

CALL NO. 403
CONTRACT ID. 222577

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER 056GR22P087 - FD05 & FE01

DESCRIPTION FRANKFORT AVENUE (US 60)

WORK TYPE ASPHALT RESURFACING

PRIMARY COMPLETION DATE 11/15/2023

LETTING DATE: <u>December 08,2022</u>

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 08,2022. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 05

CONTRACT ID - 222577

056GR22P087 - FD05 & FE01

COUNTY - JEFFERSON

PCN - MP05600602201 FD05 056 0060 000-004

FRANKFORT AVENUE (US 60) (MP 0.000) BEGIN AT US 42 EXTENDING EAST TO US 60A (MP 3.459), A DISTANCE OF 03.45 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 38:15:16.09 LONGITUDE 85:41:00.02

ADT 11,275

PCN - MP05600602202 FE01 056 0060 000-004

FRANKFORT AVENUE (US 60) (MP 0.000) BEGIN AT US 42 EXTENDING EAST TO US 60A (MP 3.459), A DISTANCE OF 03.45 MILES.SIDEWALK CONSTRUCTION

GEOGRAPHIC COORDINATES LATITUDE 38:15:16.09 LONGITUDE 84:41:00.02

ADT 11,275

COMPLETION DATE(S):

COMPLETED BY 11/15/2023 APPLIES TO ENTIRE CONTRACT

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CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

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.

October 14, 2022

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

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

April 30, 2018

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

SURFACING AREAS

The Department estimates the mainline surfacing width to be varied 40 to 48 feet.

The Department estimates the total mainline area to be surfaced to be 92,237 square yards.

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

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

ASPHALT MIXTURE

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

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INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION A

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

Special Note for Historic Concrete Mix

When specified as Historic, provide a Class A concrete mix conforming to Kentucky Standard Specification Section 601 with the following exceptions:

- Approved coarse aggregate shall be #8 or #9m river gravel. The coarse aggregate shall be at least 50% of the total aggregate in the mix with river sand being the fine aggregate.
- Achieve a "historic" weathered finish by use of a water based, pigmented, top surface retarder resulting in a surface depth etch of up to 1/8 inch. Apply and remove the surface retarder in accordance with manufacturer's recommendations.
- Placement and removal of the surface retarder shall be considered incidental to the placed concrete.

SPECIAL NOTE FOR PAVEMENT MARKING MODIFICATIONS (FRANKFORT AVE)

This Proposal does not include striping change plans, however it is anticipated that the segment of US 60 from approximately Stilz Ave to Lexington Rd will be reconfigured from the current 4-lane typical section. The Contractor shall alert the Project Engineer a minimum of four weeks before milling is scheduled to begin to allow for coordination with KYTC D5 Traffic to ensure the new striping plans have been finalized. The new configuration is expected to be a combination of a 3-lane or 2-lane section with permanent on-street parking.

Per Section 713.03.01 of the Standard Specifications, the Contractor shall still be required to submit a record of existing pavement markings prior to beginning resurfacing activities. The Department requests these records be submitted at least four weeks prior to milling or paving in order to coordinate all desired changes between the District Traffic Engineer and the Contractor. A complete striping log between Stilz Ave and Lexington Rd may not be necessary, however the Contractor shall still document locations of the current stop bars as they will be used as a reference for the striping plans.

The new striping configuration plans and any other changes will be returned to the Contractor to ensure the desired modifications can be performed during final surfacing. As the Contractor is responsible for implementing any pavement marking changes, it is highly recommended all questions are addressed to the Project Engineer prior to striping. Any incorrect markings will be removed and replaced with the proper markings at the Contractor's expense and in a manner approved by the Engineer.

SPECIAL NOTE FOR ON-STREET PARKING RESTRICTIONS

On routes which contain areas with on-street parking, advance warning shall be given to residents and businesses prior to resurfacing activities commencing. Signage advertising the dates and times when parking will be restricted shall be purchased and installed by the Contractor, at no expense to the Department and shall be considered incidental to the bid item for MAINTAIN AND CONTROL TRAFFIC. The "NO STOPPING" signs shall be installed a minimum of two business days (48 hours) prior to any parking restrictions and shall be removed as soon as the restrictions are no longer applicable.

Signs shall be installed along the side(s) of the route where stopping will be restricted, at a maximum spacing of 80 feet between signs. At intersecting side streets and/or alleys, place signs a maximum of 30 feet in each direction from the approach, along the route to be resurfaced.

No Stopping signs shall be purchased from Louisville Metro Public Works in order to utilize towing services provided by the Louisville Metro Police Department. The Contractor shall contact Jerry Cantrell at LMPW at (502) 574-8037 or Jerry.Cantrell@LouisvilleKy.gov; Marvin.Smith@LouisvilleKy.gov to place their sign order. LMPW will need a minimum of two weeks notice of the sign needs to ensure they have adequate quantity in stock. The Contractor will need to specify the quantity of signs needed, the dates and times restrictions will be in place and the day the signs will need to be acquired.

The cost is anticipated to be \$6.75 per sign. The Contractor shall remit payment and obtain signs at the LMPW office at 444 South 5th Street, 4th Floor in Downtown Louisville. Signs may be re-used, on this project, as long as they are in like-new and legible condition and date and time restrictions still apply.



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SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

SPECIAL NOTE FOR NON-TRACKING TACK COAT

- 1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can "break" within 15 minutes under conditions listed in 3.2.
- 2. MATERIALS, EQUIPMENT, AND PERSONNEL.
 - 2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.
 - 2.1.1 Provide a tack conforming to the following material requirements:

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

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

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14" and 18" from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

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

- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 180 °F. After the initial heating, between 170 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
- 4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
- 5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

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

Code
24970ECPay Item
Asphalt Material for Tack Non-TrackingPay Unit
Ton

Revised: May 23, 2022

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SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

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

2.0 Equipment

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

3.0 Testing Requirements

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

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

3.3.3 File Name. Save the Excel spreadsheet with the following file name; "Hamburg_CID_Approved Mix Number_Lot Number_Sublot Number_Date" and upload the file into the AMAW.

4.0 Data

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

5.0 Payment

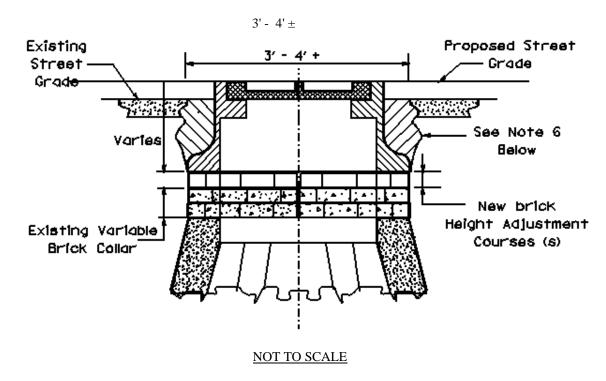
Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

June 15th, 2022

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SPECIAL NOTE FOR MANHOLE ADJUSTMENT LOUISVILLE MSD (Metropolitan Sewer District)



CONSTRUCTION NOTES:

- 1. All manhole frame or catch basin frame height adjustment shall be subject to field inspection by MSD and shall be subject to correction as directed by the Engineer at no additional cost to the Kentucky Transportation Cabinet.
- Any damaged frame, grate or cover discovered by the Contractor shall be reported to MSD's inspector and replaced. Obtain replacement hardware items from storage at MSD's Yard, 151 Cabel Street, Louisville, KY upon presentation of an MSD inspector validated Stores Requisition and exchange of the damaged hardware items.
- 3. All materials shall conform to MSD Technical Specifications. These specifications are on file and available to the Contractor at MSD's Engineering Division Office, 400 South Sixth Street, Louisville, KY 40202.
- 4. All workmanship shall be first class and in conformity with MSD Technical Specifications.
- 5. No wood shims or blocks shall be used to adjust or reset the frame height.
- 6. Cross-hatch area to be filled with concrete having a minimum 28-day compressive strength of 2000 psi.
- 7. Frame and grate to be raised with brick and mortar as directed by the Engineer.

