



**CALL NO. 400**

**CONTRACT ID. 252217**

**BOONE COUNTY**

**FED/STATE PROJECT NUMBER 008GR25P059 - FD05, FE01, & FD04**

**DESCRIPTION KY 14, KY 16, & US 25 IN BOONE COUNTY**

**WORK TYPE ASPHALT RESURFACING**

**PRIMARY COMPLETION DATE 10/31/2025**

**LETTING DATE: May 22, 2025**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 22, 2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**DEFERRED PAYMENT**

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

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BID ITEMS

# **PART I**

## **SCOPE OF WORK**



ADMINISTRATIVE DISTRICT - 06

CONTRACT ID - 252217  
008GR25P059 - FD05, FE01, & FD04  
COUNTY - BOONE  
PCN - MP00800142504  
FD05 008 0014 008-009

MARY GRUBBS HIGHWAY (KY 14)(OMIT CONC. AREAS) (MP 8.056) BEGINNING AT STEPHENSON MILL ROAD  
EXTENDING EAST TO US 25 (MP 8.830), A DISTANCE OF 0.77 MILES.ASPHALT RESURFACING  
GEOGRAPHIC COORDINATES LATITUDE 38:51:31.55 LONGITUDE 84:37:01.66  
ADT 11,883

PCN - MP00800142505  
FE01 008 0014 008-009

MARY GRUBBS HIGHWAY (KY 14) (MP 8.056) BEGINNING AT STEPHENSON MILL ROAD EXTENDING EAST TO  
US 25 (MP 8.830), A DISTANCE OF 0.77 MILES.TRAFFIC SIGNAL SYSTEMS  
GEOGRAPHIC COORDINATES LATITUDE 38:51:31.55 LONGITUDE 84:37:01.66  
ADT 11,883

PCN - MP00800142506  
FD04 008 0014 008-009

MARY GRUBBS HIGHWAY (KY 14) (MP 8.056) BEGINNING AT STEPHENSON MILL ROAD EXTENDING EAST TO  
US 25 (MP 8.830), A DISTANCE OF 0.77 MILES.ASPHALT REHAB WITH GRADE & DRAIN  
GEOGRAPHIC COORDINATES LATITUDE 38:51:31.55 LONGITUDE 84:37:01.66  
ADT 11,883

PCN - MP00800162501  
FD05 008 0016 002-004

WALTON - NICHOLSON ROAD (KY 16) (MP 2.483) BEGINNING AT US 25 EXTENDING NORTH TO THE BOONE/  
KENTON COUNTY LINE (MP 3.380), A DISTANCE OF 0.89 MILES.ASPHALT RESURFACING  
GEOGRAPHIC COORDINATES LATITUDE 38:53:10.00 LONGITUDE 84:36:23.00  
ADT 7,628

PCN - MP00800252504  
FD05 008 0025 002-004

DIXIE HIGHWAY (US 25) (MP 2.582) BEGINNING AT OLD LEXINGTON PIKE/KY 2951 EXTENDING NORTH TO THE  
PAVEMENT JOINT AT LOGISTICS BOULEVARD (MP 3.993), A DISTANCE OF 01.41 MILES.ASPHALT  
RESURFACING  
GEOGRAPHIC COORDINATES LATITUDE 38:53:55.00 LONGITUDE 84:36:42.00  
ADT 6,220

COMPLETION DATE(S):  
COMPLETED BY 10/31/2025                      APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

### **INSURANCE**

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

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

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

### **JOINT VENTURE BIDDING**

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

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

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

### **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

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

foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

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

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

### **SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT**

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

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

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

### **HARDWOOD REMOVAL RESTRICTIONS**

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

### **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

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

### **ACCESS TO RECORDS**

The state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, agrees that the contracting agency, the

Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this agreement for the purpose of financial audit or program review. The Contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

### **BOYCOTT PROVISIONS**

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

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

### **LOBBYING PROHIBITIONS**

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

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

Revised: 1/1/2025

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

10/26/2023

## 1.0 BUY AMERICA REQUIREMENT.

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

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

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

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

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

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

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

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

## 2.0 – BUILD AMERICA, BUY AMERICA (BABA)

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

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

BABA permits FHWA participation in the Contract only if all “construction materials” as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials

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

10/26/2023

incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

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

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

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

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

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

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

October 26, 2023 Letting

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

10/26/2023

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

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

Date Submitted: \_\_\_\_\_

Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

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

## **SPECIAL NOTE FOR RECIPROCAL PREFERENCE**

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

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

April 30, 2018



### **DEFERRED PAYMENT**

The successful bidder on this project has the distinct understanding that payment for any work may be delayed until July 15, 2025. Work Order/Notice to Proceed will be issued in accordance the Standard Specifications for Road and Bridge Construction, current edition.

### **SURFACING AREAS (KY 14)**

The Department estimates the mainline surfacing width to be varied 70-104 feet.  
The Department estimates the total mainline area to be surfaced to be 23,976 square yards.  
The Department estimates the shoulder width to be varied 0-10 feet on each side.  
The Department estimates the total shoulder area to be surfaced to be 0 square yards.

### **SURFACING AREAS (KY 16)**

The Department estimates the mainline surfacing width to be varied 21-34 feet.  
The Department estimates the total mainline area to be surfaced to be 13,960 square yards.  
The Department estimates the shoulder width to be varied 1-4 feet on each side.  
The Department estimates the total shoulder area to be surfaced to be 2,978 square yards.

### **SURFACING AREAS (US 25)**

The Department estimates the mainline surfacing width to be varied 22-34 feet.  
The Department estimates the total mainline area to be surfaced to be 20,178square yards.  
The Department estimates the shoulder width to be 1 foot on each side.  
The Department estimates the total shoulder area to be surfaced to be 1,657 square yards.

### **ASPHALT MIXTURE**

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

### **INCIDENTAL SURFACING**

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

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

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

### **OPTION A**

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

## **Special Notes Applicable to Project General Notes & Description of Work**

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### **CAUTION**

The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an exact evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions when developing the Unit Bid Prices for each bid item. As such, if the conditions encountered are not in accordance with the information shown, the Department does not guarantee any changes to the Unit Bid Prices nor extension of the contract will be considered. The Department will pay for bid item quantity overruns, but only if pre-approved by the Engineer.

### **STATIONING**

The contractor is advised that the planned locations of work were established using the Route Milepoint Log with a beginning location at the intersection of KY 14 and KY 1292/Stephenson Mill Rd., which corresponds to Milepoint 8.056 along KY 14. **NOTE:** The existing mile marker signs may not correspond to the proposed work locations.

### **ON-SITE INSPECTION**

Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

### **RIGHT OF WAY LIMITS**

The Department has not established the exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured and environmentally cleared by the Contractor at no additional cost to the Department. In the event that private improvements (i.e., fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

### **CONTROL**

Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his/her decision shall be final and binding upon the Contractor.

General Notes & Description of Work  
Page 2 of 2

**DESCRIPTION OF WORK**

This project contains work to be paid for using multiple funding sources. The Contractor shall work with the Engineer to document work and the appropriate bid items for measurement by the Engineer. The work and funding source is listed in the following sections. Except as specified herein, perform all work in accordance with the Department's Standard Specifications, Supplemental Specifications, applicable Special Notes and Special Provisions, and applicable Standard and Sepia Drawings, current editions. Furnish all materials, labor, equipment, and incidentals for the following work:

**FD05 008 0014 008-009**

**Pavement Resurfacing.** The existing roadway is to be resurfaced from the western approach stop bar of the intersection of KY 14 and Stephenson Mill Rd. to the eastern approach stop bar of the intersection of KY 14 and US 25. Other items that may be associated with the pavement resurfacing include: removal of existing pavement by milling and texturing, leveling and wedging, application of asphalt material for tack, and construction of permanent pavement striping and markings.

**Base Failure Repairs.** An area has been identified along the route for Base Failure Repair. The repair location and dimensions listed on the Base Failure Repair Summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Refer to the Special Note for Base Failure Repair for more details on this item of work.

**Radar Presence Detectors.** Work to include the installation and activation of Radar Detection equipment as identified in this proposal, detailed in the Special Note for Radar Presence Detection, and to the satisfaction of the District Traffic Engineer.

**FD04 008 0014 008-009**

**Removal of Existing Signal Heads and Installation of Proposed Signal Heads.** Several intersections have signal heads that are to be removed and replaced with specified equipment. The Contractor should coordinate with the District Traffic Engineer to effectively and efficiently perform this work with minimal impact to corridor traffic. Refer to the Install Items List and Signal Detail Sheets as well as the Standard Drawings for Traffic Installations and Standard Specifications for more information.

**Offset Left-Turn Lanes.** Work involves the removal of existing traffic island median and the construction of new pavement for the delineation of relocated left-turn lanes. Modifications to existing drainage structures and construction of a new line of storm sewer pipe will accommodate the drainage impacted by the relocation of the left-turn lanes. Additionally, varying amounts of new pavement markings will be constructed. Refer to the Island Removal Detail Sheets, Construction Plan Sheets, Striping and Marking Detail Sheets, and Summaries for details and location information.

**FE01 008 0014 008-009**

**Removal of Existing Signal Controllers and Installation of Proposed Signal Controllers.** Several intersections have a signal controller that is to be removed and replaced with new specified equipment. The Contractor should coordinate with the District Traffic Engineer to effectively and efficiently perform this work with minimal impact to corridor traffic. Refer to the Install Items List and Signal Detail Sheets as well as the Standard Drawings for Traffic Installations and Standard Specifications for more information.

### Special Note for Staking

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Perform Contractor Staking according to Section 201; except, in addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201.03.01, perform items 1 & 2 usually performed by the Engineer.
2. Verify the dimensions, type, and quantities of the pipes and drainage structures as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
3. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.
4. Produce and furnish to the Engineer "As Built" information for the drainage improvements. As built information will consist of a final record of the actual types, sizes, and locations of the drainage structures (i.e. box inlets, headwalls, junction boxes, etc.), pipes, and/or box culverts constructed. Final elevation data of the drainage improvements is not necessary.
5. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
6. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
7. Perform any and all other staking operations required to control and construct the work.

## **SPECIAL NOTE FOR PAVEMENT MARKING MODIFICATIONS**

This Proposal may include drawings depicting anticipated pavement marking modifications along the route to be resurfaced. However, 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 two weeks prior to milling or paving in order to coordinate all desired changes between the District Striping Engineer and the Contractor. All 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 any questions are addressed to the 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 Cored Hole Drainage Box Connector

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#### I. DESCRIPTION.

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Section references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Contractor staking; (2) Site preparation; (3) Core drill a hole in the side of an existing small drainage structure to connect the outlet end of a proposed pipe, instead of constructing an outlet headwall; (4) Maintain and Control Traffic; and (5) all other work specified as part of this contract.

#### II. MATERIALS.

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these notes.

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Erosion Control.** See the Special Note for Erosion Control.
- C. Non-Shrink Grout.** Conform to Subsection 601.03.03 (B).
- D. Asphalt Mastic Joint Sealing Compound.** Conform to Section 807.
- E. Pipe.** Conform to Subsection 704.02. Furnish the same type and size as the underdrain pipe.  
**Culvert Pipe.** Furnish the same type and size as the existing culvert pipe being connected to the existing small drainage structure. Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.
- F. Flowable Fill.** Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).
- G. Styrofoam Backer Rod.** Obtain the Engineer's approval.

#### III. CONSTRUCTION.

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Erosion Control.** See the Special Note for Erosion Control.

Cored Hole Drainage Box Connector  
Page 2 of 2

- C. Site Preparation.** Be responsible for all Site Preparation, including but not limited to removing pavement; roadway excavation and structure excavation; removal of obstructions or any other items; embankment and embankment in place; ditching, shouldering, roadside regrading, reshaping, and compacting backfill material; cleaning drainage structures; obtaining borrow and waste sites; disposal of materials, waste, and debris; and restoration, cleanup, and final dressing
- D. Core Hole Drainage Box.** Cut hole by core drilling into existing drainage structure at the location, or locations, specified in the Contract or where the Engineer directs, without damaging the existing structure. Cut holes of a diameter equal to the outside diameter of the proposed pipe with a tolerance of plus 1/2 inch. Place 2 styrofoam backer rods on the pipe near each wall face and seal the opening around the pipe with mastic material or a non-shrink grout. Use wyes, tees, and ells in the pipe system to reduce the number of holes to be drilled. Patch all damage to the existing wall in the coring operation with non-shrink grout. Apply non-shrink grout according to Subsection 601.03.
- IV. MEASUREMENT.** The Department will measure the quantity by each individual unit. The Department will not measure pipe, wyes, tees, ells, styrofoam backer rods, or repair of damage to existing wall for payment and will consider them incidental to this item of work.
- V. PAYMENT.** The Department will make payment for the completed and accepted quantities under the bid item CORED HOLE DRAINAGE BOX CON (Size). The Department will consider payment as full compensation for all work required.

## **SPECIAL NOTE FOR THERMOPLASTIC MARKINGS**

The intent of the Kentucky Specifications for Road and Bridge Construction is that all markings are to be in place within 24 hours of being removed, and this can be accomplished by installing the permanent markings (unless they will be driven over with construction activities) or temporary painted markings that meet specifications for coverage and reflectivity. This includes all thermoplastic markings. Unless approved by the project engineer, any location(s) where these markings are not installed in accordance with the specifications is subject to Liquidated Damages as outlined in Section 112.03.15 of the Standard Specifications.



**Special Note for Completion Date & Liquidated Damages**

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**I. COMPLETION DATE**

All work in this Contract is to be completed in the 2025 construction season by October 31, 2025 or before. The Contractor will have the option of selecting the starting date for the work proposed within this Contract. Once a starting date is selected, notify the Department in writing of the date selected at least two weeks prior to beginning work. Once work begins, all work shall be completed and all traffic control devices removed within a maximum of 60 calendar days. Contrary to Section 108.07.03, the Engineer will begin charging calendar days for this project on the day the Contractor starts work or sets up traffic control.

**II. LIQUIDATED DAMAGES**

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **\$1000** per day for each day, or fraction of a day, if either the 60 calendar days or the October 31, 2025 date is exceeded. All construction must be completed in accordance with any and all applicable weather limitations listed in the Standard Specifications. As such, the Contractor is advised to select a starting date based on a favorable weather forecast.

NOTE: At the sole discretion of the Engineer, all, or part, of these Liquidated Damages may be waived due to unforeseen circumstances, such as unexpected weather.

Contrary to Section 108.09, Liquidated Damages will be assessed for the months of December through March.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

## **SPECIAL PROVISION FOR WASTE AND BORROW SITES**

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

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

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

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

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

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

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

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

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

### **A. Construction Requirements**

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

### **B. Data Deliverables**

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

#### **1. Asphalt Material**

##### **a. Real-time Continuous Data Items**

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

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

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

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

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

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

| <u>Code</u> | <u>Pay Item</u>                 | <u>Pay Unit</u> |
|-------------|---------------------------------|-----------------|
| 26228EC     | ELECTRONIC DELIVERY MGMT SYSTEM | LS              |

January 2024

## 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 subplot 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 subplot, 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 15<sup>th</sup>, 2022

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

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

1-3193 Coordination Contracts  
01/02/2012



## SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

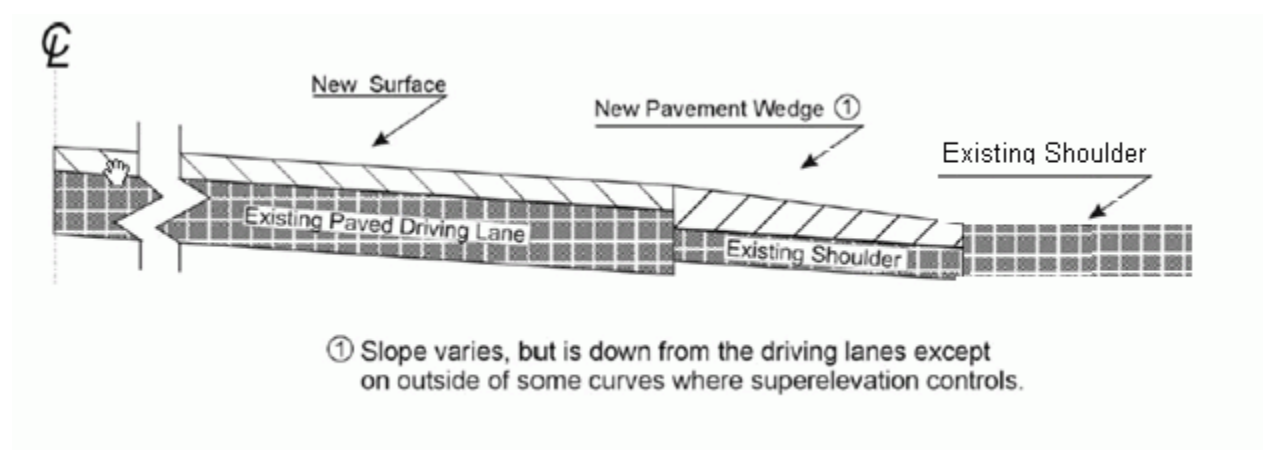
**1.0 MATERIALS.** Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

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

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

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

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



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

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

**SPECIAL NOTE FOR  
ASPHALT MILLING AND TEXTURING**

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

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

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

### **SPECIAL NOTES FOR BASE FAILURE REPAIR (KY 16 & US 25)**

Base failure repair locations will be determined by the Engineer before the resurfacing begins. Saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate approximately **9 inches** from the existing pavement level. Remove and dispose of all materials. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional costs to the Department. Waste all removed materials off the Right of Way at sites obtained by the Contractor.

Backfill the remaining area with Class 2 Asphalt Base 1.0D PG64-22 in 4 inch maximum courses up to the existing pavement surface. Seal the Asphalt Base with Leveling and Wedging. Compact each course of asphalt base to the proper compaction as required by the Section 403. 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 place new asphalt surface over repaired base failure areas until a minimum of 7 days has elapsed after placement of the final course of asphalt base. Prior to constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw his own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation of the materials encountered that are not in accord with the classification shown.

Payment at the Contract unit prices per Square Yard for "Base Failure Repair" shall be full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement, excavating and disposing of all materials, backfilling trench up to the pavement boundary, furnishing, placing the asphalt base, and all other items necessary to complete the work to the satisfaction of the Engineer. Level and wedge will be paid as per the Standard Specifications.

### **SPECIAL NOTES FOR BASE FAILURE REPAIR (KY 14)**

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 milling and/or resurfacing, saw cut the existing pavement, asphalt surface, base, DGA, and PCC pavement (if present). Excavate to an approximate depth of 15 inches below the existing pavement surface level. Use all possible care to avoid damaging existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department. Remove and dispose of all materials off the Right-of-way at sites obtained by the Contractor at no additional cost to the Department.

On the same day trench is excavated, construct Geogrid Reinforcement across the trench bottom and backfill the excavated area with 4 inches of compacted DGA. Backfill the remaining area with JPC Pavement to flush with the existing pavement surface. Concrete mix for the JPC Pavement shall be a 24-hour curing, 3,500-psi compression strength design. Refer to Section 501 for all other requirements and constructability details pertaining to JPC Pavement.

Perform all base failure repairs in such a manner that removal and replacement are completed on the same day.

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 as full compensation for all labor, materials, equipment, and incidentals for saw cutting pavement and excavating and disposing of all materials; furnishing and placing geogrid reinforcement and dense graded aggregate; JPC pavement up to the pavement boundary; and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3616 basefailurerepairpaybysy

## **SPECIAL NOTES FOR TRAFFIC ISLAND REMOVAL (KY 14)**

Remove existing traffic islands as shown on the drawings, listed in the summary, or as directed by the Engineer. Saw cut the existing pavement, asphalt surface, base, DGA and PCC pavement (if present). Excavate to an approximate depth of 8 inches below the existing adjacent pavement level. Remove and dispose of all materials off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. Do not damage existing culvert pipes and any existing underground utilities. Repair or restore any damaged items at no additional cost to the Department.

Backfill the excavated area with Class 3 Asphalt Base 1.00D PG64-22 in 4 inch maximum courses up to the existing pavement surface. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Perform all traffic island removal operations in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over replaced traffic island areas until a minimum of 14 calendar days have elapsed after placement of the asphalt base.

After a minimum of 14 calendar days and when the Engineer determines the 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 his or her own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

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

### **SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS**

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

1-3725 Typical Section Dimensions  
01/02/2012

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, Supplemental 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 shall 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

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 for KY 14, KY 16, and US 25; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus 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 will allow night work on KY 14 only. Normal hours of operation for KY 16 and US 25. 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.

Unless otherwise approved by the Engineer, no lane closures will be allowed during the following times:

|                      |   |
|----------------------|---|
| Easter Weekend       | 3 pm Friday, April 18, 2025 – 8 pm Sunday, April 20, 2025     |
| Memorial Day Weekend | 3 pm Friday, May 23, 2025 – 8 pm Monday, May 26, 2025         |
| Independence Day     | 7 am Friday, July 4, 2025 – 8 pm Sunday, July 6, 2025         |
| Labor Day Weekend    | 3 pm Friday, August 29, 2025 – 8 pm Monday, September 1, 2025 |

Do NOT erect lane closures for KY 14 during the following days and/or hours:

Normal Workday Rush Hours

Monday-Friday 6:00 AM – 9:00 AM, and 3:00 PM – 6:00 PM, daily

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed.

The Department will provide public notification regarding lane closures. The Contractor shall submit proposed lane closure days and times to the Engineer at least 14 calendar days in advance for approval. Liquidated Damages will be assessed for each hour or fraction of an hour that a lane closure is in place outside of an approved time period. See the Special Notes for Completion Dates & Liquidated Damages for details on the Liquidated Damages amount.

Traffic Control Plan  
Page 2 of 9

## **LANE CLOSURES**

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 and prohibited periods.

## **TEMPORARY SIGNS**

Temporary signposts 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 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 approximately 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. If the damage or mechanical/electrical failure is identified during active work operations, repair or replace the Changeable Message Sign within 6 hours. If the damage or mechanical/electrical failure is identified when there are no active work operations on the project, repair or replace the Changeable Message Sign within 12 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/or relocated during the duration of the project. The Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to 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 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.



Traffic Control Plan  
Page 3 of 9

## **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.

## **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.

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. Access to fire hydrants must also be maintained at all times

## **THERMOPLASTIC INTERSECTION MARKINGS**

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

## **PAVEMENT MARKINGS**

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

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

## **PAVEMENT EDGE DROP-OFFS**

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

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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 Engineer.

## 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 ensuring 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 ensure 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:

| <b><u>Word</u></b>  | <b><u>Abbrev</u></b> | <b><u>Example</u></b>               |
|---------------------|----------------------|-------------------------------------|
| Access              | ACCS                 | CRASH AHEAD/ USE ACCS RD NEXT RIGHT |
| Alternate           | ALT                  | CRASH 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                  | CRASH ON AA HWY/ EXPECT DELAYS      |
| Hour                | HR                   | CRASH 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 I75/ USE ALT RTE         |
| Mile                | MI                   | CRASH 3 MI AHEAD/ USE ALT RTE       |
| Minor               | MNR                  | CRASH 3 MI MNR DELAY                |
| Minutes             | MIN                  | CRASH 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                 | CRASH 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 I75/ USE ALT RTE         |
| Shoulder            | SHLDR                | SHLDR CLOSED NEXT 5 MI              |
| Slippery            | SLIP                 | SLIP COND POSSIBLE/ SLOW SPD        |
| Southbound          | S-BND                | S-BND I75 CLOSED/ DETOUR EXIT 50    |
| Speed               | SPD                  | SLIP COND POSSIBLE/ SLOW SPD        |

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**Standard Abbreviations** (cont.)

| <u>Word</u> | <u>Abbrev</u> | <u>Example</u>                      |
|-------------|---------------|-------------------------------------|
| 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 NOT USE THESE ABBREVIATIONS:

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

**Typical Messages**

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

| <u>Reason/Problem</u>        | <u>Action</u>       |
|------------------------------|---------------------|
| CRASH AHEAD                  | ALL TRAFFIC EXIT RT |
| CRASH/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        |

Typical Messages (cont.)

| Reason/Problem   | Action             |
|--|--------------------|
| FOG XX MILES   | PASS TO RIGHT      |
| FREEWAY CLOSED   | PREPARE TO STOP    |
| FRESH OIL  | REDUCE SPEED       |
| HAZMAT SPILL   | SLOW               |
| ICE  | SLOW DOWN          |
| INCIDENT AHEAD   | STAY IN LANE       |
| LANES (NARROW, SHIFT, MERGE, ETC.)                           | STOP AHEAD         |
| LEFT LANE CLOSED   | STOP XX MILES      |
| LEFT LANE NARROWS  | TUNE RADIO 1610 AM |
| LEFT 2 LANES CLOSED  | USE NN ROAD        |
| LEFT SHOULDER CLOSED   | USE CENTER LANE    |
| LOOSE GRAVEL   | USE DETOUR ROUTE   |
| MEDIAN WORK XX MILES   | USE LEFT TURN LANE |
| MOVING WORK ZONE, WORKERS IN ROADWAY                         | USE NEXT EXIT      |
| NEXT EXIT CLOSED   | USE RIGHT LANE     |
| NO OVERSIZED LOADS   | WATCH FOR FLAGGER  |
| NO PASSING   |                    |
| NO SHOULDER  |                    |
| ONE LANE BRIDGE  |                    |
| PEOPLE CROSSING  |                    |
| RAMP CLOSED  |                    |
| RAMP (SLIPPERY, ICE, ETC.)                                   |                    |
| 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  |                    |

DRAWING NOT TO SCALE



## **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 Subsection 723.03.17 (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).

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- 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:

| <u>Code</u>                     | <u>Pay Item</u> | <u>Pay Unit</u> |
|---------------------------------|-----------------|-----------------|
| Conduit 1”                      | 4792            | Linear Foot     |
| PVC Conduit – 1 ¼ inch – sch 80 | 24900EC         | Linear Foot     |

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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 <sup>1</sup> |
| Loop Saw Slot and Fill         | 4895    | Linear Foot <sup>1</sup> |
| Bore and Jack Conduit          | 21543EN | Linear Foot <sup>3</sup> |
| Open Cut Roadway               | 4821    | Linear Foot <sup>3</sup> |
| Remove Signal Equipment        | 24955ED | each                     |

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

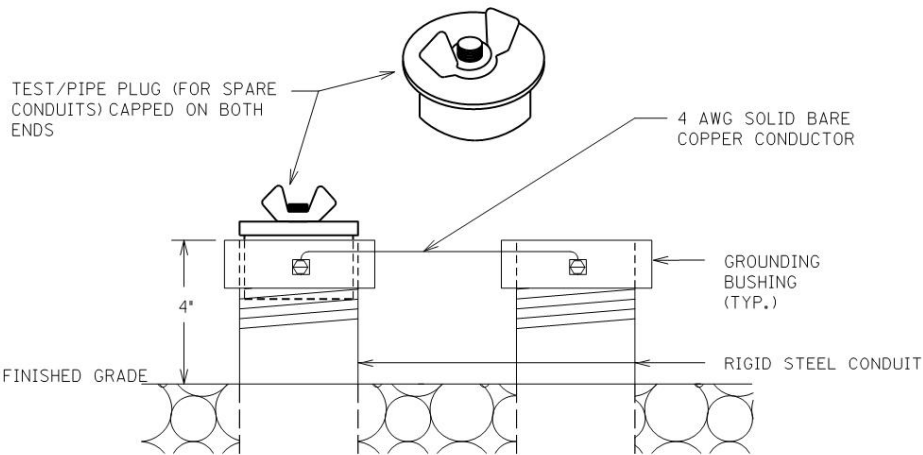
Contrary to section 723:

SUBSECTION:       03.13 Loop Installation.

