



**CALL NO. 201**

**CONTRACT ID. 171260**

**HOPKINS - CHRISTIAN COUNTIES**

**FED/STATE PROJECT NUMBER 121GR17D060**

**DESCRIPTION PENNYRILE PARKWAY (EB 9004 IN CHRISTIAN & HOPKINS COUNTIES)**

**WORK TYPE JPC PAVEMENT**

**PRIMARY COMPLETION DATE 8/31/2019**

**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 - 5%**

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

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

ADMINISTRATIVE DISTRICT - 02

CONTRACT ID - 171260  
121GR17D060  
COUNTY - CHRISTIAN  
PCN - DE02490041760  
NHPP 0411 (026)

PENNYRILE PARKWAY (EB 9004 IN CHRISTIAN COUNTY) (MP 16.556) REMOVE AND REPLACE CONCRETE PAVEMENT ON PENYRILE PARKWAY (EB 9004) NORTH/SOUTHBOUND IN CHRISTIAN COUNTY (MP 28.095), A DISTANCE OF 011.54 MILES.JPC PAVEMENT SYP NO. 02-02082.00.  
GEOGRAPHIC COORDINATES LATITUDE 37:06:56.00 LONGITUDE 87:27:30.00

COUNTY - HOPKINS  
PCN - DE05490041760  
NHPP 0411 (026)

PENNYRILE PARKWAY (EB 9004 IN HOPKINS COUNTY) (MP 28.095) REMOVE AND REPLACE CONCRETE PAVEMENT ON PENNYRILE PARKWAY (EB 9004) NORTH/SOUTHBOUND IN HOPKINS COUNTY (MP 29.900), A DISTANCE OF 01.81 MILES.JPC PAVEMENT SYP NO. 02-02082.00.  
GEOGRAPHIC COORDINATES LATITUDE 37:03:35.00 LONGITUDE 87:27:58.00

COMPLETION DATE(S):  
COMPLETED BY 08/31/2019                      APPLIES TO ENTIRE CONTRACT



## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

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

### **BID SUBMITTAL**

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

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

### **JOINT VENTURE BIDDING**

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

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

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

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

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

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

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

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

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

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

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

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

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

### **HARDWOOD REMOVAL RESTRICTIONS**

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

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

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

### **ACCESS TO RECORDS**

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

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

06/01/16

### **FEDERAL CONTRACT NOTES**

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

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

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

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

### **NOTICE TO ALL BIDDERS**

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

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

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

### **SECOND TIER SUBCONTRACTS**

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

### **DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

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

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

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

### **DBE GOAL**

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

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

### **OBLIGATION OF CONTRACTORS**

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

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

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

### **CERTIFICATION OF CONTRACT GOAL**

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

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

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

### **DBE PARTICIPATION PLAN**

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **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 Byne and the telephone number is (502) 564-3601.**

Photocopied payments and completed, signed and notarized affidavit must be submitted by the Prime Contractor to: Office of Civil Rights and Small Business Development  
6<sup>th</sup> Floor West 200 Mero Street  
Frankfort, KY 40622

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

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

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.

### **TRAINEES**

In Compliance with the "TRAINING SPECIAL PROVISION" included in Part III of the Proposal, the Contractor will be required to employ a trainee(s) for this contract.

### **ASPHALT MIXTURE**

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

### **DGA BASE**

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

### **DGA BASE FOR SHOULDERS**

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

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

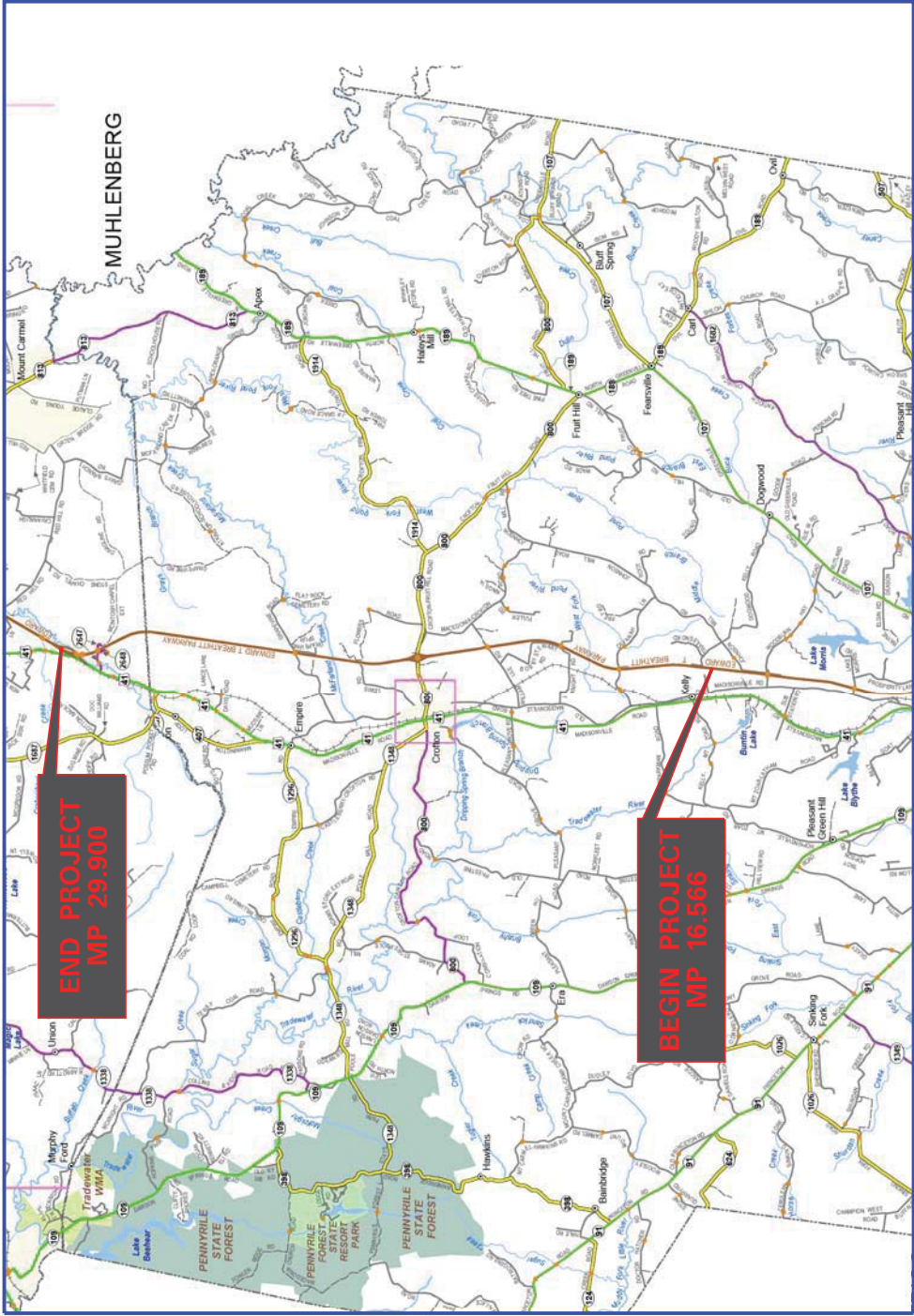
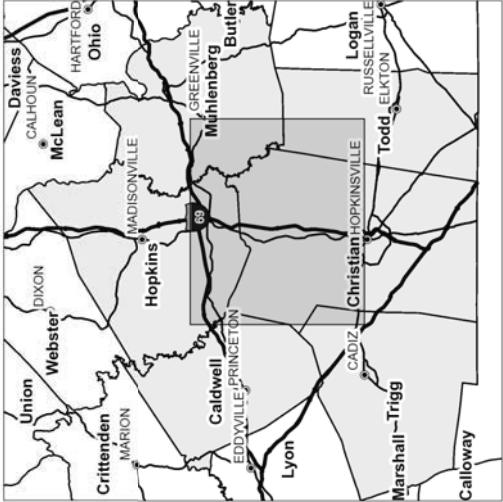
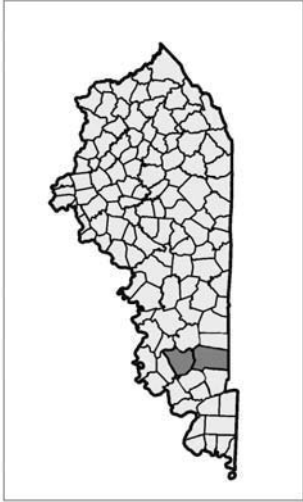
### **INCIDENTAL SURFACING**

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

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

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

3 HMR Circle, U.S. 460  
Frankfort, KY 40601  
502-692-9800



**CONSTRUCTION NUMBER:** **NHPP 0411(026)** **FD52 024 9004 016-028 / FD52 054 9004 028-030**

**ITEM NUMBER:** **2-2082.00**

**RECOMMENDED BY:** Project Manager

**PLAN APPROVED BY:** State Highway Engineer

**FHWA APPROVED BY:** \_\_\_\_\_

**LETTING DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



MP 16.4


MP 16.3

BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 16.339


LEGEND




PAVEMENT REM & REPLACE




REMOVE & REPLACE GUARDRAIL



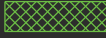
REMOVE PAVED DITCH




REMOVE & REPLACE HDWL / PIPE REPAIR



CHANNEL LINING



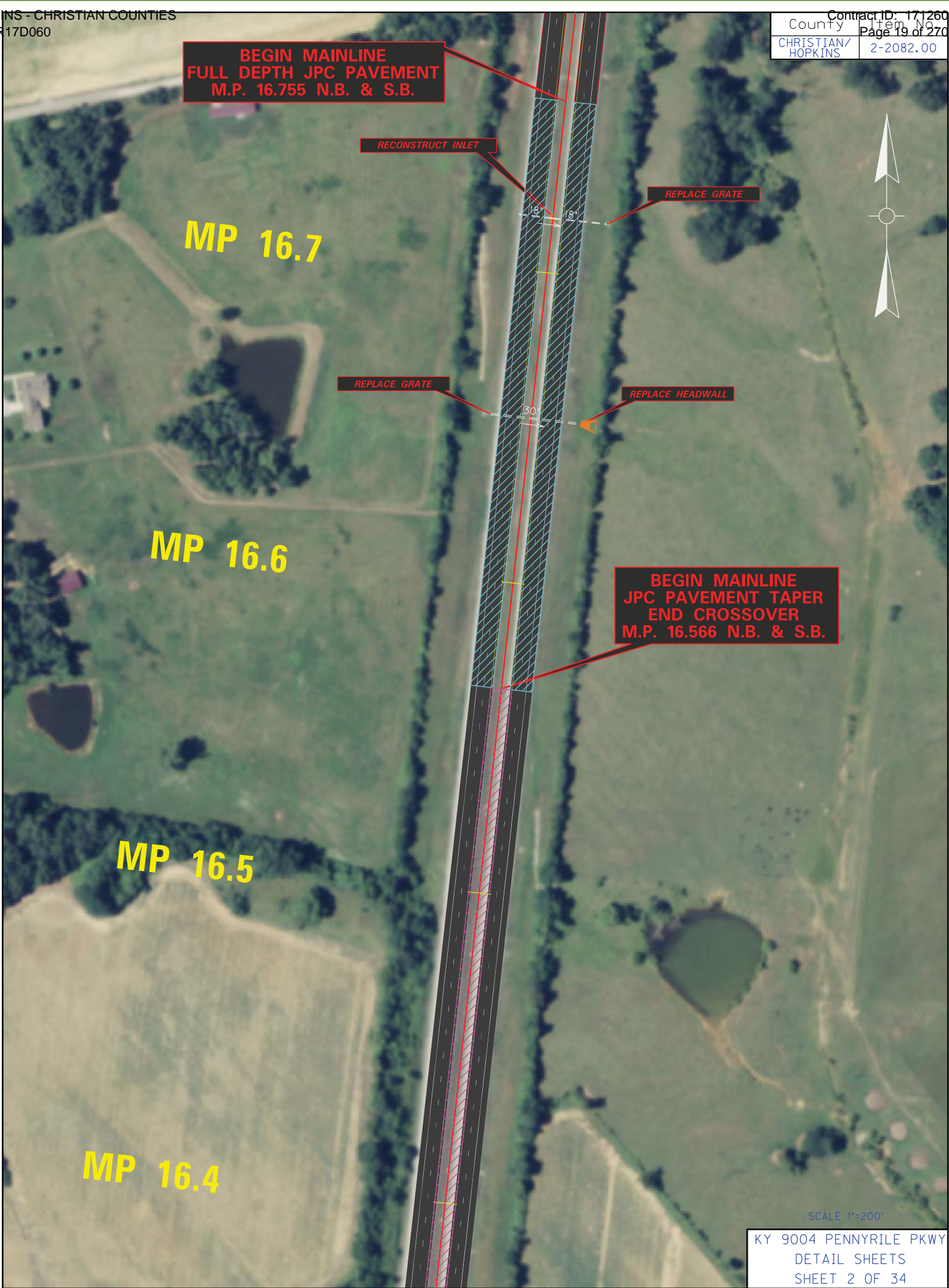
RAMP RECONSTRUCTION



TEMPORARY MEDIAN CROSSOVER

SCALE 1"=200'





SCALE 1"=200'





**MP 17.1**

RECONSTRUCT INLET

15'

REPAIR HEADWALL

20'

**MP 17.0**

**MP 16.9**

**MP 16.8**

SCALE 1"=200'