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COORDINATION OF WORK WITH OTHERS

Be advised, there are active project(s) adjacent to or within this project. These may be KYTC administered contracts or work being performed as part of a KYTC issued encroachment permit. The Engineer will help coordinate the work of any other Contractors or permit holders within the limits of this project. See Sections 105.06, 107.06 and 107.14 of the Standard Specifications.

Coordination with Others D-5

JEFFERSON COUNTY 056GR22P087 - FD05 & FE01

SPECIAL NOTE FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to overall milling and/or leveling and wedging, excavate the designated base failure areas to a depth 6 inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

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

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

Accept payment at the Contract unit prices per square yard for Base Failure repair and per ton for Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3606basefailurerepairmillinlaypaybysy 01/02/2012

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SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions 01/02/2012

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SPECIAL NOTE FOR CONSTRUCTION OF SIDEWALK RAMPS

GENERAL

Unless otherwise stated in the contract, or as directed by or with prior approval from the Engineer, construct sidewalk ramps and adjacent roadway features in accordance with Section 505 of the Standard Specifications; Supplemental Specifications; Standard Drawings RPM-100-10, RPM-150-08, RPM-152-08, RPM-170-09, RPM-172-07, RGX-040-03; current editions as applicable.

Saw cut existing sidewalks, curb and gutter, and pavement, if present, and reconstruct sidewalk ramps with detectable warnings as directed or approved by the Engineer. Unless specified otherwise in the Contract, construct concrete sidewalk with 4" nominal minimum required thickness; however, if the existing sidewalk thickness is found to be greater or less than the thickness specified, transition the thickness as directed by the Engineer.

During the work to bring the existing sidewalk ramps into current ADA standards, the elevation of the new ramp may be above the grade of the existing roadway. Following completion of the new sidewalk ramp, if a grade difference of 1/2" or greater exists between any portion of the new ramp and roadway, and more than 14 days will pass prior to beginning resurfacing, the Contractor will be required to install asphalt wedges to ensure the sidewalk facilities remain accessible until resurfacing activities begin. Failure to maintain access to the new sidewalk ramps could result in Liquidated Damages being applied at a rate of \$200/day after 14 days. All liquidated damages will be applied cumulatively.

Except as required by the work or directed by the Engineer, do not disturb drainage pipes, catch basins and other roadway features on public or private property. Restore and/or re-install any damaged and/or disturbed features and private property in like kind materials and design at no additional cost to the Department. Dispose of all waste off the right of way at sites obtained by the Contractor at no additional cost to the Department. Following completion of the concrete work, backfill and regrade all disturbed areas to ensure they are flush with the sidewalk and back slopes match or are flatter than the preconstruction conditions. Seed and protect all disturbed earthen areas using Seed Mix Type I. Remove all construction debris, rocks and other undesirable material from the disturbed areas prior to seeding.

If the sidewalk ramp work is located at a signalized intersection, the sidewalk Contractor is to coordinate with the electrical Contractor and Engineer to ensure the necessary electrical components are located and installed prior to installing the new sidewalk ramp, such as but not limited to conduit and junction boxes. Following construction of new sidewalk, the Department will not be responsible for additional work required to complete the installation of the required electrical components due to improper planning or coordination. Any damage resulting to traffic signal or other electrical facilities shall be repaired at no cost to the Department.

The Contractor shall be responsible to ensure that all sidewalk ramp landings meet flush with the final asphalt surface and maintain positive drainage following the completion of the concrete work and resurfacing, regardless of the existing conditions. This work should be coordinated between the sidewalk and paving Contractors to ensure the final product does not cause standing water or negatively affects the ride quality of the roadway.

Install curb & gutter and header curbs as closely as possible to the standard drawing as field conditions permit or as directed by the Engineer. For example, header curb shall have a thickness of 7 inches and minimum depth of 12 inches below the pavement surface with the top modified to match surrounding conditions. Also, curb and gutter shall have a gutter depth of at least 8 inches with the thickness and curb varying to match existing conditions. Unless otherwise directed by the Engineer or if field conditions prohibit, ensure minimum 1-inch/1-foot (8.33%) transitions on all curb drawdowns, both adjacent to the roadway and parallel with the sidewalk and sidewalk ramp.

MEASUREMENT & PAYMENT (see attached payment example for additional detail)

SIDEWALK-4 IN CONCRETE – The Department will measure the new sidewalk and sidewalk ramps in accordance with Section 505.04 of the current Standard Specifications. The Department will not measure Roadway Excavation or Embankment in Place, but shall consider this work to be incidental to the bid item SIDEWALK-4 IN CONCRETE. Accept payment at the Contract unit price per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk, excavation and embankment, construction of the sidewalk and ramps, and restoration of disturbed features in accordance with these notes or as directed by the Engineer. The bid item for SIDEWALK-4 IN CONCRETE will NOT include any curb and/or gutter along the edge of pavement, even if the curb and/or gutter is poured monolithic with the sidewalk. However, any curb not continually adjacent to the edge of pavement will be included in the measured square area of sidewalk and no additional compensation will be made regardless of depth or height (ie. back curb, curb returns, etc.). In the event that a small utility or curb box hood requires adjusting as part of this work, no additional compensation shall be made and will be considered incidental to the bid item for SIDEWALK-4 IN CONCRETE.

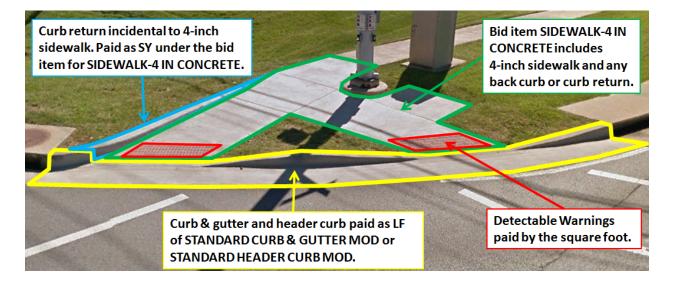
DETECTABLE WARNINGS – The Department will measure and make payment for Detectable Warnings in accordance with Section 505 of the Standard Specifications, Standard Drawing RGX-040-02 and Sepia 028, current editions.

