



CALL NO. 103

CONTRACT ID. 171052

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER NHPP IM 2651 (020)

DESCRIPTION I-265

WORK TYPE JPC PAVEMENT REPAIRS - DIAMOND GRINDING

PRIMARY COMPLETION DATE 7/31/2018

LETTING DATE: December 08,2017

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME December 08,2017. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 6.50%

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 - 171052

NHPP IM 2651 (020)

COUNTY - JEFFERSON

PCN - DE05602651752

NHPP IM 2651 (020)

I-265 REPAIR AND GRIND CONCRETE PAVEMENT ON I-265 FROM I-65(MP 10.250) EXTENDING EAST AND ENDING 0.476 MILE EAST OF KY-864 UNDERPASS(MP 15.660),. A DISTANCE OF 05.41 MILES.JPC PAVEMENT REPAIRS - DIAMOND GRINDING SYP NO. 05-02087.00.

GEOGRAPHIC COORDINATES LATITUDE 38:07:00.00 LONGITUDE 85:39:00.00

COMPLETION DATE(S):

COMPLETED BY 07/31/2018

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)

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

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. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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 **5** 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
- 6th 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.

1/27/2017

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.

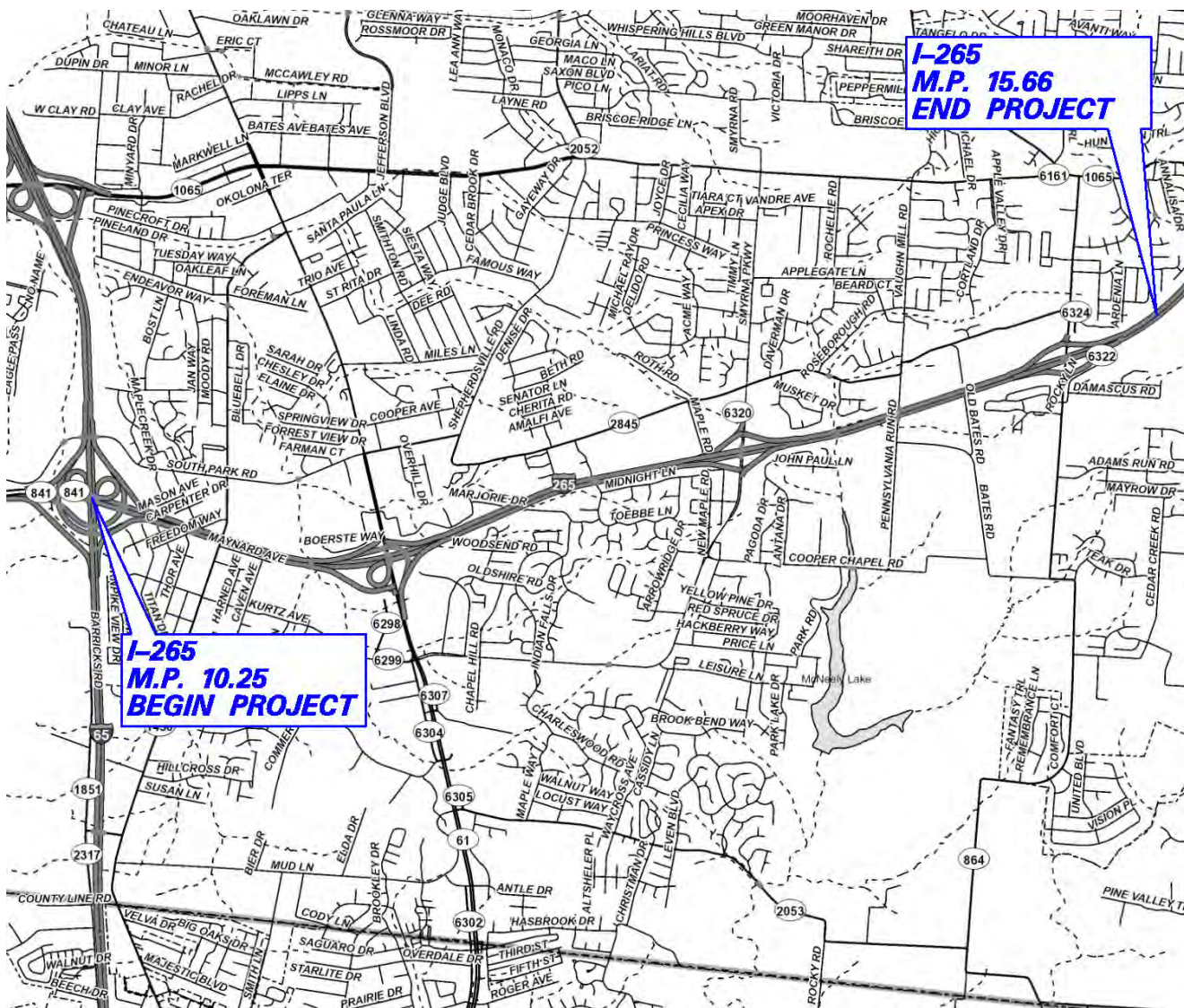
DGA BASE

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.



COUNTY: JEFFERSON

ITEM NUMBERS: 5-2087.00

PROJECT NUMBER: FD52 056 0265 010-016

CONSTRUCTION NUMBER: NHPP IM 2651 (020)

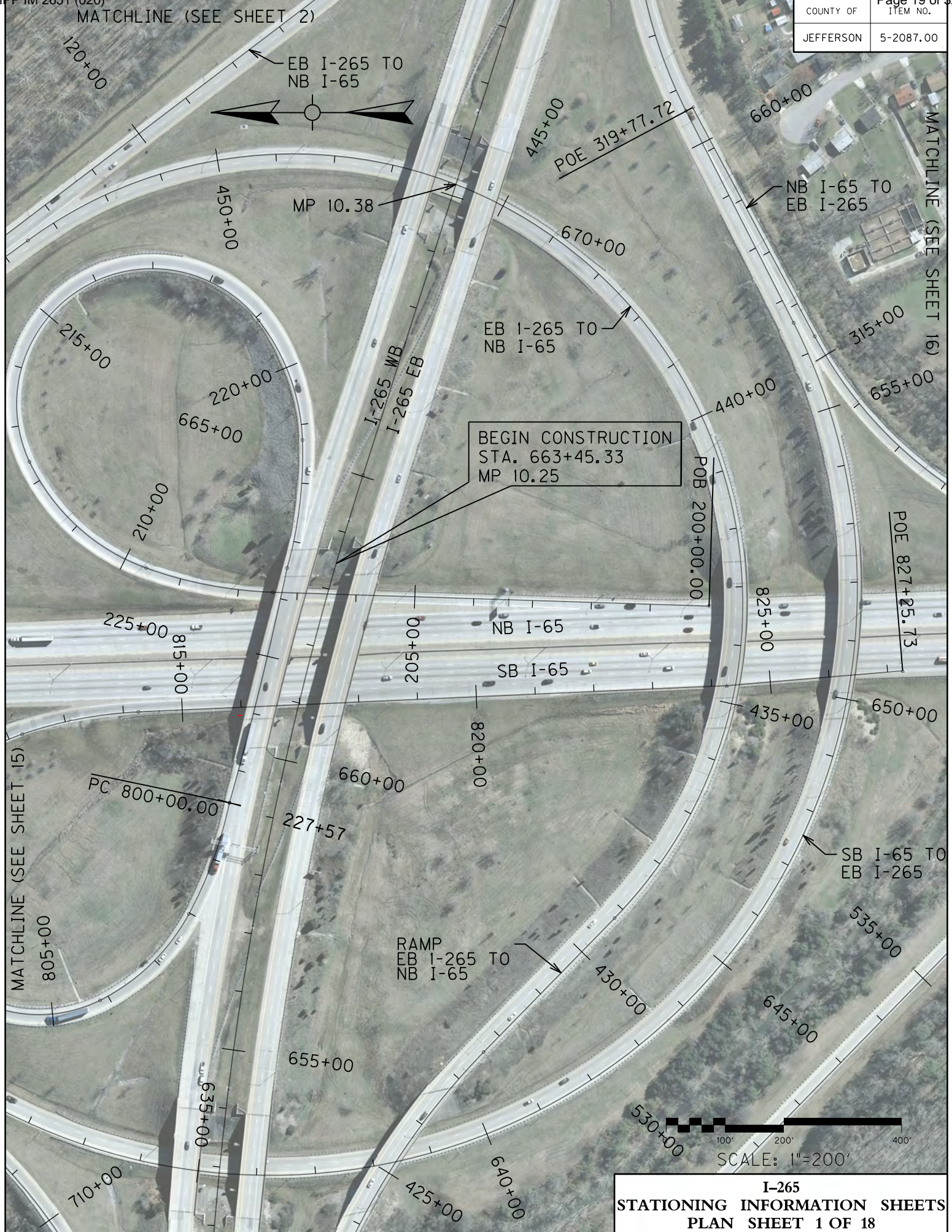
LETTING DATE: DECEMBER 8th, 2017

RECOMMENDED BY: _____ DATE: _____
Project Manager

PLAN APPROVED BY: _____ DATE: _____
State Highway Engineer

FHWA APPROVED BY: _____ DATE: _____

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 1 OF 18**

COUNTY OF	ITEM NO.
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MATCHLINE (SEE SHEET 3)



MATCHLINE (SEE SHEET 1)

**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 2 OF 18**

MATCHLINE (SEE SHEET 4)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



KY 61 TO WB I-265

260+00

715+00

POE 261+72.26

710+00

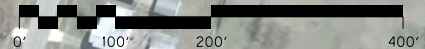
I-265 WB
I-265 EB

705+00

MILE
1
1

700+00

BLUE LICK RD.
I-265 MP 10.90



SCALE: 1"=200'

MATCHLINE (SEE SHEET 2)

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 3 OF 18

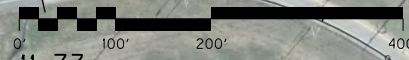
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**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 4 OF 18**

MATCHLINE (SEE SHEET 6)

COUNTY OF	ITEM NO.
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SCALE: 1"=200'

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 5 OF 18

MATCHLINE (SEE SHEET 4)

MATCHLINE (SEE SHEET 7)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



MATCHLINE (SEE SHEET 5)

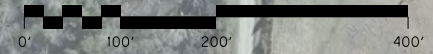
**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 6 OF 18**

MATCHLINE (SEE SHEET 8)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



MATCHLINE (SEE SHEET 6)



SCALE: 1"=200'

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 7 OF 18

COUNTY OF	ITEM NO.
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MATCHLINE (SEE SHEET 9)



MATCHLINE (SEE SHEET 7)

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 8 OF 18

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

MATCHLINE (SEE SHEET 10)



SCALE: 1"=200'

MATCHLINE (SEE SHEET 8)

**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 9 OF 18**

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

MATCHLINE (SEE SHEET 11)



MILE
1
4

865+00

860+00

POE 332+99.21

855+00

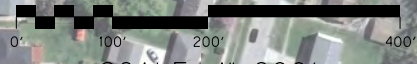
330+00

POB 110+00.00

WB I-265 TO
SMYRNA PKWY

850+00

325+00



SCALE: 1"=200'

MATCHLINE (SEE SHEET 9)

115+00

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 10 OF 18

MATCHLINE (SEE SHEET 12)

COUNTY OF	ITEM NO.
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MATCHLINE (SEE SHEET 10)

I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 11 OF 18

MATCHLINE (SEE SHEET 13)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



MATCHLINE (SEE SHEET 11)

0' 100' 200' 400'
 SCALE: 1"=200'
I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 12 OF 18

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



950+00
END CONSTRUCTION
STA. 948+77.48
MP 15.66

POE 34+71.70
945+00

I-265
EB
WB
I-265
MB

POB 10+00.00
940+00

30+00

KY 864 TO
EB I-265

WB I-265 TO
KY 864

25+00

15+00

935+00



SCALE: 1"=200'

MATCHLINE (SEE SHEET 13)

**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 14 OF 18**

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



**I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 15 OF 18**

MATCHLINE (SEE SHEET 1)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 16 OF 18

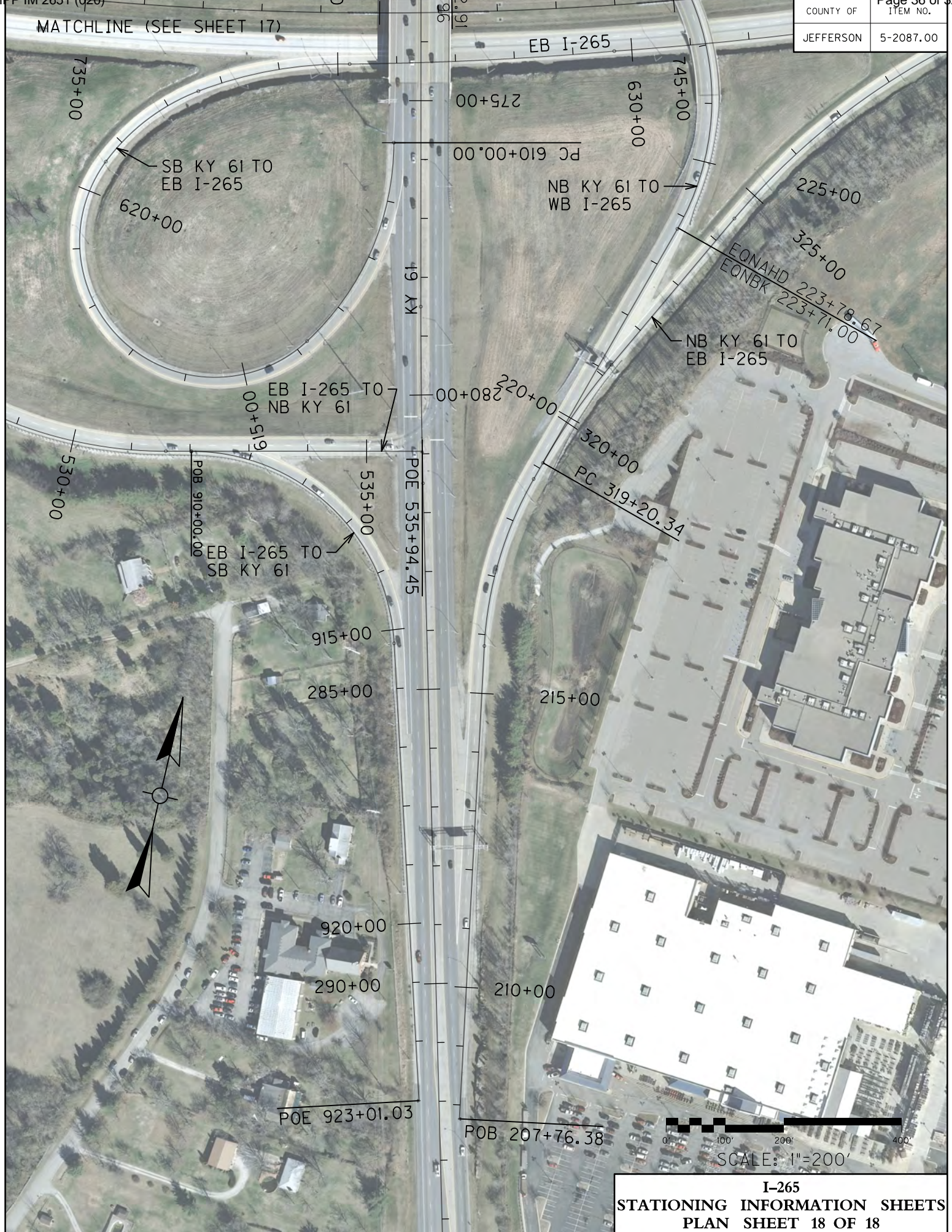
COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 17 OF 18

MATCHLINE (SEE SHEET 18)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



MATCHLINE (SEE SHEET 17)

EB I-265

275+00

630+00

745+00

SB KY 61 TO
EB I-265

620+00

00+00+019 PC

NB KY 61 TO
WB I-265

225+00

325+00

EQNAHD 223+78.67
EQNBK 223+71.00

NB KY 61 TO
EB I-265

EB I-265 TO
NB KY 61

00+082

220+00

320+00

PC 319+20.34

EB I-265 TO
SB KY 61

535+00

POE 535+94.45

915+00

285+00

215+00

920+00

290+00

210+00

POE 923+01.03

POB 207+76.38



SCALE: 1"=200'

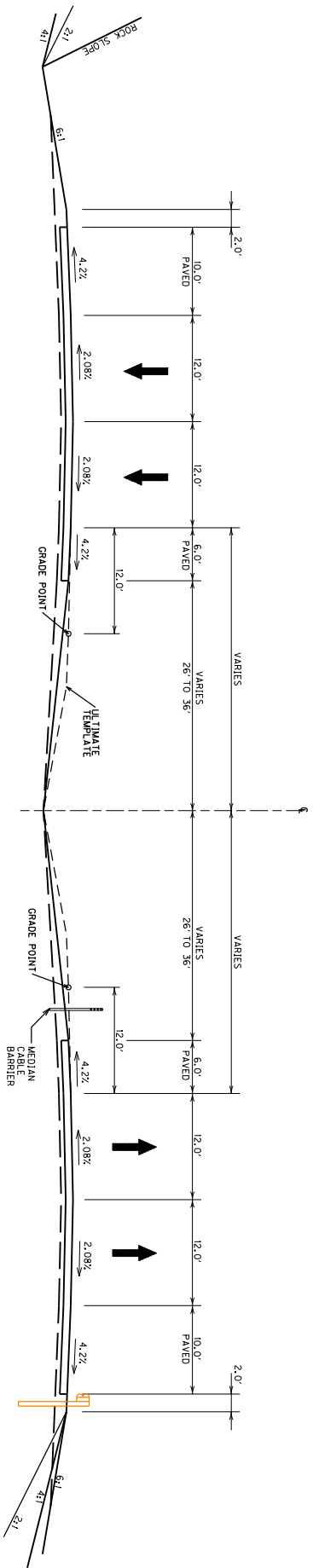
I-265
STATIONING INFORMATION SHEETS
PLAN SHEET 18 OF 18

EXISTING TYPICAL SECTIONS

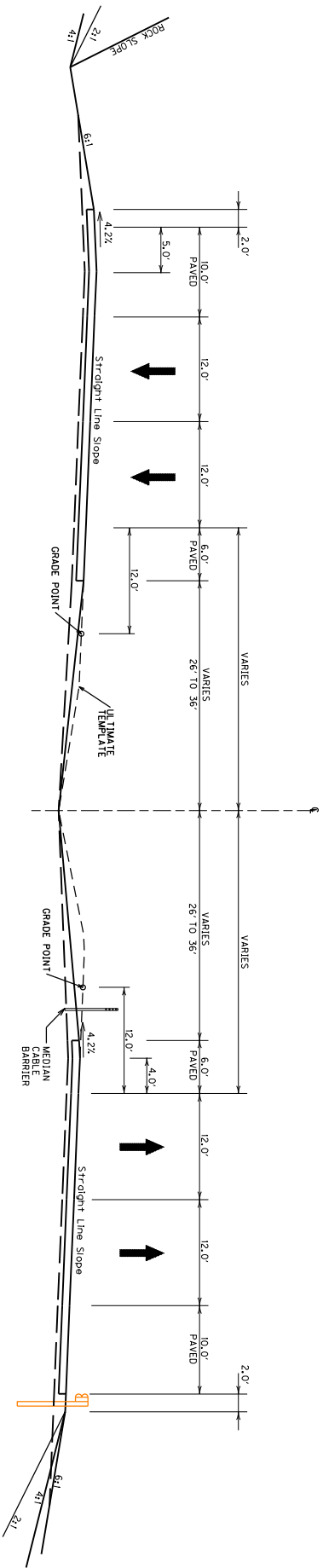
I-265 MAINLINE

TWO-LANE SECTION

STA. 663+45.33 TO STA. 689+25 (MP 10.25 TO MP 10.74)
STA. 717+99 TO STA. 948+77.48 (MP 11.28 TO MP 15.66))



NORMAL SECTION



SUPERELEVATED SECTION

- EXISTING PAVEMENT
- 6" DGA
- 10" NON-REINFORCED PCC PAVEMENT
- FOR SHOULDERS
- 10" NON-REINFORCED PCC PAVEMENT

NOT TO SCALE

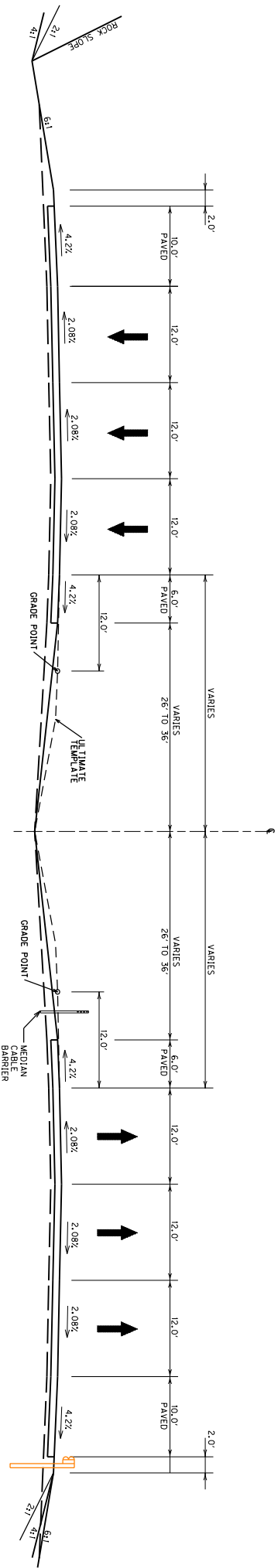
TYPICAL SECTION
I-265 MAINLINE

COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	

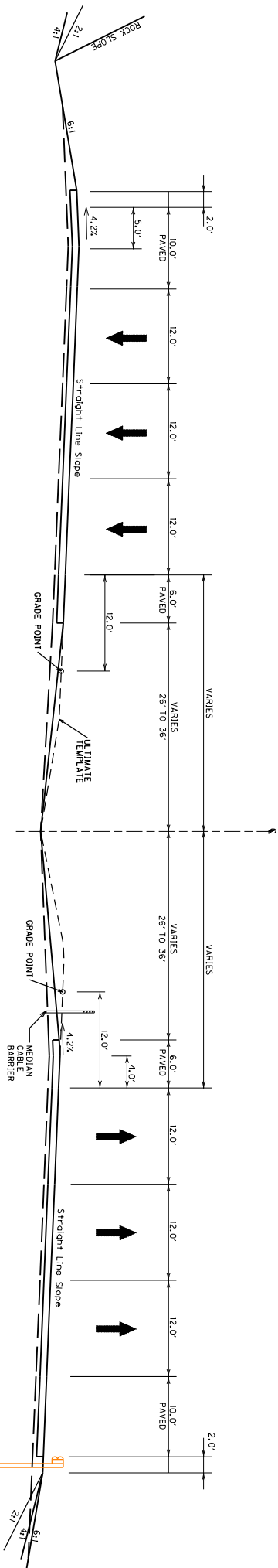
COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	

EXISTING TYPICAL SECTIONS I-265 MAINLINE THREE-LANE SECTION

STA. 689+25 TO STA. 717+99 (MP 10.74 TO MP 11.28)



NORMAL SECTION



SUPERELEVATED SECTION

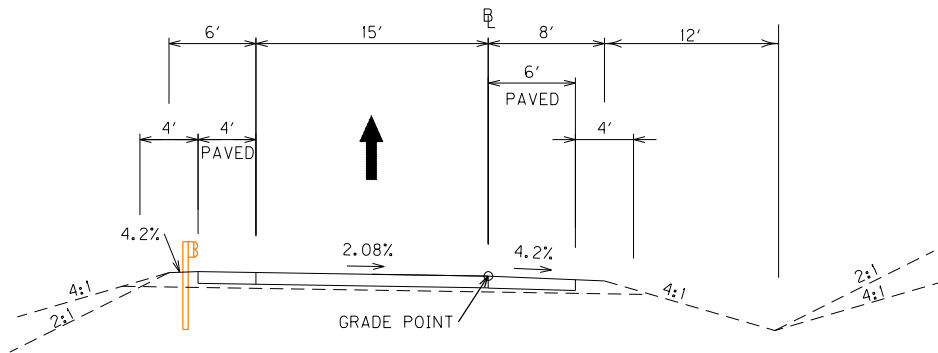
- EXISTING PAVEMENT
- 6" DGA
- 10" NON-REINFORCED PCC PAVEMENT
- FOR SHOULDERS
- 10" NON-REINFORCED PCC PAVEMENT

NOT TO SCALE

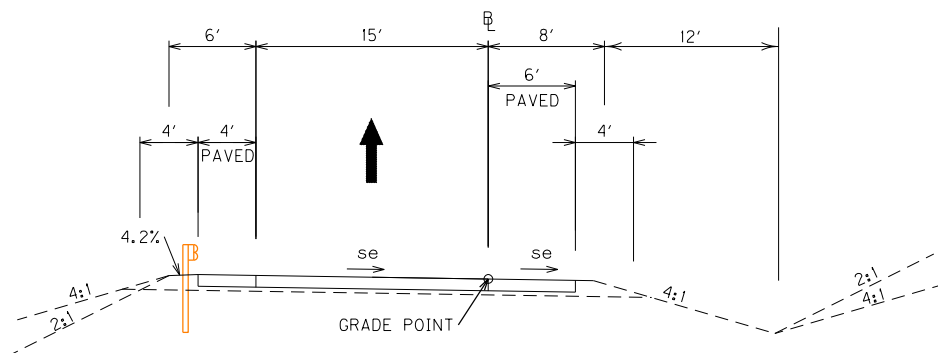
TYPICAL SECTION
I-265 MAINLINE

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

EXISTING TYPICAL SECTIONS ONE-LANE RAMPS



NORMAL SECTION



SUPERELEVATED SECTION

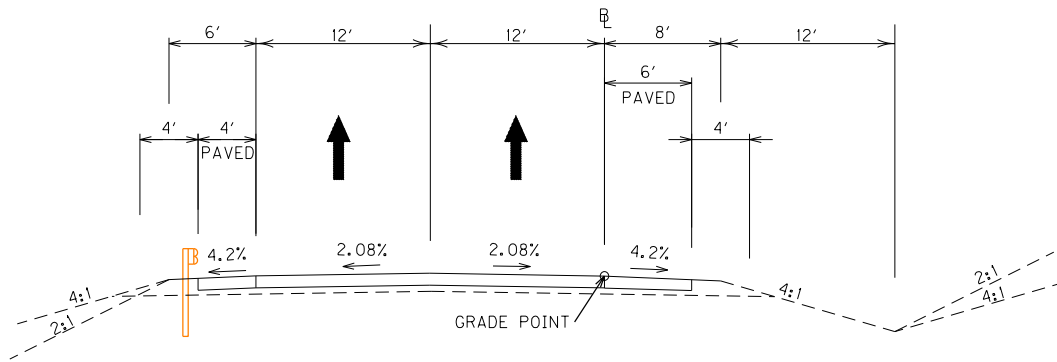
EXISTING PAVEMENT
6" DGA
10" NON-REINFORCED PCC PAVEMENT
FOR SHOULDERS
10" NON-REINFORCED PCC PAVEMENT

NOT TO SCALE

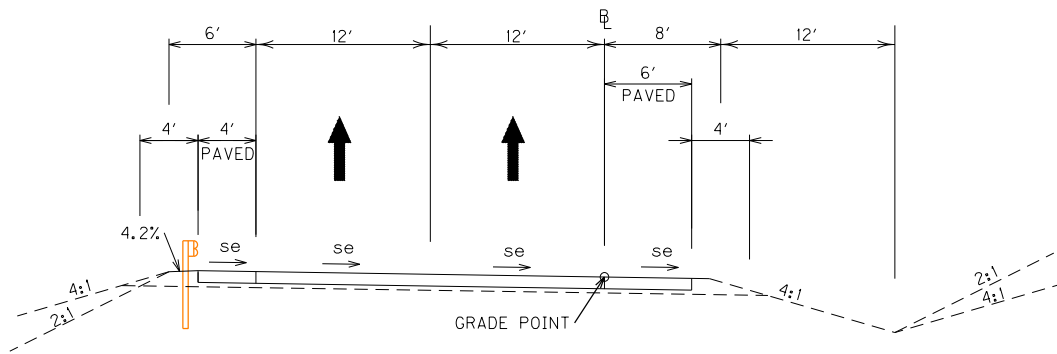
**TYPICAL SECTION
ONE-LANE RAMPS**

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

EXISTING TYPICAL SECTIONS TWO-LANE RAMPS



NORMAL SECTION



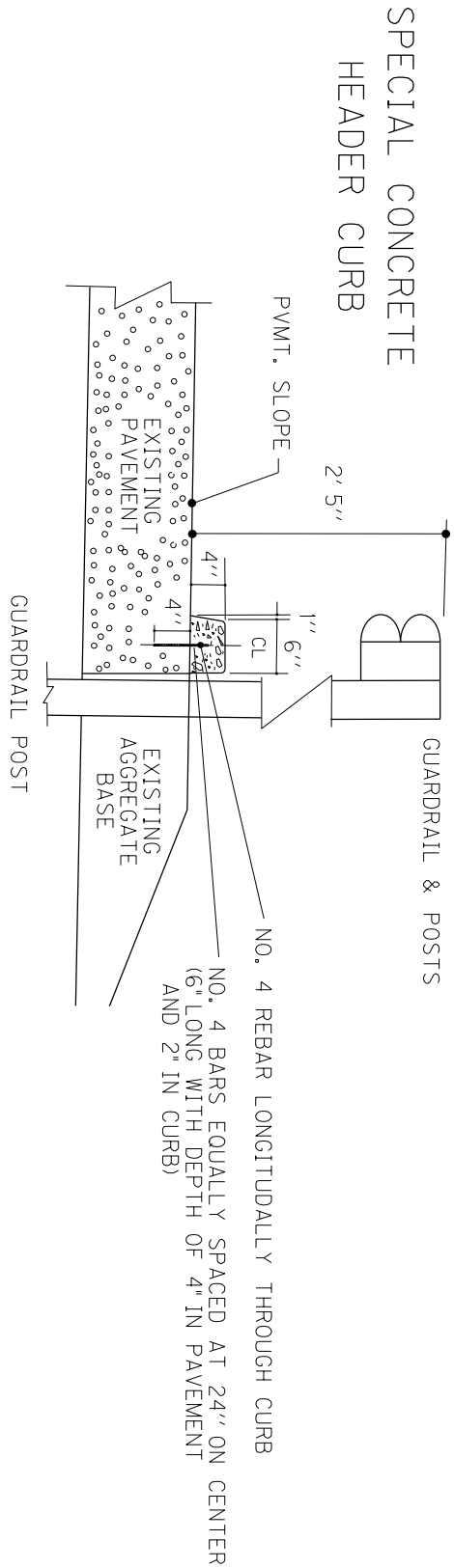
SUPERELEVATED SECTION

EXISTING PAVEMENT
 6" DGA
 10" NON-REINFORCED PCC PAVEMENT
 FOR SHOULDERS
 10" NON-REINFORCED PCC PAVEMENT

NOT TO SCALE

**TYPICAL SECTION
 TWO-LANE RAMPS**

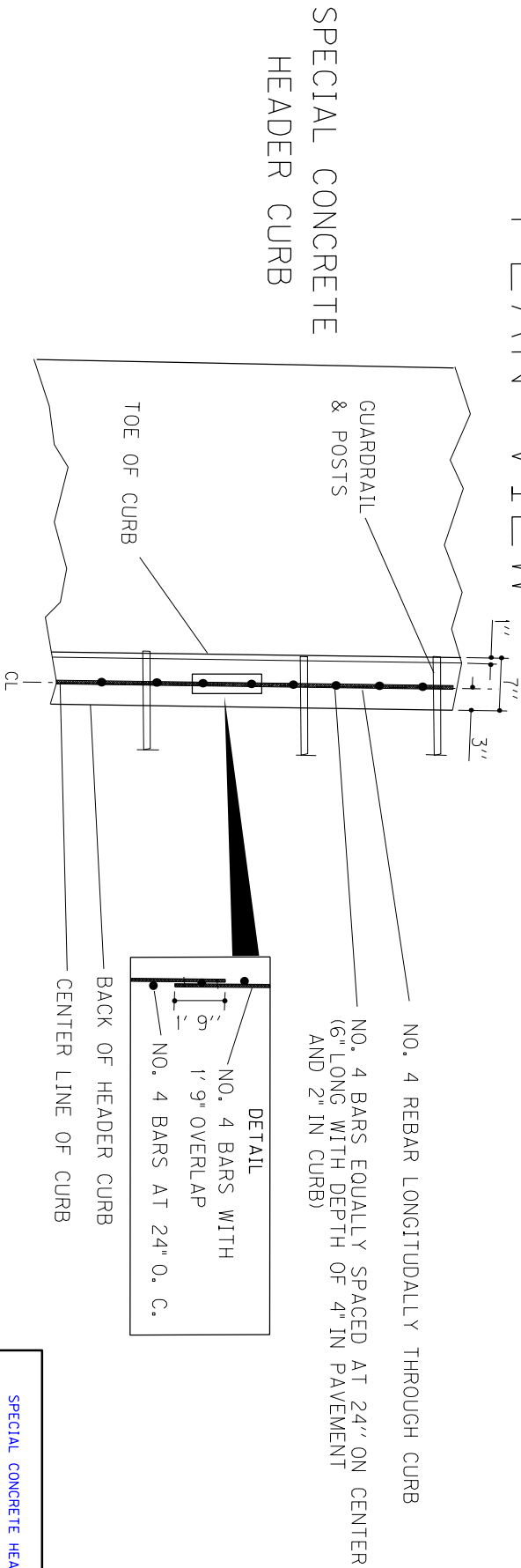
CROSS SECTION VIEW



NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	--

PLAN VIEW



NOT TO SCALE

SPECIAL CONCRETE HEADER CURB

**I-265 PAVEMENT REHABILITATION
JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
GENERAL SUMMARY**

ITEM NUMBER	ITEM	QUANTITY	UNIT
1	DGA BASE (9)	1,142	TON
69	CRUSHED AGGREGATE SIZE NO. 3 (4)	500	TON
461	CULVERT PIPE - 15 IN	8	LIN FT
462	CULVERT PIPE - 18 IN	12	LIN FT
466	CULVERT PIPE - 30IN	8	LIN FT
1000	PERFORATED PIPE-4 IN (4)	200	LIN FT
1010	NON-PERFORATED PIPE-4 IN (4)	50	LIN FT
1020	PERFORATED PIPE HEADWALL TYPE 1 - 4 INCH (4)	2	EACH
1505	DROP BOX INLET TYPE 5B	5	EACH
1691	FLUME INLET TYPE 2	3	EACH
1982	DELINEATOR FOR GUARDRAIL M/W	74	EACH
1983	DELINEATOR FOR GUARDRAIL M/Y	19	EACH
1984	DELINEATORS FOR BARRIER-WHITE	54	EACH
1985	DELINEATORS FOR BARRIER-YELLOW	54	EACH
2058	REMOVE PCC PAVEMENT (6)	30,312	SQ YD
2060	PCC PAVEMENT DIAMOND GRINDING	237,665	SQ YD
2069	JPC PAVEMENT - 10 IN (6)	30,312	SQ YD
2110	PARTIAL DEPTH PATCHING	529	CU FT
2115	SAW-CLEAN-RESEAL TRANSVERSE JOINT (8)	253,000	LIN FT
2116	SAW-CLEAN-RESEAL LONGITUDINAL JOINT (8)	296,000	LIN FT
2220	FLOWABLE FILL (5)	51	CU YD
2237	DITCHING (1)	5,000	LIN FT
2363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	4	EACH
2367	GUARDRAIL END TREATMENT TYPE 1	5	EACH
2369	GUARDRAIL END TREATMENT TYPE 2A	4	EACH
2381	REMOVE GUARDRAIL	3,775	LIN FT
2387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	1	EACH
2391	GUARDRAIL END TREATMENT TYPE 4A	1	EACH
2483	CHANNEL LINING CLASS II (2) (4)	304	TON
2484	CHANNEL LINING CLASS III (2) (4)	500	TON
2562	TEMPORARY SIGNS (3)	1,500	SQ FT
2568	MOBILIZATION	1	LUMP SUM
2569	DEMOBILIZATION	1	LUMP SUM
2599	FABRIC - GEOTEXTILE TYPE IV (4)	1,000	SQ YD
2650	MAINTAIN AND CONTROL TRAFFIC	1	LUMP SUM
2671	PORTABLE CHANGEABLE MESSAGE SIGN (3)	10	EACH
2701	TEMP SILT FENCE	5,000	LF
2704	SILT TRAP TYPE B	5	EACH
2707	CLEAN SILT TRAP TYPE B	5	EACH
2775	ARROW PANEL (3)	4	EACH
5950	EROSION CONTROL BLANKET (4)	10,000	SQ YD
5963	INITIAL FERTILIZER	0.7	TON
5964	20-10-10 FERTILIZER	1.1	TON
5985	SEEDING AND PROTECTION (4)	10,000	SQ YD
5992	AGRICULTURAL LIMESTONE	12.4	TON
6412	STEEL POST MILE MARKERS	10	EACH
6417	FLEXIBLE DELINEATOR POST-W	890	EACH

**I-265 PAVEMENT REHABILITATION
JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
GENERAL SUMMARY**

ITEM NUMBER	ITEM	QUANTITY	UNIT
6418	FLEXIBLE DELINEATOR POST-Y	760	EACH
6511	PAVEMENT STRIPING-TEMP PAINT - 6 INCH	119,600	LIN FT
6556	PAVE STRIPING-DUR TY 1-6 IN W	3,660	LIN FT
6557	PAVE STRIPING-DUR TY 1-6 IN Y	2,570	LIN FT
6568	PAVEMENT MARKING-THERMO STOP BAR-24IN	230	LIN FT
6574	PAVEMENT MARKING - THERMO CURV ARROW	33	EACH
6600	REMOVE PAVEMENT MARKER TYPE V	1,030	EACH
10020NS	FUEL ADJUSTMENT	8,807	DOLLAR
20366NN	REPLACE GRATE	5	EACH
20411ED	LAW ENFORCEMENT OFFICER	2,000	HOUR
21173EC	SAW-CLEAN-RESEAL RANDOM CRACKS	2,261	LIN FT
21533EN	EMBANKMENT (7)	500	CU YD
21802EN	GUARDRAIL-STEEL W BEAM-S FACE (7 FT POST)	3,712.5	LIN FT
22861EN	HIGH STRENGTH GEOTEXTILE FABRIC (4)	1,000	SQ YD
24189ER	DURABLE WATERBORNE MARKING - 6 IN W	173,500	LIN FT
24190ER	DURABLE WATERBORNE MARKING - 6 IN Y	153,000	LIN FT
24191ER	DURABLE WATERBORNE MARKING - 12 IN W	16,000	LIN FT
24489EC	INLAID PAVEMENT MARKER	1,600	EACH
----	SPECIAL CONCRETE HEADER CURB	2,812	LIN FT

- (1) "Ditching" is intended for repair to the eroded and/or poorly draining areas throughout the project as directed by the engineer. Any embankment required is incidental to "Ditching". Disposal of material is also incidental to "Ditching".
- (2) Any excavation and Fabric-Geotextile Type I required to place the channel lining is incidental to the lining.
- (3) The quantity for these items includes initial placement. Any relocation required will not be paid for directly, but will be considered incidental to "Maintain and Control Traffic".
- (4) To be used as directed by the Engineer
- (5) In addition to the locations specified in the Pipe and Drainage Summary, 25 CY of flowable fill is provided to repair voids near drainage structures, to be used as directed by the Engineer. Another 25 CY of flowable fill is also included to repair locations beneath the shoulder or other structures, to be used as directed by the Engineer.
- (6) Includes an additional 10% for continuing pavement deterioration. For traffic control, a 24 HR mix may be appropriate; the Contractor shall coordinate with the Engineer to determine the appropriate mix for each repair location.
- (7) To be used for pipe repair locations, slope stabilization, and/or as directed by the Engineer
Contrary to the Standard Specifications, payment will be based on measured quantity **NOT** plan quantity.
- (8) Contrary to the Standard Specifications, only Hot-Poured Elastic joint sealant shall be used.
- (9) In addition to the locations specified in the Pipe and Drainage Summary, 500 TONS is provided to be used as directed by the Engineer, and 540 TONS is provided to restore an original profile grade along WB I-265 between Blue Lick Road and Freedom Way.

NOTE: Quantities from all summaries have been carried over and included in this General Summary

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
663+95	664+18	23			X					31	
664+68	666+44	176			X					235	
666+77	666+96	19							X	11	HALF WIDTH
667+35	667+63	28		X						38	
669+08	669+16	8			X					11	
671+37	671+64	27		X						36	
675+06	675+23	17			X					23	
683+30	683+42	12				X				16	
683+30	683+42	12					X			16	
683+89	684+43	54				X				72	
686+77	687+31	54				X				72	
686+90	687+14	24			X					32	
687+49	688+45	96				X				128	
687+75	688+02	27			X					36	
688+09	688+28	19					X			26	
689+51	689+61	10		X						14	
689+75	690+03	28			X					38	
690+46	690+60	14			X					19	
690+46	690+85	39				X				39	9' WIDE
693+91	694+04	13							X	15	
695+92	696+03	11			X					15	
698+21	698+46	25				X				34	
698+21	699+18	97			X					130	
699+70	700+19	49			X					66	
702+09	702+34	25				X				34	
707+07	707+56	49			X					66	
711+96	712+50	54			X					72	
711+96	712+50	54		X						72	
714+62	714+87	25			X					34	
718+47	719+26	79			X					106	
719+94	720+19	25			X					34	
721+12	721+39	27			X					36	
721+56	722+57	101			X					135	
723+23	723+65	42			X					56	
723+83	724+24	41			X					55	
725+18	725+42	24			X					32	
725+61	726+57	96			X					128	
728+66	729+06	40			X					54	
728+66	729+06	40		X						54	
732+67	733+09	42			X					56	
733+26	733+69	43			X					58	
736+98	739+02	204			X					272	
739+94	740+19	25			X					34	
742+16	743+18	102			X					136	
746+06	746+15	9				X				12	
746+47	746+73	26			X					35	
747+07	747+32	25			X					34	
747+25	747+45	20				X				27	
748+26	748+63	37			X					50	
750+31	750+39	8			X					11	
750+61	750+87	26			X					35	
STATION EQUATION: STA. 751+99.81 BACK = STA. 753+16.17 AHEAD											
753+41	753+70	29			X					39	
755+39	755+65	26			X					35	

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
756+00	756+09	9				X				12	
756+42	757+43	101			X					135	
756+59	756+97	38				X				51	
757+78	758+04	26			X					35	
758+39	758+65	26				X				35	
759+41	759+84	43			X					58	
763+60	764+03	43			X					58	
764+80	765+22	42			X					56	
766+77	767+03	26			X					35	
767+97	768+23	26			X					35	
769+60	770+62	102			X					136	
772+16	773+62	146			X					195	
773+95	774+22	27			X					36	
776+19	776+86	67			X					90	
777+56	778+41	85			X					114	
779+66	780+21	55			X					74	
783+54	784+53	99			X					132	
785+67	785+87	20		X						27	
788+40	788+66	26			X					35	
789+01	789+26	25			X					34	
789+44	797+28	784			X					1046	
800+34	801+27	93			X					124	
810+61	810+86	25			X					34	
813+43	813+69	26			X					35	
814+20	814+46	26			X					35	
821+40	821+66	26			X					35	
823+20	823+46	26			X					35	
824+40	824+66	26			X					35	
825+00	825+26	26			X					35	
828+00	828+25	25			X					34	
831+61	832+45	84			X					112	
841+78	842+04	26			X					35	
844+01	844+44	43			X					58	
844+79	845+04	25			X					34	
848+99	849+25	26			X					35	
849+59	852+24	265			X					354	
853+01	856+43	342			X					456	
857+44	857+70	26			X					35	
858+04	858+30	26			X					35	
859+83	860+08	25			X					34	
862+21	862+46	25			X					34	
862+80	863+65	85			X					114	
863+99	865+84	185			X					247	
866+96	871+54	458			X					611	
869+95	870+21	26		X						35	
872+79	874+42	163			X					218	
875+19	877+24	205			X					274	
878+20	878+62	42			X					56	
878+96	883+54	458			X					611	
883+15	883+54	39		X						52	
884+06	885+04	98			X					131	
885+55	885+80	25		X						34	
887+17	887+62	45		X						60	
887+95	888+21	26		X						35	

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
888+55	888+92	37		X						50	
889+16	891+63	247			X					330	
891+85	893+02	117			X					156	
892+10	892+41	31		X						42	
893+79	894+21	42			X					56	
894+56	894+81	25			X					34	
895+16	896+61	145			X					194	
898+59	902+61	402			X					536	
901+14	901+40	26		X						35	
901+57	902+00	43		X						58	
904+58	904+83	25			X					34	
906+54	907+23	69			X					92	
908+35	909+21	86			X					115	
910+74	911+01	27			X					36	
911+34	911+61	27			X					36	
911+95	912+20	25			X					34	
915+54	915+81	27			X					36	
922+05	922+81	76			X					102	
922+65	922+86	21		X						28	
924+32	924+59	27			X					36	
924+94	925+20	26			X					35	
928+89	929+57	68			X					91	
930+09	930+94	85			X					114	
936+45	936+89	44			X					59	
937+25	937+49	24			X					32	
939+02	939+99	97			X					130	
941+08	943+24	216			X					288	
943+75	944+60	85			X					114	
949+52	949+95	43			X					58	
EASTBOUND TOTAL JPC PAVEMENT - 10 IN (SQ YDS.)										12,447	

* LANE NUMBERS BEGIN WITH THE LANE CLOSEST TO THE I-265 CENTERLINE, AND INCREASE AS YOU MOVE AWAY FROM THE CENTERLINE.
IN OTHER WORDS, LANE #3 IS THE THIRD LANE RIGHT OF THE CENTERLINE.

Approximate full depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
665+08	665+21	13			X					18	
671+10	672+41	131			X					175	
671+24	671+43	19							X	22	
675+55	676+08	53			X					59	
688+64	689+91	127			X					170	
689+20	690+05	85				X				114	
689+60	689+78	18		X						24	
690+01	690+18	17							X	19	
690+46	696+07	561	X							374	
690+52	696+07	555		X						740	
690+65	696+07	542			X					723	
690+78	696+07	529				X				706	
690+91	696+07	516							X	574	
697+67	699+56	189			X					252	
700+52	700+77	25				X				34	
700+52	700+77	25			X					34	
702+50	703+17	67			X					90	
705+92	706+17	25			X					34	
710+13	710+98	85			X					114	
717+10	717+58	48							X	54	
719+23	719+48	25			X					34	
719+37	719+65	28				X				38	
719+83	720+26	43			X					58	
721+64	721+90	26			X					35	
728+87	729+43	56			X					75	
729+95	730+47	52			X					70	
741+61	741+86	25			X					34	
741+61	741+86	25		X						34	
749+61	749+92	31			X					42	
751+17	751+39	22			X					30	
751+17	751+39	22		X						30	
751+77	751+99	22		X						30	
751+77	751+99	22			X					30	
STATION EQUATION: STA. 751+99.81 BACK = STA. 753+16.17 AHEAD											
762+18	762+43	25			X					34	
765+06	765+27	21		X						28	
765+06	765+27	21			X					28	
766+13	766+35	22		X						30	
766+13	766+35	22			X					30	
780+18	780+44	26		X						35	
785+30	786+23	93			X					124	
785+30	786+23	93		X						124	
786+74	787+59	85		X						114	
786+74	787+59	85			X					114	
796+58	796+83	25			X					34	
799+79	800+19	40			X					54	
800+53	801+11	58			X					78	
800+53	801+11	58		X						78	
802+34	802+59	25			X					34	
804+73	805+16	43			X					58	
805+93	806+19	26			X					35	
814+67	815+18	51			X					68	
818+87	819+54	67			X					90	
822+11	822+37	26			X					35	

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND RAMPS**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	LANE #4	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
SOUTHBOUND I-65 TO EASTBOUND I-265											
617+98	618+05	7							X	5	
623+41	623+57	16				X				27	
633+68	633+89	21		X						35	
649+24	649+48	24		X						40	
666+31	666+46	15				X				25	
NORTHBOUND I-65 TO EASTBOUND I-265											
309+06	309+30	24		X						40	
309+48	309+72	24		X						40	
EASTBOUND I-265 EXIT TO KY 61											
514+56	514+63	7			X					9	
532+30	532+71	41			X					55	
534+18	534+42	24			X					32	
534+78	535+48	70			X					93	
EASTBOUND I-265 EXIT TO SOUTHBOUND KY 61											
NO FULL DEPTH PAVEMENT REPAIRS											
SOUTHBOUND KY 61 ENTRANCE TO EASTBOUND I-265											
NO FULL DEPTH PAVEMENT REPAIRS											
NORTHBOUND KY 61 ENTRANCE TO EASTBOUND I-265											
322+65	322+99	34		X						57	
322+94	323+08	14							X	9	
332+50	332+59	9		X						15	
EASTBOUND I-265 EXIT TO SMYRNA PKWY.											
525+80	526+15	35		X						58	15' WIDE WITH TRAFFIC LOOP
525+95	526+23	28			X					47	15' WIDE WITH TRAFFIC LOOP
SOUTHBOUND SMYRNA PKWY. ENTRANCE TO EASTBOUND I-265											
NO FULL DEPTH PAVEMENT REPAIRS											
NORTHBOUND SMYRNA PKWY. ENTRANCE TO EASTBOUND I-265											
309+12	309+36	24		X						21	8' WIDE
EASTBOUND I-265 EXIT TO KY 864											
22+55	22+77	22		X						29	
SOUTHBOUND KY 864 ENTRANCE TO EASTBOUND I-265											
NO FULL DEPTH PAVEMENT REPAIRS											
NORTHBOUND KY 864 ENTRANCE TO EASTBOUND I-265											
NO FULL DEPTH PAVEMENT REPAIRS											
EASTBOUND RAMPS TOTAL - JPC PAVEMENT 10 IN (SQ YDS.)										637	
<p align="center"><i>Approximate full depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.</i></p>											

**FULL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND RAMPS**

BEGIN STATION	END STATION	LENGTH (FT)	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	LANE #4	GORE	OUTSIDE SHLDR.	TOTAL SQ. YDS. JPC - 10"	COMMENTS
WESTBOUND I-265 TO NORTHBOUND I-65											
NO FULL DEPTH PAVEMENT REPAIRS											
SOUTHBOUND KY 61 ENTRANCE TO WESTBOUND I-265											
NO FULL DEPTH PAVEMENT REPAIRS											
NORTHBOUND KY 61 ENTRANCE TO WESTBOUND I-265											
235+56	235+80	24			X					40	
236+39	236+53	14		X						23	
237+07	237+32	25			X					42	
WESTBOUND I-265 EXIT TO KY 61											
114+87	115+04	17		X						28	
117+72	120+74	302		X						503	
122+46	123+14	68			X					113	15' WIDE
123+23	123+62	39			X					39	9' WIDE
123+42	123+51	9				X				9	9' WIDE
124+73	124+99	26			X					26	9' WIDE
124+73	124+82	9				X				9	9' WIDE
125+95	126+31	36				X				60	
NORTHBOUND SMYRNA PKWY. ENTRANCE TO WESTBOUND I-265											
718+92	719+77	85		X						142	15' WIDE
712+28	712+52	24		X						53	20' WIDE
SOUTHBOUND SMYRNA PKWY. ENTRANCE TO WESTBOUND I-265											
8+82	9+07	25		X						33	12' WIDE
WESTBOUND I-265 EXIT TO SMYRNA PKWY.											
125+21	125+46	25		X						33	12' WIDE
125+21	125+46	25			X					33	12' WIDE
125+57	125+89	32			X					43	12' WIDE WITH TRAFFIC LOOP
KY 864 ENTRANCE TO WESTBOUND I-265											
26+57	27+85	128		X						213	
WESTBOUND I-265 EXIT TO KY 864											
24+95	25+39	44			X					59	
WESTBOUND RAMPS TOTAL - JPC PAVEMENT 10 IN (SQ YDS.)										1,501	
PROJECT TOTAL - JPC PAVEMENT 10 IN (SQ YDS.)										27,556	

