



**CALL NO. 318**

**CONTRACT ID. 232378**

**HANCOCK COUNTY**

**FED/STATE PROJECT NUMBER FD04 046 0060 002-010**

**DESCRIPTION OWENSBORO ROAD (US 60)**

**WORK TYPE JPC PAVEMENT REPAIRS - DIAMOND GRINDING**

**PRIMARY COMPLETION DATE 11/15/2024**

**LETTING DATE: July 20,2023**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 20,2023. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

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

**TABLE OF CONTENTS**

|          |  |
|----------|--|
| PART I   | SCOPE OF WORK <ul style="list-style-type: none"><li>PROJECT(S), COMPLETION DATE(S), &amp; LIQUIDATED DAMAGES</li><li>CONTRACT NOTES</li><li>STATE CONTRACT NOTES</li><li>SURFACING AREAS</li><li>ASPHALT MIXTURE</li><li>INCIDENTAL SURFACING</li><li>JPC PAVEMENT SMOOTHNESS</li><li>JPC RIDE QUALITY</li><li>ASPHALT PAVEMENT RIDE QUALITY</li><li>FUEL AND ASPHALT PAY ADJUSTMENT</li><li>COMPACTION OPTION B</li><li>SPECIAL NOTE(S) APPLICABLE TO PROJECT</li><li>NON-TRACKING TACK COAT</li><li>COORDINATION OF WORK WITH OTHER CONTRACTS</li><li>EDGE KEY (BY TON)</li><li>ASPHALT MILLING AND TEXTURING</li><li>MEDIAN CROSS-OVERS PAVEMENT TYPE</li><li>TRAFFIC CONTROL PLAN</li><li>DURABLE PAVEMENT EDGE DETAILS</li><li>SKETCH MAP(S)</li><li>SUMMARY SHEET(S)</li><li>TYPICAL SECTION(S)</li><li>DETAIL SHEET(S)</li><li>BRIDGE DETAIL FOR PAVING PROJECT</li></ul> |
| PART II  | SPECIFICATIONS AND STANDARD DRAWINGS <ul style="list-style-type: none"><li>STANDARD AND SUPPLEMENTAL SPECIFICATIONS</li><li>[SN-1I] PORTABLE CHANGEABLE SIGNS</li><li>[SN-10Y] UNSEALED JPC PAVEMENT AND SHOULDER JOINTS</li><li>[SN-11J] FULL DEPTH CONCRETE PAVEMENT REPAIR</li><li>[SN-11K] PARTIAL DEPTH CONCRETE PAVEMENT REPAIR</li><li>2020 STANDARD DRAWINGS THAT APPLY</li></ul>  |
| PART III | EMPLOYMENT, WAGE AND RECORD REQUIREMENTS <ul style="list-style-type: none"><li>LABOR AND WAGE REQUIREMENTS</li><li>EXECUTIVE BRANCH CODE OF ETHICS</li><li>KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978<br/>LOCALITY / STATE</li><li>PROJECT WAGE RATES / STATE FUNDED</li></ul>  |
| PART IV  | INSURANCE  |
| PART V   | BID ITEMS  |

**PART I**

**SCOPE OF WORK**

**ADMINISTRATIVE DISTRICT - 02**

**CONTRACT ID - 232378**  
**FD04 046 0060 002-010**  
**COUNTY - HANCOCK**  
**PCN - MP046006023W1**  
**FD04 046 0060 002-010**

OWENSBORO ROAD (US 60) (MP 2.30) BEGIN AT CONCRETE JOINT 0.367 MILES EAST OF KY 657 EXTENDING  
EAST TO 0.275 MILES WEST OF NUGENT RD (MP 9.070), A DISTANCE OF 06.77 MILES.JPC PAVEMENT REPAIRS  
- DIAMOND GRINDING  
GEOGRAPHIC COORDINATES LATITUDE 37:55:37.06 LONGITUDE 86:49:10.00  
ADT 10,443

**COMPLETION DATE(S):**  
COMPLETED BY 11/15/2024                      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](http://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](mailto: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](http://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.

### **BUILD AMERICA, BUY AMERICA ACT (BABA)**

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

The Act will apply to construction materials as outlined in the guidance issued in OMB [M-22-11](#).

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

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

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

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

### **BOYCOTT PROVISIONS**

If applicable, the contractor represents that, pursuant to [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.

February 1, 2023



## **SPECIAL NOTE FOR RECIPROCAL PREFERENCE**

### **RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS**

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

April 30, 2018

### **SURFACING AREAS**

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

The Department estimates the total mainline area to be JPC surfaced to be 113,140 square yards.

The Department estimates the Asphalt shoulder width to be varied 0 to 10 feet on each side.

The Department estimates the total Asphalt shoulder area to be surfaced to be 56,884 square yards.

### **ASPHALT MIXTURE**

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

### **INCIDENTAL SURFACING**

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

### **JPC PAVEMENT SMOOTHNESS**

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

### **JPC RIDE QUALITY**

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

### **ASPHALT PAVEMENT RIDE QUALITY**

Pavement Rideability Requirements shall apply on this project in accordance with Section 410 of the current Standard Specifications.

### **FUEL AND ASPHALT PAY ADJUSTMENT**

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

### **OPTION B**

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

### **SURFACING AREAS**

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

The Department estimates the total mainline area to be JPC surfaced to be 113,140 square yards.

The Department estimates the Asphalt shoulder width to be varied 0 to 10 feet on each side.

The Department estimates the total Asphalt shoulder area to be surfaced to be 56,884 square yards.

## SPECIAL NOTE FOR NON-TRACKING TACK COAT

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

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

2.1.1 Provide a tack conforming to the following material requirements:

| Property                                  | Specification | Test Procedure |
|---|---------------|----------------|
| Viscosity, SFS, 77 ° F                    | 20 – 100      | AASHTO T 72    |
| Sieve, %                                  | 0.3 max.      | AASHTO T 59    |
| Asphalt Residue <sup>1</sup> , %          | 50 min.       | AASHTO T 59    |
| Oil Distillate, %                         | 1.0 max.      | AASHTO T 59    |
| Residue Penetration, 77 ° F               | 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    |

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

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.
  - 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.
3. CONSTRUCTION.
    - 3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

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

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

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

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

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

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

Revised: May 23, 2022

## **COORDINATION OF WORK WITH OTHER CONTRACTS**

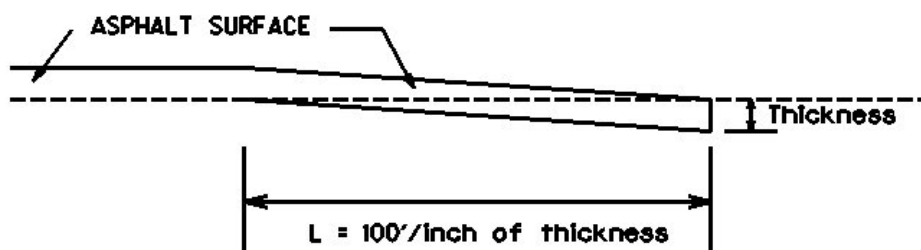
Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts  
01/02/2012

## SPECIAL NOTE FOR EDGE KEY

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

### EDGE KEY



**Thickness = 1.25 Inches**

**L = 125 LF**

**L = Length of Edge Key**



### **SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING**

Begin paving operations within **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.

