



**CALL NO. 200**

**CONTRACT ID. 161043**

**WOODFORD - FRANKLIN COUNTIES**

**FED/STATE PROJECT NUMBER 121GR16D043**

**DESCRIPTION I-64**

**WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB**

**PRIMARY COMPLETION DATE 10/1/2017**

**LETTING DATE: August 26,2016**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 26,2016. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**DBE CERTIFICATION REQUIRED - 5%**

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

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**PART I**  
**SCOPE OF WORK**

## ADMINISTRATIVE DISTRICT - 05

**CONTRACT ID - 161043**

**121GR16D043**

**COUNTY - FRANKLIN**

**PCN - DE03700641643**

**NHPP IM 0644(090)**

I-64 JPC REPAIR AND DIAMOND GRINDING ON I-64 FROM MP 57.811 IN FRANKLIN CO.TO MP 59.431.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 05-02079.00.

GEOGRAPHIC COORDINATES LATITUDE 38:09:56.00 LONGITUDE 84:44:58.00

**COUNTY - WOODFORD**

**PCN - DE12000641643**

**NHPP IM 0644(090)**

I-64 JPC REPAIR AND DIAMOND GRINDING ON I-64 FROM MP 59.431 TO MP 64.868 IN WOODFORD COUNTY.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 05-02079.00.

GEOGRAPHIC COORDINATES LATITUDE 38:09:56.00 LONGITUDE 84:44:58.00

**COMPLETION DATE(S):**

COMPLETED BY 10/01/2017

APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. ([www.transportation.ky.gov/construction-procurement](http://www.transportation.ky.gov/construction-procurement))

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.

### **SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS**

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

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

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

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

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

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

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

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

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

### **HARDWOOD REMOVAL RESTRICTIONS**

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

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

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

### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

06/01/16

### **FEDERAL CONTRACT NOTES**

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals  
102.8 Irregular Proposals 102.14 Disqualification of Bidders  
102.9 Proposal Guaranty

### **CIVIL RIGHTS ACT OF 1964**

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

### **NOTICE TO ALL BIDDERS**

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

### **SECOND TIER SUBCONTRACTS**

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

It is the policy of the Kentucky Transportation Cabinet (“the Cabinet”) that Disadvantaged Business Enterprises (“DBE”) shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

### **DBE GOAL**

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

### **OBLIGATION OF CONTRACTORS**

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

### **CERTIFICATION OF CONTRACT GOAL**

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

“The bidder certifies that it has secured participation by Disadvantaged Business Enterprises (“DBE”) in the amount of \_\_\_\_ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program.”

**The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.**

### **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **7** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

- 1 Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- 2 Description of the work each is to perform including the work item , unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the “material listing” on the Construction Procurement website under the specific letting;
- 3 The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
  - The entire expenditure paid to a DBE manufacturer;
  - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
  - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
  - c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- 4 Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- 5 Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

#### **UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED**

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

#### **CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS**

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- 1 Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- 2 Whether the bidder provided solicitations through all reasonable and available means;
- 3 Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- 4 Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- 5 Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- 6 Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- 7 Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- 8 Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- 9 Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- 10 Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal; and
- 11 Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

### **FAILURE TO MEET GOOD FAITH REQUIREMENT**

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

### **SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT**

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry out the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

### **PROMPT PAYMENT**

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

### **CONTRACTOR REPORTING**

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a signed and notarized affidavit (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. **These documents must be submitted within 10 days of being paid by the Cabinet.**

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at:

<http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx>

**The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.**

Photocopied payments and completed, signed and notarized affidavit must be submitted by the Prime Contractor to:

- Office of Civil Rights and Small Business Development
- 6<sup>th</sup> Floor West 200 Mero Street
- Frankfort, KY 40622

### **DEFAULT OR DECERTIFICATION OF THE DBE**

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

3/24/2016

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO PREFERENCE ACT (CPA).**

**(REV 12-17-15) (1-16)**

SECTION 7 is expanded by the following new Article:

102.10 **Cargo Preference Act – Use of United States-flag vessels.**

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

### **ASPHALT MIXTURE**

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

### **DGA BASE**

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

### **DGA BASE FOR SHOULDERS**

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

### **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.

# FRANKLIN AND WOODFORD COS.

INTERSTATE 64  
MP 57.811 to MP 64.868

Construction Number

**NHPP IM 0644(090)**

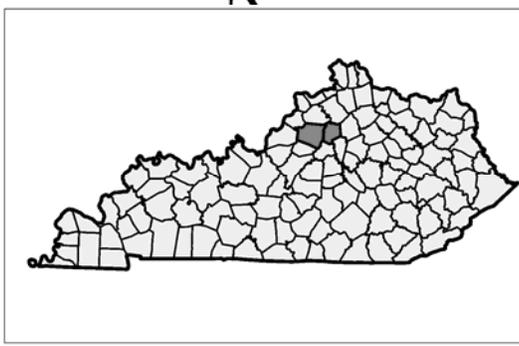
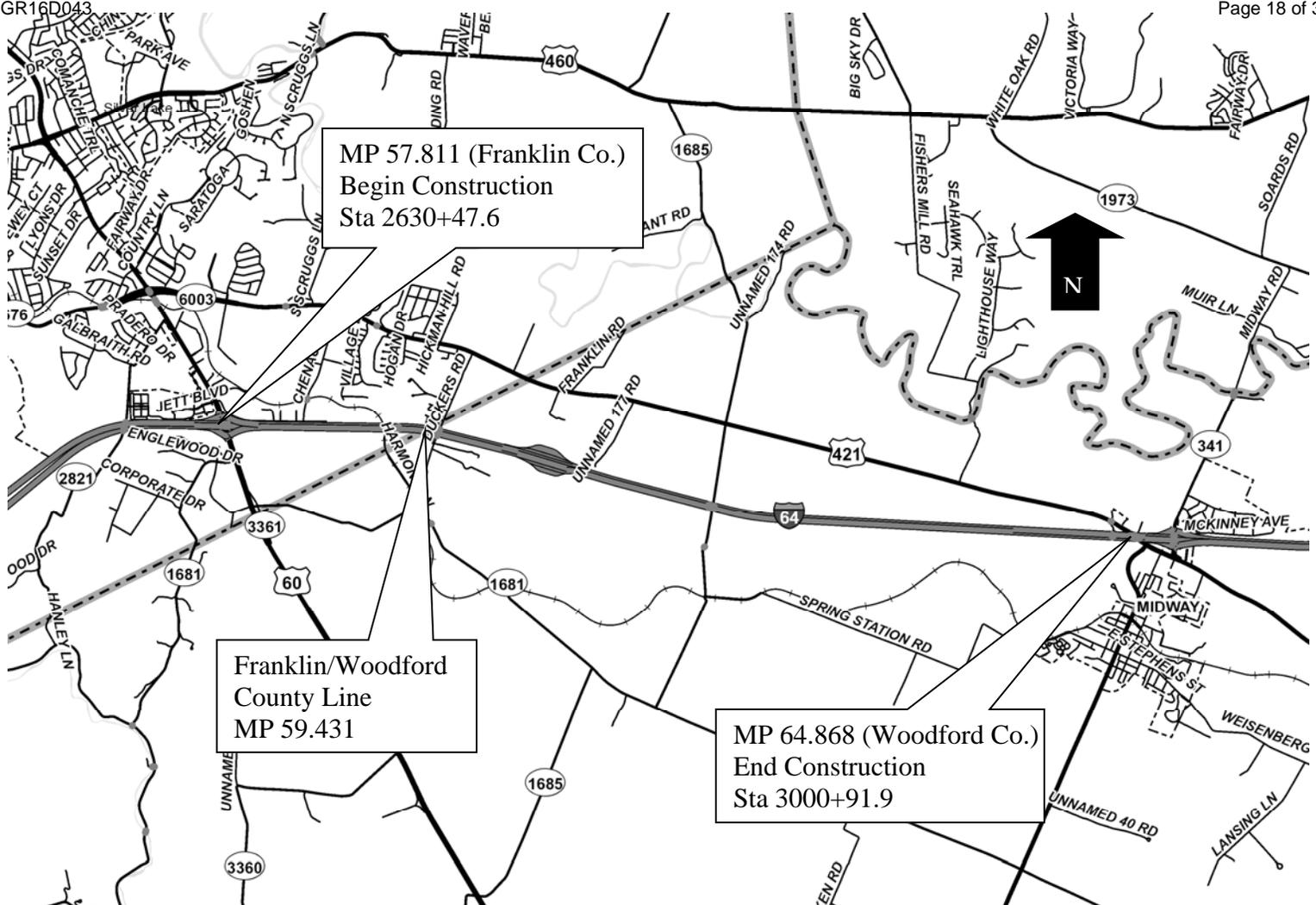
**Item Number: 5-2079.00**

**Prepared For The  
Kentucky Transportation Cabinet**



**Prepared By  
WMB, INC.  
CONSULTING ENGINEERS**

1950 Haggard Court  
Lexington, Kentucky 40505  
Ph. 859-299-5226



Not to Scale

Item Number: 5-2079.00

Construction Numbers: NHPP IM 0644(090)

Letting Date: August 26, 2016

Recommended By: Dan Hite Date: \_\_\_\_\_  
Project Manager

Plan Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
State Highway Engineer

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## REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012
2. FHWA Manual on Uniform Traffic Control Devices (MUTCD) – 2009 Edition w/Revisions
3. Kentucky Department of Highways Standard Drawings, 2016 edition, as applicable:
  - RBB-002-09 Guardrail And Bridge End Drainage For Twin Structures
  - RBB-003-03 Layout Of Guardrail At Twin Structures (Depressed Median)
  - RBC-002-03 Guardrail Connector To Bridge End Type A Components
  - RBC-003-08 Guardrail Connector To Bridge End Type A And A-1 Components
  - RBC-005 Guardrail To Bridge End Connector Type A
  - RBE-205-06 Crash Cushion Type IX-A
  - RBI-001-11 Typical Guardrail Installations
  - RBI-002-07 Typical Guardrail Installations
  - RBI-003-09 Typical Installation For Guardrail End Treatment Type 2A
  - RBI-004-05 Installation Of Guardrail End Treatment Type 1
  - RBI-006-07 Guardrail Installation At Sign Supports
  - RBM-020-09 Delineators For Concrete Barriers
  - RBR-001-12 Steel Beam Guardrail (“W” Beam)
  - RBR-005-11 Guardrail Components
  - RBR-010-06 Guardrail Terminal Sections
  - RBR-015-05 Steel Guardrail Posts
  - RBR-020-06 Guardrail End Treatment Type 1
  - RBR-025-08 Guardrail End Treatment Type 2A
  - RBR-055 Delineators For Guardrail
  - RDD-040-05 Channel Lining Class II and III
  - RDI-040-01 Erosion Control Blanket Slope Installation
  - RDI-041-01 Erosion Control Blanket Channel Installation
  - RDP-010-09 Perforated Pipe Headwalls
  - RDX-210-03 Temporary Silt Fence
  - RDX-225-01 Silt Trap Type B
  - RDX-230-01 Silt Trap Type C
  - RPM-001-04 Permanent U-Turn Opening
  - RPN-010-07 Pavement Transitions & Joint Details For Jointed Plain Concrete Pavement At Bridge Ends
  - RPN-020-04 Concrete Pavement Joints Types & Spacing
  - RPS-010-11 Concrete Pavement Joint Details
  - RPS-020-14 Expansion And Contraction Joint Load Transfer Assemblies
  - RPS-030-06 Concrete Pavement Joints Types And Spacing
  - RPX-001-04 Station Markings Concrete Pavement
  - RPX-015-04 Hot-Poured Elastic Joint Seals For Concrete Pavement

- TPM-105-03 Pavement Marker Arrangements Multi-Lane Roadways
- TPM-125-03 Pavement Marker Arrangement Exit Gore and Off-Ramp
- TPM-135-32 Pavement Marker Arrangement On-Ramp with Parallel Acceleration Lane
- TPM-165 Shoulder & Edge Line Rumble Strip Details
- TPM-170 Flexible Delineator Post Arrangements For Horizontal Curves
- TPM-171 Flexible Delineator Post Arrangements For Interchange Ramp And Crossovers
- TTC-115-03 Lane Closure Multi-Lane Highway Case I
- TTC-135-02 Shoulder Closure
- TTD-120-02 Work Zone Speed Limit and Double Fine Signs
- TTD-125-02 Pavement Condition Warning Signs
- TTS-110-02 Mobile Operation for Paint Striping Case III
- TTS-115-02 Mobile Operation for Paint Striping Case IV

4. Kentucky Department of Highways Sepias, as applicable:

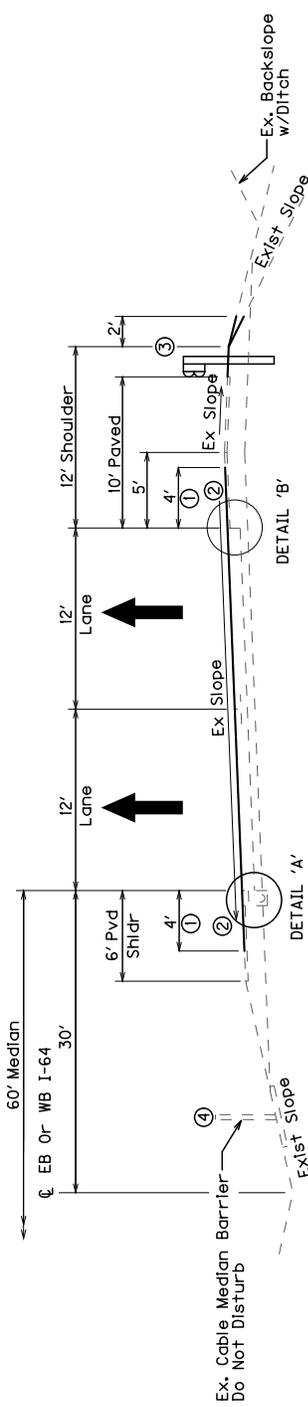
- Drawing No. 001 Treatment of Open Sinkholes

<p><b>CONDITION NO. 1: SOIL EMBANKMENT OVER DEEP OVERBURDEN WITH OPEN SINKHOLES</b> MAINTAIN POSITIVE DRAINAGE</p> <p><b>DETAIL "1 A"</b></p> <p><b>PROCEDURE:</b> g. REMOVE DEBRIS. DO NOT EXCAVATE SOIL OVERBURDEN. b. LINE OPENING WITH TYPE IV GEOTEXTILE FABRIC. c. REFILL WITH GRANULAR EMBANKMENT. d. PLACE TYPE IV GEOTEXTILE FABRIC ON TOP OF GRANULAR EMBANKMENT. e. REFILL WITH (2' MINIMUM) CLAY SOIL CAP.</p>	<p><b>CONDITION NO. 2: SOIL EMBANKMENT OVER SHALLOW OVERBURDEN WITH SINKHOLE OPENING IN ROCK</b> SEE ALTERNATE NO. 2A &amp; NO. 2B DRAINAGE</p> <p><b>PROCEDURE FOR ALTERNATE NO. 2A</b> g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING WITH GRANULAR EMBANKMENT TO 2' MIN. BELOW ROCK LINE. c. PLACE TYPE IV GEOTEXTILE FABRIC ON TOP OF GRANULAR EMB. OVERLAPPING ORIG. GROUND LINE. d. REFILL WITH (2' MIN.) CLAY SOIL CAP.</p> <p><b>PROCEDURE FOR ALTERNATE NO. 2B</b> g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING WITH GRANULAR EMBANKMENT TO 1' MIN. BELOW ROCK LINE. c. CONST. 1' REINFORCED CONC. CAP. CAP SHOULD BE INTERLOCKED WITH ROCK FOR SUPPORT.</p>	<p><b>CONDITION NO. 3: ROCK EMB. OVER DEEP OVERBURDEN WITH OPEN SINKHOLES</b> ORIGINAL GROUND LINE</p> <p><b>PROCEDURE:</b> g. REMOVE DEBRIS. DO NOT EXCAVATE SOIL OVERBURDEN. b. LINE OPENING WITH TYPE IV GEOTEXTILE FABRIC. c. REFILL OPENING WITH GRANULAR EMBANKMENT TO TOP OF DEPRESSION.</p> <p><b>CONDITION NO. 6: CUT SECTIONS WITH SINKHOLE OPENINGS IN SOIL</b></p> <p><b>ALTERNATE NO. 6A</b> ALTERNATE NO. 6A SOIL OVERBURDEN GREATER THAN 15'. g. REMOVE DEBRIS. DO NOT EXCAVATE SOIL OVERBURDEN. b. LINE OPENING WITH TYPE IV GEOTEXTILE FABRIC. c. REFILL WITH GRANULAR EMB. d. PLACE TYPE IV GEOTEXTILE FABRIC OVER GRANULAR EMBANKMENT OVERLAPPING ORIG. GROUND LINE. e. REFILL WITH (2' MIN.) CLAY SOIL CAP. IF ROCK SUBGRADE IS USED OMIT SOIL CAP AND FABRIC UNDERLYING SOIL CAP.</p> <p><b>ALTERNATE NO. 6B</b> ALTERNATE NO. 6B SOIL OVERBURDEN LESS THAN 15'. g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING WITH GRANULAR EMBANKMENT TO 2' MIN. BELOW ROCK LINE. c. PLACE TYPE IV GEOTEXTILE FABRIC OVER GRANULAR EMB. OVERLAPPING ORIG. GROUND LINE. d. CAP IS USED THE FABRIC SHALL BE OMITTED AND CAP SHALL BE INTERLOCKED WITH THE BEDROCK FOR SUPPORT AS DETAILED IN COND. NO. 2 ALTERNATE NO. 2B.</p>
<p><b>CONDITION NO. 4: ROCK EMBANKMENT OVER SHALLOW OVERBURDEN WITH SINKHOLE OPENINGS IN ROCK</b> SEE ALTN. 4B SEE ALTN. 4A MAINTAIN POSITIVE DRAINAGE</p> <p><b>ALTERNATE NO. 4A</b> ALTERNATE NO. 4A g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING TO ROCK LINE WITH GRANULAR EMBANKMENT.</p> <p><b>ALTERNATE NO. 4B</b> ALTERNATE NO. 4B g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING WITH GRANULAR EMBANKMENT TO 1' MIN. BELOW ROCK LINE. c. CONST. 1' REINFORCED CONC. CAP. CAP SHOULD BE INTERLOCKED WITH ROCK FOR SUPPORT.</p>	<p><b>CONDITION NO. 5: CUT SECTIONS WITH SINKHOLE OPENINGS IN ROCK</b> EXIST. SOIL</p> <p><b>PROCEDURE FOR ALTERNATE NO. 5A</b> g. REFILL OPENING WITH GRANULAR EMBANKMENT. IF CONCRETE CAP IS USED IT SHALL BE INTERLOCKED WITH THE BEDROCK FOR SUPPORT AS DETAILED IN CONDITION NO. 2 ALTERNATE NO. 2B.</p> <p><b>PROCEDURE FOR ALTERNATE NO. 5B</b> g. REFILL OPENING WITH GRANULAR EMBANKMENT TO 2' MINIMUM BELOW SOIL SUBGRADE. b. PLACE TYPE IV GEOTEXTILE FABRIC OVER GRANULAR EMBANKMENT. c. REFILL WITH (2' MIN.) CLAY SOIL CAP. IF CONCRETE CAP IS USED THE FABRIC SHALL BE OMITTED AND CAP SHALL BE INTERLOCKED WITH THE BEDROCK FOR SUPPORT AS DETAILED IN COND. NO. 2 ALTERNATE NO. 2B.</p>	<p><b>CONDITION NO. 6: CUT SECTIONS WITH SINKHOLE OPENINGS IN SOIL</b> ORIGINAL GROUND LINE</p> <p><b>ALTERNATE NO. 6A</b> ALTERNATE NO. 6A SOIL OVERBURDEN GREATER THAN 15'. g. REMOVE DEBRIS. DO NOT EXCAVATE SOIL OVERBURDEN. b. LINE OPENING WITH TYPE IV GEOTEXTILE FABRIC. c. REFILL WITH GRANULAR EMB. d. PLACE TYPE IV GEOTEXTILE FABRIC OVER GRANULAR EMBANKMENT OVERLAPPING ORIG. GROUND LINE. e. REFILL WITH (2' MIN.) CLAY SOIL CAP. IF ROCK SUBGRADE IS USED OMIT SOIL CAP AND FABRIC UNDERLYING SOIL CAP.</p> <p><b>ALTERNATE NO. 6B</b> ALTERNATE NO. 6B SOIL OVERBURDEN LESS THAN 15'. g. REMOVE DEBRIS AND SOIL OVERBURDEN. b. REFILL OPENING WITH GRANULAR EMBANKMENT TO 2' MIN. BELOW ROCK LINE. c. PLACE TYPE IV GEOTEXTILE FABRIC OVER GRANULAR EMB. OVERLAPPING ORIG. GROUND LINE. d. CAP IS USED THE FABRIC SHALL BE OMITTED AND CAP SHALL BE INTERLOCKED WITH THE BEDROCK FOR SUPPORT AS DETAILED IN COND. NO. 2 ALTERNATE NO. 2B.</p>

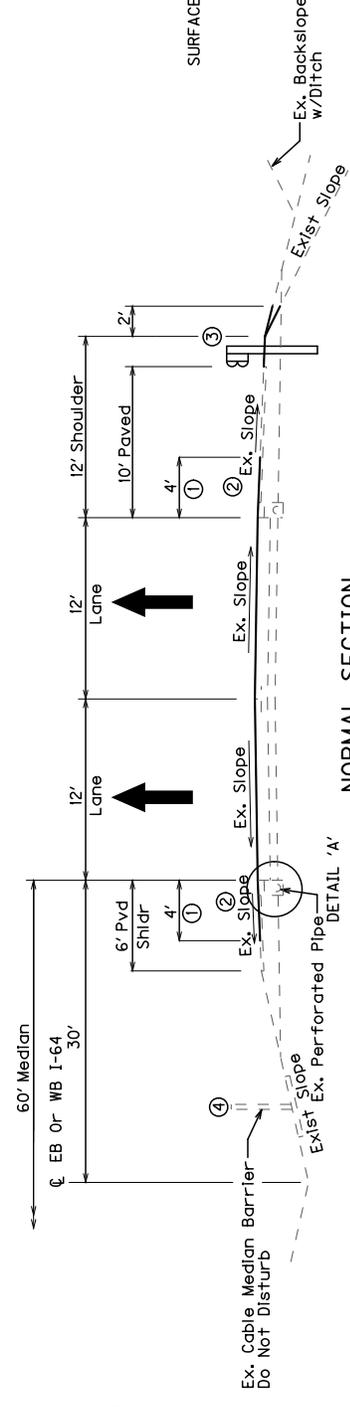
DEPARTMENT OF HIGHWAYS  
TREATMENT  
OF  
OPEN SINKHOLES

KENTUCKY  
SUBMITTED: *[Signature]*  
TECHNICAL DIVISION OF HIGHWAY DESIGN  
12-1-99  
DATE

# TYPICAL SECTIONS I-64



**SUPERELEVATED SECTION  
EASTBOUND OR WESTBOUND**



**NORMAL SECTION  
EASTBOUND OR WESTBOUND**

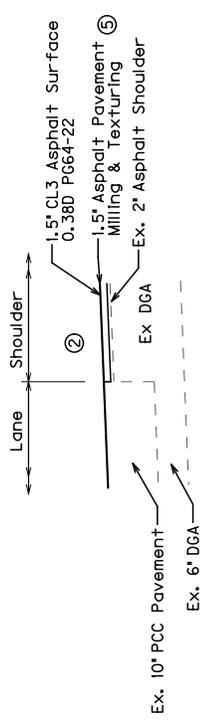
## PAVEMENT REHABILITATION

### DRIVING LANES

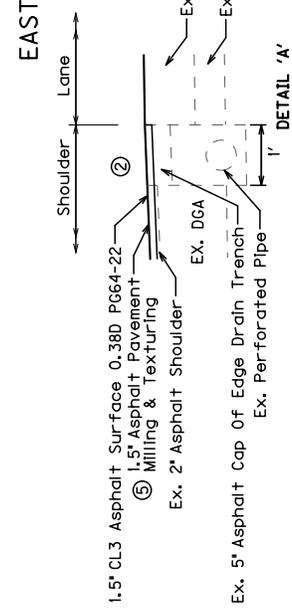
FULL DEPTH PCC PAVEMENT REPAIRS  
DIAMOND GRIND PCC PAVEMENT  
SAW, CLEAN, AND RESEAL JOINTS  
ROUT AND SEAL RANDOM CRACKS  
PLACE FIBRECRETE IN SPALLED AREAS

### SHOULDERS

SURFACE --- 1.5" CL3 ASPHALT SURFACE 0.38D PG64-22  
--- 1.5" ASPHALT MILLING & TEXTURING ⑤



**DETAIL 'B'**



**DETAIL 'A'**

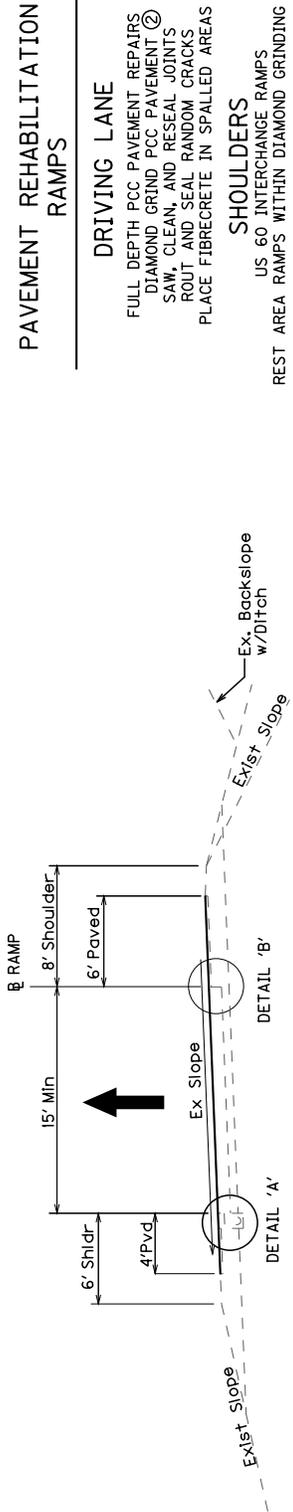
- ④ Existing Cable Median Barrier is Located On The Westbound Side Of The Median From Begin Project To The Bridge Over Woodlake Rd, Then Switches To The Eastbound Side Of The Median Through The Remainder Of Project.
- ⑤ Adjust Depth of Milling in Areas Where the Existing Asphalt Shoulder Pavement is Lower Than the Elevation Of the Adjacent Concrete Pavement So the Top of the 1.5 Inches of New Asphalt Shoulder Pavement Will Match the Top of the Existing Concrete Pavement Elevation.

- ① Mill & Fill Limits
- ② Construct Sawed Rumble Strips
- ③ At Guardrail Replacement Locations Only:  
Asphalt Seal Coat Required From The Outside Edge Of The Paved Shoulder To A Point 2' Down The Ditch Or Fill Slope, Two (2) Applications At The Rate Of 2.40 Lbs/SY Item 103 Asphalt Seal Coat  
20 Lbs/SY Item 100 Asphalt Seal Aggregate  
(Size NO. 8 OR 9M).

NOTE: EXISTING PAVEMENT INFORMATION TAKEN FROM PREVIOUS PLANS

NOT TO SCALE

# TYPICAL SECTIONS US 60 INTERCHANGE & REST AREA RAMPS & MEDIAN CROSSOVERS I-64 OVER US 60 INTERCHANGE & WOODLAKE RD TWIN BRIDGES



**NORMAL SECTION**

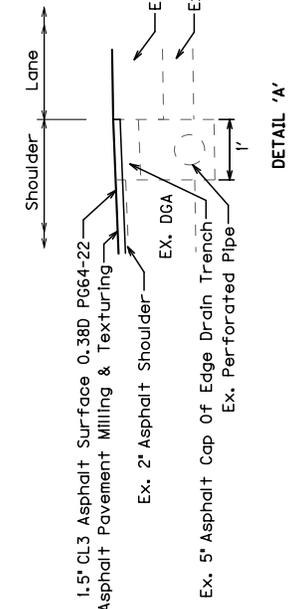
## PAVEMENT REHABILITATION RAMPS

### DRIVING LANE

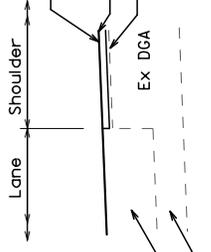
- FULL DEPTH PCC PAVEMENT REPAIRS
- DIAMOND GRIND PCC PAVEMENT ②
- SAW, CLEAN, AND RESEAL JOINTS
- ROUT AND SEAL RANDOM CRACKS
- PLACE FIBRECRETE IN SPALLED AREAS

### SHOULDERS

- US 60 INTERCHANGE RAMPS
- REST AREA RAMPS WITHIN DIAMOND GRINDING LIMITS
- SURFACE --- 1.5' CL3 ASPHALT SURFACE 0.38D PG64-22
- 1.5' ASPHALT MILLING & TEXTURING ③



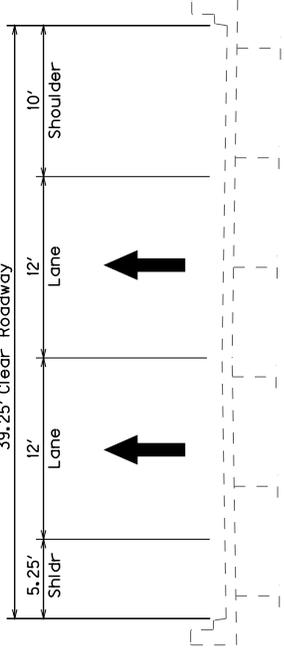
**DETAIL 'A'**



**DETAIL 'B'**

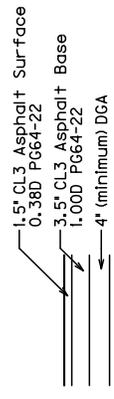
- ② Diamond Grind Only The Portion Of The Ramp From The 12 Inch Gore Stripping To The End Of The Ramp Taper With I-64.
- US 60 Ramp C: Begin Ramp To Sta 12+08
- US 60 Ramp D: Sta 12+44 To End Ramp

- ① See Bridge Proposal For Bridge Work.
- ② Adjust Depth of Milling In Areas Where the Existing Asphalt Shoulder Pavement Is Lower Than The Elevation Of the Adjacent Concrete Pavement So the Top of the 1.5 Inches of New Asphalt Shoulder Pavement Will Match the Top of the Existing Concrete Pavement Elevation.



**BRIDGES  
NORMAL SECTION**

## PAVEMENT REHABILITATION MEDIAN CROSSOVERS



NOTE: EXISTING PAVEMENT INFORMATION TAKEN FROM PREVIOUS PLANS

NOT TO SCALE

**GENERAL SUMMARY  
I-64 PAVEMENT REHABILITATION  
FRANKLIN AND WOODFORD COUNTIES  
ITEM NO. 5-2079.00**

CODE	ITEM	UNIT	FRANKLIN COUNTY	WOODFORD COUNTY	PROJECT TOTAL	NOTES
78	Crushed Aggregate Size No. 2	Ton	68	216	284	(7)
1984	Delineator For Barrier - White	Each	14	8	22	(3)
1985	Delineator For Barrier - Yellow	Each	14	8	22	(3)
2014	Barricade-Type III	Each	4	6	10	
2220	Flowable Fill	CY	3		3	(5)
2471	Fill And Cap Sinkhole	Each	1		1	(1)
2562	Temporary Signs	SF	1,000	1,000	2,000	
2568	Mobilization	LS	1		1	
2568	Mobilization	LS		1	1	
2569	Demobilization	LS	1		1	
2569	Demobilization	LS		1	1	
2575	Ditching And Shouldering	Lin Ft	8,228	28,766	36,994	(2)
2650	Maintain & Control Traffic	LS	1		1	
2650	Maintain & Control Traffic	LS		1	1	
2671	Portable Changeable Message Sign	Each	4	4	8	
2726	Staking	LS	1		1	
2726	Staking	LS		1	1	
2775	Arrow Panel	Each	2	2	4	
5950	Erosion Control Blanket	SY	2,000	8,000	10,000	
6401	Flexible Delineator Post - M/W	Each	76	68	144	(6)
6404	Flexible Delineator Post - M/Y	Each	57		57	(6)
6511	Pave Striping-Temp Paint-6 In	Lin Ft	39,026	137,447	176,473	
6515	Pave Striping-Perm Paint-6 In	Lin Ft	42,786	129,447	172,233	
6517	Pave Striping-Perm Paint-12 In	Lin Ft	1,637	2,909	4,546	
6549	Pave Striping-Temp Rem Tape-B	Lin Ft	1,000	2,000	3,000	
6550	Pave Striping-Temp Rem Tape-W	Lin Ft	1,000	2,000	3,000	
6551	Pave Striping-Temp Rem Tape-Y	Lin Ft	1,000	2,000	3,000	
10020NS	Fuel Adjustment	Doll	1,337	4,739	6,076	
10030NS	Asphalt Adjustment	Doll	2,270	8,049	10,319	
20411ED	Law Enforcement Officer	Hour	45	180	225	
20758ED	Remove And Reset Perf Pipe Headwall	Each	2	3	5	(4)
22664EN	Water Blasting Existing Stripe	Lin Ft	39,026	137,447	176,473	
23143ED	KPDES Permit And Temp Erosion Control	LS	1		1	
23143ED	KPDES Permit And Temp Erosion Control	LS		1	1	
24489EC	Inlaid Pavement Markers	Each	242	719	961	

NOTES:

- (1) For treatment of open sinkhole Rt. Sta. 213+47. Includes all materials necessary to perform this work. Sinkhole shall be filled and or capped in accordance with the current edition of Section 215 of the Standard Specifications for Road and Bridge Construction and sepia drawing No. 1 "Treatment Of Open Sinkholes". Refer to the Geotechnical notes in the proposal for additional information.
- (2) Includes removing or grading rock that has fallen into the ditches and cleaning out the perforated pipe headwalls. Lengths shown are to include all four shoulders, both outside ditches, and all median ditches.
- (3) For bridge barrier walls. Estimated at 50' spacing. To be installed prior to shifting traffic onto the shoulders during maintenance of traffic operations.
- (4) To be used as directed by the Engineer.
- (5) For filling existing washed-out area under inside shoulder pavement at west end of the eastbound bridge over US 60. See Plan Sheet 1. All work and materials required to install the flowable fill are incidental to the flowable fill bid item.
- (6) To be placed on ramps and mainline curves per Standard Drawings TPM-170 and TPM-171
- (7) 272 Ton carried forward from the Pavement Summary and 12 tons carried forward from the Drainage Summary

**SEE THE BRIDGE PROPOSAL FOR BRIDGE BID ITEM QUANTITIES**

**SEE THE TRAFFIC PLANNING LOOPS SECTION FOR PLANNING LOOPS QUANTITIES**

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

ITEM	PAVEMENT AREAS												TOTAL	
	EASTBOUND I-64			WESTBOUND I-64			US 60 INTERCHANGE RAMP C			US 60 INTERCHANGE RAMP D				
	F	W	F	F	W	F	F	W	F	W	F	W		
PCC PAVEMENT DIAMOND GRINDING (5)	97,150		96,812	21,224	75,926	21,790	32,098	176	946					195,084
1.5" CL3 ASPH SURF 0.38D PG64-22 (3) (4)	32,587		32,098	6,980	25,607	7,422	24,676	1,633	1,717					68,035
3.5" CL3 ASPH BASE 1.00D PG64-22 (3)	625		625											625
1.5" ASPHALT PAVEMENT MILLING & TEXTURING (4)	32,587		32,098	6,980	25,607	7,422	24,676	1,633	1,717					68,035
REMOVE PCC PAVEMENT	12,635		10,973	3,145	9,490	1,573	9,400							23,608
JPC PAVEMENT-10 INCH	12,635		10,973	3,145	9,490	1,573	9,400							23,608
DENSE GRADED AGGREGATE - 4 INCH (3)	625		625											625
DENSE GRADED AGGREGATE - 2 INCH (2)	1,600		1,600											3,200
ASPHALT SEAL AGGREGATE (1)	284		284	133	151	133	151							569
ASPHALT SEAL COAT (1)	284		284	133	151	133	151							569
	133		133	151	151	133	151							302

NOTES:

**'F' - FRANKLIN COUNTY TOTAL, 'W' - WOODFORD COUNTY TOTAL**

- (1) Area for one application shown. Two applications required.
- (2) Estimated quantity for settlement correction at each end of the bridges over Woodlake Road (KY 1865).
- (3) Includes 625 SY for Paving Existing Permanent Median Crossovers
- (4) Includes 253 SY (for each direction) for milling & filling 50 ft (shoulders and driving lanes) of approach at the west end of the twin bridges over US 60.
- (5) I-64 Areas include the areas of the Rest Area ramps to be diamond ground.



**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

- (1) Estimated at 115 pounds per square yard per inch depth.
- (2) Estimated at 20 pounds per square yard per application with two applications required.
- (3) Estimated at 2.4 pounds per square yard per application with two applications required.
- (4) Estimated at 110 pounds per square yard per inch depth.
- (5) Includes 2 inches depth to correct settlement at bridge ends of the twin bridges over Woodlake Road in pavement replacement area, 2 inches depth by 4 ft wide along the outside shoulders of I-64 in both directions to bring the washed-out or settled DGA areas up to grade and 2 inches depth by 4 ft wide for the shoulders of Ramp C and Ramp D to bring the washed-out or settled DGA areas up to grade. Also Includes a quantity for paving the existing permanent Median Crossovers based on 4 inches depth.
- (6) Estimated quantity for filling in holes in the shoulders next to the driving lanes prior to shifting traffic onto them.
- (7) Estimated quantity to be used only as directed by the Engineer. Fibrecrete B or an approved equivalent shall be used for this work.
- (8) 'TOTAL' quantity includes 500 Tons estimated for subgrade settlement correction in the PCC Pavement removal areas to be used as directed by the Engineer. (150 Tons for Franklin Co. and 350 Tons for Woodford Co.)
- (9) For Base Failure Repairs - To be used as directed by the Engineer. Item No. 78 quantity includes 1 ton for each "Perforated Pipe Headwall TY3-4 Inch". The No. 2 crushed stone is to be placed around perforated pipe headwall per Std. Dwg. RDP-010-09. See the Base Failure Repair Details Sheet and the PVC Pipe Outlet Details Sheet. The quantities shown are for repairing both lanes at a total of 16 locations for a width of 8 feet. Quantity carried to the General Summary.

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY												
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY			
ROADWAY	BEGIN	END	inside	outside	other	2058	02069					
	(STA)					(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in	
										(SQ YD)		
EB I-64	2631+22.6	2631+42.1				56	56	See Note 1	Franklin			
EB I-64	2634+26.2	2634+45.9				20	20	See Note 2	Franklin			
EB I-64	2634+33.0	2635+48.6	12	12		308	308		Franklin			
EB I-64	2636+55.4	2636+70.7	12	12		41	41		Franklin			
EB I-64	2637+44.8	2637+56.5		12		16	16		Franklin			
EB I-64	2637+94.9	2638+01.7	12	12		18	18		Franklin			
EB I-64	2638+28.4	2638+46.8	12	12		49	49		Franklin			
EB I-64	2638+96.5	2639+02.8	12	12		17	17		Franklin			
EB I-64	2639+25.5	2639+49.9		12		33	33		Franklin			
EB I-64	2639+74.0	2640+03.8		12		40	40		Franklin			
EB I-64	2640+33.9	2640+40.8	12	12		18	18		Franklin			
EB I-64	2640+84.1	2640+90.1	12	12		16	16		Franklin			
EB I-64	2641+34.5	2641+47.3	12	12		34	34		Franklin			
EB I-64	2641+74.7	2641+99.8		12		33	33		Franklin			
EB I-64	2641+93.4	2641+99.8	12			9	9		Franklin			
EB I-64	2642+36.0	2642+53.7	12	12		47	47		Franklin			
EB I-64	2642+86.1	2642+92.1	12	12		16	16		Franklin			
EB I-64	2643+24.8	2643+30.9	12	12		16	16		Franklin			
EB I-64	2643+43.2	2643+49.7		12		9	9		Franklin			
EB I-64	2643+93.2	2644+05.3	12	12		32	32		Franklin			
EB I-64	2644+90.3	2644+96.3	12	12		16	16		Franklin			
EB I-64	2645+74.4	2645+80.4	12	12		16	16		Franklin			
EB I-64	2646+38.9	2646+51.0	12	12		32	32		Franklin			
EB I-64	2648+57.4	2648+74.0	12	12		44	44		Franklin			
EB I-64	2649+07.7	2649+32.2	12	12		65	65		Franklin			
EB I-64	2650+61.5	2650+84.1		12		30	30		Franklin			
EB I-64	2650+70.4	2650+84.1			9.8	15	15	Ramp	Franklin			
EB I-64	2651+07.4	2651+29.9		12		30	30		Franklin			
EB I-64	2651+61.4	2651+69.3			7.9	7	7	Ramp	Franklin			
EB I-64	2651+61.4	2651+82.9	12	12		57	57		Franklin			
EB I-64	2652+13.0	2652+22.1	12	12	6.8	31	31	Ramp	Franklin			
EB I-64	2652+63.8	2652+83.0	12	12		51	51		Franklin			
EB I-64	2652+75.5	2652+83.0			5.6	5	5	Ramp	Franklin			
EB I-64	2653+13.7	2653+20.2			4.8	3	3	Ramp	Franklin			
EB I-64	2653+61.1	2653+83.9		12	4.6	42	42	Ramp	Franklin			
EB I-64	2654+05.4	2654+30.4		12	3.7	44	44	Outside and Ramp	Franklin			
EB I-64	2654+73.2	2654+80.1		12		9	9		Franklin			
EB I-64	2655+05.8	2655+30.4		12		33	33		Franklin			
EB I-64	2655+68.5	2655+82.4		12		19	19		Franklin			
EB I-64	2656+61.2	2656+81.1	12	12		53	53		Franklin			
EB I-64	2657+15.5	2657+33.0		12		23	23		Franklin			
EB I-64	2657+62.0	2657+68.0	12	12		16	16		Franklin			
EB I-64	2658+21.7	2658+35.6		12		19	19		Franklin			
EB I-64	2658+64.6	2658+70.6	12			8	8		Franklin			
EB I-64	2658+64.6	2658+81.9		12		23	23		Franklin			
EB I-64	2659+13.2	2659+27.6		12		19	19		Franklin			
EB I-64	2659+64.9	2659+88.2		12		31	31		Franklin			
EB I-64	2659+73.5	2659+88.2	12			20	20		Franklin			
EB I-64	2660+66.9	2660+84.1	12	12		46	46		Franklin			
EB I-64	2661+24.7	2661+30.7	12	12		16	16		Franklin			
EB I-64	2662+59.7	2662+80.5		12		28	28		Franklin			
EB I-64	2663+63.8	2663+69.8	12	12		16	16		Franklin			
EB I-64	2664+55.7	2664+61.7		12		8	8		Franklin			
EB I-64	2665+23.3	2665+29.3	12	12		16	16		Franklin			
EB I-64	2665+66.7	2665+72.7	12	12		16	16		Franklin			
EB I-64	2667+12.8	2667+19.4	12	12		18	18		Franklin			
EB I-64	2667+68.9	2667+75.0	12			8	8		Franklin			
EB I-64	2667+68.9	2667+80.9		12		16	16		Franklin			
EB I-64	2668+62.9	2668+69.1	12	12		17	17		Franklin			
EB I-64	2669+11.9	2669+29.5	12	12		47	47		Franklin			
EB I-64	2669+74.3	2669+80.8		12		9	9		Franklin			

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(SQ YD)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2670+14.7	2670+30.2		12		21	21		Franklin
EB I-64	2670+66.8	2670+73.3		12		9	9		Franklin
EB I-64	2671+21.7	2671+30.3		12		11	11		Franklin
EB I-64	2671+67.3	2671+73.7	12			9	9		Franklin
EB I-64	2671+67.3	2671+86.0		12		25	25		Franklin
EB I-64	2672+17.3	2672+23.7	12	12		17	17		Franklin
EB I-64	2672+66.6	2672+72.6	12			8	8		Franklin
EB I-64	2672+66.6	2672+78.7		12		16	16		Franklin
EB I-64	2673+65.7	2673+72.9	12	12		19	19		Franklin
EB I-64	2674+18.1	2674+24.6	12	12		17	17		Franklin
EB I-64	2674+67.2	2674+73.7		12		9	9		Franklin
EB I-64	2675+12.5	2675+31.4		12		25	25		Franklin
EB I-64	2675+66.4	2675+72.7	12			8	8		Franklin
EB I-64	2675+66.4	2675+80.9		12		19	19		Franklin
EB I-64	2676+15.0	2676+27.4		12		17	17		Franklin
EB I-64	2676+21.3	2676+27.4	12			8	8		Franklin
EB I-64	2676+67.8	2676+74.1	12	12		17	17		Franklin
EB I-64	2678+11.9	2678+34.4		12		30	30		Franklin
EB I-64	2678+73.1	2678+79.6	12	12		17	17		Franklin
EB I-64	2679+66.4	2679+78.8		12		17	17		Franklin
EB I-64	2680+12.8	2680+28.1		12		20	20		Franklin
EB I-64	2680+56.4	2680+81.7		12		34	34		Franklin
EB I-64	2681+07.4	2681+23.2		12		21	21		Franklin
EB I-64	2682+66.0	2682+72.6		12		9	9		Franklin
EB I-64	2683+06.5	2683+13.1		12		9	9		Franklin
EB I-64	2683+23.6	2683+29.7	12	12		16	16		Franklin
EB I-64	2683+57.5	2683+79.8		12		30	30		Franklin
EB I-64	2684+58.4	2684+64.5		12		8	8		Franklin
EB I-64	2685+24.6	2685+31.1		12		9	9		Franklin
EB I-64	2685+69.2	2685+84.3		12		20	20		Franklin
EB I-64	2686+21.6	2686+28.1	12	12		17	17		Franklin
EB I-64	2688+75.8	2688+81.9		12		8	8		Franklin
EB I-64	2689+68.2	2689+74.6	12	12		17	17		Franklin
EB I-64	2690+07.5	2690+30.4		12		31	31		Franklin
EB I-64	2690+24.4	2690+30.4	12			8	8		Franklin
EB I-64	2691+04.9	2691+11.3	12	12		17	17		Franklin
EB I-64	2692+56.6	2692+73.7		12		23	23		Franklin
EB I-64	2693+63.2	2693+78.4		12		20	20		Franklin
EB I-64	2693+89.2	2693+95.7	12			9	9		Franklin
EB I-64	2695+39.2	2695+45.2	12			8	8		Franklin
EB I-64	2695+71.3	2695+77.9		12		9	9		Franklin
EB I-64	2696+66.5	2696+72.7	12	12		17	17		Franklin
EB I-64	2697+64.0	2697+80.2		12		22	22		Franklin
EB I-64	2698+58.6	2698+76.1		12		23	23		Franklin
EB I-64	2699+61.7	2699+68.1		12		9	9		Franklin
EB I-64	2700+23.7	2700+32.4		12		12	12		Franklin
EB I-64	2700+69.5	2700+75.7	12	12		17	17		Franklin
EB I-64	2701+64.0	2701+79.6		12		21	21		Franklin
EB I-64	2702+09.9	2702+29.0	12	12		51	51		Franklin
EB I-64	2702+57.0	2702+77.8		12		28	28		Franklin
EB I-64	2703+10.0	2703+29.4		12		26	26		Franklin
EB I-64	2704+02.5	2704+28.5		12		35	35		Franklin
EB I-64	2704+61.2	2704+67.3	12	12		16	16		Franklin
EB I-64	2705+06.8	2705+28.6		12		29	29		Franklin
EB I-64	2705+54.2	2705+77.4		12		31	31		Franklin
EB I-64	2706+19.0	2706+25.3	12	12		17	17		Franklin
EB I-64	2707+25.0	2707+32.0	12	12		19	19		Franklin
EB I-64	2707+51.6	2707+57.8		12		8	8		Franklin
EB I-64	2709+06.3	2709+30.6		12		32	32		Franklin
EB I-64	2709+58.4	2709+79.3		12		28	28		Franklin
EB I-64	2710+64.6	2710+80.2		12		21	21		Franklin

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2711+05.8	2711+77.9		12		96	96		Franklin
EB I-64	2712+04.9	2712+32.1		12		36	36		Franklin
EB I-64	2712+65.3	2712+72.0	12	12		18	18		Franklin
EB I-64	2713+60.9	2713+76.5		12		21	21		Franklin
EB I-64	2714+39.9	2714+46.4		12		9	9		Woodford
EB I-64	2715+05.3	2715+33.2		12		37	37		Woodford
EB I-64	2716+40.7	2716+47.2	12			9	9		Woodford
EB I-64	2716+72.8	2716+79.9	12	12		19	19		Woodford
EB I-64	2718+05.9	2718+22.5		12		22	22		Woodford
EB I-64	2718+67.4	2718+73.9	12	12		17	17		Woodford
EB I-64	2719+68.6	2719+83.4		12		20	20		Woodford
EB I-64	2720+14.1	2720+30.6		12		22	22		Woodford
EB I-64	2720+58.4	2720+82.9		12		33	33		Woodford
EB I-64	2721+75.2	2721+81.9		12		9	9		Woodford
EB I-64	2722+56.9	2722+75.2		12		24	24		Woodford
EB I-64	2723+05.6	2723+19.6		12		19	19		Woodford
EB I-64	2724+23.0	2724+36.2		12		18	18		Woodford
EB I-64	2724+62.3	2724+77.3		12		20	20		Woodford
EB I-64	2726+18.6	2726+31.1		12		17	17		Woodford
EB I-64	2727+15.9	2727+32.1		12		22	22		Woodford
EB I-64	2731+14.8	2731+21.3		12		9	9		Woodford
EB I-64	2732+08.0	2732+24.2		12		22	22		Woodford
EB I-64	2732+62.9	2732+79.1	12	12		43	43		Woodford
EB I-64	2733+66.2	2733+82.3		12		21	21		Woodford
EB I-64	2734+67.3	2734+73.8	12			9	9		Woodford
EB I-64	2734+67.3	2734+80.8		12		18	18		Woodford
EB I-64	2735+11.6	2735+18.0		12		9	9		Woodford
EB I-64	2735+74.4	2735+80.7	12	12		17	17		Woodford
EB I-64	2736+67.3	2736+73.6		12		8	8		Woodford
EB I-64	2737+17.4	2737+23.7	12	12		17	17		Woodford
EB I-64	2738+69.2	2738+75.2		12		8	8		Woodford
EB I-64	2740+14.6	2740+20.8	12	12		17	17		Woodford
EB I-64	2740+66.5	2740+72.5		12		8	8		Woodford
EB I-64	2741+08.2	2741+31.4		12		31	31		Woodford
EB I-64	2746+12.4	2746+18.7	12	12		17	17		Woodford
EB I-64	2746+76.1	2746+86.0	12	12		26	26		Woodford
EB I-64	2747+56.2	2747+76.9		12		28	28		Woodford
EB I-64	2748+04.2	2748+19.7		12		21	21		Woodford
EB I-64	2748+66.5	2748+72.9	12	12		17	17		Woodford
EB I-64	2749+10.8	2749+29.5		12		25	25		Woodford
EB I-64	2749+71.6	2749+78.0		12		9	9		Woodford
EB I-64	2749+71.6	2749+97.6	12			35	35		Woodford
EB I-64	2750+78.4	2750+87.4		12	0.9	13	13	Outside and Ramp	Woodford
EB I-64	2751+19.2	2751+26.0		12	1.5	10	10	Outside and Ramp	Woodford
EB I-64	2751+44.7	2751+87.3			2.6	12	12	Ramp	Woodford
EB I-64	2751+62.1	2751+68.1		12		8	8		Woodford
EB I-64	2752+68.8	2752+83.2		12	8.5	33	33	Outside and Ramp	Woodford
EB I-64	2754+97.1	2755+03.5	12	12		17	17		Woodford
EB I-64	2757+19.1	2757+25.8	12	12		18	18		Woodford
EB I-64	2758+65.1	2758+84.3		12		26	26		Woodford
EB I-64	2759+23.8	2759+36.7		12		17	17		Woodford
EB I-64	2759+66.0	2759+72.3		12		8	8		Woodford
EB I-64	2760+21.6	2760+28.2	12	12		18	18		Woodford
EB I-64	2761+11.3	2761+17.7		12		9	9		Woodford
EB I-64	2761+77.1	2761+83.3	12	12		17	17		Woodford
EB I-64	2762+29.5	2762+35.7		12		8	8		Woodford
EB I-64	2762+73.4	2762+87.6		12		19	19		Woodford
EB I-64	2764+15.2	2764+22.4	12	12		19	19		Woodford
EB I-64	2764+76.1	2764+82.7	12	12		18	18		Woodford
EB I-64	2765+77.3	2765+84.5	12	12		19	19		Woodford
EB I-64	2766+77.2	2766+83.3	12	12		16	16		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2767+12.9	2767+37.2		12		32	32		Woodford
EB I-64	2768+13.6	2768+34.7		12		28	28		Woodford
EB I-64	2768+47.1	2768+53.4		12		8	8		Woodford
EB I-64	2769+67.5	2769+74.0	12			9	9		Woodford
EB I-64	2769+67.5	2769+85.4		12		24	24		Woodford
EB I-64	2770+16.8	2770+33.0		12		22	22		Woodford
EB I-64	2770+47.2	2770+53.4	12			8	8		Woodford
EB I-64	2774+29.3	2774+35.4	12	12		16	16		Woodford
EB I-64	2775+02.1	2775+08.2	12	12		16	16		Woodford
EB I-64	2777+84.8	2777+91.2		12		9	9		Woodford
EB I-64	2778+51.7	2778+58.1	12	12		17	17		Woodford
EB I-64	2779+18.8	2779+39.7		12		28	28		Woodford
EB I-64	2780+17.5	2780+35.8		12		24	24		Woodford
EB I-64	2780+51.6	2780+57.8			12	8	8	Ramp	Woodford
EB I-64	2780+73.9	2781+07.0	12	12		88	88		Woodford
EB I-64	2781+29.7	2781+38.3	12	12		23	23		Woodford
EB I-64	2781+51.2	2781+57.8			5.8	4	4	Gore Area	Woodford
EB I-64	2781+77.3	2781+85.5	12	12	5.0	26	26	Gore Area and Main Line	Woodford
EB I-64	2782+01.2	2782+09.4		12	13.1	23	23	Ramp and Gore Area, Outside	Woodford
EB I-64	2782+27.6	2782+39.2	12	12	12.5	47	47	Ramp, Gore, In, Out	Woodford
EB I-64	2782+51.4	2782+58.8			12.1	10	10	Ramp and Gore Area	Woodford
EB I-64	2782+79.8	2783+04.6			3.4	9	9	Gore Area	Woodford
EB I-64	2783+00.8	2783+08.6			8.0	7	7	Ramp	Woodford
EB I-64	2783+40.5	2783+58.7		12	10.2	45	45	Ramp and Outside Lane	Woodford
EB I-64	2784+01.5	2784+29.6			9.0	28	28	Ramp	Woodford
EB I-64	2784+20.0	2784+29.3	12	12		25	25		Woodford
EB I-64	2785+15.9	2785+34.4			6.8	14	14	Ramp	Woodford
EB I-64	2785+27.4	2785+34.6	12	12		19	19		Woodford
EB I-64	2785+63.7	2788+52.0			3.0	96	96	End of Ramp	Woodford
EB I-64	2785+63.7	2786+09.2		12		61	61		Woodford
EB I-64	2786+50.4	2786+57.8	12	12		20	20		Woodford
EB I-64	2787+01.1	2787+08.0	12	12		18	18		Woodford
EB I-64	2787+50.7	2787+58.0	12	12		19	19		Woodford
EB I-64	2788+27.2	2788+33.4	12	12		17	17		Woodford
EB I-64	2789+48.4	2789+56.0	12	12		20	20		Woodford
EB I-64	2789+72.7	2789+87.9		12		20	20		Woodford
EB I-64	2792+10.0	2792+36.9	12			36	36		Woodford
EB I-64	2792+30.9	2792+36.9		12		8	8		Woodford
EB I-64	2792+69.6	2792+89.5		12		27	27		Woodford
EB I-64	2794+17.2	2794+40.9		12		32	32		Woodford
EB I-64	2797+64.7	2797+85.3		12		27	27		Woodford
EB I-64	2798+96.7	2799+04.6	12	12		21	21		Woodford
EB I-64	2800+19.1	2800+36.3		12		23	23		Woodford
EB I-64	2800+64.7	2800+86.4		12		29	29		Woodford
EB I-64	2801+18.9	2801+31.6		12		17	17		Woodford
EB I-64	2802+62.1	2802+83.0		12		28	28		Woodford
EB I-64	2804+18.6	2804+38.9		12		27	27		Woodford
EB I-64	2805+46.9	2805+53.5		12		9	9		Woodford
EB I-64	2809+61.3	2809+87.1		12		34	34		Woodford
EB I-64	2810+18.6	2810+33.9		12		20	20		Woodford
EB I-64	2811+69.1	2811+80.5		12		15	15		Woodford
EB I-64	2812+14.1	2812+35.9		12		29	29		Woodford
EB I-64	2813+16.3	2813+38.6		12		30	30		Woodford
EB I-64	2813+62.8	2813+88.9		12		35	35		Woodford
EB I-64	2815+13.3	2815+21.6	12	12		22	22		Woodford
EB I-64	2816+45.8	2816+52.7	12			9	9		Woodford
EB I-64	2818+45.3	2818+53.0	12			10	10		Woodford
EB I-64	2818+67.7	2818+85.3		12		23	23		Woodford
EB I-64	2819+96.0	2820+03.6	12	12		20	20		Woodford
EB I-64	2820+22.7	2820+39.4		12		22	22		Woodford
EB I-64	2820+59.0	2820+72.9		12		19	19		Woodford

### I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2821+70.7	2821+76.7		12		8	8		Woodford
EB I-64	2822+29.9	2822+41.2		12		15	15		Woodford
EB I-64	2822+70.3	2822+85.7		12		21	21		Woodford
EB I-64	2823+72.1	2823+78.9	12	12		18	18		Woodford
EB I-64	2824+30.7	2824+38.0	12	12		19	19		Woodford
EB I-64	2826+63.2	2826+73.4		12		14	14		Woodford
EB I-64	2827+63.3	2827+85.5		12		30	30		Woodford
EB I-64	2828+85.6	2829+18.4		12		44	44		Woodford
EB I-64	2828+96.2	2829+03.0	12			9	9		Woodford
EB I-64	2829+46.6	2829+84.1	12	12		100	100		Woodford
EB I-64	2830+22.0	2830+53.3		12		42	42		Woodford
EB I-64	2831+16.3	2831+24.7	12	12		22	22		Woodford
EB I-64	2831+46.1	2831+53.4	12	12		19	19		Woodford
EB I-64	2831+84.9	2832+23.5		12		51	51		Woodford
EB I-64	2832+23.5	2835+27.8	12	12		811	811	BT Overlay - Replace FD	Woodford
EB I-64	2836+49.4	2839+42.8	12	12		782	782	BT Overlay - Replace FD	Woodford
EB I-64	2839+42.8	2840+00.3	12			77	77		Woodford
EB I-64	2839+42.8	2840+43.9		12		135	135		Woodford
EB I-64	2840+81.7	2840+95.6		12		19	19		Woodford
EB I-64	2841+39.9	2841+46.4	12	12		17	17		Woodford
EB I-64	2841+83.6	2841+89.8	12	12		17	17		Woodford
EB I-64	2842+58.9	2842+67.5	12			11	11		Woodford
EB I-64	2842+73.7	2842+93.7		12		27	27		Woodford
EB I-64	2843+76.5	2843+95.8		12		26	26		Woodford
EB I-64	2844+34.5	2844+51.5		12		23	23		Woodford
EB I-64	2845+58.0	2845+65.1	12			9	9		Woodford
EB I-64	2849+55.7	2849+62.9	12			10	10		Woodford
EB I-64	2850+71.8	2850+93.9	12	12		59	59		Woodford
EB I-64	2853+04.0	2853+11.6	12	12		20	20		Woodford
EB I-64	2853+53.7	2853+60.7	12			9	9		Woodford
EB I-64	2856+28.4	2856+43.4		12		20	20		Woodford
EB I-64	2856+84.5	2856+94.6	12	12		27	27		Woodford
EB I-64	2857+68.4	2857+90.0		12		29	29		Woodford
EB I-64	2858+16.1	2858+36.0	12	12		53	53		Woodford
EB I-64	2858+66.2	2858+90.5		12		32	32		Woodford
EB I-64	2860+15.0	2860+33.9		12		25	25		Woodford
EB I-64	2860+67.1	2860+87.4		12		27	27		Woodford
EB I-64	2861+22.3	2861+31.4	12	12		24	24		Woodford
EB I-64	2863+19.3	2863+27.1		12		10	10		Woodford
EB I-64	2864+14.0	2864+22.4	12	12		22	22		Woodford
EB I-64	2864+77.0	2864+84.8	12	12		21	21		Woodford
EB I-64	2865+10.0	2865+30.7		12		28	28		Woodford
EB I-64	2865+63.7	2865+84.7		12		28	28		Woodford
EB I-64	2867+23.3	2867+31.2		12		11	11		Woodford
EB I-64	2867+95.9	2868+20.8		12		33	33		Woodford
EB I-64	2869+27.4	2869+35.2	12	12		21	21		Woodford
EB I-64	2870+14.7	2870+22.4		12		10	10		Woodford
EB I-64	2870+63.0	2870+85.6		12		30	30		Woodford
EB I-64	2870+79.4	2870+85.6	12			8	8		Woodford
EB I-64	2873+67.8	2873+74.6		12		9	9		Woodford
EB I-64	2875+64.4	2875+71.1	12	12		18	18	(3)	Woodford
EB I-64	2876+67.4	2876+87.1	12	12		53	53	(3)	Woodford
EB I-64	2877+11.0	2877+30.2		12		26	26	(3)	Woodford
EB I-64	2877+76.6	2877+84.4	12	12		21	21	(3)	Woodford
EB I-64	2878+72.9	2878+79.6	12	12		18	18		Woodford
EB I-64	2880+16.2	2880+24.0	12	12		21	21	(3)	Woodford
EB I-64	2880+71.5	2880+78.9		12		10	10	(3)	Woodford
EB I-64	2880+95.4	2881+04.0		12		11	11	(3)	Woodford
EB I-64	2881+22.2	2881+29.0	12	12		18	18		Woodford
EB I-64	2883+68.8	2883+75.3	12	12		17	17		Woodford
EB I-64	2885+47.4	2885+90.5		12		57	57		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2886+17.0	2886+23.4		12		9	9		Woodford
EB I-64	2888+70.5	2888+80.4	12	12		26	26		Woodford
EB I-64	2889+12.9	2889+79.1	12	12		177	177		Woodford
EB I-64	2891+17.8	2891+36.2		12		25	25		Woodford
EB I-64	2894+73.8	2894+80.9	12	12		19	19		Woodford
EB I-64	2895+71.3	2895+82.8	12	12		31	31		Woodford
EB I-64	2896+73.3	2896+80.7	12	12		20	20		Woodford
EB I-64	2897+26.8	2897+33.2	12	12		17	17		Woodford
EB I-64	2898+19.9	2898+30.2	12	12		27	27		Woodford
EB I-64	2899+09.8	2899+17.5		12		10	10		Woodford
EB I-64	2899+78.0	2899+84.8		12		9	9		Woodford
EB I-64	2900+71.9	2900+78.8		12		9	9		Woodford
EB I-64	2901+11.1	2901+39.4		12		38	38		Woodford
EB I-64	2901+65.2	2901+85.0		12		26	26		Woodford
EB I-64	2902+15.6	2902+35.4		12		26	26		Woodford
EB I-64	2902+84.0	2902+93.6		12		13	13		Woodford
EB I-64	2903+15.5	2903+29.2	12	12		37	37		Woodford
EB I-64	2903+96.6	2904+21.7		12		33	33		Woodford
EB I-64	2904+77.0	2904+86.0	12	12		24	24		Woodford
EB I-64	2905+66.1	2905+85.6		12		26	26		Woodford
EB I-64	2907+28.7	2907+36.2		12		10	10		Woodford
EB I-64	2907+64.2	2907+82.0	12			24	24		Woodford
EB I-64	2907+64.2	2907+88.4		12		32	32		Woodford
EB I-64	2908+63.4	2908+85.4		12		29	29		Woodford
EB I-64	2915+22.5	2916+28.5		12		141	141		Woodford
EB I-64	2917+66.8	2917+73.5	12			9	9		Woodford
EB I-64	2919+13.9	2919+36.3		12		30	30		Woodford
EB I-64	2920+67.6	2920+82.5	12	12		40	40		Woodford
EB I-64	2922+15.3	2922+31.5		12		22	22		Woodford
EB I-64	2922+61.1	2922+80.4		12		26	26		Woodford
EB I-64	2922+95.1	2923+01.6	12			9	9		Woodford
EB I-64	2923+79.7	2923+85.7		12		8	8		Woodford
EB I-64	2923+94.6	2924+22.8	12			38	38		Woodford
EB I-64	2924+16.2	2924+22.8		12		9	9		Woodford
EB I-64	2925+45.2	2925+78.3		12		44	44		Woodford
EB I-64	2928+64.3	2928+75.3	12	12		29	29		Woodford
EB I-64	2930+09.9	2930+35.4		12		34	34		Woodford
EB I-64	2932+41.6	2932+52.6	12	12		29	29		Woodford
EB I-64	2932+83.9	2933+01.3		12		23	23		Woodford
EB I-64	2933+42.2	2933+51.7	12			13	13		Woodford
EB I-64	2933+42.2	2934+28.2		12		115	115		Woodford
EB I-64	2935+26.3	2935+34.5	12	12		22	22		Woodford
EB I-64	2935+75.6	2935+82.3		12		9	9		Woodford
EB I-64	2937+17.3	2937+34.5		12		23	23		Woodford
EB I-64	2937+68.9	2937+83.9		12		20	20		Woodford
EB I-64	2938+12.9	2938+31.1		12		24	24		Woodford
EB I-64	2939+06.8	2939+36.8		12		40	40		Woodford
EB I-64	2939+92.7	2939+99.5		12		9	9		Woodford
EB I-64	2940+28.0	2940+34.7		12		9	9		Woodford
EB I-64	2940+53.6	2940+83.2		12		39	39		Woodford
EB I-64	2941+43.5	2941+52.2	12	12		23	23		Woodford
EB I-64	2941+67.4	2941+73.4	12	12		16	16		Woodford
EB I-64	2942+42.5	2942+50.3	12			10	10		Woodford
EB I-64	2942+42.5	2942+81.1		12		51	51		Woodford
EB I-64	2944+12.7	2944+38.4		12		34	34		Woodford
EB I-64	2944+72.3	2944+80.4		12		11	11		Woodford
EB I-64	2945+19.6	2945+26.5		12		9	9		Woodford
EB I-64	2946+33.1	2946+49.3		12		22	22		Woodford
EB I-64	2946+60.8	2946+67.3		12		9	9		Woodford
EB I-64	2947+06.6	2947+23.9		12		23	23		Woodford
EB I-64	2947+63.7	2947+70.6		12		9	9		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
EB I-64	2948+31.3	2948+37.7		12		9	9		Woodford
EB I-64	2948+70.5	2948+77.2	12	12		18	18		Woodford
EB I-64	2949+20.9	2949+32.5	12	12		31	31		Woodford
EB I-64	2950+24.1	2950+33.8	12	12		26	26		Woodford
EB I-64	2952+07.3	2952+30.3		12		31	31		Woodford
EB I-64	2952+91.6	2952+98.8	12	12		19	19		Woodford
EB I-64	2953+24.8	2953+32.1		12		10	10		Woodford
EB I-64	2954+69.6	2954+78.0		12		11	11		Woodford
EB I-64	2955+09.0	2955+29.7		12		28	28		Woodford
EB I-64	2957+14.4	2957+33.2		12		25	25		Woodford
EB I-64	2957+68.3	2957+80.2		12		16	16		Woodford
EB I-64	2958+25.1	2958+31.9	12	12		18	18		Woodford
EB I-64	2958+69.1	2958+85.1	12			21	21		Woodford
EB I-64	2958+69.1	2959+22.9		12		72	72		Woodford
EB I-64	2959+05.5	2959+13.5	12			11	11		Woodford
EB I-64	2960+72.7	2960+79.4	12	12		18	18		Woodford
EB I-64	2962+12.0	2962+18.0	12	12		16	16		Woodford
EB I-64	2964+07.5	2964+28.2		12		28	28		Woodford
EB I-64	2964+40.4	2964+62.0	12			29	29		Woodford
EB I-64	2964+40.4	2964+98.7		12		78	78		Woodford
EB I-64	2964+91.2	2964+98.7	12			10	10		Woodford
EB I-64	2965+79.1	2965+86.0	12	12		18	18		Woodford
EB I-64	2966+05.1	2966+13.7	12	12		23	23		Woodford
EB I-64	2966+41.6	2966+63.9	12	12		59	59		Woodford
EB I-64	2966+90.9	2966+98.3	12			10	10		Woodford
EB I-64	2967+68.6	2967+79.1	12	12		28	28		Woodford
EB I-64	2967+91.2	2967+97.7	12	12		17	17		Woodford
EB I-64	2968+41.1	2968+47.1	12			8	8		Woodford
EB I-64	2968+41.1	2968+63.8		12		30	30		Woodford
EB I-64	2969+13.1	2969+20.2	12	12		19	19		Woodford
EB I-64	2969+40.6	2969+48.9		12		11	11		Woodford
EB I-64	2970+16.9	2970+23.0	12	12		16	16		Woodford
EB I-64	2971+40.5	2971+46.9	12			9	9		Woodford
EB I-64	2971+59.9	2971+80.5		12		27	27		Woodford
EB I-64	2972+20.5	2972+29.1	12	12		23	23		Woodford
EB I-64	2972+57.0	2972+97.7		12		54	54		Woodford
EB I-64	2974+12.8	2974+27.2		12		19	19		Woodford
EB I-64	2974+57.4	2974+75.8		12		25	25		Woodford
EB I-64	2975+22.0	2975+46.8		12		33	33		Woodford
EB I-64	2975+65.8	2975+71.8	12	12		16	16		Woodford
EB I-64	2976+20.1	2976+26.1	12	12		16	16		Woodford
EB I-64	2976+39.0	2976+48.5	12			13	13		Woodford
EB I-64	2976+39.0	2976+58.8		12		26	26		Woodford
EB I-64	2977+28.2	2977+46.1	12	12		48	48		Woodford
EB I-64	2978+40.4	2978+68.2	12	12		74	74		Woodford
EB I-64	2979+12.7	2979+20.1		12		10	10		Woodford
EB I-64	2979+77.0	2979+96.6		12		26	26		Woodford
EB I-64	2979+89.7	2979+96.6	12			9	9		Woodford
EB I-64	2980+55.6	2980+63.8	12	12		22	22		Woodford
EB I-64	2982+06.9	2982+13.5	12	12		18	18		Woodford
EB I-64	2982+88.6	2982+96.4	12			10	10		Woodford
EB I-64	2983+19.5	2983+31.8	12	12		33	33		Woodford
EB I-64	2985+05.7	2985+29.0		12		31	31		Woodford
EB I-64	2986+38.6	2986+45.9	12			10	10		Woodford
EB I-64	2986+73.0	2986+80.9		12		11	11		Woodford
EB I-64	2987+06.7	2987+18.6		12		16	16		Woodford
EB I-64	2987+39.4	2987+55.1		12		21	21		Woodford
EB I-64	2988+03.6	2988+12.6	12	12		24	24		Woodford
EB I-64	2989+13.9	2989+21.7	12			10	10		Woodford
EB I-64	2989+13.9	2989+29.7		12		21	21		Woodford
EB I-64	2989+88.1	2989+96.6	12			11	11		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
						(SQ YD)			
EB I-64	2990+60.5	2990+77.1		12		22	22		Woodford
EB I-64	2991+06.6	2991+23.6		12		23	23		Woodford
EB I-64	2992+03.2	2992+09.7		12		9	9		Woodford
EB I-64	2992+54.8	2992+63.5		12		12	12		Woodford
EB I-64	2992+88.4	2993+29.5		12		55	55		Woodford
EB I-64	2993+53.4	2993+95.5		12		56	56		Woodford
EB I-64	2993+61.1	2993+68.0	12			9	9		Woodford
EB I-64	2994+59.0	2994+68.0	12			12	12		Woodford
EB I-64	2994+59.0	2994+79.3		12		27	27		Woodford
EB I-64	2995+07.2	2995+26.6		12		26	26		Woodford
EB I-64	2995+58.8	2995+79.2		12		27	27		Woodford
EB I-64	2996+03.3	2996+29.2		12		35	35		Woodford
EB I-64	2997+55.3	2997+76.0		12		28	28		Woodford
EB I-64	2998+24.3	2998+33.1		12		12	12		Woodford
EB I-64	2998+61.6	2998+78.5		12		23	23		Woodford
EB I-64	2999+02.5	2999+25.5		12		31	31		Woodford
EB I-64	2999+17.1	2999+25.5	12			11	11		Woodford
EB I-64	2999+66.8	3000+90.8		12		165	165		Woodford
EB I-64	2999+74.9	2999+82.5	12			10	10		Woodford
EB I-64	3000+60.5	3000+90.8	12			40	40		Woodford
<b>SUB TOTAL</b>						<b>12635</b>	<b>12635</b>		
			<b>Franklin:</b>	<b>3145</b>	<b>Woodford:</b>	<b>9490</b>			
WB I-64	2630+91.6	2631+11.1	0	0		56	56	See Note 1	Franklin
WB I-64	2633+96.1	2634+16.0				25	25	See Note 2	Franklin
WB I-64	2634+04.0	2635+55.1	12	12		403	403		Franklin
WB I-64	2637+19.2	2637+39.1		12		27	27		Franklin
WB I-64	2638+22.4	2638+29.1	12	12		18	18		Franklin
WB I-64	2639+10.4	2639+32.1		12		29	29		Franklin
WB I-64	2639+21.5	2639+32.1	12			14	14		Franklin
WB I-64	2640+48.6	2640+76.9	12	12		75	75		Franklin
WB I-64	2640+99.0	2641+05.0	12	12		16	16		Franklin
WB I-64	2641+57.5	2641+64.8		12		10	10		Franklin
WB I-64	2645+40.3	2645+48.6		12		11	11		Franklin
WB I-64	2650+32.3	2650+40.3		12		11	11		Franklin
WB I-64	2651+32.6	2651+50.3		12		24	24		Franklin
WB I-64	2653+38.2	2653+45.2	12	12		19	19		Franklin
WB I-64	2653+79.6	2653+92.7		12		17	17		Franklin
WB I-64	2655+84.5	2656+17.5		12		44	44		Franklin
WB I-64	2658+76.1	2659+03.2		12		36	36		Franklin
WB I-64	2663+28.7	2663+47.9		12		26	26		Franklin
WB I-64	2665+76.0	2665+98.9		12		31	31		Franklin
WB I-64	2675+33.1	2675+39.2	12	12		16	16		Franklin
WB I-64	2677+58.4	2677+64.9	12			9	9		Franklin
WB I-64	2678+75.8	2678+88.8	12	12		35	35		Franklin
WB I-64	2680+36.5	2680+42.9	12	12		17	17		Franklin
WB I-64	2680+82.2	2680+88.6	12	12		17	17		Franklin
WB I-64	2684+72.7	2684+93.6		12		28	28		Franklin
WB I-64	2684+86.7	2684+93.6	12			9	9		Franklin
WB I-64	2685+33.1	2685+39.5	12	12		17	17		Franklin
WB I-64	2687+27.9	2687+37.5	12	12		26	26		Franklin
WB I-64	2694+84.1	2694+90.4	12	12		17	17		Franklin
WB I-64	2697+25.8	2697+35.3	12	12		25	25		Franklin
WB I-64	2698+81.0	2698+99.0	12	12		48	48		Franklin
WB I-64	2700+77.4	2700+84.1	12	12		18	18		Franklin
WB I-64	2701+70.7	2702+24.3		12		71	71		Franklin
WB I-64	2701+84.7	2702+13.7	12			39	39		Franklin
WB I-64	2705+23.8	2705+45.6	12	12		58	58		Franklin
WB I-64	2706+71.1	2706+92.6		12		29	29		Franklin
WB I-64	2709+69.7	2709+88.3	12	12		50	50		Franklin
WB I-64	2712+14.9	2712+34.8		12		27	27		Franklin

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY												
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY			
ROADWAY	BEGIN	END	inside	outside	other	2058	02069					
	(STA)					(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in	
										(SQ YD)		
WB I-64	2713+62.9	2713+86.4		12		31	31		Franklin			
WB I-64	2714+11.0	2714+34.4		12		31	31		Franklin			
WB I-64	2715+10.4	2715+22.0	12	12		31	31		Franklin			
WB I-64	2715+57.6	2715+81.3		12		32	32		Franklin			
WB I-64	2718+07.3	2718+32.6		12		34	34		Woodford			
WB I-64	2718+59.0	2718+83.0		12		32	32		Woodford			
WB I-64	2719+17.7	2719+37.2	12	12		52	52		Woodford			
WB I-64	2719+54.7	2719+97.5	12			57	57		Woodford			
WB I-64	2720+16.6	2720+30.0		12		18	18		Woodford			
WB I-64	2720+51.4	2720+97.7		12		62	62		Woodford			
WB I-64	2720+76.4	2720+97.7	12			28	28		Woodford			
WB I-64	2721+59.1	2722+23.6		12		86	86		Woodford			
WB I-64	2723+02.7	2723+29.7		12		36	36		Woodford			
WB I-64	2723+54.4	2723+76.0		12		29	29		Woodford			
WB I-64	2724+03.1	2724+29.8		12		36	36		Woodford			
WB I-64	2724+57.6	2724+75.1		12		23	23		Woodford			
WB I-64	2725+03.7	2725+28.6		12		33	33		Woodford			
WB I-64	2726+67.6	2726+73.8	12	12		17	17		Woodford			
WB I-64	2726+90.0	2726+96.4	12			9	9		Woodford			
WB I-64	2727+40.3	2727+46.7	12	12		17	17		Woodford			
WB I-64	2727+89.9	2727+96.7	12			9	9		Woodford			
WB I-64	2728+07.2	2728+32.2		12		33	33		Woodford			
WB I-64	2728+59.1	2728+70.3		12		15	15		Woodford			
WB I-64	2729+01.8	2729+19.2		12		23	23		Woodford			
WB I-64	2729+87.6	2730+82.8		12		127	127		Woodford			
WB I-64	2729+87.6	2729+96.8	12			12	12		Woodford			
WB I-64	2730+63.4	2730+82.8	12			26	26		Woodford			
WB I-64	2731+58.8	2731+80.6		12		29	29		Woodford			
WB I-64	2732+09.2	2732+20.8		12		15	15		Woodford			
WB I-64	2734+04.2	2734+18.5	12	12		38	38		Woodford			
WB I-64	2735+54.0	2735+60.7	12	12		18	18		Woodford			
WB I-64	2736+59.9	2736+66.4	12	12		17	17		Woodford			
WB I-64	2737+10.4	2737+17.7	12	12		19	19		Woodford			
WB I-64	2737+89.4	2737+95.8		12		9	9		Woodford			
WB I-64	2738+15.2	2738+29.1		12		19	19		Woodford			
WB I-64	2739+39.3	2739+55.6	12			22	22		Woodford			
WB I-64	2739+89.5	2740+39.5	12	12		133	133		Woodford			
WB I-64	2741+16.2	2741+24.6	12	12		22	22		Woodford			
WB I-64	2742+13.3	2742+20.5	12	12	2.4	21	21	Plus Ramp	Woodford			
WB I-64	2743+04.2	2743+21.5	12	12		46	46		Woodford			
WB I-64	2745+86.9	2745+94.7			10.1	9	9	Ramp	Woodford			
WB I-64	2747+55.8	2747+75.5		12		26	26		Woodford			
WB I-64	2749+80.6	2750+14.0			12.0	45	45	Ramp	Woodford			
WB I-64	2751+91.5	2751+98.0		12		9	9		Woodford			
WB I-64	2753+71.1	2753+77.3	12	12		17	17		Woodford			
WB I-64	2756+10.3	2756+18.9	12	12		23	23		Woodford			
WB I-64	2756+69.9	2756+76.5	12	12		18	18		Woodford			
WB I-64	2759+16.8	2759+23.8	12	12		19	19		Woodford			
WB I-64	2759+66.7	2759+74.0	12	12		19	19		Woodford			
WB I-64	2760+62.8	2760+69.8		12		9	9		Woodford			
WB I-64	2761+39.7	2761+46.1	12			9	9		Woodford			
WB I-64	2764+53.2	2764+69.8	12	12		44	44		Woodford			
WB I-64	2765+67.5	2765+74.0	12	12		17	17		Woodford			
WB I-64	2768+64.1	2768+70.1	12	12		16	16		Woodford			
WB I-64	2770+03.7	2770+23.2		12		26	26		Woodford			
WB I-64	2770+69.1	2770+76.8		12		10	10		Woodford			
WB I-64	2772+15.1	2772+31.9	12	12		45	45		Woodford			
WB I-64	2773+20.3	2773+26.6	12	12		17	17		Woodford			
WB I-64	2773+61.4	2773+67.4		12		8	8		Woodford			
WB I-64	2774+17.6	2774+24.7	12	12		19	19		Woodford			
WB I-64	2775+43.4	2775+49.8		12		9	9		Woodford			