**MP 17.6**

**MP 17.5**

**MP 17.4**

**MP 17.3**

**MP 17.2**

RECONSTRUCT INLET

RECONSTRUCT INLET



SCALE 1"=200'



MP 18.0

MP 17.9

MP 17.8

MP 17.7

RECONSTRUCT INLET

CHANNEL LINING

CONSTRUCT FLUME TYPE 2

CHANNEL LINING

REPAIR HEADWALL

CONSTRUCT FLUME TYPE 1

RECONSTRUCT INLET

CHANNEL LINING

SLIDE REPAIR AREA



SCALE 1"=200'



MP 18.4

MP 18.3

MP 18.2

MP 18.1

RECONSTRUCT INLET

15'

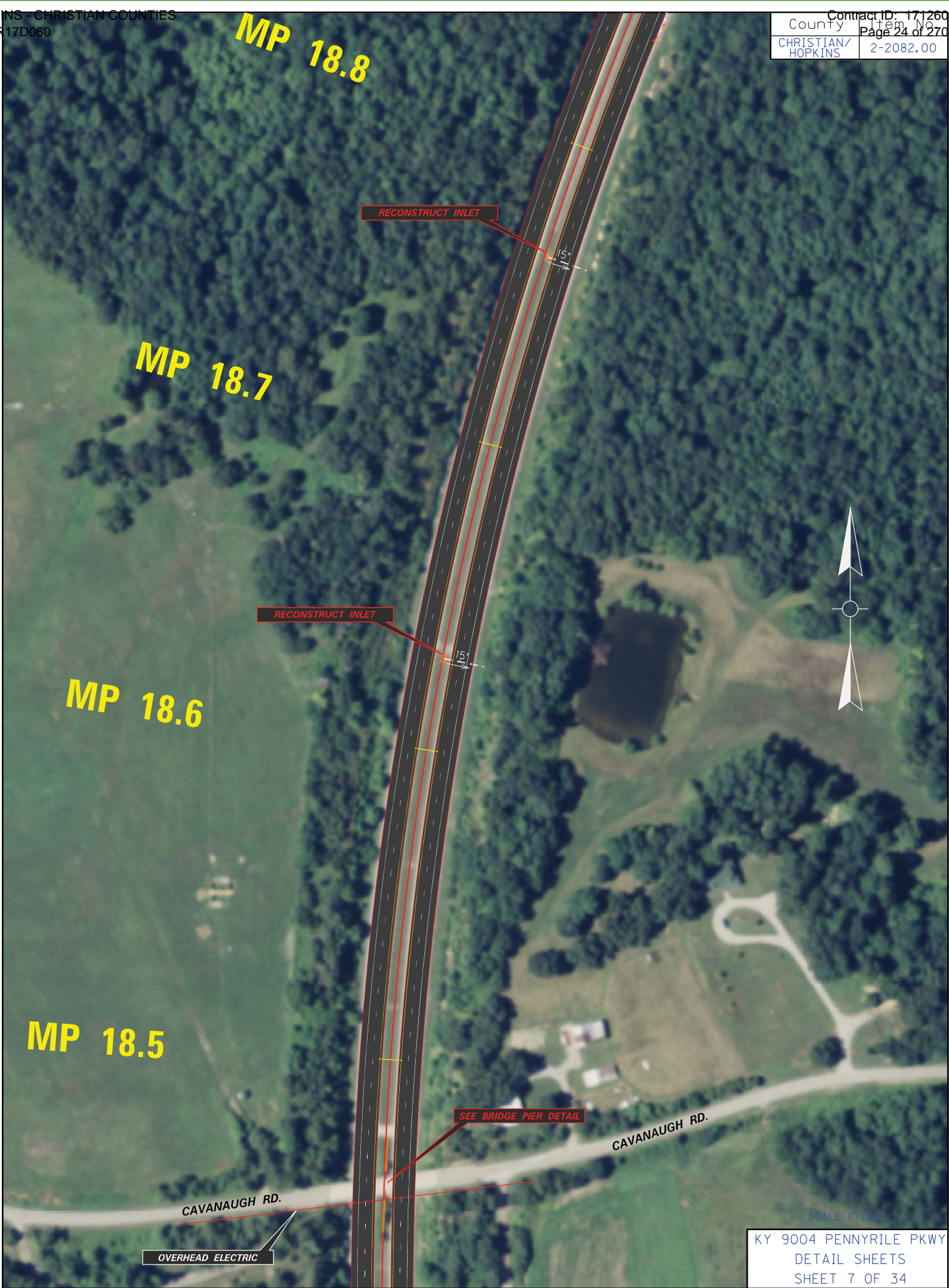
RECONSTRUCT INLET

15'

CHANNEL LINING

SCALE 1"=200'







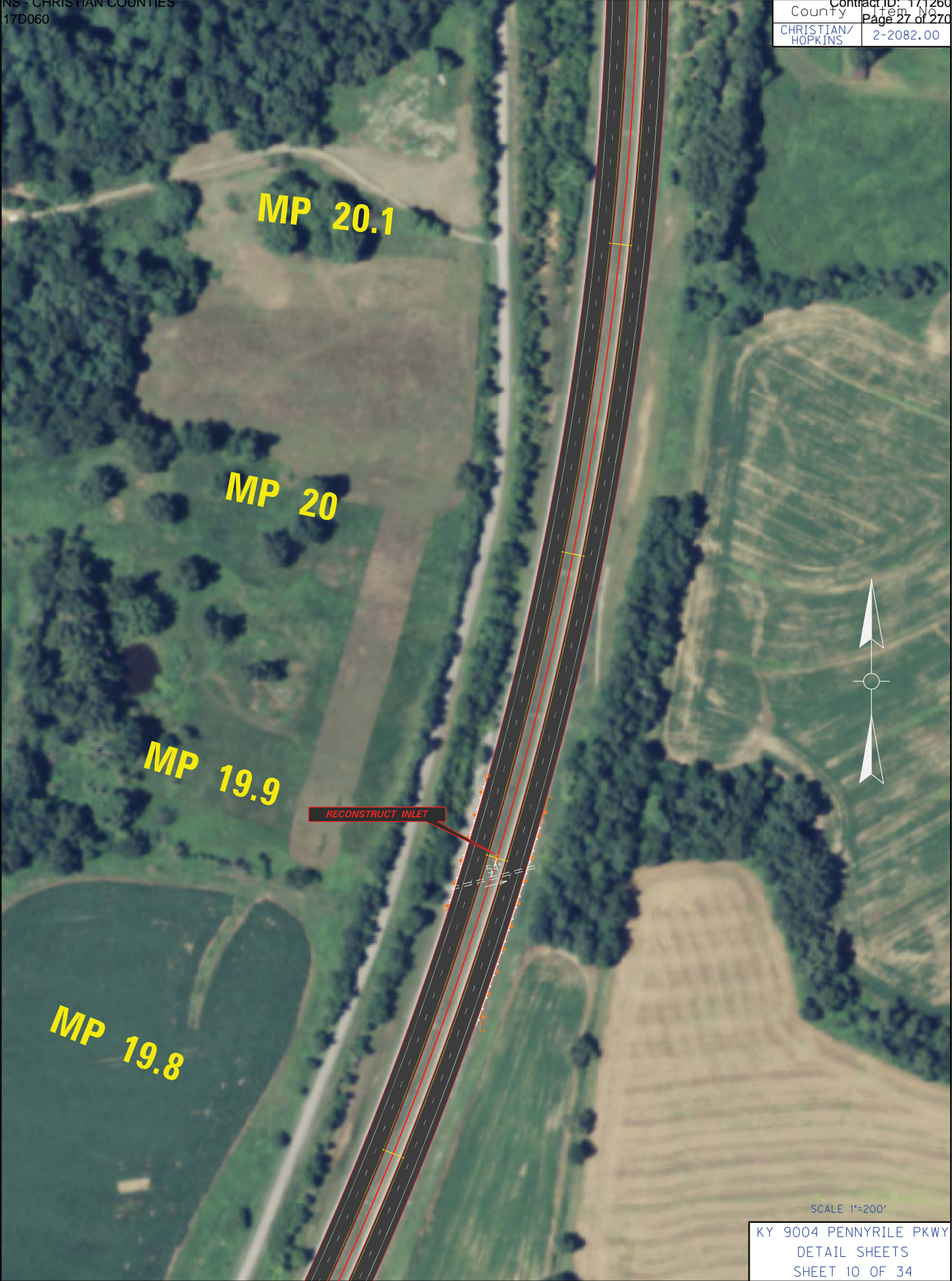






SCALE 1"=200'





SCALE 1"=200'



MP 20.6

MP 20.5

MP 20.4

MP 20.3

MP 20.2

CONSTRUCT FLUME TYPE 2

CHANNEL LINING

RECONSTRUCT INLET

CHANNEL LINING

CONSTRUCT FLUME TYPE 2

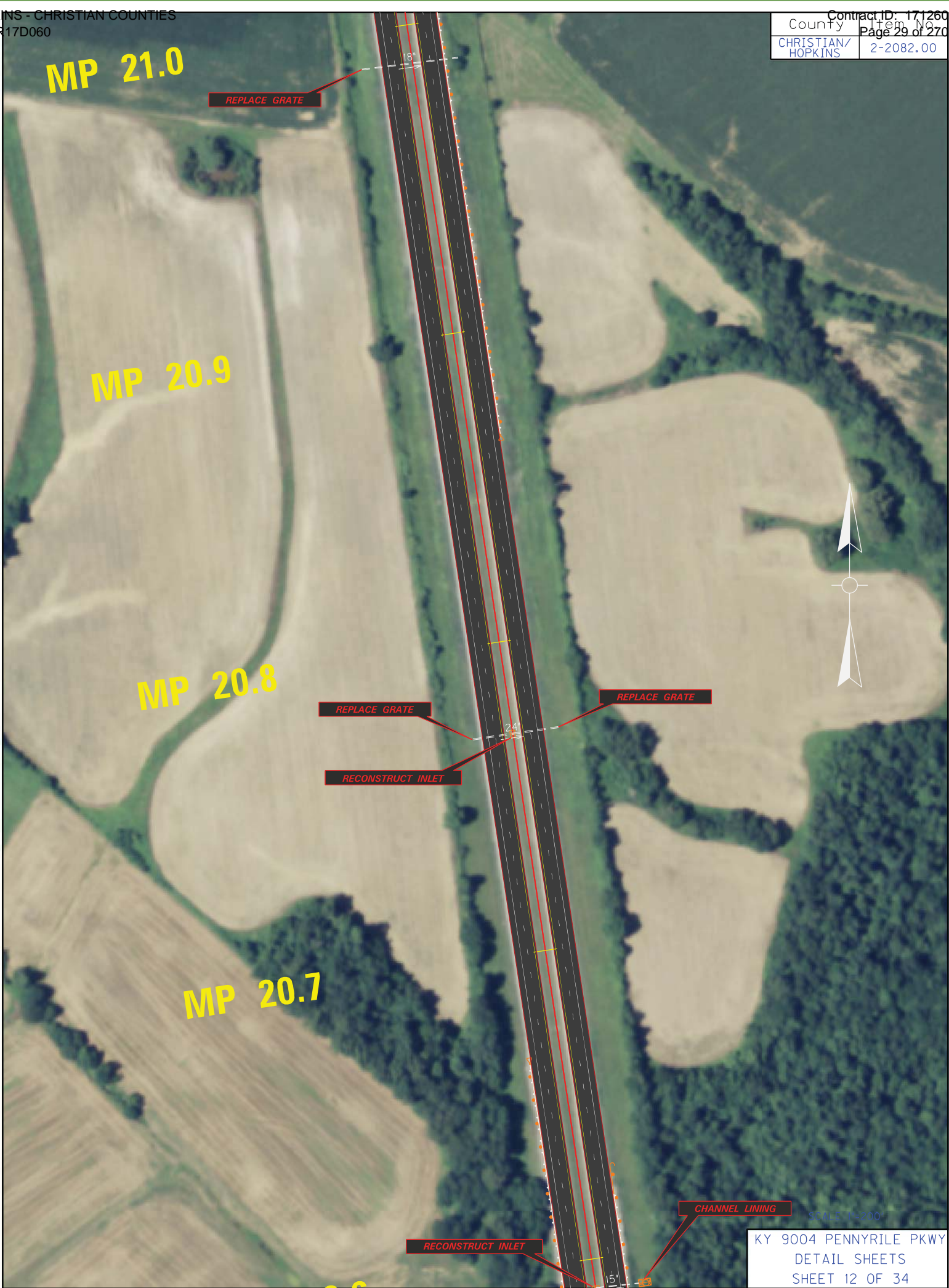
CHANNEL LINING

RECONSTRUCT INLET



SCALE 1"=500'





MP 21.0

MP 20.9

MP 20.8

MP 20.7

REPLACE GRATE

REPLACE GRATE

RECONSTRUCT INLET

REPLACE GRATE

CHANNEL LINING

RECONSTRUCT INLET



SCALE: 1"=200'