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

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

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

### **SPECIAL NOTE FOR MEDIAN CROSS-OVERS**

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

1-3710 Median Crossovers  
01/02/2012

## MAINTENANCE OF TRAFFIC

### TRAFFIC CONTROL SPECIAL NOTES

1. The Contractor shall maintain a one lane traveled way with a minimum lane width of 10 feet, unless noted otherwise.
2. Pavement Drop-Off
  - Pavement edges that traffic is not expected to cross, except accidentally, should be treated as follows:
    - Less Than 2 inches - No protection required. Warning signs should be placed in advance and throughout the drop-off area.
    - 2 to 4 inches - Place plastic drums, vertical panels or barricades every 90 feet on tangent sections for speeds of 45 miles per hour or greater. Cones may be used in place of plastic drums, panels, and barricades during daylight hours.
    - Greater Than 4 inches - Positive separation or wedge with 3:1 or flatter slope needed. If there is 5 feet or more distance between the edge of pavement and drop-off, drums panels or barricades may be used.
  - For temporary conditions, drop-offs greater than 4 inches may be protected with plastic drums, vertical panels of barricades for short distances during daylight hours while work is being done in the drop-off area.
  - Lesser treatments than those described above may be considered for low-volume local streets.

Payment will be allowed for crushed stone base materials used for wedging.
3. The contractor shall remove temporary facilities such as diversions and restore to original condition, as directed by the engineer, when the facilities are no longer needed.
4. All traffic control devices and methods shall conform to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

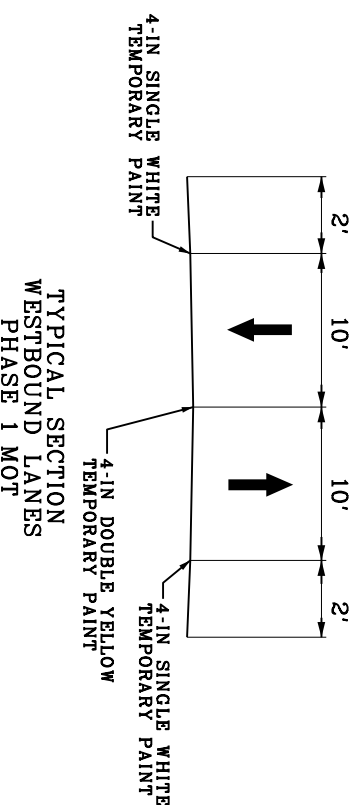
### PHASING NOTES

#### PHASE 1

SHIFT ALL EASTBOUND TRAFFIC TO THE WESTBOUND LANES.  
MAINTAIN A MINIMUM LANE WIDTH OF 10 FEET, UNLESS NOTED OTHERWISE.  
CONSTRUCT ALL CROSS DRAINS AND CULVERT EXTENSION, BEGINNING AT THE DOWNSTREAM END.  
MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.  
PROVIDE TEMPORARY ACCESS TO ALL PARCELS DURING CONSTRUCTION.  
CONSTRUCT ALL PAVEMENT COURSES THROUGH FINAL SURFACE.

#### PHASE 2

SHIFT ALL EASTBOUND TRAFFIC TO THE NEWLY CONSTRUCTED LANES.



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



HANCOCK COUNTY - US 60  
EB PAVEMENT REHAB  
MP 2.2 TO MP 9.4



HORIZONTAL SCALE: 1" = 10'

ITEM NO. COUNTY OF  
SHEET NO. HANCOCK  
MOT NOTES

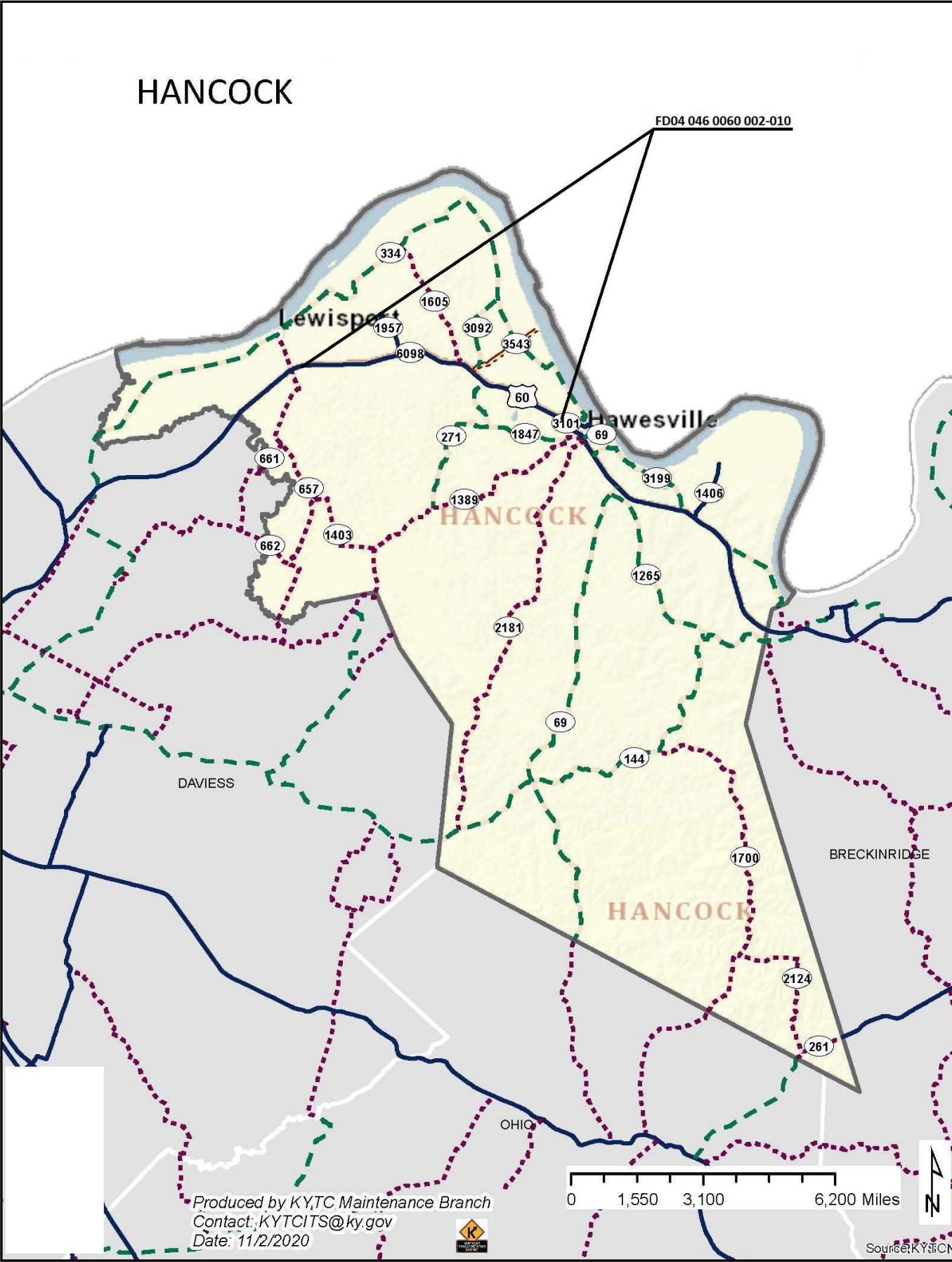


EXISTING  
FILL SLOPE or  
DITCH FORESLOPE

EXISTING  
FILL SLOPE or  
DITCH FORESLOPE

1. DETAILS DO NOT APPLY TO OVERLAYS LESS THAN 1 INCH THICK.
2. THE DURABLE PAVEMENT EDGE DEVICE MAY BE DISENGAGED AT DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT, AS APPROVED BY THE ENGINEER.

