or as the Engineer directs. The minimum length of patches measured along centerline is 3 feet on each side of an existing joint.

When working with pavements with non-skewed transverse joints, if it is necessary to remove existing pavement closer than 6 feet to a transverse joint, remove the pavement 3 feet beyond that joint .

When working with pavements with skewed transverse joints, if it is necessary to remove existing pavement closer than 3 feet to a transverse joint, remove the pavement 3 feet beyond that joint.

Details of configurations of pavement and joints for various situations are depicted in the drawings herein.

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When small areas of removal and replacement are performed at bridge ends, maintain or reconstruct existing expansion joints at their existing location. When the Engineer determines extensive full width removal and replacement is required, construct new expansion joints at the locations shown on Standard Drawing No. RPN-010.

In the removal operation, make a full depth saw cut longitudinally along the centerline joint and shoulder joint and transversely along the area marked for removal. To prevent damage to the subbase, do not allow the saw to penetrate more than ½" into the subbase. The Engineer may direct or approve additional cuts within the removal area for ease of removal of the damaged slab and to prevent damage to adjacent pavement to remain in place. Do not overcut beyond the limits of the removal area. Prevent saw slurry from entering existing joints and cracks. To avoid pumping and erosion beneath the slab, do not allow traffic on sawed pavement for more than 48 hours before beginning removal procedures, unless directed by the Engineer.

Lift out the deteriorated concrete vertically with lift pins. If approved by the Engineer, use other methods that do not damage the base, shoulder, or sides of pavement that is to be left in place. If any damage does occur, repair as the Engineer directs and use an acceptable alternative method for the removal process. Do not damage the pavement base during these operations.

3.2 Pavement Replacement. Do not damage the pavement base during these operations.

3.2.1 Preparation of Base. Compact the new and existing aggregate base to the Engineer's satisfaction. The Engineer will accept compaction by either visual inspection or by nuclear gauge. When the Engineer deems it necessary to stabilize the existing base or replace unsuitable materials, excluding bridge ends, use 12 inches of geotextile fabric wrapped No. 2 aggregate topped with 4 inches of DGA or CSB. Use Class 2 geotextile fabric. Flowable fill and cement stabilization may be used as an alternative to stabilize the existing base or to replace unsuitable materials when a plan for such is presented to and approved by the Engineer. The Engineer may also direct using only DGA or CSB to correct base deficiencies. At bridge ends, treat existing base and subgrade as the Contract specifies. During compaction, wet the base as the Engineer directs. Compact areas not accessible to compaction equipment by hand tamping.

3.2.2 Underdrains. Construct, or repair damage to, pavement edge drains according to Section 704. If underdrains are placed omitting areas to be patched, construct additional lateral drains as necessary to provide outlets for the installed underdrain until performing the pavement replacement and completing the underdrain system. Provide drainage for any undercut or base repair areas.

3.2.3 Pavement Replacement. Using load transfer assemblies for dowel joints drill into the existing slab according to the details shown herein and on the Standard Drawings.

Use plain epoxy coated dowels of the size specified on the standard drawings based on the pavement thickness for contraction and expansion joints.

Drill holes for dowel bars and tie bars into the face of the existing slab, at a diameter as specified in the following. Drill the dowel bar holes and tie bar

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holes to a depth equal to 1/2 the length of the bars. Anchor tie bars into the existing pavement using an epoxy resin. Anchor dowel bars into the existing pavement using either an epoxy resin or an adhesive grout. For tie bars and dowel bars where an epoxy resin is to be used drill the holes 1/8 inch larger than the bar diameter. For dowel bars where an adhesive grout product is to be used, drill holes 1/4 inch larger than the bar diameter. Use a clear or opaque grout retention disk in both grout and epoxy applications. Operate the equipment to prevent damage to the pavement being drilled. Obtain the Engineer's approval of the drilling procedure. Install load transfer assemblies according to the Standard Drawings and Standard Specifications.

When indicated herein or in the Standard Drawings, use 1 inch deformed tie bars, 18 inches long on 30-inch centers and starting and ending 20 inches inside the edges of the repair area in the longitudinal joint. Use 1 inch deformed tie bars, or plain epoxy coated dowel bars sized in accordance with the Standard Drawings, 18 inches long beginning 12 inches inside of each edge and on 12-inch centers in transverse construction joints.