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
WB I-64	2778+11.6	2778+18.7		12		9	9		Woodford
WB I-64	2778+23.9	2778+31.0	12			9	9		Woodford
WB I-64	2778+53.8	2778+60.9	12			9	9		Woodford
WB I-64	2780+68.3	2780+98.8			14.0	47	47	Ramp	Woodford
WB I-64	2781+22.2	2781+36.0	12	12	14.8	59	59	Plus Ramp	Woodford
WB I-64	2781+73.8	2781+96.2		12		30	30		Woodford
WB I-64	2782+25.8	2782+32.7	12	12		18	18		Woodford
WB I-64	2782+91.9	2782+99.7	12	12	2.1	23	23	Plus Ramp	Woodford
WB I-64	2783+62.3	2783+69.4	12			9	9		Woodford
WB I-64	2784+75.2	2784+94.1		12		25	25		Woodford
WB I-64	2785+62.3	2786+06.8		12		59	59		Woodford
WB I-64	2785+88.9	2786+19.1	12			40	40		Woodford
WB I-64	2786+50.1	2786+56.4	12			8	8		Woodford
WB I-64	2786+81.1	2787+02.0		12		28	28		Woodford
WB I-64	2787+49.9	2787+56.7	12			9	9		Woodford
WB I-64	2788+11.9	2788+18.9	12			9	9		Woodford
WB I-64	2788+86.0	2788+92.2	12	12		17	17		Woodford
WB I-64	2789+62.3	2789+69.2	12	12		18	18		Woodford
WB I-64	2789+88.7	2790+04.5		12		21	21		Woodford
WB I-64	2791+89.2	2791+95.7		12		9	9		Woodford
WB I-64	2792+77.8	2792+84.4		12		9	9		Woodford
WB I-64	2793+40.7	2793+91.5		12		68	68		Woodford
WB I-64	2794+87.2	2794+94.9	12	12		21	21		Woodford
WB I-64	2795+34.6	2795+42.7		12		11	11		Woodford
WB I-64	2796+79.8	2796+87.6	12	12		21	21		Woodford
WB I-64	2797+85.3	2797+91.6	12	12		17	17		Woodford
WB I-64	2798+27.3	2798+44.5		12		23	23		Woodford
WB I-64	2798+97.0	2799+42.0		12		60	60		Woodford
WB I-64	2800+27.0	2800+40.0	12	12		35	35		Woodford
WB I-64	2801+30.1	2801+54.1		12		32	32		Woodford
WB I-64	2801+85.3	2801+93.5	12	12		22	22		Woodford
WB I-64	2802+34.6	2802+53.7		12		25	25		Woodford
WB I-64	2802+34.6	2802+41.3	12			9	9		Woodford
WB I-64	2804+36.1	2804+53.0		12		23	23		Woodford
WB I-64	2804+78.4	2804+95.6		12		23	23		Woodford
WB I-64	2805+80.8	2806+04.9	12	12		64	64		Woodford
WB I-64	2806+25.9	2806+47.2		12		28	28		Woodford
WB I-64	2806+78.0	2806+98.0	12	12		53	53		Woodford
WB I-64	2808+84.5	2809+02.8		12		24	24		Woodford
WB I-64	2809+84.1	2809+91.1	12	12		19	19		Woodford
WB I-64	2811+37.7	2811+44.3	12	12		18	18		Woodford
WB I-64	2811+86.5	2812+03.3		12		22	22		Woodford
WB I-64	2813+28.7	2813+46.3		12		23	23		Woodford
WB I-64	2813+77.2	2813+96.1	12	12		50	50		Woodford
WB I-64	2814+30.5	2814+41.6	12	12		30	30		Woodford
WB I-64	2814+91.4	2814+98.6	12	12		19	19		Woodford
WB I-64	2815+79.8	2816+02.5		12		30	30		Woodford
WB I-64	2817+25.2	2817+41.6		12		22	22		Woodford
WB I-64	2817+75.5	2817+94.4		12		25	25		Woodford
WB I-64	2818+24.4	2818+51.3		12		36	36		Woodford
WB I-64	2818+75.5	2818+98.5	12	12		61	61		Woodford
WB I-64	2819+27.4	2819+47.3		12		27	27		Woodford
WB I-64	2820+78.7	2820+96.5		12		24	24		Woodford
WB I-64	2821+35.2	2821+67.7		12		43	43		Woodford
WB I-64	2822+81.3	2822+99.8	12	12		49	49		Woodford
WB I-64	2823+86.1	2824+44.0		12		77	77		Woodford
WB I-64	2823+86.1	2824+17.5	12			42	42		Woodford
WB I-64	2825+37.2	2825+43.3	12	12		16	16		Woodford
WB I-64	2826+61.4	2826+81.1	12	12		53	53		Woodford
WB I-64	2827+10.5	2828+04.2	12			125	125		Woodford
WB I-64	2827+75.4	2828+45.4		12		93	93		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
WB I-64	2828+73.1	2828+80.0		12		9	9		Woodford
WB I-64	2828+97.6	2829+04.5	12	12		18	18		Woodford
WB I-64	2829+69.8	2829+89.8		12		27	27		Woodford
WB I-64	2830+23.5	2832+13.8		12		254	254		Woodford
WB I-64	2830+60.2	2830+82.0	12			29	29		Woodford
WB I-64	2831+76.2	2832+13.8	12			50	50		Woodford
WB I-64	2832+13.8	2835+19.3	12	12		815	815	BT Overlay - Replace FD	Woodford
WB I-64	2836+40.8	2839+39.7	12	12		797	797	BT Overlay - Replace FD	Woodford
WB I-64	2839+39.7	2839+65.3	12	12		68	68		Woodford
WB I-64	2839+98.0	2840+18.3		12		27	27		Woodford
WB I-64	2840+10.0	2840+18.3	12			11	11		Woodford
WB I-64	2840+51.4	2840+98.0	12	12		124	124		Woodford
WB I-64	2841+36.7	2842+10.6		12		99	99		Woodford
WB I-64	2841+86.9	2842+10.6	12			32	32		Woodford
WB I-64	2842+48.8	2842+64.3	12	12		41	41		Woodford
WB I-64	2843+18.2	2843+44.0		12		34	34		Woodford
WB I-64	2843+37.0	2843+44.0	12			9	9		Woodford
WB I-64	2844+37.0	2844+56.1	12	12		51	51		Woodford
WB I-64	2844+95.4	2845+37.6		12		56	56		Woodford
WB I-64	2845+10.2	2845+24.0	12			18	18		Woodford
WB I-64	2847+02.3	2847+94.5		12		123	123		Woodford
WB I-64	2847+02.3	2847+27.8	12			34	34		Woodford
WB I-64	2848+32.8	2848+57.8	12	12		67	67		Woodford
WB I-64	2848+87.9	2848+95.9		12		11	11		Woodford
WB I-64	2850+87.1	2851+69.5		12		110	110		Woodford
WB I-64	2850+87.1	2850+97.5	12			14	14		Woodford
WB I-64	2853+89.0	2854+45.6		12		75	75		Woodford
WB I-64	2854+23.3	2854+45.6	12			30	30		Woodford
WB I-64	2855+02.6	2855+09.2		12		9	9		Woodford
WB I-64	2855+38.4	2855+45.8	12	12		20	20		Woodford
WB I-64	2855+88.4	2855+95.3	12			9	9		Woodford
WB I-64	2856+11.5	2856+19.6	12	12		22	22		Woodford
WB I-64	2857+54.4	2857+65.9		12		15	15		Woodford
WB I-64	2858+89.7	2859+26.6		12		49	49		Woodford
WB I-64	2859+00.3	2859+09.2	12			12	12		Woodford
WB I-64	2861+15.6	2861+71.5		12		75	75		Woodford
WB I-64	2861+63.7	2861+71.5	12			10	10		Woodford
WB I-64	2862+12.8	2862+19.5	12	12		18	18		Woodford
WB I-64	2862+55.1	2862+62.7		12		10	10		Woodford
WB I-64	2864+27.4	2864+33.7		12		8	8		Woodford
WB I-64	2864+61.9	2864+68.6	12	12		18	18		Woodford
WB I-64	2865+02.4	2865+46.9		12		59	59		Woodford
WB I-64	2866+06.0	2866+27.5		12		29	29		Woodford
WB I-64	2866+52.6	2866+60.0	12	12		20	20		Woodford
WB I-64	2871+40.0	2871+46.9		12		9	9		Woodford
WB I-64	2872+08.4	2872+30.0		12		29	29		Woodford
WB I-64	2879+50.8	2879+67.7		12		23	23		Woodford
WB I-64	2880+06.5	2880+14.0		12		10	10		Woodford
WB I-64	2882+20.7	2882+31.2	12	12		28	28		Woodford
WB I-64	2883+56.4	2883+65.0	12	12		23	23		Woodford
WB I-64	2886+08.1	2886+27.7		12		26	26		Woodford
WB I-64	2887+69.8	2887+76.4		12		9	9		Woodford
WB I-64	2888+04.9	2888+11.2	12	12		17	17		Woodford
WB I-64	2888+69.7	2888+76.8		12		9	9		Woodford
WB I-64	2889+59.8	2889+66.4	12	12		18	18		Woodford
WB I-64	2890+06.1	2890+27.2		12		28	28		Woodford
WB I-64	2890+64.7	2890+71.8		12		9	9		Woodford
WB I-64	2892+20.7	2892+27.4		12		9	9		Woodford
WB I-64	2892+96.2	2893+78.0		12		109	109		Woodford
WB I-64	2895+06.8	2895+13.6	12	12		18	18		Woodford
WB I-64	2896+15.4	2896+22.8	12	12		20	20		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
						(SQ YD)			
WB I-64	2896+60.0	2896+66.8	12	12		18	18		Woodford
WB I-64	2897+38.9	2897+45.7	12	12		18	18		Woodford
WB I-64	2897+64.5	2897+70.9		12		9	9		Woodford
WB I-64	2898+03.4	2898+27.7		12		32	32		Woodford
WB I-64	2899+09.0	2899+30.6		12		29	29		Woodford
WB I-64	2901+08.8	2901+28.6	12	12		53	53		Woodford
WB I-64	2902+64.0	2902+70.8		12		9	9		Woodford
WB I-64	2903+65.9	2903+72.3	12	12		17	17		Woodford
WB I-64	2904+65.5	2904+73.0	12	12		20	20		Woodford
WB I-64	2910+11.3	2910+17.8	12	12		17	17		Woodford
WB I-64	2910+61.0	2910+75.3		12		19	19		Woodford
WB I-64	2911+10.0	2911+18.1	12	12		22	22		Woodford
WB I-64	2911+87.5	2911+94.2	12	12		18	18		Woodford
WB I-64	2912+60.2	2912+77.7	12	12		47	47		Woodford
WB I-64	2914+74.3	2914+80.3	12	12		16	16		Woodford
WB I-64	2915+37.3	2915+43.9	12	12		18	18		Woodford
WB I-64	2916+10.3	2916+17.3		12		9	9		Woodford
WB I-64	2921+05.4	2921+18.3		12		17	17		Woodford
WB I-64	2921+52.1	2921+58.7		12		9	9		Woodford
WB I-64	2922+37.0	2922+43.5		12		9	9		Woodford
WB I-64	2923+36.6	2923+43.2		12		9	9		Woodford
WB I-64	2928+18.2	2928+27.2	12	12		24	24		Woodford
WB I-64	2931+01.3	2931+24.7	12	12		62	62		Woodford
WB I-64	2932+65.7	2932+73.0		12		10	10		Woodford
WB I-64	2934+35.4	2934+42.2	12	12		18	18		Woodford
WB I-64	2935+57.7	2935+66.0		12		11	11		Woodford
WB I-64	2936+16.8	2936+24.0	12	12		19	19		Woodford
WB I-64	2936+73.7	2936+92.2		12		25	25		Woodford
WB I-64	2936+85.7	2936+92.2	12			9	9		Woodford
WB I-64	2937+66.4	2937+76.6		12		14	14		Woodford
WB I-64	2939+60.3	2939+67.2		12		9	9		Woodford
WB I-64	2947+09.9	2947+16.7		12		9	9		Woodford
WB I-64	2949+13.5	2949+21.4	12	12		21	21		Woodford
WB I-64	2950+07.3	2950+13.9	12	12		18	18		Woodford
WB I-64	2951+83.6	2951+90.1	12			9	9		Woodford
WB I-64	2953+05.3	2953+12.4		12		9	9		Woodford
WB I-64	2954+59.9	2954+67.8	12	12		21	21		Woodford
WB I-64	2956+16.3	2956+26.4		12		13	13		Woodford
WB I-64	2956+66.7	2956+73.5	12	12		18	18		Woodford
WB I-64	2958+05.0	2958+11.0	12	12		16	16		Woodford
WB I-64	2958+32.6	2958+40.1	12	12		20	20		Woodford
WB I-64	2960+68.1	2960+75.3	12	12		19	19		Woodford
WB I-64	2962+41.5	2962+54.8		12		18	18		Woodford
WB I-64	2963+31.8	2963+38.8		12		9	9		Woodford
WB I-64	2963+68.0	2963+74.0		12		8	8		Woodford
WB I-64	2964+19.3	2964+30.9	12	12		31	31		Woodford
WB I-64	2965+01.2	2965+13.7		12		17	17		Woodford
WB I-64	2965+31.7	2965+64.6		12		44	44		Woodford
WB I-64	2965+58.3	2965+64.6	12			8	8		Woodford
WB I-64	2966+65.3	2966+71.3		12		8	8		Woodford
WB I-64	2967+64.2	2967+71.8	12	12		20	20		Woodford
WB I-64	2968+12.2	2968+18.8	12	12		18	18		Woodford
WB I-64	2968+95.6	2969+03.0	12	12		20	20		Woodford
WB I-64	2972+45.3	2972+51.6	12	12		17	17		Woodford
WB I-64	2973+13.8	2973+21.7		12		11	11		Woodford
WB I-64	2973+45.7	2973+53.4	12	12		21	21		Woodford
WB I-64	2976+99.4	2977+05.6	12	12		17	17		Woodford
WB I-64	2978+47.4	2978+55.9	12	12		23	23		Woodford
WB I-64	2978+97.9	2979+12.7	12	12		39	39		Woodford
WB I-64	2982+80.5	2982+87.0	12			9	9		Woodford
WB I-64	2983+78.8	2983+87.3	12	12		23	23		Woodford

## I-64 PAVEMENT REHABILITATION FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00

CONCRETE PAVEMENT REPAIR SUMMARY									
LOCATION			LANE & WIDTH			ITEM		REMARKS	COUNTY
ROADWAY	BEGIN	END	inside	outside	other	2058	02069		
	(STA)	(feet)				REMOVE PCC PAVEMENT	JPC PAVEMENT 10in		
WB I-64	2984+48.0	2984+54.2		12		8	8		Woodford
WB I-64	2986+54.8	2986+61.3		12		9	9		Woodford
WB I-64	2987+80.2	2987+87.3		12		9	9		Woodford
WB I-64	2988+14.4	2988+21.3	12	12		18	18		Woodford
WB I-64	2989+80.2	2989+86.8		12		9	9		Woodford
WB I-64	2990+45.1	2990+71.2		12		35	35		Woodford
WB I-64	2991+58.9	2991+68.2	12	12		25	25		Woodford
WB I-64	2992+29.6	2992+37.4	12			10	10		Woodford
WB I-64	2992+79.7	2992+87.1	12			10	10		Woodford
WB I-64	2993+46.6	2993+53.1	12	12		17	17		Woodford
WB I-64	2994+03.6	2994+10.7	12	12		19	19		Woodford
WB I-64	2994+44.4	2999+33.6		12		652	652	Entire Outside lane for 490'	Woodford
WB I-64	2995+05.9	2995+12.1	12			8	8		Woodford
WB I-64	2997+03.1	2997+20.1	12			23	23		Woodford
WB I-64	2998+04.3	2998+22.3	12			24	24		Woodford
<b>SUB TOTAL</b>						<b>10973</b>	<b>10973</b>		

**Franklin: 1573    Woodford: 9400**

**PROJECT TOTAL** **23608    23608**

**Total: Franklin: 4718    Woodford: 18890**

All quantities carried forward to the Pavement Summary.

Notes:

- (1) Estimated area to be removed during bridge joint elimination. Includes shoulders and driving lanes.
- (2) Estimated area of PCC shoulders to be removed during bridge joint elimination. Driving lanes area included in other totals.
- (3) Removal of the asphalt test strips in these areas will be incidental to the Remove PCC Pavement bid item.

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2637+02.0	12	12		24		Franklin
EB I-64	2637+27.5	12	12		24		Franklin
EB I-64	2637+81.8		12		12		Franklin
EB I-64	2638+82.7	12	12		24		Franklin
EB I-64	2639+37.4	12			12		Franklin
EB I-64	2639+89.6	12			12		Franklin
EB I-64	2640+25.8		12		12		Franklin
EB I-64	2640+51.5	12	12		24		Franklin
EB I-64	2640+77.0		12		12		Franklin
EB I-64	2641+00.5	12	12		24		Franklin
EB I-64	2641+25.8	12	12		24		Franklin
EB I-64	2642+24.8	12	12		24		Franklin
EB I-64	2642+74.7		12		12		Franklin
EB I-64	2643+00.2		12		12		Franklin
EB I-64	2643+43.2	12			12		Franklin
EB I-64	2643+80.9	12	12		24		Franklin
EB I-64	2644+31.7	12	12		24		Franklin
EB I-64	2644+45.4	12	12		24		Franklin
EB I-64	2644+76.7	12	12		24		Franklin
EB I-64	2645+31.0	12	12		24		Franklin
EB I-64	2645+47.6	12	12		24		Franklin
EB I-64	2645+97.8		12		12		Franklin
EB I-64	2646+76.5	12	12		24		Franklin
EB I-64	2647+10.4		12		12		Franklin
EB I-64	2647+21.3	12	12		24		Franklin
EB I-64	2647+30.8		12		12		Franklin
EB I-64	2647+59.2	12	12		24		Franklin
EB I-64	2647+66.4			8.0	8	ramp taper	Franklin
EB I-64	2647+70.3		12		12		Franklin
EB I-64	2647+82.3	12	12		24		Franklin
EB I-64	2648+16.1		12		12		Franklin
EB I-64	2648+26.2	12	12		24		Franklin
EB I-64	2648+73.3			13.8	13.8	ramp taper	Franklin
EB I-64	2649+63.8	12	12		24		Franklin
EB I-64	2649+78.5	12	12	12.6	36.6	12.6 ft in taper	Franklin
EB I-64	2650+20.3	12	12		24		Franklin
EB I-64	2650+26.8		12	11.7	23.7	11.7 ft in taper	Franklin
EB I-64	2650+79.9	12			12		Franklin
EB I-64	2651+09.9	12			12		Franklin
EB I-64	2651+20.7			8.9	8.9	ramp taper	Franklin
EB I-64	2651+27.3	12			12		Franklin
EB I-64	2652+33.4			6.5	6.5	ramp taper	Franklin
EB I-64	2653+16.3	12	12		24		Franklin
EB I-64	2653+28.2	12	12		24		Franklin
EB I-64	2653+65.0	12			12		Franklin
EB I-64	2653+74.3	12			12		Franklin
EB I-64	2654+17.6	12			12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2654+75.9	12			12		Franklin
EB I-64	2655+13.3	12			12		Franklin
EB I-64	2655+27.8	12			12		Franklin
EB I-64	2655+58.4	12	12		24		Franklin
EB I-64	2655+72.0	12			12		Franklin
EB I-64	2655+81.0	12			12		Franklin
EB I-64	2656+09.9	12	12		24		Franklin
EB I-64	2656+21.7	12	12		24		Franklin
EB I-64	2656+30.8		12		12		Franklin
EB I-64	2657+16.7	12			12		Franklin
EB I-64	2658+23.4	12			12		Franklin
EB I-64	2659+25.3	12			12		Franklin
EB I-64	2660+38.3	12			12		Franklin
EB I-64	2661+09.8		12		12		Franklin
EB I-64	2661+78.0	12	12		24		Franklin
EB I-64	2662+19.0	12	12		24		Franklin
EB I-64	2662+28.5	12	12		24		Franklin
EB I-64	2662+61.9	12			12		Franklin
EB I-64	2662+78.7	12			12		Franklin
EB I-64	2663+16.4	12	12		24		Franklin
EB I-64	2663+26.2	12	12		24		Franklin
EB I-64	2663+81.6		12		12		Franklin
EB I-64	2664+07.2		12		12		Franklin
EB I-64	2664+22.5	12	12		24		Franklin
EB I-64	2664+58.1	12			12		Franklin
EB I-64	2665+14.6	12	12		24		Franklin
EB I-64	2666+09.4		12		12		Franklin
EB I-64	2666+58.9		12		12		Franklin
EB I-64	2666+72.7	12			12		Franklin
EB I-64	2667+30.2	12	12		24		Franklin
EB I-64	2668+31.3		12		12		Franklin
EB I-64	2669+65.5	12	12		24		Franklin
EB I-64	2669+78.0	12			12		Franklin
EB I-64	2670+17.4	12			12		Franklin
EB I-64	2670+28.1	12			12		Franklin
EB I-64	2670+70.2	12			12		Franklin
EB I-64	2670+82.4	12	12		24		Franklin
EB I-64	2671+26.1	12			12		Franklin
EB I-64	2671+56.8		12		12		Franklin
EB I-64	2672+06.0		12		12		Franklin
EB I-64	2672+31.2		12		12		Franklin
EB I-64	2672+55.1		12		12		Franklin
EB I-64	2673+10.1		12		12		Franklin
EB I-64	2673+83.7		12		12		Franklin
EB I-64	2674+70.5	12			12		Franklin
EB I-64	2675+18.2	12			12		Franklin
EB I-64	2676+83.3		12		12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2677+12.8		12		12		Franklin
EB I-64	2677+24.2	12	12		24		Franklin
EB I-64	2677+65.7	12	12		24		Franklin
EB I-64	2677+79.7		12		12		Franklin
EB I-64	2678+22.6	12			12		Franklin
EB I-64	2678+63.6	12	12		24		Franklin
EB I-64	2679+13.2		12		12		Franklin
EB I-64	2679+25.3	12	12		24		Franklin
EB I-64	2679+67.7	12			12		Franklin
EB I-64	2680+14.7	12			12		Franklin
EB I-64	2680+71.4	12			12		Franklin
EB I-64	2681+09.6	12			12		Franklin
EB I-64	2681+20.6	12			12		Franklin
EB I-64	2681+67.1	12	12		24		Franklin
EB I-64	2681+77.7		12		12		Franklin
EB I-64	2682+16.1	12	12		24		Franklin
EB I-64	2682+25.6	12	12		24		Franklin
EB I-64	2682+58.0		12		12		Franklin
EB I-64	2682+69.9	12			12		Franklin
EB I-64	2683+09.7	12			12		Franklin
EB I-64	2683+59.7	12			12		Franklin
EB I-64	2683+77.7	12			12		Franklin
EB I-64	2684+15.3	12	12		24		Franklin
EB I-64	2684+29.4	12	12		24		Franklin
EB I-64	2684+60.3	12			12		Franklin
EB I-64	2684+76.1	12	12		24		Franklin
EB I-64	2685+28.4	12			12		Franklin
EB I-64	2685+72.8	12			12		Franklin
EB I-64	2686+08.6		12		12		Franklin
EB I-64	2686+59.4	12	12		24		Franklin
EB I-64	2686+68.6		12		12		Franklin
EB I-64	2687+11.4		12		12		Franklin
EB I-64	2687+26.2	12	12		24		Franklin
EB I-64	2687+60.1		12		12		Franklin
EB I-64	2687+72.9	12	12		24		Franklin
EB I-64	2688+08.8		12		12		Franklin
EB I-64	2688+18.1	12	12		24		Franklin
EB I-64	2688+77.5	12			12		Franklin
EB I-64	2689+08.5		12		12		Franklin
EB I-64	2689+25.3	12	12		24		Franklin
EB I-64	2689+59.1		12		12		Franklin
EB I-64	2690+57.3		12		12		Franklin
EB I-64	2690+65.7	12	12		24		Franklin
EB I-64	2691+68.8	12	12		24		Franklin
EB I-64	2692+71.1	12			12		Franklin
EB I-64	2693+66.5	12			12		Franklin
EB I-64	2694+45.1	12			12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2694+49.2		12		12		Franklin
EB I-64	2694+60.5		12		12		Franklin
EB I-64	2694+76.1		12		12		Franklin
EB I-64	2694+78.0	12			12		Franklin
EB I-64	2695+18.7	12	12		24		Franklin
EB I-64	2695+54.4		12		12		Franklin
EB I-64	2695+63.4		12		12		Franklin
EB I-64	2695+71.3	12			12		Franklin
EB I-64	2696+23.1	12	12		24		Franklin
EB I-64	2697+17.9		12		12		Franklin
EB I-64	2697+66.3	12			12		Franklin
EB I-64	2697+80.2	12			12		Franklin
EB I-64	2698+09.3	12	12		24		Franklin
EB I-64	2698+25.4	12			12		Franklin
EB I-64	2699+09.4		12		12		Franklin
EB I-64	2699+18.2	12	12		24		Franklin
EB I-64	2700+58.3	12	12		24		Franklin
EB I-64	2701+10.6	12	12		24		Franklin
EB I-64	2701+24.4		12		12		Franklin
EB I-64	2701+54.0		12		12		Franklin
EB I-64	2701+65.5	12			12		Franklin
EB I-64	2702+59.7	12			12		Franklin
EB I-64	2702+75.1	12			12		Franklin
EB I-64	2703+12.5	12			12		Franklin
EB I-64	2703+27.0	12			12		Franklin
EB I-64	2703+59.7	12	12		24		Franklin
EB I-64	2703+74.0	12	12		24		Franklin
EB I-64	2704+04.6	12			12		Franklin
EB I-64	2704+14.7	12			12		Franklin
EB I-64	2704+25.0	12			12		Franklin
EB I-64	2705+10.1	12			12		Franklin
EB I-64	2705+56.3	12			12		Franklin
EB I-64	2705+74.3	12			12		Franklin
EB I-64	2706+04.7		12		12		Franklin
EB I-64	2707+15.7	12	12		24		Franklin
EB I-64	2708+13.2		12		12		Franklin
EB I-64	2708+25.3		12		12		Franklin
EB I-64	2708+56.9	12	12		24		Franklin
EB I-64	2708+77.2	12	12		24		Franklin
EB I-64	2709+08.2	12			12		Franklin
EB I-64	2709+18.8	12			12		Franklin
EB I-64	2709+28.3	12			12		Franklin
EB I-64	2709+60.7	12			12		Franklin
EB I-64	2709+76.5	12			12		Franklin
EB I-64	2710+09.2	12	12		24		Franklin
EB I-64	2710+20.2		12		12		Franklin
EB I-64	2710+58.1		12		12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2710+70.7	12			12		Franklin
EB I-64	2711+07.1	12			12		Franklin
EB I-64	2711+19.4	12			12		Franklin
EB I-64	2711+75.7	12			12		Franklin
EB I-64	2712+07.1	12			12		Franklin
EB I-64	2712+21.4	12			12		Franklin
EB I-64	2713+06.9	12	12		24		Franklin
EB I-64	2713+14.3	12	12		24		Franklin
EB I-64	2713+63.2	12			12		Franklin
EB I-64	2713+74.5	12			12		Franklin
EB I-64	2714+19.1	12	12		24		Woodford
EB I-64	2714+82.2		12		12		Woodford
EB I-64	2715+07.5	12			12		Woodford
EB I-64	2715+31.2	12			12		Woodford
EB I-64	2715+60.9	12	12		24		Woodford
EB I-64	2715+73.8		12		12		Woodford
EB I-64	2716+08.6	12			12		Woodford
EB I-64	2716+12.7		12		12		Woodford
EB I-64	2716+61.3		12		12		Woodford
EB I-64	2717+32.9		12		12		Woodford
EB I-64	2718+19.7	12			12		Woodford
EB I-64	2719+12.3	12	12		24		Woodford
EB I-64	2719+68.6	12			12		Woodford
EB I-64	2720+28.7	12			12		Woodford
EB I-64	2720+71.9	12			12		Woodford
EB I-64	2721+15.6		12		12		Woodford
EB I-64	2721+26.2		12		12		Woodford
EB I-64	2721+67.5	12			12		Woodford
EB I-64	2722+09.9		12		12		Woodford
EB I-64	2723+19.6	12			12		Woodford
EB I-64	2724+07.4		12		12		Woodford
EB I-64	2724+20.7	12			12		Woodford
EB I-64	2724+64.5	12			12		Woodford
EB I-64	2725+77.0		12		12		Woodford
EB I-64	2726+59.0	12	12		24		Woodford
EB I-64	2726+76.2	12	12		24		Woodford
EB I-64	2727+17.8	12			12		Woodford
EB I-64	2727+30.3	12			12		Woodford
EB I-64	2727+69.2	12	12		24		Woodford
EB I-64	2728+79.7		12		12		Woodford
EB I-64	2729+09.6	12	12		24		Woodford
EB I-64	2729+21.9		12		12		Woodford
EB I-64	2729+68.7	12	12		24		Woodford
EB I-64	2730+10.5		12		12		Woodford
EB I-64	2730+24.1	12	12		24		Woodford
EB I-64	2730+73.2	12	12		24		Woodford
EB I-64	2731+18.7	12			12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2731+63.3		12		12		Woodford
EB I-64	2731+74.5	12	12		24		Woodford
EB I-64	2732+09.8	12			12		Woodford
EB I-64	2733+27.2	12	12		24		Woodford
EB I-64	2733+67.9	12			12		Woodford
EB I-64	2735+14.6	12			12		Woodford
EB I-64	2735+59.5	12	12		24		Woodford
EB I-64	2736+10.4	12	12		24		Woodford
EB I-64	2737+71.1		12		12		Woodford
EB I-64	2738+19.6	12	12		24		Woodford
EB I-64	2738+72.1	12			12		Woodford
EB I-64	2739+13.0	12	12		24		Woodford
EB I-64	2739+73.0	12	12		24		Woodford
EB I-64	2740+70.0	12			12		Woodford
EB I-64	2741+10.2	12			12		Woodford
EB I-64	2741+28.9	12			12		Woodford
EB I-64	2741+60.0	12	12		24		Woodford
EB I-64	2742+72.3	12	12		24		Woodford
EB I-64	2745+71.9	12	12		24		Woodford
EB I-64	2747+59.8	12			12		Woodford
EB I-64	2747+72.5	12			12		Woodford
EB I-64	2748+18.0	12			12		Woodford
EB I-64	2751+21.9	12			12		Woodford
EB I-64	2751+71.6	12			12		Woodford
EB I-64	2752+09.2			4.3	4.3	ramp	Woodford
EB I-64	2752+22.9	12	12	5.0	29	5.0' in ramp	Woodford
EB I-64	2752+70.5	12			12		Woodford
EB I-64	2753+13.5	12	12		24		Woodford
EB I-64	2753+73.1	12	12	17.0	41	17.0 ft in ramp	Woodford
EB I-64	2754+17.3			10.3	10.3	ramp	Woodford
EB I-64	2754+26.6			17.9	17.9	ramp	Woodford
EB I-64	2754+32.4			5.9	5.9	ramp	Woodford
EB I-64	2754+63.5	12	12		24		Woodford
EB I-64	2755+45.2	12	12		24		Woodford
EB I-64	2755+45.8			10.5	10.5	ramp	Woodford
EB I-64	2755+93.9		12		12		Woodford
EB I-64	2756+42.4	12	12		24		Woodford
EB I-64	2756+51.1		12		12		Woodford
EB I-64	2756+86.2	12	12		24		Woodford
EB I-64	2757+76.0	12	12		24		Woodford
EB I-64	2758+17.0	12	12		24		Woodford
EB I-64	2758+35.7		12		12		Woodford
EB I-64	2758+68.1	12			12		Woodford
EB I-64	2758+81.2	12			12		Woodford
EB I-64	2759+25.8	12			12		Woodford
EB I-64	2759+69.7	12			12		Woodford
EB I-64	2759+88.8		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2760+64.1		12		12		Woodford
EB I-64	2760+84.2	12	12		24		Woodford
EB I-64	2761+14.4	12			12		Woodford
EB I-64	2761+35.6	12	12		24		Woodford
EB I-64	2761+65.8	12	12		24		Woodford
EB I-64	2762+15.7	12	12		24		Woodford
EB I-64	2762+32.0	12			12		Woodford
EB I-64	2762+75.4	12			12		Woodford
EB I-64	2763+36.2	12	12		24		Woodford
EB I-64	2763+75.5	12	12		24		Woodford
EB I-64	2764+35.3		12		12		Woodford
EB I-64	2766+23.7	12	12		24		Woodford
EB I-64	2766+35.0		12		12		Woodford
EB I-64	2767+14.7	12			12		Woodford
EB I-64	2767+27.4	12			12		Woodford
EB I-64	2767+84.2		12		12		Woodford
EB I-64	2768+24.6	12			12		Woodford
EB I-64	2768+86.8		12		12		Woodford
EB I-64	2769+37.4		12		12		Woodford
EB I-64	2770+78.9	12	12		24		Woodford
EB I-64	2772+30.5	12	12		24		Woodford
EB I-64	2772+79.1	12	12		24		Woodford
EB I-64	2773+23.5		12		12		Woodford
EB I-64	2773+85.0	12	12		24		Woodford
EB I-64	2774+18.9		12		12		Woodford
EB I-64	2774+88.1	12	12		24		Woodford
EB I-64	2775+79.2	12	12		24		Woodford
EB I-64	2776+80.8	12	12		24		Woodford
EB I-64	2777+32.3	12	12		24		Woodford
EB I-64	2778+32.5	12	12		24		Woodford
EB I-64	2778+81.4	12	12		24		Woodford
EB I-64	2779+21.3	12			12		Woodford
EB I-64	2779+74.7	12	12	17.7	41.7	17.7 ft in ramp	Woodford
EB I-64	2780+20.8	12			12		Woodford
EB I-64	2780+34.3	12			12		Woodford
EB I-64	2782+74.8	12	12	11.7	35.7	11.7 ft in ramp	Woodford
EB I-64	2783+76.1	12	12	9.7	33.7	9.7 ft in taper	Woodford
EB I-64	2783+87.0	12	12	9.5	33.5	9.5 ft in taper	Woodford
EB I-64	2784+67.7	12	12		24		Woodford
EB I-64	2784+84.1	12	12	7.5	31.5	7.5 ft in taper	Woodford
EB I-64	2785+88.1	12			12		Woodford
EB I-64	2786+28.8	12	12		24		Woodford
EB I-64	2786+78.5	12	12		24		Woodford
EB I-64	2787+30.8	12	12		24		Woodford
EB I-64	2787+84.1	12	12		24		Woodford
EB I-64	2788+81.3	12	12		24		Woodford
EB I-64	2789+22.6	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2789+75.4	12			12		Woodford
EB I-64	2790+26.0	12	12		24		Woodford
EB I-64	2791+19.6	12	12		24		Woodford
EB I-64	2791+35.9	12	12		24		Woodford
EB I-64	2791+82.1	12	12		24		Woodford
EB I-64	2792+72.8	12			12		Woodford
EB I-64	2793+18.4	12	12		24		Woodford
EB I-64	2793+36.7	12	12		24		Woodford
EB I-64	2793+71.7	12	12		24		Woodford
EB I-64	2794+20.9	12			12		Woodford
EB I-64	2794+37.3	12			12		Woodford
EB I-64	2794+75.3	12	12		24		Woodford
EB I-64	2794+86.3		12		12		Woodford
EB I-64	2795+16.2	12	12		24		Woodford
EB I-64	2795+32.0	12	12		24		Woodford
EB I-64	2795+65.4	12	12		24		Woodford
EB I-64	2795+79.3	12	12		24		Woodford
EB I-64	2796+23.9	12	12		24		Woodford
EB I-64	2796+33.9		12		12		Woodford
EB I-64	2796+63.2	12	12		24		Woodford
EB I-64	2796+82.9	12	12		24		Woodford
EB I-64	2797+27.3	12	12		24		Woodford
EB I-64	2797+68.1	12			12		Woodford
EB I-64	2797+81.8	12			12		Woodford
EB I-64	2798+19.8	12	12		24		Woodford
EB I-64	2798+33.2	12	12		24		Woodford
EB I-64	2798+72.6	12	12		24		Woodford
EB I-64	2798+83.7	12	12		24		Woodford
EB I-64	2799+31.1	12	12		24		Woodford
EB I-64	2799+66.4	12	12		24		Woodford
EB I-64	2799+77.7	12	12		24		Woodford
EB I-64	2800+22.5	12			12		Woodford
EB I-64	2800+34.2	12			12		Woodford
EB I-64	2800+66.4	12			12		Woodford
EB I-64	2800+80.5	12			12		Woodford
EB I-64	2801+27.5	12			12		Woodford
EB I-64	2801+68.6	12	12		24		Woodford
EB I-64	2801+80.5	12	12		24		Woodford
EB I-64	2801+89.2		12		12		Woodford
EB I-64	2802+08.5		12		12		Woodford
EB I-64	2802+22.7	12	12		24		Woodford
EB I-64	2802+36.3	12	12		24		Woodford
EB I-64	2802+64.5	12			12		Woodford
EB I-64	2802+80.4	12			12		Woodford
EB I-64	2803+36.7	12	12		24		Woodford
EB I-64	2803+65.5	12	12		24		Woodford
EB I-64	2803+86.6	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2804+21.2	12			12		Woodford
EB I-64	2804+35.1	12			12		Woodford
EB I-64	2804+77.6	12	12		24		Woodford
EB I-64	2804+88.2		12		12		Woodford
EB I-64	2805+24.8	12	12		24		Woodford
EB I-64	2805+34.6		12		12		Woodford
EB I-64	2805+74.2	12	12		24		Woodford
EB I-64	2805+85.1		12		12		Woodford
EB I-64	2806+17.9	12	12		24		Woodford
EB I-64	2806+30.7		12		12		Woodford
EB I-64	2806+79.9	12	12		24		Woodford
EB I-64	2807+14.7	12	12		24		Woodford
EB I-64	2807+32.1	12	12		24		Woodford
EB I-64	2807+65.1	12	12		24		Woodford
EB I-64	2807+85.4	12	12		24		Woodford
EB I-64	2808+18.2	12	12		24		Woodford
EB I-64	2808+68.0	12	12		24		Woodford
EB I-64	2808+85.0	12	12		24		Woodford
EB I-64	2809+19.1	12	12		24		Woodford
EB I-64	2809+63.5	12			12		Woodford
EB I-64	2809+84.2	12			12		Woodford
EB I-64	2810+20.4	12			12		Woodford
EB I-64	2810+31.5	12			12		Woodford
EB I-64	2810+71.3	12	12		24		Woodford
EB I-64	2810+86.1		12		12		Woodford
EB I-64	2811+12.5	12	12		24		Woodford
EB I-64	2811+22.7	12	12		24		Woodford
EB I-64	2811+34.4	12	12		24		Woodford
EB I-64	2812+17.4	12			12		Woodford
EB I-64	2812+30.3	12			12		Woodford
EB I-64	2812+75.5	12	12		24		Woodford
EB I-64	2813+16.3	12			12		Woodford
EB I-64	2813+35.8	12			12		Woodford
EB I-64	2813+65.2	12			12		Woodford
EB I-64	2813+79.6	12			12		Woodford
EB I-64	2814+21.1	12	12		24		Woodford
EB I-64	2814+32.7	12			12		Woodford
EB I-64	2814+68.8	12	12		24		Woodford
EB I-64	2816+20.5	12			12		Woodford
EB I-64	2816+26.9		12		12		Woodford
EB I-64	2818+82.2	12			12		Woodford
EB I-64	2819+18.4	12	12		24		Woodford
EB I-64	2819+32.9	12	12		24		Woodford
EB I-64	2820+13.7		12		12		Woodford
EB I-64	2820+24.5	12			12		Woodford
EB I-64	2820+37.1	12			12		Woodford
EB I-64	2821+28.4		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2821+74.9	12			12		Woodford
EB I-64	2822+31.6	12			12		Woodford
EB I-64	2822+72.5	12			12		Woodford
EB I-64	2823+13.3		12		12		Woodford
EB I-64	2823+24.5	12			12		Woodford
EB I-64	2823+29.2		12		12		Woodford
EB I-64	2825+27.5		12		12		Woodford
EB I-64	2826+66.2	12			12		Woodford
EB I-64	2827+65.3	12			12		Woodford
EB I-64	2828+25.5	12	12		24		Woodford
EB I-64	2828+63.8	12	12		24		Woodford
EB I-64	2830+64.8		12		12		Woodford
EB I-64	2830+80.7		12		12		Woodford
EB I-64	2840+40.7	12			12		Woodford
EB I-64	2840+84.4	12			12		Woodford
EB I-64	2842+31.7	12	12		24		Woodford
EB I-64	2842+47.2	12	12		24		Woodford
EB I-64	2842+93.7	12			12		Woodford
EB I-64	2843+32.6	12	12		24		Woodford
EB I-64	2843+47.5	12	12		24		Woodford
EB I-64	2843+95.8	12			12		Woodford
EB I-64	2844+37.3	12			12		Woodford
EB I-64	2844+82.8	12	12		24		Woodford
EB I-64	2844+96.5	12	12		24		Woodford
EB I-64	2845+23.7		12		12		Woodford
EB I-64	2845+40.4	12			12		Woodford
EB I-64	2845+45.0		12		12		Woodford
EB I-64	2846+37.2	12	12		24		Woodford
EB I-64	2846+48.2		12		12		Woodford
EB I-64	2846+89.1	12	12		24		Woodford
EB I-64	2847+33.5	12	12		24		Woodford
EB I-64	2847+78.1	12	12		24		Woodford
EB I-64	2847+88.7	12	12		24		Woodford
EB I-64	2848+32.6	12	12		24		Woodford
EB I-64	2848+45.4		12		12		Woodford
EB I-64	2848+91.1	12	12		24		Woodford
EB I-64	2849+23.1	12	12		24		Woodford
EB I-64	2849+37.5	12	12		24		Woodford
EB I-64	2849+45.1		12		12		Woodford
EB I-64	2849+85.5	12	12		24		Woodford
EB I-64	2850+32.7	12	12		24		Woodford
EB I-64	2851+34.1	12	12		24		Woodford
EB I-64	2851+82.5	12	12		24		Woodford
EB I-64	2852+35.2	12	12		24		Woodford
EB I-64	2852+84.0	12	12		24		Woodford
EB I-64	2853+26.2		12		12		Woodford
EB I-64	2853+39.8		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2853+86.8	12	12		24		Woodford
EB I-64	2854+72.3	12	12		24		Woodford
EB I-64	2854+85.7	12	12		24		Woodford
EB I-64	2855+23.3	12	12		24		Woodford
EB I-64	2855+38.4	12	12		24		Woodford
EB I-64	2855+84.5	12	12		24		Woodford
EB I-64	2856+22.5	12			12		Woodford
EB I-64	2856+34.5	12			12		Woodford
EB I-64	2856+69.2		12		12		Woodford
EB I-64	2857+19.4	12	12		24		Woodford
EB I-64	2857+35.2	12	12		24		Woodford
EB I-64	2857+70.9	12			12		Woodford
EB I-64	2857+87.3	12			12		Woodford
EB I-64	2858+68.1	12			12		Woodford
EB I-64	2858+83.3	12			12		Woodford
EB I-64	2859+29.3		12		12		Woodford
EB I-64	2860+20.6	12			12		Woodford
EB I-64	2860+69.1	12			12		Woodford
EB I-64	2860+82.3	12			12		Woodford
EB I-64	2861+86.8		12		12		Woodford
EB I-64	2862+19.3		12		12		Woodford
EB I-64	2862+31.4	12	12		24		Woodford
EB I-64	2862+84.7	12	12		24		Woodford
EB I-64	2863+22.8	12			12		Woodford
EB I-64	2863+43.0		12		12		Woodford
EB I-64	2863+68.4	12	12		24		Woodford
EB I-64	2865+28.6	12			12		Woodford
EB I-64	2865+66.2	12			12		Woodford
EB I-64	2865+82.1	12			12		Woodford
EB I-64	2866+71.4		12		12		Woodford
EB I-64	2866+75.4	12			12		Woodford
EB I-64	2867+65.4		12		12		Woodford
EB I-64	2868+69.7	12	12		24		Woodford
EB I-64	2868+87.2		12		12		Woodford
EB I-64	2871+30.1	12	12		24		Woodford
EB I-64	2871+67.3		12		12		Woodford
EB I-64	2872+65.2	12	12		24		Woodford
EB I-64	2872+82.9	12	12		24		Woodford
EB I-64	2873+25.7	12	12		24		Woodford
EB I-64	2874+24.7	12	12		24		Woodford
EB I-64	2874+80.5	12	12		24		Woodford
EB I-64	2875+33.8	12	12		24		Woodford
EB I-64	2877+27.5	12			12		Woodford
EB I-64	2877+67.4		12		12		Woodford
EB I-64	2879+71.8	12	12		24		Woodford
EB I-64	2880+74.5	12			12		Woodford
EB I-64	2881+77.7	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2884+75.4	12	12		24		Woodford
EB I-64	2885+74.5	12			12		Woodford
EB I-64	2886+20.4	12			12		Woodford
EB I-64	2886+35.6		12		12		Woodford
EB I-64	2890+30.3	12	12		24		Woodford
EB I-64	2890+77.3	12	12		24		Woodford
EB I-64	2890+85.4		12		12		Woodford
EB I-64	2891+31.8	12			12		Woodford
EB I-64	2891+64.2		12		12		Woodford
EB I-64	2891+88.1		12		12		Woodford
EB I-64	2893+31.5	12	12		24		Woodford
EB I-64	2893+77.7	12	12		24		Woodford
EB I-64	2897+75.9	12	12		24		Woodford
EB I-64	2898+76.4	12	12		24		Woodford
EB I-64	2898+85.7		12		12		Woodford
EB I-64	2899+13.5	12			12		Woodford
EB I-64	2899+80.9	12			12		Woodford
EB I-64	2900+26.4	12	12		24		Woodford
EB I-64	2900+79.8	12			12		Woodford
EB I-64	2901+28.1	12			12		Woodford
EB I-64	2901+68.0	12			12		Woodford
EB I-64	2901+81.8	12			12		Woodford
EB I-64	2903+62.7		12		12		Woodford
EB I-64	2903+82.5		12		12		Woodford
EB I-64	2904+18.0	12			12		Woodford
EB I-64	2905+17.4	12	12		24		Woodford
EB I-64	2905+68.4	12			12		Woodford
EB I-64	2906+26.8	12	12		24		Woodford
EB I-64	2906+77.3		12		12		Woodford
EB I-64	2906+82.4	12			12		Woodford
EB I-64	2907+32.2	12			12		Woodford
EB I-64	2908+26.3	12	12		24		Woodford
EB I-64	2908+65.3	12			12		Woodford
EB I-64	2908+82.5	12			12		Woodford
EB I-64	2909+13.4		12		12		Woodford
EB I-64	2909+24.4	12	12		24		Woodford
EB I-64	2909+74.8	12	12		24		Woodford
EB I-64	2910+28.4	12	12		24		Woodford
EB I-64	2910+81.7		12		12		Woodford
EB I-64	2911+23.5	12	12		24		Woodford
EB I-64	2911+72.4	12	12		24		Woodford
EB I-64	2912+12.1		12		12		Woodford
EB I-64	2912+32.4	12	12		24		Woodford
EB I-64	2912+62.5		12		12		Woodford
EB I-64	2912+78.8	12	12		24		Woodford
EB I-64	2912+87.6		12		12		Woodford
EB I-64	2913+11.3		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2913+25.4	12	12		24		Woodford
EB I-64	2914+19.1	12	12		24		Woodford
EB I-64	2914+36.3		12		12		Woodford
EB I-64	2914+83.0	12	12		24		Woodford
EB I-64	2915+58.7	12			12		Woodford
EB I-64	2915+74.4	12			12		Woodford
EB I-64	2916+25.4	12			12		Woodford
EB I-64	2916+73.9	12	12		24		Woodford
EB I-64	2917+14.6		12		12		Woodford
EB I-64	2917+27.8	12	12		24		Woodford
EB I-64	2917+69.3		12		12		Woodford
EB I-64	2917+83.6		12		12		Woodford
EB I-64	2918+17.3	12	12		24		Woodford
EB I-64	2918+33.1		12		12		Woodford
EB I-64	2918+75.4	12	12		24		Woodford
EB I-64	2919+15.5	12			12		Woodford
EB I-64	2919+34.1	12			12		Woodford
EB I-64	2919+63.3	12	12		24		Woodford
EB I-64	2919+76.0		12		12		Woodford
EB I-64	2921+22.9	12	12		24		Woodford
EB I-64	2921+35.8		12		12		Woodford
EB I-64	2921+73.7		12		12		Woodford
EB I-64	2922+17.2	12			12		Woodford
EB I-64	2922+29.8	12			12		Woodford
EB I-64	2922+63.6	12			12		Woodford
EB I-64	2922+77.8	12			12		Woodford
EB I-64	2923+12.4		12		12		Woodford
EB I-64	2923+28.6		12		12		Woodford
EB I-64	2923+82.3	12			12		Woodford
EB I-64	2924+77.3	12	12		24		Woodford
EB I-64	2925+13.0	12	12		24		Woodford
EB I-64	2925+25.0		12		12		Woodford
EB I-64	2925+76.3	12			12		Woodford
EB I-64	2926+23.0		12		12		Woodford
EB I-64	2926+35.3	12	12		24		Woodford
EB I-64	2926+83.1	12	12		24		Woodford
EB I-64	2927+19.7	12	12		24		Woodford
EB I-64	2927+64.5	12	12		24		Woodford
EB I-64	2927+81.6	12	12		24		Woodford
EB I-64	2928+11.6		12		12		Woodford
EB I-64	2928+16.0	12			12		Woodford
EB I-64	2928+32.8		12		12		Woodford
EB I-64	2929+24.1	12	12		24		Woodford
EB I-64	2929+34.1		12		12		Woodford
EB I-64	2929+61.8		12		12		Woodford
EB I-64	2929+73.8	12	12		24		Woodford
EB I-64	2929+86.9		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2930+13.0	12			12		Woodford
EB I-64	2930+26.8	12			12		Woodford
EB I-64	2930+62.9		12		12		Woodford
EB I-64	2930+73.3	12	12		24		Woodford
EB I-64	2930+83.3		12		12		Woodford
EB I-64	2931+12.2	12	12		24		Woodford
EB I-64	2931+28.6	12	12		24		Woodford
EB I-64	2931+65.1	12	12		24		Woodford
EB I-64	2931+77.5	12	12		24		Woodford
EB I-64	2932+15.6	12	12		24		Woodford
EB I-64	2933+83.1	12			12		Woodford
EB I-64	2934+25.0	12			12		Woodford
EB I-64	2934+63.7	12	12		24		Woodford
EB I-64	2935+79.6	12			12		Woodford
EB I-64	2936+10.8	12	12		24		Woodford
EB I-64	2936+26.4		12		12		Woodford
EB I-64	2936+72.8		12		12		Woodford
EB I-64	2937+20.1	12			12		Woodford
EB I-64	2937+32.9	12			12		Woodford
EB I-64	2937+59.1	12	12		24		Woodford
EB I-64	2937+71.8	12			12		Woodford
EB I-64	2938+64.2	12	12		24		Woodford
EB I-64	2938+80.2	12	12		24		Woodford
EB I-64	2939+34.9	12			12		Woodford
EB I-64	2939+63.3	12	12		24		Woodford
EB I-64	2939+78.1	12	12		24		Woodford
EB I-64	2940+32.1	12			12		Woodford
EB I-64	2940+62.0	12			12		Woodford
EB I-64	2940+78.8	12			12		Woodford
EB I-64	2941+12.8		12		12		Woodford
EB I-64	2941+27.3	12	12		24		Woodford
EB I-64	2942+12.9		12		12		Woodford
EB I-64	2942+76.2	12			12		Woodford
EB I-64	2943+77.7		12		12		Woodford
EB I-64	2944+59.4		12		12		Woodford
EB I-64	2945+22.3	12			12		Woodford
EB I-64	2945+59.7		12		12		Woodford
EB I-64	2945+77.0		12		12		Woodford
EB I-64	2946+15.9	12	12		24		Woodford
EB I-64	2946+35.6	12			12		Woodford
EB I-64	2946+64.7	12			12		Woodford
EB I-64	2947+21.8	12			12		Woodford
EB I-64	2947+67.4	12			12		Woodford
EB I-64	2948+59.9		12		12		Woodford
EB I-64	2950+58.9	12	12		24		Woodford
EB I-64	2950+71.8	12	12		24		Woodford
EB I-64	2950+80.9	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2951+08.6		12		12		Woodford
EB I-64	2951+79.9		12		12		Woodford
EB I-64	2952+10.3	12			12		Woodford
EB I-64	2952+60.4	12	12		24		Woodford
EB I-64	2952+67.9		12		12		Woodford
EB I-64	2952+77.9	12	12		24		Woodford
EB I-64	2953+28.6	12			12		Woodford
EB I-64	2953+66.4	12	12		24		Woodford
EB I-64	2953+80.5		12		12		Woodford
EB I-64	2954+28.2		12		12		Woodford
EB I-64	2954+59.5		12		12		Woodford
EB I-64	2954+73.9	12			12		Woodford
EB I-64	2955+11.6	12			12		Woodford
EB I-64	2955+26.2	12			12		Woodford
EB I-64	2955+66.8		12		12		Woodford
EB I-64	2955+78.6		12		12		Woodford
EB I-64	2956+11.9		12		12		Woodford
EB I-64	2956+23.3	12	12		24		Woodford
EB I-64	2956+31.9		12		12		Woodford
EB I-64	2956+58.5		12		12		Woodford
EB I-64	2956+70.2		12		12		Woodford
EB I-64	2957+16.8	12			12		Woodford
EB I-64	2957+65.2	12			12		Woodford
EB I-64	2957+78.3	12			12		Woodford
EB I-64	2958+08.5		12		12		Woodford
EB I-64	2959+64.1		12		12		Woodford
EB I-64	2960+17.5		12		12		Woodford
EB I-64	2960+30.2	12	12		24		Woodford
EB I-64	2960+56.1	12	12		24		Woodford
EB I-64	2961+14.2	12	12		24		Woodford
EB I-64	2961+76.9		12		12		Woodford
EB I-64	2962+79.6	12	12		24		Woodford
EB I-64	2963+08.8	12	12		24		Woodford
EB I-64	2963+28.2	12	12		24		Woodford
EB I-64	2963+61.4	12	12		24		Woodford
EB I-64	2964+17.4	12			12		Woodford
EB I-64	2964+73.5	12			12		Woodford
EB I-64	2966+21.5		12		12		Woodford
EB I-64	2967+12.5		12		12		Woodford
EB I-64	2967+28.7	12	12		24		Woodford
EB I-64	2968+15.9		12		12		Woodford
EB I-64	2968+28.6	12	12		24		Woodford
EB I-64	2968+63.8	12			12		Woodford
EB I-64	2968+75.6		12		12		Woodford
EB I-64	2969+65.1		12		12		Woodford
EB I-64	2970+07.2		12		12		Woodford
EB I-64	2970+64.9		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2971+11.7		12		12		Woodford
EB I-64	2971+26.2	12	12		24		Woodford
EB I-64	2971+62.9	12			12		Woodford
EB I-64	2972+59.0	12			12		Woodford
EB I-64	2972+78.0	12			12		Woodford
EB I-64	2973+10.5	12	12		24		Woodford
EB I-64	2973+26.5	12	12		24		Woodford
EB I-64	2973+59.4	12	12		24		Woodford
EB I-64	2973+73.9	12	12		24		Woodford
EB I-64	2974+59.6	12			12		Woodford
EB I-64	2975+25.5	12			12		Woodford
EB I-64	2975+80.9		12		12		Woodford
EB I-64	2978+06.8		12		12		Woodford
EB I-64	2978+31.7		12		12		Woodford
EB I-64	2979+15.7	12			12		Woodford
EB I-64	2981+67.7		12		12		Woodford
EB I-64	2984+20.1		12		12		Woodford
EB I-64	2985+15.6	12			12		Woodford
EB I-64	2985+62.2	12	12		24		Woodford
EB I-64	2986+56.0		12		12		Woodford
EB I-64	2986+73.0	12			12		Woodford
EB I-64	2987+16.1	12			12		Woodford
EB I-64	2988+58.0		12		12		Woodford
EB I-64	2988+75.0	12	12		24		Woodford
EB I-64	2989+59.0		12		12		Woodford
EB I-64	2990+17.8	12	12		24		Woodford
EB I-64	2990+27.2		12		12		Woodford
EB I-64	2990+62.3	12			12		Woodford
EB I-64	2990+73.8	12			12		Woodford
EB I-64	2991+09.0	12			12		Woodford
EB I-64	2991+59.7		12		12		Woodford
EB I-64	2991+80.8		12		12		Woodford
EB I-64	2992+06.2	12			12		Woodford
EB I-64	2992+26.6		12		12		Woodford
EB I-64	2992+58.5	12			12		Woodford
EB I-64	2992+77.2	12	12		24		Woodford
EB I-64	2993+11.2	12			12		Woodford
EB I-64	2994+14.5	12	12		24		Woodford
EB I-64	2994+27.5	12	12		24		Woodford
EB I-64	2995+22.4	12			12		Woodford
EB I-64	2995+79.2	12			12		Woodford
EB I-64	2996+26.8	12			12		Woodford
EB I-64	2996+69.6		12		12		Woodford
EB I-64	2997+09.2	12			12		Woodford
EB I-64	2997+27.5	12	12		24		Woodford
EB I-64	2997+56.7	12			12		Woodford
EB I-64	2997+73.0	12			12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
EB I-64	2998+07.2		12		12		Woodford
EB I-64	2998+28.7	12			12		Woodford
EB I-64	2998+73.9	12			12		Woodford
					<b>Total:</b>	<b>12740.5</b>	
<b>Franklin:</b>		<b>3193.5</b>	<b>Woodford:</b>	<b>9547</b>			
WB I-64	2636+84.3		12		12		Franklin
WB I-64	2637+35.9	12			12		Franklin
WB I-64	2637+80.9		12		12		Franklin
WB I-64	2638+71.1		12		12		Franklin
WB I-64	2639+78.7		12		12		Franklin
WB I-64	2639+88.4		12		12		Franklin
WB I-64	2640+30.4		12		12		Franklin
WB I-64	2641+16.7		12		12		Franklin
WB I-64	2641+61.7	12			12		Franklin
WB I-64	2642+19.7		12	4.5	16.5	4.5 ft in taper	Franklin
WB I-64	2642+47.4	12	12		24		Franklin
WB I-64	2642+60.6	12	12	7.2	31.2	7.2 ft in taper	Franklin
WB I-64	2644+49.9		12		12		Franklin
WB I-64	2644+82.9	12	12	22.2	46.2	22.2 ft in ramp	Franklin
WB I-64	2644+96.8		12	21.2	33.2	21.2 ft in ramp	Franklin
WB I-64	2645+34.7		12		12		Franklin
WB I-64	2645+44.5	12			12		Franklin
WB I-64	2645+84.3	12	12		24		Franklin
WB I-64	2646+95.1	12	12	7.2	31.2	7.2 ft in taper	Franklin
WB I-64	2647+36.1	12	12	4.3	28.3	4.3 ft in taper	Franklin
WB I-64	2647+45.6		12	3.7	15.7	3.7 ft in taper	Franklin
WB I-64	2647+79.2		12		12		Franklin
WB I-64	2647+88.3	12	12		24		Franklin
WB I-64	2647+99.2		12		12		Franklin
WB I-64	2648+43.4	12			12		Franklin
WB I-64	2648+47.1		12		12		Franklin
WB I-64	2648+97.9	12	12		24		Franklin
WB I-64	2649+32.7		12		12		Franklin
WB I-64	2649+45.5	12	12		24		Franklin
WB I-64	2649+81.8	12			12		Franklin
WB I-64	2650+37.4	12			12		Franklin
WB I-64	2650+84.4		12		12		Franklin
WB I-64	2650+96.4	12	12		24		Franklin
WB I-64	2651+36.0	12			12		Franklin
WB I-64	2651+48.1	12			12		Franklin
WB I-64	2651+80.4	12	12		24		Franklin
WB I-64	2652+29.6		12		12		Franklin
WB I-64	2652+75.1		12		12		Franklin
WB I-64	2652+87.6		12		12		Franklin
WB I-64	2652+95.9	12	12		24		Franklin
WB I-64	2653+31.9		12		12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2653+90.3	12			12		Franklin
WB I-64	2654+30.6		12		12		Franklin
WB I-64	2654+82.0	12	12		24		Franklin
WB I-64	2655+35.3	12	12		24		Franklin
WB I-64	2655+47.4		12		12		Franklin
WB I-64	2655+87.9	12			12		Franklin
WB I-64	2656+00.1	12			12		Franklin
WB I-64	2656+30.9		12		12		Franklin
WB I-64	2656+81.4	12	12		24		Franklin
WB I-64	2656+90.9	12			12		Franklin
WB I-64	2656+96.7		12		12		Franklin
WB I-64	2657+27.1		12		12		Franklin
WB I-64	2657+50.7		12		12		Franklin
WB I-64	2657+95.1	12	12		24		Franklin
WB I-64	2658+30.7	12	12		24		Franklin
WB I-64	2658+47.1	12	12		24		Franklin
WB I-64	2658+89.8	12			12		Franklin
WB I-64	2659+26.9		12		12		Franklin
WB I-64	2659+37.9	12			12		Franklin
WB I-64	2659+45.9	12	12		24		Franklin
WB I-64	2659+80.1		12		12		Franklin
WB I-64	2659+89.3		12		12		Franklin
WB I-64	2660+36.5		12		12		Franklin
WB I-64	2660+47.1		12		12		Franklin
WB I-64	2660+49.5	12			12		Franklin
WB I-64	2660+93.7	12	12		24		Franklin
WB I-64	2661+38.0	12	12		24		Franklin
WB I-64	2661+92.2	12	12		24		Franklin
WB I-64	2662+41.4	12	12		24		Franklin
WB I-64	2663+31.3	12			12		Franklin
WB I-64	2663+43.6	12			12		Franklin
WB I-64	2663+87.3	12	12		24		Franklin
WB I-64	2663+96.2		12		12		Franklin
WB I-64	2664+30.5	12	12		24		Franklin
WB I-64	2664+84.3	12	12		24		Franklin
WB I-64	2665+40.8	12			12		Franklin
WB I-64	2665+97.2	12			12		Franklin
WB I-64	2666+43.3		12		12		Franklin
WB I-64	2666+85.8	12	12		24		Franklin
WB I-64	2666+96.5	12	12		24		Franklin
WB I-64	2667+26.8	12	12		24		Franklin
WB I-64	2667+42.5	12	12		24		Franklin
WB I-64	2667+81.5		12		12		Franklin
WB I-64	2668+45.6	12	12		24		Franklin
WB I-64	2668+78.9	12	12		24		Franklin
WB I-64	2668+96.8	12	12		24		Franklin
WB I-64	2669+31.6	12	12		24		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2669+74.3		12		12		Franklin
WB I-64	2669+82.8	12	12		24		Franklin
WB I-64	2669+94.8	12	12		24		Franklin
WB I-64	2670+41.2	12	12		24		Franklin
WB I-64	2670+48.4		12		12		Franklin
WB I-64	2670+75.6		12		12		Franklin
WB I-64	2670+90.6	12	12		24		Franklin
WB I-64	2671+29.3	12	12		24		Franklin
WB I-64	2671+82.5		12		12		Franklin
WB I-64	2672+83.7	12	12		24		Franklin
WB I-64	2672+95.7	12	12		24		Franklin
WB I-64	2673+33.7	12	12		24		Franklin
WB I-64	2673+47.8	12	12		24		Franklin
WB I-64	2673+89.0	12	12		24		Franklin
WB I-64	2674+31.2	12	12		24		Franklin
WB I-64	2674+87.4	12			12		Franklin
WB I-64	2674+92.1		12		12		Franklin
WB I-64	2675+74.8	12	12		24		Franklin
WB I-64	2676+83.1	12			12		Franklin
WB I-64	2676+87.8		12		12		Franklin
WB I-64	2677+30.5	12	12		24		Franklin
WB I-64	2677+37.6	12	12		24		Franklin
WB I-64	2677+77.8		12		12		Franklin
WB I-64	2677+91.8	12	12		24		Franklin
WB I-64	2679+35.8	12	12		24		Franklin
WB I-64	2680+26.3		12		12		Franklin
WB I-64	2681+32.8	12	12		24		Franklin
WB I-64	2681+95.5	12			12		Franklin
WB I-64	2682+41.8	12	12		24		Franklin
WB I-64	2682+99.6		12		12		Franklin
WB I-64	2683+41.3		12		12		Franklin
WB I-64	2683+79.4	12	12		24		Franklin
WB I-64	2683+93.1		12		12		Franklin
WB I-64	2685+70.8		12		12		Franklin
WB I-64	2685+91.9	12	12		24		Franklin
WB I-64	2686+21.6		12		12		Franklin
WB I-64	2686+36.0	12	12		24		Franklin
WB I-64	2689+79.9	12	12		24		Franklin
WB I-64	2689+91.0	12	12		24		Franklin
WB I-64	2690+25.2	12	12		24		Franklin
WB I-64	2690+42.4	12	12		24		Franklin
WB I-64	2691+28.3	12	12		24		Franklin
WB I-64	2691+86.1		12		12		Franklin
WB I-64	2692+37.4	12	12		24		Franklin
WB I-64	2692+87.2	12	12		24		Franklin
WB I-64	2693+31.7	12	12		24		Franklin
WB I-64	2693+44.7		12		12		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2693+74.8	12	12		24		Franklin
WB I-64	2693+90.5	12	12		24		Franklin
WB I-64	2694+24.2	12	12		24		Franklin
WB I-64	2694+35.9	12	12		24		Franklin
WB I-64	2695+34.4		12		12		Franklin
WB I-64	2695+88.2	12	12		24		Franklin
WB I-64	2696+28.8	12	12		24		Franklin
WB I-64	2696+44.6	12	12		24		Franklin
WB I-64	2696+78.6	12	12		24		Franklin
WB I-64	2697+47.0		12		12		Franklin
WB I-64	2697+77.4	12	12		24		Franklin
WB I-64	2698+15.5		12		12		Franklin
WB I-64	2698+45.7		12		12		Franklin
WB I-64	2699+34.9	12	12		24		Franklin
WB I-64	2699+96.0		12		12		Franklin
WB I-64	2700+05.6		12		12		Franklin
WB I-64	2700+95.5	12	12		24		Franklin
WB I-64	2701+26.1		12		12		Franklin
WB I-64	2701+33.2	12	12		24		Franklin
WB I-64	2701+48.5	12	12		24		Franklin
WB I-64	2701+72.4	12			12		Franklin
WB I-64	2702+22.2	12			12		Franklin
WB I-64	2702+40.7		12		12		Franklin
WB I-64	2702+77.9	12	12		24		Franklin
WB I-64	2702+94.9	12	12		24		Franklin
WB I-64	2703+26.2		12		12		Franklin
WB I-64	2703+36.5	12	12		24		Franklin
WB I-64	2703+48.5	12	12		24		Franklin
WB I-64	2703+78.8	12	12		24		Franklin
WB I-64	2703+91.1	12	12		24		Franklin
WB I-64	2704+26.7	12	12		24		Franklin
WB I-64	2704+45.1	12	12		24		Franklin
WB I-64	2704+71.0	12	12		24		Franklin
WB I-64	2704+88.2	12	12		24		Franklin
WB I-64	2705+77.8		12		12		Franklin
WB I-64	2705+93.6	12	12		24		Franklin
WB I-64	2706+25.1	12	12		24		Franklin
WB I-64	2706+44.9		12		12		Franklin
WB I-64	2706+90.6	12			12		Franklin
WB I-64	2707+20.5	12	12		24		Franklin
WB I-64	2707+41.5		12		12		Franklin
WB I-64	2707+72.4	12	12		24		Franklin
WB I-64	2707+85.4	12	12		24		Franklin
WB I-64	2708+27.1	12	12		24		Franklin
WB I-64	2708+39.6	12	12		24		Franklin
WB I-64	2708+73.7		12		12		Franklin
WB I-64	2708+83.2	12	12		24		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2709+20.5	12	12		24		Franklin
WB I-64	2709+36.8	12	12		24		Franklin
WB I-64	2710+23.7	12	12		24		Franklin
WB I-64	2710+67.1		12		12		Franklin
WB I-64	2710+75.1	12	12		24		Franklin
WB I-64	2711+20.4		12		12		Franklin
WB I-64	2711+24.8	12			12		Franklin
WB I-64	2711+34.6		12		12		Franklin
WB I-64	2711+66.7		12		12		Franklin
WB I-64	2711+74.0	12	12		24		Franklin
WB I-64	2711+85.1		12		12		Franklin
WB I-64	2712+32.9	12			12		Franklin
WB I-64	2712+70.5	12	12		24		Franklin
WB I-64	2712+84.4	12	12		24		Franklin
WB I-64	2713+11.9		12		12		Franklin
WB I-64	2713+24.8	12	12		24		Franklin
WB I-64	2713+74.3	12			12		Franklin
WB I-64	2714+21.3	12			12		Franklin
WB I-64	2714+32.0	12			12		Franklin
WB I-64	2714+64.6		12		12		Franklin
WB I-64	2715+36.6		12		12		Franklin
WB I-64	2715+68.6	12			12		Franklin
WB I-64	2715+79.3	12			12		Franklin
WB I-64	2716+06.2		12		12		Woodford
WB I-64	2716+17.5	12	12		24		Woodford
WB I-64	2716+64.5	12	12		24		Woodford
WB I-64	2716+81.7	12	12		24		Woodford
WB I-64	2717+17.4	12	12		24		Woodford
WB I-64	2717+59.9	12			12		Woodford
WB I-64	2717+79.9		12		12		Woodford
WB I-64	2718+19.1	12			12		Woodford
WB I-64	2718+70.1	12			12		Woodford
WB I-64	2720+27.8	12			12		Woodford
WB I-64	2721+12.0	12	12		24		Woodford
WB I-64	2721+23.0		12		12		Woodford
WB I-64	2721+31.0		12		12		Woodford
WB I-64	2721+72.9	12			12		Woodford
WB I-64	2722+11.9	12			12		Woodford
WB I-64	2722+65.5	12	12		24		Woodford
WB I-64	2723+73.9	12			12		Woodford
WB I-64	2724+18.0	12			12		Woodford
WB I-64	2724+60.9	12			12		Woodford
WB I-64	2724+75.1	12			12		Woodford
WB I-64	2725+13.1	12			12		Woodford
WB I-64	2725+25.6	12			12		Woodford
WB I-64	2725+57.7	12	12		24		Woodford
WB I-64	2725+65.6		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2725+76.4	12	12		24		Woodford
WB I-64	2726+09.4	12	12		24		Woodford
WB I-64	2726+24.7	12	12		24		Woodford
WB I-64	2726+56.5	12	12		24		Woodford
WB I-64	2728+63.9	12			12		Woodford
WB I-64	2729+66.2	12	12		24		Woodford
WB I-64	2731+12.8	12	12		24		Woodford
WB I-64	2731+61.8	12			12		Woodford
WB I-64	2731+80.6	12			12		Woodford
WB I-64	2732+18.5	12			12		Woodford
WB I-64	2732+63.2	12	12		24		Woodford
WB I-64	2732+73.1	12	12		24		Woodford
WB I-64	2733+20.2		12		12		Woodford
WB I-64	2733+60.7	12	12		24		Woodford
WB I-64	2733+76.9	12	12		24		Woodford
WB I-64	2734+68.3	12	12		24		Woodford
WB I-64	2735+07.1	12	12		24		Woodford
WB I-64	2735+25.3	12	12		24		Woodford
WB I-64	2735+80.4	12			12		Woodford
WB I-64	2736+29.0		12		12		Woodford
WB I-64	2737+02.9		12		12		Woodford
WB I-64	2737+55.3		12		12		Woodford
WB I-64	2737+66.0	12	12		24		Woodford
WB I-64	2738+18.2	12			12		Woodford
WB I-64	2738+27.5	12			12		Woodford
WB I-64	2738+78.1	12	12		24		Woodford
WB I-64	2739+17.5	12	12		24		Woodford
WB I-64	2739+30.4	12	12		24		Woodford
WB I-64	2739+67.4	12	12		24		Woodford
WB I-64	2739+81.3		12		12		Woodford
WB I-64	2741+08.5		12		12		Woodford
WB I-64	2741+60.5	12	12		24		Woodford
WB I-64	2741+73.9	12	12		24		Woodford
WB I-64	2742+54.6			3.2	3.2	ramp taper	Woodford
WB I-64	2742+75.3	12	12	3.4	27.4	3.4 ft ramp taper	Woodford
WB I-64	2743+03.2			4.1	4.1	ramp taper	Woodford
WB I-64	2743+12.9			4.3	4.3	ramp taper	Woodford
WB I-64	2743+69.3	12	12	6.0	30	6.0 ft ramp taper	Woodford
WB I-64	2744+08.3			6.2	6.2	ramp taper	Woodford
WB I-64	2744+13.3	12	12		24		Woodford
WB I-64	2744+21.1	12	12	6.4	30.4	6.4 ft ramp taper	Woodford
WB I-64	2744+66.6	12	12		24		Woodford
WB I-64	2745+19.8	12			12		Woodford
WB I-64	2745+26.3		12		12		Woodford
WB I-64	2745+64.9	12	12	9.6	33.6	9.6 ft ramp taper	Woodford
WB I-64	2746+14.8			10.7	10.7	ramp taper	Woodford
WB I-64	2746+27.6		12	11.1	23.1	11.1 ft ramp taper	Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2746+55.6		12		12		Woodford
WB I-64	2746+68.0		12		12		Woodford
WB I-64	2746+78.0		12		12		Woodford
WB I-64	2747+63.1	12			12		Woodford
WB I-64	2748+16.0	12	12		24		Woodford
WB I-64	2748+29.6		12		12		Woodford
WB I-64	2748+63.1	12	12		24		Woodford
WB I-64	2748+77.6		12		12		Woodford
WB I-64	2749+80.8		12		12		Woodford
WB I-64	2750+67.8	12			12		Woodford
WB I-64	2750+77.7		12		12		Woodford
WB I-64	2751+22.8		12		12		Woodford
WB I-64	2752+26.0		12		12		Woodford
WB I-64	2753+15.3	12	12		24		Woodford
WB I-64	2754+73.7	12	12		24		Woodford
WB I-64	2755+12.4	12	12		24		Woodford
WB I-64	2755+21.9	12	12		24		Woodford
WB I-64	2755+66.8	12	12		24		Woodford
WB I-64	2757+17.6	12	12		24		Woodford
WB I-64	2757+57.4		12		12		Woodford
WB I-64	2757+77.2	12	12		24		Woodford
WB I-64	2758+09.6	12	12		24		Woodford
WB I-64	2758+26.6	12	12		24		Woodford
WB I-64	2758+62.3	12	12		24		Woodford
WB I-64	2758+79.3		12		12		Woodford
WB I-64	2760+13.4	12	12		24		Woodford
WB I-64	2760+65.8	12			12		Woodford
WB I-64	2761+78.0	12	12		24		Woodford
WB I-64	2762+16.7	12	12		24		Woodford
WB I-64	2762+71.9	12	12		24		Woodford
WB I-64	2763+12.2	12	12		24		Woodford
WB I-64	2763+26.2	12	12		24		Woodford
WB I-64	2763+58.1	12	12		24		Woodford
WB I-64	2763+79.2		12		12		Woodford
WB I-64	2764+28.7		12		12		Woodford
WB I-64	2765+20.9		12		12		Woodford
WB I-64	2765+56.5	12	12		24		Woodford
WB I-64	2766+06.2	12	12		24		Woodford
WB I-64	2766+18.5	12	12		24		Woodford
WB I-64	2766+70.7		12		12		Woodford
WB I-64	2767+08.8		12		12		Woodford
WB I-64	2767+25.3	12	12		24		Woodford
WB I-64	2767+68.6	12	12		24		Woodford
WB I-64	2768+15.6	12	12		24		Woodford
WB I-64	2768+54.4	12	12		24		Woodford
WB I-64	2768+78.9		12		12		Woodford
WB I-64	2769+10.8	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2769+23.7	12	12		24		Woodford
WB I-64	2769+64.3	12	12		24		Woodford
WB I-64	2769+78.7	12	12		24		Woodford
WB I-64	2770+21.2	12			12		Woodford
WB I-64	2770+74.3	12			12		Woodford
WB I-64	2772+57.2		12		12		Woodford
WB I-64	2772+67.4	12	12		24		Woodford
WB I-64	2772+83.0	12	12		24		Woodford
WB I-64	2773+63.0	12	12		24		Woodford
WB I-64	2774+71.0	12	12		24		Woodford
WB I-64	2775+13.1	12	12		24		Woodford
WB I-64	2775+31.4		12		12		Woodford
WB I-64	2775+62.1		12		12		Woodford
WB I-64	2775+76.9		12		12		Woodford
WB I-64	2776+16.5	12	12		24		Woodford
WB I-64	2777+08.2	12	12		24		Woodford
WB I-64	2777+42.9	12	12	4.5	28.5	4.5 ft in ramp	Woodford
WB I-64	2778+82.6	12	12		24		Woodford
WB I-64	2779+29.3			8.2	8.2	8.2 ft in ramp	Woodford
WB I-64	2779+29.9	12	12		24		Woodford
WB I-64	2779+31.5			8.9	8.9	8.9 ft in ramp	Woodford
WB I-64	2779+33.5			12.9	12.9	12.9 ft in ramp	Woodford
WB I-64	2779+76.9	12	12		24		Woodford
WB I-64	2779+87.2		12		12		Woodford
WB I-64	2780+34.6	12	12		24		Woodford
WB I-64	2780+77.2	12			12		Woodford
WB I-64	2781+44.4		12		12		Woodford
WB I-64	2781+75.7	12			12		Woodford
WB I-64	2781+94.7	12			12		Woodford
WB I-64	2782+69.5		12		12		Woodford
WB I-64	2783+41.9	12	12		24		Woodford
WB I-64	2783+50.5		12		12		Woodford
WB I-64	2783+92.0	12	12		24		Woodford
WB I-64	2784+28.8		12		12		Woodford
WB I-64	2784+39.6	12	12		24		Woodford
WB I-64	2784+53.0	12	12		24		Woodford
WB I-64	2784+78.2	12			12		Woodford
WB I-64	2784+91.9	12			12		Woodford
WB I-64	2786+29.9	12	12		24		Woodford
WB I-64	2786+41.9	12	12		24		Woodford
WB I-64	2786+53.2		12		12		Woodford
WB I-64	2786+81.1	12			12		Woodford
WB I-64	2786+99.4	12			12		Woodford
WB I-64	2787+30.9		12		12		Woodford
WB I-64	2787+40.0	12	12		24		Woodford
WB I-64	2787+53.6		12		12		Woodford
WB I-64	2787+80.6	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2787+90.5	12	12		24		Woodford
WB I-64	2788+39.5	12	12		24		Woodford
WB I-64	2788+53.8		12		12		Woodford
WB I-64	2789+35.3	12	12		24		Woodford
WB I-64	2789+93.0	12			12		Woodford
WB I-64	2790+33.3	12	12		24		Woodford
WB I-64	2790+90.4		12		12		Woodford
WB I-64	2790+92.5	12			12		Woodford
WB I-64	2791+40.8	12	12		24		Woodford
WB I-64	2791+52.8		12		12		Woodford
WB I-64	2791+93.3	12			12		Woodford
WB I-64	2792+29.0		12		12		Woodford
WB I-64	2792+36.1	12	12		24		Woodford
WB I-64	2792+54.8		12		12		Woodford
WB I-64	2792+81.7	12			12		Woodford
WB I-64	2793+44.4	12			12		Woodford
WB I-64	2793+89.5	12			12		Woodford
WB I-64	2794+40.8	12	12		24		Woodford
WB I-64	2795+39.7	12			12		Woodford
WB I-64	2795+93.7	12	12		24		Woodford
WB I-64	2796+41.8	12	12		24		Woodford
WB I-64	2797+46.4	12	12		24		Woodford
WB I-64	2797+99.8		12		12		Woodford
WB I-64	2798+29.9	12			12		Woodford
WB I-64	2798+78.6	12	12		24		Woodford
WB I-64	2799+39.8	12			12		Woodford
WB I-64	2799+90.6	12	12		24		Woodford
WB I-64	2800+82.3		12		12		Woodford
WB I-64	2800+89.3	12	12		24		Woodford
WB I-64	2801+02.3	12	12		24		Woodford
WB I-64	2801+32.1	12			12		Woodford
WB I-64	2801+51.6	12			12		Woodford
WB I-64	2801+79.0		12		12		Woodford
WB I-64	2802+51.4	12			12		Woodford
WB I-64	2802+88.8		12		12		Woodford
WB I-64	2802+97.5	12	12		24		Woodford
WB I-64	2803+34.1	12	12		24		Woodford
WB I-64	2803+48.9	12	12		24		Woodford
WB I-64	2803+94.5		12		12		Woodford
WB I-64	2804+38.7	12			12		Woodford
WB I-64	2804+50.3	12			12		Woodford
WB I-64	2804+80.8	12			12		Woodford
WB I-64	2804+92.5	12			12		Woodford
WB I-64	2805+30.6		12		12		Woodford
WB I-64	2805+39.6	12	12		24		Woodford
WB I-64	2806+30.8	12			12		Woodford
WB I-64	2806+43.7	12			12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2807+29.9	12	12		24		Woodford
WB I-64	2807+49.5	12	12		24		Woodford
WB I-64	2807+90.3	12	12		24		Woodford
WB I-64	2808+33.3	12	12		24		Woodford
WB I-64	2809+41.5	12	12		24		Woodford
WB I-64	2809+78.3		12		12		Woodford
WB I-64	2810+02.2		12		12		Woodford
WB I-64	2810+29.3	12	12		24		Woodford
WB I-64	2810+80.9		12		12		Woodford
WB I-64	2810+87.4	12	12		24		Woodford
WB I-64	2811+02.0	12	12		24		Woodford
WB I-64	2811+90.6	12			12		Woodford
WB I-64	2812+00.5	12			12		Woodford
WB I-64	2812+30.8		12		12		Woodford
WB I-64	2812+44.7	12	12		24		Woodford
WB I-64	2812+85.3	12			12		Woodford
WB I-64	2812+88.1		12		12		Woodford
WB I-64	2813+34.0	12			12		Woodford
WB I-64	2815+37.3	12	12		24		Woodford
WB I-64	2815+84.0	12			12		Woodford
WB I-64	2815+99.4	12			12		Woodford
WB I-64	2816+28.4		12		12		Woodford
WB I-64	2816+42.0	12	12		24		Woodford
WB I-64	2816+77.6		12		12		Woodford
WB I-64	2816+89.2	12	12		24		Woodford
WB I-64	2816+94.6		12		12		Woodford
WB I-64	2817+40.0	12			12		Woodford
WB I-64	2817+52.5		12		12		Woodford
WB I-64	2817+78.6	12			12		Woodford
WB I-64	2817+92.3	12			12		Woodford
WB I-64	2818+02.5		12		12		Woodford
WB I-64	2818+29.2	12			12		Woodford
WB I-64	2818+47.8	12			12		Woodford
WB I-64	2819+30.7	12			12		Woodford
WB I-64	2819+77.6		12		12		Woodford
WB I-64	2819+95.8	12	12		24		Woodford
WB I-64	2820+28.2		12		12		Woodford
WB I-64	2820+44.5	12	12		24		Woodford
WB I-64	2820+84.4	12			12		Woodford
WB I-64	2821+45.7	12			12		Woodford
WB I-64	2821+78.4	12	12		24		Woodford
WB I-64	2821+98.4		12		12		Woodford
WB I-64	2822+36.0	12	12		24		Woodford
WB I-64	2823+33.9	12	12		24		Woodford
WB I-64	2824+42.4	12			12		Woodford
WB I-64	2824+90.2	12	12		24		Woodford
WB I-64	2825+02.4		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2825+26.1		12		12		Woodford
WB I-64	2825+89.1	12	12		24		Woodford
WB I-64	2826+29.9	12	12		24		Woodford
WB I-64	2826+47.3		12		12		Woodford
WB I-64	2827+17.4		12		12		Woodford
WB I-64	2827+30.3		12		12		Woodford
WB I-64	2827+39.0		12		12		Woodford
WB I-64	2827+55.2		12		12		Woodford
WB I-64	2828+27.8	12			12		Woodford
WB I-64	2828+42.7	12			12		Woodford
WB I-64	2829+27.3	12	12		24		Woodford
WB I-64	2829+88.0	12			12		Woodford
WB I-64	2829+97.0		12		12		Woodford
WB I-64	2830+45.2	12			12		Woodford
WB I-64	2831+00.3	12			12		Woodford
WB I-64	2831+49.0	12			12		Woodford
WB I-64	2840+27.7		12		12		Woodford
WB I-64	2841+55.6	12			12		Woodford
WB I-64	2841+71.0	12			12		Woodford
WB I-64	2842+22.4	12	12		24		Woodford
WB I-64	2842+73.2		12		12		Woodford
WB I-64	2844+20.8	12	12		24		Woodford
WB I-64	2845+56.5		12		12		Woodford
WB I-64	2845+69.5		12		12		Woodford
WB I-64	2846+06.3		12		12		Woodford
WB I-64	2846+20.6	12	12		24		Woodford
WB I-64	2846+59.0		12		12		Woodford
WB I-64	2846+70.8	12	12		24		Woodford
WB I-64	2847+64.1	12			12		Woodford
WB I-64	2848+18.9	12	12		24		Woodford
WB I-64	2848+73.6	12	12		24		Woodford
WB I-64	2849+03.9		12		12		Woodford
WB I-64	2849+12.1	12	12		24		Woodford
WB I-64	2849+24.3		12		12		Woodford
WB I-64	2849+54.9		12		12		Woodford
WB I-64	2849+67.8	12	12		24		Woodford
WB I-64	2849+83.0		12		12		Woodford
WB I-64	2850+73.1	12	12		24		Woodford
WB I-64	2851+61.3	12			12		Woodford
WB I-64	2851+80.4		12		12		Woodford
WB I-64	2852+08.6		12		12		Woodford
WB I-64	2852+18.0		12		12		Woodford
WB I-64	2852+20.6	12			12		Woodford
WB I-64	2852+62.2		12		12		Woodford
WB I-64	2853+14.7	12	12		24		Woodford
WB I-64	2853+59.2	12	12		24		Woodford
WB I-64	2853+78.3	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2854+62.2	12			12		Woodford
WB I-64	2854+68.2		12		12		Woodford
WB I-64	2854+79.0	12	12		24		Woodford
WB I-64	2855+16.6		12		12		Woodford
WB I-64	2855+66.1	12	12		24		Woodford
WB I-64	2855+76.1		12		12		Woodford
WB I-64	2856+28.3		12		12		Woodford
WB I-64	2856+59.5		12		12		Woodford
WB I-64	2856+76.9		12		12		Woodford
WB I-64	2857+15.7		12		12		Woodford
WB I-64	2857+24.9	12	12		24		Woodford
WB I-64	2857+62.8	12			12		Woodford
WB I-64	2857+79.1		12		12		Woodford
WB I-64	2858+12.1	12	12		24		Woodford
WB I-64	2858+25.7		12		12		Woodford
WB I-64	2858+68.2	12	12		24		Woodford
WB I-64	2859+62.6		12		12		Woodford
WB I-64	2859+79.5		12		12		Woodford
WB I-64	2860+15.3		12		12		Woodford
WB I-64	2860+71.6	12	12		24		Woodford
WB I-64	2860+82.6		12		12		Woodford
WB I-64	2861+81.4		12		12		Woodford
WB I-64	2862+05.9		12		12		Woodford
WB I-64	2862+80.4		12		12		Woodford
WB I-64	2863+11.5		12		12		Woodford
WB I-64	2863+23.7	12	12		24		Woodford
WB I-64	2863+63.1		12		12		Woodford
WB I-64	2863+76.0		12		12		Woodford
WB I-64	2864+82.9		12		12		Woodford
WB I-64	2865+29.0	12			12		Woodford
WB I-64	2865+77.1	12	12		24		Woodford
WB I-64	2866+12.1	12			12		Woodford
WB I-64	2866+25.6	12			12		Woodford
WB I-64	2866+71.2		12		12		Woodford
WB I-64	2866+82.1	12	12		24		Woodford
WB I-64	2868+07.7	12	12		24		Woodford
WB I-64	2868+24.7	12	12		24		Woodford
WB I-64	2868+62.2	12	12		24		Woodford
WB I-64	2868+79.7		12		12		Woodford
WB I-64	2869+68.2		12		12		Woodford
WB I-64	2870+29.5		12		12		Woodford
WB I-64	2870+58.1		12		12		Woodford
WB I-64	2871+10.1		12		12		Woodford
WB I-64	2871+25.7		12		12		Woodford
WB I-64	2872+55.7		12		12		Woodford
WB I-64	2872+65.3	12	12		24		Woodford
WB I-64	2872+79.4		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2873+11.7		12		12		Woodford
WB I-64	2873+76.5	12	12		24		Woodford
WB I-64	2874+25.9		12		12		Woodford
WB I-64	2874+66.7	12	12		24		Woodford
WB I-64	2875+11.9	12	12		24		Woodford
WB I-64	2875+25.4	12	12		24		Woodford
WB I-64	2875+70.5		12		12		Woodford
WB I-64	2876+24.2	12	12		24		Woodford
WB I-64	2876+80.1		12		12		Woodford
WB I-64	2877+14.2	12	12		24		Woodford
WB I-64	2877+28.8		12		12		Woodford
WB I-64	2877+74.2	12	12		24		Woodford
WB I-64	2878+13.6	12	12		24		Woodford
WB I-64	2878+59.8	12	12		24		Woodford
WB I-64	2878+71.7	12	12		24		Woodford
WB I-64	2879+17.7	12	12		24		Woodford
WB I-64	2880+09.6	12			12		Woodford
WB I-64	2880+26.7	12	12		24		Woodford
WB I-64	2880+69.3	12	12		24		Woodford
WB I-64	2881+13.2		12		12		Woodford
WB I-64	2881+78.3	12	12		24		Woodford
WB I-64	2883+07.4		12		12		Woodford
WB I-64	2883+24.6	12	12		24		Woodford
WB I-64	2883+78.1	12	12		24		Woodford
WB I-64	2884+08.9		12		12		Woodford
WB I-64	2884+59.5		12		12		Woodford
WB I-64	2884+63.1	12			12		Woodford
WB I-64	2885+11.9	12	12		24		Woodford
WB I-64	2885+60.8	12	12		24		Woodford
WB I-64	2885+76.4	12	12		24		Woodford
WB I-64	2886+12.5	12			12		Woodford
WB I-64	2886+26.3	12			12		Woodford
WB I-64	2886+63.9		12		12		Woodford
WB I-64	2889+78.0	12	12		24		Woodford
WB I-64	2890+07.9	12			12		Woodford
WB I-64	2890+70.1	12			12		Woodford
WB I-64	2891+30.6		12		12		Woodford
WB I-64	2891+56.8		12		12		Woodford
WB I-64	2891+67.3	12	12		24		Woodford
WB I-64	2891+79.8		12		12		Woodford
WB I-64	2892+69.5		12		12		Woodford
WB I-64	2893+37.5	12			12		Woodford
WB I-64	2893+58.8	12			12		Woodford
WB I-64	2893+76.3	12			12		Woodford
WB I-64	2894+72.5	12	12		24		Woodford
WB I-64	2895+23.7	12	12		24		Woodford
WB I-64	2895+69.7	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2896+77.1	12	12		24		Woodford
WB I-64	2897+12.1	12	12		24		Woodford
WB I-64	2897+25.1	12	12		24		Woodford
WB I-64	2897+68.0	12			12		Woodford
WB I-64	2898+25.5	12			12		Woodford
WB I-64	2898+64.3	12	12		24		Woodford
WB I-64	2898+81.7		12		12		Woodford
WB I-64	2899+13.9	12			12		Woodford
WB I-64	2899+28.4	12			12		Woodford
WB I-64	2900+06.4	12	12		24		Woodford
WB I-64	2900+26.6		12		12		Woodford
WB I-64	2900+60.5	12	12		24		Woodford
WB I-64	2900+78.8	12	12		24		Woodford
WB I-64	2902+16.1	12	12		24		Woodford
WB I-64	2902+57.7		12		12		Woodford
WB I-64	2903+17.7	12	12		24		Woodford
WB I-64	2903+55.3		12		12		Woodford
WB I-64	2904+19.4	12	12		24		Woodford
WB I-64	2905+08.6	12	12		24		Woodford
WB I-64	2905+64.1	12	12		24		Woodford
WB I-64	2905+77.8		12		12		Woodford
WB I-64	2906+18.2		12		12		Woodford
WB I-64	2906+62.3		12		12		Woodford
WB I-64	2907+24.2	12	12		24		Woodford
WB I-64	2907+59.4	12	12		24		Woodford
WB I-64	2908+07.3		12		12		Woodford
WB I-64	2908+11.9	12			12		Woodford
WB I-64	2908+53.3		12		12		Woodford
WB I-64	2908+65.3	12	12		24		Woodford
WB I-64	2909+59.7		12		12		Woodford
WB I-64	2909+78.1		12		12		Woodford
WB I-64	2910+26.8		12		12		Woodford
WB I-64	2910+66.0	12			12		Woodford
WB I-64	2911+60.2	12	12		24		Woodford
WB I-64	2911+73.8	12	12		24		Woodford
WB I-64	2913+10.9	12	12		24		Woodford
WB I-64	2914+25.0	12	12		24		Woodford
WB I-64	2915+09.3		12		12		Woodford
WB I-64	2915+18.8		12		12		Woodford
WB I-64	2915+61.2		12		12		Woodford
WB I-64	2915+79.5		12		12		Woodford
WB I-64	2916+15.7	12			12		Woodford
WB I-64	2916+57.3		12		12		Woodford
WB I-64	2917+05.0		12		12		Woodford
WB I-64	2917+12.0	12	12		24		Woodford
WB I-64	2917+25.8		12		12		Woodford
WB I-64	2917+79.8		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2918+03.2		12		12		Woodford
WB I-64	2918+57.4	12	12		24		Woodford
WB I-64	2920+06.7		12		12		Woodford
WB I-64	2920+76.5	12	12		24		Woodford
WB I-64	2922+27.9		12		12		Woodford
WB I-64	2922+71.1	12	12		24		Woodford
WB I-64	2923+04.6		12		12		Woodford
WB I-64	2923+18.1	12	12		24		Woodford
WB I-64	2924+25.9		12		12		Woodford
WB I-64	2924+55.7		12		12		Woodford
WB I-64	2924+76.8	12	12		24		Woodford
WB I-64	2926+01.2		12		12		Woodford
WB I-64	2926+12.8	12	12		24		Woodford
WB I-64	2926+25.5	12	12		24		Woodford
WB I-64	2926+56.7	12	12		24		Woodford
WB I-64	2927+05.5		12		12		Woodford
WB I-64	2927+14.9	12	12		24		Woodford
WB I-64	2928+04.7		12		12		Woodford
WB I-64	2929+23.2	12	12		24		Woodford
WB I-64	2929+61.8		12		12		Woodford
WB I-64	2931+57.3	12	12		24		Woodford
WB I-64	2933+09.3	12	12		24		Woodford
WB I-64	2933+24.1		12		12		Woodford
WB I-64	2934+16.9		12		12		Woodford
WB I-64	2934+61.2		12		12		Woodford
WB I-64	2937+51.2	12	12		24		Woodford
WB I-64	2937+70.7	12			12		Woodford
WB I-64	2938+14.7	12	12		24		Woodford
WB I-64	2938+58.4	12	12		24		Woodford
WB I-64	2938+71.1	12	12		24		Woodford
WB I-64	2939+04.8		12		12		Woodford
WB I-64	2939+19.5	12	12		24		Woodford
WB I-64	2939+63.6	12			12		Woodford
WB I-64	2940+69.8	12	12		24		Woodford
WB I-64	2941+05.4		12		12		Woodford
WB I-64	2941+70.5		12		12		Woodford
WB I-64	2942+02.8		12		12		Woodford
WB I-64	2942+13.7	12	12		24		Woodford
WB I-64	2942+68.3	12	12		24		Woodford
WB I-64	2942+74.4		12		12		Woodford
WB I-64	2943+04.4		12		12		Woodford
WB I-64	2944+62.9	12	12		24		Woodford
WB I-64	2945+56.3	12	12		24		Woodford
WB I-64	2945+71.2		12		12		Woodford
WB I-64	2948+04.5		12		12		Woodford
WB I-64	2948+19.1		12		12		Woodford
WB I-64	2948+65.9	12	12		24		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2949+70.1	12	12		24		Woodford
WB I-64	2950+64.3	12	12		24		Woodford
WB I-64	2951+20.9		12		12		Woodford
WB I-64	2952+69.2	12	12		24		Woodford
WB I-64	2955+63.4		12		12		Woodford
WB I-64	2957+66.4	12	12		24		Woodford
WB I-64	2958+69.7	12	12		24		Woodford
WB I-64	2961+55.8		12		12		Woodford
WB I-64	2964+69.3		12		12		Woodford
WB I-64	2966+68.8	12			12		Woodford
WB I-64	2967+14.3		12		12		Woodford
WB I-64	2968+00.0		12		12		Woodford
WB I-64	2968+05.8		12		12		Woodford
WB I-64	2969+57.7		12		12		Woodford
WB I-64	2970+50.8		12		12		Woodford
WB I-64	2971+00.5		12		12		Woodford
WB I-64	2971+59.5		12		12		Woodford
WB I-64	2972+20.4		12		12		Woodford
WB I-64	2972+63.6		12		12		Woodford
WB I-64	2972+73.2	12	12		24		Woodford
WB I-64	2973+04.4		12		12		Woodford
WB I-64	2973+70.6	12	12		24		Woodford
WB I-64	2975+10.1		12		12		Woodford
WB I-64	2975+69.2	12	12		24		Woodford
WB I-64	2977+19.1		12		12		Woodford
WB I-64	2980+16.2		12		12		Woodford
WB I-64	2981+47.3		12		12		Woodford
WB I-64	2981+68.2	12	12		24		Woodford
WB I-64	2981+98.2	12	12		24		Woodford
WB I-64	2982+08.6	12			12		Woodford
WB I-64	2982+13.8		12		12		Woodford
WB I-64	2982+67.8		12		12		Woodford
WB I-64	2983+01.2		12		12		Woodford
WB I-64	2985+09.6	12			12		Woodford
WB I-64	2985+19.9		12		12		Woodford
WB I-64	2985+63.4	12	12		24		Woodford
WB I-64	2986+11.9	12	12		24		Woodford
WB I-64	2986+21.7		12		12		Woodford
WB I-64	2987+02.8		12		12		Woodford
WB I-64	2987+13.9	12	12		24		Woodford
WB I-64	2987+51.8	12	12		24		Woodford
WB I-64	2988+00.4	12	12		24		Woodford
WB I-64	2988+47.3	12	12		24		Woodford
WB I-64	2988+66.2	12	12		24		Woodford
WB I-64	2989+08.8	12	12		24		Woodford
WB I-64	2989+20.6		12		12		Woodford
WB I-64	2989+47.1		12		12		Woodford