REVISION:        Replace first sentence note with the following:

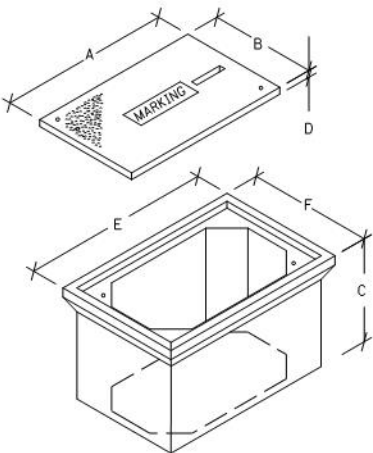
twist unshielded loop wire (imsa 51-7) with 3 to 5 turns from the start of homerun to the inside conduit, junction box, cabinet, or pole. Twist unshielded loop wires (imsa 51-7) with 3 to 5 turns per foot from the start of the homerun to the junction box, cabinet, or pole. Slot can be widen to .5" to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

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

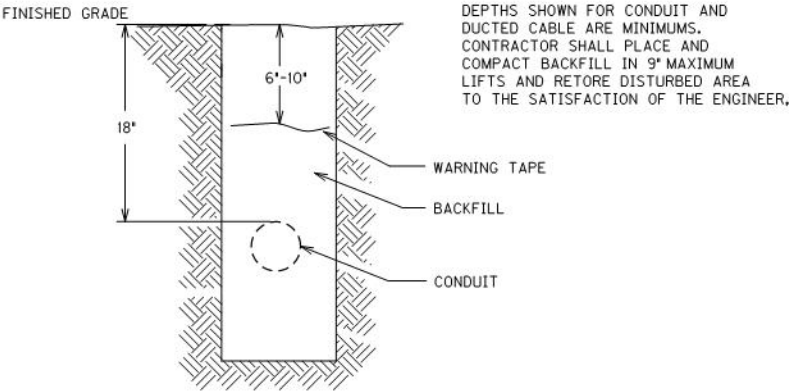
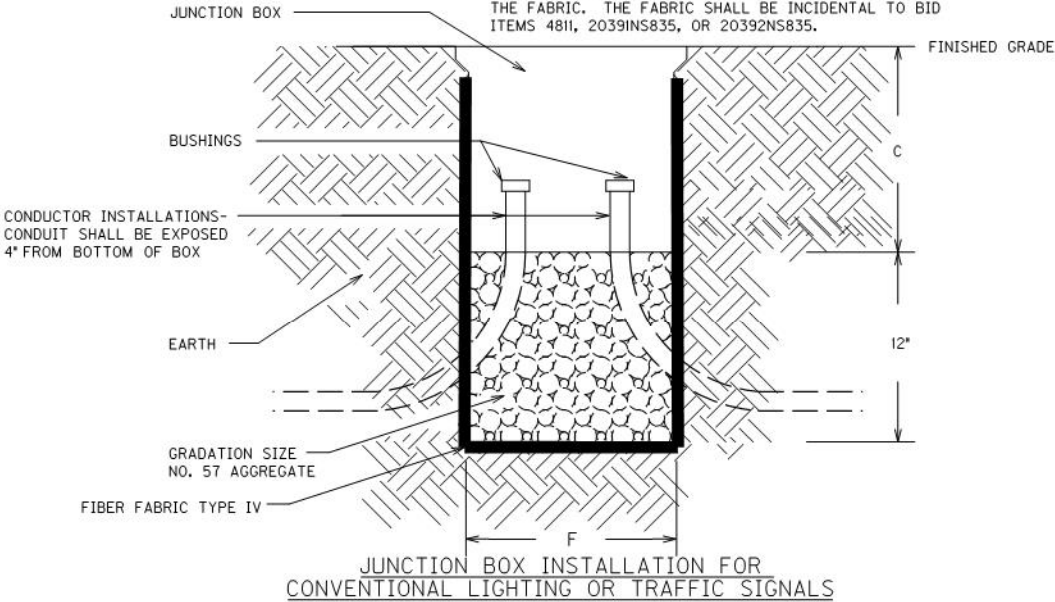
Traffic Signal Loop Detectors  
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| JUNCTION BOX DIMENSIONS (NOMINAL) |     |     |     |        |     |     |
|-----------------------------------|-----|-----|-----|--------|-----|-----|
|                                   | A   | B   | C   | D      | E   | F   |
| TYPE A                            | 23" | 14" | 27" | 2"     | 25" | 15" |
| TYPE B                            | 18" | 11" | 12" | 1 3/4" | 20" | 13" |
| TYPE C                            | 36" | 24" | 30" | 3"     | 38" | 26" |

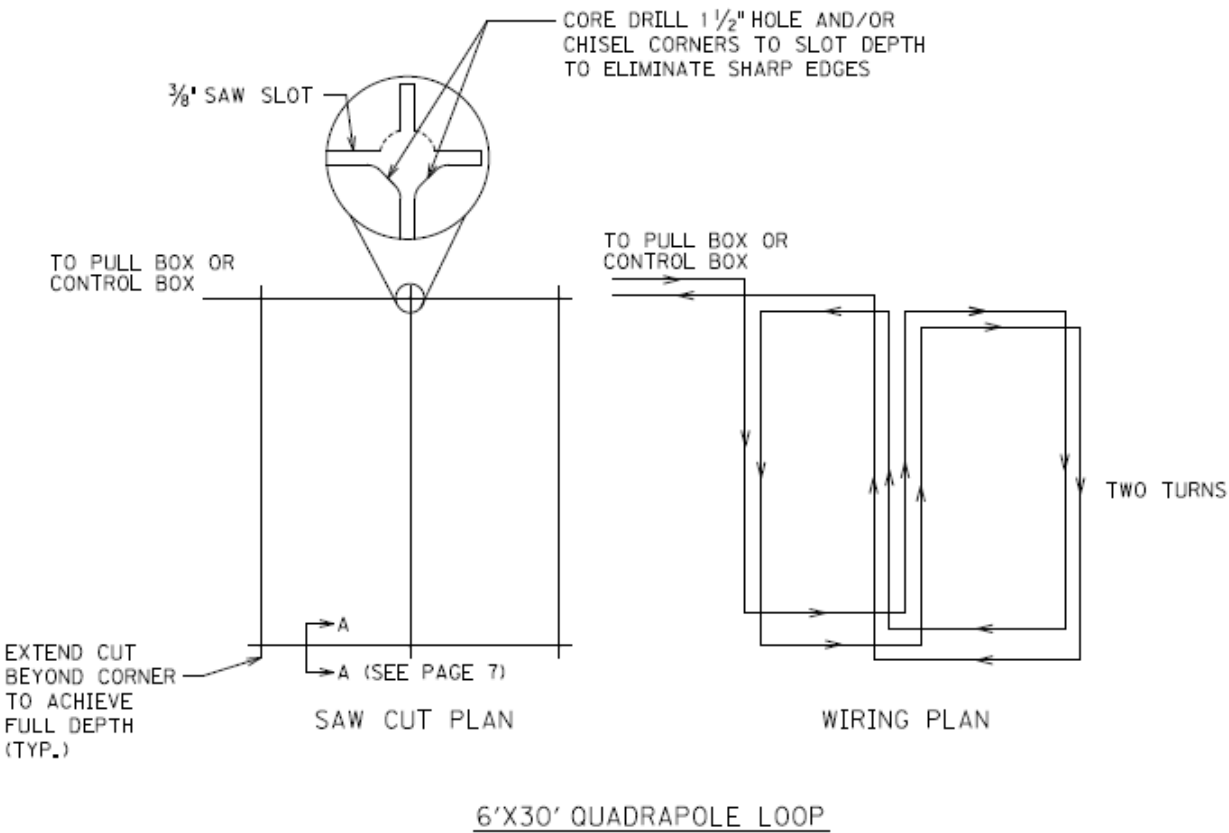
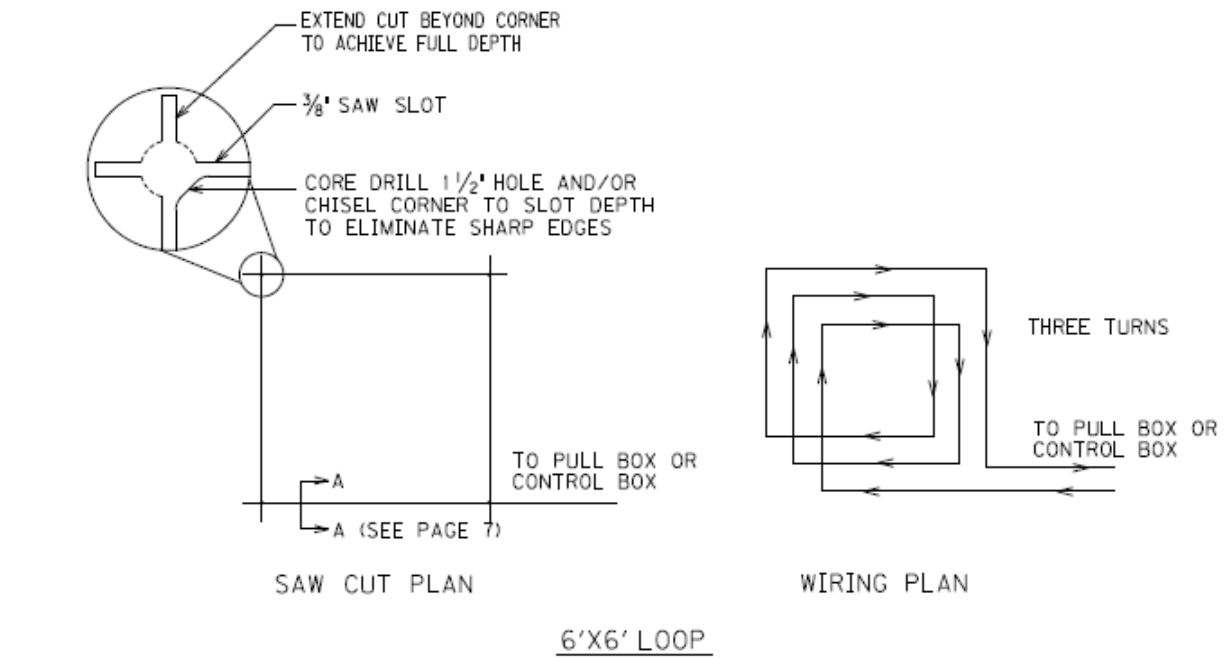
• MINIMUM  
NOTE: STACKABLE BOXES ARE PERMITTED

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.

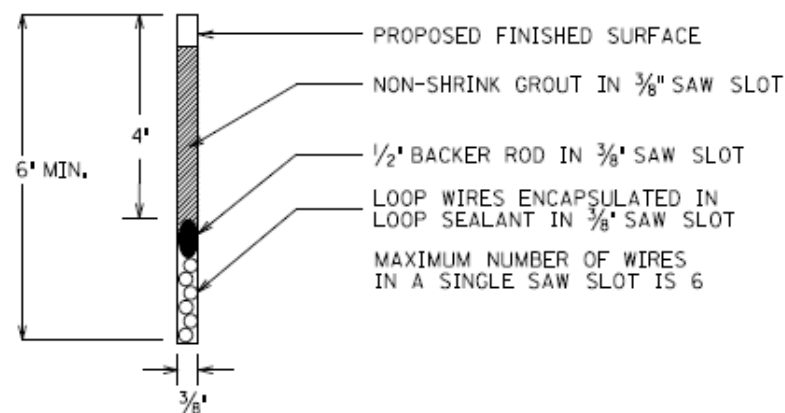


CONDUIT AND WARNING TAPE TRENCH

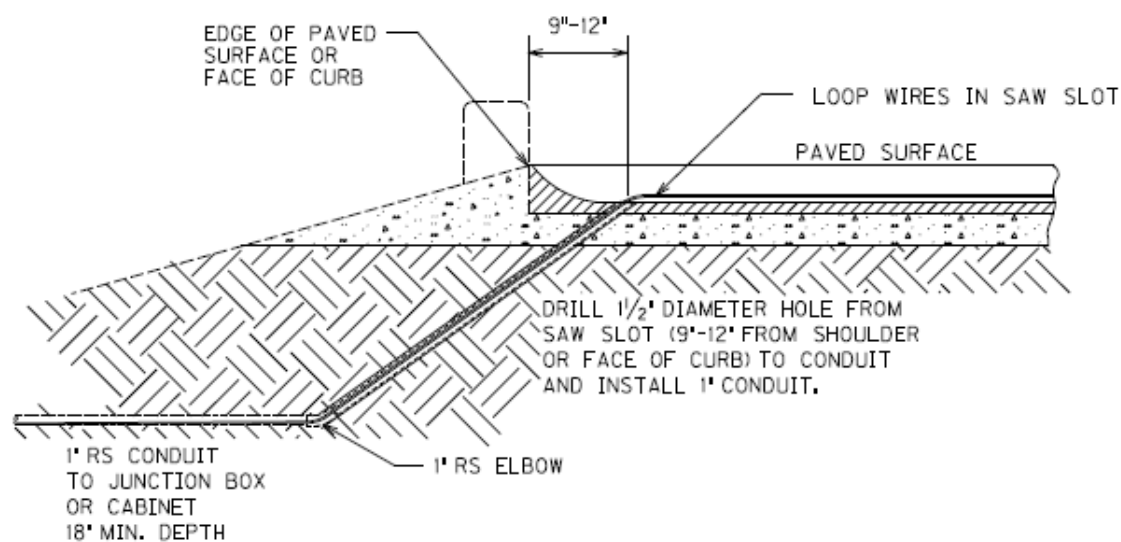
Traffic Signal Loop Detectors  
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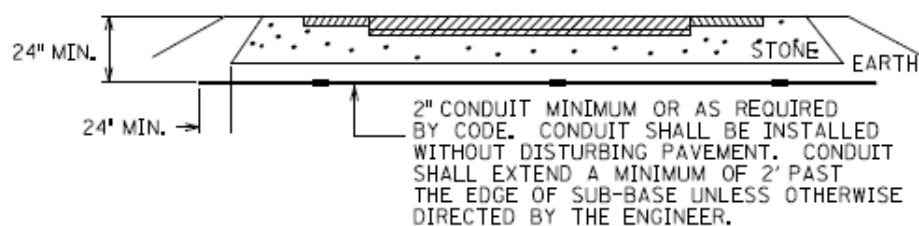
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SECTION A-A (SAW SLOT DETAIL)

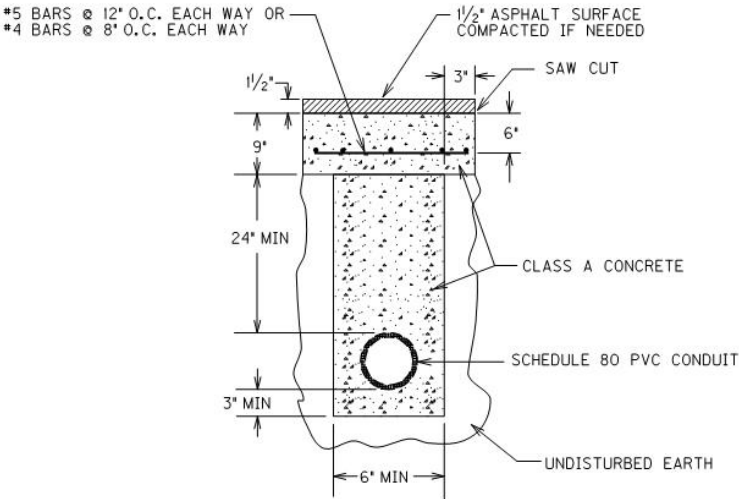


SAW SLOT EDGE OF PAVEMENT TRANSITION

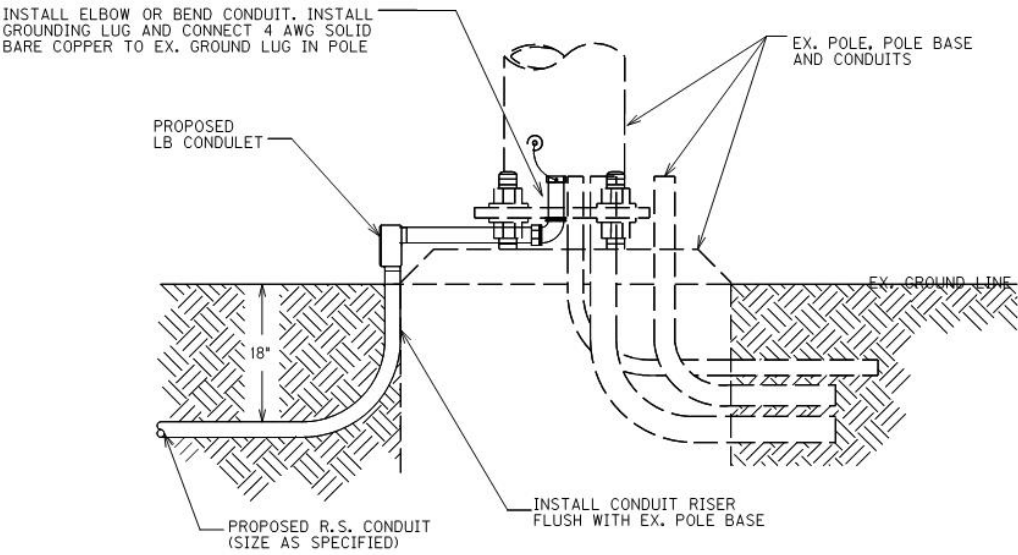


CONDUIT UNDER EXISTING PAVEMENT DETAIL

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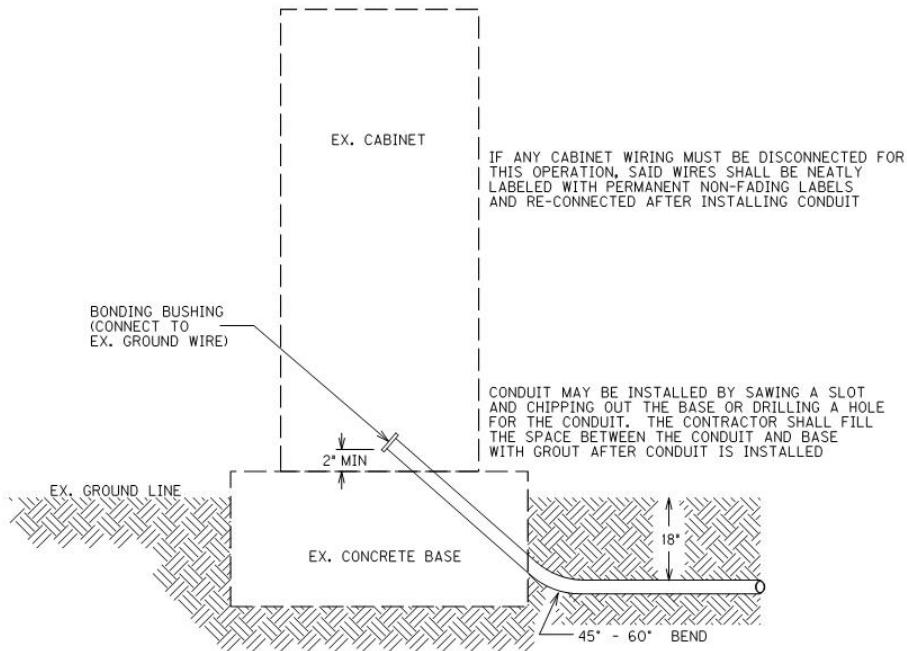
OPEN CUT PAVEMENT DETAIL



CONDUIT INSTALLATION IN EX. POLE BASE



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CONDUIT INSTALLATION IN EX. CABINET BASE

Update: 4-5-2022

## **INSTALL RADAR PRESENCE DETECTOR TYPE A**

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

March 25, 2025

## **SPECIAL NOTE FOR EROSION CONTROL (KY 14)**

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### **I. DESCRIPTION**

Perform all erosion and water pollution control work in accordance with the Department's Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

### **II. MATERIALS**

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

### **III. CONSTRUCTION**

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and

## Erosion Control

### Page 2 of 4

local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

#### IV. MEASUREMENT

**Erosion Control Blanket.** If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

**Sodding.** If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

**Channel Lining.** If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

**Erosion Control.** Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will measure Erosion Control as one lump sum. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to Erosion Control.

#### V. Basis of Payment

**Erosion Control Blanket.** If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

**Sodding.** If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

**Channel Lining.** If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

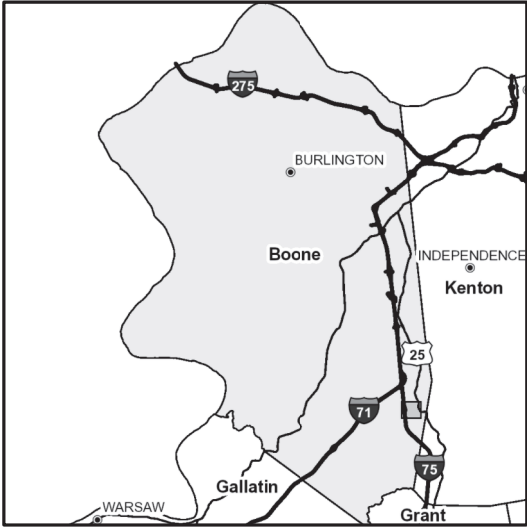
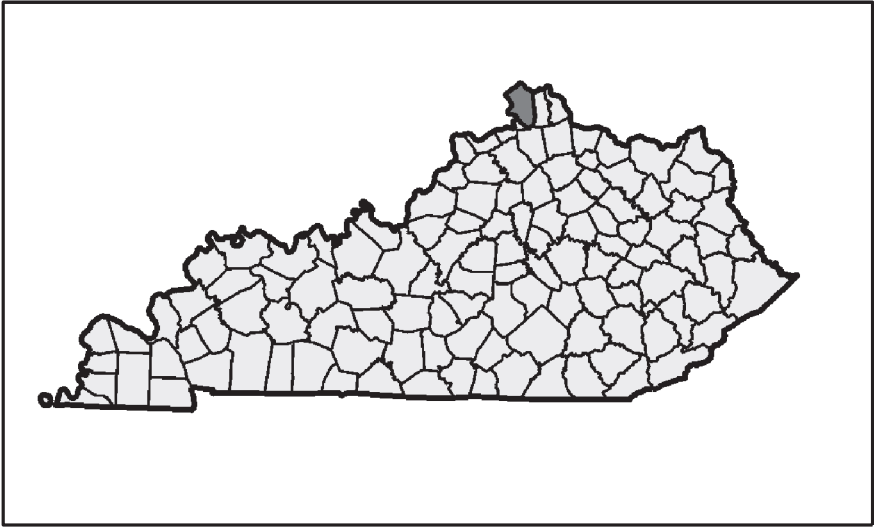
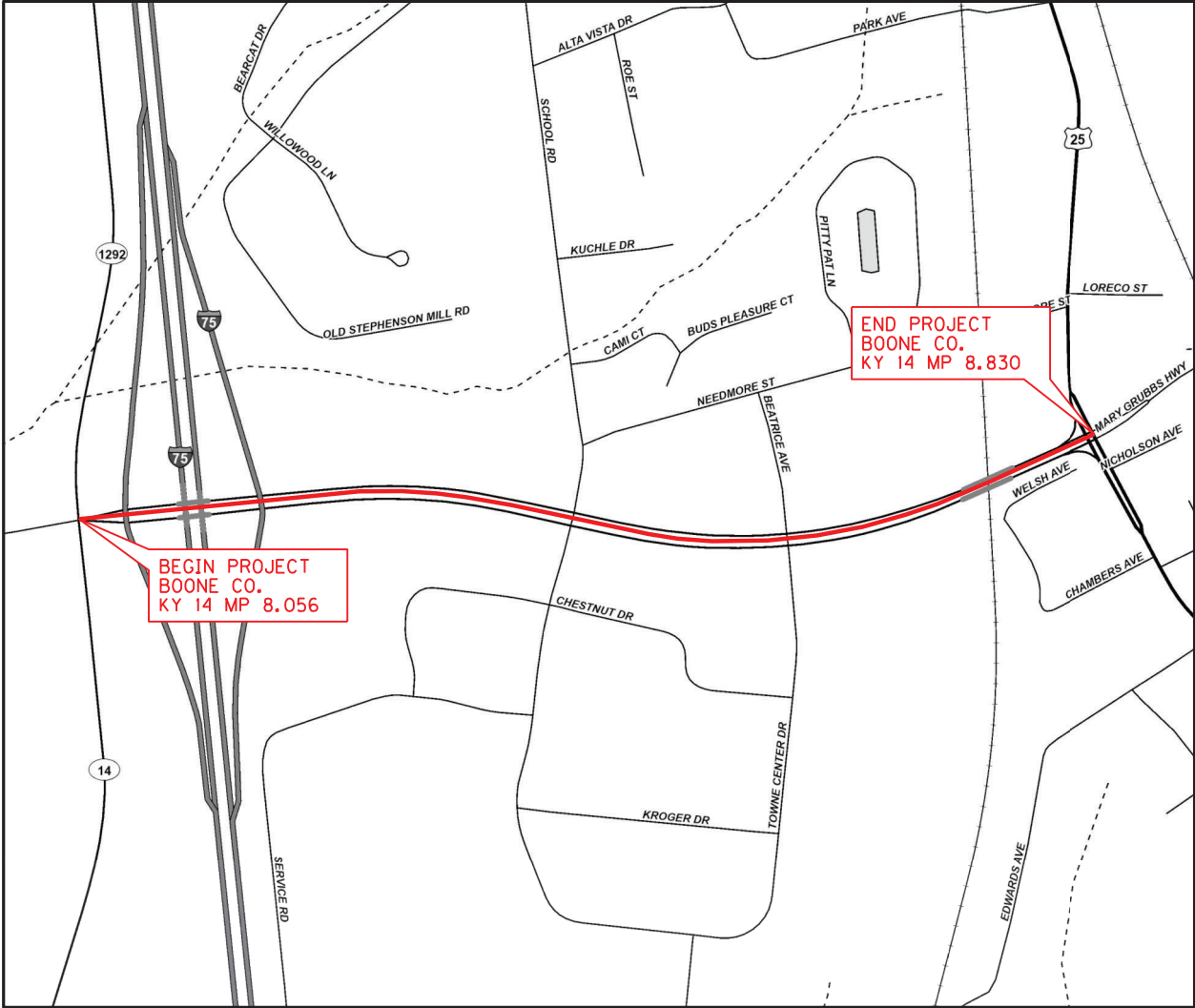
Erosion Control  
Page 4 of 4

**Erosion Control.** Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for Erosion Control, shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric and all other erosion and water pollution control items required by the BMP or the Engineer.