STANDARD CURB AND GUTTER – The Department will measure and make payment for curb and gutter in accordance with Section 506 of the current Standard Specifications. Curb and gutter will be measured for the full length installed, including the area between the sidewalk ramp and roadway pavement. Accept payment at the Contract unit price per linear foot as full compensation for all labor, materials, equipment and incidentals required for removal and disposal of the existing curb and gutter, grade adjustments, transitions, restoration of adjacent pavement and disturbed areas, and all other work necessary to install the new curb and gutter to meet current ADA standards, Standard Drawing RPM-100-09 and the satisfaction of the Engineer. In the event that a small utility or curb box hood requires adjusting as part of this work, no additional compensation shall be made and will be considered incidental to the bid item for STANDARD CURB AND GUTTER.

STANDARD HEADER CURB – The Department will measure and make payment for header curb in accordance with Section 506 of the current Standard Specifications. Header curb will be measured for the full length installed, including the area between the sidewalk ramp and roadway pavement. Accept payment at the Contract unit price per linear foot as full compensation for all labor, materials, equipment and incidentals required for removal and disposal of the existing curb, grade adjustments, transitions, restoration of adjacent pavement and disturbed areas, and all other work necessary to install the new header curb to meet current ADA standards, Standard Drawing RPM-100-09 and the satisfaction of the Engineer. In the event that a small utility or curb box hood requires adjusting as part of this work, no

additional compensation shall be made and will be considered incidental to the bid item for STANDARD HEADER CURB.

SIDEWALK RAMP PAYMENT EXAMPLE



TRAFFIC CONTROL PLAN

FD05 056 0060 000-004

TRAFFIC CONTROL GENERAL

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

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

LANE CLOSURES & MOBILE OPERATIONS ARE PERMITTED DURING THE FOLLOWING HOURS:

• Sunday through Thursday nights 8:00 P.M. – 6:00 A.M.

Lane closures for operations that cause minimal disruption to traffic (ie. sidewalk ramps & pavement markings), can be in place during the following hours:

• Monday through Friday 9:00 A.M. - 3:00 P.M.

LANE CLOSURES WILL NOT BE PERMITTED ON THE FOLLOWING DAYS:

Friday April 7 – Sunday April 9, 2023

Friday May 5 – Sunday May 7, 2023

Friday May 26 – Monday May 29, 2023

Friday June 30 – Tuesday July 4, 2023

Friday September 1 – Monday September 4, 2023

Easter Weekend

KY Derby Weekend

Independence Day Weekend

Independence Day Weekend

Labor Day Weekend

The Engineer may specify additional days and hours when lane closures will not be allowed. Work will also be restricted during special events in the area at the District's discretion.

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At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one-way traffic during construction and provide a minimum clear lane width of 10 feet. During any lane closure or partial lane closure, make provisions for the passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

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

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

LANE CLOSURES & LIQUIDATED DAMAGES

Long term lane closures shall not be allowed; therefore, lane closures will not be measured for payment. Do not leave lane closures in place during non-working hours.

In the event that lane closures are in place outside of the days and/or times listed above, Liquidated Damages shall be applied as follows:

- \$ 1,000 for the first hour or fraction thereof
- \$2,500 for any additional hour or fraction thereof

A lane closure shall be defined as any traffic control device or Contract worker or vehicle in the traveled way that could potentially impact the flow of traffic. This includes but not limited to signs, barricades, barrels, cones, arrow boards, flaggers and Contractor work vehicles.

All liquidated damages will be applied cumulatively.

TEMPORARY SIGNS

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

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incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

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

ARROW PANELS

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

TEMPORARY ENTRANCES

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

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

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

TRAFFIC SIGNAL DETECTION

Install traffic signal items according to the included Special Notes. Coordinate all work with the Engineer.

THERMOPLASTIC INTERSECTION MARKINGS

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

BARRICADES

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

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

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PAVEMENT MARKINGS

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

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

PAVEMENT EDGE DROP-OFFS

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

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

Less than 2" - No protection required.

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

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

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

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engineer.

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USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

Application

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

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

CMS should not be used for:

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

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Messages

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

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

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

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

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Standard Abbreviations

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

he following is a list of standard abbreviations to be used on CMS:			
	Word	<u>Abbrev</u>	Example
	Access	ACCS	ACCIDENT AHEAD/ USE ACCS RD NEXT RIGHT
	Alternate	ALT	ACCIDENT AHEAD/ USE ALT RTE NEXT RIGHT
	Avenue	AVE	FIFTH AVE CLOSED/ DETOUR NEXT LEFT
	Blocked	BLKD	FIFTH AVE BLKD/ MERGE LEFT
	Boulevard	BLVD	MAIN BLVD CLOSED/ USE ALT RTE
	Bridge	BRDG	SMITH BRDG CLOSED/ USE ALT RTE
	Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
	Center	CNTR	CNTR LANE CLOSED/ MERGE LEFT
	Commercial	COMM	OVRSZ COMM VEH/ USE I275
	Condition	COND	ICY COND POSSIBLE
	Congested	CONG	HVY CONG NEXT 3 MI
	Construction	CONST	CONST WORK AHEAD/ EXPECT DELAYS
	Downtown	DWNTN	DWNTN TRAF USE EX 40
	Eastbound	E-BND	E-BND I64 CLOSED/ DETOUR EXIT 20
	Emergency	EMER	EMER VEH AHEAD/ PREPARE TO STOP
	Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
	Expressway	EXPWY	WTRSN EXPWY CLOSED/ DETOUR EXIT 10
	Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/ DETOUR EXIT 15
	Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ ALL TRAF EXIT 25
	Highway	HWY	ACCIDENT ON AA HWY/ EXPECT DELAYS
	Hour	HR	ACCIDENT ON AA HWY/ 2 HR DELAY
	Information	INFO	TRAF INFO TUNE TO 1240 AM
	Interstate	I	E-BND I64 CLOSED/ DETOUR EXIT 20
	Lane	LN	LN CLOSED MERGE LEFT
	Left	LFT	LANE CLOSED MERGE LFT
	Local	LOC	LOC TRAF USE ALT RTE
	Maintenance	MAINT	MAINT WRK ON BRDG/ SLOW
	Major	MAJ	MAJ DELAYS 175/ USE ALT RTE
	Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
	Minor	MNR	ACCIDENT 3 MI MNR DELAY
	Minutes	MIN	ACCIDENT 3 MI/ 30 MIN DELAY
	Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
	Oversized	OVRSZ	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
	Parking	PKING	EVENT PKING NEXT RGT
	Parkway	PKWY	CUM PKWAY TRAF/ DETOUR EXIT 60
	Prepare	PREP	ACCIDENT 3 MI/ PREP TO STOP
	Right	RGT	EVENT PKING NEXT RGT
	Road	RD	HAZMAT IN RD/ ALL TRAF EXIT 25
	Roadwork	RDWK	RDWK NEXT 4 MI/ POSSIBLE DELAYS
	Route	RTE	MAJ DELAYS 175/ USE ALT RTE
	Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
	Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
	Southbound	S-BND	S-BND I75 CLOSED/ DETOUR EXIT 50

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Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD
Standard Abbreviation	ons (cont)	
Word	Abbrev	Example
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/ DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

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

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

Typical Messages

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

Reason/Problem	<u>Action</u>
ACCIDENT	ALL TRAFFIC EXIT RT
ACCIDENT/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT

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FOG XX MILES

Typical Messages (cont)

Reason/Problem

FREEWAY CLOSED

FRESH OIL

HAZMAT SPILL

ICE

INCIDENT AHEAD

LANES (NARROW, SHIFT, MERGE, ETC.)