MP 21.4

MP 21.3

MP 21.2

MP 21.1

RECONSTRUCT INLET

OVERHEAD ELECTRIC

CONSTRUCT DBI TY 1

SEE BRIDGE PIER DETAIL

REMOVE DBI, PLACE JUNCTION BOX

CONST. 40' OF 15" STORM PIPE

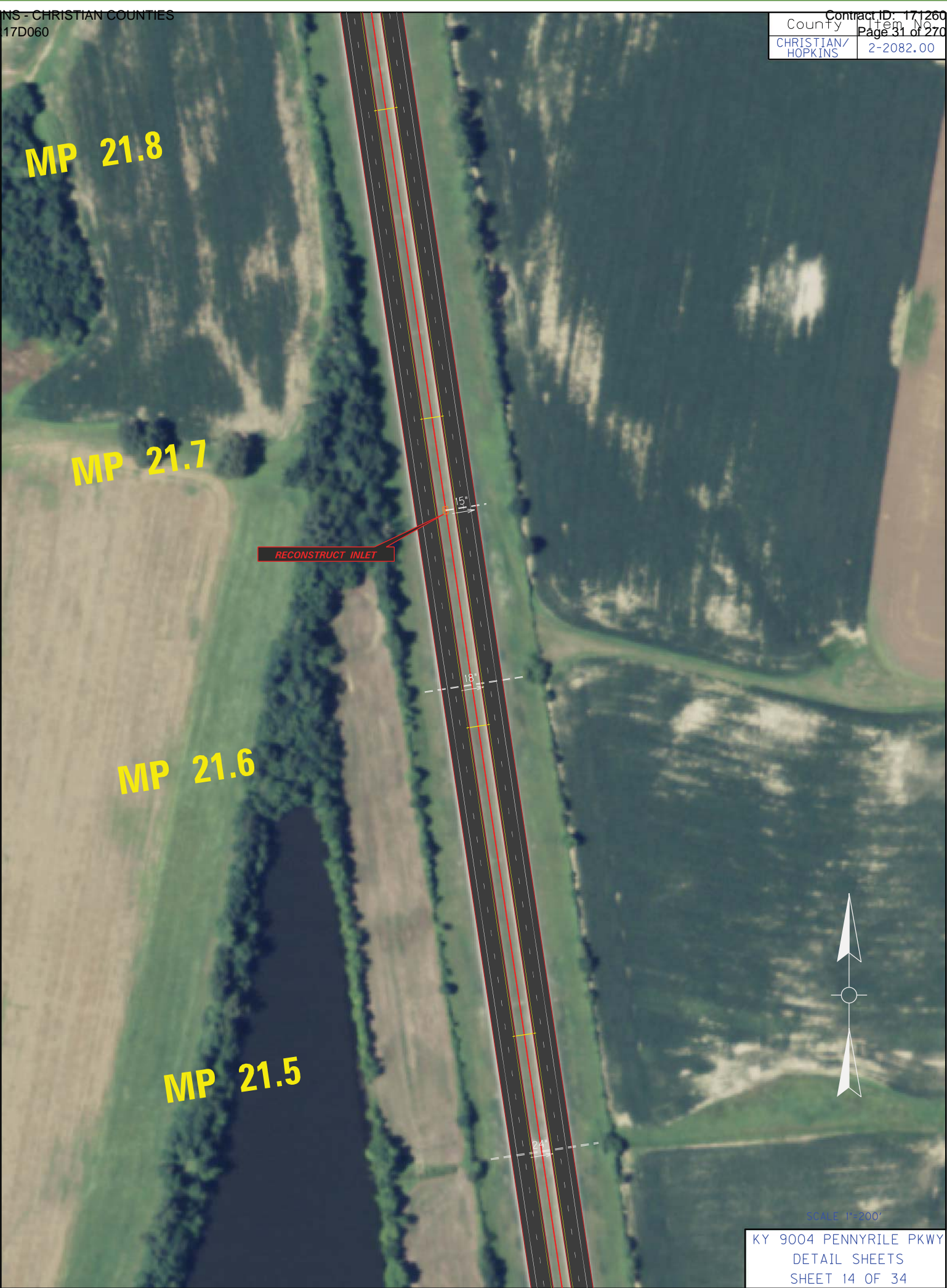
WILLIAM LILE RD.

WILLIAM LILE RD.



SCALE 1"=50'





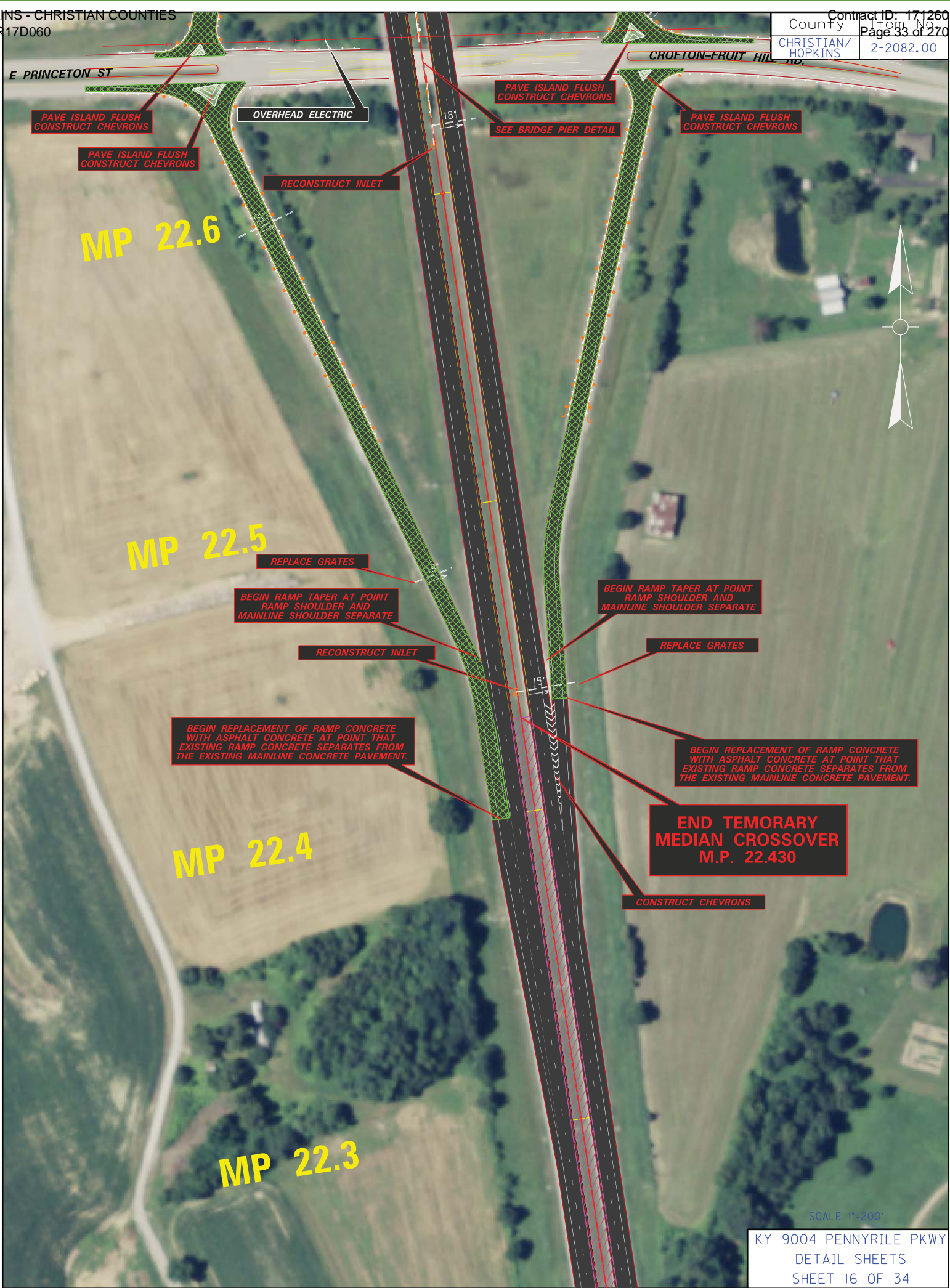
SCALE 1"=200'





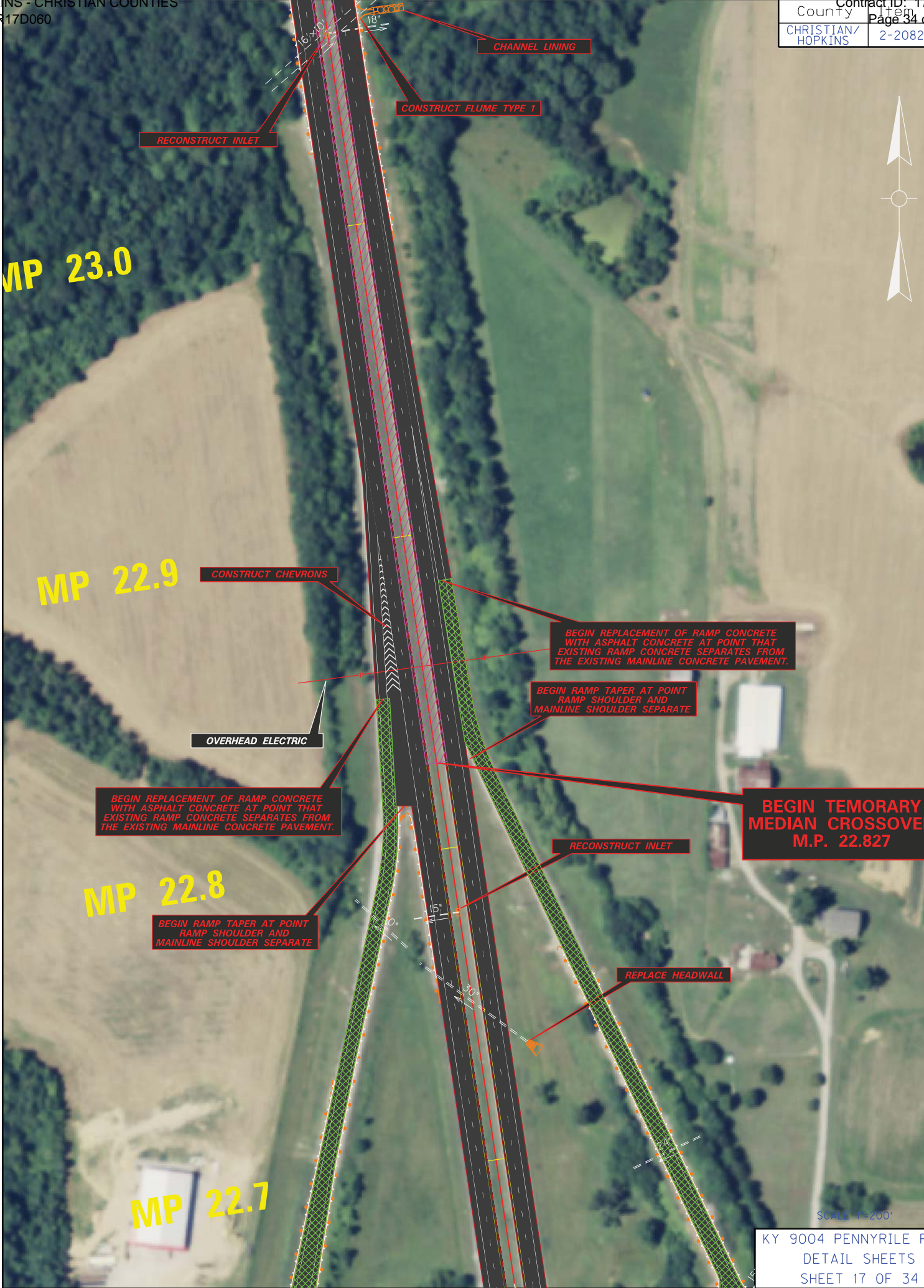
SCALE 1"=200'





SCALE 1"=200'