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
WB I-64	2989+61.0	12	12		24		Woodford
WB I-64	2990+00.0		12		12		Woodford
WB I-64	2990+14.5	12	12		24		Woodford
WB I-64	2991+00.5		12		12		Woodford
WB I-64	2991+11.5	12			12		Woodford
WB I-64	2991+17.5		12		12		Woodford
WB I-64	2991+48.4	12	12		24		Woodford
WB I-64	2992+47.7	12	12		24		Woodford
WB I-64	2992+65.2	12	12		24		Woodford
WB I-64	2993+00.4		12		12		Woodford
WB I-64	2993+09.9		12		12		Woodford
WB I-64	2993+18.2		12		12		Woodford
WB I-64	2993+66.1	12	12		24		Woodford
WB I-64	2993+95.1		12		12		Woodford
WB I-64	2994+19.2	12			12		Woodford
WB I-64	2994+22.0		12		12		Woodford
WB I-64	2994+58.6	12			12		Woodford
WB I-64	2995+97.9	12			12		Woodford
WB I-64	2996+11.8	12			12		Woodford
WB I-64	2996+67.0	12			12		Woodford
WB I-64	2997+48.4	12			12		Woodford
WB I-64	2998+57.6	12			12		Woodford
					<b>Total:</b>	<b>13369.8</b>	
<b>Franklin:</b>		<b>3754.3</b>	<b>Woodford:</b>	<b>9615.5</b>			

Ramp C	14+62.0			24.2	24.2		Franklin
Ramp C	15+61.8			14.7	14.7		Franklin
Ramp C	16+04.4			14.8	14.8		Franklin
Ramp C	16+54.0			14.7	14.7		Franklin
Ramp C	17+10.4			14.8	14.8		Franklin
Ramp C	17+19.9			14.8	14.8		Franklin
Ramp C	18+15.8			14.7	14.7		Franklin
Ramp C	19+99.0			14.8	14.8		Franklin
Ramp C	20+12.4			14.8	14.8		Franklin
Ramp C	21+61.3			14.6	14.6		Franklin
Ramp C	22+87.5			15.4	15.4		Franklin
Ramp C	23+44.8			17.2	17.2		Franklin
					<b>Total:</b>	<b>189.5</b>	

Ramp D	11+99.2			10.9	10.9		Franklin
Ramp D	12+42.9			9.5	9.5		Franklin
Ramp D	12+80.6			8.3	8.3		Franklin
Ramp D	12+91.0			12.0	12.0		Franklin
Ramp D	13+44.5			6.5	6.5		Franklin
Ramp D	13+76.8			15.4	15.4	Longitudinal crack	Franklin
Ramp D	13+77.0			17.4	17.4		Franklin
Ramp D	13+93.4			17.1	17.1		Franklin

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

SAW-CLEAN-RESEAL RANDOM CRACKS SUMMARY							
DESCRIPTION		ITEM 21173EC				REMARKS	COUNTY
ROADWAY	LOCATION	SAW-CLEAN-RESEAL RANDOM CRACKS					
	(STATION)	Inside	Outside	Other	Total		
		(LF)	(LF)	(LF)	(LF)		
Ramp D	14+41.4			3.6	3.6		Franklin
Ramp D	14+41.4			21.3	21.3	Longitudinal crack	Franklin
Ramp D	15+24.4			14.6	14.6		Franklin
Ramp D	15+64.9			14.6	14.6		Franklin
Ramp D	17+64.6			14.8	14.8		Franklin
Ramp D	18+28.2			14.2	14.2		Franklin
Ramp D	18+71.0			14.4	14.4		Franklin
Ramp D	19+20.5			14.4	14.4		Franklin
Ramp D	19+68.8			14.9	14.9		Franklin
Ramp D	19+81.1			15.0	15.0		Franklin
Ramp D	20+17.3			15.1	15.1		Franklin
Ramp D	20+22.3			15.0	15.0		Franklin
Ramp D	20+27.2			15.1	15.1		Franklin
Ramp D	21+58.2			14.3	14.3		Franklin
Ramp D	22+27.0			13.7	13.7		Franklin
Ramp D	23+08.5			12.4	12.4		Franklin
					<b>Total:</b>	<b>324.5</b>	
<b>Franklin:</b>		<b>7461.8</b>	<b>Woodford:</b>	<b>19162.5</b>			
					<b>Project Total:</b>	<b>26624.3</b>	<b>ft</b>

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

GUARDRAIL SUMMARY												
LOCATION	BEGIN	END	ITEM									
			21802EN ①	2352	2363	2365	2367	2369	2381 ②	1982 ③	1983 ③	
			GUARDRAIL STEEL W BEAM S FACE (7 FT POST)	GUARDRAIL STEEL W BEAM-D FACE	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A	CRASH CUSHION TYPE IX-A	GUARDRAIL END TREATMENT TYPE 1	GUARDRAIL END TREATMENT TYPE 2A	REMOVE GUARDRAIL	DELINEATOR FOR GUARDRAIL-WHITE	DELINEATOR FOR GUARDRAIL-YELLOW	
(ROADWAY)	(STA)		LF	EACH				LF				
<b>I-64 WB</b>												
Outside	2634+04.7	2636+20.0	162.5		1			1		215.3	3	
Inside	2634+18.4	2636+37.9	87.5	137.5	1	1				219.5		5
Inside	④ 2695+54.8	2699+31.0								376.2		
Outside	2836+28.0	2838+80.7	200.0		1			1		252.7	4	
Inside	2836+31.3	2839+13.6	100.0	137.5	1	1				282.3		5
<b>I-64 EB</b>												
Inside	④ 2695+54.8	2699+31.0								376.2		
Inside	④ 2695+54.8	2697+79.7	175.0					1	1			4
Inside	2832+55.8	2835+37.2	100.0	137.5	1	1				281.4		5
Outside	2832+86.7	2835+40.6	200.0		1			1		253.9	4	
WOODFORD CO. TOTAL			600.0	275.0	4	2		2		1070.3	8	10
FRANKLIN CO. TOTAL			425.0	137.5	2	1		2	1	1187.2	3	9
<b>PROJECT TOTALS</b>			<b>1025.0</b>	<b>412.5</b>	<b>6</b>	<b>3</b>		<b>4</b>	<b>1</b>	<b>2257.5</b>	<b>11</b>	<b>19</b>

NOTES:

- 1.) Contrary to the standard drawing, guardrail posts shall be 7 feet in length.
- 2.) Salvage existing material as per Section 719.03.07, except that the Contractor shall deliver existing salvaged guardrail system materials to the Guardrail and Sign Center at 1224 Wilkinson Blvd. in Frankfort, Kentucky. Contact the Lot Supervisor at (502) 564-8187 to schedule delivery of the material. Deliver the material between the hours of 8:00 AM and 3:30 PM, eastern time, Monday through Friday. The "Guardrail Delivery Verification Sheet" shown on the following page of this proposal must be completed at the job site and provided to the Guardrail and Sign Center representative when the salvaged material is delivered.
- 3.) Estimated at 50' spacing.
- 4.) Remove all existing guardrail in the median at the bridge over CSX Railroad. Construct new guardrail for the eastbound roadway only beginning at the location of the existing crash cushion on the west end of the bridge to a point 25 ft east of the pier with a leading End Treatment Type 1 and a trailing End Treatment Type 2A.

**Any guardrail removed must be replaced within the same weekend lane closure.**

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QTY LEAVING PROJECT</u>	<u>QTY RECEIVED@BB YARD</u>
GUARDRAIL (Includes End treatments & crash cushions)	LF	_____	_____
STEEL POSTS	EACH	_____	_____
STEEL BLOCKS	EACH	_____	_____
WOOD OFFSET BLOCKS	EACH	_____	_____
BACK UP PLATES	EACH	_____	_____
CRASH CUSHION	EACH	_____	_____
NUTS, BOLTS, WASHERS	BAG/BCKT	_____	_____
DAMAGED RAIL TO MAINT. FACILITY	LF	_____	_____
DAMAGED POSTS TO MAINT. FACILITY	EACH	_____	_____

**\*Required Signatures before Leaving Project Site**

Printed Section Engineer's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Section Engineer's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Printed Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

**\*Required Signatures after Arrival at Bailey Bridge Yard (All material on truck must be counted & the quantity received column completed before signatures)**

Printed Bailey Bridge Yard Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Bailey Bridge Yard Representative \_\_\_\_\_ & Date \_\_\_\_\_

Printed Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

Signature Contractor's Representative \_\_\_\_\_ & Date \_\_\_\_\_

\*\*Payment for the bid item remove guardrail will be based upon the quantities shown in the Bailey Bridge Yard received column. Payment will not be made for guardrail removal until the guardrail verification sheets are electronically submitted to the Section Engineer by the Bailey Bridge Yard Representative.

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2077.00  
DRAINAGE SUMMARY**

Roadway	Station	Length	Crushed Aggregate Size No. 2	Recon. Catch Basin	(4) Remove Paved Ditch	Channel Lining Class III	County	Comments
		FT	Ton	Each	SY	Ton		
I-64 MED.	2726+96	-	2.5 (5)	1			Woodford	Reconstruct Apron
I-64 MED.	2940+50	-	2.5 (5)	1			Woodford	Reconstruct Apron
I-64 EB	2743+18.8 - 2749+85.5	666.7			444	444	Woodford	2' FB
I-64 EB	2746+70.6	5.0			3	3	Woodford	2' FB
I-64 EB	2779+37.1 - 2786+81.1	749.1			499	699 (1)	Woodford	2' FB
I-64 EB	2782+47.2	6.4			4	4	Woodford	2' FB
I-64 WB	2741+98.3 - 2742+91.3	102.1			68	68	Woodford	2' FB
I-64 WB	2745+25.2 - 2746+50.1	126.8			85	85	Woodford	2' FB
I-64 WB	2777+93.0 - 2789+05.5	1129.5			844	844	Woodford	718.4' of 2' FB, 411.1' of 4' FB
I-64 WB	2789+85.1 - 2793+59.4	389.6			260	260	Woodford	2' FB
I-64 WB	2828+91.8 - 2832+97.6	417.8			279	279	Woodford	2' FB
I-64 WB	2829+75.1	10.4			7	7	Woodford	2' FB
I-64 WB	2832+27.1	14.6			10	10	Woodford	2' FB
I-64 WB	2836+14.0 - 2838+92.6	280.7			187	187	Woodford	2' FB
I-64 WB	2928+41.2 - 2932+51.2	435.1			290	565 (2)	Woodford	2' FB (2)
I-64 WB	2932+89.3 - 2936+12.6	338.3			226	226	Woodford	2' FB
I-64 WB	2935+81.7	11.7	7 (3)		8	15	Woodford	2' FB (3)
<b>Total</b>			<b>12 (6)</b>	<b>2</b>	<b>3214</b>	<b>3689</b>		

- (1) Includes 200 Tons for Filling In Washed-out Area
- (2) Includes 275 Tons for Filling in Washed-out Area
- (3) For Filling Eroded Area Behind and Around Headwall. Quantity carried to the General Summary.
- (4) Any clearing and grubbing required to remove the paved ditches will be incidental to this bid item. Paved ditches are to be broken into pieces equivalent to Channel Lining Class III and used to line and fill in washed-out areas where the existing paved ditches are removed.
- (5) For Filling in Washed-out Area Around Catch Basin
- (6) Quantity carried forward to the General Summary

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
Ramp C	16+05.8	Right
Ramp C	20+05.4	Right
Ramp C	20+07.9	Left
Ramp C	25+05.7	Right
Ramp C	25+07.4	Left
Ramp D	11+91.8	Right
Ramp D	11+91.8	Left
Ramp D	16+92.5	Right
Ramp D	16+92.5	Left
Ramp D	21+94.7	Right
EB I-64	2634+75.4	Outside
EB I-64	2636+75.2	Outside
EB I-64	2647+44.1	Inside
EB I-64	2654+45.0	Inside
EB I-64	2656+90.8	Outside
EB I-64	2656+96.4	Inside
EB I-64	2659+36.9	Outside
EB I-64	2659+45.8	Inside
EB I-64	2661+85.5	Outside
EB I-64	2664+34.2	Outside
EB I-64	2664+45.9	Inside
EB I-64	2666+85.4	Outside
EB I-64	2666+95.4	Inside
EB I-64	2668+84.2	Outside
EB I-64	2668+95.4	Inside
EB I-64	2670+98.3	Outside
EB I-64	2670+96.1	Inside
EB I-64	2676+44.6	Inside
EB I-64	2676+58.0	Outside
EB I-64	2679+54.6	Outside
EB I-64	2681+59.2	Inside
EB I-64	2684+44.6	Inside
EB I-64	2684+55.7	Outside
EB I-64	2691+04.6	Outside
EB I-64	2695+34.7	Outside
EB I-64	2697+97.3	Inside
EB I-64	2698+00.6	Outside
EB I-64	2699+55.6	Outside
EB I-64	2701+81.9	Outside
EB I-64	2707+32.6	Outside

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
WB I-64	2634+47.0	Outside
WB I-64	2636+69.3	Outside
WB I-64	2647+44.5	Median
WB I-64	2647+48.3	Outside
WB I-64	2651+90.3	Outside
WB I-64	2654+41.3	Outside
WB I-64	2654+45.1	Median
WB I-64	2656+89.8	Outside
WB I-64	2656+96.5	Median
WB I-64	2659+44.4	Outside
WB I-64	2659+46.9	Median
WB I-64	2661+89.5	Outside
WB I-64	2664+41.2	Outside
WB I-64	2664+45.9	Median
WB I-64	2666+89.5	Outside
WB I-64	2666+95.1	Median
WB I-64	2668+95.2	Median
WB I-64	2668+97.8	Outside
WB I-64	2670+90.0	Outside
WB I-64	2670+94.7	Median
WB I-64	2676+45.9	Median
WB I-64	2676+49.8	Outside
WB I-64	2679+59.8	Outside
WB I-64	2681+59.2	Median
WB I-64	2681+66.3	Outside
WB I-64	2684+44.7	Median
WB I-64	2684+50.9	Outside
WB I-64	2691+08.6	Outside
WB I-64	2695+33.7	Outside
WB I-64	2699+56.1	Outside
WB I-64	2701+89.4	Outside
WB I-64	2707+37.6	Outside
WB I-64	2712+41.1	Outside
WB I-64	2712+43.9	Median
WB I-64	2715+87.4	Outside
WB I-64	2722+15.3	Outside
WB I-64	2726+87.1	Outside
WB I-64	2729+88.2	Outside
WB I-64	2729+96.1	Median
WB I-64	2732+37.4	Outside
WB I-64	2732+43.7	Median
WB I-64	2734+83.2	Outside

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
EB I-64	2712+31.1	Outside
EB I-64	2712+43.8	Inside
EB I-64	2715+82.7	Outside
EB I-64	2722+17.8	Outside
EB I-64	2726+82.2	Outside
EB I-64	2729+82.3	Outside
EB I-64	2729+98.1	Inside
EB I-64	2732+32.0	Outside
EB I-64	2732+44.9	Inside
EB I-64	2734+82.4	Outside
EB I-64	2736+80.6	Outside
EB I-64	2736+93.9	Inside
EB I-64	2738+80.9	Outside
EB I-64	2738+94.0	Inside
EB I-64	2741+32.5	Outside
EB I-64	2743+81.9	Outside
EB I-64	2743+97.7	Inside
EB I-64	2746+83.0	Outside
EB I-64	2749+45.5	Inside
EB I-64	2752+96.5	Outside
EB I-64	2755+46.9	Inside
EB I-64	2756+91.2	Outside
EB I-64	2757+98.0	Inside
EB I-64	2762+50.6	Inside
EB I-64	2762+59.6	Outside
EB I-64	2769+99.8	Inside
EB I-64	2770+08.9	Outside
EB I-64	2775+17.2	Outside
EB I-64	2779+04.1	Inside
EB I-64	2786+04.2	Inside
EB I-64	2787+98.7	Outside
EB I-64	2788+92.7	Outside
EB I-64	2790+92.4	Outside
EB I-64	2792+91.9	Outside
EB I-64	2795+90.7	Outside
EB I-64	2796+02.5	Inside
EB I-64	2798+92.7	Outside
EB I-64	2799+01.6	Inside
EB I-64	2801+38.7	Outside
EB I-64	2802+47.7	Outside
EB I-64	2803+39.7	Outside
EB I-64	2803+50.2	Inside

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
WB I-64	2736+89.4	Outside
WB I-64	2736+93.4	Median
WB I-64	2738+87.9	Outside
WB I-64	2738+92.3	Median
WB I-64	2749+43.0	Inside
WB I-64	2753+99.0	Outside
WB I-64	2757+88.6	Outside
WB I-64	2757+99.2	Median
WB I-64	2762+53.3	Outside
WB I-64	2765+51.8	Outside
WB I-64	2770+04.9	Median
WB I-64	2770+08.9	Outside
WB I-64	2775+06.1	Outside
WB I-64	2788+00.0	Outside
WB I-64	2789+02.5	Outside
WB I-64	2790+97.7	Outside
WB I-64	2791+01.7	Median
WB I-64	2792+92.8	Outside
WB I-64	2795+97.0	Outside
WB I-64	2796+01.2	Median
WB I-64	2798+94.0	Outside
WB I-64	2799+00.1	Median
WB I-64	2801+41.4	Outside
WB I-64	2803+43.6	Outside
WB I-64	2803+51.2	Median
WB I-64	2805+95.6	Outside
WB I-64	2806+00.8	Median
WB I-64	2807+87.9	Outside
WB I-64	2810+40.0	Outside
WB I-64	2810+48.2	Median
WB I-64	2815+98.8	Median
WB I-64	2816+07.4	Outside
WB I-64	2821+14.2	Outside
WB I-64	2823+20.0	Outside
WB I-64	2824+99.7	Median
WB I-64	2825+04.8	Outside
WB I-64	2829+59.3	Outside
WB I-64	2832+34.0	Outside
WB I-64	2839+30.0	Outside
WB I-64	2843+79.3	Outside
WB I-64	2848+01.1	Outside
WB I-64	2848+10.2	Median

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
EB I-64	2805+89.6	Outside
EB I-64	2806+00.3	Inside
EB I-64	2807+89.1	Outside
EB I-64	2810+39.0	Outside
EB I-64	2810+50.1	Inside
EB I-64	2815+98.9	Inside
EB I-64	2816+10.7	Outside
EB I-64	2821+10.7	Outside
EB I-64	2824+50.4	Outside
EB I-64	2824+99.3	Inside
EB I-64	2825+11.2	Outside
EB I-64	2829+60.8	Outside
EB I-64	2832+35.2	Outside
EB I-64	2836+54.1	Outside
EB I-64	2839+32.8	Outside
EB I-64	2844+00.9	Outside
EB I-64	2847+99.2	Outside
EB I-64	2848+10.7	Inside
EB I-64	2852+11.1	Outside
EB I-64	2855+93.1	Outside
EB I-64	2856+07.8	Inside
EB I-64	2859+93.1	Outside
EB I-64	2863+90.0	Outside
EB I-64	2864+02.5	Inside
EB I-64	2867+90.4	Outside
EB I-64	2870+89.0	Outside
EB I-64	2871+01.4	Inside
EB I-64	2873+88.6	Outside
EB I-64	2876+89.7	Outside
EB I-64	2877+01.0	Inside
EB I-64	2880+24.6	Outside
EB I-64	2880+33.7	Outside
EB I-64	2882+38.2	Outside
EB I-64	2882+50.8	Inside
EB I-64	2884+90.5	Outside
EB I-64	2885+00.6	Inside
EB I-64	2889+41.3	Outside
EB I-64	2889+50.5	Inside
EB I-64	2892+48.9	Inside
EB I-64	2892+60.4	Outside
EB I-64	2893+56.8	Outside
EB I-64	2894+99.9	Inside

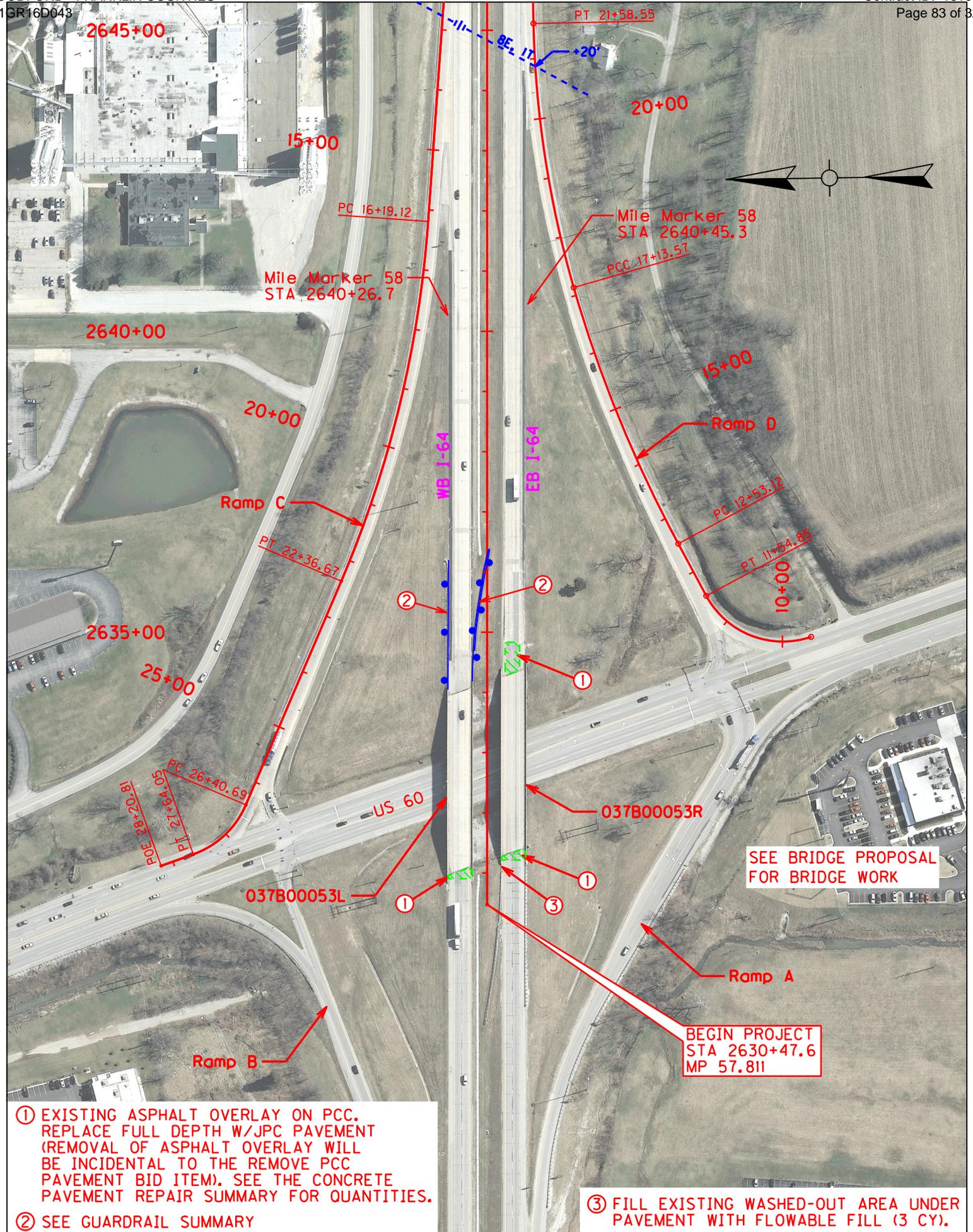
LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
WB I-64	2852+12.4	Outside
WB I-64	2855+96.4	Outside
WB I-64	2856+08.7	Median
WB I-64	2859+82.9	Outside
WB I-64	2863+83.3	Outside
WB I-64	2864+03.5	Median
WB I-64	2867+83.0	Outside
WB I-64	2870+84.1	Outside
WB I-64	2871+00.0	Median
WB I-64	2873+83.1	Outside
WB I-64	2876+83.3	Outside
WB I-64	2877+00.6	Median
WB I-64	2880+33.2	Outside
WB I-64	2882+33.1	Outside
WB I-64	2882+50.2	Median
WB I-64	2884+83.6	Outside
WB I-64	2885+00.2	Median
WB I-64	2889+49.5	Median
WB I-64	2889+52.5	Outside
WB I-64	2892+48.8	Median
WB I-64	2892+52.7	Outside
WB I-64	2895+00.8	Median
WB I-64	2895+03.1	Outside
WB I-64	2897+53.3	Outside
WB I-64	2900+00.7	Median
WB I-64	2900+01.8	Outside
WB I-64	2903+01.6	Median
WB I-64	2903+01.6	Outside
WB I-64	2905+99.2	Outside
WB I-64	2908+99.1	Median
WB I-64	2909+00.2	Outside
WB I-64	2911+49.2	Median
WB I-64	2911+50.8	Outside
WB I-64	2914+01.8	Outside
WB I-64	2917+48.7	Median
WB I-64	2917+50.6	Outside
WB I-64	2921+01.1	Outside
WB I-64	2924+48.2	Median
WB I-64	2924+49.3	Outside
WB I-64	2928+12.2	Outside
WB I-64	2931+96.6	Median
WB I-64	2932+00.2	Outside

**I-64 PAVEMENT REHABILITATION  
FRANKLIN - WOODFORD COUNTIES ITEM NO. 5-2079.00**

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
EB I-64	2895+10.1	Outside
EB I-64	2897+61.0	Outside
EB I-64	2900+00.2	Inside
EB I-64	2900+11.2	Outside
EB I-64	2903+01.3	Inside
EB I-64	2903+11.0	Outside
EB I-64	2906+11.2	Outside
EB I-64	2908+99.3	Inside
EB I-64	2909+10.5	Outside
EB I-64	2911+49.8	Inside
EB I-64	2911+60.1	Outside
EB I-64	2914+09.4	Outside
EB I-64	2917+48.5	Inside
EB I-64	2917+59.9	Outside
EB I-64	2921+08.9	Outside
EB I-64	2924+48.4	Inside
EB I-64	2924+60.8	Outside
EB I-64	2928+10.3	Outside
EB I-64	2930+75.1	Outside
EB I-64	2931+97.9	Inside
EB I-64	2932+09.2	Outside
EB I-64	2935+81.6	Outside
EB I-64	2938+36.2	Outside
EB I-64	2938+47.8	Inside
EB I-64	2940+36.1	Outside
EB I-64	2944+86.0	Outside
EB I-64	2944+96.4	Inside
EB I-64	2948+85.8	Outside
EB I-64	2954+37.0	Outside
EB I-64	2954+45.2	Inside
EB I-64	2964+55.9	Outside
EB I-64	2965+02.2	Outside
EB I-64	2970+05.2	Outside
EB I-64	2976+04.3	Outside
EB I-64	2982+04.1	Outside
EB I-64	2985+92.0	Inside
EB I-64	2986+04.5	Outside
EB I-64	2990+03.0	Outside
EB I-64	2993+43.5	Inside
EB I-64	2993+52.6	Outside
EB I-64	2997+06.4	Outside

LOCATION OF EXISTING PERFORATED PIPE HEADWALLS		
Roadway	Station	Location
WB I-64	2935+81.8	Outside
WB I-64	2938+40.3	Outside
WB I-64	2938+47.5	Median
WB I-64	2940+37.7	Outside
WB I-64	2944+89.2	Outside
WB I-64	294496.1	Median
WB I-64	2948+76.9	Outside
WB I-64	2954+26.8	Outside
WB I-64	295444.4	Median
WB I-64	2964+44.9	Outside
WB I-64	2969+95.7	Outside
WB I-64	2975+62.2	Outside
WB I-64	2982+14.6	Outside
WB I-64	2985+92.8	Median
WB I-64	2985+93.5	Outside
WB I-64	2990+14.0	Outside
WB I-64	2993+42.5	Outside
WB I-64	2993+43.0	Median
WB I-64	2997+05.0	Outside

NOTE: Approximate location of existing perforated pipe headwalls to be cleaned out. There may exist additional headwalls that were not field located. All Perforated Pipe Headwalls are to be cleaned. This work will be incidental to Bid Item No. 2575 'Ditching And Shouldering'.



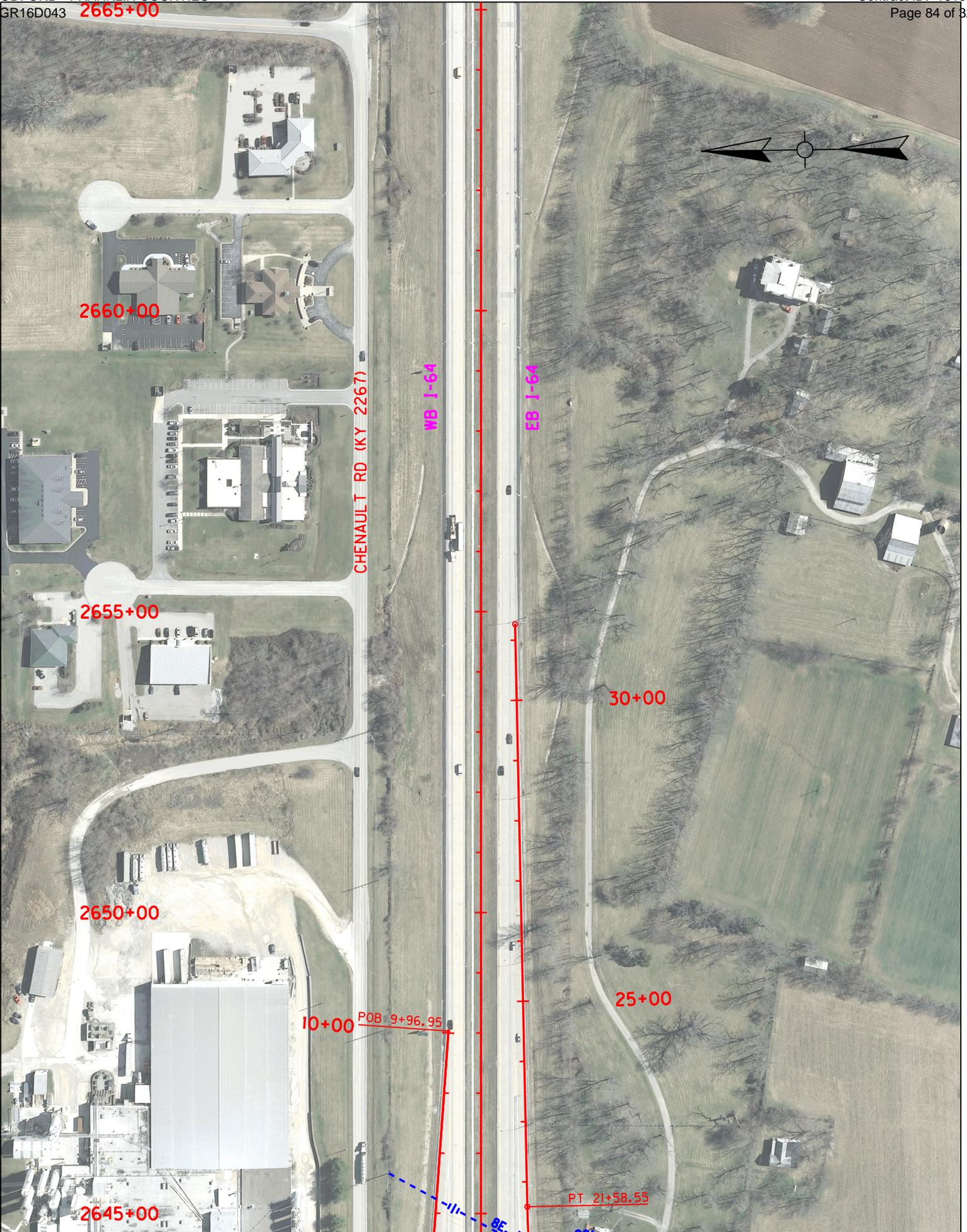
- ① EXISTING ASPHALT OVERLAY ON PCC. REPLACE FULL DEPTH W/JPC PAVEMENT (REMOVAL OF ASPHALT OVERLAY WILL BE INCIDENTAL TO THE REMOVE PCC PAVEMENT BID ITEM). SEE THE CONCRETE PAVEMENT REPAIR SUMMARY FOR QUANTITIES.
- ② SEE GUARDRAIL SUMMARY

- ③ FILL EXISTING WASHED-OUT AREA UNDER PAVEMENT WITH FLOWABLE FILL (3 CY).

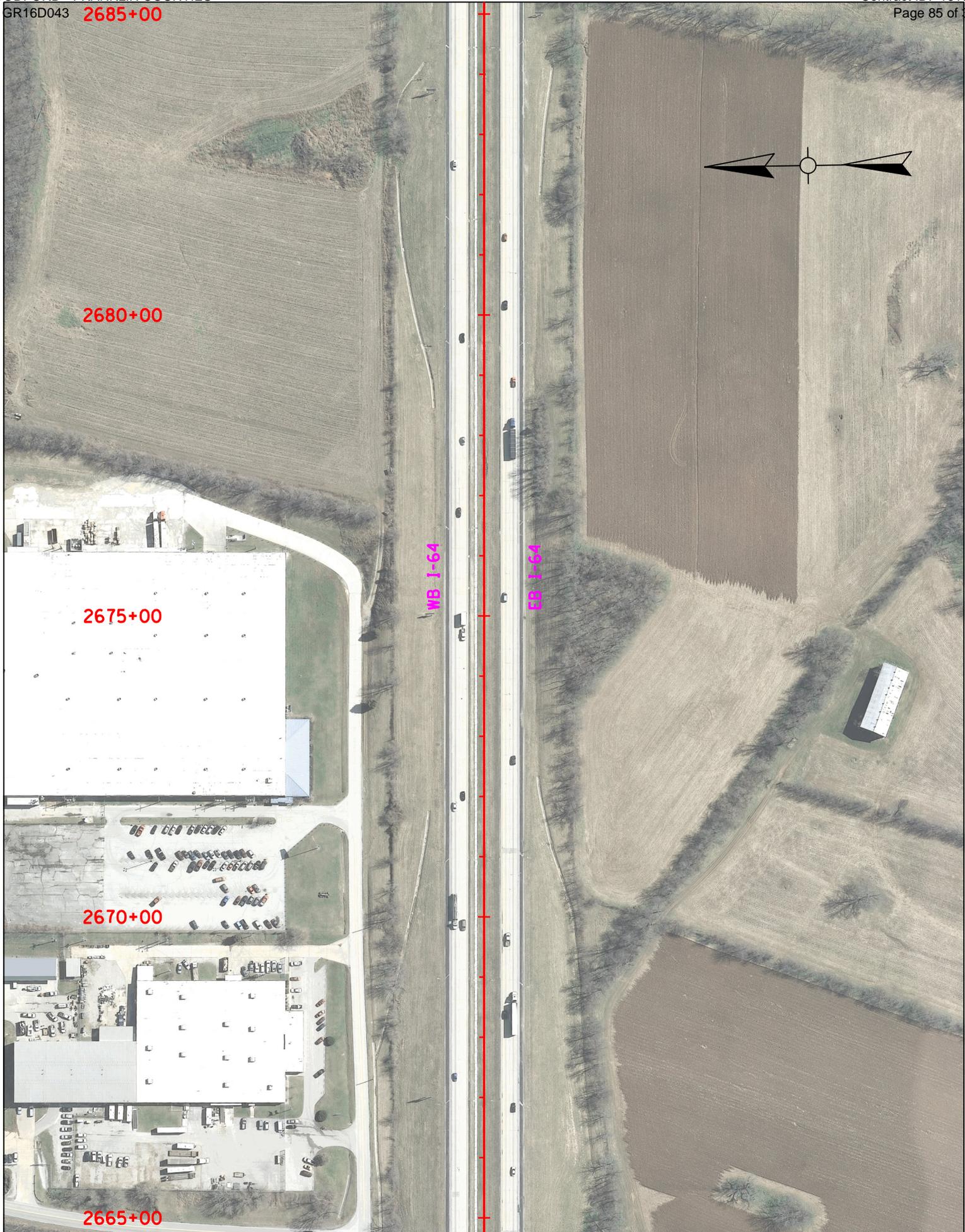
SEE BRIDGE PROPOSAL FOR BRIDGE WORK

BEGIN PROJECT  
STA 2630+47.6  
MP 57.811

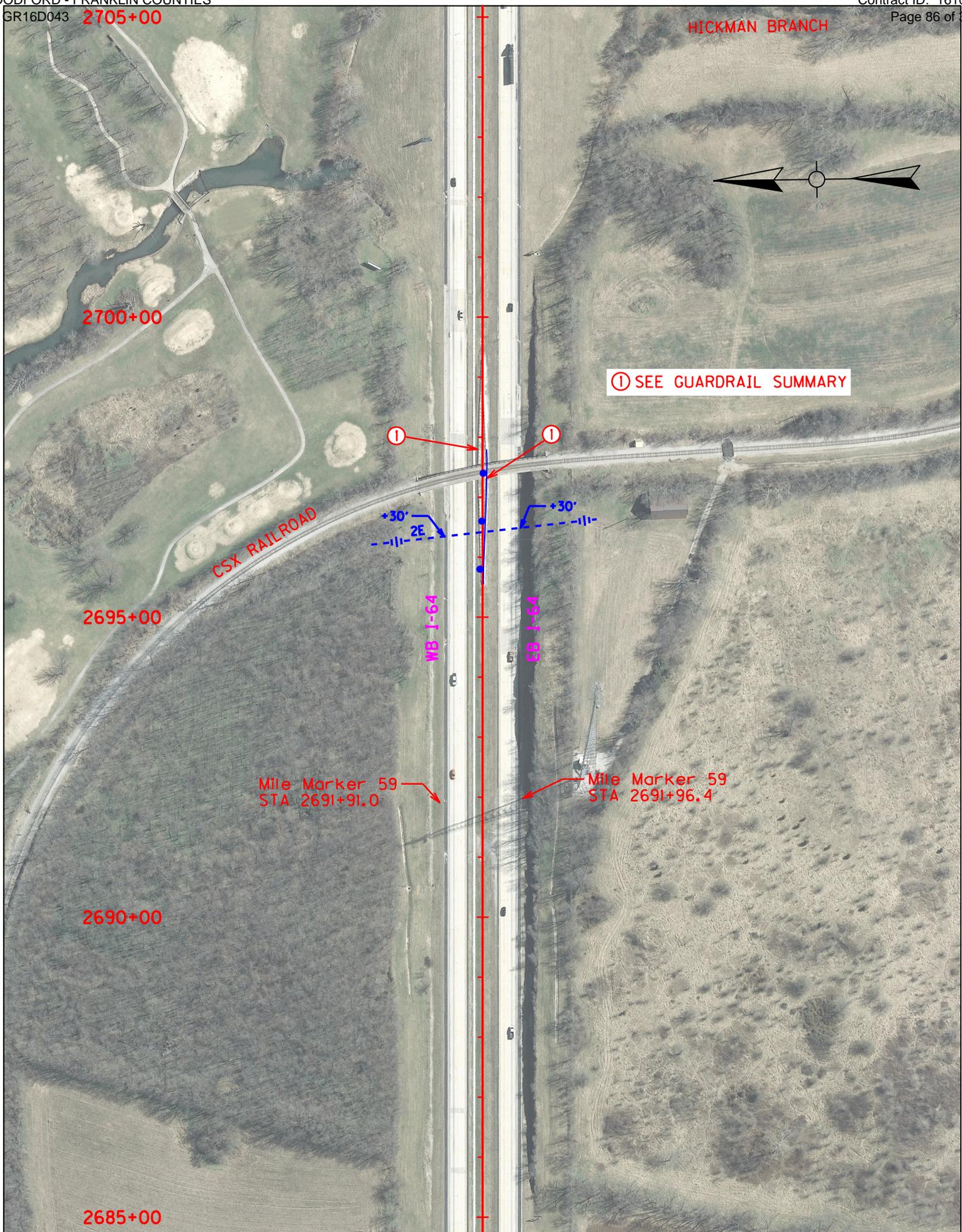
I-64 Plan - Scale 1" = 200' - Sheet 1 of 20 - Begin Project to Sta 2645+00



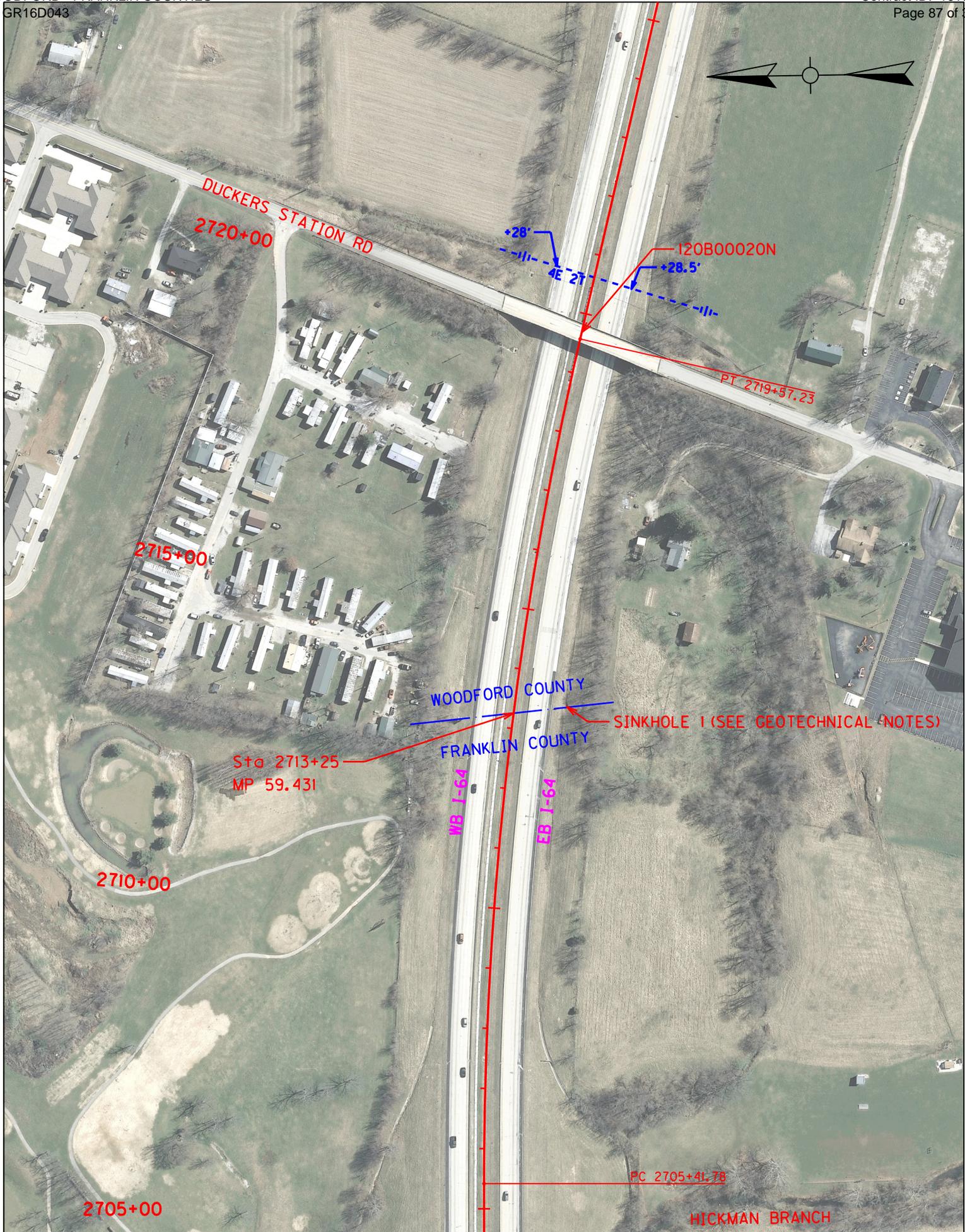
I-64 Plan - Scale 1" = 200' - Sheet 2 of 20 - Sta 2645+00 to Sta 2665+00



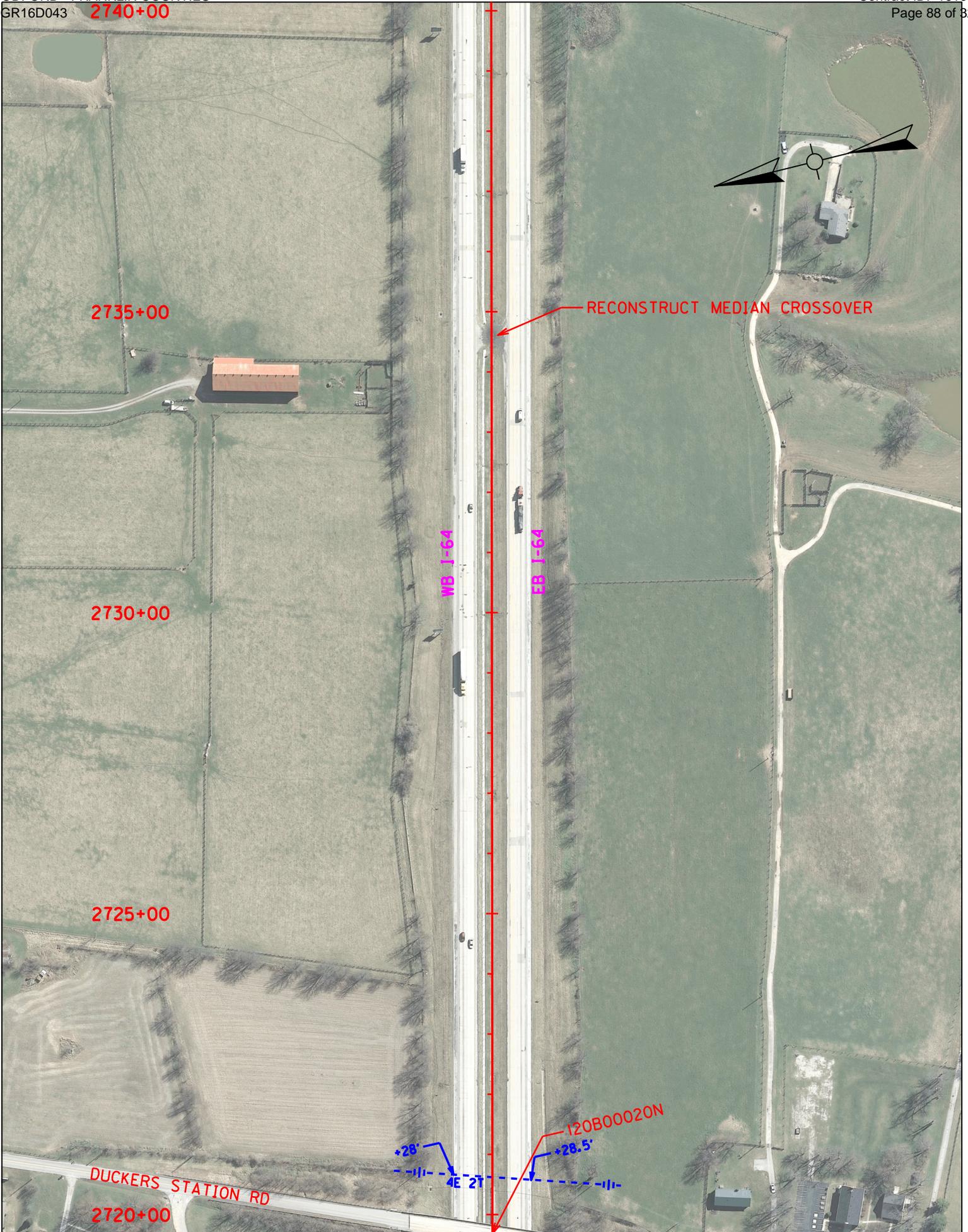
I-64 Plan - Scale 1" = 200' - Sheet 3 of 20 - Sta 2665+00 to Sta 2685+00



I-64 Plan - Scale 1" = 200' - Sheet 4 of 20 - Sta 2685+00 to Sta 2705+00



I-64 Plan - Scale 1" = 200' - Sheet 5 of 20 - Sta 2705+00 to Sta 2720+00



I-64 Plan - Scale 1" = 200' - Sheet 6 of 20 - Sta 2720+00 to Sta 2740+00

2760+00

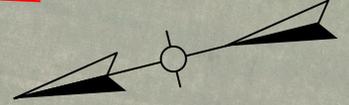
2755+00

2750+00

2745+00

2740+00

PT 2756+91.32



① SEE DRAINAGE SUMMARY

CB I-64

CB I-64

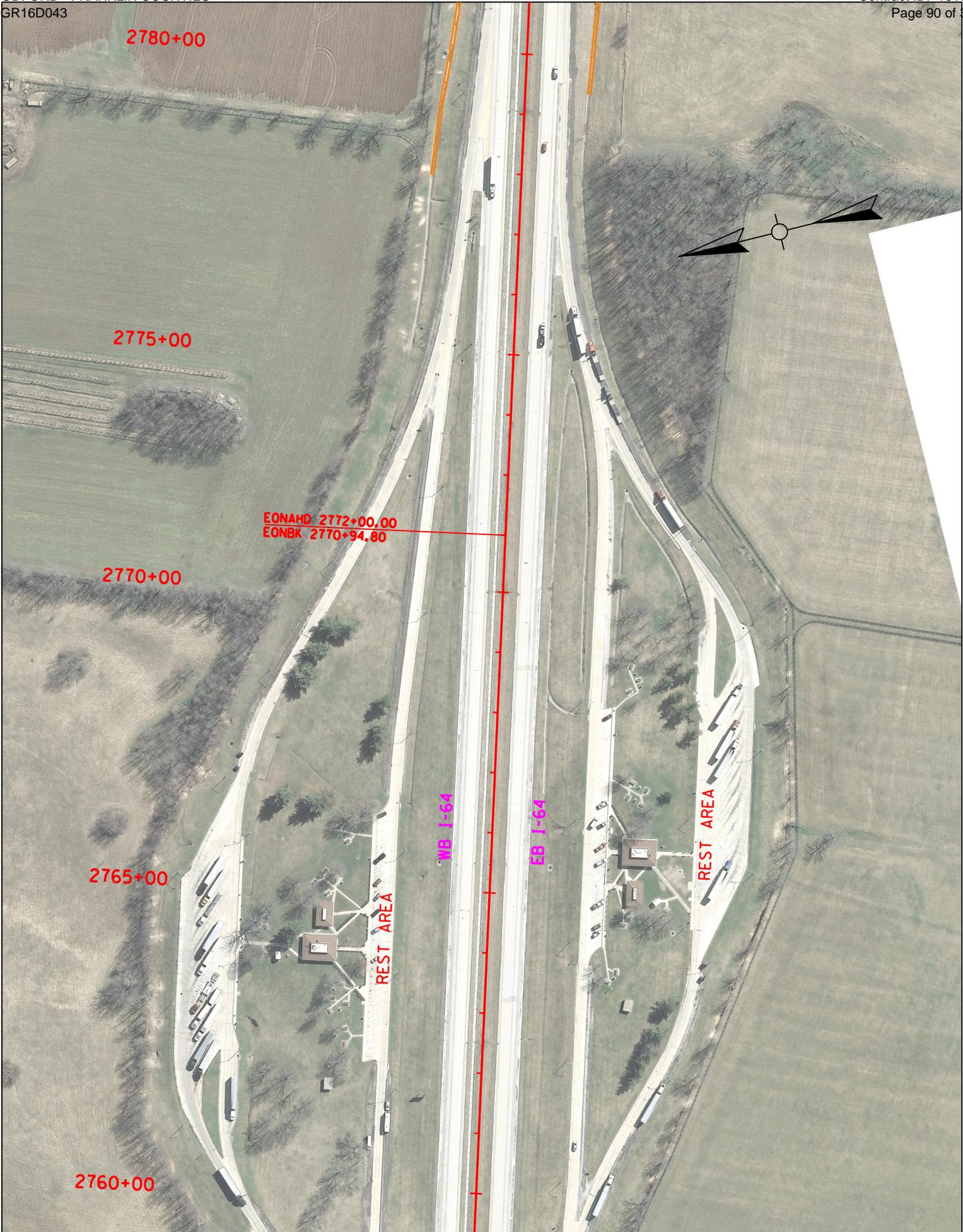
PC 2744+99.92

Mile Marker 60  
STA 2743+41.0

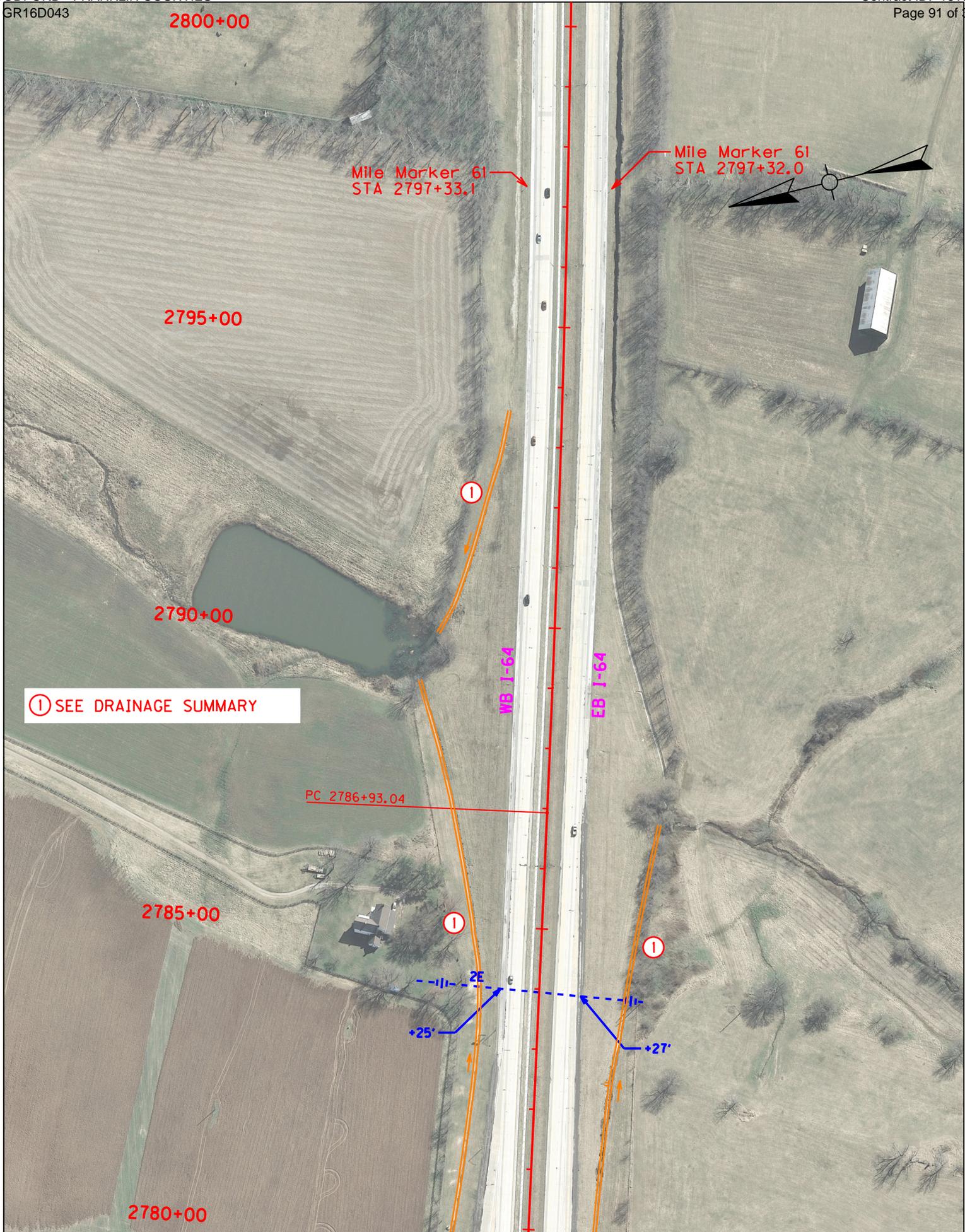
Mile Marker 60  
STA 2743+41.3

PI 2741+63.58

I-64 Plan - Scale 1" = 200' - Sheet 7 of 20 - Sta 2740+00 to Sta 2760+00



I-64 Plan - Scale 1" = 200' - Sheet 8 of 20 - Sta 2760+00 to Sta 2780+00



① SEE DRAINAGE SUMMARY

I-64 Plan - Scale 1" = 200' - Sheet 9 of 20 - Sta 2780+00 to Sta 2800+00

2820+00

2815+00

2810+00

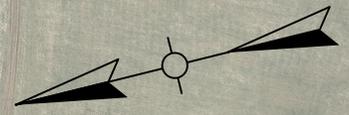
2805+00

2800+00

WB I-64

EB I-64

PT 2802+23.51



I-64 Plan - Scale 1" = 200' - Sheet 10 of 20 - Sta 2800+00 to Sta 2820+00

2840+00

2835+00

2830+00

2825+00

2820+00

BEALS RUN

WOODLAKE RD (KY 1865)