LEFT LANE CLOSED

LEFT LANE NARROWS

LEFT 2 LANES CLOSED

LEFT SHOULDER CLOSED

LOOSE GRAVEL

MEDIAN WORK XX MILES

MOVING WORK ZONE, WORKERS IN ROADWAY

NEXT EXIT CLOSED

NO OVERSIZED LOADS

NO PASSING

NO SHOULDER

ONE LANE BRIDGE

PEOPLE CROSSING

RAMP CLOSED

RAMP (SLIPPERY, ICE, ETC.)

RIGHT LANE CLOSED

RIGHT LANE NARROWS

RIGHT SHOULDER CLOSED

ROAD CLOSED

ROAD CLOSED XX MILES

ROAD (SLIPPERY, ICE, ETC.)

ROAD WORK

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

ROAD WORK XX MILES

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

NEW SIGNAL XX MILES

SLOW 1 (OR 2) - WAY TRAFFIC

SOFT SHOULDER

STALLED VEHICLES AHEAD

TRAFFIC BACKUP

TRAFFIC SLOWS

TRUCK CROSSING

TRUCKS ENTERING

TOW TRUCK AHEAD

UNEVEN LANES

WATER ON ROAD

WET PAINT

WORK ZONE XX MILES

WORKERS AHEAD

PASS TO RIGHT

Action

PREPARE TO STOP REDUCE SPEED

SLOW

SLOW DOWN

STAY IN LANE

STOP AHEAD

STOP XX MILES

TUNE RADIO 1610 AM

USE NN ROAD

USE CENTER LANE

USE DETOUR ROUTE

USE LEFT TURN LANE

USE NEXT EXIT USE RIGHT LANE

WATCH FOR FLAGGER

WATCH FOR FLAGGER

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SPECIAL NOTE FOR TRAFFIC SIGNAL LOOP DETECTORS

- 1.0 DESCRIPTION. Be advised that there are existing traffic signal loop detectors within the construction limits of this project. Except as specified herein, perform traffic signal loop replacement in accordance with the Department's Standard/Supplemental Specifications, Special Provisions, Special Notes, and Standard/Sepia Drawings, current editions and as directed by the Engineer. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for replacement of traffic signal loop installation(s) and all other work specified as part of this contract.
 - 1.1 Pre-bid Requirements. Conform to Subsection 723.03.17
- **2.0 MATERIALS.** Except as specified herein, furnish materials in accordance with Subsection 732.02 and Section 835. Provide for materials to be sampled and tested in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in this Special Note.
 - 2.1 Maintain and Control Traffic. See Traffic Control Plan.
 - **2.2** Sand. Furnish natural sand meeting the requirements of Subsection 804.04.01.
 - **2.3 Seeding.** Furnish Seed Mix Type I.
- **2.4** Loop Saw Slot and Fill. Furnish loop sealant, backer rod, and non-shrink grout according to the Saw Slot Detail.
- **2.5 Junction Boxes.** Furnish junction box type B, #57 aggregate, and geotextile filter type IV according to junction box detail.
- **2.6** Cable No. 14/1 Pair (Lead-in). Furnish cable that is specified in Section 835. Cable shall be ran splice free. This shall include splice kits to connect to the loop wire.
- **2.7 Conduit.** Furnish and install appropriate conduit from transitions to the roadway, junction boxes and poles. See details below.
- **3.0 CONSTRUCTION.** Except as specified herein, install and test Traffic Signal Loop Detectors in accordance with Section 723 and the drawings.
 - **3.1 Testing.** Conform to Subsection 723.03.17 (A)
 - **3.2** Coordination. Conform to Subsection723.03.17 (B)
 - **3.3 Connection.** Conform to Subsection 723.03.17 (C)
 - 3.4 Maintain and Control Traffic. See Traffic Control Plan.
 - **3.5** Milling. Conform to Subsection 723.03.17 (F)
 - **3.6** Loop Saw Slot and Fill. Conform to Subsection 723.03.13 (A).

Traffic Signal Loop Detectors Page 2 of 9

- **3.7 Backfilling and Disturbed Areas.** Conform to Subsection 723.03.11.
- **3.8 Removal.** Conform to Subsection 723.03.16.
- **3.9 Property/Roadway Damage.** Conform to Subsection 723.03.17 (J).
- **3.10 Right-of-Way Limits.** Conform to Subsection 723.03.17 (K).
- **3.11** Utility Clearance. Conform to Subsection 716.03.01.
- **3.12 Control.** Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to permit other contractors, state forces, public utility companies, and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. The Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to ensure the completion of the work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.
 - **3.13 Bore and Jack**. Conform to Subsection 723.03.06 (I).
 - **3.14 Open Cut Roadway.** Conform to Subsection 723.03.06 (I).
- **4.0 MEASUREMENT.** See Subsection 723.04 for bid item notes. Additional bid items include the following:
- **4.1 Loop Test.** The Department will measure the quantity as each individual unit loop tested. The Department will not measure disconnection, reconnection, traffic control, re-splicing per specifications, before and after testing per note above, and any associated hardware for payment and will consider them incidental to this item of work.
- **4.2 Remove Signal Equipment.** The department will measure the quantity by each. The department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.
- **5.0 PAYMENT**. The Department will make payment for the completed and accepted quantities of listed items according to Subsection 723.05 in addition to the following:

CodePay ItemPay UnitConduit 1"4792Linear FootPVC Conduit - 1 1/4 inch - sch 8024900ECLinear Foot

JEFFERSON COUNTY 056GR22P087 - FD05 & FE01 Contract ID: 222577 Page 40 of 72

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PVC Conduit – 2 inch – sch 80	24901EC	Linear Foot
Conduit 2"	4795	Linear Foot
Electrical Junction Box type B	4811	Each
Loop Test	24963ED	Each
Trenching and Backfilling	4820	Linear Foot
Loop Wire	4830	Linear Foot
Cable-No. 14/1 Pair	4850	Linear Foot ¹
Loop Saw Slot and Fill	4895	Linear Foot ¹
Bore and Jack Conduit	21543EN	Linear Foot ³
Open Cut Roadway	4821	Linear Foot ³
Remove Signal Equipment	24955ED	each

The Department will consider payment as full compensation for all work required under these notes and the Standard Specifications.

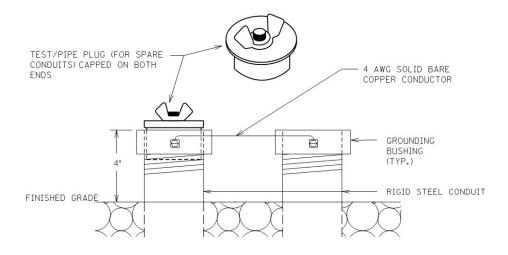
Contrary to section 723:

SUBSECTION: 03.13 Loop Installation.