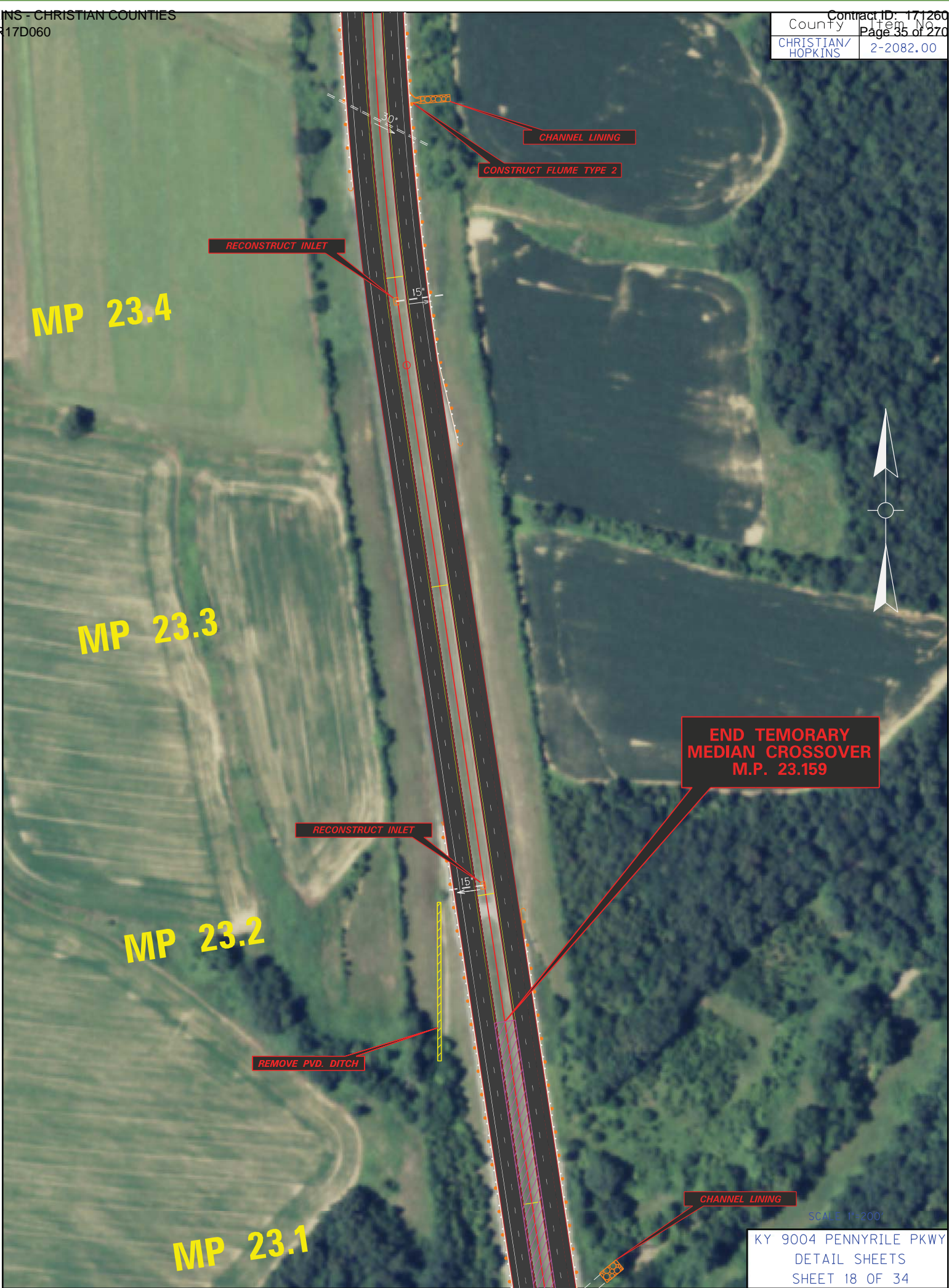




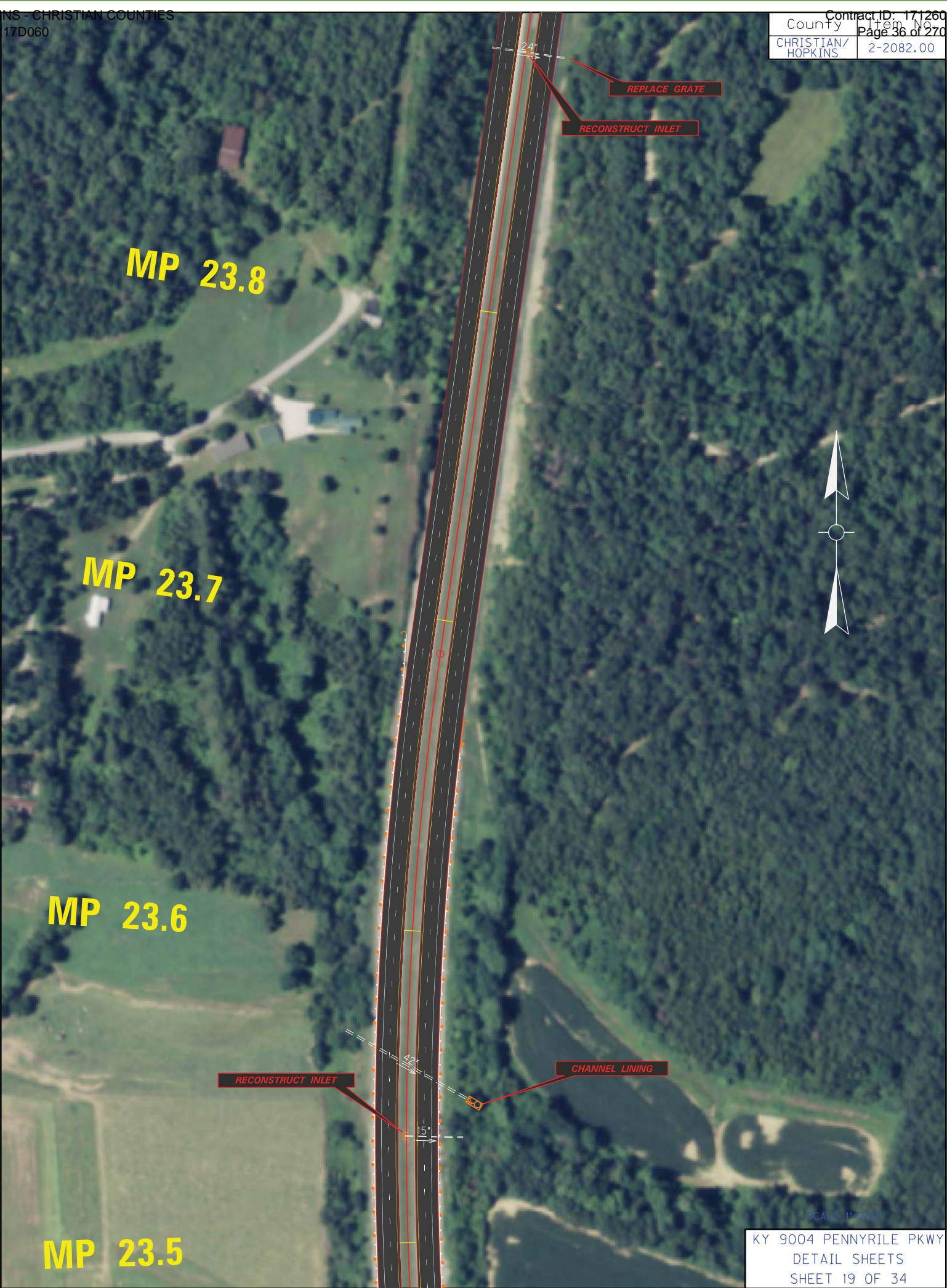
**BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.827**

SCALE 1"=200'