120B00021L

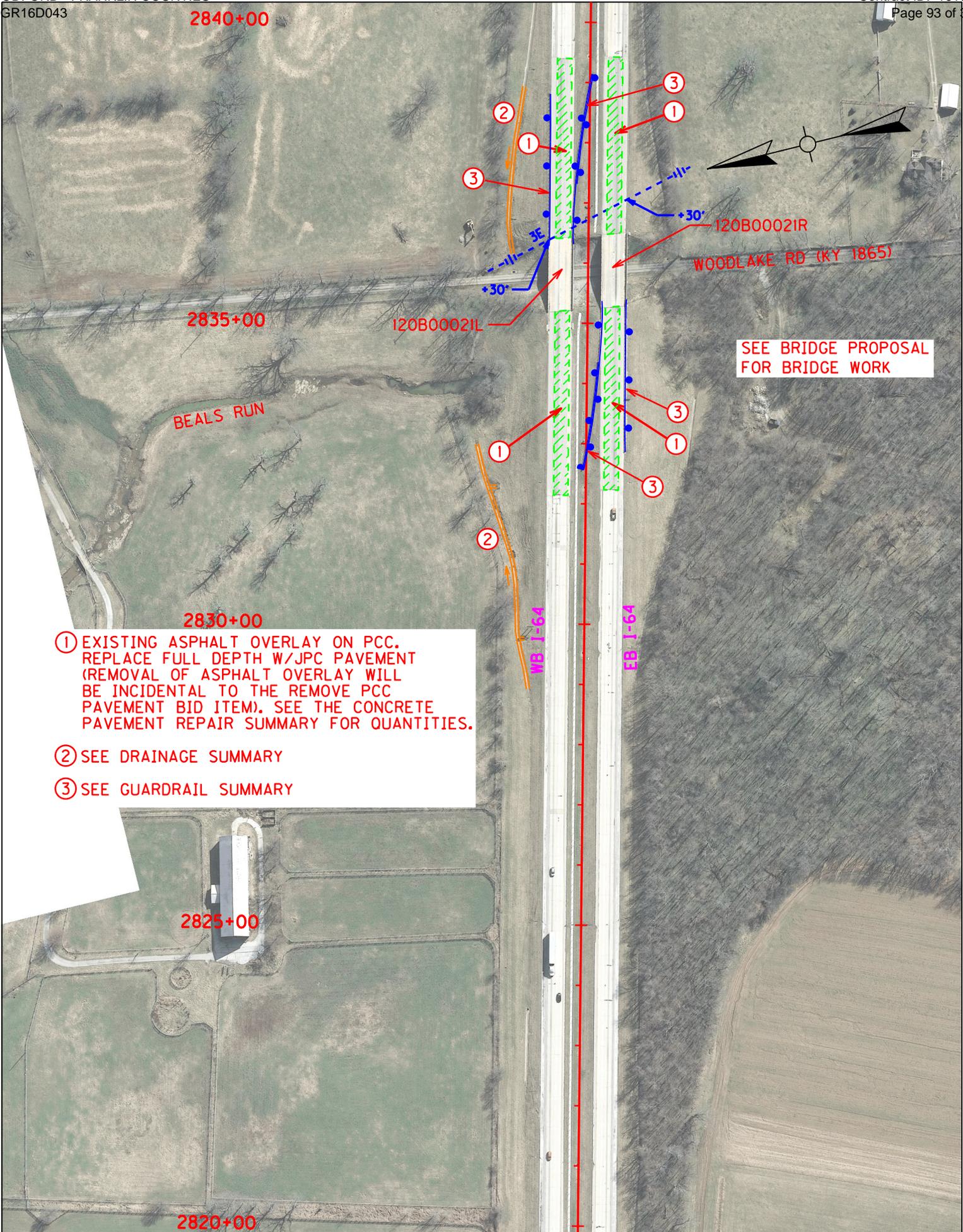
120B00021R

WB I-64

EB I-64

SEE BRIDGE PROPOSAL FOR BRIDGE WORK

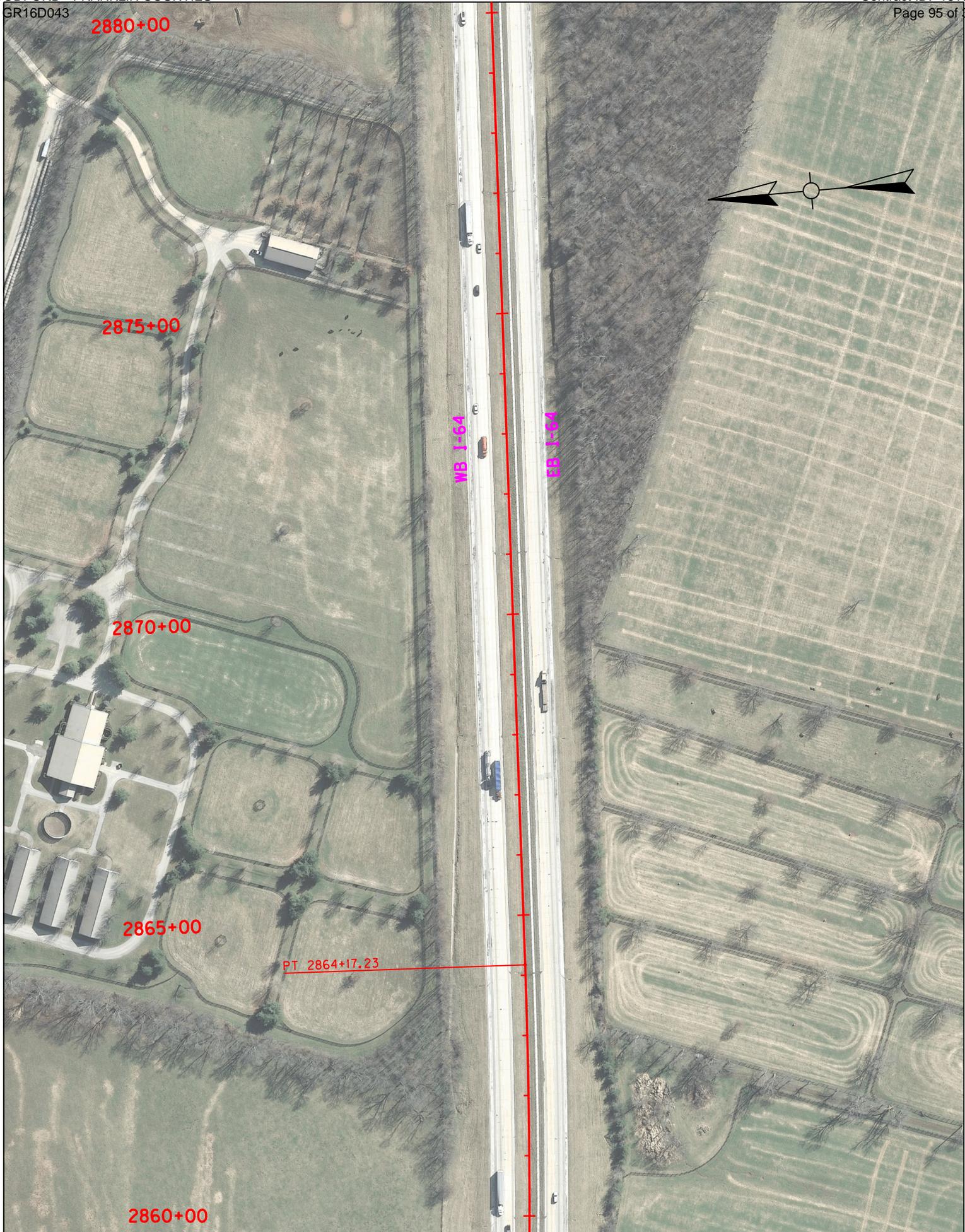
- ① EXISTING ASPHALT OVERLAY ON PCC. REPLACE FULL DEPTH W/JPC PAVEMENT (REMOVAL OF ASPHALT OVERLAY WILL BE INCIDENTAL TO THE REMOVE PCC PAVEMENT BID ITEM). SEE THE CONCRETE PAVEMENT REPAIR SUMMARY FOR QUANTITIES.
- ② SEE DRAINAGE SUMMARY
- ③ SEE GUARDRAIL SUMMARY



I-64 Plan - Scale 1" = 200' - Sheet 11 of 20 - Sta 2820+00 to Sta 2840+00



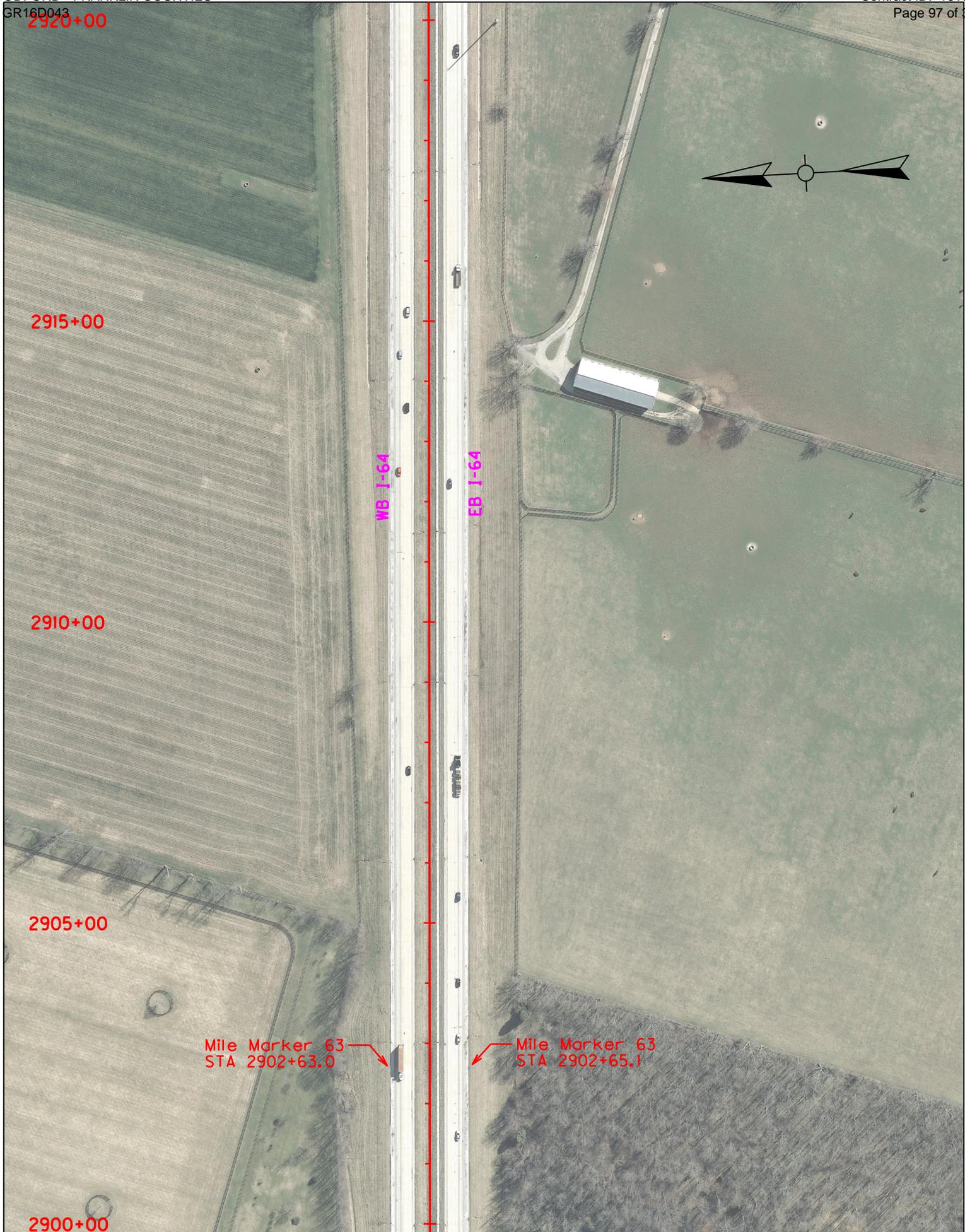
I-64 Plan - Scale 1" = 200' - Sheet 12 of 20 - Sta 2840+00 to Sta 2860+00



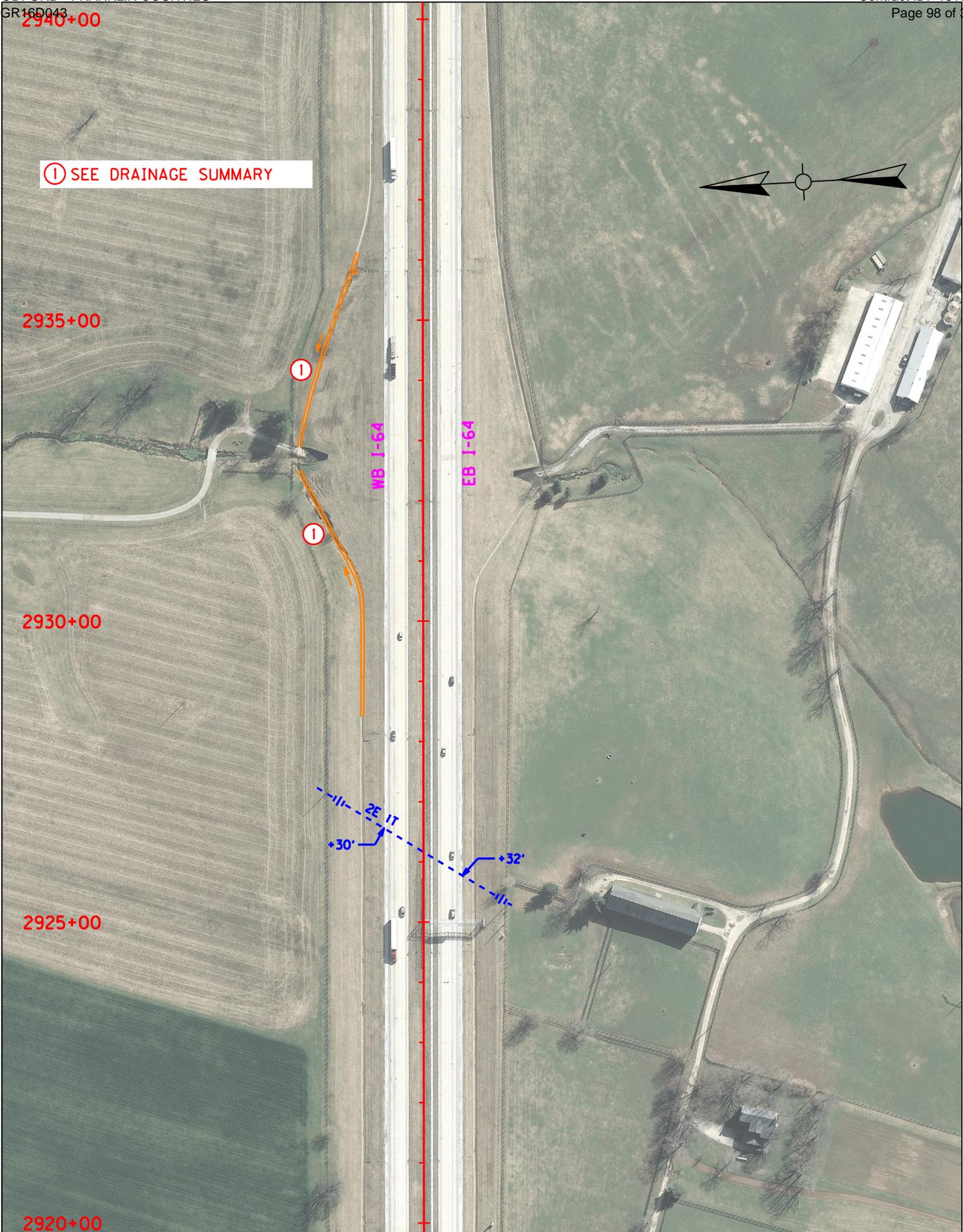
I-64 Plan - Scale 1" = 200' - Sheet 13 of 20 - Sta 2860+00 to Sta 2880+00



I-64 Plan - Scale 1" = 200' - Sheet 14 of 20 - Sta 2880+00 to Sta 2900+00



I-64 Plan - Scale 1" = 200' - Sheet 15 of 20 - Sta 2900+00 to Sta 2920+00



① SEE DRAINAGE SUMMARY

2940+00

2935+00

2930+00

2925+00

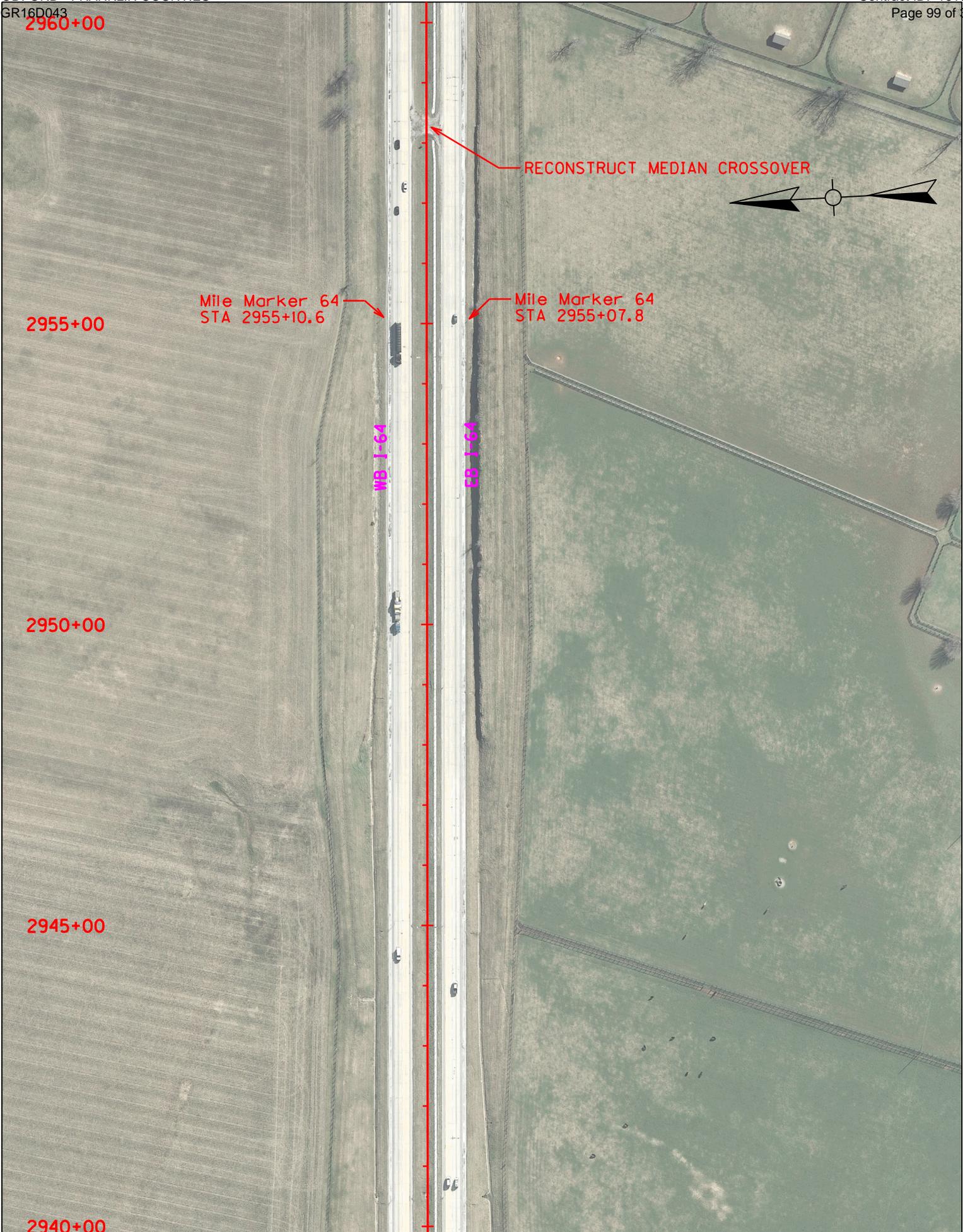
2920+00

WB I-64

EB I-64

2E 1T  
+30' +32'

I-64 Plan - Scale 1" = 200' - Sheet 16 of 20 - Sta 2920+00 to Sta 2940+00



2960+00

2955+00

2950+00

2945+00

2940+00

Mile Marker 64  
STA 2955+10.6

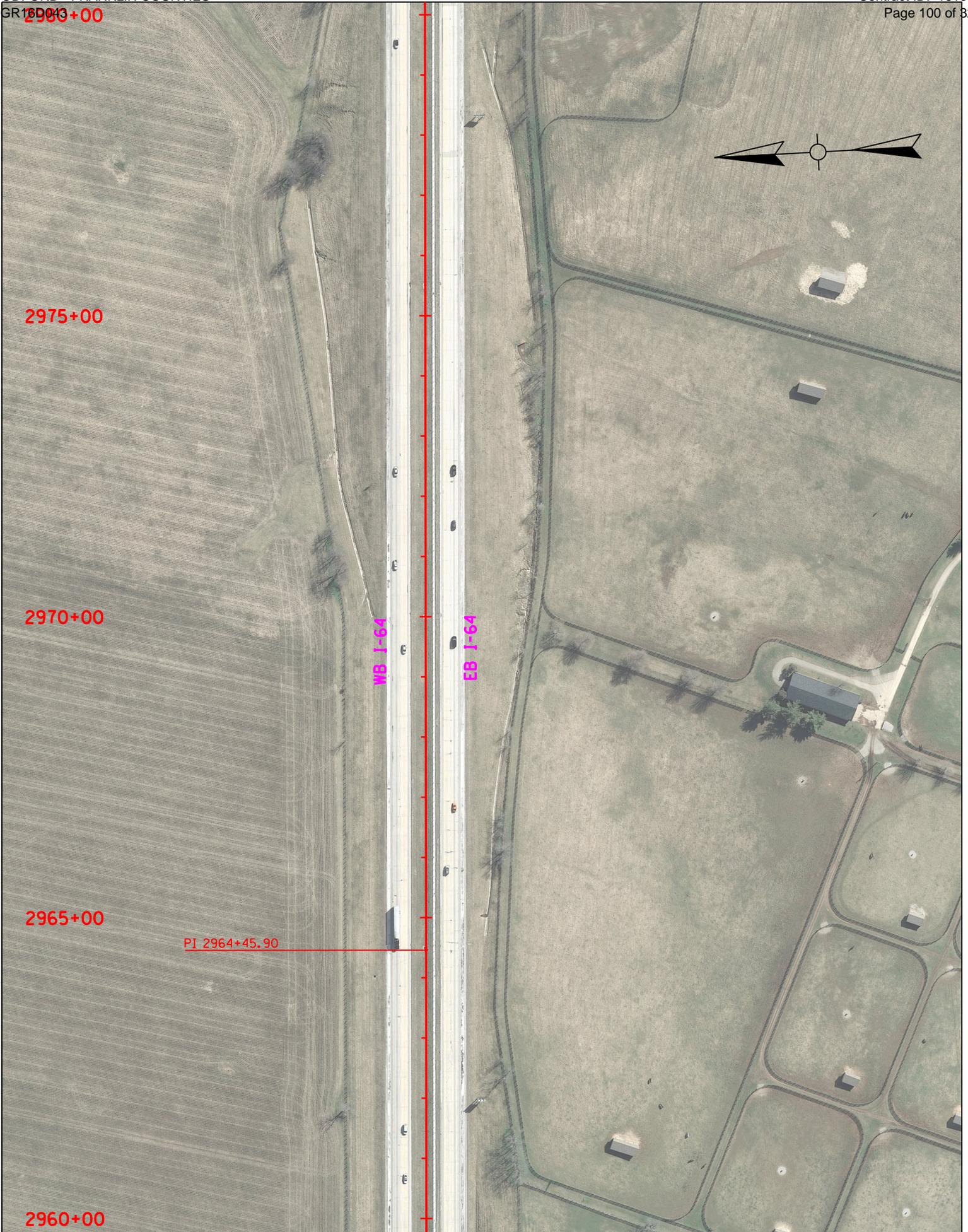
Mile Marker 64  
STA 2955+07.8

RECONSTRUCT MEDIAN CROSSOVER

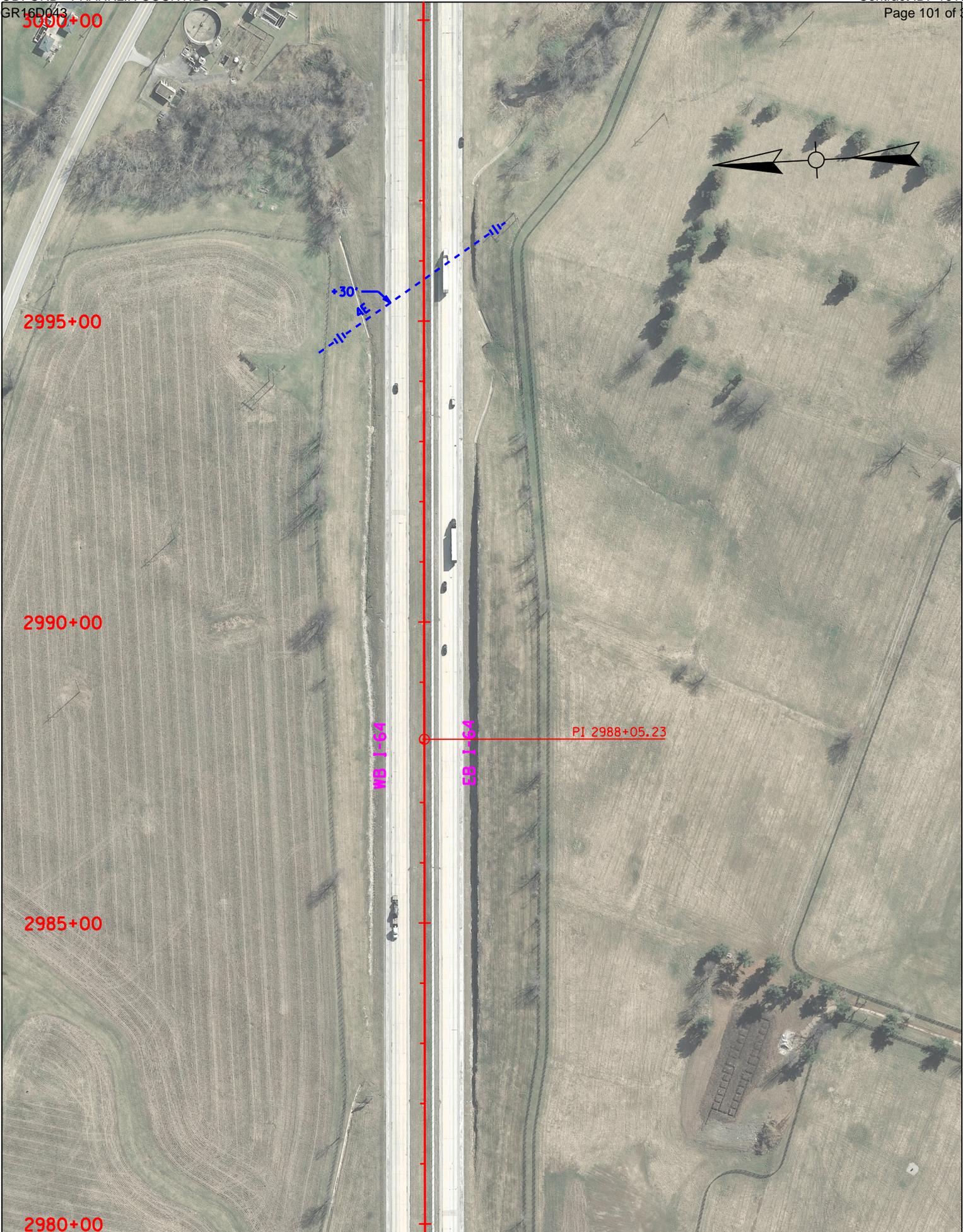
WB I-64

EB I-64

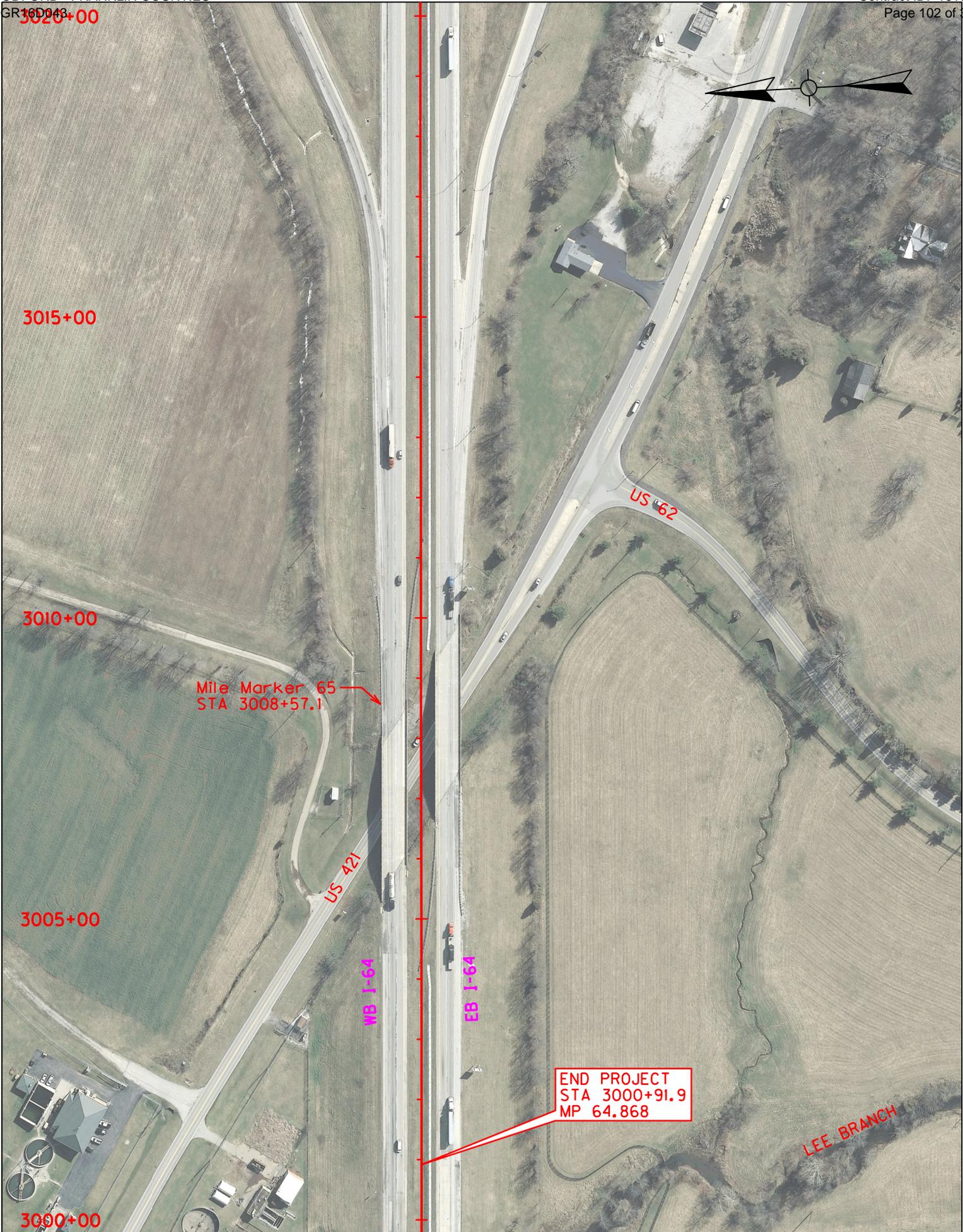
I-64 Plan - Scale 1" = 200' - Sheet 17 of 20 - Sta 2940+00 to Sta 2960+00



I-64 Plan - Scale 1" = 200' - Sheet 18 of 20 - Sta 2960+00 to Sta 2980+00



I-64 Plan - Scale 1" = 200' - Sheet 19 of 20 - Sta 2980+00 to Sta 3000+00



I-64 Plan - Scale 1" = 200' - Sheet 20 of 20 - Sta 3000+00 to Sta 3020+00

# GEOTECHNICAL NOTES

## SINKHOLE #1

1.) All open sinkholes and/or solution cavities within the limits of construction, whether shown on the plans or not, that are not used for drainage purposes, shall be filled and/or capped in accordance with the current edition of Section 215 of the Standard Specifications for Road and Bridge Construction. Sinkholes/solution features not used for drainage were noted at the following approximate locations. Refer to Kentucky Department of Highways Active Sepia 001 "Treatment of Open Sinkholes" Condition No. 2 for guidance in treating this sinkhole.

Mainline  
SINKHOLE #1  
EAST OF M.P. 59.4 (AT FRANKLIN/WOODFORD COUNTY LINE MARKER)  
APPROX. 48' SOUTH OF CENTERLINE OF EASTBOUND DRIVING LANES  
VISIBLE DEPTH 3.5 FEET  
(38.172822, -84.783483)

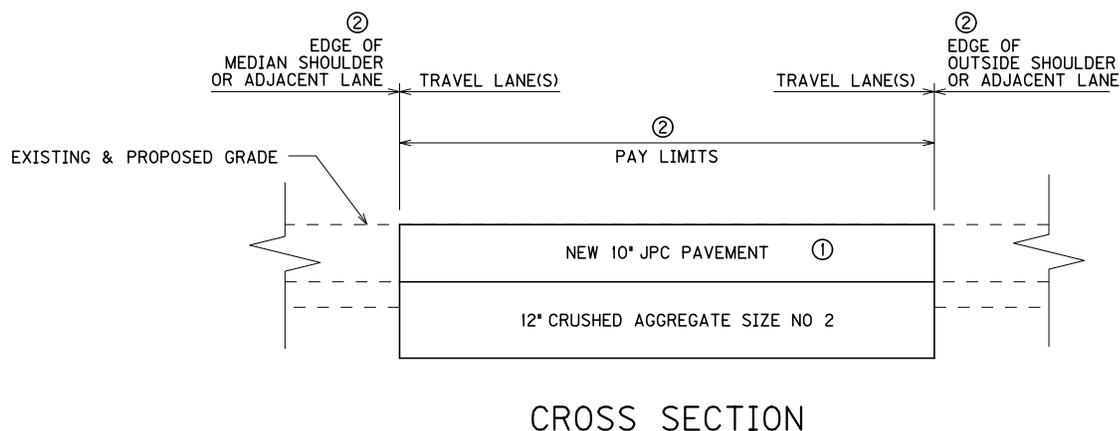
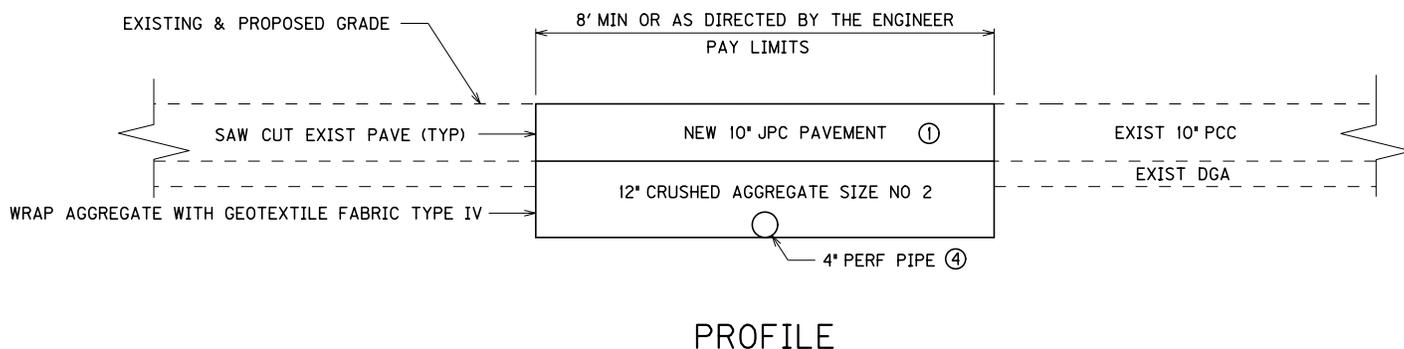
ROCKLINE SOUNDING INFORMATION

HOLE #1	21.5' EAST OF THROAT	3.1' REFUSAL
HOLE #2	8' NORTH OF THROAT	6.5' REFUSAL
HOLE #3	5' WEST OF THROAT	3.0' REFUSAL
HOLE #4	CENTER OF THROAT	6.5' REFUSAL
HOLE #5	12' SOUTH OF THROAT	7.7' REFUSAL

2.) If other sinkholes are encountered during construction, please contact the Department's Geotechnical Branch for mitigation procedures.

3.) Special care shall be exercised during construction to prevent siltation of the above sinkhole, and any other sinkholes that are encountered during construction.

## I-64 BASE FAILURE REPAIR DETAILS WET SUBGRADE CONDITION



- ① Removal of the existing PCC pavement will be paid by Item No. 2058 Remove PCC Pavement. Installation of the JPC pavement will be paid for by Item No. 2069 JPC Pavement-10 IN. It is expected all base failure repairs will be in PCC replacement areas already included in the 'Concrete Pavement Repair Summary' but the Contractor will be paid for any additional replacement areas required for base failure repairs at the same unit price bid for these two items.
- ② The Engineer will determine if the base failure repair is needed in only one, or both, of the travelled lanes at each location.
- ③ Perforated Pipe Headwalls will only be installed where the PVC pipe does not outlet behind guardrail. Only Perforated Pipe Headwall TY3-4 Inch is being bid, but the actual type required is to be field verified and approved by the Engineer prior to ordering and installation.
- ④ See the PVC Pipe Outlet Detail sheet included on the next page in this proposal.

### NOTES:

The locations of the Base Failure areas to be repaired as shown on this page will be determined by the Engineer in the field. It is expected these areas are already included in the 'Concrete Pavement Repair Summary'. The Contractor will be paid for any additional base failure repair areas not shown in this summary at the same unit price bid for Item No. 2058 Remove PCC Pavement and Item No. 2069 JPC Pavement-10 IN. These areas will have a wet subgrade unless the Engineer specifies otherwise. Before removal of the existing material, saw cuts shall be made in sound concrete pavement to each side of the area to be repaired no closer than four feet to an existing joint. The Engineer will determine the actual location of the saw cut. All base failure repairs are to be completed before the asphalt shoulders are resurfaced.

In addition to the two bid items mentioned above, additional payment at the unit bid price will be paid for the following items when base failure repairs are required:

- ④ Crushed Aggregate Size No. 2 (Ton)  
Fabric - Geotextile Type IV (SY)  
Perforated Pipe - 4 Inch (LF)
- ④ PVC Pipe - 4 Inch (LF)
- ③④ Perforated Pipe Headwall TY3-4 Inch (Each)

See the Paving Summary for estimated quantities.

## PVC PIPE OUTLET DETAILS

### SPECIAL NOTE FOR PAVEMENT SUBSURFACE DRAINAGE OUTLET

A quantity of Crushed Aggregate Size No. 2 as defined in the current 'Kentucky Standard Specifications for Road and Bridge Construction' shall be used at all Perforated Pipe Headwall Outlets as illustrated in the detail below. Crushed Aggregate Size No. 2 shall be placed a minimum of 4 inches deep.

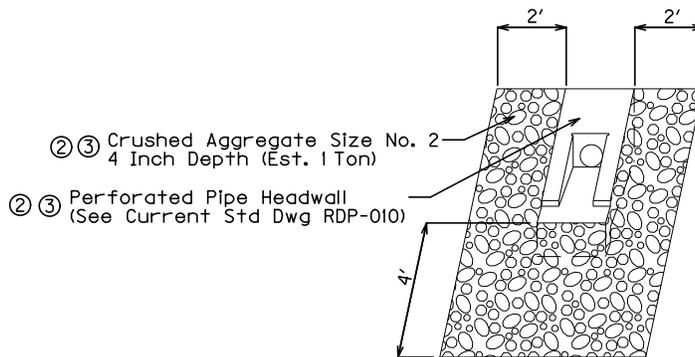
Dense Graded Aggregate (DGA) removed during placement of the Crushed Aggregate Size No. 2 shall be used to dress existing shoulders where DGA is exposed. Other materials removed during placement of the Crushed Aggregate Size No. 2 shall be wasted as directed by the Engineer. No direct payment will be allowed for disposal of wasted material.

The contract unit price for Crushed Aggregate Size No. 2 shall be full compensation for all materials, labor, and other incidentals necessary to place Crushed Aggregate Size No. 2 for control of vegetation and/or erosion control at pavement edge outlets.

See current Standard Drawing RDP-010 for dimensions and other details of perforated pipe headwalls.

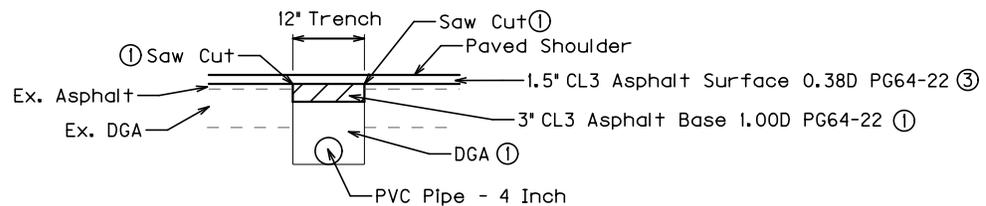
Estimate one (1) Ton of Crushed Aggregate Size No. 2 for each Perforated Pipe Headwall Outlet.

### PAVEMENT SUBSURFACE DRAINAGE OUTLET

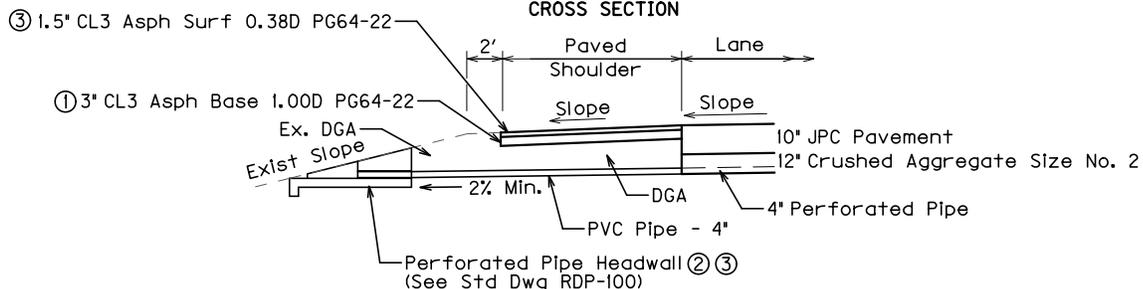


### PVC OUTLET PIPE DETAILS

#### PROFILE



#### CROSS SECTION



- ① These Items And All Other Cost Associated With Installing The PVC Pipe - 4 Inch Including Excavating The Trench, Considered Incidental To PVC Pipe - 4"
- ② Not Required When Outletting the PVC Pipe Behind Guardrail
- ③ Paid Separately

NOT TO SCALE

**PERMANENT TRAFFIC DATA ACQUISITION STATIONS  
ESTIMATE OF QUANTITIES**

Bid Item Code	Description	Unit	Quantity
2562	TEMPORARY SIGNS	SQ FT	
2650	MAINTAIN AND CONTROL TRAFFIC	LP SUM	
2775	ARROW PANEL	EACH	
4791	CONDUIT ¾ INCH	LIN FT	
4793	CONDUIT 1 ¼ INCH	LIN FT	50
4795	CONDUIT 2 INCH	LIN FT	20
4811	JUNCTION BOX TYPE B	EACH	
4820	TRENCHING AND BACKFILLING	LIN FT	60
4821	OPEN CUT ROADWAY	LIN FT	
4829	PIEZOELECTRIC SENSOR	EACH	4
4830	LOOP WIRE	LIN FT	1500
4850	CABLE NO. 14/1 PAIR	LIN FT	
4871	POLE – 35’ WOODEN	EACH	
4895	LOOP SAW SLOT AND FILL	LIN FT	365
4899	ELECTRICAL SERVICE	EACH	
20213EC	INSTALL PAD MOUNT ENCLOSURE	EACH	
20359EC	GALV STEEL CABINET	EACH	2
20360ES818	WOOD POST	EACH	4
20391ES835	JUNCTION BOX TYPE A	EACH	2
20392ES835	JUNCTION BOX TYPE C	EACH	
20468EC	JUNCTION BOX 10x8x4	EACH	
21543EN	BORE AND JACK PIPE – 2 IN	LIN FT	
23206EC	INSTALL CONTROLLER CABINET	EACH	

**MATERIAL, INSTALLATION, AND BID ITEM NOTES FOR**

WOODFORD CO. I-64 M.P. ~ 61.8  
~LAT/LONG N38.16425, W84.74272  
STATION 798

SITE LOCATION IS APPROXIMATE AND WILL BE DETERMINED IN THE FIELD AND APPROVED BY DIVISION OF PLANNING PERSONNEL PRIOR TO ANY CONSTRUCTION.

ALL LOOPS SHALL BE 6'X6' SQUARE AND SHALL BE INSTALLED 16' FROM LEADING EDGE TO LEADING EDGE AS SHOWN. PIEZOELECTRIC SENSORS (PIEZOS) SHALL BE INSTALLED 5' FROM THE EDGE OF LOOPS WITH THE EDGE OF EACH PIEZO FLUSH WITH THE EDGE OF THE CORRESPONDING DRIVING LANE. LOOPS AND PIEZOS SHALL BE INSTALLED SPLICE-FREE TO THE CABINET AND A MINIMUM OF 2' OF WIRE FOR EACH SENSOR SHALL BE COILED INSIDE EACH JUNCTION BOX AND CABINET. ALL LOOPS AND PIEZOS SHALL BE LABELED IN ALL JUNCTION BOXES AND CABINETS. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS AND PIEZOS INSIDE THE CABINETS.

INSTALL ONE (1) 1 1/4" CONDUIT FROM EACH SAW SLOT TO NEAREST JUNCTION BOX.

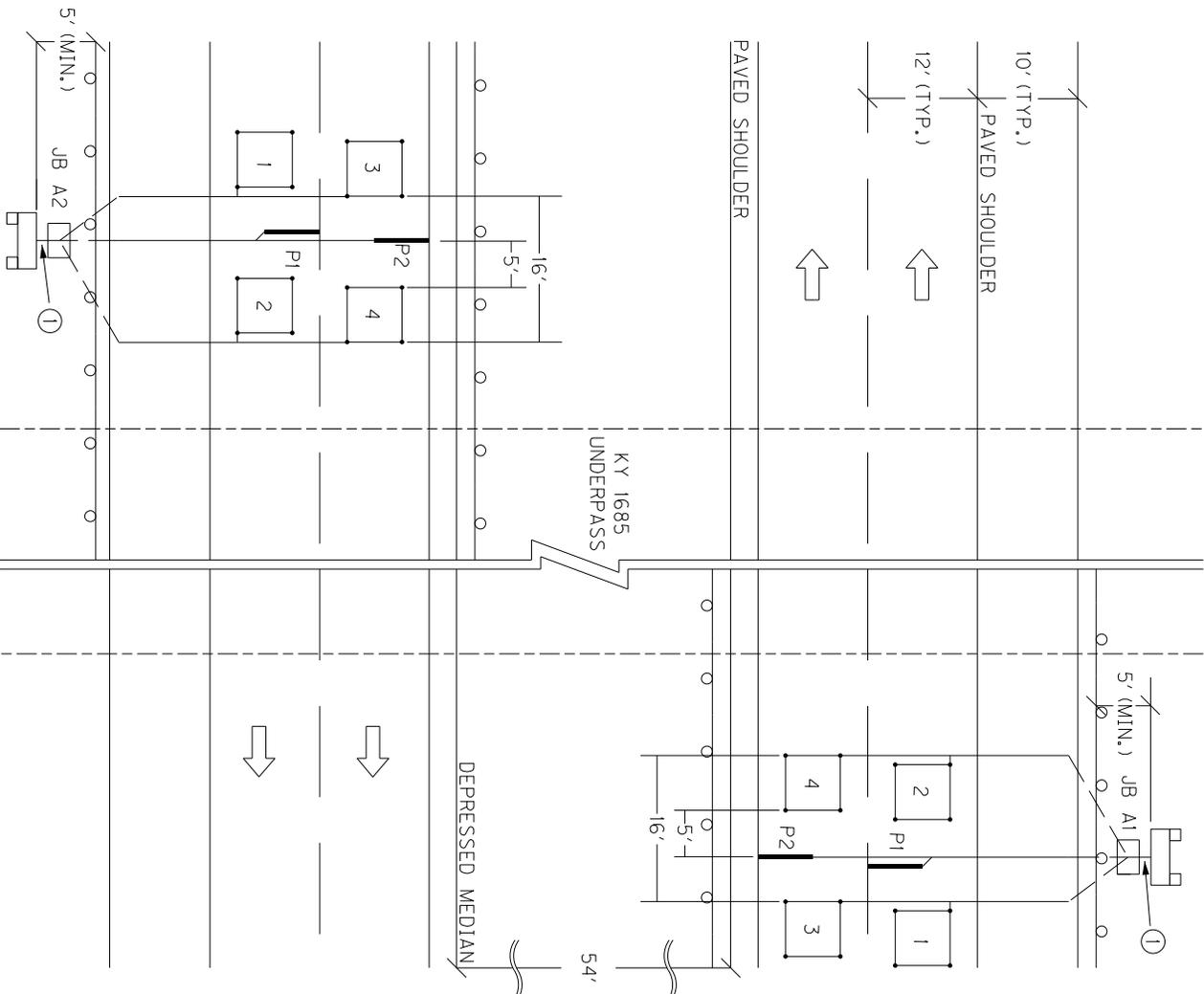
INSTALL TWO (2) TYPE A JUNCTION BOXES (JB A1, JB A2).

INSTALL TWO (2) 20"x20"x8" CABINETS MOUNTED TO TWO (2) WOOD POSTS EACH.

REMOVE EX. TRAFFIC DATA COLLECTION EQUIPMENT (CABINETS, CONDUITS, JUNCTION BOXES, WIRE, ETC.) FROM ~LAT/LONG N38.164372, W84.743738 AND DISPOSE OFF THE PROJECT.

CODED NOTE:

① INSTALL ONE (1) 2" CONDUIT.



## PERMANENT TRAFFIC DATA ACQUISITION STATIONS

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### 1. DESCRIPTION

Except as specified in these notes, all work shall consist of furnishing and installing all materials necessary for permanent data acquisition station equipment installation(s) and shall be performed in accordance with the current editions of:

- The Contract
- Division of Planning Standard Detail Sheets
- Kentucky Transportation Cabinet, Department of Highways, *Standard Specifications for Road and Bridge Construction*
- Kentucky Transportation Cabinet, Department of Highways, Standard Drawings
- National Fire Protection Association (NFPA) 70: *National Electrical Code*
- Institute of Electrical and Electronic Engineers (IEEE), *National Electrical Safety Code*
- Federal Highway Administration, *Manual on Uniform Traffic Control Devices*
- American Association of State Highway and Transportation Officials (AASHTO), *Roadside Design Guide*.
- Standards of the utility company serving the installation, if applicable

The permanent traffic data acquisition station layout(s) indicate the extent and general arrangement of the proposed installation and are for general guidance. Any omission or commission shown or implied shall not be cause for deviation from the intent of the plans and specifications. Information shown on the plans and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department of Highways (Department) does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown. If any modifications of the plans or specifications are considered necessary by the Contractor, details of such modifications and the reasons, therefore, shall be submitted in writing to the Engineer for written approval prior to beginning such modified work.

The Contractor shall contact all utility companies and the district utility agent prior to beginning construction to insure proper clearance and shielding from existing and proposed utilities. The Contractor shall use all possible care in excavating on this project so as not to disturb any existing utilities whether shown on the plans or not shown on the plans. Any utilities disturbed or damaged by the Contractor during construction shall be replaced or repaired to original condition by the Contractor at no cost to the department. If necessary, to avoid existing utilities, the Contractor shall hand dig areas where poles or conduit cross utilities.

The Contractor shall be responsible for all damage to public and/or private property resulting from his work.

The Contractor shall inspect the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions. Submission of a bid will be considered an affirmation of this inspection having been completed. The Department will not honor any claims resulting from site conditions.

## 2. MATERIALS

All proposed materials shall be approved prior to being utilized. The Contractor shall submit for material approval an electronic file of descriptive literature, drawings and any requested design data for the proposed materials. After approval, no substitutions of any approved materials may be made without the written approval of the Engineer.

Materials requiring sampling shall be made available a sufficient time in advance of their use to allow for necessary testing.

### 2.1. Anchoring

#### 2.1.1. Anchor and Anchor Rod

Anchor, except rock anchor, shall be expanding type, with a minimum area of 135 square inches.

Anchor rod shall be galvanized steel, double-eye, have a minimum diameter of 5/8 inches, and a minimum length of 84 inches. Minimum holding capacity shall be 15,400 lbs.

Rock anchor shall be galvanized steel, triple-eye, expanding type, with a minimum diameter of 3/4 inch, a minimum 53 inches long, and a minimum tensile strength of 23,000 lb.

#### 2.1.2. Guy Wire and Guy Guard

Guy wire shall be Class A, Zinc-coated, 3/8 inch diameter, high strength grade steel (minimum 10,800 lb.) and galvanized per ASTM A475. Guy guard shall be 8' long, fully-rounded, yellow, and able to be securely attached to the guy wire.

#### 2.1.3. Strandwise for Guy Wire

Strandwise for guy wire shall be 3/8 inch and rated to hold a minimum of 90% of the rated breaking strength (RBS) of the strand used.

### 2.2. Asphalt

Asphalt shall be a minimum CL2 Asph Surf 0.38C PG64-22 and conform to the *Standard Specifications for Road and Bridge Construction*.

### 2.3. Backer Rod

Backer rod shall be 1/2 inch diameter, closed cell polyethylene foam and shall meet or exceed the following physical properties:

- Density (average): 2.0 lbs/cu.ft. (minimum): ASTM D 1622 test method
- Tensile Strength: 50 PSI (minimum): ASTM D 1623 test method
- Compression Recovery: 90% (minimum): ASTM D 5249 test method
- Water Absorption: 0.03 gm/cc (maximum): ASTM C 1016 test method

## 2.4. Cabinets

### 2.4.1. Galvanized Steel Cabinet

Galvanized Steel Cabinet shall be constructed of 16 or 14 gauge galvanized steel and shall meet or exceed the industry standards set forth by UL 50 and NEMA 3R. The finish shall be an ANSI 61 gray polyester powder finish inside and out over the galvanized steel. Cabinet shall have minimum inside dimensions of 20 inches high by 20 inches wide by 8 inches deep.

The cabinet shall be equipped with the following:

- Drip shield top
- Seam-free sides, front, and back, to provide protection in outdoor installations against rain, sleet, and snow
- Hinged cover with 16 gauge galvanized steel continuous stainless steel pin.
- Cover fastened with captive plated steel screws, knob or latch
- Hasp and staple for padlocking
- No gaskets or knockouts
- Back panel for terminal block installation
- Post mounting hardware
- Terminal Blocks

### 2.4.2. Anchor Bolt for Pad Mounted Cabinet

Anchor bolt for pad mounted cabinet shall be galvanized steel with minimum dimensions of 3/8 inch by 6 inches.

## 2.5. Concrete

Concrete shall be Class A and conform to the *Standard Specifications for Road and Bridge Construction*.

## 2.6. Conduit and Conduit Fittings

Conduit and conduit fittings shall be rigid steel unless otherwise specified.

Conduit shall be zinc galvanized inside and out and conform to the NEC, UL Standard 6, and ANSI C-80.1.

Rigid Steel Conduit Fittings shall be galvanized inside and out and conform to the NEC, UL Standard 514B, and ANSI C-80.4. Intermediate Metal Conduit (IMC) will not be approved as an acceptable alternative to rigid steel conduit.

## 2.7. Conduit sealant

Conduit sealant shall be weather-, mold-, and mildew-resistant and chemically resistant to gasoline, oil, dilute acids and bases. Conduit sealant shall be closed cell type and shall meet or exceed the following properties:

- Cure Time 20 minutes max.
- Density 64.4 kg/m<sup>3</sup>; 6 lbs/ft<sup>3</sup>
- Compressive Strength (ASTM 1691) 13.8 MPa; 330 or 300 psi

- Tensile Strength (ASTM 1623) 15.9 MPa; 270 or 250 psi
- Flexural Strength (ASTM D790) 14.5 MPa; 460 or 450 psi
- Service Temperature -20 to 200 F

## **2.8. Electrical Service Meter Base**

Electrical service meter base shall meet or exceed all requirements of the National Electrical Code and the local utility providing the electrical service.

## **2.9. Electrical Service Disconnect**

Electrical service disconnect shall meet or exceed all requirements of the National Electrical Code and the local utility providing the electrical service.

## **2.10. Flashing Arrow**

Flashing Arrow shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.11. Ground Fault Circuit Interrupter (GFCI) Receptacle**

Ground Fault Circuit Interrupter Receptacle shall be 2-pole, 3-wire, 20 Amp, 125 Volt, 60 Hz, NEMA 5-20R configuration and meet or exceed the following standards and certifications:

- NEMA WD-1 and WD-6
- UL 498 and 943
- NOM 057
- ANSI C-73

This item shall include a UL listed, 4 inch x4 inch x 2<sup>1</sup>/<sub>8</sub> inch box with ¾ inch side and end knockouts and a 1½ inches deep, single-receptacle cover to house the GFCI receptacle. Box and cover shall be hot rolled, galvanized steel with a minimum thickness of 0.62 inches.

## **2.12. Grounding**

### **2.12.1. Ground Rod**

Ground Rod shall be composite shaft consisting of a pure copper exterior (5 mil minimum) that has been inseparably molten welded to a steel core. Ground Rod shall have a minimum diameter of 5/8 inch, a minimum length of 8 feet and shall be manufactured for the sole purpose of providing electrical grounding.

### **2.12.2. Ground Rod Clamp**

Ground rod shall be equipped with a one piece cast copper or bronze body with a non-ferrous hexagonal head set screw and designed to accommodate a 10 AWG solid through 2 AWG stranded grounding conductor.

## **2.13. Grout**

### **2.13.1. Grout for Inductive Loop Installation**

Grout for inductive loop installation shall be non-shrink, shall meet the requirements of the *Standard Specifications for Road and Bridge Construction*,

and shall be included on the KYTC Division of Materials, *List of Approved Materials*.

### **2.13.2. Grout for Piezoelectric Sensor Installation**

Grout for piezoelectric sensor installation shall be per the piezoelectric sensor manufacturer's recommendation. Grout shall be suitable for installation in both asphalt and Portland cement pavements. Grout shall have a short curing time (tack free in ten minutes; open to traffic in forty minutes; and fully cured within sixty minutes) to prevent unnecessary lane closure time and should be of sufficient consistency to prevent running when applied on road surfaces with a drainage cross slope. Particulate matter within the grout shall not separate or settle and the grout shall not shrink during the curing process.

## **2.14. Hardware**

Except where specified otherwise, all hardware such as nuts, bolts, washers, threaded ends of fastening devices, etc. with a diameter less than 5/8 inch shall be passivated stainless steel, alloy type 316 or type 304. Stainless steel hardware shall meet ASTM F593 and F594 for corrosion resistance. All other nuts and bolts shall meet ASTM A307 and shall be galvanized.

### **2.14.1. Conduit Strap**

Conduit strap shall be double-hole, stainless steel, and sized to support specified conduit. Conduit strap shall attach to wood pole or post with two 2 1/4 inch wood screws.

### **2.14.2. Mounting Strap for Pole Mount Cabinet**

Mounting strap for pole mount cabinet shall be 3/4 inch x 0.03 inch stainless steel; equipped with clips or buckles to securely hold strap.

### **2.14.3. Metal Framing Channel and Fittings**

Metal framing channel shall be 1 5/8 inches wide galvanized steel that conforms to ASTM A1011 and ASTM A653. One side of the channel shall have a continuous slot with in-turned edges to accommodate toothed fittings.

Fittings shall be punch pressed from steel plates and conform to ASTM A575 and the physical requirements of ASTM A1011.

## **2.15. Junction Box**

### **2.15.1. Junction Box Type A, B, or C**

Junction Box Type A, B, or C shall meet or exceed ANSI/SCTE 77-2007, Tier 15. Box shall have an open bottom. A removable, non-slip cover marked "PLANNING" shall be equipped with a lifting slot and attached with a minimum of two 3/8 inch stainless steel hex bolts and washers. Type A Box shall have nominal inside dimensions of 13 inches wide by 24 inches long by 18 inches deep. Type B Box shall have nominal inside dimensions of 11 inches wide by 18 inches long by 12

inches deep. Type C Box shall have nominal inside dimensions of 24 inches wide by 36 inches long by 30 inches deep.

#### **2.15.2. Aggregate for Junction Box Type A, B, or C**

Aggregate for junction box type A, B, or C shall be gradation size no. 57 and conform to the *Standard Specifications for Road and Bridge Construction*.

#### **2.15.3. Junction Box 10x8x4**

Junction Box Type 10x8x4 shall be constructed of a UV-stabilized, nonmetallic material or non-rusting metal and be weatherproof in accordance with NEMA 4X. Box shall be equipped with an overhanging door with a continuous durable weatherproof gasket between the body and door. Door shall be hinged with stainless steel screws, hinge(s) and pin(s) and shall be equipped with a stainless steel padlockable latch on the side opposite the hinge(s). Junction Box 10x8x4 shall have minimum inside dimensions of 10 inches high by 8 inches wide by 4 inches deep.

#### **2.16. Maintain and Control Traffic**

Materials for the bid item Maintain and Control Traffic shall conform to the *Standard Specifications for Road and Bridge Construction*, and the KYTC Department of Highways *Standard Drawings*.

#### **2.17. Piezoelectric Sensor**

Piezoelectric sensor (piezo) shall provide a consistent level voltage output signal when a vehicle axle passes over it, shall have a shielded transmission cable attached, and shall meet the following requirements:

- Dimensions: such that sensor will fit in a ¾ inch wide by 1 inch deep saw cut. Total length shall be 6 feet unless specified otherwise.
- Output uniformity: ± 7% (maximum)
- Typical output level range: 250mV (minimum) from a wheel load of 400 lbs.
- Working temperature range: -40° to 160° F.
- Sensor life: 30 million Equivalent Single Axle Loadings (minimum)

Shielded transmission cable shall be coaxial and shall meet the following requirements:

- RG 58C/U with a high density polyethylene outer jacket rated for direct burial
- Length shall be a minimum of 100 feet. Installations may exceed 100 feet so the piezo shall be supplied with a lead-in of appropriate length so that the cable can be installed splice-free from the piezo to the cabinet.
- Soldered, water resistant connection to the sensor.

One installation bracket for every 6 inches of sensor length shall also be supplied. Piezo shall be a RoadTrax BL Class I or approved equal.

#### **2.18. Saw Slot Sealant**

Saw Slot Sealant shall be non-shrink, non-stringing, moisture cure, polyurethane

encapsulant suitable for use in both asphalt and concrete pavements. It shall provide a void-free encapsulation for detector loop cables and adequate compressive yield strength and flexibility to withstand heavy vehicular traffic and normal pavement movement.

The cured encapsulant shall meet or exceed the following:

- Hardness (Indentation): 35-65 Shore A, ASTM D2240
- Tensile Strength: 150 psi minimum, ASTM D412
- Elongation: 125% minimum 2 inch/minute pull, ASTM D412
- Tack-free Drying Time: 24 hours maximum, ASTM C679
- Complete Drying Time: 30 hours maximum, KM 64-447
- Chemical Interactions (seven day cure at room temperature, 24-hour immersion, KM 64-446):
  - Motor Oil: No effect
  - Deicing Chemicals: No effect
  - Gasoline: Slight swell
  - Hydraulic Brake Fluid: No effect
  - Calcium Chloride (5%): No effect

## **2.19. Seeding and Protection**

Material for Seeding and Protection shall be Seed Mixture Type I and conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.20. Signs**

Materials for signs shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.21. Splicing Materials**

### **2.21.1. Electrical Tape**

Electrical tape shall be a premium grade, UL-listed, all-weather, vinyl-insulating tape with a minimum thickness of 7 mil. Tape shall be flame retardant and resistant to abrasion, moisture, alkalis, acids, corrosion, and weather (including ultraviolet exposure).

### **2.21.2. Splice Kit**

Splice kit shall be inline resin-type and rated for a minimum of 600V. Resin shall be electrical insulating-type and shall provide complete moisture and insulation resistance.

## **2.22. Steel Reinforcing Bar**

Steel reinforcing bar shall be #5 and shall conform to the *Standard Specifications for Road and Bridge Construction*.

## **2.23. Terminal Block**

Terminal block shall be rated for a minimum of 300 V and have a minimum of six

terminal pairs with 9/16-inch nominal spacing (center to center) for connecting loop and piezoelectric sensor wires to cable assemblies. Terminal block shall have screw type terminal strips to accommodate wire with spade-tongue ends.

#### **2.24. Warning Tape**

Warning tape shall be acid and alkali resistant formulated for direct burial. Tape shall be a minimum of 3 inches wide by 4.0 mils (nominal) thick, and shall be permanently imprinted with a minimum 1 inch black legend on a red background warning of an electric line. Tape shall meet or exceed the following industry specifications:

- American Gas Association (AGA) 72-D-56
- American Petroleum Institute (API) RP 1109
- American Public Works Association (APWA) Uniform Color Code
- Department of Transportation (DOT) Office of Pipeline Safety USAS B31.8
- Federal Gas Safety Regulations S 192-321 (e)
- General Services Administration (GSA) Public Buildings Service Guide: PBS 4-1501, Amendment 2
- National Transportation Safety Board (NTSB) PSS 73-1
- Occupational Safety and Health Administration (OSHA) 1926.956 (c) (1)

#### **2.25. Wire and Cable**

All cable and wire shall be plainly marked in accordance with the National Electrical Code (NEC).

##### **2.25.1. Loop Wire**

Loop wire shall be 14 AWG, stranded, copper, single conductor, and shall conform to the International Municipal Signal Association (IMSA) Specification No. 51-7.

##### **2.25.2. Cable No. 14/1 Pair**

Cable No. 14/1 pair loop lead-in cable shall be 14 AWG, stranded, copper paired, electrically shielded conductors, and shall conform to IMSA 19-2.

##### **2.25.3. Grounding conductor**

Grounding conductor and bonding jumper shall be solid or stranded, 4 AWG bare copper.

##### **2.25.4. Service Entrance Conductor**

Service entrance conductor shall be stranded, copper, Type USE-2, sized as required to comply with the NEC.

##### **2.25.5. Terminal for electrical wire or cable**

Terminal for electrical wires or cables shall be insulated, solderless, spade tongue terminals of correct wire and stud size. Terminal for electrical wires or cables shall be incidental to the wire or cable (including piezoelectric sensor transmission cable) to be connected to terminal strips.

**2.26. Wood Post**

Wood post shall be Southern Pine pretreated to conform to the American Wood Preservers' Association (AWPA) C-14 and shall have minimum dimensions of 4 inches by 4 inches by 8 feet long (for Galvanized Steel Cabinet) or 4 feet long (for Junction Box 10x8x4), sawed on all four sides with both ends square.

**2.27. Wooden Pole**

Wooden pole shall be a Class IV wood pole of the length specified and shall conform to the *Standard Specifications for Road and Bridge Construction* except the pole shall be treated in accordance with AWPA P9 Type A.

### 3. CONSTRUCTION METHODS

The plans indicate the extent and general arrangement of the installation and are for guidance. When the Contractor deems any modifications to the plans or specifications necessary, details of such changes and the reasons shall be submitted in writing to the engineer for written approval prior to beginning the modified work.

After the project has been let and awarded, the Division of Construction shall notify the Division of Planning of the scheduled date for a Pre-Construction meeting so that prior arrangements can be made to attend. This will allow the Division of Planning an opportunity to address any concerns and answer any questions that the Contractor may have before beginning the work.

The Division of Planning Equipment Management Team (502-564-7183) shall be notified a minimum of seven days before any work pertaining to these specifications begins to allow their personnel the option to be present during installation.

Unless otherwise specified, installed materials shall be new.

Construction involving the installation of loops or piezoelectric sensors shall not be performed when the temperature of the pavement is less than 38°F.

A final inspection will be performed by a member of the Central Office Division of Planning equipment staff after the installation is complete to verify that the installation is in compliance with the plans and specifications.

Any required corrective work shall be performed per the *Standard Specifications for Road and Bridge Construction*.

#### 3.1. Anchoring

Furnish: Anchor, anchor rod, guy wire, strand vise, guy guard.

Anchor shall be installed in relatively dry and solid soil. Rock anchor shall be installed in solid rock. Excavate the hole at a 45° to 60° angle in line with the guy (hole size shall be slightly larger than the expanded anchor – see manufacturer's recommendation). Attach rod to anchor, install assembly into hole, and expand anchor. Backfill and tamp entire disturbed area. The effectiveness of the anchor is dependent upon the thoroughness of backfill tamping. Attach guy to strand vise on pole and anchor rod and tighten to required tension. Install guy guard on guy.

#### 3.2. Bore and Jack Pipe – 2”

Furnish: Steel Encasement Pipe, 2”

Bore and jack pipe – 2” shall conform to the Section 706 of the *Standard Specifications for Road and Bridge Construction*.

### **3.3. Cleanup and Restoration**

Furnish: Seed Mix Type 1 (as required); fertilizer (as required); agricultural limestone (as required); mulch or hydromulch (as required); tackifier (as required).

The Contractor shall be responsible for repairing any damage to public and/or private property resulting from his work. Upon completion of the work, restore all disturbed highway features in like kind design and materials. This shall include filling any ruts and leveling ground appropriately. Contractor shall dispose of all waste and debris off the project. Sow all disturbed earthen areas with Seed Mix Type 1 per Section 212 of the *Standard Specifications for Road and Bridge Construction*. All materials and labor necessary for cleanup and restoration shall be considered incidental to other bid items.

### **3.4. Conduit**

Furnish: Conduit; conduit fittings; bushings (grounding where required); LB condulets (as required); weatherheads (as required); conduit straps; hardware; conduit sealant.

Conduit that may be subject to regular pressure from traffic shall be laid to a minimum depth of 24 inches below grade. Conduit that will not be subject to regular pressure from traffic shall be laid to a minimum depth of 18 inches below grade.

Conduit ends shall be reamed to remove burrs and sharp edges. Cuts shall be square and true so that the ends will butt together for the full circumference of the conduit. Tighten couplings until the ends of the conduit are brought together. Do not leave exposed threads. Damaged portions of the galvanized surfaces and untreated threads resulting from field cuts shall be painted with an Engineer-approved, rust inhibitive paint. Conduit bends shall have a radius of no less than 12 times the nominal diameter of the conduit, unless otherwise shown on the plans.

Contractor shall install a bushing (grounding bushing where required) on both ends of all conduits. Cap spare conduits on both ends with caps or conduit sealant.

Conduit openings in junction boxes and cabinets shall be waterproofed with a flexible, removable conduit sealant, working it around the wires, and extending it a minimum 1 inch into the end of the conduit.

After the conduit has been installed and prior to backfilling, the conduit installation shall be inspected and approved by the Engineer.

### **3.5. Electrical Service**

Furnish: Meter base, service disconnect, wire, GFCI AC duplex receptacle with box and cover; conduit, conduit fittings, bushings (grounding where required); LB condulets (as required); weatherhead; conduit straps; hardware; conduit sealant; ground rod with clamp; grounding conductor.

Prior to any construction, the Contractor shall initiate a work order with the local power

company for the installation of electrical service to the site. A representative from the Division of Planning and the local power company shall be consulted prior to choosing an exact location for the pole. The Contractor shall clear the right-of-way for the electrical service drop.

Contractor shall obtain electrical inspections, memberships, meter base, service disconnect and any other requirements by the utility serving the installation and pay all fees as required.

Install meter-base and disconnect panel with a 30-ampere, fused, circuit breaker inside. Install a manufactured weatherproof hub connectors to connect the conduit to the top of the meter base and service disconnect.

Install a rigid  $\frac{3}{4}$  inch conduit with three 8 AWG service conductors from the cabinet, through the service disconnect to the meter base and a 1 $\frac{1}{4}$ " conduit with three 8 AWG service conductors from the meter base to a weatherhead two feet from the top of the electrical service pole. Install conduit straps 30 inches on center and provide a drip loop where the wire enters the weatherhead. Splice electric drop with service entrance conductors at the top of the pole.

The limit of conduit incidental to "Install Electrical Service" for a pad mounted cabinet is 24 inches beyond face of service pole.

Install a 120-volt, 20-amp GFCI AC duplex receptacle with box and cover in the automatic data recorder (ADR) cabinet.

Install a ground rod with clamp. Install a grounding conductor wire from the meter base, through the disconnect panel, to the ground rod clamp. Install grounding conductor in 1- $\frac{3}{4}$ " conduit from service disconnect to ground rod.

After completing the installation and before the electrical service is connected, obtain a certificate of compliance from the Kentucky Department of Housing, Buildings and Construction, Electrical Inspection Division.

### **3.6. Flashing Arrow**

Furnish: Arrow Panel

Construction of Flashing Arrow shall conform to the *Standard Specifications for Road and Bridge Construction*.

### **3.7. Galvanized Steel Cabinet**

Furnish: Cabinet; wood posts; concrete; conduit fittings; metal framing channel; pipe clamp; terminal block(s); spade tongue wire terminals; wire labels; hardware.

Where right-of-way allows, locate the cabinet such that it is outside the clear zone in accordance with the *Roadside Design Guide*. Install Cabinet such that the door of the

cabinet faces the roadway.

Excavate as required and install wood posts to a depth of 36 inches and place concrete around posts as shown on the standard detail sheets. Install metal framing channel with pipe clamp between posts.

Install Cabinet on wood posts 38 inches above the finished grade as shown on the standard detail sheets. Install a unistrut between posts when two posts are specified.

Install the required number of terminal blocks on the cabinet back plate. Install a spade tongue terminal on each loop and piezo sensor wire entering the cabinet and connect wires to terminal block(s). Wiring shall be neat and orderly. Label all wires and cables inside cabinet.

Install conduit from ground to cabinet and attach to pipe clamp. Install locknuts to attach conduit to cabinet and install a conduit bushing as shown on the standard detail sheets.

### **3.8. Grounding**

Furnish: Ground rod with clamp; grounding conductor.

At sites with electrical or solar service, all conduits, poles, and cabinets shall be bonded to ground rods and the electrical system ground to form a complete grounded system.

Install such that top of ground rod is a minimum of 3 inches below finished grade.

Grounding systems shall have a maximum 25 ohms resistance to ground. If the resistance to ground is greater than 25 ohms, two or more ground rods connected in parallel shall be installed. Adjacent ground rods shall be separated by a minimum of 6 feet.

### **3.9. Install Pad Mount Enclosure**

Furnish: Concrete; anchor bolts with washers and nuts; conduit; conduit fittings; conduit grounding bushings; ground rod with clamp; grounding conductor; conduit sealant; wooden stakes (where required); wire labels; hardware.

The Contractor shall be responsible for securing the enclosure from the Central Office Division of Planning Warehouse in Frankfort and transporting it to the installation site.

Where right-of-way allows, locate the enclosure such that it is outside the clear zone in accordance with the *Roadside Design Guide*.

Excavate as required, and place concrete to construct the enclosure foundation as specified on the standard detail sheets. Install enclosure on the concrete base such that the door(s) of the enclosure opens away from traffic (hinges away from traffic). Install anchor bolts, washers, and nuts to secure the enclosure to the foundation.

Install ground rod with clamp and install one ¾ inch rigid conduit from enclosure base to

ground rod. Install a grounding conductor from ground rod to enclosure base and bond to each conduit bushing in the base.

Install one ¾ inch rigid steel conduit for electrical service from the base of the enclosure to 24 inches beyond the concrete base. Make all field wiring connections to the electrical service, as applicable.

If electrical service is not provided as a bid item in the contract, plug conduit on both ends with a cap, conduit sealant, or electrical tape. Mark the location of the buried conduit end with a wooden stake labeled “¾ in. conduit.”

Install specified rigid steel conduit(s) into the base of the enclosure for sensor wire entry. Install one spare 2 inch conduit from the enclosure base to 2 feet beyond the concrete base. Plug spare conduit on both ends with a cap, conduit sealant or electrical tape.

The limit of all conduits incidental to “Install Pad Mount Enclosure” is 24 inches beyond the edge of the concrete base.

Wiring in enclosure shall be neat and orderly. Label all wires and cables inside enclosure. KYTC personnel will furnish and install terminal blocks and connect sensors to terminal blocks.

### **3.10. Install Controller Cabinet**

Furnish: Mounting brackets; mounting straps; conduit; LB condulets; conduit fittings; conduit grounding bushings; ground rod with clamp; grounding conductor; cable staples; conduit sealant; wooden stakes (where required); wire labels; hardware.

The Contractor shall be responsible for securing the cabinet from the Central Office Division of Planning Warehouse in Frankfort and transporting it to the installation site. Any existing holes in the cabinet not to be reused shall be covered or plugged to meet NEC requirements.

Install mounting brackets and secure cabinet to pole with mounting straps.

Install a ground rod with clamp. Install grounding conductor in 1-¾” conduit from cabinet to ground rod.

Install one ¾ inch rigid steel conduit with two lb condulets from cabinet to electrical service disconnect box. Make all field wiring connections to the electrical service, as applicable.

If electrical service is not provided as a bid item in the contract, plug conduit on both ends with cap, plumbers putty, conduit sealant, or electrical tape. Mark the location of the buried conduit end with a wooden stake labeled “¾ in. conduit”.

Install specified rigid steel conduit(s) and type LB condulet(s) into the bottom of the

cabinet for sensor wire entry. The limit of conduits incidental to “Install Controller Cabinet” is 24 inches beyond the face of the pole.

Wiring in cabinet shall be neat and orderly. Label all wires and cables inside cabinet. KYTC personnel will furnish and install terminal blocks and connect sensors to terminal blocks.

### **3.11. Junction Box Type 10x8x4**

Furnish: Junction box; wood post; conduit fittings; wire labels; hardware.

Where right-of-way allows, locate the junction box such that it is outside the clear zone in accordance with the Roadside Design Guide.

Excavate as required and install wood post(s) to a depth of 18 inches. Install junction box on wood post such that the bottom of the box is 18 inches above the finished grade as shown on the standard detail sheets. Box shall be installed with four (4) 2½ inch wood screws and washers.

Install locknuts to attach conduit to junction box and install a conduit bushing as shown on the standard detail sheets.

Wiring inside box shall be neat and orderly. Label all wires and cables inside box.

### **3.12. Junction Box Type A, B, or C**

Furnish: Junction box, No. 57 aggregate; grounding conductor

Excavate as required and place approximately 12 inches of No. 57 aggregate beneath the proposed junction box to allow for drainage. Install specified junction box type A, B, or C near the edge of pavement, flush with finished grade per the detail sheets. Where required, orient the box so that the dimensions comply with the National Electrical Code. Stub conduits with grounding bushings into junction box at its base to accommodate wires and connect grounding conductor to all grounding bushings. Backfill to existing grade, and restore disturbed area to the satisfaction of the Engineer.

Wiring inside box shall be neat and orderly. Label all wires and cables inside box.

### **3.13. Loops - Proposed**

Furnish: Wire; saw slot sealant; backer rod; grout; conduit sealant.

The plans and notes specify the approximate location for loop installations. Prior to sawing slots or drilling cores, the Contractor shall meet with a representative of the Division of Planning to verify the precise layout locations on site. Avoid expansion joints and pavement sections where potholes, cracks, or other roadway flaws exist.

Upon completion of this meeting, the Contractor shall measure out and mark the proposed loop locations with spray paint or chalk such that the saw slots will be parallel

and perpendicular to the direction of traffic. Marked lines shall be straight and exact to the locations determined and sized as shown on the plans. Unless indicated otherwise, loops shall be 6 feet by 6 feet square and loops in the same lane shall be spaced 16 feet from leading edge to leading edge.

On resurfacing, rehabilitation, and new construction projects that include new asphalt pavement, the Contractor shall install loops prior to laying the final surface course. On projects with milling and texturing, the Contractor may install the loops prior to or after the milling operation; however, if installed prior to milling, the Contractor shall be responsible for ensuring that the loops are installed at a depth such that the milling operation will not disturb the newly installed loops. The Contractor shall correct damage caused by the milling operations to newly installed loops prior to placement of the final surface course at no additional cost to the Cabinet.

For projects that include the installation of new asphalt and piezoelectric sensors, the Contractor shall mark or otherwise reference all loops installed prior to the final surface course such that the loops can be accurately located when the piezoelectric sensors are installed after placement of the final surface course.

For projects that do not have asphalt surfacing, the Contractor shall install the loops in the surface of the pavement.

The Prime Contractor shall coordinate the installation of loops with the electrical sub-Contractor and the Engineer to ensure correct operation of the completed installation.

The following is a typical step by step procedure for the installation of a loop.

- Carefully mark the slot to be cut, perpendicular to the flow of traffic and centered in the lane.
- Make each saw-cut 3/8-inch wide and at a depth such that the top of the backer rod is a minimum of 2 inches below the surface of rigid (PCC/Concrete) pavement or 4 inches below the surface of asphalt pavement.
- Drill a 1½ inch core hole at each corner and use a chisel to smooth corners to prevent sharp bends in the wire.
- Clean ALL foreign and loose matter out of the slots and drilled cores and within 1 foot on all sides of the slots using a high pressure washer.
- Completely dry the slots and drilled cores and within 1 foot on all sides of the slots using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
- Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a 1½ inch hole on a 45° angle to the conduit adjacent to the roadway.
- Closely inspect all cuts, cores, and slots for jagged edges or protrusions prior to the placement of the wire. All jagged edges and protrusions shall be ground or re-cut and cleaned again.

- Place the loop wire splice-free from the termination point (cabinet or junction box) to the loop, continue around the loop for four turns, and return to the termination point.
- Push the wire into the saw slot with a blunt object such as a wooden stick. Make sure that the loop wire is pushed fully to the bottom of the saw slot.
- Install conduit sealant to a minimum of 1” deep into the cored 1½ inch hole.
- Apply loop sealant from the bottom up and fully encapsulate the loop wires in the saw slot. The wire should not be able to move when the sealant has set.
- Cover the encapsulated loop wire with a continuous layer of backer rod along the entire loop and home run saw slots such that no voids are present between the loop sealant and backer rod.
- Finish filling the saw cut with non-shrinkable grout per manufacturer’s instructions. Alleviate all air pockets and refill low spaces. There shall be no concave portion to the grout in the saw slot. Any excess grout shall be cleaned from the roadway to alleviate tracking.
- Clean up the site and dispose of all waste off the project.
- Ensure that the grout has completely cured prior to subjecting the loop to traffic. Curing time varies with temperature and humidity.

Exceptions to installing loop wire splice-free to the junction box or cabinet may be considered on a case-by-case basis and must be pre-approved by the Engineer. If splices are allowed, they shall be located in a junction box and shall conform to the construction note for Splicing.

If loop lead-in cable (Cable No. 14/1 Pair) is specified, cable shall be installed splice free to the cabinet ensuring that extra cable is left in each junction box or cabinet. All wires and cables shall be labeled in each junction box and cabinet.