REVISION: Replace first sentence note with the following:

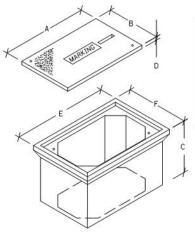
twist unshielded loop wire (imsa 51-7) with 3 to 5 turns from the start of homerun to the inside conduit, junction box, cabinet, or pole. Twist unshielded loop wires (imsa 51-7) with 3 to 5 turns per foot from the start of the homerun to the junction box, cabinet, or pole. Slot can be widen to .5" to .625" to help with the installation of the twisted wire.

Traffic Signal Loop Detectors Page 4 of 9



TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL

Traffic Signal Loop Detectors Page 5 of 9



JUNCTION BOX

	JUNC.	TION BOX (DIMENSIONS	S (NOMINAL)		
	А	В	С	D	E	F
TYPE A	23*	14"	27'	2"	25"	15*
TYPE B	18"	111*	12"	13/4" •	20"	13*
TYPE C	36*	24"	30*	3*	38"	26'

* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED

BEFORE THE INSTALLATION OF THE "57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT' ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 2039INS835, OR 20392NS835.

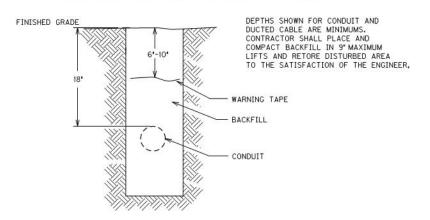
CONDUCTOR INSTALLATIONSCONDUIT SHALL BE EXPOSED

4* FROM BOTTOM OF BOX

GRADATION SIZE
NO. 57 AGGREGATE

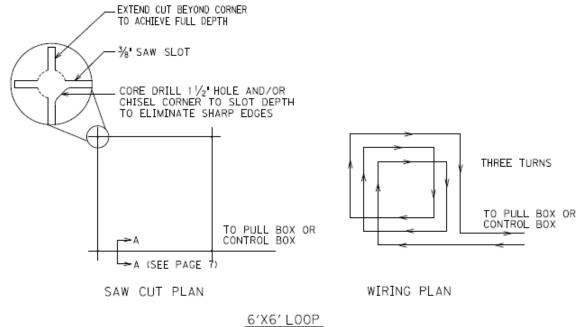
FIBER FABRIC TYPE IV

JUNCTION BOX INSTALLATION FOR
CONVENTIONAL LIGHTING OR TRAFFIC SIGNALS

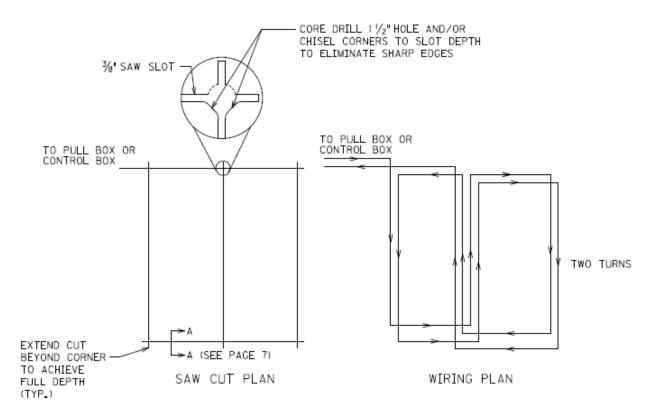


CONDUIT AND WARNING TAPE TRENCH

Traffic Signal Loop Detectors Page 6 of 9

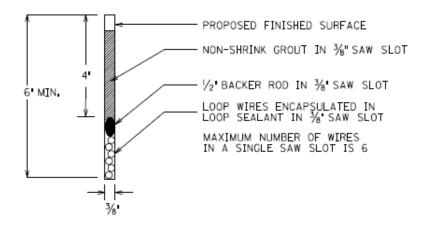




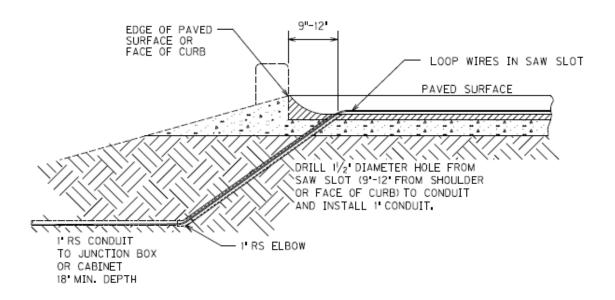


6'X30' QUADRAPOLE LOOP

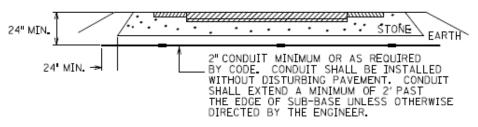
Traffic Signal Loop Detectors Page 7 of 9



SECTION A-A (SAW SLOT DETAIL)