Approximate full depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
664+13							X		4	0.28	1.12		PATCH
665+38			X						1	0.28	0.28		PATCH
665+92							X		1	0.28	0.28		PATCH
666+15			X						1	0.28	0.28		PATCH
666+27							X		1	0.28	0.28		PATCH
666+29							X		1	0.28	0.28		PATCH
667+12				X					1	0.28	0.28		PATCH
667+14							X		2	0.28	0.56		PATCH
667+18							X		2	0.28	0.56		PATCH
667+18		X										4	R&S
667+23							X		1	0.28	0.28		PATCH
667+35							X		2	0.28	0.56		PATCH
667+59							X		1	0.28	0.28		PATCH
667+70				X					1	0.28	0.28		PATCH
667+77				X					1	0.28	0.28		PATCH
667+93							X		2	0.28	0.56		PATCH
671+02			X						2	0.28	0.56		PATCH
671+10				X								12	R&S
671+60							X					5	R&S
671+66							X					10	R&S
671+71			X						1	0.28	0.28		PATCH
672+15							X		2	0.28	0.56		PATCH
672+19							X		1	0.28	0.28		PATCH
673+34			X						1	0.28	0.28		PATCH
675+62			X						1	0.28	0.28		PATCH
676+33			X						1	0.28	0.28		PATCH
677+49				X					1	0.28	0.28		PATCH
677+96			X						2	0.28	0.56		PATCH
678+43								X	2	0.28	0.56		PATCH
678+75			X						2	0.28	0.56		PATCH
679+20								X	1	0.28	0.28		PATCH
679+20								X				7	R&S
679+49			X						2	0.28	0.56		PATCH
679+49				X					1	0.28	0.28		PATCH
680+35			X						2	0.28	0.56		PATCH
680+51								X	1	0.28	0.28		PATCH
681+16			X						1	0.28	0.28		PATCH
681+90			X						1	0.28	0.28		PATCH
683+20							X		1	0.28	0.28		PATCH
683+70					X				1	0.28	0.28		PATCH
684+28			X						1	0.28	0.28		PATCH
684+53					X				1	0.28	0.28		PATCH
684+71				X					1	0.28	0.28		PATCH
685+31					X				1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
685+31						X			1	0.28	0.28		PATCH
686+01					X				1	0.28	0.28		PATCH
686+56					X				1	0.28	0.28		PATCH
687+55				X					1	0.28	0.28		PATCH
688+17							X					2	R&S
689+16						X						2	R&S
689+82					X				1	0.28	0.28		PATCH
690+37					X				1	0.28	0.28		PATCH
690+65			X						1	0.28	0.28		PATCH
690+88							X					4	R&S
691+11				X					1	0.28	0.28		PATCH
691+41						X			1	0.28	0.28		PATCH
691+48			X						1	0.28	0.28		PATCH
691+87				X					1	0.28	0.28		PATCH
692+49							X		1	0.28	0.28		PATCH
692+65				X					1	0.28	0.28		PATCH
693+07			X						1	0.28	0.28		PATCH
693+43				X					1	0.28	0.28		PATCH
693+83			X						1	0.28	0.28		PATCH
693+95				X					2	0.28	0.56		PATCH
694+24				X					1	0.28	0.28		PATCH
694+61			X						1	0.28	0.28		PATCH
694+73				X					1	0.28	0.28		PATCH
694+76			X						1	0.28	0.28		PATCH
695+01				X					1	0.28	0.28		PATCH
695+47					X				4	0.28	1.12		PATCH
695+66				X					1	0.28	0.28		PATCH
697+73			X						1	0.28	0.28		PATCH
697+96				X					1	0.28	0.28		PATCH
698+83							X					5	R&S
699+40			X						1	0.28	0.28		PATCH
700+19			X						1	0.28	0.28		PATCH
700+56				X					1	0.28	0.28		PATCH
700+95			X						2	0.28	0.56		PATCH
701+38				X					1	0.28	0.28		PATCH
701+71			X						1	0.28	0.28		PATCH
702+17				X					1	0.28	0.28		PATCH
702+43			X						2	0.28	0.56		PATCH
702+94				X					1	0.28	0.28		PATCH
703+30			X						1	0.28	0.28		PATCH
703+74				X					1	0.28	0.28		PATCH
704+07				X					2	0.28	0.56		PATCH
704+17			X						1	0.28	0.28		PATCH
704+55				X					1	0.28	0.28		PATCH
706+14				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
706+49			X						1	0.28	0.28		PATCH
706+52			X						1	0.28	0.28		PATCH
706+91				X					1	0.28	0.28		PATCH
707+34			X						1	0.28	0.28		PATCH
707+76				X					1	0.28	0.28		PATCH
708+12			X						1	0.28	0.28		PATCH
708+52				X					1	0.28	0.28		PATCH
708+91			X						1	0.28	0.28		PATCH
709+30				X					1	0.28	0.28		PATCH
709+66			X						1	0.28	0.28		PATCH
709+98				X					1	0.28	0.28		PATCH
710+44			X						1	0.28	0.28		PATCH
710+73				X					1	0.28	0.28		PATCH
711+20			X						1	0.28	0.28		PATCH
711+54				X					1	0.28	0.28		PATCH
711+80				X								12	R&S
712+79			X						1	0.28	0.28		PATCH
713+18				X					1	0.28	0.28		PATCH
713+40				X								12	R&S
713+58			X						1	0.28	0.28		PATCH
713+97				X					1	0.28	0.28		PATCH
714+38			X						1	0.28	0.28		PATCH
715+13			X						1	0.28	0.28		PATCH
715+39			X						1	0.28	0.28		PATCH
715+47				X					1	0.28	0.28		PATCH
716+06			X						1	0.28	0.28		PATCH
716+28				X					1	0.28	0.28		PATCH
716+84			X						1	0.28	0.28		PATCH
717+17				X					1	0.28	0.28		PATCH
717+63			X						1	0.28	0.28		PATCH
717+87				X					1	0.28	0.28		PATCH
718+45			X						1	0.28	0.28		PATCH
718+75					X				1	0.28	0.28		PATCH
719+24			X						1	0.28	0.28		PATCH
719+52					X				1	0.28	0.28		PATCH
720+01			X						1	0.28	0.28		PATCH
721+44								X	1	0.28	0.28		PATCH
721+63								X	1	0.28	0.28		PATCH
721+64			X						1	0.28	0.28		PATCH
722+05								X	1	0.28	0.28		PATCH
722+26								X	1	0.28	0.28		PATCH
722+47			X						1	0.28	0.28		PATCH
722+69								X	1	0.28	0.28		PATCH
722+85								X				22	R&S
722+89								X	1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
723+09								X	1	0.28	0.28		PATCH
723+32								X	1	0.28	0.28		PATCH
723+53								X	1	0.28	0.28		PATCH
723+72								X	1	0.28	0.28		PATCH
723+93								X	1	0.28	0.28		PATCH
724+04			X						2	0.28	0.56		PATCH
724+88			X						1	0.28	0.28		PATCH
725+73			X						1	0.28	0.28		PATCH
726+10			X									12	R&S
726+47			X						1	0.28	0.28		PATCH
727+28			X						1	0.28	0.28		PATCH
728+10			X						1	0.28	0.28		PATCH
729+72			X						1	0.28	0.28		PATCH
730+49			X						1	0.28	0.28		PATCH
731+28			X						2	0.28	0.56		PATCH
731+69				X					1	0.28	0.28		PATCH
732+07			X						1	0.28	0.28		PATCH
732+90			X						1	0.28	0.28		PATCH
734+58			X						1	0.28	0.28		PATCH
735+25				X					1	0.28	0.28		PATCH
735+39			X						1	0.28	0.28		PATCH
736+14			X						1	0.28	0.28		PATCH
737+75			X						1	0.28	0.28		PATCH
738+52			X						1	0.28	0.28		PATCH
739+35			X						1	0.28	0.28		PATCH
740+10			X						1	0.28	0.28		PATCH
741+06			X						1	0.28	0.28		PATCH
741+75			X						1	0.28	0.28		PATCH
742+52			X						1	0.28	0.28		PATCH
743+05			X									12	R&S
743+40			X						1	0.28	0.28		PATCH
743+62				X								12	R&S
744+15			X						1	0.28	0.28		PATCH
744+25					X				5	0.28	1.40		PATCH
744+93			X						1	0.28	0.28		PATCH
745+69					X				4	0.28	1.12		PATCH
745+75			X						1	0.28	0.28		PATCH
746+55			X						1	0.28	0.28		PATCH
747+39			X						2	0.28	0.56		PATCH
747+87			X						1	0.28	0.28		PATCH
747+99			X						1	0.28	0.28		PATCH
748+14			X						1	0.28	0.28		PATCH
748+30			X						1	0.28	0.28		PATCH
748+58			X						1	0.28	0.28		PATCH
748+89				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
749+00			X						1	0.28	0.28		PATCH
749+77			X						1	0.28	0.28		PATCH
750+61			X						1	0.28	0.28		PATCH
751+41			X						1	0.28	0.28		PATCH
753+39			X						1	0.28	0.28		PATCH
753+80								X	1	0.28	0.28		PATCH
753+90			X						1	0.28	0.28		PATCH
754+20			X						1	0.28	0.28		PATCH
755+03			X						1	0.28	0.28		PATCH
755+57					X				1	0.28	0.28		PATCH
755+73					X				1	0.28	0.28		PATCH
755+83			X						1	0.28	0.28		PATCH
756+65			X						1	0.28	0.28		PATCH
757+42							X		1	0.28	0.28		PATCH
757+45			X						1	0.28	0.28		PATCH
758+26			X						1	0.28	0.28		PATCH
759+12					X							12	R&S
759+62			X						1	0.28	0.28		PATCH
760+39			X						1	0.28	0.28		PATCH
760+50			X						1	0.28	0.28		PATCH
760+65			X						1	0.28	0.28		PATCH
760+65				X					1	0.28	0.28		PATCH
761+52			X						1	0.28	0.28		PATCH
761+72					X				1	0.28	0.28		PATCH
761+83			X						1	0.28	0.28		PATCH
762+09				X								12	R&S
762+27							X		1	0.28	0.28		PATCH
762+32			X						1	0.28	0.28		PATCH
762+51				X								12	R&S
762+78			X						1	0.28	0.28		PATCH
763+96			X						1	0.28	0.28		PATCH
764+70			X						1	0.28	0.28		PATCH
764+83			X						1	0.28	0.28		PATCH
765+18			X						1	0.28	0.28		PATCH
765+58			X						1	0.28	0.28		PATCH
766+36			X						1	0.28	0.28		PATCH
768+60			X						1	0.28	0.28		PATCH
769+62			X						1	0.28	0.28		PATCH
769+99			X						1	0.28	0.28		PATCH
770+41			X						1	0.28	0.28		PATCH
770+71							X		1	0.28	0.28		PATCH
771+22			X						1	0.28	0.28		PATCH
771+66			X									12	R&S
772+04			X						1	0.28	0.28		PATCH
772+50			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
773+69			X						1	0.28	0.28		PATCH
773+70				X					1	0.28	0.28		PATCH
774+48			X						1	0.28	0.28		PATCH
774+89				X					1	0.28	0.28		PATCH
775+49				X					1	0.28	0.28		PATCH
775+50							X		1	0.28	0.28		PATCH
775+80							X		1	0.28	0.28		PATCH
775+87				X								12	R&S
776+09			X						1	0.28	0.28		PATCH
776+91			X						1	0.28	0.28		PATCH
777+09				X								12	R&S
777+29			X						1	0.28	0.28		PATCH
777+60							X		1	0.28	0.28		PATCH
777+89			X						1	0.28	0.28		PATCH
777+90							X		2	0.28	0.56		PATCH
778+03							X		1	0.28	0.28		PATCH
778+20							X		1	0.28	0.28		PATCH
778+25			X									12	R&S
778+38							X		1	0.28	0.28		PATCH
778+56			X						1	0.28	0.28		PATCH
778+62				X					1	0.28	0.28		PATCH
778+88				X								12	R&S
779+34			X						1	0.28	0.28		PATCH
779+57			X						1	0.28	0.28		PATCH
780+15			X						1	0.28	0.28		PATCH
780+18							X		1	0.28	0.28		PATCH
780+89				X					1	0.28	0.28		PATCH
780+94			X						1	0.28	0.28		PATCH
781+18			X						1	0.28	0.28		PATCH
781+36			X						1	0.28	0.28		PATCH
781+77			X						1	0.28	0.28		PATCH
781+96			X						1	0.28	0.28		PATCH
782+22				X					1	0.28	0.28		PATCH
782+38				X					1	0.28	0.28		PATCH
782+38			X						1	0.28	0.28		PATCH
782+81				X					1	0.28	0.28		PATCH
783+16				X					1	0.28	0.28		PATCH
783+55							X		1	0.28	0.28		PATCH
783+58			X						1	0.28	0.28		PATCH
783+59							X		2	0.28	0.56		PATCH
784+18			X						1	0.28	0.28		PATCH
784+38							X		1	0.28	0.28		PATCH
784+49			X						1	0.28	0.28		PATCH
784+80			X						1	0.28	0.28		PATCH
785+02			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
785+89							X		3	0.28	0.84		PATCH
786+12				X								12	R&S
787+42			X						1	0.28	0.28		PATCH
788+02				X					1	0.28	0.28		PATCH
788+14				X					1	0.28	0.28		PATCH
788+25			X						1	0.28	0.28		PATCH
789+08			X						1	0.28	0.28		PATCH
789+48			X						1	0.28	0.28		PATCH
789+83			X						1	0.28	0.28		PATCH
790+25			X						1	0.28	0.28		PATCH
790+70			X						1	0.28	0.28		PATCH
790+86			X						1	0.28	0.28		PATCH
791+04			X						1	0.28	0.28		PATCH
791+29			X						1	0.28	0.28		PATCH
791+54			X						1	0.28	0.28		PATCH
792+36			X						1	0.28	0.28		PATCH
792+51			X						1	0.28	0.28		PATCH
792+69							X		1	0.28	0.28		PATCH
792+86			X						1	0.28	0.28		PATCH
793+29			X						1	0.28	0.28		PATCH
793+38							X		1	0.28	0.28		PATCH
793+44							X		1	0.28	0.28		PATCH
793+89			X						1	0.28	0.28		PATCH
794+20			X						1	0.28	0.28		PATCH
794+82			X						1	0.28	0.28		PATCH
795+59			X						1	0.28	0.28		PATCH
797+04							X					12	R&S
797+25			X						1	0.28	0.28		PATCH
797+43			X									12	R&S
799+37							X					5	R&S
799+45				X								12	R&S
799+68			X						1	0.28	0.28		PATCH
800+52							X					10	R&S
802+08			X						1	0.28	0.28		PATCH
802+89			X						1	0.28	0.28		PATCH
803+74			X						1	0.28	0.28		PATCH
803+79			X						1	0.28	0.28		PATCH
804+63			X						1	0.28	0.28		PATCH
804+82				X					1	0.28	0.28		PATCH
808+64			X						1	0.28	0.28		PATCH
809+01			X						1	0.28	0.28		PATCH
810+24			X						1	0.28	0.28		PATCH
810+94			X						1	0.28	0.28		PATCH
811+06			X						1	0.28	0.28		PATCH
812+14				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
812+68			X						1	0.28	0.28		PATCH
813+15				X								12	R&S
813+48			X						1	0.28	0.28		PATCH
814+23			X						1	0.28	0.28		PATCH
814+26			X						1	0.28	0.28		PATCH
814+41			X						1	0.28	0.28		PATCH
814+67			X						1	0.28	0.28		PATCH
815+41			X						1	0.28	0.28		PATCH
815+74			X						1	0.28	0.28		PATCH
816+15							X		1	0.28	0.28		PATCH
816+19			X						1	0.28	0.28		PATCH
816+96			X						1	0.28	0.28		PATCH
817+54			X						1	0.28	0.28		PATCH
817+76			X						1	0.28	0.28		PATCH
818+53			X						1	0.28	0.28		PATCH
818+73			X						1	0.28	0.28		PATCH
819+94				X					1	0.28	0.28		PATCH
820+05			X						1	0.28	0.28		PATCH
820+10			X						1	0.28	0.28		PATCH
820+33					X				1	0.28	0.28		PATCH
820+92			X						1	0.28	0.28		PATCH
822+09								X	1	0.28	0.28		PATCH
822+30				X					1	0.28	0.28		PATCH
822+46			X						1	0.28	0.28		PATCH
823+25			X						1	0.28	0.28		PATCH
823+61				X					1	0.28	0.28		PATCH
823+83				X					1	0.28	0.28		PATCH
824+02			X						1	0.28	0.28		PATCH
824+06				X					1	0.28	0.28		PATCH
824+25				X					1	0.28	0.28		PATCH
824+69				X					1	0.28	0.28		PATCH
824+90				X					1	0.28	0.28		PATCH
825+45				X					1	0.28	0.28		PATCH
825+66				X					1	0.28	0.28		PATCH
825+86				X					1	0.28	0.28		PATCH
827+16			X						1	0.28	0.28		PATCH
827+92			X						1	0.28	0.28		PATCH
829+28							X		1	0.28	0.28		PATCH
829+41			X						1	0.28	0.28		PATCH
829+51			X						1	0.28	0.28		PATCH
831+06			X						1	0.28	0.28		PATCH
833+39			X						1	0.28	0.28		PATCH
834+12				X								12	R&S
834+19			X						1	0.28	0.28		PATCH
834+33				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
834+96			X						1	0.28	0.28		PATCH
835+23			X						1	0.28	0.28		PATCH
836+54			X						1	0.28	0.28		PATCH
837+27			X						1	0.28	0.28		PATCH
838+08			X						1	0.28	0.28		PATCH
838+86			X						1	0.28	0.28		PATCH
839+51				X								12	R&S
839+63			X						1	0.28	0.28		PATCH
840+11				X								12	R&S
840+41			X						1	0.28	0.28		PATCH
840+55				X								12	R&S
840+71				X								12	R&S
841+20			X						1	0.28	0.28		PATCH
841+97			X						1	0.28	0.28		PATCH
842+25				X					1	0.28	0.28		PATCH
842+60				X					1	0.28	0.28		PATCH
842+86				X					1	0.28	0.28		PATCH
843+55			X						1	0.28	0.28		PATCH
845+12			X						1	0.28	0.28		PATCH
845+89			X						1	0.28	0.28		PATCH
846+11				X								12	R&S
846+44			X						1	0.28	0.28		PATCH
846+44				X					1	0.28	0.28		PATCH
846+67			X						1	0.28	0.28		PATCH
847+47			X						1	0.28	0.28		PATCH
848+05								X	2	0.28	0.56		PATCH
848+44					X				1	0.28	0.28		PATCH
848+62								X	1	0.28	0.28		PATCH
848+70								X	1	0.28	0.28		PATCH
848+74								X	1	0.28	0.28		PATCH
849+04			X						1	0.28	0.28		PATCH
850+59			X						1	0.28	0.28		PATCH
851+37			X						1	0.28	0.28		PATCH
852+15			X						1	0.28	0.28		PATCH
852+96			X						1	0.28	0.28		PATCH
853+70			X						1	0.28	0.28		PATCH
854+46			X						1	0.28	0.28		PATCH
855+27			X						1	0.28	0.28		PATCH
855+98							X		2	0.28	0.56		PATCH
856+05			X						1	0.28	0.28		PATCH
856+30			X									12	R&S
856+82			X						1	0.28	0.28		PATCH
856+92				X					1	0.28	0.28		PATCH
856+92			X						1	0.28	0.28		PATCH
856+94							X		1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
857+14							X		10	0.28	2.80		PATCH
857+61			X						1	0.28	0.28		PATCH
858+41			X						1	0.28	0.28		PATCH
858+66		X							1	0.28	0.28		PATCH
859+15			X						1	0.28	0.28		PATCH
859+94			X						1	0.28	0.28		PATCH
860+03		X							1	0.28	0.28		PATCH
860+46			X						1	0.28	0.28		PATCH
860+71			X						1	0.28	0.28		PATCH
861+49			X						1	0.28	0.28		PATCH
862+26			X						1	0.28	0.28		PATCH
863+04			X						1	0.28	0.28		PATCH
863+43			X						1	0.28	0.28		PATCH
863+84			X						1	0.28	0.28		PATCH
865+39			X						1	0.28	0.28		PATCH
866+10			X						1	0.28	0.28		PATCH
866+14			X						1	0.28	0.28		PATCH
866+23			X						1	0.28	0.28		PATCH
866+42				X					2	0.28	0.56		PATCH
866+94			X						1	0.28	0.28		PATCH
867+44							X		2	0.28	0.56		PATCH
868+50			X						1	0.28	0.28		PATCH
869+48			X									12	R&S
871+63			X						1	0.28	0.28		PATCH
872+30				X								12	R&S
872+40			X						1	0.28	0.28		PATCH
872+40				X					1	0.28	0.28		PATCH
872+62				X					2	0.28	0.56		PATCH
873+19			X						1	0.28	0.28		PATCH
873+37							X		3	0.28	0.84		PATCH
873+69			X									12	R&S
873+97			X						1	0.28	0.28		PATCH
875+11							X		1	0.28	0.28		PATCH
875+33							X		1	0.28	0.28		PATCH
876+32			X						1	0.28	0.28		PATCH
877+10			X						1	0.28	0.28		PATCH
877+34							X		1	0.28	0.28		PATCH
877+43							X		1	0.28	0.28		PATCH
877+88			X						1	0.28	0.28		PATCH
878+64			X						1	0.28	0.28		PATCH
879+31							X		1	0.28	0.28		PATCH
879+45			X						1	0.28	0.28		PATCH
881+43			X						1	0.28	0.28		PATCH
881+50							X		1	0.28	0.28		PATCH
881+79			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
882+58			X						1	0.28	0.28		PATCH
882+90							X		1	0.28	0.28		PATCH
884+14			X						1	0.28	0.28		PATCH
884+31							X		3	0.28	0.84		PATCH
884+38							X		3	0.28	0.84		PATCH
884+92			X						1	0.28	0.28		PATCH
886+14							X		1	0.28	0.28		PATCH
886+17							X		1	0.28	0.28		PATCH
886+20							X		1	0.28	0.28		PATCH
886+47			X						2	0.28	0.56		PATCH
887+12							X		1	0.28	0.28		PATCH
887+26							X		1	0.28	0.28		PATCH
887+70			X						1	0.28	0.28		PATCH
888+11							X		1	0.28	0.28		PATCH
888+24							X		1	0.28	0.28		PATCH
888+28							X		1	0.28	0.28		PATCH
888+31							X		1	0.28	0.28		PATCH
888+87				X					1	0.28	0.28		PATCH
889+58							X		1	0.28	0.28		PATCH
889+62			X						1	0.28	0.28		PATCH
889+63							X		1	0.28	0.28		PATCH
890+40			X						1	0.28	0.28		PATCH
890+77							X		1	0.28	0.28		PATCH
891+08			X									12	R&S
891+68			X									12	R&S
891+94			X						1	0.28	0.28		PATCH
892+75			X						1	0.28	0.28		PATCH
893+52			X						1	0.28	0.28		PATCH
894+31			X						1	0.28	0.28		PATCH
895+09			X						1	0.28	0.28		PATCH
895+88			X						1	0.28	0.28		PATCH
896+66			X						1	0.28	0.28		PATCH
897+45			X						1	0.28	0.28		PATCH
898+21			X						1	0.28	0.28		PATCH
898+99			X						1	0.28	0.28		PATCH
900+58			X						1	0.28	0.28		PATCH
902+14			X						1	0.28	0.28		PATCH
902+48			X									12	R&S
902+93			X						1	0.28	0.28		PATCH
903+70			X						1	0.28	0.28		PATCH
904+49			X						1	0.28	0.28		PATCH
905+26			X						1	0.28	0.28		PATCH
906+03			X						1	0.28	0.28		PATCH
906+60							X		1	0.28	0.28		PATCH
906+81			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
907+37							X		1	0.28	0.28		PATCH
907+60			X						1	0.28	0.28		PATCH
907+75							X		1	0.28	0.28		PATCH
908+40			X						1	0.28	0.28		PATCH
908+67			X						2	0.28	0.56		PATCH
908+74							X		1	0.28	0.28		PATCH
909+54					X				3	0.28	0.84		PATCH
909+96			X						1	0.28	0.28		PATCH
910+48				X					1	0.28	0.28		PATCH
910+63								X	1	0.28	0.28		PATCH
910+71				X					1	0.28	0.28		PATCH
910+71			X						1	0.28	0.28		PATCH
912+25				X					1	0.28	0.28		PATCH
912+46				X					1	0.28	0.28		PATCH
912+88				X					1	0.28	0.28		PATCH
913+12				X					1	0.28	0.28		PATCH
913+18				X					1	0.28	0.28		PATCH
913+34				X					1	0.28	0.28		PATCH
913+56				X					1	0.28	0.28		PATCH
913+61			X						1	0.28	0.28		PATCH
913+61				X					1	0.28	0.28		PATCH
913+78				X					1	0.28	0.28		PATCH
913+87			X						1	0.28	0.28		PATCH
914+01				X					1	0.28	0.28		PATCH
914+38			X						1	0.28	0.28		PATCH
914+47				X								6	R&S
914+47							X		1	0.28	0.28		PATCH
914+63			X						1	0.28	0.28		PATCH
914+87							X		1	0.28	0.28		PATCH
915+29							X		1	0.28	0.28		PATCH
915+42							X		6	0.28	1.68		PATCH
915+42			X						1	0.28	0.28		PATCH
916+19			X						1	0.28	0.28		PATCH
916+97			X						1	0.28	0.28		PATCH
917+77			X						1	0.28	0.28		PATCH
918+55			X						1	0.28	0.28		PATCH
919+49							X		1	0.28	0.28		PATCH
919+59							X		3	0.28	0.84		PATCH
919+67							X		1	0.28	0.28		PATCH
919+93							X		1	0.28	0.28		PATCH
919+97							X		1	0.28	0.28		PATCH
920+00							X		1	0.28	0.28		PATCH
921+68			X						1	0.28	0.28		PATCH
922+48			X						1	0.28	0.28		PATCH
924+41							X					10	R&S

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
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EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
925+22			X						1	0.28	0.28		PATCH
925+97			X						1	0.28	0.28		PATCH
926+76			X						1	0.28	0.28		PATCH
927+54			X						1	0.28	0.28		PATCH
927+81				X								12	R&S
929+11			X						1	0.28	0.28		PATCH
929+90				X					1	0.28	0.28		PATCH
931+45			X						1	0.28	0.28		PATCH
932+21			X						1	0.28	0.28		PATCH
932+59			X						1	0.28	0.28		PATCH
932+93			X						1	0.28	0.28		PATCH
933+00			X						1	0.28	0.28		PATCH
933+77				X								12	R&S
933+98			X						1	0.28	0.28		PATCH
934+56			X						1	0.28	0.28		PATCH
934+97				X								12	R&S
935+32			X						1	0.28	0.28		PATCH
936+10			X						1	0.28	0.28		PATCH
936+86			X						1	0.28	0.28		PATCH
936+86								X	1	0.28	0.28		PATCH
937+18								X	2	0.28	0.56		PATCH
937+58								X	1	0.28	0.28		PATCH
937+71								X	1	0.28	0.28		PATCH
937+99		X							2	0.28	0.56		PATCH
938+16			X						1	0.28	0.28		PATCH
938+72								X	4	0.28	1.12		PATCH
939+94			X						1	0.28	0.28		PATCH
940+01			X						1	0.28	0.28		PATCH
940+07			X						1	0.28	0.28		PATCH
940+53			X						1	0.28	0.28		PATCH
940+77			X						1	0.28	0.28		PATCH
940+83				X					1	0.28	0.28		PATCH
941+01			X						1	0.28	0.28		PATCH
941+13			X						1	0.28	0.28		PATCH
941+54			X						1	0.28	0.28		PATCH
942+32			X						1	0.28	0.28		PATCH
942+44			X						1	0.28	0.28		PATCH
942+88					X				1	0.28	0.28		PATCH
942+90			X						1	0.28	0.28		PATCH
943+10			X						1	0.28	0.28		PATCH
943+19			X						1	0.28	0.28		PATCH
943+86			X						1	0.28	0.28		PATCH
944+56			X						1	0.28	0.28		PATCH
944+56		X							1	0.28	0.28		PATCH
944+65			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
945+06				X								12	R&S
945+40			X						1	0.28	0.28		PATCH
945+45			X						1	0.28	0.28		PATCH
945+53							X		1	0.28	0.28		PATCH
945+55							X		1	0.28	0.28		PATCH
945+74			X						1	0.28	0.28		PATCH
945+86			X						1	0.28	0.28		PATCH
946+19			X						1	0.28	0.28		PATCH
946+34			X						1	0.28	0.28		PATCH
947+76			X						1	0.28	0.28		PATCH
947+76				X					1	0.28	0.28		PATCH
948+52			X						1	0.28	0.28		PATCH
948+71			X						1	0.28	0.28		PATCH

EASTBOUND SUBTOTAL -- PARTIAL DEPTH PATCHING (CU FT)	173.3
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EASTBOUND SUBTOTAL -- SAW-CLEAN-RESEAL RANDOM CRACKS (LF)	524
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* LANE NUMBERS BEGIN WITH THE LANE CLOSEST TO THE I-265 CENTERLINE, AND INCREASE AS YOU MOVE AWAY FROM THE CENTERLINE. IN OTHER WORDS, LANE #3 IS THE THIRD LANE RIGHT OF THE CENTERLINE.

Approximate partial depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
664+75							X					5	R&S
666+45							X					10	R&S
666+82			X						1	0.28	0.28		PATCH
667+32				X					1	0.28	0.28		PATCH
668+49			X						1	0.28	0.28		PATCH
668+52							X		1	0.28	0.28		PATCH
668+77			X						1	0.28	0.28		PATCH
669+19				X					4	0.28	1.12		PATCH
671+16							X					12	R&S
671+34			X									12	R&S
671+34		X										4	R&S
671+59			X						1	0.28	0.28		PATCH
672+37			X						1	0.28	0.28		PATCH
673+86				X					1	0.28	0.28		PATCH
673+96			X						1	0.28	0.28		PATCH
674+08							X		2	0.28	0.56		PATCH
674+27							X		1	0.28	0.28		PATCH
674+47							X		1	0.28	0.28		PATCH
674+68							X		1	0.28	0.28		PATCH
674+75			X						1	0.28	0.28		PATCH
674+88							X		1	0.28	0.28		PATCH
675+10							X		1	0.28	0.28		PATCH
675+10		X										10	R&S
675+15							X		1	0.28	0.28		PATCH
675+34				X					1	0.28	0.28		PATCH
675+59							X		1	0.28	0.28		PATCH
675+67							X		1	0.28	0.28		PATCH
676+07							X					10	R&S
676+30			X						1	0.28	0.28		PATCH
677+07			X						1	0.28	0.28		PATCH
678+56								X	1	0.28	0.28		PATCH
678+71			X						1	0.28	0.28		PATCH
678+73								X	1	0.28	0.28		PATCH
678+89								X	1	0.28	0.28		PATCH
678+94								X	1	0.28	0.28		PATCH
679+51			X						1	0.28	0.28		PATCH
680+26			X						1	0.28	0.28		PATCH
680+40								X	1	0.28	0.28		PATCH
680+61								X	1	0.28	0.28		PATCH
681+04								X	1	0.28	0.28		PATCH
681+04			X						1	0.28	0.28		PATCH
681+44								X	1	0.28	0.28		PATCH
681+63								X	1	0.28	0.28		PATCH
681+90			X						1	0.28	0.28		PATCH
682+24								X	1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
682+46								X	1	0.28	0.28		PATCH
682+66								X	1	0.28	0.28		PATCH
682+86								X	1	0.28	0.28		PATCH
683+11								X	1	0.28	0.28		PATCH
683+30								X	1	0.28	0.28		PATCH
683+47			X						1	0.28	0.28		PATCH
683+47								X	1	0.28	0.28		PATCH
683+65								X	1	0.28	0.28		PATCH
683+86							X					8	R&S
683+91							X		15	0.28	4.20		PATCH
684+09								X	1	0.28	0.28		PATCH
684+34							X		1	0.28	0.28		PATCH
684+51								X	1	0.28	0.28		PATCH
684+91								X	1	0.28	0.28		PATCH
685+12								X	1	0.28	0.28		PATCH
685+80				X					1	0.28	0.28		PATCH
685+83			X						1	0.28	0.28		PATCH
685+87					X				1	0.28	0.28		PATCH
685+95							X		1	0.28	0.28		PATCH
686+14							X		1	0.28	0.28		PATCH
686+20							X					15	R&S
686+27							X		6	0.28	1.68		PATCH
686+39							X		1	0.28	0.28		PATCH
686+39					X				1	0.28	0.28		PATCH
686+63					X				1	0.28	0.28		PATCH
686+68			X						1	0.28	0.28		PATCH
686+87					X				1	0.28	0.28		PATCH
686+99							X		1	0.28	0.28		PATCH
687+12					X				1	0.28	0.28		PATCH
687+16							X		1	0.28	0.28		PATCH
687+17					X				1	0.28	0.28		PATCH
687+41				X					1	0.28	0.28		PATCH
687+47			X						1	0.28	0.28		PATCH
688+23			X						1	0.28	0.28		PATCH
697+69					X				3	0.28	0.84		PATCH
697+87					X				1	0.28	0.28		PATCH
698+01					X				1	0.28	0.28		PATCH
698+60					X				1	0.28	0.28		PATCH
698+61			X						1	0.28	0.28		PATCH
698+73					X				1	0.28	0.28		PATCH
698+75					X				1	0.28	0.28		PATCH
699+39			X						1	0.28	0.28		PATCH
699+62				X					1	0.28	0.28		PATCH
700+17			X						1	0.28	0.28		PATCH
700+40				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
701+22				X					1	0.28	0.28		PATCH
701+76			X						1	0.28	0.28		PATCH
701+96				X					1	0.28	0.28		PATCH
702+52			X						1	0.28	0.28		PATCH
703+63				X					1	0.28	0.28		PATCH
704+14			X						1	0.28	0.28		PATCH
704+32							X					10	R&S
704+45				X					1	0.28	0.28		PATCH
704+92			X						1	0.28	0.28		PATCH
705+25				X					1	0.28	0.28		PATCH
705+31							X					13	R&S
705+69			X						1	0.28	0.28		PATCH
706+55			X						1	0.28	0.28		PATCH
706+83				X					1	0.28	0.28		PATCH
707+32			X						1	0.28	0.28		PATCH
707+62				X					1	0.28	0.28		PATCH
707+92					X				1	0.28	0.28		PATCH
708+12			X						1	0.28	0.28		PATCH
708+33					X				1	0.28	0.28		PATCH
708+40				X					1	0.28	0.28		PATCH
708+90			X						1	0.28	0.28		PATCH
709+20				X					1	0.28	0.28		PATCH
709+34					X				1	0.28	0.28		PATCH
709+72			X						1	0.28	0.28		PATCH
709+99				X					1	0.28	0.28		PATCH
710+34			X						2	0.28	0.56		PATCH
710+49			X						1	0.28	0.28		PATCH
711+63				X					1	0.28	0.28		PATCH
712+06			X						1	0.28	0.28		PATCH
712+48				X					1	0.28	0.28		PATCH
713+45			X									12	R&S
713+56					X				1	0.28	0.28		PATCH
713+68					X				1	0.28	0.28		PATCH
713+70			X						2	0.28	0.56		PATCH
713+80					X				2	0.28	0.56		PATCH
714+76					X				1	0.28	0.28		PATCH
714+86				X					1	0.28	0.28		PATCH
714+90							X					15	R&S
715+02							X					10	R&S
715+22							X					6	R&S
715+25			X						1	0.28	0.28		PATCH
715+37							X					15	R&S
715+67				X					1	0.28	0.28		PATCH
715+82							X					6	R&S
715+99							X					10	R&S

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
716+13							X					6	R&S
716+23							X					15	R&S
716+48				X					1	0.28	0.28		PATCH
716+91			X						1	0.28	0.28		PATCH
717+31				X					1	0.28	0.28		PATCH
717+71			X						1	0.28	0.28		PATCH
718+05				X					1	0.28	0.28		PATCH
718+51			X						1	0.28	0.28		PATCH
718+76					X				1	0.28	0.28		PATCH
719+29			X						1	0.28	0.28		PATCH
719+53								X				2	R&S
719+95					X							12	R&S
719+95								X				3	R&S
721+26				X					1	0.28	0.28		PATCH
722+31			X						1	0.28	0.28		PATCH
722+63								X	4	0.28	1.12		PATCH
723+00				X								12	R&S
723+09								X	7	0.28	1.96		PATCH
723+12			X						1	0.28	0.28		PATCH
723+95			X						1	0.28	0.28		PATCH
723+96								X				6	R&S
725+90							X		1	0.28	0.28		PATCH
726+37			X						2	0.28	0.56		PATCH
726+48				X					1	0.28	0.28		PATCH
726+96			X						1	0.28	0.28		PATCH
727+22			X						1	0.28	0.28		PATCH
727+58			X						1	0.28	0.28		PATCH
727+70				X					1	0.28	0.28		PATCH
727+82				X					1	0.28	0.28		PATCH
728+06			X						1	0.28	0.28		PATCH
728+30				X					1	0.28	0.28		PATCH
728+43				X					1	0.28	0.28		PATCH
728+79			X						1	0.28	0.28		PATCH
729+03			X						1	0.28	0.28		PATCH
729+25			X						1	0.28	0.28		PATCH
729+64			X						1	0.28	0.28		PATCH
729+64				X					1	0.28	0.28		PATCH
730+00			X						1	0.28	0.28		PATCH
730+13			X						1	0.28	0.28		PATCH
730+26			X						1	0.28	0.28		PATCH
730+86			X						1	0.28	0.28		PATCH
730+86				X					1	0.28	0.28		PATCH
731+33				X					1	0.28	0.28		PATCH
731+46				X					1	0.28	0.28		PATCH
731+68			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
732+07			X						1	0.28	0.28		PATCH
732+55			X						1	0.28	0.28		PATCH
733+03			X						1	0.28	0.28		PATCH
733+34			X						1	0.28	0.28		PATCH
733+55				X								12	R&S
733+76				X					1	0.28	0.28		PATCH
733+76			X						1	0.28	0.28		PATCH
733+89			X						1	0.28	0.28		PATCH
734+07				X					2	0.28	0.56		PATCH
734+18			X						1	0.28	0.28		PATCH
734+49				X					1	0.28	0.28		PATCH
734+57			X						1	0.28	0.28		PATCH
735+01			X						1	0.28	0.28		PATCH
735+70				X					1	0.28	0.28		PATCH
735+86			X						1	0.28	0.28		PATCH
736+41				X								12	R&S
736+65			X						1	0.28	0.28		PATCH
736+66				X					1	0.28	0.28		PATCH
736+67			X						1	0.28	0.28		PATCH
736+79				X					1	0.28	0.28		PATCH
736+92			X						1	0.28	0.28		PATCH
737+40				X					1	0.28	0.28		PATCH
737+45			X						1	0.28	0.28		PATCH
737+71				X					1	0.28	0.28		PATCH
737+71			X						1	0.28	0.28		PATCH
738+25				X					1	0.28	0.28		PATCH
738+74				X					1	0.28	0.28		PATCH
739+05			X						1	0.28	0.28		PATCH
739+45				X								12	R&S
739+88			X						1	0.28	0.28		PATCH
740+85			X						1	0.28	0.28		PATCH
741+48			X						1	0.28	0.28		PATCH
741+77							X		2	0.28	0.56		PATCH
742+27			X						1	0.28	0.28		PATCH
743+06				X								12	R&S
743+14			X						1	0.28	0.28		PATCH
743+93			X						1	0.28	0.28		PATCH
744+70			X						1	0.28	0.28		PATCH
745+54			X						1	0.28	0.28		PATCH
746+09				X								12	R&S
746+42			X						1	0.28	0.28		PATCH
747+24			X						1	0.28	0.28		PATCH
747+93				X								12	R&S
748+03			X						1	0.28	0.28		PATCH
748+32			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
748+83			X						1	0.28	0.28		PATCH
749+31				X								12	R&S
749+65			X						1	0.28	0.28		PATCH
750+00				X					1	0.28	0.28		PATCH
750+25				X					1	0.28	0.28		PATCH
750+44				X					1	0.28	0.28		PATCH
750+52			X						1	0.28	0.28		PATCH
750+60				X					1	0.28	0.28		PATCH
750+74			X						1	0.28	0.28		PATCH
750+74				X					1	0.28	0.28		PATCH
751+04			X						1	0.28	0.28		PATCH
751+10								X	1	0.28	0.28		PATCH
751+29								X	1	0.28	0.28		PATCH
751+46				X					1	0.28	0.28		PATCH
751+51								X	1	0.28	0.28		PATCH
751+72								X	1	0.28	0.28		PATCH
751+95								X	1	0.28	0.28		PATCH
752+30								X	1	0.28	0.28		PATCH
753+23			X						2	0.28	0.56		PATCH
753+40				X					1	0.28	0.28		PATCH
753+41			X						1	0.28	0.28		PATCH
753+52								X	1	0.28	0.28		PATCH
753+60			X						1	0.28	0.28		PATCH
753+60				X					1	0.28	0.28		PATCH
753+70			X						1	0.28	0.28		PATCH
753+73								X	1	0.28	0.28		PATCH
753+83				X					1	0.28	0.28		PATCH
753+94								X	1	0.28	0.28		PATCH
754+01				X					1	0.28	0.28		PATCH
754+15								X	1	0.28	0.28		PATCH
754+35								X	1	0.28	0.28		PATCH
754+57								X	1	0.28	0.28		PATCH
754+89			X						1	0.28	0.28		PATCH
754+97								X	1	0.28	0.28		PATCH
755+13				X								12	R&S
755+20				X					1	0.28	0.28		PATCH
755+20			X						1	0.28	0.28		PATCH
755+20								X	1	0.28	0.28		PATCH
755+41								X	1	0.28	0.28		PATCH
755+64			X						1	0.28	0.28		PATCH
755+84								X	1	0.28	0.28		PATCH
756+32				X								12	R&S
756+40				X					1	0.28	0.28		PATCH
756+45			X						1	0.28	0.28		PATCH
756+62				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
756+70			X						1	0.28	0.28		PATCH
756+82			X						1	0.28	0.28		PATCH
756+83			X						1	0.28	0.28		PATCH
757+33			X						1	0.28	0.28		PATCH
757+77			X						1	0.28	0.28		PATCH
757+99							X					7	R&S
758+15			X						1	0.28	0.28		PATCH
758+50				X					1	0.28	0.28		PATCH
758+93			X						1	0.28	0.28		PATCH
759+75			X						1	0.28	0.28		PATCH
760+54			X						1	0.28	0.28		PATCH
760+60				X					1	0.28	0.28		PATCH
761+32			X						1	0.28	0.28		PATCH
761+38			X						1	0.28	0.28		PATCH
761+63			X						1	0.28	0.28		PATCH
762+18			X						1	0.28	0.28		PATCH
762+98			X						1	0.28	0.28		PATCH
763+31			X						1	0.28	0.28		PATCH
763+82			X						1	0.28	0.28		PATCH
764+49				X					1	0.28	0.28		PATCH
764+49			X						1	0.28	0.28		PATCH
764+64			X						1	0.28	0.28		PATCH
765+42			X						1	0.28	0.28		PATCH
765+70				X					1	0.28	0.28		PATCH
765+70			X						1	0.28	0.28		PATCH
765+83			X						1	0.28	0.28		PATCH
766+50				X								12	R&S
766+90			X						1	0.28	0.28		PATCH
767+09			X						1	0.28	0.28		PATCH
767+37				X					1	0.28	0.28		PATCH
767+38			X						1	0.28	0.28		PATCH
767+62			X						1	0.28	0.28		PATCH
767+87			X						1	0.28	0.28		PATCH
768+10			X						1	0.28	0.28		PATCH
768+10				X					1	0.28	0.28		PATCH
768+40				X					1	0.28	0.28		PATCH
768+66			X						1	0.28	0.28		PATCH
768+82			X						1	0.28	0.28		PATCH
769+00			X						1	0.28	0.28		PATCH
769+17			X						1	0.28	0.28		PATCH
769+44			X						1	0.28	0.28		PATCH
769+77			X						1	0.28	0.28		PATCH
770+28			X						1	0.28	0.28		PATCH
770+37			X						1	0.28	0.28		PATCH
770+37				X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
771+13			X						1	0.28	0.28		PATCH
771+94			X						1	0.28	0.28		PATCH
772+71			X						1	0.28	0.28		PATCH
772+77			X						1	0.28	0.28		PATCH
772+77				X					1	0.28	0.28		PATCH
773+59			X						1	0.28	0.28		PATCH
773+80			X						1	0.28	0.28		PATCH
774+19							X		2	0.28	0.56		PATCH
774+28				X					1	0.28	0.28		PATCH
774+37			X						1	0.28	0.28		PATCH
774+40			X						1	0.28	0.28		PATCH
774+82				X					2	0.28	0.56		PATCH
775+27			X						1	0.28	0.28		PATCH
775+28				X					5	0.28	1.40		PATCH
775+42				X					1	0.28	0.28		PATCH
776+03			X						1	0.28	0.28		PATCH
776+11				X								12	R&S
776+79			X						1	0.28	0.28		PATCH
777+10				X					1	0.28	0.28		PATCH
777+39				X					1	0.28	0.28		PATCH
777+40			X						1	0.28	0.28		PATCH
777+58			X						1	0.28	0.28		PATCH
778+37			X						1	0.28	0.28		PATCH
778+90			X						1	0.28	0.28		PATCH
779+16			X						1	0.28	0.28		PATCH
780+11			X						1	0.28	0.28		PATCH
781+30		X							1	0.28	0.28		PATCH
781+41			X						1	0.28	0.28		PATCH
781+71			X						1	0.28	0.28		PATCH
781+76			X						1	0.28	0.28		PATCH
782+36				X					1	0.28	0.28		PATCH
782+48			X						1	0.28	0.28		PATCH
782+80				X					1	0.28	0.28		PATCH
783+21			X						1	0.28	0.28		PATCH
783+24			X						1	0.28	0.28		PATCH
783+56				X					1	0.28	0.28		PATCH
783+69			X						1	0.28	0.28		PATCH
783+69				X					1	0.28	0.28		PATCH
784+09			X						1	0.28	0.28		PATCH
784+25		X							3	0.28	0.84		PATCH
784+28			X						1	0.28	0.28		PATCH
784+57				X					1	0.28	0.28		PATCH
784+75			X						1	0.28	0.28		PATCH
784+87				X					1	0.28	0.28		PATCH
784+87			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
784+92			X						1	0.28	0.28		PATCH
786+51			X						1	0.28	0.28		PATCH
787+38		X							1	0.28	0.28		PATCH
787+84			X						1	0.28	0.28		PATCH
788+12			X						1	0.28	0.28		PATCH
788+64				X								12	R&S
788+93			X						1	0.28	0.28		PATCH
789+14			X						1	0.28	0.28		PATCH
789+73			X						1	0.28	0.28		PATCH
789+74			X						1	0.28	0.28		PATCH
790+10			X						1	0.28	0.28		PATCH
790+21			X						1	0.28	0.28		PATCH
790+50			X						1	0.28	0.28		PATCH
790+81				X					1	0.28	0.28		PATCH
790+81			X						1	0.28	0.28		PATCH
791+39			X						1	0.28	0.28		PATCH
792+15			X						1	0.28	0.28		PATCH
792+92			X						1	0.28	0.28		PATCH
792+98			X						1	0.28	0.28		PATCH
793+75			X						1	0.28	0.28		PATCH
793+88			X						1	0.28	0.28		PATCH
794+52			X						1	0.28	0.28		PATCH
795+42			X						1	0.28	0.28		PATCH
796+19			X						1	0.28	0.28		PATCH
796+72							X					11	R&S
796+99			X						1	0.28	0.28		PATCH
799+37			X						1	0.28	0.28		PATCH
799+73			X						1	0.28	0.28		PATCH
800+25			X						1	0.28	0.28		PATCH
801+85			X						1	0.28	0.28		PATCH
801+85				X								12	R&S
802+03				X								12	R&S
802+69			X						1	0.28	0.28		PATCH
803+44			X						1	0.28	0.28		PATCH
804+28			X						1	0.28	0.28		PATCH
805+11			X						1	0.28	0.28		PATCH
805+26			X						1	0.28	0.28		PATCH
805+87			X						1	0.28	0.28		PATCH
806+45			X						1	0.28	0.28		PATCH
806+74			X						1	0.28	0.28		PATCH
807+51			X						1	0.28	0.28		PATCH
807+77			X						1	0.28	0.28		PATCH
807+77				X					1	0.28	0.28		PATCH
808+29			X						1	0.28	0.28		PATCH
809+08			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
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WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
809+45			X						1	0.28	0.28		PATCH
809+86			X						1	0.28	0.28		PATCH
809+92			X						1	0.28	0.28		PATCH
810+05			X						1	0.28	0.28		PATCH
810+17			X						1	0.28	0.28		PATCH
810+35			X						1	0.28	0.28		PATCH
810+78			X						1	0.28	0.28		PATCH
811+37			X						1	0.28	0.28		PATCH
811+57			X						1	0.28	0.28		PATCH
811+97			X						1	0.28	0.28		PATCH
812+34			X						1	0.28	0.28		PATCH
812+57				X					1	0.28	0.28		PATCH
812+73				X					1	0.28	0.28		PATCH
812+76			X						1	0.28	0.28		PATCH
813+05			X						1	0.28	0.28		PATCH
813+05				X					1	0.28	0.28		PATCH
813+16			X						1	0.28	0.28		PATCH
813+99			X						1	0.28	0.28		PATCH
814+80			X						1	0.28	0.28		PATCH
814+93			X									12	R&S
815+05			X						1	0.28	0.28		PATCH
815+67			X						1	0.28	0.28		PATCH
816+27				X								12	R&S
816+45			X						1	0.28	0.28		PATCH
817+11				X					1	0.28	0.28		PATCH
817+23			X						1	0.28	0.28		PATCH
817+25				X					1	0.28	0.28		PATCH
817+26			X						1	0.28	0.28		PATCH
817+55				X					1	0.28	0.28		PATCH
817+71				X					1	0.28	0.28		PATCH
818+12			X						1	0.28	0.28		PATCH
818+91			X						1	0.28	0.28		PATCH
819+68			X						1	0.28	0.28		PATCH
819+84				X								12	R&S
820+11				X					1	0.28	0.28		PATCH
820+24			X						1	0.28	0.28		PATCH
820+44				X								12	R&S
820+50			X						1	0.28	0.28		PATCH
821+15			X						1	0.28	0.28		PATCH
821+29			X						1	0.28	0.28		PATCH
821+44			X						1	0.28	0.28		PATCH
821+91			X						1	0.28	0.28		PATCH
822+03				X					1	0.28	0.28		PATCH
822+16			X						1	0.28	0.28		PATCH
822+63			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
822+94				X					1	0.28	0.28		PATCH
822+94			X						1	0.28	0.28		PATCH
823+35				X					1	0.28	0.28		PATCH
823+35			X						1	0.28	0.28		PATCH
823+53			X						1	0.28	0.28		PATCH
823+73			X						1	0.28	0.28		PATCH
823+82			X						1	0.28	0.28		PATCH
824+13			X						1	0.28	0.28		PATCH
824+29				X					1	0.28	0.28		PATCH
824+42					X				1	0.28	0.28		PATCH
824+58			X						1	0.28	0.28		PATCH
825+03				X					1	0.28	0.28		PATCH
825+11								X	1	0.28	0.28		PATCH
825+13								X	1	0.28	0.28		PATCH
825+34			X						1	0.28	0.28		PATCH
825+37			X						1	0.28	0.28		PATCH
825+60								X	1	0.28	0.28		PATCH
825+99								X	1	0.28	0.28		PATCH
826+22			X						1	0.28	0.28		PATCH
826+94			X						1	0.28	0.28		PATCH
827+74				X					1	0.28	0.28		PATCH
827+91			X						1	0.28	0.28		PATCH
828+04				X					1	0.28	0.28		PATCH
828+64			X						1	0.28	0.28		PATCH
828+85				X								12	R&S
829+24			X						1	0.28	0.28		PATCH
829+54			X						1	0.28	0.28		PATCH
829+96			X						1	0.28	0.28		PATCH
830+28			X						1	0.28	0.28		PATCH
830+45			X						1	0.28	0.28		PATCH
831+00			X						1	0.28	0.28		PATCH
831+05			X						1	0.28	0.28		PATCH
831+49			X						1	0.28	0.28		PATCH
831+64			X						1	0.28	0.28		PATCH
832+24			X						2	0.28	0.56		PATCH
832+24				X					1	0.28	0.28		PATCH
832+35				X					1	0.28	0.28		PATCH
832+84			X						1	0.28	0.28		PATCH
833+03				X								12	R&S
833+31			X						1	0.28	0.28		PATCH
833+44			X						1	0.28	0.28		PATCH
833+44				X					1	0.28	0.28		PATCH
833+56			X						1	0.28	0.28		PATCH
833+74				X					1	0.28	0.28		PATCH
833+81			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
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WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
834+64			X						1	0.28	0.28		PATCH
835+11			X						1	0.28	0.28		PATCH
835+36			X						1	0.28	0.28		PATCH
836+85			X						1	0.28	0.28		PATCH
839+29			X						1	0.28	0.28		PATCH
840+02			X						1	0.28	0.28		PATCH
840+84			X						1	0.28	0.28		PATCH
841+53			X						1	0.28	0.28		PATCH
842+43			X						1	0.28	0.28		PATCH
842+65				X								12	R&S
843+16			X						1	0.28	0.28		PATCH
843+95			X						1	0.28	0.28		PATCH
844+10			X						1	0.28	0.28		PATCH
844+83			X						1	0.28	0.28		PATCH
845+30			X						1	0.28	0.28		PATCH
845+43				X					1	0.28	0.28		PATCH
845+54			X						1	0.28	0.28		PATCH
845+74			X						1	0.28	0.28		PATCH
846+32			X						1	0.28	0.28		PATCH
846+33				X					1	0.28	0.28		PATCH
846+63			X						1	0.28	0.28		PATCH
847+35			X						1	0.28	0.28		PATCH
847+35				X					1	0.28	0.28		PATCH
847+52				X					1	0.28	0.28		PATCH
847+84			X						2	0.28	0.56		PATCH
848+34				X					1	0.28	0.28		PATCH
848+77				X					1	0.28	0.28		PATCH
848+96			X						1	0.28	0.28		PATCH
849+22								X				11	R&S
851+00			X						1	0.28	0.28		PATCH
851+79			X						1	0.28	0.28		PATCH
852+12					X				1	0.28	0.28		PATCH
852+14			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
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WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
852+32			X						1	0.28	0.28		PATCH
852+58			X						1	0.28	0.28		PATCH
852+60					X				1	0.28	0.28		PATCH
853+33					X				1	0.28	0.28		PATCH
853+35			X						1	0.28	0.28		PATCH
853+38							X		1	0.28	0.28		PATCH
853+83			X						1	0.28	0.28		PATCH
854+14			X						1	0.28	0.28		PATCH
854+73			X						1	0.28	0.28		PATCH
854+89				X					1	0.28	0.28		PATCH
855+71			X						1	0.28	0.28		PATCH
856+22			X						1	0.28	0.28		PATCH
856+51			X						1	0.28	0.28		PATCH
856+52				X					1	0.28	0.28		PATCH
856+88		X							2	0.28	0.56		PATCH
856+92		X							3	0.28	0.84		PATCH
857+27			X						1	0.28	0.28		PATCH
858+04			X						1	0.28	0.28		PATCH
858+82			X						1	0.28	0.28		PATCH
859+64			X						1	0.28	0.28		PATCH
860+23							X		1	0.28	0.28		PATCH
860+34							X		1	0.28	0.28		PATCH
860+42			X						1	0.28	0.28		PATCH
860+43							X		3	0.28	0.84		PATCH
861+02							X		1	0.28	0.28		PATCH
861+20			X						1	0.28	0.28		PATCH
861+20							X		1	0.28	0.28		PATCH
861+80							X		1	0.28	0.28		PATCH
861+81							X		1	0.28	0.28		PATCH
861+98			X						1	0.28	0.28		PATCH
862+01							X		3	0.28	0.84		PATCH
862+22							X		2	0.28	0.56		PATCH
862+76			X						1	0.28	0.28		PATCH
862+83							X		2	0.28	0.56		PATCH
863+25							X		2	0.28	0.56		PATCH
863+31							X		1	0.28	0.28		PATCH
863+43							X		1	0.28	0.28		PATCH
863+54			X						1	0.28	0.28		PATCH
863+97				X					1	0.28	0.28		PATCH
864+35			X						1	0.28	0.28		PATCH
864+52							X		1	0.28	0.28		PATCH
864+91				X					1	0.28	0.28		PATCH
864+99							X		1	0.28	0.28		PATCH
865+12			X						2	0.28	0.56		PATCH
865+89			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
866+68			X						1	0.28	0.28		PATCH
867+46			X						1	0.28	0.28		PATCH
868+24			X						1	0.28	0.28		PATCH
868+59							X		1	0.28	0.28		PATCH
869+02			X						1	0.28	0.28		PATCH
869+12			X									12	R&S
869+14							X		1	0.28	0.28		PATCH
869+80			X						1	0.28	0.28		PATCH
870+58			X						1	0.28	0.28		PATCH
871+40			X						1	0.28	0.28		PATCH
872+16			X						1	0.28	0.28		PATCH
872+95			X						1	0.28	0.28		PATCH
874+55			X						1	0.28	0.28		PATCH
875+32			X						1	0.28	0.28		PATCH
876+07			X						1	0.28	0.28		PATCH
876+85			X						1	0.28	0.28		PATCH
877+33				X					1	0.28	0.28		PATCH
877+41							X		1	0.28	0.28		PATCH
877+66			X						2	0.28	0.56		PATCH
878+29							X		1	0.28	0.28		PATCH
878+44			X						1	0.28	0.28		PATCH
878+63			X						1	0.28	0.28		PATCH
878+83			X						1	0.28	0.28		PATCH
879+22			X						1	0.28	0.28		PATCH
879+63				X					1	0.28	0.28		PATCH
879+99			X						1	0.28	0.28		PATCH
880+67							X		2	0.28	0.56		PATCH
880+72							X		1	0.28	0.28		PATCH
880+78			X						1	0.28	0.28		PATCH
880+80				X					1	0.28	0.28		PATCH
881+56			X						1	0.28	0.28		PATCH
882+34			X						1	0.28	0.28		PATCH
882+63							X		1	0.28	0.28		PATCH
883+11			X						1	0.28	0.28		PATCH
883+88			X						1	0.28	0.28		PATCH
885+44			X						1	0.28	0.28		PATCH
885+51			X						1	0.28	0.28		PATCH
887+03			X						1	0.28	0.28		PATCH
887+81			X						1	0.28	0.28		PATCH
888+38							X		1	0.28	0.28		PATCH
888+53							X		4	0.28	1.12		PATCH
888+59			X						1	0.28	0.28		PATCH
888+63							X		1	0.28	0.28		PATCH
888+71							X		1	0.28	0.28		PATCH
889+41			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
890+17			X						1	0.28	0.28		PATCH
890+93			X						1	0.28	0.28		PATCH
891+72			X						1	0.28	0.28		PATCH
892+92							X		1	0.28	0.28		PATCH
893+29			X						1	0.28	0.28		PATCH
894+84			X						1	0.28	0.28		PATCH
896+18			X						1	0.28	0.28		PATCH
896+31			X						1	0.28	0.28		PATCH
896+41			X						1	0.28	0.28		PATCH
896+44			X						1	0.28	0.28		PATCH
897+21			X						1	0.28	0.28		PATCH
897+97			X						1	0.28	0.28		PATCH
898+73			X						1	0.28	0.28		PATCH
899+51			X						1	0.28	0.28		PATCH
900+90							X		1	0.28	0.28		PATCH
901+10			X						1	0.28	0.28		PATCH
901+70					X				1	0.28	0.28		PATCH
901+86			X						1	0.28	0.28		PATCH
902+17					X				1	0.28	0.28		PATCH
902+64			X						1	0.28	0.28		PATCH
903+19					X				1	0.28	0.28		PATCH
903+44			X						1	0.28	0.28		PATCH
904+08					X				1	0.28	0.28		PATCH
904+23			X						1	0.28	0.28		PATCH
904+98			X						1	0.28	0.28		PATCH
905+79			X						1	0.28	0.28		PATCH
906+59			X						1	0.28	0.28		PATCH
907+35			X						1	0.28	0.28		PATCH
908+14			X						1	0.28	0.28		PATCH
908+27								X	1	0.28	0.28		PATCH
909+69			X						1	0.28	0.28		PATCH
909+84				X					1	0.28	0.28		PATCH
911+28			X						1	0.28	0.28		PATCH
912+04			X						1	0.28	0.28		PATCH
912+06							X		1	0.28	0.28		PATCH
912+81			X						1	0.28	0.28		PATCH
913+59			X						1	0.28	0.28		PATCH
914+39			X						1	0.28	0.28		PATCH
917+52			X						1	0.28	0.28		PATCH
918+28			X						1	0.28	0.28		PATCH
921+47			X						1	0.28	0.28		PATCH
922+63				X					1	0.28	0.28		PATCH
923+02			X						1	0.28	0.28		PATCH
924+93			X						1	0.28	0.28		PATCH
925+70			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
926+45		X							3	0.28	0.84		PATCH
926+51			X						1	0.28	0.28		PATCH
927+29			X						1	0.28	0.28		PATCH
927+40			X						1	0.28	0.28		PATCH
927+64				X					1	0.28	0.28		PATCH
928+05			X						1	0.28	0.28		PATCH
928+86			X						1	0.28	0.28		PATCH
929+02			X						1	0.28	0.28		PATCH
929+63			X						1	0.28	0.28		PATCH
930+10			X						1	0.28	0.28		PATCH
930+22			X						1	0.28	0.28		PATCH
930+41			X						1	0.28	0.28		PATCH
931+22			X						1	0.28	0.28		PATCH
932+80			X						1	0.28	0.28		PATCH
935+16			X						1	0.28	0.28		PATCH
935+95			X						1	0.28	0.28		PATCH
936+74			X						1	0.28	0.28		PATCH
936+74				X					1	0.28	0.28		PATCH
937+51			X						1	0.28	0.28		PATCH
937+78								X	1	0.28	0.28		PATCH
938+32			X						1	0.28	0.28		PATCH
940+20					X				1	0.28	0.28		PATCH
940+64					X				1	0.28	0.28		PATCH
941+42				X					1	0.28	0.28		PATCH
941+45			X						1	0.28	0.28		PATCH
942+25			X						1	0.28	0.28		PATCH
942+37				X								12	R&S
943+04			X						1	0.28	0.28		PATCH
943+49				X					1	0.28	0.28		PATCH
943+83			X						1	0.28	0.28		PATCH
944+59			X						1	0.28	0.28		PATCH
945+23			X						1	0.28	0.28		PATCH
945+40			X						1	0.28	0.28		PATCH
945+64			X						1	0.28	0.28		PATCH
946+18			X						1	0.28	0.28		PATCH
946+97							X		1	0.28	0.28		PATCH
946+97			X						1	0.28	0.28		PATCH
946+99			X						1	0.28	0.28		PATCH
947+59			X						1	0.28	0.28		PATCH
947+76			X						1	0.28	0.28		PATCH
948+19			X						1	0.28	0.28		PATCH
948+31			X						1	0.28	0.28		PATCH
948+66				X					1	0.28	0.28		PATCH
948+66			X						1	0.28	0.28		PATCH
948+92			X						1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1*	LANE #2*	LANE #3*	LANE #4*	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
949+10			X						1	0.28	0.28		PATCH
949+25				X					1	0.28	0.28		PATCH
949+35			X						1	0.28	0.28		PATCH
949+39				X					1	0.28	0.28		PATCH
WESTBOUND SUBTOTAL -- PARTIAL DEPTH PATCHING (CU FT)												204.4	
WESTBOUND SUBTOTAL -- SAW-CLEAN-RESEAL RANDOM CRACKS (LF)												544	
* LANE NUMBERS BEGIN WITH THE LANE CLOSEST TO THE I-265 CENTERLINE, AND INCREASE AS YOU MOVE AWAY FROM THE CENTERLINE. IN OTHER WORDS, LANE #3 IS THE THIRD LANE RIGHT OF THE CENTERLINE.													
<i>Approximate partial depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.</i>													