MP 23.5

MP 23.6

MP 23.7

MP 23.8

RECONSTRUCT INLET

CHANNEL LINING

RECONSTRUCT INLET

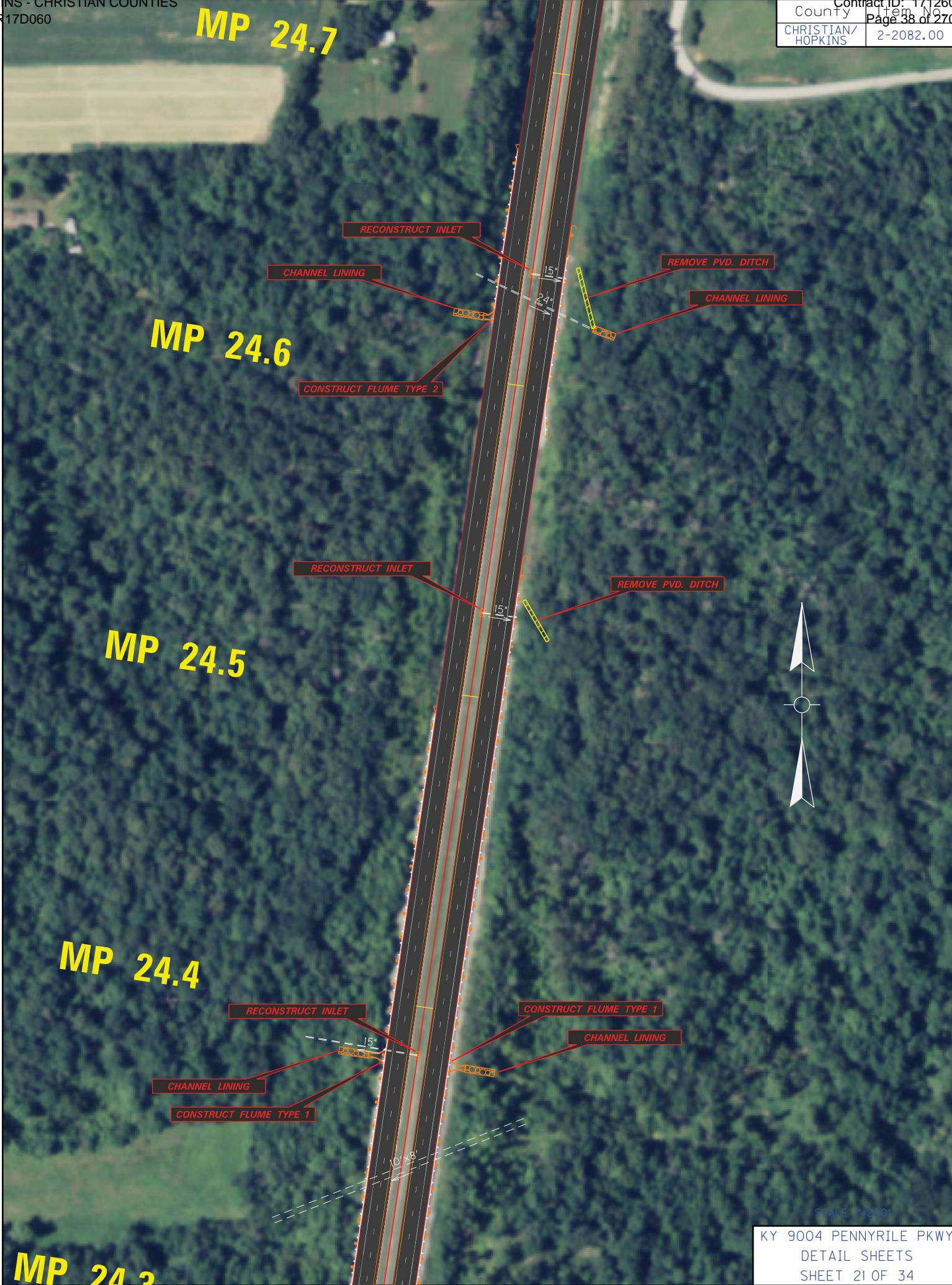
REPLACE GRATE



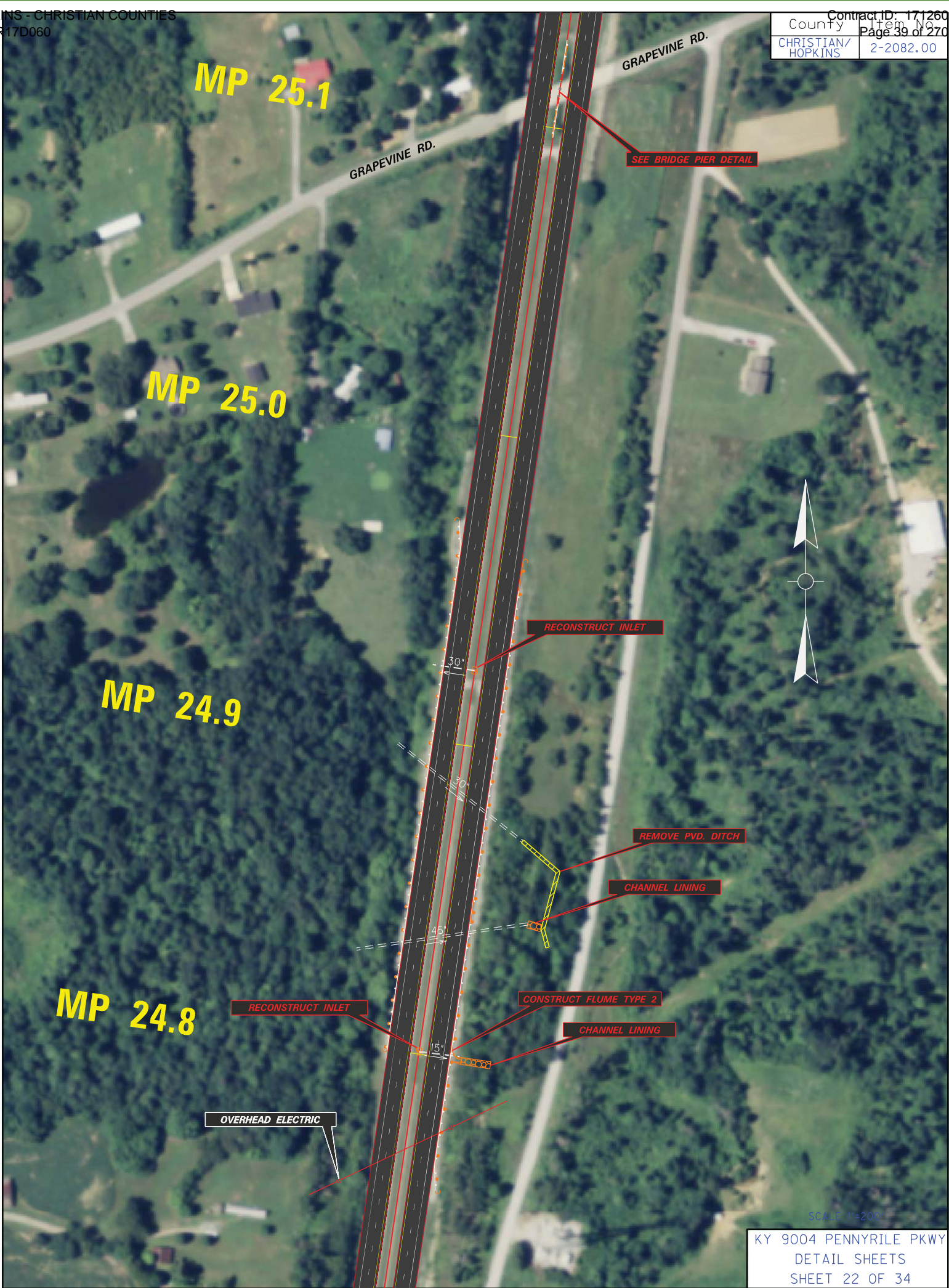


KY 9004 PENNYRILE PKWY  
DETAIL SHEETS  
SHEET 20 OF 34

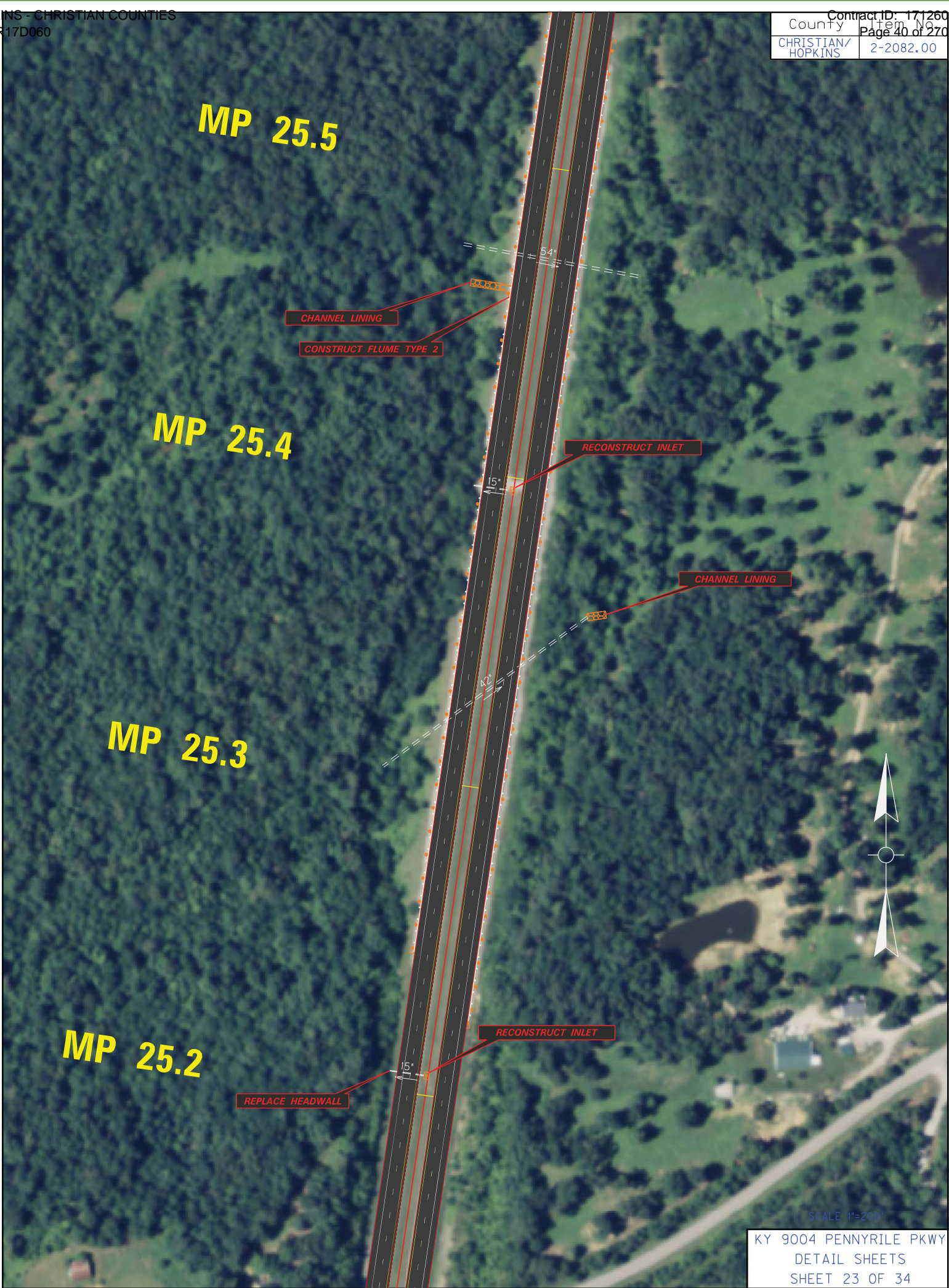




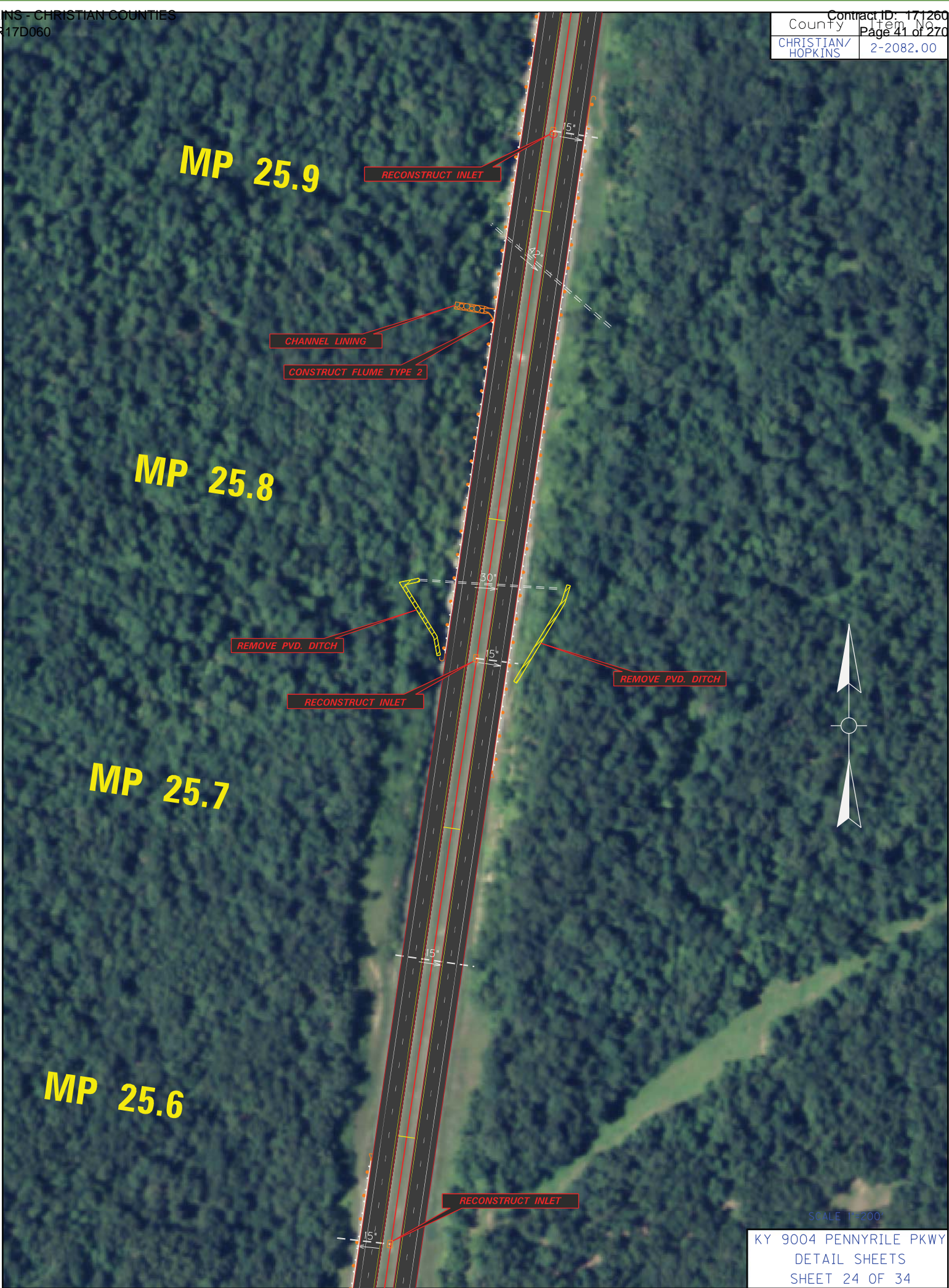














MP 26.3

MP 26.2

MP 26.1

MP 26.0

CONSTRUCT FLUME TYPE 1

CHANNEL LINING

RECONSTRUCT INLET

REMOVE PVD. DITCH

RECONSTRUCT INLET

REMOVE PVD. DITCH

CHANNEL LINING

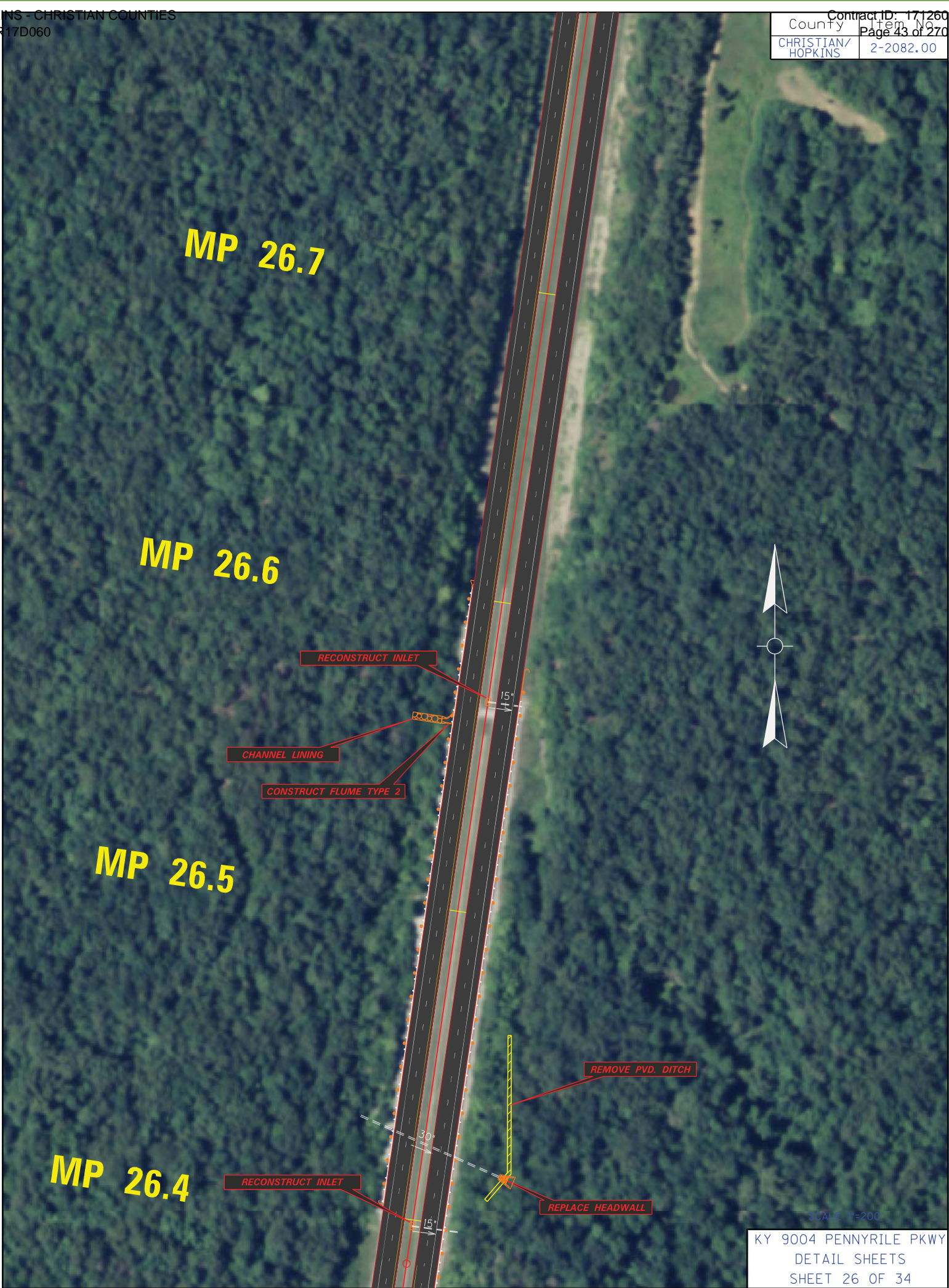
CONSTRUCT FLUME TYPE 2

CHANNEL LINING

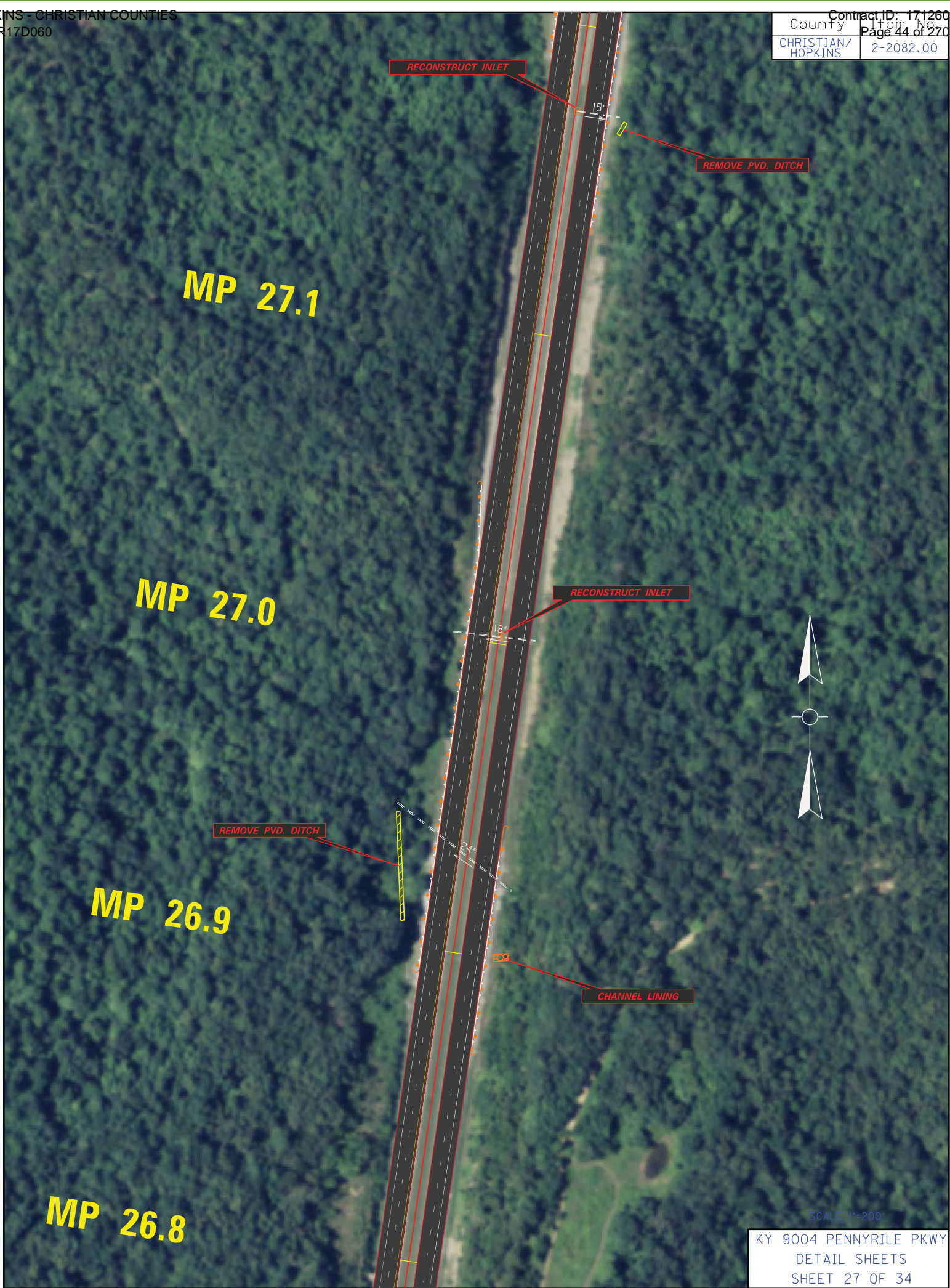


SCALE 1"=200'









SCALE 1"=200'



MP 27.6

MP 27.5

MP 27.4

MP 27.3

MP 27.2

CONSTRUCT FLUME TYPE 2  
CHANNEL LINING  
RECONSTRUCT INLET

CONSTRUCT FLUME TYPE 2  
CHANNEL LINING  