Install the dowels and tie bars according to Section 511 unless contradicted here. Ensure the holes are dry and free of dust and debris. Use a nozzle to insert the grout or epoxy starting at the back of the drilled hole to allow for full coating of the dowel or tie bar. After placement, use a bond breaker on the section of the dowel bar that is protruding from the hole.

Mix, place, finish, and cure concrete according to Section 501 with the exception that the Department will allow truck mixing, 2-bag mixers, and hand finishing.

When required, use a form on the side of the slab at longitudinal joints. When the adjacent traffic lane is not closed to traffic or the drop-off is not protected, temporarily fill the space between the form and the adjacent pavement with DGA. After placing the slab, remove the DGA and form. Fill the hole with concrete and thoroughly consolidate by rodding, spading, and sufficient vibration to form a dense homogeneous mass. Use a form on the side of the slab adjacent to shoulders. Excavate and backfill as shown on Section F'-F'.

For patches less than 25 feet in length, use a bond breaker and do not install tie bars at the longitudinal joint. Bond breakers should not exceed 1/8 inch in thickness, e.g. tar paper.

When resurfacing is required, a float finish is satisfactory. Otherwise, broom finish or, when the adjacent surface has a grooved finish, texture the surface according to Subsection 501.03.13 H). Finish the surface, including joints, to meet a surface tolerance of 1/8 inch in 10 feet that will be verified by straightedge. Cure the pavement and apply curing membranes according to 501.03.15.

Keep all pavement surfaces adjacent to this operation reasonably clean of excess grout and other materials at all times. Maintain all original longitudinal joints. Place transverse joints according to the details shown herein and on the Standard Drawings.

3.3 Joint Sealing. Seal all new or partially new joints with hot-poured elastic joint sealant only according to Subsection 501.03.18.

4.0 MEASUREMENT.

4.1 Remove JPC Pavement. The Department will measure the quantity in square yards of surface area. The Department will not measure removal of

underlying base material for payment and will consider it incidental to Remove JPC Pavement.

4.2 DGA or CSB. The Department will measure the quantity used to stabilize the existing base or to replace unsuitable material in tons. The Department will not measure removal of existing base material or underlying material for payment and will consider incidental to DGA or CSB. The quantity of DGA used for the drop-off protection shall be incidental to this work and will not be measured for payment.

4.3 JPC Pavement Non-Reinforced. The Department will measure according to 501.04.01. The Department will not measure dowels, tie bars, or joint sealing for payment and will consider it incidental to Non-Reinforced JPC Pavement.

JPC Pavement will be paid according to section 5.0 below and according to the following payment schedule based on the compressive strength. The cylinders for payment will be tested two hours prior the scheduled opening of traffic.

| | |
|------------------|---|
| 3000 psi and up | 100% payment |
| 2750 to 3000 psi | 75% payment and approval from the Engineer to open to traffic* |
| 2500 to 2750 psi | 50% payment and approval from the Engineer to open to traffic* |
| 2250 to 2500 psi | 25% payment and approval from the Engineer to open to traffic* |
| Below 2250 psi | 10% payment and no potential to open to traffic. Maintain traffic closure until concrete reaches a minimum of 2250 psi. |

*If the Engineer approves opening to traffic, the Engineer will evaluate the concrete at 28 days (or sooner) to determine if the removal and replacement of the concrete is necessary due to pavement distress induced by the early opening (i.e. noticeable cracking). If required by the Engineer, remove and replace those slabs showing distress at no cost to the Department.

4.4 Underdrains. The Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains.

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

| <u>Code</u> | <u>Pay Item</u> | <u>Pay Unit</u> |
|--|--|-----------------------|
| ---- | Remove JPC Pavement | Square Yard |
| 00001 | DGA Base | Ton |
| 00003 | Crushed Stone Base | Ton |
| 02069-02071, 02073, 02075, 02084, 02086, 02088 | JPC Pavement Non-Reinforced, thickness | See Subsection 501.05 |
| 01000 | Perforated Pipe, 4-inch | Linear Foot |
| 02603 | Fabric-Geotextile, Class | Square Yard |

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

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**SPECIAL NOTE FOR PARTIAL DEPTH
CONCRETE PAVEMENT REPAIR**

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

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

2.0 MATERIALS AND EQUIPMENT.

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

2.2 Latex Materials. Conform to Section 606.

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

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

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

3.0 CONSTRUCTION.

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

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

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

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

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

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

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

3.5 Patching Material and Placement.

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

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

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

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

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

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

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4.0 MEASUREMENT.