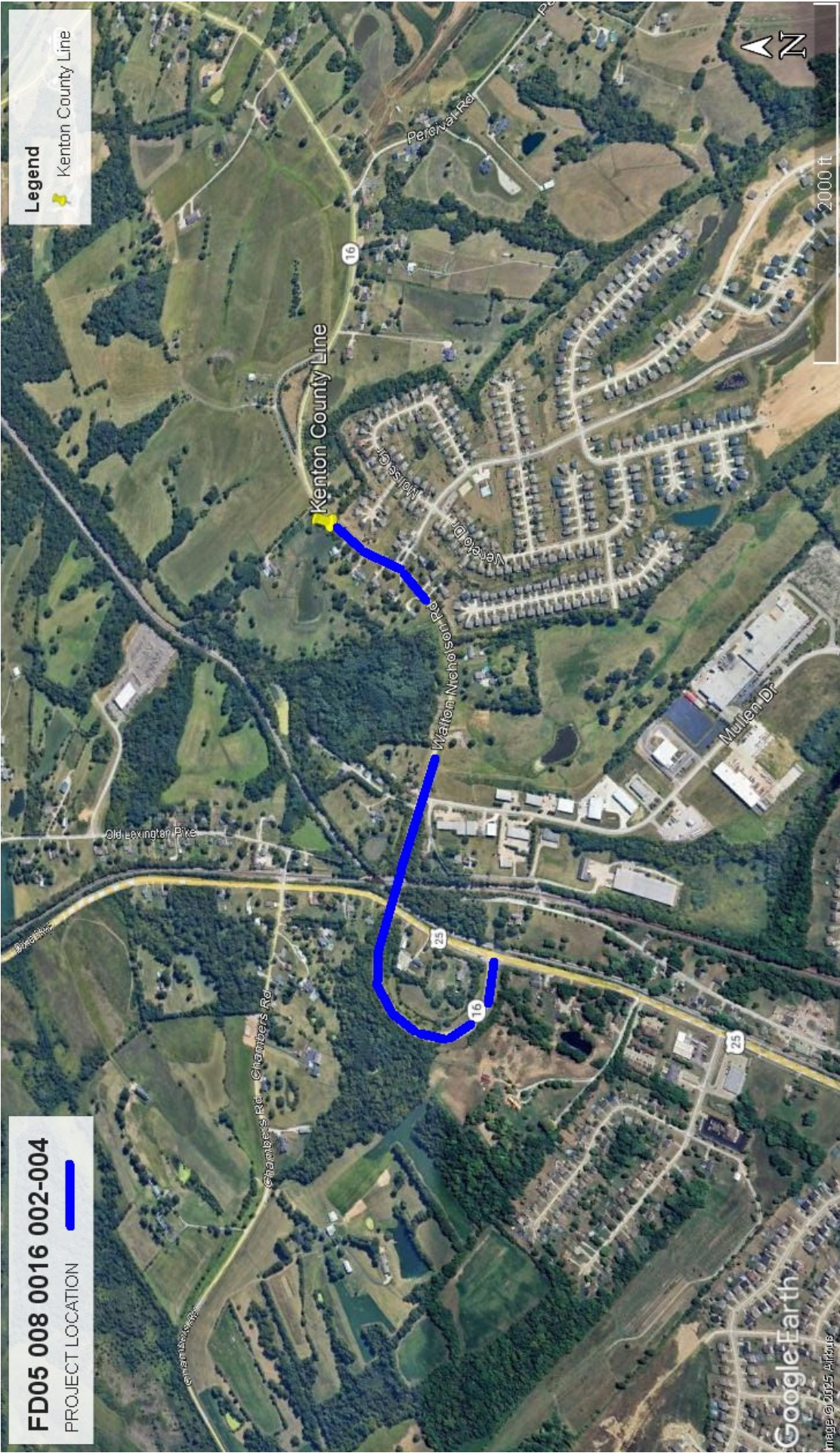
1-561 erosion Control Note for Maintenance Projects  
06/08/2012

Commonwealth of Kentucky  
DEPARTMENT OF HIGHWAYS  
PLANS OF  
PROPOSED PROJECT  
CORRIDOR IMPROVEMENTS  
BOONE COUNTY  
KY 14

| COUNTY OF | ITEM NO.              |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |











MATERIAL SUMMARY

CONTRACT ID: 252217

008GR25P059 - FD05, FE01, & FD04

MP00800142504

MARY GRUBBS HIGHWAY (KY 14)(OMIT CONC. AREAS) BEGINNING AT STEPHENSON MILL ROAD  
EXTENDING EAST TO US 25 ASPHALT RESURFACING, A DISTANCE OF .77 MILES.

| Project<br>Line No | Bid Code   | DESCRIPTION                                      | Quantity  | Unit |
|--------------------|------------|--|-----------|------|
| 0225               | 00190      | LEVELING & WEDGING PG64-22                       | 50.00     | TON  |
| 0230               | 00356      | ASPHALT MATERIAL FOR TACK                        | 11.00     | TON  |
| 0235               | 00388      | CL3 ASPH SURF 0.38B PG64-22                      | 1,735.00  | TON  |
| 0240               | 02562      | TEMPORARY SIGNS                                  | 270.00    | SQFT |
| 0245               | 02650      | MAINTAIN & CONTROL TRAFFIC - (KY 14 - FD05)      | 1.00      | LS   |
| 0250               | 02671      | PORTABLE CHANGEABLE MESSAGE SIGN                 | 3.00      | EACH |
| 0255               | 02676      | MOBILIZATION FOR MILL & TEXT - (KY 14 - FD05)    | 1.00      | LS   |
| 0260               | 02677      | ASPHALT PAVE MILLING & TEXTURING                 | 1,735.00  | TON  |
| 0265               | 02775      | ARROW PANEL                                      | 2.00      | EACH |
| 0270               | 03240      | BASE FAILURE REPAIR                              | 140.00    | SQYD |
| 0275               | 06510      | PAVE STRIPING-TEMP PAINT-4 IN                    | 18,390.00 | LF   |
| 0280               | 06514      | PAVE STRIPING-PERM PAINT-4 IN                    | 18,390.00 | LF   |
| 0285               | 06516      | PAVE STRIPING-PERM PAINT-8 IN                    | 435.00    | LF   |
| 0290               | 06517      | PAVE STRIPING-PERM PAINT-12 IN                   | 31.00     | LF   |
| 0295               | 06565      | PAVE MARKING-THERMO X-WALK-6 IN                  | 424.00    | LF   |
| 0300               | 06568      | PAVE MARKING-THERMO STOP BAR-24IN                | 339.00    | LF   |
| 0305               | 06569      | PAVE MARKING-THERMO CROSS-HATCH                  | 682.00    | SQFT |
| 0310               | 06573      | PAVE MARKING-THERMO STR ARROW                    | 2.00      | EACH |
| 0315               | 06574      | PAVE MARKING-THERMO CURV ARROW                   | 27.00     | EACH |
| 0320               | 06575      | PAVE MARKING-THERMO COMB ARROW                   | 2.00      | EACH |
| 0325               | 06576      | PAVE MARKING-THERMO ONLY                         | 2.00      | EACH |
| 0330               | 10020NS    | FUEL ADJUSTMENT                                  | 2,778.00  | DOLL |
| 0335               | 10030NS    | ASPHALT ADJUSTMENT                               | 6,979.00  | DOLL |
| 0340               | 20099ES842 | PAVE MARK TEMP PAINT STOP BAR                    | 339.00    | LF   |
| 0345               | 20100ES842 | PAVE MARK TEMP PAINT LINE ARROW                  | 27.00     | EACH |
| 0350               | 23261EC    | PAVE MARK-THERMO-X-WALK-24 IN                    | 352.00    | LF   |
| 0355               | 24679ED    | PAVE MARK THERMO CHEVRON                         | 287.00    | SQFT |
| 0360               | 26119EC    | INSTALL RADAR PRESENCE DETECTOR TYPE A           | 20.00     | EACH |
| 0365               | 26228EC    | ELECTRONIC DELIVERY MGMT SYSTEM - (KY 14 - FD05) | 1.00      | LS   |
| 0370               | 02569      | DEMOBILIZATION                                   | 1.00      | LS   |



MATERIAL SUMMARY

CONTRACT ID: 252217                      008GR25P059 - FD05, FE01, & FD04                      MP00800142505

MARY GRUBBS HIGHWAY (KY 14) BEGINNING AT STEPHENSON MILL ROAD EXTENDING EAST TO US 25 TRAFFIC SIGNAL SYSTEMS, A DISTANCE OF .77 MILES.

| Project Line No | Bid Code | DESCRIPTION                      | Quantity | Unit |
|-----------------|----------|----------------------------------|----------|------|
| 0375            | 24908EC  | INSTALL SIGNAL CONTROLLER-TY ATC | 4.00     | EACH |
| 0380            | 24955ED  | REMOVE SIGNAL EQUIPMENT          | 4.00     | EACH |

CONTRACT ID: 252217                      008GR25P059 - FD05, FE01, & FD04                      MP00800142506

MARY GRUBBS HIGHWAY (KY 14) BEGINNING AT STEPHENSON MILL ROAD EXTENDING EAST TO US 25 ASPHALT REHAB WITH GRADE & DRAIN, A DISTANCE OF .77 MILES.

| Project Line No | Bid Code   | DESCRIPTION                                 | Quantity | Unit |
|-----------------|------------|---|----------|------|
| 0385            | 01810      | STANDARD CURB AND GUTTER                    | 100.00   | LF   |
| 0390            | 02562      | TEMPORARY SIGNS                             | 100.00   | SQFT |
| 0395            | 02650      | MAINTAIN & CONTROL TRAFFIC - (KY 14 - FD04) | 1.00     | LS   |
| 0400            | 02671      | PORTABLE CHANGEABLE MESSAGE SIGN            | 4.00     | EACH |
| 0405            | 02726      | STAKING - (KY 14 - FD04)                    | 1.00     | LS   |
| 0410            | 08100      | CONCRETE-CLASS A                            | 2.00     | CUYD |
| 0415            | 20997ED    | REMOVE TRAFFIC ISLAND                       | 815.00   | SQYD |
| 0420            | 21415ND    | EROSION CONTROL - (KY 14 - FD04)            | 1.00     | LS   |
| 0425            | 00521      | STORM SEWER PIPE-15 IN                      | 205.00   | LF   |
| 0430            | 01456      | CURB BOX INLET TYPE A                       | 1.00     | EACH |
| 0435            | 01585      | REMOVE DROP BOX INLET - (TOP PHASE ONLY)    | 2.00     | EACH |
| 0440            | 01789      | RECONSTRUCT MANHOLE                         | 2.00     | EACH |
| 0445            | 23822EC    | CORED HOLE DRAINAGE BOX CON-15 IN           | 1.00     | EACH |
| 0450            | 20188NS835 | INSTALL LED SIGNAL-3 SECTION                | 4.00     | EACH |
| 0455            | 20266ES835 | INSTALL LED SIGNAL- 4 SECTION               | 4.00     | EACH |
| 0460            | 24955ED    | REMOVE SIGNAL EQUIPMENT                     | 4.00     | EACH |
| 0465            | 02569      | DEMOBILIZATION                              | 1.00     | LS   |

MATERIAL SUMMARY

CONTRACT ID: 252217                      008GR25P059 - FD05, FE01, & FD04                      MP00800162501

WALTON - NICHOLSON ROAD (KY 16) BEGINNING AT US 25 EXTENDING NORTH TO THE BOONE/KENTON COUNTY LINE ASPHALT RESURFACING, A DISTANCE OF .89 MILES.

| Project Line No | Bid Code | DESCRIPTION                               | Quantity  | Unit |
|-----------------|----------|---|-----------|------|
| 0105            | 00388    | CL3 ASPH SURF 0.38B PG64-22               | 1,175.00  | TON  |
| 0110            | 00356    | ASPHALT MATERIAL FOR TACK                 | 7.00      | TON  |
| 0115            | 02562    | TEMPORARY SIGNS                           | 230.00    | SQFT |
| 0120            | 02650    | MAINTAIN & CONTROL TRAFFIC - (KY 16)      | 1.00      | LS   |
| 0125            | 02676    | MOBILIZATION FOR MILL & TEXT - (KY 16)    | 1.00      | LS   |
| 0130            | 02677    | ASPHALT PAVE MILLING & TEXTURING          | 1,175.00  | TON  |
| 0135            | 02697    | EDGE LINE RUMBLE STRIPS                   | 9,400.00  | LF   |
| 0140            | 03240    | BASE FAILURE REPAIR                       | 85.00     | SQYD |
| 0145            | 04793    | CONDUIT-1 1/4 IN                          | 50.00     | LF   |
| 0150            | 04811    | ELECTRICAL JUNCTION BOX TYPE B            | 1.00      | EACH |
| 0155            | 04830    | LOOP WIRE                                 | 672.00    | LF   |
| 0160            | 04850    | CABLE-NO. 14/1 PAIR                       | 50.00     | LF   |
| 0165            | 04895    | LOOP SAW SLOT AND FILL                    | 254.00    | LF   |
| 0170            | 06510    | PAVE STRIPING-TEMP PAINT-4 IN             | 19,000.00 | LF   |
| 0175            | 06515    | PAVE STRIPING-PERM PAINT-6 IN             | 19,000.00 | LF   |
| 0180            | 06568    | PAVE MARKING-THERMO STOP BAR-24IN         | 38.00     | LF   |
| 0185            | 06574    | PAVE MARKING-THERMO CURV ARROW            | 4.00      | EACH |
| 0190            | 10020NS  | FUEL ADJUSTMENT                           | 1,572.00  | DOLL |
| 0195            | 10030NS  | ASPHALT ADJUSTMENT                        | 3,949.00  | DOLL |
| 0200            | 20208NC  | PAVE MARK-PAINT ARROWS                    | 4.00      | EACH |
| 0205            | 23010EN  | PAVE MARK TEMP PAINT STOP BAR-24 IN       | 38.00     | LF   |
| 0210            | 24963ED  | LOOP TEST                                 | 2.00      | EACH |
| 0215            | 26228EC  | ELECTRONIC DELIVERY MGMT SYSTEM - (KY 16) | 1.00      | LS   |
| 0220            | 02569    | DEMOBILIZATION                            | 1.00      | LS   |

MATERIAL SUMMARY

CONTRACT ID: 252217

008GR25P059 - FD05, FE01, & FD04

MP00800252504

DIXIE HIGHWAY (US 25) BEGINNING AT OLD LEXINGTON PIKE/KY 2951 EXTENDING NORTH TO THE PAVEMENT JOINT AT LOGISTICS BOULEVARD ASPHALT RESURFACING, A DISTANCE OF 1.41 MILES.

| Project Line No | Bid Code   | DESCRIPTION                               | Quantity  | Unit |
|-----------------|------------|---|-----------|------|
| 0005            | 00190      | LEVELING & WEDGING PG64-22                | 22.00     | TON  |
| 0010            | 00356      | ASPHALT MATERIAL FOR TACK                 | 10.00     | TON  |
| 0015            | 00388      | CL3 ASPH SURF 0.38B PG64-22               | 1,510.00  | TON  |
| 0020            | 02562      | TEMPORARY SIGNS                           | 190.00    | SQFT |
| 0025            | 02650      | MAINTAIN & CONTROL TRAFFIC - (US 25)      | 1.00      | LS   |
| 0030            | 02676      | MOBILIZATION FOR MILL & TEXT - (US 25)    | 1.00      | LS   |
| 0035            | 02677      | ASPHALT PAVE MILLING & TEXTURING          | 1,510.00  | TON  |
| 0040            | 02697      | EDGE LINE RUMBLE STRIPS                   | 14,900.00 | LF   |
| 0045            | 03240      | BASE FAILURE REPAIR                       | 220.00    | SQYD |
| 0050            | 06510      | PAVE STRIPING-TEMP PAINT-4 IN             | 31,000.00 | LF   |
| 0055            | 06515      | PAVE STRIPING-PERM PAINT-6 IN             | 31,000.00 | LF   |
| 0060            | 06568      | PAVE MARKING-THERMO STOP BAR-24IN         | 24.00     | LF   |
| 0065            | 06574      | PAVE MARKING-THERMO CURV ARROW            | 3.00      | EACH |
| 0070            | 10020NS    | FUEL ADJUSTMENT                           | 2,385.00  | DOLL |
| 0075            | 10030NS    | ASPHALT ADJUSTMENT                        | 5,990.00  | DOLL |
| 0080            | 20100ES842 | PAVE MARK TEMP PAINT LINE ARROW           | 3.00      | EACH |
| 0085            | 23010EN    | PAVE MARK TEMP PAINT STOP BAR-24 IN       | 24.00     | LF   |
| 0090            | 26119EC    | INSTALL RADAR PRESENCE DETECTOR TYPE A    | 1.00      | EACH |
| 0095            | 26228EC    | ELECTRONIC DELIVERY MGMT SYSTEM - (US 25) | 1.00      | LS   |
| 0100            | 02569      | DEMOBILIZATION                            | 1.00      | LS   |

[illegible]

Boone County - KY 14  
RADAR PRESENCE DETECTOR SUMMARY  
FD05 008 0014 008-009

| MP.              | INTERSECTION                                    | RADAR PRESENCE<br>DETECTOR |  | RADAR PRESENCE<br>DETECTOR<br>TYPE B<br>EA | NOTES  |
|------------------|---|----------------------------|--|--|--|
|                  |   | TYPE A<br>EA               |  |  |  |
| 8.056 &<br>8.084 | KY 1292 / Stephenson Mill Rd. &<br>I-75 S Ramps | 5                          |  |  | Refer to Signal Detail Sheet and Special Note for<br>Radar Detection for more information. |
| 8.221            | I-75 N Ramps                                    | 3                          |  |  | Refer to Signal Detail Sheet and Special Note for<br>Radar Detection for more information. |
| 8.445            | Towne Center Dr. / School Rd.                   | 4                          |  |  | Refer to Signal Detail Sheet and Special Note for<br>Radar Detection for more information. |
| 8.604            | Towne Center Dr. / Beatrice Ave.                | 4                          |  |  | Refer to Signal Detail Sheet and Special Note for<br>Radar Detection for more information. |
| 8.830            | US 25   | 4                          |  |  | Refer to Signal Detail Sheet and Special Note for<br>Radar Detection for more information. |
| TOTAL            |   | 20                         |  | 0  |  |

NOTES:

Boone County  
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY  
FD05 008 0014 008-009

| MPT.          | INTERSECTION            | X-WALKS      |               | STP BARS      |               | CURVE |    | ARROWS    |            | "ONLY" |    | CROSS |    | CHEVRONS |     | NOTES                     |
|---------------|-------------------------|--------------|---------------|---------------|---------------|-------|----|-----------|------------|--------|----|-------|----|----------|-----|---------------------------|
|               |                         | 6 INCH<br>LF | 24 INCH<br>LF | 24 INCH<br>LF | 24 INCH<br>LF | EA    | EA | STR<br>EA | COMB<br>EA | EA     | EA | SF    | SF | SF       | SF  |                           |
| 8.062         | KY 1292 & KY 16         |              |               |               | 24            |       |    |           |            |        |    |       |    |          |     |                           |
| 8.062 - 8.084 | KY 1292 & I-75S         |              |               |               |               | 1     |    |           | 1          |        |    | 307   |    |          |     | 24" YELLOW ON 20' SPACING |
| 8.068         | KY 1292 & KY 16         |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.075         | KY 1292 & KY 16         |              |               |               |               |       |    |           | 1          |        |    |       |    |          |     |                           |
| 8.106         | I-75S                   |              |               |               | 36            |       |    |           |            |        |    |       |    |          |     |                           |
| 8.117         | I-75S                   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.174         | I-75N                   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.190         | I-75N                   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.200         | I-75N                   |              |               |               | 36            |       |    |           |            |        |    |       |    |          |     |                           |
| 8.221 - 8.245 | I-75N                   |              |               |               |               |       |    |           |            |        |    | 277   |    |          |     | 24" YELLOW ON 20' SPACING |
| 8.232         | I-75N                   |              |               |               | 40            |       |    |           |            |        |    |       |    |          |     |                           |
| 8.328         |                         |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.345         |                         |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.396 - 8.411 | TOWNE CENTER / SCHOOL   |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.401         | TOWNE CENTER / SCHOOL   |              |               |               |               | 2     |    |           |            |        |    | 98    |    |          |     | 24" YELLOW ON 20' SPACING |
| 8.415         | TOWNE CENTER / SCHOOL   |              |               |               |               | 2     |    |           |            |        |    |       |    |          |     |                           |
| 8.426         | TOWNE CENTER / SCHOOL   |              |               |               |               | 2     |    |           |            |        |    |       |    |          |     |                           |
| 8.433         | TOWNE CENTER / SCHOOL   | 224          | 296           | 48            |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.433 - 8.449 | TOWNE CENTER / SCHOOL   | 128          |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.453         | TOWNE CENTER / SCHOOL   |              |               | 46            |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.453 - 8.484 | TOWNE CENTER / SCHOOL   |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.462         | TOWNE CENTER / SCHOOL   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.477         | TOWNE CENTER / SCHOOL   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.491         | TOWNE CENTER / SCHOOL   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.568         | TOWNE CENTER / BEATRICE |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.574 - 8.594 | TOWNE CENTER / BEATRICE |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.579         | TOWNE CENTER / BEATRICE |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.589         | TOWNE CENTER / BEATRICE |              |               |               |               | 2     |    |           |            |        |    |       |    |          |     | 24" WHITE ON 20' SPACING  |
| 8.594         | TOWNE CENTER / BEATRICE |              |               | 58            |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.598 - 8.608 | TOWNE CENTER / BEATRICE | 104          |               | 24            |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.617         | TOWNE CENTER / BEATRICE |              |               | 42            |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.617 - 8.647 | TOWNE CENTER / BEATRICE |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.625         | TOWNE CENTER / BEATRICE |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.638         | TOWNE CENTER / BEATRICE |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.652         | TOWNE CENTER / BEATRICE |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.785         | US 25                   |              |               |               |               | 1     |    |           |            |        |    |       |    |          |     |                           |
| 8.793         | US 25                   |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.801         | US 25                   |              |               |               |               | 2     |    | 1         |            |        |    |       |    |          |     |                           |
| 8.809         | US 25                   |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.817         | US 25                   |              |               |               |               | 2     |    | 1         |            |        |    |       |    |          |     |                           |
| 8.822         | US 25                   |              |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| 8.823         | US 25                   | 200          |               |               | 42            |       |    |           |            |        |    |       |    |          |     |                           |
| 8.823 - 8.830 | US 25                   | 328          |               |               |               |       |    |           |            |        |    |       |    |          |     |                           |
| TOTAL         |                         | 984          | 296           | 396           |               | 28    |    | 2         | 2          | 2      |    | 682   |    |          | 287 |                           |

NOTE: SUMMARY INCLUDES MARKINGS THAT ARE TO BE CONSTRUCTED DIFFERENTLY THAN WHAT EXIST TODAY.



**Base Failure  
Repair Summary  
FD05 008 0016 002-004**

[illegible]

**Boone County**  
**THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY**  
**FD05 008 0016 002-004**

| MPT.  | INTERSECTION | X-WALKS<br>6 INCH<br>LF | STP BARS<br>24 INCH<br>LF | CURVE<br>EA | ARROWS<br>STR<br>EA | COMB<br>EA | "ONLY" | "STOP" |
|-------|--------------|-------------------------|---------------------------|-------------|---------------------|------------|--------|--------|
| 2.483 | US 25        |                         | 38                        | 4           |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
|       |              |                         |                           |             |                     |            |        |        |
| TOTAL |              | 0                       | 38                        | 4           | 0                   | 0          | 0      | 0      |

[illegible]

**NOTES:**

## Base Failure Repair Summary

|       |     |
|-------|-----|
| Total | 220 |
|-------|-----|

**Boone County**  
**THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY**  
**FD05 008 0025 002-004**

| MPT.  | INTERSECTION   | X-WALKS      |  | STP BARS      |  | CURVE | ARROWS |    | "ONLY" |    | "STOP" |    |
|-------|----------------|--------------|--|---------------|--|-------|--------|----|--------|----|--------|----|
|       |                | 6 INCH<br>LF |  | 24 INCH<br>LF |  |       | EA     | EA | EA     | EA | EA     | EA |
| 3.983 | LOGISTICS BLVD |              |  | 24            |  | 3     |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
|       |                |              |  |               |  |       |        |    |        |    |        |    |
| TOTAL |                | 0            |  | 24            |  | 3     | 0      | 0  | 0      | 0  | 0      | 0  |

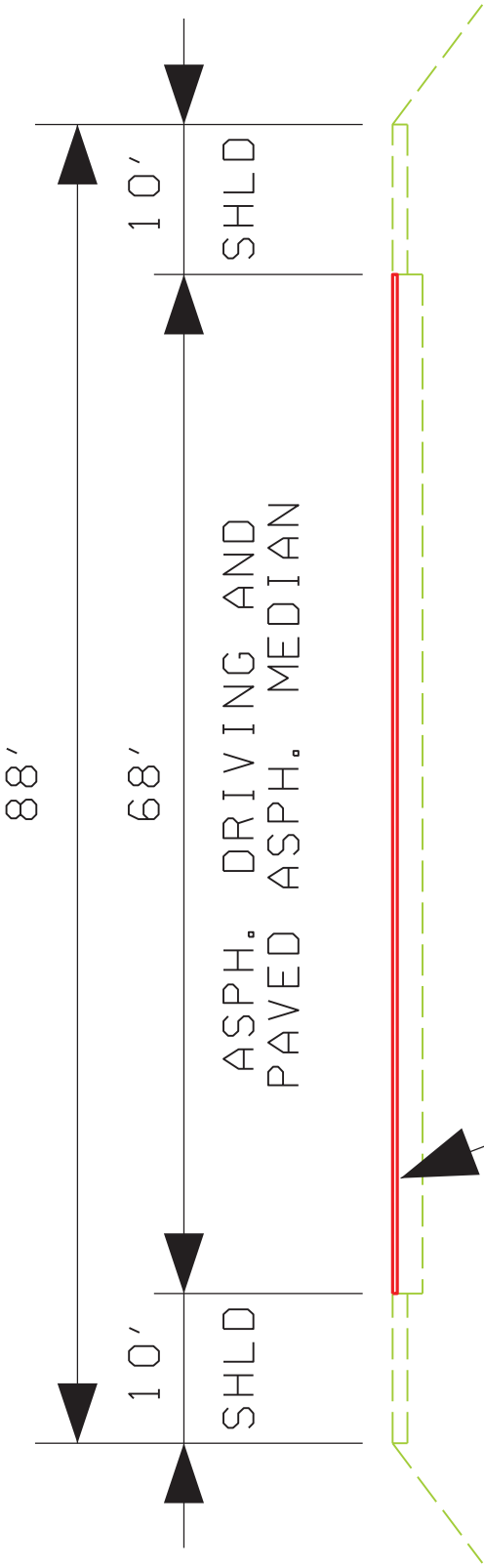
[illegible]

**NOTES:**

\* NOTE:

AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP: 8.056 - 8.132  
MP: 8.172 - 8.280



1.25" OF ASPH PAVE MILL & TEXT  
LEVELING & WEDGING PG64-22 \*  
1.25" OF CL3 ASPH SURF 0.38B PG64-22

\*DO NOT DISTURB EXISTING SHOULDERS

| COUNTY OF | ITEM NO.              |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |

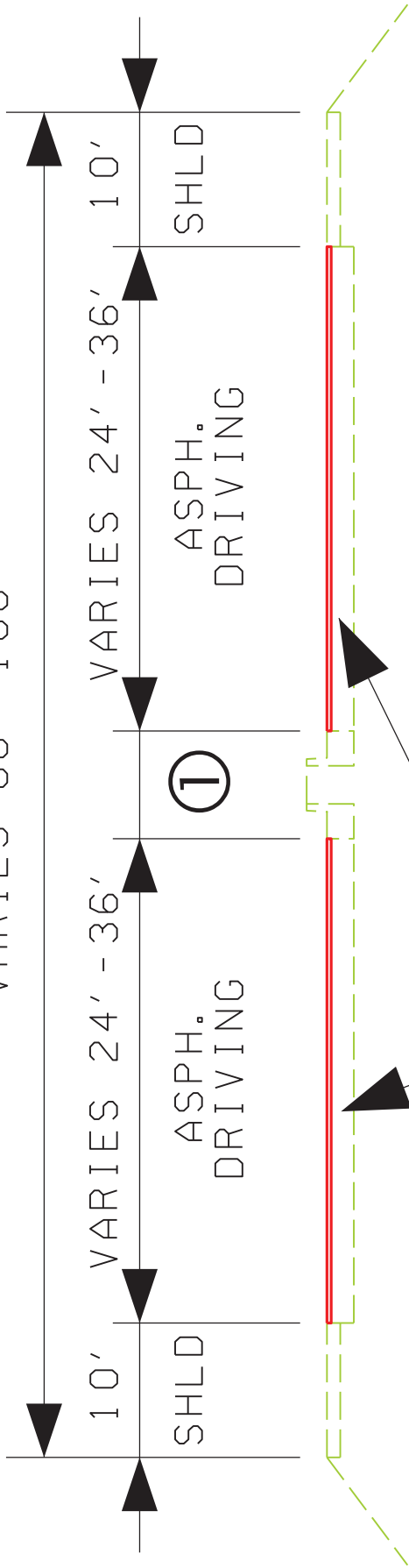
|   |
|---|
| KY 14<br>RESURFACING<br>TYPICAL SECTION |
|---|

\* NOTE:

AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP. 8.280 - 8.378

VARIES 88' - 100'



\*DO NOT DISTURB EXISTING SHOULDERS

① RAISED CONC. MEDIAN  
VARYING IN WIDTH 8' - 20'

KY 14  
RESURFACING  
TYPICAL SECTION

COUNTY OF

BOONE

ITEM NO.