## DURABLE PAVEMENT EDGE DETAILS



Project: FD05 046  
0060 002 010

County: Hancock

District: D2 - Madisonville

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

Project: FD05 046  
0060 002 010

County: Hancock

District: D2 - Madisonville

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

## IRI Summary

### FD04 046 0060 002-010

|         |         |     |                       |
|---------|---------|-----|-----------------------|
| 002.288 | 002.307 | 216 | 4/16/2021 12:00:00 AM |
| 002.307 | 002.389 | 216 | 4/16/2021 12:00:00 AM |
| 002.389 | 002.488 | 144 | 4/16/2021 12:00:00 AM |
| 002.488 | 002.588 | 182 | 4/16/2021 12:00:00 AM |
| 002.588 | 002.688 | 139 | 4/16/2021 12:00:00 AM |
| 002.688 | 002.788 | 126 | 4/16/2021 12:00:00 AM |
| 002.788 | 002.871 | 151 | 4/16/2021 12:00:00 AM |
| 002.871 | 002.888 | 151 | 4/16/2021 12:00:00 AM |
| 002.888 | 002.988 | 120 | 4/16/2021 12:00:00 AM |
| 002.988 | 003.088 | 139 | 4/16/2021 12:00:00 AM |
| 003.088 | 003.188 | 107 | 4/16/2021 12:00:00 AM |
| 003.188 | 003.288 | 110 | 4/16/2021 12:00:00 AM |
| 003.288 | 003.385 | 134 | 4/16/2021 12:00:00 AM |
| 003.385 | 003.483 | 144 | 4/16/2021 12:00:00 AM |
| 003.483 | 003.580 | 119 | 4/16/2021 12:00:00 AM |
| 003.580 | 003.677 | 133 | 4/16/2021 12:00:00 AM |
| 003.677 | 003.780 | 140 | 4/16/2021 12:00:00 AM |
| 003.780 | 003.883 | 157 | 4/16/2021 12:00:00 AM |
| 003.883 | 003.985 | 121 | 4/16/2021 12:00:00 AM |
| 003.985 | 004.088 | 169 | 4/16/2021 12:00:00 AM |
| 004.088 | 004.191 | 129 | 4/16/2021 12:00:00 AM |



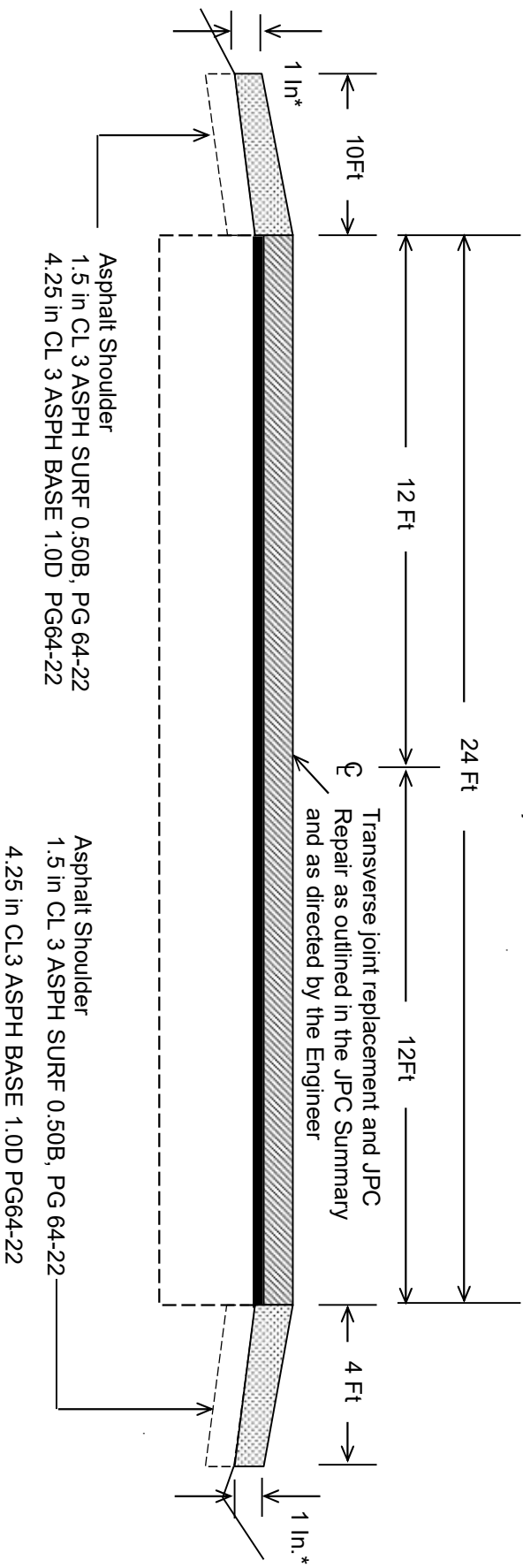
|         |         |     |                       |
|---------|---------|-----|-----------------------|
| 004.191 | 004.293 | 101 | 4/16/2021 12:00:00 AM |
| 004.293 | 004.395 | 157 | 4/16/2021 12:00:00 AM |
| 004.395 | 004.493 | 146 | 4/16/2021 12:00:00 AM |
| 004.493 | 004.590 | 177 | 4/16/2021 12:00:00 AM |
| 004.590 | 004.687 | 180 | 4/16/2021 12:00:00 AM |
| 004.687 | 004.784 | 122 | 4/16/2021 12:00:00 AM |
| 004.784 | 004.883 | 141 | 4/16/2021 12:00:00 AM |
| 004.883 | 004.983 | 90  | 4/16/2021 12:00:00 AM |
| 004.983 | 005.083 | 145 | 4/16/2021 12:00:00 AM |
| 005.083 | 005.183 | 147 | 4/16/2021 12:00:00 AM |
| 005.183 | 005.283 | 152 | 4/16/2021 12:00:00 AM |
| 005.283 | 005.383 | 145 | 4/16/2021 12:00:00 AM |
| 005.383 | 005.482 | 156 | 4/16/2021 12:00:00 AM |
| 005.482 | 005.582 | 106 | 4/16/2021 12:00:00 AM |
| 005.582 | 005.683 | 147 | 4/16/2021 12:00:00 AM |
| 005.683 | 005.783 | 121 | 4/16/2021 12:00:00 AM |
| 005.783 | 005.882 | 157 | 4/16/2021 12:00:00 AM |
| 005.882 | 005.983 | 155 | 4/16/2021 12:00:00 AM |
| 005.983 | 006.083 | 140 | 4/16/2021 12:00:00 AM |
| 006.083 | 006.183 | 137 | 4/16/2021 12:00:00 AM |
| 006.183 | 006.284 | 129 | 4/16/2021 12:00:00 AM |
| 006.284 | 006.384 | 162 | 4/16/2021 12:00:00 AM |
| 006.384 | 006.484 | 171 | 4/16/2021 12:00:00 AM |
| 006.484 | 006.582 | 174 | 4/16/2021 12:00:00 AM |
| 006.582 | 006.681 | 140 | 4/16/2021 12:00:00 AM |
| 006.681 | 006.781 | 134 | 4/16/2021 12:00:00 AM |