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

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

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

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

June 15, 2012

2020 KENTUCKY STANDARD DRAWINGS

| | |
|---|------------|
| CURVE WIDENING AND SUPERELEVATION TRANSITIONS | RGS-001-07 |
| SUPERELEVATION FOR MULTILANE PAVEMENT | RGS-002-06 |
| MISCELLANEOUS STANDARDS | RGX-001-06 |
| APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT..... | RPM-110-07 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE I..... | TTC-115-04 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE II | TTC-120-04 |
| SHOULDER CLOSURE..... | TTC-135-02 |
| PAVEMENT CONDITION WARNING SIGNS | TTD-125-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE I..... | TTS-100-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE II | TTS-105-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE III | TTS-110-02 |
| MOBILE OPERATION FOR PAINT STRIPING CASE IV | TTS-115-02 |
| DETECTABLE WARNINGS | RGX-040-03 |
| CONCRETE ENTRANCE PAVEMENT AND SIDEWALK..... | RPM-150-08 |
| CONCRETE ENTRANCE PAVEMENT AND SIDEWALK..... | RPM-152-08 |
| SIDEWALK RAMPS | RPM-170-09 |
| CURB AND GUTTER, CURBS AND VALLEY GUTTER..... | RPM-100-11 |
| DROP BOX INLET TYPE 13 (DETAIL SHEET) | RDB-013-07 |
| DROP BOX INLET TYPE 13 AND TYPE 16 (FRAME & GRATE DETAILS)..... | RDB-014-06 |
| DROP BOX INLET TYPE 13 (DETAIL & BAR CHART FOR LID)..... | RDB-015-04 |
| DROP BOX INLET TYPE 13 (PIPE CHAMBER - GRADE CONDITION) | RDB-016-03 |
| DROP BOX INLET TYPE 13 (PIPE CHAMBER - SAG CONDITION)..... | RDB-017-03 |
| DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - RISER)..... | RDB-018-04 |
| DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - CHAMBER)..... | RDB-019-04 |
| CURB BOX INLET TYPE A (DETAIL DRAWING)..... | RDB-270-09 |
| CURB BOX INLET TYPE A (STEEL DRAWING)..... | RDB-271-05 |
| CURB BOX INLET TYPE A (TOP PHASE TABLE) | RDB-272-07 |
| CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID)..... | RDB-273-06 |

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.

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 administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

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.

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25 PER HOUR

BEGINNING JULY 24, 2009

OVERTIME PAY

At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR

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

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

No more than

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

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

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

For additional information:



1-866-4-USWAGE

(1-866-487-9243)