FD05 008 0014 008-009

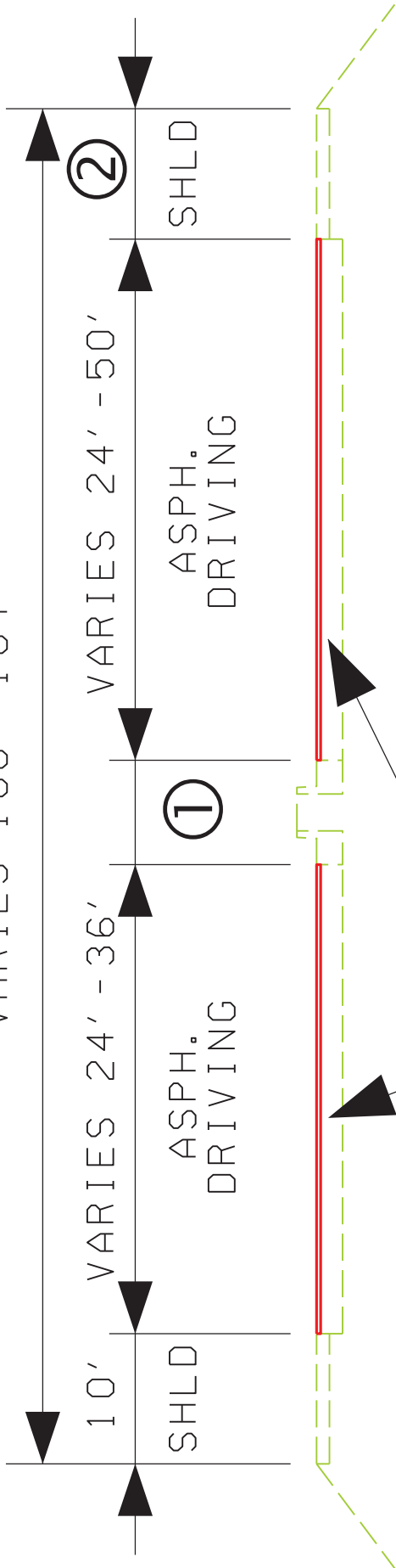


\* NOTE:

AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP. 8.378 - 8.438

VARIES 100' - 104'



①

RAISED CONC. MEDIAN  
VARYING IN WIDTH 8' - 20'

②

VARIES 0' - 10'

KY 14  
RESURFACING  
TYPICAL SECTION

COUNTY OF

BOONE

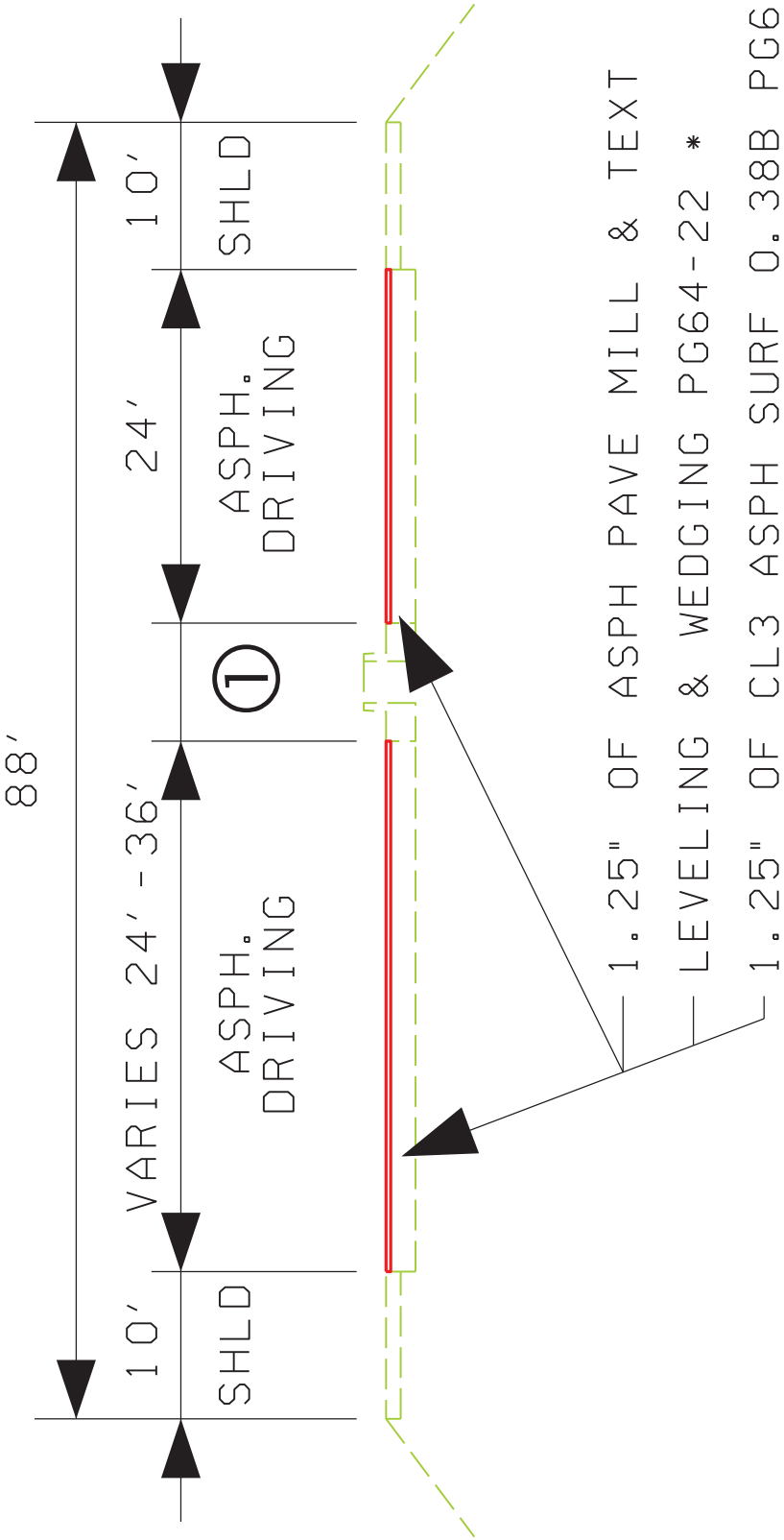
ITEM NO.

FD05 008 0014 008-009

| COUNTY OF | ITEM NO.              |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |

\* NOTE:  
AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP: 8.438 - 8.564  
MP: 8.600 - 8.674



① RAISED CONC. MEDIAN  
VARYING IN WIDTH 8' - 20'

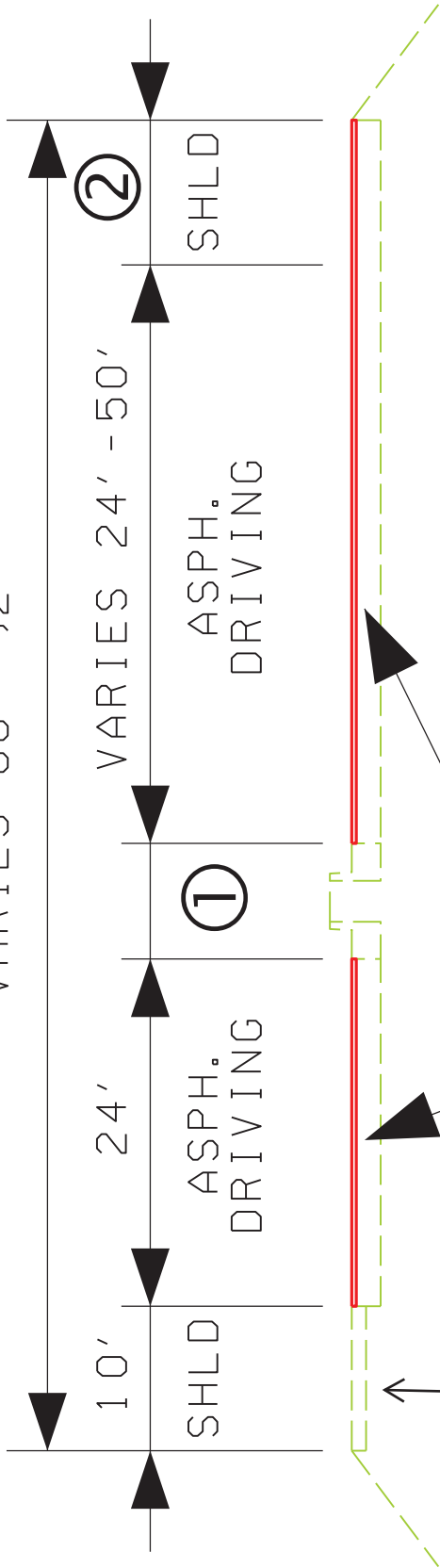
KY 14  
RESURFACING  
TYPICAL SECTION

| COUNTY OF | ITEM NO.              |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |

\* NOTE:  
AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP. 8.564 - 8.600

VARIES 88' - 92'



\*DO NOT DISTURB EXISTING SHOULDER

1.25" OF ASPH PAVE MILL & TEXT  
LEVELING & WEDGING PG64-22 \*  
1.25" OF CL3 ASPH SURF 0.38B PG64-22

- ① RAISED CONC. MEDIAN  
VARYING IN WIDTH 8' - 20'
- ② VARIES 0' - 10'

KY 14  
RESURFACING  
TYPICAL SECTION

\* NOTE:  
AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

COUNTY OF

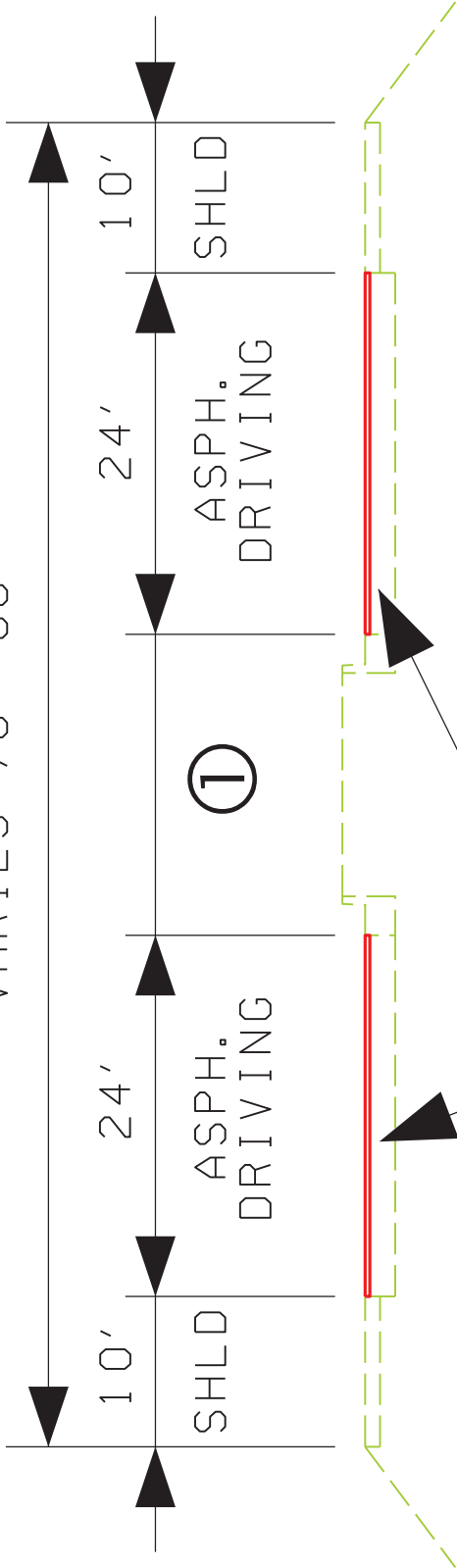
BOONE

ITEM NO.

FD05 008 0014 008-009

MP. 8.674 - 8.738

VARIES 76' - 88'



\*DO NOT DISTURB EXISTING SHOULDERS

① RAISED CONC. MEDIAN  
VARYING IN WIDTH 8' - 20'

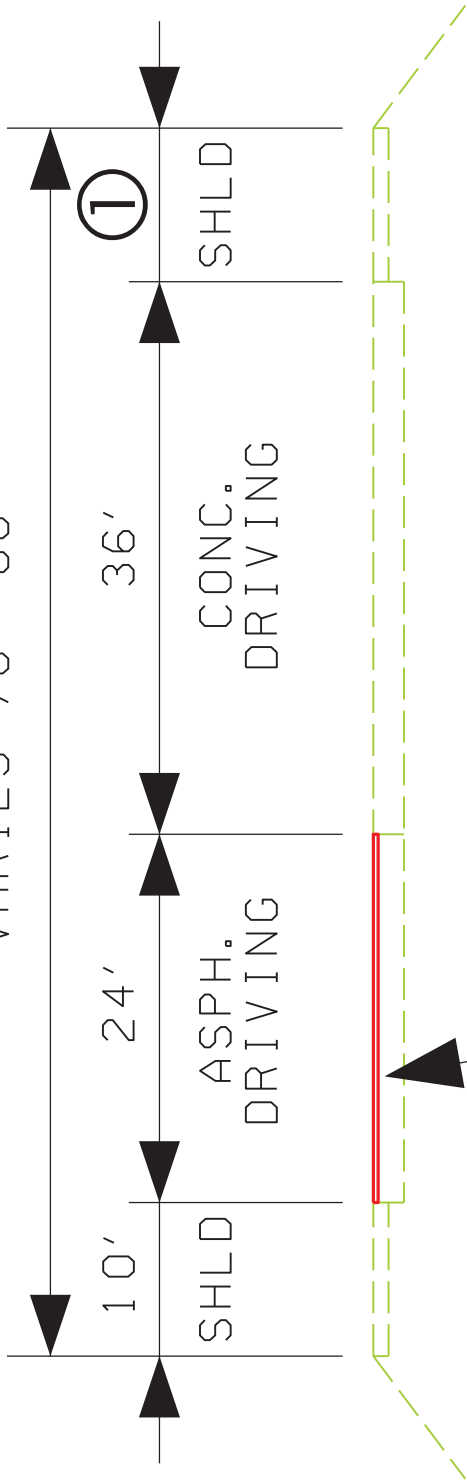
KY 14  
RESURFACING  
TYPICAL SECTION

\* NOTE:

AS DIRECTED BY ENGINEER, CONSTRUCT  
LEVELING & WEDGING PG64-22 PRIOR  
TO CONSTRUCTING ASPHALT SURFACE.

MP. 8.772 - 8.830

VARIES 70' - 80'



1.25" OF ASPH PAVE MILL & TEXT  
LEVELING & WEDGING PG64-22 \*

1.25" OF CL3 ASPH SURF 0.38B PG64-22

\*DO NOT DISTURB EXISTING SHOULDERS

① VARIES 0' - 10'

KY 14  
RESURFACING  
TYPICAL SECTION

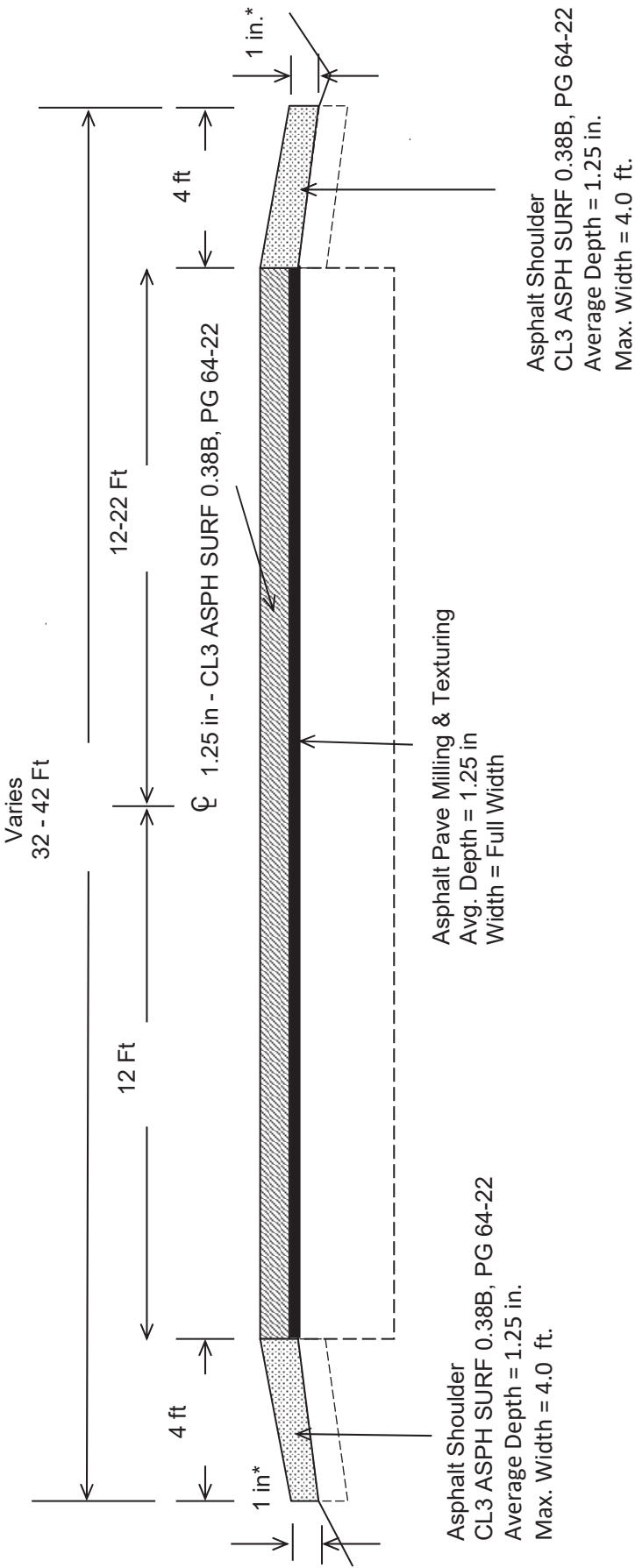
COUNTY OF

BOONE

ITEM NO.

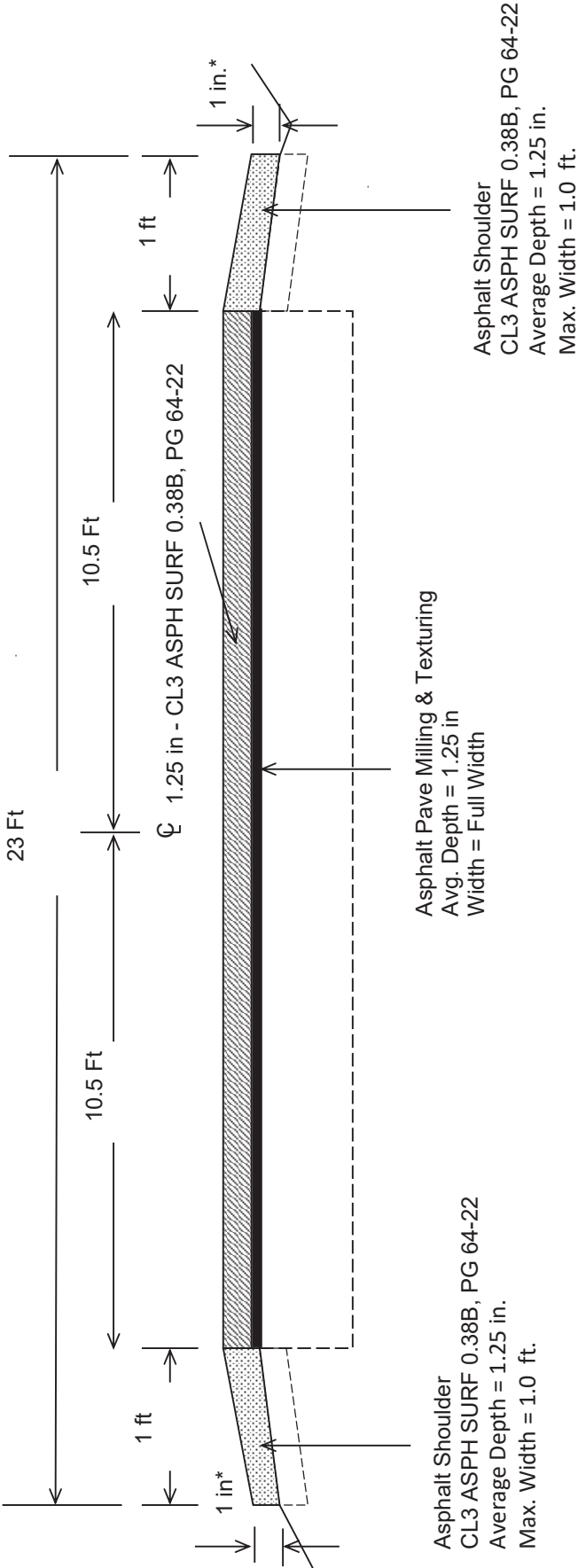
FD05 008 0014 008-009

**BOONE COUNTY**  
**FD05 008 0016 002-004**  
**TYPICAL SECTION**  
**MP 2.483 - 3.030**



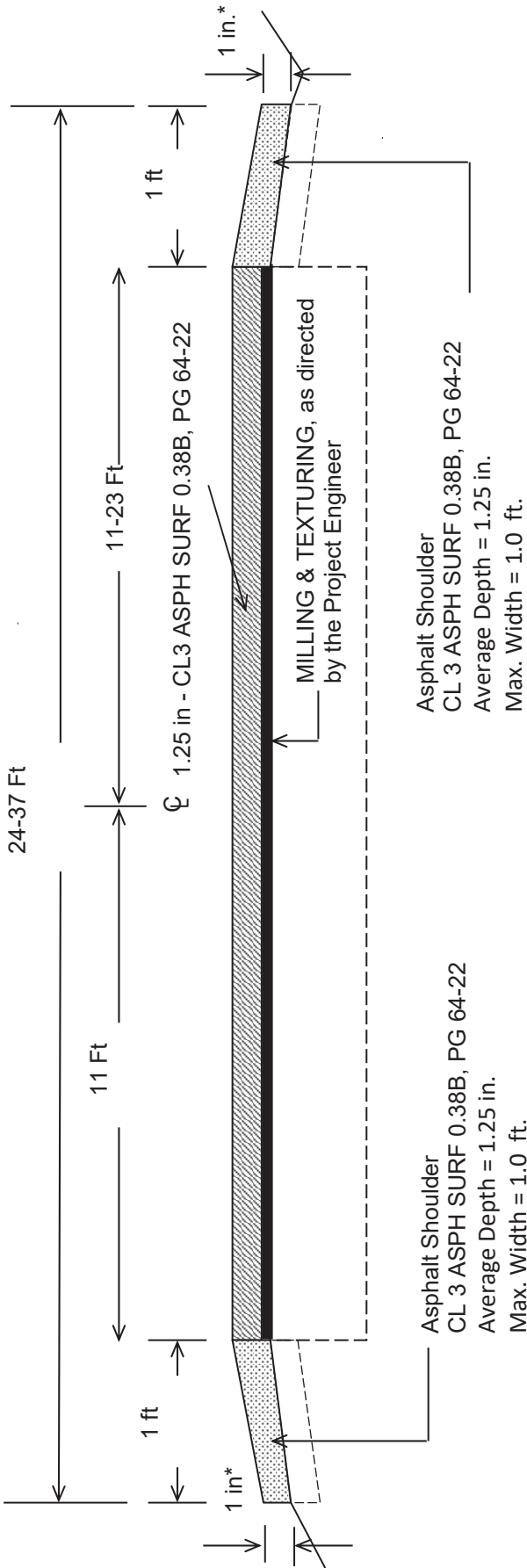
**\*Where Existing Site Conditions Permit**

**BOONE COUNTY**  
**FD05 008 0016 002-004**  
**TYPICAL SECTION**  
**MP 3.030 - MP 3.380**



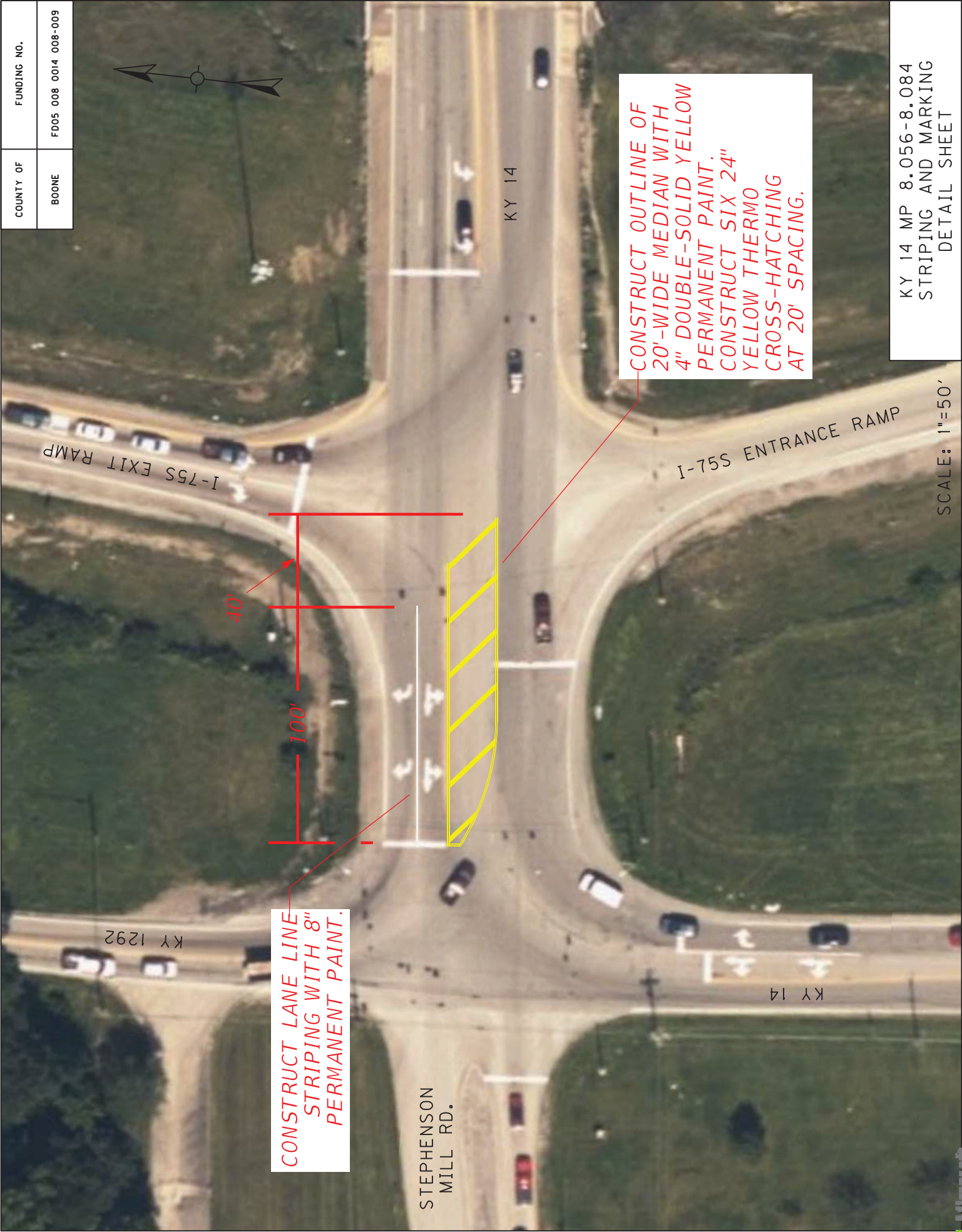
**\*Where Existing Site Conditions Permit**

BOONE COUNTY  
FD05 008 0025 002-004  
TYPICAL SECTION  
MP 2.582 - 3.993




**\*Where Existing Site Conditions Permit**








| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |


LEGEND

 EX. BASE-MOUNTED CONTROLLER

 EX. STEEL STRAIN POLE

 EX. MESSENGER CABLE

 PROP. DETECTION ZONE

 PROP. RADAR DETECTOR

|           |                       |
|-----------|-----------------------|
| COUNTY OF | FUNDING NO.           |
| BOONE     | FD05 008 0014 008-009 |



INSTALL RADAR PRESENCE DETECTOR ON  
POLE G FOR DETECTION ZONE 8.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE H FOR DETECTION ZONE 4.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE B FOR DETECTION ZONES 2A, 2B, & 2C.