|         |         |     |                       |
|---------|---------|-----|-----------------------|
| 006.781 | 006.880 | 116 | 4/16/2021 12:00:00 AM |
| 006.880 | 006.981 | 145 | 4/16/2021 12:00:00 AM |
| 006.981 | 007.081 | 109 | 4/16/2021 12:00:00 AM |
| 007.081 | 007.182 | 155 | 4/16/2021 12:00:00 AM |
| 007.182 | 007.281 | 180 | 4/16/2021 12:00:00 AM |
| 007.281 | 007.380 | 149 | 4/16/2021 12:00:00 AM |
| 007.380 | 007.479 | 217 | 4/16/2021 12:00:00 AM |
| 007.479 | 007.579 | 213 | 4/16/2021 12:00:00 AM |
| 007.579 | 007.678 | 179 | 4/16/2021 12:00:00 AM |
| 007.678 | 007.777 | 178 | 4/16/2021 12:00:00 AM |
| 007.777 | 007.876 | 144 | 4/16/2021 12:00:00 AM |
| 007.876 | 007.975 | 136 | 4/16/2021 12:00:00 AM |
| 007.975 | 008.075 | 116 | 4/16/2021 12:00:00 AM |
| 008.075 | 008.173 | 107 | 4/16/2021 12:00:00 AM |
| 008.173 | 008.272 | 120 | 4/16/2021 12:00:00 AM |
| 008.272 | 008.371 | 87  | 4/16/2021 12:00:00 AM |
| 008.371 | 008.470 | 114 | 4/16/2021 12:00:00 AM |
| 008.470 | 008.569 | 122 | 4/16/2021 12:00:00 AM |
| 008.569 | 008.668 | 133 | 4/16/2021 12:00:00 AM |
| 008.668 | 008.769 | 156 | 4/16/2021 12:00:00 AM |
| 008.769 | 008.871 | 103 | 4/16/2021 12:00:00 AM |
| 008.871 | 008.972 | 109 | 4/16/2021 12:00:00 AM |
| 008.972 | 009.073 | 172 | 4/16/2021 12:00:00 AM |

JPC REMOVAL LOCATIONS SUMMARY

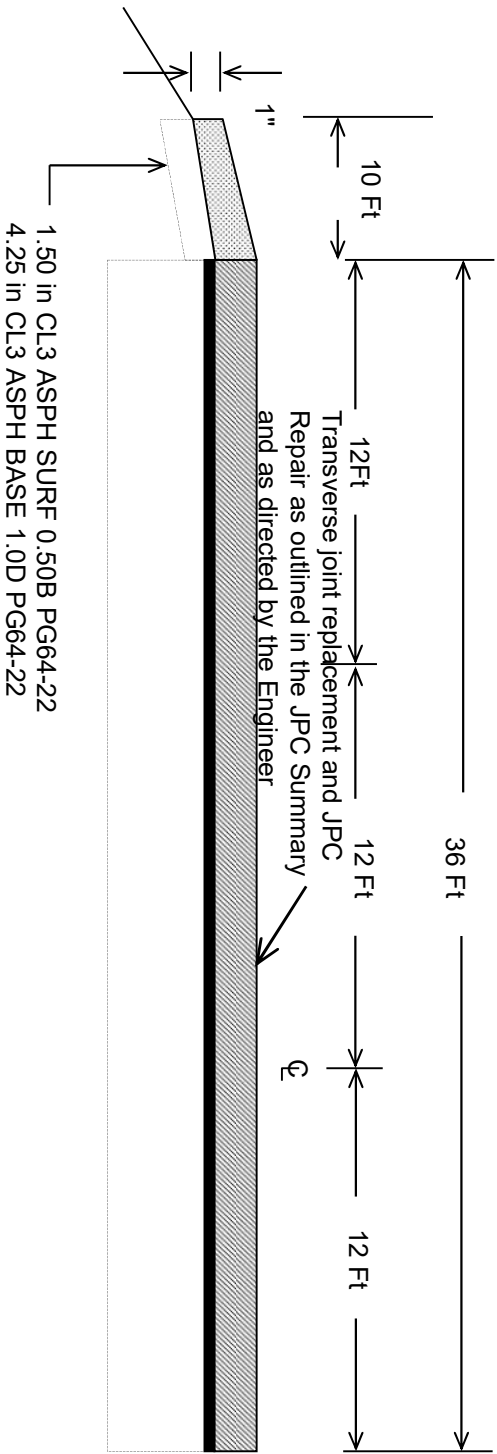
| Location | Length | Width |
|----------|--------|-------|
| 2.3      | 528    | 24    |
| 2.77     | 8      | 24    |
| 3        | 500    | 24    |
| 3.33     | 65     | 24    |
| 3.55     | 176    | 12    |
| 3.7      | 100    | 24    |
| 3.8      | 106    | 24    |
| 3.86     | 105    | 24    |
| 4.06     | 75     | 12    |
| 4.35     | 50     | 12    |
| 4.41     | 100    | 24    |
| 4.46     | 70     | 24    |
| 5.23     | 53     | 24    |
| 5.36     | 53     | 24    |
| 5.47     | 56     | 24    |
| 5.86     | 150    | 24    |
| 5.96     | 106    | 24    |
| 6.07     | 56     | 12    |
| 6.56     | 206    | 24    |
| 7.6      | 50     | 12    |
| 9.07     | 100    | 24    |

**Hancock County**  
**TYPICAL SECTION**  
**FD05 046 0060 002 010**  
**MP's 2.3 to 9.07**  
**(excluding turn lane**  
**areas)**

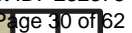


**\*Where Existing Site Conditions Permit**

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







HORIZONTAL SCALE: 1"=300'









COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



CONTRACTOR'S  
TRAFFIC CABLE

HANCOCK COUNTY - US 60  
EB PAVEMENT REHAB  
MP 2.2 TO MP 9.4

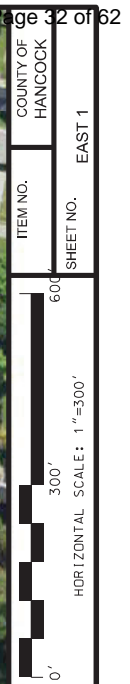
ITEM NO.  
SHEET NO.

COUNTY OF  
HANCOCK  
WEST - 2

0'  
300'  
600'

HORIZONTAL SCALE: 1"=300'





HANCOCK COUNTY - US 60  
EB PAVEMENT REHAB  
MP 2.2 TO MP 9.4



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS







|                      |           |
|----------------------|-----------|
| COUNTY OF<br>HANCOCK |           |
| ITEM NO.             | SHEET NO. |
| EAST 2               |           |

0'

300'

600'

HORIZONTAL SCALE: 1"=300'

HANCOCK COUNTY - US 60  
EB PAVEMENT REHAB  
MP 2.2 TO MP 9.4



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS





| ITEM                                 | MOT  | TOTAL PROJECT | S Q U A R E Y A R D S |  |  |
|--------------------------------------|------|---------------|-----------------------|--|--|
|                                      |      |               |                       |  |  |
| 1 1/2" CL3 ASPH. SURF. 0.50B PG64-22 | 324  |               | 324                   |  |  |
| 3" CL3 ASPH. BASE 1.00D PG64-22      | 504  |               | 504                   |  |  |
| 8" CRUSHED STONE BASE                | 7016 |               | 7016                  |  |  |
|                                      |      |               |                       |  |  |
|                                      |      |               |                       |  |  |
|                                      |      |               |                       |  |  |
|                                      |      |               |                       |  |  |

ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD.  
PER INCH OF DEPTH.