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
SOUTHBOUND I-65 TO EASTBOUND I-265												
610+84				X				1	0.28	0.28		PATCH
610+86			X					1	0.28	0.28		PATCH
610+99				X				1	0.28	0.28		PATCH
610+99			X					1	0.28	0.28		PATCH
611+00						X		1	0.28	0.28		PATCH
611+07				X				1	0.28	0.28		PATCH
611+75				X				1	0.28	0.28		PATCH
611+82				X				1	0.28	0.28		PATCH
611+88			X					1	0.28	0.28		PATCH
612+56				X				1	0.28	0.28		PATCH
612+64			X					1	0.28	0.28		PATCH
612+66			X					1	0.28	0.28		PATCH
612+91				X				1	0.28	0.28		PATCH
612+99			X					1	0.28	0.28		PATCH
613+01			X					1	0.28	0.28		PATCH
613+22			X					1	0.28	0.28		PATCH
613+26			X					1	0.28	0.28		PATCH
613+26				X				1	0.28	0.28		PATCH
613+39						X		1	0.28	0.28		PATCH
613+67				X				1	0.28	0.28		PATCH
613+67			X					2	0.28	0.56		PATCH
614+09			X					2	0.28	0.56		PATCH
614+23			X					1	0.28	0.28		PATCH
614+28				X				1	0.28	0.28		PATCH
614+43			X					1	0.28	0.28		PATCH
614+46				X				1	0.28	0.28		PATCH
615+13			X					1	0.28	0.28		PATCH
615+27				X				1	0.28	0.28		PATCH
615+38				X				1	0.28	0.28		PATCH
615+46			X					1	0.28	0.28		PATCH
615+66			X					1	0.28	0.28		PATCH
615+67				X				1	0.28	0.28		PATCH
615+90			X					1	0.28	0.28		PATCH
616+08				X				1	0.28	0.28		PATCH
616+27			X					1	0.28	0.28		PATCH
616+28				X				1	0.28	0.28		PATCH
616+50			X					1	0.28	0.28		PATCH
616+80						X		4	0.28	1.12		PATCH
616+99				X				1	0.28	0.28		PATCH
617+68				X				4	0.28	1.12		PATCH
617+72						X		1	0.28	0.28		PATCH
618+01			X					1	0.28	0.28		PATCH
618+86			X					1	0.28	0.28		PATCH
620+07				X				1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
622+43						X		1	0.28	0.28		PATCH
622+71						X		1	0.28	0.28		PATCH
623+43				X							6	R&S
623+88						X		1	0.28	0.28		PATCH
623+88					X			1	0.28	0.28		PATCH
630+11		X									4	R&S
631+37		X						4	0.28	1.12		PATCH
637+93		X						1	0.28	0.28		PATCH
645+59						X		1	0.28	0.28		PATCH
649+27		X									6	R&S
649+36		X									6	R&S
662+59			X					1	0.28	0.28		PATCH
663+01			X					1	0.28	0.28		PATCH
663+18			X					1	0.28	0.28		PATCH
663+47				X				1	0.28	0.28		PATCH
663+89				X				1	0.28	0.28		PATCH
664+59				X				1	0.28	0.28		PATCH
664+94				X				2	0.28	0.56		PATCH
665+52				X				1	0.28	0.28		PATCH
666+92				X				1	0.28	0.28		PATCH
671+99				X				1	0.28	0.28		PATCH
671+99			X					4	0.28	1.12		PATCH
NORTHBOUND I-65 TO EASTBOUND I-265												
305+18			X					1	0.28	0.28		PATCH
305+38			X					1	0.28	0.28		PATCH
310+87						X		1	0.28	0.28		PATCH
312+47						X		1	0.28	0.28		PATCH
312+67		X									4	R&S
315+30						X		2	0.28	0.56		PATCH
315+76							X				6	R&S
315+90							X				6	R&S
316+65					X						12	R&S
EASTBOUND I-265 EXIT TO NORTHBOUND KY 61												
NO PARTIAL DEPTH PAVEMENT REPAIRS												
EASTBOUND I-265 EXIT TO SOUTHBOUND KY 61												
NO PARTIAL DEPTH PAVEMENT REPAIRS												
SOUTHBOUND KY 61 ENTRANCE TO EASTBOUND I-265												
611+99			X					2	0.28	0.56		PATCH
612+00						X		2	0.28	0.56		PATCH
619+54	623+54		X								400	R&S
NORTHBOUND KY 61 ENTRANCE TO EASTBOUND I-265												
NO PARTIAL DEPTH PAVEMENT REPAIRS												
EASTBOUND I-265 EXIT TO SMYRNA PKWY.												
518+67				X				1	0.28	0.28		PATCH
518+85			X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
518+85				X				1	0.28	0.28		PATCH
519+70				X				1	0.28	0.28		PATCH
519+70			X					1	0.28	0.28		PATCH
519+87				X				1	0.28	0.28		PATCH
520+05				X				1	0.28	0.28		PATCH
520+29				X				1	0.28	0.28		PATCH
520+29			X					1	0.28	0.28		PATCH
521+06			X					1	0.28	0.28		PATCH
521+24				X				1	0.28	0.28		PATCH
521+48			X					2	0.28	0.56		PATCH
521+48				X				1	0.28	0.28		PATCH
521+66			X					1	0.28	0.28		PATCH
522+25			X					1	0.28	0.28		PATCH
522+73						X		3	0.28	0.84		PATCH
523+63				X				1	0.28	0.28		PATCH
523+89				X				1	0.28	0.28		PATCH
524+35			X					1	0.28	0.28		PATCH
524+35				X				1	0.28	0.28		PATCH
524+48			X					1	0.28	0.28		PATCH
525+08				X				1	0.28	0.28		PATCH
525+72						X					8	R&S
525+76				X				1	0.28	0.28		PATCH
525+96						X					8	R&S
SOUTHBOUND SMYRNA PKWY. ENTRANCE TO EASTBOUND I-265												
309+61						X					8	R&S
310+20						X					8	R&S
310+80			X					1	0.28	0.28		PATCH
310+88						X					8	R&S
311+22						X		2	0.28	0.56		PATCH
311+59		X									8	R&S
311+62			X					1	0.28	0.28		PATCH
311+69		X									8	R&S
311+74			X					2	0.28	0.56		PATCH
311+90				X				2	0.28	0.56		PATCH
311+98						X					8	R&S
311+98			X								8	R&S
311+99		X									8	R&S
312+03		X									8	R&S
312+06				X				1	0.28	0.28		PATCH
314+56			X					1	0.28	0.28		PATCH
316+19	316+66			X							47	R&S
317+50			X					2	0.28	0.56		PATCH
317+53		X						3	0.28	0.84		PATCH
320+60			X					1	0.28	0.28		PATCH

PARTIAL DEPTH PCC PAVEMENT REPAIRS I-265, JEFFERSON COUNTY ITEM NUMBER: 5-2087.00 EASTBOUND RAMPS												
BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
NORTHBOUND SMYRNA PKWY. ENTRANCE TO EASTBOUND I-265												
309+95						X		1	0.28	0.28		PATCH
310+04						X					8	R&S
310+04						X		1	0.28	0.28		PATCH
310+22			X					2	0.28	0.56		PATCH
310+44						X					8	R&S
310+49			X					1	0.28	0.28		PATCH
310+78			X					1	0.28	0.28		PATCH
310+86						X					8	R&S
311+22						X		1	0.28	0.28		PATCH
EASTBOUND I-265 EXIT TO KY 864												
11+98			X					1	0.28	0.28		PATCH
13+32				X				1	0.28	0.28		PATCH
13+44				X				1	0.28	0.28		PATCH
13+62				X				1	0.28	0.28		PATCH
13+77				X				1	0.28	0.28		PATCH
13+81				X				1	0.28	0.28		PATCH
13+92				X				1	0.28	0.28		PATCH
14+05				X				1	0.28	0.28		PATCH
14+22				X				1	0.28	0.28		PATCH
14+22						X		1	0.28	0.28		PATCH
14+41				X				1	0.28	0.28		PATCH
14+53				X				1	0.28	0.28		PATCH
14+53						X		1	0.28	0.28		PATCH
14+66				X				1	0.28	0.28		PATCH
14+66						X		1	0.28	0.28		PATCH
14+83				X				2	0.28	0.56		PATCH
14+83						X		1	0.28	0.28		PATCH
15+01				X				2	0.28	0.56		PATCH
15+01						X		1	0.28	0.28		PATCH
15+13				X				2	0.28	0.56		PATCH
15+13						X		1	0.28	0.28		PATCH
15+26				X				1	0.28	0.28		PATCH
15+26						X		1	0.28	0.28		PATCH
15+92						X		2	0.28	0.56		PATCH
18+91			X					2	0.28	0.56		PATCH
21+23				X				2	0.28	0.56		PATCH
21+42			X					2	0.28	0.56		PATCH
22+07				X				3	0.28	0.84		PATCH
22+14						X		1	0.28	0.28		PATCH
22+14				X				3	0.28	0.84		PATCH
22+31				X				1	0.28	0.28		PATCH
22+61			X					1	0.28	0.28		PATCH
22+61				X				2	0.28	0.56		PATCH
22+74				X				2	0.28	0.56		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
EASTBOUND RAMP**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
22+76			X					1	0.28	0.28		PATCH
22+90				X				1	0.28	0.28		PATCH
23+40				X				1	0.28	0.28		PATCH
23+58				X				1	0.28	0.28		PATCH
23+68				X				1	0.28	0.28		PATCH
23+68			X					1	0.28	0.28		PATCH
23+80				X				1	0.28	0.28		PATCH
23+85			X					1	0.28	0.28		PATCH
SOUTHBOUND KY 864 ENTRANCE TO EASTBOUND I-265												
10+50						X					14	R&S
10+66			X					6	0.28	1.68		PATCH
10+70			X					2	0.28	0.56		PATCH
10+75			X					2	0.28	0.56		PATCH
10+83		X						1	0.28	0.28		PATCH
10+84			X					2	0.28	0.56		PATCH
10+92		X						1	0.28	0.28		PATCH
10+93			X					4	0.28	1.12		PATCH
11+04			X					1	0.28	0.28		PATCH
11+04		X						1	0.28	0.28		PATCH
11+19			X					1	0.28	0.28		PATCH
11+30			X					2	0.28	0.56		PATCH
11+41			X					1	0.28	0.28		PATCH
11+58			X					1	0.28	0.28		PATCH
12+30			X					1	0.28	0.28		PATCH
12+47							X	2	0.28	0.56		PATCH
13+61			X					1	0.28	0.28		PATCH
13+73			X					2	0.28	0.56		PATCH
13+85			X					2	0.28	0.56		PATCH
16+64			X					1	0.28	0.28		PATCH
22+39			X					2	0.28	0.56		PATCH
22+47			X					1	0.28	0.28		PATCH

PARTIAL DEPTH PCC PAVEMENT REPAIRS I-265, JEFFERSON COUNTY ITEM NUMBER: 5-2087.00 EASTBOUND RAMP												
BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
NORTHBOUND KY 864 ENTRANCE TO EASTBOUND I-265												
0+90						X					8	R&S
0+91			X								10	R&S
1+57			X								15	R&S
1+58						X					8	R&S
3+07			X					1	0.28	0.28		PATCH
3+85			X					2	0.28	0.56		PATCH
4+11			X					2	0.28	0.56		PATCH
4+44			X					2	0.28	0.56		PATCH
4+63			X					1	0.28	0.28		PATCH
5+16				X				2	0.28	0.56		PATCH
5+16			X					1	0.28	0.28		PATCH
EASTBOUND SUBTOTAL -- RAMP PARTIAL DEPTH PATCHING (CU FT)											66.92	
EASTBOUND SUBTOTAL -- RAMP SAW-CLEAN-RESEAL RANDOM CRACKS (LF)											664	
EASTBOUND TOTAL -- PARTIAL DEPTH PATCHING (CU FT)											240.2	
EASTBOUND TOTAL -- SAW-CLEAN-RESEAL RANDOM CRACKS (LF)											1,188	
<i>Approximate partial depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.</i>												

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
WESTBOUND I-265 TO NORTHBOUND I-65												
104+33						X		10	0.28	2.8		PATCH
104+35						X					8	R&S
105+21			X					1	0.28	0.28		PATCH
108+79						X		4	0.28	1.12		PATCH
109+06						X		4	0.28	1.12		PATCH
109+15						X		5	0.28	1.40		PATCH
109+26						X		12	0.28	3.36		PATCH
109+30			X					1	0.28	0.28		PATCH
109+91						X		2	0.28	0.56		PATCH
116+66			X					1	0.28	0.28		PATCH
116+84			X					1	0.28	0.28		PATCH
118+55				X							12	R&S
119+24			X					1	0.28	0.28		PATCH
122+13			X					1	0.28	0.28		PATCH
122+13				X				1	0.28	0.28		PATCH
126+64					X			1	0.28	0.28		PATCH
STATION EQUATION: STA. 131+59.55 BACK = STA. 462+52.95 AHEAD												
465+13				X				4	0.28	1.12		PATCH
466+07			X								8	R&S
466+51				X							8	R&S
467+10			X					1	0.28	0.28		PATCH
467+26					X			4	0.28	1.12		PATCH
467+44					X			3	0.28	0.84		PATCH
467+87			X					1	0.28	0.28		PATCH
467+91					X			10	0.28	2.80		PATCH
468+49			X					1	0.28	0.28		PATCH
468+63			X					1	0.28	0.28		PATCH
468+64			X					1	0.28	0.28		PATCH
468+79			X					1	0.28	0.28		PATCH
468+79				X				1	0.28	0.28		PATCH
468+83						X		6	0.28	1.68		PATCH
468+97				X				1	0.28	0.28		PATCH
468+97			X					1	0.28	0.28		PATCH
469+16						X		4	0.28	1.12		PATCH
469+21			X					1	0.28	0.28		PATCH
469+25						X		2	0.28	0.56		PATCH
469+40			X					1	0.28	0.28		PATCH
469+42						X		2	0.28	0.56		PATCH
469+60				X				1	0.28	0.28		PATCH
470+17					X			1	0.28	0.28		PATCH
470+19			X					1	0.28	0.28		PATCH
470+32						X		1	0.28	0.28		PATCH
470+42				X				1	0.28	0.28		PATCH

PARTIAL DEPTH PCC PAVEMENT REPAIRS I-265, JEFFERSON COUNTY ITEM NUMBER: 5-2087.00 WESTBOUND RAMPS												
BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
NORTHBOUND KY 61 ENTRANCE TO WESTBOUND I-265												
210+64				X				1	0.28	0.28		PATCH
210+94				X				1	0.28	0.28		PATCH
211+11			X					1	0.28	0.28		PATCH
211+83			X					1	0.28	0.28		PATCH
211+96			X					1	0.28	0.28		PATCH
211+98				X				1	0.28	0.28		PATCH
212+13			X					1	0.28	0.28		PATCH
212+13				X				1	0.28	0.28		PATCH
212+73			X					1	0.28	0.28		PATCH
212+73				X				1	0.28	0.28		PATCH
212+91			X					1	0.28	0.28		PATCH
212+91				X				1	0.28	0.28		PATCH
213+03				X				3	0.28	0.84		PATCH
213+17				X				1	0.28	0.28		PATCH
213+17			X					1	0.28	0.28		PATCH
213+51				X				1	0.28	0.28		PATCH
213+51			X					1	0.28	0.28		PATCH
213+64				X				1	0.28	0.28		PATCH
213+64			X					1	0.28	0.28		PATCH
213+76			X					1	0.28	0.28		PATCH
213+76				X				1	0.28	0.28		PATCH
213+93				X				1	0.28	0.28		PATCH
214+11				X				1	0.28	0.28		PATCH
214+11			X					1	0.28	0.28		PATCH
214+24			X					1	0.28	0.28		PATCH
214+25				X				5	0.28	1.40		PATCH
214+36			X					1	0.28	0.28		PATCH
214+36				X				1	0.28	0.28		PATCH
214+54				X				1	0.28	0.28		PATCH
214+72				X				1	0.28	0.28		PATCH
214+84				X				1	0.28	0.28		PATCH
214+97			X					1	0.28	0.28		PATCH
214+97				X				1	0.28	0.28		PATCH
215+01			X					1	0.28	0.28		PATCH
215+22				X							12	R&S
216+64				X							12	R&S
216+66						X					10	R&S
217+95						X					5	R&S
218+21						X					16	R&S
219+18						X					16	R&S
219+53						X					8	R&S
219+56						X		4	0.28	1.12		PATCH
219+58				X							16	R&S
223+81				X							12	R&S

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
223+81			X								12	R&S
223+90						X		3	0.28	0.84		PATCH
224+30						X		1	0.28	0.28		PATCH
224+40				X							12	R&S
224+83		X									4	R&S
224+84			X								12	R&S
235+06				X							12	R&S
235+06			X								12	R&S
235+68						X					8	R&S
235+68			X								12	R&S
237+19			X								12	R&S
238+40				X							12	R&S
241+39				X							12	R&S
241+39			X								12	R&S
241+39						X					6	R&S
241+97			X								12	R&S
241+97				X							12	R&S
241+97			X					1	0.28	0.28		PATCH
242+00							X				10	R&S
242+60				X							12	R&S
243+24							X				7	R&S
243+88							X	4	0.28	1.12		PATCH
245+20					X			3	0.28	0.84		PATCH
247+80					X			1	0.28	0.28		PATCH
247+86					X			1	0.28	0.28		PATCH
250+48					X			2	0.28	0.56		PATCH
252+03			X					1	0.28	0.28		PATCH
252+64							X	1	0.28	0.28		PATCH
SOUTHBOUND KY 61 ENTRANCE TO WESTBOUND I-265												
713+50						X		1	0.28	0.28		PATCH
WESTBOUND I-265 EXIT TO KY 61												
125+72				X							18	R&S
NORTHBOUND SMYRNA PKWY. ENTRANCE TO WESTBOUND I-265												
711+03	711+09		X								6	R&S
711+20		X									4	R&S
711+21		X									4	R&S
711+24		X									4	R&S
711+24		X						1	0.28	0.28		PATCH
711+34		X									4	R&S
711+42			X					1	0.28	0.28		PATCH
711+48		X									4	R&S
711+62		X									4	R&S
711+63			X					1	0.28	0.28		PATCH
711+69			X					1	0.28	0.28		PATCH
711+76		X									4	R&S

PARTIAL DEPTH PCC PAVEMENT REPAIRS I-265, JEFFERSON COUNTY ITEM NUMBER: 5-2087.00 WESTBOUND RAMPS												
BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
711+80						X		1	0.28	0.28		PATCH
718+61			X					1	0.28	0.28		PATCH
SOUTHBOUND SMYRNA PKWY. ENTRANCE TO WESTBOUND I-265												
9+31			X					2	0.28	0.56		PATCH
9+99						X		1	0.28	0.28		PATCH
10+16						X		1	0.28	0.28		PATCH
10+60			X					2	0.28	0.56		PATCH
10+60						X		1	0.28	0.28		PATCH
11+40						X		1	0.28	0.28		PATCH
11+65	11+83		X								18	R&S
12+00				X				2	0.28	0.56		PATCH
12+00						X		1	0.28	0.28		PATCH
12+02			X								16	R&S
12+40			X								16	R&S
WESTBOUND I-265 EXIT TO SMYRNA PKWY.												
123+55			X					1	0.28	0.28		PATCH
123+73			X					1	0.28	0.28		PATCH
123+73				X				1	0.28	0.28		PATCH
124+16				X				1	0.28	0.28		PATCH
124+16			X					1	0.28	0.28		PATCH
125+32				X				2	0.28	0.56		PATCH
125+32			X								15	R&S
125+42			X					1	0.28	0.28		PATCH
125+84	125+93			X							9	R&S
SOUTHBOUND KY 864 ENTRANCE TO WESTBOUND I-265												
2+13			X					1	0.28	0.28		PATCH
2+28			X					2	0.28	0.56		PATCH
2+38			X					1	0.28	0.28		PATCH
2+57			X					1	0.28	0.28		PATCH
NORTHBOUND KY 864 ENTRANCE TO WESTBOUND I-265												
10+89				X				1	0.28	0.28		PATCH
10+89			X					1	0.28	0.28		PATCH
11+00				X				3	0.28	0.84		PATCH
11+00			X					1	0.28	0.28		PATCH
11+10				X				2	0.28	0.56		PATCH
11+10			X					1	0.28	0.28		PATCH
11+47			X								10	R&S
11+58			X					1	0.28	0.28		PATCH
11+75			X					1	0.28	0.28		PATCH
11+88			X					1	0.28	0.28		PATCH
12+04			X					1	0.28	0.28		PATCH
12+10			X					3	0.28	0.84		PATCH
12+21			X					1	0.28	0.28		PATCH
12+35			X					1	0.28	0.28		PATCH
12+37							X	2	0.28	0.56		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
12+54							X	4	0.28	1.12		PATCH
12+55			X					5	0.28	1.4		PATCH
12+70				X				2	0.28	0.56		PATCH
12+83				X				2	0.28	0.56		PATCH
14+63			X					1	0.28	0.28		PATCH
14+78			X					1	0.28	0.28		PATCH
14+85			X					1	0.28	0.28		PATCH
14+89			X					1	0.28	0.28		PATCH
20+96			X					1	0.28	0.28		PATCH
21+31			X					1	0.28	0.28		PATCH
21+56			X					1	0.28	0.28		PATCH
23+93			X					1	0.28	0.28		PATCH
24+25			X					1	0.28	0.28		PATCH
24+37			X					1	0.28	0.28		PATCH
24+68			X					1	0.28	0.28		PATCH
24+72			X					1	0.28	0.28		PATCH
25+72			X					2	0.28	0.56		PATCH
WESTBOUND I-265 EXIT TO KY 864												
13+10			X					1	0.28	0.28		PATCH
13+22			X					1	0.28	0.28		PATCH
13+61			X					3	0.28	0.84		PATCH
13+69			X					2	0.28	0.56		PATCH
14+12			X					2	0.28	0.56		PATCH
14+29			X					1	0.28	0.28		PATCH
16+45			X					1	0.28	0.28		PATCH
21+49			X					2	0.28	0.56		PATCH
21+51				X				1	0.28	0.28		PATCH
21+69				X				1	0.28	0.28		PATCH
21+92			X					1	0.28	0.28		PATCH
21+94			X					1	0.28	0.28		PATCH
22+11				X				1	0.28	0.28		PATCH
22+28			X					1	0.28	0.28		PATCH
22+28				X				1	0.28	0.28		PATCH
22+41				X				2	0.28	0.56		PATCH
22+71				X				1	0.28	0.28		PATCH
22+90				X				2	0.28	0.56		PATCH
22+90			X					2	0.28	0.56		PATCH
23+00			X					2	0.28	0.56		PATCH
23+00				X				2	0.28	0.56		PATCH
23+13				X				1	0.28	0.28		PATCH
23+15			X					1	0.28	0.28		PATCH
23+31			X					2	0.28	0.56		PATCH
23+31				X				2	0.28	0.56		PATCH
23+49				X				2	0.28	0.56		PATCH
23+49			X					1	0.28	0.28		PATCH

**PARTIAL DEPTH PCC PAVEMENT REPAIRS
I-265, JEFFERSON COUNTY
ITEM NUMBER: 5-2087.00
WESTBOUND RAMPS**

BEGIN STATION	END STATION	INSIDE SHLDR.	LANE #1	LANE #2	LANE #3	OUTSIDE SHLDR.	RAMP GORE	APPROX. SURF AREA (SQ FT)	DEPTH (FT)	PARTIAL DEPTH PATCHING (CU FT)	SAW-CLEAN & RESEAL RANDOM CRACKS (LF)	COMMENTS
23+60			X					1	0.28	0.28		PATCH
23+60				X				1	0.28	0.28		PATCH
23+74				X				1	0.28	0.28		PATCH
23+74			X					1	0.28	0.28		PATCH
23+90			X					2	0.28	0.56		PATCH
23+90				X				2	0.28	0.56		PATCH
24+08			X					1	0.28	0.28		PATCH
24+08				X				2	0.28	0.56		PATCH
24+20				X				2	0.28	0.56		PATCH
24+20			X					2	0.28	0.56		PATCH
24+34				X				2	0.28	0.56		PATCH
24+34			X					2	0.28	0.56		PATCH
24+48			X					2	0.28	0.56		PATCH
24+48				X				2	0.28	0.56		PATCH
25+19	25+28						X				10	R&S
25+45	25+56		X								25	R&S
25+56				X							12	R&S
25+59	25+68		X								12	R&S
WESTBOUND SUBTOTAL -- RAMP PARTIAL DEPTH PATCHING (CU FT)											83.7	
WESTBOUND SUBTOTAL -- RAMP SAW-CLEAN-RESEAL RANDOM CRACKS (LF)											529	
WESTBOUND TOTAL -- PARTIAL DEPTH PATCHING (CU FT)											288.1	
WESTBOUND TOTAL -- SAW-CLEAN-RESEAL RANDOM CRACKS (LF)											1,073	
PROJECT TOTAL -- PARTIAL DEPTH PATCHING (CU FT)											529	
PROJECT TOTAL -- SAW-CLEAN-RESEAL RANDOM CRACKS TOTAL (LF)											2,261	
<i>Approximate partial depth pavement repair locations are listed in this proposal. The Engineer will determine the exact location at the time of construction.</i>												

**DIAMOND GRINDING SUMMARY
JEFFERSON COUNTY
I-265 - GENE SNYDER FREEWAY
Item Number: 5-2087.00
EASTBOUND**

DIRECTION	NUMBER OF LANES	BEGIN STATION	END STATION	LINEAR LANE-FEET	* SQUARE YARDS
Eastbound	2	663+91	669+17	526	1,870
Eastbound	2	670+99	683+58	1,259	4,475
Eastbound	4	683+58	688+50	492	3,061
Eastbound	4	689+29	692+60	331	2,060
Eastbound	3	692+60	696+03	343	1,677
Eastbound	3	697+63	717+91	2,028	9,913
Eastbound	2	717+91	797+70	7,863	27,956
Eastbound	2	799+15	922+87	12,372	43,989
Eastbound	2	924+35	948+78	2,443	8,685
TOTAL EASTBOUND LINEAR LANE-FEET				27,656	
EASTBOUND TOTAL PCC PAVEMENT DIAMOND GRINDING (Bid Item No. 2060)					103,687

* INCLUDES 4FT ON EACH SHOULDER

Bridges (NOT INCLUDED)

- Bridge over EB I-265 Ramp to NB I-65
- Bridge over Freedom Way
- Bridge over KY 1450
- Bridge over Cinderella Ln
- Bridge over KY 864

669+17	670+99
688+50	689+29
696+03	697+63
797+70	799+15
922+87	924+35

STATION EQUATIONS	
Back	Ahead
751+99.81	753+16.17

Eastbound Traffic Loops

699+58	699+82	INCLUDED (LOOP INACTIVE)
705+61	705+83	INCLUDED (LOOP INACTIVE)
706+44	706+66	INCLUDED (LOOP TO BE REPLACED)
795+15	795+26	INCLUDED (LOOP TO BE REPLACED)
800+74	801+02	INCLUDED (LOOP INACTIVE)
878+66	878+87	INCLUDED (LOOP TO BE REPLACED)

**DIAMOND GRINDING SUMMARY
JEFFERSON COUNTY
I-265 - GENE SNYDER FREEWAY
Item Number: 5-2087.00
WESTBOUND**

DIRECTION	NUMBER OF LANES	BEGIN STATION	END STATION	LINEAR LANE-FEET	* SQUARE YARDS
Westbound	2	663+52	669+26	574	2,042
Westbound	2	671+09	689+24	1,816	6,456
Westbound	3	689+24	689+94	70	341
Westbound	3	690+74	696+07	533	2,604
Westbound	3	697+67	711+70	1,403	6,861
Westbound	2	711+70	797+42	8,456	30,064
Westbound	2	798+78	923+25	12,447	44,256
Westbound	2	924+73	948+78	2,405	8,551
TOTAL WESTBOUND LINEAR LANE-FEET				27,703	
WESTBOUND TOTAL PCC PAVEMENT DIAMOND GRINDING (Bid Item No. 2060)					101,174

* INCLUDES 4FT ON EACH SHOULDER

Bridges (NOT INCLUDED)

- Bridge over EB I-265 Ramp to NB I-65
- Bridge over Freedom Way
- Bridge over KY 1450
- Bridge over Cinderella Ln
- Bridge over KY 864

669+26	671+09
689+94	690+74
696+07	697+67
797+42	798+78
923+25	924+73

STATION EQUATIONS	
Back	Ahead
751+99.81	753+16.17

Westbound Traffic Loops

699+70	699+95	INCLUDED (LOOP INACTIVE)
705+43	705+67	INCLUDED (LOOP INACTIVE)
707+82	708+05	INCLUDED (LOOP TO BE REPLACED)
795+15	795+23	INCLUDED (LOOP TO BE REPLACED)
800+82	801+07	INCLUDED (LOOP INACTIVE)
878+81	879+05	INCLUDED (LOOP TO BE REPLACED)

**DIAMOND GRINDING SUMMARY
JEFFERSON COUNTY
I-265 - GENE SNYDER FREEWAY
Item Number: 5-2087.00
I-65 INTERCHANGE RAMP**

DIRECTION	NUMBER OF LANES	BEGIN STATION	END STATION	LINEAR LANE-FEET	* SQUARE YARDS
WB EXIT TO NB I-65	2	98+94	125+67	2,075	7,376
WB/EB EXIT TO NB I-65	3	456+61	470+53	727	3,556
EB ENT FROM SB I-65	2	610+77	616+70	593	2,108
EB ENT FROM SB I-65	2	625+31	652+47	2,433	8,651
EB ENT FROM SB I-65	2	652+47	660+00	753	2,677
EB ENT FROM SB I-65	3	660+00	666+50	66	323
EB ENT FROM SB I-65	2	666+50	681+16	1,466	5,212
EN ENT FROM NB I-65	1	300+00	319+15	1,135	2,901
TOTAL RAMP LINEAR LANE-FEET				42,519	
**RAMP TOTAL PCC PAVEMENT DIAMOND GRINDING (Bid Item No. 2060)					32,804

* INCLUDES 4FT ON EACH SHOULDER

** SQUARE YARDS CALCULATED BASED ON CALCULATED RAMP AREAS

Bridges (NOT INCLUDED)

SB I-65 Ramp to EB I-265, Bridge over I-65

649+64	652+47
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Existing High Friction Surface Course (NOT INCLUDED)

EB ENT FROM SB I-65
EB ENT FROM SB I-65
EB ENT FROM NB I-65
WB EXIT TO NB I-65
WB/EB EXIT TO NB I-65

616+70	625+31
660+25	666+09
307+50	315+30
109+78	115+76
461+30	467+95

GUARDRAIL SUMMARY												
I-265 PAVEMENT REHABILITATION, JEFFERSON COUNTY												
MP 10.25 TO MP 15.66												
ITEM NUMBER 5-2087.00												
LOCATION	SIDE	BEGIN STA	END STA	GUARDRAIL STEEL W BEAMS FACE (7 FT POST)	GUARDRAIL END TREATMENT TYPE 1	EACH		REMOVE GUARDRAIL	GUARDRAIL CONNECTOR TO BRIDGE END TY A	GUARDRAIL CONNECTOR TO BRIDGE END TY A-I	COMMENTS	
						LF	2367					2369	2391	LF	2381	2363	2387
Units												
Bid Item Number												
Eastbound												
I-265	RT	665+14	665+52	37.5								
I-265	RT	671+65	673+90	225.0	1			37.5				
I-265	RT	692+59	695+59	300.0		1		137.5			Existing guardrail ends at 673+05	
I-265	RT	856+00	857+45	100.0	1			300.0	1			
Westbound												
I-265	RT	671+42	674+67	287.5			1	312.5	1		Existing guardrail ends at 674+56	
I-265	RT	684+20	689+83	562.5		1		550.0		1	Existing guardrail ends at 684+36	
I-265	RT	712+21	714+35	175.0	1			225.0				
Ramps												
I-65 Ramp 1	RT	122+88	125+70	237.5	1			287.5				
I-65 Ramp 3	RT	309+47	317+60	812.5		1		812.5				
I-65 Ramp 6	LT	652+99	657+62	462.5				462.5	1			
KY 61 Ramp 2	LT	219+25	221+25	150.0	1		1	112.5			Existing guardrail begins at 220+22	
KY 61 Ramp 2	LT	224+00	226+00	150.0	1			175.0	1		Existing guardrail begins at 224+26	
KY 61 Ramp 5	RT	514+70	514+83	12.5				12.5				
KY 61 Ramp 7	RT	729+90	731+90	200.0				200.0				
				3712.5	5	4	1	3775	4	1		
PROJECT TOTAL												

Quantities have been carried over and included in the general summary.

PIPE AND DRAINAGE SUMMARY																	
I-265 PAVEMENT REHABILITATION, JEFFERSON COUNTY																	
MP 10.25 TO MP 15.66																	
ITEM NUMBER 5-2087.00																	
LOCATION	SIDE OF ROADWAY	BEGIN STATION	END STATION	EXISTING TYPE (1)	CLEAN INLET/OUTLET (2)		RESET GRATE	DGA	CULVERT PIPE - 15 IN (3)			CULVERT PIPE - 18 IN (3)			COMMENTS		
					EACH	INCIDENTAL			LF	TON	LF	TON	LF	TON		LF	TON
Units																	
Bid Item Number																	
EASTBOUND																	
I-265	RT	664+43	664+43	HEADWALL	1					461	462	466					
I-265	RT	665+18	665+48	CURB											18" PIPE		
I-265	RT	665+33	665+33	WASHOUT											MISSING CURB		
I-265	RT	671+39	671+39	HEADWALL	1												
I-265	RT	671+67	673+85	CURB											18" PIPE		
I-265	RT	692+71	695+59	CURB											MISSING/BROKEN CURB		
I-265	RT	693+11	693+80	WASHOUT			20								MISSING/BROKEN CURB		
I-265	RT	797+38	797+38	HEADWALL	1										18" PIPE		
I-265	RT	858+95	858+95	HEADWALL											EROSION NEAR HEADWALL		
I-265	RT	890+95	890+95	HEADWALL	1		1								30" PIPE		
EASTBOUND TOTAL					4		1	20	0	0	0	0	0	536	0	20	0
WESTBOUND																	
I-265	RT	671+42	673+96	CURB										254			
I-265	RT	684+26	684+26	WASHOUT			5							1		45	
I-265	RT	684+23	685+83	CURB										1	160		INSTALL FLUME AT STATION 684+26
I-265	RT	685+21	685+21	WASHOUT			5							1	200		INSTALL FLUME AT STATION 685+83
I-265	RT	685+83	687+83	CURB										1			
I-265	RT	686+17	686+17	WASHOUT			18										
I-265	RT	687+83	689+83	CURB										200			
I-265	RT	688+69	688+69	WASHOUT			8										
I-265	RT	695+62	695+62	HEADWALL													
I-265	RT	705+49	705+49	HEADWALL	1												
I-265	RT	738+26	738+26	DBI												1	
I-265	RT	797+11	797+11	HEADWALL	1												
I-265	RT	906+61	906+61	HEADWALL			1										
I-265	RT	910+53	910+53	HEADWALL													
I-265	RT	923+47	923+47	HEADWALL	1												
I-265	RT	947+14	949+16	EROSION													
WESTBOUND TOTAL					4		1	36	0	0	0	0	0	814	1	215	1
MEDIAN																	
I-265		684+30	684+30	EROSION			5										
I-265		777+95	777+95	DBI					4								
I-265		819+57	819+57	DBI								8					
I-265		846+96	846+96	DBI						8							
I-265		880+70	880+70	DBI							4						
I-265		947+87	948+47	EROSION												40	
MEDIAN TOTAL					0		0	5	8	8	8	8	4	0	0	40	0

**NOTES APPLICABLE TO PROJECT
DIAMOND GRINDING REHABILITATION
JEFFERSON COUNTY
I-265 GENE SNYDER FREEWAY**

**FD52 056 0265 010-016
NHPP IM 2651 (020)
Item No. 5-2087.00**

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

1. There is a summary of full depth concrete repair locations. Also, because of continuing deterioration of the pavement, there is an additional quantity for full-depth repairs, included in the bid total. The Engineer will determine the ultimate locations that will be repaired based upon the condition of the pavement at the time the repairs are accomplished. The repair locations listed may be lengthened, shortened, or eliminated completely if the conditions are such that modification of the locations would be deemed desirable by the Department. Any asphalt patches removed and its disposal will be incidental to the underlying "Remove PCC Pavement" bid item.
2. The dimensions shown on the typical section for pavement and shoulder widths and thickness 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 in the Proposal.
3. The contractor is to be advised of the locations of low wires on the project. These locations include approximately:

I-265	Sta. 689+16
I-265	Sta. 696+66
I-265	Sta. 739+97
I-265	Sta. 798+94
I-265	Sta. 799+18
I-265	Sta. 860+40
I-265	Sta. 877+97
I-265	Sta. 878+94
I-265	Sta. 896+45
I-265	Sta. 922+85
KY 61 Ramp 2	Sta. 234+05
KY 61 Ramp 5	Sta. 534+90
KY 61 Ramp 7	Sta. 712+31
Smyrna Rd Ramp 3	Sta. 310+38
Smyrna Rd Ramp 5	Sta. 526+19
Smyrna Rd Ramp 7	Sta. 710+35
KY 864	Sta. 54+42
KY 864 Ramp 5	Sta. 23+60
KY 864 Ramp 7A	Sta. 3+12

CAUTION: Other locations may exist. These and all other utilities should be avoided on this project. If any utility is impacted, it will be the contractor's responsibility to contact the affected utility and cover any costs associated with the impact.

4. Any delineator posts 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.
5. All "green" milepost signs shall be replaced with this project. Payment for these signs will be made by "each" for the bid item "Steel Post Mile Markers".
6. The proposed striping for this project shall be as directed and/or approved by the Engineer. The existing striping layout may be modified in several locations according to the current MUTCD manual. The contractor is to provide a diagram of existing striping layout.
7. Several areas throughout the project have fill slopes that are beginning to fail or slip due to poor drainage. These areas shall be ditched as directed by the Engineer. The degrading slopes shall be regraded and dressed as directed by the Engineer. Payment for this work will be measured by linear foot of "Ditching", cubic yard of "Embankment" and square yard of "Erosion Control Blanket".
8. A quantity of "Flowable Fill" is provided to fill locations on the project that have erosion under the existing pavement or other structures. These and any other areas with similar erosion issues shall be filled with "Flowable Fill" as directed by the Engineer. All flowable fill applications shall utilize the strongest mix design dictated by the Standard Specifications. Payment for this work shall be per cubic yard of "Flowable Fill" and will be based on quantities measured by the field Engineer. Any form work required to contain the "Flowable Fill" will be considered incidental to this item of work.
9. Remove any existing guardrail with a lane closure in place. Do not leave the area unprotected. After the guardrail is removed, a shoulder closure shall remain in place until the guardrail is replaced in that area. Guardrail must be replaced in the unprotected area within seven (7) days of the initial removal. The shoulder closure shall be removed after the guardrail is restored.
The Contractor shall deliver existing salvaged guardrail system materials to the Central Sign Shop and Recycle Center in Frankfort, KY (502-564-8187) between the hours of 8:00AM and 3:00PM, Monday through Friday and shall be neatly stacked in accordance with section 719.03.07 of the standard specifications. A "Guardrail Delivery Verification Sheet" has been included in this proposal and must be completed prior to delivery for verification of the components delivered. The Contractor, Engineer, and Central Sign Shop and Recycle Center Representative must all sign off on this sheet before payment may be made.
10. The drainage summary lists locations where the existing grates have been dislodged from their proper position. The contractor will be required to "re-set" the existing grates. "Resetting Grates" will be considered incidental to the bid item "Ditching". Grates that have been damaged and will need to be replaced and will be paid for under the bid item

"Replace Grate" and will be paid for by "each". The "Replace Grate" bid item will be paid one each per headwall but may include multiple grate segments.

11. Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications. Delineators shall be placed in accordance with Section 3F of the MUTCD.
12. Existing pavement markers in the mainline concrete will be removed. A partial depth patch shall be performed to repair the pavement at the removal locations and will be paid for under the bid item "Remove Pavement Marker Type V". See "Special Note for Removing Existing Pavement Markers on Portland Cement Pavement".
13. A quantity of Channel Lining Class II and Class III has been included to be applied to eroded areas around drainage outlets and for some of the areas that will need to be ditched. The Engineer will make the determination whether a ditch receives ditching and/or channel lining. Geotextile Fabric Type I will not be measured for payment, but will be considered incidental to the bid item "Channel Lining Class II" and "Channel Lining Class III".
14. The cleaning of existing pipe culvert inlets and outlets 36 inches or less in diameter are incidental to the bid item for "Ditching" in accordance with Section 209.03.01 of the 2012 Edition of the Standard Specifications for Road and Bridge Construction. There is a list of locations included in the Pipe and Drainage Summary that have been identified to be cleaned. This list may not be complete and therefore there may be additional outlets which require cleaning. The Engineer will determine any additional outlets to be cleaned.
15. Any light poles damaged during construction are to be replaced at the Contractor's expense.
16. The existing cable median barrier is not to be disturbed with this project. In accordance with Section 107.12 of the Standard Specifications for Road and Bridge Construction, 2012 Edition, the Contractor will be responsible for the cost to repair any cable barrier that is damaged due to the operations of the Contractor. The Department will make any necessary repairs at the Contractor's expense.
17. The existing noise wall is not to be disturbed with this project. In accordance with Section 107.12 of the Standard Specifications for Road and Bridge Construction, 2012 Edition, the Contractor will be responsible for the cost to repair any portion of wall that is damaged due to the operations of the Contractor. The Department will make any necessary repairs at the Contractor's expense.
18. The existing edge drain system is to be preserved. Care should be taken when the concrete is removed and replaced; any edge drains damaged during these activities will be replaced at the Contractor's expense. Edge drain headwalls damaged during Ditching operations will also be replaced at the Contractor's expense.

19. Full depth repairs along WB I-265 between the bridge ends at Blue Lick Road and Freedom Way shall be performed such that they restore the original profile grade along WB I-265. The Contractor shall coordinate with the Engineer to establish an original profile grade in this area. Any Staking required to perform this work shall be considered incidental to the bid item, "JPC Pavement – 10 in".
20. Shouldering shall be provided in the area where guardrail is replaced. The Shouldering operation shall be performed as outlined in the Standard Specifications, except that there will be no direct payment for Shouldering. The cost for Shouldering shall be considered incidental to the bid item, "Guardrail-Steel W Beam-S Face (7 ft Post)".
21. It is intended to not disturb the underlying soil; however, a quantity of DGA, Crushed Aggregate Size No. 3, Geotextile Fabric Type IV, Geotextile Fabric Type V, 4" Perforated pipe and 4" Non- perforated pipe (to drain the aggregate), and Perforated Pipe Headwalls is included for undercutting very poor, soft, wet soils - to be used sparingly and only as directed by the Engineer. Geotextile Fabric Type V shall be used to wrap the sides and bottom of the Crushed Aggregate Size No. 3 and Geotextile Fabric Type IV shall be used to cover the top of the aggregate. Undercutting will not be measured as a bid item and will be considered incidental to the bid item, "JPC Pavement – 10 in".

**TRAFFIC CONTROL PLAN
DIAMOND GRINDING REHABILITATION
I-265 JEFFERSON COUNTY
ITEM NO. 5-2087.00**

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

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the 2012 Standard Specifications and the Standard Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic". All lane closures used on the Project will be in compliance with the appropriate Standard Drawings. Do NOT use cones for lane closures or shoulder closures.

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 (Interchange ramps may be reduced to 35mph) 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. All signs shall be placed as directed and/or approved by the Engineer. Payment for the signs will be at the unit bid price for "Signs" erected. Any relocation or covering of the signs will be incidental to "Maintain and Control Traffic".

Night work is required on this project. Obtain approval from the Engineer for the method of lighting prior to its use.

PROJECT PHASING & CONSTRUCTION PROCEDURES

No lane closures will be allowed during the following days:

December 23-26, 2017	Christmas Weekend
December 29, 2017-January 1, 2018	New Years Weekend
March 30, 2018-April 1, 2018	Easter Weekend
April 20-22, 2018	Thunder Over Louisville
April 27, 2018-May 6, 2018	Kentucky Derby Week
May 25-28, 2018	Memorial Day Weekend
July 4-8, 2018	Independence Day Weekend
5:00 a.m. to 9:00 p.m.	Monday - Friday

In the event construction extends past the specified contract completion date, additional dates restricting lane closures may apply.

These dates will be determined by the Department, and may include, but are not limited to:

August 2-5, 2018	Street Rod Nationals
August 16-26, 2018	Kentucky State Fair

Traffic may be reduced to one lane in each direction during the following times:

- Weeknights from 9 PM until 5 AM the following morning
- Weekends from 9 PM Friday night until 5 AM the following Monday morning

The normal two lane traffic configuration must be maintained at all other times unless otherwise directed by the Engineer.

Use only one lane closure in each direction of travel at the same time during the hours specified. Lane closures may only be in the active work area. The minimum allowable clear lane width will be 11 feet; however, make provisions for the passage of wide loads up to 16 feet in width, with approval of the Engineer. Use a lane closure all times work is being performed in the lane or adjacent shoulder. Remove existing striping by water blasting. Remove edge lines throughout the project as directed and/or approved by the Engineer. Paint temporary edge lines through the lane closure. Payment for water blasting existing striping will be considered incidental to the bid item "Maintain and Control Traffic".

Approximate full depth pavement repair locations are listed in the proposal. The Engineer will determine the exact location at the time of construction. Once removal of pavement at a particular repair location has begun, work continuously within the parameters outlined above to complete the work and eliminate the "hole". Place Type III Barricades immediately in front of each pavement removal area, if not protected from traffic behind temporary concrete barrier wall, until the new JPC Pavement achieves 3000PSI compressive strength. Payment for Type III Barricades will be considered incidental to the bid item "Maintain and Control Traffic".

The Contractor will only be allowed to have traffic utilizing a portion of the shoulders as a driving lane while work is ongoing. If the Contractor suspends work for more than seven (7) consecutive days for any reason, traffic shall be placed back in the original lane configuration, with all lanes operational. These traffic shifts, due to non-working days, shall be considered incidental to the bid item, "Maintain and Control Traffic." The Department reserves the right to place traffic into its original configuration at any time.

Access to all ramps at interchanges on the project shall be maintained at all times unless otherwise noted or directed by the Engineer.

Note that Lane shifts are required throughout the project. See the Maintenance of Traffic Typical Sections for lane locations and widths. Stripe according to the MUTCD.

During the days and hours when a lane closure is allowed, implement the following procedures: Maintain traffic as specified in the phasing notes. Maintain at least 3 feet of lateral clearance between the traveled lanes and any drop off resulting from pavement removal if not protected with temporary barrier wall. Please refer to the "Special Note for Fixed Completion Date and Liquidated Damages" for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods or if the project is not completed by the fixed completion date. Once pavement removal at a site has begun, full depth replacement must be completed within the time a lane closure is allowed.

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

SHOULDER PREPARATION AND RESTORATION

Shoulders used as temporary roadways will be inspected by the Engineer and if deemed necessary by the Engineer, repaired with Asphalt Mixture for Level & Wedging (PG64-22), as directed, prior to opening to traffic. Patch and remove any foreign debris on the shoulders, as directed by the Engineer. Removal of failed materials and additional patching shall be performed by the Contractor, as directed by the Engineer, during the time the shoulder is used as a travel lane.

The stabilized shoulders are to be inspected and low spots refilled to the satisfaction of the Engineer prior to placing traffic on the shoulders. Daytime shoulder closures will be permitted to repair the stabilized shoulders. Install delineators for the existing guardrail and bridges before shifting traffic onto the shoulders. All work required for shoulder preparation and restoration is incidental to the bid item for "Maintain and Control Traffic".

I-265 PHASE I - JPC PAVEMENT REMOVAL AND REPLACEMENT, OUTSIDE LANES AND OUTSIDE SHOULDER

Utilize a lane closure and shift I-265 traffic to the inside lane and inside shoulder during removal and construction of the outside lane and shoulder. Remove the JPC pavement, prepare the subbase if necessary, pour the new JPC Pavement 10". Remove all existing Type V pavement markers in the outside lanes and patch the residual hole. Complete any other miscellaneous patching in the specified lane as directed by the Engineer. Complete any roadside work including guardrail installation. All work should be completed during the time allotted unless otherwise directed by the Engineer. Please refer to the "Special Note for Fixed Completion Date and Liquidated Damages" for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods.