INSTALL RADAR PRESENCE DETECTOR ON  
POLE F FOR DETECTION ZONE 3A & 3B.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE C FOR DETECTION ZONES 1, 6A, & 6B.

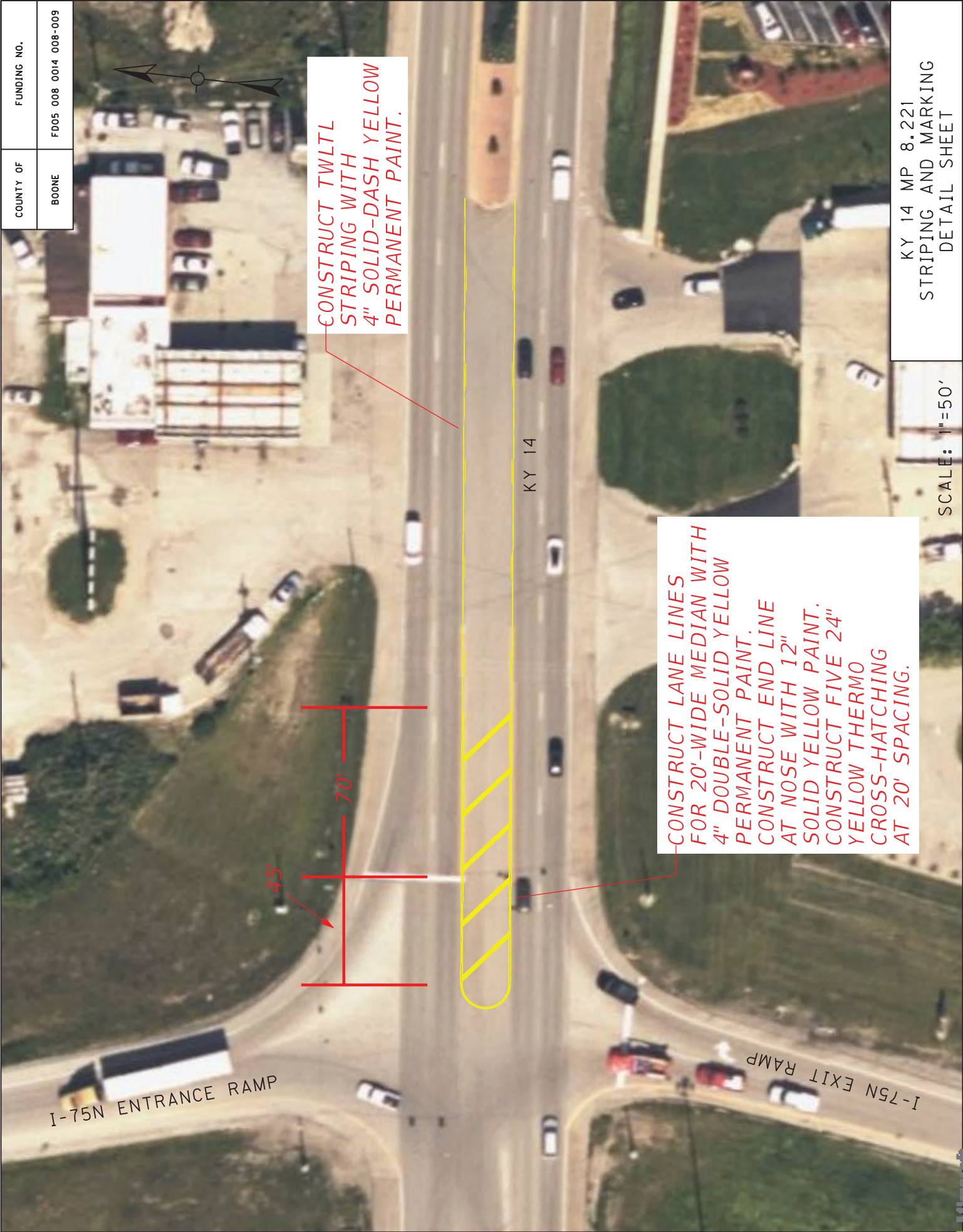
LOOP SCHEDULE

| DETECTION ZONE | PHASE | SLOT | CHANNEL | SIZE    | # OF TURNS | DIST. FROM STOP BAR |
|----------------|-------|------|---------|---------|------------|---------------------|
| 1              | 1     | 11   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2A             | 2     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2B             | 2     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 2C             | 2     | 13   | 1       | 10 X 48 | RADAR      | 0'                  |
| 3A             | 3     | 15   | 1       | 10 X 48 | RADAR      | 0'                  |
| 3B             | 3     | 15   | 2       | 10 X 48 | RADAR      | 0'                  |
| 4              | 4     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6A             | 6     | J2   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6B             | 6     | J2   | 2       | 10 X 48 | RADAR      | 0'                  |
| 8              | 8     | J6   | 1       | 10 X 48 | RADAR      | 0'                  |


SCALE: 1"=80'


KY 14 MP 8.056-8.084  
SIGNAL DETAIL SHEET








LEGEND

 EX. BASE-MOUNTED CONTROLLER

 EX. STEEL STRAIN POLE

 EX. MESSENGER CABLE

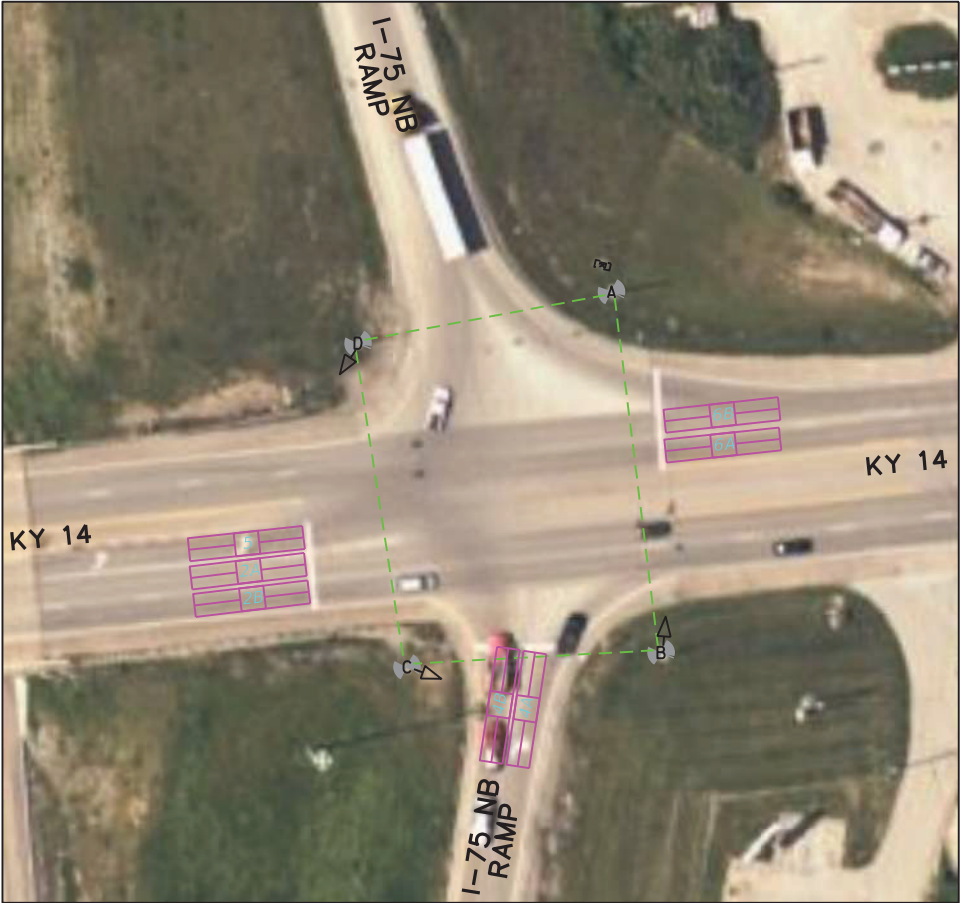
 PROP. DETECTION ZONE

 PROP. RADAR DETECTOR

SIGNAL WORK SHALL BE COMPLETED PRIOR TO THE RESURFACING AND STRIPING. THE EXISTING SIGNAL SHALL REMAIN WITH THE DESIGNED MODIFICATIONS.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE D FOR DETECTION ZONE 5, 2A, & 2B.

INSTALL 2070 CONTROLLER IN  
EX. BASE-MOUNTED CABINET.  
(PAID BY FE01 FUNDS)



INSTALL RADAR PRESENCE DETECTOR ON  
POLE C FOR DETECTION ZONES 4A & 4B.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE B FOR DETECTION ZONES 6A & 6B.

LOOP SCHEDULE

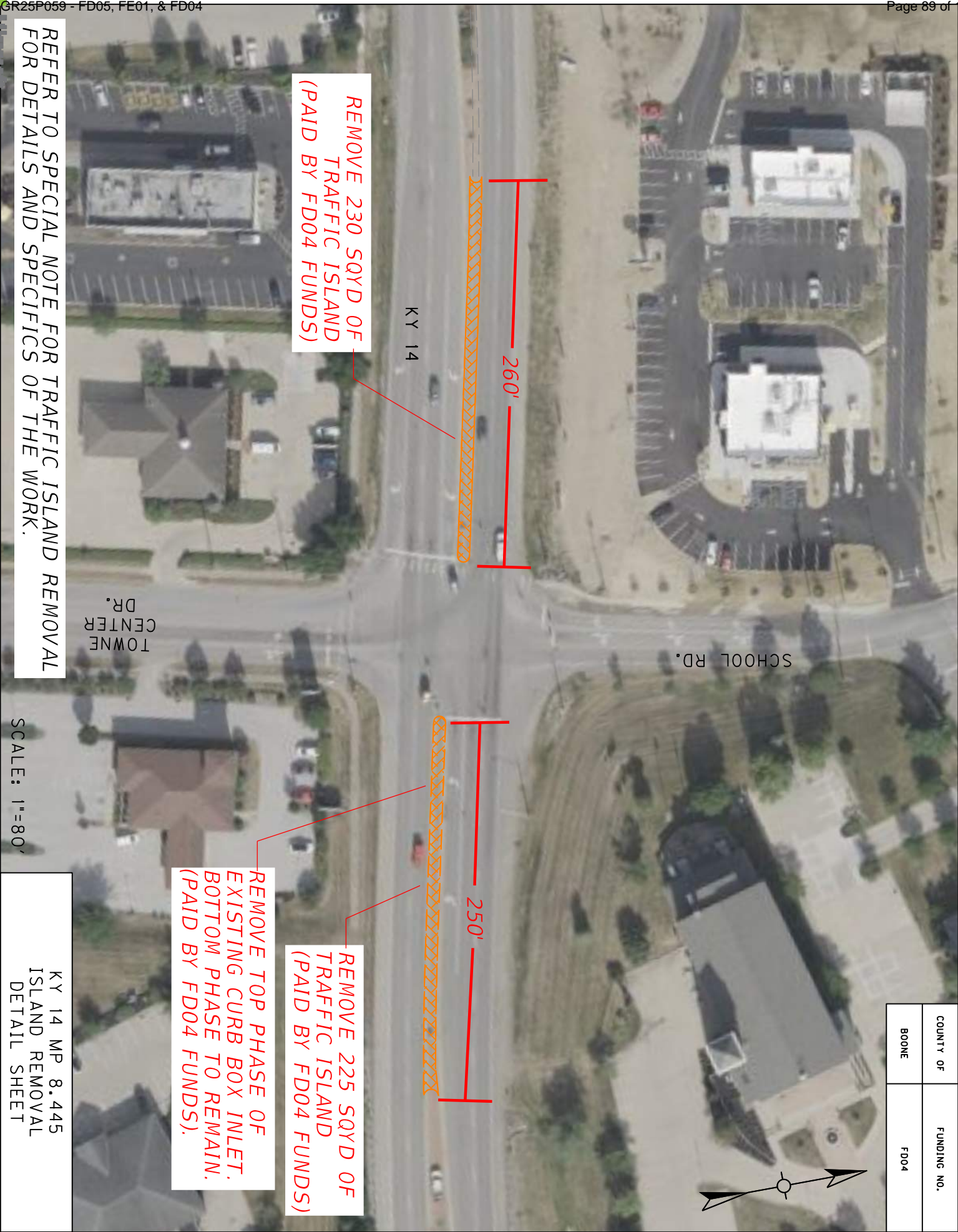
| DETECTION ZONE | PHASE | SLOT | CHANNEL | SIZE    | * OF TURNS | DIST. FROM STOP BAR |
|----------------|-------|------|---------|---------|------------|---------------------|
| 2A             | 2     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2B             | 2     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 4A             | 4     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4B             | 4     | 16   | 2       | 10 X 48 | RADAR      | 0'                  |
| 5              | 5     | J1   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6A             | 6     | J2   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6B             | 6     | J2   | 2       | 10 X 48 | RADAR      | 0'                  |

SCALE: 1"=80'

KY 14 MP 8.221  
SIGNAL DETAIL SHEET



| COUNTY OF | FUNDING NO. |
|-----------|-------------|
| BOONE     | FD04        |



REMOVE 230 SQYD OF  
TRAFFIC ISLAND  
(PAID BY FD04 FUNDS)

KY 14

260'

SCHOOL RD.

250'

REMOVE 225 SQYD OF  
TRAFFIC ISLAND  
(PAID BY FD04 FUNDS)

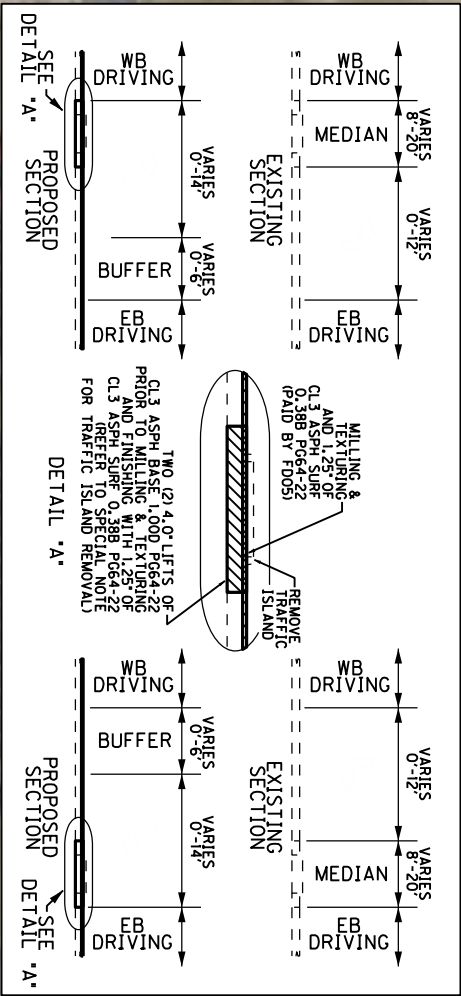
REMOVE TOP PHASE OF  
EXISTING CURB BOX INLET.  
BOTTOM PHASE TO REMAIN.  
(PAID BY FD04 FUNDS).

REFER TO SPECIAL NOTE FOR TRAFFIC ISLAND REMOVAL  
FOR DETAILS AND SPECIFICS OF THE WORK.

SCALE: 1"=80'

KY 14 MP 8.445  
ISLAND REMOVAL  
DETAIL SHEET

| COUNTY OF | FUNDING NO. |
|-----------|-------------|
| BOONE     | FD04        |



SCHOOL RD.

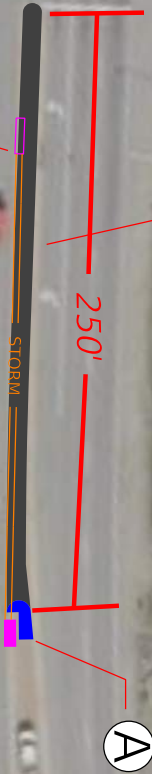
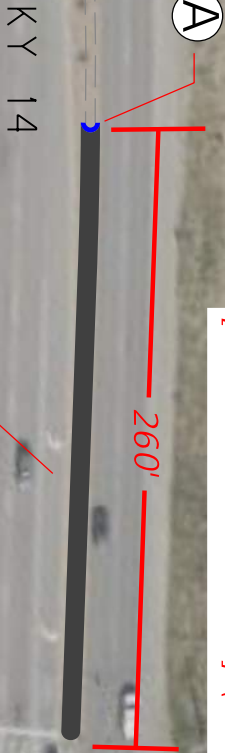
**NOTE (A)**  
RECONSTRUCT MEDIAN NOSE USING STANDARD CURB AND GUTTER. INFILL ISLAND USING CLASS A CONCRETE. (PAID BY FD04 FUNDS)

CONSTRUCT ASPH. PAVEMENT STRUCTURE IN TRENCH FROM REMOVED ISLAND [REFER TO DETAIL] (PAID BY FD04 FUNDS)

CONSTRUCT ASPH. PAVEMENT STRUCTURE IN TRENCH FROM REMOVED ISLAND [REFER TO DETAIL] (PAID BY FD04 FUNDS)

CONSTRUCT MANHOLE RISER AND TYPE 2 FRAME AND LID ON EXISTING CURB BOX CHAMBER. CONNECT PROP. PIPE TO CHAMBER. (PAID BY FD04 FUNDS)

WITHIN TRAFFIC ISLAND TO REMAIN, CONSTRUCT CURB BOX INLET TYPE A-4-2. FROM PROP. CBI TO EX. CBI CHAMBER, CONSTRUCT 15" STORM SEWER PIPE. (PAID BY FD04 FUNDS)



SCALE: 1"=80'

KY 14 MP 8.445  
CONSTRUCTION  
DETAIL SHEET



Boone County  
Boone County  
Boone County

| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |



STRIPE TURN LANE ALONGSIDE OPPOSING LANE AND  
CONSTRUCT THREE LEFT TURN ARROWS (40' FROM STOP BAR  
THEN EQUAL SPACING TO BEGINNING OF TURN LANE)  
AND FIVE 24" WHITE CHEVRON PAVEMENT MARKINGS (20' SPACING)

STRIPE TURN LANE  
ALONGSIDE OPPOSING LANE  
AND CONSTRUCT FIVE  
LEFT TURN ARROWS  
(40' FROM STOP BAR  
THEN EQUAL SPACING  
TO BEGINNING OF  
TURN LANE) AND FIVE  
24" YELLOW HATCHING  
PAVEMENT MARKINGS  
(20' SPACING)



SCALE: 1"=80'

KY 14 MP 8.445  
STRIPING AND MARKING  
DETAIL SHEET

| LEGEND |                               |
|--------|-------------------------------|
|        | EX. POLE-MOUNTED CONTROLLER   |
|        | EX. STEEL STRAIN POLE         |
|        | EX. MESSENGER CABLE           |
|        | PROP. DETECTION ZONE          |
|        | PROP. RADAR DETECTOR          |
|        | EX. SIGNAL HEAD (FOR REMOVAL) |
|        | NEW SIGNAL HEAD               |

| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |



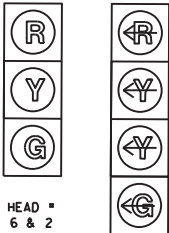
SIGNAL WORK SHALL BE COMPLETED PRIOR TO THE RESURFACING AND STRIPING. THE EXISTING SIGNAL SHALL REMAIN WITH THE DESIGNED MODIFICATIONS.

NOTES:

INSTALL NEW SIGNAL HEADS ON EXISTING SPAN WIRES, ADJUST POLE COLLARS, AS NEEDED, TO ATTAIN REQUIRED CLEARANCES. ADJUSTMENT OF POLE COLLARS WILL BE INCIDENTAL TO THE PROJECT. IF DIFFERENT POLE COLLARS ARE NEEDED, THEY SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT. REPLACEMENT POLE COLLARS SHALL MEET KYTC STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT POLE COLLAR MANUFACTURER DIAGRAMS TO THE DIVISION OF TRAFFIC FOR REVIEW. APPROVAL OF REPLACEMENT POLE COLLAR ASSEMBLIES MUST BE OBTAINED PRIOR TO INSTALLATION. IF POLE COLLARS ARE REPLACED, EXISTING COLLARS SHALL BE DELIVERED TO KYTC DISTRICT MAINTENANCE FACILITY.

RELOCATE EXISTING SIGNAL HEADS AND SPAN MOUNTED SIGNS IF NECESSARY TO ALIGN WITH NEW STRIPING.

NEW SIGNAL HEADS



ALL INDICATIONS L.E.D.  
REFLECTIVE BACKPLATES ON ALL NEW HEADS

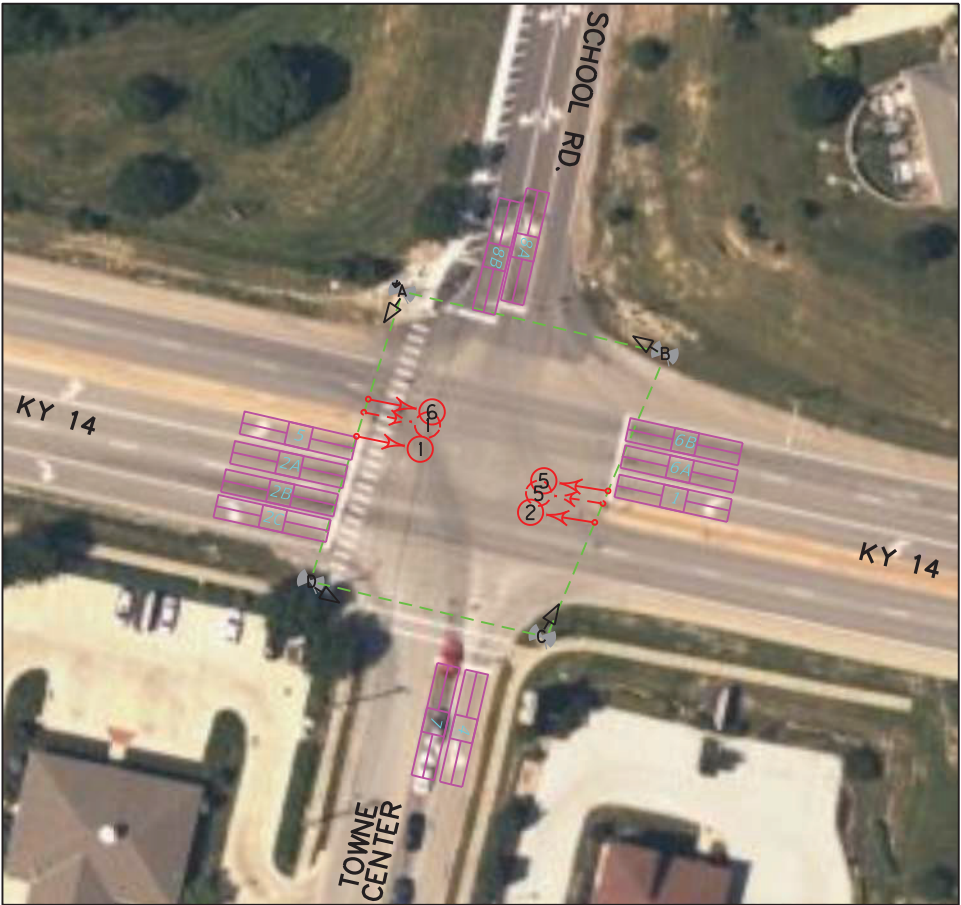
WIRING SCHEDULE

| CABLE    | ORIGIN     | ENDING | CONNECTING |
|----------|------------|--------|------------|
| 1-#14/7C | CONTROLLER | SH 1   | SH 1       |
| 1-#14/5C | CONTROLLER | SH 2   | SH 2       |
| 1-#14/7C | CONTROLLER | SH 5   | SH 5       |
| 1-#14/5C | CONTROLLER | SH 6   | SH 6       |

INSTALL 2070 CONTROLLER IN EX. POLE-MOUNTED CABINET. (PAID BY FE01 FUNDS)

INSTALL RADAR PRESENCE DETECTOR ON POLE A FOR DETECTION ZONES 5, 2A, 2B, & 2C.

INSTALL RADAR PRESENCE DETECTOR ON POLE B FOR DETECTION ZONES 8A & 8B.