## PAVING SUMMARY

[illegible]

HANCOCK COUNTY - US 60  
REB PAVEMENT REHAB  
MP 2.2 TO MP 9.4



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS



|          |                      |
|----------|----------------------|
| ITEM NO. | COUNTY OF<br>HANCOCK |
|----------|----------------------|

SHEET NO. PAV SUMMARY

BRIDGE DETAIL FOR PAVING PROJECT



W = bridge width curb to curb  
T = thickness of existing asphalt overlay  
L = length of bridge  
L<sub>1</sub> & L<sub>2</sub> = length of approach pavement to be removed  
T<sub>R</sub> = thickness to be removed and replaced on bridge  
P<sub>R</sub> = thickness to be removed and replaced on pavement  
Note: L<sub>1</sub> & L<sub>2</sub> lengths shall be determined by using a transition rate of 100 ft/in of thickness

| Route | Bridge No. | MP    | W (ft) | T (in) | L <sub>1</sub> (ft) | L <sub>2</sub> (ft) | T <sub>R</sub> (in) | L (ft) | P <sub>R</sub> (in) |
|-------|------------|-------|--------|--------|---------------------|---------------------|---------------------|--------|---------------------|
| US 60 | B00034R    | 2.510 | 25.00  |        |                     |                     | 0.000               | 104.00 | 1.25                |
| US 60 | B00034L    | 2.510 | 25.00  |        |                     |                     | 0.000               | 104.00 | 1.25                |
| US 60 | B00035R    | 7.518 | 25.00  |        |                     |                     | 0.000               | 146.00 | 1.25                |
| US 60 | B00035L    | 7.518 | 25.00  |        |                     |                     | 0.000               | 146.00 | 1.25                |
|       |            |       |        |        |                     |                     |                     |        |                     |
|       |            |       |        |        |                     |                     |                     |        |                     |
|       |            |       |        |        |                     |                     |                     |        |                     |
|       |            |       |        |        |                     |                     |                     |        |                     |
|       |            |       |        |        |                     |                     |                     |        |                     |

**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.

11

- 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/***0 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 assume ownership of these signs.

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

11  
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



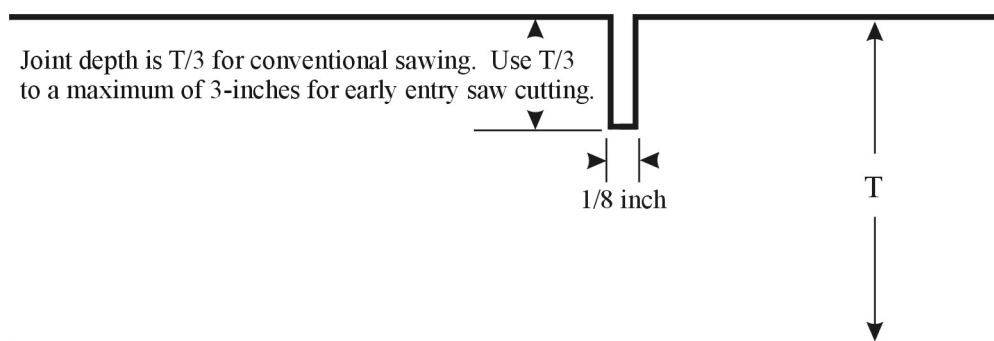
10Y

### **SPECIAL NOTE FOR UNSEALED JPC PAVEMENT AND SHOULDER JOINTS**

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

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

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



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

June 15, 2012

11J

## **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.

11J

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

11J

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. |

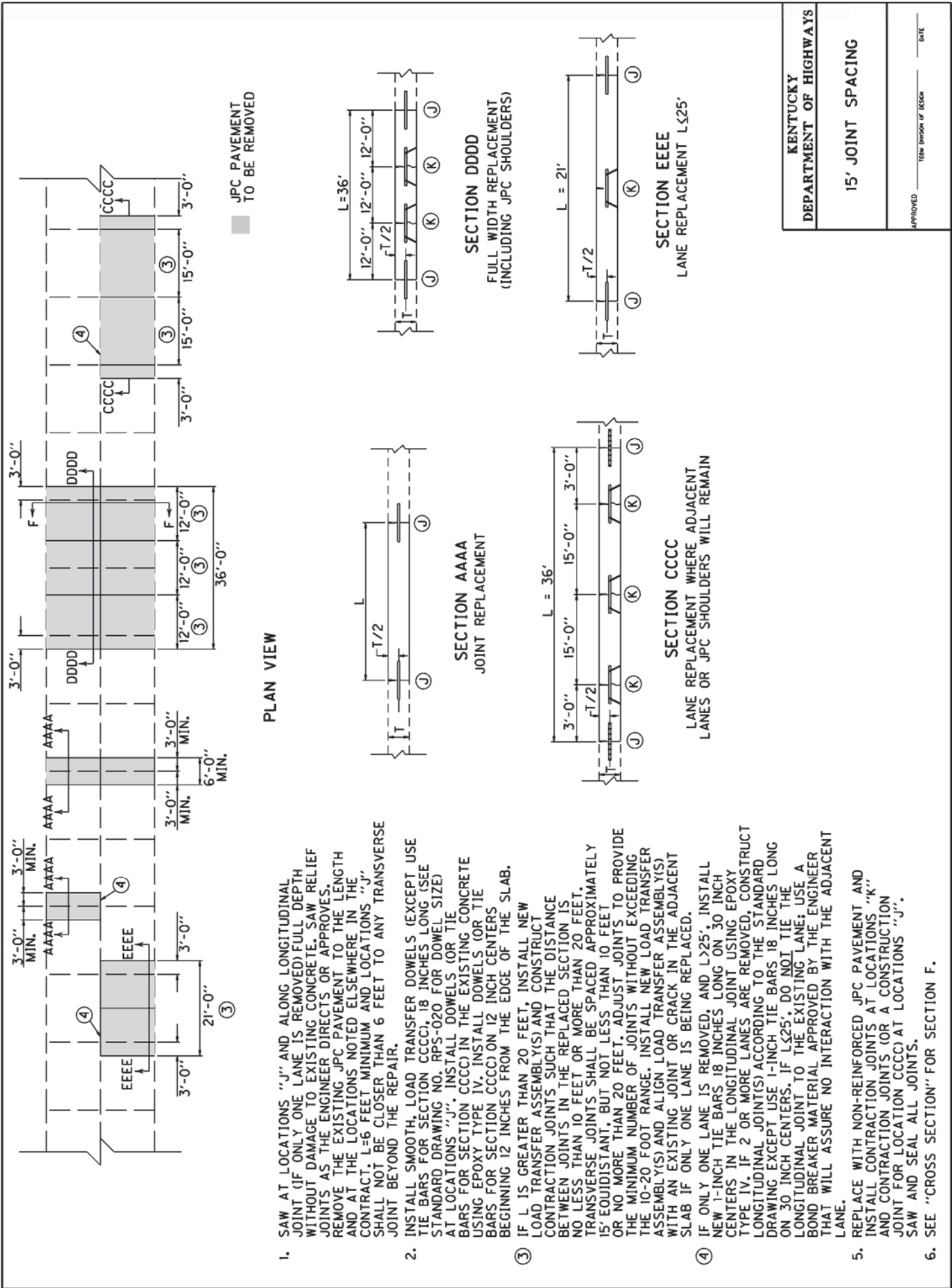
\*If the Engineer approves opening to traffic, the Engineer will evaluate the concrete at 28 days (or sooner) to determine if the removal and replacement of the concrete is necessary due to pavement distress induced by the early opening (i.e. noticeable cracking). If required by the Engineer, remove 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:

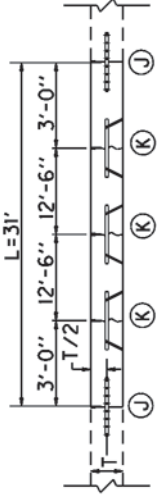
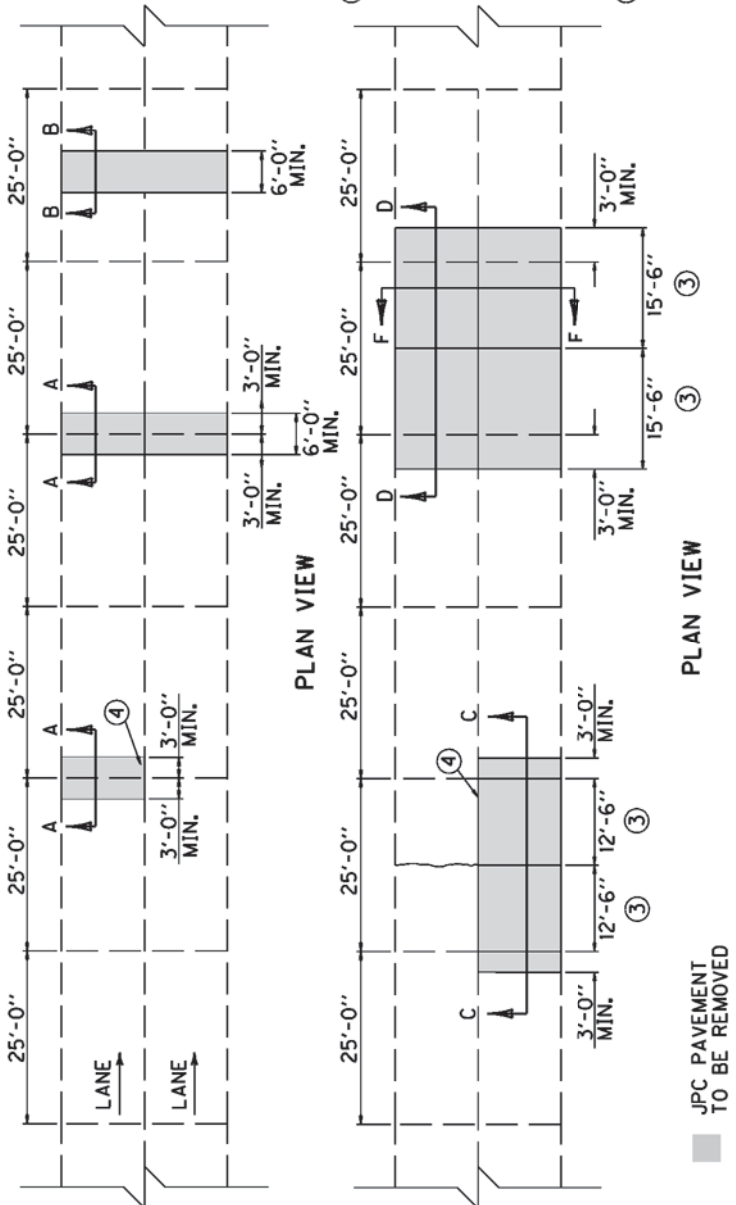
| <u>Code</u>                                    | <u>Pay Item</u>                        | <u>Pay Unit</u>       |
|--|--|-----------------------|
| ----   | Remove JPC Pavement                    | Square Yard           |
| 00001  | DGA Base                               | Ton                   |
| 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.





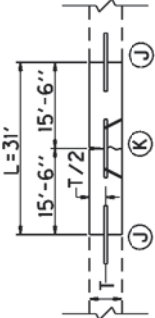
1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION C), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION C) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION C) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR MORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY 15' EQUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET. ADJUST JOINTS TO PROVIDE THE MINIMUM NUMBER OF JOINTS WITHOUT EXCEEDING THE 10-20 FOOT RANGE. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED.
3. IF ONLY ONE LANE IS REMOVED, AND L>25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L<25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE. USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
4. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION C) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.



SECTION C  
LANE REPLACEMENT WHERE ADJACENT LANES OR JPC SHOULDERS WILL REMAIN



SECTION A  
JOINT REPLACEMENT



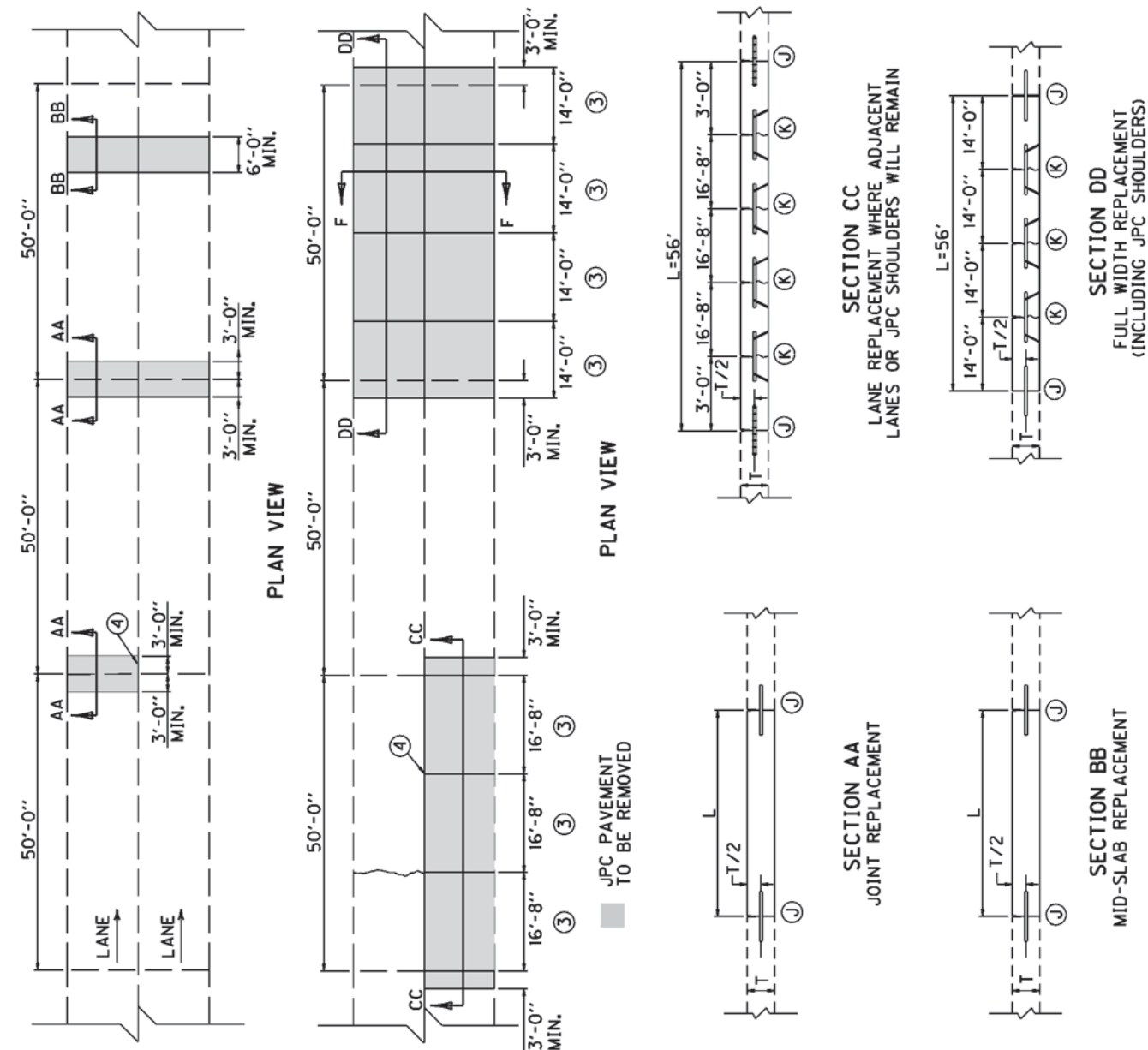
SECTION D  
FULL WIDTH REPLACEMENT (INCLUDING JPC SHOULDERS)