I-265 PHASE II – JPC PAVEMENT REMOVAL AND REPLACEMENT, INSIDE LANE AND INSIDE SHOULDER

Utilize a lane closure and shift I-265 traffic to the outside lane and outside shoulder during removal and construction of the inside lane and inside shoulder. Remove the JPC pavement, prepare the subbase if necessary and pour the new JPC Pavement 10". Remove all existing Type V pavement markers in the inside lanes and patch the residual hole. Complete any other miscellaneous patching in the specified lanes as directed by the Engineer. All work should be completed during the time allotted. Please refer to the "Special Note for Fixed Completion Date and Liquidated Damages" for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods.

I-265 PHASE III – DIAMOND GRIND, OUTSIDE LANES

Utilize a lane closure and shift I-265 traffic to the inside lane and inside shoulder during diamond grinding of the outside lanes and shoulder. Diamond Grind the JPC Pavement the full lane width when strength is achieved using appropriate lane configurations. The minimum allowable clear lane width will be 11 feet; however, make provisions for the passage of wide loads up to 16 feet in width, with approval of the Engineer. Lane closures will be permitted only during hours of actual operations. Lane closures will not be permitted during the days and hours specified. Lane closures will be shortened, reduced to a shoulder closure, or removed as appropriate, when the Contractor does not have active operations requiring a lane closure. Limit the length of the lane closure to no more than can be completed during the specified time period.

Diamond Grind the full lane width when strength is achieved. The diamond grinding area will also include at least four feet of the outside shoulder to allow for surface water runoff from the pavement. The diamond grind area is to include that portion of all ramps to the point where they diverge from the mainline pavement (ramp gore). The diamond

grind area will not include bridge decks or traffic loops. Please refer to the “Special Note for Fixed Completion Date and Liquidated Damages” for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods.

I-265 PHASE IV – DIAMOND GRIND, INSIDE LANES

Utilize a lane closure and shift I-265 traffic to the outside lanes and outside shoulder during diamond grinding of the inside lane and shoulder. Diamond Grind the JPC Pavement the full lane width when strength is achieved using appropriate lane configurations. The minimum allowable clear lane width will be 11 feet; however, make provisions for the passage of wide loads up to 16 feet in width, with approval of the Engineer. Lane closures will be permitted only during hours of actual operations. Lane closures will not be permitted during the days and hours specified. Lane closures will be shortened, reduced to a shoulder closure, or removed as appropriate, when the Contractor does not have active operations requiring a lane closure. Limit the length of the lane closure to no more than can be completed during the specified time period.

Diamond Grind the full lane width when strength is achieved. The diamond grinding area will also include at least four feet of the inside shoulder to allow for surface water runoff from the pavement. The diamond grind area will not include bridge decks or traffic loops. Please refer to the “Special Note for Fixed Completion Date and Liquidated Damages” for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods.

I-265 PHASE V – SAW AND SEAL JOINTS

Saw and seal the concrete pavement. Seal the joints between the mainline driving lanes and shoulders using appropriate lane configurations, as directed by the Engineer. Close one lane, only in the direction of work, using drums and flashing arrows in accordance with the Standard Drawings and these notes. The minimum allowable clear lane width will be 11 feet; however, make provisions for the passage of wide loads up to 16 feet in width, with approval of the Engineer. Lane closures will be permitted only during hours of actual operations. Lane closures will not be permitted during the days and hours specified. Lane closures will be shortened, reduced to a shoulder closure, or removed as appropriate, when the Contractor does not have active operations requiring a lane closure. Please refer to the “Special Note for Fixed Completion Date and Liquidated Damages” for damage rates per hour associated with failure to maintain the required number of lanes during the specified time periods.

PLACE PERMANENT STRIPING & PAVEMENT MARKERS

After all other work is completed, place permanent striping and pavement markers. Mobile operations may be utilized. In addition to newly paved areas, place permanent striping on bridge decks within the project limits. Place permanent striping in accordance with the current edition of the MUTCD. Refer to the “Special Note for Inlaid Pavement Markers” for specifications and construction details.

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. Contrary to Section 112, lane closures will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic”.

RAMP CLOSURES & DETOURS

All ramp access is to be maintained except when the ramp is closed. The contractor will be allowed to close each of the ramps listed for one weekend.

The following ramp will need to be closed to complete the proposed full depth repairs on the respective ramp:

I-65 Interchange

NB I-65 to EB 265 entrance ramp

Preston Highway Interchange

NB Preston Hwy entrance ramp to EB 265

WB 265 exit ramp to Preston Hwy

Smyrna Parkway Interchange

NB Smyrna Parkway entrance ramp to WB 265

SB Smyrna Parkway entrance ramp to WB 265

NB Smyrna Parkway entrance ramp to EB 265

Beulah Church Road Interchange

Beulah Church Rd entrance ramp to WB 265

Only one ramp closure will be allowed at any one time throughout the project with the Engineer’s approval. Ramp closures shall be completed on weekends during times of adjacent lane closures on the mainline. Once pavement removal at a ramp site has begun, all full depth pavement repairs, guardrail work, sawing and sealing all joints and random cracks, and repairing the DGA portion of the shoulders where specified for that particular ramp must be completed and restriped within the time a ramp closure is allowed. Liquidated Damages, at the rate specified per hour in the “Special Note for Fixed Completion Date and Liquidated Damages”,

will be assessed for each hour beyond the specified time a ramp closure is permitted. Detour signing plan exhibits are attached for each ramp closure. The sign locations shown on the exhibits are approximate. The location and type of sign used shall be as directed or approved by the Engineer prior to any ramp closure. All messages to be used on Portable Changeable Message Signs shall be approved by the Engineer prior to any ramp or lane closure.

Contrary to Section 112, ramp/lane closures will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic”.

Detours will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic”.

RAMP CLOSURES, LANE CLOSURES AND LANE SHIFTS

All lane closures, lane shifts and tapers shall be in accordance with the standard drawings or the Manual of Uniform Traffic Control Devices (MUTCD). Any ramp closure, lane closure or lane shift must be approved by the Engineer prior to the closure or lane shift. The Contractor must notify the Engineer as least five (5) days prior to any proposed closure or traffic pattern shift.

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 MILES, LEFT/RIGHT LANE CLOSED 3 MILES, 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.

A quantity of signs has been included for detours, lane shifts, “Roadwork Ahead” signs on entrance ramps, and extra Double Fine signs and Speed Limit signs between interchanges to be paid only once, regardless of how many times they are moved or relocated.

FLASHING ARROWS

Flashing arrows will be paid for once, regardless of 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 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 Portable Changeable Message Signs. Place Portable Changeable Message Signs one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional Portable Changeable Message Signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The Portable Changeable Message Signs will be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the Portable Changeable Message Sign immediately. Portable Changeable Message Signs will be paid for once, regardless of how many times they are moved or relocated. The Department **WILL NOT** take possession of the signs upon completion of the work.

TRUCK MOUNTED ATTENUATORS

Furnish and install MUTCD approved Truck Mounted Attenuators (TMA) in advance of work areas not protected by temporary concrete barrier wall, 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 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 will be approved by the Engineer. Truck Mounted Attenuators 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

If lane closures are in place during nighttime hours, 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 (ramp gore striping will be 12")
2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used; however removable tape will be measured and paid as "Pavement Striping-Temporary Paint 6 Inch".
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 Durable Waterborne Paint except for bridge decks receiving epoxy-urethane overlay. Permanent striping of these bridges will be thermoplastic.

Voids created from removing the raised pavement markers are to be filled prior to allowing traffic on them. The partial depth patching material is to be used to fill the voids. The patching material and all work involved in patching the voids created by removing the existing pavement markers are incidental to the pavement marker removal bid item. See 'Special Note For Removing Existing Type V Raised Pavement Markers On Portland Cement Pavement'.

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 or barricades, as shown on the Standard Drawings.

It may be necessary to saw cut or excavate small areas in an adjacent lane to allow room for forms to pour a new slab to the proper grade. Any hole will be filled temporarily with DGA when adjacent to traffic or there exists a possibility that a vehicle wheel may drop into the hole.

TRAFFIC COORDINATOR

The I-265 rehabilitation is classified as a Significant Project.

Designate an employee to be traffic coordinator. The designated Traffic Coordinator shall meet the requirements described in Section 112.03.12 of the Department's Standard Specifications. The Traffic Coordinator will inspect the project maintenance of traffic once every two hours 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 a 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 Signs 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 EMPLOYEE'S VEHICLES

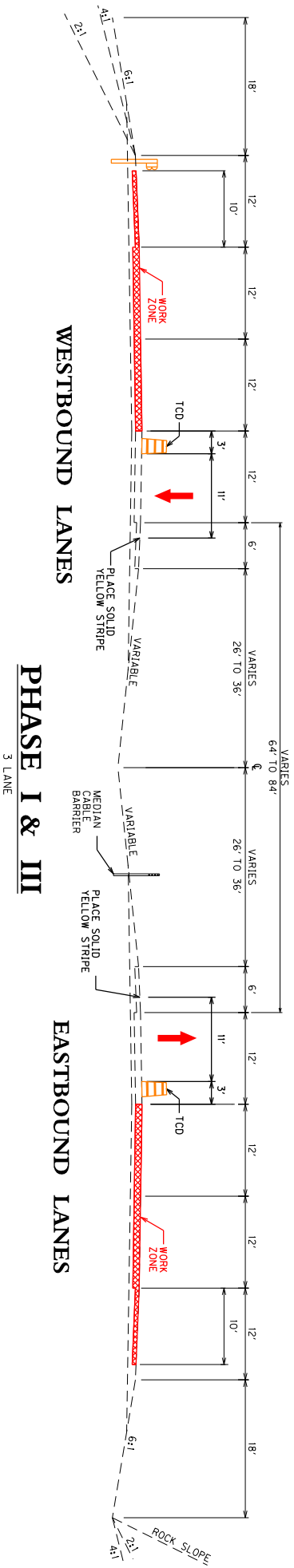
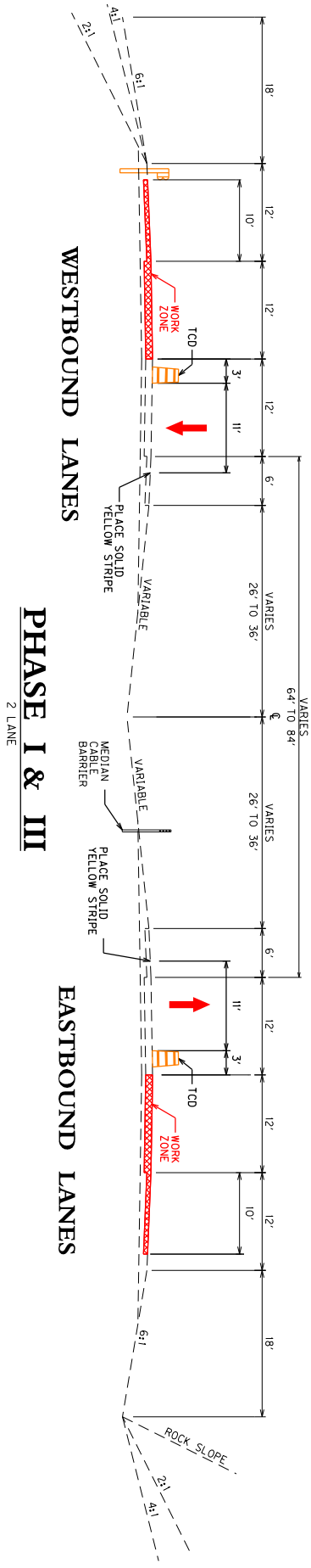
Do not use or allow employees to use median crossovers at any time except when inside lanes are closed for construction. In all other phases of construction, change vehicular direction of travel only at interchanges.

LAW ENFORCEMENT OFFICERS (LEO'S)

Police support shall be a unit consisting of an off-duty police officer from any police force agency having lawful jurisdiction and a police car equipped with externally mounted flashing blue lights. Officers may be asked to issue citations for traffic violations, but will be considered incidental to the contract unit bid price for "Law Enforcement Officer". No additional compensation will be provided. The officers will be placed at the discretion of the Engineer. Police support will be measured and paid on a per hour basis for each officer and police vehicle.

I-265 MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

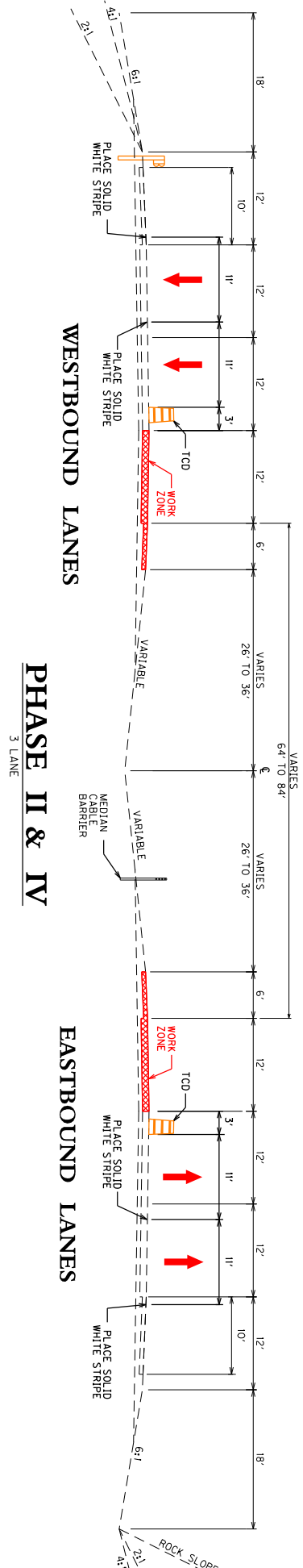
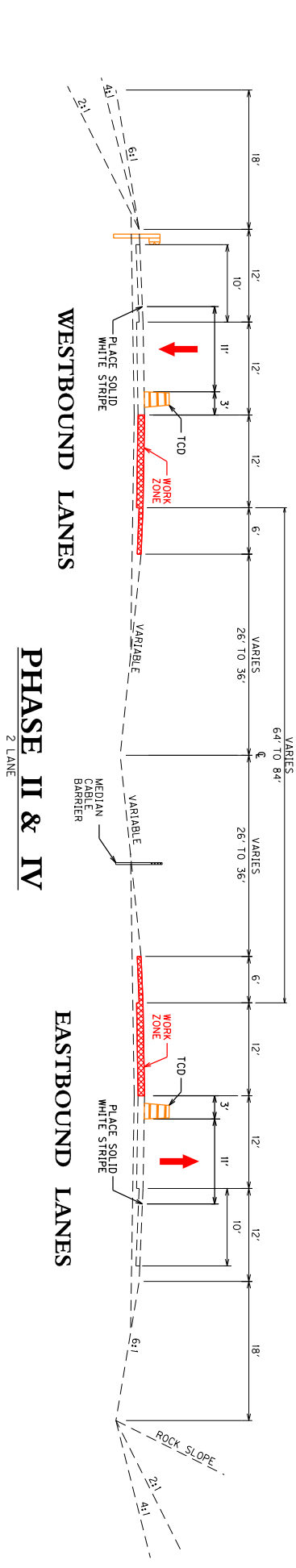
COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	



I-265
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

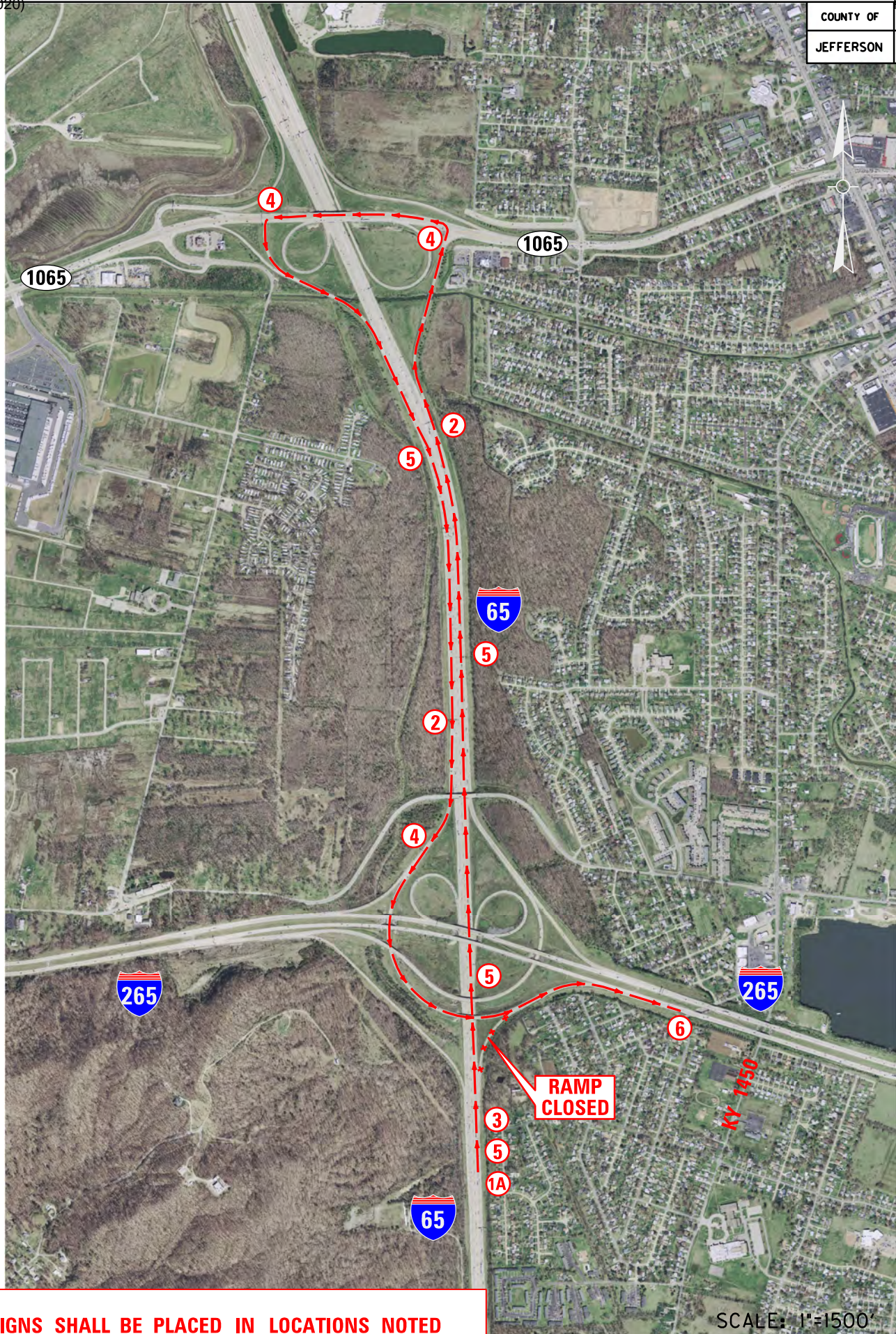
I-265 MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	



I-265
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

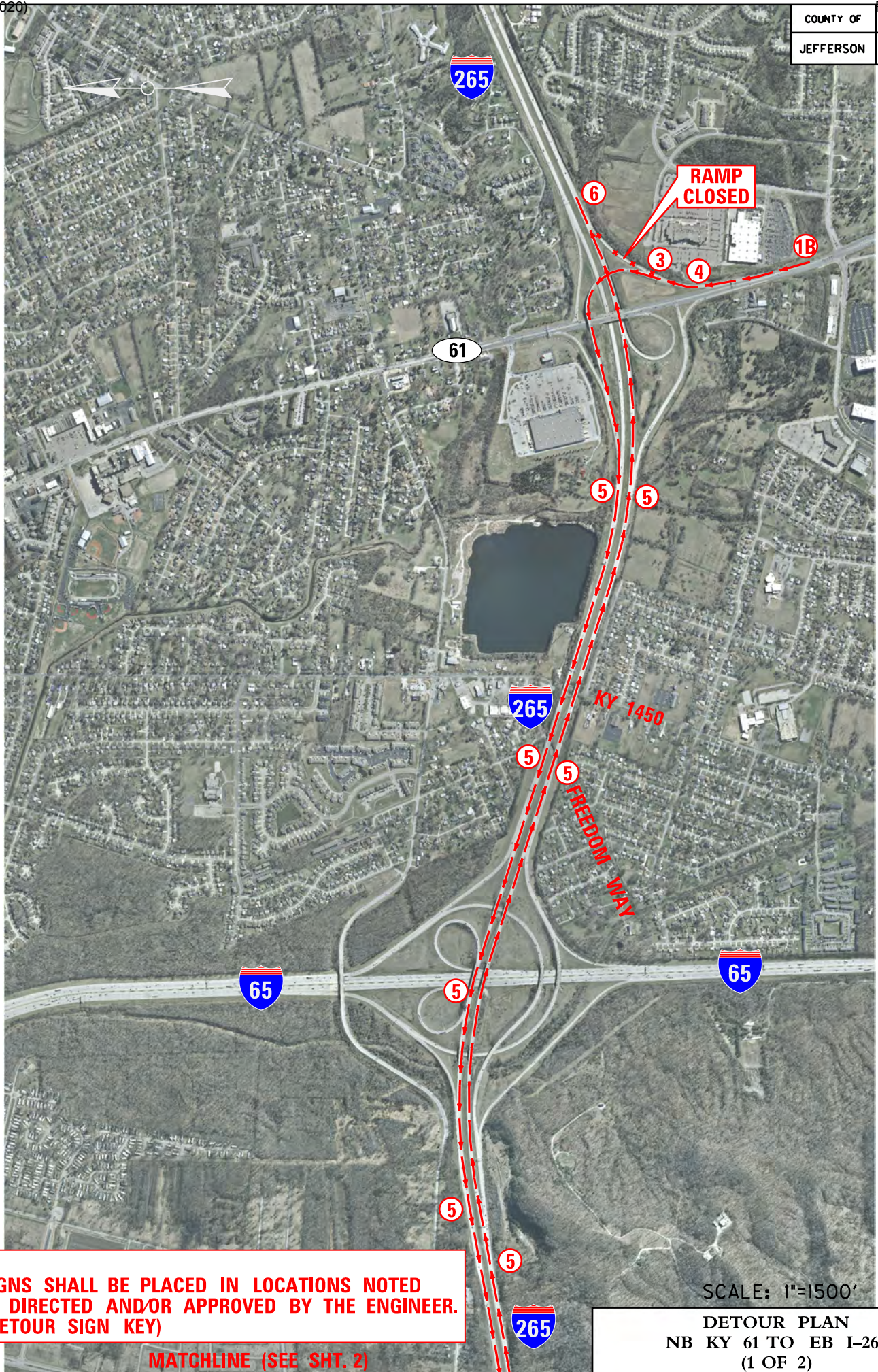


NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

SCALE: 1"=1500'

DETOUR PLAN
NB I-65 TO EB I-265

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

MATCHLINE (SEE SHT. 2)

SCALE: 1"=1500'

DETOUR PLAN
NB KY 61 TO EB I-265
(1 OF 2)

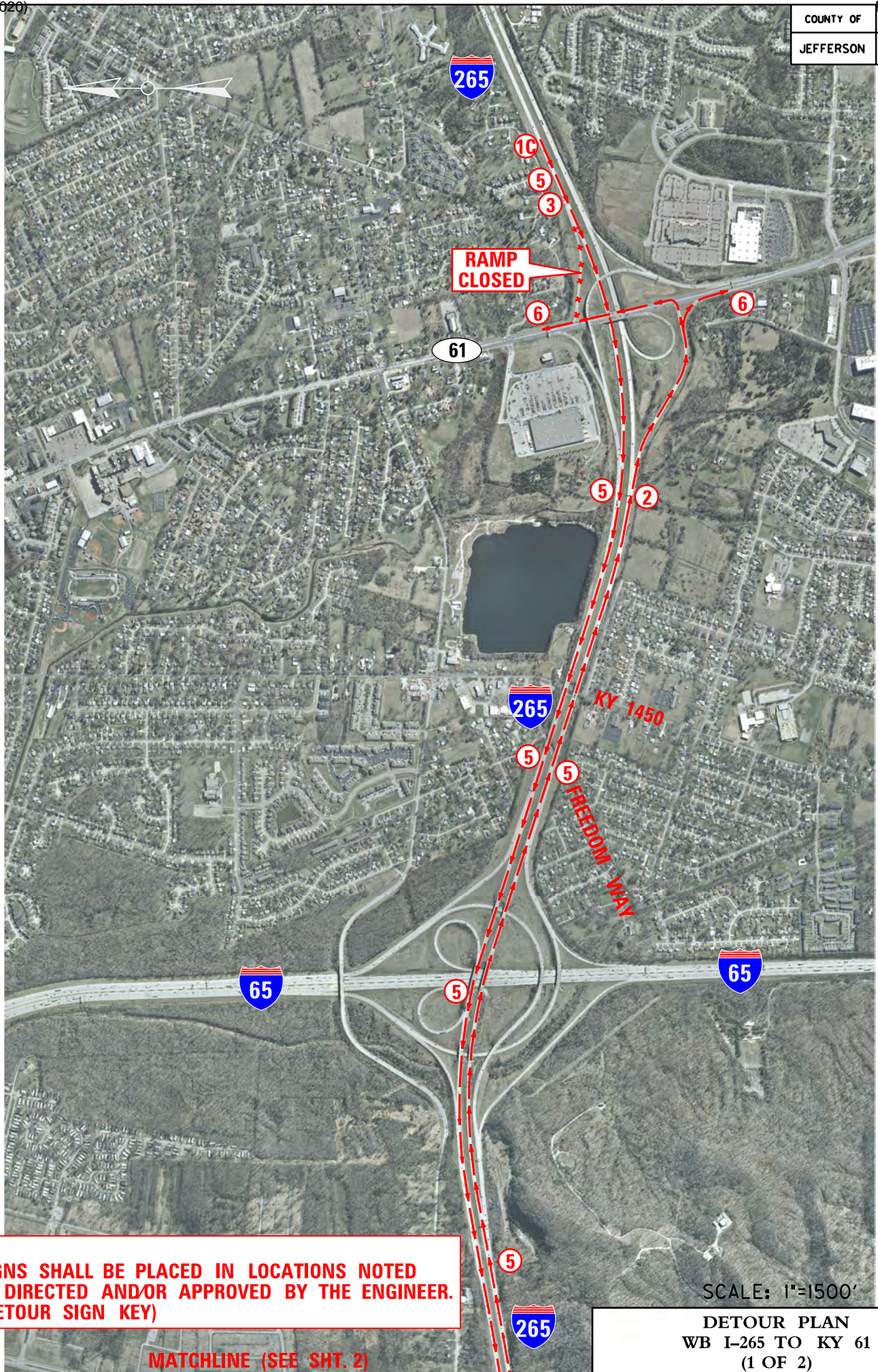


COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

SCALE: 1"=1500'
DETOUR PLAN
NB KY 61 TO EB I-265
(2 OF 2)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

MATCHLINE (SEE SHT. 2)

SCALE: 1"=1500'

DETOUR PLAN
WB I-265 TO KY 61
(1 OF 2)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

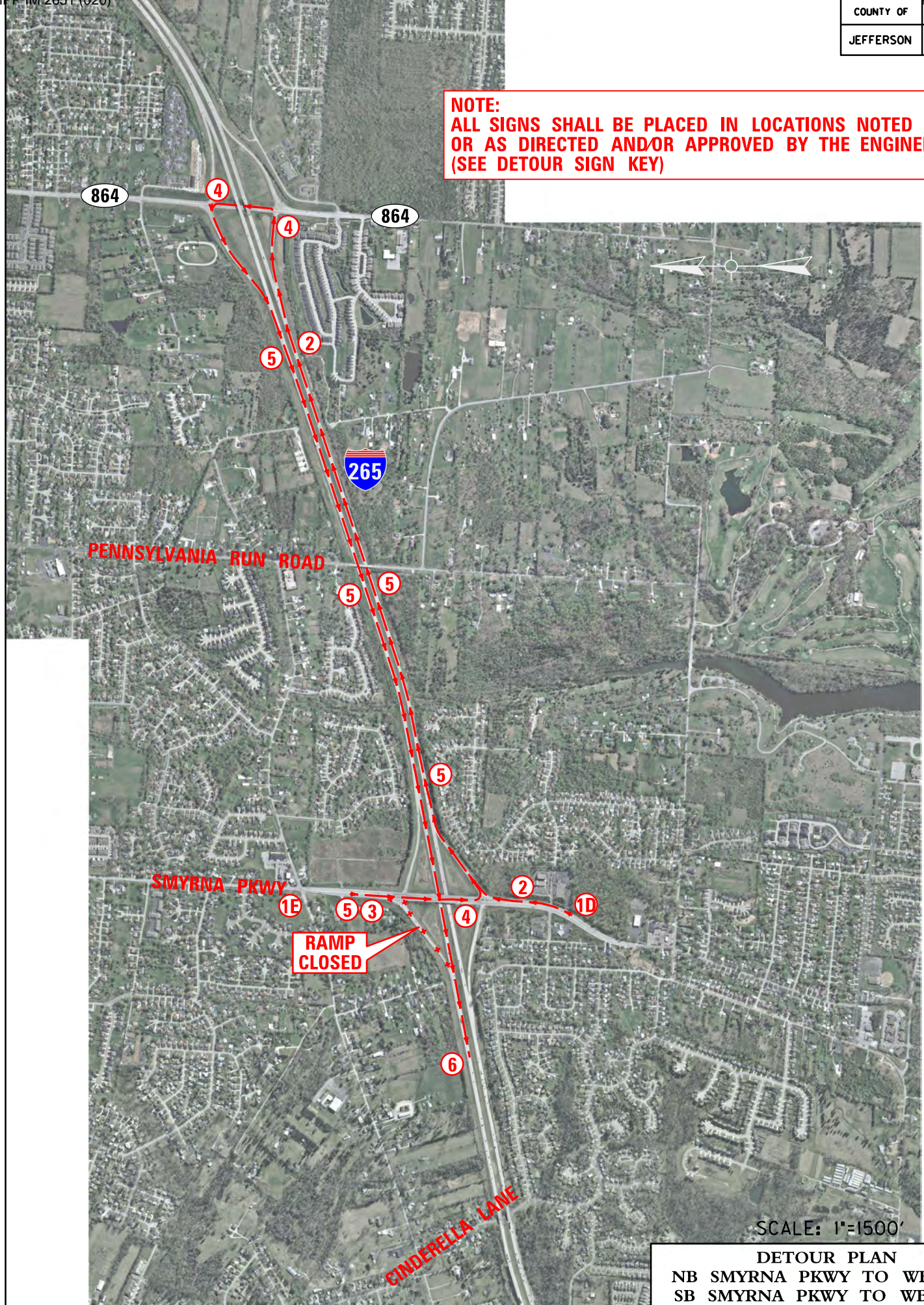


NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

SCALE: 1"=1500'
DETOUR PLAN
WB I-265 TO KY 61
(2 OF 2)

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

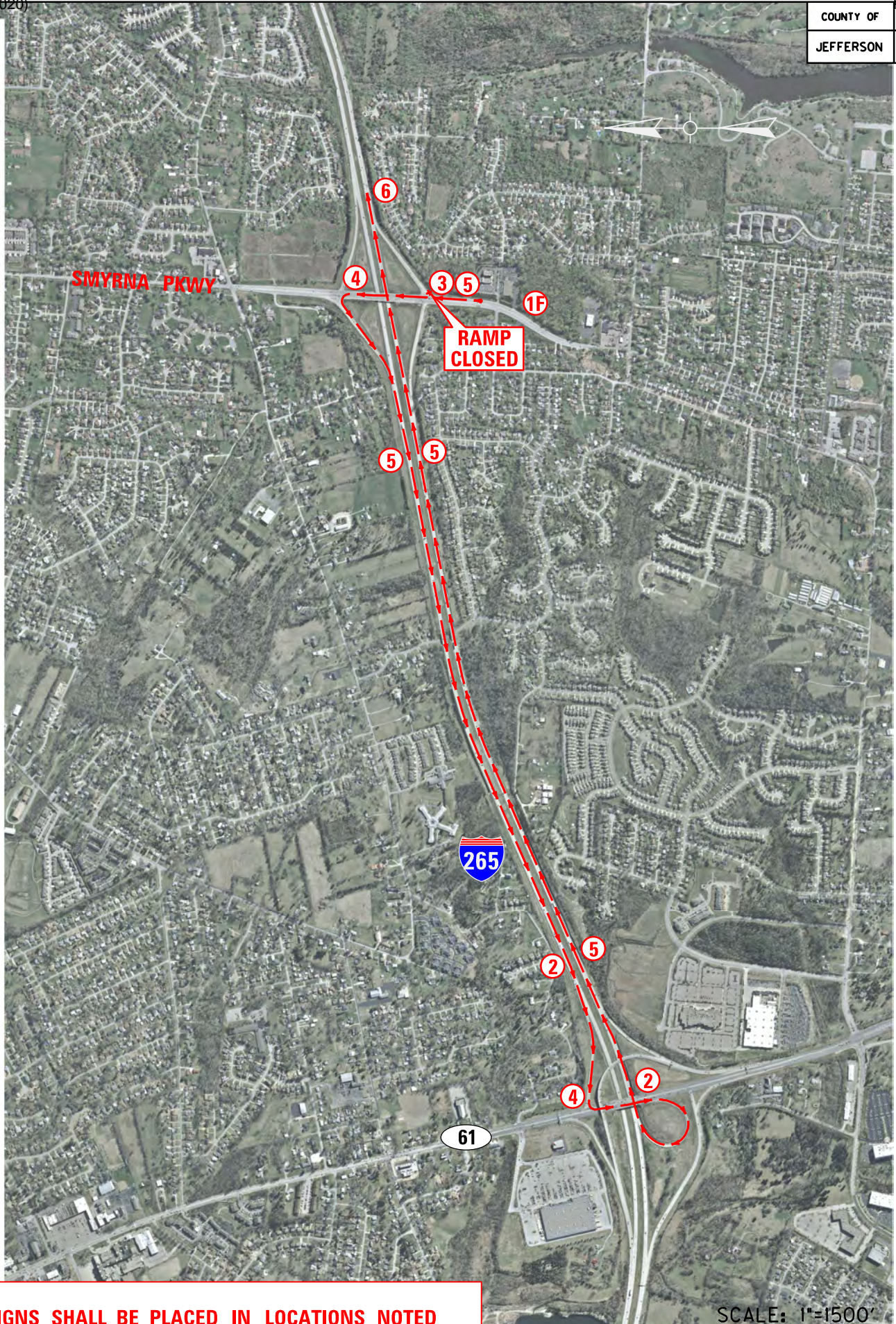
NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)



SCALE: 1"=1500'

DETOUR PLAN
 NB SMYRNA PKWY TO WB I-265
 SB SMYRNA PKWY TO WB I-265

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00

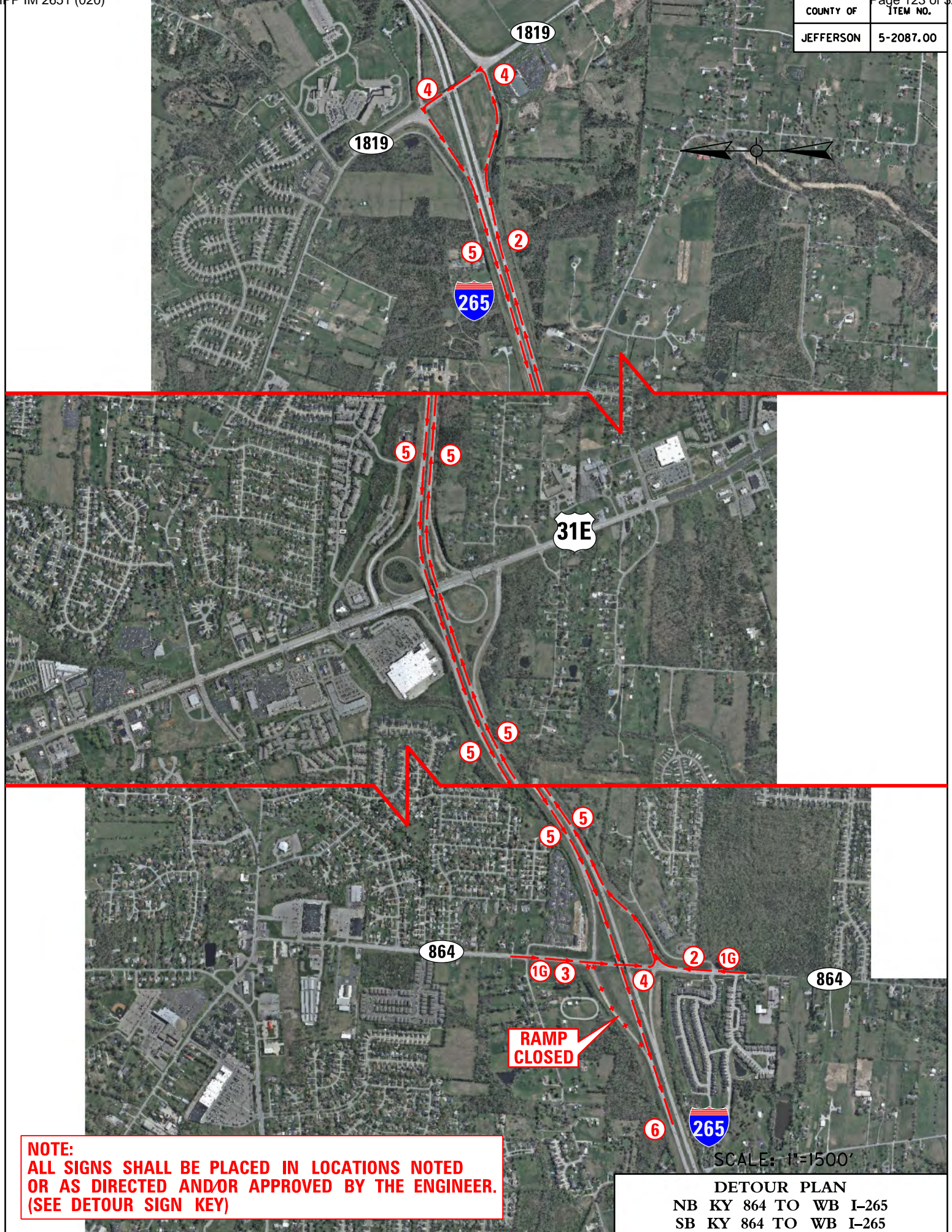


NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

SCALE: 1"=1500'

DETOUR PLAN
NB SMYRNA PKWY TO EB I-625

COUNTY OF	ITEM NO.
JEFFERSON	5-2087.00



NOTE:
ALL SIGNS SHALL BE PLACED IN LOCATIONS NOTED
OR AS DIRECTED AND/OR APPROVED BY THE ENGINEER.
(SEE DETOUR SIGN KEY)

SCALE: 1"=1500'
DETOUR PLAN
 NB KY 864 TO WB I-265
 SB KY 864 TO WB I-265

COUNTY OF	ITEM NO.	SHEET NO.
JEFFERSON	5-2087.00	

DETOUR SIGNS KEY

PORTABLE CHANGEABLE MESSAGE SIGNS

1A NB I-65
TO EB I-265
~~CLOSED~~
FOLLOW
DETOUR

1B NB KY-61 RAMP
TO EB I-265
~~CLOSED~~
FOLLOW
DETOUR

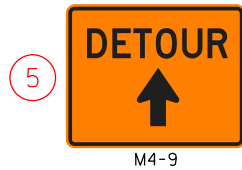
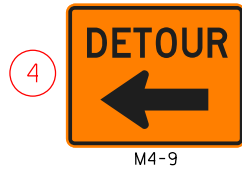
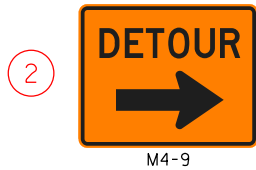
1C WB I-265 RAMP
TO KY-61
~~CLOSED~~
FOLLOW
DETOUR

1D NB SMYRNA PKWY RAMP
TO WB I-265
~~CLOSED~~
FOLLOW
DETOUR

1E SB SMYRNA PKWY RAMP
TO WB I-265
~~CLOSED~~
FOLLOW
DETOUR

1F NB SMYRNA PKWY RAMP
TO EB I-265
~~CLOSED~~
FOLLOW
DETOUR

1G KY-864 RAMP
TO WB I-265
~~CLOSED~~
FOLLOW
DETOUR



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), latest edition.
3. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

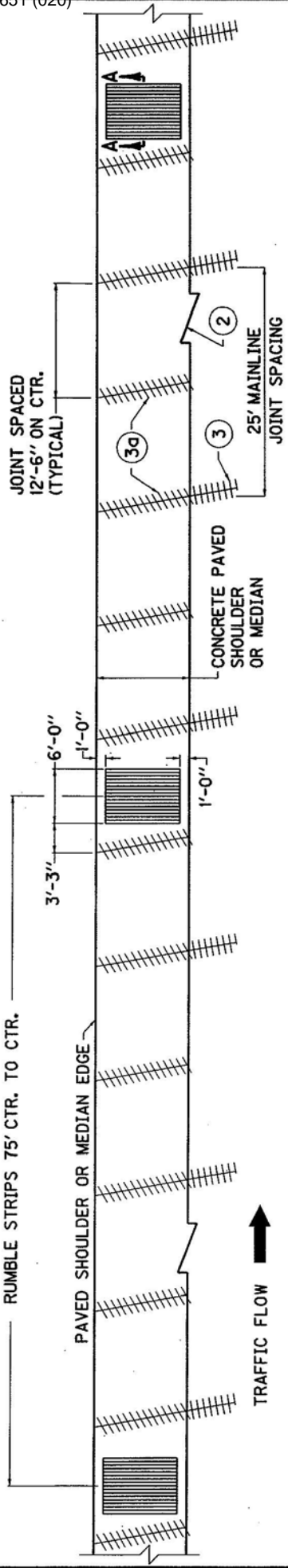
RBB-002	Guardrail and Bridge End Drainage For Twin Structures
RBB-003	Layout of Guardrail At Twin Structures-Depressed Median
RBC-002	Guardrail Connector to Bridge End Type A Components
RBC-003	Guardrail Connector to Bridge End Type A and A1 Components
RBC-005	Guardrail Connector to Bridge End Type A
RBC-006	Guardrail Connector to Bridge End Type A
RBI-001	Typical Guardrail Installations
RBI-002	Typical Guardrail Installations
RBI-003	Typical Installation for Guardrail End Treatment Type 2A
RBI-004	Installation of Guardrail End Treatment Type 1
RBI-006	Guardrail Installation at Sign Supports
RBM-020	Delineators for Concrete Barriers
RBR-001	Steel Beam Guardrail (“W” Beam)
RBR-005	Guardrail Components
RBR-015	Steel Guardrail Posts
RBR-020	Guardrail End Treatment Type 1
RBR-025	Guardrail End Treatment Type 2A
RBR-035	Guardrail End Treatment Type 4A
RBR-055	Delineators for Guardrail
RDB-005	Drop Box Inlet Type 5B
RDB-106	Grates for Sloped and Flared Box Inlet-Outlet
RDD-021	Flume Inlet Type 2
RDD-040	Channel Lining Class II and III
RDI-001	Culvert, Entrance & Storm Sewer Pipe Types & Cover Heights
RDI-002	Culvert, Entrance & Storm Sewer Pipe Types & Cover Heights
RDI-020	Pipe Bedding for Culverts, Entrance and Storm Sewer Pipe
RDI-021	Pipe Bedding for Culverts, Entrance and Storm Sewer Reinforced Concrete Pipe
RDI-025	Pipe Bedding, Trench Condition
RDI-026	Pipe Bedding Trench Condition Reinforced Conc. Pipe
RDI-040	Erosion Control Blanket Slope Installation
RDI-041	Erosion Control Blanket Channel Installation
RDX-050	Subgrade Drainage Concrete Pavement
RDX-060	Intermediate and End Anchors for Circular Pipe
RDX-160	Security Devices for Frames, Grates and Lids
RDX-210	Temporary Silt Fence

RDX-225	Silt Trap Type B
RGS-001	Curve Widening and Superelevation Transitions
RGS-002	Superelevation for Multilane Pavement
RGX-001	Miscellaneous Standards Part I
RGX-200	One Point Procter Family of Curves
RPM-100	Curb and Gutter, Curbs, and Valley Gutter
RPM-145	Rumble Strips Type 3
RPN-001*	Jointed Plain Concrete Pavement for Shoulders and Medians
RPN-010	Pavement Transitions & Joint Details for Jointed Plain Concrete Pavement at Bridge Ends
RPN-015*	Non-Reinforced Concrete Pavement
RPN-020	Concrete Pavement Joints Types and Spacing
RPS-010	Concrete Pavement Joint Details
RPS-020*	Expansion and Contraction Joint Load Transfer Assemblies
RPS-030*	Concrete Pavement Joints Types and Spacing
RPS-031	Concrete Pavement Joints Types and Spacing
RPS-035	Concrete Pavement Joints Types and Spacing
RPS-036	Concrete Pavement Joints Types and Spacing
RPS-037	Concrete Pavement Joints Types and Spacing
RPS-038	Concrete Pavement Joints Types and Spacing
RPS-039	Concrete Pavement Joints Types and Spacing
RPX-001	Station Markings Concrete Pavement
RPX-010	Preformed Compression Joint Seal for Concrete Pavement
RPX-015	Hot-Poured Elastic Joint Seals for Concrete Pavement
RPX-020	Silicone Rubber Seals for Concrete Pavement
TPM-105	Pavement Marker Arrangements Multi-Lane Roadways
TPM-125	Pavement Marker Arrangement Exit Gore and Off-Ramp
TPM-130	Pavement Marker Arrangement On-Ramp with Tapered Acceleration Lane
TPM-135	Pavement Marker Arrangement On-Ramp with Parallel Acceleration Lane
TPM-170	Flexible Delineator Post Arrangements for Horizontal Curves
TPM-171	Flexible Delineator Post Arrangements for Inter. Ramps and Crossovers
TTC-115	Lane Closure Multi-Lane Highway Case I
TTC-120	Lane Closure Multi-Lane Highway Case II
TTC-125	Double Lane Closure
TTC-135	Shoulder Closure
TTC-155	Temporary Pavement Marker Arrangements for Construction Zones
TTC-160	Temporary Pavement Marker Arrangements for Lane Closures
TTD-120	Double Fines Zone Signs
TTD-125	Pavement Condition Warning Signs
TTS-110	Mobile Operation for Paint Striping Case III
TTS-115	Mobile Operation for Paint Striping Case IV
TTS-120	Mobile Operation for Durable Striping Case I
TTS-125	Mobile Operation for Durable Striping Case II

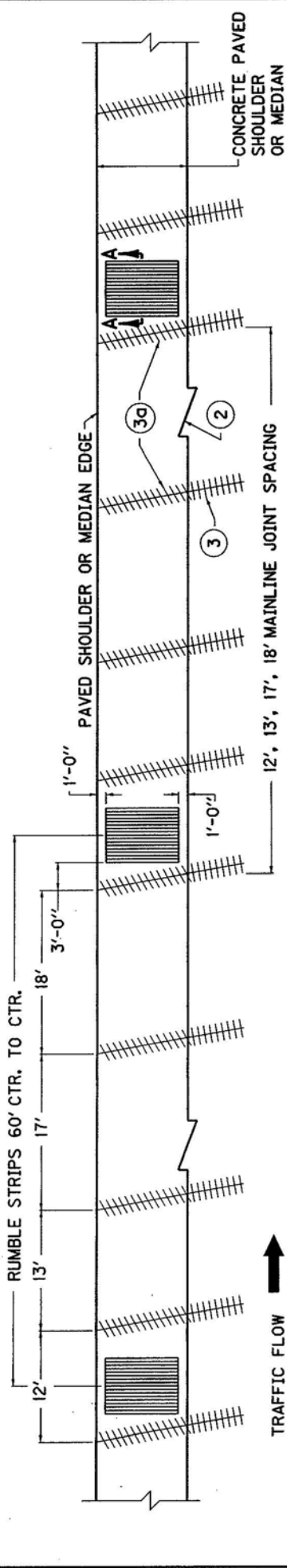
* - Older "Standard Drawings" showing skewed joints have been included for reference.

4. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2012 - Supplemental Specifications, as applicable:

Special Note 1I	Portable Changeable Message Signs (6/15/2012)
Special Note 11J	Full Depth Concrete Pavement Repair (6/15/2012)
Special Note	Typical Section Dimensions <i>attached</i>
Special Note	Removing Existing Pavement Markers on Portland Cement Pavement <i>attached</i>
Special Note	Before You Dig <i>attached</i>
Special Note	Guardrail Delivery Verification Sheet <i>attached</i>
Special Note	Fixed Completion Date and Liquidated Damages <i>attached</i>
Special Note	Sealing Existing Transverse and Longitudinal Joints and Random Cracks <i>attached</i>
Special Note	Shoulder Preparation and Restoration <i>attached</i> (See MOT Notes)
Special Note	Ride Quality Adjustment for Diamond Grinding <i>attached</i>
Special Note	Polymer Modified Partial Depth Patching <i>attached</i>
Special Note	Inlaid Pavement Markers <i>attached</i>
Special Note	Material, Installation, and Bid Item Notes for Permanent Traffic Data Acquisition Stations <i>attached</i>



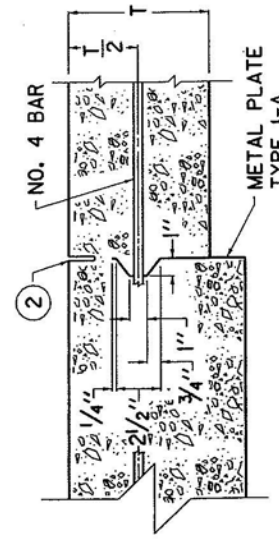
NON-REINFORCED CONCRETE PAVED SHOULDER OR MEDIAN WITH STANDARD REINFORCED CONCRETE MAINLINE



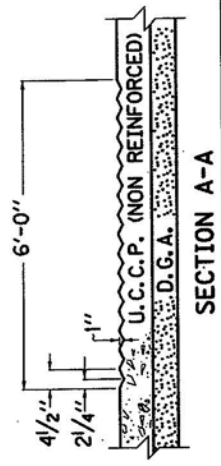
NON-REINFORCED CONCRETE PAVED SHOULDER OR MEDIAN WITH NON-REINFORCED CONCRETE MAINLINE

NOTES

1. THE COST OF CONSTRUCTING RUMBLE STRIPS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR NON-REINFORCED CONCRETE PAVEMENT.
2. (2) (3) SEE CUR. STD. DWG. RPS-010 FOR JOINT SYMBOLS AND DETAILS.
3. AFTER FINAL FINISHING OF THE PAVEMENT, CORRUGATIONS FOR RUMBLE STRIPS SHALL BE FORMED AT THE INTERVALS SHOWN INTO THE PLASTIC CONCRETE.
4. THE CORRUGATIONS SHALL BE ROUNDED RATHER THAN PEAKED, WITH THE TOP FLUSH WITH THE SHOULDER OR MEDIAN SLOPE.
5. THE TROUGH SHALL BE TAILOD OUT, SO AS TO PROVIDE POSITIVE DRAINAGE.



JOINT DETAIL

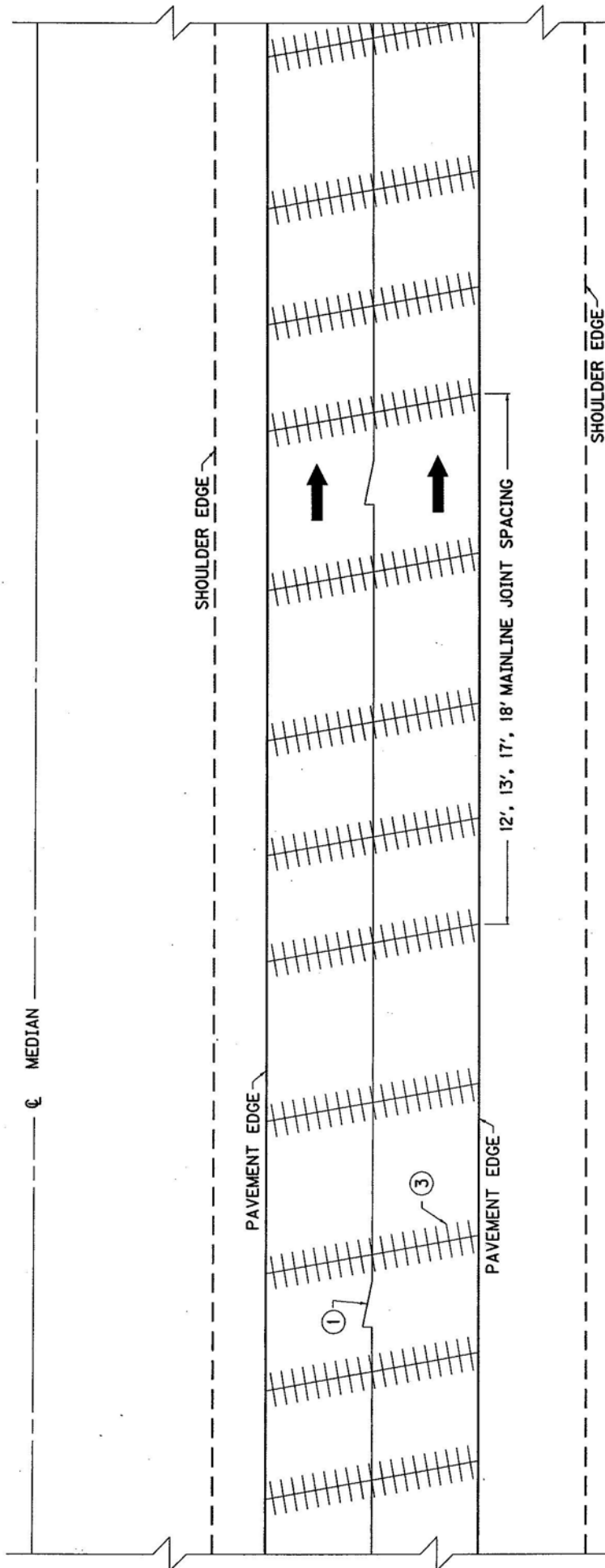


SECTION A-A

KENTUCKY
DEPARTMENT OF HIGHWAYS
NON-REINFORCED
CONCRETE PAVEMENT
FOR
SHOULDERS & MEDIANS
STANDARD DRAWING NO. RPN-001-04

SUBMITTED _____ DATE _____
APPROVED _____ DATE _____
DIRECTOR DIVISION OF DESIGN
STATE HIGHWAY ENGINEER

METAL PLATE FOR USE WITH CONCRETE SHOULDER PAVING CONSTRUCTED IN CONJUNCTION WITH MAINLINE PAVEMENT. IF OTHER ALTERNATES ARE USED, THE TIE-STEEL AND KEYWAY SHALL BE LOCATED IN ACCORDANCE WITH THIS DRAWING.