RECONSTRUCT INLET  
CHANNEL LINING



SCALE 1"=500'



MP 28.0

CHANNEL LINING

CONSTRUCT FLUME TYPE 1

MP 27.9

MP 27.8

RECONSTRUCT INLET

MP 27.7

RECONSTRUCT INLET



SCALE 1"=200'



MP 28.4

CONSTRUCT FLUME TYPE 2

CHANNEL LINING

REMOVE PVD. DITCH

RECONSTRUCT INLET

MP 28.3

CONSTRUCT FLUME TYPE 2

CHANNEL LINING

MP 28.2

RECONSTRUCT INLET

CHANNEL LINING

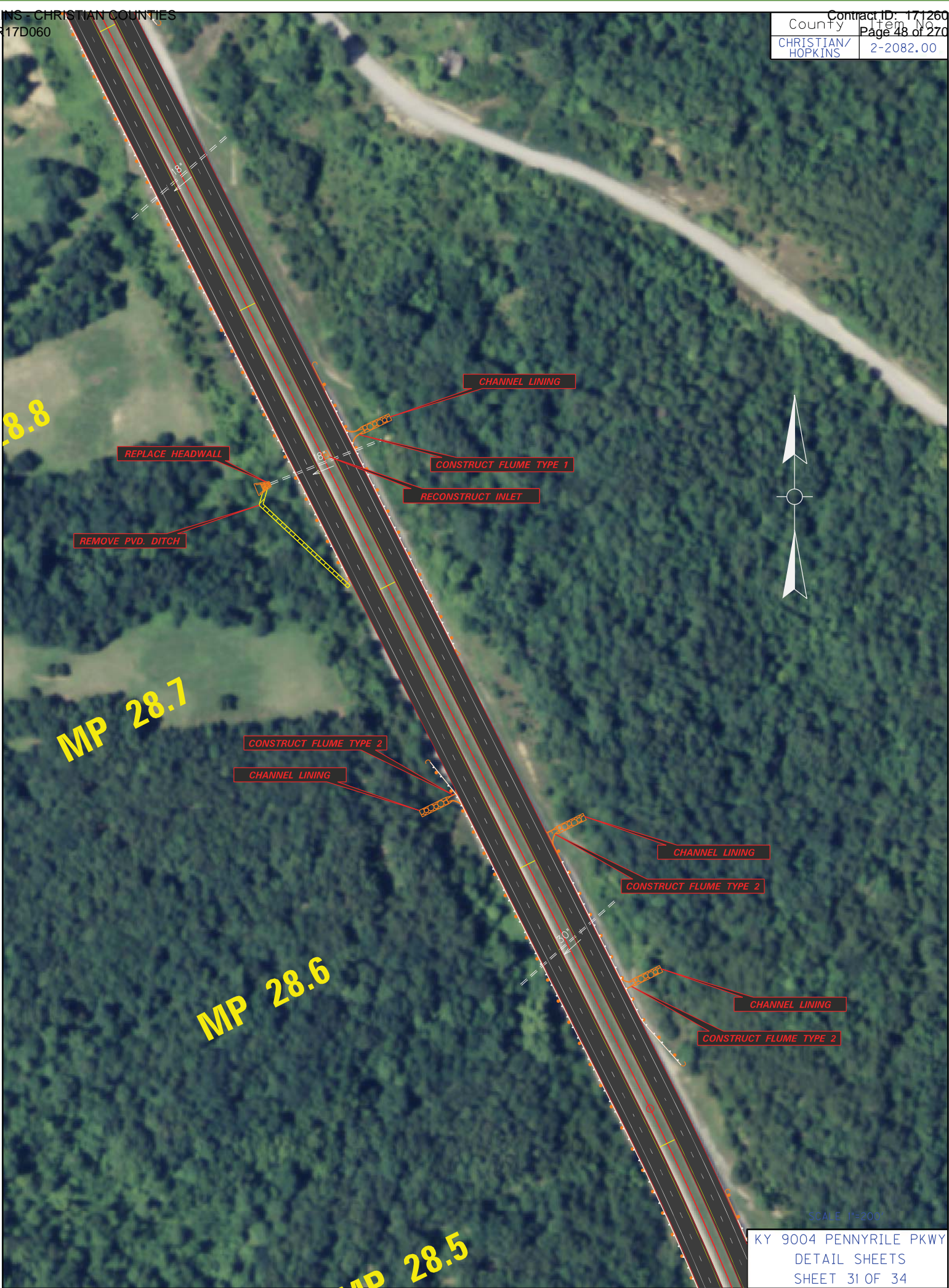
MP 28.1

RECONSTRUCT INLET



SCALE 1"=200'



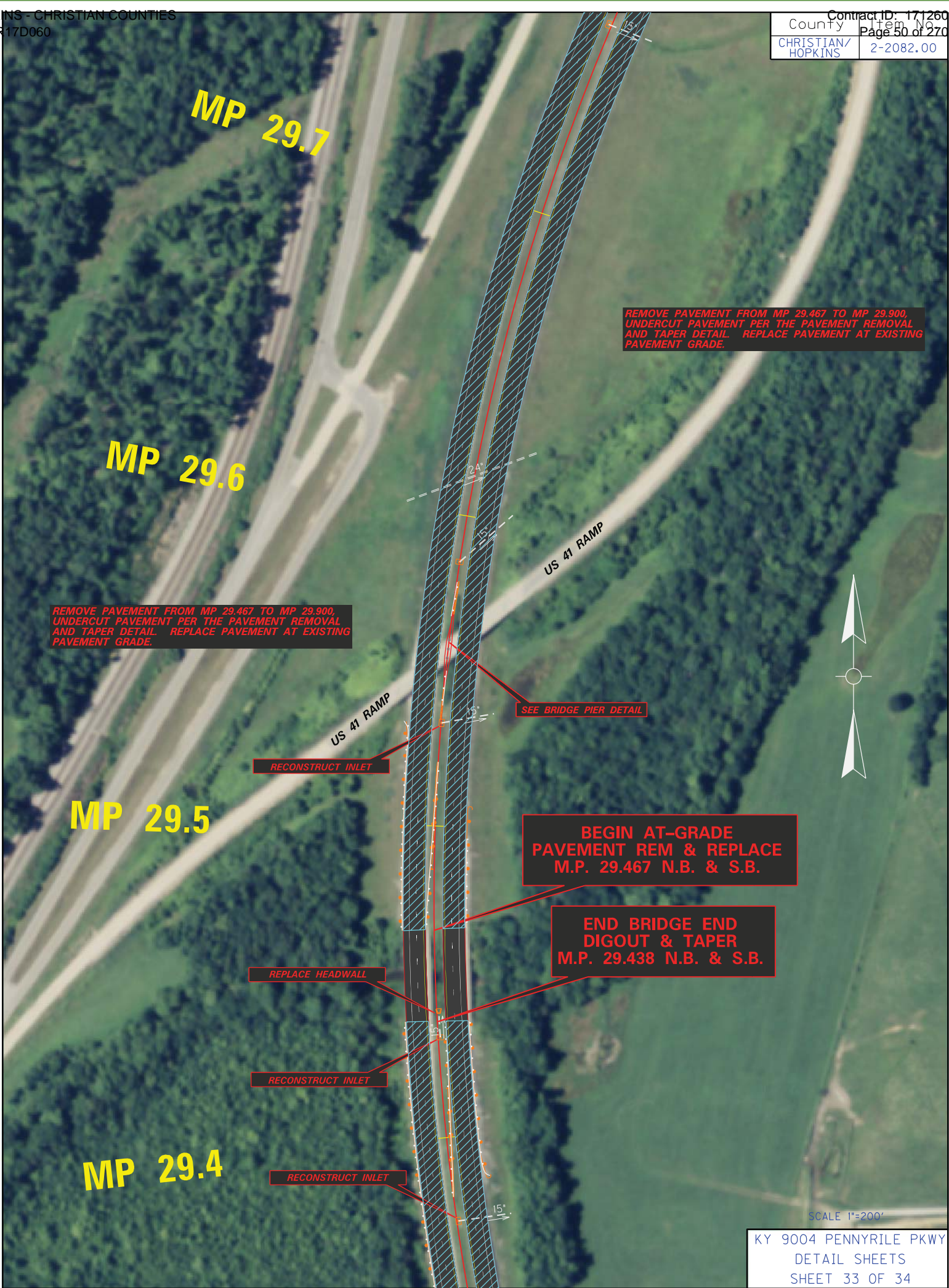


SCALE 1"=200'













**END TEMORARY  
MEDIAN CROSSOVER  
M.P. 30.127**

**END MAINLINE  
JPC PAVEMENT  
BEGIN CROSSOVER  
M.P. 29.900 N.B. & S.B.**

**REMOVE PAVEMENT FROM MP 29.467 TO MP 29.900.  
UNDERCUT PAVEMENT PER THE PAVEMENT REMOVAL  
AND TAPER DETAIL. REPLACE PAVEMENT AT EXISTING  
PAVEMENT GRADE.**

SCALE 1"=200'