Loop inductance readings shall be between 100 and 300 microhenries. The difference of the loop inductance between two loops in the same lane shall be  $\pm 20$  microhenries. Inductance loop conductors shall test free of shorts and grounds. Upon completion of the project, all loops must pass an insulation resistance test of at least 100 million ohms to ground when tested with a 500 Volt direct current potential in a reasonably dry atmosphere between conductors and ground.

### **3.14. Loops – Existing**

When noted on a data collection station layout sheet that there are existing inductive loops within the limits of the project, notify the Engineer in writing, a minimum of 14 calendar days prior to beginning milling operations. After milling and prior to placing asphalt inlay, conduct an operating test on the existing inductance loops at the control cabinet in the presence of the Engineer to determine if the inductance loop conductors have an insulating resistance of a minimum of 100 megohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground. The Department may also conduct its own tests with its own equipment.

If the tests indicate the loop resistances are above the specified limit and the Engineer determines the system is operable, proceed with the asphalt inlay. If the test indicates the loop resistance is not within the specified limits or if the Engineer determines the system is otherwise not operable, prior to placing the asphalt inlay install and test new loop detectors according to the station layout, notes, and Detail Drawings.

The Engineer will contact and maintain liaison with the District Planning Engineer and the Division of Planning in order to coordinate any necessary work.

### **3.15. Maintain and Control Traffic**

Furnish (all as required): Drums, traffic cones, barricades used for channelization purposes, delineators, and object markers.

Maintain and Control Traffic shall conform to the plans, the Standard Specifications for Road and Bridge Construction, and the KYTC Department of Highways Standard Drawings.

### **3.16. Open Cut Roadway**

Furnish: Concrete, reinforcing bars.

Excavate trench by sawing and chipping away roadway to dimensions as indicated on the detail sheets. After placing conduit, install concrete and steel reinforcing bars per the *Standard Specifications for Road and Bridge Construction*. Restore any disturbed sidewalk to its original condition.

### **3.17. Piezoelectric Sensor**

Furnish: Piezoelectric sensor and cable; sensor support brackets; saw slot sealant; backer rod; grout; conduit sealant.

The plans and notes specify the approximate location for piezoelectric sensor (piezo) installations. Prior to sawing slots or drilling cores, the Contractor shall meet with a representative of the Division of Planning to verify the final layout on site. Avoid expansion joints and pavement sections where potholes, cracks, or other roadway flaws exist. Roadway ruts at the proposed piezo location shall not be in excess of 1/2 inch under a 4-foot straight edge.

Install the piezo perpendicular to traffic in the final surface course of the pavement. Locate the sensor in the lane as shown on the site layout drawing. Eleven-foot length sensors shall be centered in the lane.

The following is a typical step by step procedure for the installation of a piezo. Refer specifically to the manufacturer's instructions provided with the sensor prior to installation.

- Carefully mark the slot to be cut, perpendicular to the flow of traffic and properly positioned in the lane.

- It is strongly recommended that a ¾ inch wide diamond blade be used for cutting the slot, or that blades be ganged together to provide a single ¾ inch wide cut. The slot shall be wet cut to minimize damage to the pavement.
- Cut a slot ¾ inch wide ( $\pm 1/16$  inch) by 1 inch minimum deep. The slot should be a minimum of 2 inches longer than the sensor (including the lead attachment). Drop the saw blade an extra ½ inch down on both ends of the sensor. The lead out of the passive cable should be centered on the slot.
- Cut the slot for the passive cable ¼ inch wide and at a depth so that the top of the backer rod is a minimum of 2 inches below the road surface.
- Clean ALL foreign and loose matter out of the slot and within 1 foot on all sides of the slot using a high pressure washer.
- Completely dry the slot and within 1 foot on all sides of the slot using oil-free forced air, torpedo heaters, electric heaters, or natural evaporation, depending on weather conditions. Be very careful not to burn the asphalt if heat is used.
- Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a 1½ inch hole on a 45° angle to the conduit adjacent to the roadway.
- Place strips of 2-4 inch wide tape strips on the pavement along the lengths of both sides of the sensor slot, 1/8 inch away from the slot.
- Wear clean, protective latex (or equivalent) gloves at all times when handling sensors. Visually inspect sensor to ensure it is straight. Check lead attachment and passive cable for cuts, gaps, cracks and/or bare wire. Verify that the correct sensor type and length is being installed by checking the data sheet. Verify there is sufficient cable to reach the cabinet. Piezo lead-in cable shall not be spliced.
- Test the sensor for capacitance, dissipation factor and resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within  $\pm 20\%$  of the piezo data sheet. Resistance (using the 20M setting) should be infinite. Record the sensor serial number and the test results and label “pre-installation.” This information should be stored in the counter cabinet and/or returned to Department Planning personnel.
- Lay the sensor next to the slot and ensure that it is straight and flat.
- Clean the sensor with steel wool or an emery pad and wipe with alcohol and a clean, lint-free cloth.
- Place the installation bracket clips every 6 inches along the length of the sensor.
- Bend the tip of the sensor downward at a 30° angle. Bend the lead attachment end down at a 15° angle and then 15° back up until level (forming a lazy Z).
- Place the sensor in the slot, with the brass element 3/8 inch below the road surface along the entire length. The tip of the sensor should be a minimum of 2 inches from the end of the slot and should not touch the bottom of the slot. The top of the plastic installation bracket clips should be 1/8 inch below the surface of the road. The lead attachment should not touch the bottom or sides of the slot. Ensure the sensor ends are pushed down per the manufacturer’s instructions.
- Visually inspect the length of the sensor to ensure it is at uniform depth along its length and it is level (not twisted, canted or bent).

- On the passive cable end, block the end of the slot approximately 3-5 inches beyond the end of the lead attachment area creating an adequate “dam” so that the sensor grout does not flow out.
- Use one bucket of sensor grout per piezo installation. Overfill the slot with sensor grout and allow to cure for a minimum of 10 minutes before continuing with the installation. Ensure that sensor grout fills around and beneath the sensor completely and that there is not a trough on top.
- Remove the tape along the sides of the saw slot when the adhesive starts to cure.
- Carefully remove the dam from the end of the sensor.
- Route the lead-in cable through the saw slot
- Install conduit sealant to a minimum of 1” deep into the cored 1½ inch hole.
- Cover the lead-in cable with encapsulant, backer rod, and grout.
- If necessary, after the grout has hardened, grind with an angle grinder until the profile is a 1/16 inch mound. There shall be no concave portion to the mound.
- Clean up the site and dispose of all waste off the project.
- Ensure that the sensor grout has completely cured prior to subjecting the sensor to traffic. Curing time will vary with temperature and humidity.

Upon installation, test the sensor for capacitance, dissipation factor and resistance, according to the directions enclosed with the sensor. Capacitance and dissipation should be within +20% of the piezo data sheet. Resistance (using the 20M setting) should be infinite. Perform a functional test of the piezo with an oscilloscope to ensure that the sensor is generating a proper response to the passage of vehicles.

Record the sensor serial number and the test results and label “post-installation.” This information should be stored in the counter cabinet and/or returned to Department Planning personnel.

### **3.18. Pole – Wooden**

Furnish: Pole; anchoring equipment (as required); hardware (as required).

Excavate and install wood pole to a minimum depth of one-sixth the total pole height. Place backfill material in hole and compact until flush with existing grade. Install guy wire, guy guard, anchor, anchor rod, and strand vise, if necessary. Anchor shall be a minimum of one-third the pole height from the face of the pole. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer.

### **3.19. Removal of Existing Equipment**

The Contractor shall remove existing materials (including but not limited to: poles, anchors, cabinets, junction boxes, conduit and wire) not to be reused. Contractor shall dispose of all removed materials off the project. All materials and labor necessary for the removal of existing equipment shall be considered incidental to other bid items.

### **3.20. Signs**

Furnish: Signs; sign standards; hardware.

Construction of signs shall conform to the *Standard Specifications for Road and Bridge Construction*.

### **3.21. Splicing**

Furnish: Splice kit; solder.

These notes describe the splicing process (if permitted) and are not intended to grant permission to splice. Permission to splice shall be determined by the Division of Planning and the locations shall be shown on the layout sheet. If splicing is needed but not shown on the layout sheet, the Contractor shall receive prior written approval from the Division of Planning.

All splices shall conform to the provisions of the NEC.

Splices for loop and loop lead-in wire shall be twisted and soldered. Abrade the outer jacket of both wires to promote good adhesion and prevent capillary leak paths. Seal the splice with an electrical sealing resin. Spliced loop conductors shall test free of shorts and unauthorized grounds and shall have an insulating resistance of at least 100 megohms when tested with a 500 volt direct current potential in a reasonably dry atmosphere between conductors and ground.

For piezos, the same type coax cable, supplied by the manufacturer, shall be used to splice to the sensor's lead-in cable. Cables shall be soldered. Abrade the outer jacket of both cables to promote good adhesion and prevent capillary leak paths. Seal the splice with an electrical sealing resin. Spliced piezo cables shall be tested and have a minimum resistance of 20 megohms, a maximum dissipation factor of 0.03, a capacitance within the manufacturer's recommended range based upon the length of additional cable. A functional test of the piezo shall be performed to ensure that the sensor is generating a proper response to the passage of vehicles.

### **3.22. Trenching and Backfilling**

Furnish: Warning tape; seed mix type I; cereal rye or German foxtail-millet; mulch; concrete (as required); asphalt (as required).

Excavate trench and provide required cover as shown on the standard detail sheets. After placing conduit, backfill material shall be placed and compacted in lifts of 9 inches or less. Install warning tape as shown on the detail sheet. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer. This item shall include concrete, asphalt or approved replacement material for sidewalks, curbs, roadways, etc. (if required).

### **3.23. Wiring**

Furnish: Wire; wire labels; spade tongue wire terminals (as required).

Installation of all wiring shall conform to the NEC. Permanent identification numbers shall be affixed to all wires in all junction boxes and cabinets (see Layout(s) for loop and piezo numbers).

Additional lengths of each loop and piezo sensor wire shall be neatly coiled in all cabinets and junction boxes as follows:

<u>Enclosure Type</u>	<u>Additional length of each wire</u>
Galvanized Steel Cabinet	2'
Pad Mount Cabinet (332)	8'
Pole Mount Cabinet (336)	4'
Junction Box Type 10x8x4	2'
Junction Box Type A, B, or C	2'

### **3.24. Wood Post**

Furnish: Wood post; concrete (as required); seed mix type I; cereal rye or German foxtail-millet; mulch.

Excavate hole to specified depth and place concrete, if required. Install post, backfill to existing grade, and tamp backfill. Provide temporary erosion control, seeding, protection and restoration of disturbed areas to the satisfaction of the Engineer.

#### **4. BID ITEM NOTES AND METHOD OF MEASUREMENT FOR PAYMENT**

Only the bid items listed will be measured for payment. All other items required to complete the vehicle detection installation shall be incidental to other items of work. Payment at the contract unit price shall be full compensation for all materials, labor, equipment and incidentals to furnish and install these items.

##### **4.1. Bore and Jack Pipe – 2”**

Bore and jack pipe – 2” shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

##### **4.2. Conduit**

Conduit shall include furnishing and installing specified conduit in accordance with the specifications. This item shall include conduit fittings, bodies, boxes, weatherheads, expansion joints, couplings, caps, conduit sealant, electrical tape, clamps, bonding straps and any other necessary hardware. Conduit will be measured in linear feet.

##### **4.3. Electrical Service**

Electrical Service shall include furnishing and installing all necessary materials and payment of all fees toward the complete installation of an electrical service which has passed all required inspections. Incidental to this item shall be furnishing and installing:

- Meter-base per utility company’s specifications
- Service disconnect panel per utility company’s specifications
- Meter base and service disconnect entrance hubs, waterproof
- Service entrance conductors
- Rigid steel conduit
- Rigid steel conduit fittings
- Conduit straps
- Weatherhead
- Duplex GFCI receptacle, 120-volt, 20-amp
- Ground rod with clamp
- Grounding conductor

Also incidental to this item shall be any necessary clearing of right of way for the electrical service drop.

Electrical service will be measured in individual units each.

##### **4.4. Flashing Arrow**

Flashing Arrow shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

##### **4.5. Galvanized Steel Cabinet**

Galvanized Steel Cabinet shall include furnishing and installing galvanized steel cabinet on post as specified. Incidental to this item shall be furnishing and installing grounding hardware, and any necessary post/pole mounting hardware. Also incidental to this item shall be furnishing and installing the required number of terminal blocks and connection of all

sensors to the terminal blocks. Galvanized Steel Cabinet will be measured in individual units each.

#### **4.6. Install Pad Mount Enclosure**

Install Pad Mount Enclosure shall include installing a Department-furnished enclosure as specified on the detail sheets.

This item shall include obtaining the enclosure from KYTC and transporting it to the installation site and furnishing and installing the following:

- Concrete foundation (including any excavation necessary)
- Anchor bolts, lock washers, and nuts
- Conduit
- Conduit fittings (including grounding bushings)
- Weatherhead
- Terminal Strip(s)
- Ground rod with clamp
- Grounding conductor

Install Pad Mount Enclosure will be measured in individual units each.

#### **4.7. Install Controller Cabinet**

Install Controller Cabinet shall include installing a Department-furnished cabinet as specified on the detail sheets.

This item shall include obtaining the cabinet from KYTC and transporting it to the installation site and furnishing and installing the following:

- Conduit
- Conduit Fittings
- Terminal Strip(s)
- Ground rod with clamp
- Grounding conductor

Install Controller Cabinet will be measured in individual units each.

#### **4.8. Junction Box Type 10" x 8" x 4"**

Junction Box Type 10"x8"x4" shall include furnishing and installing specified junction box in accordance with the specifications. This item shall include connectors, splice sleeves, conduit fittings, mounting materials and any other items required to complete the installation. Incidental to this item shall be furnishing and installing specified post (wood, channel, metal, etc.) as required for the installation. Junction Box Type 10"x8"x4" will be measured in individual units each.

#### **4.9. Junction Box Type A, B, or C**

Junction Box Type A, B, or C shall include furnishing and installing specified junction box in accordance with the specifications. This item shall include excavation, furnishing and installing #57 aggregate, backfilling around the box, and restoration of disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be furnishing and installing a

grounding conductor bonding all conduit grounding bushings in the box. Junction Box Type A, B, or C will be measured in individual units each.

#### **4.10. Loop Saw Slot and Fill**

Loop Saw Slot and Fill shall include sawing and cleaning saw slots and furnishing and installing conduit sealant, loop sealant, backer rod, grout, or other specified material. Loop Saw Slot and Fill will be measured in linear feet of sawed slot.

#### **4.11. Maintain and Control Traffic**

Maintain and Control Traffic shall be measured for payment per the *Standard Specifications for Road and Bridge Construction*.

#### **4.12. Open Cut Roadway**

Open Cut Roadway shall include excavating trench (sawing and chipping roadway) to dimensions as indicated on the detail sheets and furnishing and placing concrete, steel reinforcing bars, and asphalt. This item also includes restoring any disturbed sidewalk to its original condition. Open Cut Roadway will be measured in linear feet.

#### **4.13. Piezoelectric Sensor**

Piezoelectric sensor (piezo) shall include sawing and cleaning saw slots and furnishing and installing piezo in accordance with the specifications. This item shall include furnishing and installing lead-in wire, conduit sealant, encapsulation material, backer rod, grout, testing, and accessories. Piezo will be measured in individual units each.

#### **4.14. Pole – 35' Wooden**

Pole – 35' Wooden shall include excavation, furnishing and installing specified wood pole, backfilling and restoring disturbed areas to the satisfaction of the Engineer. Incidental to this item shall be furnishing and installing guy wire, anchor and anchor rod, strand vise, and guy guard, if specified.

Pole – 35' Wooden will be measured in individual units each.

#### **4.15. Signs**

Signs shall be furnished, installed, and measured for payment per the *Standard Specifications for Road and Bridge Construction*.

#### **4.16. Trenching and Backfilling**

Trenching and Backfilling shall include excavation, warning tape, backfilling, temporary erosion control, seeding, protection and restoration of disturbed areas to original condition. This item shall include concrete, asphalt or approved replacement material for sidewalks, curbs, roadways, etc. (if required). Trenching and backfilling will be measured in linear feet.

#### **4.17. Wire or Cable**

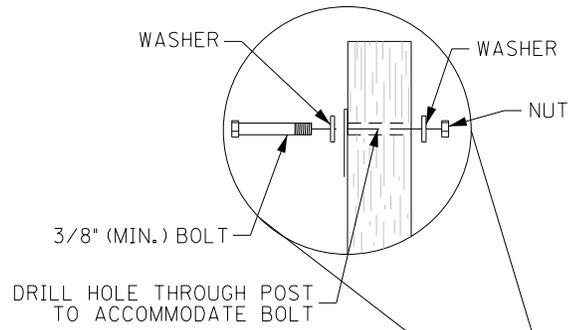
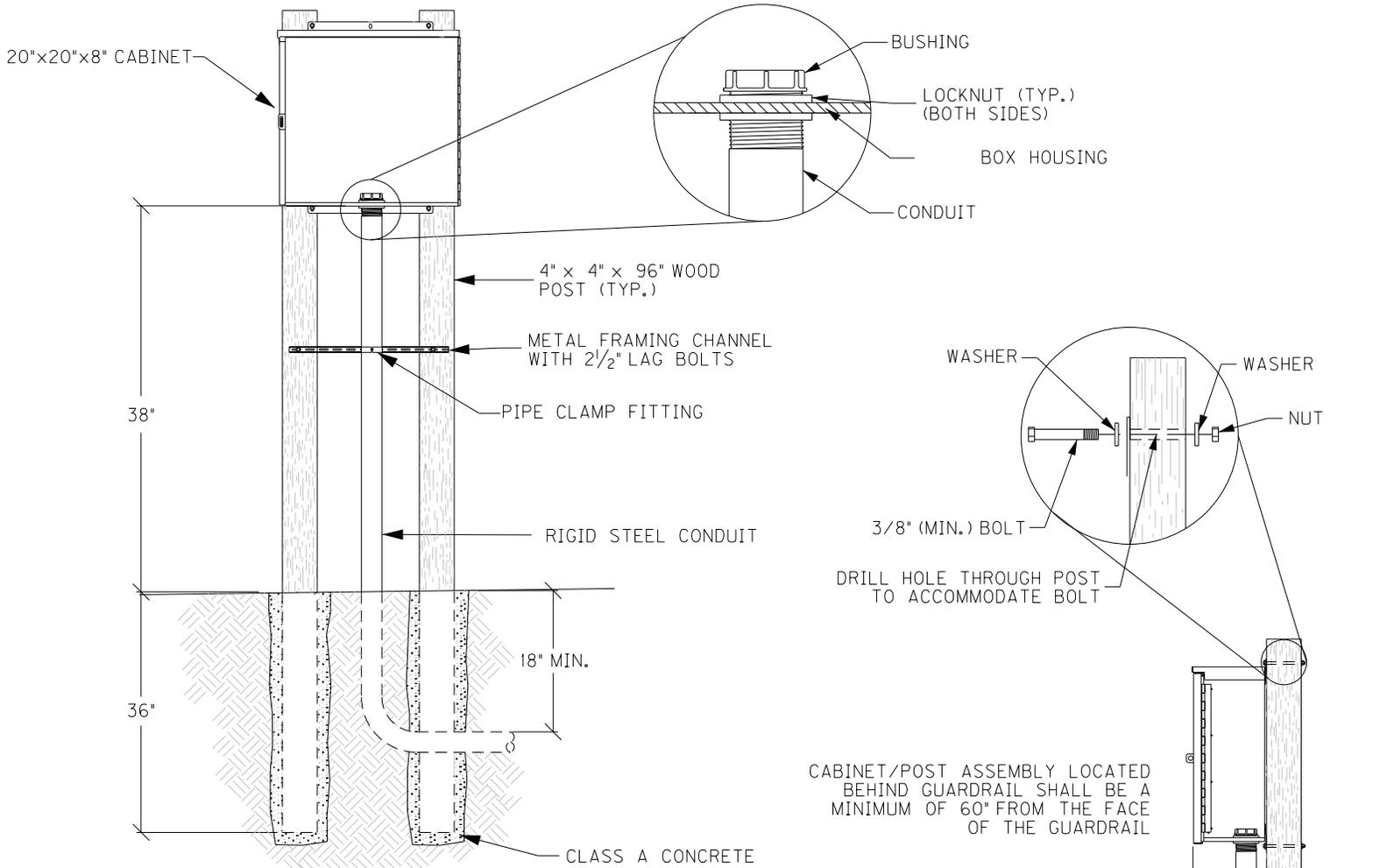
Wire or cable shall include furnishing and installing specified wire or cable within saw slot, conduit, junction box, cabinet, or overhead as indicated on the detail sheets. Incidental to this item shall be the labeling of all wires and cables in each junction box, cabinet and splice

box, and furnishing and installing other hardware required for installing cable. Wire or Cable will be measured in linear feet.

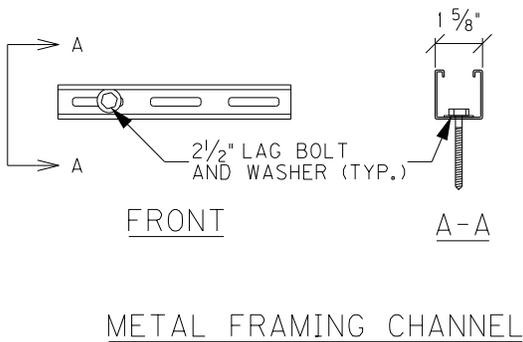
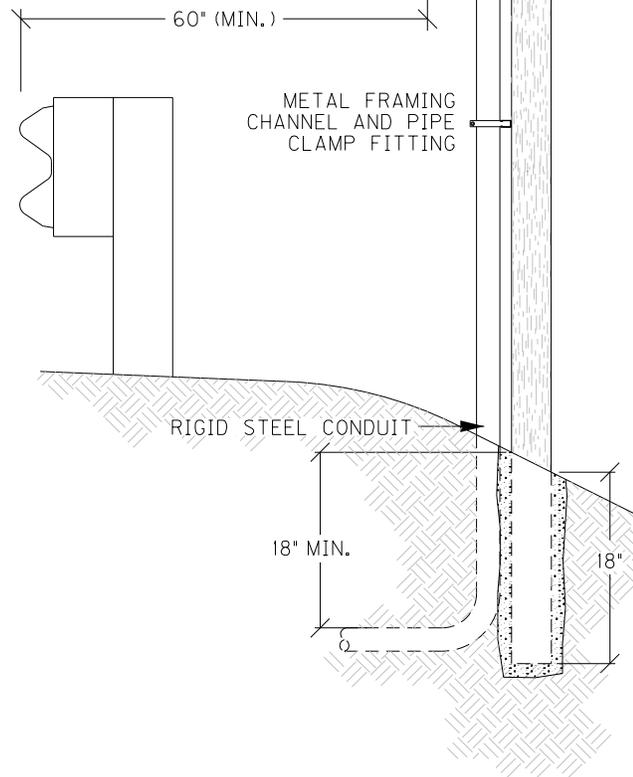
**4.18. Wood Post**

Wood Post shall include furnishing and installing wood post as specified. This item shall include excavation, furnishing and placing concrete (if required), backfilling around the post, and restoration of disturbed areas to the satisfaction of the engineer. Wood Post will be measured in individual units each.

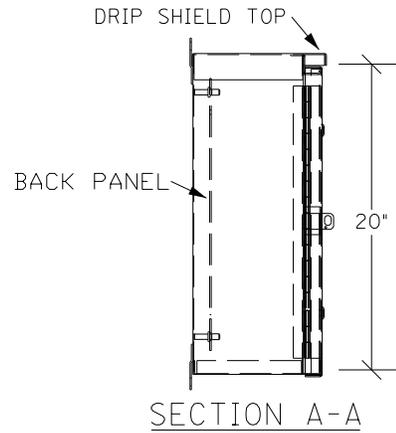
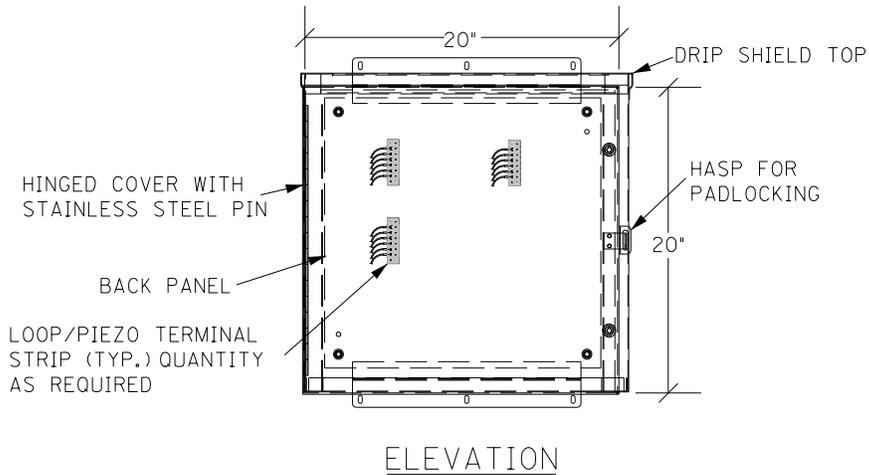
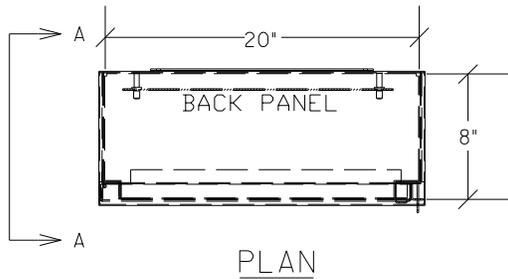




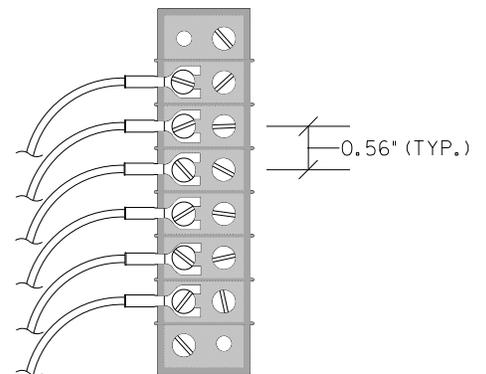
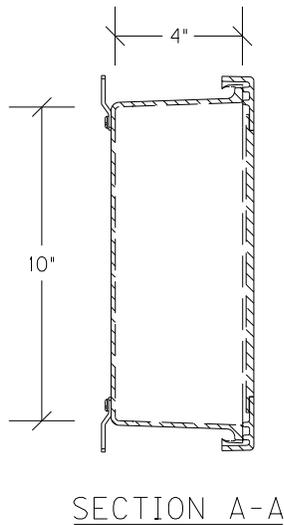
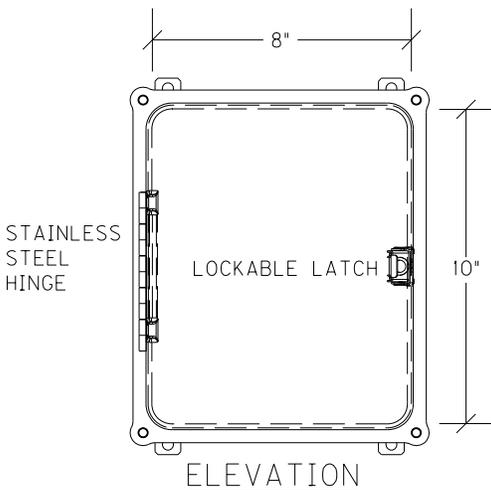
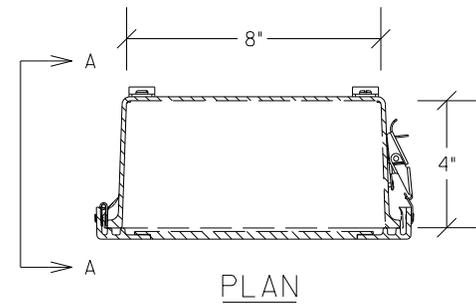
CABINET/POST ASSEMBLY LOCATED BEHIND GUARDRAIL SHALL BE A MINIMUM OF 60" FROM THE FACE OF THE GUARDRAIL



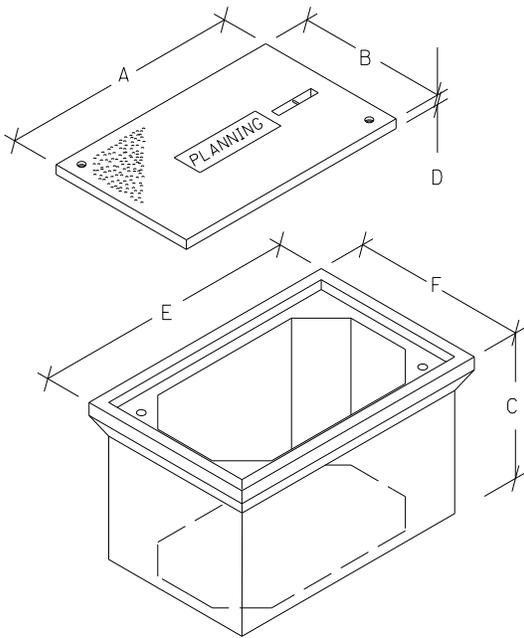
GALVANIZED STEEL CABINET  
DOUBLE POST ASSEMBLY



GALVANIZED STEEL CABINET

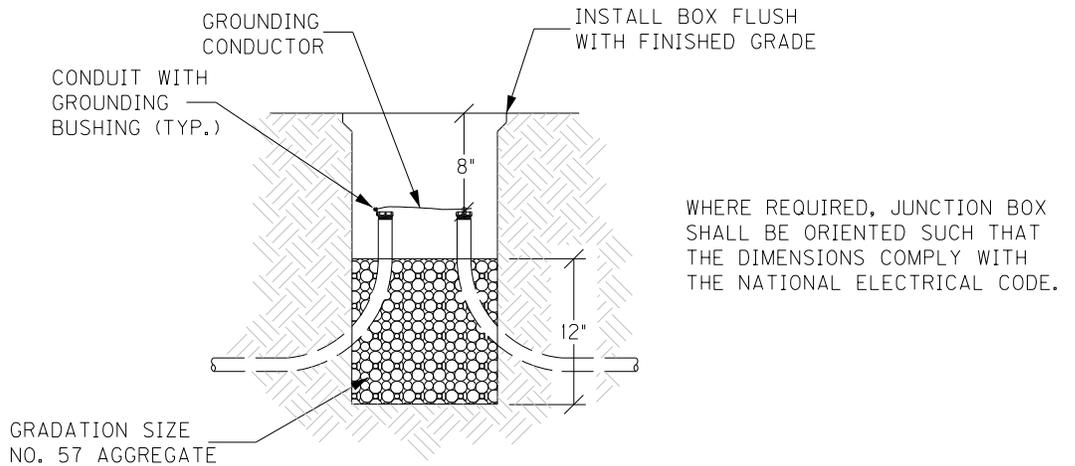


JUNCTION BOX 10"X8"X4"



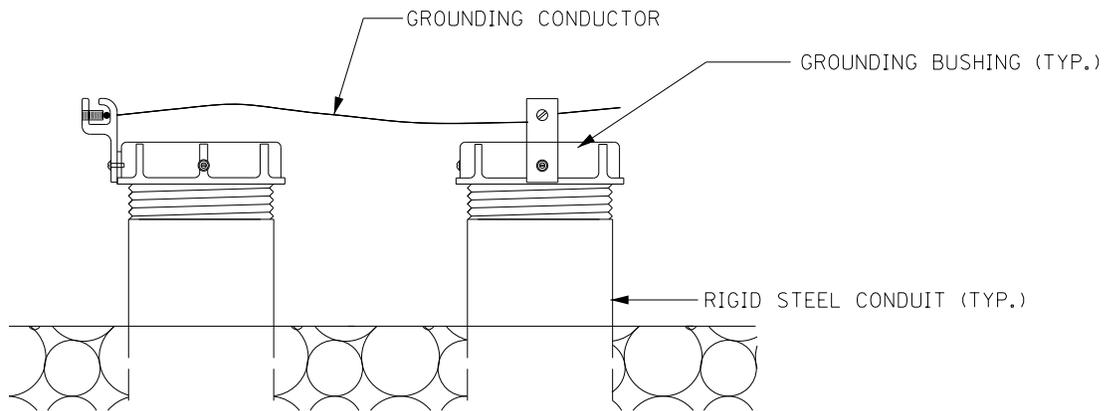
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D*	E	F
TYPE A	23"	14"	18"	2"	25"	16"
TYPE B	18"	11"	12"	1¾"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

\* MINIMUM  
STACKABLE BOXES ARE PERMITTED



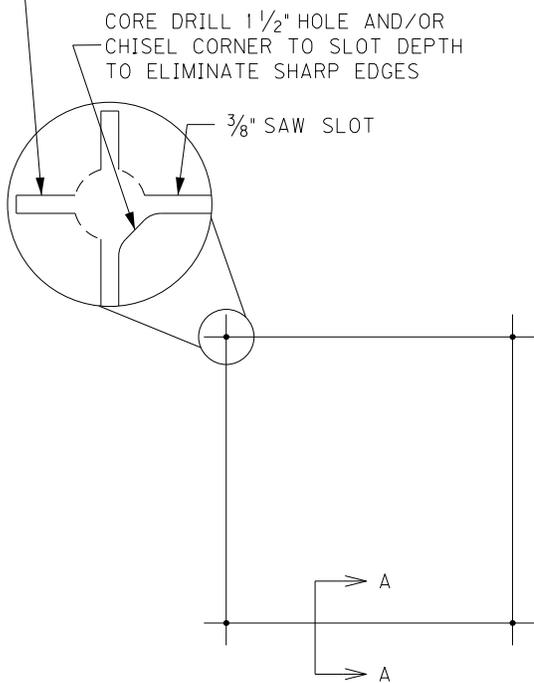
WHERE REQUIRED, JUNCTION BOX SHALL BE ORIENTED SUCH THAT THE DIMENSIONS COMPLY WITH THE NATIONAL ELECTRICAL CODE.

ELEVATION



GROUNDING DETAIL

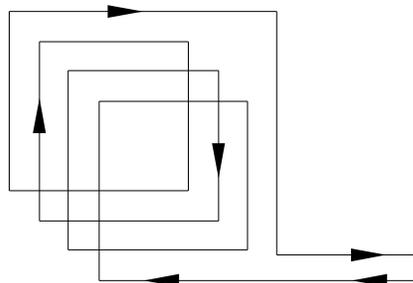
JUNCTION BOX - TYPE A, TYPE B, TYPE C



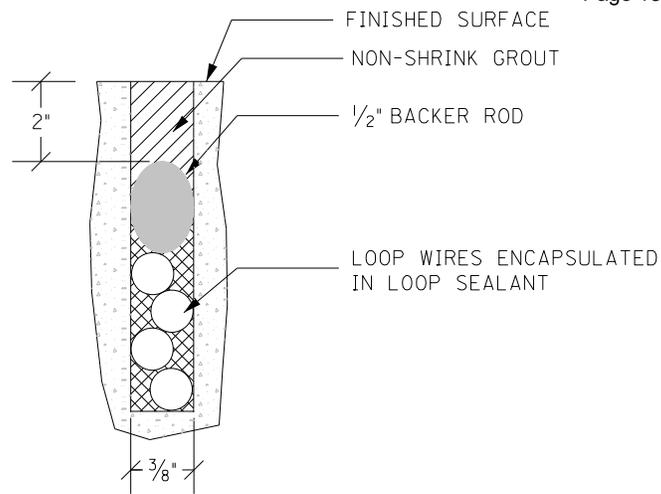
SAW CUT PLAN

UNLESS SPECIFIED OTHERWISE, ALL LOOPS SHALL BE 6' x 6' SQUARE, CENTERED IN EACH LANE, WITH FOUR TURNS OF 14 AWG LOOP WIRE.

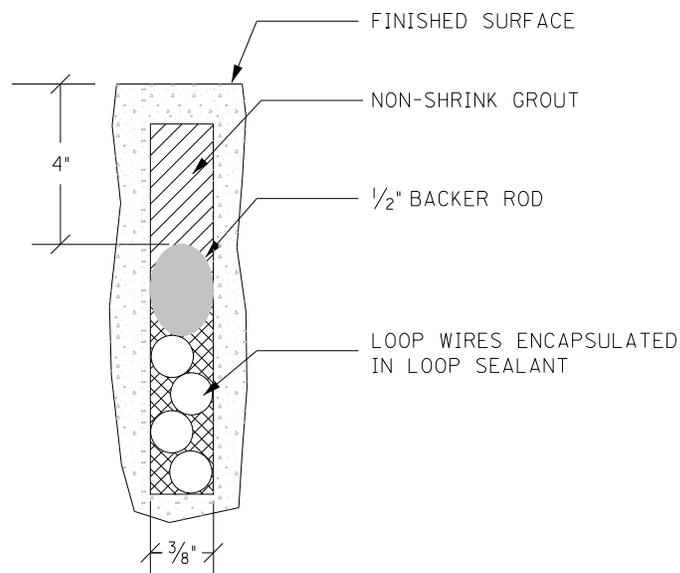
ADJACENT SAW SLOTS SHALL BE A MINIMUM OF 12" APART.



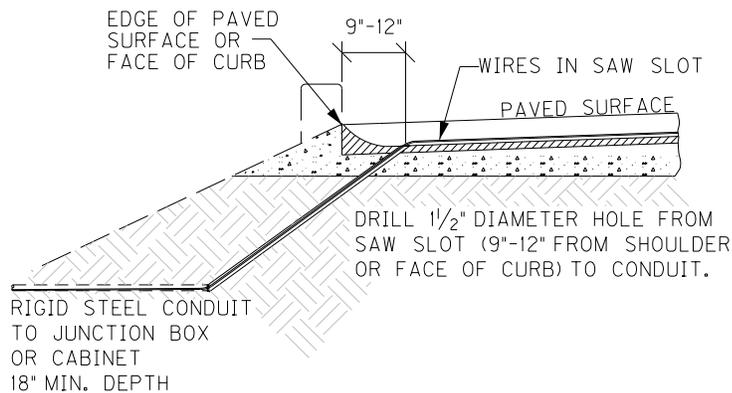
WIRING PLAN



SECTION A-A (CONCRETE)

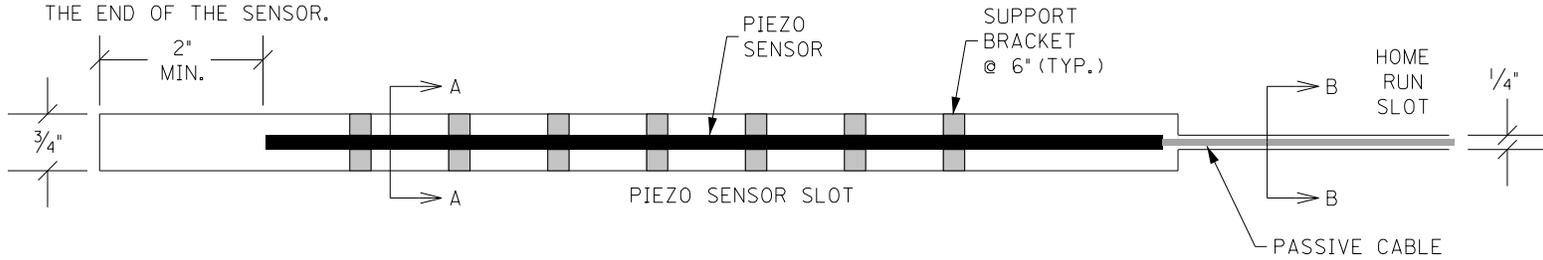


SECTION A-A (ASPHALT)

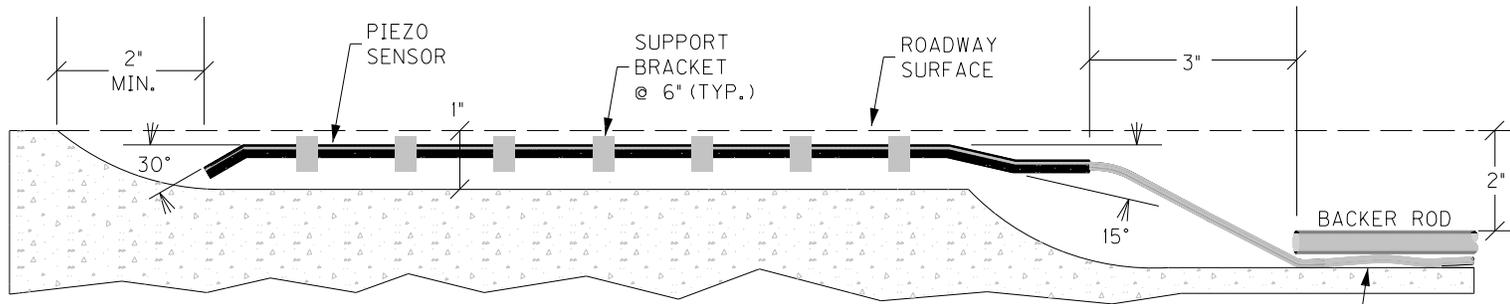


SAW SLOT EDGE OF PAVEMENT TRANSITION

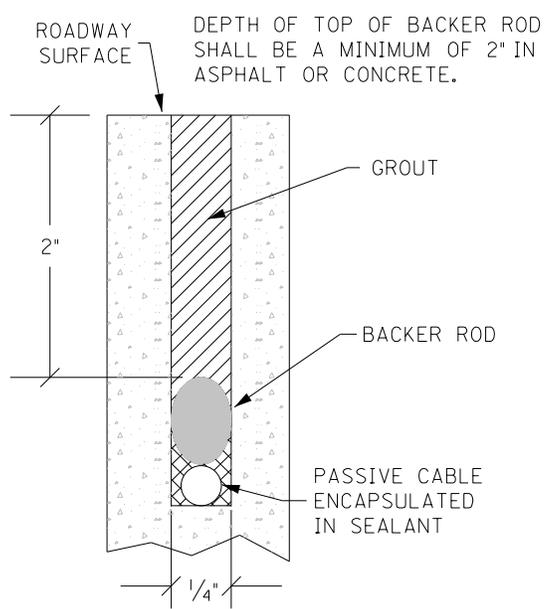
INDUCTIVE LOOP DETECTOR



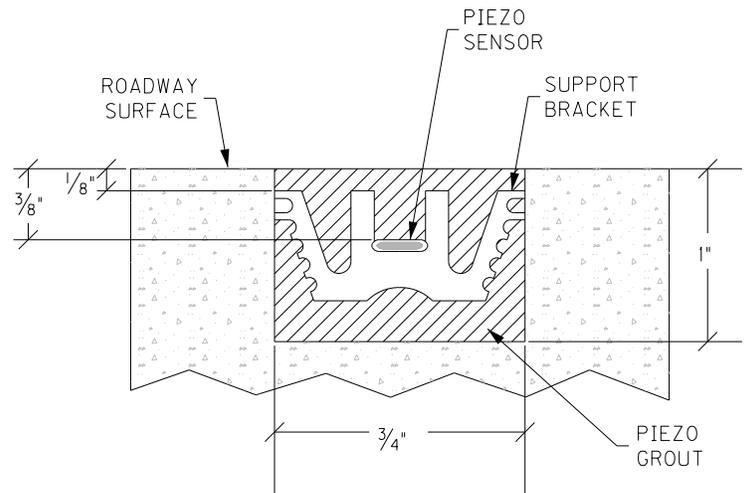
PLAN



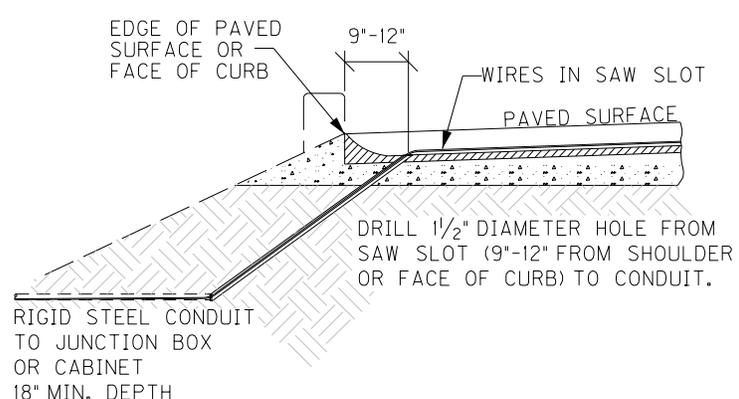
ELEVATION



SECTION B-B



SECTION A-A



SAW SLOT EDGE OF PAVEMENT TRANSITION

PIEZOELECTRIC SENSOR INSTALLATION

**GENERAL NOTES  
I-64 REHABILITATION PROJECT  
FRANKLIN AND WOODFORD COUNTIES  
ITEM NO. 5-2079.00**

**THIS PROJECT IS FOR A FULLY CONTROLLED  
ACCESS HIGHWAY**

**I. GENERAL**

Perform all work in accordance with the Department's 2012 Standard Specifications, Supplemental Specifications, applicable Special Provisions, and the 2016 Standard and Sepia Drawings except as specified in these notes or elsewhere in this proposal. Article references are to the Standard Specifications. This project includes the following work:

- (1) Maintain and Control Traffic; (2) Install Inlaid Pavement Markers; (3) JPC Pavement Diamond Grinding; (4) Partial Depth JPC Pavement Repair; (5) Full Depth JPC Pavement Replacement; (6) Asphalt Pavement Milling and Texturing; (7) Bridge Overlays and Joint Replacements; (8) Guardrail Replacement; and (9) All other work specified as part of this contract.

**II. MATERIALS**

Except as specified in these notes or on the drawings, all materials will be according to the Standard Specifications and applicable Special Provisions and Special Notes. The Department will sample and test all materials according to the Department's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance Of Traffic Plan.

**B. PAVEMENT STRIPING-6 INCH PAINT.** Use 6-inch paint for permanent striping (12 inch at entrance and exit ramp tapers).

**C. EROSION CONTROL BLANKET.** Erosion Control Blanket is to be placed on all disturbed areas such as slopes and around drainage work areas. Straw is not to be used in the median.

**III. CONSTRUCTION METHODS**

**A. MAINTAIN AND CONTROL TRAFFIC.** See Maintenance Of Traffic Plan.

**B. SITE PREPARATION.** Be responsible for all site preparation. This item shall include, but is not limited to, clearing and grubbing, excavation and backfilling, embankments, removal of obstructions or any other items, and disposal of materials. All site preparation shall be only as approved or directed by the Engineer. Except for the bid items listed, site preparation will not be measured for payment but shall be incidental to the other items of work.

- C. MILLING AND PAVING.** After milling, where milling is called for in the proposal, correct settlement over pipes and culverts and remove de-bonded or flaking courses.
- D. DISPOSAL OF WASTE.** Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The Contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right-of-way fence for direct access to waste sites off the right-of-way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits, but will be incidental to the other items of the work. On site disposal of waste will not be allowed.
- E. FINAL DRESSING, CLEANUP, AND SEEDING.** After all work is completed, completely remove all debris from the job site. Perform Final Dressing Class A on all disturbed areas. Place erosion control blanket on all disturbed earthen areas unless directed otherwise by the Engineer.
- F. ON SITE INSPECTION.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.
- G. PROPERTY DAMAGE.** The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's work. Restore all disturbed features in like kind materials and design to the existing or proposed grades, as applicable, at no additional cost to the Department.
- H. CAUTION.** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion 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 conditions encountered are not in accordance with the information shown.
- I. UTILITY CLEARANCE.** Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations at no additional cost to the Department.

#### **IV. METHOD OF MEASUREMENT**

Except as specified in these notes, or elsewhere in the drawings or this proposal, the method of measurement will be in accordance with the Standard Specifications.

- A. MAINTAIN AND CONTROL TRAFFIC.** See Traffic Control Plan.
- B. SITE PREPARATION.** Other than the bid items listed, the Department will not measure Site Preparation for payment but shall be incidental to other items of work.
- C. INLAID PAVEMENT MARKERS AND PERMANENT STRIPING.** Permanent striping (6" and 12") will be measured per linear foot. Inlaid Pavement Markers are measured as each. See the special note for Inlaid Pavement Markers.
- D. JPC PAVEMENT RIDE QUALITY.** See the special note.

#### **V. BASIS OF PAYMENT**

No direct payment will be made other than for the bid items listed. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at the Contractor's expense.

- A. MAINTAIN AND CONTROL TRAFFIC.** See the Traffic Control Plan.
- B. SITE PREPARATION.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.
- C. INLAID PAVEMENT MARKERS AND PERMANENT STRIPING.** See the General Summary sheet.
- D. JPC PAVEMENT RIDE QUALITY.** See the special note.

**NOTES APPLICABLE TO PROJECT  
I-64 REHABILITATION PROJECT  
FRANKLIN AND WOODFORD COUNTIES  
ITEM NO. 5-2079.00**

**THIS PROJECT IS FOR A FULLY CONTROLLED ACCESS HIGHWAY**

1. This project includes full depth PCC pavement replacement, random crack routing and sealing, PCC pavement joint sawing, cleaning and sealing, filling spalled areas in the PCC pavement with Fibrecrete or an approved equivalent, diamond grinding PCC pavement, milling & texturing asphalt shoulders, removing existing concrete paved ditches and replacing them with channel lined ditches, concrete bridge deck overlays and joint replacements as shown in the bridge proposal and any other work shown in the proposal.
2. Four feet of the inside and outside asphalt shoulders on I-64 and Ramps C and D at the US 60 interchange (six feet on right shoulder for ramps) are to be milled 1.5 inches and paved with 1.5 inches of "CL3 Asphalt Surface 0.38D PG64-22". If needed, the depth of the milling is to be adjusted so the elevation of the top of the new asphalt surface matches the elevation of the top of the existing adjacent PCC pavement after it is milled.
3. The two Median Crossovers are to be regraded and additional DGA is to be placed to bring the base up to grade prior to placement of the asphalt base and surface. An estimated quantity of DGA has been included in the Pavement Summary for this work. Crossovers are to be paved with 3.5 inches of "CL3 Base 1.00D PG64-22" and 1.5 inches of "CL3 Asphalt Surface 0.38D PG64-22".
4. DGA is to be used to bring the existing DGA shoulders up to the grade of the paved shoulders where drop-offs exist. A quantity of DGA has been included on the Pavement Summary for this work. The use of asphalt millings will not be permitted for this work.
5. Hydrodemolition is to be used to remove the existing concrete from bridge decks. See the special note for Hydrodemolition in the Bridge Proposal.
6. The concrete latex overlay on the bridge decks may not be placed when the ambient temperature is below 45°F.
7. Any delineator posts, light poles or roadway signs that are damaged during construction are to be replaced at the contractor's expense. Signs that appear to have no visible damage but that are leaning are to be reset as directed by the Engineer. Payment for this work will be considered incidental to the contract.
8. Portable Changeable Message Signs furnished by the contractor shall be retained by the contractor upon completion of the project.

9. The speed limit on this project will be reduced to 55 mph while lane closures are in place. Any time work is suspended, the speed limit will revert back to 70 mph. Also, double fine signs are set up in the project to be installed while workers are present in the work zone.
10. Damaged or missing signs shall be replaced as directed by the Engineer. Per Section 715 of the 2012 Edition of the Standard Specifications for Road and Bridge Construction, payment for sign replacement will be made by "square feet" of "SBM Aluminum Sheet Signs" or "SBM Aluminum Panel Signs" and shall include all materials, labor and equipment necessary to complete the installation of the new signs unless otherwise noted in this proposal or directed by the Engineer. Removal of the existing sign panels will be considered incidental to bid items to construct new signs.
11. Approximately 5,613 tons of asphalt millings from the project are to become the property of the Contractor. The Contractor must remove them from the site and deliver them to a site approved by the Engineer at no additional cost to the Department.
12. The specified completion date for this project is October 1, 2017.
13. All perforated pipe headwalls are to be cleaned. This work is incidental to "Shouldering and Ditching".
14. The cable median barrier is not to be disturbed. Any damage to the cable median barrier caused by the Contractor's equipment or personnel will be repair by the Contractor at no additional expense to the Department.

**TRAFFIC CONTROL PLAN  
I-64 REHABILITATION PROJECT  
FRANKLIN AND WOODFORD COUNTIES  
Item No. 5-2079.00**

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**THIS PROJECT IS FOR A FULLY  
CONTROLLED ACCESS HIGHWAY**

**TRAFFIC CONTROL GENERAL**

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the 2012 Standard Specifications and the 2016 Standard Drawings, current editions. Except for the roadway and traffic control bid items included in the project, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings and the Manual on Uniform Traffic Control Devices (MUTCD), current edition.

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. Traffic control devices will conform to current MUTCD.

Reduce the speed limit in work areas to 55 miles per hour on I-64 (10 miles per hour less than posted speed for ramps) and establish double fines for work zone speeding violations. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Notify the Engineer a minimum of 12 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs will be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for temporary signs. Any relocation or covering of the signs will be incidental to "Maintain and Control Traffic".

**PROJECT PHASING & CONSTRUCTION PROCEDURES**

This project has a fixed completion date of October 1, 2017. See the special note for Fixed Completion Date and Liquidated Damages.

Lane closures will only be permitted during the following days and times:

Daily: Monday – Thursday: 7 PM each evening to 6 AM the following morning  
Weekends: From 7 PM on Friday to 6 AM the following Monday

Only one lane closure per direction may be in place at the same time.

## **RESTRICTED WORKING DAYS**

- July 4<sup>th</sup> Holiday 2017 – From Saturday July 1st at 7 AM to Wednesday July 5th at 7 PM
- Labor Day Weekend – From Friday at 7 AM to Monday at 7 PM
- Thanksgiving Day Weekend – From Thursday at 7 AM to Sunday at 7 PM
- All UK home football game days
- All other holidays covered by the Standard Specifications

The Engineer may specify additional days and hours when lane closures are not allowed.

Note that lane closures are required for the project. Stripe and taper according to the MUTCD and Standard Drawings. Lane closures will be incidental to the “Maintain and Control Traffic” bid item.

During the days and hours when a lane closure is allowed maintain traffic as specified in the phasing notes and typical sections included in these plans.

The contractor must notify the Engineer at least fourteen (14) days prior to the beginning of each construction phase in either direction.

## **PHASE I**

### **I-64 EB & WB**

- a. Use Leveling and Wedging to fill all holes and drop-offs on the inside asphalt shoulder prior to shifting traffic onto the shoulder. Shift traffic to the inside lane and shoulder.
- b. Perform the full depth concrete pavement repairs as shown in the Proposal for the outside traffic lane. Diamond grind all concrete pavement in the outside lane then saw and seal the joints and make all partial depth repairs.
- c. Mill 1.5 inches of surface pavement on four (4) foot of the outside shoulder adjacent to the traffic lane, then place 1.5 inches of surface pavement on the milled shoulder.
- d. Complete all guardrail and shoulder work, and any other work shown in the plans for the outside shoulder, side slopes, ditches and roadway drainage.
- e. Perform the bridge work on the outside lane and shoulder of the bridges for the bridges shown in the Bridge Proposal section of this Proposal.
- f. Place temporary striping before shifting traffic back onto the outside lane at the end of each work session.

Traffic channelizing devices are to be moved along with the active construction zone to minimize traffic on the shoulders.

## **PHASE II**

### **I-64 EB & WB**

- a. Shift traffic to the outside lane and shoulder.
- b. Perform the full depth concrete pavement repairs as shown in the Proposal for the inside traffic lane. Diamond grind all concrete pavement in the inside lane then saw and seal the joints and make all partial depth repairs.
- c. Mill 1.5 inches of surface pavement on four (4) foot of the inside shoulder then place 1.5 inches of surface pavement on the milled shoulder.
- d. Complete all guardrail and shoulder work, and any other work shown in the plans for the inside shoulder, side slopes, ditches and roadway drainage.
- e. Perform the bridge work on the inside lane and shoulder of the bridges for the bridges shown in the Bridge Proposal section of this Proposal.
- f. Place temporary striping before shifting traffic back onto the inside lane at the end of each work session.

Traffic channelizing devices are to be moved along with the active construction zone to minimize traffic on the shoulders.

## **PHASE III – PERMANENT STRIPING**

After all other work is completed, or when approved by the Engineer, place permanent striping and install the inlaid pavement markers. Mobile operations may be utilized.

## **BRIDGE WORK**

Work on bridge decks and joints is to be performed on the same side of the roadway as the roadway work being performed in that phase.

Work on the bridge approaches (300' either side of the bridge) is not to be performed until after the latex overlay has been placed on the bridge.

The latex overlay on the bridges may not be placed when the ambient temperature is below 45°F.

If unforeseen problems occur during bridge work (as determined by the Engineer), such as the need for full depth repairs that will not permit traffic to be reopened to the lane under construction at the specified time, a lane closure may be permitted to remain in place around the bridge working area only.

## **RAMPS AT THE US 60 INTERCHANGE**

Ramps C and D at the US 60 Interchange will be permitted to be closed from 7 PM on a Friday until 6 AM the following Monday (one weekend) to perform all work on the ramp. The ramps are to be closed on the same weekend.

## **REST AREAS**

The eastbound and westbound rest areas will be permitted to be closed from 7 PM on a Friday until 6 AM the following Monday (one weekend) to perform all work on the rest area ramps. The rest areas are not to be closed at the same time.

## **LANE CLOSURES**

Limit the lengths of lane closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Only one lane closure in each direction at any time will be permitted. Contrary to section 112, lane closures will **NOT** be measured for payment, but are considered incidental to "Maintain and Control Traffic".

Drums are to be used for channelization through the tapers of lane closures. The use of grabber cones will not be permitted in these areas, but will be elsewhere throughout the project with the approval of the Engineer. The Department reserves the right to require drums at any location.

## **SIGNS**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted TRUCKS USE LEFT/RIGHT LANE, LEFT/RIGHT LANE CLOSED 1 MILE, LEFT/RIGHT LANE CLOSED 2 MILE, LEFT/RIGHT LANE CLOSED 3 MILE, SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

## **FLASHING ARROWS**

Flashing arrows will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the flashing arrows upon completion of the work.

## **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message signs (PCMS) in advance of and within the project at locations to be determined by the Engineer. If work is in progress concurrently in both directions provide additional PCMS. Place PCMS one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens, relocate or provide additional PCMS 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 locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. The Department **WILL NOT** take possession of the PCMS upon completion of the work.

## **TRUCK MOUNTED ATTENUATORS**

Furnish and install MUTCD approved truck mounted attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location as directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. TMA will not be measured for payment, but are incidental to "Maintain and Control Traffic". The Department **WILL NOT** take possession of the TMAs upon completion of the work.

## **PAVEMENT MARKINGS**

Remove or cover the lenses of raised pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic".

Place temporary and permanent striping in accordance with Section 112, except that:

1. Temporary and permanent striping will be 6" in width.
2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable tape will be used.
3. Edge lines will be required for temporary striping.
4. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.
5. Place permanent striping on bridge decks and pavement within the project limits.
6. Permanent striping will be Permanent Paint (6 or 12 inch).

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration after a certain period of time especially if no work is anticipated for a period of time (i.e. Winter shutdown).

## **PAVEMENT EDGE DROP-OFFS**

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, cones, vertical panels, or barricades as shown on the Standard Drawings.

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – Protect with a lane closure.

2" to 4" – Protect with a lane closure. Place plastic drums, cones, vertical panels, or barricades every 50 feet. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

4" and greater - Drop-offs 4" or greater will be allowed during duration of the project. Protect with a lane or shoulder closure using drums, cones, or barricades. Place drums, cones, or barricades with spacing not to exceed 20 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations. Place Type III Barricades facing oncoming traffic at each drop off. If for any reason traffic must be maintained less than 6 feet from the drop off, wedge with DGA on 3:1 or flatter slope when work is not actively in progress in the drop-off area. Once excavation begins, work continuously to construct DGA and asphalt base to eliminate the drop-off. Drop-offs greater than 4 inches within 6 feet of traffic will not be allowed during non-working hours.

## **TRAFFIC COORDINATOR**

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must be certified by the American Traffic Safety Services Association (ATSSA). The Traffic Coordinator will inspect the project maintenance of traffic once daily, including weekends, during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

## **COORDINATION OF WORK**

The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

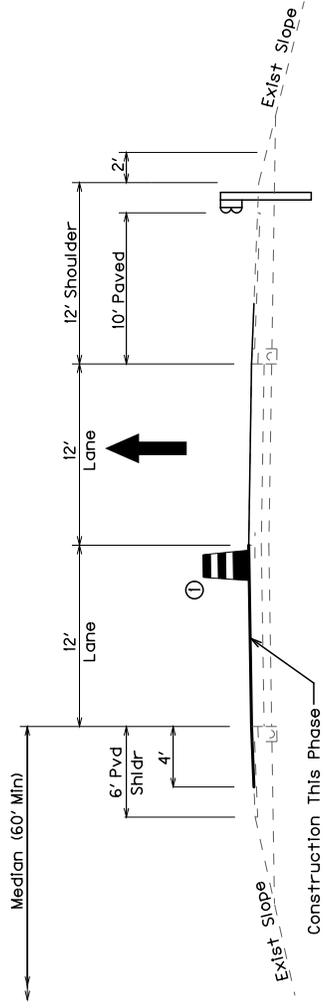
## **CONTRACTOR'S AND CONTRACTOR'S EMPLOYEES' VEHICLES**

Do not use or allow employees to use median crossovers at any time except when inside lanes are closed for construction. In all other phases of construction, change vehicular direction of travel only at interchanges.

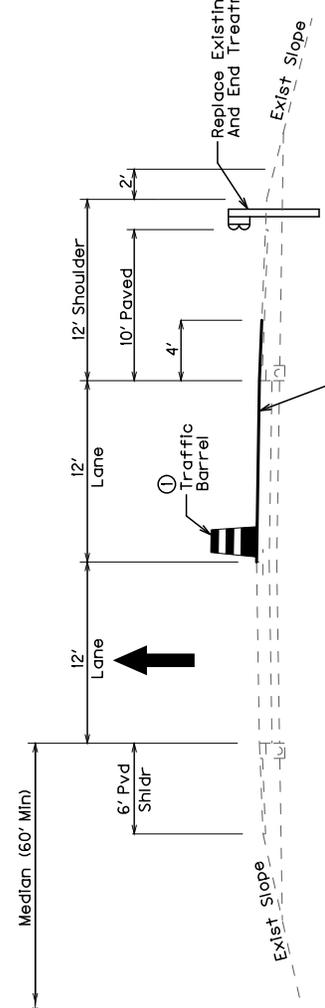
## **LAW ENFORCEMENT OFFICERS (LEO'S)**

Police support shall be a unit consisting of an off-duty policeman from any police force agency having lawful jurisdiction and a police car equipped with externally mounted flashing blue lights. The officers will be placed at the discretion of the engineer. Police support will be measured and paid by bid item 20411ED Law Enforcement Officer on a per hour basis for each officer and police vehicle.

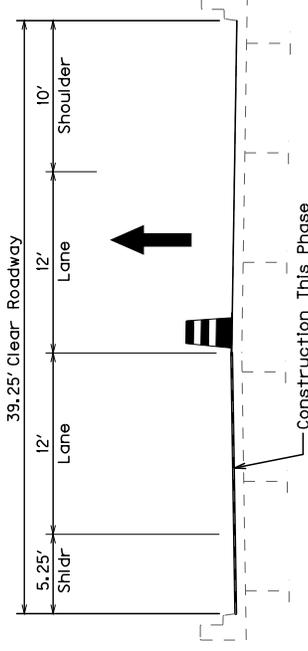
# MAINTENANCE OF TRAFFIC TYPICAL SECTIONS I-64



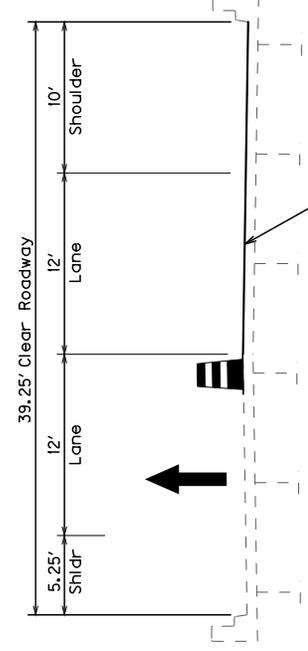
NORMAL SECTION  
EASTBOUND OR WESTBOUND  
PHASE 2



NORMAL SECTION  
EASTBOUND OR WESTBOUND  
PHASE 1



BRIDGE WORK  
NORMAL SECTION  
PHASE 2



BRIDGE WORK  
NORMAL SECTION  
PHASE 1

① Barrels Are To Be Moved Along With The Patching & Grinding Operations To Minimize Traffic On Shoulders.

NOT TO SCALE

**SPECIAL NOTES APPLICABLE TO  
I-64 REHABILITATION PROJECT  
FRANKLIN AND WOODFORD COUNTIES  
ITEM NO. 5-2079.00**

- FIXED COMPLETION DATE AND LIQUIDATED DAMAGES
- 11J FULL DEPTH CONCRETE PAVEMENT REPAIR
- CONCRETE PAVEMENT JOINT AND RANDOM CRACK SEALING
- POLYMER MODIFICATION PARTIAL DEPTH REPAIR
- RIDE QUALITY ADJUSTMENT
- ASPHALT MILLING & TEXTURING
- INLAID PAVEMENT MARKERS
- 1I PORTABLE CHANGEABLE MESSAGE SIGNS
- KPDES PERMIT AND TEMPORARY EROSION CONTROL
- WASTE AND BORROW SITES
- TYPICAL SECTION DIMENSIONS

OTHER SPECIAL NOTES MAY APPLY.

**SEE BRIDGE PROPOSAL FOR SPECIAL NOTES RELATED TO BRIDGE WORK.**

**Special Note for Fixed Completion Date  
And Liquidated Damages  
I-64  
Franklin and Woodford Counties  
Item No. 5-2079.00**

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day or fraction thereof will be assessed for each day work remains uncompleted beyond the Specified Completion Date.

This project has a Fixed Completion Date of October 1, 2017.

In addition to the Liquidated Damages specified in Section 108.09, Liquidated Damages in the following amounts will be charged when a lane closure remains in place during prohibited periods specified in the Traffic Control Plan:

\$3,000 for the first hour or fraction thereof  
\$5,000 for each additional hour or fraction thereof

In addition to the Liquidated Damages specified in Section 108.09, Liquidated Damages in the following amounts will be charged when one of the US 60 Interchange Ramps or Rest Area Ramps remains closed beyond the opening time specified in the Traffic Control Plan:

\$2,500 for the first hour or fraction thereof  
\$5,000 for each additional hour or fraction thereof

Contrary to Section 108.09 of the Standard Specifications, the disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation. This includes the months from December through March.

All liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

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

This Special Note applies to full depth repairs of concrete pavement. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

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

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

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

**2.2 Dowel Bars and Sleeves.** Conform to 811.

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

**2.4 Joint Sealants.** Conform to Subsection 807.03.01 or 807.03.05.

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

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

**2.7 Geotextile Fabric.** Conform to Section 843.

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

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

### **3.0 CONSTRUCTION.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **4.0 MEASUREMENT.**

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

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

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

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

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

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

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

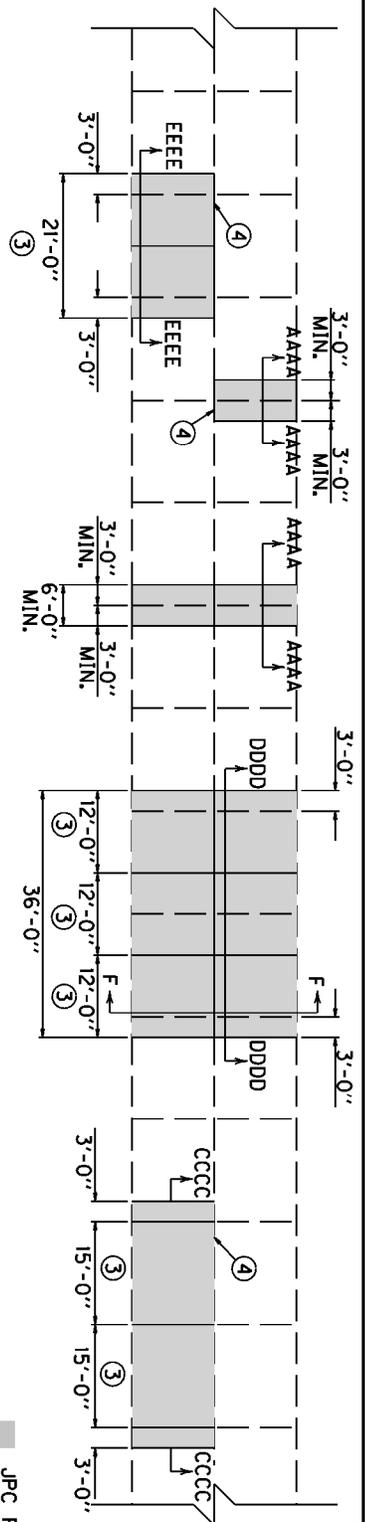
**4.4 Underdrains.** The Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains.

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

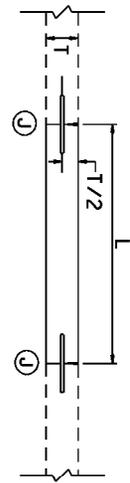
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
----	Remove JPC Pavement	Square Yard
00001	DGA Base	Ton
00003	Crushed Stone Base	Ton
02069-02071, 02073, 02075, 02084, 02086, 02088	JPC Pavement Non-Reinforced, thickness	See Subsection 501.05
01000	Perforated Pipe, 4-inch	Linear Foot
02598, 02599	Fabric-Geotextile, Type	Square Yard

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

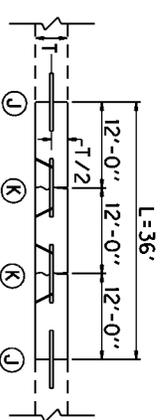
June 15, 2012



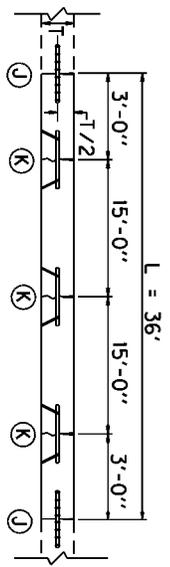
PLAN VIEW



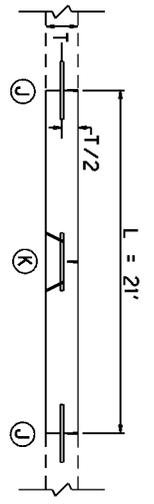
SECTION AAAA  
JOINT REPLACEMENT



SECTION DDDD  
FULL WIDTH REPLACEMENT  
(INCLUDING JPC SHOULDERS)



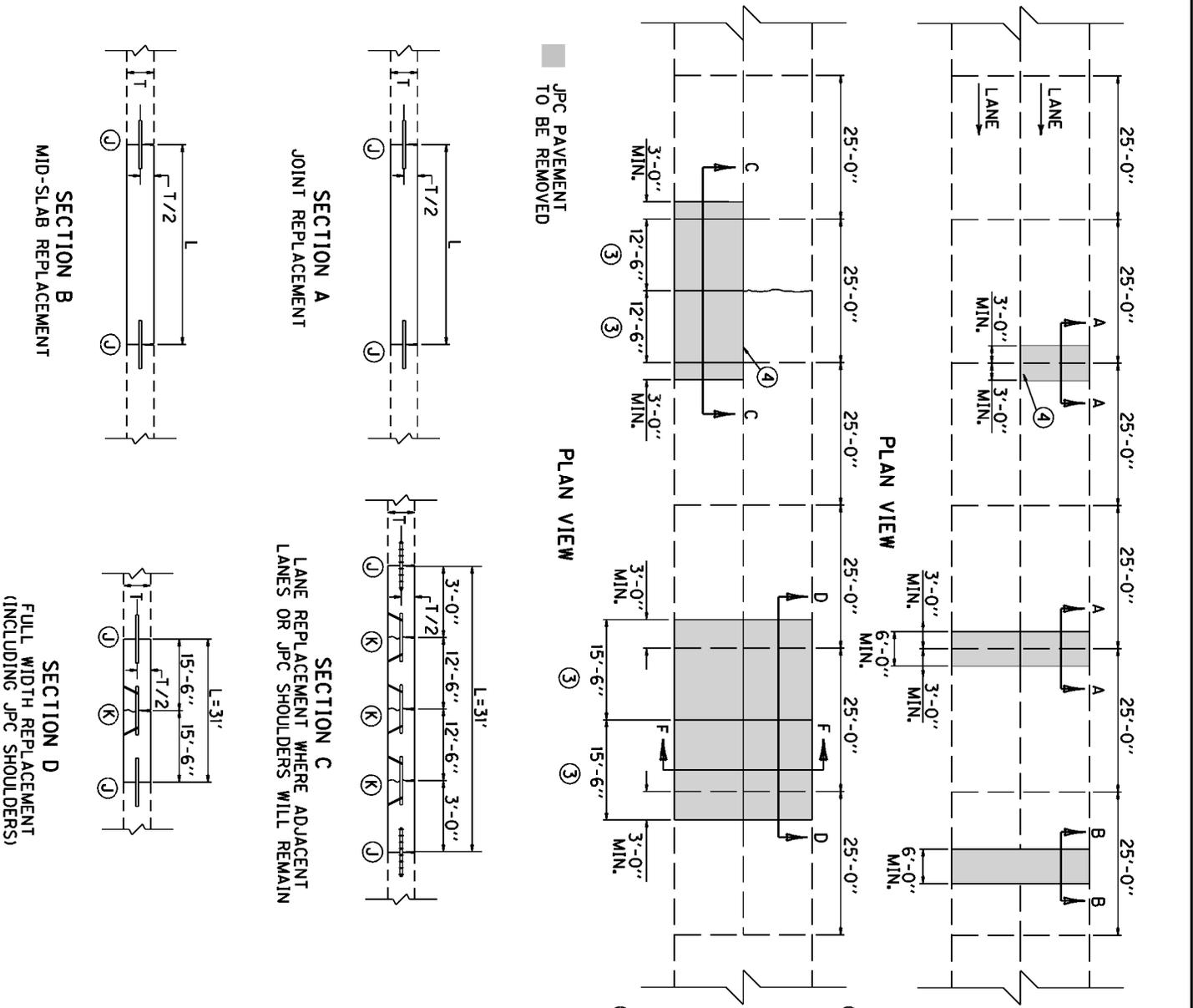
SECTION CCCC  
LANE REPLACEMENT WHERE ADJACENT  
LANES OR JPC SHOULDERS WILL REMAIN



SECTION EEEE  
LANE REPLACEMENT L&25'

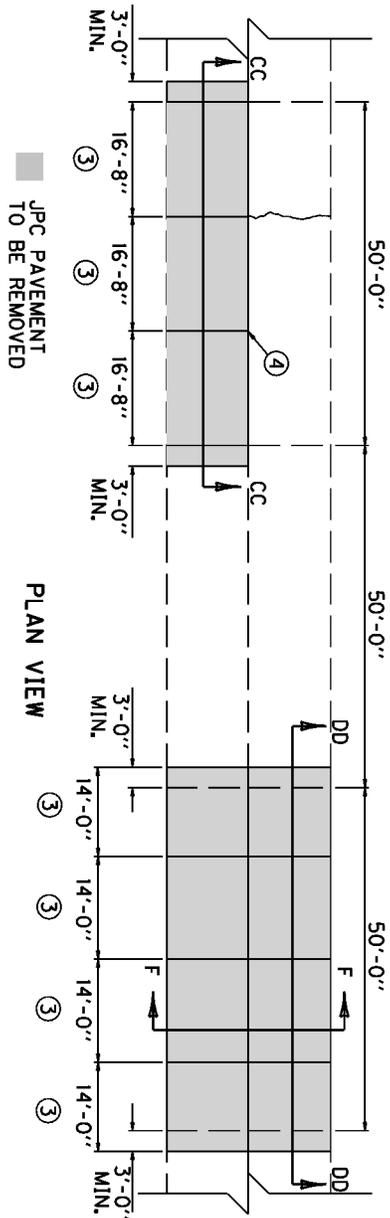
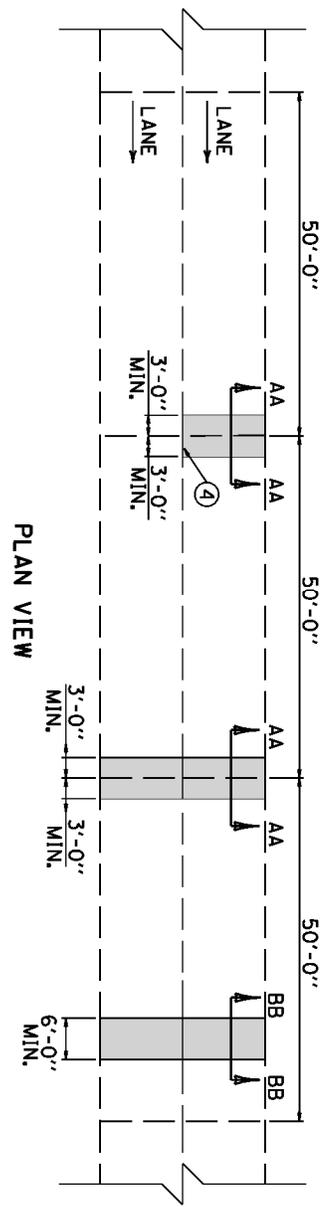
1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM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

KENTUCKY DEPARTMENT OF HIGHWAYS
15' JOINT SPACING
APPROVED _____ <small>TS&amp;M DIVISION OF RES&amp;M</small>
DATE _____

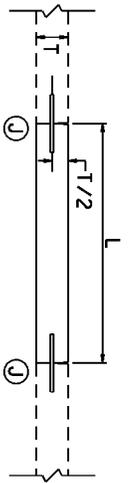


1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM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

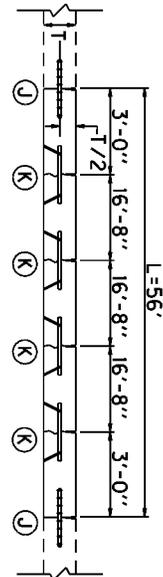
<p><b>KENTUCKY</b> <b>DEPARTMENT OF HIGHWAYS</b></p>
<p><b>25' JOINT SPACING</b></p>
<p>APPROVED _____ DATE _____</p> <p>TEAM DIVISION OF DESIGN</p>



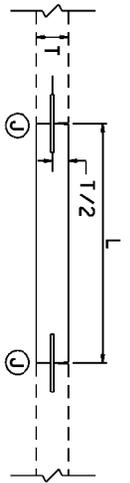
SECTION AA  
JOINT REPLACEMENT



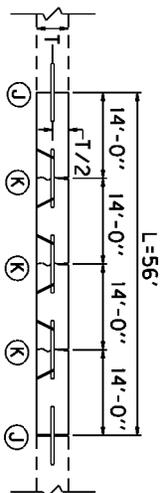
SECTION CC  
LANE REPLACEMENT WHERE ADJACENT  
LANES OR JPC SHOULDERS WILL REMAIN



SECTION BB  
MID-SLAB REPLACEMENT

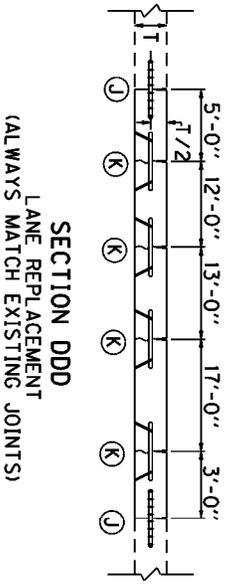
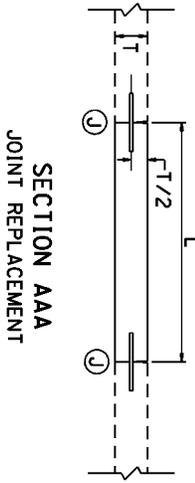
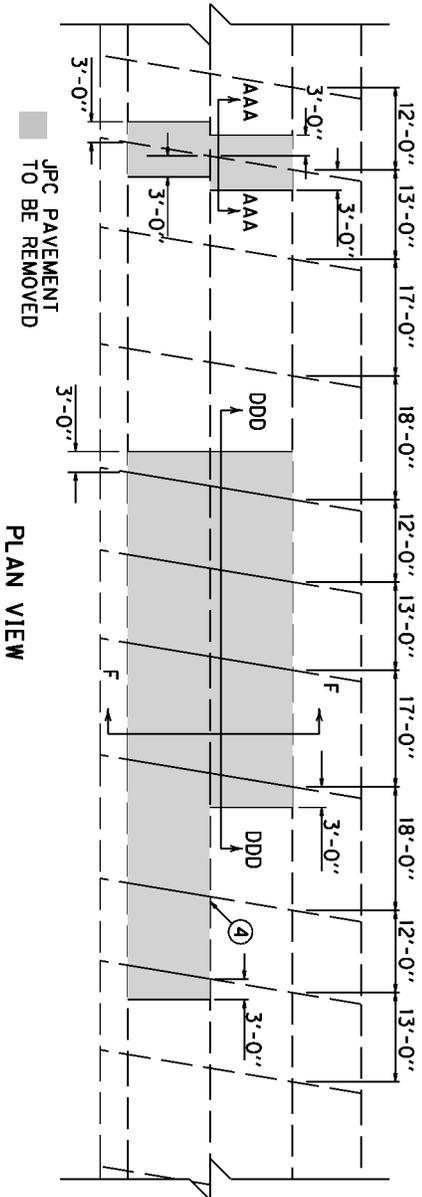


SECTION DD  
FULL WIDTH REPLACEMENT  
(INCLUDING JPC SHOULDERS)



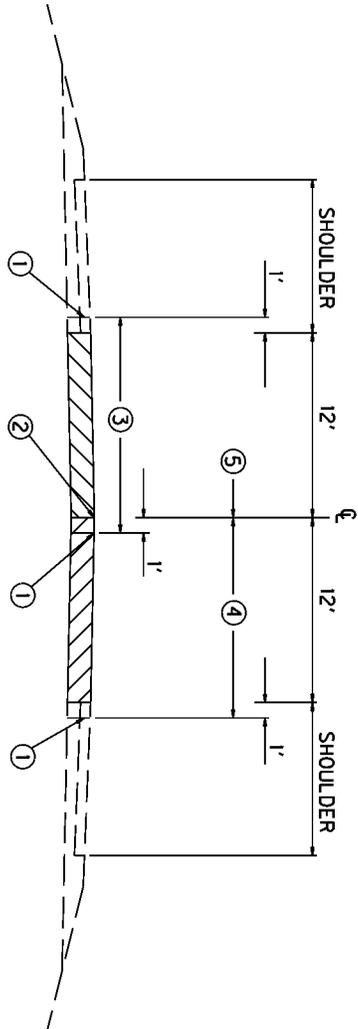
1. SAW AT LOCATIONS "J" AND ALONG LONGITUDINAL JOINT (IF ONLY ONE LANE IS REMOVED) FULL DEPTH WITHOUT DAMAGE TO EXISTING CONCRETE. SAW RELIEF JOINTS AS THE ENGINEER DIRECTS OR APPROVES. REMOVE THE EXISTING JPC PAVEMENT TO THE LENGTH AND AT THE LOCATIONS NOTED ELSEWHERE IN THE CONTRACT. L=6 FEET MINIMUM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

KENTUCKY DEPARTMENT OF HIGHWAYS
50' JOINT SPACING
SUBMITTED _____ TEAM DIVISION OF DESIGN _____ DATE _____



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

KENTUCKY DEPARTMENT OF HIGHWAYS  RANDOM SKEWED	APPROVED _____ <small>TEAM DIVISION OF DESIGN</small>  DATE _____
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SECTION F

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

KENTUCKY  
DEPARTMENT OF HIGHWAYS

CROSS SECTION

APPROVED \_\_\_\_\_  
TECH DIVISION OR DESIG \_\_\_\_\_ DATE \_\_\_\_\_

## **SPECIAL NOTE FOR CONCRETE PAVEMENT JOINT AND RANDOM CRACK SEALING**

### **I. DESCRIPTION**

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications, Special Notes and Special Provisions, and Standard and Sepia Drawings, current editions, as applicable. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Saw, Clean, and Reseal Longitudinal Joints, Transverse Joints, and Random Cracks; (2) Maintain and Control Traffic; and (3) All other work specified as part of this contract.