SECTION B  
MID-SLAB REPLACEMENT

|   |
|---|
| KENTUCKY<br>DEPARTMENT OF HIGHWAYS                      |
| 25' JOINT SPACING                                       |
| APPROVED _____ TEAM DIVISION OF DESIGN _____ DATE _____ |

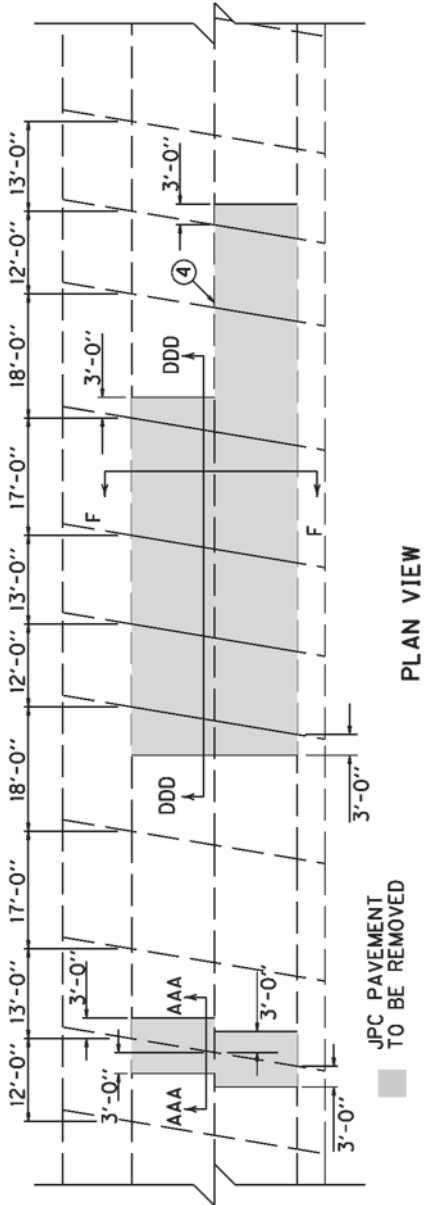
1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION CC), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION CC) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION CC) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB.
3. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND CONSTRUCT CONTRACTION JOINTS SUCH THAT THE DISTANCE BETWEEN JOINTS IN THE REPLACED SECTION IS NO LESS THAN 10 FEET OR MORE THAN 20 FEET. TRANSVERSE JOINTS SHALL BE SPACED APPROXIMATELY 15' EQUIDISTANT, BUT NOT LESS THAN 10 FEET OR NO MORE THAN 20 FEET. ADJUST JOINTS TO PROVIDE THE MINIMUM NUMBER OF JOINTS WITHOUT EXCEEDING THE 10-20 FOOT RANGE. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH AN EXISTING JOINT OR CRACK IN THE ADJACENT SLAB IF ONLY ONE LANE IS BEING REPLACED.
4. IF ONLY ONE LANE IS REMOVED, AND L>25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L<25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE; USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
5. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION CC) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.



|   |
|---|
| KENTUCKY<br>DEPARTMENT OF HIGHWAYS                        |
| 50' JOINT SPACING   |
| SUBMITTED: _____ TEAM DIVISION OF DESIGN _____ DATE _____ |



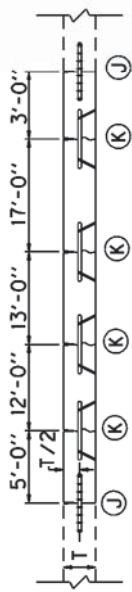
1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM AND LOCATIONS "J" SHALL NOT BE CLOSER THAN 6 FEET TO ANY TRANSVERSE JOINT BEYOND THE REPAIR.
2. INSTALL SMOOTH, LOAD TRANSFER DOWELS (EXCEPT USE TIE BARS FOR SECTION DDD), 18 INCHES LONG (SEE STANDARD DRAWING NO. RPS-020 FOR DOWEL SIZE) AT LOCATIONS "J". INSTALL DOWELS (OR TIE BARS FOR SECTION DDD) IN THE EXISTING CONCRETE USING EPOXY TYPE IV. INSTALL DOWELS (OR TIE BARS FOR SECTION DDD) ON 12 INCH CENTERS BEGINNING 12 INCHES FROM THE EDGE OF THE SLAB. IF L IS GREATER THAN 20 FEET, INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND MATCH EXISTING JOINTS. INSTALL NEW LOAD TRANSFER ASSEMBLY(S) AND ALIGN LOAD TRANSFER ASSEMBLY(S) WITH EXISTING JOINTS IN ADJACENT SLABS.
3. IF ONLY ONE LANE IS REMOVED, AND L>25', INSTALL NEW 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS IN THE LONGITUDINAL JOINT USING EPOXY TYPE IV. IF 2 OR MORE LANES ARE REMOVED, CONSTRUCT LONGITUDINAL JOINT(S) ACCORDING TO THE STANDARD DRAWING EXCEPT USE 1-INCH TIE BARS 18 INCHES LONG ON 30 INCH CENTERS. IF L<25', DO NOT TIE THE LONGITUDINAL JOINT TO THE EXISTING LANE; USE A BOND BREAKER MATERIAL APPROVED BY THE ENGINEER THAT WILL ASSURE NO INTERACTION WITH THE ADJACENT LANE.
4. REPLACE WITH NON-REINFORCED JPC PAVEMENT AND INSTALL CONTRACTION JOINTS AT LOCATIONS "K" AND CONTRACTION JOINTS (OR A CONSTRUCTION JOINT FOR LOCATION DDD) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.



PLAN VIEW



SECTION AAA  
JOINT REPLACEMENT



SECTION DDD  
LANE REPLACEMENT  
(ALWAYS MATCH EXISTING JOINTS)

|   |
|---|
| KENTUCKY<br>DEPARTMENT OF HIGHWAYS                      |
| RANDOM SKEWED   |
| APPROVED _____ TEAM DIVISION OF DESIGN _____ DATE _____ |



- ① SAW-CUT LINE. THIS ONE FOOT IS TO ALLOW FOR A FORM AND THE REMOVAL AND REPLACEMENT SHALL BE INCIDENTAL TO THE WORK, EXCEPT NEW ASPHALT MIXTURE SHALL BE PAID DIRECT ON A TONNAGE BASIS, AND NEW JPC PAVEMENT WILL BE PAID BY THE SQUARE YARD. COMPACT THE DGA BASE BY MECHANICAL TAMPERS TO THE ENGINEER'S SATISFACTION.
- ② EXISTING LONGITUDINAL JOINT.
- ③ FIRST SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.
- ④ SECOND SLAB REMOVAL LIMITS AND REPLACE 12-FOOT LANE.
- ⑤ THIS ONE FOOT IS TO ALLOW FOR A FORM ON THE FIRST POUR, AND A TEMPORARY PAVEMENT IS REQUIRED. THE DEPARTMENT WILL NOT REQUIRE REMOVAL OF THIS ONE FOOT IF THE GRADE OF THE EXISTING PAVEMENT IS ADEQUATE TO ENSURE THE NEW CONCRETE CAN BE PLACED AND FINISHED TO THE SATISFACTION OF THE ENGINEER. ANY TEMPORARY PAVEMENT IS INCIDENTAL TO JPC PAVEMENT.
6. THE ABOVE DRAWING DEPICTS THE ORDER OF SLAB REMOVAL WHEN BOTH ARE TO BE REMOVED AT THE SAME LOCATION. WHEN ONLY ONE SLAB OR LANE IS TO BE REMOVED, REMOVE AND REPLACE ACCORDING TO SECTION C, CC, OR CCCC. TRAFFIC CONTROL WILL SPECIFY WHICH LANE TO REMOVE FIRST.