TYPICAL SECTIONS

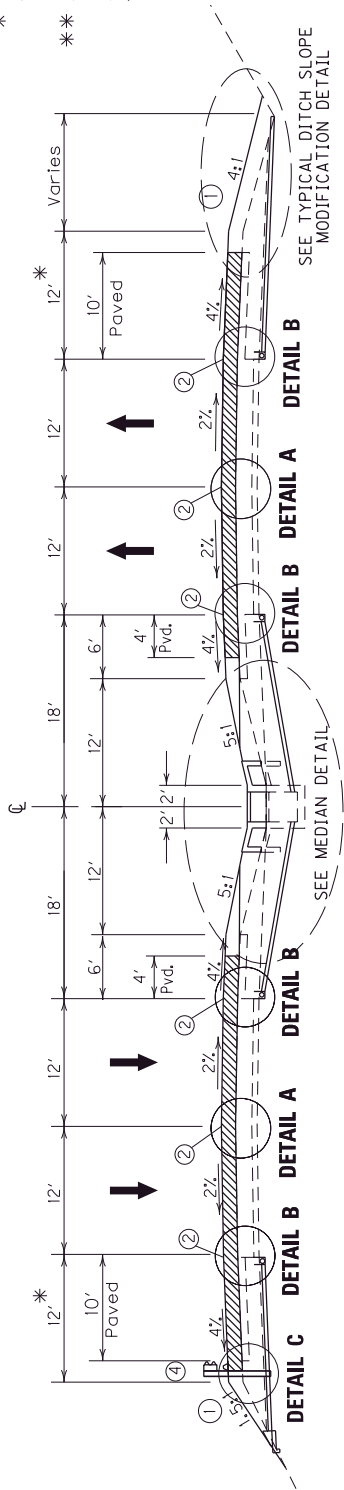
PENNYRILE PARKWAY

NORTHBOUND & SOUTHBOUND MP 16.566 TO MP 29.900

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/HOPKINS	2-2082.00	

\* OVERLAY ACCELERATION AND DECELERATION LANES WHERE APPLICABLE WIDTHS VARY

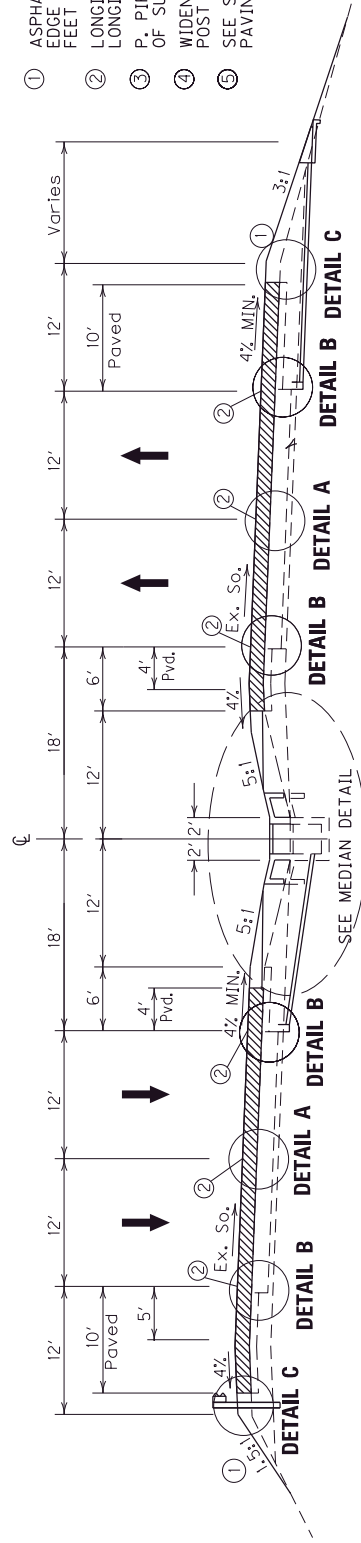
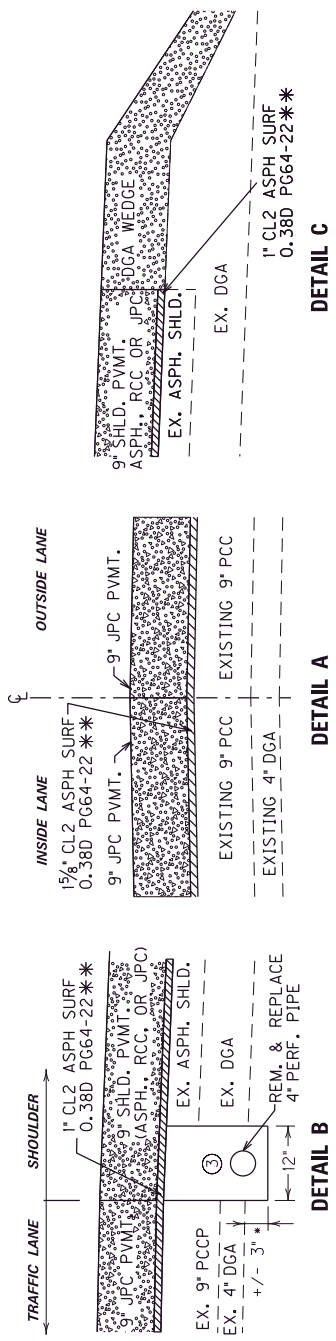
\*\* PLACE 1" MINIMUM THICKNESS OF CL2 ASPH SURF PG64-22 AS A BOND BREAKER AND FOR LEVELING. INCREASE THICKNESS AS NEEDED AT THE CROWN TO INCREASE CROSS SLOPE TO 2%.



MAINLINE NORMAL SECTION

SURFACING SCHEDULE

MAINLINE TRAFFIC LANES	
CL2 ASPH SURF 0.380 PG64-22	1 3/4" AVG. DEPTH
JPC PAVEMENT	9" DEPTH
* CROSS SLOPE CORRECTION TO 2% IN NORMAL SECTIONS **	
MAINLINE INSIDE SHOULDERS	
CL2 ASPH SURF 0.380 PG64-22	1" DEPTH
JPC PAVEMENT	9" DEPTH
MAINLINE OUTSIDE SHOULDERS	
CL2 ASPH SURF 0.380 PG64-22	1" DEPTH
AND JPC PAVEMENT	9" DEPTH
OR RCC PAVEMENT	9" DEPTH
CL2 ASPH BASE 1.000 PG64-22	7.5" DEPTH (3.75*+3.75")
CL2 ASPH SURF 0.380 PG64-22	1.5" DEPTH



MAINLINE SUPERELEVATED SECTION

- 1 ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
- 2 LONGITUDINAL SAWED JOINT OR LONGITUDINAL CONST. JOINT
- 3 P. PIPE NOT REQUIRED ON HIGH SIDE OF SUPERELEVATED CURVES
- 4 WIDEN SHOULDER 9" TO GUARDRAIL POST AT CONCRETE CURB LOC.
- 5 SEE SPECIAL NOTE FOR SHOULDER PAVING ALTERNATES.

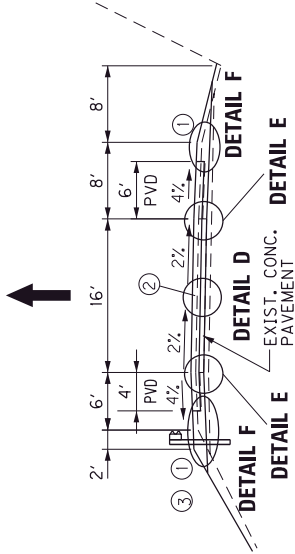
NOT TO SCALE

PENNYRILE PKWY

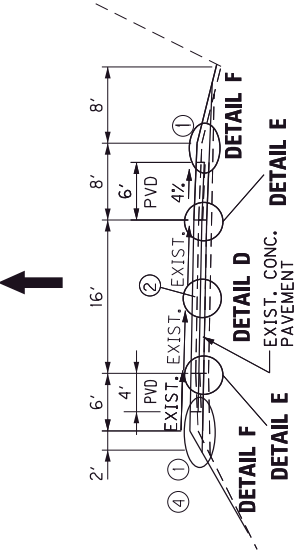
TYPICAL SECTIONS

# TYPICAL SECTIONS PENNYRILE PARKWAY EXIT 23 RAMPS

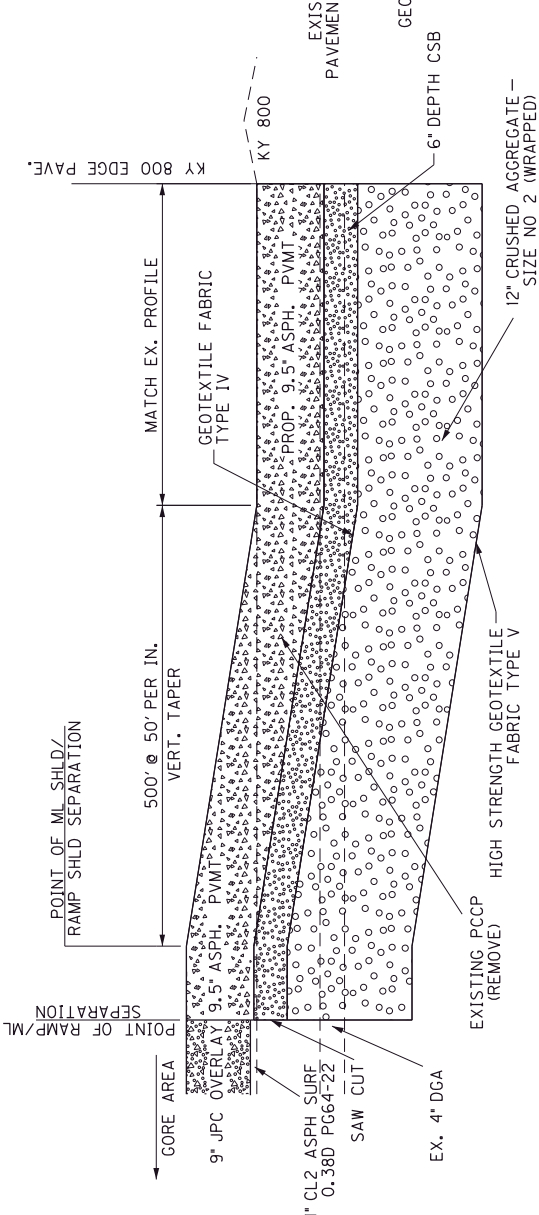
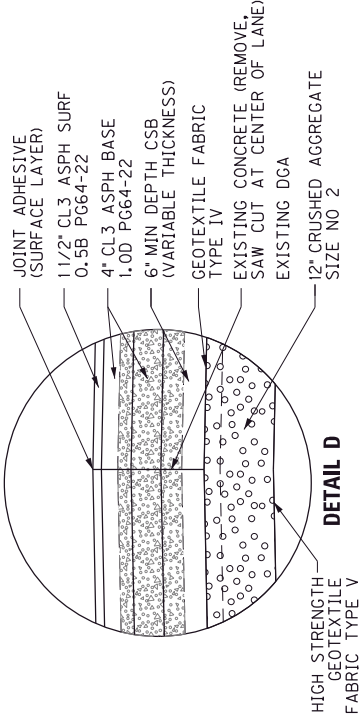
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



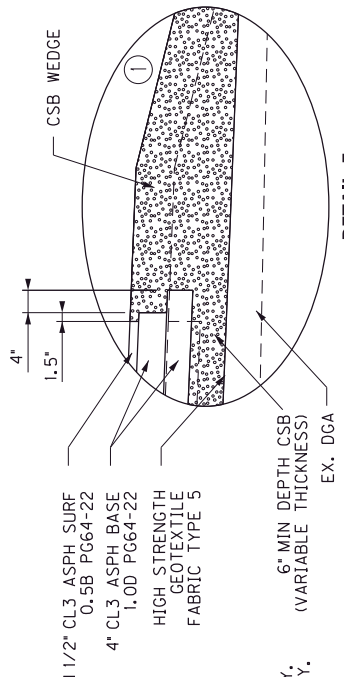
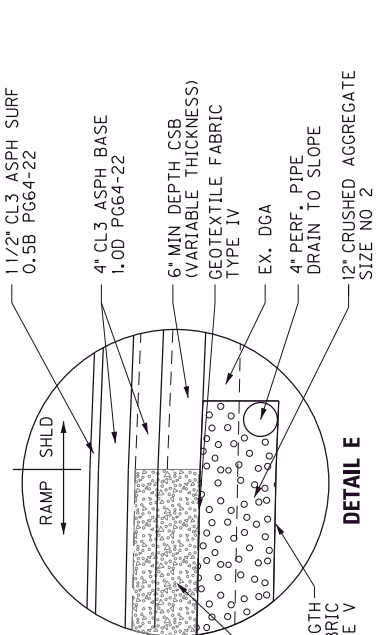
EXIT RAMP NORMAL CROWN



EXIT RAMP SUPERELEVATED



RAMP OVERLAY TAPERS



## SURFACING SCHEDULE RAMP TRAFFIC LANES AND SHOULDER

HIGH STRENGTH GEOTEXTILE FABRIC TYPE V	
CRUSHED AGGREGATE SIZE NO. 2	12" DEPTH
CRUSHED STONE BASE	6" DEPTH
CL3 ASPH BASE 1.0D PG64-22	4" DEPTH
CL3 ASPH SURFACE 0.5B PG64-22	4" DEPTH
CL3 ASPH SURFACE 0.5B PG64-22	1 1/2" DEPTH

- ① ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FOOT DOWN THE DITCH OR FILL SLOPE (Where Applicable). TWO APPLICATIONS OF THE FOLLOWING : ASPHALT SEAL COAT ..... 2.4 lbs. / S.Y. ASPHALT SEAL AGGREGATE ..... 20 lbs. / S.Y.
- ② JOINT ADHESIVE