INSTALL RADAR PRESENCE DETECTOR ON POLE D FOR DETECTION ZONES 4 & 7.  
REPLACE 5-SECTION EX. SIGNAL HEAD #1 WITH NEW SIGNAL HEADS #1 AND #6. (PAID BY FLO3 FUNDS)

INSTALL RADAR PRESENCE DETECTOR ON POLE C FOR DETECTION ZONES 1, 6A, & 6B.  
REPLACE 5-SECTION EX. SIGNAL HEAD #5 WITH NEW SIGNAL HEADS #5 AND #2. (PAID BY FLO3 FUNDS)

LOOP SCHEDULE

| DETECTION ZONE | PHASE | SLOT | CHANNEL | SIZE    | * OF TURNS | DIST. FROM STOP BAR |
|----------------|-------|------|---------|---------|------------|---------------------|
| 1              | 1     | 11   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2A             | 2     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2B             | 2     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 2C             | 2     | 13   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4              | 4     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |
| 7              | 7     | J5   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6A             | 6     | J2   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6B             | 6     | J2   | 2       | 10 X 48 | RADAR      | 0'                  |
| 8A             | 8     | J6   | 1       | 10 X 48 | RADAR      | 0'                  |
| 8B             | 8     | J6   | 2       | 10 X 48 | RADAR      | 0'                  |

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR  
FOUR-SECTION FYA HEADS

| CONNECTION            | COLOR        | OUTPUT FILE CONNECTION FOR FYA ON PHASE 1 | OUTPUT FILE CONNECTION OF FYA ON PHASE 5 |
|-----------------------|--------------|---|--|
| RED ARROW             | RED          | PHASE 1 RED                               | PHASE 5 RED                              |
| STEADY YELLOW ARROW   | ORANGE       | PHASE 1 YELLOW                            | PHASE 5 YELLOW                           |
| FLASHING YELLOW ARROW | BLACK        | PHASE 1 GREEN                             | PHASE 5 GREEN                            |
| GREEN ARROW           | BLUE         | RED YELLOW PHASE 2                        | RED YELLOW PHASE 6                       |
| NEUTRAL               | WHITE        | WHITE                                     | WHITE                                    |
| EQUIPMENT GROUND      | GREEN        |   |  |
| NOT USED              | WHITE/TRACER |   |  |

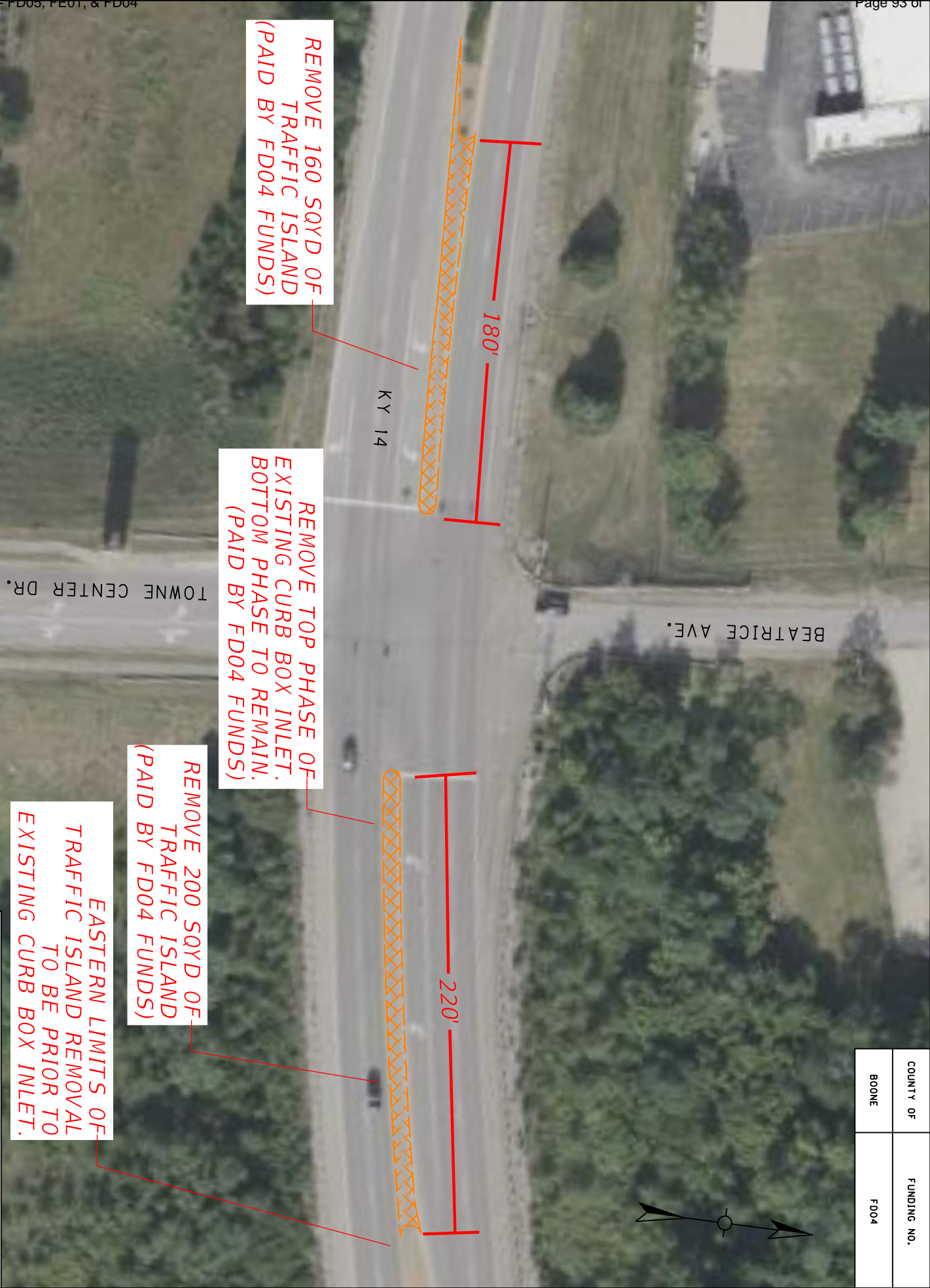
THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

SCALE: 1"=80'

KY 14 MP 8.445  
SIGNAL DETAIL SHEET



| COUNTY OF | FUNDING NO. |
|-----------|-------------|
| BOONE     | FD04        |

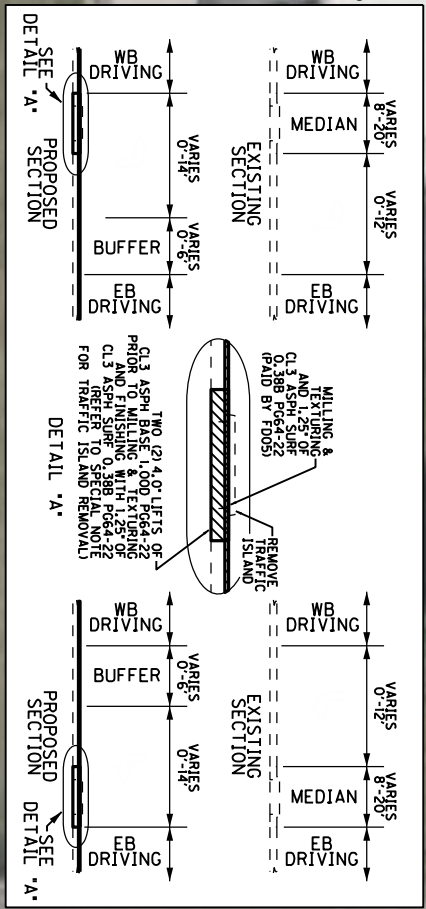


REFER TO SPECIAL NOTE FOR TRAFFIC ISLAND REMOVAL FOR DETAILS AND SPECIFICS OF THE WORK.

EASTERN LIMITS OF TRAFFIC ISLAND REMOVAL TO BE PRIOR TO EXISTING CURB BOX INLET.

SCALE: 1"=60'

KY 14 MP 8.604 ISLAND REMOVAL DETAIL SHEET



BEATRICE AVE.



| COUNTY OF | FUNDING NO. |
|-----------|-------------|
| BOONE     | FD04        |

CONSTRUCT ASPH. PAVEMENT STRUCTURE IN TRENCH FROM REMOVED ISLAND [REFER TO DETAIL] (PAID BY FD04 FUNDS)

NOTE (A) RECONSTRUCT MEDIAN NOSE USING STANDARD CURB AND GUTTER. INFILL ISLAND USING CLASS A CONCRETE. (PAID BY FD04 FUNDS)

CONSTRUCT ASPH. PAVEMENT STRUCTURE IN TRENCH FROM REMOVED ISLAND [REFER TO DETAIL] (PAID BY FD04 FUNDS)

CONSTRUCT MANHOLE RISER AND TYPE 2 FRAME AND LID ON EXISTING CURB BOX CHAMBER. (PAID BY FD04 FUNDS)

KY 14

TOWNE CENTER DR.

SCALE: 1"=60'

KY 14 MP 8.604  
CONSTRUCTION  
DETAIL SHEET



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| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |



12' | 12' | 12' | 14' | 6' | 12' | 12' | 12'

12' | 12' | 12' | 14' | 12' | 12'

STRIPE TURN LANE  
ALONGSIDE OPPOSING LANE  
AND CONSTRUCT THREE  
LEFT TURN ARROWS  
(40' FROM STOP BAR THEN  
EQUAL SPACING TO BEGINNING  
OF TURN LANE) AND FIVE  
24" WHITE CHEVRON  
PAVEMENT MARKINGS  
(20' SPACING)

STRIPE TURN LANE  
ALONGSIDE OPPOSING LANE  
AND CONSTRUCT THREE  
LEFT TURN ARROWS  
(40' FROM STOP BAR THEN  
EQUAL SPACING TO BEGINNING  
OF TURN LANE) AND SIX  
24" WHITE CHEVRON  
PAVEMENT MARKINGS  
(20' SPACING)

TOWNE CENTER DR.

BEATRICE AVE.

SCALE: 1"=60'

KY 14 MP 8.604  
STRIPING AND MARKING  
DETAIL SHEET

| LEGEND |                               |
|--------|-------------------------------|
|        | EX. POLE-MOUNTED CONTROLLER   |
|        | EX. STEEL STRAIN POLE         |
|        | EX. MESSENGER CABLE           |
|        | PROP. DETECTION ZONE          |
|        | PROP. RADAR DETECTOR          |
|        | EX. SIGNAL HEAD (FOR REMOVAL) |
|        | NEW SIGNAL HEAD               |

| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |



INSTALL 2070 CONTROLLER IN  
EX. POLE-MOUNTED CABINET.  
(PAID BY FE01 FUNDS)

INSTALL RADAR PRESENCE DETECTOR ON  
POLE A FOR DETECTION ZONE 8.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE D FOR DETECTION ZONES  
5, 2A, 2B, & 2C.

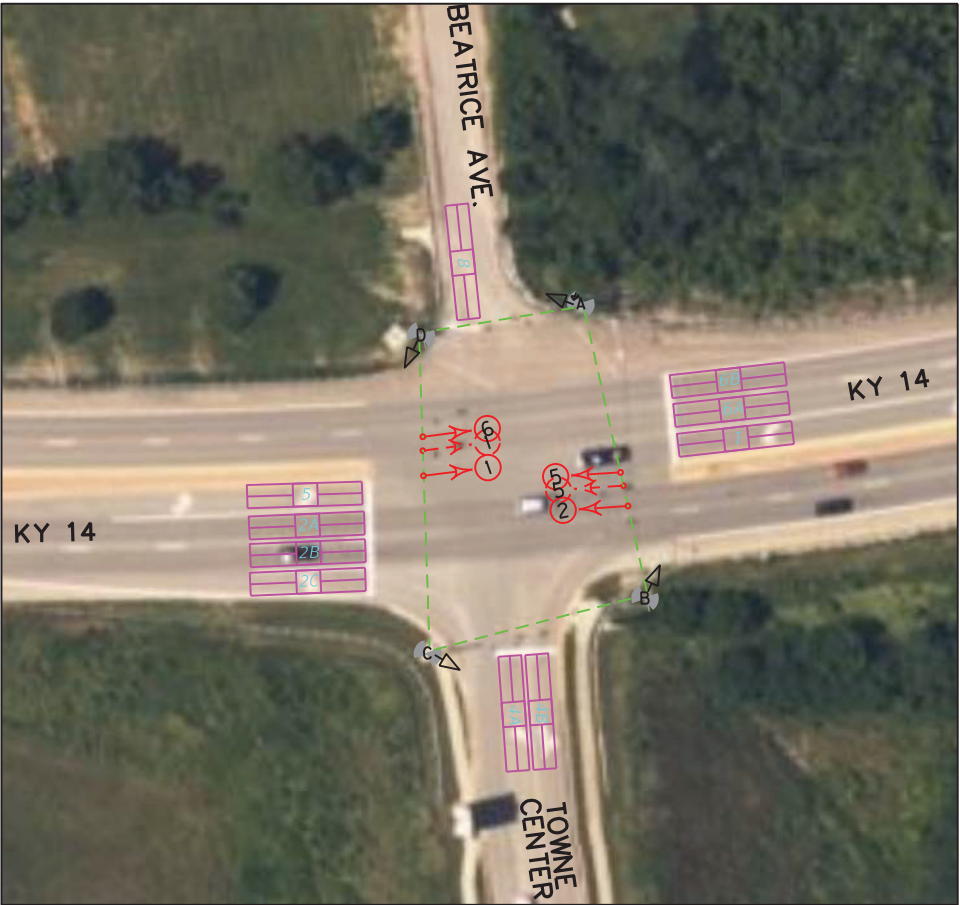
SIGNAL WORK SHALL BE COMPLETED PRIOR TO THE  
RESURFACING AND STRIPING. THE EXISTING SIGNAL  
SHALL REMAIN WITH THE DESIGNED MODIFICATIONS.

NOTES:

INSTALL NEW SIGNAL HEADS ON EXISTING SPAN WIRES,  
ADJUST POLE COLLARS, AS NEEDED, TO ATTAIN REQUIRED  
CLEARANCES. ADJUSTMENT OF POLE COLLARS WILL BE  
INCIDENTAL TO THE PROJECT. IF DIFFERENT POLE COLLARS  
ARE NEEDED, THEY SHALL BE PROVIDED BY THE CONTRACTOR  
AT NO ADDITIONAL COST TO THE DEPARTMENT. REPLACEMENT  
POLE COLLARS SHALL MEET KYTC STANDARDS AND  
SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT POLE  
COLLAR MANUFACTURER DIAGRAMS TO THE DIVISION OF  
TRAFFIC FOR REVIEW. APPROVAL OF REPLACEMENT POLE  
COLLAR ASSEMBLIES MUST BE OBTAINED PRIOR TO  
INSTALLATION. IF POLE COLLARS ARE REPLACED, EXISTING  
COLLARS SHALL BE DELIVERED TO KYTC DISTRICT  
MAINTENANCE FACILITY.

RELOCATE EXISTING SIGNAL HEADS AND SPAN MOUNTED  
SIGNALS IF NECESSARY TO ALIGN WITH NEW STRIPING

| WIRING SCHEDULE |            |      |      |
|-----------------|------------|------|------|
| 1-#14/7C        | CONTROLLER | SH 1 | SH 1 |
| 1-#14/5C        | CONTROLLER | SH 2 | SH 2 |
| 1-#14/7C        | CONTROLLER | SH 5 | SH 5 |
| 1-#14/5C        | CONTROLLER | SH 6 | SH 6 |



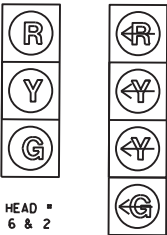
INSTALL RADAR PRESENCE DETECTOR ON  
POLE C FOR DETECTION ZONES 4A & 4B.

REPLACE 5-SECTION EX. SIGNAL HEAD #1  
WITH NEW SIGNAL HEADS #1 AND #6.  
(PAID BY FLO3 FUNDS)

INSTALL RADAR PRESENCE DETECTOR ON  
POLE B FOR DETECTION ZONES 1, 6A, & 6B.

REPLACE 5-SECTION EX. SIGNAL HEAD #5  
WITH NEW SIGNAL HEADS #5 AND #2.  
(PAID BY FLO3 FUNDS)

NEW SIGNAL HEADS



HEAD #  
6 & 2

HEAD #  
1 & 5

ALL INDICATIONS L.E.D.  
REFLECTIVE BACKPLATES ON ALL NEW HEADS

LOOP SCHEDULE

| DETECTION ZONE | PHASE | SLOT | CHANNEL | SIZE    | # OF TURNS | DIST. FROM STOP BAR |
|----------------|-------|------|---------|---------|------------|---------------------|
| 1              | 1     | 11   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2A             | 2     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2B             | 2     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 2C             | 2     | 13   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4A             | 4     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4B             | 4     | 16   | 2       | 10 X 48 | RADAR      | 0'                  |
| 6A             | 6     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6B             | 6     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 8              | 8     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR  
FOUR-SECTION FYA HEADS

| CONNECTION            | COLOR        | OUTPUT FILE CONNECTION FOR FYA ON PHASE 1 | OUTPUT FILE CONNECTION OF FYA ON PHASE 5 |
|-----------------------|--------------|---|--|
| RED ARROW             | RED          | PHASE 1 RED                               | PHASE 5 RED                              |
| STEADY YELLOW ARROW   | ORANGE       | PHASE 1 YELLOW                            | PHASE 5 YELLOW                           |
| FLASHING YELLOW ARROW | BLACK        | PHASE 1 GREEN                             | PHASE 5 GREEN                            |
| GREEN ARROW           | BLUE         | PED YELLOW PHASE 2                        | PED YELLOW PHASE 6                       |
| NEUTRAL               | WHITE        | WHITE                                     | WHITE                                    |
| EQUIPMENT GROUND      | GREEN        |   |  |
| NOT USED              | WHITE/TRACER |   |  |

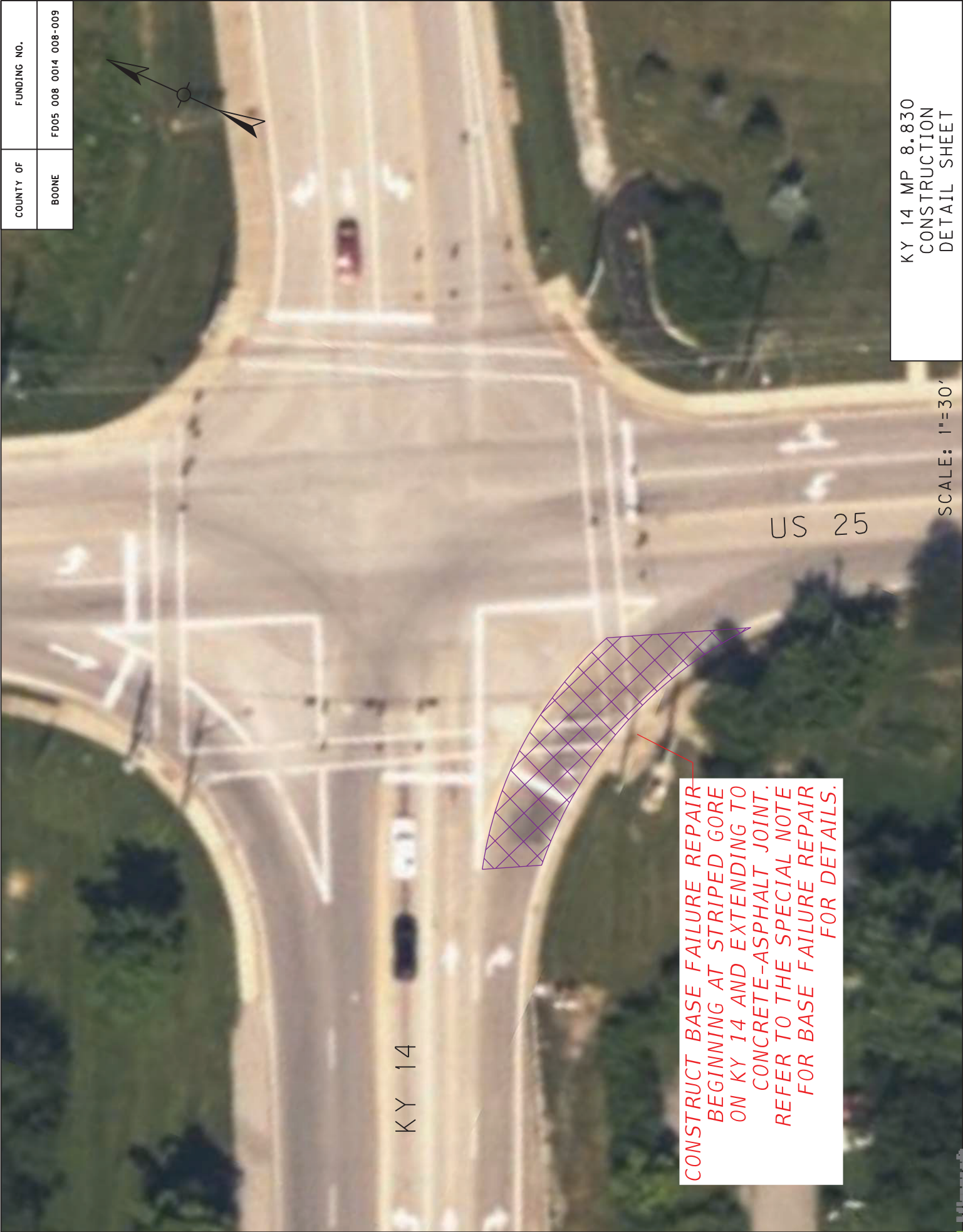
THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO  
CONNECTOR "1CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET  
(SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

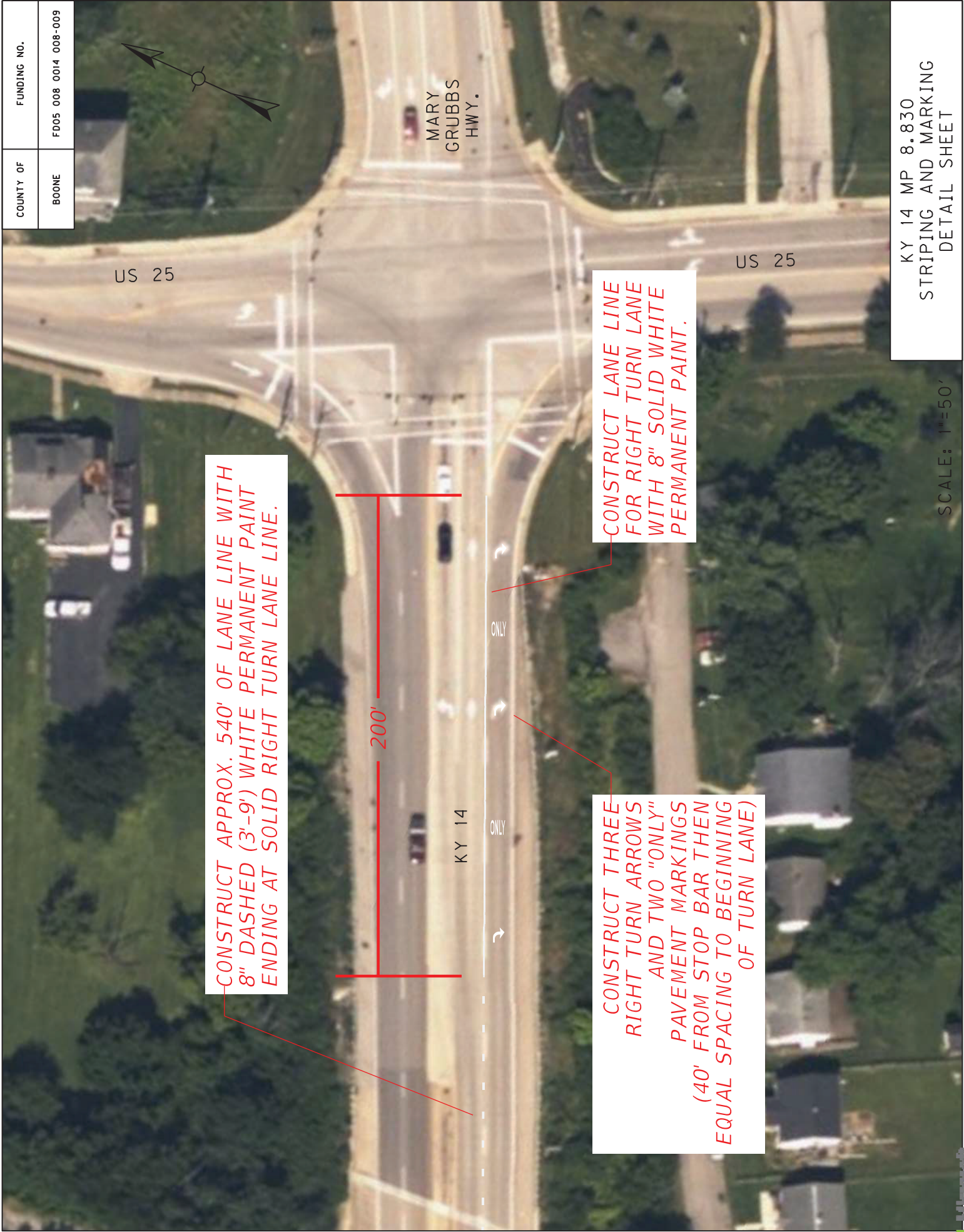
KY 14 MP 8.604  
SIGNAL DETAIL SHEET

SCALE: 1"=80'




| COUNTY OF | FUNDING NO.           |
|-----------|-----------------------|
| BOONE     | FD05 008 0014 008-009 |











LEGEND

 EX. BASE-MOUNTED CONTROLLER

 EX. STEEL STRAIN POLE

 EX. MESSENGER CABLE

 PROP. DETECTION ZONE

 PROP. RADAR DETECTOR

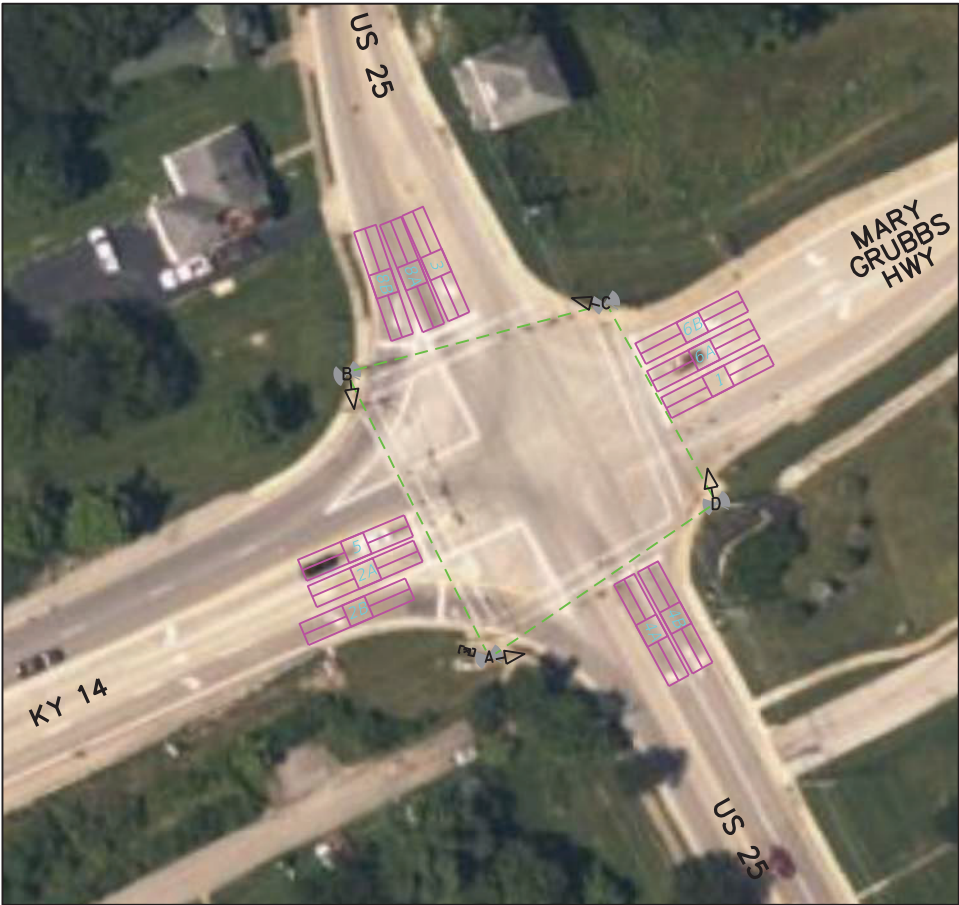
SIGNAL WORK SHALL BE COMPLETED PRIOR TO THE RESURFACING AND STRIPING. THE EXISTING SIGNAL SHALL REMAIN WITH THE DESIGNED MODIFICATIONS.

|           |                       |
|-----------|-----------------------|
| COUNTY OF | FUNDING NO.           |
| BOONE     | FD05 008 0014 008-009 |



INSTALL RADAR PRESENCE DETECTOR ON  
POLE B FOR DETECTION ZONE 5, 2A, & 2B.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE C FOR DETECTION ZONES 3, 8A, & 8B.