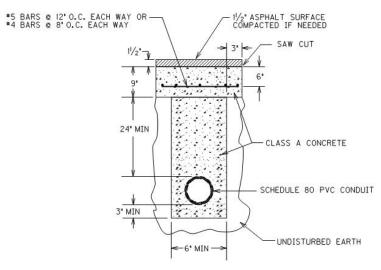


SAW SLOT EDGE OF PAVEMENT TRANSITION

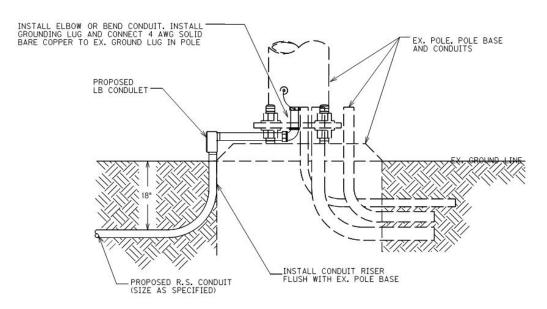


CONDUIT UNDER EXISTING PAVEMENT DETAIL

Traffic Signal Loop Detectors Page 8 of 9

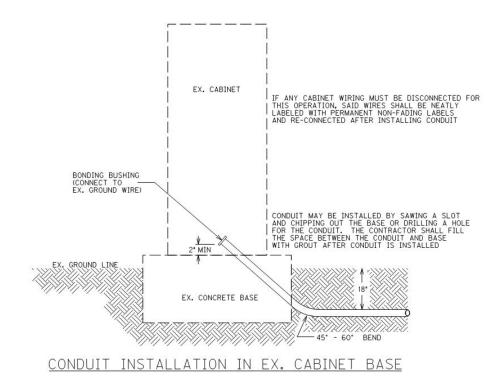


OPEN CUT PAVEMENT DETAIL

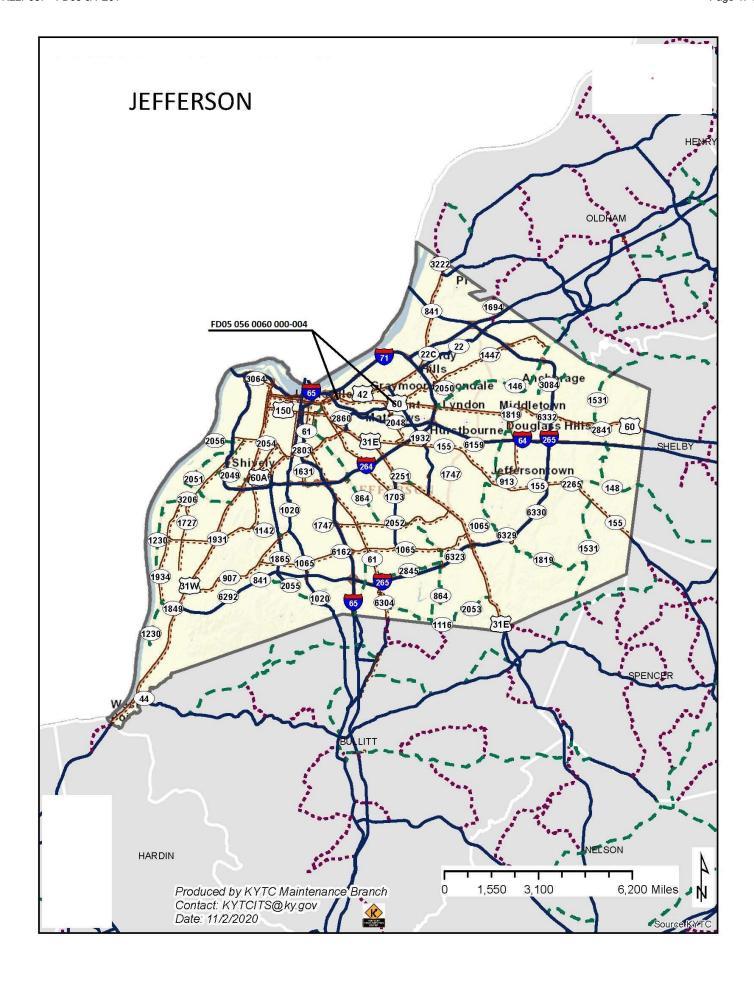


CONDUIT INSTALLATION IN EX. POLE BASE

Traffic Signal Loop Detectors Page 9 of 9



Update: 4-5-2022



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MATERIAL SUMMARY

CONTRACT ID: 222577	056GR22P087 - FD05 & FE01	MP05600602201
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FRANKFORT AVENUE (US 60) BEGIN AT US 42 EXTENDING EAST TO US 60A ASPHALT RESURFACING, A DISTANCE OF 3.45 MILES.

Project ine No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00190	LEVELING & WEDGING PG64-22	385.00	TON
0010	00388	CL3 ASPH SURF 0.38B PG64-22	6,342.00	TON
0015	01876	STANDARD HEADER CURB MOD	65.00	LF
0020	01876	STANDARD HEADER CURB MOD - (HISTORIC MIX)	376.00	LF
0025	02562	TEMPORARY SIGNS	2,000.00	SQF
0030	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0035	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0040	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS
0045	02677	ASPHALT PAVE MILLING & TEXTURING	6,342.00	TON
0050	02720	SIDEWALK-4 IN CONCRETE	30.00	SQYI
0055	02720	SIDEWALK-4 IN CONCRETE - (HISTORIC MIX)	275.00	SQYI
0060	02775	ARROW PANEL	2.00	EACH
0065	04793	CONDUIT-1 1/4 IN	200.00	LF
0070	04820	TRENCHING AND BACKFILLING	200.00	LF
0075	04830	LOOP WIRE	1,056.00	LF
0800	04850	CABLE-NO. 14/1 PAIR	200.00	LF
0085	04895	LOOP SAW SLOT AND FILL	408.00	LF
0090	06510	PAVE STRIPING-TEMP PAINT-4 IN	41,570.00	LF
0095	06514	PAVE STRIPING-PERM PAINT-4 IN	5,400.00	LF
0100	06542	PAVE STRIPING-THERMO-6 IN W	48,400.00	LF
0105	06542	PAVE STRIPING-THERMO-6 IN W - (EDGELINE TAPERS)	4,365.00	LF
0110	06543	PAVE STRIPING-THERMO-6 IN Y	44,100.00	LF
0115	06562	PAVE MARKING-THERMO R 6 FT	4.00	EACI
0120	06563	PAVE MARKING-R/R XBUCKS 16 IN	88.00	LF
0125	06565	PAVE MARKING-THERMO X-WALK-6 IN	5,000.00	LF
0130	06568	PAVE MARKING-THERMO STOP BAR-24IN	948.00	LF
0135	06569	PAVE MARKING-THERMO CROSS-HATCH	1,035.00	SQF
0140	06574	PAVE MARKING-THERMO CURV ARROW	48.00	EAC
0145	06575	PAVE MARKING-THERMO COMB ARROW	2.00	EACI
0150	06600	REMOVE PAVEMENT MARKER TYPE V	510.00	EAC
0155	10020NS	FUEL ADJUSTMENT	7,899.00	DOLI
0160	10030NS	ASPHALT ADJUSTMENT	19,841.00	DOLI
0165	20782NS714	PAVE MARKING THERMO-BIKE	9.00	EACI
0170	20782NS714	PAVE MARKING THERMO-BIKE	6.00	EACI
0175	21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW	55.00	SQF
0180	22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN	190.00	LF
0185	23158ES505	DETECTABLE WARNINGS - (NEW)	304.00	SQF
0190		DETECTABLE WARNINGS - (RETROFIT)	17.00	
0195		PAVE MARK-THERMO-X-WALK-24 IN	3,360.00	LF
0200		PAVE MARKING THERMO-BIKE LANE ARROW - (SHARED LANE CHEVRONS)	,	EACI
0205		PAVE MARKING-THERMO DOTTED LANE EXTEN	116.00	LF
0210		ASPHALT MATERIAL FOR TACK NON-TRACKING	36.00	TON

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MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0215	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 222577 056GR22P087 - FD05 & FE01 MP05600602202

FRANKFORT AVENUE (US 60) BEGIN AT US 42 EXTENDING EAST TO US 60A SIDEWALK CONSTRUCTION, A DISTANCE OF 3.45 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0220	01876	STANDARD HEADER CURB MOD - (HISTORICAL MIX)	110.00	LF
0225	02562	TEMPORARY SIGNS	300.00	SQFT
0230	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0235	02720	SIDEWALK-4 IN CONCRETE - (HISTORICAL MIX)	60.00	SQYD
0240	23158ES505	DETECTABLE WARNINGS - (NEW)	32.00	SQFT
0245	02569	DEMOBILIZATION	1.00	LS

JEFFERSON COUNTY THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY FD05 056 0060 000-004