TTY: 1-877-889-5627



WWW.WAGEHOUR.DOL.GOV

PART IV

INSURANCE

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

PART V

BID ITEMS

Report Date 9/21/23

Section: 0001 - ROADWAY

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|------------|-----|--|----------|------|-----------|----|--------|
| 0010 | 00001 | | DGA BASE | 300.00 | TON | | \$ | |
| 0020 | 00301 | | CL2 ASPH SURF 0.38D PG64-22 | 65.00 | TON | | \$ | |
| 0030 | 01459 | | CURB BOX INLET TYPE A MOD | 9.00 | EACH | | \$ | |
| 0040 | 01792 | | ADJUST MANHOLE | 1.00 | EACH | | \$ | |
| 0050 | 01810 | | STANDARD CURB AND GUTTER | 2,292.00 | LF | | \$ | |
| 0060 | 01812 | | REMOVE CURB AND GUTTER | 2,292.00 | LF | | \$ | |
| 0070 | 01840 | | LIP INTEGRAL CURB | 2,220.00 | LF | | \$ | |
| 0080 | 01902 | | REMOVE INTEGRAL CURB | 2,220.00 | LF | | \$ | |
| 0090 | 01950 | | MOUNTABLE MEDIAN TYPE 7A | 240.00 | SQYD | | \$ | |
| 0100 | 02014 | | BARRICADE-TYPE III | 6.00 | EACH | | \$ | |
| 0110 | 02015 | | CEMENT CONCRETE ISLAND | 302.00 | SQYD | | \$ | |
| 0120 | 02016 | | REMOVE CONCRETE ISLAND | 302.00 | SQYD | | \$ | |
| 0130 | 02058 | | REMOVE PCC PAVEMENT | 904.00 | SQYD | | \$ | |
| 0140 | 02060 | | PCC PAVEMENT DIAMOND GRINDING | 7,000.00 | SQYD | | \$ | |
| 0150 | 02084 | | JPC PAVEMENT-8 IN | 904.00 | SQYD | | \$ | |
| 0160 | 02110 | | PARTIAL DEPTH PATCHING | 15.00 | CUFT | | \$ | |
| 0170 | 02115 | | SAW-CLEAN-RESEAL TVERSE JOINT | 4,010.00 | LF | | \$ | |
| 0180 | 02116 | | SAW-CLEAN-RESEAL LONGIT JOINT | 2,720.00 | LF | | \$ | |
| 0190 | 02562 | | TEMPORARY SIGNS | 557.00 | SQFT | | \$ | |
| 0200 | 02650 | | MAINTAIN & CONTROL TRAFFIC | 1.00 | LS | | \$ | |
| 0210 | 02671 | | PORTABLE CHANGEABLE MESSAGE SIGN | 2.00 | EACH | | \$ | |
| 0220 | 02676 | | MOBILIZATION FOR MILL & TEXT | 1.00 | LS | | \$ | |
| 0230 | 02677 | | ASPHALT PAVE MILLING & TEXTURING | 65.00 | TON | | \$ | |
| 0240 | 02775 | | ARROW PANEL | 2.00 | EACH | | \$ | |
| 0250 | 04960 | | REMOVE AND REPLACE SIDEWALK | 27.00 | SQYD | | \$ | |
| 0260 | 06510 | | PAVE STRIPING-TEMP PAINT-4 IN | 6,360.00 | LF | | \$ | |
| 0270 | 06554 | | PAVE STRIPING-DUR TY 1-4 IN W | 3,730.00 | LF | | \$ | |
| 0280 | 06555 | | PAVE STRIPING-DUR TY 1-4 IN Y | 2,630.00 | LF | | \$ | |
| 0290 | 06566 | | PAVE MARKING-THERMO X-WALK-12 IN | 408.00 | LF | | \$ | |
| 0300 | 06568 | | PAVE MARKING-THERMO STOP BAR-24IN | 36.00 | LF | | \$ | |
| 0310 | 06574 | | PAVE MARKING-THERMO CURV ARROW | 4.00 | EACH | | \$ | |
| 0320 | 06600 | | REMOVE PAVEMENT MARKER TYPE V | 50.00 | EACH | | \$ | |
| 0330 | 20569ES710 | | DROP BOX INLET TY 13G(MOD) | 3.00 | EACH | | \$ | |
| 0340 | 23158ES505 | | DETECTABLE WARNINGS (NEW) | 24.00 | SQFT | | \$ | |
| 0350 | 23608EC | | YELLOW PAINT FOR MEDIAN SAFETY NOSE | 55.00 | SQFT | | \$ | |
| 0360 | 23623EC | | REMOVE MOUNTABLE MEDIAN | 180.00 | SQYD | | \$ | |
| 0370 | 24935EC | | CONCRETE PAINT | 40.00 | SQYD | | \$ | |
| 0380 | 24970EC | | ASPHALT MATERIAL FOR TACK NON- TRACKING | 1.00 | TON | | \$ | |
| 0390 | 26119EC | | INSTALL RADAR PRESENCE DETECTOR TYPE A | 2.00 | EACH | | \$ | |
| 0400 | 26121EC | | PAVE STRIPE-CONTRAST TAPE-6 IN B | 2,835.00 | LF | | \$ | |

Section: 0002 - DEMOBILIZATION

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|-------------|----------|------|-----------|----|--------|
|------|----------|-----|-------------|----------|------|-----------|----|--------|

232312

PROPOSAL BID ITEMS

Page 2 of 2

Report Date 9/21/23

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|-----------|----|--------|
| 0410 | 02569 | | DEMOBILIZATION | 1.00 | LS | | \$ | |