PLAN VIEW

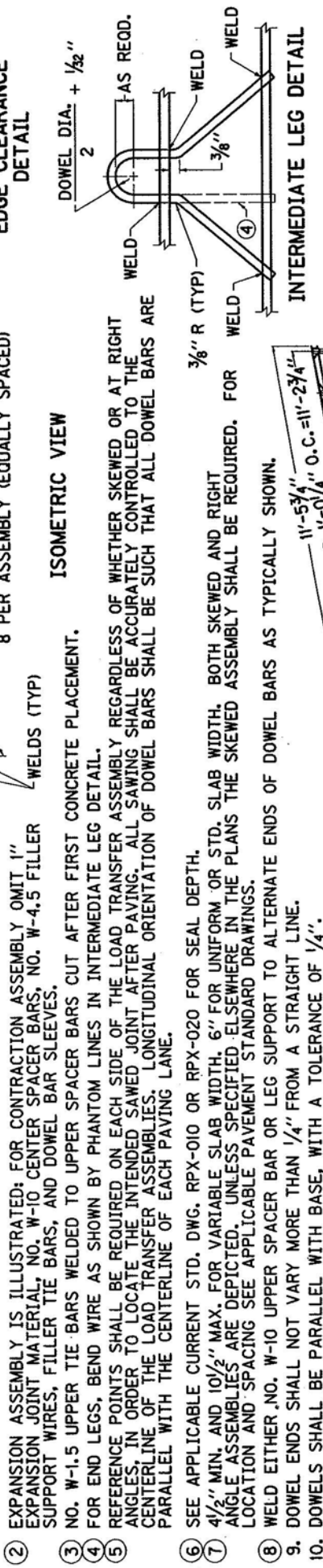
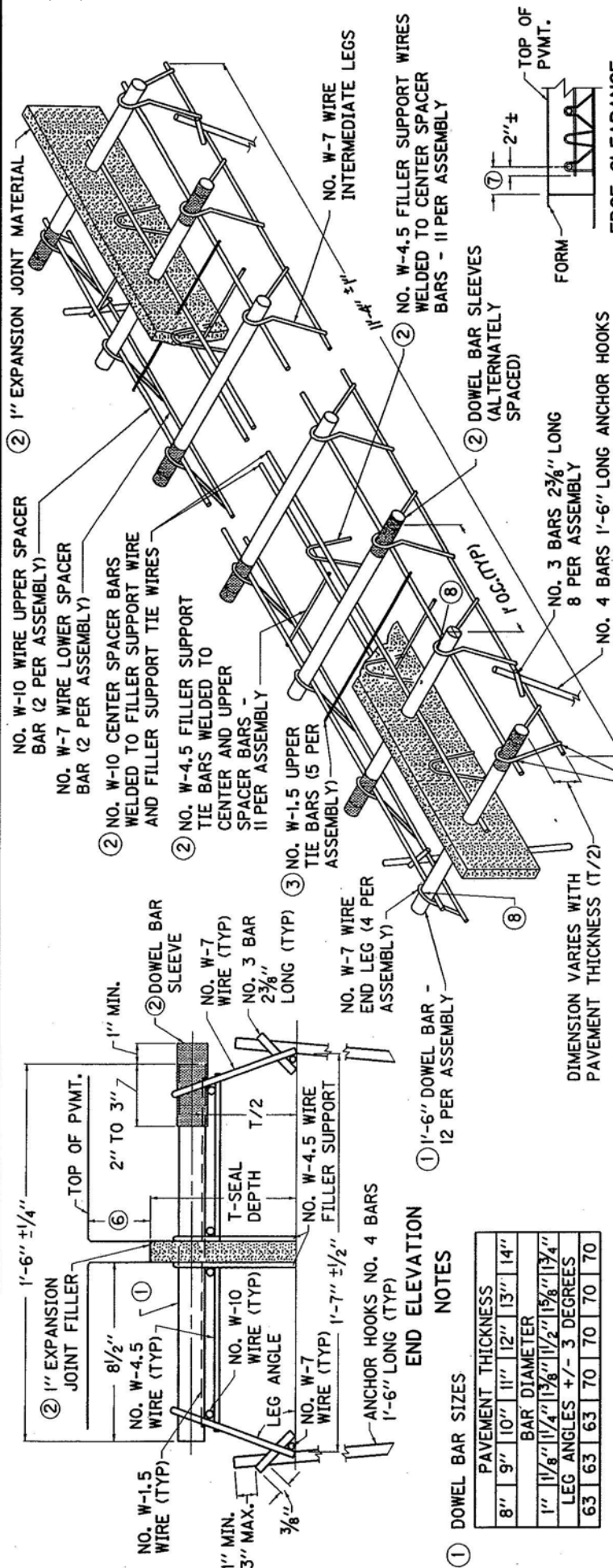
NOTES

JOINTS

TRANSVERSE CONTRACTION JOINTS SHALL BE SPACED AS FOLLOWS: 12', 13', 17', 18', AND SHALL BE SAWED TO A MINIMUM DEPTH OF ONE FOURTH OF THE PAVEMENT THICKNESS OR 1/4". ALL TRANSVERSE CONTRACTION AND TRANSVERSE EXPANSION JOINTS SHALL REQUIRE LOAD TRANSFER ASSEMBLIES AS DETAILED ON THE PLANS OR STANDARD DRAWINGS.
 JOINT SPACING AND TYPE, AT BRIDGE ENDS, SHALL BE REQUIRED AS SHOWN ON THE PLANS OR CURRENT STANDARD DRAWING RPS-010.
 TRANSVERSE CONTRACTION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 501.03.16, EXCEPT THEY SHALL BE NO CLOSER THAN 5'-0" TO ANY TRANSVERSE CONTRACTION JOINT OR EXPANSION JOINT.

- ① ③ SEE CURRENT STANDARD DRAWING RPS-010 FOR JOINT SYMBOLS AND DETAILS.
- THIS DRAWING DEPICTS JOINTS SKEWED TO THE CENTERLINE OF THE ROADWAY, HOWEVER JOINTS AT RIGHT ANGLES TO THE CENTERLINE SHALL BE SPACED IN THE SAME MANNER.

KENTUCKY DEPARTMENT OF HIGHWAYS	
NON-REINFORCED CONCRETE PAVEMENT	
STANDARD DRAWING NO. RPN-015-03	
SUBMITTED _____ DATE _____	APPROVED _____ DATE _____
DIRECTOR DIVISION OF DESIGN	STATE HIGHWAY DIVISION



KENTUCKY
DEPARTMENT OF HIGHWAYS
EXPANSION AND CONTRACTION JOINT LOAD TRANSFER ASSEMBLIES
STANDARD DRAWING NO. RPS-020-11

SUBMITTED: _____ DATE _____
APPROVED: _____ STATE HIGHWAY NUMBER _____ DATE _____

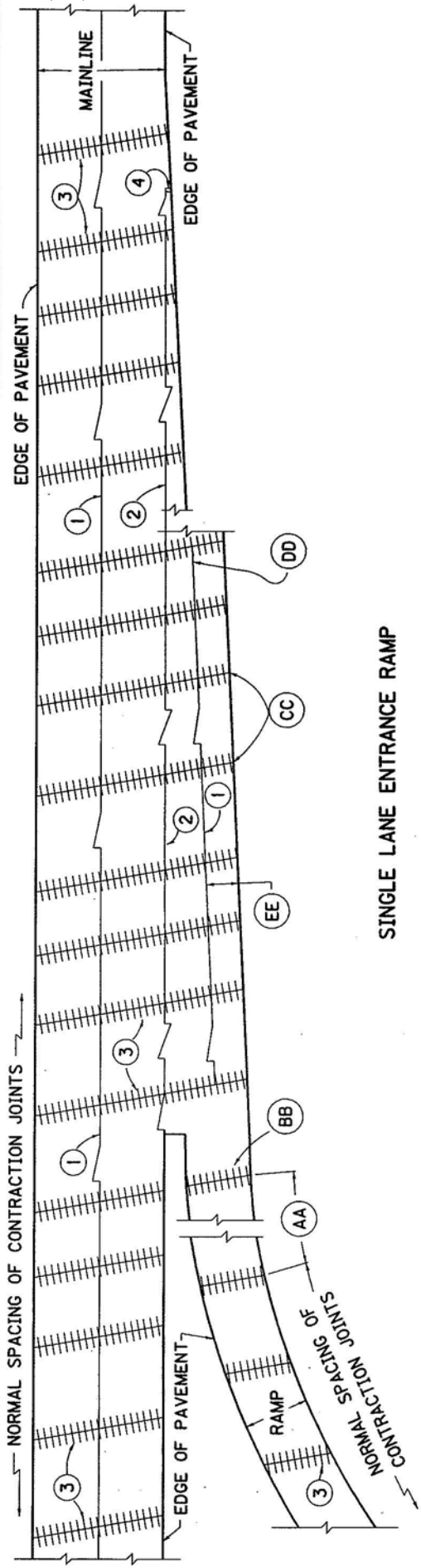
NOTES

DOWEL BAR SIZES	
PAVEMENT THICKNESS	BAR DIAMETER
8"	9"
10"	11"
12"	13"
14"	14"
LEG ANGLES +/- 3 DEGREES	
63	63
63	63
63	63
70	70
70	70
70	70

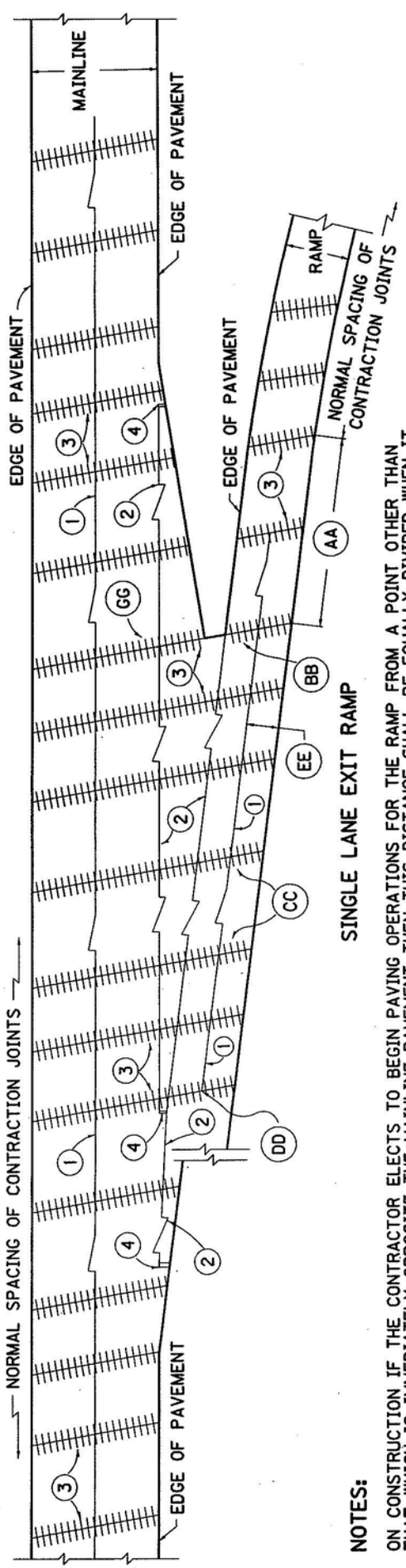
- EXPANSION ASSEMBLY IS ILLUSTRATED; FOR CONTRACTION ASSEMBLY OMIT 1" EXPANSION JOINT MATERIAL, NO. W-10 CENTER SPACER BARS, NO. W-4.5 FILLER SUPPORT WIRES, FILLER TIE BARS, AND DOWEL BAR SLEEVES.
- NO. W-1.5 UPPER TIE BARS WELDED TO UPPER SPACER BARS CUT AFTER FIRST CONCRETE PLACEMENT.
- FOR END LEGS, BEND WIRE AS SHOWN BY PHANTOM LINES IN INTERMEDIATE LEG DETAIL.
- REFERENCE POINTS SHALL BE REQUIRED ON EACH SIDE OF THE LOAD TRANSFER ASSEMBLY REGARDLESS OF WHETHER SKEWED OR AT RIGHT ANGLES. IN ORDER TO LOCATE THE INTENDED SAWED JOINT AFTER PAVING, ALL SAWING SHALL BE ACCURATELY CONTROLLED TO THE CENTERLINE OF THE LOAD TRANSFER ASSEMBLIES. LONGITUDINAL ORIENTATION OF DOWEL BARS SHALL BE SUCH THAT ALL DOWEL BARS ARE PARALLEL WITH THE CENTERLINE OF EACH PAVING LANE.
- SEE APPLICABLE CURRENT STD. DWG. RPX-010 OR RPX-020 FOR SEAL DEPTH.
- 4 1/2" MIN. AND 10 1/2" MAX. FOR VARIABLE SLAB WIDTH. 6" FOR UNIFORM OR STD. SLAB WIDTH. BOTH SKEWED AND RIGHT ANGLE ASSEMBLIES ARE DEPICTED. UNLESS SPECIFIED ELSEWHERE IN THE PLANS THE SKEWED ASSEMBLY SHALL BE REQUIRED. FOR WELD LOCATION AND SPACING SEE APPLICABLE PAVEMENT STANDARD DRAWINGS.
- WELD EITHER NO. W-10 UPPER SPACER BAR OR LEG SUPPORT TO ALTERNATE ENDS OF DOWEL BARS AS TYPICALLY SHOWN.
- DOWEL ENDS SHALL NOT VARY MORE THAN 1/4" FROM A STRAIGHT LINE.
- DOWELS SHALL BE PARALLEL WITH BASE, WITH A TOLERANCE OF 1/4".
- EPOXY SHALL BE CLEANED OFF TO BARE METAL BEFORE WELDING DOWEL TO WIRE.

(SKEWED IN DIRECTION OF TRAFFIC)
SKEWED PVMT. JT. PLACEMENT

PLAN VIEW (SKEWED DETAIL)



SINGLE LANE ENTRANCE RAMP



SINGLE LANE EXIT RAMP

NOTES:

- AA ON CONSTRUCTION IF THE CONTRACTOR ELECTS TO BEGIN PAVING OPERATIONS FOR THE RAMP FROM A POINT OTHER THAN THAT WHICH IS IMMEDIATELY OPPOSITE THE MAINLINE PAVEMENT THEN THIS DISTANCE SHALL BE EQUALLY DIVIDED WHEN IT BECOMES GREATER THAN 20 FEET AND LESS THAN 40 FEET.
- BB THIS CONTRACTION JOINT IN THE RAMP SHALL ALWAYS BE OPPOSITE THE CONTRACTION JOINT IN THE MAINLINE PAVEMENT.
- CC ALL CONTRACTION JOINTS IN THE RAMP IMMEDIATELY OPPOSITE THE MAINLINE PAVEMENT SHALL BE A CONTINUATION OF THE JOINTS IN THE MAINLINE PAVEMENT.
- DD LONGITUDINAL SAWED JOINT SHALL END AT THE NEAREST CONTRACTION JOINT, WHERE THE OVERALL WIDTH OF THE RAMP IS A MAXIMUM OF 16 FEET.
- EE THIS DISTANCE SHALL BE EQUAL TO 1/2 THE NORMAL RAMP SECTION.
- FF. LONGITUDINAL SAWED JOINTS AT CENTERLINE SHALL BE REQUIRED FOR ALL RAMP AND LOOP WIDTHS GREATER THAN 16 FEET.
- GG THIS CONTRACTION JOINT SHALL ALWAYS BE PLACED OPPOSITE THE NOSE OF THE RAMP. THE TWO CONTRACTION JOINTS IMMEDIATELY PRECEDING THIS JOINT, DEPENDING ON THE DIRECTION OF PAVING OPERATIONS, SHALL BE EQUALLY DIVIDED, PROVIDED THE SPACING DOES NOT EXCEED THE NORMAL SPACING. SHOULD SPACING BE GREATER THAN NORMAL, AN EXTRA JOINT SHALL BE ADDED AND THE DISTANCE EQUALLY DIVIDED. THE JOINT IMMEDIATELY FOLLOWING THE JOINT THAT IS PLACED OPPOSITE THE RAMP NOSE SHALL BE NORMALLY SPACED.
- HH. SEE CURRENT STANDARD DRAWING RPS-010 FOR JOINT SYMBOLS AND DETAILS.
- II. NORMAL SPACING OF CONTRACTION JOINTS INDICATED ON THIS DRAWING ARE TO BE IN ACCORDANCE WITH SPACING INDICATED ON CURRENT STANDARD DRAWING RPN-015.

KENTUCKY DEPARTMENT OF HIGHWAYS	
CONCRETE PAVEMENT JOINTS TYPES AND SPACING	
STANDARD DRAWING NO. RPS-030-04	
SUBMITTED _____ DATE _____	DIRECTOR DIVISION OF DESIGN _____ DATE _____
APPROVED _____	STATE WORKS DIRECTOR _____ DATE _____

**SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS
I-265**

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.

**SPECIAL NOTE FOR REMOVING EXISTING PAVEMENT MARKERS
ON PORTLAND CEMENT PAVEMENT
I-265**

Before diamond grinding, sawcut around and remove existing Type V snow plowable raised pavement markers (iron castings). Patch the hole with Partial Depth Repair Material listed in the Special Note for Polymer Modified Partial Depth Patching. This material can be diamond ground unless otherwise noted by the manufacturer.

Removal of Type V markers will be paid at the contract unit price each, which shall be full compensation for removing the markers and disposing of the castings and any debris. The bid quantity is estimated by dividing the length of each run of markers by their average spacing (80'), plus one. Actual quantities removed will be verified by the Engineer. Partial Depth Repair Material to repair the resulting recess will be incidental to the pay item "Remove Pavement Marker Type V".

SPECIAL NOTE FOR BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.



KENTUCKY TRANSPORTATION CABINET
Department of Highways
DIVISION OF CONSTRUCTION

TC 63-72
Rev. 08/2015
Page 1 of 1

GUARDRAIL DELIVERY VERIFICATION SHEET

SECTION 1: CONTRACT INFORMATION

CONTRACT ID	CONTRACTOR
SECTION ENGINEER	DISTRICT & COUNTY

SECTION 2: GUARDRAIL DESCRIPTIONS & QUANTITIES

DESCRIPTION	UNIT	QTY. LEAVING PROJECT	QTY. RECEIVED @ BB YARD
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 maintenance facility	LF		
Damaged posts to maintenance facility	EACH		

SECTION 3: REQUIRED SIGNATURES PART 1 *(required before leaving project site)*

SECTION ENGINEER'S REPRESENTATIVE NAME <i>((Print.))</i>	
SECTION ENGINEER'S REPRESENTATIVE SIGNATURE	DATE
CONTRACTOR'S REPRESENTATIVE NAME <i>(Print.)</i>	
CONTRACTOR'S REPRESENTATIVE SIGNATURE	DATE

SECTION 4: REQUIRED SIGNATURES PART 2 *(required after arrival at Bailey Bridge Yard)*

Note: All material on the truck must be counted & the quantity received column completed before signatures.

BAILEY BRIDGE YARD REPRESENTATIVE NAME <i>(Print.)</i>	
BAILEY BRIDGE YARD REPRESENTATIVE SIGNATURE	DATE
CONTRACTOR'S REPRESENTATIVE NAME <i>(Print.)</i>	
CONTRACTOR'S REPRESENTATIVE SIGNATURE	DATE

Note: 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.

Completed form submitted to Section Engineer by	DATE
---	------

**Special Note for Fixed Completion Date and
Liquidated Damages
I-265
Jefferson County
Item No. 5-2087.00**

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day will be assessed for each day or fraction thereof work remains uncompleted beyond the Specified Project Completion Date. This project has a Fixed Project Completion Date of **July 31, 2018**.

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

Mainline & Ramps:	\$10,000 for the first hour or fraction thereof
	\$30,000 for any additional hour or fraction thereof

These hourly disincentives will still be in effect after the Fixed Completion Date and will be charged in addition to the \$5,000 per calendar day if warranted. The Contractor is expected to make every effort to complete the work in order to open the mainline lane closure within a specified timeframe.

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 SEALING EXISTING TRANSVERSE AND LONGITUDINAL JOINTS AND RANDOM CRACKS

Sealing Existing Transverse and Longitudinal Joints

The contractor shall clean and seal the existing transverse and longitudinal joints where indicated in the plans or proposal or as marked by the Engineer. Old sealant and incompressible material shall be completely removed from the joint to the minimum width and depth of the new reservoir with a diamond saw blade. The removed sealant shall become the property of the Contractor and be removed from the jobsite.

Removal of the old sealant for the entire depth of the joint is not required if the depth of the new reservoir is less than the depth of the existing joint.

Reseal with Hot-Poured Elastic

The existing joint width should not be increased more than 1/8 inch or to the dimensions shown in Standard Drawing RPX-015-04. The hot-poured elastic sealant should be placed in the existing joint to a depth of T/3 or 4", whichever is less.

For all joint reseals, the cracks shall be blown clean with dry, oil-free compressed air immediately prior to sealing. The joints shall be completely dry before the sealing installation may begin. Immediately following air blowing, the sealant material shall be installed in conformance to the manufacturer's recommendations and in accordance with the Standard Drawings and Specifications.

The top surface of the sealant shall be at least 1/4-inch below the surface of the pavement and the shape should be in accordance with the standard drawings. All joints should have beveled edges reestablished according to the standard drawing(s) prior to seal replacement.

Sealing Existing Concrete Random Cracks

The Contractor shall route, clean and seal existing concrete random cracks where indicated in the plans or proposal or where directed by the Engineer. Cracks smaller than 5/16-inch in width shall be routed to 5/16-inch wide by 1-inch deep prior to placing the sealant. Cracks over 5/16-inch in width shall be cleaned and sealed.

All incompressible material shall be completely removed from the existing random crack to a depth of 3/4-inch. Immediately prior to sealing, the cracks shall be blown clean with dry, oil-free compressed air.

The top surface of the sealant shall be at least 1/4-inch below the surface of the pavement.

**Special Note for Diamond Grinding Ride Quality
Jefferson County – I-265
Item No. 5-2087.00**

Conform to the Standard Specifications for Road and Bridge Construction, current edition, Section 501 **Category B** ride quality requirements, except:

- Perform corrective work to achieve the required IRI by regrinding the entire width of the traffic lane at areas having a high IRI.
- The Engineer may exclude pavement areas where grinding alone will not correct the deficiency.

Existing IRIs are provided with this note for informational purposes only.

I-265 IRI NB Lane 1 from July 2017. For Information Only

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
10.295	10.380	449	156
10.425	10.525	528	108
10.525	10.625	528	75
10.625	10.725	528	97
10.725	10.745	106	230
10.770	10.870	528	175
10.870	10.885	80	159
10.925	11.025	528	225
11.025	11.125	528	123
11.125	11.225	528	119
11.225	11.325	528	85
11.325	11.425	528	147
11.425	11.525	528	119
11.525	11.625	528	59
11.625	11.725	528	67
11.725	11.825	528	69
11.825	11.925	528	37
11.925	12.025	528	48
12.025	12.125	528	46
12.125	12.225	528	48
12.225	12.325	528	43
12.325	12.425	528	110
12.425	12.525	528	46
12.525	12.625	528	41
12.625	12.725	528	80
12.725	12.796	373	248
12.836	12.936	528	102
12.936	13.036	528	44

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
13.036	13.136	528	48
13.136	13.236	528	41
13.236	13.336	528	54
13.336	13.436	528	46
13.436	13.536	528	51
13.536	13.636	528	49
13.636	13.736	528	66
13.736	13.836	528	82
13.836	13.936	528	110
13.936	14.036	528	81
14.036	14.136	528	76
14.136	14.236	528	131
14.236	14.336	528	109
14.336	14.436	528	251
14.436	14.536	528	112
14.536	14.636	528	73
14.636	14.736	528	73
14.736	14.836	528	122
14.836	14.936	528	89
14.936	15.036	528	66
15.036	15.136	528	58
15.136	15.162	137	99
15.202	15.302	528	113
15.302	15.402	528	68
15.402	15.502	528	65
15.502	15.602	528	95
15.602	15.702	528	102
15.702	15.755	278	81

I-265 IRI NB Lane 2 from July 2017. For Information Only

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
10.295	10.380	449	159
10.430	10.530	528	92
10.530	10.630	528	73
10.630	10.730	528	71
10.730	10.750	106	168
10.780	10.880	528	90
10.880	10.890	53	166
10.935	11.035	528	60
11.035	11.135	528	55
11.135	11.235	528	92
11.235	11.335	528	47
11.335	11.435	528	40
11.435	11.535	528	53
11.535	11.635	528	39
11.635	11.735	528	46
11.735	11.835	528	43
11.835	11.935	528	42
11.935	12.035	528	41
12.035	12.135	528	43
12.135	12.235	528	41
12.235	12.335	528	38
12.335	12.435	528	45
12.435	12.535	528	46
12.535	12.635	528	46
12.635	12.735	528	44
12.735	12.796	320	67
12.841	12.941	528	66
12.941	13.041	528	44

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
13.041	13.141	528	48
13.141	13.241	528	46
13.241	13.341	528	55
13.341	13.441	528	53
13.441	13.541	528	77
13.541	13.641	528	54
13.641	13.741	528	52
13.741	13.841	528	54
13.841	13.941	528	59
13.941	14.041	528	51
14.041	14.141	528	56
14.141	14.241	528	59
14.241	14.341	528	63
14.341	14.441	528	63
14.441	14.541	528	71
14.541	14.641	528	72
14.641	14.741	528	60
14.741	14.841	528	56
14.841	14.941	528	60
14.941	15.041	528	63
15.041	15.141	528	70
15.141	15.167	137	90
15.217	15.317	528	74
15.317	15.417	528	67
15.417	15.517	528	60
15.517	15.617	528	59
15.617	15.717	528	79
15.717	15.739	117	78

I-265 IRI SB Lane 1 from July 2017. For Information Only

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
15.360	15.260	528	73
15.260	15.200	318	103
15.155	15.055	528	88
15.055	14.955	528	80
14.955	14.855	528	78
14.855	14.755	528	84
14.755	14.655	528	93
14.655	14.555	528	90
14.555	14.455	528	80
14.455	14.355	528	100
14.355	14.255	528	197
14.255	14.155	528	78
14.155	14.055	528	91
14.055	13.955	528	102
13.955	13.855	528	77
13.855	13.755	528	95
13.755	13.655	528	49
13.655	13.555	528	41
13.555	13.455	528	49
13.455	13.355	528	83
13.355	13.255	528	55
13.255	13.155	528	42
13.155	13.055	528	70
13.055	12.955	528	42

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
12.669	12.569	528	40
12.569	12.469	528	36
12.469	12.369	528	44
12.369	12.269	528	52
12.269	12.169	528	44
12.169	12.069	528	51
12.069	11.969	528	48
11.969	11.869	528	57
11.869	11.769	528	42
11.769	11.669	528	62
11.669	11.569	528	42
11.569	11.469	528	38
11.469	11.369	528	93
11.369	11.269	528	108
11.269	11.169	528	146
11.169	11.069	528	125
11.069	10.969	528	160
10.969	10.928	215	115
10.878	10.798	423	142
10.763	10.663	528	163
10.663	10.563	528	175
10.563	10.463	528	238
10.463	10.423	212	221
10.373	10.283	476	206

I-265 IRI SB Lane 2 from July 2017. For Information Only

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
15.660	15.560	528	57
15.560	15.460	528	48
15.460	15.360	528	49
15.360	15.260	528	53
15.260	15.195	344	75
15.150	15.050	528	72
15.050	14.950	528	66
14.950	14.850	528	58
14.850	14.750	528	51
14.750	14.650	528	58
14.650	14.550	528	62
14.550	14.450	528	56
14.450	14.350	528	61
14.350	14.250	528	54
14.250	14.150	528	55
14.150	14.050	528	58
14.050	13.950	528	55
13.950	13.850	528	56
13.850	13.750	528	72
13.750	13.650	528	46
13.650	13.550	528	45
13.550	13.450	528	48
13.450	13.350	528	48
13.350	13.250	528	44
13.250	13.150	528	48
13.150	13.050	528	46
13.050	12.950	528	37

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Before Grinding MRI (in/mi)
12.950	12.850	528	37
12.850	12.814	190	62
12.769	12.669	528	43
12.669	12.569	528	36
12.569	12.469	528	35
12.469	12.369	528	55
12.369	12.269	528	37
12.269	12.169	528	36
12.169	12.069	528	33
12.069	11.969	528	37
11.969	11.869	528	47
11.869	11.769	528	40
11.769	11.669	528	42
11.669	11.569	528	37
11.569	11.469	528	34
11.469	11.369	528	43
11.369	11.269	528	42
11.269	11.169	528	46
11.169	11.069	528	45
11.069	10.969	528	41
10.969	10.928	215	52
10.878	10.793	449	94
10.758	10.658	528	61
10.658	10.558	528	52
10.558	10.458	528	81
10.458	10.423	185	80
10.373	10.283	476	99

July 2016

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).

July 2016

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.

SPECIAL NOTE FOR INLAID PAVEMENT MARKERS

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.

SPECIFICATIONS FOR HOUSING AND REFLECTOR	
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.

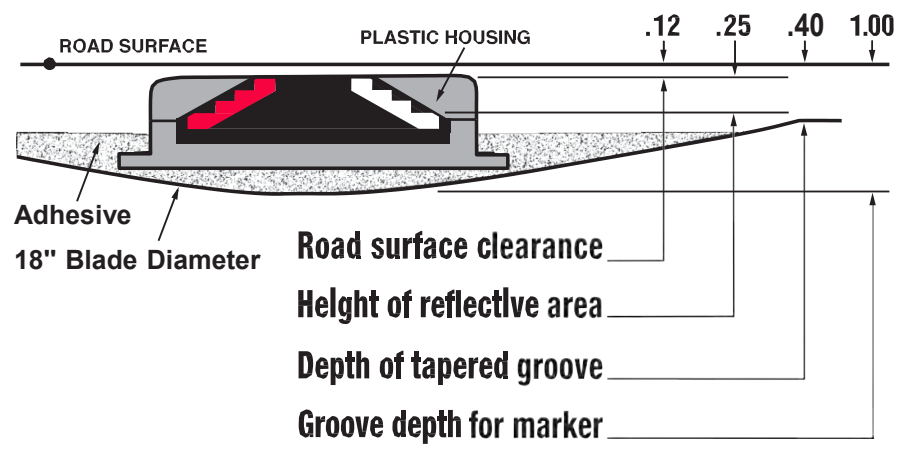
III. CONSTRUCTION

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.

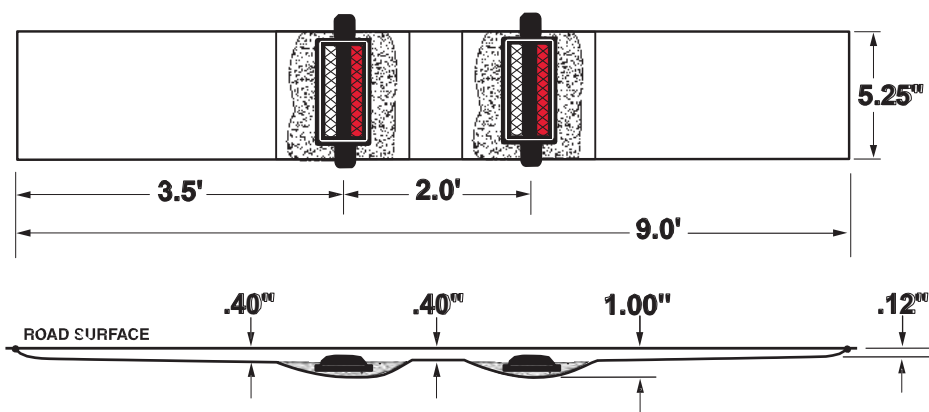
C. Installation. Install IPMs in recessed grooves cut into the final course of asphalt pavement according to the manufacturer's recommendations. Do not cut the grooves until the pavement has cured sufficiently to prevent tearing or raveling. Cut installation grooves using diamond blades on saws that 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 asphalt 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 PAVEMENT MARKER” shall be measured as each. One (1) installation of “INLAID PAVEMENT MARKER” will consist of grooving the pavement, removing asphalt 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.

MATERIAL, INSTALLATION, AND BID ITEM NOTES FOR PERMANENT TRAFFIC DATA ACQUISITION STATIONS

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/m³; 6 lbs/ft³
- 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 2¹/₈ 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 ± 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 a minimum of 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 $\pm 20\%$ 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' - 3'
Pad Mount Cabinet (332)	6' - 8'
Pole Mount Cabinet (336)	3' - 4'
Junction Box Type 10x8x4	2' - 3'
Junction Box Type A, B, or C	2' - 3'

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.

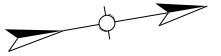
4.18. Wood Post

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.

**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	200
4795	CONDUIT 2 INCH	LIN FT	20
4811	ELECTRICAL JUNCTION BOX TYPE B	EACH	4
4820	TRENCHING AND BACKFILLING	LIN FT	190
4821	OPEN CUT ROADWAY	LIN FT	
4829	PIEZOELECTRIC SENSOR	EACH	14
4830	LOOP WIRE	LIN FT	6250
4850	CABLE NO. 14/1 PAIR	LIN FT	
4871	POLE – 35’ WOODEN	EACH	
4895	LOOP SAW SLOT AND FILL	LIN FT	1280
4899	ELECTRICAL SERVICE	EACH	
20213EC	INSTALL PAD MOUNT ENCLOSURE	EACH	
20359NN	GALVANIZED STEEL CABINET	EACH	2
20360ES818	WOOD POST	EACH	8
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	EACH	2
20392NS835	ELECTRICAL JUNCTION BOX TYPE C	EACH	
20468EC	ELECTRICAL JUNCTION BOX 10x8x4	EACH	2
21543EN	BORE AND JACK PIPE – 2 IN	LIN FT	
23206EC	INSTALL CONTROLLER CABINET	EACH	

JEFFERSON CO. I-265 m.p. ~ 11.1
~LAT/LONG N 38.111006, W 85.687017
STATION G74



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 AND LABELED INSIDE EACH JUNCTION BOX AND CABINET. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS AND PIEZOS INSIDE THE CABINET.

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

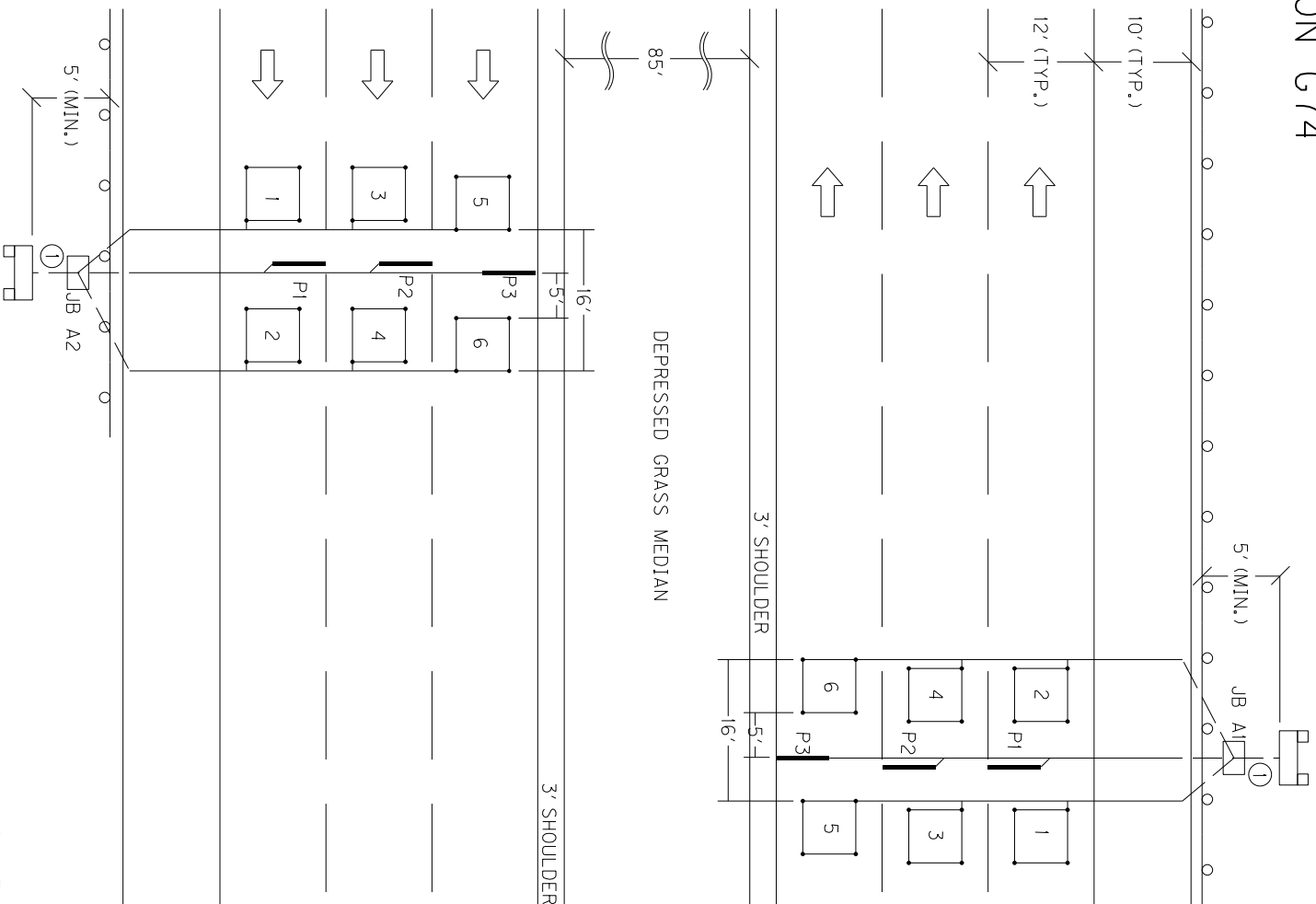
INSTALL TWO (2) TYPE A JUNCTION BOXES (JB A1 AND A2).

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

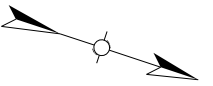
REMOVE ALL EXISTING EQUIPMENT (JUNCTION BOXES, CONDUIT, WIRE, ETC.) AND DISPOSE OF OFF THE PROJECT.

CODED NOTE:

① INSTALL ONE (1) 2" CONDUIT.



JEFFERSON CO. I-265 m.p. 12.796
~LAT/LONG N 38.115975, W 85.657304
STATION D28



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 THE 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 AND LABELED INSIDE EACH JUNCTION BOX AND CABINET. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS AND PIEZOS INSIDE THE CABINETS.

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

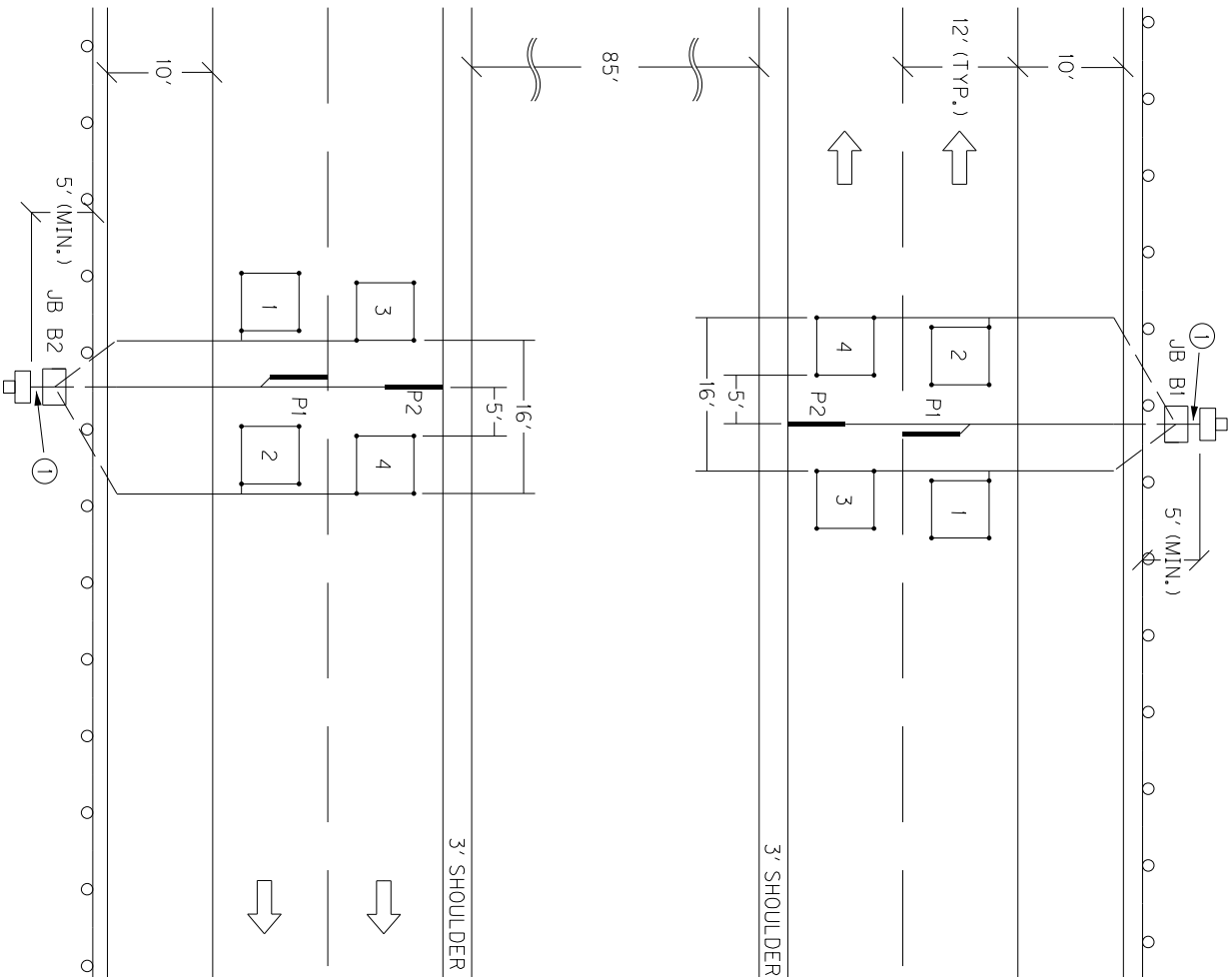
INSTALL TWO (2) TYPE B JUNCTION BOXES (JB B1, JB B2).

INSTALL TWO (2) 10"x8"x4" CABINETS MOUNTED TO ONE (1) WOOD POST EACH.

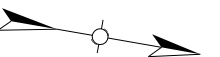
REMOVE ALL EXISTING EQUIPMENT (JUNCTION BOXES, CONDUIT, WIRE, ETC.) AND DISPOSE OF OFF THE PROJECT.

CODED NOTE:

① INSTALL ONE (1) 1/4" CONDUIT.



JEFFERSON CO. I-265 m.p. 14.05 (EB), 14.25 (WB)
 ~LAT/LONG N 38.119486, W 85.634336 (EB)
 ~LAT/LONG N 38.120827, W 85.630757 (WB)
 STATION D09



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 THE 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 AND LABELED INSIDE EACH JUNCTION BOX AND CABINET. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS AND PIEZOS INSIDE THE CABINETS.

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

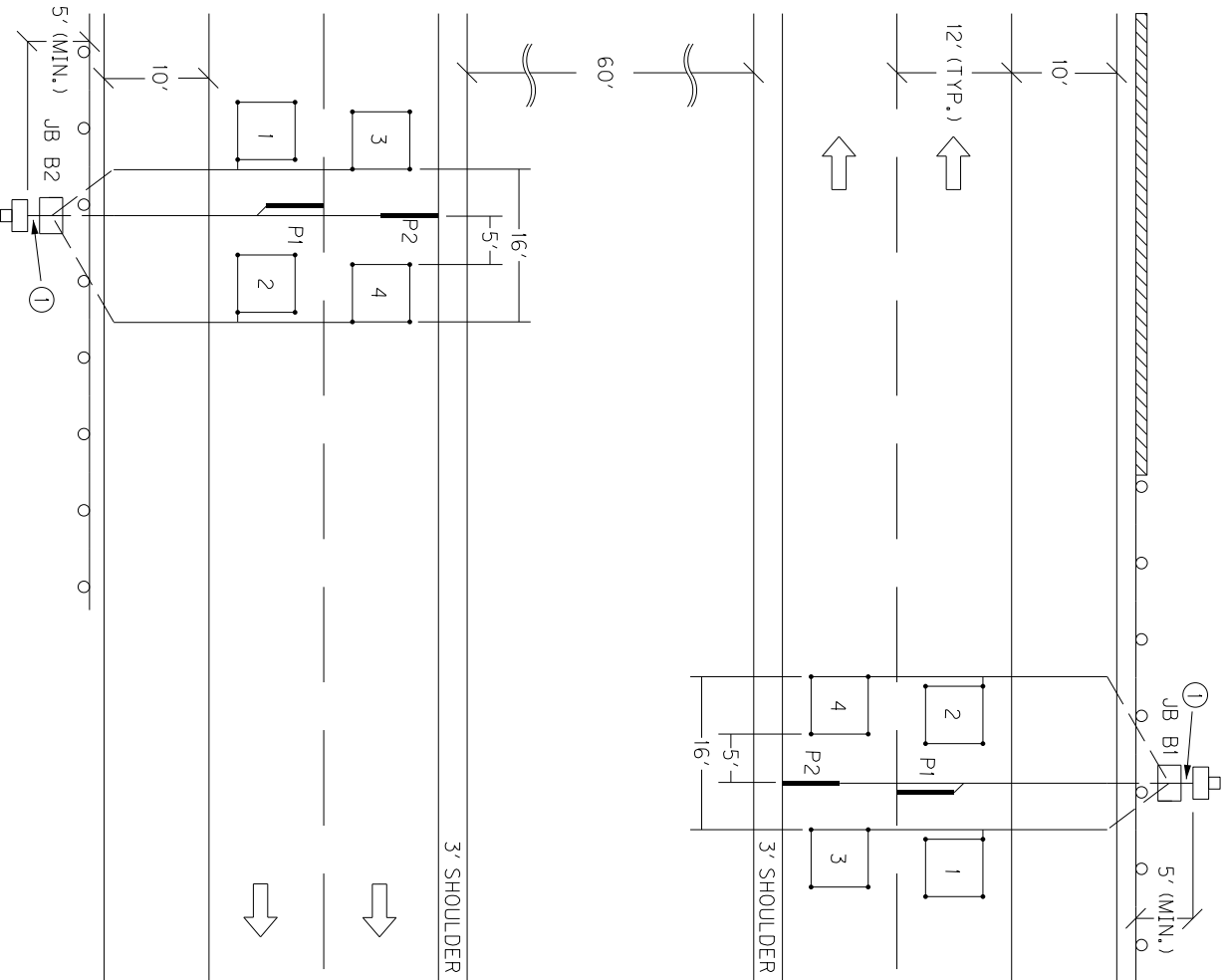
INSTALL TWO (2) TYPE B JUNCTION BOXES (JB B1, JB B2).

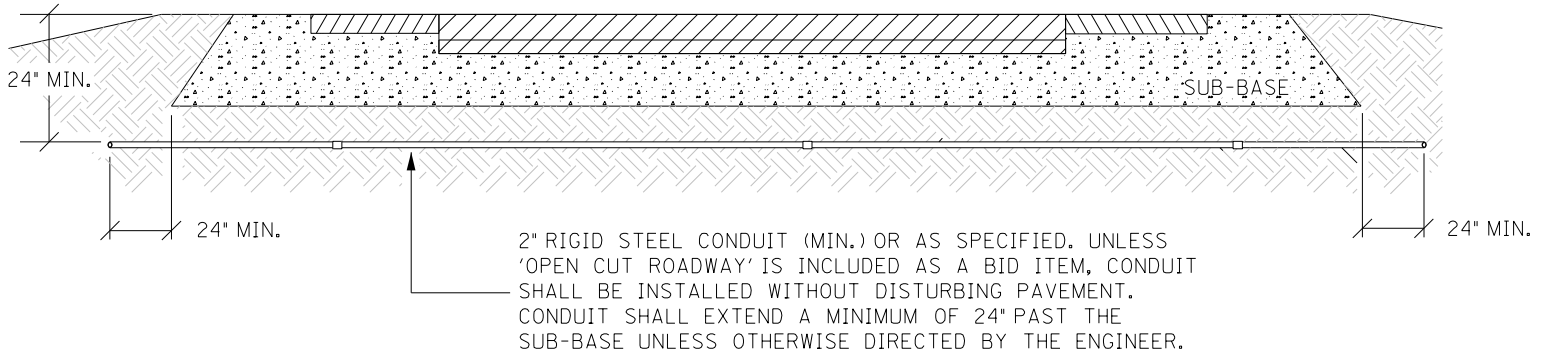
INSTALL TWO (2) 10"x8"x4" CABINETS MOUNTED TO ONE (1) WOOD POST EACH.

REMOVE ALL EXISTING EQUIPMENT (JUNCTION BOXES, CONDUIT, WIRE, ETC.) AND DISPOSE OF OFF THE PROJECT.

CODED NOTE:

① INSTALL ONE (1) 1/4" CONDUIT.



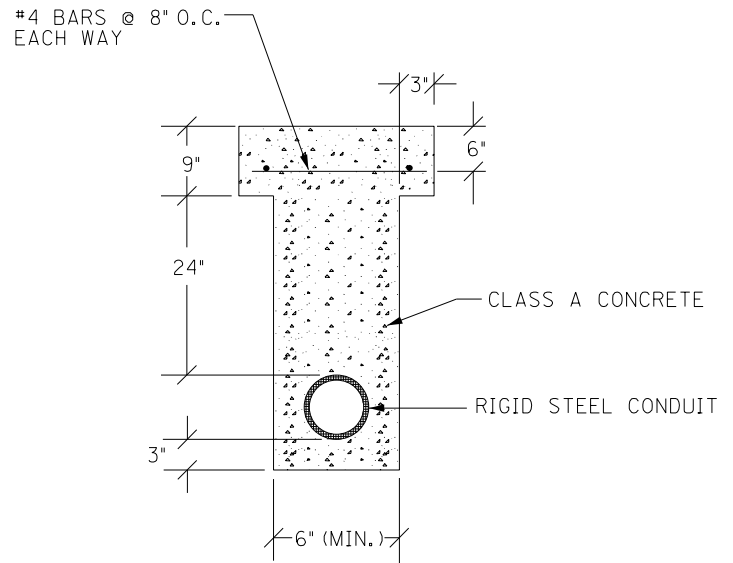
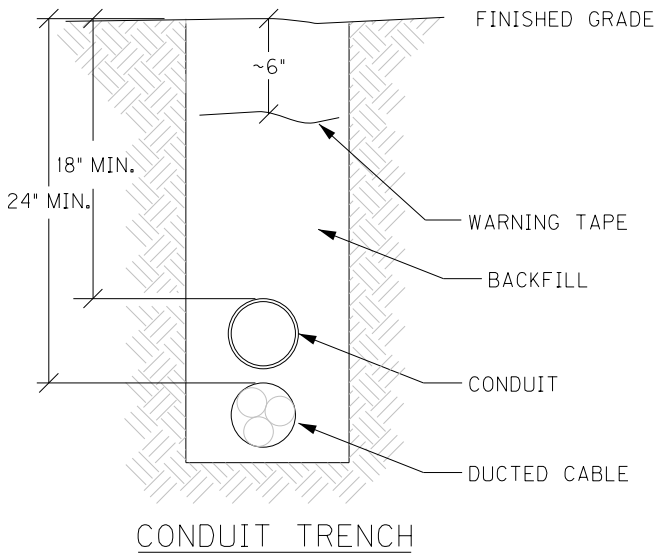


CONDUIT UNDER PAVEMENT

TOTAL TRENCH WIDTH SHALL BE 3" (NOM.) WIDER THAN THE SUM OF THE OUTSIDE DIAMETER(S) OF THE CONDUIT(S) INSTALLED. CONDUIT(S) SHALL BE CENTERED IN TRENCH.

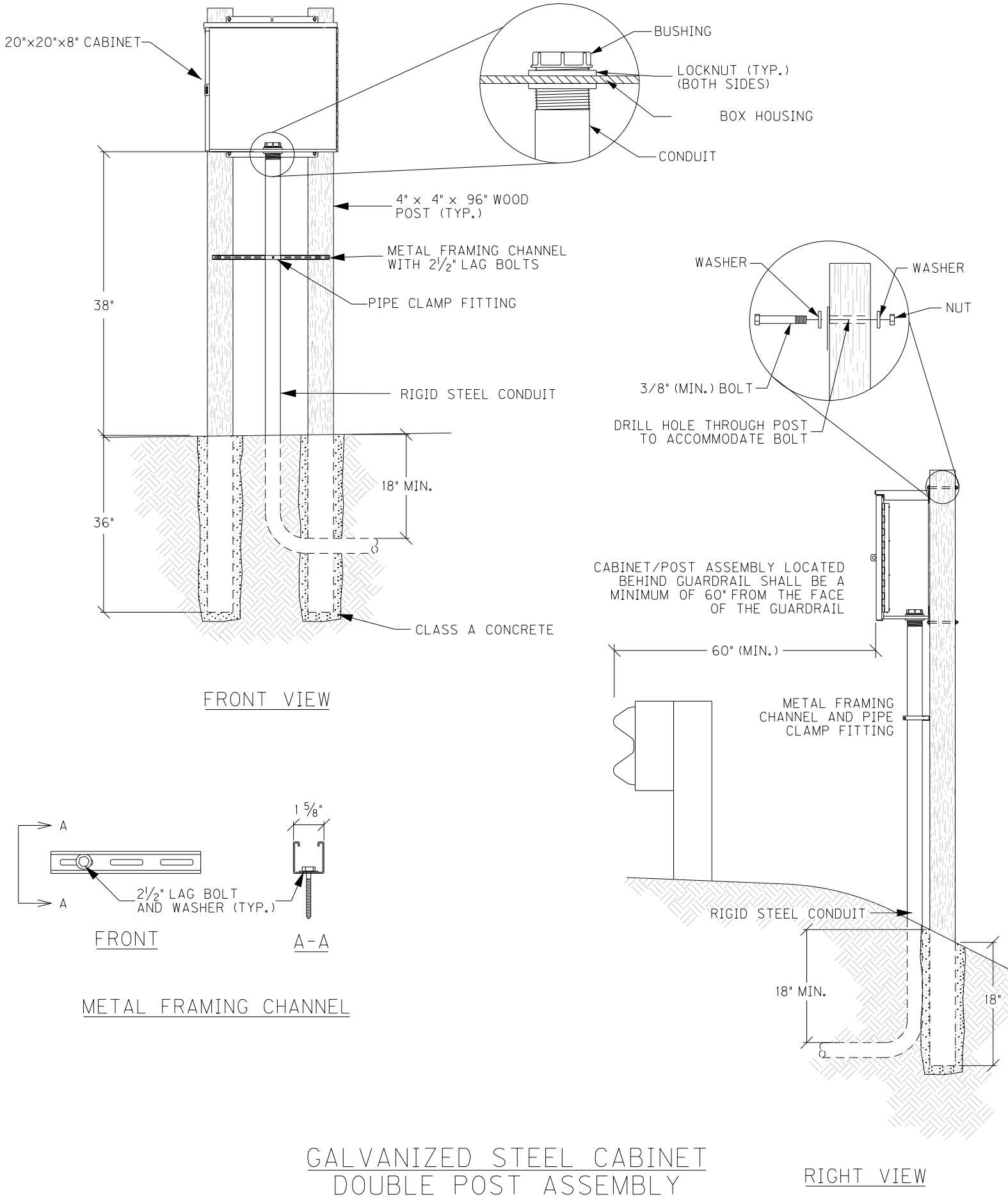
CONTRACTOR SHALL PLACE BACKFILL IN LIFTS (9" MAX.) COMPACT BACKFILL, AND RESTORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER

CONTRACTOR SHALL INSTALL UNDERGROUND UTILITY WARNING TAPE ABOVE CONDUIT AS SHOWN.