	3.459		3.185	3.089	3.001	2.924	2.865	2.735		2.454	2.308	2.241	2.165	2.042	1.979	1.910		1.596	1.472	1.354	1.290	1.213	1.120		0.778	0.707		0.520		0.382		0.228	0.123		0.000	Ğ	ME	
PROJECT TOTALS	US 60A - Lexington Rd	Bauer Ave to Lexington Rd	Bauer Ave	Cornell PI	Oxford PI	lola Rd	Fairlawn Rd	Cannons Lane/Fenley Ave	Blackburn Ave to Cannons Ln	Blackburn Ave	Eastover Court	Sacred Heart Lane	Reservoir Ave	Pennsylvania Ave	Hillcrest Ave	Stilz Ave	Birchwood to Stilz Ave	Birchwood Ave	S Bayly Ave	Franck Ave	Galt Ave	Peterson Ave	Ewing Ave	Clifton to Ewing Ave	Clifton Ave	Railroad Crossing	Bellaire to Clifton Ave	Bellaire Ave	Haldeman to Bellaire Ave	Haldeman Ave	State St to Haldeman Ave	State Street	Pope Street	Mellwood Ave to Pope St	US 42 - Mellwood Ave		INTERSECTION	
5000	140		500					500		170			180		300	260		390	270		90	90	360		290	100		290		240		360	360		110	F	CROS	
3360										200			20			200		360	280		100	100	380		300			300		270		360	370		120	LF	CROSSWALK	
948	22		88					86							40	62			56	40			76		58	106		70		76		72	72		24	LF	STOP BARS	
4365		200							320	105						100	360	240	400	160	160	160	80	560			320		480		280	80	80	280		LF	TRANSVERSE	-
48			6	2	4	2	2	6			4	4	2	6	4	4																			2		≘	
2															2																					EACH	ARROWS	
4																										4										ᄕ		
88																										88										LF	RAILROAD	
190										40			30					40			40	40															YIELD BAR	
116	26																									90										LF	DOTTED LN	
1035		275							160	220			180			200																					CROSS	
55													55																							SQFT	CAP	
9																										9										EACH	BIKE	
3																										3										EACH	BIKE LANE	
6																										6										EACH	SHARED LANE CHEVRONS	

JEFFERSON COUNTY 056GR22P087 - FD05 & FE01

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Loops Summary Sheet

Project: FD05-056-0060-000-004 County: Jefferson District: D5 - Louisville

Milepoint	Intersectio n/Location	Notes	CABLE- NO. 14/1 PAIR	CONDUIT -1 1/4 IN	LOOP SAW SLOT AND FILL	LOOP WIRE	TRENCHI NG AND BACKFIL LING
0.000	US 42	WEST BOUND	100	100	204	528	100
3.459	US 60A	EAST BOUND	100	100	204	528	100
		Total:	200	200	408	1,056	200

Sidewalks & Detectable Warnings Summary Jefferson County FD05 056 0060 000-004

_	1	1		1						1			1	1		1	1			1
PROJE	Bauer Ave		Cannons I n/Fenley Ave	200	N Galt Ave)	Ewing Ave			Clifton Ave		Weikel Ave		Haldeman Ave	State Street	i obe oneer	Pone Street	US 42 - Mellwood Ave	Intersection
PROJECT TOTALS	3.185	!! 66	2 735	1.100	1 286			1 120			0.778		0.717	0.001	0 383	0.228	9.15	0 123	0.000	Mile Point
ALS	WW	NE ⁴	NW ³	NE	WW	SE	WS	NE	WW	SE	NE	WW	NW ¹	NE.	NW ¹	NW ²	NE	WN	SE ¹	Ramp Location
	3	2 x 1's	З	_	_	ω	3	သ	З	ы	2	2	_	3	_	_	З	ω	3	Ramp Type
30		18	12																	4" Sidewalk SQYD
275				10.00	10.00	25.00	25.00		15.00	20.00	20.00	20.00	15.00	22.00	16.00	12	25	20	20	4" Sidewalk HISTORICAL SQYD
65		35.00	30.00																	Header Curb Mod LF
376				20.00	20.00	30.00	25.00		25.00	25.00	20.00	20.00	25.00	30.00	25.00	25	30	30	26	Header Curb Mod HISTORICAL LF
17	12.00							5.00												Detectable Warning Retrofit SQFT
304		20.00	20.00	10.00	10.00	24.00	20.00		20.00	24.00	10.00	10.00	16.00	24	12	12	28	24	20	Detectable Warning SQFT

^{1 -} Adjust curb line for a larger radius. Will require mass concrete (minimum 8" thick) between new curb and existing pavement.

2 - Install curb extension as drainage allows to construct compliant ramp.

3 - Install curb line and ramp to allow for 48" in front of strain pole. Use 8" thick concrete for sidewalk ramp where vehicles may track over. Fill in any deficient pavement or voids with mass concrete (minimum 8" thick).

4 - Install curb line and ramp in a uniform radius, filling in void between pavement with mass concrete (minimum 8" thick). Use 8" thick concrete for sidewalk ramp where vehicles may track over.

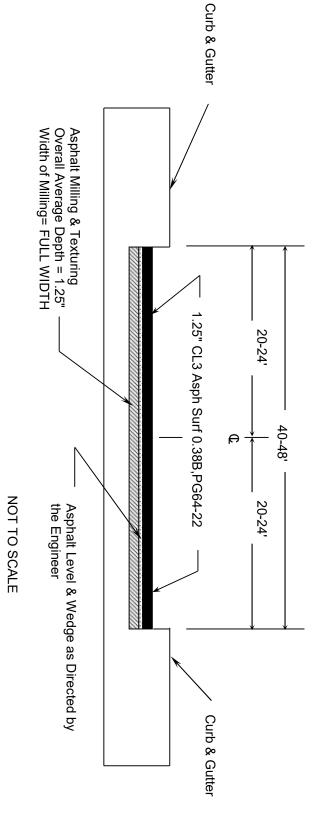
Sidewalks & Detectable Warnings Summary Jefferson County FE01 056 0060 000-004

PROJECT TOTALS		Risckhum Avo	Intersection
TOTAL	101.1	2 454	Mile Point
S	* ws	* WN	Ramp Location
	2	2 x 1's	Ramp Type
60	30	30	4" Sidewalk HISTORICAL SQYD
110	50	60	Header Curb Mod HISTORICAL LF
32	12	20	Detectable Warning SQFT

*New sidewalk and curb ramps to be installed in preparation for a new crosswalk. Coordinate ramp and crosswalk location with KYTC D5 Traffic prior to starting work.

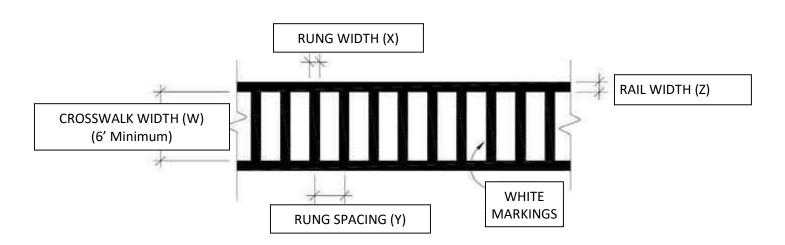
TYPICAL SECTION FD05-056-0060-000-004 JEFFERSON COUNTY

MP 0.000-3.459



Page 1

LADDER STYLE CROSSWALK DETAIL



Ladder Style Crosswalks consist of white markings that produce rails and rungs. The overall crosswalk width (W), rung width (X), rung spacing (Y), and rail width (Z) are to be installed as specified above or as specified on the plans and/or summary sheets (the latter case is typically because there are multiple crosswalks with different dimensions). If this detail, the plans, and/or summary sheets do not specify the dimensions, then construct the Ladder Style Crosswalks as directed by the District Traffic Engineer and/or the Engineer.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the sum of the lengths of the rails in linear feet and make payment under the X-Walk bid item with a description containing the applicable rail width and material type.