### **II. MATERIALS**

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

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

**B. Joint Sealant.** Contrary to Section 501.03.18(B) use hot poured elastic, no alternates.

### **III. CONSTRUCTION METHODS**

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

**B. Site Preparation.** Be responsible for all site preparation, including, but not limited to, removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; and any other incidentals. All site preparation shall be only as approved or directed by the Engineer.

**C. Sealing Joints and Random Cracks.** After diamond grinding of the concrete pavement is complete, saw cut, clean, and reseal all longitudinal and transverse joints in the concrete pavement within the project limits. Saw cut, clean, and reseal random cracks shown in the Saw-Clean-Reseal Random Cracks Summary in the Proposal or as designated by the Engineer. Contrary to Standard Drawing RPX-015-04, saw cut the joint or crack a minimum of 1/8 inch wider than the existing joint or crack or to the width necessary to provide a clean, new face for a reservoir for the new seal. Except as provided herein, perform all joint and crack sealing according to section 501.03.18(F) except random cracks only need to be routed to a depth of approximately one inch.

**D. Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design as directed by the Engineer at no additional cost to the Department.

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

**F. Utility Clearance.** Work around and do not disturb existing utilities. It is not anticipated that any utility facilities will require relocation and/or adjustment; however, in the event utilities are discovered that require relocation, the utility companies will work concurrently with the Contractor while relocating their facilities. Working days will not be charged for those days on which work on the controlling item is delayed due to the utility company's phase of the work, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion dates for the applicable category of work will be negotiated with the Contractor for delay to the Contractor's work.

**G. Caution.** Do not take information shown on the sketches and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

**H. Control.** Perform all work under this contract 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 each other's work will be reduced to a minimum. By submitting bid, 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 assure the completion of the work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

#### IV. METHOD OF MEASUREMENT

Except as provided herein, the Department will measure all work in accordance with the 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. The Department will measure only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

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

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

**C. Saw-Clean-Reseal Joints and Random Cracks.** The Department will measure sawed and resealed joints and random cracks in linear feet along the joint or crack. The Department will not measure removing existing joint material or cleaning joints but shall be incidental to Saw-Clean-Reseal Joints and Random Cracks.

#### V. BASIS OF PAYMENT

The Department will make direct payment only for the bid items listed. Consider all other items required to complete the construction to be incidental to the bid items listed.

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

**B. Saw-Clean-Reseal Joints and Random Cracks.** Accept payment at the contract unit price per linear foot of each type as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified.

<u>CODE</u>	<u>PAY ITEM</u>	<u>PAY UNIT</u>
02115	Saw-Clean-Reseal Transverse Joint	Linear Foot
02116	Saw-Clean-Reseal Longitudinal Joint	Linear Foot
021173EC	Saw-Clean-Reseal Random Cracks	Linear Foot

## SPECIAL NOTE FOR POLYMER MODIFIED PARTIAL DEPTH PATCHING

### DESCRIPTION

This work consists of milling or routing, cleaning and patching pot holes, transverse and longitudinal cracks reflected in the existing bituminous surface or longitudinal shoulder joints, transverse and longitudinal random cracks, centerline joints, contraction joints, longitudinal and transverse expansion joints or spalled areas in Portland cement concrete pavement.

### APPLICATIONS

The installed product shall be a hot applied, flexible repair made from a highly polymer modified asphalt binder. The installed product shall provide a load transferring repair that has superior tensile strength and flexibility to accommodate joint and crack movement associated with thermal expansion and contraction, and vibratory movements. The patch must have exceptional resistance to water intrusion and to a broad range of salts, bases, and organic materials.

### MATERIAL SPECIFICATIONS

<u>PROPERTY</u>	<u>METHOD</u>	<u>REQUIREMENT</u>
Tensile Strain	FTL 548-C	35%Minimum @ 2"/minute
Cone Flow	FTL 549-C	10% Maximum
Aggregate Settlement	FTL 551-C	5% Maximum
Flexibility / Mandrel	FTL 550-C	Good/ Better (No tearing at bend point)
Resilience	FTL 547-C	50% Recovery
Application Temp.		300°F - 380°F
Specific Gravity		1.7 -2.0

### SITE PREPARATION

The joint or crack shall be milled with an approved milling machine to the specified width and depth. The pot hole or spall shall be milled, saw cut and jack hammered, or cored and jackhammered to remove the defective areas. The repair surfaces will be cleaned and dried with a hot air lance. The recessed area and vertical walls will be treated with a primer agent to promote adhesion and prevent moisture intrusion (for concrete applications only).

## INSTALLATION

Installation of the material shall be by factory trained and certified installation professionals.

The material will be heated in a thermostatically controlled purpose built mixer, having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300 - 320°F, the molten material will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion.

If the depth of the repair exceeds 1 inch, the remainder of the repair process will consist of layering coarse hot angular aggregate (cleaned and dried) at a rate of 25%-35% by volume with the molten material until within ¾" of the top of the repair. The bulking aggregate must be worked into the patch completely.

**NO DRY LAYERS OF BULKING AGGREGATE WILL BE ALLOWED.**

The final ¾" of the repair will be material for optimum flexibility of the repair. Once this top layer has been screeded to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance. The patch shall be ready for traffic in no more than 1 hour.

All removed materials and residual repair materials will be recovered and disposed of away from the site at the Contractor's expense.

## MEASUREMENT

The Department will measure the quantity of PARTIAL DEPTH PATCHING in cubic feet, either from field measurements or the metered quantity from the mixer, as the Engineer determines.

## PAYMENT

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

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

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

An acceptable product to meet this specification is "Fibrecrete B". Other products that fully meet this specification will also be accepted.

Item No. 5-2079.00  
I64, Franklin and Woodford Counties

### **Special Note for Ride Quality Adjustment**

Contrary to Ride Quality Specification 503.03.09 for Diamond Grinding JPC Pavement, the following Ride Quality Specifications are to be applied:

IRI measurements were performed on the existing pavement on June 29, 2016. Profile data was evaluated to determine projected IRI values after grinding. Attached are the results of the simulation.

The Department will apply a Ride Quality Adjustment for each 0.1-mile lane section tested. The contractor will be required to achieve the IRI listed in the attached table for each 0.1-mile lane section. The values listed are from the outside travel lane in each direction. These were determined to be the highest limiting values. All other lanes in the respective direction should have equal or lower initial IRI values and will be required to obtain equal or lower final IRI values after grinding. The Department will calculate the adjustment by multiplying the diamond grinding payment for each 0.1-mile section tested by its appropriate ride quality pay value found in the Ride Quality Adjustment Schedule below. ***The sum of the pay value adjustments for ride quality shall not result in a positive incentive payment for project as a whole. A negative sum will result in a disincentive being charged to the contractor.***

When requesting tests on partially completed pavement, the Department will perform one test at no charge. The Department will perform additional requested testing and retesting for corrective work or pavement replacement at a cost of \$150 per lane-mile. The Department will deduct charges for additional requested testing and retesting for corrective work from monies due on the Contract.

Item No. 5-2079.00  
I64, Franklin and Woodford Counties

<b>Ride Quality Adjustment Schedule</b>	
<b>All Sections (0.1-mile)</b>	
<b>IRI</b>	<b>Pay Value Adjustment</b>
50 or less	\$750
51	\$630
52	\$520
53	\$420
54	\$330
55	\$250
56	\$180
57	\$120
58	\$70
59	\$30
60 to Target IRI +10	\$0
+11	-\$30
+12	-\$70
+13	-\$120
+14	-\$180
+15	-\$250
+16	-\$330
+17	-\$420
+18	-\$520
+19	-\$630
+20	-\$750
+21 or higher	-\$1,200

*(1) The Department will not apply a positive pay value for corrective work other than removal and replacement to achieve the IRI.*

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	IRI Before Grinding (in/mi)	IRI After Grinding (in/mi)	Target IRI (in/mi)
<b>I64 Eastbound</b>					
57.900	58.000	528	169	128	128
58.000	58.100	528	126	91	91
58.100	58.200	528	94	75	80
58.200	58.300	528	80	61	80
58.300	58.400	528	115	89	89
58.400	58.500	528	85	66	80
58.500	58.600	528	106	100	100
58.600	58.700	528	89	90	90
58.700	58.800	528	82	77	80
58.800	58.900	528	92	85	85
58.900	59.000	528	99	98	98
59.000	59.100	528	130	83	83
59.100	59.200	528	92	80	80
59.200	59.300	528	119	103	103
59.300	59.400	528	132	103	103
59.400	59.500	528	99	84	84
59.500	59.600	528	118	94	94
59.600	59.700	528	95	79	80
59.700	59.800	528	116	103	103
59.800	59.900	528	112	94	94
59.900	60.000	528	73	52	80
60.000	60.100	528	144	125	125
60.100	60.200	528	97	83	83
60.200	60.300	528	87	69	80
60.300	60.400	528	93	67	80
60.400	60.500	528	76	53	80
60.500	60.600	528	99	91	91
60.600	60.700	528	97	93	93
60.700	60.800	528	86	77	80
60.800	60.900	528	124	100	100
60.900	61.000	528	109	101	101
61.000	61.100	528	115	96	96
61.100	61.200	528	125	117	117
61.200	61.300	528	123	106	106
61.300	61.400	528	82	65	80
61.400	61.500	528	104	97	97
61.500	61.600	528	118	106	106
61.600	61.662	325	213	185	185

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	IRI Before Grinding (in/mi)	IRI After Grinding (in/mi)	Target IRI (in/mi)
<b>I64 Eastbound</b>					
61.704	61.804	528	190	141	141
61.804	61.904	528	116	112	112
61.904	62.004	528	82	75	80
62.004	62.104	528	99	75	80
62.104	62.204	528	137	133	133
62.204	62.304	528	91	85	85
62.304	62.404	528	104	88	88
62.404	62.504	528	103	85	85
62.504	62.604	528	109	84	84
62.604	62.704	528	112	105	105
62.704	62.804	528	133	114	114
62.804	62.904	528	100	98	98
62.904	63.004	528	173	156	156
63.004	63.104	528	116	106	106
63.104	63.204	528	67	48	80
63.204	63.304	528	66	50	80
63.304	63.404	528	81	63	80
63.404	63.504	528	59	48	80
63.504	63.604	528	84	76	80
63.604	63.704	528	161	151	151
63.704	63.804	528	120	103	103
63.804	63.904	528	111	103	103
63.904	64.004	528	83	67	80
64.004	64.104	528	85	64	80
64.104	64.204	528	91	87	87
64.204	64.304	528	111	91	91
64.304	64.404	528	112	103	103
64.404	64.504	528	77	61	80
64.504	64.604	528	64	57	80
64.604	64.704	528	75	60	80
64.704	64.804	528	141	135	135
64.804	64.904	528	110	75	
64.904	64.932	147	65	50	

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	IRI Before Grinding (in/mi)	IRI After Grinding (in/mi)	Target IRI
<b>I-64 Westbound</b>					
64.750	64.650	528	148	141	141
64.650	64.550	528	116	101	101
64.550	64.450	528	100	107	107
64.450	64.350	528	68	62	80
64.350	64.250	528	74	63	80
64.250	64.150	528	69	61	80
64.150	64.050	528	93	100	100
64.050	63.950	528	102	104	104
63.950	63.850	528	82	70	80
63.850	63.750	528	70	63	80
63.750	63.650	528	52	32	80
63.650	63.550	528	87	65	80
63.550	63.450	528	72	57	80
63.450	63.350	528	69	50	80
63.350	63.250	528	102	87	87
63.250	63.150	528	56	49	80
63.150	63.050	528	72	56	80
63.050	62.950	528	68	53	80
62.950	62.850	528	98	93	93
62.850	62.750	528	118	112	112
62.750	62.650	528	115	104	104
62.650	62.550	528	89	80	80
62.550	62.450	528	79	68	80
62.450	62.350	528	63	55	80
62.350	62.250	528	67	57	80
62.250	62.150	528	100	87	87
62.150	62.050	528	107	82	82
62.050	61.950	528	85	75	80
61.950	61.850	528	89	76	80
61.850	61.750	528	138	122	122
61.750	61.669	428	173	131	131
61.625	61.525	528	228	156	156
61.525	61.425	528	149	128	128
61.425	61.325	528	141	115	115
61.325	61.225	528	127	118	118
61.225	61.125	528	103	94	94
61.125	61.025	528	107	94	94
61.025	60.925	528	128	137	137

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	IRI Before Grinding (in/mi)	IRI After Grinding (in/mi)	Target IRI
<b>I-64 Westbound</b>					
60.925	60.825	528	104	93	93
60.825	60.725	528	84	80	80
60.725	60.625	528	107	96	96
60.625	60.525	528	73	58	80
60.525	60.425	528	70	54	80
60.425	60.325	528	78	57	80
60.325	60.225	528	51	37	80
60.225	60.125	528	75	54	80
60.125	60.025	528	67	43	80
60.025	59.925	528	60	45	80
59.925	59.825	528	96	86	86
59.825	59.725	528	135	111	111
59.725	59.625	528	132	127	127
59.625	59.525	528	164	131	131
59.525	59.425	528	203	166	166
59.425	59.325	528	109	85	85
59.325	59.225	528	104	82	82
59.225	59.125	528	109	103	103
59.125	59.025	528	193	145	145
59.025	58.925	528	106	80	80
58.925	58.825	528	81	63	80
58.825	58.725	528	76	64	80
58.725	58.625	528	63	48	80
58.625	58.525	528	75	66	80
58.525	58.425	528	68	38	80
58.425	58.325	528	70	55	80
58.325	58.225	528	81	66	80
58.225	58.125	528	77	59	80
58.125	58.025	528	78	61	80
58.025	57.925	528	106	94	94
57.925	57.840	449	110	98	98

**SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING  
ITEM NO. 5-2079.00  
WOODFORD AND FRANKLIN COUNTIES**

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, liquidated damages will be assessed at the rate prescribed by Section 108.09 of the current Standard Specifications until such time as paving operations are begun. Milling & Paving operations must be completed that prevents uneven pavement with adjacent lanes.

Millings will become property of the contractor at no charge to the contractor.

Removal of existing pavement markers prior to milling operations are considered incidental to "Milling and Texturing."

**SPECIAL NOTE FOR INLAID PAVEMENT MARKERS**

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**I. DESCRIPTION**

Except as provided herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and applicable Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. This work shall consist of:

- (1) Maintain and Control Traffic; and (2) Furnish and install Inlaid Pavement Markers (IPMs) in recessed grooves; and (3) Any other work as specified by these notes and the Contract.

**II. MATERIALS**

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

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

**B. Markers.** Provide reflective lenses with depth control breakaway positioning tabs. Before furnishing the markers, provide to the Engineer the manufacturer's current recommendations for adhesives and installation procedures. Use one brand and design throughout the project. Use markers meeting the specifications in the table below.

<b>SPECIFICATIONS FOR HOUSING AND REFLECTOR</b>	
Material:	Polycarbonate Plastic
Weight:	Housing 2.00 oz.
	Reflector 2.00oz.
Housing Size:	5.00" x 3.00" x 0.70" high
Specific Intensity of Reflectivity at 0.2° Observation Angle	
White:	3.0 at 0°entrance angle
	1.2 at 20°entrance angle
Yellow:	60% of white values
Red:	25% of white values

**C. Adhesives.** Use adhesives that conform to the manufacturer's recommendations.

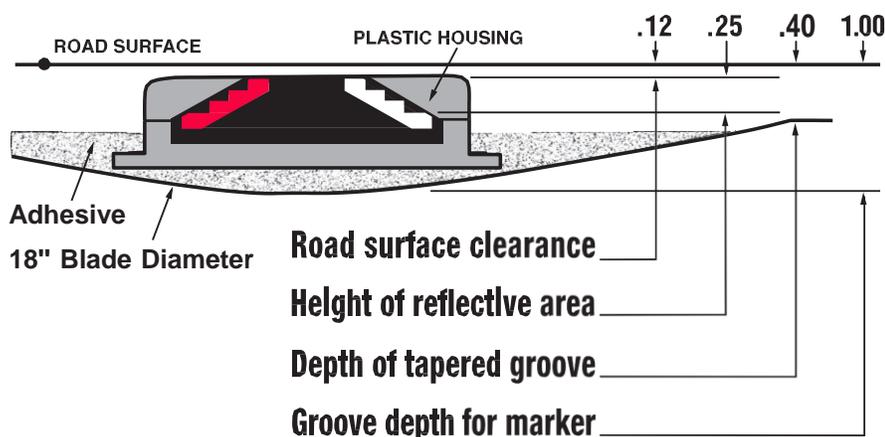
### III. CONSTRUCTION

**A. Experimental Evaluation.** The University of Kentucky Transportation Center will be evaluating this installation of IPMs. Notify the Engineer a minimum of 14 calendar days prior to beginning work. The Engineer will coordinate the University's activities with the Contractor's work.

**B. Maintain and Control Traffic.** See Traffic Control Plan.

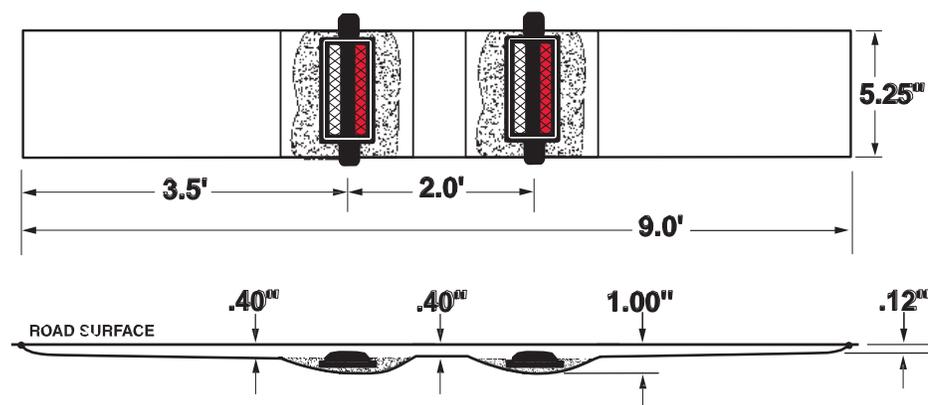
**C. Installation.** Install IPMs in recessed grooves cut into the final course of pavement according to the manufacturer's recommendations. Do not cut the grooves until the pavement has cured sufficiently to prevent damaging the pavement. Cut installation grooves using diamond blades on saws that accurately control groove dimensions. Remove all dirt, grease, oil, loose or unsound layers, and any other material from the marker area which would reduce the bond of the adhesive. Maintain pavement surfaces in a clean condition until placing markers.

Prepare the pavement surfaces, and install the markers in the recessed groove according to the drawing below. Use an approved snowplowable epoxy adhesive. Ensure that the adhesive bed area is equal to the bottom area of the marker, and apply adhesive in sufficient quantity to force excess out around the entire perimeter of the marker. Use materials, equipment, and construction procedures that ensure proper adhesion of the markers to the pavement surface according to the manufacturer's recommendations. Remove all excess adhesive from in front of the reflective faces. If any adhesive or foreign matter cannot be removed from the reflective faces, or if any marker fails to properly adhere to the pavement surface, remove and replace the marker at no additional cost to the Department.



**D. Location and Spacing.** Install the markers in the pattern for high reflectivity with two (2) IPMs per groove. Locate and space markers as shown in the current standard drawings or sepias (note: use Inlaid Pavement Markers wherever Type V Pavement Markers are called for). Do not install markers on bridge decks. Do not install a marker

on top of a pavement joint or crack. Offset the recessed groove a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Give preference to maintaining the 2-inch offset between recessed groove and joint as opposed to keeping the line of markers straight.



Place inlaid markers as much in line with existing pavement striping as possible. Place markers installed along an edge line or channelizing line so that the near edge of the plastic housing is no more than one inch from the near edge of the line. Place markers installed along a lane line between and in line with the dashes. Do not place markers over the lines except where the lines deviate visibly from their correct alignment, and then only after obtaining the Engineer's prior approval of the location.

If conflicts between recessed groove placement in relation to pavement joint and striping cannot be resolved, obtain the Engineer's approval to eliminate the marker or revise the alignment.

**E. Disposal of Waste.** Dispose of all removed pavement, debris, and other waste at sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.

**F. Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.

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

**H. Caution.** Do not take information shown on the drawings and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the

material and conditions to be encountered during construction, but consider the types and quantities of work listed as approximate only. The bidder must draw his own conclusion 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 or extension of Contract time if the conditions encountered are not in accordance with the information shown.

#### **IV. MEASUREMENT**

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

**B. “INLAID PAYMENT MARKER”** shall be measured as each. One (1) installation of “INLAID PAVEMENT MARKER” will consist of grooving the pavement, removing cuttings and debris, preheating pavement to remove moisture, adhesives, and installation of two (2) markers with all lenses in accordance with this note.

**Note: Each pay item of Inlaid Pavement Marker will require two markers.**

#### **V. PAYMENT**

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

**B. Inlaid Pavement Markers.** The Department will make payment for the completed and accepted quantity of completely installed “INLAID PAVEMENT MARKERS” at the Contract unit price, each. Accept payment as full compensation for all labor, equipment, materials, and incidentals to accomplish this work to the satisfaction of the Engineer. A system of one (1) groove and two (2) markers shall be paid as one “INLAID PAVEMENT MARKER”. The bid item “INLAID PAVEMENT MARKER” shall be used regardless of the color and type of lenses required.

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### **SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS**

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

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

### **2.0 MATERIALS.**

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

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

**2.2 Sign and Controls.** All signs must:

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

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

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

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

**2.3 Power.**

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

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

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

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

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

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

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

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

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

Effective June 15, 2012

## **Special Note For: K.P.D.E.S. Permit & Temporary Erosion Control Item No. 5-2079.00 – Woodford and Franklin Counties**

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.

Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices" as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

**Payment:** Payment will be by lump sum under the bid item "K.P.D.E.S. Permit & Temporary Erosion Control".

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

The contractor is advised that it is their responsibility to gain U.S. Army Corp of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". "Waters of the United States" are defined as perennial or intermittent streams, ponds or wetlands. Ephemeral streams are also considered jurisdictional waters, and are typically dry except during rainfall, but have a defined drainage channel. Questions concerning any potential impacts to "Waters..." should be brought to the attention of the appropriate District Office for the Corps of Engineers for a determination, prior to disturbance. Any fees associated with obtaining approval from the U.S. Army Corp of Engineer or other appropriate regulatory agencies for waste and borrow sites is the responsibility of the contractor.

01/01/2009

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

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed or diamond ground may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

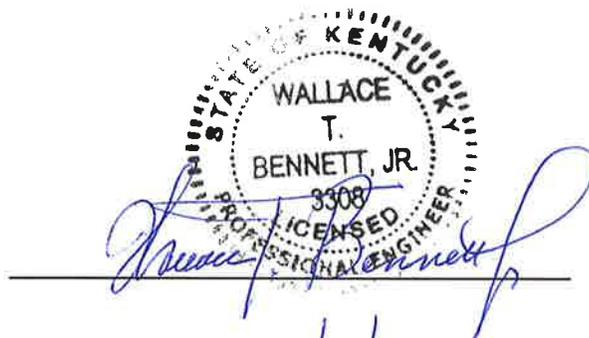
**FRANKLIN & WOODFORD COUNTIES  
LOUISVILLE-LEXINGTON ROAD  
INTERSTATE 64**

**CONSTRUCTION NUMBER  
NHPP IM 0644(090)**

**ITEM NUMBER  
5-2079.00**

**BRIDGE REHABILITATION  
(4 LOCATIONS)**

**MP 57.9 TO MP 64.9**



**DATE** 7/8/14

**PREPARED BY**

**WMB, INC. CONSULTING ENGINEERS  
1950 HAGGARD COURT  
LEXINGTON, KY. 40505  
PHONE 859/299-5226**

**FRANKLIN & WOODFORD COUNTIES  
LOUISVILLE-LEXINGTON ROAD  
INTERSTATE 64**

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**SUMMARY OF BRIDGE QUANTITIES FOR I-64 REHAB PROJECT  
CONSTRUCTION NUMBER NHPP IM 0644(090)  
ITEM NO. 5-2079.00**

ESTIMATED QUANTITIES REQUIRED

<u>ITEM CODE</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>
<b>FRANKLIN COUNTY</b>			
3298	EXPANSION JOINT REPLACEMENT 4"	166.4	LIN FT
3299	ARMORED EDGE FOR CONCRETE	166.4	LIN FT
22146EN	CONCRETE PATCHING REPAIR	1000	SQ FT

**WOODFORD COUNTY**

3299	ARMORED EDGE FOR CONCRETE	157.6	LIN FT
8504	EPOXY SAND SLURRY	270	SQ YD
8510	REM EPOXY BIT FOREIGN OVERLAY	1060	SQ YD
8534	CONCRETE OVERLAY-LATEX	58.8	CU YD
8549	BLAST CLEANING	1276	SQ YD
8550	HYDRODEMOLITION	1060	SQ YD
24094EC	PARTIAL DEPTH PATCHING	20.0	CU YD

**PROJECT TOTALS**

3298	EXPANSION JOINT REPLACEMENT 4"	166.4	LIN FT
3299	ARMORED EDGE FOR CONCRETE	324.0	LIN FT
8504	EPOXY SAND SLURRY	270	SQ YD
8510	REM EPOXY BIT FOREIGN OVERLAY	1060	SQ YD
8534	CONCRETE OVERLAY-LATEX	58.8	CU YD
8549	BLAST CLEANING	1276	SQ YD
8550	HYDRODEMOLITION	1060	SQ YD
22146EN	CONCRETE PATCHING REPAIR	1000	SQ FT
24094EC	PARTIAL DEPTH PATCHING	20.0	CU YD

## REFERENCES

**THE SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2012 EDITION AND THE FOLLOWING SPECIAL NOTES THAT APPLY TO ALL BRIDGES ARE FOUND IN THE ROADWAY PLANS FOR THIS PROJECT:**

- **SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES**
- **PROJECT PHASING AND MAINTENANCE OF TRAFFIC PLAN**

## **SPECIAL NOTE FOR BRIDGE RESTORATION AND WATERPROOFING WITH CONCRETE OVERLAYS**

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove the existing overlay; (3) Complete full-depth and partial depth repairs as directed by the Engineer; (4) Repair/replace damaged and corroded reinforcing bars; (5) Place new concrete overlay and epoxy-sand slurry in accordance with Section 606; (6) Complete asphalt approach pavement; (7) Maintain and control traffic; and (8) Any other work specified as part of this contract.

All construction will be in accordance with Section 606 unless otherwise specified.

**II. MATERIALS.**

- A. Latex Concrete.** See Section 606.03.17.
- B. Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
- C. Bituminous Asphalt.** Use CL2 ASPH SURF 0.38D PG64-22.
- D. Epoxy-Sand Slurry.** See Section 606.03.10.

**III. CONSTRUCTION.**

- A. Remove Existing Overlay.** In addition to Section 606.03.03, totally remove the existing concrete overlay by milling.
- B. Partial Depth Slab Repair and Latex Overlay.** Remove areas determined to be unsound by the Engineer via hand held jackhammers weighing less than 45lbs in accordance with Section 606.02.10 D. Repair/Replace all damaged or severely corroded reinforcing bars prior to partial depth repair operation. The Department will not measure material removal and will consider this work incidental to the bid item "PARTIAL DEPTH PATCHING". Mix and place Latex Modified Concrete Overlay in accordance with Sections 606.03.08 and 606.03.17.
- C. Surface Texturing.** Texture the concrete surface of the overlay in accordance with Section 609.03.10.

**IV. MEASUREMENT.** See Section 606 and the following:

- A. Latex Modified Concrete for Overlay.** The Department will measure the quantity in cubic yards using the theoretical volume as follows for each bridge:

$$120B00021L (121.50' \times 39.25' \times (2''/12''))/27 \text{ CF/CY} = 29.4 \text{ CU YD}$$

$$120B00021R (121.50' \times 39.25' \times (2''/12''))/27 \text{ CF/CY} = 29.4 \text{ CU YD}$$

- B. Latex Modified Concrete for Partial Depth Patching and variable thickness of Overlay.** The Department will measure the quantity in cubic yards by deducting the theoretical volume of bridge deck overlay (LMC) from the total volume (as indicated by the batch quantity tickets) of Concrete required to obtain the finished grade shown on the Plans or established by the Engineer.
  - C. Remove Existing Overlay.** The Department will measure the removal of the existing overlay in square yards, which shall include all labor, equipment, and material needed to complete this work.
  - D. Steel Reinforcement.** Will not be measured for payment, but will be considered incidental to "CONCRETE OVERLAY-LATEX".
  
- V. PAYMENT.** See Section 606 and the following:
  - A. Latex Modified Concrete for Overlay.** The Department will make payment for the Latex Modified Concrete under bid item #08534 "CONCRETE OVERLAY – LATEX" for the theoretical quantity.
  - B. Latex Modified Concrete for Partial Depth Patching and variable thickness of Overlay.** The Department will make payment for the Partial Depth Patching under bid item #24094EC "PARTIAL DEPTH PATCHING". Payment will be for the quantity per cubic yard complete in place.
  - C. Remove Existing Overlay.** The Department will make payment for the removal of the existing overlay under the bid item #08510 "REM EPOXY BIT FOREIGN OVERLAY". Payment will be for the square yard complete.

### **SPECIAL NOTE FOR PARTIAL DEPTH REPAIR OF CONCRETE BRIDGE DECKS**

This Special Note applies to partial depth repairs of concrete bridge decks. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

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

**2.0 MATERIALS AND EQUIPMENT.**

**2.1 Concrete-Class M1 OR M2.** Conform to Section 601.02 and 601.03.

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

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

**2.4 Silicone Rubber Sealant.** Conform to Subsection 807.03.05.

**2.5 Hammers.** Provide power driven hammers lighter than nominal 45 pound class.

**3.0 CONSTRUCTION.**

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

**3.2 Concrete Removal.** Saw the hole to be patched with a vertical face to a depth that does not cut the existing reinforcing steel and to the configuration the Contract specifies or the Engineer directs. After sawing, keep exposure to traffic to a minimum until patching.

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

**3.3 Repair Area Preparation.** Following the removal of the concrete, the surface of the repair area must be prepared to provide a clean, irregular surface for the development of a good bond between the repair material and the existing slab. Clean the repair area by sandblasting followed by compressed air blasting to remove dirt, oil, thin layers of unsound concrete, and laitance. The compressed air used in the final cleaning must be free of oil. This should be checked by placing a cloth over the air compressor nozzle and visually inspecting for oil.

**3.4 Steel Reinforcement.** Steel reinforcement damaged by the contractor shall be replaced to the size, type, and lap lengths determined by the Engineer. Remove concrete to a depth of ¾ inch below any reinforcing bar which is more than 50 percent exposed or that appears not to be bonded to the existing concrete. Protect any underlying sound concrete and steel reinforcement. Ensure that the periphery of routed areas is as nearly vertical as possible.

**3.5 Patching Material and Placement.**

**3.5.1 Concrete-Class M1 or M2.** Fill partial depth holes with Class M1 or M2 Concrete. Immediately before placing concrete, dampen and surface dry the contact surface. Then apply a grout-bond by vigorously scrubbing or brushing into the vertical and horizontal surface of partial depth areas.

Proportion the grout mixture according to Subsection 601.03 using Type I cement. Carefully place the Class M1 or M2 concrete and tamp or vibrate into place. Finish the full depth patched areas to an elevation and finish corresponding to the surrounding area and cure for a period of no less than 7 calendar days, by means of a double layer of wetted burlap or similar material.

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

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

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

**3.6 Cleaning and Sealing Joints.** Rework each joint according to the Standard Drawings and as follows.

**A) Joint Preparation.** Remove any old sealant and joint sealer. Use tools and techniques as approved by the Engineer.

When joint is dry, sandblast to remove all contaminants. Sandblast each joint a minimum of 2 passes, one each for each face, with nozzle held at an angle to the joint face and within 1 to 2 inches of the pavement. After sandblasting, air blast each joint to remove sand and other contaminants. Air blast in only one direction to prevent recontamination of the joint. Compressed air used for air blasting will be at a pressure of at least 90 psi. The air compressor used will be equipped with traps capable of removing moisture, and oil from the air. Apply primer as recommended by the sealant's manufacturer.

**B) Sealant Filler and Installation.** Seal joints on the same day that preparation occurs. When joints are prepared, but not sealed on the same day, sandblasting removal of sand and debris, and primer application will be repeated as directed by the Engineer.

Also any joint that has become contaminated will be recleaned as directed by the Engineer. Prior to installation of sealant, each joint will be inspected by the Engineer for proper depth, width, alignment, and cleanliness. Install sealant at a minimum of 1/2 inch below the pavement face and in accordance with the manufacturer's recommendations.

**4.0 MEASUREMENT.**

**4.1 Concrete Patching Repair.** The Department will measure the quantity in square feet from field measurements of the area repaired.

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
22146EN	Concrete Patching Repair	Square Foot

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

## SPECIAL NOTE FOR USE OF HYDRODEMOLITION METHOD

### Description

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This work consists of bridge surface deck preparation using Hydrodemolition to provide a uniform depth, highly bondable surface and to remove all variable depth, unsound material possible. This item also includes any additional jack hammering required after hydrodemolition is complete, the removal and disposal of all concrete and debris, vacuuming, shielding, water control and all other aspects of work necessary to prepare the deck for the placement of the new latex modified concrete overlay.

### Equipment

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**Hydro-Demolition Equipment.** The Hydrodemolition equipment shall consist of a filtering and pumping unit operating with a self-propelled computerized robot that utilizes a high pressure water jet capable of removing concrete to the depth specified on the plans or as directed by the Engineer and be capable of removing rust and concrete particles from reinforcing steel. The equipment shall provide a rough and bondable surface and remove all unsound concrete during the initial pass. The minimum water usage shall be 43 gal/min operating at 13,000 psi minimum. The pressure and water usage shall be calibrated to remove as much deteriorated concrete as possible without removing any areas of the deck completely, to the satisfaction of the engineer.

**Vacuum Cleanup Equipment.** The vacuum cleanup equipment shall be equipped with fugitive dust control devices and be capable of removing wet debris and water all in the same pass. Provide equipment capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface.

**Hand Held Blast Cleaning Equipment.** Hand held blast shall be either sand or water as necessary to expose fine and coarse aggregates; thoroughly clean all exposed reinforcing steel; and remove any unsound concrete or laitance layers from the proposed concrete overlay surface. If sand blasting equipment is utilized, the equipment shall have oil traps. If water blasting equipment is utilized, the equipment must be capable of delivering a minimum of 5,000 psi.

**Power Driven Hand Tools.** Power driven hand tools and jackhammers will be permitted, but shall not be heavier than the nominal 35 lb class. Chipping hammers shall not be heavier than the nominal 15 lb class. Only hand chipping tools shall be used when removing concrete within one inch of reinforcing steel. Mechanically driven tools shall be operated at a maximum angle of 45 degrees from the bridge floor surface.

## Construction Methods

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**General:** Perform Hydrodemolition surface preparation over the entire top surface of the reinforced concrete bridge deck to provide a rough and bondable surface and to remove all unsound concrete possible during the initial Hydrodemolition surface preparation pass.

**Description:** This work shall consist of furnishing the necessary labor, materials and equipment to completely remove the top surface of the Portland cement concrete bridge deck surface in accordance with these Specifications and in reasonably close conformity with the grades, thickness, or sections shown on the Plans or as directed by the Engineer. This work shall include the removal of patches other than sound Portland cement concrete and all loose and unsound concrete possible by Hydrodemolition; preparation of the sound existing concrete surface; removal, forming and concrete for full depth repairs; blast cleaning or high pressure water cleaning the existing deck prior to placement of the modified concrete overlay; and all other operations necessary to complete this work according to these specifications and to the satisfaction of the Engineer.

### Concrete Removal by Hydro-Demolition

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**General:** The total surface area of the reinforced concrete bridge deck shall be completely prepared by Hydrodemolition as necessary to provide a highly roughened and bondable surface prior to placement of the proposed bridge deck overlay while removing any deteriorated and unsound concrete in the initial pass. Unsound concrete is defined as existing bridge deck concrete that is deteriorated, spalled, or determined by the engineer to be unsound.

With the use of Hydrodemolition surface preparation, the requirement to provide a minimum ¾" clearance around all reinforcing bars that are more than 50% diameter exposed is waived, providing that the existing concrete is sound. The amount of steel exposed shall be kept to a minimum.

Calibration shall be required on each structure each time Hydrodemolition is performed and as required to achieve the results specified by the plan.

**Debris and Fluid Containment:** Prior to commencement of the Hydrodemolition operation, the Contractor shall submit a plan for approval to the engineer for control and filtering of all water discharged during operation. The Contractor, at a minimum, shall block all drains on the deck and install aggregate dams every 150 feet; 6 inches high by 1 foot wide minimum, to strain runoff. The deck shall be used as a settlement basin within itself unless an alternate method of water control, satisfactory to the Engineer and meeting the environmental requirements of any associated Regulatory Agency, is required.

The Contractor shall provide shielding, as necessary, to insure containment of all dislodged concrete within the removal area in order to protect the public from flying debris both on and under the work site.

**Cleaning:** Cleaning shall be performed with a vacuum system capable of removing wet debris and water all in the same pass. The vacuum equipment shall be capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface. Cleaning shall be done in a timely manner, before debris and water is allowed to dry on the deck surface.

**Resounding:** After the Hydrodemolition operation has been completed and the deck is cleaned and allowed to dry, the deck shall be resounded to assure that all unsound concrete deck material has been removed. The final sounding of the deck shall be done by the Engineer and shall only be performed when the deck is completely dry and frost-free. Final sounding shall consist of as many successive resounding as required to ensure that all deteriorated and fractured concrete has been removed. Additional removal shall be performed with 35 lb maximum weight jackhammers operated at an angle of no more than 45 degrees from horizontal. Aerosol spray paint for outlining and sounding chains shall be provided by the Contractor. This work shall be incidental to the "Hydrodemolition Bid Item".

### **Method of Measurement**

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Hydrodemolition will be measured in square yards.

### **Basis of Payment**

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Hydrodemolition will be paid by the bid item #8550 "HYDRODEMOLITION".

## **SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE ON BRIDGES**

### **I. DESCRIPTION.**

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

### **II. MATERIALS.**

- A. Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
- B. Structural Steel.** Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. See Standard Drawing BJE-001, current edition.
- C. Stud Anchors.** The armored edge stud anchors are  $\frac{3}{4}$ " x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).
- D. Steel Reinforcement.** Use Grade 60. See Section 602.
- E. Epoxy Bond Coat.** See Section 511.
- F. Neoprene Joint Sealers (Compression Seals).** See Section 807.
- G. Silicone Rubber Sealant.** See Section 807.
- H. Neoprene Strip Seals.** See attached detail drawings and Section 807.

### **III. CONSTRUCTION.**

- A. Remove Existing Materials.** Remove the existing expansion dam/bridge end and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

Clean and leave all existing steel reinforcement encountered in place.

- B. Place New Concrete and Armored Edges.** After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay or to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the scarified grade and finish to receive the new overlay or place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb. No accelerants are to be added to Class "M" Concrete as specified in Section 601 of the Standard Specifications.

All new structural steel shall be cleaned and painted with two coats of commercial primer paint red orange in color, except that surfaces to come in contact with concrete are not to be painted.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

- C. Additional Steel Reinforcement.** Furnish for replacement, as directed by the Engineer, 0 linear feet of steel reinforcing bars ½" diameter by 20' lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete. Deliver unused bars to the Local County Maintenance Barn. Reinforcement is incidental to the contract unit price for "Expansion Joint Replacement".
- D. Stage Construction.** Installation of concrete and armored edges in two (or more if specified) stages is necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld and grind smooth.
- E. Preformed Neoprene Joint Seal.** Place the preformed joint seal in one continuous, unbroken length. Place neoprene compression seals as recommended by the manufacturer and in accordance with Section 609.03.04 (D). Place neoprene strip seals as recommended by the manufacturer and in accordance with Section 609.03.04 (E), except that shop drawings will not be required.
- F. Silicone Rubber Sealant.** Place the silicone sealant as recommended by the manufacturer and in accordance with Section 609.03.04 (C).
- G. Shop Plans.** Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

**IV. MEASUREMENT.**

- A. Expansion Joint Replacement - 1 ½", 2", 2 ½", 4".** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.
- B. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.
- C. Steel Reinforcement.** See Section 602.

**V. PAYMENT.**

- A. Expansion Joint Replacement - 1 ½", 2", 2 ½", 4".** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete, neoprene joint seal, and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- B. Armored Edge for Concrete.** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- C. Steel Reinforcement.** Reinforcement is incidental to the contract unit price for "Expansion Joint Replacement".

The Department will consider payment as full compensation for all work required by this note and the attached detail drawings.

BI

# FRANKLIN COUNTY

037B00053L  
I-64 WESTBOUND OVER US 60



Approximate Location Information  
Latitude: 38°10'26.0"  
Longitude: 84°48'41.6"  
MP 57.868

**BRIDGE #1 (37B00053L) SUMMARY OF QUANTITIES**

1. DISTRICT: 5  
 2. COUNTY: FRANKLIN  
 3. ROUTE: I-64  
 4. CONST. NUMBER NHPP IM 0644(090)  
 5. ROAD NAME: I-64  
 6. DESCRIPTION: I-64 WESTBOUND OVER US 60  
 7. TYPE OF WORK REPLACE EXPANSION JOINTS:INSTALL ARMORED EDGES

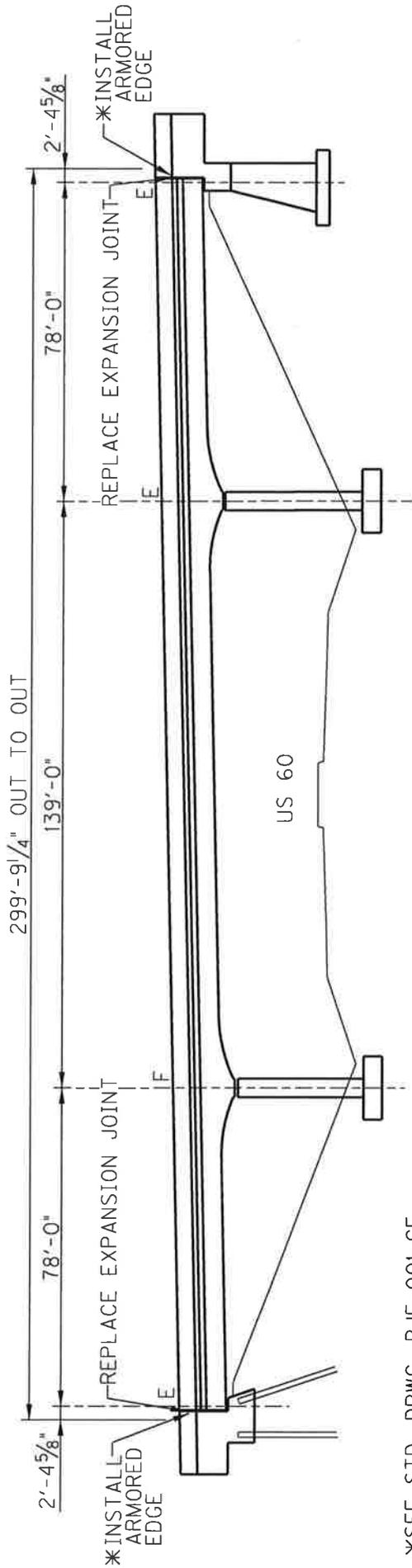
8. LENGTH (FT.): 299.77 BRIDGE WIDTH (FT.): 39.25 SURFACE AREA (SQ. YD.): 1307  
 SKEW (DEGREES): 19.32 LT DECK THICKNESS (INCHES): 7.5

**ESTIMATED QUANTITIES REQUIRED**

ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3298	EXPANSION JOINT REPLACEMENT 4"	83.2	LIN FT
3299	ARMORED EDGE FOR CONCRETE	83.2	LIN FT
22146EN	CONCRETE PATCHING REPAIR	500.0	SQ FT

**I-64 WESTBOUND OVER US 60  
BRIDGE MAINTENANCE NUMBER 037B00053L**

B1



\*SEE STD. DRWG. BJE-001-CE

END BENT 1

PIER 1

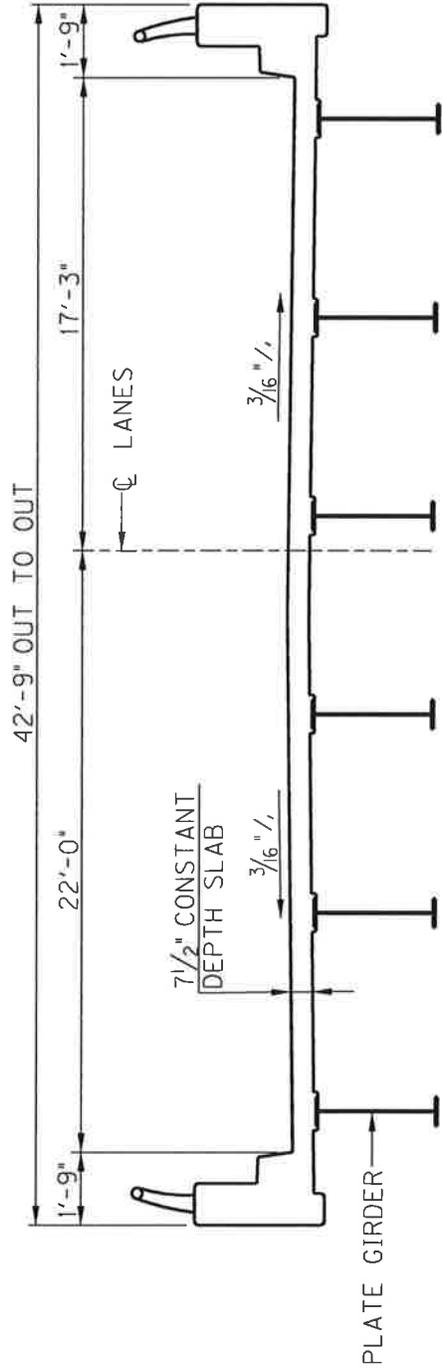
PIER 2

ABUTMENT 2

**ELEVATION**

19°19'20" SKEW L.T.  
NOT TO SCALE

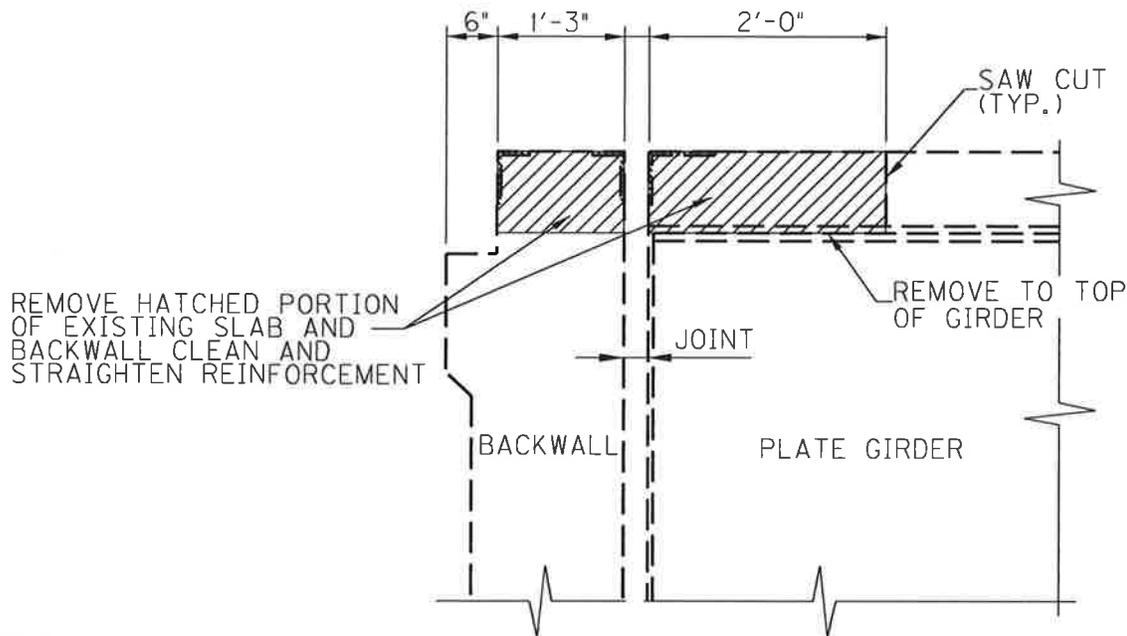
NOTE:  
CONTRACTOR IS RESPONSIBLE  
FOR VERIFYING SIZE OF SEAL.



**TYPICAL SECTION**

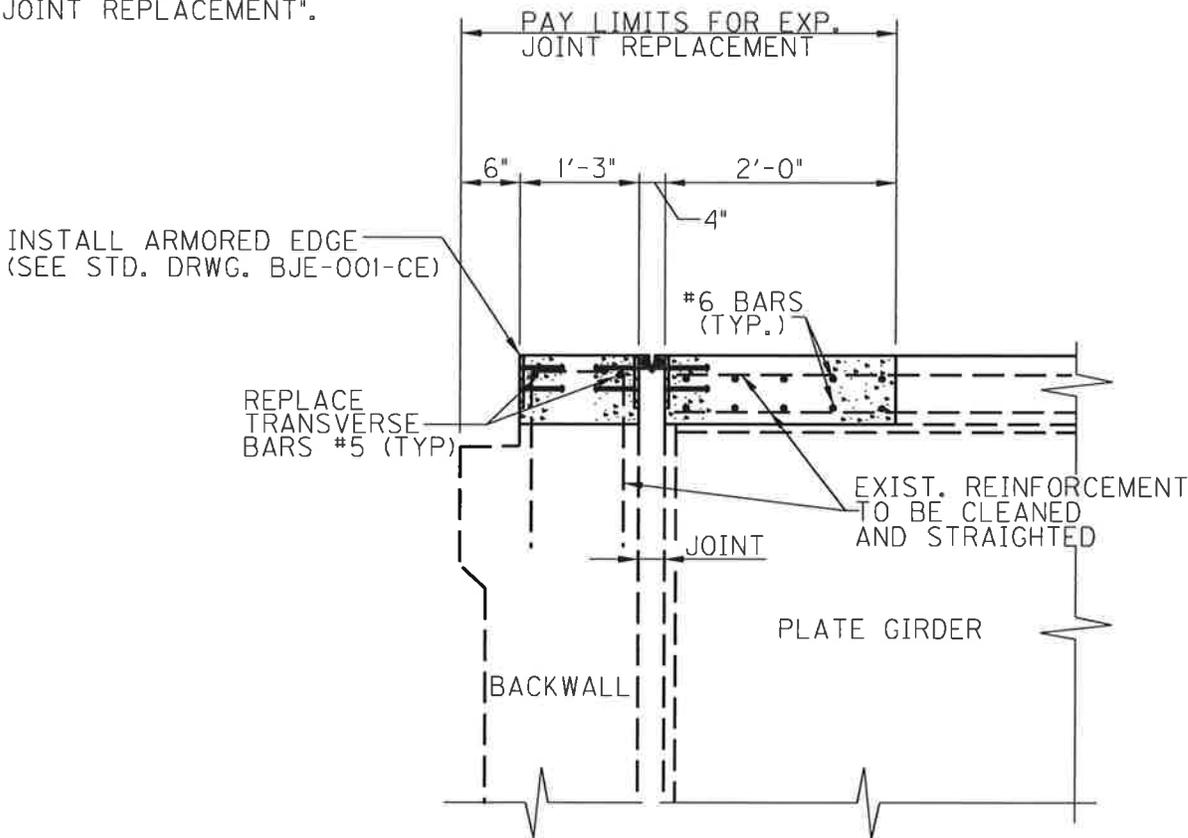
B1

# REPLACE JOINT @ END BENTS



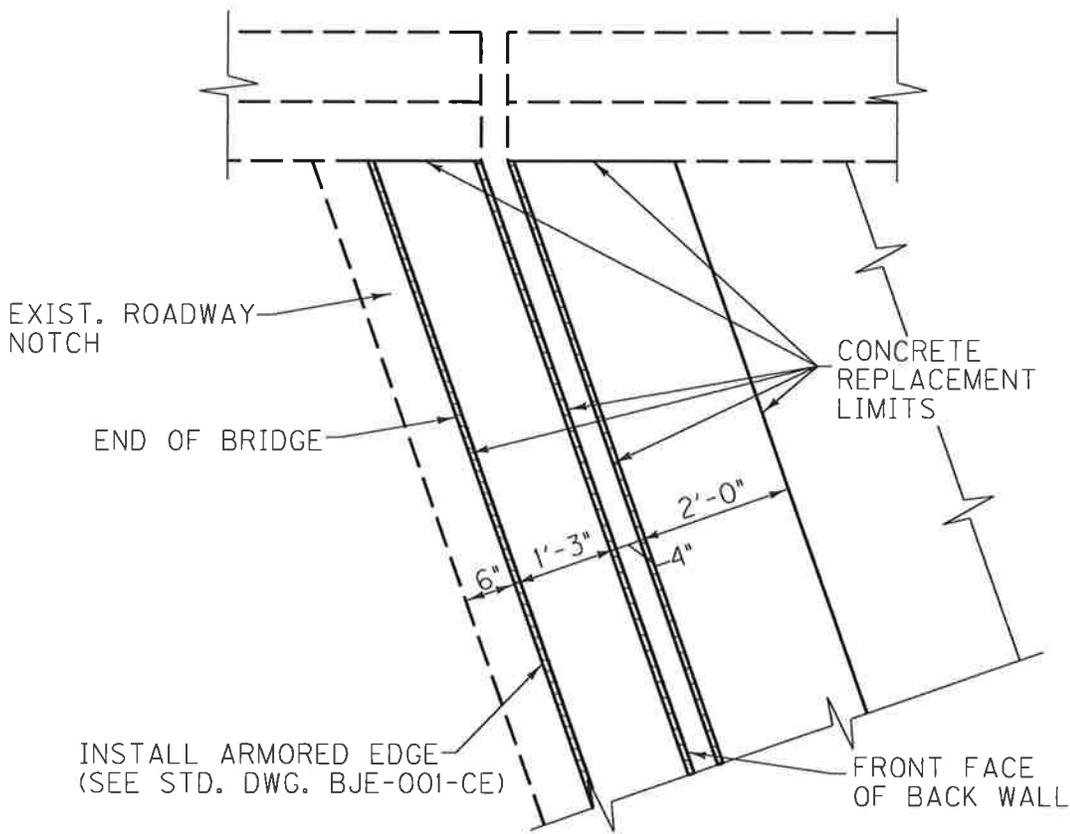
NOTE:  
WHERE A NORMAL LAP CANNOT BE ATTAINED ON REBARS USE MECHANICAL SPLICES. SPLICES ARE INCIDENTAL TO "EXPANSION JOINT REPLACEMENT".

## EXISTING SECTION

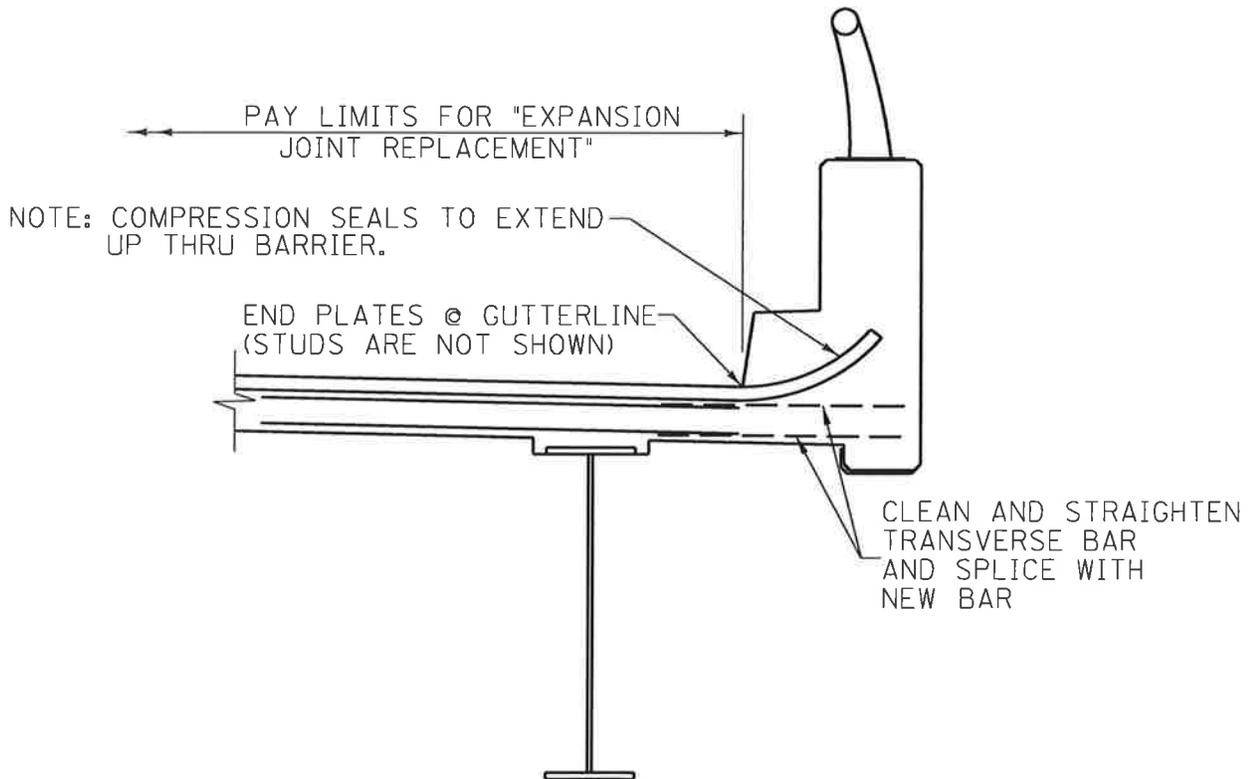


## PROPOSED SECTION

# CURB SECTION @ END BENT & ABUTMENT

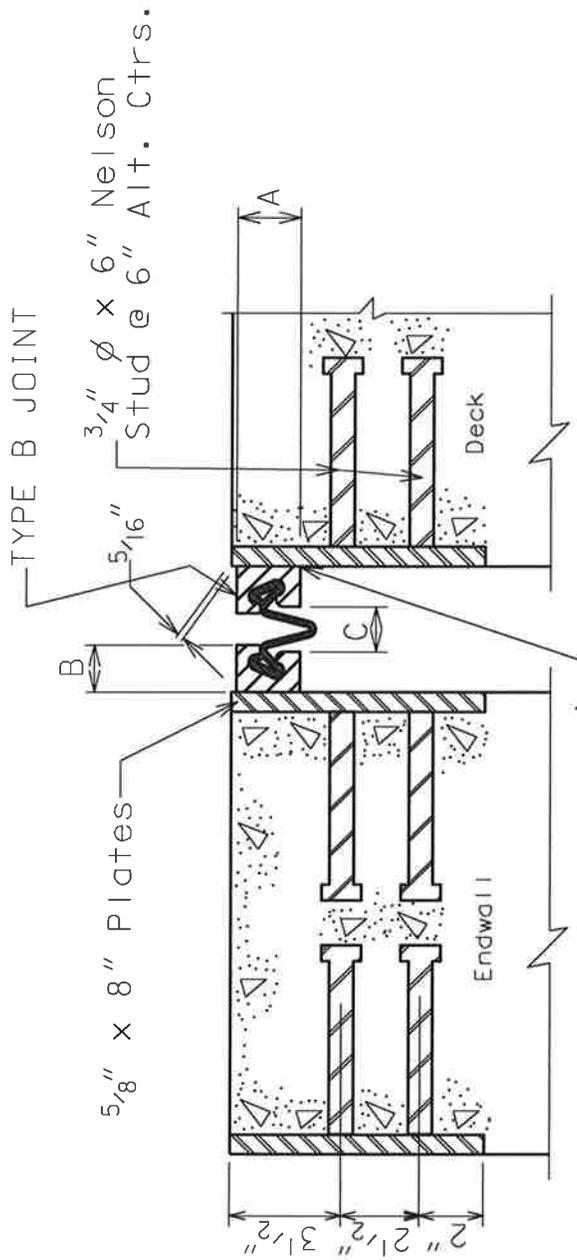


## PROPOSED PLAN



## PROPOSED SECTION

B1



(Strip Seal)

NOTE: Joint openings shall be adjusted for each 10 above or below 60° f. Decrease or increase respectively by increment shown.

INCREMENT FOR 10° TEMPERATURE CHANGE					
- STEEL SPAN -					
THRU 60'	61' - 100'	101' - 140'	141' - 180'	181' - 240'	241' - 320'
1/32"	1/16"	3/32"	1/8"	3/16"	1/4"
					5/16"

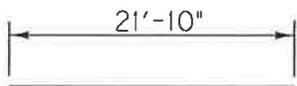
Not to Scale

ALTERNATE NEOPRENE EXPANSION DAMS - 4"					
	A	B	C		
B	WABO STRIP SEAL Type A Extrusion with S-400 Seal	2"	1 1/2"	2"	Watson Bowman Associates Inc.
B	STEEL FLEX Type SSA with 400 Seal	2"	1 1/2"	2 1/2"	D. S. Brown Co.
B	GENERAL STRIP CD Profile A Steel Extrusion with Gen Strip CD Seal	2"	1 3/8"	2 1/4"	General Tire Co.
B	ONFLEX Type AM2 Extrusion with 40SEQ Sal	2"	1 1/4"	2"	Structural Accessories Inc.

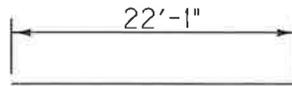
Not to Scale

# BILL OF REINFORCEMENT

B1



#5 STRAIGHT BAR  
4 REQ'D END BENT 1  
4 REQ'D ABUTMENT 2



#6 STRAIGHT BAR  
20 REQ'D END BENT 1  
20 REQ'D ABUTMENT 2

755 LBS END BENT 1  
755 LBS ABUTMENT 2

## END BENT REINFORCEMENT

TOTAL REINFORCEMENT 1,510 LBS.  
REINFORCEMENT IS INCIDENTAL TO "EXPANSION JOINT REPLACEMENT".

B2

# FRANKLIN COUNTY

037B00053R  
I-64 EASTBOUND OVER US 60



Approximate Location Information  
Latitude: 38°10'25.1"  
Longitude: 84°48'41.2"  
MP 57.908

**BRIDGE #2 (37B00053R) SUMMARY OF QUANTITIES**

1. DISTRICT: 5  
 2. COUNTY: FRANKLIN  
 3. ROUTE: I-64  
 4. CONST. NUMBER NHPP IM 0644(090)  
 5. ROAD NAME: I-64 EASTBOUND  
 6. DESCRIPTION: I-64 EASTBOUND OVER US 60  
 7. TYPE OF WORK REPLACE EXPANSION JOINTS:INSTALL ARMORED EDGES

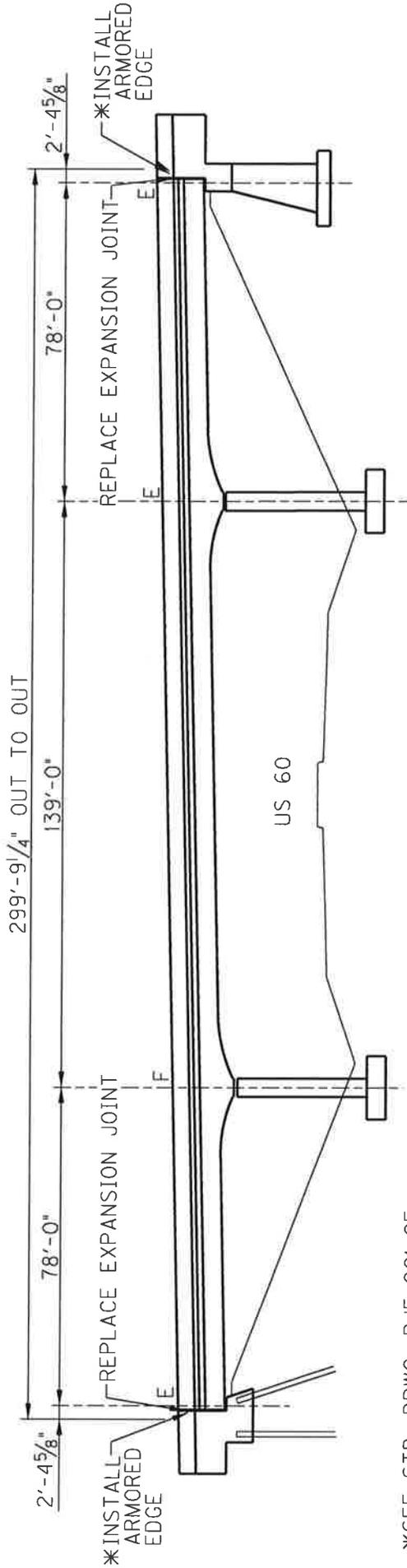
8. LENGTH (FT.): 299.77 BRIDGE WIDTH (FT.): 39.25 SURFACE AREA (SQ. YD.): 1307  
 SKEW (DEGREES): 19.32 LT DECK THICKNESS (INCHES): 7.5

**ESTIMATED QUANTITIES REQUIRED**

ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3298	EXPANSION JOINT REPLACEMENT 4"	83.2	LIN FT
3299	ARMORED EDGE FOR CONCRETE	83.2	LIN FT
22146EN	CONCRETE PATCHING REPAIR	500.0	SQ FT

I-64 EASTBOUND OVER US 60  
BRIDGE MAINTENANCE NUMBER 037B00053R

B2



\*SEE STD. DRWG. BJE-001-CE

END BENT 1

PIER 1

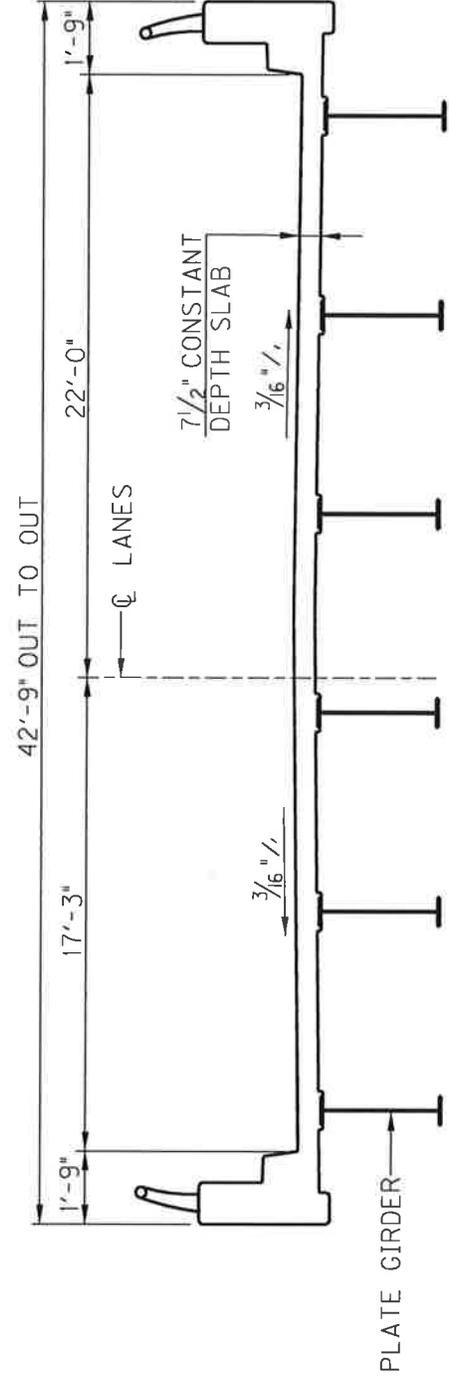
PIER 2

ABUTMENT 2

**ELEVATION**

19°19'20" SKEW LT.  
NOT TO SCALE.

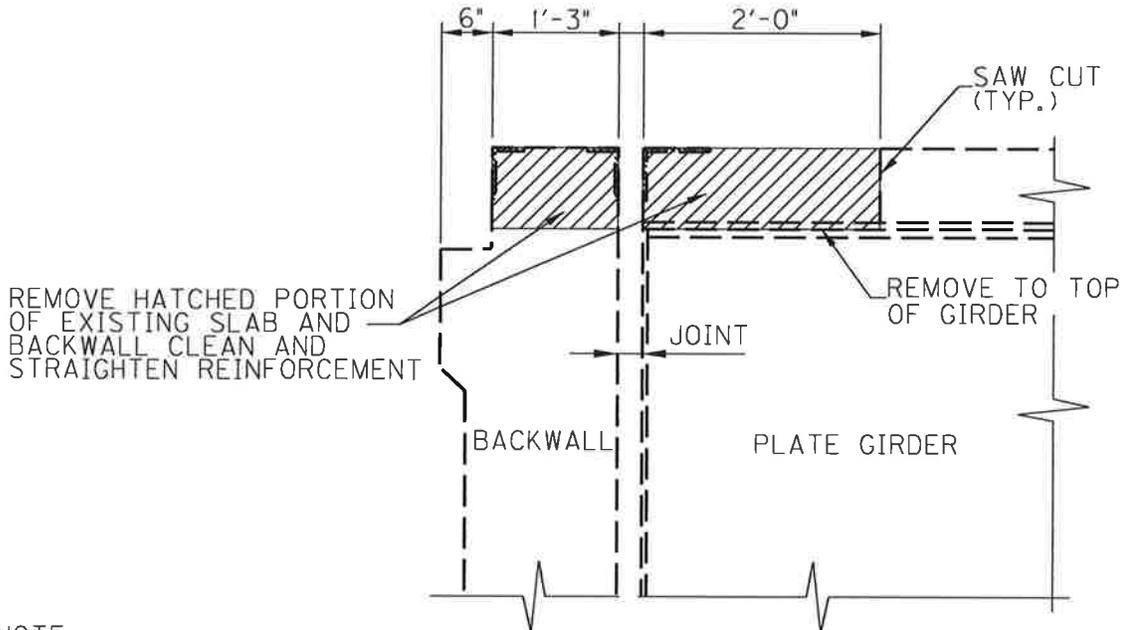
NOTE:  
CONTRACTOR IS RESPONSIBLE  
FOR VERIFYING SIZE OF SEAL.



**TYPICAL SECTION**

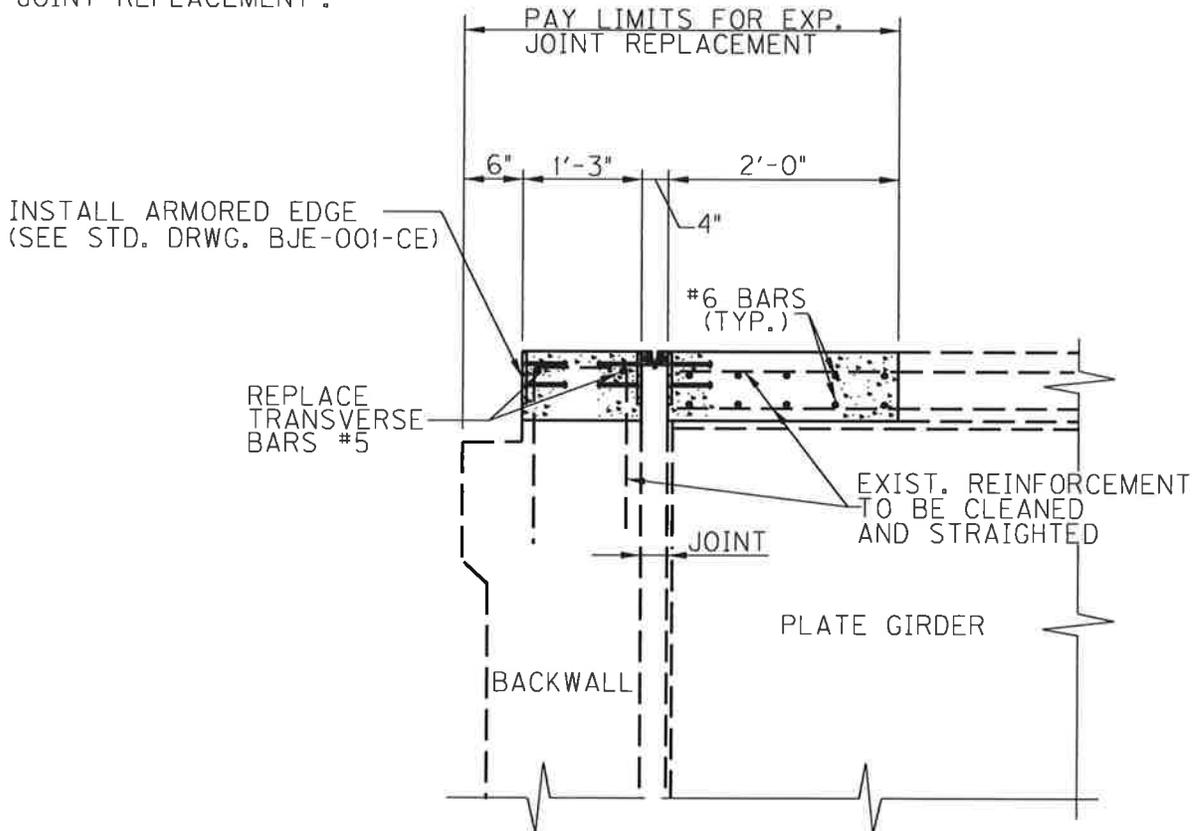
B2

# REPLACE JOINT @ END BENTS



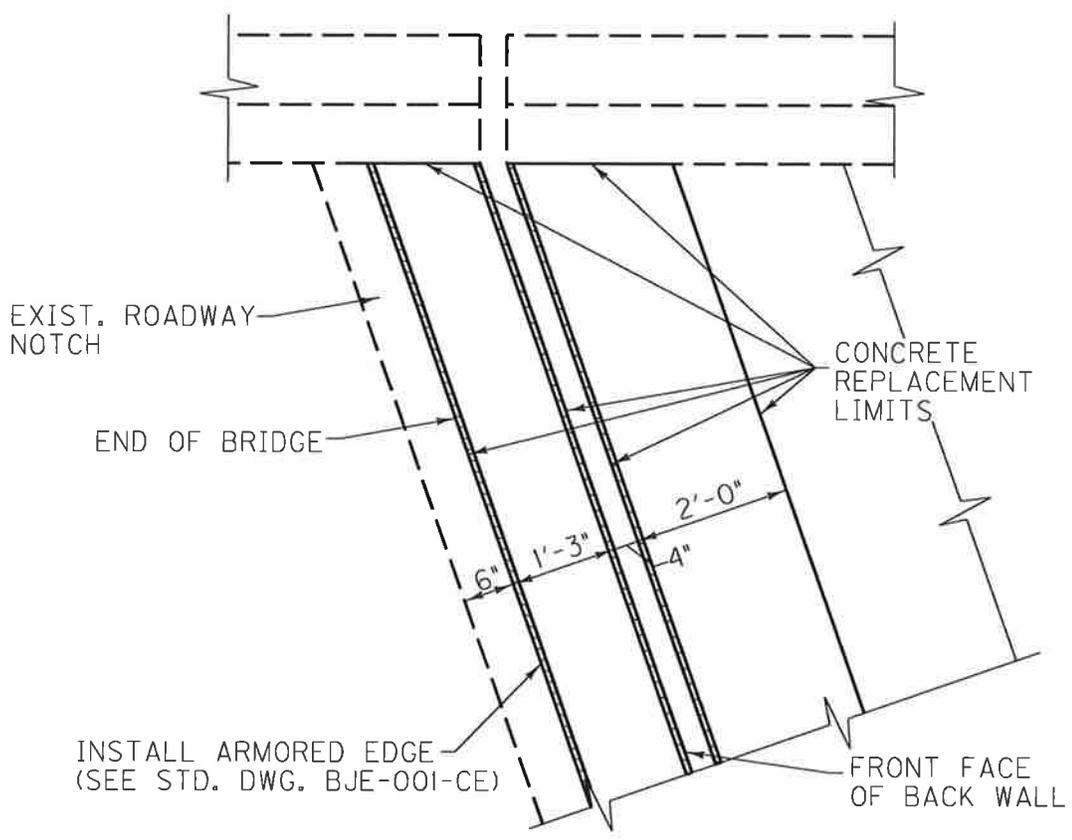
**EXISTING SECTION**

NOTE:  
WHERE A NORMAL LAP CANNOT BE ATTAINED ON REBARS USE MECHANICAL SPLICES. SPLICES ARE INCIDENTAL TO "EXPANSION JOINT REPLACEMENT".