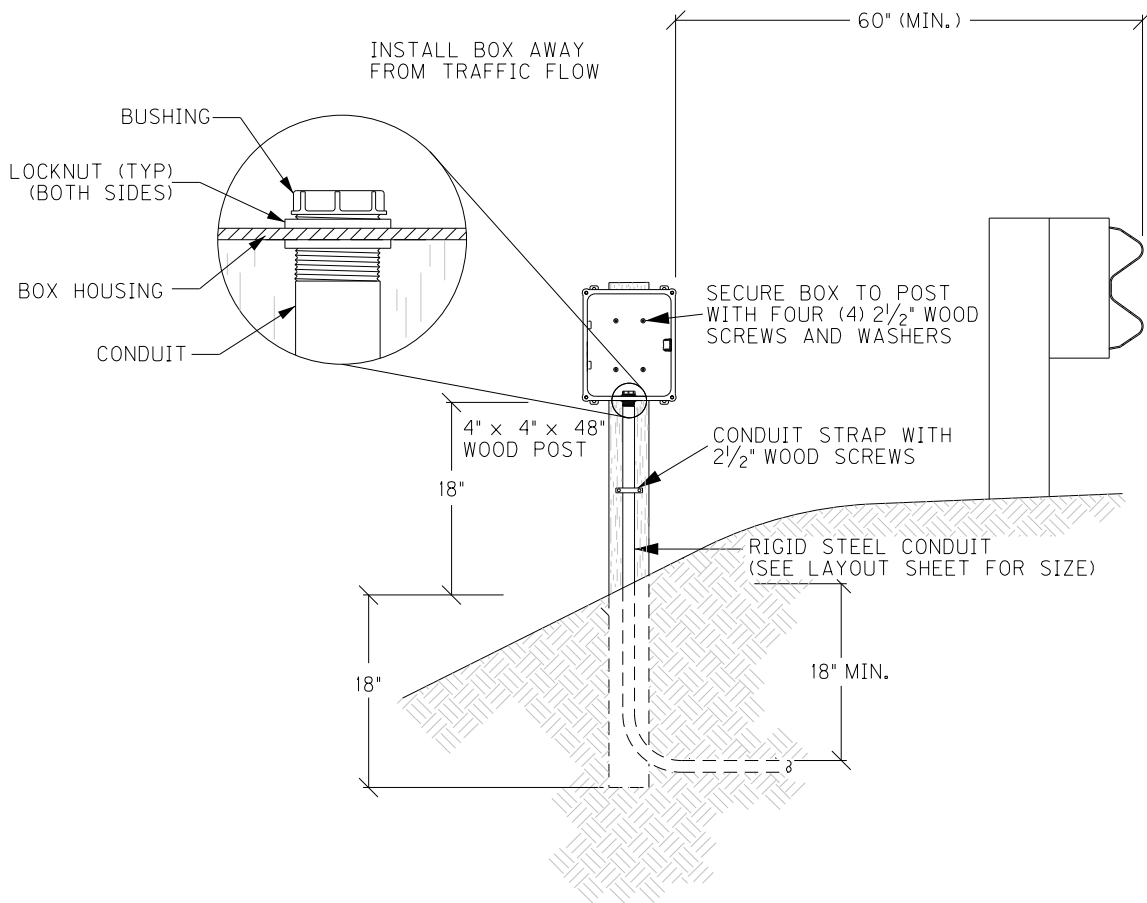


OPEN CUT PAVEMENT DETAIL

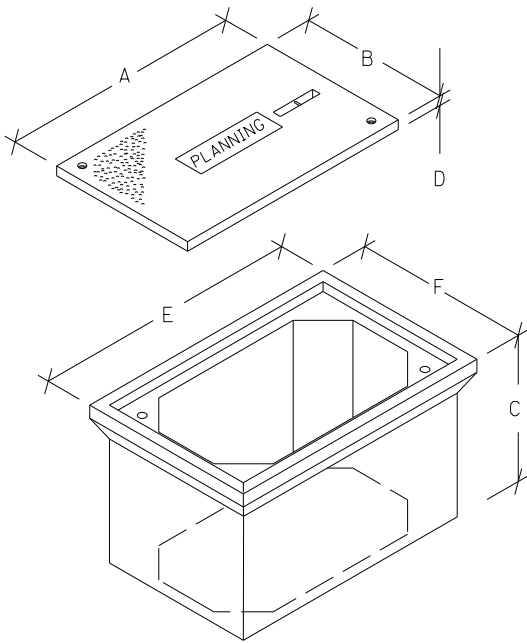
CONDUIT INSTALLATION



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

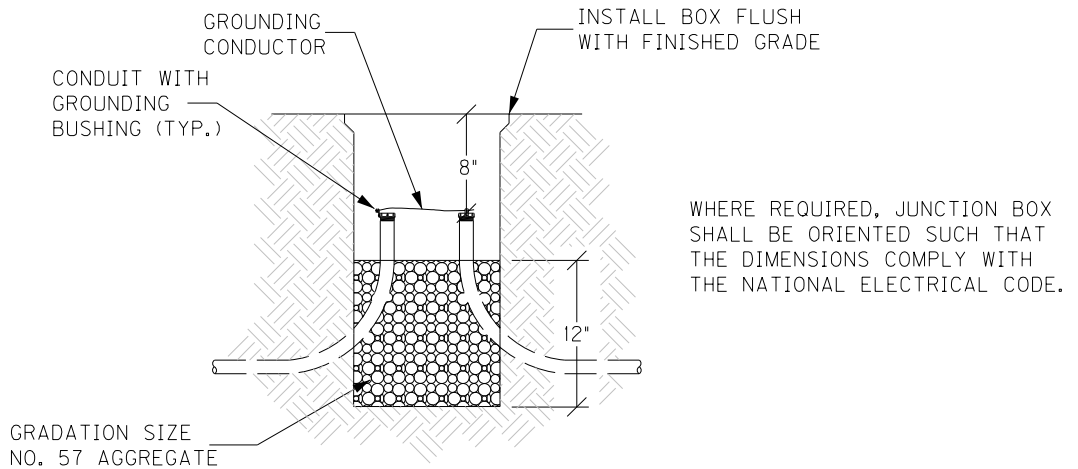


JUNCTION BOX 10" x 8" x 4"
AND POST ASSEMBLY



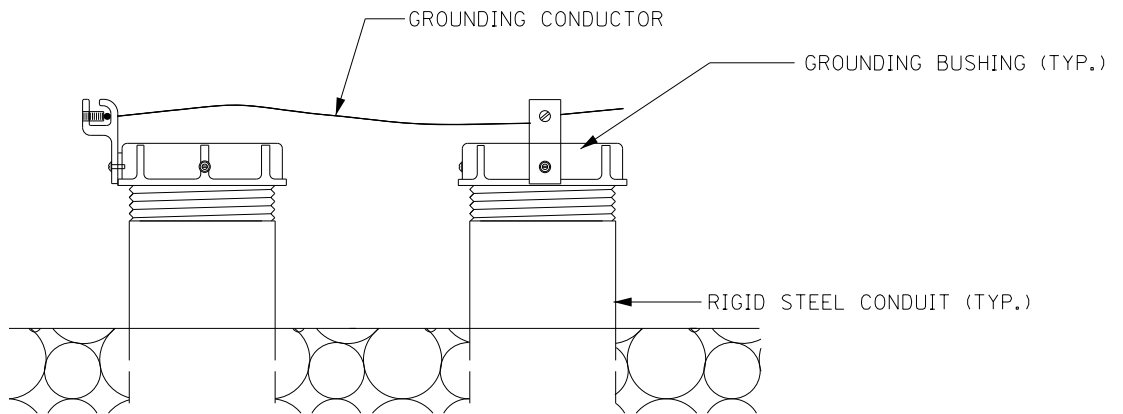
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D*	E	F
TYPE A	23"	14"	18"	2"	25"	16"
TYPE B	18"	11"	12"	1¾"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

* MINIMUM
STACKABLE BOXES ARE PERMITTED



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

ELEVATION

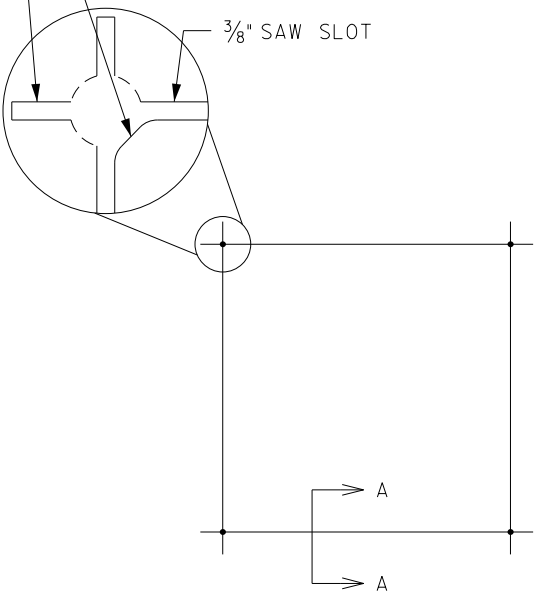


GROUNDING DETAIL

JUNCTION BOX - TYPE A, TYPE B, TYPE C

JEFFERSON COUNTY
NHPP IM 2659 (020)

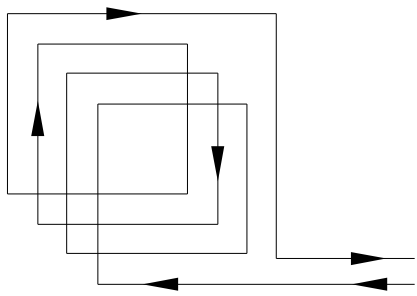
CUT BEYOND CORNER
CHIEVE FULL DEPTH
CORE DRILL 1 1/2" HOLE AND/OR
CHISEL CORNER TO SLOT DEPTH
TO ELIMINATE SHARP EDGES



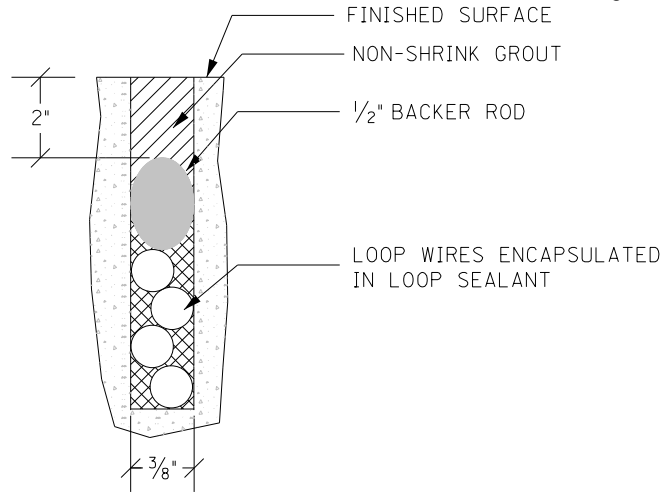
SAW CUT PLAN

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

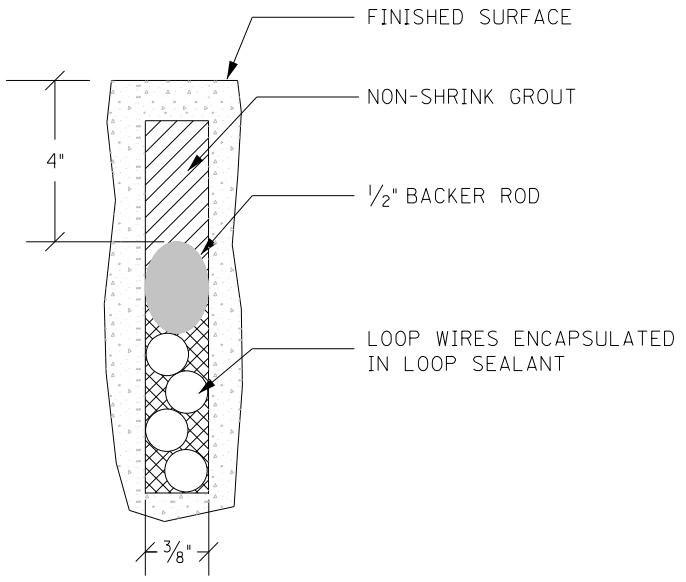
ADJACENT SAW SLOTS SHALL BE A MINIMUM OF 12" APART.



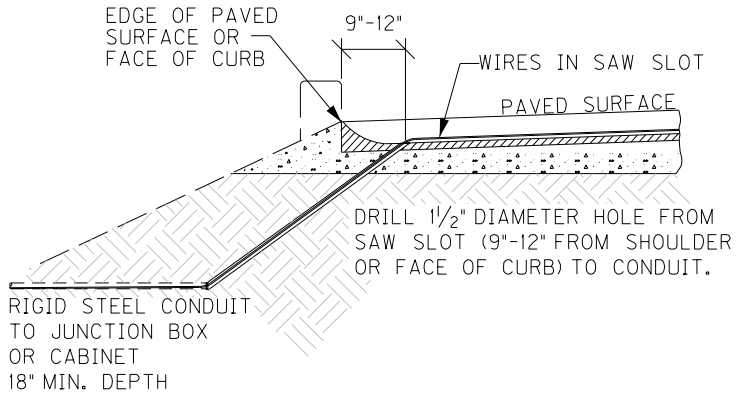
WIRING PLAN



SECTION A-A (CONCRETE)

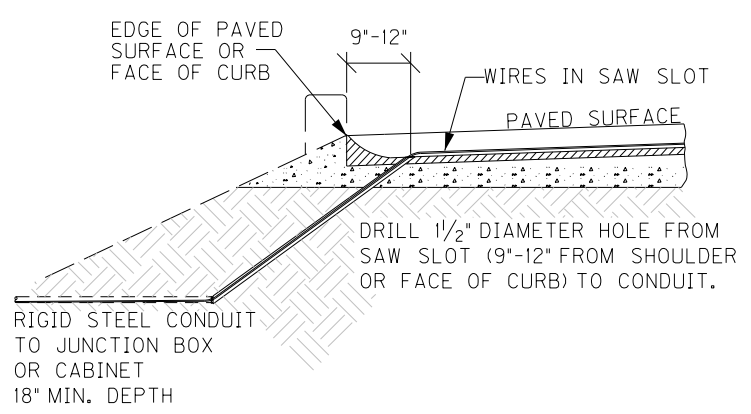
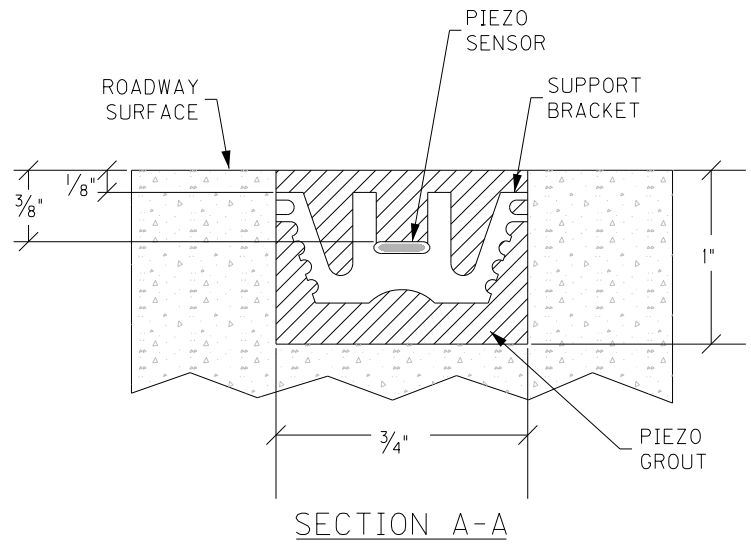
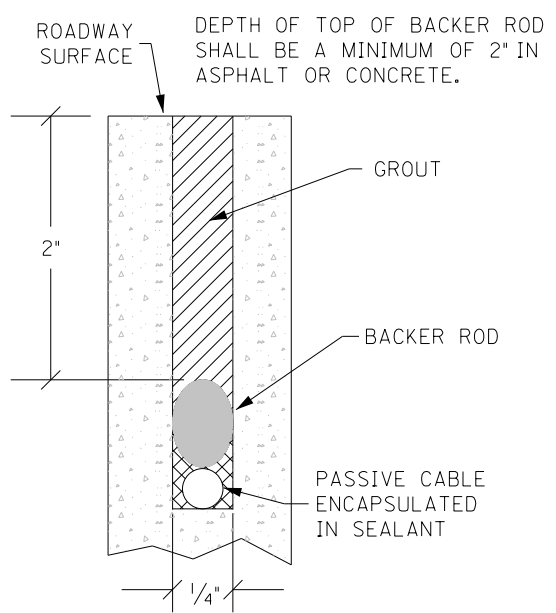
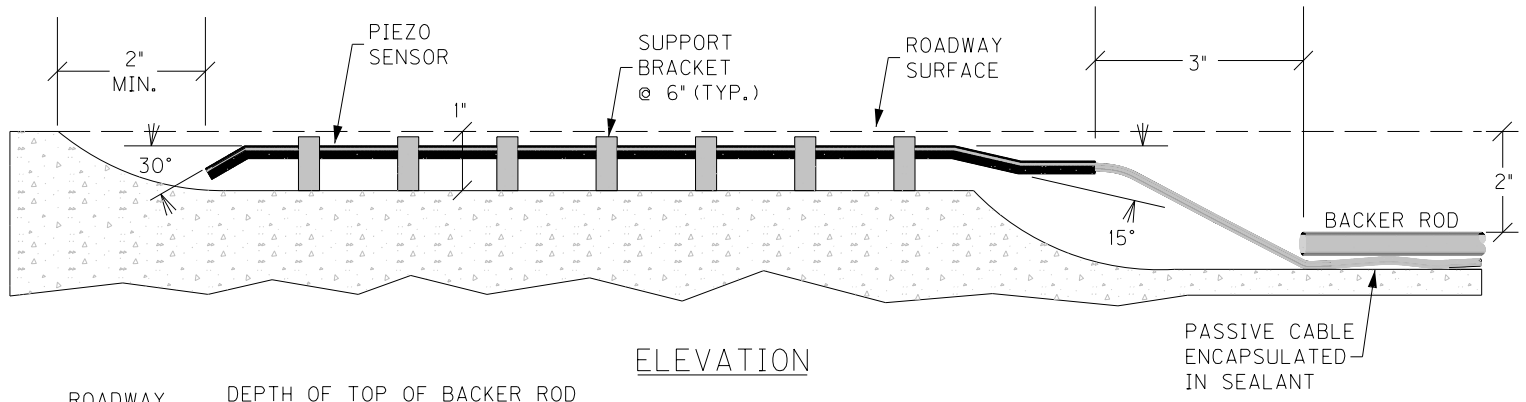
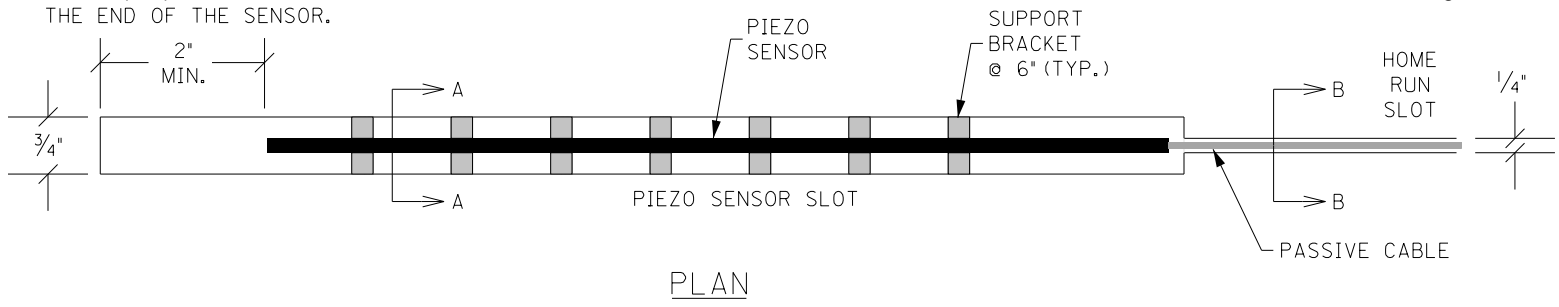


SECTION A-A (ASPHALT)



SAW SLOT EDGE OF PAVEMENT TRANSITION

INDUCTIVE LOOP DETECTOR



PIEZOELECTRIC SENSOR INSTALLATION

JEFFERSON COUNTY, INTERSTATE I-265

ITEM NO. 5-2087

BRIDGE REHABILITATION (FOURTEEN LOCATIONS)

MILE POINT 10.25 TO 15.66

SPECIAL NOTE INDEX

- SPECIAL NOTE FOR EPOXY OVERLAY
- SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND INSTALLING ARMORED EDGES FOR CONCRETE BRIDGES
- SPECIAL NOTE FOR CONCRETE PATCHING REPAIR
- SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION

BRIDGE INDEX

- | | | |
|--|----------------|------------------|
| - I-265 over I-65 | (056B00318L/R) | MP 10.25 |
| - I-65 (SB) Ramp 6 to I-265 (EB) | (056B00320N) | MP 124.98 (I-65) |
| - I-265 over KY 841 (EB) Ramp 4 to I-65 (NB) | (056B00322L/R) | MP 10.39 |
| - I-265 over Freedom Way | (056B00324L/R) | MP 10.75 |
| - I-265 over KY 1450 (Blue Lick Rd) | (056B00325L/R) | MP 10.90 |
| - I-265 over Cinderella Lane | (056B00368L/R) | MP 12.81 |
| - I-265 over KY 864 (Beulah Church Rd) | (056B00372L/R) | MP 15.18 |

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

I. DESCRIPTION

This specification describes the Pre-treatment and Overlay consisting of multiple layers of hybrid polymer systems and a special blend of extremely hard aggregate designed to provide a minimum of a 3/8" thick application for the purpose of complete waterproofing as well as providing a non-skid surface to withstand continuous heavy traffic and extreme changes in weather conditions.

Unless otherwise noted, Section references herein are to the Department's Standard Specifications for Road and Bridge Construction. All applicable portions of the Department's Standard Specifications apply unless specifically modified herein.

II. MATERIALS

A. Pre-Treatment

1. Hairline Cracks

- a. This two part hybrid polymer shall be free of any fillers, volatile solvents and shall be formulated to provide simple volumetric ratio of two components such as one to one or two to one by volume.
- b. This hybrid polymer system shall be formulated to provide a unique combination of extremely low viscosity and low surface tension coupled with a built-in affinity for concrete and steel.

2. Partial Depth Patching (if necessary)

- a. Class "M" Concrete. Use either "M1" or "M2". See Section 601.

3. Overlay

- a. The two-part epoxy-urethane co-polymer system shall be free of any fillers volatile solvents and shall be formulated to provide simple volumetric mixing ratio of two components such as one to one or two to one by volume.
- b. The epoxy-urethane co-polymer system shall be formulated to provide flexibility in the system without any sacrifice of the hardness, chemical resistance or strength of the epoxy-urethane co-polymer system. Use of external/conventional flexibilizers are not acceptable. Flexibility shall be introduced by interaction of elastomers to chemically link in the process of curing so that the flexibility of the molecule is least affected during the low temperature conditions that are confronted in actual use.

**SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING
OVERLAY FOR BRIDGE DECKS**

4. Material Requirements of Epoxy Overlay

- a. Physical Requirements of Cured Pretreatment for Cracks System. When Components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements of Table 1. (Test methods are discussed in detail in Item III of this specification.)

TABLE 1	
PHYSICAL PROPERTIES OF THE CURED SYSTEM	
Property	Value
Compressive Strength, min. psi	5000
Tensile Strength, min. psi	2500
Tensile Elongation, percent	25 [±] 5
Water Absorption, percent by wt. max.	0.5%
Shore D hardness, 25°C (77°F)	70 [±] 5
Gel Time, minutes	48-52 (100gms)
Adhesion to Concrete	100% failure in concrete
Percent Solids	100

- b. Physical requirements of Epoxy-Urethane Copolymer Overlay System. When Components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements of Table 2. (Test methods are discussed in detail in Item III of this specification.)

TABLE 2	
PHYSICAL PROPERTIES OF THE CURED SYSTEM	
Property	Value
Compressive Strength, min. psi	6000
Tensile Strength, min. psi	2000
Tensile Elongation, percent	30 [±] 10
Water Absorption, percent by wt. max.	0.5%
Shore D hardness, 25°C (77°F)	70 [±] 5
Gel Time, minutes	25-31 (100gms)
Abrasion Resistance, mg., max.	85
Adhesion to Concrete	100% failure in concrete
Flexural Yield Strength, min. psi	5000
Percent Solids	100

- c. Visco-Elastic Properties of Epoxy-Urethane Copolymer system. The modulus of the cured epoxy-urethane system determined by variable temperature Dynamic Mechanical Analysis (DMA) using DMA instruments and according to ASTM D4065-95, shall conform to the following minimum values as given in Table 3.

**SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING
OVERLAY FOR BRIDGE DECKS**

TABLE 3		
VISCO-ELASTIC PROPERTIES OF THE CURED SYSTEM		
Temperature	Storage Modulus Dynes/Sq.Cm.	Loss Modulus Dynes/Sq.Cm.
-10°C	1 x 10 ⁹	7 x 10 ⁷
20°C	6 x 10 ⁸	7 x 10 ⁷
50°C	4 x 10 ⁷	2 x 10 ⁷
60°C	1 x 10 ⁷	5 x 10 ⁶
70°C	6 x 10 ⁶	1 x

- d. The tests shall be conducted at a frequency of 1 Hz with a 0.3% strain in accordance with the guidelines described in the testing equipment manual.
- e. **Load Bearing Capabilities.** The cured epoxy-urethane system must exhibit the following load bearing capacity. At approximately 20% strain, the polymer shall retain at least 85% of its original load bearing strength (tensile stress) as per ASTM D-638.

5. Material Provider

The bridge deck restoration system shall be provided by the following Manufacturer or an approved equivalent.:

POLY-CARB, INC.,
 Pretreatment: MARK-135
 Overlay: MARK-163 FLEXOGRID
 33095 Bainbridge Road Solon, Ohio 44139
 (440) 248-1223

6. Aggregate

- a. Aggregate used for all layers shall be non-friable, non-polishing, clean and free from surface moisture. It shall be durable and sound and have a proven record of performance in applications of this type. The aggregate shall be 100 percent fractured, thoroughly washed and kiln dried to a maximum moisture content of 0.2 percent by weight, measured in accordance with ASTM C566. The fracture requirements shall be at least one mechanically fractured face and will apply to materials retained on U.S. No. 10 sieve. The recommended sources of aggregate are Washington Stone or Oklahoma Flint.
- b. Aggregate for all layers shall have a minimum Mohs scale hardness of 6.5.
- c. The grading of the aggregate shall conform to the requirements of Table 4.

**SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING
OVERLAY FOR BRIDGE DECKS**

TABLE 4	
AGGREGATE GRADATION	
Sieve Size	Percent Passing
No. 6	60 - 100
No. 10	0 - 40
No. 20	0 - 10

d. Thermoplastic. Conform to Section 837.

III. METHOD OF TESTING

B. Tests shall be conducted in accordance with the following methods:

1. **Compressive Strength:** ASTM C109, Compressive Strength of Hydraulic Cement Mortars. The two components of the resin are to be thoroughly mixed in their appropriate ratios. Two volumes of graded silica sand in accordance with ASTM C778 shall be added to one volume of mixed resin. The samples shall then be prepared according to the requirements of ASTM C109 and allowed to cure for 7 days at $23 \pm 2^{\circ}\text{C}$.
2. **Tensile Strength and Elongation:** ASTM D638, Tensile Properties of Plastics, Specimen Type I or Type II. Samples shall be cured at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity. Speed of testing shall be at 0.5 in./min.
3. **Water Absorption:** ASTM D570, Water Absorption of Plastics. Sample specimens shall be prepared according to section 4.1 and allowed to cure at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity. Tests are then to be carried out as per section 6.1.
4. **Shore D Hardness:** ASTM D2240, Rubber Property – Durometer Hardness. Specimen shall be prepared as per ASTM D570 section 4.1 and allowed to cure at $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 3.6^{\circ}\text{F}$).
5. **Gel Time:** The following procedure shall be used to determine gel time. Measure 4 oz. of Part A and 2 oz. of Part B each at 25°C (77°F), into an unwaxed paper cup and record the time and mix immediately. 100 gms of this mixture shall be poured into a 6 oz. unwaxed paper cup and placed on a wooden bench top. Starting twenty minutes from the time recorded above, the mixture shall be probed every two minutes with a small stick until a small ball forms in the center of the container. The total time, including mixing, required for the ball to form shall be regarded as the gel time. The test shall be performed in a room or enclosed area maintained at $25 \pm 2^{\circ}\text{C}$ ($77 \pm 3.6^{\circ}\text{F}$) and $50 \pm 5\%$ relative humidity

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

- 6. Abrasion Resistance:** ASTM C501, Test Method for Relative Resistance to Wear of Unglazed Ceramic Tile by the Taber Abrader. Tests shall be done using a CS-17 wheel and a 1,000-gram load for 1,000 cycles.
- 7. Adhesion to Concrete:** ACI-503-R; Pull Out Test.
- 8. Flexural Yield Strength:** ASTM D-790.
- 9. DMA:** ASTM D-4065-95

IV. CONSTRUCTION PRACTICE

A. Surface Preparation

- 1.** Perform partial depth patching in accordance with the requirements of Section 606.03.06. All patching materials shall be in accordance with the requirements of Section 601 and be free of Magnesium Phosphate.
- 2.** Patching shall be scheduled so that the bridge can be open to traffic during all non-working hours.
- 3.** Polymer patching system such as POLY-CARB, Inc.'s MARK-120 is recommended for shallow and partial depth repair. Completion of Partial Depth Patching including removal of concrete, cleaning, and placing the material will not be measured for payment and shall be considered incidental to "Epoxy-Urethane Waterproofing Overlay". The pay item includes additional quantity for partial depth patching.
- 4.** The entire concrete deck shall be cleaned by shotblasting to remove any oil, dirt, rubber or any other potentially detrimental material such as curing compound and laitances which, in the Manufacturer and Engineer's opinion, would prevent proper bonding to and curing of the material.
- 5.** In areas that the shotblasting equipment cannot reach (i.e., along curbs and median walls) or cannot remove (linemarking, asphalt, etc.), sandblasting and walk behind grinders are permitted to an extent satisfactory to the Manufacturer and Engineer. This should be performed prior to the shotblasting whenever applicable and practical.
- 6.** Steel surfaces such as expansion joints, sidewalks, steel grids and steel plate to be treated with the restoration system, shall be shot or sand blasted clean to SSPC-SP-6 standards.
- 7.** The overlay application equipment is allowed to drive on the deck surface during application provided precautions have been taken to

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

ensure that the deck surface will not become contaminated. For any reason traffic is to be allowed on the deck after surface preparation, or between layers, a visual inspection by the Manufacturer and state Engineer will be required to determine if additional surface preparation is needed before applying material.

8. All surfaces to be treated shall be dry at the time of application. Immediately before the application of any liquids, all prepared surfaces shall be cleaned with compressed air (or vacuumed) to remove dust and debris.
9. The application of the system shall not be made when it has rained 24 hours before application or rain is forecast (greater than 50%) within eight hours after application or as determined by the Manufacturer (fog and high humidity will not impede the application of or affect the performance of the overlay). If waiting for 24 hours is impractical, then the moisture content in concrete substrate shall not exceed 4.5% when measured by an electronic moisture meter. Any exception shall be determined by the moisture content present in the deck which shall not exceed 75% of air entrainment in the mix design.
10. The minimum recommended temperature in which the system shall be applied is 50°F and rising. All applications at temperatures below 50°F shall require prior written approval from the Manufacturer.

B. Application of Overlay System

1. The Manufacturer of the epoxy-urethane overlay material shall have a representative on the jobsite at all times who, upon consultation with the Engineer, may suspend any item of work that is suspect and does not meet the requirements of this specification. Resumption of work will occur only after the Manufacturer's representative and the Engineer are satisfied that appropriate remedial action has been taken by the Contractor.
2. The overlay shall be applied on all deck areas using metering, mixing and distribution machinery owned and operated by the Manufacturer of the epoxy-urethane overlay system. The application machine shall feature positive displacement volumetric metering pumps controlled by a hydraulic power unit. Components A and B shall be stored in temperature controlled reservoirs capable of maintaining 100°F + 10°F to insure optimum mixing. Ratio check verification at the pump outlets as well as cycle counting capabilities to monitor output will be standard features. In line mixing shall be motionless so as to not overly shear the material or entrap air in the mix. The machine shall also make maximum use of the working time of the material to insure proper "wetting" of the system by mixing it immediately prior to dispensing onto the deck.

**SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING
OVERLAY FOR BRIDGE DECKS**

3. The number of layers (a minimum of three) and the application rates of the liquid in the various layers shall be as recommended by the Manufacturer in order to achieve an average overlay thickness of 3/8".

4. Hand mixing of material is not permitted.

5. Application of Pre-treatment - Crack Filling (First Layer)

Application of the Liquid: After mechanically measuring and mixing of the components, the liquid shall be evenly distributed on the clean, dry deck surface at the rate/process recommended by the Manufacturer. The overlay application equipment may drive on this layer (prior to being cured) when applying the overlay system. If the overlay application is going to be applied after 6-8 hrs of the pretreatments application, a medium size coarse silica sand shall be broadcasted evenly into the pre-treatment system (prior to it curing) as directed by the Manufacturer.

6. Overlay (Second and Third Layers)

Application of Liquid: Prior to the application, if there exists any excess or loose aggregate from the previous coat, such excess aggregate shall be completely removed by vacuum or with compressed air. After mixing of the components via the mechanical application equipment, the liquid shall be evenly distributed on the clean, dry deck surface at the rate recommended by the Manufacturer.

7. After the application of the liquid in the second and third coats, the maximum time allowed before broadcasting of the aggregate is as follows:

Above 90°F	.....	10 minutes
80°F to 90°F	.....	15 minutes
70°F to 80°F	.....	20 minutes
60°F to 70°F	.....	25 minutes
50°F to 60°F	.....	35 minutes

8. No vehicle shall be allowed on the overlay during the curing period.

9. Broadcasting on decks shall be by truck-mounted equipment capable of dispensing the aggregate onto the deck in a uniform manner as directed or otherwise approved by the Manufacturer of the epoxy-urethane overlay.

10. The aggregate shall be broadcast as described below such that to cover the surface so that no wet spots appear and before the co-polymer begins to gel (see section 3.1.5). The aggregate must be dropped vertically in such a manner that the level of the liquid is not disturbed.

a. In the second and third layers of FLEXOGRID (or approved

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

equivalent) liquid aggregate conforming to table 4 shall be broadcast to saturation.

11. **Removal of Excess Aggregate:** After the overlay has hardened, removal of all loose and excess aggregate with a power vacuum or other method shall be made prior to the application of subsequent coat.
12. **Joints in the Overlay:** (i.e., between two adjacent lanes) shall be staggered and overlapped between successive coats so that no ridges will appear.
13. **Traffic may be allowed on the final layer (or in between layers) after the resin has cured (as determined by the Manufacturer) and after removal of all excess, loose aggregate.**

V. STORAGE AND HANDLING

- A. Liquid Material:** All material shall be transported and stored in their original containers inside a dry, temperature controlled facility and maintained at a minimum temperature of 60°F and not to exceed 120°F.
- B. Job Site Storage:** The materials shall be stored on the jobsite in a dry, weather protected facility away from moisture and within the temperature range of 60°F to 90°F. When the materials are transported or stored on the job in the application machine tanks, the material must also be maintained at a temperature of 60°F to 90°F. Outdoor storage is permitted with Manufacturer's approval.
- C. Handling of Liquid Materials on the Job:** Protective gloves, clothing, and goggles shall be provided to workers and inspectors directly exposed to the material if required. Product safety data sheets shall be provided to all workers and inspectors as obtained from the Manufacturer.
- D. Packing Requirement:** All materials must be packaged in strong, substantial containers. The containers shall be identified as Part A and Part B and shall be plainly marked with the name and address of the Manufacturer, name of the product, mixing proportions and instructions, lot and batch numbers, date of manufacture, and quantity contained therein.
- E. Aggregate:** All aggregate shall be stored in a dry, moisture-free atmosphere. The aggregate shall be fully protected from any contaminants on the jobsite and shall be stored so as not to be exposed to rain or other moisture sources.

VI. SAMPLING AND ACCEPTANCES

- A. Product Acceptance:** The Manufacturer of the system shall provide evidence of

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

field performance, lab performance with infrared spectra in order to obtain state approval of the overlay system for use on the project:

- 1. Independent Lab Performance.** A nationally recognized independent lab must verify that the material:
 - a. Has the capability of preventing the ingress of essentially all the chloride ions into the concrete at 1" depth when tested according to NCHRP-244 method.
 - b. Has the capability to de-activate the existing chloride ions present in the concrete specimen so that the corrosion of steel rebar embedded in the concrete stop corroding.
 - c. When tested as per Tables 1,2 and 3, fully comply with the test results specified for cured system.

 - 2. Infrared Spectrograph:** In addition to the initial certification process each Manufacturer shall furnish the state an infrared spectrum of each component of system for its permanent record and for individual installation verification.

 - 3. Field Performance:** The selected material must have verifiable satisfactory performance of at least five (5) years in the state of Kentucky and a minimum of twelve (12) years in three neighboring states with comparable weather conditions.
- B. Certification for Compliance:** At the pre-construction conference, the Contractor shall notify the state project Engineer of the source of material.
- 1. Independent Test Lab Report:** Test results certified and verified by a nationally recognized independent testing laboratory verifying properties of the cured system as per Table 1, 2 & 3 shall be submitted to the Engineer for approval prior to the bid opening. This certification shall be provided on each lot number to be used on the project.

 - 2. Infrared Spectra:** Infrared spectra of each component from each lot number (to be used on the project) shall be submitted with the independent lab certification.

 - 3. Test Sample for DOT Laboratory:** The Manufacturer shall furnish at least a one-quart sample of each component from each lot to the DOT laboratory to verify material supplied by the Manufacturer. Material shall be taken at job site.
- C. Performance Acceptance**
- 1. Thickness Verification:** The state shall be notified of the number of

SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING OVERLAY FOR BRIDGE DECKS

gallons used on the project with two notarized statements - one from the Contractor and one from the Manufacturer. In addition, the Contractor shall verify to the State that the overlay is an average of at least 3/8" thick at three random locations agreed upon by the state Engineer and material Manufacturer representative. If 3/8" average is not achieved, a retest shall be performed in adjoining areas. Thin areas shall be re-coated as described above by the Contractor and re-verified at no additional cost to the State. This verification may consist of cores, holes, etc., but in all cases, any destructively tested areas shall be repaired by the Contractor before final acceptance by the Engineer.

2. **Performance Guarantee:** The epoxy-urethane co-polymer Manufacturer and the Contractor, by acceptance of the work described in this specification, jointly agree to guarantee the wearing surface against all defects incurred during normal traffic use for a period of five (5) years. The guarantee period shall commence on the date of acceptance of the work, usually the date the final layer of the overlay has been applied and cured. The guarantee covers all labor and materials required to satisfactorily repair or replace the wearing surface. Manufacturer will be responsible for integrity of warranty and will be removed from QPL if warranty repair not upheld within timely manner.

VII. MEASUREMENT

- A. **Epoxy-Urethane Waterproofing Overlay.** The Department will measure the square feet of overlay application.
- B. **Shotblasting:** The Department will measure "Blast Cleaning" in Square Yard. The Department will only measure this quantity once for any area to be shotblast. Additional blast cleaning to meet the requirements of this note shall be performed at the Contractor's expense.
- C. **Partial Depth Patching.** The Department will measure the concrete necessary for partial depth patches in cubic yards.
- D. **Thermoplastic Pavement Markings.** See Section 714.

VIII. PAYMENT

- A. **Epoxy-Urethane Waterproofing Overlay.** The Department will pay for the measured quantities at the Contract unit bid price for "Epoxy-Urethane Waterproofing". -Urethane Waterproofing Overlay. The Department will measure the square feet of overlay application.
- B. **Shotblasting.** The payment at the contract unit price for the pay item "Blast Cleaning" shall include all labor, equipment and material needed to complete the

**SPECIAL NOTE FOR 3/8" EPOXY-URETHANE WATERPROOFING
OVERLAY FOR BRIDGE DECKS**

task as described in paragraphs 4.1.4 and 4.1.5.

C. Partial Depth Patching. The payment at the contract unit price, if necessary, shall include all labor, equipment and material needed to complete this task. The Department will not measure material removal, forming, blast cleaning, or retying steel reinforcement in the patches and will consider this work incidental to the pay item "Partial Depth Patching."

D. Thermoplastic Pavement Markings. See Section 714.

SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE BRIDGES

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Current 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 devices 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
- (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, for armored edges. See Manufacturer's specifications for "Armored Edges on Strip Seal Expansion Dams".
- 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 - Epoxy Coated.** Use Grade 60. See Section 602.
- E. Epoxy Bond Coat.** See Section 511.
- F. Pre-Compressed Horizontal Expansion Joint System.** It shall have a cellular or micro-cell, polyurethane foam impregnated with hydrophobic acrylic emulsion, or a hydrophobic polymer. The polyurethane foam external facing shall be factory coated and cured with highway-grade, fuel resistant silicone or a highway-grade elastomeric coating at a width greater than the maximum joint expansion.

III. EQUIPMENT

- A. Hammers.** See Section 606.02.10 B.
- B. Sawing Equipment.** See Section 606.02.10 C.
- C. Hydraulic Impact Equipment.** See Section 606.02.10 D.

IV. 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.

SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE BRIDGES

When deteriorated concrete adjacent to the limits of removal is encountered, extend the removal area as directed by the Engineer. Dispose of all removed material entirely away from the job site. Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department. This work is incidental to the Contract unit price for “Expansion Joint Replacement” or “Armored Edge for Concrete”.

- 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 (See attached detail drawings).

All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23 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 this work, as directed by the Engineer, steel reinforcement as shown in the attached detail drawings. Splice these bars to the existing reinforcement in the deck in the areas of removed concrete as shown in the attached detail drawings or as directed by the Engineer. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class “M” Concrete. 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.

Reinforcement, bar splices, and mechanical connectors are incidental to the Contract unit price for “Expansion Joint Replacement” or “Replace Armored Edge”.

- D. Stage Construction.** Install concrete and armored edges in two (or more if specified) stages as necessary. Join the armored edges at or near the centerline of the roadway or lane line, field weld, and grind smooth.

SPECIAL NOTE FOR REPLACING EXPANSION DAMS AND/OR INSTALLING ARMORED EDGES FOR CONCRETE BRIDGES

- E. Pre-Compressed Horizontal Expansion Joint System.** System shall be supplied in pre-compressed sticks for easy installation. System shall be installed in accordance with Manufacturer's recommendations concerning approved adhesives, welds between sticks and appurtenances, and adhesion to concrete deck or armored edges. Joint seal is to be installed $\frac{3}{4}$ " recessed from the surface.
- F. 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.

V. MEASUREMENT

- A. Expansion Joint Replacement – $1\frac{1}{2}$ ", 2" and $2\frac{1}{2}$ ".** The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.
- B. Longitudinal Joint Replacement – $\frac{3}{4}$ ".** The Department will measure the quantity in linear feet from abutment to abutment along the centerline of the joint.
- C. Armored Edge for Concrete.** The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.

VI. PAYMENT

- A. Expansion Joint Replacement – $1\frac{1}{2}$ ", 2" and $2\frac{1}{2}$ ".** 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, reinforcement, precompressed joint seal, and all incidental items necessary to complete the work as specified by this Note and as shown on the attached detail drawings.
- B. Longitudinal Joint Replacement – $\frac{3}{4}$ ".** 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, reinforcement, precompressed joint seal, and all incidental items necessary to complete the work as specified by this Note and as shown on the attached detail drawings.
- C. 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, reinforcement, and all incidental items necessary to complete work as specified by this Note and as shown on the attached detail drawings.

The Department will consider payment as full compensation for all work required by this Note and the attached detail drawings.

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, and this Note. Section references are to the Standard Specifications.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Provide safe access to the bridge substructure (piers) in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction
- (3) Remove the deteriorated concrete
- (4) Blast clean and prepare the surfaces for patching
- (5) Prime the areas immediately prior to patching
- (6) Apply the Vertical and Overhead Patch or Class "M" Concrete
- (7) Finish the patched surface
- (8) Maintain and control traffic
- (9) Any other work specified as part of this Contract

II. MATERIALS

- A. **Vertical and Overhead Patching Material.** Conform to Manufacturer's Technical Guidance.
- B. **Class "M" Concrete.** Use either "M1" or "M2". See Section 601.

III. CONSTRUCTION

- A. **Remove Deteriorated Concrete.** Prior to beginning the concrete repairs, provide safe access to the substructure, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas. The Engineer will sound the concrete with a hammer and mark the areas of concrete to be removed and patched. All areas of deteriorated concrete found should be repaired as part of this work. Final payment for "Concrete Patching Repair" will be the field measured quantity of patching completed in accordance with this Note and as designated by the Engineer.

Remove specified areas of deteriorated concrete as directed by the Engineer. The removal of unsound material shall be accomplished with hand tools or pneumatic hammers that do not exceed twenty (20) pounds. Precautions shall be exercised to protect the underlying sound material. Saw, route, or otherwise manipulate the sides of the patch so that the interface between the old concrete and patch area are perpendicular. Remove all deteriorated loose concrete to a minimum depth of 2" for repairs using vertical and overhead patching material and 4" for repairs using Class "M" Concrete. Also ensure concrete removal in the patch area extends at least three-quarters (3/4) inch beyond any steel reinforcement more than 50 percent exposed. Dispose of all removed material entirely away from the job site or as directed by the Engineer.

SPECIAL NOTE FOR CONCRETE PATCHING REPAIR

Extreme care shall be taken when removing the existing spalled or delaminated concrete so as not to damage the existing reinforcing steel. Completely clean all existing steel reinforcement encountered free of rust and leave in place. Wire brushing may be required to thoroughly clean exposed steel reinforcement. Repair or replace any damaged steel reinforcement as directed by the Engineer at no additional cost to the Department. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04.

- B. Prepare Concrete Surfaces for Patching.** Prepare concrete surfaces to be patched in accordance with Section 510.03.01. Final blast cleaning shall be completed within twelve (12) hours prior to placement of the epoxy mortar patch. Concrete must be sound, dry, and clean prior to placement of epoxy resin prime coat.
- C. Apply Vertical and Overhead Patching Material or Class “M” Concrete.** The Engineer shall have the option of designating a spalled or delaminated area to be repaired using Class “M” high early strength concrete or a Vertical and Overhead Patching Material. Any material used must be approved by the Engineer. Refer to the Transportation Cabinet, Division of Materials’ List of Approved Materials for currently approved materials for vertical and overhead patching. Place either the Class “M” Concrete or Vertical and Overhead Patching Material as approved by the Engineer. Place the epoxy resin primer in accordance with the standard specifications and Manufacturer’s recommendations. Place the Vertical and Overhead Patching Material in accordance with the Manufacturer’s specifications to restore the deteriorated areas to their original dimensions as directed by the Engineer. Place Class “M” Concrete according to the Standard Specifications.

IV. MEASUREMENT

- A. Concrete Patching Repair.** The Department will measure the quantity in square feet.

V. PAYMENT

- A. Concrete Patching Repair.** Payment at the Contract unit price per square foot is full compensation for removal of deteriorated concrete, preparation of the concrete surface, application of the Vertical and Overhead Patching Material or Class “M” Concrete, application of the epoxy resin seal coat, and all incidental items necessary to complete the work in accordance with this Note.

The Department will consider payment as full compensation for all work required by this Note.

SPECIAL NOTE FOR BRIDGE CLEANING AND PREVENTIVE MAINTENANCE: BEARING CLEANING AND LUBRICATION

I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's Current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, and this Note. Section references are to the Standard Specifications.

This work consists of the following:

- (1) Furnish all labor, materials, tools, and equipment
- (2) Provide safe access to the bridge in accordance with Section 107.01.01
- (3) Remove stratified and pack rust from bearings
- (4) Pressure wash bearings
- (5) Coat all surfaces of bearings with lubricant
- (6) Maintain and control traffic
- (7) Any other work specified as part of this Contract

II. MATERIALS

A. Bearing Lubricant. Conform to Manufacturer's Technical Guidance. One of the following lubricants shall be used:

"Never Seez – Mariner's Choice" produced by Bostick, Inc.

"Mobile Centaur Moly NLGI Grades 1 or 2" produced by Mobil Oil

"Premalub #1 WG" produced by Certified Labs

III. CONSTRUCTION

A. Removal of Stratified and Pack Rust. Stratified and pack rust shall be removed from all bearing devices. See attached detailed drawings for each bridge showing location and quantity of the bearing devices. Hand tools including wire brushes, scrapers or impact devices (hand hammers or power chisels) are to be used for removing stratified and pack rust. All surfaces to have stratified and pack rust removed shall be cleaned to an SSPC SP-2 level. All debris collected shall be disposed of in a suitable off-site disposal facility.

B. Pressure Washing. Specified bridge components shall be pressure washed. All equipment for pressure washing shall be operated at a minimum pressure of up 4,000 psi with 0-degree spinner tips and/or fan tips as determined by the Engineer at the working location with a minimum flow rate of 3.5 gal/minute provided that these pressures do not damage any components of the structure. Pressure and flow rates shall be reduced to a level satisfactory to the Engineer should any damage occur due to power washing procedures. Pressure washing shall be operated at distance of approximately six inches from and perpendicular to the surface. All pressure washing wands shall be equipped with a gauge to accurately determine the amount pressure used. Pressure washing of any bridge element will proceed from top of wash area to bottom of wash area. Wash water will not be released to a bridge element previously washed.

**SPECIAL NOTE FOR BRIDGE CLEANING AND PREVENTIVE MAINTENANCE:
BEARING CLEANING AND LUBRICATION**

- C. Residual Lead Paint.** Residual lead paint may still be on bridge. The Contractor is advised to take all necessary protective measures including worker safety and environmental regulations when performing surface preparation. The Department will not consider any claims based on residual lead paint.

- D. Bearing Lubrication.** Bearing devices shall be lubricated after all stratified rust and pack rust is removed and power washing is complete, bearing devices shall have lubricant applied to all surfaces of the bearing including bearing plates and points of movement. Allow bearing devices to dry before lubricant is applied. Lubricant must be applied to a clean and dry surface.

IV. MEASUREMENT

- A. Bridge Cleaning and Preventive Maintenance.** The Department will measure the quantity as Lump Sum.

V. PAYMENT

- A. Bridge Cleaning and Preventive Maintenance.** Payment at the Contract lump sum price includes all labor, all materials and all incidental items necessary to complete bearing lubrication work in accordance with this Note, the Plans and the Standard Specifications.

The Department will consider payment as full compensation for all work required by this Note.

I-265 over I-65 (056B00318L/R)

(MP 10.25)

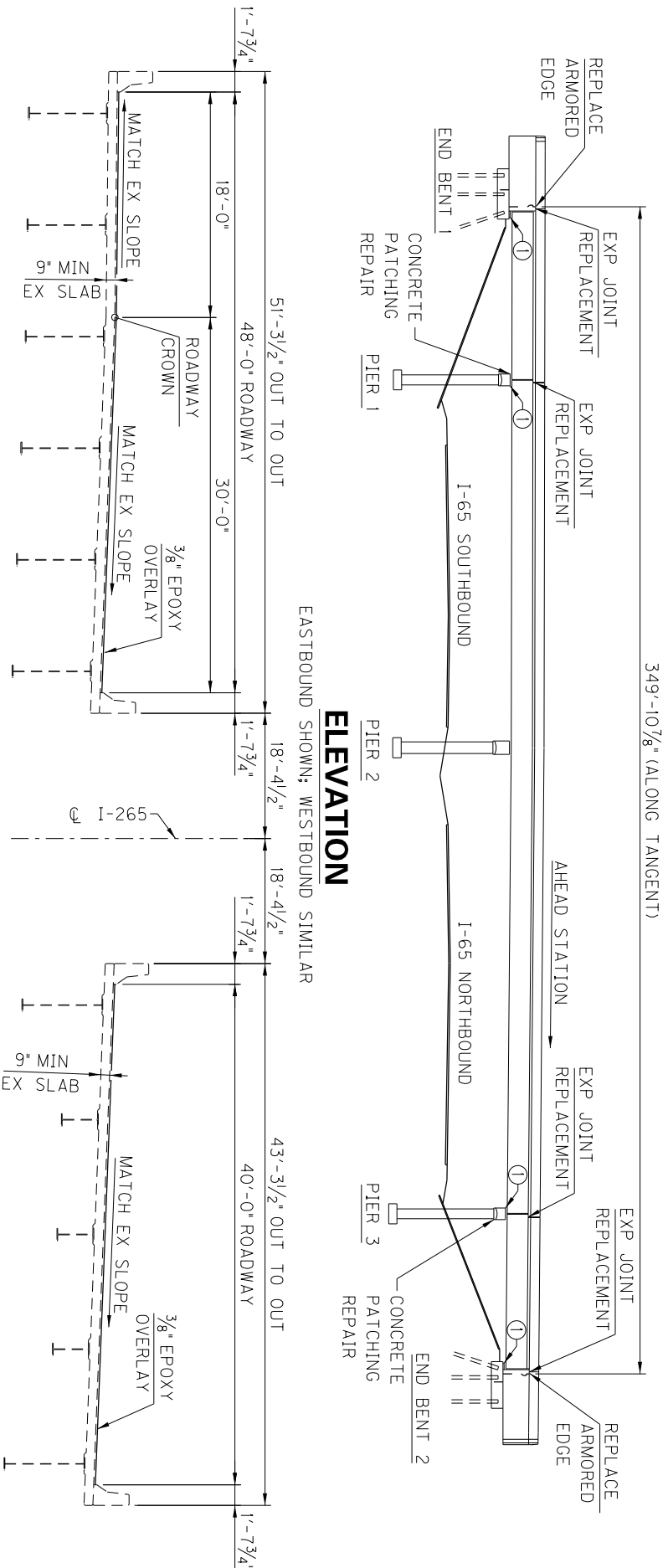


SUMMARY OF QUANTITIES – 056B00318L			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	101	LF
3296	EXPAN JOINT REPLACE 2 1/2 IN	101	LF
3299	ARMORED EDGE FOR CONCRETE	101	LF
8549	BLAST CLEANING	1806	SY
22146EN	CONCRETE PATCHING REPAIR	54	SF
23331EC	EPOXY-URETHANE WATERPROOFING	16250	SF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS
24094EC	PARTIAL DEPTH PATCHING	1.6	CY

SUMMARY OF QUANTITIES – 056B00318R			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	84	LF
3296	EXPAN JOINT REPLACE 2 1/2 IN	84	LF
3299	ARMORED EDGE FOR CONCRETE	84	LF
8549	BLAST CLEANING	1505	SY
22146EN	CONCRETE PATCHING REPAIR	103	SF
23331EC	EPOXY-URETHANE WATERPROOFING	13540	SF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS
24094EC	PARTIAL DEPTH PATCHING	1.3	CY

NOTES:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.
- PARTIAL DEPTH QUANTITY IS BASED ON APPROXIMATE ESTIMATES OF 0.50% OF THE OVERALL OVERLAY AREA.
- CONCRETE PATCHING QUANTITY BASED ON VISUAL INSPECTION + 25%.
- BRIDGE CLEANING & PREVENTATIVE MAINTENANCE LUMP SUM CORRESPONDS TO THE CLEANING AND LUBRICATION OF ALL MOVEABLE BEARINGS. SEE THE SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION.