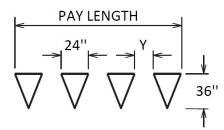
The Department will measure the sum of the lengths of the rungs in linear feet and make payment under the X-Walk bid item with a description containing the applicable rung width and material type.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Ladder Style Crosswalks under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
06565	Pave Marking-Thermo X-Walk-6 Inch	Linear Foot
06566	Pave Marking-Thermo X-Walk-12 Inch	Linear Foot
23261EC	Pave Mark-Thermo-X-Walk-24 Inch	Linear Foot
23251ES717	Pave Mark TY 1 Tape X-Walk-6 Inch	Linear Foot
23264ES717	Pave Mark TY 1 Tape X-Walk-12 Inch	Linear Foot
26164ES717	Pave Mark TY 1 Tape X-Walk-24 Inch	Linear Foot

YIELD BAR PAVEMENT MARKING DETAIL

YIELD BAR DETAILS



NOTE: SPACING (Y) BETWEEN TRIANGLES SHOULD BE 3" - 12"

Triangles should be evenly spaced. The spacing (Y) between triangles will depend on the width of the lane the yield bar is for. Unless otherwise directed by the Engineer, space the triangles according to the lane width as follows:

Lane Width	# of Triangles	Spacing (Y)
9'	4	4"
10'	4	8"
11'	5	3"
12'	5	6"

In the event of larger lane widths, install triangles on equal spacing, as close to the 3" minimum as possible.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure Yield Bars in Linear Feet. The measurement will include the void space between triangles. See Section 717.04 for additional measurement information.

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>
22520EN	Pave Marking-Thermo Yield Bar-36 Inch	Linear Foot
26165ES717	Pave Mark TY 1 Tape Yield Bar-36 IN	Linear Foot

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PART II

SPECIFICATIONS AND STANDARD DRAWINGS

Contract ID: 222577 Page 58 of 72

SPECIFICATIONS REFERENCE

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

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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

1I

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

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

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

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

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

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

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

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

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	
SHOULDER CLOSURE	TTC-135-02
PAVEMENT CONDITION WARNING SIGNS	TTD-125-02
MOBILE OPERATION FOR PAINT STRIPING CASE I	
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
MOBILE OPERATION FOR PAINT STRIPING CASE III	TTS-110-02
MOBILE OPERATION FOR PAINT STRIPING CASE IV	
DETECTABLE WARNINGS	RGX-040-03
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-150-08
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-152-08
SIDEWALK RAMPS	
CURB AND GUTTER, CURBS AND VALLEY GUTTER	RPM-100-11

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PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

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

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

I. APPLICATION

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

II. NONDISCRIMINATION OF EMPLOYEES

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

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

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

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

Revised: January 25, 2017

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EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

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

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

EMPLOYEE RIGHTS

UNDER THE FAIR LABOR STANDARDS ACT
THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

BEGINNING JULY 24, 2009

OVERTIME PAY

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

CHILD LABOR

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

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

No more than

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

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

TIP CREDIT

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

ENFORCEMENT

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

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

ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- \bullet Some state laws provide greater employee protections; employers must comply with both.
- 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.



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PART IV

INSURANCE

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

current edition

PART V

BID ITEMS

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PROPOSAL BID ITEMS

Report Date 11/7/22

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190	LEVELING & WEDGING PG64-22	385.00	TON		\$	
0020	00388	CL3 ASPH SURF 0.38B PG64-22	6,342.00	TON		\$	
0030	01876	STANDARD HEADER CURB MOD	65.00	LF		\$	
0040	01876	STANDARD HEADER CURB MOD (HISTORIC MIX)	376.00	LF		\$	
0050	02562	TEMPORARY SIGNS	2,000.00	SQFT		\$	
0060	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
070	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
080	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0090	02677	ASPHALT PAVE MILLING & TEXTURING	6,342.00	TON		\$	
0100	02720	SIDEWALK-4 IN CONCRETE	30.00	SQYD		\$	
		SIDEWALK-4 IN CONCRETE					
0110	02720	(HISTORIC MIX)	275.00	SQYD		\$	
0120	02775	ARROW PANEL	2.00	EACH		\$	
0130	04793	CONDUIT-1 1/4 IN	200.00	LF		\$	
0140	04820	TRENCHING AND BACKFILLING	200.00	LF		\$	
0150	04830	LOOP WIRE	1,056.00	LF		\$	
0160	04850	CABLE-NO. 14/1 PAIR	200.00	LF		\$	
0170	04895	LOOP SAW SLOT AND FILL	408.00	LF		\$	
0180	06510	PAVE STRIPING-TEMP PAINT-4 IN	41,570.00	LF		\$	
0190	06514	PAVE STRIPING-PERM PAINT-4 IN	5,400.00	LF		\$	
0200	06542	PAVE STRIPING-THERMO-6 IN W PAVE STRIPING-THERMO-6 IN W	48,400.00	LF		\$	
0210	06542	(EDGELINE TAPERS)	4,365.00	LF		\$	
0220	06543	PAVE STRIPING-THERMO-6 IN Y	44,100.00	LF		\$	
0230	06562	PAVE MARKING-THERMO R 6 FT	4.00	EACH		\$	
0240	06563	PAVE MARKING-R/R XBUCKS 16 IN	88.00	LF		\$	
0250	06565	PAVE MARKING-THERMO X-WALK-6 IN	5,000.00	LF		\$	
260	06568	PAVE MARKING-THERMO STOP BAR-24IN	948.00	LF		\$	
0270	06569	PAVE MARKING-THERMO CROSS-HATCH	1,035.00	SQFT		\$	
0280	06574	PAVE MARKING-THERMO CURV ARROW	48.00	EACH		\$	
0290	06575	PAVE MARKING-THERMO COMB ARROW		EACH		\$	
0300	06600	REMOVE PAVEMENT MARKER TYPE V	510.00	EACH		\$	
0310	10020NS	FUEL ADJUSTMENT	7,899.00			\$	\$7,899.00
0320	10030NS	ASPHALT ADJUSTMENT	19,841.00			\$	\$19,841.00
0330	20782NS714	PAVE MARKING THERMO-BIKE	•	EACH		\$,
0340	21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW		SQFT		\$	
0350	22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN	190.00	LF		\$	
		DETECTABLE WARNINGS					
0360	23158ES505	(NEW)	304.00	SQFT		\$	
0370	23158ES505	DETECTABLE WARNINGS (RETROFIT)	17.00	SQFT		\$	
0380	23261EC	PAVE MARK-THERMO-X-WALK-24 IN	3,360.00	LF		\$	
		PAVE MARKING THERMO-BIKE LANE ARROW					
0390	24386EC	(SHARED LANE CHEVRONS)	3.00	EACH		\$	
0400	24683ED	PAVE MARKING-THERMO DOTTED LANE EXTEN	116.00	LF		\$	

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Report Date	11/	7/22
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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
			ASPHALT MATERIAL FOR TACK NON-					
0410	24970EC		TRACKING	36.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	01876		STANDARD HEADER CURB MOD (HISTORICAL MIX)	110.00	LF		\$	
0430	02562		TEMPORARY SIGNS	300.00	SQFT		\$	
0440	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0450	02720		SIDEWALK-4 IN CONCRETE (HISTORICAL MIX)	60.00	SQYD		\$	
0460	23158ES505		DETECTABLE WARNINGS (NEW)	32.00	SQFT		\$	

Section: 0003 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	02569		DEMOBILIZATION	1.00	LS		\$	