INSTALL 2070 CONTROLLER IN  
EX. BASE-MOUNTED CABINET.  
(PAID BY FE01 FUNDS)

INSTALL RADAR PRESENCE DETECTOR ON  
POLE A FOR DETECTION ZONES 4A & 4B.

INSTALL RADAR PRESENCE DETECTOR ON  
POLE D FOR DETECTION ZONES 1, 6A, & 6B.

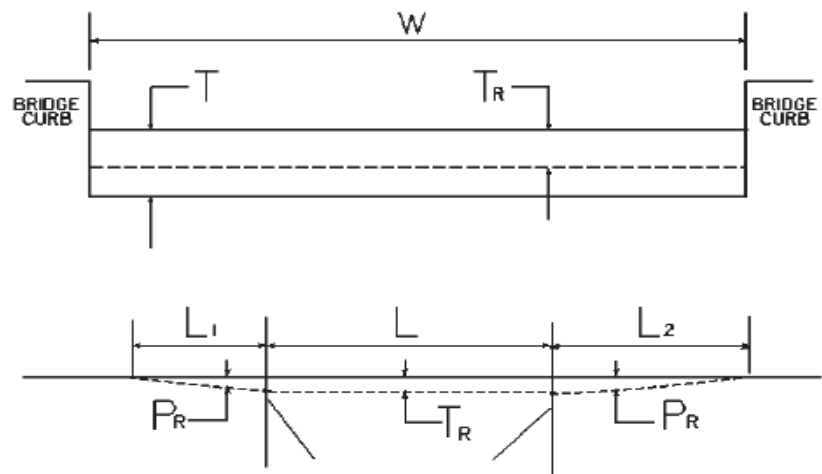
LOOP SCHEDULE

| DETECTION ZONE | PHASE | SLOT | CHANNEL | SIZE    | * OF TURNS | DIST. FROM STOP BAR |
|----------------|-------|------|---------|---------|------------|---------------------|
| 1              | 1     | 11   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2A             | 2     | 12   | 1       | 10 X 48 | RADAR      | 0'                  |
| 2B             | 2     | 12   | 2       | 10 X 48 | RADAR      | 0'                  |
| 3              | 3     | 15   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4A             | 4     | 16   | 1       | 10 X 48 | RADAR      | 0'                  |
| 4B             | 4     | 16   | 2       | 10 X 48 | RADAR      | 0'                  |
| 5              | 5     | J1   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6A             | 6     | J2   | 1       | 10 X 48 | RADAR      | 0'                  |
| 6B             | 6     | J2   | 2       | 10 X 48 | RADAR      | 0'                  |
| 8A             | 8     | J6   | 1       | 10 X 48 | RADAR      | 0'                  |
| 8B             | 8     | J6   | 2       | 10 X 48 | RADAR      | 0'                  |

SCALE: 1"=80'

KY 14 MP 8.83  
SIGNAL DETAIL SHEET

CONSTRUCTION DETAIL FOR BRIDGE WITHIN LIMITS OF  
PAVING PROJECT  
FD05 008 0014 008-009



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

| BRIDGE NO  | MP    | W (ft) | T (in) | L <sub>1</sub> (ft) | L <sub>2</sub> (ft) | T <sub>R</sub> (in) | L (ft) | P <sub>R</sub> (in) |
|------------|-------|--------|--------|---------------------|---------------------|---------------------|--------|---------------------|
| 008B00085N | 8.152 | 88.00  | 0.00   | 0.00                | 0.00                | 0.00                | 163.00 | 1.25                |
| 008B00061R | 8.755 | 36.00  | 0.00   | 0.00                | 0.00                | 0.00                | 197.00 | 1.25                |
| 008B00061L | 8.758 | 36.00  | 0.00   | 0.00                | 0.00                | 0.00                | 197.00 | 1.25                |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |
|            |       |        |        |                     |                     |                     |        |                     |



# **PART II**

## **SPECIFICATIONS AND STANDARD DRAWINGS**

### **STANDARD SPECIFICATIONS**

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

### **SUPPLEMENTAL SPECIFICATIONS**

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

2020 STANDARD DRAWINGS THAT APPLY

|   |            |
|---|------------|
| ROADWAY   |            |
| ~ DRAINAGE ~  |            |
| BOX INLETS AND OUTLETS  |            |
| CURB BOXES  |            |
| CURB BOX INLET TYPE A (DETAIL DRAWING) .....                                      | RDB-270-09 |
| CURB BOX INLET TYPE A (STEEL DRAWING) .....                                       | RDB-271-05 |
| CURB BOX INLET TYPE A (TOP PHASE TABLES) .....                                    | RDB-272-07 |
| CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID) .....                       | RDB-273-06 |
| BOX INLET RISER .....   | RDB-400-05 |
| BOX INLET PIPE CHAMBER .....  | RDB-410-06 |
| BOX INLET PIPE CHAMBER (ADDITIONAL STEEL) .....                                   | RDB-420-05 |
| TYPICAL DRAINAGE INSTALLATIONS  |            |
| CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE) ..... | RDI-001-10 |
| PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE .....                   | RDI-020-10 |
| PIPE BEDDING, TRENCH CONDITION .....  | RDI-025-06 |
| MANHOLES  |            |
| MANHOLE TYPE A .....  | RDM-001-07 |
| MANHOLE TYPE B .....  | RDM-005-06 |
| MANHOLE TYPE C (CHAMBER LAYOUT) .....   | RDM-010-06 |
| MANHOLE TYPE C (TOWER APPLICATION) .....  | RDM-011-05 |
| MANHOLE TYPE C (STEEL PATTERN) .....  | RDM-012-03 |
| MANHOLE TYPE C (TABLE OF QUANTITIES) .....  | RDM-013-04 |
| FRAME AND LID TYPE 2 .....  | RDM-105-03 |
| ~ GENERAL ~   |            |
| MISCELLANEOUS STANDARDS   |            |
| MISCELLANEOUS STANDARDS .....   | RGX-001-06 |
| TYPE D BREAKAWAY SIGN SUPPORT .....   | RGX-065-02 |
| ~ PAVEMENT ~  |            |
| NON-REINFORCED CONCRETE PAVEMENT  |            |
| NON-REINFORCED CONCRETE PAVEMENT .....  | RPN-015-05 |
| CONCRETE PAVEMENT JOINTS - TYPES & SPACING .....                                  | RPN-020-04 |
| MISCELLANEOUS PAVING  |            |
| STATION MARKINGS, CONCRETE PAVEMENT .....   | RPX-001-04 |
| PREFORMED COMPRESSION JOINT SEAL FOR CONCRETE PAVEMENT .....                      | RPX-010-05 |
| HOT POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT .....                        | RPX-015-04 |
| SILICONE RUBBER SEALS USED IN PORTLAND CONCRETE PAVEMENT .....                    | RPX-020-06 |

Standard Drawings That Apply  
Page 2 of 2

TRAFFIC  
~ **PERMANENT** ~

MARKERS

|   |           |
|---|-----------|
| INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS.....      | Sepia 006 |
| INLAID PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANE .....  | Sepia 015 |
| INLAID PAVEMENT MARKER ARRANGEMENT CHANNELIZED INTERSECTION ..... | Sepia 016 |
| TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS .....                | TPM-203   |
| TYPICAL MARKINGS FOR ISLANDS AND MEDIANS .....                    | TPM-205   |
| TYPICAL MARKINGS FOR TURN LANES PAGE 1.....                       | TPM-206   |
| TYPICAL MARKINGS FOR TURN LANES PAGE 2.....                       | TPM-207   |

~ **TEMPORARY** ~

TRAFFIC CONTROL

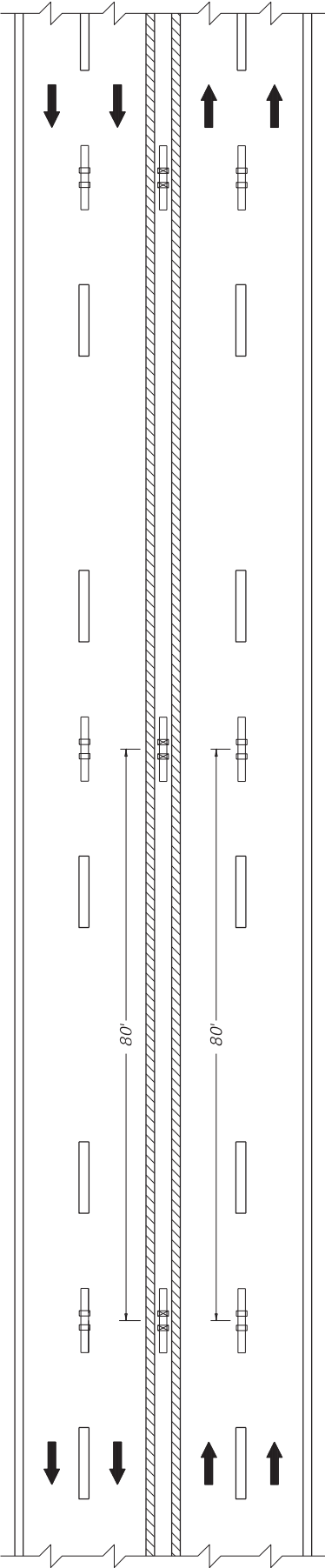
|   |            |
|---|------------|
| LANE CLOSURE TWO-LANE HIGHWAY.....            | TTC-100-05 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE I .....  | TTC-115-04 |
| LANE CLOSURE MULTI-LANE HIGHWAY CASE II ..... | TTC-120-04 |

DEVICES

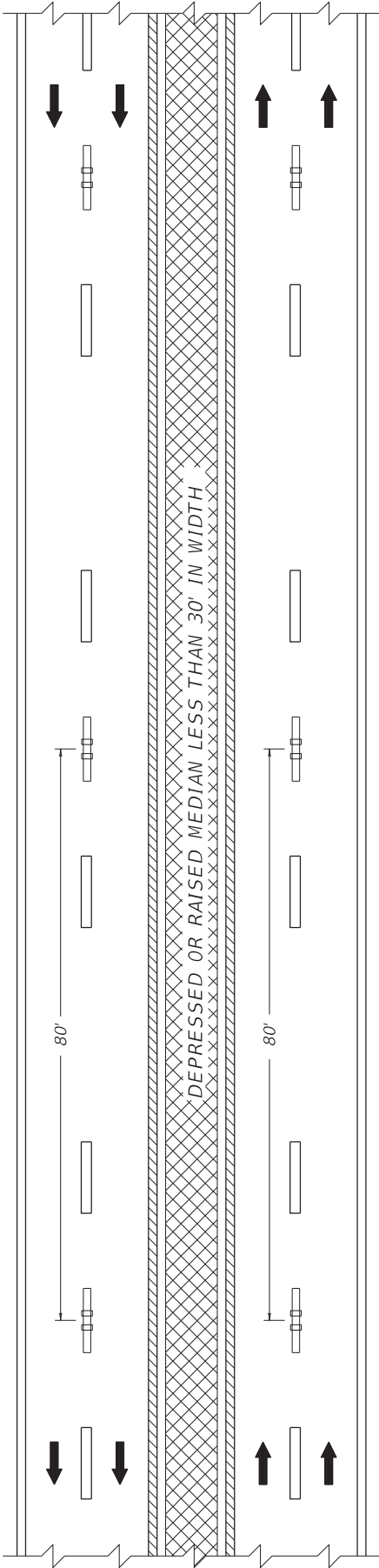
|   |            |
|---|------------|
| DOUBLE FINES ZONE SIGNS.....            | TTD-120-03 |
| PAVEMENT CONDITION WARNING SIGNS .....  | TTD-125-03 |
| SPEED ZONE SIGNING FOR WORK ZONES ..... | TTD-130    |

STRIPING OPERATIONS

|  |            |
|--|------------|
| MOBILE OPERATION FOR DURABLE STRIPING CASE I .....   | TTS-120-02 |
| MOBILE OPERATION FOR DURABLE STRIPING CASE II .....  | TTS-125-02 |
| MOBILE OPERATION FOR DURABLE STRIPING CASE III ..... | TTS-130-02 |
| MOBILE OPERATION FOR DURABLE STRIPING CASE IV .....  | TTS-135-02 |



ARRANGEMENT "A" (UNDIVIDED HIGHWAY)



ARRANGEMENT "B" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN LESS THAN 30' IN WIDTH)

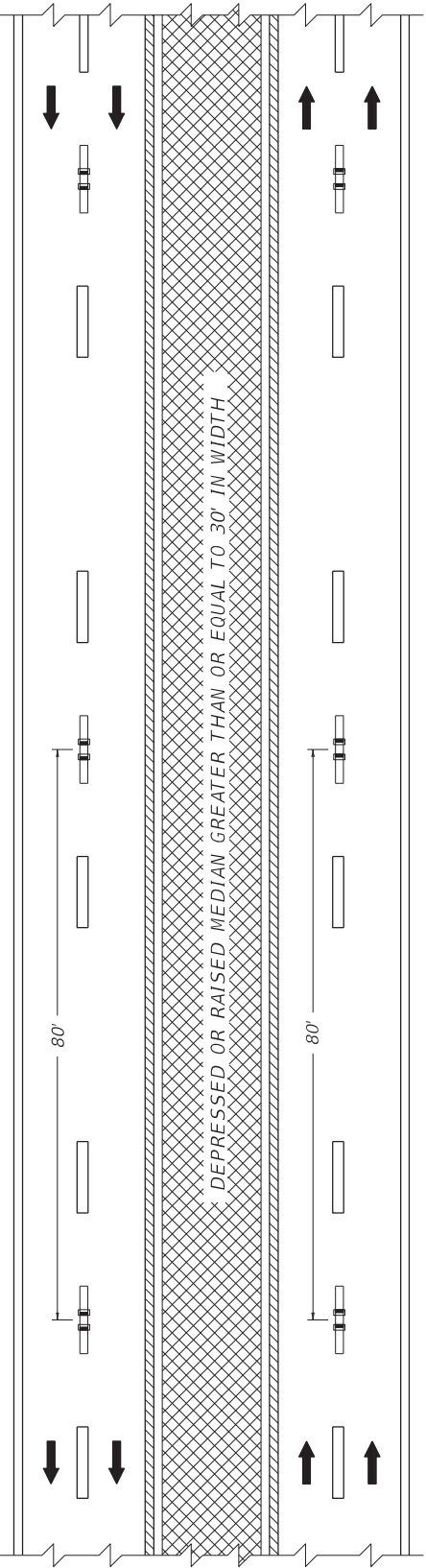
- ~ NOTES ~
1. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHOULD BE PLACED BETWEEN THE TWO LINES.
  2. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
  4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.
- BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY
- UNIT TO BID  
EACH  
EACH

| LEGEND |  |
|--------|--|
|        | BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)  |
|        | MONO-DIRECTIONAL PAVEMENT MARKER (WHITE) |
|        | MARKINGS (YELLOW)                        |
|        | MARKINGS (WHITE)                         |
|        | DEPRESSED OR RAISED MEDIAN               |

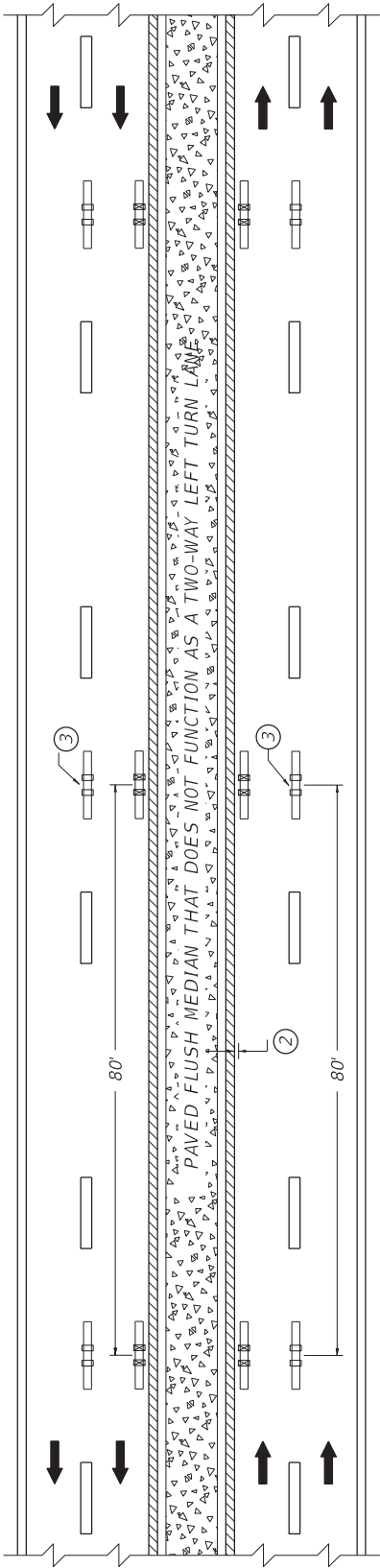
DRAWING NOT TO SCALE

|                                     |
|-------------------------------------|
| KENTUCKY                            |
| DEPARTMENT OF HIGHWAYS              |
| INLAID PAVEMENT MARKER ARRANGEMENTS |
| MULTI-LANE ROADWAYS                 |

|                   |          |
|-------------------|----------|
| SUBMITTED         | 06-09-21 |
| DIVISION DIRECTOR | DATE     |
| 006               |          |



ARRANGEMENT "C" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN GREATER THAN OR EQUAL TO 30' IN WIDTH)



ARRANGEMENT "D" (DIVIDED HIGHWAY WITH PAVED FLUSH MEDIAN THAT DOES NOT FUNCTION AS A TWO-WAY LEFT TURN LANE)

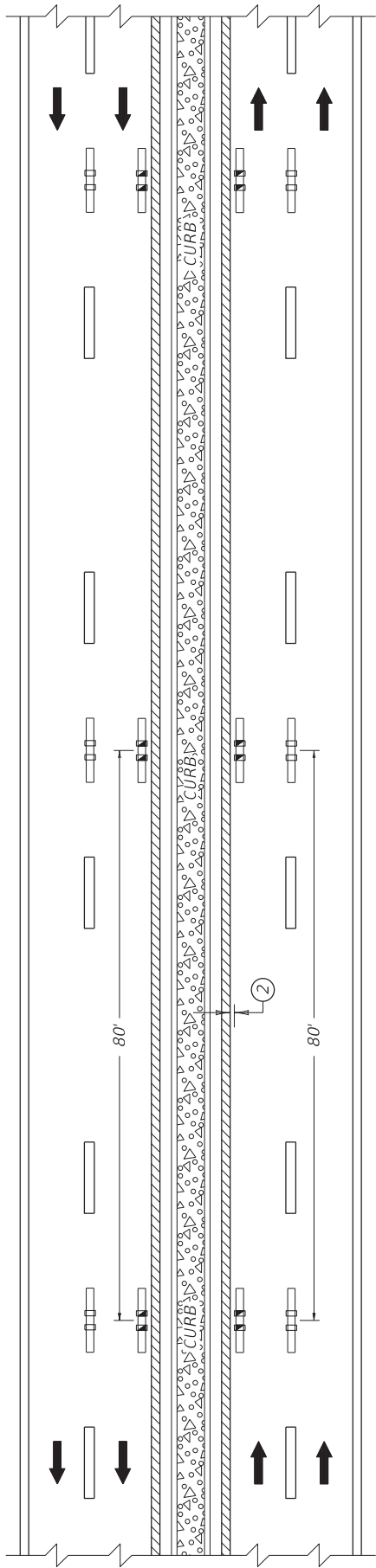
- ~ NOTES ~
1. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  2. MARKERS INSTALLED ALONG EDGE LINES SHOULD BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
  3. IF WIDTH OF PAVED FLUSH MEDIAN IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.
  4. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
  5. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LINES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.
- BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY  
06613 - INLAID PAVEMENT MARKER - B W/R
- UNIT TO BID  
EACH  
EACH  
EACH

| LEGEND |  |
|--------|--|
|        | BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)    |
|        | BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED) |
|        | MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)   |
|        | MARKINGS (YELLOW)                          |
|        | MARKINGS (WHITE)                           |
|        | FLUSH MEDIAN                               |
|        | DEPRESSED OR RAISED MEDIAN                 |

DRAWING NOT TO SCALE

|                        |
|------------------------|
| KENTUCKY               |
| DEPARTMENT OF HIGHWAYS |
| INLAID PAVEMENT MARKER |
| ARRANGEMENTS           |
| MULTI-LANE ROADWAYS    |

|                   |          |
|-------------------|----------|
| SUBMITTED         | 06-09-21 |
| DIVISION DIRECTOR | DATE     |
|                   | 007      |



ARRANGEMENT "E" (DIVIDED HIGHWAY WITH CURB WITHIN 8' OF DRIVING LANE)

LEGEND

MONO-DIRECTIONAL PAVEMENT MARKER (YELLOW)

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

MARKINGS (YELLOW)

MARKINGS (WHITE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06611 - INLAID PAVEMENT MARKER - MY  
UNIT TO BID  
EACH  
EACH

DRAWING NOT TO SCALE

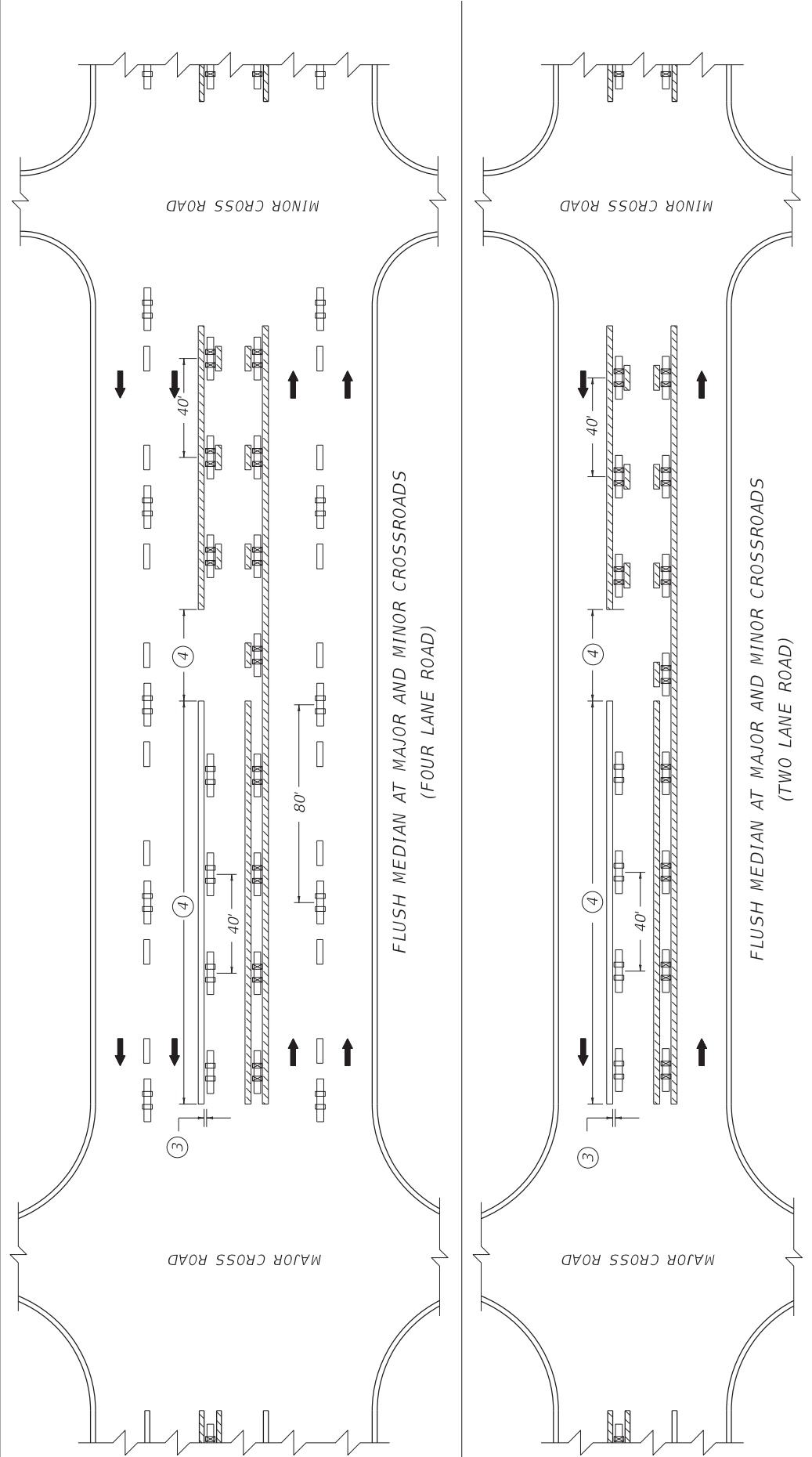
KENTUCKY

DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER  
ARRANGEMENTS

MULTI-LANE ROADWAYS

SUBMITTED 06-09-21  
DIVISION DIRECTOR  
008



- ~ NOTES ~
- 1. MARKERS INSTALLED AT DOUBLE YELLOW CENTERLINES SHALL BE PLACED BETWEEN THE TWO LINES.
  - 2. MARKERS INSTALLED ALONG LANE LINES OR DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
  - 3. MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
  - 4. LENGTH TO BE DETERMINED ON A PROJECT BY PROJECT BASIS.
  - 5. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
- BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY
- UNIT TO BID  
EACH  
EACH

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWG.  
TPM-207

LEGEND

BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)

MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

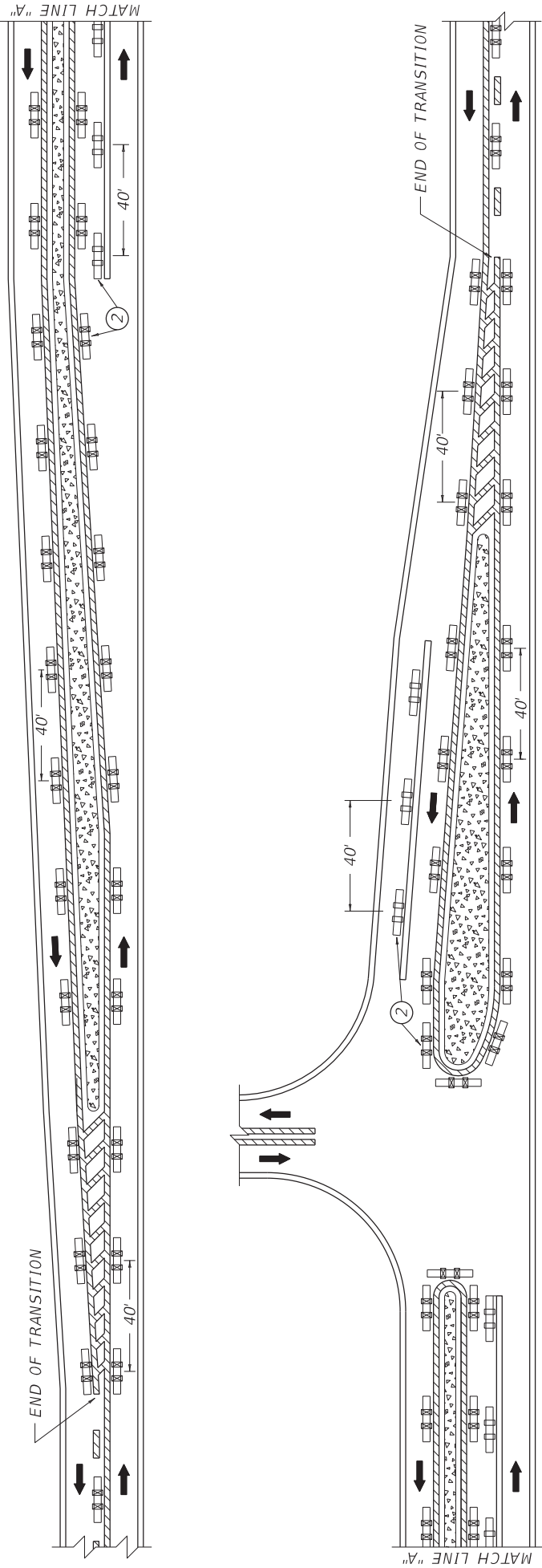
MARKINGS (YELLOW)