ELEVATION

WESTBOUND
056B00318L

TYPICAL DECK SECTIONS
LOOKING AHEAD STATION

EASTBOUND
056B00318R

CONCRETE PATCHING REPAIR	
PIER 1R	
EAST FACE	9 SF
PIER 3L	
WEST FACE	18 SF
EAST FACE	18 SF
UNDERSIDE	18 SF
PIER 3R	
WEST FACE	40 SF
EAST FACE	40 SF
UNDERSIDE	14 SF

ACTUAL QUANTITIES MAY VARY.

BRIDGES:
056B00318L
056B00318R

SHEET 1 OF 3

NOTES:
DETAILS SHOWN ARE BASED ON EXISTING PLANS (DWG NO 20000). FEATURES AND DIMENSIONS SHOWN ARE APPROXIMATE.

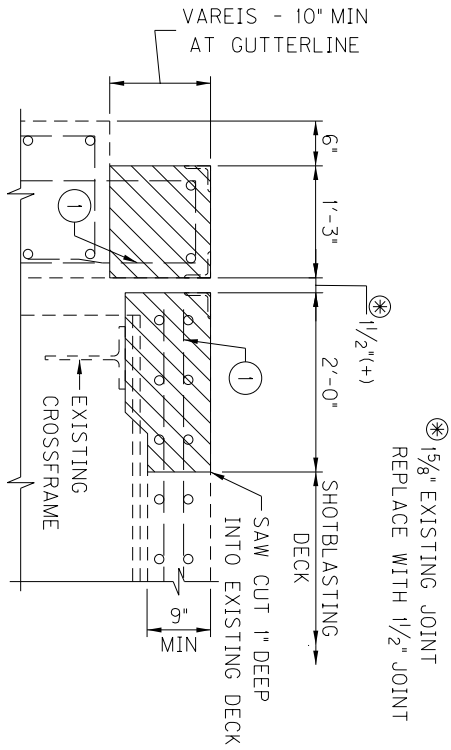
CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS, PROFILE GRADE LOCATION AND CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS AND ROADWAY PAVEMENT REHABILITATION PLANS.



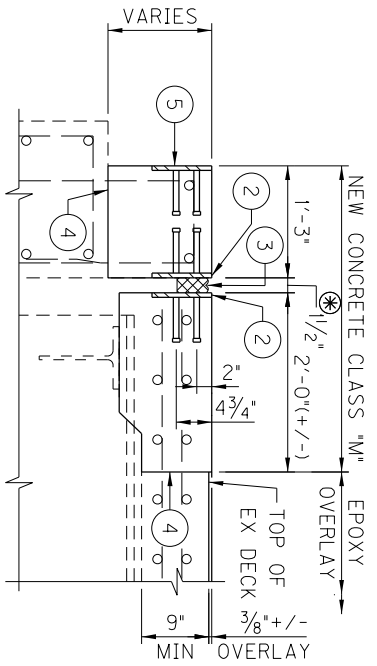
ELEVATION AND TYPICAL DECK SECTIONS

COUNTY: JEFFERSON
ROUTE: I-265
CROSSING: I-65

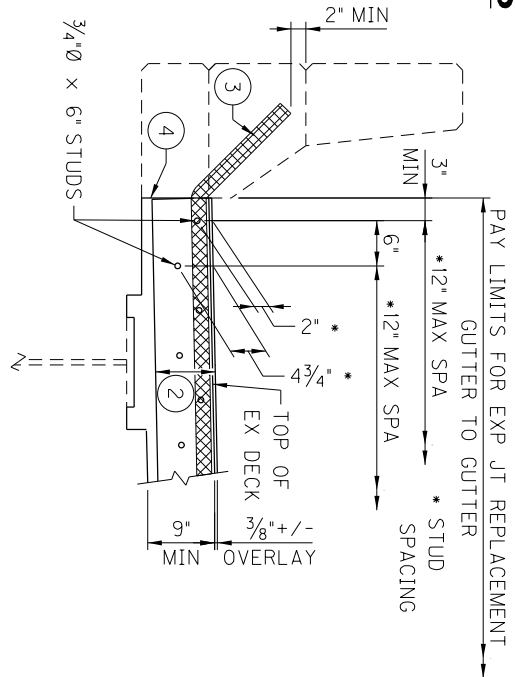
MP 10.25



EXISTING SECTION AT END BENTS
(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT END BENTS



PROPOSED SECTION THRU JOINT AT BARRIER

NOTES:
 REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE. CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID ITEM 3294 "EXPAN JOINT REPLACE 1/2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4"Ø x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE GUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BUE-001-13



JOINT REPLACEMENT DETAILS - END BENTS

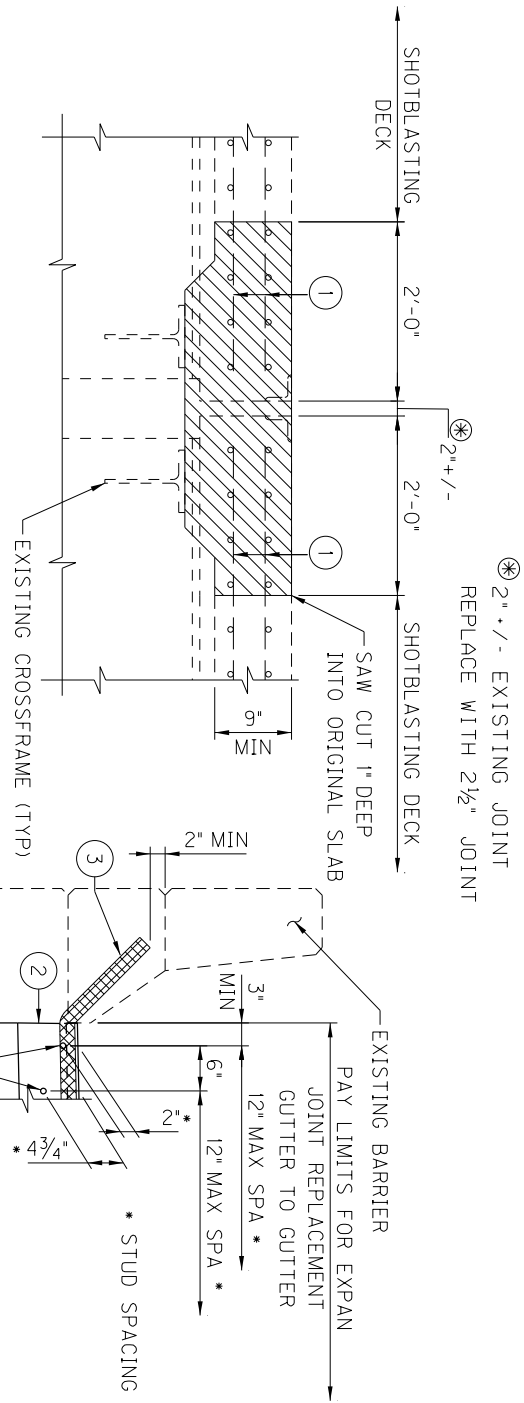
BRIDGES:
 056B00318L
 056B00318R

JEFFERSON COUNTY
 ROUTE 1-265
 CROSSING 1-65

JEFFERSON COUNTY
 ROUTE 1-265
 CROSSING 1-65

MP 10.25

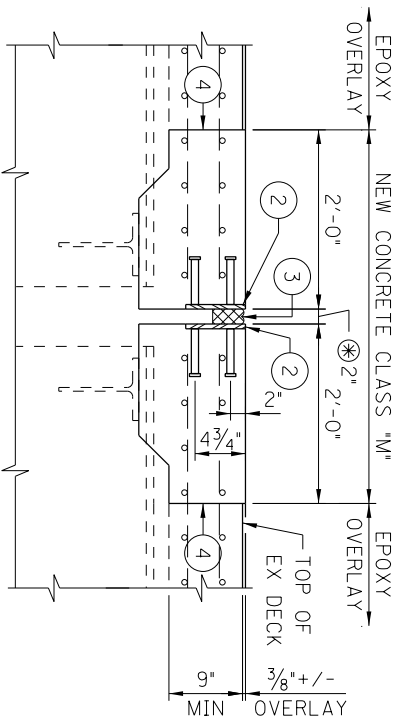
SHEET 2 OF 3



EXISTING SECTION AT PIERS

(SHOWING LIMITS OF REMOVAL)

PROPOSED SECTION THRU JOINT AT BARRIER



PROPOSED SECTION AT PIERS

NOTES:

REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE. CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

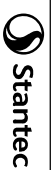
FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID ITEM 3295 "EXPAN JOINT REPLACE 2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING EMBEDDED REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4"Ø x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE GUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT



JOINT REPLACEMENT DETAILS - PIERS 1 & 3

COUNTY: JEFFERSON
ROUTE: I-265
CROSSING: I-65
MP: 10.25

BRIDGES:
056B00318L
056B00318R

SHEET 3 OF 3

I-65 SB Ramp 6 over I-265 EB (056B00320N)

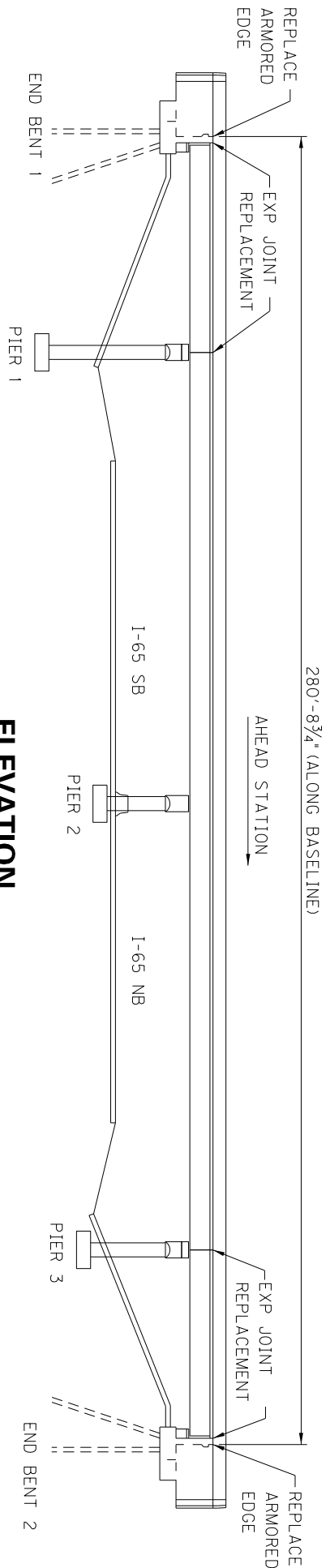
(MP 124.98)



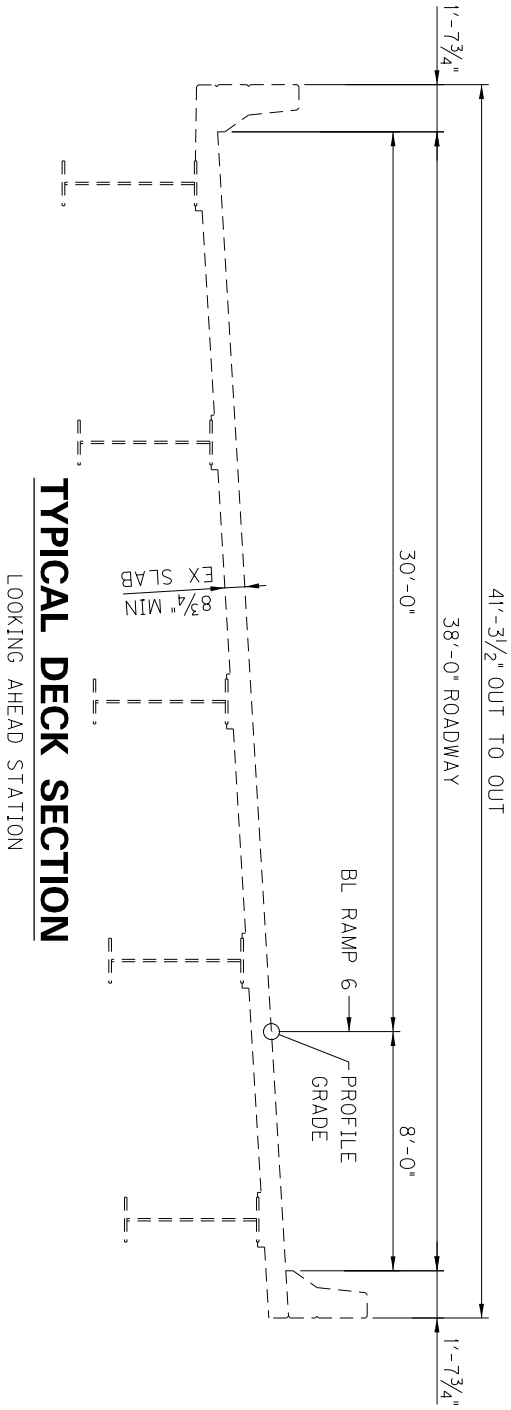
SUMMARY OF QUANTITIES – 056B00320N			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	154	LF
3299	ARMORED EDGE FOR CONCRETE	77	LF

NOTE:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.



ELEVATION



TYPICAL DECK SECTION

LOOKING AHEAD STATION

NOTES:
DETAILS SHOWN ARE BASED ON EXISTING PLANS (DWG NO 19999). FEATURES AND DIMENSIONS SHOWN ARE APPROXIMATE.

CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS, PROFILE GRADE LOCATION AND CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS AND ROADWAY PAVEMENT REHABILITATION PLANS.



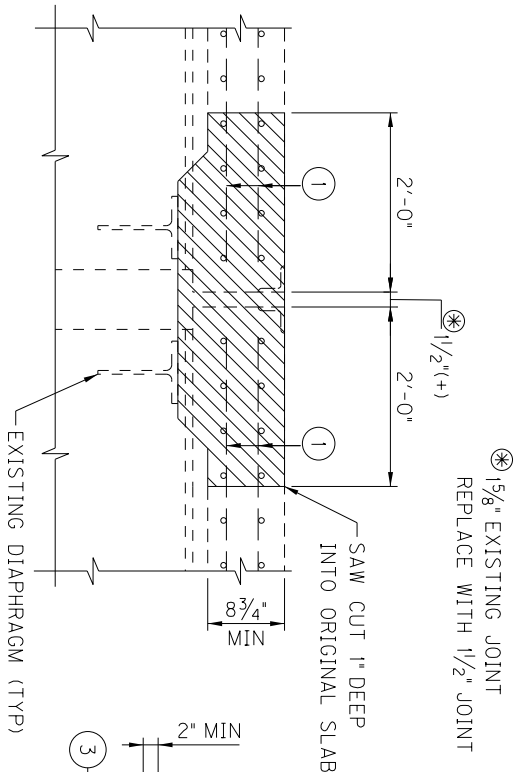
JEFFERSON COUNTY
NHPP IM 2651 (020)

ELEVATION & TYPICAL DECK SECTION

BRIDGE: 056B00320N

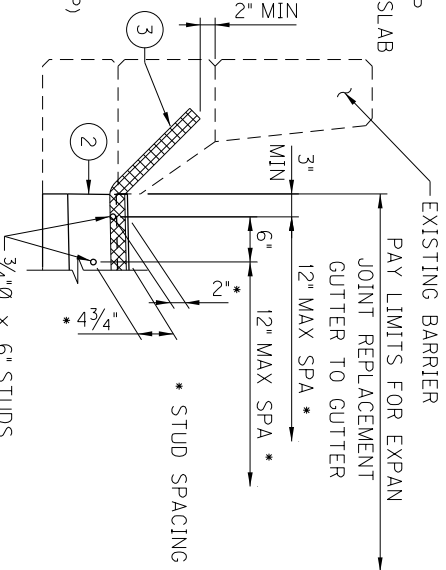
SHEET 1 OF 3

COUNTY:	JEFFERSON	ROUTE:	I-65 SB RAMP 6 TO EB I-265	MP:	124.98
CROSSING:	I-65				

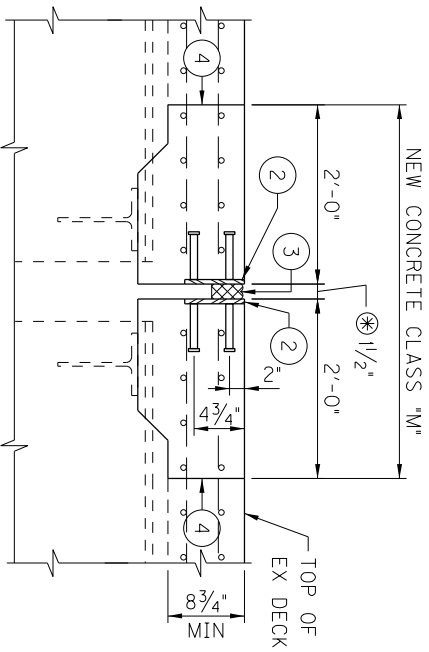


EXISTING SECTION AT PIERS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION THRU JOINT AT BARRIER



PROPOSED SECTION AT PIERS

⊗ 1 5/8" EXISTING JOINT
REPLACE WITH 1 1/2" JOINT

NOTES:

REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE. CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID ITEM 3294 "EXPAN JOINT REPLACE 1 1/2 IN."

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING EMBEDDED REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4" x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE GUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT



JOINT REPLACEMENT DETAILS - PIERS 1 & 3

COUNTY: JEFFERSON
ROUTE: I-65 SB RAMP 6 TO EB I-265
DOWNSHIFT: I-65
SHEET 3 OF 3

MP 124.98

I-265 over KY 841 EB Ramp 4 to I-65 NB (056B00322L/R)

(MP 10.39)

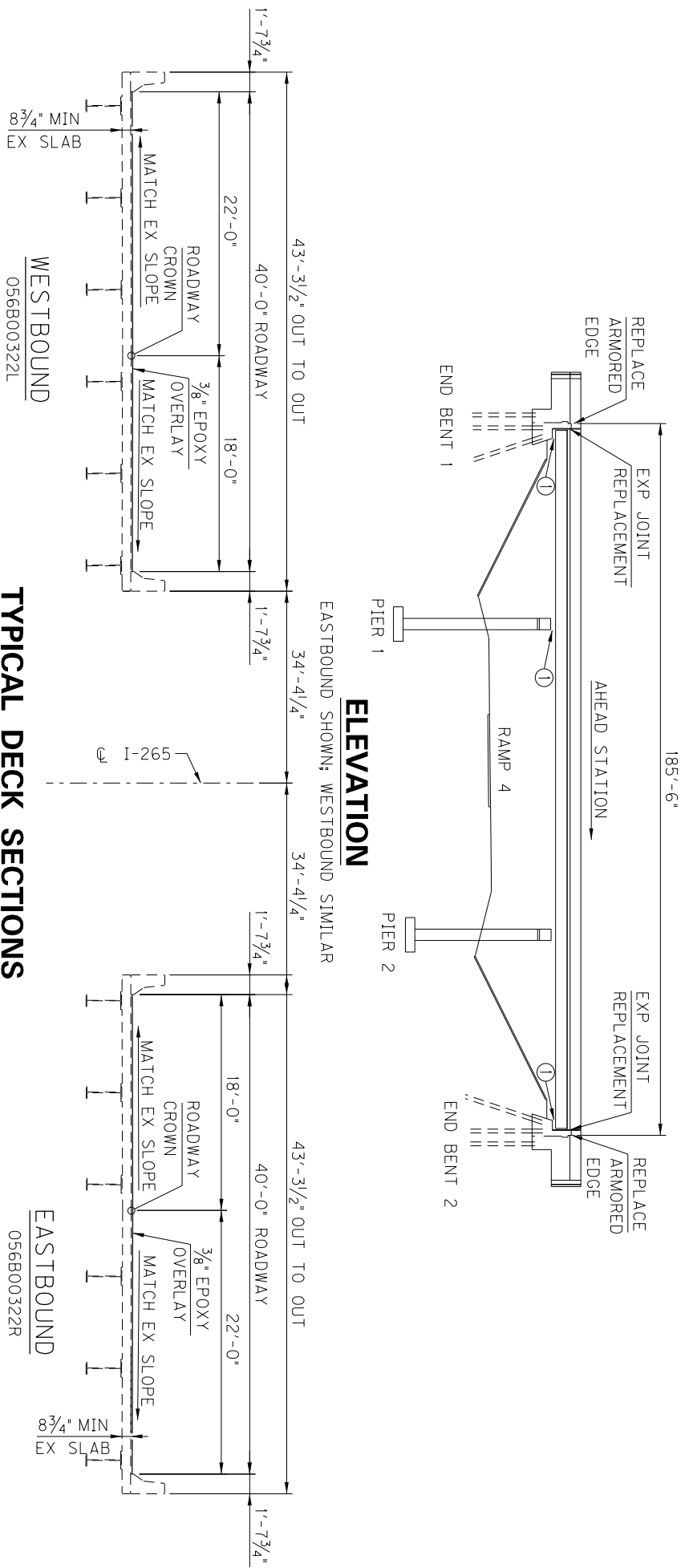


SUMMARY OF QUANTITIES – 056B00322L			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	40	LF
3295	EXPAN JOINT REPLACE 2 IN	40	LF
3299	ARMORED EDGE FOR CONCRETE	80	LF
8549	BLAST CLEANING	809	SY
23331EC	EPOXY-URETHANE WATERPROOFING	7280	SF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS
24094EC	PARTIAL DEPTH PATCHING	0.7	CY

SUMMARY OF QUANTITIES – 056B00322R			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	40	LF
3295	EXPAN JOINT REPLACE 2 IN	40	LF
3299	ARMORED EDGE FOR CONCRETE	80	LF
8549	BLAST CLEANING	809	SY
23331EC	EPOXY-URETHANE WATERPROOFING	7280	SF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS
24094EC	PARTIAL DEPTH PATCHING	0.7	CY

NOTES:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.
- PARTIAL DEPTH QUANTITY IS BASED ON APPROXIMATE ESTIMATES OF 0.50% OF THE OVERALL OVERLAY AREA.
- BRIDGE CLEANING & PREVENTATIVE MAINTENANCE LUMP SUM CORRESPONDS TO THE CLEANING AND LUBRICATION OF ALL MOVEABLE BEARINGS. SEE THE SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION.



TYPICAL DECK SECTIONS

LOOKING AHEAD STATION

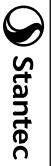
NOTES:
DETAILS SHOWN ARE BASED ON EXISTING PLANS (DWG NO 20001). FEATURES AND DIMENSIONS SHOWN ARE APPROXIMATE.

CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS, PROFILE GRADE LOCATION AND CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS AND ROADWAY PAVEMENT REHABILITATION PLANS.

- ① BRIDGE CLEANING AND PREVENTATIVE MAINTENANCE (SEE SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION)
- 056B00322L: 6 MOVEABLE BEARINGS PER NOTED SUBSTRUCTURE
- 056B00322R: 6 MOVEABLE BEARINGS PER NOTED SUBSTRUCTURE

BRIDGES:
056B00322L
056B00322R

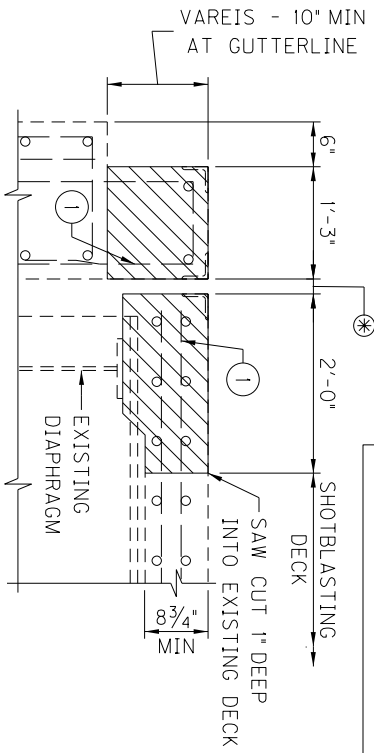
SHEET 1 OF 2



ELEVATION & TYPICAL DECK SECTIONS

COUNTY: JEFFERSON
ROUTE: I-265
CROSSING: KY 841 EB RAMP 4 TO I-65 NB

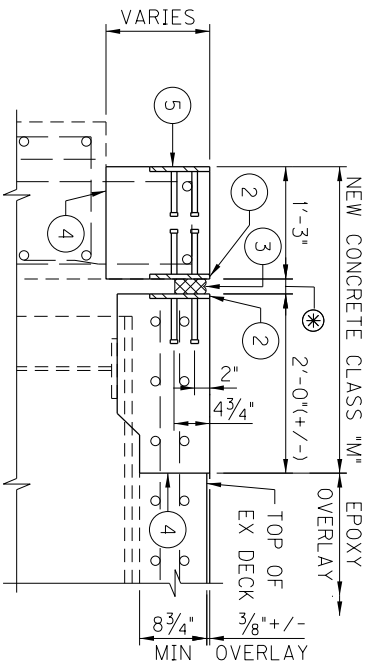
MP 10.39



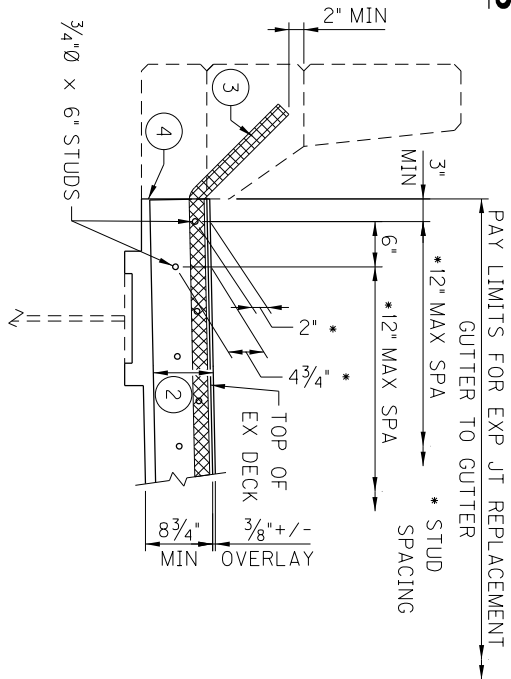
⊗ END BENT 1: 2" EXISTING JOINT, REPLACE WITH 2" JOINT
 END BENT 2: 1 5/8" EXISTING JOINT, REPLACE WITH 1 1/2" JOINT

EXISTING SECTION AT END BENTS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT END BENTS



PROPOSED SECTION THRU JOINT AT BARRIER

NOTES:
 REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE, CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

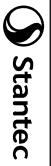
FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID FOR: ITEM 3294 "EXPAN JOINT REPLACE 1 1/2 IN", ITEM 3295 "EXPAN JOINT REPLACE 2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4"Ø x 6" STUDS
- ③ 1 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM, INSTALL 3/4" FROM TOP OF DECK.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BJE-001-13



JOINT REPLACEMENT DETAILS - END BENTS

COUNTY: JEFFERSON
 ROUTE: I-265
 CROSSING: KY 841 EB RAMP 4 TO I-65 NB

MP 10.39

BRIDGES:
 056B00322L
 056B00322R

SHEET 2 OF 2

I-265 over Freedom Way (056B00324L/R)

(MP 10.75)

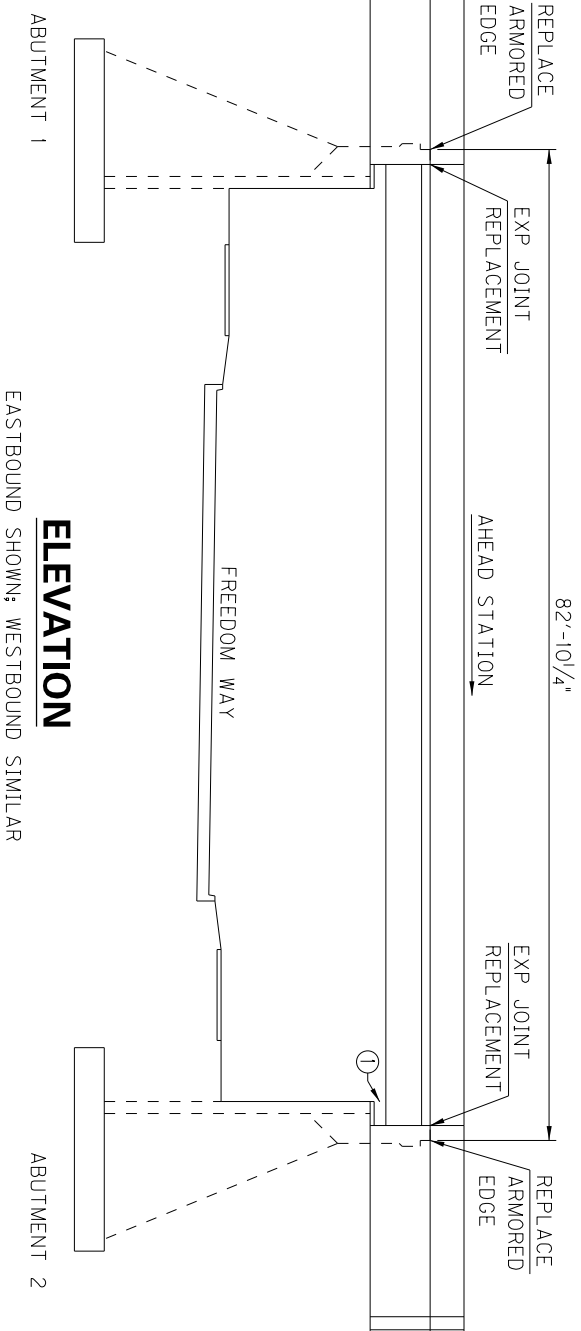


SUMMARY OF QUANTITIES – 056B00324L			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	80	LF
3295	EXPAN JOINT REPLACE 2 IN	80	LF
3299	ARMORED EDGE FOR CONCRETE	159	LF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS

SUMMARY OF QUANTITIES – 056B00324R			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	92	LF
3295	EXPAN JOINT REPLACE 2 IN	92	LF
3299	ARMORED EDGE FOR CONCRETE	183	LF
23949EC	BRIDGE CLEANING & PREVENTATIVE MAINTENANCE	1	LS

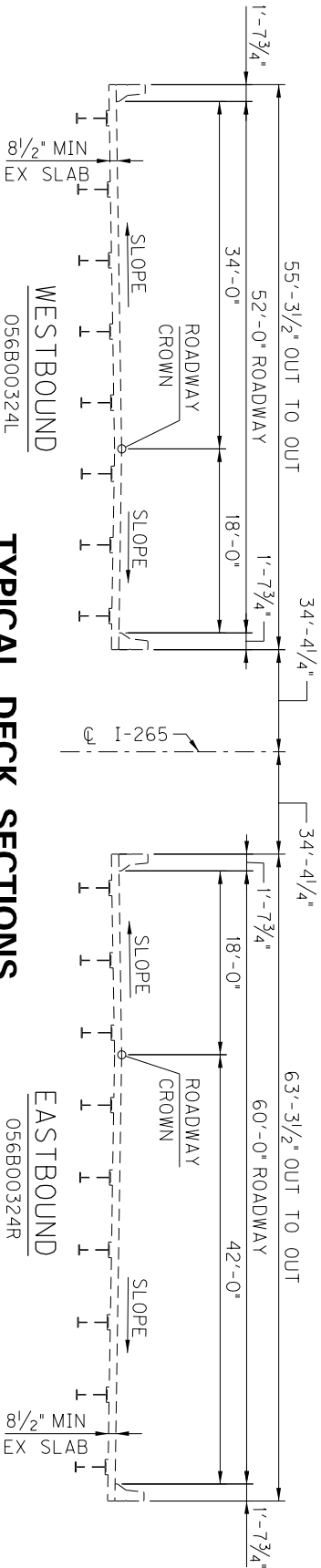
NOTES:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.
- BRIDGE CLEANING & PREVENTATIVE MAINTENANCE LUMP SUM CORRESPONDS TO THE CLEANING AND LUBRICATION OF ALL MOVEABLE BEARINGS. SEE THE SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION.



ELEVATION

EASTBOUND SHOWN; WESTBOUND SIMILAR



TYPICAL DECK SECTIONS

LOOKING AHEAD STATION

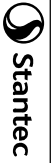
NOTES:
 DETAILS SHOWN ARE BASED ON EXISTING PLANES
 (DWG NO 19996, FEATURES AND DIMENSIONS
 SHOWN ARE APPROXIMATE.

CONTRACTOR SHALL FIELD VERIFY THE EXISTING
 CONDITIONS, PROFILE GRADE LOCATION AND
 CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS
 AND ROADWAY PAVEMENT REHABILITATION PLANS.

① BRIDGE CLEANING AND PREVENTATIVE MAINTENANCE
 (SEE SPECIAL NOTE FOR BEARING CLEANING AND LUBRICATION)
 056B00324L: 8 MOVEABLE BEARINGS AT ABUTMENT 2
 056B00324R: 9 MOVEABLE BEARINGS AT ABUTMENT 2

BRIDGES:
 056B00324L
 056B00324R

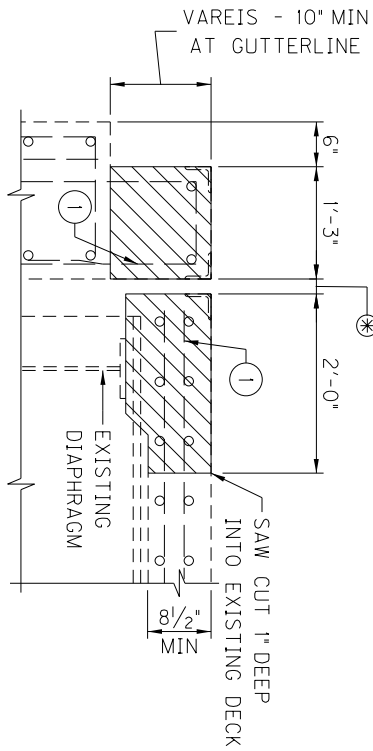
SHEET 1 OF 2



ELEVATION & TYPICAL DECK SECTIONS

COUNTY: JEFFERSON
 ROUTE: I-265
 CROSSING: FREEDOM WAY

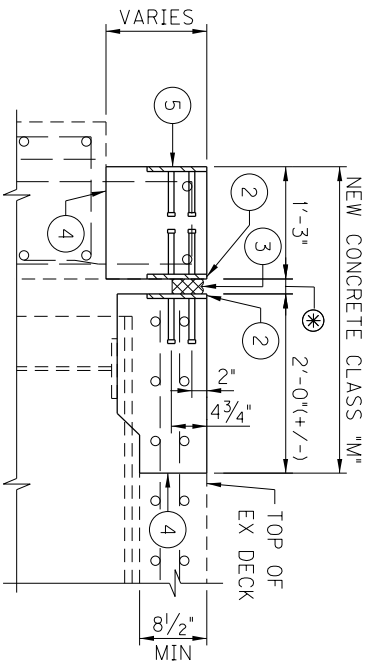
MP 10.75



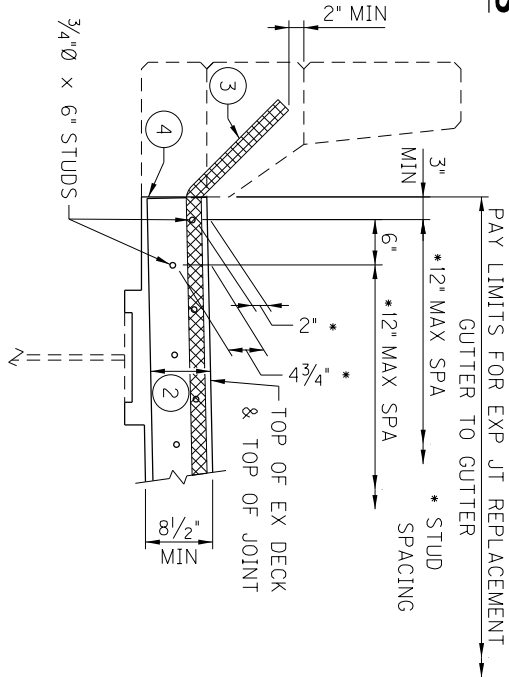
⊗ ABUTMENT 1: 1 5/8" EXISTING JOINT, REPLACE WITH 1 1/2" JOINT
 ⊗ ABUTMENT 2: 2" EXISTING JOINT, REPLACE WITH 2" JOINT

EXISTING SECTION AT ABUTMENTS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT ABUTMENTS



PROPOSED SECTION THRU JOINT AT BARRIER

NOTES:
 REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE. CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

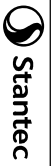
FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID FOR: ITEM 3294 "EXPAN JOINT REPLACE 1 1/2 IN", ITEM 3295 "EXPAN JOINT REPLACE 2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4"Ø x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE CUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BJE-001-13



JOINT REPLACEMENT DETAILS - ABUTMENTS

COUNTY: JEFFERSON
 ROUTE: I-265
 CROSSING: FREEDOM WAY

BRIDGES:
 056B00324L
 056B00324R

SHEET 2 OF 2

MP 10.75

I-265 over KY 1450 (Blue Lick Rd) (056B00325L/R)

(MP 10.90)

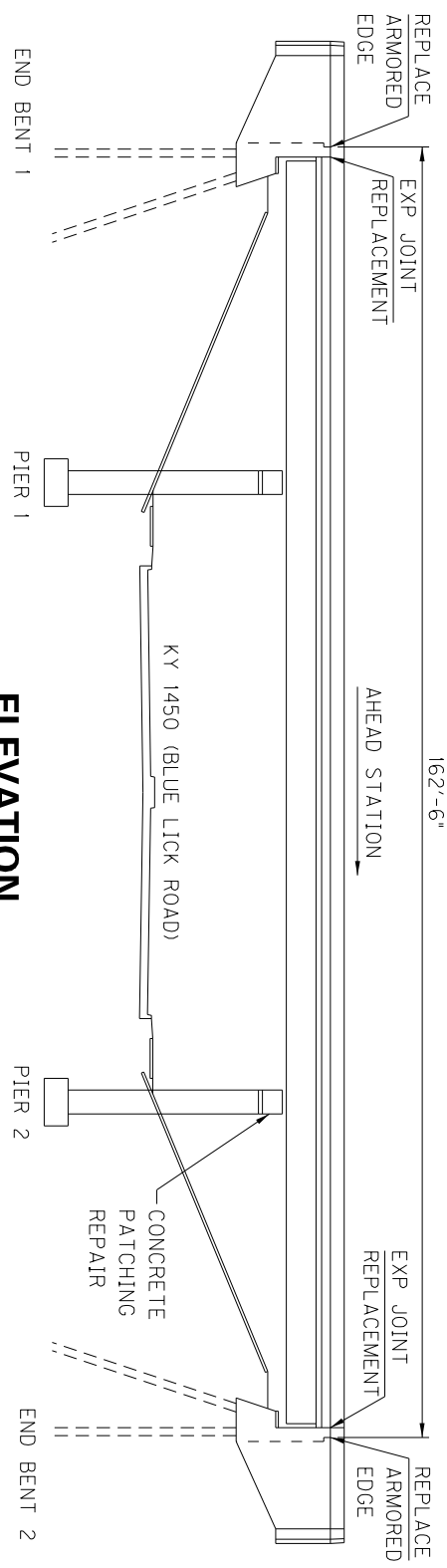


SUMMARY OF QUANTITIES – 056B00325L			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	105	LF
3299	ARMORED EDGE FOR CONCRETE	105	LF

SUMMARY OF QUANTITIES – 056B00325R			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	105	LF
3299	ARMORED EDGE FOR CONCRETE	105	LF
22146EN	CONCRETE PATCHING REPAIR	14	SF

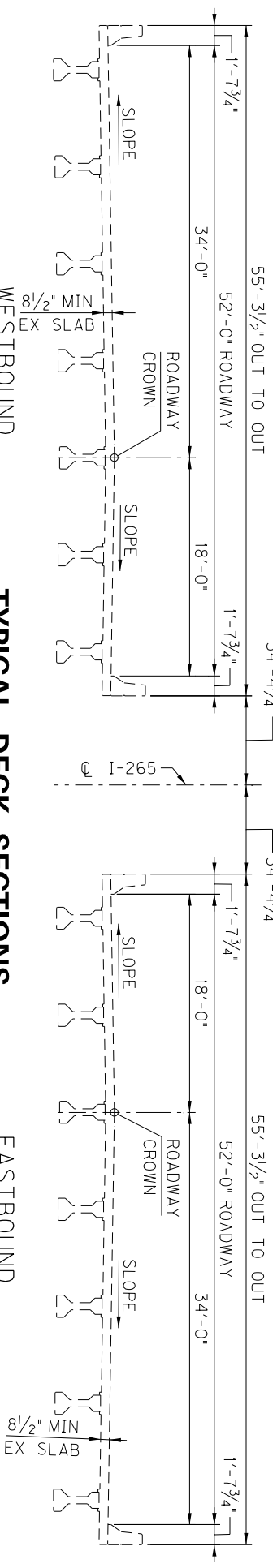
NOTES:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.
- CONCRETE PATCHING QUANTITY BASED ON VISUAL INSPECTION + 25%.



ELEVATION

EASTBOUND SHOWN; WESTBOUND SIMILAR



TYPICAL DECK SECTIONS

LOOKING AHEAD STATION

WESTBOUND
056B00325L

EASTBOUND
056B00325R

CONCRETE PATCHING REPAIR	
PIER 3R	2 SF
WEST FACE	2 SF
EAST FACE	2 SF
UNDERSIDE	10 SF

ACTUAL QUANTITIES MAY VARY.

NOTES:
DETAILS SHOWN ARE BASED ON EXISTING PLANS (DWG NO 19180). FEATURES AND DIMENSIONS SHOWN ARE APPROXIMATE.
CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS, PROFILE GRADE LOCATION AND CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS AND ROADWAY PAVEMENT REHABILITATION PLANS.

BRIDGES:
056B00325L
056B00325R

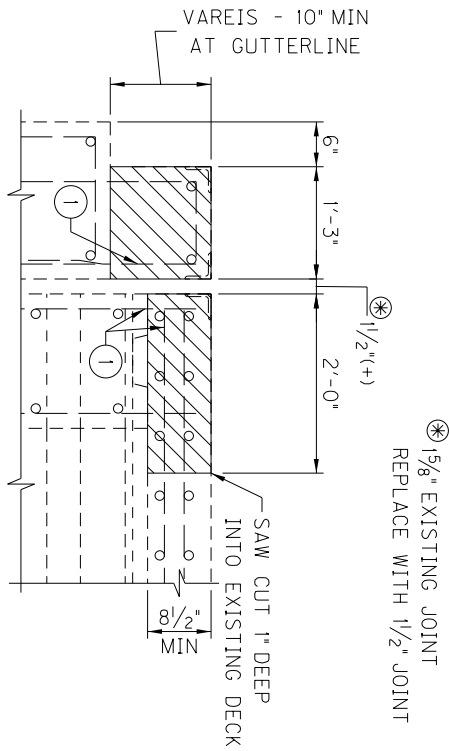
SHEET 1 OF 2



ELEVATION & TYPICAL DECK SECTIONS

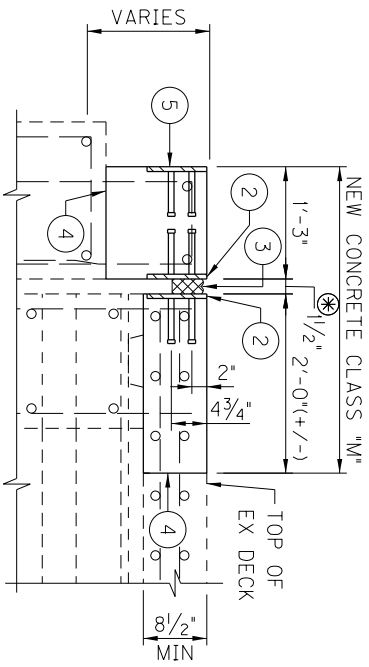
COUNTY: JEFFERSON
ROUTE: I-265
GROSSING: KY 1450 (BLUE LICK ROAD)

MP 10.90

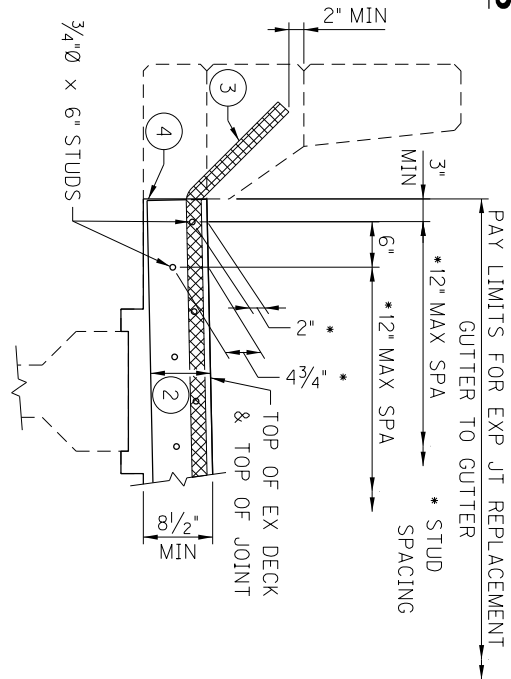


EXISTING SECTION AT END BENTS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT END BENTS



PROPOSED SECTION THRU JOINT AT BARRIER

NOTES:
 REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE, CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

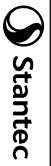
FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID ITEM 3294 "EXPLAN JOINT REPLACE 1 1/2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4" Ø x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE CUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BJE-001-13



JOINT REPLACEMENT DETAILS - END BENTS

COUNTY: JEFFERSON
 ROUTE: I-265
 CROSSING: KY 1450 (BLUE LICK ROAD)

MP 10.90

BRIDGES:
 056B00325L
 056B00325R

SHEET 2 OF 2

I-265 over Cinderella Lane (056B00368L/R)

(MP 12.81)

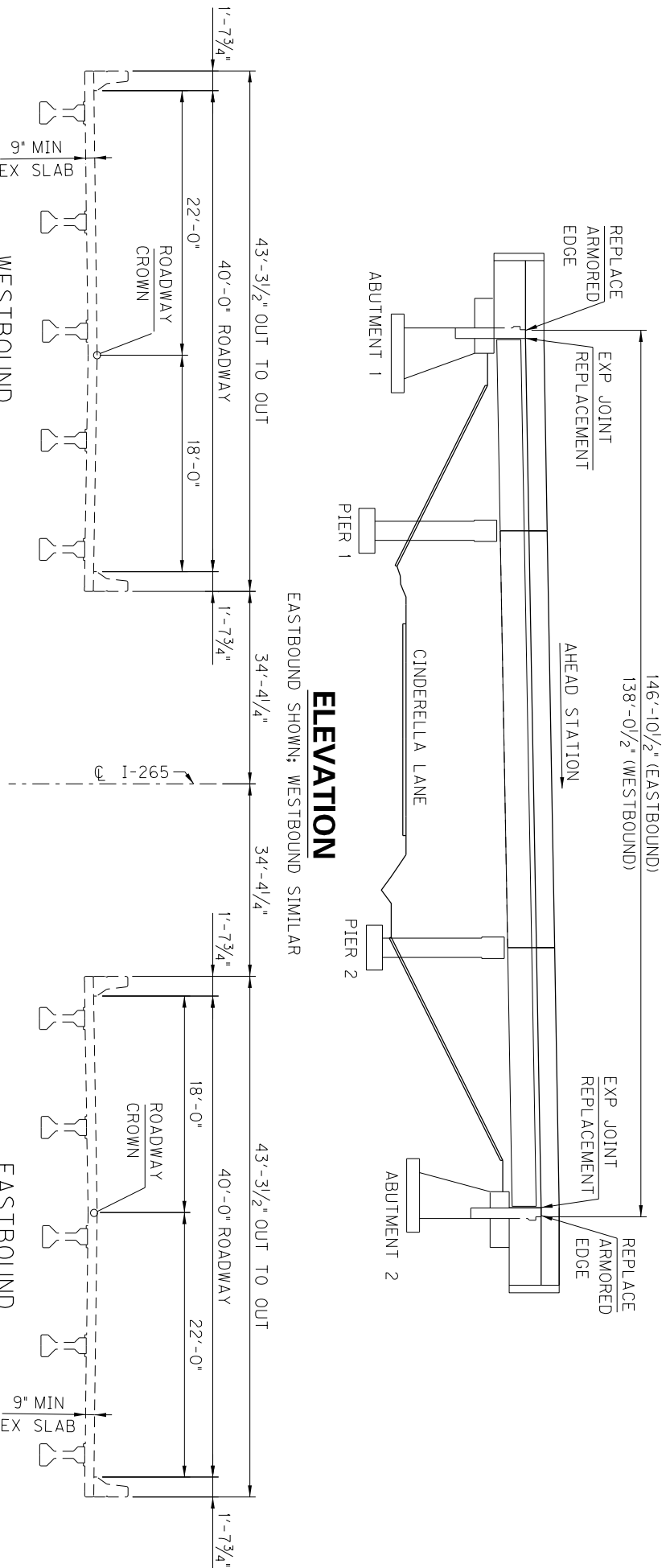


SUMMARY OF QUANTITIES – 056B00368L			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	81	LF
3299	ARMORED EDGE FOR CONCRETE	81	LF

SUMMARY OF QUANTITIES – 056B00368R			
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	87	LF
3299	ARMORED EDGE FOR CONCRETE	87	LF

NOTE:

- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.



ELEVATION

EASTBOUND SHOWN; WESTBOUND SIMILAR

TYPICAL DECK SECTIONS

LOOKING AHEAD STATION

WESTBOUND
056B00368L

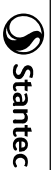
EASTBOUND
056B00368R

NOTES:
DETAILS SHOWN ARE BASED ON EXISTING PLANS (DMG NO 19753). FEATURES AND DIMENSIONS SHOWN ARE APPROXIMATE.

CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS, PROFILE GRADE LOCATION AND CROSS-SLOPES WITH THE EXISTING BRIDGE PLANS AND ROADWAY PAVEMENT REHABILITATION PLANS.

BRIDGES:
056B00368 L
056B00368 R

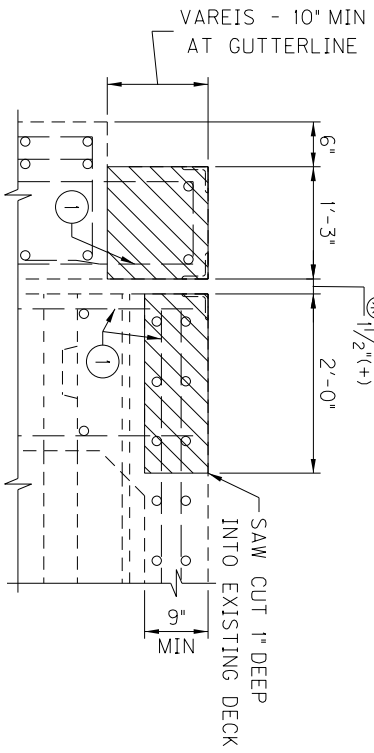
SHEET 1 OF 2



ELEVATION & TYPICAL DECK SECTIONS

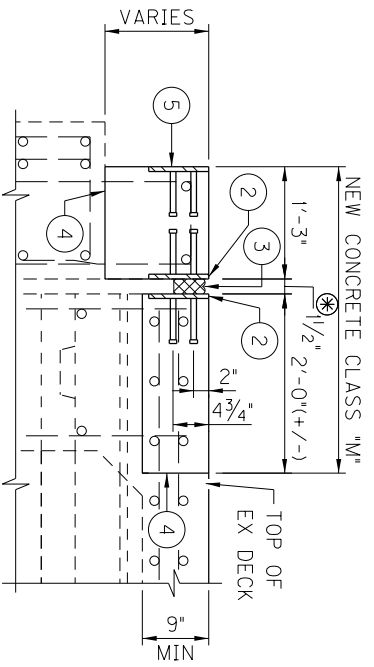
COUNTY: JEFFERSON
ROUTE: I-265
CROSSING: CINDERELLA LANE

MP 12.81

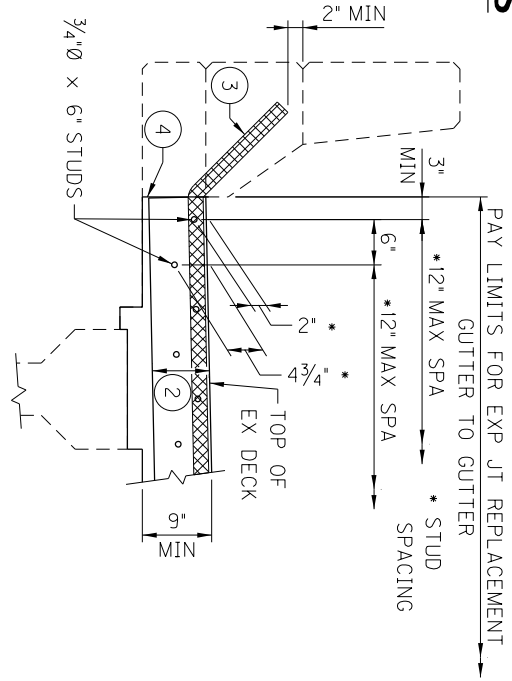


EXISTING SECTION AT ABUTMENTS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT ABUTMENTS



PROPOSED SECTION THRU JOINT AT BARRIER

⊗ 1/8" EXISTING JOINT
REPLACE WITH 1/2" JOINT

NOTES:
REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE, CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.

ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID ITEM 3294 "EXPLAN JOINT REPLACE 1/2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4" Ø x 6" STUDS
- ③ 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM, INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE CUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BJE-001-13



JOINT REPLACEMENT DETAILS - ABUTMENTS

BRIDGES:
056B00368L
056B00368R

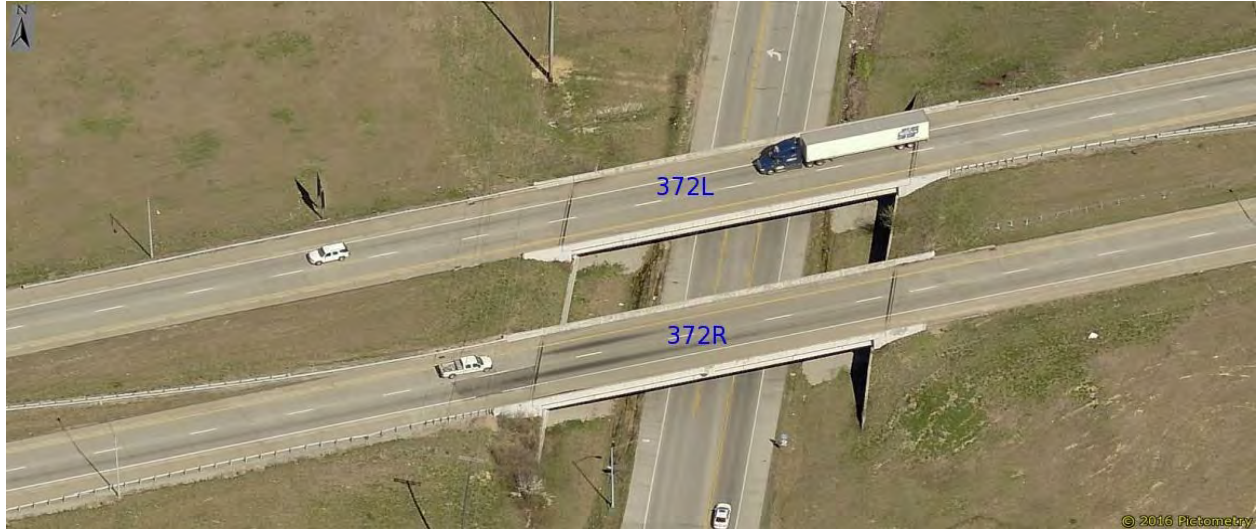
SHEET 2 OF 2

COMT# JEFFERSON
ROUTE 1-265
CROSSING: CINDERELLA LANE

MP 12.81

I-265 over KY 864 (Beulah Church Rd) (056B00372L/R)

(MP 15.18)



SUMMARY OF QUANTITIES – 056B00372L

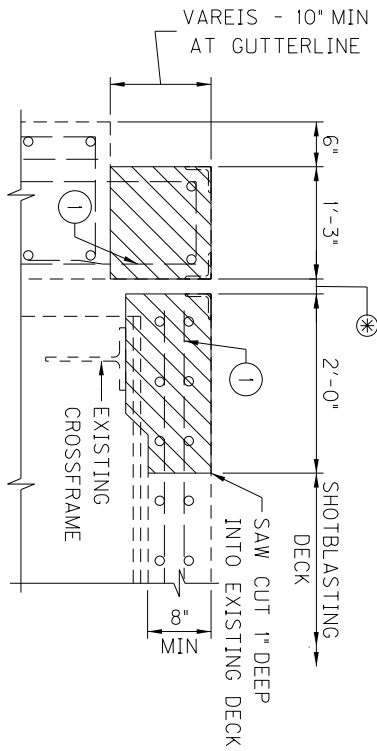
ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	44	LF
3295	EXPAN JOINT REPLACE 2 IN	44	LF
3299	ARMORED EDGE FOR CONCRETE	88	LF
8549	BLAST CLEANING	653	SY
23331EC	EPOXY-URETHANE WATERPROOFING	5870	SF
24094EC	PARTIAL DEPTH PATCHING	0.5	CY

SUMMARY OF QUANTITIES – 056B00372R

ITEM CODE	DESCRIPTION	QUANTITY	UNIT
3294	EXPAN JOINT REPLACE 1 1/2 IN	44	LF
3295	EXPAN JOINT REPLACE 2 IN	44	LF
3299	ARMORED EDGE FOR CONCRETE	88	LF
8549	BLAST CLEANING	653	SY
23331EC	EPOXY-URETHANE WATERPROOFING	5870	SF
24094EC	PARTIAL DEPTH PATCHING	0.5	CY

NOTES:

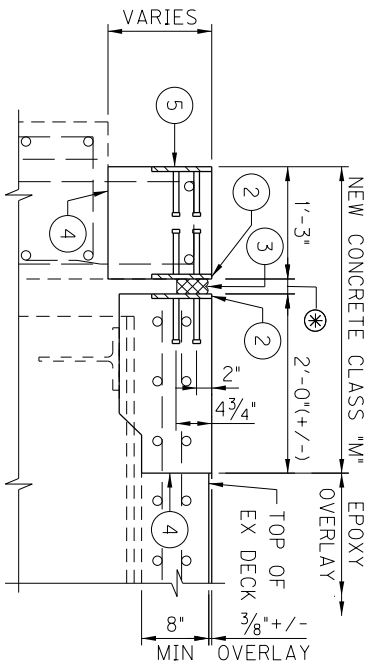
- EXPANSION JOINT REPLACEMENT SIZE BASED ON WIDTH SHOWN ON EXISTING PLANS. CONTRACTOR SHALL FIELD VERIFY JOINT SEAL WIDTH BEFORE ORDERING MATERIAL.
- PARTIAL DEPTH QUANTITY IS BASED ON APPROXIMATE ESTIMATES OF 0.50% OF THE OVERALL OVERLAY AREA.



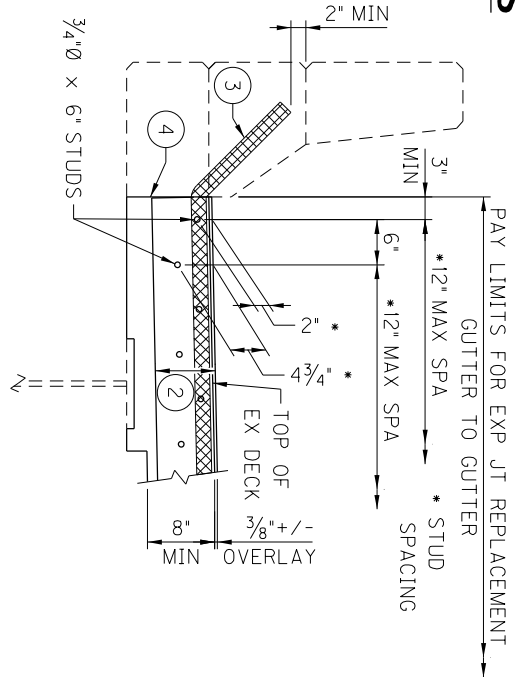
⊗ ABUTMENT 1: 1 5/8" EXISTING JOINT, REPLACE WITH 1 1/2" JOINT
 ⊗ ABUTMENT 2: 2" +/- EXISTING JOINT, REPLACE WITH 2" JOINT

EXISTING SECTION AT ABUTMENTS

(SHOWING LIMITS OF REMOVAL)



PROPOSED SECTION AT ABUTMENTS



PROPOSED SECTION THRU JOINT AT BARRIER

NOTES:
 REMOVE HATCHED AREA OF CONCRETE, EXPANSION DEVICE AND ARMORED EDGE. CLEAN AND REUSE EXISTING REINFORCEMENT. THE CONTRACTOR HAS THE OPTION TO REUSE OR REPLACE THE TRANSVERSE REINFORCEMENT.

FOR BONDING NEW CONCRETE TO EXISTING SURFACES, SEE SECTION 511 OF THE STANDARD SPECIFICATIONS.
 ROUGHEN EXISTING CONCRETE WHEN IN CONTACT WITH NEW CONCRETE.

THIS WORK, INCLUDING ALL LABOR, TOOLS AND MATERIAL, IS TO BE INCLUDED IN THE BID FOR: ITEM 3294 "EXPAN JOINT REPLACE 1 1/2 IN". ITEM 3295 "EXPAN JOINT REPLACE 2 IN".

NOTATIONS:

- ① CLEAN AND STRAIGHTEN EXISTING REINFORCEMENT
- ② PL 5/8" x 8" WITH 3/4"Ø x 6" STUDS
- ③ 1 1/2" PRECOMPRESSED, SILICONE-AND-FOAM HYBRID JOINT SYSTEM. INSTALL 3/4" FROM TOP OF DECK. MITER CUT THE JOINT TRANSITION INSTALLED AT BARRIERS TO MATCH THE SKEW AT THE CUTTERLINE.
- ④ BONDED CONSTRUCTION JOINT
- ⑤ ARMORED EDGE, SEE STD DWG BJE-001-13

BRIDGES:

056B00372L
 056B00372R

SHEET 2 OF 2



JOINT REPLACEMENT DETAILS - ABUTMENTS

COUNTY: JEFFERSON
 ROUTE: I-265
 CROSSING: KY 864 (BEULAH CHURCH ROAD) MP 15.18

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.



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 12, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00318L

Structure Location: Gene Snyder Freeway over I-65 Ramps 2 and 8

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



MRS, INC. MRS, Inc. Analytical Laboratory Division

332 West Broadway/ Suite # 902
Louisville, Kentucky - 40202 - 2133

Phone #: (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client: KY Transportation Cabinet
Address: 200 Mero Street
Frankfort, KY
40601
Attention : O'Dail Lawson

Project No: # 09083 B
Sample ID: # 1
Sampled: 22-Aug-17
Received: 22-Aug-17
Analyzed: 08-Sep-17 - Point Count

Bulk Sample Analysis

Sampled by: O'Dail Lawson
Facility/Location: Jefferson County - 056B00318L
Field Description: Masonry Sealant
Laboratory Description:
Tan & Gray Material

Asbestos Materials:
Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative

Non-asbestos Fibrous Materials & Matrix Materials:

Cellulose	0.25 %
Binders	99.50 %

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-061317-00518

O'Dail Lawson

has on 06-13-2017, 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: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 12, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00320N

Structure Location: SB I-265 to West Bound I-265

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



MRS, INC. *MRS, Inc. Analytical Laboratory Division*

332 West Broadway/ Suite # 902
Louisville, Kentucky - 40202 - 2133

Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client: KY Transportation Cabinet
Address: 200 Mero Street
Frankfort, KY
40601
Attention : O'Dail Lawson

Project No: # 09082 B
Sample ID: # 1
Sampled: 22-Aug-17
Received: 22-Aug-17
Analyzed: 08-Sep-17 - Point Count

Bulk Sample Analysis

Sampled by: O'Dail Lawson

Facility/Location: Jefferson County - B056B00320N

Field Description: Masonry Sealant

Laboratory Description:
Tan & Gray Material

Asbestos Materials:
Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative

Non-asbestos Fibrous Materials & Matrix Materials:

Cellulose	0.25 %
Binders	99.50 %

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

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P.O Box 99603 Louisville, KY 40269
(502)640-2951

Certification Number: ETC-AIR-061317-00518

O'Dail Lawson

has on 06-13-2017, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

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Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

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Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 12, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00322R

Structure Location: East Bound I-265 over Ramp to I-65 NB

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%. No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.





Chain of Custody Record

Kentucky Transportation Cabinet
200 Mero Street, 5th Floor West
Frankfort, Kentucky 40622
(502) 564-7250 fax (502) 564-5655

**KENTUCKY
TRANSPORTATION
CABINET**

O'Dail Lawson odail.lawson@ky.gov
KYTC
Address: 200 Mero Street
Frankfort KY
Phone: 502-564-7250 Fax: 502-564-5655
PO#:

Client Information KY TRANS CABINET
Results Code: *East Island 265 over Remp to I-65 NB*
ND = None Detected
FTD = Filter Tampering or Damaged
N/A = Not Applicable

Samplers (signature) *[Signature]*

Project or Subject Reference *056 B00322R*

Sample ID	Sample Description	Collected		Analysis Requested	Grab/Comp.	No. of Cont.	Cont. Type	Preservative
		Date	Time					
1	TAN MASONRY SEALANT	10/22	10:46	asbestos	G	1	BA	N/A
2	BLACK JOINT CMPD	10	↓	↓	↓	↓	↓	↓

Relinquished By: _____ Date/Time: _____
 Received By: *Thayer Acosta* Date/Time: *08/22/17*
 Relinquished By: _____ Date/Time: _____
 Received at Lab By: _____ Date/Time: _____

ENVIRONMENTAL TRAINING CONCEPTS, INC
P.O. Box 99603 Louisville, KY 40269
(502)640-2951

Certification Number: ETC-AIR-061317-00518

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Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

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TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 12, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00324R

Structure Location: I-265 over Freedom Way

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



MRS, INC. MRS, Inc. Analytical Laboratory Division

332 West Broadway/ Suite # 902 Phone #: (502) 495-1212
Louisville, Kentucky - 40202 - 2133 E-Mail Address: CEOMRSInc@AOL.Com

Client:	<u>KY Transportation Cabinet</u>	Project No:	<u># 09085 B</u>
Address:	<u>200 Mero Street</u>	Sample ID:	<u># 1</u>
	<u>Frankfort, KY</u>	Sampled:	<u>22-Aug-17</u>
	<u>40601</u>	Received:	<u>22-Aug-17</u>
		Analyzed:	<u>08-Sep-17 - Point Count</u>
	<u>Attention : O'Dail Lawson</u>		

Bulk Sample Analysis

Sampled by: O'Dail Lawson

Facility/Location: Jefferson County - 056B00324R

Field Description: Masonry Sealant


Laboratory Description:
Tan & 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-061317-00518

O'Dail Lawson


has on 06-13-2017, 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: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 11, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00325R

Structure Location: I-265 over Blue Lick Road

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.




<i>MRS, INC.</i>	<i>MRS, Inc. Analytical Laboratory Division</i>
-------------------------	---

332 West Broadway/ Suite # 902
Louisville, Kentucky - 40202 - 2133

Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client: <u>KY Transportation Cabinet</u>	Project No: <u># 09086 B</u>
Address: <u>200 Mero Street</u>	Sample ID: <u># 1</u>
<u>Frankfort, KY</u>	Sampled: <u>22-Aug-17</u>
<u>40601</u>	Received: <u>22-Aug-17</u>
Attention : <u>O'Dail Lawson</u>	Analyzed: <u>08-Sep-17 - Point Count</u>

Bulk Sample Analysis	
Sampled by:	<u>O'Dail Lawson</u>
Facility/Location:	<u>Jefferson County - 056B00325R</u>
Field Description:	<u>Masonry Sealant</u>
Laboratory Description:	<u>Tan & Gray Material</u>
Asbestos Materials:	<u>Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative</u>
Non-asbestos Fibrous Materials & Matrix Materials:	
Cellulose	0.25 %
Binders	99.50 %
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: <u>Winterford Mensah</u>	Reviewed By: <u></u> <small>Signature</small>

ENVIRONMENTAL TRAINING CONCEPTS, INC

P.O. Box 99603 Louisville, KY 40269
(502)640-2951

Certification Number: ETC-AIR-061317-00518

O'Dail Lawson

has on 06-13-2017, 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: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 12, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00327N

Structure Location: NB Preston Highway Ramp over I-265

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



MRS, INC. *MRS, Inc. Analytical Laboratory Division*

332 West Broadway/ Suite # 902
Louisville, Kentucky - 40202 - 2133

Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client: <u>KY Transportation Cabinet</u>	Project No: <u># 09087 B</u>
Address: <u>200 Mero Street</u>	Sample ID: <u># 2</u>
<u>Frankfort, KY</u>	Sampled: <u>22-Aug-17</u>
<u>40601</u>	Received: <u>22-Aug-17</u>
Attention : O'Dail Lawson	Analyzed: <u>08-Sep-17 - Point Count</u>

Bulk Sample Analysis

Sampled by: O'Dail Lawson

Facility/Location: Jefferson County - 056B00327N

Field Description: Tan Masonary Sealant

Laboratory Description:
Tan & 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-061317-00518

O'Dail Lawson

has on 06-13-2017, 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: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 11, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00368L

Structure Location: I-265 over Cinderella Lane

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



MRS, INC. *MRS, Inc. Analytical Laboratory Division*

332 West Broadway/ Suite # 902
Louisville, Kentucky - 40202 - 2133

Phone # : (502) 495-1212
E-Mail Address: CEOMRSInc@AOL.Com

Client: KY Transportation Cabinet
Address: 200 Mero Street
Frankfort, KY
40601
Attention : O'Dail Lawson

Project No: # 09088 B
Sample ID: # 1
Sampled: 22-Aug-17
Received: 22-Aug-17
Analyzed: 08-Sep-17 - Point Count

Bulk Sample Analysis

Sampled by: O'Dail Lawson
Facility/Location: Jefferson County - 056B00368L
Field Description: Masonry Sealant


Laboratory Description:
Tan & Gray Material

Asbestos Materials:
Chrysotile = 1/400 = 0.25 % (< 1 %) Sample Is Negative

Non-asbestos Fibrous Materials & Matrix Materials:

Cellulose	0.25 %
Binders	99.50 %

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

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P.O. Box 99603 Louisville, KY 40269
(502)640-2951

Certification Number: ETC-AIR-061317-00518

O'Dail Lawson

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Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 06-13-2018


Name - Training Manager


Name - Instructor



Matthew G. Bevin
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Greg Thomas
Secretary

Asbestos Inspection Report

To: Andre Johannes

District: Central Office

Date: September 11, 2017

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Jefferson 05-2087.00

Structure ID: 056B00372R

Structure Location: I-265 over Beulah Church Road

Sample Description: The samples collected were negative for asbestos.

Inspection Date: August 22, 2017

Results and Recommendations

The results of the samples collected were negative for the presence of asbestos above 1%.
No abatement is required at this time.

It is recommended that this report accompany the 10-Day Notice of Intent for Demolition ([DEP7036 Form](#)) which is to be submitted to the Kentucky Division of Air Quality prior to abatement, demolition, or renovation of any building or structure in the Commonwealth.



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(502)640-2951

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Conducted at: 1220 Kentucky Mills Drive, Louisville, KY

Expiration Date: 06-13-2018


Name - Training Manager


Name - Instructor



KENTUCKY TRANSPORTATION CABINET
Department of Highways
DIVISION OF RIGHT OF WAY & UTILITIES

RIGHT OF WAY CERTIFICATION

TC 62-226
Rev. 01/2016
Page 1 of 1

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)		
5-2087.00	Jefferson	FD52 056 8659101D	NHPP IM 2651 (020)		

PROJECT DESCRIPTION
Payment rehab on I-265 between I-65 interchange to just east of Beulah Church Rd interchange.

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 Boy King
Signature		Signature	<i>[Signature]</i>
Date		Date	11-7-17
Right of Way Director		FHWA	
Printed Name	DMLay	Printed Name	DAVID WHITWORTH
Signature	<i>[Signature]</i>	Signature	<i>[Signature]</i>
Date	09 NOV 17	Date	11-10-17

UTILITIES AND RAIL CERTIFICATION NOTE

**JEFFERSON COUNTY, NHPP IM 2651 (020)
FD52 056 0265 010-016)
Pavement Rehabilitation on I-265 from MP 10.25 to MP 15.66
Item Number 5-2087**

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

**JEFFERSON COUNTY, NHPP IM 2651 (020)
FD52 056 0265 010-016)
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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.	LG&E KU (Electric) 820 West Broadway Louisville, KY 40202 LG&E Emergency Number (502) 589-1444 LG&E and KU Emergency Number 1-800-331-7370		Greg Geiser work: (502) 627-3708 Greg.Geiser@LGE-KU.com
2.	LG&E (Gas) 820 West Broadway Louisville, KY 40202 Gas Emergency Number (502) 589-5511 LG&E and KU Emergency Number 1-800-331-7370		Greg Geiser work: (502) 627-3708 Greg.Geiser@LGE-KU.com
3.	Louisville Water Company 550 South Third Street Louisville, KY 40202		Daniel Tegene, PE (502) 569-3649 DTegene@LWCKy.com
4.	AT&T KY 1350 E. John Rowan Blvd Bardstown, KY 40004		Scott Roche sr8832@att.com (502) 348-4528
5.	Metropolitan Sewer District 700 West Liberty Street Louisville, KY 40203-1911		Brandon Flaherty Brandon.Flaherty@LouisvilleMSD.org Office: (502) 540-6632 Cell: (502) 381-0804

UTILITIES AND RAIL CERTIFICATION NOTE

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- Greg Powell
Greg.Powell@LouisvilleMSD.org
6. Charter Communications
10168 Linn Station Road
Suite 120
Louisville, KY 40223
- Deno Barbour
Cell: (502) 664-7395
Office: (502) 357-4376
Dwight.Barbour@TWCable.com
Kevin Mercer
(502) 817-5055 – Cell
(502) 357-4724 - Office
kevin.mercer@charter.com
7. Texas Gas Transmission Corporation
10327 Gaslight Way
Louisville, KY 40299
- John Weaver
(502) 438-2407
John.Weaver@BWPMLP.com
- Howard Menser
Howard.Menser@BWPMLP.com
Office: (502) 491-0251
Cell: (502) 396-2418
8. Marathon Pipeline, LLC
539 S Main St, Rm 7642
Findlay, OH 45840
- Greg Newman
gcneman@marathonpetroleum.com
(419) 884-0800 ext. 236
9. Indiana Gas Company Inc
d.b.a. Vectren Energy Delivery of Indiana, Inc
or
Ohio River Pipeline Corporation
2520 Lincoln Drive
Clarksville, Indiana 47129
- Mary Barber
MBarber@Vectren.com
(812) 948-4952
- Line Maintained By**
Texas Gas Transmission, LLC
3800 Frederica Street
Owensboro, Kentucky 42302
Cell: (270) 485-1152

UTILITIES AND RAIL CERTIFICATION NOTE

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- | | |
|---|--|
| <p>10. Indiana Utilities Corporation</p> <p>123 West Chestnut Street
Corydon, Indiana 47112
(812) 738-3235</p> | <p>Scott Schmitt
scotts@indianautilitiescorp.com
Corey Thatcher
coreyt@indianautilitiescorp.com
Kevin Kinney
Ron Timberlake
Jackie Rogers
JackieR@IndianaUtilitiesCorp.com</p> |
| <p>11. Sprint - Fiber Optics
11370 Enterprise Park Dr.
Sharonville, OH 45241</p> | <p>Joe Thomas
Joeseeph.J.Thomas@sprint.com
Office (440) 447-6163
Cell (937) 209-9754</p> |
| <p>12. Mid-Valley Pipeline Company
4910 Limaburg Road
Burlington, KY 41005
FAX (866) 699-1185</p> | <p>Todd Calfee (Richard)
(859) 371-4469 ext. 14
(859) 630-8271
RTCALFEE@SunocoLogistics.com</p> |
| <p>13. Level 3 Communications (Transmission)
848 S. 8th St.
Louisville, KY 40203</p> | <p>Kevin Webster
Kevin.Webster@Level3.com
Office (502) 777-8622
Cell (502) 777-8622
Fax (502) 561-6950</p> |
| <p>Level 3 Communications (Distribution)
11857 Commonwealth Drive
Louisville, KY 40299</p> | <p>Mark Sewell
Mark.Sewell@Level3.com
Office (502) 389-4811
Cell (502) 295-0939</p> |
| <p>3770 Lucius Rd.
Columbia, SC 29201</p> | <p>Harold Waters
Harold.Waters@Level3.com
Office (502) 719-2393
Cell (502) 435-0956</p> <p>Russ Wheat, Relocation Project Manager
russ.wheat@level3.com
Office (803) 239-1116
Cell (803) 206-9563</p> |

UTILITIES AND RAIL CERTIFICATION NOTE

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Send to Relocations Email

Relocations

relo@level3.com

14. Jefferson County Public Schools (JCPS)
C B Young
Building 7
3001 Crittenden Dr.
Louisville. KY 40209

Jeff Hardy
Jeff.Hardy@Jefferson.kyschools.us
(502) 485-7975
Scott McMahan (Team Fishel)
cell: (502) 664-9312
office: (502) 456-2900

15. Kentucky Data Link (KDL now Windstream)
Project Manager
111 S. Main St.
Elizabethtown, KY 42701

James Galvin
Office: (270) 765-1818
Cell: (TBD)
Email – james.galvin@windstream.com
Mark Ware
Mark.Ware@windstream.com

16. AT&T Legacy
7555 E. Pleasant Valley Rd. – Suite 140
Independence, OH 44131

Mike Diederich
MD4145@att.com
PHONE - (216) 750.0135
CELL - (216) 212-8556
Don Garr
DRGarr@Hughes.net
Cell: (502) 741-8374

17. CenturyLink
260 Winn Ave
Winchester, KY 40391
CenturyLink National Network Construction
3625 Brookside Parkway Suite 400
Alpharetta, GA 30022

Jim Trapnell
jim.trapnell@centurylink.com
Cell (859) 806-5833
Chad Kirkland
Chadrick.kirkland@centurylink.com
Cell (770) 328-2449

Qwest Communications Company, LLC
700 W Mineral Ave, UTD2734
Littleton, Colorado 80120

George McElvain
George.McElvain@Qwest.com
(303) 992-9931

UTILITIES AND RAIL CERTIFICATION NOTE

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- | | | |
|------------|---|--|
| | | Cell: (720) 260-2514
Fax: (303) 707-3252 |
| 18. | Atmos Energy
105 Hudson Blvd
Shelbyville, KY 40065
(502) 633-2831 ext. 104 | Bernie Anderson
cell: (502) 321-8073
Bernie.Anderson@AtmosEnergy.com
OR
Ryne White
Ryne.white@atmosenergy.com
(270) 929-1706
Send to all contacts |
| 19. | Crown Castle Network Operations
10300 Ormsby Park Place
Suite 501
Louisville, KY 40223 | Rebecca Gray
rebecca.gray@CrownCastle.com
(502)318-1313
Chris Gladstone
Chris.Gladstone@CrownCastle.com
(502) 689-2162 |
| 20. | Zayo
9209 Castlegate Dr
Indianapolis, IN 46256 | Manny Naves
manuel.naves@zayo.com
(812) 459-9696 |
| 21. | MCI/Verizon(Owns WUTEL)
MCI/Verizon
730 West Henry Street
Indianapolis, IN 46225 | David Dickerson
david.b.dickerson@xo.com
Office: (615) 777-7855
Cell: (615) 507-5287

Dave Wiley (Field)
(502) 439-8783
dave.wiley@verizon.com |
| 22. | TRIMARC
Public Safety & Transportation Systems
901 West Main Street
Louisville, KY 40202 | Todd Hood
Todd.Hood@ngc.com
Office: (502) 587-6624
Cell: (502) 307-7456 |
| 23. | Lighttower Network LLC | Mike Prather |

UTILITIES AND RAIL CERTIFICATION NOTE

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2701 Michell Arc
Lexington, KY 40511

Office-585-445-5823
Cell: 585-330-7825
mprather@lighttower.com

24. Google Fiber
101 N. 7th Street, Ste 400
Louisville, KY 40202

Paul Cobb
cell 650-253-7860
pcobb@google.com

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

The contractor shall use the Supplemental Specifications that are effective at the time of letting.
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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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

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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.

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

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

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

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

3.2.1 Preparation of Base. Compact the new and existing aggregate base to the Engineer's satisfaction. The Engineer will accept compaction by either visual inspection or by nuclear gauge. When the Engineer deems it necessary to stabilize the existing base or replace unsuitable materials, excluding bridge ends, use 12 inches of geotextile fabric wrapped No. 2 aggregate topped with 4 inches of DGA or CSB. Use 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

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

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

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

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

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

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

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

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

3.3 Joint Sealing. Seal all new or partially new joints with 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.

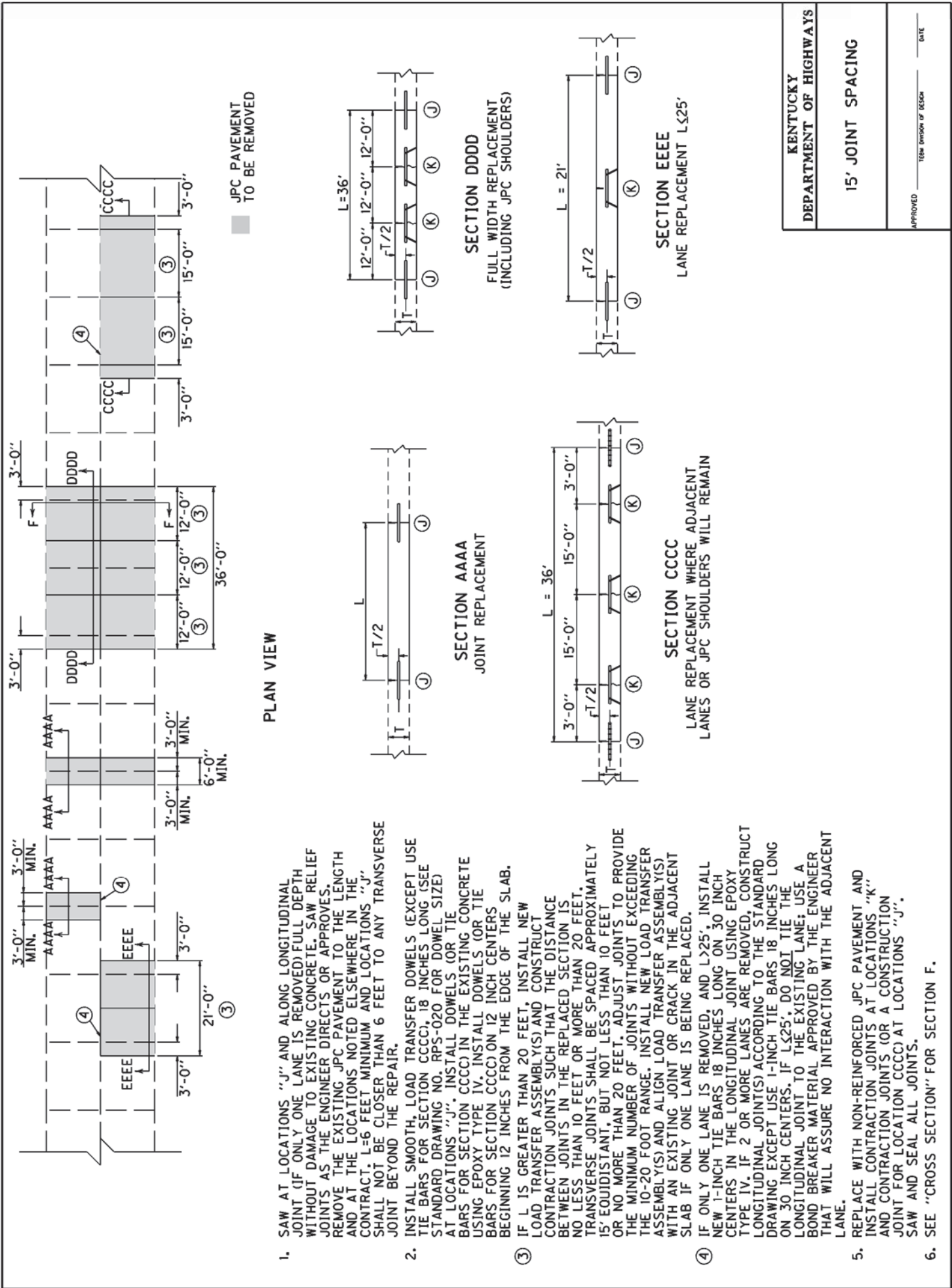
4.4 Underdrains. The Department will measure the quantity according to Subsection 704.04. The Department will not measure lateral drains for payment and will consider them incidental to the Underdrains.

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.

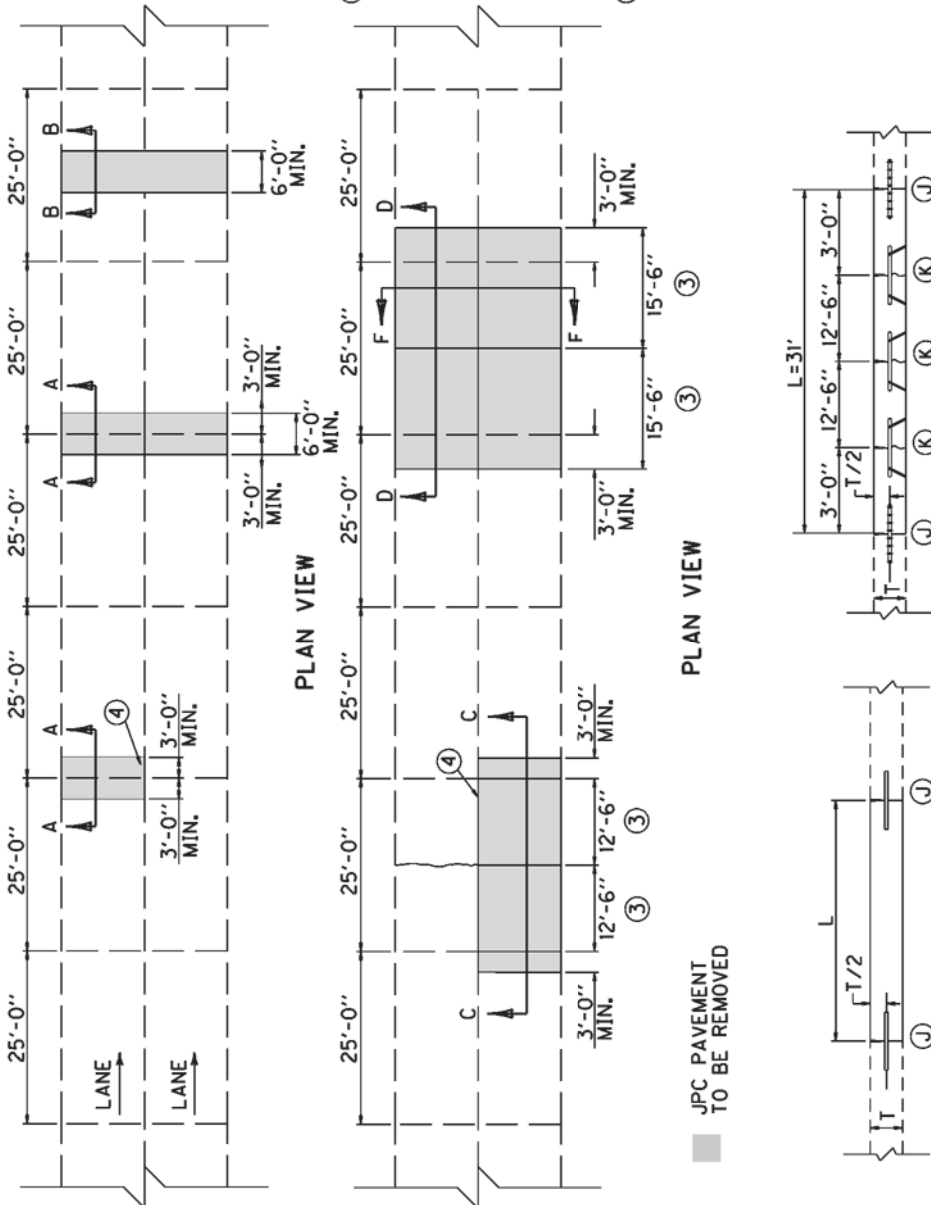
June 15, 2012



KENTUCKY DEPARTMENT OF HIGHWAYS
15' JOINT SPACING
APPROVED _____ DATE _____ <small>TERM DIVISION OF DESIGN</small>

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 L25', 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 CONTRACTION JOINT FOR LOCATION CCCC) AT LOCATIONS "J". SAW AND SEAL ALL JOINTS.
6. SEE "CROSS SECTION" FOR SECTION F.

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



SECTION A
JOINT REPLACEMENT

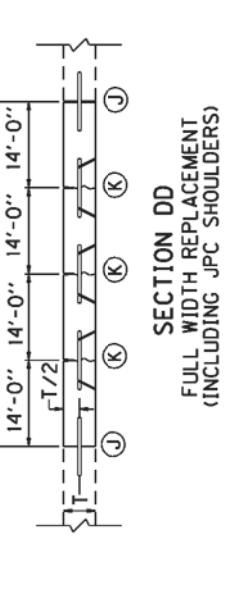
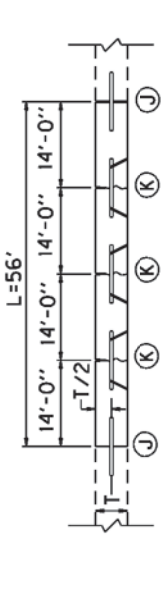
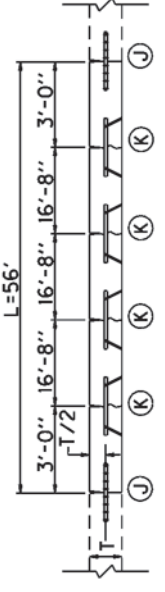
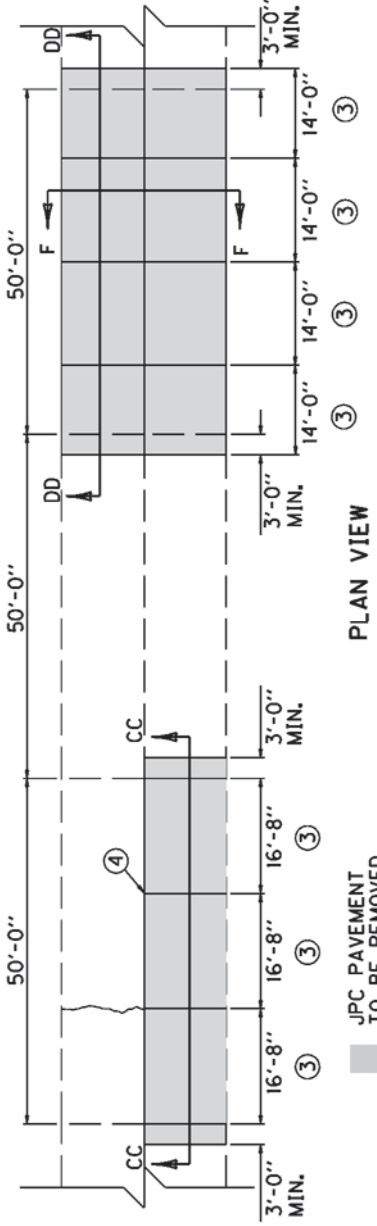
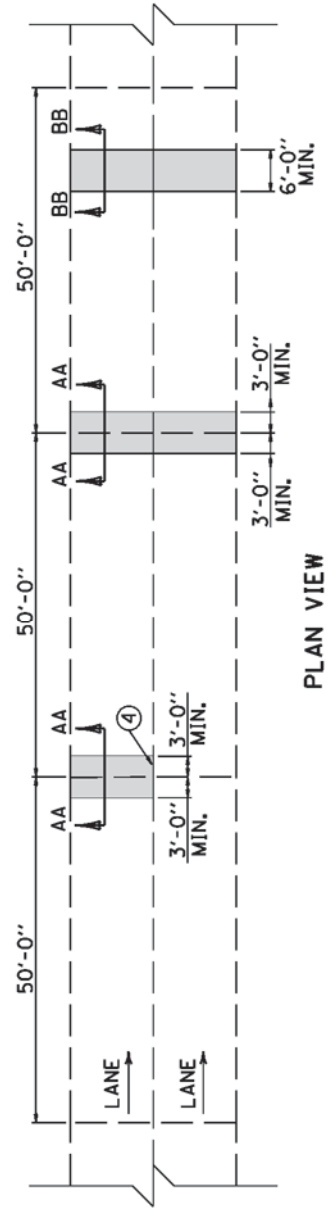
SECTION B
MID-SLAB REPLACEMENT

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

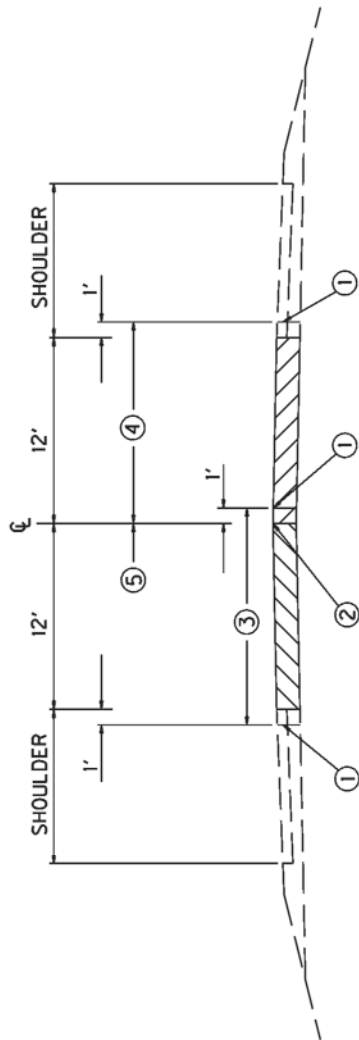
SECTION D
FULL WIDTH REPLACEMENT (INCLUDING JPC SHOULDERS)

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

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



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 _____ DATE _____ TECH. DIVISION OF NELSON

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.

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 (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

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

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

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

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

General Decision Number: KY170100 10/13/2017 KY100

Superseded General Decision Number: KY20160100

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 \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any 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 \$10.20 (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 2017. 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.

Modification Number	Publication Date
0	01/06/2017
1	01/13/2017
2	02/03/2017
3	03/10/2017
4	05/19/2017
5	07/14/2017
6	08/04/2017
7	08/11/2017
8	09/08/2017
9	09/15/2017
10	09/29/2017
11	10/13/2017

* BRIN0004-003 06/01/2017

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38

* BRKY0001-005 06/01/2017

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE,
MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE
COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.80	12.38

* BRKY0002-006 06/01/2017

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 27.81	13.01

* BRKY0007-004 06/01/2017

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 32.98	19.02

* BRKY0017-004 06/01/2017

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN,
HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS,
OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

	Rates	Fringes
BRICKLAYER.....	\$ 26.47	12.76

CARP0064-001 05/01/2015

	Rates	Fringes
CARPENTER.....	\$ 27.50	16.06
Diver.....	\$ 41.63	16.06
PILEDRIVERMAN.....	\$ 27.75	16.06

ELEC0212-008 06/05/2017

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.90	17.56

ELEC0212-014 12/01/2014

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
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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.

IRON0044-009 06/01/2017

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.....	\$ 27.60	20.10

 IRON0070-006 06/01/2017

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.....	\$ 28.30	21.85

 IRON0769-007 06/01/2017

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, Pecksrige, 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
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IRONWORKER

ZONE 1.....	\$ 31.33	23.97
ZONE 2.....	\$ 31.73	23.97
ZONE 3.....	\$ 33.33	23.97

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.

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.....	\$ 23.14	13.29
GROUP 2.....	\$ 23.39	13.29
GROUP 3.....	\$ 23.44	13.29
GROUP 4.....	\$ 24.04	13.29

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

LABO0189-008 07/01/2017

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE,
MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE &
WASHINGTON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.14	13.29
GROUP 2.....	\$ 23.39	13.29
GROUP 3.....	\$ 23.44	13.29
GROUP 4.....	\$ 24.04	13.29

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

 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

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

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

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

PAIN1072-003 12/01/2016

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

Rates	Fringes
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Painters:

Bridges; Locks; Dams;		
Tension Towers & Energized		
Substations.....	\$ 32.98	16.15
Power Generating Facilities.	\$ 29.74	16.15

PLUM0248-003 06/01/2017

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

	Rates	Fringes
Plumber and Steamfitter.....	\$ 35.00	25.12

PLUM0392-007 06/01/2014

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 29.80	17.79

PLUM0502-003 08/01/2016

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	20.13

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

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
for Federal Contractors applies to all contracts subject to the
Davis-Bacon Act for which the contract is awarded (and any
solicitation was issued) on or after January 1, 2017. If this
contract is covered by the EO, the contractor must provide
employees with 1 hour of paid sick leave for every 30 hours
they work, up to 56 hours of paid sick leave each year.
Employees must be permitted to use paid sick leave for their
own illness, injury or other health-related needs, including
preventive care; to assist a family member (or person who is
like family to the employee) who is ill, injured, or has other
health-related needs, including preventive care; or for reasons
resulting from, or to assist a family member (or person who is
like family to the employee) who is a victim of, domestic
violence, sexual assault, or stalking. Additional information
on contractor requirements and worker protections under the EO
is available at www.dol.gov/whd/govcontracts.

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)).

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.

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.

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:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
11.2%	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 Jefferson 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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Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	1,142.00	TON		\$	
0020	00069		CRUSHED AGGREGATE SIZE NO 3	500.00	TON		\$	
0030	02058		REMOVE PCC PAVEMENT	30,312.00	SQYD		\$	
0040	02060		PCC PAVEMENT DIAMOND GRINDING	237,665.00	SQYD		\$	
0050	02069		JPC PAVEMENT-10 IN	30,312.00	SQYD		\$	
0060	02110		PARTIAL DEPTH PATCHING	529.00	CUFT		\$	
0070	02115		SAW-CLEAN-RESEAL TVERSE JOINT	253,000.00	LF		\$	
0080	02116		SAW-CLEAN-RESEAL LONGIT JOINT	296,000.00	LF		\$	
0090	21173EC		SAW-CLEAN-RESEAL RANDOM CRACKS	2,261.00	LF		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0480	01877		SPECIAL HEADER CURB CONCRETE	2,812.00	LF		\$	
0490	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	74.00	EACH		\$	
0500	01983		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	19.00	EACH		\$	
0510	01984		DELINEATOR FOR BARRIER - WHITE	54.00	EACH		\$	
0520	01985		DELINEATOR FOR BARRIER - YELLOW	54.00	EACH		\$	
0530	02220		FLOWABLE FILL	51.00	CUYD		\$	
0540	02237		DITCHING	5,000.00	LF		\$	
0550	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH		\$	
0560	02367		GUARDRAIL END TREATMENT TYPE 1	5.00	EACH		\$	
0570	02369		GUARDRAIL END TREATMENT TYPE 2A	4.00	EACH		\$	
0580	02381		REMOVE GUARDRAIL	3,775.00	LF		\$	
0590	02387		GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	1.00	EACH		\$	
0600	02391		GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH		\$	
0610	02562		TEMPORARY SIGNS	1,500.00	SQFT		\$	
0620	02599		FABRIC-GEOTEXTILE TYPE IV	1,000.00	SQYD		\$	
0630	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0640	02671		PORTABLE CHANGEABLE MESSAGE SIGN	10.00	EACH		\$	
0650	02701		TEMP SILT FENCE	5,000.00	LF		\$	
0660	02704		SILT TRAP TYPE B	5.00	EACH		\$	
0670	02707		CLEAN SILT TRAP TYPE B	5.00	EACH		\$	
0680	02775		ARROW PANEL	4.00	EACH		\$	
0690	05950		EROSION CONTROL BLANKET	10,000.00	SQYD		\$	
0700	05963		INITIAL FERTILIZER	.70	TON		\$	
0710	05964		20-10-10 FERTILIZER	1.10	TON		\$	
0720	05985		SEEDING AND PROTECTION	10,000.00	SQYD		\$	
0730	05992		AGRICULTURAL LIMESTONE	12.40	TON		\$	
0740	06401		FLEXIBLE DELINEATOR POST-M/W	890.00	EACH		\$	
0750	06404		FLEXIBLE DELINEATOR POST-M/Y	760.00	EACH		\$	
0760	06412		STEEL POST MILE MARKERS	10.00	EACH		\$	
0770	06511		PAVE STRIPING-TEMP PAINT-6 IN	119,600.00	LF		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0780	06556		PAVE STRIPING-DUR TY 1-6 IN W	3,660.00	LF		\$	
0790	06557		PAVE STRIPING-DUR TY 1-6 IN Y	2,570.00	LF		\$	
0800	06568		PAVE MARKING-THERMO STOP BAR-24IN	230.00	LF		\$	
0810	06574		PAVE MARKING-THERMO CURV ARROW	33.00	EACH		\$	
0820	06600		REMOVE PAVEMENT MARKER TYPE V	1,030.00	EACH		\$	
0830	10020NS		FUEL ADJUSTMENT	8,807.00	DOLL	\$1.00	\$	\$8,807.00
0840	20411ED		LAW ENFORCEMENT OFFICER	2,000.00	HOUR		\$	
0850	21533EN		EMBANKMENT	500.00	CUYD		\$	
0860	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	3,712.50	LF		\$	
0870	22861EN		HIGH STRENGTH GEOTEXTILE FABRIC TY V	1,000.00	SQYD		\$	
0880	24189ER		DURABLE WATERBORNE MARKING-6 IN W	173,500.00	LF		\$	
0890	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	153,000.00	LF		\$	
0900	24191ER		DURABLE WATERBORNE MARKING-12 IN W	16,000.00	LF		\$	
0910	24489EC		INLAID PAVEMENT MARKER	1,600.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0920	00461		CULVERT PIPE-15 IN	8.00	LF		\$	
0930	00462		CULVERT PIPE-18 IN	12.00	LF		\$	
0940	00466		CULVERT PIPE-30 IN	8.00	LF		\$	
0950	01000		PERFORATED PIPE-4 IN	200.00	LF		\$	
0960	01010		NON-PERFORATED PIPE-4 IN	50.00	LF		\$	
0970	01020		PERF PIPE HEADWALL TY 1-4 IN	2.00	EACH		\$	
0980	01505		DROP BOX INLET TYPE 5B	5.00	EACH		\$	
0990	01691		FLUME INLET TYPE 2	3.00	EACH		\$	
1000	02483		CHANNEL LINING CLASS II	304.00	TON		\$	
1010	02484		CHANNEL LINING CLASS III	500.00	TON		\$	
1020	20366NN		REPLACE GRATE	5.00	EACH		\$	

Section: 0004 - BRIDGE-056B00318L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1030	03294		EXPAN JOINT REPLACE 1 1/2 IN	101.00	LF		\$	
1040	03296		EXPAN JOINT REPLACE 2 1/2 IN	101.00	LF		\$	
1050	03299		ARMORED EDGE FOR CONCRETE	101.00	LF		\$	
1060	08549		BLAST CLEANING	1,806.00	SQYD		\$	
1070	22146EN		CONCRETE PATCHING REPAIR	54.00	SQFT		\$	
1080	23331EC		EPOXY-URETHANE WATERPROOFING	16,250.00	SQFT		\$	
1090	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
1100	24094EC		PARTIAL DEPTH PATCHING	1.60	CUYD		\$	

Section: 0005 - BRIDGE-056B00318R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1110	03294		EXPAN JOINT REPLACE 1 1/2 IN	84.00	LF		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1120	03296		EXPAN JOINT REPLACE 2 1/2 IN	84.00	LF		\$	
1130	03299		ARMORED EDGE FOR CONCRETE	84.00	LF		\$	
1140	08549		BLAST CLEANING	1,505.00	SQYD		\$	
1150	22146EN		CONCRETE PATCHING REPAIR	103.00	SQFT		\$	
1160	23331EC		EPOXY-URETHANE WATERPROOFING	13,540.00	SQFT		\$	
1170	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
1180	24094EC		PARTIAL DEPTH PATCHING	1.30	CUYD		\$	

Section: 0006 - BRIDGE-056B00320N

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1190	03294		EXPAN JOINT REPLACE 1 1/2 IN	154.00	LF		\$	
1200	03299		ARMORED EDGE FOR CONCRETE	77.00	LF		\$	

Section: 0007 - BRIDGE-056B00322L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1210	03294		EXPAN JOINT REPLACE 1 1/2 IN	40.00	LF		\$	
1220	03295		EXPAN JOINT REPLACE 2 IN	40.00	LF		\$	
1230	03299		ARMORED EDGE FOR CONCRETE	80.00	LF		\$	
1240	08549		BLAST CLEANING	809.00	SQYD		\$	
1250	23331EC		EPOXY-URETHANE WATERPROOFING	7,280.00	SQFT		\$	
1260	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
1270	24094EC		PARTIAL DEPTH PATCHING	.70	CUYD		\$	

Section: 0008 - BRIDGE-056B00322R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1280	03294		EXPAN JOINT REPLACE 1 1/2 IN	40.00	LF		\$	
1290	03295		EXPAN JOINT REPLACE 2 IN	40.00	LF		\$	
1300	03299		ARMORED EDGE FOR CONCRETE	80.00	LF		\$	
1310	08549		BLAST CLEANING	809.00	SQYD		\$	
1320	23331EC		EPOXY-URETHANE WATERPROOFING	7,280.00	SQFT		\$	
1330	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
1340	24094EC		PARTIAL DEPTH PATCHING	.70	CUYD		\$	

Section: 0009 - BRIDGE-056B00324L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1350	03294		EXPAN JOINT REPLACE 1 1/2 IN	80.00	LF		\$	
1360	03295		EXPAN JOINT REPLACE 2 IN	80.00	LF		\$	
1370	03299		ARMORED EDGE FOR CONCRETE	159.00	LF		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1380	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	

Section: 0010 - BRIDGE-056B00324R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0100	03294		EXPAN JOINT REPLACE 1 1/2 IN	92.00	LF		\$	
0110	03295		EXPAN JOINT REPLACE 2 IN	92.00	LF		\$	
0120	03299		ARMORED EDGE FOR CONCRETE	183.00	LF		\$	
0130	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	

Section: 0011 - BRIDGE-0056B00325L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0140	03294		EXPAN JOINT REPLACE 1 1/2 IN	105.00	LF		\$	
0150	03299		ARMORED EDGE FOR CONCRETE	105.00	LF		\$	

Section: 0012 - BRIDGE-056B00325R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0160	03294		EXPAN JOINT REPLACE 1 1/2 IN	105.00	LF		\$	
0170	03299		ARMORED EDGE FOR CONCRETE	105.00	LF		\$	
0180	22146EN		CONCRETE PATCHING REPAIR	14.00	SQFT		\$	

Section: 0013 - BRIDGE-056B00368L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0190	03294		EXPAN JOINT REPLACE 1 1/2 IN	81.00	LF		\$	
0200	03299		ARMORED EDGE FOR CONCRETE	81.00	LF		\$	

Section: 0014 - BRIDGE-056B00368R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0210	03294		EXPAN JOINT REPLACE 1 1/2 IN	87.00	LF		\$	
0220	03299		ARMORED EDGE FOR CONCRETE	87.00	LF		\$	

Section: 0015 - BRIDGE-056B00372L

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0230	03294		EXPAN JOINT REPLACE 1 1/2 IN	44.00	LF		\$	
0240	03295		EXPAN JOINT REPLACE 2 IN	44.00	LF		\$	
0250	03299		ARMORED EDGE FOR CONCRETE	88.00	LF		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0260	08549		BLAST CLEANING	653.00	SQYD		\$	
0270	23331EC		EPOXY-URETHANE WATERPROOFING	5,870.00	SQFT		\$	
0280	24094EC		PARTIAL DEPTH PATCHING	.50	CUYD		\$	

Section: 0016 - BRIDGE-056B00372R

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0290	03294		EXPAN JOINT REPLACE 1 1/2 IN	44.00	LF		\$	
0300	03295		EXPAN JOINT REPLACE 2 IN	44.00	LF		\$	
0310	03299		ARMORED EDGE FOR CONCRETE	88.00	LF		\$	
0320	08549		BLAST CLEANING	653.00	SQYD		\$	
0330	23331EC		EPOXY-URETHANE WATERPROOFING	5,870.00	SQFT		\$	
0340	24094EC		PARTIAL DEPTH PATCHING	.50	CUYD		\$	

Section: 0017 - TRAFFIC LOOPS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0350	04793		CONDUIT-1 1/4 IN	200.00	LF		\$	
0360	04795		CONDUIT-2 IN	20.00	LF		\$	
0370	04811		ELECTRICAL JUNCTION BOX TYPE B	4.00	EACH		\$	
0380	04820		TRENCHING AND BACKFILLING	190.00	LF		\$	
0390	04829		PIEZOELECTRIC SENSOR	14.00	EACH		\$	
0400	04830		LOOP WIRE	6,250.00	LF		\$	
0410	04895		LOOP SAW SLOT AND FILL	1,280.00	LF		\$	
0420	20359NN		GALVANIZED STEEL CABINET	2.00	EACH		\$	
0430	20360ES818		WOOD POST	8.00	EACH		\$	
0440	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	2.00	EACH		\$	
0450	20468EC		ELECTRICAL JUNCTION BOX-10 X 8 X 4	2.00	EACH		\$	

Section: 0018 - MOBILIZATION AND/OR DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0460	02568		MOBILIZATION	1.00	LS		\$	
0470	02569		DEMOBILIZATION	1.00	LS		\$	