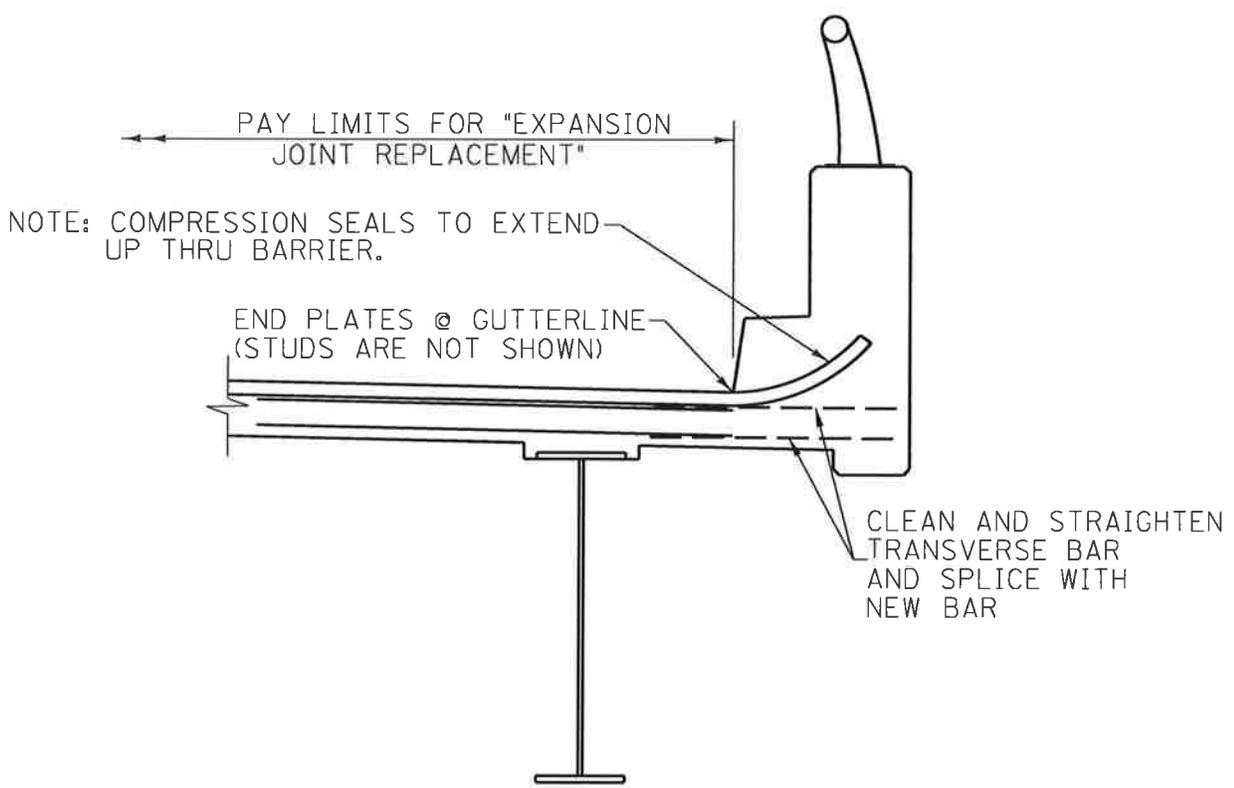


**PROPOSED SECTION**

# CURB SECTION @ END BENT & ABUTMENT

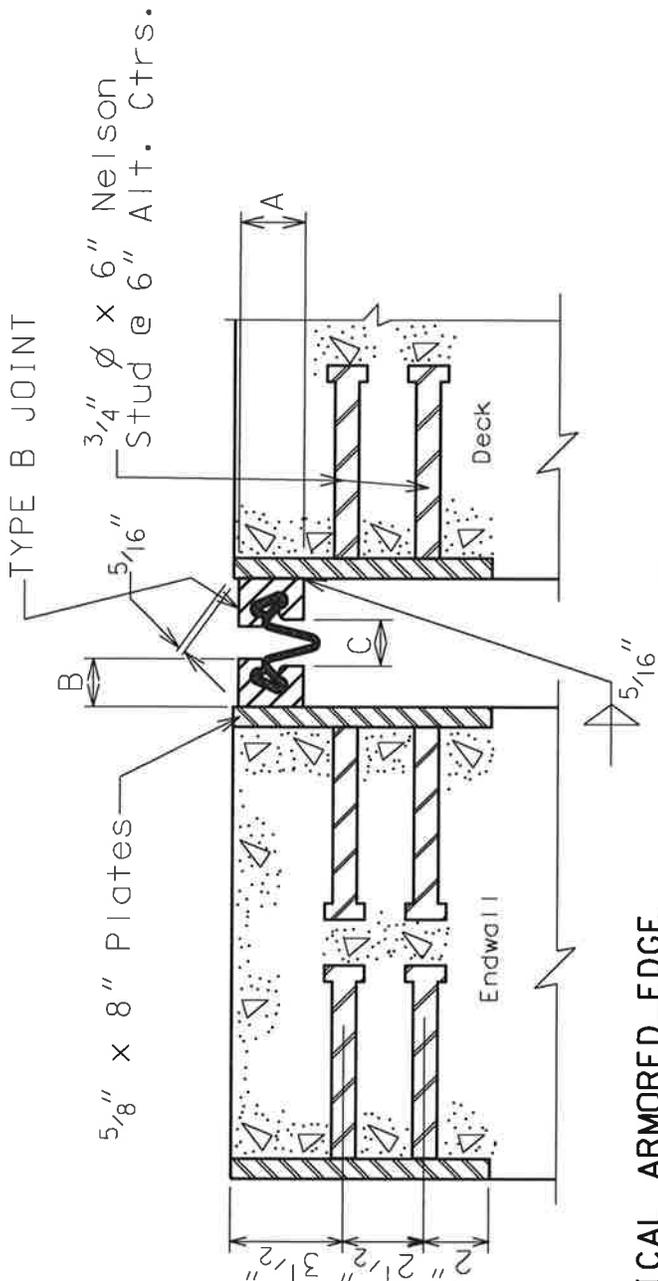


## PROPOSED PLAN



## PROPOSED SECTION

B2



(Strip Seal)

**TYPICAL ARMORED EDGE**

**TYPICAL 4" JOINT**

4" - Joint Opening @ 60 F.

NOTE: Joint openings shall be adjusted for each 10 above or below 60° f. Decrease or increase respectively by increment shown.

INCREMENT FOR 10° TEMPERATURE CHANGE					
- STEEL SPAN -					
THRU 60'	61' - 100'	101' - 140'	141' - 180'	181' - 240'	241' - 320'
1/32"	1/16"	3/32"	1/8"	3/16"	5/16"

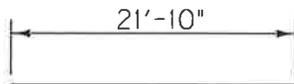
Not to Scale

ALTERNATE NEOPRENE EXPANSION DAMS - 4"					
	A			B C	
B	WABO STRIP SEAL	2"	1 1/2"	2"	2"
	Type A Extrusion with S-400 Seal	Watson Bowman Associates Inc.			
B	STEEL FLEX	2"	1 1/2"	2 1/2"	2 1/2"
	Type SSA with 400 Seal	D. S. Brown Co.			
B	GENERAL STRIP CD	2"	1 3/8"	2 1/4"	2 1/4"
	Profile A Steel Extrusion with Gen Strip CD Seal	General Tire Co.			
B	ONFLEX	2"	1 1/4"	2"	2"
	Type AM2 Extrusion with 40SEQ Sal	Structural Accessories Inc.			

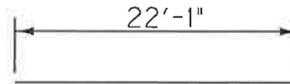
Not to Scale

B2

## BILL OF REINFORCEMENT



#5 STRAIGHT BAR  
4 REQ'D END BENT 1  
4 REQ'D ABUTMENT 2



#6 STRAIGHT BAR  
20 REQ'D END BENT 1  
20 REQ'D ABUTMENT 2

755 LBS END BENT 1  
755 LBS ABUTMENT 2

## END BENT REINFORCEMENT

TOTAL REINFORCEMENT 1,510 LBS.

REINFORCEMENT IS INCIDENTAL TO "EXPANSION JOINT REPLACEMENT".

B3

# WOODFORD COUNTY

120B00021L  
I-64 WESTBOUND OVER  
WOODLAKE ROAD (KY 1865)



Approximate Location Information  
Latitude: 38° 09' 51.4"  
Longitude: 84° 44' 33.9"  
MP 61.748

**BRIDGE #3 (120B00021L) SUMMARY OF QUANTITIES**

1. DISTRICT: 7  
 2. COUNTY: WOODFORD  
 3. ROUTE: I-64  
 4. CONST. NUMBER NHPP IM 0644(090)  
 5. ROAD NAME: I-64 WESTBOUND  
 6. DESCRIPTION: I-64 WESTBOUND OVER WOODLAKE ROAD (1865)  
 7. TYPE OF WORK BRIDGE DECK RESTORATION AND WATERPROOFING:INSTALL ARMORED EDGES

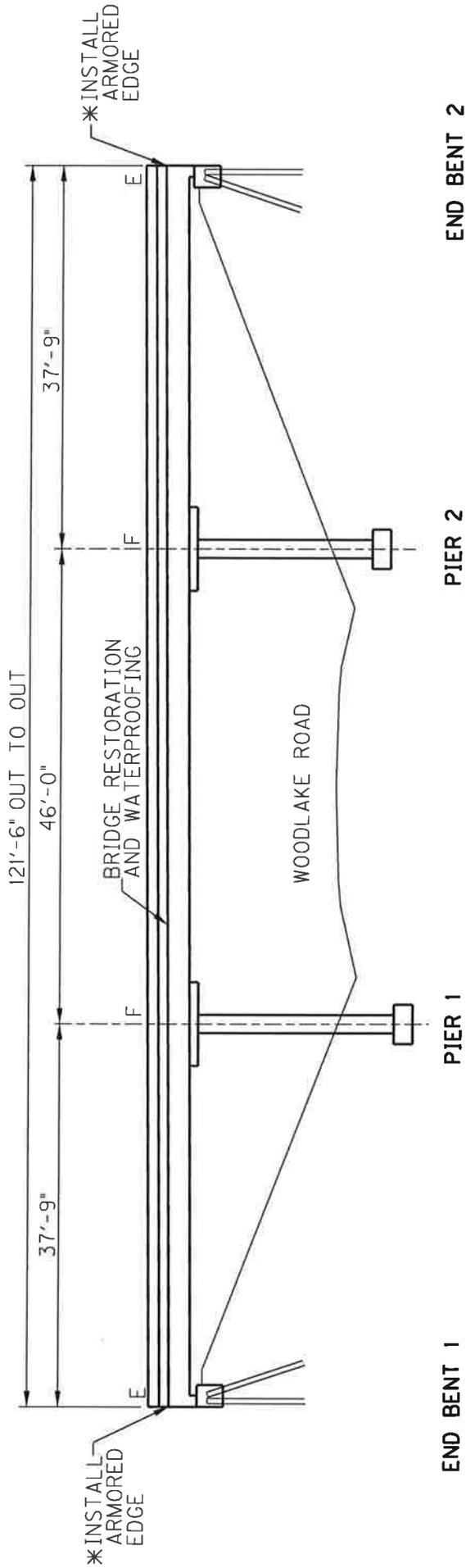
8. LENGTH (FT.): 121.50      BRIDGE WIDTH (FT.): 39.25      SURFACE AREA (SQ. YD.): 530  
 SKEW (DEGREES): 5.08 LT.      DECK THICKNESS (INCHES): 16.0

**ESTIMATED QUANTITIES REQUIRED**

ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3299	ARMORED EDGE FOR CONCRETE	78.8	LIN FT
8504	EPOXY SAND SLURRY	135	SQ YD
8510	REM EPOXY BIT FOREIGN OVERLAY	530.0	SQ YD
8534	CONCRETE OVERLAY-LATEX	29.4	CU YD
8549	BLAST CLEANING	638	SQ YD
8550	HYDRODEMOLITION	530	SQ YD
24094EC	PARTIAL DEPTH PATCHING	10.0	CUYD

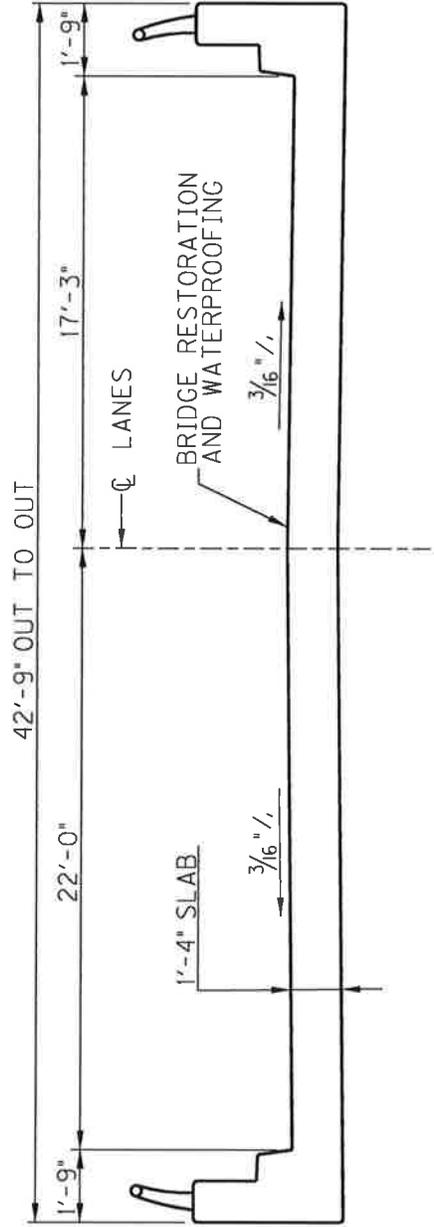
I-64 WESTBOUND OVER WOODLAKE ROAD (KY 1865)  
BRIDGE MAINTENANCE NUMBER 120B00021L

B3



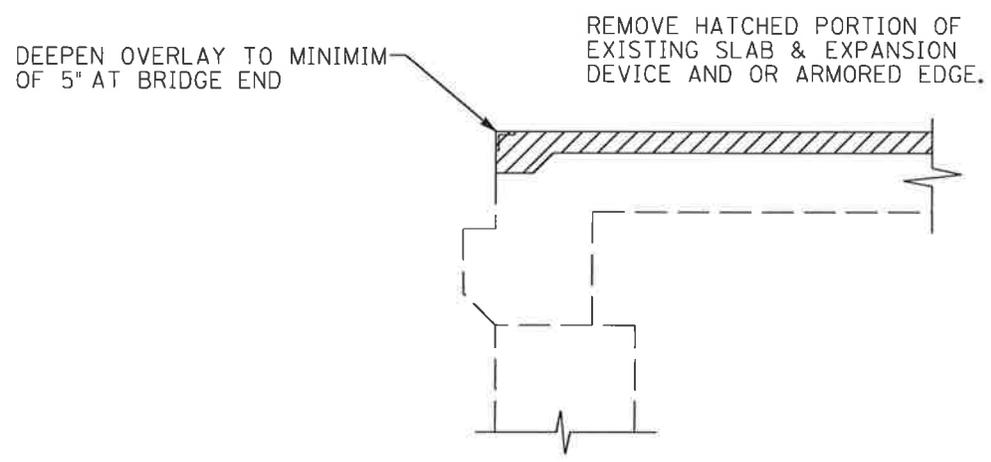
**ELEVATION**  
5° 05' 15" SKEW LT.  
NOT TO SCALE

\*SEE STD. DRWG. BJE-001-CE

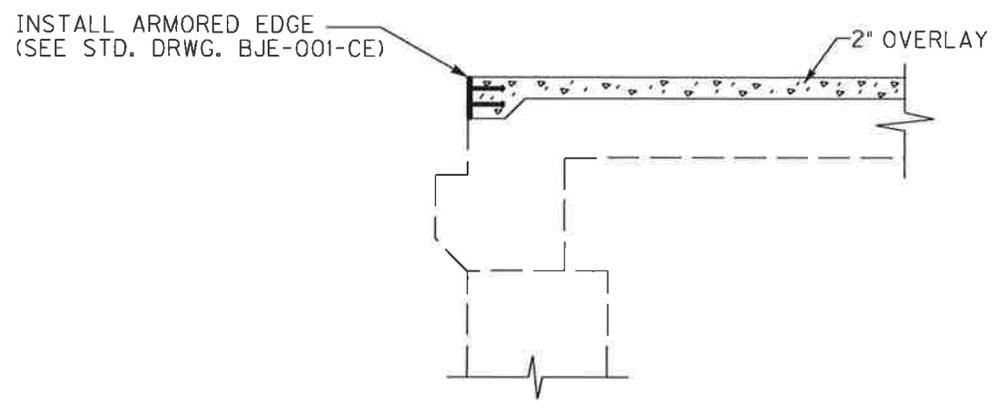


TYPICAL SECTION

# INSTALL ARMORED EDGE AT END OF SLAB



## EXISTING SECTION @ END BENTS



## PROPOSED SECTION @ END BENTS

B4

# WOODFORD COUNTY

120B00021R  
I-64 EASTBOUND OVER  
WOODLAKE ROAD (KY 1865)



Approximate Location Information  
Latitude: 38° 09' 50.5"  
Longitude: 84° 44' 34.1"  
MP 61.731

**BRIDGE #4 (120B00021R) SUMMARY OF QUANTITIES**

1. DISTRICT: 7  
 2. COUNTY: WOODFORD  
 3. ROUTE: I-64  
 4. CONST. NUMBER NHPP IM 0644(090)  
 5. ROAD NAME: I-64 EASTBOUND  
 6. DESCRIPTION: I-64 EASTBOUND OVER WOODLAKE ROAD (1865)  
 7. TYPE OF WORK BRIDGE DECK RESTORATION AND WATERPROOFING:INSTALL ARMORED EDGES

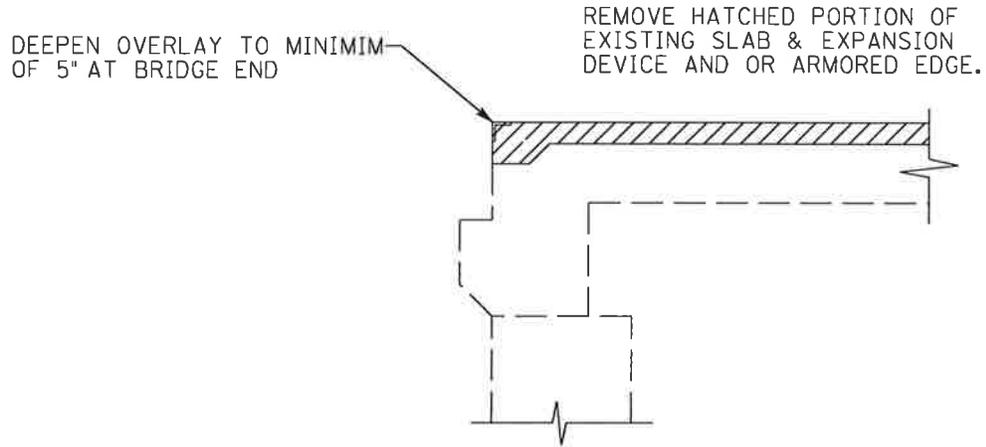
8. LENGTH (FT.): 121.50      BRIDGE WIDTH (FT.): 39.25      SURFACE AREA (SQ. YD.): 530  
 SKEW (DEGREES): 5.08 LT.      DECK THICKNESS (INCHES): 16.0

**ESTIMATED QUANTITIES REQUIRED**

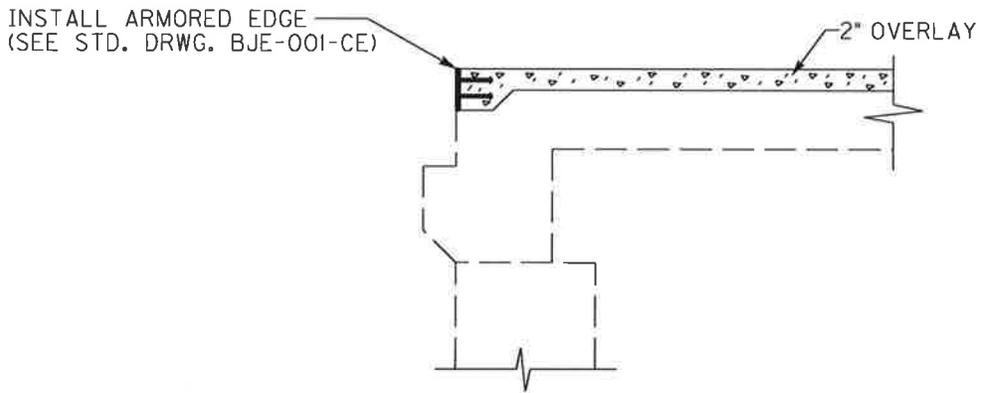
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3299	ARMORED EDGE FOR CONCRETE	78.8	LIN FT
8504	EPOXY SAND SLURRY	135	SQ YD
8510	REM EPOXY BIT FOREIGN OVERLAY	530.0	SQ YD
8534	CONCRETE OVERLAY-LATEX	29.4	CU YD
8549	BLAST CLEANING	638	SQ YD
8550	HYDRODEMOLITION	530	SQ YD
24094EC	PARTIAL DEPTH PATCHING	10.0	CUYD



# INSTALL ARMORED EDGE AT END OF SLAB



## EXISTING SECTION @ END BENTS



## PROPOSED SECTION @ END BENTS

**INTERSTATE 64 PAVEMENT REHABILITATION IN FRANKLIN AND  
WOODFORD COUNTIES  
M.P. 57.8 to 64.8  
ITEM # 5-2079  
PUBLIC INFORMATION PLAN**

The primary goal of the Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) lane and ramp closures. The KYTC District 5 Public Information Officer (PIO) will coordinate and disseminate to stakeholders and the media appropriate information regarding the construction plans.

**LOCAL STAKEHOLDERS**

- Elected Officials
  - State Senator Julian Carroll – (502) 564-8100; [julian.carroll@lrc.ky.gov](mailto:julian.carroll@lrc.ky.gov)
  - State Representative James Kay – (502) 564-8100; [james.kay@lrc.ky.gov](mailto:james.kay@lrc.ky.gov)
  - Franklin County Judge Executive Huston Wells – (502) 875-8751; [hwells@franklincountyky.com](mailto:hwells@franklincountyky.com)
  - Franklin County Magistrate Fred Goins – (502) 229-4870; [fhgoins@yahoo.com](mailto:fhgoins@yahoo.com)
  - Woodford County Judge/Executive John Coyle – (859) 873-4139; [jcoyle@woodfordcountyky.org](mailto:jcoyle@woodfordcountyky.org)
  - Mayor Tom Bozarth, City of Midway – (859) 846-5067; [bozie6@windstream.net](mailto:bozie6@windstream.net)
  
- Local Agencies
  - Mark Watson, Director of Transportation for Franklin County Public Schools – (502) 695-6707; [mark.watson@franklin.kyschools.us](mailto:mark.watson@franklin.kyschools.us)
  - Pat Melton, Franklin County Sheriff – (502) 875-8740; [pat.melton@franklincountyky.com](mailto:pat.melton@franklincountyky.com)
  - Chief Kevin Hutcherson, Franklin County Fire Department – (502) 695-1617; [khutcherson@franklincountyky.gov](mailto:khutcherson@franklincountyky.gov)
  - Trooper Kendra Wilson, Kentucky State Police Public Affairs – (502)-782-1800; [Kendra.wilson@ky.gov](mailto:Kendra.wilson@ky.gov)
  - Woodford County EMS Director Hunter Shewmaker – (859) 873-8161; [hshewmaker@woodfordcountyky.org](mailto:hshewmaker@woodfordcountyky.org)
  - Woodford County/City of Versailles Sheriff Wayne (Tiny) Wright – (859) 7873-3119; [wwright@woodfordcountyky.org](mailto:wwright@woodfordcountyky.org)
  - Woodford County School – Pupil Transportation Mark Lancaster – (859) 873-3941; [mark.lancaster@woodford.kyschools.us](mailto:mark.lancaster@woodford.kyschools.us)
  - Midway Fire Chief John Armstrong – (859) 846-4964
  
- Utility Companies
  - Local utility companies are kept apprised of this project at the monthly utility coordination meetings hosted by District 5

- Neighborhoods and their Mayors

### **TRUCKING FIRMS AND OUT OF STATE STAKEHOLDERS**

Information will be distributed electronically to trucking firms via Rick Taylor at the Department of Vehicle Regulation (502-564-4540; [rick.taylor@ky.gov](mailto:rick.taylor@ky.gov)). Information will also be posted on the 511 website ([www.511.ky.gov](http://www.511.ky.gov)) and on the 511 telephone information system.

### **PRESENTATIONS**

A project description including anticipated schedule will be provided to the media, stakeholders, TRIMARC, rest areas and other emergency service agencies via e-mail prior to construction. Information will be provided to these groups via traffic advisories, press releases, the District 5 website and the weekly District 5 Road Show of Construction and Maintenance Activities.

### **MEDIA RELATIONS**

The District PIO will prepare an initial news release regarding the contract award for the project. The PIO will conduct interviews with the media throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. The contractor must provide to the PIO via the Section Engineer notification of any change in the MOT at least five (5) days prior to the change.

**ROADWAY LIGHTING ESTIMATE OF QUANTITIES**

WOODFORD COUNTY KY 341 @ I-64	WOODFORD COUNTY I-64EB REST AREA	WOODFORD COUNTY I-64WB REST AREA	FRANKLIN COUNTY US 60 @ I-64	TOTAL	UNITS	CODE	ITEM DESCRIPTION
24	22	24	4	74	EACH	24589ED	LED LUMINAIRE
0	0	0	24	24	EACH	24749EC	HIGH MAST LED LUMINAIRE
0	1	0	1	2	LP SUM	4940	REMOVE LIGHTING

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

4-14-2016

FRANKLIN WOODFORD 5-2019.00

DESIGN CRITERIA FOR LUMINAIRES

1-64 @ US 60 INTERCHANGE  
THE DESIGN CRITERIA IS INSIDE THE DESIGN LINES ON THE PLAN SHEET  
ILLUMINANCE: NOT LESS THAN .96 FOOTCANDLES AND NOT TO EXCEED 1.06 FOOTCANDLES  
MINIMUM: NOT LESS THAN .20 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 4.80:1  
HPS LLF IS .80 AND LED IS 1

1-64 WESTBOUND REST AREA  
THE DESIGN CRITERIA IS INSIDE THE DESIGN LINES ON THE PLAN SHEET  
ILLUMINANCE:  
AVERAGE: NOT LESS THAN 1.5 FOOTCANDLES AND NOT TO EXCEED 1.65 FOOTCANDLES  
MINIMUM: NOT LESS THAN .22 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 6.82:1

1-64 EASTBOUND REST AREA  
ON THE DESIGN CRITERIA IS INSIDE THE DESIGN LINES ON THE PLAN SHEET  
ILLUMINANCE:  
AVERAGE: NOT LESS THAN 1.36 FOOTCANDLES AND NOT TO EXCEED 1.50 FOOTCANDLES  
MINIMUM: NOT LESS THAN .27 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 5.04:1  
LLF ON BOTH EAST AND WEST REST AREAS DESIGNS IS TO BE SET TO 1

1-64 @ KY 341  
THE DESIGN CRITERIA IS INSIDE THE DESIGN LINES ON THE PLAN SHEET  
ILLUMINANCE:  
AVERAGE: NOT LESS THAN .91 FOOTCANDLES AND NOT TO EXCEED 1.00 FOOTCANDLES  
MINIMUM: NOT LESS THAN .10 FOOTCANDLES  
AVERAGE/MINIMUM: NOT MORE THAN 9.10:1  
LED LLF IS 1

ALL POLE LOCATIONS, ARM LENGTHS, AND ORIENTATION OF LUMINAIRE (TO CURVE/ROAD) SHOULD BE MAINTAINED DUE TO UTILITIES/DRAINAGE/RIGHT-OF-WAY.

CONVENTIONAL AND HIGHMAST LUMINAIRES  
TYPE G: CAN NOT EXCEED 173W, TYPE II DISTRIBUTION DRIVER: NOT TO EXCEED 850 mA  
CCT: 4000K

TYPE A1: CAN NOT EXCEED 72 W, TYPE II DISTRIBUTION DRIVER: NOT TO EXCEED 1050mA  
CCT: 4000K

HIGHMAST: CAN NOT EXCEED 500 W, TYPE V DISTRIBUTION DRIVER: NOT TO EXCEED 1050mA  
CCT: 5000K

10/15/2014

LED Luminaire Specifications

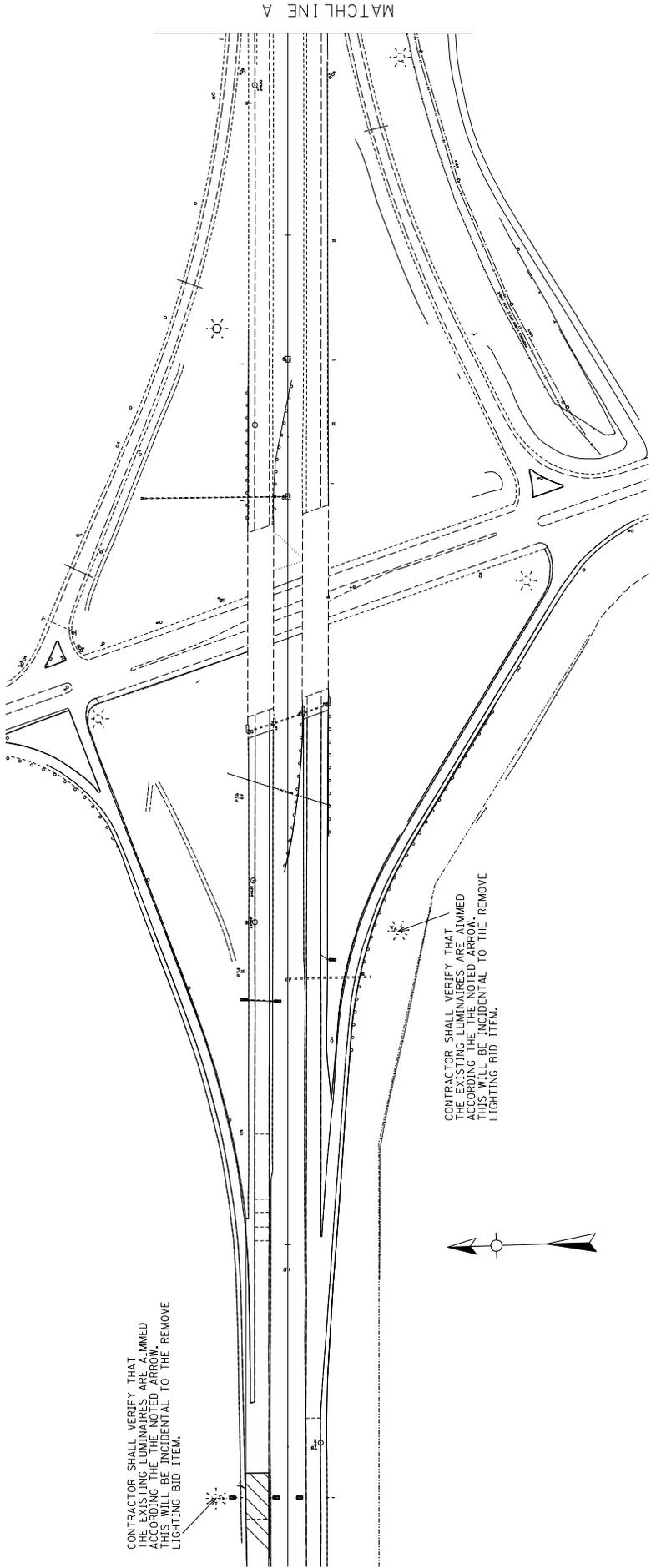
The following are the required Specifications for the LED Fixtures:

- The Luminaire shall be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor. The testing laboratory must be listed by OSHA in its scope of recognition for the applicable tests being conducted as required by this specification. A list of recognized testing labs may be found on the U.S. Department of Labor's web site: <http://www.osha-slc.gov/>
- The Luminaire shall be listed and labeled by a NRTL or CSA as being in compliance with UL 1598 and suitable for use in wet locations.
- Key components including LED drivers, LED light sources, and surge protection devices shall be RoHS compliant.
- Shall have an International Electrotechnical Commission (IEC) 529 Ingress Protection (IP) rating with Electronic Interference (EMI) requirements as defined by FCC 47 Sub Part 15, Class B, CISPR22 Class A (EMV/min), EN61000-3-2, -3, -3, -4-4, -4-5.
- Shall be tested according to the most current version of Illuminating Engineering Society of North America (IESNA) LM-79.
- Shall have lumen maintenance measured in accordance the most current version of Illuminating Engineering Society of North America (IESNA) LM-80. The most current version of Illuminating Engineering Society of North America (IESNA) TM-21.
- The fixture shall have a diecast aluminum housing.
- The luminaire finish shall be corrosion resistant with a polyester powdercoat of 2.5 mil nominal thickness. Finish shall pass per ASTM D1654 after 3000 hours of testing per ASTM B117.
- The luminaire shall be constructed of aluminum, including cover and latch shall be stainless steel, zinc or steel with zinc alloy electroplate and chromate top coat.
- The luminaire shall be easy to open when properly mounted and shall have readily accessible internal parts. Access to all internal parts requiring replacement shall not require tools (i.e. tool-less entry).
- The luminaire shall have a vibration rating of 3g per the American National Standard ANSI/IEEE C36.31 (Die Resonance Testing Equipment - Luminaire Vibration) for applications for use in high-vibration environments.
- The luminaire shall be designed to allow water shedding.
- The luminaire shall have a passive cooling method shall be employed to manage thermal output of LED light engine and power supply.
- The luminaire shall have a label per ANSI C136.22 that states operating voltage and current range. The label must be clearly visible on the inside of the housing.
- The luminaire shall fully operate in a temperature range of -40 degrees C up to 40 degrees C (-40 degrees F to 104 degrees F).
- In retrofit applications, the LED luminaire shall not be more wattage than the original HPS fixture if you are replacing one for one. For the optimized proposal, we will allow the wattage to be greater than the original proposed luminaire.
- The luminaire shall have an integral power supply (electronic driver). The output supply shall not have a manual, field-adjustable setting for current.
- The luminaire shall have a power supply (electronic driver) that will operate on a 480 volt single phase at 60 hertz.
- The luminaire shall have a power supply (electronic driver) that has a power factor of .90 or greater at full load.
- The luminaire shall have a power supply (electronic driver) that has total harmonic distortion of 20% or less at full load.
- The luminaire shall have power supply (electronic driver) output ripple of less than 10%.
- The luminaire shall have power supply (electronic driver) with a rated life of 100,000 hours with a luminaire operated at an ambient temperature of 25°C (77°F).
- The luminaire shall have an isolated power supply (electronic driver) output.
- The luminaire shall have a power supply (electronic driver) that has thermal overload protection.
- The luminaire shall have a power supply (electronic driver) that is self-limited short circuit protected and over load protected.
- The luminaire shall not use any active thermal cutback, such as in order to achieve a higher thermal performance.
- The luminaire shall have a power supply (electronic driver) that is terminated in a shock-absorbable terminal block.
- The luminaire shall have a terminal block for terminating wiring to the luminaire. The terminal block shall be 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG pole wire.
- Fixture shall have a surge protection that meets 10kV/5KA per ANSI/IEEE C62.41.
- The luminaire shall have life rating on all electrical components of 10,000 hours.
- All LED components shall be L70 rated when operated in a luminaire at 25 degrees C (77 degrees F) at 100,000 hours.
- Electrical components shall be protected per ANSI/IEEE standard C62.41, for Class C applications.
- The LED shall fully operate in a temperature range -40 degrees C to 40 degrees C (-40 degrees F to 104 degrees F).
- LED shall have more than 100% lumen output when operated at 25°C (77°F), delivered lumens due to thermal loading when operated at 25°C (77°F).

- The LED shall deliver an average 80% of initial delivered lumens after 70,000 hours of operation when operated at 25°C (77°F).
- The LED shall have a rated life of 100,000 hours when operated at 25°C (77°F).
- The LED shall have a minimum Luminaire efficacy of 80 lumens/watt.
- The Correlated Color Temperature (CCT) shall be 4000K with a variance of 250K, white, that conforms to LM-79. The Correlated Color Temperature (CCT) must only be 4000K with a variance of 250K, white, that conforms to LM-79 (418K).
- The minimum color rendering index (CRI) shall not be less than 70.
- The optics shall have a completely sealed optical system.
- The optical system shall have a (IEC) IP rating of 66 or greater.
- The optics shall have an Illuminating Engineering Society of North America (IESNA) Backlight, Uplight and glare (BUG) rating as follows:  
a. Backlight rating shall not exceed 3; highmast fixture backlight rating shall not exceed 0;4  
b. Uplight rating shall not exceed 3/4  
c. Glare rating shall be calculated for each fixture as follows:  
LLF = LLD X LDD  
Lamp Lumen Depreciation Factor (LDD) shall be the specified percentage of LED Lamp Lumen emitted at 25°C (77°F) from the TM-21 report. This LDD should be according to LM -80 and TM -21 reports. This report shall be submitted for verification.
- Luminaire Dirt Depreciation (LDD) = .9  
The TM-21 Report must show the drive current used for the submitted luminaire. The report can show a larger drive current to represent a worst case scenario.
- Minimum Maintenance Life L<sub>70</sub> from the TM-21 Report must not be below 80% at 70,000 hours at 25°C (77°F).
- The manufacturer shall provide certified test laboratories IES photometrics which verify light levels. Product submittal shall be accompanied by IES TM-21 compliant test reports from a CALIPER qualified or NVLAP accredited testing laboratory for the specific model being submitted.
- WARRANTY: The Manufacturer shall ensure that the LED Luminaires have a 5 year warranty, both required to repair or replace the luminaire. The warranty shall begin upon the date the luminaire is received. The warranty shall be transferable.  
The warranty shall cover all failures including:  
(1) Failure in luminaire LED, housing, wiring, connections, and drivers.  
(2) More than 10 percent decrease in lumen output.  
(3) Failure in luminaire color.  
Technical support in the output color, technical support shall be available from the manufacturer via telephone within 24 hours of the time the call is made from KYTC, and this support shall be made available from factory certified personnel or factory certified installers at no additional charge to the Department.
- MINIMUM REQUIRED SUBMITTALS:  
Luminaire specification sheet.  
Luminaire photometric report.  
LM-79 luminaire photometric report.  
The vendor must submit LM-79 in-situ test data to confirm thermal operating temperatures of the luminaire.  
LM-80 Lumen maintenance report.  
TM-21 calculations as defined.  
Backlight, Uplight, Glare (BUG) rating of the luminaire.  
Certified test lab IES photometric reports.  
Certified test lab IES photometric reports.  
Including intensity and chromaticity data.  
Instructions for installation and maintenance.  
The luminaire shall be equipped with a shorting cap and a 7-pin photocontrol receptacle that meets ANSI 2013 standard C136.41

50. The luminaire shall have an integral power supply (electronic driver). The output supply shall not have a manual, field-adjustable setting for current.
51. The luminaire shall have a power supply (electronic driver) that will operate on a 480 volt single phase at 60 hertz.
52. The luminaire shall have a power supply (electronic driver) that has a power factor of .90 or greater at full load.
53. The luminaire shall have a power supply (electronic driver) that has total harmonic distortion of 20% or less at full load.
54. The luminaire shall have power supply (electronic driver) output ripple of less than 10%.
55. The luminaire shall have power supply (electronic driver) with a rated life of 100,000 hours with a luminaire operated at an ambient temperature of 25°C (77°F).
56. The luminaire shall have an isolated power supply (electronic driver) output.
57. The luminaire shall have a power supply (electronic driver) that has thermal overload protection.
58. The luminaire shall have a power supply (electronic driver) that is self-limited short circuit protected and over load protected.
59. The luminaire shall not use any active thermal cutback, such as in order to achieve a higher thermal performance.
60. The luminaire shall have a power supply (electronic driver) that is terminated in a shock-absorbable terminal block.
61. The luminaire shall have a terminal block for terminating wiring to the luminaire. The terminal block shall be 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG pole wire.
62. Fixture shall have a surge protection that meets 10kV/5KA per ANSI/IEEE C62.41.
63. The luminaire shall have life rating on all electrical components of 10,000 hours.
64. All LED components shall be L70 rated when operated in a luminaire at 25 degrees C (77 degrees F) at 100,000 hours.
65. Electrical components shall be protected per ANSI/IEEE standard C62.41, for Class C applications.
66. The LED shall fully operate in a temperature range -40 degrees C to 40 degrees C (-40 degrees F to 104 degrees F).
67. LED shall have more than 100% lumen output when operated at 25°C (77°F), delivered lumens due to thermal loading when operated at 25°C (77°F).

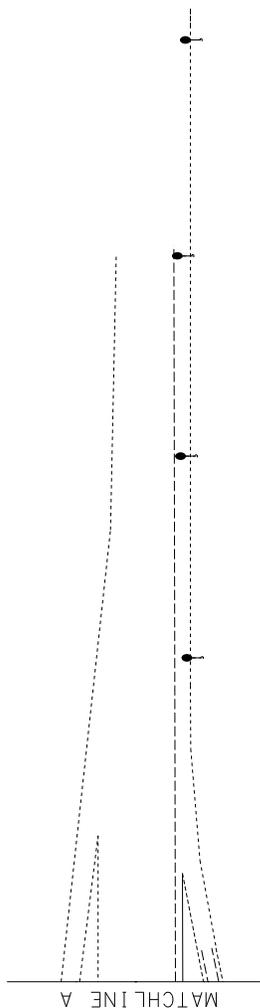
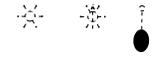
I-64 @ US 60

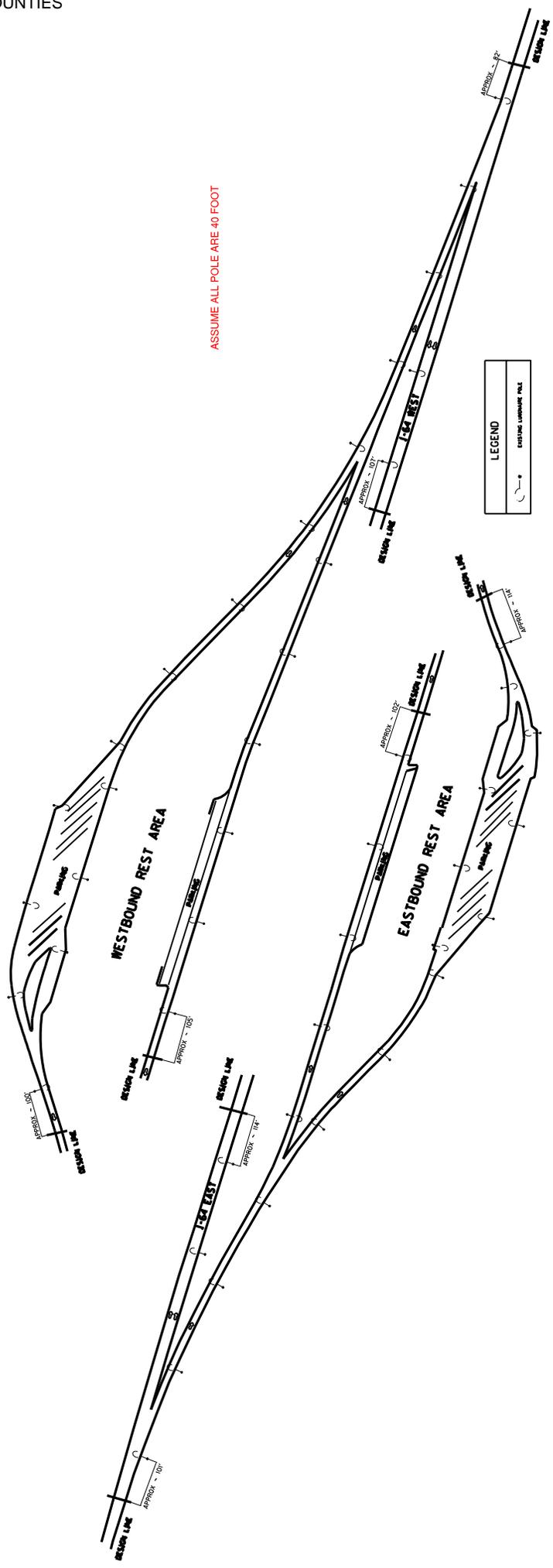


Scale 1" = 100'

LEGEND

- TYPE V LED LUMINAIRES MOUNTED ON EXISTING HIGH MAST POLE
- 1000 W HPS LUMINAIRES (ASYMMETRICAL) MOUNTED ON HIGH MAST POLE
- TYPE II LED LUMINAIRE POLE



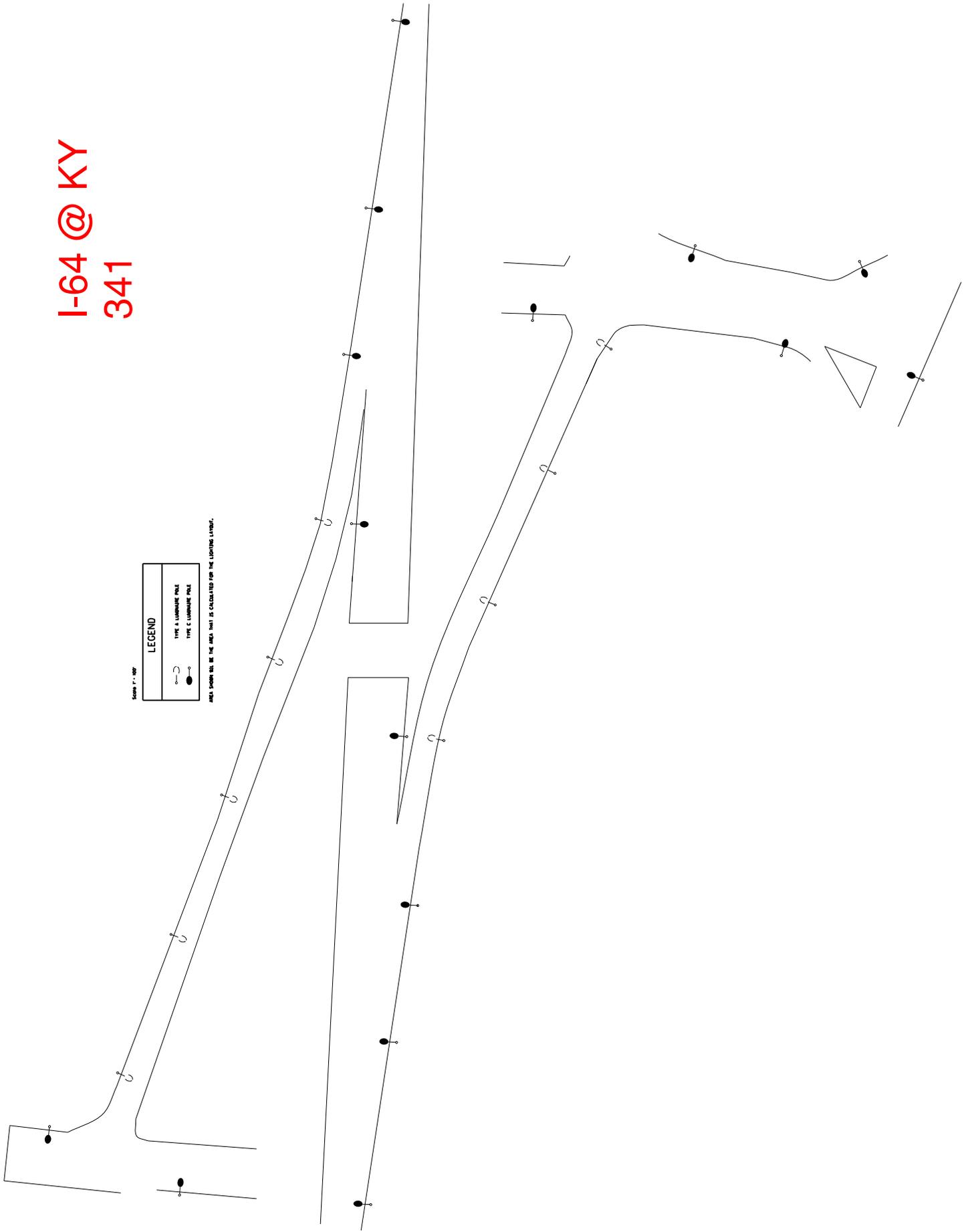


ASSUME ALL POLE ARE 40 FOOT

**LEGEND**

- DESIGN LINE
- EXISTING UTILITY POLE

# I-64 @ KY 341



Scale: 1" = 100'

LEGEND	
	TYPE A LIGHTING POLE
	TYPE C LIGHTING POLE

AREA SHOWN WILL BE THE AREA THAT IS CALCULATED FOR THE LIGHTING LAYOUT.

### **Special Note for Bridge Demolition, Renovation and Asbestos Abatement**

**If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.**

**Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.**



**TRANSPORTATION CABINET**  
Frankfort, Kentucky 40622  
www.transportation.ky.gov/

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

## Memorandum

**To:** Dan Hite  
**CC:**  
**From:** O'Dail Lawson  
Environmental Scientist IV  
Division of Environmental Analysis  
**Date:** 8/11/2015  
**Re:** Asbestos Inspection Report for 5-2079

---

**This report is prepared to accompany the 10-Day NOI for Demolition to the Division of Air Quality. Please include all pages with submittal.**

### **Project and Structure Information**

**Project #** 05-2079

**Bridge #** 037B00053L

**Location:** I-64 over US 60 at MP 57.86

**Description:** The samples collected were point counted below 1%. No abatement necessary.

**Inspection Date:** July 10, 2015

### **Results**

The results revealed that there is no ACM abatement required at this time.



An Equal Opportunity Employer M/F/D



**MRS, INC.**      *MRS, Inc. Analytical Laboratory Division*

332 West Broadway, Suite 613  
Louisville, Kentucky 40202

(502) 495-1212  
Fax: (502) 491-7111

<b>Client:</b> <u>KY Transportation Cabinet</u>	<b>Project No:</b> <u>258044 B</u>
<b>Address:</b> <u>200 Mero Street</u>	<b>Sample ID:</b> <u>F - 1</u>
<u>Frankfort, KY</u>	<b>Sampled:</b> <u>10-Jul-15</u>
<u>40601</u>	<b>Received:</b> <u>21-Jul-15</u>
<u>Attention O'Dail Lawson</u>	<b>Analyzed:</b> <u>04-Aug-15 - Point Count -</u>

**Bulk Sample Analysis**

**Sampled by:** O'Dail Lawson

**Facility/Location:** (Franklin & Woodford) 5-2079 037B00053L

**Field Description:** Joint Compound - West End & East Lane

**Laboratory Description:**

Thick Black Material

**Asbestos Materials:**

Chrysotile = 2/400 = 0.50 % ( < 1 % ) Sample Is Negative

**Non-asbestos Fibrous Materials & Matrix Materials:**

<u>Cellulose</u>	<u>0.25 %</u>
<u>Binders (Tar)</u>	<u>99.25 %</u>

**Remarks:** The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

**Analyst:** Winterford Mensah      **Reviewed By:**   
Signature

**MRS, INC.**      *MRS, Inc. Analytical Laboratory Division*

332 West Broadway, Suite 613  
Louisville, Kentucky 40202

(502) 495-1212

Fax: (502) 491-7111

<b>Client:</b> <u>KY Transportation Cabinet</u>	<b>Project No:</b> <u>258044 B</u>
<b>Address:</b> <u>200 Mero Street</u>	<b>Sample ID:</b> <u>F - 2</u>
<u>Frankfort, KY</u>	<b>Sampled:</b> <u>10-Jul-15</u>
<u>40601</u>	<b>Received:</b> <u>21-Jul-15</u>
<u>Attention O'Dail Lawson</u>	<b>Analyzed:</b> <u>04-Aug-15 - Point Count -</u>

**Bulk Sample Analysis**

**Sampled by:** O'Dail Lawson

**Facility/Location:** (Franklin & Woodford) 5-2079 037B00053L

**Field Description:** Guard Rail Mastic - West End & East Lane -

**Laboratory Description:**

Gray Material

**Asbestos Materials:**

Chrysotile = 1/400 = 0.25 % ( < 1 % ) Sample Is Negative

**Non-asbestos Fibrous Materials & Matrix Materials:**

<u>Cellulose</u>	<u>0.25 %</u>
<u>Binders</u>	<u>99.50 %</u>

**Remarks:** The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

**Analyst:** Winterford Mensah

**Reviewed By:**   
Signature



**ENVIRONMENTAL TRAINING CONCEPTS, INC**  
P.O. Box 99603 Louisville, KY 40269  
(502)640-2951

Certification Number: ETC-AIR-071415-00276

# O'Dail Lawson

has on 07-14-2015, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

## ASBESTOS INSPECTOR REFRESHER

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management and Tennessee Department of Environment & Conservation The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA).

Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 07-14-2016

  
Name - Training Manager

  
Name - Instructor



**TRANSPORTATION CABINET**  
Frankfort, Kentucky 40622  
www.transportation.ky.gov/

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

## Memorandum

**To:** Dan Hite  
**CC:**  
**From:** O'Dail Lawson  
Environmental Scientist IV  
Division of Environmental Analysis  
**Date:** 8/11/2015  
**Re:** Asbestos Inspection Report for 5-2079

---

**This report is prepared to accompany the 10-Day NOI for Demolition to the Division of Air Quality. Please include all pages with submittal.**

### **Project and Structure Information**

**Project #** 05-2079

**Bridge #** 120B00021L

**Location:** I-64 over KY 1865 (Wood Lake Road) MP 61.711

**Description:** The samples collected were point counted below 1%. No abatement necessary.

**Inspection Date:** July 10, 2015

### **Results**

The results revealed that there is no ACM abatement required at this time.





***MRS, INC.*** *MRS, Inc. Analytical Laboratory Division*

332 West Broadway, Suite 613  
Louisville, Kentucky 40202

(502) 495-1212  
Fax: (502) 491-7111

<b>Client:</b>	<u>KY Transportation Cabinet</u>	<b>Project No:</b>	<u>258045 B</u>
<b>Address:</b>	<u>200 Mero Street</u>	<b>Sample ID:</b>	<u>W - 1</u>
	<u>Frankfort, KY</u>	<b>Sampled:</b>	<u>10-Jul-15</u>
	<u>40601</u>	<b>Received:</b>	<u>21-Jul-15</u>
	<u>Attention O'Dail Lawson</u>	<b>Analyzed:</b>	<u>04-Aug-15 - Point Count -</u>

**Bulk Sample Analysis**

**Sampled by:** O'Dail Lawson

**Facility/Location:** Woodford County - 5-2079 120B00021 L

**Field Description:** Guard Rail Mastic - East Lane & West Lane

**Laboratory Description:**

Gray Material

**Asbestos Materials:**

Chrysotile = 1/400 = 0.25 % ( < 1 % ) Sample Is Negative

**Non-asbestos Fibrous Materials & Matrix Materials:**

<u>Cellulose</u>	<u>0.25 %</u>
<u>Binders</u>	<u>99.50 %</u>

**Remarks:** The sample was analyzed for asbestos content following the EPA Methodology (600/R-93/116). The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S. Government.

**Analyst:** Winterford Mensah      **Reviewed By:** *Winterford Mensah*  
Signature



**ENVIRONMENTAL TRAINING CONCEPTS, INC**  
P.O. Box 99603 Louisville, KY 40269  
(502)640-2951

Certification Number: ETC-AIR-071415-00276

**O'Dail Lawson**

has on 07-14-2015, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

**ASBESTOS INSPECTOR REFRESHER**

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management and Tennessee Department of Environment & Conservation The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA).

Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 07-14-2016

  
Name - Training Manager

  
Name - Instructor



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226  
Rev. 01/2016  
Page 1 of 1

RIGHT OF WAY CERTIFICATION

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	<b>RIGHT OF WAY CERTIFICATION</b>	
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ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
5-2079.00.00	Franklin/Woodford	FD52 037 86591 01D	NHPP IM 0644(90)

**PROJECT DESCRIPTION**

JPC Repair and Diamond Grind on I-64 from US 60 in Franklin County to US 421 in Woodford Co

**No Additional Right of Way Required**

Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

**Condition # 1 (Additional Right of Way Required and Cleared)**

All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.

**Condition # 2 (Additional Right of Way Required with Exception)**

The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract

**Condition # 3 (Additional Right of Way Required with Exception)**

The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.

Total Number of Parcels on Project	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired		
Signed Deed		
Condemnation		
Signed ROE		

**Notes/ Comments (Use Additional Sheet if necessary)**

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Tom Boylston
Signature		Signature	<i>[Signature]</i>
Date		Date	7-20-2016
Right of Way Director		FHWA	
Printed Name	DMLay	Printed Name	DAVID WHITWORTH
Signature	<i>[Signature]</i>	Signature	<i>[Signature]</i>
Date	20 July 2016	Date	7/21/16

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)**  
**FD52 037 86591 01D**  
**JPC Repair and Diamond Grind on I-64**  
**5-2079**

*Utility coordination efforts conducted by the project sponsor have determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.*

**THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED**

**No Rail Involved**     **Minimal Rail Involved (See Below)**     **Rail Involved (See Below)**

**UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG**

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. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

**SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES**

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The

Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)**  
**FD52 037 86591 01D**  
**JPC Repair and Diamond Grind on I-64**  
**5-2079**

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

***Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.***

### AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
1. AT&T KY 894 East Main Street, ext Georgetown, KY 40324		Frank Ambrose <a href="mailto:FA2207@ATT.com">FA2207@ATT.com</a> office (502)867-8240 cell (859)753-8377
2. Frankfort Plant Board - <b>Electric</b> P O Box 308 Frankfort, KY 40601		Vent Foster (502) 352-4402 <a href="mailto:VFoster@FEWPB.com">VFoster@FEWPB.com</a> or Jim Carter (502)352-4401 <a href="mailto:JCarter@FEWPB.com">JCarter@FEWPB.com</a>
3. Frankfort Plant Board - <b>CATV</b> P O Box 308 Frankfort, KY 40601		Shane Holt (502) 352-4546 <a href="mailto:SHolt@FEWPB.com">SHolt@FEWPB.com</a> and/or Adam Hellard (502) 352-4551 <a href="mailto:AHellard@FEWPB.com">AHellard@FEWPB.com</a>
4. Frankfort Plant Board - <b>Water</b> P O Box 308 Frankfort, KY 40601 (502) 875-4501		David Billings (502) 352-4468 <a href="mailto:DBillings@FEWPB.com">DBillings@FEWPB.com</a>

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)**  
**FD52 037 86591 01D**  
**JPC Repair and Diamond Grind on I-64**  
**5-2079**

5. Frankfort Sewer Department  
1200 Kentucky Ave.  
Frankfort, KY 40601
- William Scalf  
[WScalf@Frankfort.ky.gov](mailto:WScalf@Frankfort.ky.gov)  
(502) 875-2448  
Or  
Bob Peterson  
[BPeterson@Frankfort.ky.gov](mailto:BPeterson@Frankfort.ky.gov)  
Cell (502)229-6313
6. Bluegrass Energy  
P O Box 990  
1201 Lexington Rd.  
Nicholasville, KY 40356
- Jim Kendrick  
[jim.kendrick@bgenergy.com](mailto:jim.kendrick@bgenergy.com)  
859.885.2114  
859.806.5066
7. Peaks Mill Water District  
7165 US Highway 127 N  
Frankfort, KY 40601
- Dale Gatewood  
(502) 227-5740  
(502) 695-2641 – Maint. Office
8. Farmdale Water District  
100 Highwood Drive  
Frankfort, KY 40601  
[FWD@fewpb.net](mailto:FWD@fewpb.net)
- David Robinson or  
Clifford Toles  
(502) 223-3562  
Does not participate in BUD; call  
David Robinson for locate  
assistance.
9. Columbia Gas of Kentucky, Inc.  
2001 Mercer Rd., PO Box 14241  
Lexington, KY 40512
- David Lemons  
[DNLemons@NiSource.com](mailto:DNLemons@NiSource.com)  
cell – (859) 940-9210  
Office-(859) 288-0249  
or  
Bryan Slone  
[BKSlone@NiSource.com](mailto:BKSlone@NiSource.com)  
Office-(859)221-2185
10. LG&E KU
- Greg Geiser

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)**  
**FD52 037 86591 01D**  
**JPC Repair and Diamond Grind on I-64**  
**5-2079**

820 West Broadway  
Louisville, KY 40202  
LG&E Emergency Number (502) 589-1444  
KU Emergency Number 1-800-331-7370

work: (502) 627-3708  
[Greg.Geiser@lge-ku.com](mailto:Greg.Geiser@lge-ku.com)

**11.** Elkhorn Water District  
P.O.Box 67 OR  
Frankfort, KY 40602  
Telephone (502) 695-2641(maint. office)

Dale Gatewood  
Jolene Parris (office manager)  
(502)695-4431

**12.** Atmos Energy  
105 Hudson Boulevard  
Shelbyville, KY 40065  
[Bernie.Anderson@AtmosEnergy.com](mailto:Bernie.Anderson@AtmosEnergy.com)  
(502) 633-2831 ext. 104

Bernie Anderson  
cell: 502-321-8073

Ryne White  
270-929-1706  
[Ryne.white@atmosenergy.com](mailto:Ryne.white@atmosenergy.com)

**13.** North Shelby Water  
North Shelby Water District  
P.O. Box 97, 4596 Bagdad Rd.  
Bagdad, KY 40003

Pete Hedges  
[PeteHedges@bellsouth.net](mailto:PeteHedges@bellsouth.net)  
(502) 747-8942

**14.** Kentucky Data Link (KDL now Windstream)  
3701 Communications Way  
Evansville, IN 47715  
(Address envelopes ATTN LaDon Haley)

John McDowell  
[John.McDowell@windstream.com](mailto:John.McDowell@windstream.com)  
Office (606)329-6196  
Cell (606)369-3623  
Timothy Gibson (Fiber location/relocation)  
[Timothy.Gibson@Windstream.com](mailto:Timothy.Gibson@Windstream.com)  
(812) 454-6756  
Mark Ware  
[Mark.Ware@windstream.com](mailto:Mark.Ware@windstream.com)

Windstream Kentucky East, LLC

Lezlie Allison  
[Lezlie.Allison@Windstream.com](mailto:Lezlie.Allison@Windstream.com)  
**Send to all contacts**

**15.** East Kentucky Power Coop  
4775 Lexington Road

Garry Harvey  
[Garry.Harvey@EKPC.coop](mailto:Garry.Harvey@EKPC.coop)

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)**  
**FD52 037 86591 01D**  
**JPC Repair and Diamond Grind on I-64**  
**5-2079**

- |  |    |   |
|--|----|---|
| Winchester, KY 40391   | OR | (859)745-9601<br>Jason Witt<br><a href="mailto:Jason.Witt@EKPC.coop">Jason.Witt@EKPC.coop</a><br>Cell: (859) 749-9110<br>Office (859) 745-9596  |
| P O Box 707<br>Winchester, KY 40391  | OR | Barry Warner<br><a href="mailto:Barry.Warner@EKPC.coop">Barry.Warner@EKPC.coop</a><br>(859)745-9304   |
| <b>16.</b> Windstream Kentucky, Inc.<br>229 Lees Valley Road<br>Shepherdsville, KY 40165<br><b>OR</b><br>Barry Roberts<br>111 S. Main St.<br>Elizabethtown, KY 42071           |    | Roger Redford<br>cell – (502) 264-2053<br><a href="mailto:Roger.Redford@Windstream.com">Roger.Redford@Windstream.com</a><br>(502) 957-7127<br><br>(270) 723-7358  |
| <b>17.</b> Insight Communications Company<br>4701 Commerce Crossings Dr.<br>Louisville, KY 40229<br><a href="mailto:Dwight.Barbour@TWCable.com">Dwight.Barbour@TWCable.com</a> |    | Deno Barbour<br>Cell: (502) 664-7395<br>Office(502) 357-4376  |
| <b>18.</b> Sprint - Fiber Optics<br>11370 Enterprise Park Dr.<br>Sharonville, OH 45241   |    | Joe Thomas<br><a href="mailto:Joe.Thomas@Ericsson.com">Joe.Thomas@Ericsson.com</a><br>Office (513) 612-4204<br>Cell (937) 209-9754  |
| <b>19.</b> AT&T Legacy<br>7555 E. Pleasant Valley Rd. – Suite 140<br>Independence, OH 44131  |    | Mike Diederich<br><a href="mailto:MD4145@att.com">MD4145@att.com</a><br>Phone - (216) 750.0135<br>Cell - (216) 212-8556<br>Don Garr<br><a href="mailto:DRGarr@Hughes.net">DRGarr@Hughes.net</a><br>Cell: (502) 741-8374<br><b>Send to both contacts</b> |
| <b>20.</b> Kentucky American Water Company<br>2300 Richmond Rd<br>Lexington, KY 40502  |    | Wes Felts<br><a href="mailto:Jon.Felts@AMWater.com">Jon.Felts@AMWater.com</a><br>(859) 537-0762 cell  |

## UTILITIES AND RAIL CERTIFICATION NOTE

**FRANKLIN - WOODFORD, NHPP IM 0644 (090)  
FD52 037 86591 01D  
JPC Repair and Diamond Grind on I-64  
5-2079**

(859) 268-6360 office

**21.** Shelby Energy Cooperative  
P.O. Box 311, 620 Old Finchville Road  
Shelbyville, KY 40065  
(502) 633-4420

Jason Ginn  
[Jason@ShelbyEnergy.com](mailto:Jason@ShelbyEnergy.com)  
cell: 502-643-2778

**22.** Crown Castle Network Operations  
10170 Linn Station Road  
Suite 525  
Louisville, KY 40223  
(builds cell towers and leases space on them)

Brian Watkins  
[Brian.Watkins@CrownCastle.com](mailto:Brian.Watkins@CrownCastle.com)  
(502)318-1323  
Brandy Bowling (Brian's supervisor)  
[Brandy.Bowling@CrownCastle.com](mailto:Brandy.Bowling@CrownCastle.com)  
(502)318-1322  
Cindy Shaffer  
[Cynthia.Shaffer@CrownCastle.com](mailto:Cynthia.Shaffer@CrownCastle.com)  
(502) 318-1313

**Send Facility Map request only to:**  
Chris Gladstone  
[Chris.Gladstone@CrownCastle.com](mailto:Chris.Gladstone@CrownCastle.com)  
(502) 689-2162  
and  
Rebecca Gray  
[Rebecca.gray@crowncastle.com](mailto:Rebecca.gray@crowncastle.com)  
(502) 318-1313

# MATERIAL SUMMARY

**CONTRACT ID: 161043**

**121GR16D043**

**DE03700641643**

I-64 JPC REPAIR AND DIAMOND GRINDING ON I-64 FROM MP 57.811 IN FRANKLIN CO. TO MP 59.431.  
ASPHALT PAVEMENT & ROADWAY REHAB.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	1,129.00	TON
0010	00078	CRUSHED AGGREGATE SIZE NO 2	68.00	TON
0015	00100	ASPHALT SEAL AGGREGATE	5.00	TON
0020	00103	ASPHALT SEAL COAT	.70	TON
0025	00190	LEVELING & WEDGING PG64-22	126.00	TON
0030	00339	CL3 ASPH SURF 0.38D PG64-22	1,465.00	TON
0035	01000	PERFORATED PIPE-4 IN	96.00	LF
0040	01028	PERF PIPE HEADWALL TY 3-4 IN	4.00	EACH
0045	02058	REMOVE PCC PAVEMENT	4,718.00	SQYD
0050	02060	PCC PAVEMENT DIAMOND GRINDING	44,137.00	SQYD
0055	02069	JPC PAVEMENT-10 IN	4,718.00	SQYD
0060	02110	PARTIAL DEPTH PATCHING	520.00	CUFT
0065	02115	SAW-CLEAN-RESEAL TVERSE JOINT	8,790.00	LF
0070	02599	FABRIC-GEOTEXTILE TYPE IV	120.00	SQYD
0075	02116	SAW-CLEAN-RESEAL LONGIT JOINT	17,541.00	LF
0080	02676	MOBILIZATION FOR MILL & TEXT - FRANKLIN	1.00	LS
0085	02677	ASPHALT PAVE MILLING & TEXTURING	1,465.00	TON
0090	02696	SHOULDER RUMBLE STRIPS-SAWED	32,912.00	LF
0095	03383	PVC PIPE-4 IN	100.00	LF
0100	10020NS	FUEL ADJUSTMENT	1,337.00	DOLL
0105	10030NS	ASPHALT ADJUSTMENT	2,270.00	DOLL
0110	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	7,462.00	LF
0115	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	3.00	EACH
0120	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	9.00	EACH
0125	01984	DELINEATOR FOR BARRIER - WHITE	14.00	EACH
0130	01985	DELINEATOR FOR BARRIER - YELLOW	14.00	EACH
0135	02014	BARRICADE-TYPE III	4.00	EACH
0140	02220	FLOWABLE FILL	3.00	CUYD
0145	02352	GUARDRAIL-STEEL W BEAM-D FACE	137.50	LF
0150	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	2.00	EACH
0155	02365	CRASH CUSHION TYPE IX-A	1.00	EACH
0160	02367	GUARDRAIL END TREATMENT TYPE 1	2.00	EACH
0165	02369	GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH
0170	02381	REMOVE GUARDRAIL	1,187.20	LF
0175	02471	FILL AND CAP SINKHOLE	1.00	EACH
0180	02562	TEMPORARY SIGNS	1,000.00	SQFT
0185	02575	DITCHING AND SHOULDERING	8,228.00	LF
0190	02650	MAINTAIN & CONTROL TRAFFIC - FRANKLIN	1.00	LS
0195	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0200	02726	STAKING - FRANKLIN	1.00	LS
0205	02775	ARROW PANEL	2.00	EACH
0210	05950	EROSION CONTROL BLANKET	2,000.00	SQYD

**MATERIAL SUMMARY**

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0215	06401	FLEXIBLE DELINEATOR POST-M/W	76.00	EACH
0220	06404	FLEXIBLE DELINEATOR POST-M/Y	57.00	EACH
0225	06511	PAVE STRIPING-TEMP PAINT-6 IN	39,026.00	LF
0230	06515	PAVE STRIPING-PERM PAINT-6 IN	42,786.00	LF
0235	06517	PAVE STRIPING-PERM PAINT-12 IN	1,637.00	LF
0240	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF
0245	06550	PAVE STRIPING-TEMP REM TAPE-W	1,000.00	LF
0250	06551	PAVE STRIPING-TEMP REM TAPE-Y	1,000.00	LF
0255	20411ED	LAW ENFORCEMENT OFFICER	90.00	HOURL
0260	20758ED	REMOVE AND RESET PERF PIPE HEADWALL	2.00	EACH
0265	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	425.00	LF
0270	22664EN	WATER BLASTING EXISTING STRIPE	39,026.00	LF
0275	23143ED	KPDES PERMIT AND TEMP EROSION CONTROL - FRANKLIN	1.00	LS
0280	24489EC	INLAID PAVEMENT MARKER	242.00	EACH
0285	03298	EXPAN JOINT REPLACE 4 IN - 37B00053L	83.20	LF
0290	03299	ARMORED EDGE FOR CONCRETE - 37B00053L	83.20	LF
0295	22146EN	CONCRETE PATCHING REPAIR - 37B00053L	500.00	SQFT
0300	03298	EXPAN JOINT REPLACE 4 IN - 37B00053R	83.20	LF
0305	03299	ARMORED EDGE FOR CONCRETE - 37B00053R	83.20	LF
0310	22146EN	CONCRETE PATCHING REPAIR - 37B00053R	500.00	SQFT
0315	02568	MOBILIZATION	1.00	LS
0320	02569	DEMOBILIZATION	1.00	LS
0325	24589ED	LED LUMINAIRE	4.00	EACH
0330	24749EC	HIGH MAST LED LUMINAIRE	24.00	EACH
0335	04940	REMOVE LIGHTING - FRANKLIN	1.00	LS

**CONTRACT ID: 161043****121GR16D043****DE12000641643**

I-64 JPC REPAIR AND DIAMOND GRINDING ON I-64 FROM MP 59.431 TO MP 64.868 IN WOODFORD COUNTY. ASPHALT PAVEMENT & ROADWAY REHAB.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0340	00001	DGA BASE	3,788.00	TON
0345	00078	CRUSHED AGGREGATE SIZE NO 2	216.00	TON
0350	00100	ASPHALT SEAL AGGREGATE	6.00	TON
0355	00103	ASPHALT SEAL COAT	.70	TON
0360	00190	LEVELING & WEDGING PG64-22	439.00	TON
0365	00214	CL3 ASPH BASE 1.00D PG64-22	120.00	TON
0370	00339	CL3 ASPH SURF 0.38D PG64-22	4,148.00	TON
0375	01000	PERFORATED PIPE-4 IN	288.00	LF
0380	01028	PERF PIPE HEADWALL TY 3-4 IN	12.00	EACH
0385	02058	REMOVE PCC PAVEMENT	18,890.00	SQYD
0390	02060	PCC PAVEMENT DIAMOND GRINDING	150,947.00	SQYD
0395	02069	JPC PAVEMENT-10 IN	18,890.00	SQYD
0400	02110	PARTIAL DEPTH PATCHING	1,540.00	CUFT
0405	02115	SAW-CLEAN-RESEAL TVERSE JOINT	27,312.00	LF

**MATERIAL SUMMARY**

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0410	02116	SAW-CLEAN-RESEAL LONGIT JOINT	56,605.00	LF
0415	02599	FABRIC-GEOTEXTILE TYPE IV	360.00	SQYD
0420	02676	MOBILIZATION FOR MILL & TEXT - WOODFORD	1.00	LS
0425	02677	ASPHALT PAVE MILLING & TEXTURING	4,148.00	TON
0430	02696	SHOULDER RUMBLE STRIPS-SAWED	115,064.00	LF
0435	03383	PVC PIPE-4 IN	300.00	LF
0440	10020NS	FUEL ADJUSTMENT	4,739.00	DOLL
0445	10030NS	ASPHALT ADJUSTMENT	8,049.00	DOLL
0450	21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	19,162.00	LF
0455	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	8.00	EACH
0460	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	10.00	EACH
0465	01984	DELINEATOR FOR BARRIER - WHITE	8.00	EACH
0470	01985	DELINEATOR FOR BARRIER - YELLOW	8.00	EACH
0475	02014	BARRICADE-TYPE III	6.00	EACH
0480	02352	GUARDRAIL-STEEL W BEAM-D FACE	275.00	LF
0485	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH
0490	02365	CRASH CUSHION TYPE IX-A	2.00	EACH
0495	02367	GUARDRAIL END TREATMENT TYPE 1	2.00	EACH
0500	02381	REMOVE GUARDRAIL	1,070.30	LF
0505	02562	TEMPORARY SIGNS	1,000.00	SQFT
0510	02575	DITCHING AND SHOULDERING	28,766.00	LF
0515	02650	MAINTAIN & CONTROL TRAFFIC - WOODFORD	1.00	LS
0520	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0525	02726	STAKING - WOODFORD	1.00	LS
0530	02775	ARROW PANEL	2.00	EACH
0535	05950	EROSION CONTROL BLANKET	8,000.00	SQYD
0540	06401	FLEXIBLE DELINEATOR POST-M/W	68.00	EACH
0545	06511	PAVE STRIPING-TEMP PAINT-6 IN	137,447.00	LF
0550	06515	PAVE STRIPING-PERM PAINT-6 IN	129,447.00	LF
0555	06517	PAVE STRIPING-PERM PAINT-12 IN	2,909.00	LF
0560	06549	PAVE STRIPING-TEMP REM TAPE-B	2,000.00	LF
0565	06550	PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF
0570	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF
0575	20411ED	LAW ENFORCEMENT OFFICER	135.00	HOURL
0580	20758ED	REMOVE AND RESET PERF PIPE HEADWALL	3.00	EACH
0585	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	600.00	LF
0590	22664EN	WATER BLASTING EXISTING STRIPE	137,447.00	LF
0595	23143ED	KPDES PERMIT AND TEMP EROSION CONTROL - WOODFORD	1.00	LS
0600	24489EC	INLAID PAVEMENT MARKER	719.00	EACH
0605	01708	RECONSTRUCT CATCH BASIN	2.00	EACH
0610	02165	REMOVE PAVED DITCH	3,214.00	SQYD
0615	02484	CHANNEL LINING CLASS III	3,689.00	TON
0620	03299	ARMORED EDGE FOR CONCRETE - 120B00021L	78.80	LF
0625	08504	EPOXY SAND SLURRY - 120B00021L	135.00	SQYD
0630	08534	CONCRETE OVERLAY-LATEX - 120B00021L	29.40	CUYD
0635	08510	REM EPOXY BIT FOREIGN OVERLAY	530.00	SQYD
0640	08549	BLAST CLEANING - 120B00021L	638.00	SQYD
0645	08550	HYDRODEMOLITION - 120B00021L	530.00	SQYD

## MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0650	24094EC	PARTIAL DEPTH PATCHING - 120B00021L	10.00	CUYD
0655	03299	ARMORED EDGE FOR CONCRETE - 120B00021R	78.80	LF
0660	08504	EPOXY SAND SLURRY - 120B00021R	135.00	SQYD
0665	08534	CONCRETE OVERLAY-LATEX - 120B00021R	29.40	CUYD
0670	08510	REM EPOXY BIT FOREIGN OVERLAY	530.00	SQYD
0675	08549	BLAST CLEANING - 120B00021R	638.00	SQYD
0680	08550	HYDRODEMOLITION - 120B00021R	530.00	SQYD
0685	24094EC	PARTIAL DEPTH PATCHING - 120B00021R	10.00	CUYD
0690	04793	CONDUIT-1 1/4 IN	50.00	LF
0695	04795	CONDUIT-2 IN	20.00	LF
0700	04820	TRENCHING AND BACKFILLING	60.00	LF
0705	04829	PIEZOELECTRIC SENSOR	4.00	EACH
0710	04830	LOOP WIRE	1,500.00	LF
0715	04895	LOOP SAW SLOT AND FILL	365.00	LF
0720	20359NN	GALVANIZED STEEL CABINET	2.00	EACH
0725	20360ES818	WOOD POST	4.00	EACH
0730	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	2.00	EACH
0735	02568	MOBILIZATION	1.00	LS
0740	02569	DEMOBILIZATION	1.00	LS
0745	24589ED	LED LUMINAIRE	70.00	EACH
0750	04940	REMOVE LIGHTING - WOODFORD	1.00	LS

**PART II**  
**SPECIFICATIONS AND STANDARD DRAWINGS**

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2012* and *Standard Drawings, Edition of 2016*.