**KENTUCKY  
DEPARTMENT OF HIGHWAYS**

CROSS SECTION

APPROVED \_\_\_\_\_  
 TERM DIVISION OF DESIGN \_\_\_\_\_  
 DATE \_\_\_\_\_

11K

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

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

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

### **2.0 MATERIALS AND EQUIPMENT.**

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

**2.2 Latex Materials.** Conform to Section 606.

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

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

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

### **3.0 CONSTRUCTION.**

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

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

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

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

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

11K

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

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

### **3.5 Patching Material and Placement.**

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

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

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

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

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

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

11K

**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 TWO-LANE HIGHWAY .....                             | TTC-100-04 |
| 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 |
| SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS .....       | TPR-115    |
| SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS .....           | TPR-125    |
| RUMBLE STRIP DETAILS MULTI LANE ROADWAYS & RAMPS .....          | TPR-130    |
| JOINTED PLAIN CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS ..... | RPN-001-07 |
| CONCRETE PAVEMENT JOINT DETAILS.....                            | RPS-010-11 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-030-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-031-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-032-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-033-07 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-034-07 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-035-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-036-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-037-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-038-06 |
| CONCRETE PAVEMENT JOINTS - TYPES AND SPACING.....               | RPS-039-06 |
| MEDIAN CROSSOVER CASE I.....                                    | TTC-140-04 |
| MEDIAN CROSSOVER CASE I.....                                    | TTC-141-04 |
| MEDIAN CROSSOVER CASE II .....                                  | TTC-145-04 |
| MEDIAN CROSSOVER CASE II .....                                  | TTC-146-04 |

## **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](mailto: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  $1\frac{1}{2}$  times your regular rate of pay for all hours worked over 40 in a workweek.

### CHILD LABOR

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

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

#### *No more than*

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

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

### TIP CREDIT

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

### ENFORCEMENT

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

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

### ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- 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 6/19/23

Section: 0001 - ROADWAY

| LINE | BID CODE   | ALT | DESCRIPTION                            | QUANTITY   | UNIT | UNIT PRIC | FP | AMOUNT      |
|------|------------|-----|--|------------|------|-----------|----|-------------|
| 0010 | 00001      |     | DGA BASE                               | 1,500.00   | TON  |           | \$ |             |
| 0020 | 00190      |     | LEVELING & WEDGING PG64-22             | 212.00     | TON  |           | \$ |             |
| 0030 | 00214      |     | CL3 ASPH BASE 1.00D PG64-22            | 10,000.00  | TON  |           | \$ |             |
| 0040 | 00324      |     | CL3 ASPH SURF 0.50B PG64-22            | 3,900.00   | TON  |           | \$ |             |
| 0050 | 02022      |     | JPC PAVEMENT-8 IN/24                   | 9,000.00   | SQYD |           | \$ |             |
| 0060 | 02058      |     | REMOVE PCC PAVEMENT                    | 9,000.00   | SQYD |           | \$ |             |
| 0070 | 02060      |     | PCC PAVEMENT DIAMOND GRINDING          | 113,140.00 | SQYD |           | \$ |             |
| 0080 | 02115      |     | SAW-CLEAN-RESEAL TVERSE JOINT          | 18,001.00  | LF   |           | \$ |             |
| 0090 | 02116      |     | SAW-CLEAN-RESEAL LONGIT JOINT          | 37,000.00  | LF   |           | \$ |             |
| 0100 | 02200      |     | ROADWAY EXCAVATION                     | 19,000.00  | CUYD |           | \$ |             |
| 0110 | 02562      |     | TEMPORARY SIGNS                        | 1,500.00   | SQFT |           | \$ |             |
| 0120 | 02603      |     | FABRIC-GEOTEXTILE CLASS 2              | 1,000.00   | SQYD |           | \$ |             |
| 0130 | 02650      |     | MAINTAIN & CONTROL TRAFFIC             | 1.00       | LS   |           | \$ |             |
| 0140 | 02671      |     | PORTABLE CHANGEABLE MESSAGE SIGN       | 4.00       | EACH |           | \$ |             |
| 0150 | 02676      |     | MOBILIZATION FOR MILL & TEXT           | 1.00       | LS   |           | \$ |             |
| 0160 | 02677      |     | ASPHALT PAVE MILLING & TEXTURING       | 405.00     | TON  |           | \$ |             |
| 0170 | 03225      |     | TUBULAR MARKERS                        | 550.00     | EACH |           | \$ |             |
| 0180 | 06510      |     | PAVE STRIPING-TEMP PAINT-4 IN          | 10,500.00  | LF   |           | \$ |             |
| 0190 | 06542      |     | PAVE STRIPING-THERMO-6 IN W            | 132,000.00 | LF   |           | \$ |             |
| 0200 | 06543      |     | PAVE STRIPING-THERMO-6 IN Y            | 36,000.00  | LF   |           | \$ |             |
| 0210 | 06568      |     | PAVE MARKING-THERMO STOP BAR-24IN      | 68.00      | LF   |           | \$ |             |
| 0220 | 06574      |     | PAVE MARKING-THERMO CURV ARROW         | 23.00      | EACH |           | \$ |             |
| 0230 | 10020NS    |     | FUEL ADJUSTMENT                        | 13,900.00  | DOLL | \$1.00    | \$ | \$13,900.00 |
| 0240 | 10030NS    |     | ASPHALT ADJUSTMENT                     | 1,500.00   | DOLL | \$1.00    | \$ | \$1,500.00  |
| 0250 | 20259ED    |     | TEMPORARY MEDIAN CROSSOVER             | 1.00       | EACH |           | \$ |             |
| 0260 | 20362ES403 |     | SHOULDER RUMBLE STRIPS-SAWED           | 75,000.00  | LF   |           | \$ |             |
| 0270 | 21173EC    |     | SAW-CLEAN-RESEAL RANDOM CRACKS         | 2,000.00   | LF   |           | \$ |             |
| 0280 | 22146EN    |     | CONCRETE PATCHING REPAIR               | 8,000.00   | SQFT |           | \$ |             |
| 0290 | 22664EN    |     | WATER BLASTING EXISTING STRIPE         | 90,000.00  | LF   |           | \$ |             |
| 0300 | 24489EC    |     | INLAID PAVEMENT MARKER                 | 450.00     | EACH |           | \$ |             |
| 0310 | 24861EC    |     | PVC FOLD AND FORM PIPE LINER-15 IN     | 72.00      | LF   |           | \$ |             |
| 0320 | 24862EC    |     | PVC FOLD AND FORM PIPE LINER-18 IN     | 608.00     | LF   |           | \$ |             |
| 0330 | 24863EC    |     | PVC FOLD AND FORM PIPE LINER-24 IN     | 1,436.00   | LF   |           | \$ |             |
| 0340 | 24864EC    |     | PVC FOLD AND FORM PIPE LINER-30 IN     | 472.00     | LF   |           | \$ |             |
| 0350 | 24865EC    |     | PVC FOLD AND FORM PIPE LINER-36 IN     | 428.00     | LF   |           | \$ |             |
| 0360 | 24880EC    |     | REMOVE PAVEMENT MARKER                 | 450.00     | EACH |           | \$ |             |
| 0370 | 24970EC    |     | ASPHALT MATERIAL FOR TACK NON-TRACKING | 22.00      | TON  |           | \$ |             |

Section: 0002 - DEMOBILIZATION

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