MARKINGS (WHITE)

KENTUCKY  
DEPARTMENT OF HIGHWAYS  
INLAID PAVEMENT MARKER  
ARRANGEMENTS  
TWO-WAY, LEFT-TURN LANE


SUBMITTED  
06-09-21  
DATE  
015








CHANNELIZED INTERSECTION ON A TWO DIRECTIONAL TWO LANE FACILITY


LEGEND

 B1-DIRECTIONAL PAVEMENT MARKER (YELLOW)

 MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)

 CURBED OR FLUSH MEDIAN

 MARKINGS (YELLOW)

 MARKINGS (WHITE)

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWG.  
TPM-205

~ NOTES ~

1. MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
- ② MARKERS INSTALLED ALONG EDGE LINES OR CHANNELIZING LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS  
06610 - INLAID PAVEMENT MARKER - MW  
06612 - INLAID PAVEMENT MARKER - BY  
UNIT TO BID  
EACH  
EACH

KENTUCKY

DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER  
ARRANGEMENT  
CHANNELIZED  
INTERSECTION

SUBMITTED

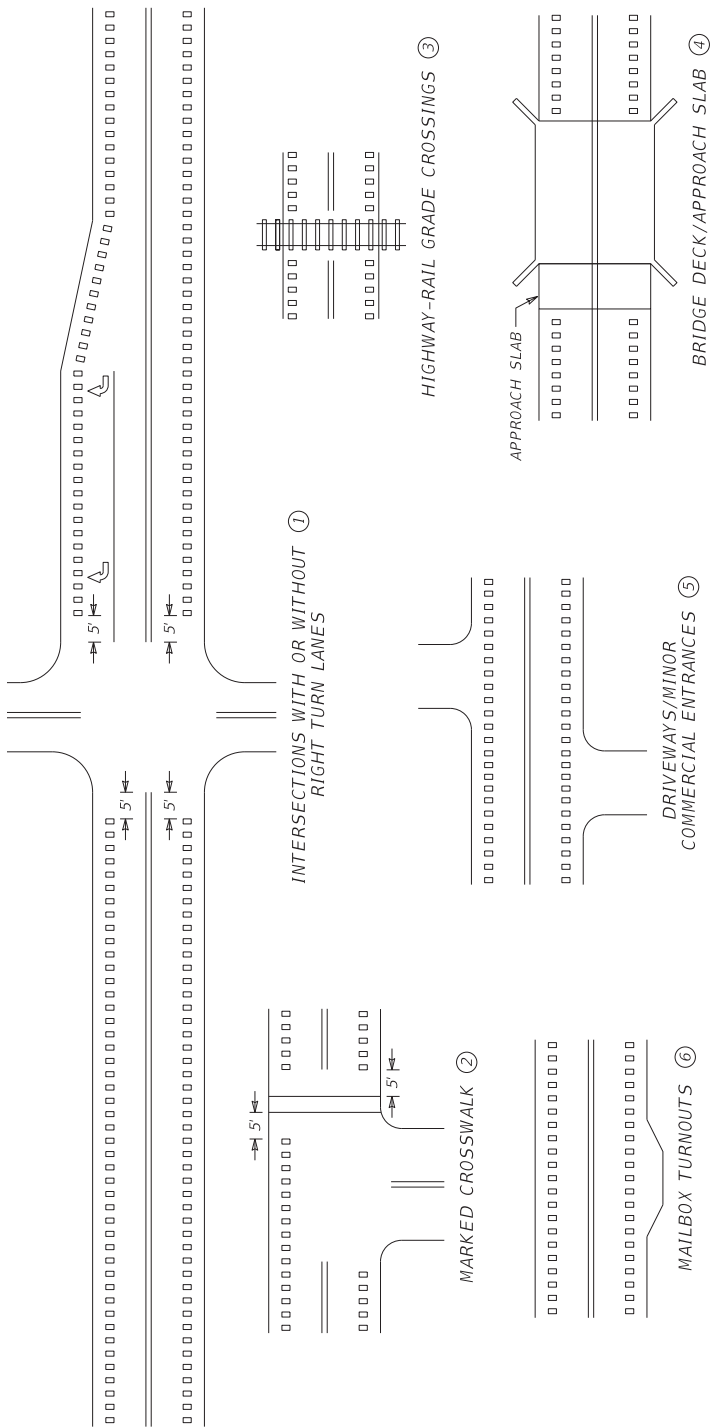


DIVISION DIRECTOR

06-09-21

DATE

016



~ NOTES ~

① EDGELINE RUMBLE STRIPS SHALL BE OMITTED THROUGH MAJOR INTERSECTIONS WITH OR WITHOUT RIGHT-TURN LANES. OMIT EDGELINE RUMBLE STRIPS APPROXIMATELY 5' IN ADVANCE OF THE AREA WHERE EDGELINE PAVEMENT MARKINGS HAVE BEEN OMITTED (NORMALLY WHERE THE SIDE STREET RADIUS INTERSECTS THE MAINLINE).

② EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED THROUGH MARKED CROSSWALKS. OMIT EDGELINE RUMBLE STRIPS APPROXIMATELY 5 FT IN ADVANCE OF MARKED CROSSWALKS.

③ EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED ACROSS HIGHWAY-RAIL GRADE CROSSINGS.

④ EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS OR APPROACH SLABS.

⑤ EDGELINE RUMBLE STRIPS SHALL BE INSTALLED THROUGH DRIVEWAYS & MINOR COMMERCIAL ENTRANCES.

⑥ EDGELINE RUMBLE STRIPS SHALL BE INSTALLED THROUGH MAILBOX TURNOUTS.

7. EDGELINE RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS.

DRAWING NOT TO SCALE

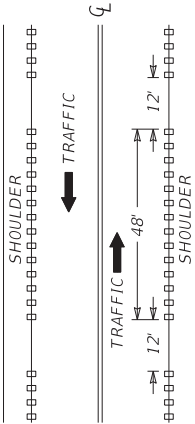
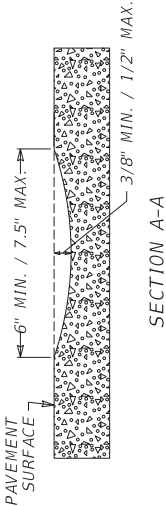
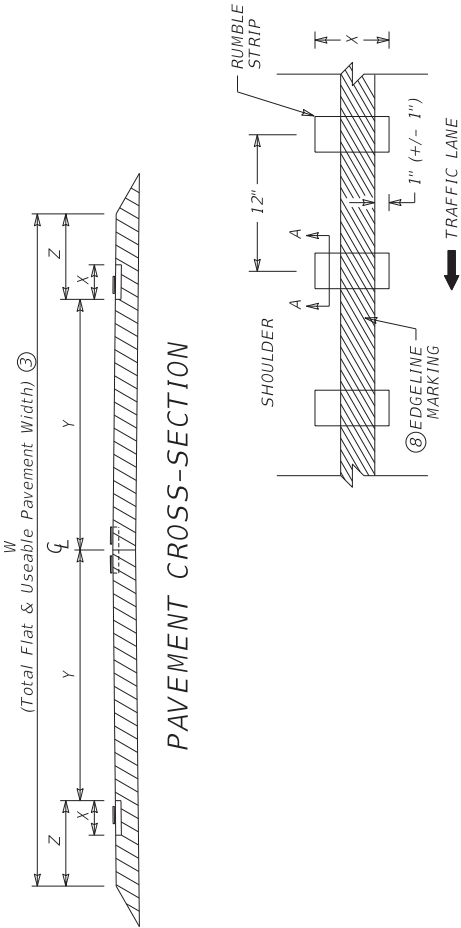
USE WITH CUR. STD. DWGS.  
TPR-120, TPR-125, AND  
TPR-130

SUBMITTED *[Signature]* 08-21-2023  
DIVISION DIRECTOR DATE

BID ITEMS AND UNIT TO BID  
EDGELINE RUMBLE STRIPS  
LF

|  |  |  |  |  |           |           |
|--|--|--|--|--|-----------|-----------|
|  | COMMONWEALTH OF KENTUCKY<br>DEPARTMENT OF HIGHWAYS |  | DRAWING TITLE: SEPIA 028 - EDGELINE RUMBLE STRIP PLACEMENT DETAILS |  | ITEM NO.  | COUNTY OF |
|  | OpenRoads Designer v12.02.4                        |  | FILE NAME: C:\P\WORK\KAYTC\ONLINE\ENGINEERING\028\04\TPR115.DGN    |  | SHEET NO. |           |

| PAVEMENT WIDTH (W) ③ | TYPES OF RUMBLE STRIPS TO INSTALL                            | LANE WIDTH (Y) ⑤ | SHOULDER WIDTH (Z) ⑥ | LENGTH OF EDGELINE RUMBLE (X) ⑦ |
|----------------------|--|------------------|----------------------|---------------------------------|
| 20'                  | ④ OPTIONAL: EDGELINE RUMBLE STRIPS                           | 9'               | 1'                   | 8"                              |
| 21'                  |  | 9.5'             | 1'                   | 8"                              |
| 22'                  |  | 10'              | 1'                   | 8"                              |
| 23'                  |  | 10'              | 1.5'                 | 8"                              |
| 24'                  |  | 10.5'            | 1.5'                 | 8"                              |
| 25'                  | STANDARD: INSTALL ONLY EDGELINE RUMBLE STRIPS                | 11'              | 1.5'                 | 8"                              |
| 26'                  |  | 11'              | 2'                   | 8"                              |
| 27'                  |  | 11'              | 2.5'                 | 8"                              |
| 28'                  |  | 11'              | 3'                   | 8"                              |
| 29'                  |  | 11'              | 3.5'                 | 8"                              |
| 30'                  | STANDARD: INSTALL BOTH EDGELINE AND CENTERLINE RUMBLE STRIPS | 11'              | 4'                   | 8"                              |
| 31'                  |  | 11'              | 4.5'                 | 8"                              |
| 32'                  |  | 11'              | 5'                   | 8"                              |
| 33'                  |  | 11'              | 5.5'                 | 8"                              |
| 34'                  |  | 11'              | 6'                   | 8"                              |
| 35'                  |  | 11.5'            | 6'                   | 8"                              |
| 36'                  |  | 12'              | 6'                   | 8"                              |
| 37'                  |  | 12'              | 6.5'                 | 12"                             |
| 38'                  |  | 12'              | 7'                   | 12"                             |
| 39'                  |  | 12'              | 7.5'                 | 12"                             |
| >=40'                |  | 12'              | >=8'                 | 16"                             |



~ NOTES ~  
SEE CURRENT STANDARD DRAWING NUMBER TPR-120N FOR ALL NOTES.  
APPLICATION OF THE TABLE ABOVE: THE TOTAL PAVEMENT WIDTH (W) IS THE STARTING POINT IN USING THE TABLE. THE TOTAL PAVEMENT WIDTH (W) IS THE TOTAL PAVEMENT THAT IS FLAT AND USEABLE FOR DRIVING. WHEN MEASURING THE TOTAL PAVEMENT WIDTH (W) DO NOT INCLUDE THE WIDTH OF ANY PAVEMENT THAT IS NOT FLAT AND USEABLE FOR DRIVING, SUCH AS PAVEMENT WEDGES. ONCE THE TOTAL PAVEMENT WIDTH (W) IS DETERMINED, USE THIS VALUE AND THE TABLE ABOVE TO DETERMINE THE TYPE(S) OF RUMBLE STRIPS TO INSTALL AND THE RECOMMENDED LANE WIDTH (Y) AND SHOULDER WIDTH (Z).

BID ITEM AND UNIT TO BID  
EDGELINE RUMBLE STRIPS LF  
CENTERLINE RUMBLE STRIPS LF

DRAWING NOT TO SCALE  
USE WITH CUR. STD. DWGS.  
TPR-100, TPR-105, TPR-110,  
TPR-115 AND TPR-120N

SUBMITTED *[Signature]* 08-21-2023  
DIVISION DIRECTOR DATE



TWO LANE ROADWAY  
PAVEMENT CROSS-SECTION

| TRAVELED<br>WAY<br>② | TYPE OF<br>PAVEMENT<br>STRIPING                    | NON-STATE PRIMARY ROUTES |          |             |          | STATE PRIMARY ROUTES |  |
|----------------------|--|--------------------------|----------|-------------|----------|----------------------|--|
|                      |  | < 1000 ADT               |          | >= 1000 ADT |          | ANY ADT              |  |
| < 16' ④              | EDGELINE STRIPES ONLY                              | WIDTH                    | MATERIAL | WIDTH       | MATERIAL | WIDTH                | MATERIAL*                                  |
|                      |  | 4"                       | PAINT    | 4"          | PAINT    | 6"                   | THERMO (ASPHALT)<br>TYPE I TAPE (CONCRETE) |
| 16' TO < 20'         | EDGELINE STRIPES ONLY OR<br>CENTERLINE STRIPE ONLY | 4"                       | PAINT    | 4"          | PAINT    | 6"                   | THERMO (ASPHALT)<br>TYPE I TAPE (CONCRETE) |
| >=20' ③              | CENTERLINE AND<br>EDGELINE STRIPES                 | 4" ⑤                     | PAINT    | 6"          | PAINT    | 6"                   | THERMO (ASPHALT)<br>TYPE I TAPE (CONCRETE) |

\*OTHER DURABLE NON-WATERBORNE MARKINGS MAY BE USED WITH APPROVAL FROM THE DIVISION OF TRAFFIC OPERATIONS.

~ NOTES ~

1. INSTALL PAVEMENT STRIPING ON TWO LANE, TWO WAY ROADWAYS AS DETAILED IN THE ABOVE TABLE AND IN ACCORDANCE WITH THE PAVEMENT MARKINGS AND DELINEATION CHAPTER OF THE TRAFFIC OPERATIONS GUIDANCE MANUAL. CONTACT THE DIVISION OF TRAFFIC OPERATIONS FOR ADDITIONAL GUIDANCE IF NECESSARY.
2. THE TRAVELED WAY IS THE PORTION OF ROADWAY FOR THE MOVEMENT OF VEHICLES, EXCLUSIVE OF THE SHOULDERS.
3. ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 20 FT OR GREATER, BUT LESS THAN 22 FT, EDGELINE RUMBLE STRIPS ARE AN OPTIONAL APPLICATION. THE DIVISION OF TRAFFIC OPERATIONS IS AVAILABLE TO ASSIST WITH THE DETERMINATION OF WHETHER OR NOT TO INSTALL EDGELINE RUMBLE STRIPS ON PAVEMENT WIDTHS LESS THAN 22 FT.
- ON TWO LANE, TWO WAY ROADWAYS THAT HAVE A TOTAL PAVEMENT WIDTH (W) THAT IS 22 FT OR GREATER, INSTALL PAVEMENT STRIPING AS DETAILED IN THE ABOVE TABLE AND IN CONJUNCTION WITH THE RUMBLE STRIPS AS DETAILED ON TPR-120 AND TPR-120N.
4. EDGELINES MAY BE OMITTED FROM ROADWAYS WITH A TRAVELED WAY WIDTH LESS THAN 16 FEET WITH THE APPROVAL OF THE DIVISION OF TRAFFIC OPERATIONS.
5. EDGELINES MAY BE OMITTED ON NON-STATE PRIMARY ROUTES WITH A TRAVELED WAY WIDTH GREATER THAN OR EQUAL TO 20 FEET AND AN ADT LESS THAN 1,000.
6. EDGELINES MAY BE OMITTED, BASED ON ENGINEERING JUDGMENT, IN AREAS WHERE THE PAVEMENT EDGE IS DELINEATED BY PHYSICAL OBJECTS SUCH AS CURBS, PARKING SPACES, OR OTHER MARKINGS. EDGELINES SHOULD BE INSTALLED ON ROADWAYS WITH CURB AND GUTTER IF THE POSTED SPEED LIMIT IS 45 MPH OR GREATER.

DRAWING NOT TO SCALE  
USE WITH CUR STD. DWGS.  
TPR-120 & TPR-120N

SUBMITTED:  09/28/2023  
MATTHEW H. SMITH



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

OpenRoads Designer v10.16.2.267

DATE PLOTTED: 8/1/2015 9:53:17 AM

FILE NAME: C:\PWORK\KVC\_C\WILLBERGER\020445\SEP0032.DGN

DRAWING TITLE: SEPIA 032 - PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS

ITEM NO.

COUNTY OF

SHEET NO.

## **PART III**

### **EMPLOYMENT, WAGE AND RECORD REQUIREMENTS**

**TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

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

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

**I. APPLICATION**

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

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

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

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

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

Revised: January 25, 2017

**II. NONDISCRIMINATION OF EMPLOYEES**

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

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

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

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

## EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

### **Kentucky Equal Employment Opportunity Act of 1978**

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

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

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

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

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



# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

## FEDERAL MINIMUM WAGE

**\$7.25** PER HOUR

BEGINNING JULY 24, 2009

- OVERTIME PAY** At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.
- CHILD LABOR** An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.
- Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:
- No more than*
- **3** hours on a school day or **18** hours in a school week;
  - **8** hours on a non-school day or **40** hours in a non-school week.
- Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.
- TIP CREDIT** Employers of “tipped employees” must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee’s tips combined with the employer’s cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.
- ENFORCEMENT** The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.
- Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act’s child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.
- ADDITIONAL INFORMATION**
- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
  - Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
  - Some state laws provide greater employee protections; employers must comply with both.
  - The law requires employers to display this poster where employees can readily see it.
  - Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
  - Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.

For additional information:



**1-866-4-USWAGE**

(1-866-487-9243)

TTY: 1-877-889-5627



**WWW.WAGEHOUR.DOL.GOV**

**PART IV**

**BID ITEMS**

252217

PROPOSAL BID ITEMS

Report Date 4/17/25

Page 1 of 2

Section: 0001 - PAVING

| LINE | BID CODE   | ALT | DESCRIPTION                                    | QUANTITY  | UNIT | UNIT PRIC | FP | AMOUNT      |
|------|------------|-----|--|-----------|------|-----------|----|-------------|
| 0010 | 00190      |     | LEVELING & WEDGING PG64-22                     | 72.00     | TON  |           | \$ |             |
| 0020 | 00356      |     | ASPHALT MATERIAL FOR TACK                      | 28.00     | TON  |           | \$ |             |
| 0030 | 00388      |     | CL3 ASPH SURF 0.38B PG64-22                    | 4,420.00  | TON  |           | \$ |             |
| 0040 | 02562      |     | TEMPORARY SIGNS                                | 690.00    | SQFT |           | \$ |             |
| 0050 | 02650      |     | MAINTAIN & CONTROL TRAFFIC<br>(KY 14 - FD05)   | 1.00      | LS   |           | \$ |             |
| 0060 | 02650      |     | MAINTAIN & CONTROL TRAFFIC<br>(KY 16)          | 1.00      | LS   |           | \$ |             |
| 0070 | 02650      |     | MAINTAIN & CONTROL TRAFFIC<br>(US 25)          | 1.00      | LS   |           | \$ |             |
| 0080 | 02671      |     | PORTABLE CHANGEABLE MESSAGE SIGN               | 3.00      | EACH |           | \$ |             |
| 0090 | 02676      |     | MOBILIZATION FOR MILL & TEXT<br>(KY 14 - FD05) | 1.00      | LS   |           | \$ |             |
| 0100 | 02676      |     | MOBILIZATION FOR MILL & TEXT<br>(KY 16)        | 1.00      | LS   |           | \$ |             |
| 0110 | 02676      |     | MOBILIZATION FOR MILL & TEXT<br>(US 25)        | 1.00      | LS   |           | \$ |             |
| 0120 | 02677      |     | ASPHALT PAVE MILLING & TEXTURING               | 4,420.00  | TON  |           | \$ |             |
| 0130 | 02697      |     | EDGE LINE RUMBLE STRIPS                        | 24,300.00 | LF   |           | \$ |             |
| 0140 | 02775      |     | ARROW PANEL                                    | 2.00      | EACH |           | \$ |             |
| 0150 | 03240      |     | BASE FAILURE REPAIR                            | 445.00    | SQYD |           | \$ |             |
| 0160 | 04793      |     | CONDUIT-1 1/4 IN                               | 50.00     | LF   |           | \$ |             |
| 0170 | 04811      |     | ELECTRICAL JUNCTION BOX TYPE B                 | 1.00      | EACH |           | \$ |             |
| 0180 | 04830      |     | LOOP WIRE                                      | 672.00    | LF   |           | \$ |             |
| 0190 | 04850      |     | CABLE-NO. 14/1 PAIR                            | 50.00     | LF   |           | \$ |             |
| 0200 | 04895      |     | LOOP SAW SLOT AND FILL                         | 254.00    | LF   |           | \$ |             |
| 0210 | 06510      |     | PAVE STRIPING-TEMP PAINT-4 IN                  | 68,390.00 | LF   |           | \$ |             |
| 0220 | 06514      |     | PAVE STRIPING-PERM PAINT-4 IN                  | 18,390.00 | LF   |           | \$ |             |
| 0230 | 06515      |     | PAVE STRIPING-PERM PAINT-6 IN                  | 50,000.00 | LF   |           | \$ |             |
| 0240 | 06516      |     | PAVE STRIPING-PERM PAINT-8 IN                  | 435.00    | LF   |           | \$ |             |
| 0250 | 06517      |     | PAVE STRIPING-PERM PAINT-12 IN                 | 31.00     | LF   |           | \$ |             |
| 0260 | 06565      |     | PAVE MARKING-THERMO X-WALK-6 IN                | 424.00    | LF   |           | \$ |             |
| 0270 | 06568      |     | PAVE MARKING-THERMO STOP BAR-24IN              | 401.00    | LF   |           | \$ |             |
| 0280 | 06569      |     | PAVE MARKING-THERMO CROSS-HATCH                | 682.00    | SQFT |           | \$ |             |
| 0290 | 06573      |     | PAVE MARKING-THERMO STR ARROW                  | 2.00      | EACH |           | \$ |             |
| 0300 | 06574      |     | PAVE MARKING-THERMO CURV ARROW                 | 34.00     | EACH |           | \$ |             |
| 0310 | 06575      |     | PAVE MARKING-THERMO COMB ARROW                 | 2.00      | EACH |           | \$ |             |
| 0320 | 06576      |     | PAVE MARKING-THERMO ONLY                       | 2.00      | EACH |           | \$ |             |
| 0330 | 10020NS    |     | FUEL ADJUSTMENT                                | 6,735.00  | DOLL | \$1.00    | \$ | \$6,735.00  |
| 0340 | 10030NS    |     | ASPHALT ADJUSTMENT                             | 16,918.00 | DOLL | \$1.00    | \$ | \$16,918.00 |
| 0350 | 20099ES842 |     | PAVE MARK TEMP PAINT STOP BAR                  | 339.00    | LF   |           | \$ |             |
| 0360 | 20100ES842 |     | PAVE MARK TEMP PAINT LINE ARROW                | 30.00     | EACH |           | \$ |             |
| 0370 | 20208NC    |     | PAVE MARK-PAINT ARROWS                         | 4.00      | EACH |           | \$ |             |
| 0380 | 23010EN    |     | PAVE MARK TEMP PAINT STOP BAR-24 IN            | 62.00     | LF   |           | \$ |             |
| 0390 | 23261EC    |     | PAVE MARK-THERMO-X-WALK-24 IN                  | 352.00    | LF   |           | \$ |             |
| 0400 | 24679ED    |     | PAVE MARK THERMO CHEVRON                       | 287.00    | SQFT |           | \$ |             |
| 0410 | 24963ED    |     | LOOP TEST                                      | 2.00      | EACH |           | \$ |             |
| 0420 | 26119EC    |     | INSTALL RADAR PRESENCE DETECTOR<br>TYPE A      | 21.00     | EACH |           | \$ |             |

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| LINE | BID CODE | ALT | DESCRIPTION                                    | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--|----------|------|-----------|----|--------|
| 0430 | 26228EC  |     | ELECTRONIC DELIVERY MGMT SYSTEM (KY 14 - FD05) | 1.00     | LS   |           | \$ |        |
| 0440 | 26228EC  |     | ELECTRONIC DELIVERY MGMT SYSTEM (KY 16)        | 1.00     | LS   |           | \$ |        |
| 0450 | 26228EC  |     | ELECTRONIC DELIVERY MGMT SYSTEM (US 25)        | 1.00     | LS   |           | \$ |        |

Section: 0002 - ROADWAY

| LINE | BID CODE | ALT | DESCRIPTION                               | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|---|----------|------|-----------|----|--------|
| 0460 | 01810    |     | STANDARD CURB AND GUTTER                  | 100.00   | LF   |           | \$ |        |
| 0470 | 02562    |     | TEMPORARY SIGNS                           | 100.00   | SQFT |           | \$ |        |
| 0480 | 02650    |     | MAINTAIN & CONTROL TRAFFIC (KY 14 - FD04) | 1.00     | LS   |           | \$ |        |
| 0490 | 02671    |     | PORTABLE CHANGEABLE MESSAGE SIGN          | 4.00     | EACH |           | \$ |        |
| 0500 | 02726    |     | STAKING (KY 14 - FD04)                    | 1.00     | LS   |           | \$ |        |
| 0510 | 08100    |     | CONCRETE-CLASS A                          | 2.00     | CUYD |           | \$ |        |
| 0520 | 20997ED  |     | REMOVE TRAFFIC ISLAND                     | 815.00   | SQYD |           | \$ |        |
| 0530 | 21415ND  |     | EROSION CONTROL (KY 14 - FD04)            | 1.00     | LS   |           | \$ |        |

Section: 0003 - DRAINAGE

| LINE | BID CODE | ALT | DESCRIPTION                            | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--|----------|------|-----------|----|--------|
| 0540 | 00521    |     | STORM SEWER PIPE-15 IN                 | 205.00   | LF   |           | \$ |        |
| 0550 | 01456    |     | CURB BOX INLET TYPE A                  | 1.00     | EACH |           | \$ |        |
| 0560 | 01585    |     | REMOVE DROP BOX INLET (TOP PHASE ONLY) | 2.00     | EACH |           | \$ |        |
| 0570 | 01789    |     | RECONSTRUCT MANHOLE                    | 2.00     | EACH |           | \$ |        |
| 0580 | 23822EC  |     | CORED HOLE DRAINAGE BOX CON-15 IN      | 1.00     | EACH |           | \$ |        |

Section: 0004 - SIGNALIZATION

| LINE | BID CODE   | ALT | DESCRIPTION                      | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|------------|-----|----------------------------------|----------|------|-----------|----|--------|
| 0590 | 20188NS835 |     | INSTALL LED SIGNAL-3 SECTION     | 4.00     | EACH |           | \$ |        |
| 0600 | 20266ES835 |     | INSTALL LED SIGNAL- 4 SECTION    | 4.00     | EACH |           | \$ |        |
| 0610 | 24908EC    |     | INSTALL SIGNAL CONTROLLER-TY ATC | 4.00     | EACH |           | \$ |        |
| 0620 | 24955ED    |     | REMOVE SIGNAL EQUIPMENT          | 8.00     | EACH |           | \$ |        |

Section: 0005 - DEMOBILIZATION

| LINE | BID CODE | ALT | DESCRIPTION    | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|----------------|----------|------|-----------|----|--------|
| 0630 | 02569    |     | DEMOBILIZATION | 1.00     | LS   |           | \$ |        |