**Supplemental Specifications to the  
Standard Specifications for Road and Bridge Construction, 2012 Edition  
Effective with the April 29, 2016 Letting**

<b>Subsection:</b>	101.03 DEFINITIONS
<b>Revision:</b>	Add the following Definitions to this section: <b>Superpave Mix Design Technologist (SMDT)</b> - An inspector qualified by the KYTC to submit, adjust, or approve asphalt mix designs.  <b>Superpave Plant Technologist (SPT)</b> - An inspector qualified by the KYTC to perform routine inspection and process control, acceptance, or verification testing on asphalt mixtures.
<b>Subsection:</b>	102.15 Process Agent.
<b>Revision:</b>	Replace the 1st paragraph with the following: Every corporation doing business with the Department shall submit evidence of compliance with KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-220, and file with the Department the name and address of the process agent upon whom process may be served.
<b>Subsection:</b>	105.13 Claims Resolution Process.
<b>Revision:</b>	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer available through the forms library and are forms generated within the AASHTO SiteManager software.
<b>Subsection:</b>	108.01 Subcontracting of Contract.
<b>Revision:</b>	Replace the section with the following: Do not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion of the Contract or Contracts, or of the right, title, or interest therein, without the Engineer's written consent. If the Contractor chooses to subcontract any portion of the Contract, a written request to sublet work must be submitted on the Subcontract Request (TC 63-35) form for the Engineer's approval. When directed by the Engineer, submit a certified copy of the actual subcontract agreement executed between the parties.  The Engineer will allow the Contractor to subcontract a portion, but the Contractor must perform with his own organization work amounting to no less than 30 percent of the total Contract cost. The Engineer will not allow any subcontractor to exceed the percentage to be performed by the Contractor and will require the Contractor to maintain a supervisory role over the entire project.  Do not allow any subcontractor to further subcontract any portion of the work without obtaining written consent from the Engineer. When the Engineer gives such consent, the first tier subcontractor may further subcontract a portion of his work not to exceed 50 percent of the work originally subcontracted to him by the Contractor. Do not allow any second tier subcontractor to subcontract any portion of the work.  Extra work performed by subcontractors in accordance with Section 109 will not be utilized in the computation of total dollar amount subcontracted. Subcontract percentages are based upon the original contract amount.  Payment to subcontractors for satisfactory performance of their work or materials supplied must be made within 7 calendar days from receipt of payment from the Engineer. Upon request by the Engineer, provide proof that payment has been made to the subcontractor within the 7 calendar days. Progress payments may be withheld for failure to comply with this request

**Supplemental Specifications to the  
Standard Specifications for Road and Bridge Construction, 2012 Edition  
Effective with the April 29, 2016 Letting**

	<p>The Engineer's written consent to subcontract, assign, or otherwise dispose of any portion of the Contract does not, under any circumstances, relieve the Contractor or the surety of their respective liabilities and obligations under the Contract. The Engineer will make transactions only with the Contractor. The Engineer will recognize subcontractors only in the similar capacity of employees or workers of the Contractor who are subject to the same requirements as to character and competence as specified in Subsection 108.06.</p> <p>Lease agreements are acceptable on Department projects. No additional paperwork is needed when equipment is rented from a commercial rental company unless the leased equipment comes with an operator. In these circumstances, payroll records for the operator of the leased equipment must be maintained and submitted by the contractor in accordance with Department policy.</p> <p>Lease agreements between contractors that involve equipment only will require the submittal of a TC 63-71 Department Equipment Rental Form. If a Contractor is found to be in violation of these requirements, the Engineer reserves the right to withhold payment for the work which was performed in violation of these requirements. This provision does not include the lease or use of equipment from a corporation or company wholly owned by the Contractor. The Contractor shall not use equipment in the performance of the Contract to which title is not held by the Contractor or an approved subcontractor without a submitted lease agreement.</p> <p>If a public official has provided a documented Declaration of Emergency, then the Engineer may verbally waive the requirement of submitting a TC 63-71 Department Equipment Rental Form until the situation has ended. After the emergency situation ends, immediately remove the equipment from the project or submit a completed TC 63-71 Department Equipment Rental Form to the Engineer.</p>
<b>Subsection:</b>	108.03 Preconstruction Conference.
<b>Revision:</b>	Replace 8) Staking with the following: 8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
<b>Subsection:</b>	109.07.02 Fuel.
<b>Revision:</b>	Revise item Crushed Aggregate Used for Embankment Stabilization to the following: Crushed Aggregate Used for Stabilization of Unsuitable Materials Used for Embankment Stabilization
	Delete the following item from the table. <del>Crushed Sandstone Base (Cement Treated)</del>
<b>Subsection:</b>	110.02 Demobilization.
<b>Revision:</b>	Replace the first part of the first sentence of the second paragraph with the following: Perform all work and operations necessary to accomplish final clean-up as specified in the first paragraph of Subsection 105.12;
<b>Subsection:</b>	112.03.12 Project Traffic Coordinator (PTC).
<b>Revision:</b>	Replace the last paragraph of this subsection with the following: Ensure the designated PTC has sufficient skill and experience to properly perform the task assigned and has successfully completed the qualification courses.

**Supplemental Specifications to the  
Standard Specifications for Road and Bridge Construction, 2012 Edition  
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<b>Subsection:</b>	112.04.18 Diversions (By-Pass Detours).
<b>Revision:</b>	Insert the following sentence after the 2nd sentence of this subsection. The Department will not measure temporary drainage structures for payment when the contract documents provide the required drainage opening that must be maintained with the diversion. The temporary drainage structures shall be incidental to the construction of the diversion. If the contract documents fail to provide the required drainage opening needed for the diversion, the cost of the temporary drainage structure will be handled as extra work in accordance with section 109.04.
<b>Subsection:</b>	201.03.01 Contractor Staking.
<b>Revision:</b>	Replace the first paragraph with the following: Perform all necessary surveying under the general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
<b>Subsection:</b>	201.04.01 Contractor Staking.
<b>Revision:</b>	Replace the last sentence of the paragraph with the following: Complete the general layout of the project under the supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.
<b>Subsection:</b>	206.04.01 Embankment-in-Place.
<b>Revision:</b>	Replace the fourth paragraph with the following: The Department will not measure <b>suitable</b> excavation included in the original plans that is disposed of for payment and will consider it incidental to Embankment-in-Place.
<b>Subsection:</b>	208.02.01 Cement.
<b>Revision:</b>	Replace paragraph with the following: Select Type I or Type II cement conforming to Section 801. Use the same type cement throughout the work.
<b>Subsection:</b>	208.03.06 Curing and Protection.
<b>Revision:</b>	Replace the fourth paragraph with the following: Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day consists of a continuous 24-hour period in which the ambient air temperature does not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7) , 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department may allow a shortened curing period when the Contractor requests. The Contractor shall give the Department at least 3 day notice of the request for a shortened curing period. The Department will require a minimum of 3 curing days after final compaction. The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened curing time is requested. The Department will test cores using an unconfined compression test. Roadbed cores must achieve a minimum strength requirement of 80 psi.
<b>Subsection:</b>	208.03.06 Curing and Protection.
<b>Revision:</b>	Replace paragraph eight with the following: At no expense to the Department, repair any damage to the subgrade caused by freezing.

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<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	A) Seed Mixtures for Permanent Seeding.
<b>Revision:</b>	Revise <b>Seed Mix Type I</b> to the mixture shown below: 50% Kentucky 31 Tall Fescue ( <i>Festuca arundinacea</i> ) 35% Hard Fescue ( <i>Festuca (Festuca longifolia)</i> ) 10% Ryegrass, Perennial ( <i>Lolium perenne</i> ) 5% White Dutch Clover ( <i>Trifolium repens</i> )
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	A) Seed Mixtures for Permanent Seeding.
<b>Number:</b>	2)
<b>Revision:</b>	Replace the paragraph with the following: Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course replace the crown vetch with Kentucky 31 Tall Fescue.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	A) Seed Mixtures for Permanent Seeding.
<b>Number:</b>	3)
<b>Revision:</b>	Replace the paragraph with the following: Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to crop land or golf course, replace the <i>Sericea Lespedeza</i> with Kentucky 31 Fescue.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	B) Procedures for Permanent Seeding.
<b>Revision:</b>	Delete the first sentence of the section.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	B) Procedures for Permanent Seeding.
<b>Revision:</b>	Replace the second and third sentence of the section with the following: Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural limestone to the seedbed when the Engineer determines it is needed. When required, place agricultural limestone at a rate of 3 tons per acre.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	D) Top Dressing.
<b>Revision:</b>	Change the title of part to D) Fertilizer.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	D) Fertilizer.
<b>Revision:</b>	Replace the first paragraph with the following: Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10 fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000 square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional cost to the Department. Re-establish any vegetation severely damaged or destroyed because of an excessive application of fertilizer at no cost to the Department.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
<b>Part:</b>	D) Fertilizer.
<b>Revision:</b>	Delete the second paragraph.

**Supplemental Specifications to the  
Standard Specifications for Road and Bridge Construction, 2012 Edition  
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<b>Subsection:</b>	212.04.04 Agricultural Limestone.												
<b>Revision:</b>	Replace the entire section with the following: The Department will measure the quantity of agricultural limestone in tons.												
<b>Subsection:</b>	212.04.05 Fertilizer.												
<b>Revision:</b>	Replace the entire section with the following: The Department will measure fertilizer used in the seeding or sodding operations for payment. The Department will measure the quantity by tons.												
<b>Subsection:</b>	212.05 PAYMENT.												
<b>Revision:</b>	Delete the following item code: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Pay Item</u></th> <th style="text-align: left;"><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>05966</td> <td>Topdressing Fertilizer</td> <td>Ton</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	05966	Topdressing Fertilizer	Ton						
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>											
05966	Topdressing Fertilizer	Ton											
<b>Subsection:</b>	212.05 PAYMENT.												
<b>Revision:</b>	Add the following pay items: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Pay Item</u></th> <th style="text-align: left;"><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>05963</td> <td>Initial Fertilizer</td> <td>Ton</td> </tr> <tr> <td>05964</td> <td>20-10-10 Fertilizer</td> <td>Ton</td> </tr> <tr> <td>05992</td> <td>Agricultural Limestone</td> <td>Ton</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	05963	Initial Fertilizer	Ton	05964	20-10-10 Fertilizer	Ton	05992	Agricultural Limestone	Ton
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>											
05963	Initial Fertilizer	Ton											
05964	20-10-10 Fertilizer	Ton											
05992	Agricultural Limestone	Ton											
<b>Subsection:</b>	213.03.02 Progress Requirements.												
<b>Revision:</b>	Replace the third paragraph with the following: After exposing areas of erodible material, make every effort to stabilize and protect the areas as quickly as possible. Permanently seed and mulch all areas at final grade within 14 days. Temporary stabilization practices on those portions of the project where construction activities have temporarily ceased shall be initiated within 14 days of the date of activity cessation. The Engineer will suspend grading operations for instances where the Contractor fails to sustain erosion control measures to effectively control erosion and to prevent water pollution in accordance with the KPDES Permit. In addition, the Engineer will withhold monies due on current estimates until corrective work has been initiated and is continuously progressing to remediate noted deficiencies. Additionally, should noted deficiencies not be adequately addressed to the satisfaction of the Engineer within 7 calendar days of receipt of written notification of deficiencies, the Department will apply a penalty equal to the daily liquidated damages rate until all aspects of the work have been completed.												
<b>Subsection:</b>	213.03.05 Temporary Control Measures.												
<b>Part:</b>	E) Temporary Seeding and Protection.												
<b>Revision:</b>	Delete the second sentence of the first paragraph.												
<b>Subsection:</b>	304.02.01 Physical Properties.												
<b>Table:</b>	Required Geogrid Properties												
<b>Revision:</b>	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.												
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.												
<b>Part:</b>	B) Sampling.												
<b>Revision:</b>	Replace the second sentence with the following: The Department will determine when to obtain the quality control samples using the random-number feature of the mix design submittal and approval spreadsheet. The Department will randomly determine when to obtain the verification samples required in Subsections 402.03.03 and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.												

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<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.
<b>Part:</b>	D) Testing Responsibilities.
<b>Number:</b>	3) VMA.
<b>Revision:</b>	Add the following paragraph below Number 3) VMA: Retain the AV/VMA specimens and one additional corresponding $G_{mm}$ sample for 5 working days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens from the affected subplot(s) for the duration of the project.
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.
<b>Part:</b>	D) Testing Responsibilities.
<b>Number:</b>	4) Density.
<b>Revision:</b>	Replace the second sentence of the Option A paragraph with the following: Perform coring by the end of the following work day.
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.
<b>Part:</b>	D) Testing Responsibilities.
<b>Number:</b>	5) Gradation.
<b>Revision:</b>	Delete the second paragraph.
<b>Subsection:</b>	402.03.02 Contractor Quality Control and Department Acceptance.
<b>Part:</b>	H) Unsatisfactory Work.
<b>Number:</b>	1) Based on Lab Data.
<b>Revision:</b>	Replace the second paragraph with the following: When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.
<b>Subsection:</b>	402.03.03 Verification.
<b>Revision:</b>	Replace the first paragraph with the following: <b>402.03.03 Mixture Verification.</b> For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected subplot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.
<b>Subsection:</b>	402.03.03 Verification.
<b>Part:</b>	A) Evaluation of Subplot(s) Verified by Department.
<b>Revision:</b>	Replace the third sentence of the second paragraph with the following: When the paired $t$ -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

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<b>Subsection:</b>	402.03.03 Verification.
<b>Part:</b>	B) Evaluation of Sublots Not Verified by Department.
<b>Revision:</b>	Replace the third sentence of the first paragraph with the following: When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.
<b>Subsection:</b>	402.03.03 Verification.
<b>Part:</b>	B) Evaluation of Sublots Not Verified by Department.
<b>Revision:</b>	Replace the third sentence of the second paragraph with the following: When the <i>F</i> -test or <i>t</i> -test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.
<b>Subsection:</b>	402.03.03 Verification.
<b>Part:</b>	C) Test Data Patterns.
<b>Revision:</b>	Replace the second sentence with the following: When patterns indicate substantial differences between the verified and non-verified sublots, the Department will perform further comparative testing according to subsection 402.03.05.
<b>Subsection:</b>	402.03 CONSTRUCTION.
<b>Revision:</b>	Add the following subsection: <b>402.03.04 Testing Equipment and Technician Verification.</b> For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the Department will obtain an additional verification sample at random using the Asphalt Mixture Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and Department's laboratory testing equipment and technicians. The Department will obtain a mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it according to AASHTO R 47. The Department will retain one split portion of the sample and provide the other portion to the Contractor. At a later time convenient to both parties, the Department and Contractor will simultaneously reheat the sample to the specified compaction temperature and test the mixture for AV and VMA using separate laboratory equipment according to the corresponding procedures given in Subsection 402.03.02. The Department will evaluate the differences in test results between the two laboratories. When the difference between the results for AV or VMA is not within $\pm 2.0$ percent, the Department will investigate and resolve the discrepancy according to Subsection 402.03.05.
<b>Subsection:</b>	402.03.04 Dispute Resolution.
<b>Revision:</b>	Change the subsection number to 402.03.05.
<b>Subsection:</b>	402.05 PAYMENT.
<b>Part:</b>	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
<b>Table:</b>	AC
<b>Revision:</b>	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to $\pm 0.6$ .
<b>Subsection:</b>	403.01 Description.
<b>Revision:</b>	Replace the sentence three and four of the first paragraph with the following: Provide a Superpave Plant Technologist (SPT) or Superpave Mix Design Technician (SMDT) qualified by the Laboratories' Quality Acceptance program. Be available to address all Quality Control concerns arising during work performed under section 403.
<b>Subsection:</b>	403.02.10 Material Transfer Vehicle (MTV).
<b>Revision:</b>	Replace the first sentence with the following: In addition to the equipment specified above, provide a MTV with the following minimum characteristics:

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<b>Subsection:</b>	403.03.03 Preparation of Mixture
<b>Part:</b>	C) Mix Design Criteria
<b>Number:</b>	2)
<b>Revision:</b>	Revise part 2) to read as follows: Selection of Optimum AC. Normally, the Department will approve the AC at an air-void content of 4.0 percent. The Engineer may assign an AC corresponding to other air-void levels as deemed appropriate. Ensure the optimum AC is a minimum of 5.2 percent by weight of the total mixture for all 0.5-inch nominal surface mixtures and 5.5 percent by weight of the total mixture for all 0.38-inch nominal surface mixtures.
<b>Subsection:</b>	412.02.09 Material Transfer Vehicle (MTV).
<b>Revision:</b>	Replace the paragraph with the following: Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.
<b>Subsection:</b>	412.03.07 Placement and Compaction.
<b>Revision:</b>	Replace the first paragraph with the following: Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps and/or shoulders unless specified in the contract. When the Engineer determines the use of the MTV is not practical for a portion of the project, the Engineer may waive its requirement for that portion of pavement by a letter documenting the waiver.
<b>Subsection:</b>	412.04 MEASUREMENT.
<b>Revision:</b>	Add the following subsection: 412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for payment and will consider its use incidental to the asphalt mixture.
<b>Subsection:</b>	501.03.19 Surface Tolerances and Testing Surface.
<b>Part:</b>	B) Ride Quality.
<b>Revision:</b>	Add the following to the end of the first paragraph: The Department will specify if the ride quality requirements are Category A or Category B when ride quality is specified in the Contract. Category B ride quality requirements shall apply when the Department fails to classify which ride quality requirement will apply to the Contract.
<b>Subsection:</b>	501.03.05 Weather Limitations and Protection.
<b>Revision:</b>	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.
<b>Subsection:</b>	601.02.02 Cement
<b>Revision:</b>	Replace the third sentence with the following: The Department will allow the use of Type IP( $\leq$ 20), Type IS( $\leq$ 30), Type IL, Type II, and Type III when the Engineer approves.
<b>Subsection:</b>	601.02.02 Cement
<b>Revision:</b>	Replace the fifth sentence with the following: If unsatisfactory test results are obtained using Type IP( $\leq$ 20), Type IS( $\leq$ 30), Type IL, Type II, or Type III cement complete the work using Type I cement.

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<b>Subsection:</b>	601.03.02 Concrete Producer Responsibilities.																																																																																										
<b>Part:</b>	E) Trip Tickets.																																																																																										
<b>Revision:</b>	Replace the section with the following: Furnish a trip ticket containing the minimum information shown in the table below. Certify that the data on the ticket is correct and that the mixture conforms to the approved mix design. Ensure that the plant manager or a Level II concrete technician signs the ticket. The Department's jobsite inspector will complete all other necessary information on the back of the trip ticket.																																																																																										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Contract Id:</td> <td>Proj. Number:</td> <td>Date:</td> <td>County:</td> <td></td> </tr> <tr> <td>Truck No:</td> <td colspan="2">Producer Name:</td> <td colspan="2">SiteManager Sample Id:</td> </tr> <tr> <td>Qty(Yds<sup>3</sup>):</td> <td colspan="3">Time Loaded (Non Agitated Concrete Only):</td> <td></td> </tr> <tr> <td colspan="5">Begin Mixing Time: _____ AM ____ PM ____ REV _____</td> </tr> <tr> <td colspan="2">Set Retarder Used</td> <td>Yes ___</td> <td>Type ___</td> <td>No ___</td> </tr> <tr> <td colspan="2">Water Reducer Used</td> <td>Yes ___</td> <td>Type ___</td> <td>No ___</td> </tr> <tr> <td colspan="2">Water Underrun</td> <td>_____ Gal/Yd<sup>3</sup></td> <td colspan="2">_____ Total Gallons</td> </tr> <tr> <td>Design W/C:</td> <td>Actual W/C:</td> <td colspan="2">Slump (inches)</td> <td></td> </tr> <tr> <td colspan="5"><b>Batch Weight Information:</b></td> </tr> <tr> <td><u>Material:</u></td> <td><u>Description:</u></td> <td><u>Design Qty:</u></td> <td><u>Required:</u></td> <td><u>Batched:</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>%Var:</u></td> <td><u>%Moisture:</u></td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>Actual:</u></td> <td></td> </tr> <tr> <td colspan="5">Remarks:</td> </tr> <tr> <td colspan="5"> </td> </tr> <tr> <td colspan="5">*The data on this ticket is correct for the approved concrete mix design.*</td> </tr> <tr> <td colspan="5"> </td> </tr> <tr> <td colspan="3">Signature: _____</td> <td colspan="2">Date: _____</td> </tr> <tr> <td colspan="5" style="text-align: center;">KRMCA Level II Technician or Plant Manager</td> </tr> </table>		Contract Id:	Proj. Number:	Date:	County:		Truck No:	Producer Name:		SiteManager Sample Id:		Qty(Yds <sup>3</sup> ):	Time Loaded (Non Agitated Concrete Only):				Begin Mixing Time: _____ AM ____ PM ____ REV _____					Set Retarder Used		Yes ___	Type ___	No ___	Water Reducer Used		Yes ___	Type ___	No ___	Water Underrun		_____ Gal/Yd <sup>3</sup>	_____ Total Gallons		Design W/C:	Actual W/C:	Slump (inches)			<b>Batch Weight Information:</b>					<u>Material:</u>	<u>Description:</u>	<u>Design Qty:</u>	<u>Required:</u>	<u>Batched:</u>				<u>%Var:</u>	<u>%Moisture:</u>				<u>Actual:</u>		Remarks:										*The data on this ticket is correct for the approved concrete mix design.*										Signature: _____			Date: _____		KRMCA Level II Technician or Plant Manager				
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<b>Part:</b>	A) Concrete																																																																																										
<b>Revision:</b>	Revise Table for INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE as follows: Replace "M1 w/ Type 1 cement" with "M1 w/ Type 1 or blended hydraulic cement"																																																																																										
<b>Subsection:</b>	601.03.03 Proportioning and Requirements																																																																																										
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<b>Revision:</b>	Revise part C) header to read as follows: Mixtures Using Type IP(≤20), IS(≤30), and IL Cement and Mineral Admixtures.																																																																																										
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<b>Number:</b>	2)																																																																																										
<b>Revision:</b>	Revise second sentence to read as follows: The use of fly ash, blast furnace slag cement, or micosilica in concrete is the Contractor's option.																																																																																										

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<b>Subsection:</b>	601.03.03 Proportioning and Requirements
<b>Part:</b>	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
<b>Number:</b>	2)
<b>Revision:</b>	Revise the first sentence in the second paragraph to read as follows: When the ability to use blast furnace slag cement or microsilica has not been demonstrated have the concrete producer provide trial batches in accordance with Subsection 601.03.02 G) 1).
<b>Subsection:</b>	601.03.03 Proportioning and Requirements
<b>Part:</b>	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
<b>Number:</b>	2)
<b>Part:</b>	b)
<b>Revision:</b>	Revise first sentence to read as follows: Blast Furnace Slag Cement
<b>Subsection:</b>	601.03.03 Proportioning and Requirements
<b>Part:</b>	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
<b>Number:</b>	2)
<b>Part:</b>	b)
<b>Revision:</b>	Revise second sentence to read as follows: When added as a separate ingredient, use Grade 120 or Grade 100 slag to reduce the quantity of cement, except do not use blast furnace slag cement to reduce the quantity of Type IS( $\leq 30$ ) cement.
<b>Subsection:</b>	601.03.03 Proportioning and Requirements
<b>Part:</b>	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
<b>Number:</b>	2)
<b>Part:</b>	b)
<b>Revision:</b>	In part b), replace all references to "GGBF slag" with "blast furnace slag cement".
<b>Subsection:</b>	601.03.04 Classes and Primary Uses
<b>Part:</b>	H) Class M1
<b>Revision:</b>	Revise part H) to read as follows: High early strength for bridge joint repair and full or partial depth bridge deck patching. (Type 1 cement or blended hydraulic cement)
<b>Subsection:</b>	603.03.06 Cofferdams.
<b>Revision:</b>	Replace the seventh sentence of paragraph one with the following: Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.
<b>Subsection:</b>	605.03.04 Tack Welding.
<b>Revision:</b>	Insert the subsection and the following: 605.03.04 Tack Welding. The Department does not allow tack welding.
<b>Subsection:</b>	606.03.17 Special Requirements for Latex Concrete Overlays.
<b>Part:</b>	A) Existing Bridges and New Structures.
<b>Number:</b>	1) Prewetting and Grout-Bond Coat.
<b>Revision:</b>	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge decks prepared by hydrodemolition.
<b>Subsection:</b>	609.03 Construction.
<b>Revision:</b>	Replace Subsection 609.03.01 with the following: 609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast concrete release the temporary erection supports under the bridge and swing the span free on its supports. 609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam is placed in the final location and prior to placing steel reinforcement. At locations where lift loops are cut, paint the top of the beam with galvanized or epoxy paint.

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<b>Subsection:</b>	611.03.02 Precast Unit Construction.
<b>Revision:</b>	Replace the first sentence of the subsection with the following: Construct units according to ASTM C1577, <b>replacing Table 1 (Design Requirements for Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with KY Table 1 (Precast Culvert KYHL-93 Design Table)</b> , and Section 605 with the following exceptions and additions:
<b>Subsection:</b>	613.03.01 Design.
<b>Number:</b>	2)
<b>Revision:</b>	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD Bridge Design Specifications"
<b>Subsection:</b>	615.06.02
<b>Revision:</b>	Add the following sentence to the end of the subsection. The ends of units shall be normal to walls and centerline except exposed edges shall be beveled $\frac{3}{4}$ inch.
<b>Subsection:</b>	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
<b>Revision:</b>	Replace the reference of 6.6 in the section to 615.06.06.
<b>Subsection:</b>	615.06.04 Placement of Reinforcement for Precast Endwalls.
<b>Revision:</b>	Replace the reference of 6.7 in the section to 615.06.07.
<b>Subsection:</b>	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
<b>Revision:</b>	Replace the subsection with the following: Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be not more than 16 inches.
<b>Subsection:</b>	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
<b>Revision:</b>	Replace the subsection with the following: Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.

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<b>Subsection:</b>	615.08.01 Type of Test Specimen.
<b>Revision:</b>	Replace the subsection with the following: Start-up slump, air content, unit weight, and temperature tests will be performed each day on the first batch of concrete. Acceptable start-up results are required for production of the first unit. After the first unit has been established, random acceptance testing is performed daily for each 50 yd <sup>3</sup> (or fraction thereof). In addition to the slump, air content, unit weight, and temperature tests, a minimum of one set of cylinders shall be required each time plastic property testing is performed.
<b>Subsection:</b>	615.08.02 Compression Testing.
<b>Revision:</b>	Delete the second sentence.
<b>Subsection:</b>	615.08.04 Acceptability of Core Tests.
<b>Revision:</b>	Delete the entire subsection.
<b>Subsection:</b>	615.12 Inspection.
<b>Revision:</b>	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the "Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the production facility. Units shall be inspected upon arrival for any evidence of damage resulting from transport to the jobsite.
<b>Subsection:</b>	701.04.16 Deduction for Pipe Deflection.
<b>Revision:</b>	Insert the following at the end of the paragraph: The section length is determined by the length of the pipe between joints where the failure occurred.
<b>Subsection:</b>	716.02.02 Paint.
<b>Revision:</b>	Replace sentence with the following: Conform to Section 821.
<b>Subsection:</b>	716.03 CONSTRUCTION.
<b>Revision:</b>	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims,
<b>Subsection:</b>	716.03.02 Lighting Standard Installation.
<b>Revision:</b>	Replace the paragraph with the following: Locate poles to avoid trees, drainage, structures, etc. Regardless of the station & offset noted, locate all poles/bases behind guardrail a minimum of 4 feet behind the face of the guardrail. All poles shall be placed as close to stations and offsets as stated on Plans to provide proper illumination. If any pole needs to be relocated from stations indicated, the Division of Traffic Operations shall be contacted. When submitting brochures for suggested luminaires include iso lux curves, IES type distribution, lamp lumens, and typical ballast factor used for each type of luminaire. Submit the photometric data in a digital IES format to the Division of Traffic Operations. Include with the submittal a point of contact and phone number to answer technical questions about the luminaire.
<b>Subsection:</b>	716.03.02 Lighting Standard Installation.
<b>Part:</b>	A) Conventional Installation.
<b>Revision:</b>	Replace the third sentence with the following: Orient the transformer base so the door is positioned on the side away from on-coming traffic.
<b>Subsection:</b>	716.03.02 Lighting Standard Installation.
<b>Part:</b>	A) Conventional Installation.
<b>Number:</b>	1) Breakaway Installation and Requirements.
<b>Revision:</b>	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.

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**Subsection:** 716.03.02 Lighting Standard Installation.  
**Part:** B) High Mast Installation  
**Revision:** Replace the first three sentences of the first paragraph with the following: Install each high mast pole as noted on Plans. Install each high mast pole on a separate circuit and use luminaires with light patterns as indicated. Orient luminaires as shown in Plans.

**Subsection:** 716.03.02 Lighting Standard Installation.  
**Part:** B) High Mast Installation  
**Number:** 2) Concrete Base Installation  
**Revision:** Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
Level Ground		3:1 Ground Slope		2:1 Ground Slope		1.5:1 Ground Slope <sup>(2)</sup>	
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft
Steel Requirements							
Vertical Bars		Ties or Spiral					
Size	Total	Size	Spacing or Pitch				
#10	16	#4	12 inch				

Note 1: Shaft length is 22 feet for cohesive soil only. For cohesionless soil, contact Geotechnical Branch for design.

Note 2: Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic Operations.

If rock is encountered during drilling operations and confirmed by the Engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the design table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted

If a shorter depth is desired for the drilled shaft, the Contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the Geotechnical Branch if such conditions

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

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<b>Subsection:</b>	716.03.03 Trenching.
<b>Part:</b>	A) Trenching of Conduit for Highmast Ducted Cables.
<b>Revision:</b>	Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.
<b>Subsection:</b>	716.03.03 Trenching.
<b>Part:</b>	B) Trenching of Conduit for Non-Highmast Cables.
<b>Revision:</b>	Add the following after the second sentence: If depths greater than 24 inches are necessary for either situation listed previously, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes.
<b>Subsection:</b>	716.03.04 Conduit Installation.
<b>Revision:</b>	Replace the first two sentences of the paragraph with the following: Provide rigid steel conduit encasement for all conductors except as specified in the Contract. Provide conduit that is listed on the Department's List of Approved Materials.
<b>Subsection:</b>	716.03.04 Conduit Installation.
<b>Part:</b>	A) Conduit Requirements in Junction Boxes.
<b>Number:</b>	1) Highmast Ducted Cable.
<b>Revision:</b>	Replace the first two sentences with the following: Install conduit horizontally through the junction box. Conduit shall be 4 inches from the bottom and 4 inches from the side of the junction box.
<b>Subsection:</b>	716.03.04 Conduit Installation.
<b>Revision:</b>	Add the following to the Part to the Subsection: <b>G) Bore and Jack.</b> Construction methods shall be in accordance with Subsections 706.03.02, paragraphs 1, 2 and 4.
<b>Subsection:</b>	716.03.08 Splicing.
<b>Revision:</b>	Replace the last sentence of the paragraph with the following: Ensure the splices are of the correct size for the wire being used.
<b>Subsection:</b>	716.03.10 Junction Boxes.
<b>Revision:</b>	Replace subsection title with the following: Electrical Junction Box and replace the last sentence of the paragraph with the following: Any additional junction boxes shall be approved by the Engineer.
<b>Subsection:</b>	716.03.13 Temporary Lighting.
<b>Revision:</b>	Change subsection heading to the following: <b>716.03.13 Temporary/Maintain Lighting.</b>
<b>Subsection:</b>	716.03.13 Temporary /Maintain Lighting.
<b>Revision:</b>	Replace the entire section with the following: The Contractor shall furnish and install all materials necessary to temporarily light the proposed roadway to design standards in Subsection 716.03. The Contractor shall submit his proposed design of temporary lighting to the Division of Traffic Operations for approval at least 30 days before installation.  Maintain all lighting elements impacted within or outside the project limits until new lighting elements are installed and a functional inspection has been performed on the new lighting elements. The Contractor shall submit a proposed design for maintaining lighting to the Division of Traffic Operations for approval at least 30 days before installation.

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<b>Subsection: Revision:</b>	716.03.14 Remove Lighting.  Replace the section with the following: Remove all lighting equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, and wood poles. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. All materials shall be removed from the project as directed by the Engineer. Transformers not owned by a utility shall be tested for PCB's and disposed of in accordance with state regulations.
<b>Subsection: Revision:</b>	716.03.15 Painting.  Replace the first sentence with the following: Clean non-galvanized or damaged surfaces of exposed junction boxes, pull boxes, control panels, poles, and similar equipment, and apply one coat of an inhibiting paint and two coats of aluminum paint.
<b>Subsection: Revision:</b>	716.04.01. Poles. Change the subsection heading to 716.04.01 Pole and replace the last sentence of the subsection with the following: The Department will not measure anchor bolts, washers, nuts, anchor bolt covers, ground lugs, and any associated hardware for payment and will consider them incidental to this item of work.
<b>Subsection: Revision:</b>	716.04.02 High Mast Pole.  Replace the second sentence with the following: The Department will not measure the lowering device, anchor bolts, head frame assembly, cables, winch unit, power cables, wiring, connectors, circuit breakers, grounding lugs, ground wire, ground rods, conduits, test plugs,, adjustment and calibration of the unit to provide the desired operation, and any associated hardware for payment and will consider them incidental to this item of work.
<b>Subsection: Revision:</b>	716.04.03 Bracket. Replace the second sentence with the following: The Department will not measure any associated hardware needed for attaching the bracket to the pole for payment and will consider them incidental to this item of work.
<b>Subsection: Revision:</b>	716.04.04 Pole Base. Change the subsection heading to 716.04.04 Pole Bases and delete the paragraph.
<b>Subsection: Revision:</b>	716.04.04 Pole Bases. Insert the following: <b>A. Pole Base.</b> The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work. <b>B. Pole Base High Mast.</b> The Department will measure the quantity in cubic yards furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.

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<b>Subsection:</b>	716.04.05 Pole Base in Median Wall.
<b>Revision:</b>	Replace the last sentence with the following: The Department will not measure conduits, fittings, junction boxes, additional reinforcing steel, ground rods, ground wire, ground lugs, and aluminum cover plates (if specified) for payment, and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.06 Transformer Base.
<b>Revision:</b>	Replace the last sentence with the following: The Department will not measure transformer door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment and will consider them incidental to this item of work. The filling of any unused holes will also be considered incidental to this item of work.
<b>Subsection:</b>	716.04.07 Pole with Secondary Equipment.
<b>Revision:</b>	Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment.
<b>Subsection:</b>	716.04.07 Pole with Secondary Control Equipment.
<b>Revision:</b>	Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, electrical inspection fees, and required building fees involving utility secondary, and primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The filling of unused holes will also be considered incidental to this item of work.
<b>Subsection:</b>	716.04.08 Lighting Control Equipment.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.09 Luminaire.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure lamps, starters, ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.10 Fused Connector Kits.
<b>Revision:</b>	Replace the heading with the following: 716.04.10 Fuse Connector Kits.

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<b>Subsection:</b>	716.04.10 Fuse Connector Kits.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure fuses/lugs for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.11 Conduit.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure installation in ground or on structures, conduit fittings, test plugs, expansion joints with bonding straps, grounding lugs, drill anchors, clamps, and any additional hardware required for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.12 Markers.
<b>Revision:</b>	Replace the section with the following: The Department will measure the quantity as each individual unit furnished and installed.
<b>Subsection:</b>	716.04.13 Junction Box.
<b>Revision:</b>	Replace the subsection title with the following: Electrical Junction Box Type Various.
<b>Subsection:</b>	716.04.13 Electrical Junction Box Type Various.
<b>Revision:</b>	Replace the section with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, #57 aggregate, backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile filter fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment , and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.13 Junction Box.
<b>Part:</b>	A) Junction Electrical.
<b>Revision:</b>	Delete Part A.
<b>Subsection:</b>	716.04.14 Trenching and Backfilling.
<b>Revision:</b>	Replace the section with the following: The Department will measure the quantity in linear feet. The Department will not measure excavation, backfilling, underground utility warning tape (if required), and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.15 Wire or Cable.
<b>Revision:</b>	Replace the section with the following: The Department will measure the quantity in linear feet furnished and installed. The Department will not measure installation within conduit, splice boots, and any other hardware required for installing cable for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.16 Ducted Cable.
<b>Revision:</b>	Replace the second sentence of the paragraph with the following: The Department will not measure installation within trench or conduit and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.17 Temporary Lighting
<b>Revision:</b>	Rename the subsection as follows: 716.04.17 Temporary Lighting/Maintain Lighting.

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<b>Subsection:</b>	716.04.17 Temporary Lighting/Maintain Lighting.																														
<b>Revision:</b>	Delete the paragraph and add the following parts: A) Temporary Lighting. The Department will measure the quantity by lump sum. The Department will not measure poles, luminaires, wire, conduit, trenching and backfilling, control equipment, all relocations and removal, design (if required), and any other necessary hardware to make a complete installation for payment and will consider them incidental to this item of work. B) Maintain Lighting. The Department will measure the quantity by lump sum. The Department will not measure maintenance of lighting elements and design (if required) for payment and will consider them incidental to this item of work.																														
<b>Subsection:</b>	716.04.18 Remove Lighting.																														
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the lighting 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.																														
<b>Subsection:</b>	716.04.19 Remove Pole Base.																														
<b>Revision:</b>	Delete Subsection.																														
<b>Subsection:</b>	716.04.20 Bore and Jack Conduit.																														
<b>Revision:</b>	Renumber Subsection to 716.04.19 Bore and Jack Conduit.																														
<b>Subsection:</b>	716.04.19 Bore and Jack Conduit.																														
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.																														
<b>Subsection:</b>	716.05 PAYMENT.																														
<b>Revision:</b>	Revise the following under <u>Code</u> , <u>Pay Item</u> , and <u>Pay Unit</u> with the following:																														
	<table border="0"> <thead> <tr> <th><u>Code</u></th> <th><u>Pay Item</u></th> <th><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>04700-04701</td> <td>Pole(Various)Mtg Ht</td> <td>Each</td> </tr> <tr> <td>04710-04714</td> <td>Pole(Various)Mtg Ht High Mast</td> <td>Each</td> </tr> <tr> <td>04810-04811</td> <td>Electrical Junction Box (Various)</td> <td>Each</td> </tr> <tr> <td>20391NS835</td> <td>Electrical Junction Box Type A</td> <td>Each</td> </tr> <tr> <td>20392NS835</td> <td>Electrical Junction Box Type C</td> <td>Each</td> </tr> <tr> <td>04770-04773</td> <td>Luminaire (Various)</td> <td>Each</td> </tr> <tr> <td>04780</td> <td>Fuse Connector Kit</td> <td>Each</td> </tr> <tr> <td>20410ED</td> <td>Maintain Lighting</td> <td>Lump Sum</td> </tr> <tr> <td><del>04941</del></td> <td><del>Remove Pole Base</del></td> <td><del>Each</del></td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	04700-04701	Pole(Various)Mtg Ht	Each	04710-04714	Pole(Various)Mtg Ht High Mast	Each	04810-04811	Electrical Junction Box (Various)	Each	20391NS835	Electrical Junction Box Type A	Each	20392NS835	Electrical Junction Box Type C	Each	04770-04773	Luminaire (Various)	Each	04780	Fuse Connector Kit	Each	20410ED	Maintain Lighting	Lump Sum	<del>04941</del>	<del>Remove Pole Base</del>	<del>Each</del>
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<b>Subsection:</b>	723.02.02 Paint.																														
<b>Revision:</b>	Replace sentence with the following: Conform to Section 821.																														
<b>Subsection:</b>	723.03 CONSTRUCTION.																														
<b>Revision:</b>	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims,																														
<b>Subsection:</b>	723.03.02 Poles and Bases Installation.																														
<b>Revision:</b>	Replace the title with the following: 723.03.02 Pole and Base Installation.																														

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<b>Subsection:</b>	723.03.02 Pole and Base Installation.
<b>Revision:</b>	Replace the first paragraph with the following: Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum of four feet from the front face of the guardrail to the front face of the pole base. Orient the handhole door away from traffic travel path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade as the sidewalk.
<b>Subsection:</b>	723.03.02 Poles and Bases Installation.
<b>Part:</b>	A) Steel Strain and Mastarm Poles Installation
<b>Revision:</b>	Replace the title of Part A) Steel Strain and Mast Arm Pole Installation.
<b>Subsection:</b>	723.03.02 Pole and Base Installation.
<b>Part:</b>	A) Steel Strain and Mast Arm Pole Installation.
<b>Revision:</b>	Insert the following sentence at the beginning of the first paragraph: Install pole bases 4 to 6 inches above grade.
<b>Subsection:</b>	723.03.02 Pole and Base Installation.
<b>Part:</b>	A) Steel Strain and Mast Arm Pole Installation.
<b>Revision:</b>	Replace the second paragraph with the following: For concrete base installation, see Subsection 716.03.02 B), 2), Paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions encountered during drilling and slope condition at the site. Refer to the design chart below:
<b>Subsection:</b>	723.03.02 Pole and Base Installation.
<b>Part:</b>	B) Pedestal or Pedestal Post Installation.
<b>Revision:</b>	Replace the second sentence with the following: If over 12 feet high the base shall have the minimum depth and diameter as Subsection 716.03.02 (A), paragraph 2.
<b>Subsection:</b>	723.03.02 Poles and Bases Installation.
<b>Part:</b>	B) Pedestal or Pedestal Post Installation.
<b>Revision:</b>	Replace the fourth sentence of the paragraph with the following: For breakaway supports, conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
<b>Subsection:</b>	723.03.03 Trenching.
<b>Revision:</b>	Replace the first sentence with the following: See Subsection 716.03.03 (B).
<b>Subsection:</b>	723.03.03 Trenching.
<b>Part:</b>	A) Under Roadway.
<b>Revision:</b>	Delete Part A) Under Roadway.
<b>Subsection:</b>	723.03.05 Conduit Requirements in Junction Boxes.
<b>Revision:</b>	Delete the Subsection and replace with the following: 723.03.05 Fuse Connector Kits. See Subsection 716.03.09.
<b>Subsection:</b>	723.03.06 Coupling Installation.
<b>Revision:</b>	Delete the Subsection and replace with the following: 723.03.06 Painting. See Subsection 716.03.15.
<b>Subsection:</b>	723.03.07 Bonding Requirements.
<b>Revision:</b>	Delete the Subsection and replace with the following: 723.03.07 Electrical Junction Boxes. See Subsection 716.03.10.

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<b>Subsection:</b>	723.03.08 Painting.
<b>Revision:</b>	Replace with 723.03.06 Painting. See Subsection 716.03.15.
<b>Subsection:</b>	723.03.09 Underground Warning Tape.
<b>Revision:</b>	Renumber Subsection to 723.03.08 Underground Warning Tape.
<b>Subsection:</b>	723.03.10 Backfilling and Disturbed Areas.
<b>Revision:</b>	Renumber Subsection to 723.03.09 Backfilling and Disturbed Areas.
<b>Subsection:</b>	723.03.11 Wiring Installation.
<b>Revision:</b>	Renumber Subsection to 723.03.10 Wiring Installation.
<b>Subsection:</b>	723.03.10 Wiring Installation.
<b>Revision:</b>	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
<b>Subsection:</b>	723.03.12 Loop Installation.
<b>Revision:</b>	Renumber Subsection to 723.03.11 Loop Installation.
<b>Subsection:</b>	723.03.11 Loop Installation.
<b>Revision:</b>	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.
<b>Subsection:</b>	723.03.13 Grounding Installation.
<b>Revision:</b>	Renumber Subsection to 723.03.12 Grounding Installation.
<b>Subsection:</b>	723.03.12 Grounding Installation.
<b>Revision:</b>	Replace the reference to "Standard Detail Sheets" in the first sentence with "Plans".
<b>Subsection:</b>	723.03.14 Splicing.
<b>Revision:</b>	Renumber Subsection to 723.03.13 Splicing.
<b>Subsection:</b>	723.03.13 Splicing.
<b>Revision:</b>	Delete the reference to (IMSA 19-2) from the 5th sentence of the paragraph.
<b>Subsection:</b>	723.03.15 Painting.
<b>Revision:</b>	Delete Subsection.
<b>Subsection:</b>	723.03.14 Splicing.
<b>Revision:</b>	Replace with new Subsection 723.03.14 Remove Signal Equipment.
<b>Subsection:</b>	723.03.14 Remove Signal Equipment.
<b>Revision:</b>	Insert the following for the new subsection: Remove all traffic signal equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. Contact the district traffic Engineer to determine if any removed signal equipment needs to be returned to the district and to determine the location/time for such deliveries.
<b>Subsection:</b>	723.05.16 Drawings.
<b>Revision:</b>	Renumber the Subsection to 723.03.15 Drawings.

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<b>Subsection:</b>	723.03.15 Drawings.
<b>Revision:</b>	Replace Subsection with the following: Before final inspection of the traffic control device, provide a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment including: junction boxes, conduits, spare conduits, etc. Keep a daily record of all conduits placed in trenches, showing the distance from the pavement edge, the depth, and the length of runs, and indicate this information on the as-built drawings.
<b>Subsection:</b>	723.03.17 Acceptance and Inspection Requirements.
<b>Revision:</b>	Renumber Subsection to 723.03.16 Acceptance and Inspection Requirements.
<b>Subsection:</b>	723.03.16 Acceptance and Inspection Requirements.
<b>Revision:</b>	Replace the first paragraph of the section with the following: See Subsection 105.12. In coordination with the District Traffic Engineer, energize traffic control device as soon as it is fully functional and ready for inspection. After the work has been completed, conduct an operational test demonstrating that the system operates in accordance with the Plans in the presence of the Engineer. The Department will also conduct its own tests with its own equipment before final acceptance. Ensure that the traffic control device remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.
<b>Subsection:</b>	723.04.01 Conduit.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.02 Junction Box.
<b>Revision:</b>	Replace subsection title with the following: Electrical Junction Box Type Various.
<b>Subsection:</b>	723.04.02 Electrical Junction Box Type Various.
<b>Revision:</b>	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, Aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.03 Trenching and Backfilling.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.04 Open Cut Roadway.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure concrete, reinforcing steel, and asphalt for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.05 Loop Wire.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.06 Cable.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.

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<b>Subsection:</b>	723.04.07 Pole-Wooden.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.08 Steel Strain Pole.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.09 Mast Arm Pole.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure anchor bolts, arms, mounting brackets, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.10 Signal Pedestal.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, concrete, reinforcing steel, conduits, fittings, ground rods, ground wire, ground lugs, backfilling, restoring disturbed areas, and other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.11 Post.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, and restoring disturbed areas for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.12 Anchor.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: . The Department will not measure down-guy, messenger, clamps, guy guard, or insulators, and possible installation in various soil conditions for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.13 Messenger.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure strand vises, bolts, washers, and other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.14 Install Signal LED.
<b>Revision:</b>	Revise subsection title to 723.04.14 Install Beacon Controller - 2 Circuit.
<b>Subsection:</b>	723.04.14 Install Beacon Controller - 2 Circuit.
<b>Revision:</b>	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.

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<b>Subsection:</b>	723.04.15 Loop Saw Slot and Fill.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole for conduit, and grout for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.16 Pedestrian Detector.
<b>Revision:</b>	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished, installed and connected to pole/pedestal. The Department will not measure installing R10-3e signs, detector housing, and installing mounting hardware for sign for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.17 Signal.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure furnishing and installing LED modules, retroreflective tape, back plates, and any other hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.18 Signal Controller- Type 170.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and building fees involving secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches, model 400 modem card, electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground wires, and ground lugs for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.19 Beacon Controller - 2 Circuit.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.20 Install Signal Controller - Type 170.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure the concrete base, mounting the cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure connecting the induction loop amplifiers, pedestrian isolators, load switches, model 400 modem card for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, conduits, anchors, meter base, fused cutout, fuses, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.21 Install Steel Strain Pole.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure any necessary clamp assemblies for payment and will consider them incidental to this item of work.

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<b>Subsection:</b>	723.04.22 Remove Signal Equipment.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity by lump sum. 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.
<b>Subsection:</b>	723.04.23 Install Span/Pole Mounted Sign.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure the hanger or any other hardware necessary to install the sign for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.24 Install Pedestrian Head LED.
<b>Revision:</b>	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.25 Install Signal LED.
<b>Revision:</b>	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules, retroreflective tape, back plates, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.26 Install Coordinating Unit.
<b>Revision:</b>	Replace the subsection with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.27 Video Camera.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure video modules, mounting bracket, truss type arm, power cable, coaxial cable, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.28 Install Pedestrian Detector Audible.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure installing R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.29 Audible Pedestrian Detector.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure furnishing and installing the R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.30 Bore and Jack Conduit.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.

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<b>Subsection:</b>	723.04.31 Install Pedestrian Detector.
<b>Revision:</b>	Replace the paragraph with the following: The Department will measure the quantity as each individual unit installed and connected to pole/pedestal. The Department will not measure installing R 10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.32 Install Mast Arm Pole.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure installation of arms, signal mounting brackets, anchor bolts, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.33 Pedestal Post.
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, ground lugs, or any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.34 Span Mounted Sign.
<b>Revision:</b>	Revise subsection title to 723.04.34 Span/Pole-Mounted Sign.
<b>Subsection:</b>	723.04.34 Span/Pole-Mounted Sign.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure the hanger, sign, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.35 Remove and Reinstall Coordinating Unit.
<b>Revision:</b>	Add the following sentence to the end of the subsection: The Department will not measure removing, storage, reinstalling, and connecting radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.36 Traffic Signal Pole Base.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing reinforcing steel, anchor bolts, conduits, ground rods, ground wires, and ground lugs for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.37 Install Signal Pedestal.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: . The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, conduits, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.38 Install Pedestal Post.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing steel, conduit, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware for payment and will consider them incidental to this item of work.
<b>Subsection:</b>	723.04.39 Install Antenna.
<b>Revision:</b>	Replace the second sentence of the subsection with the following: The Department will not measure any other materials necessary to complete the installation for payment and will consider them incidental to this item of work.

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<b>Subsection:</b>	723.05 PAYMENT.																					
<b>Revision:</b>	Replace items 04810-04811, 20391NS835, 20392NS835,23052NN and add item number 24526ED under <u>Code</u> , <u>Pay Item</u> , and <u>Pay Unit</u> with the following:																					
	<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Pay Item</u></th> <th><u>Pay Unit</u></th> </tr> </thead> <tbody> <tr> <td>04810</td> <td>Electrical Junction Box</td> <td>Each</td> </tr> <tr> <td>04811</td> <td>Electrical Junction Box Type B</td> <td>Each</td> </tr> <tr> <td>20391NS835</td> <td>Electrical Junction Box Type A</td> <td>Each</td> </tr> <tr> <td>20392NS835</td> <td>Electrical Junction Box Type C</td> <td>Each</td> </tr> <tr> <td>23052NN</td> <td>Span/Pole-Mounted Sign</td> <td>Each</td> </tr> <tr> <td>24526ED</td> <td>Install Beacon Controller 2 Cir</td> <td>Each</td> </tr> </tbody> </table>	<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>	04810	Electrical Junction Box	Each	04811	Electrical Junction Box Type B	Each	20391NS835	Electrical Junction Box Type A	Each	20392NS835	Electrical Junction Box Type C	Each	23052NN	Span/Pole-Mounted Sign	Each	24526ED	Install Beacon Controller 2 Cir	Each
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<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Revision:</b>	Replace first sentence in paragraph one with the following: Provide Portland cement <i>or blended hydraulic cement</i> from approved mills listed in the Department's List of Approved Materials.																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	1)																					
<b>Revision:</b>	Replace first sentence with the following: Type I, II, III, and IV <i>Portland cement</i> conforms to ASTM C 150.																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	3)																					
<b>Revision:</b>	Replace the first sentence with the following: Type IP ( $\leq 20$ ), Portland-pozzolan cement, conforms to ASTM C595, and the following additional requirements to Type IP ( $\leq 20$ ).																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	3)																					
<b>Part:</b>	b)																					
<b>Revision:</b>	Delete part b)																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	3)																					
<b>Part:</b>	c)																					
<b>Revision:</b>	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer shall furnish to the Engineer reports showing the results of tests performed on the fly ash used in the manufacture of the Type IP( $\leq 20$ ) cement shipped to the project.																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	3)																					
<b>Part:</b>	d)																					
<b>Revision:</b>	Rename Part d) to Part c)																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	3)																					
<b>Part:</b>	e)																					
<b>Revision:</b>	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type IP( $\leq 20$ ) cement throughout the project, unless the Engineer approved a change in brand in writing.																					
<b>Subsection:</b>	801.01 REQUIREMENTS																					
<b>Number:</b>	4)																					
<b>Revision:</b>	Replace first sentence with the following: Type IS( $\leq 30$ ), Portland blast furnace slag cement, conforms to ASTM C 595 and the following requirements:																					

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<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	4)
<b>Part:</b>	a)
<b>Revision:</b>	Replace part a) with the following: Use Grade 100 or 120 blast furnace slag cement conforming to the requirements of ASTM C 989.
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	4)
<b>Part:</b>	b)
<b>Revision:</b>	Delete part b)
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	4)
<b>Part:</b>	c)
<b>Revision:</b>	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer shall furnish to the Engineer reports showing the results of the tests performed on the blast furnace slag cement used in the manufacturing of the Type IS( $\leq$ 30) shipped to the project.
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	4)
<b>Part:</b>	d)
<b>Revision:</b>	Rename Part d) to Part c)
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	4)
<b>Part:</b>	e)
<b>Revision:</b>	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type IS( $\leq$ 30) cement throughout the project, unless the Engineer approves otherwise.
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	5)
<b>Revision:</b>	Insert part 5) as the following: Type IL(5-15), Portland-limestone cement, conforms to ASTM C 595 and the following additional requirements:
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	5)
<b>Part:</b>	a)
<b>Revision:</b>	Insert part a) as the following: The cement manufacturer shall furnish to the Engineer reports showing the results of test performed on the limestone used in the manufacture of the Type IL cement shipped to the project.
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	5)
<b>Part:</b>	b)
<b>Revision:</b>	Insert part b) as the following: Use only one brand of Type IL cement throughout the project, unless the Engineer approves a brand change in writing.
<b>Subsection:</b>	801.01 REQUIREMENTS
<b>Number:</b>	5)
<b>Part:</b>	c)
<b>Revision:</b>	Insert part c) as the following: The Type IL blended cement shall be an intimate and uniform blend produced by intergrinding of the Portland cement and limestone.
<b>Subsection:</b>	804.01.02 Crushed Sand.
<b>Revision:</b>	Delete last sentence of the section.

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<b>Subsection:</b>	804.01.06 Slag.														
<b>Revision:</b>	Add subsection and following sentence. Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only in asphalt surface applications.														
<b>Subsection:</b>	804.04 Asphalt Mixtures.														
<b>Revision:</b>	Replace the subsection with the following: Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as necessary, to meet gradation requirements. The Department will allow any combination of natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using cold feeds at the plant. The Engineer may allow other fine aggregates.														
<b>Subsection:</b>	806.03.01 General Requirements.														
<b>Revision:</b>	Replace the second sentence of the paragraph with the following: Additionally, the material must have a minimum solubility of 99.0 percent when tested according to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a J <sub>NR</sub> (non-recoverable creep compliance) between 0.1 and 0.5, when tested according to AASHTO TP 70.														
<b>Subsection:</b>	806.03.01 General Requirements.														
<b>Table:</b>	PG Binder Requirements and Price Adjustment Schedule														
<b>Revision:</b>	Replace the Elastic Recovery, % <sup>(3)</sup> (AASHTO T301) and all corresponding values in the table with the following:														
	<table border="1"> <thead> <tr> <th>Test</th> <th>Specification</th> <th>100% Pay</th> <th>90% Pay</th> <th>80% Pay</th> <th>70% Pay</th> <th>50%Pay<sup>(1)</sup></th> </tr> </thead> <tbody> <tr> <td>MSCR recovery, %<sup>(3)</sup> (AASHTO TP 70)</td> <td>60 Min.</td> <td>≥58</td> <td>56</td> <td>55</td> <td>54</td> <td>&lt;53</td> </tr> </tbody> </table>	Test	Specification	100% Pay	90% Pay	80% Pay	70% Pay	50%Pay <sup>(1)</sup>	MSCR recovery, % <sup>(3)</sup> (AASHTO TP 70)	60 Min.	≥58	56	55	54	<53
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<b>Table:</b>	PG Binder Requirements and Price Adjustment Schedule														
<b>Superscript:</b>	(3)														
<b>Revision:</b>	Replace (3) with the following: Perform testing at 64°C.														
<b>Subsection:</b>	808.07 Polypropylene Waterproofing Membrane.														
<b>Revision:</b>	Replace the paragraph and table with the following: Furnish a layered waterproofing membrane. The layers will consist of an internal puncture resistant woven polypropylene fabric sandwiched between two rubberized mastic layers. The mastic will have a heavy polyethylene membrane attached on the top and the bottom mastic layer will be covered by a protective release film.														
<b>Subsection:</b>	808.09 Acceptance.														
<b>Revision:</b>	Replace the reference to "KMIMS" in the second paragraph with SiteManager.														
<b>Subsection:</b>	811.10.04 Properties of the Coated Bar.														
<b>Part:</b>	B) Flexibility of Coating.														
<b>Revision:</b>	Replace the second sentence of the paragraph with the following: Ensure that the coated bars are capable of being bent to 180 degrees (after rebound) over a mandrel, without any visible evidence of cracking the coating.														
<b>Subsection:</b>	813.04 Gray Iron Castings.														
<b>Revision:</b>	Replace the reference to "AASHTO M105" with "ASTM A48".														
<b>Subsection:</b>	813.09.02 High Strength Steel Bolts, Nuts, and Washers.														
<b>Number:</b>	A) Bolts.														
<b>Revision:</b>	Delete first paragraph and "Hardness Number" Table. Replace with the following: A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.														

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<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.
<b>Revision:</b>	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".
<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.
<b>Revision:</b>	Replace the first sentence of the fourth paragraph with the following: Use any of the species of wood for round or square posts covered under AWPA U1.
<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.
<b>Revision:</b>	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph 4.1".
<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.
<b>Revision:</b>	Delete the second sentence of the fourth paragraph.
<b>Subsection:</b>	814.05.02 Composite Plastic.
<b>Revision:</b>	1) Add the following to the beginning of the first paragraph: Select composite offset blocks conforming to this section and assure blocks are from a manufacturer included on the Department's List of Approved Materials. 2) Delete the last paragraph of the subsection.
<b>Subsection:</b>	816.07.02 Wood Posts and Braces.
<b>Revision:</b>	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph 4.1".
<b>Subsection:</b>	816.07.02 Wood Posts and Braces.
<b>Revision:</b>	Delete the second sentence of the first paragraph.
<b>Subsection:</b>	818.07 Preservative Treatment.
<b>Revision:</b>	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".
<b>Subsection:</b>	833.01.02 Sheeting Signs.
<b>Revision:</b>	Replace the second sentence with the following: Provide a thickness of 125 mils if any single edge dimension of the sign exceeds 3 feet.
<b>Subsection:</b>	834.14 Lighting Poles.
<b>Revision:</b>	Replace the first sentence with the following: Lighting pole design shall be in accordance with loading and allowable stress requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims, with the exception of the following: The Cabinet will waive the requirement stated in the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only). The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).
<b>Subsection:</b>	834.14.03 High Mast Poles.
<b>Revision:</b>	Remove the second and fourth sentence from the first paragraph.
<b>Subsection:</b>	834.14.03 High Mast Poles.
<b>Revision:</b>	Replace the third paragraph with the following: Provide calculations and drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.

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<p><b>Subsection:</b> 834.14.03 High Mast Poles. <b>Revision:</b></p>	<p>Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.</p> <p>The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated products) or ASTM A 153 (hardware items).</p>
<p><b>Subsection:</b> 834.16 ANCHOR BOLTS. <b>Revision:</b></p>	<p>Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.</p>
<p><b>Subsection:</b> 834.17.01 Conventional. <b>Revision:</b></p>	<p>Add the following sentence after the second sentence: Provide a waterproof sticker mounted on the bottom of the housing that is legible from the ground and indicates the wattage of the fixture by providing the first two numbers of the wattage.</p>
<p><b>Subsection:</b> 834.21.01 Waterproof Enclosures. <b>Revision:</b></p>	<p>Replace the last five sentences in the second paragraph with the following sentences: Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex receptacle in the enclosure with a separate 20 amp breaker.</p>

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<b>Subsection:</b>	835.07 Traffic Poles.
<b>Revision:</b>	Replace the first sentence of the first paragraph with the following: Pole diameter and wall thickness shall be calculated in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
<b>Subsection:</b>	835.07 Traffic Poles.
<b>Revision:</b>	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates have a thickness $\geq 2$ inches. *Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall not be less than 16.25 inches.
<b>Subsection:</b>	835.07 Traffic Poles.
<b>Revision:</b>	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole forces shall be positioned in such a manner to maximize the force on any individual anchor bolt regardless of the actual anchor bolt orientation with the pole.
<b>Subsection:</b>	835.07 Traffic Poles.
<b>Revision:</b>	Replace the first and second sentence of the sixth paragraph with the following: The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube but needs to be at least 12 inches.
<b>Subsection:</b>	835.07 Traffic Poles.
<b>Revision:</b>	*Replace the first sentence of the last paragraph with the following: Provide calculations and drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky. *Replace the third sentence of the last paragraph with the following: All tables referenced in 835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.
<b>Subsection:</b>	835.07.01 Steel Strain Poles.
<b>Revision:</b>	Replace the second sentence of the second paragraph with the following: The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.
<b>Subsection:</b>	835.07.01 Steel Strain Poles.
<b>Revision:</b>	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from table 11.9.3.1-1.
<b>Subsection:</b>	835.07.02 Mast Arm Poles.
<b>Revision:</b>	Replace the second sentence of the fourth paragraph with the following: The detailed analysis shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.

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<b>Subsection:</b>	835.07.02 Mast Arm Poles.		
<b>Revision:</b>	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from table 11.9.3.1-1.		
<b>Subsection:</b>	835.07.03 Anchor Bolts.		
<b>Revision:</b>	Add the following to the end of the paragraph: There shall be two steel templates (one can be used for the headed part of the anchor bolt when designed in this manner) provided per pole. Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized (ASTM A 153).		
<b>Subsection:</b>	835.16.05 Optical Units.		
<b>Revision:</b>	Replace the 3rd paragraph with the following: The list of certified products can be found on the following website: <a href="http://www.intertek.com">http://www.intertek.com</a> .		
<b>Subsection:</b>	835.19.01 Pedestrian Detector Body.		
<b>Revision:</b>	Replace the first sentence with the following: Provide a four holed pole mounted aluminum rectangular housing that is compatible with the pedestrian detector.		
<b>Subsection:</b>	843.01.01 Geotextile Fabric.		
<b>Table:</b>	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING		
<b>Revision:</b>	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value<sup>(1)</sup></u>	<u>Test Method</u>
	CBR Puncture (lbs)	494	ASTM D6241
	Permittivity (1/s)	0.7	ASTM D4491
<b>Subsection:</b>	843.01.01 Geotextile Fabric.		
<b>Table:</b>	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS		
<b>Revision:</b>	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value<sup>(1)</sup></u>	<u>Test Method</u>
	CBR Puncture (lbs)	210	ASTM D6241
	Permittivity (1/s)	0.5	ASTM D4491
<b>Subsection:</b>	843.01.01 Geotextile Fabric.		
<b>Table:</b>	TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION		
<b>Revision:</b>	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value<sup>(1)</sup></u>	<u>Test Method</u>
	CBR Puncture (lbs)	370	ASTM D6241
	Permittivity (1/s)	0.05	ASTM D4491
<b>Subsection:</b>	843.01.01 Geotextile Fabric.		
<b>Table:</b>	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND PAVEMENT EDGE DRAINS		
<b>Revision:</b>	Add the following to the chart:		
	<u>Property</u>	<u>Minimum Value<sup>(1)</sup></u>	<u>Test Method</u>
	CBR Puncture (lbs)	309	ASTM D6241
	Permittivity (1/s)	0.5	ASTM D4491

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<b>Subsection:</b>	843.01.01 Geotextile Fabric.		
<b>Table:</b>	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC		
<b>Revision:</b>	Make the following changes to the chart:		
	<u>Property</u>	<u>Minimum Value<sup>(1)</sup></u>	<u>Test Method</u>
	CBR Puncture (lbs)	618	ASTM D6241
	Apparent Opening Size	U.S. #40 <sup>(3)</sup>	ASTM D4751
	<sup>(3)</sup> Maximum average roll value.		

## **PART III**

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

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

**ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

**II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

**I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

**III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

**IV. DAVIS-BACON AND RELATED ACT PROVISIONS**

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

**1. Minimum wages**

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

**IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

**X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

**1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

**EMPLOYMENT REQUIREMENTS  
RELATING TO  
NONDISCRIMINATION OF EMPLOYEES  
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)**

**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 (between forty and seventy); 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 (between forty and seventy). 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, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), 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: 12-3-92

### **Standard Title VI/Non-Discrimination Assurances**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

### **Standard Title VI/Non-Discrimination Statutes and Authorities**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

## EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during 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, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved 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.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY160100 07/22/2016 KY100

Superseded General Decision Number: KY20150100

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/08/2016
1	02/19/2016
2	03/25/2016
3	06/03/2016
4	06/24/2016
5	07/01/2016
6	07/08/2016
7	07/22/2016

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER.....	\$ 24.11	10.07

BRKY0001-005 06/01/2015

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE

COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 25.96	10.64
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BRKY0002-006 06/01/2011		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.57	10.26
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* BRKY0007-004 06/01/2016		

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 32.20	18.27
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BRKY0017-004 06/01/2015		

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN,  
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 24.79	11.72
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CARP0064-001 05/01/2015		

	Rates	Fringes
CARPENTER.....	\$ 27.50	16.06
Diver.....	\$ 41.63	16.06
PILEDRIVERMAN.....	\$ 27.75	16.06
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ELEC0212-008 06/06/2016		

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.47	17.13
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ELEC0212-014 12/01/2014		

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
Sound & Communication Technician.....	\$ 22.75	10.08
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ELEC0317-012 05/28/2014		

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN		
Cable Splicer.....	\$ 32.68	18.13
Electrician.....	\$ 32.62	21.45

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ELEC0369-007 06/01/2016

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL,  
CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY,  
JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER,  
MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT,  
SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 30.56	16.10

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ELEC0575-002 06/02/2014

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 31.70	14.21

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ENGI0181-018 07/01/2015

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 29.95	14.40
GROUP 2.....	\$ 27.26	14.40
GROUP 3.....	\$ 27.68	14.40
GROUP 4.....	\$ 26.96	14.40

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller;  
Batcher Plant; Bituminous Paver; Bituminous Transfer  
Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All  
Scoop; Carry Deck Crane; Central Compressor Plant; Cherry  
Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over);  
Concrete Paver; Truck-Mounted Concrete Pump; Core Drill;  
Crane; Crusher Plant; Derrick; Derrick Boat; Ditching &  
Trenching Machine; Dragline; Dredge Operator; Dredge  
Engineer; Elevating Grader & Loaders; Grade-All; Gurries;  
Heavy Equipment Robotics Operator/Mechanic; High Lift;  
Hoe-Type Machine; Hoist (Two or More Drums); Hoisting  
Engine (Two or More Drums); Horizontal Directional Drill  
Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau;  
Locomotive; Mechanic; Mechanically Operated Laser Screed;  
Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel  
Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete;  
Push Dozer; Rock Spreader, attached to equipment; Rotary  
Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier;

Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

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IRON0044-009 06/01/2015

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,  
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);  
CARROLL (Eastern third, including the Township of Ghent);  
FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);  
NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

	Rates	Fringes
IRONWORKER		
Fence Erector.....	\$ 23.76	19.15
Structural.....	\$ 26.40	19.15

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IRON0070-006 06/01/2016

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD  
BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);  
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);  
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);  
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);  
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes
IRONWORKER.....	\$ 27.91	21.11

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IRON0372-006 06/15/2015

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON  
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);  
CARROLL (Eastern third, including the Township of Ghent);  
FLEMING (Western part, Excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);  
MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);  
NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);  
OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita &

Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmsville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) COUNTIES

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 27.00	19.00
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IRON0769-007 06/01/2016		

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksville, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

	Rates	Fringes
IRONWORKER		
ZONE 1.....	\$ 31.33	23.47
ZONE 2.....	\$ 31.73	23.47
ZONE 3.....	\$ 33.33	23.47
ZONE 1 - Up to 10 mile radius of Union Hall, Ashland, Ky., 1643 Greenup Ave.		
ZONE 2 - 10 to 50 mile radius of Union Hall, Ashland, Ky., 1643 Greenup Ave.		
ZONE 3 - 50 mile radius & over of Union Hall, Ashland, Ky., 1643 Greenup Ave.		

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LABO0189-003 07/01/2016

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.75	12.84
GROUP 2.....	\$ 23.00	12.84
GROUP 3.....	\$ 23.05	12.84
GROUP 4.....	\$ 23.65	12.84

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-008 07/01/2014

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.71	11.05
GROUP 2.....	\$ 22.96	11.05
GROUP 3.....	\$ 23.01	11.05
GROUP 4.....	\$ 23.61	11.05

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines;

Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushhammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-009 07/01/2014

BRECKINRIDGE & GRAYSON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.66	11.10
GROUP 2.....	\$ 22.91	11.10
GROUP 3.....	\$ 22.96	11.10
GROUP 4.....	\$ 23.56	11.10

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper;

Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);  
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;  
Burner & Welder; Bushhammer; Chain Saw Operator; Concrete  
Saw Operator; Deckhand Scow Man; Dry Cement Handler;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Level C; Forklift Operator for Masonary; Form Setter;  
Green Concrete Cutting; Hand Operated Grouter & Grinder  
Machine Operator; Jackhammer; Pavement Breaker; Paving  
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven  
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;  
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind  
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;  
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman;  
Gunnite Operator & Mixer; Grout Pump Operator; Side Rail  
Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free  
Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher;  
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste  
- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster;  
& Tunnel Mucker (Free Air); Directional & Horizontal  
Boring; Air Track Drillers (All Types); Powdermen &  
Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN,  
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,  
ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder..\$	18.90	5.90
Brush & Roller.....\$	21.30	5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....\$	22.30	5.90
Sandblasting & Waterblasting.....\$	22.05	5.90
Spray.....\$	21.80	5.90

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PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping)		
Bridge Equipment Tender and Containment Builder.....\$	20.73	9.06

Brush & Roller.....	\$ 23.39	9.06
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement.....	\$ 24.39	9.06
Sandblasting & Water Blasting.....	\$ 24.14	9.06
Spray.....	\$ 23.89	9.06

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PAIN0118-004 06/01/2014

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN,  
HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY,  
SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 18.50	11.97
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....	\$ 19.50	11.97

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PAIN1072-003 12/01/2015

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

	Rates	Fringes
Painters:.....	\$ 29.39	14.27
Bridges; Locks; Dams; Tension Towers & Energized Substations.....	\$ 31.83	15.30
Power Generating Facilities.	\$ 28.59	15.30

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PLUM0248-003 06/01/2016

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
Plumber and Steamfitter.....	\$ 35.00	19.05

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PLUM0392-007 06/01/2014

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN &  
ROBERTSON COUNTIES:

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 29.80	17.79

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PLUM0502-003 08/01/2015

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN  
(Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON,  
LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &  
WASHINGTON COUNTIES

	Rates	Fringes
PLUMBER.....	\$ 32.00	19.13
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SUKY2010-160 10/08/2001		

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 16.57	7.34
GROUP 2.....	\$ 16.68	7.34
GROUP 3.....	\$ 16.86	7.34
GROUP 4.....	\$ 16.96	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.  
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).  
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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed

in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-16-III- HWY dated July 1, 2016.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

**TO: EMPLOYERS/EMPLOYEES**

**PREVAILING WAGE SCHEDULE:**

**The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.**

**OVERTIME:**

**Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.**

Director  
Division of Construction Procurement  
Frankfort, Kentucky 40622  
502-564-3500

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director  
Office of Federal Contract Compliance Programs  
61 Forsyth Street, SW, Suite 7B75  
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Franklin County.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
10.8%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director  
Office of Federal Contract Compliance Programs  
61 Forsyth Street, SW, Suite 7B75  
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Woodford County.

**PART IV**  
**INSURANCE**

## INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

**PART V**  
**BID ITEMS**

**PROPOSAL BID ITEMS**

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Report Date 8/3/16

**Section: 0001 - PAVING**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	4,917.00	TON		\$	
0020	00078		CRUSHED AGGREGATE SIZE NO 2	284.00	TON		\$	
0030	00100		ASPHALT SEAL AGGREGATE	11.00	TON		\$	
0040	00103		ASPHALT SEAL COAT	1.40	TON		\$	
0050	00190		LEVELING & WEDGING PG64-22	565.00	TON		\$	
0060	00214		CL3 ASPH BASE 1.00D PG64-22	120.00	TON		\$	
0070	00339		CL3 ASPH SURF 0.38D PG64-22	5,613.00	TON		\$	
0080	01000		PERFORATED PIPE-4 IN	384.00	LF		\$	
0090	01028		PERF PIPE HEADWALL TY 3-4 IN	16.00	EACH		\$	
0100	02058		REMOVE PCC PAVEMENT	23,608.00	SQYD		\$	
0110	02060		PCC PAVEMENT DIAMOND GRINDING	195,084.00	SQYD		\$	
0120	02069		JPC PAVEMENT-10 IN	23,608.00	SQYD		\$	
0130	02110		PARTIAL DEPTH PATCHING	2,060.00	CUFT		\$	
0140	02115		SAW-CLEAN-RESEAL TVERSE JOINT	36,102.00	LF		\$	
0150	02116		SAW-CLEAN-RESEAL LONGIT JOINT	74,146.00	LF		\$	
0160	02599		FABRIC-GEOTEXTILE TYPE IV	480.00	SQYD		\$	
0170	02676		MOBILIZATION FOR MILL & TEXT FRANKLIN	1.00	LS		\$	
0180	02676		MOBILIZATION FOR MILL & TEXT WOODFORD	1.00	LS		\$	
0190	02677		ASPHALT PAVE MILLING & TEXTURING	5,613.00	TON		\$	
0200	02696		SHOULDER RUMBLE STRIPS-SAWED	147,976.00	LF		\$	
0210	03383		PVC PIPE-4 IN	400.00	LF		\$	
0220	10020NS		FUEL ADJUSTMENT	6,076.00	DOLL	\$1.00	\$	\$6,076.00
0230	10030NS		ASPHALT ADJUSTMENT	10,319.00	DOLL	\$1.00	\$	\$10,319.00
0240	21173EC		SAW-CLEAN-RESEAL RANDOM CRACKS	26,624.00	LF		\$	

**Section: 0002 - ROADWAY**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0270	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	11.00	EACH		\$	
0280	01983		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	19.00	EACH		\$	
0290	01984		DELINEATOR FOR BARRIER - WHITE	22.00	EACH		\$	
0300	01985		DELINEATOR FOR BARRIER - YELLOW	22.00	EACH		\$	
0310	02014		BARRICADE-TYPE III	10.00	EACH		\$	
0320	02220		FLOWABLE FILL	3.00	CUYD		\$	
0330	02352		GUARDRAIL-STEEL W BEAM-D FACE	412.50	LF		\$	
0340	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	6.00	EACH		\$	
0350	02365		CRASH CUSHION TYPE IX-A	3.00	EACH		\$	
0360	02367		GUARDRAIL END TREATMENT TYPE 1	4.00	EACH		\$	
0370	02369		GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH		\$	
0380	02381		REMOVE GUARDRAIL	2,257.50	LF		\$	
0390	02471		FILL AND CAP SINKHOLE	1.00	EACH		\$	
0400	02562		TEMPORARY SIGNS	2,000.00	SQFT		\$	
0410	02575		DITCHING AND SHOULDERING	36,994.00	LF		\$	

**PROPOSAL BID ITEMS**

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Report Date 8/3/16

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	02650		MAINTAIN & CONTROL TRAFFIC FRANKLIN	1.00	LS		\$	
0430	02650		MAINTAIN & CONTROL TRAFFIC WOODFORD	1.00	LS		\$	
0440	02671		PORTABLE CHANGEABLE MESSAGE SIGN	8.00	EACH		\$	
0450	02726		STAKING FRANKLIN	1.00	LS		\$	
0460	02726		STAKING WOODFORD	1.00	LS		\$	
0470	02775		ARROW PANEL	4.00	EACH		\$	
0480	05950		EROSION CONTROL BLANKET	10,000.00	SQYD		\$	
0490	06401		FLEXIBLE DELINEATOR POST-M/W	144.00	EACH		\$	
0500	06404		FLEXIBLE DELINEATOR POST-M/Y	57.00	EACH		\$	
0510	06511		PAVE STRIPING-TEMP PAINT-6 IN	176,473.00	LF		\$	
0520	06515		PAVE STRIPING-PERM PAINT-6 IN	172,233.00	LF		\$	
0530	06517		PAVE STRIPING-PERM PAINT-12 IN	4,546.00	LF		\$	
0540	06549		PAVE STRIPING-TEMP REM TAPE-B	3,000.00	LF		\$	
0550	06550		PAVE STRIPING-TEMP REM TAPE-W	3,000.00	LF		\$	
0560	06551		PAVE STRIPING-TEMP REM TAPE-Y	3,000.00	LF		\$	
0570	20411ED		LAW ENFORCEMENT OFFICER	225.00	HOURL		\$	
0580	20758ED		REMOVE AND RESET PERF PIPE HEADWALL	5.00	EACH		\$	
0590	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	1,025.00	LF		\$	
0600	22664EN		WATER BLASTING EXISTING STRIPE	176,473.00	LF		\$	
0610	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL FRANKLIN	1.00	LS		\$	
0620	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL WOODFORD	1.00	LS		\$	
0630	24489EC		INLAID PAVEMENT MARKER	961.00	EACH		\$	

**Section: 0003 - DRAINAGE**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0640	01708		RECONSTRUCT CATCH BASIN	2.00	EACH		\$	
0650	02165		REMOVE PAVED DITCH	3,214.00	SQYD		\$	
0660	02484		CHANNEL LINING CLASS III	3,689.00	TON		\$	

**Section: 0004 - BRIDGE-B00053L**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0670	03298		EXPAN JOINT REPLACE 4 IN 37B00053L	83.20	LF		\$	
0680	03299		ARMORED EDGE FOR CONCRETE 37B00053L	83.20	LF		\$	
0690	22146EN		CONCRETE PATCHING REPAIR 37B00053L	500.00	SQFT		\$	

**Section: 0005 - BRIDGE-B00053R**

**PROPOSAL BID ITEMS**

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0700	03298		EXPAN JOINT REPLACE 4 IN 37B00053R	83.20	LF		\$	
0710	03299		ARMORED EDGE FOR CONCRETE 37B00053R	83.20	LF		\$	
0720	22146EN		CONCRETE PATCHING REPAIR 37B00053R	500.00	SQFT		\$	

**Section: 0006 - BRIDGE-B00021L**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0730	03299		ARMORED EDGE FOR CONCRETE 120B00021L	78.80	LF		\$	
0740	08504		EPOXY SAND SLURRY 120B00021L	135.00	SQYD		\$	
0750	08510		REM EPOXY BIT FOREIGN OVERLAY	530.00	SQYD		\$	
0760	08534		CONCRETE OVERLAY-LATEX 120B00021L	29.40	CUYD		\$	
0770	08549		BLAST CLEANING 120B00021L	638.00	SQYD		\$	
0780	08550		HYDRODEMOLITION 120B00021L	530.00	SQYD		\$	
0790	24094EC		PARTIAL DEPTH PATCHING 120B00021L	10.00	CUYD		\$	

**Section: 0007 - BRIDGE-B00021R**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0800	03299		ARMORED EDGE FOR CONCRETE 120B00021R	78.80	LF		\$	
0810	08504		EPOXY SAND SLURRY 120B00021R	135.00	SQYD		\$	
0820	08510		REM EPOXY BIT FOREIGN OVERLAY	530.00	SQYD		\$	
0830	08534		CONCRETE OVERLAY-LATEX 120B00021R	29.40	CUYD		\$	
0840	08549		BLAST CLEANING 120B00021R	638.00	SQYD		\$	
0850	08550		HYDRODEMOLITION 120B00021R	530.00	SQYD		\$	
0860	24094EC		PARTIAL DEPTH PATCHING 120B00021R	10.00	CUYD		\$	

**Section: 0008 - LIGHTING**

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0870	04940		REMOVE LIGHTING FRANKLIN	1.00	LS		\$	
0880	04940		REMOVE LIGHTING WOODFORD	1.00	LS		\$	
0890	24589ED		LED LUMINAIRE	74.00	EACH		\$	
0900	24749EC		HIGH MAST LED LUMINAIRE	24.00	EACH		\$	

### PROPOSAL BID ITEMS

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#### Section: 0009 - TRAFFIC LOOPS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0910	04793		CONDUIT-1 1/4 IN	50.00	LF		\$	
0920	04795		CONDUIT-2 IN	20.00	LF		\$	
0930	04820		TRENCHING AND BACKFILLING	60.00	LF		\$	
0940	04829		PIEZOELECTRIC SENSOR	4.00	EACH		\$	
0950	04830		LOOP WIRE	1,500.00	LF		\$	
0960	04895		LOOP SAW SLOT AND FILL	365.00	LF		\$	
0970	20359NN		GALVANIZED STEEL CABINET	2.00	EACH		\$	
0980	20360ES818		WOOD POST	4.00	EACH		\$	
0990	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	2.00	EACH		\$	

#### Section: 0010 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0250	02568		MOBILIZATION	1.00	LS		\$	
0260	02569		DEMOBILIZATION	1.00	LS		\$	