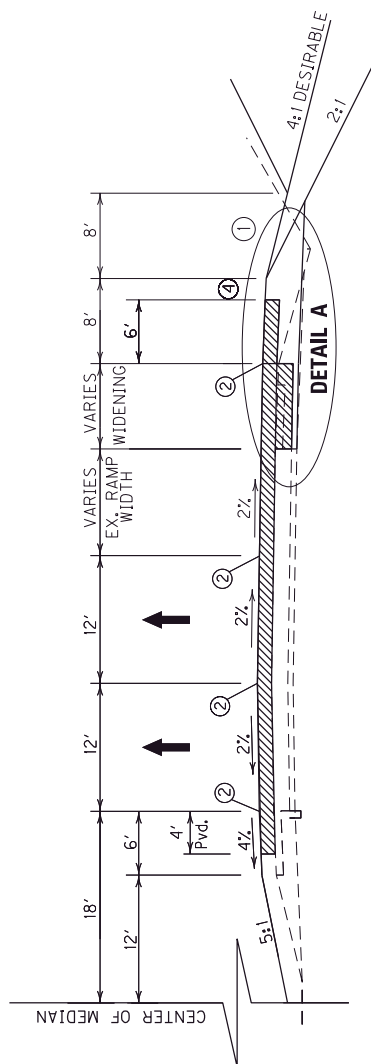
NOT TO SCALE

PENNYRILE PKWY  
TYPICAL SECTIONS

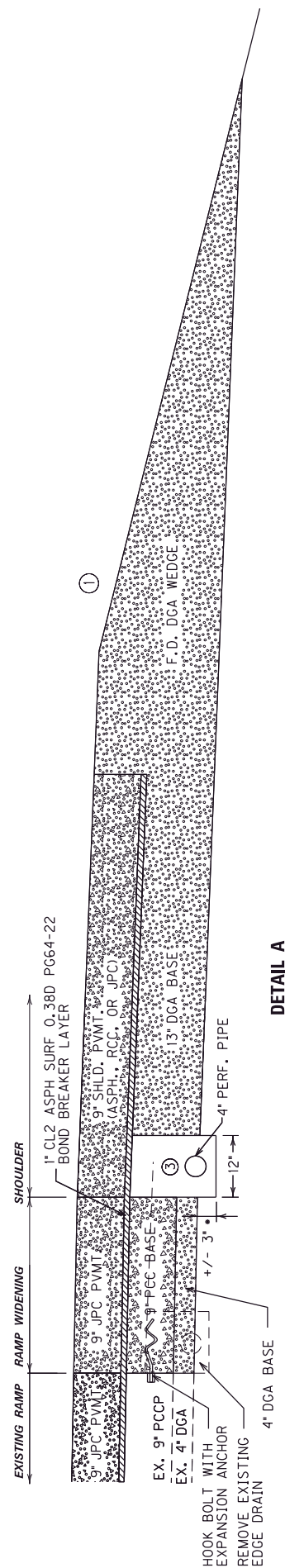


# TYPICAL SECTIONS PENNYRILE PARKWAY

# ACCELERATION LANE EXTENSION EXIT 23 ON RAMPS NORTHBOUND AND SOUTHBOUND



**EXIT 43 RAMP WIDENING**



## SURFACING SCHEDULE

## MAINLINE TRAFFIC LANES

CL2 ASPH SURF 0.38D	PG64-22	.....	1 3/8" AVG. DEPTH
PCC BASE.....			9" DEPTH
UPC PAVEMENT.....			9" DEPTH
* CROSS SLOPE CORRECTION TO 2% IN NORMAL SECTIONS			

### SHOULDERS IN WIDENING AREA

CL2 ASPH SURF	0.38D	PG64-22	.....	1" DEPTH
DCA BASE	.....			13" DEPTH
AND				
JPC PAVEMENT	.....			9" DEPTH
OR				
RCC PAVEMENT	.....			9" DEPTH
OR				
CL2 ASPH BASE	1.00D	PG64-22	.....	7.5" DEPTH (3.75"+3.75")
CL2 ASPH SURF	1.00D	PG64-22	.....	1.5" DEPTH

- ① ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
- ② LONGITUDINAL SAWED JOINT OR LONGITUDINAL CONST. JOINT
- ③ P. PIPE NOT REQUIRED ON HIGH SIDE OF SUPERELEVATED CURVES
- ④ WIDEN SHOULDER 9" TO GUARDRAIL POST WHERE AT WEDGE CURB LOC.
- ⑤ SEE SPECIAL NOTE FOR SHOULDER PAVING ALTERNATES.

NOT TO SCALE

PENNYRILE PKWY  
TYPICAL SECTIONS

**CHRISTIAN COUNTY**  
**PENNYRILE PARKWAY (KY 9004)**  
**PAVEMENT REHABILITATION, MILEPOST 16.556 TO 28.095**  
**ITEM NO. 2-2082**  
**GENERAL SUMMARY**

ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA BASE ① ⑨	TON	104,602
3	CRUSHED STONE BASE ①	TON	8,307
100	ASPHALT SEAL AGGREGATE ①	TON	2,435
103	ASPHALT SEAL COAT ①	TON	292
190	ASPHALT LEVELING AND WEDGING ①	TON	9,500
212	CL2 ASPH BASE 1.00D PG64-22 ①	TON	14,172
214	CL3 ASPH BASE 1.00D PG64-22 ①	TON	7,745
301	CL2 ASPH SURF 0.38D PG64-22 ①	TON	57,637
324	CL3 ASPH SURF 0.50B PG64-22 ①	TON	1,084
2073	JPC PAVEMENT - 9 IN ①	SQ YD	330,883
2082	JPC PAVEMENT - 9 IN SHLD ①	SQ YD	187,871
78	CRUSHED AGGREGATE SIZE NO. 2 ① ⑦	TON	45,972
2064	PCC BASE 9-IN ①	SQ YD	1,100
2587	HOOK BOLT WITH EXPAN ANCHOR	EACH	940
22861EN	HIGH STRENGTH GEOTEXTILE FABRIC	SQ YD	13,140
2007IEC	JOINT ADHESIVE	SQ YD	5,000
1982	DELINEATOR FOR GR MONO DIRECTIONAL - W ②	EACH	622
2929	CRASH CUSHION TYPE IX ②	EACH	10
2367	GUARDRAIL END TREATMENT TYPE 1 ②	EACH	68
2369	GUARDRAIL END TREATMENT TYPE 2A ②	EACH	25
2373	GUARDRAIL END TREATMENT TYPE 3 ②	EACH	9
2381	REMOVE GUARDRAIL ②	LIN FT	53,500
2391	GUARDRAIL END TREATMENT TYPE 4A ②	EACH	13
21802EN	GUARDRAIL - STEEL W BEAM - S FACE (7 FT POST) ②	LIN FT	51,587.5
1983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	EACH	27
2695	RUMBLE STRIPS TYPE 3 ⑧	LIN FT	1,578
462	CULVERT PIPE - 18" ③	EACH	4
466	CULVERT PIPE - 30" ③	EACH	12
521	STORM SEWER PIPE - 15 IN ③	LIN FT	40
1210	PIPE CULVERT HEADWALL - 30 IN ③	EACH	1
1310	REMOVE PIPE ③	LIN FT	24
1450	S & F BOX INLET-OUTLET - 18 IN ③	EACH	1
1452	S & F BOX INLET-OUTLET - 30 IN ③	EACH	2
1490	DROP BOX INLET TYPE 1 ③	EACH	1
1641	JUNCTION BOX - 15 IN ③	EACH	1
1690	FLUME INLET TYPE 1 ③	EACH	7
1691	FLUME INLET TYPE 2 ③	EACH	14
1718	REMOVE INLET ③	EACH	1
1633	RECONSTRUCT MEDIAN BOX INLET ③	EACH	56
2165	REMOVE PAVED DITCH ③ ⑥	SQ YD	12,007

**CONTINUED ON NEXT SHEET**

- |   |  |
|---|--|
| ① CARRIED OVER FROM PAVING SUMMARY      | ⑥ 10,901 SY FROM MED. GRADING DETAIL, 1,106 FROM DRAINAGE SUMMARY.                                 |
| ② CARRIED OVER FROM GUARDRAIL SUMMARY   | ⑦ 35,292 TONS FROM DITCH SLOPE DETAIL, SLIDE REPIAR DETAIL, PERF PIPE HDWL, AND PAVEMENT UNDERCUTS |
| ③ CARRIED OVER FROM DRAINAGE SUMMARIES  | ⑧ PMT. REQUIRED BY MOT, SEE SECT. 501.01.04 STD SPEC.  |
| ④ CARRIED OVER FROM PERF PIPE SUMMARY   | ⑨ 7,500 TONS ADDED FOR G.R. END TREATMENT GRADING.   |
| ⑤ CARRIED OVER FROM BRIDGE PIER DETAILS |  |



CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.556 TO 28.095  
ITEM NO. 2-2082  
GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
2483	CHANNEL LINING CLASS II ③	TON	840
2484	CHANNEL LINING CLASS III ③	TON	1,658
2625	REMOVE HEADWALL ③	EACH	4
8100	CONCRETE - CLASS A ③⑤	CU YD	165.01
8150	STEEL REINFORCEMENT ③⑤	LBS	5,588
22660EN	REPLACE GRATE ③	LBS	2,854
1831	STANDARD INTEGRAL CURB MODIFIED ③⑥	LIN FT	12,990
23629EC	REPAIR HEADWALL ③	EACH	2
1000	PERFORATED PIPE - 4 IN ④	LIN FT	111,250
1001	PERFORATED PIPE - 6 IN ④	LIN FT	106,420
1010	NON-PERFORATED PIPE - 4 IN ④	LIN FT	4,008
1011	NON-PERFORATED PIPE - 6 IN ④	LIN FT	3,438
1012	NON-PERFORATED PIPE - 8 IN ④	LIN FT	17,015
1015	INSPECT AND CERTIFY EDGE DRAIN SYSTEM	LP SUM	1
1020	PERF PIPE HEADWALL TY 1 - 4 IN ④	EACH	113
1024	PERF PIPE HEADWALL TY 2 - 4 IN ④	EACH	18
1028	PERF PIPE HEADWALL TY 3 - 4 IN ④	EACH	103
1741	CORED HOLE DRAINAGE BOX CON - 6 IN ④	EACH	45
1742	CORED HOLE DRAINAGE BOX CON - 8 IN ④	EACH	40
20758ED	REMOVE AND RESET PERF PIPE HEADWALL	EACH	25
24189ER	DURABLE WATERBORNE MARKING - 6 IN W	LIN FT	169,398
24190ER	DURABLE WATERBORNE MARKING - 6 IN Y	LIN FT	133,836
24191ER	DURABLE WATERBORNE MARKING - 12 IN W	LIN FT	3,110
24489EC	INLAID PAVEMENT MARKERS	EACH	1,461
6401	FLEXIBLE DELINEATOR POST - M/W	EACH	672
6404	FLEXIBLE DELINEATOR POST - M/Y	EACH	83
6511	PAVE STRIPING TEMP PAINT - 6 IN	LIN FT	450,000
22664EN	WATER BLASTING EXISTING STRIPE	LIN FT	175,000
6549	PAVE STRIPING-TEMP REM TAPE-B (8 IN)	LIN FT	1,000
6550	PAVE STRIPING-TEMP REM TAPE-W (6 IN)	LIN FT	2,000
6551	PAVE STRIPING-TEMP REM TAPE-Y (6 IN)	LIN FT	2,000
2562	TEMPORARY SIGNS	SQ FT	1500
2655	CROSSOVERS #1	LP SUM	1
2655	CROSSOVERS #2	LP SUM	1
2655	CROSSOVERS #3	LP SUM	1
2650	MAINTAIN & CONTROL TRAFFIC	LP SUM	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	3
2775	ARROW PANEL	EACH	1
3225	TUBULAR MARKERS	EACH	2,000
2014	BARRICADE TYPE III	EACH	8

CONTINUED ON NEXT SHEET

① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM DRAINAGE SUMMARIES

④ CARRIED OVER FROM PERF PIPE SUMMARY

⑤ CARRIED OVER FROM BRIDGE PIER DETAILS

⑥ TO BE USED IN LIEU OF ASPHALT WEDGE CURB

CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.556 TO 28.095  
ITEM NO. 2-2082  
GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
2091	REMOVE PAVEMENT	SQ YD	18,917
2200	ROADWAY EXCAVATION (PAVEMENT UNDERCUTS) ⑦	CU YD	7,192
2575	DITCHING AND SHOULDERING	LIN FT	60,873
2599	FABRIC - GEOTEXTILE TYPE IV ⑧	SQ YD	21,103
2726	STAKING	LP SUM	1
21451ED	FILL AND GRADE MEDIAN	LIN FT	60,873
2555	CONCRETE - CLASS B	CU YD	20
2403	REMOVE CONCRETE MASONRY ⑤	CU YD	128
71	CRUSHED AGGREGATE SIZE NO 57 ⑤	TON	237
2230	EMBANKMENT IN PLACE ⑥	CU YD	2,770
2157	PAVED DITCH TYPE 1	SQ YD	10,901
5952	TEMP MULCH	SQ YD	126,566
2703	SILT TRAP TYPE A	EACH	40
2706	CLEAN SILT TRAP TYPE A	EACH	40
2704	SILT TRAP TYPE B	EACH	40
2707	CLEAN SILT TRAP TYPE B	EACH	40
2705	SILT TRAP TYPE C	EACH	40
2708	CLEAN SILT TRAP TYPE C	EACH	40
2701	TEMP SILT FENCE	LIN FT	35,235
2159	TEMP DITCH	LIN FT	35,235
2160	CLEAN TEMP DITCH	LIN FT	17,618
5950	EROSION CONTROL BLANKET	SQ YD	189,848
5963	INITIAL FERTILIZER	TON	19.70
5964	20-10-10 FERTILIZER	TON	9.90
5992	AGRICULTURAL LIMESTONE	TON	117.70
5953	TEMPORARY SEEDING AND PROTECTION	SQ YD	94,925
2545	CLEARING AND GRUBBING	LP SUM	1
6412	STEEL POST MILE MARKER	EACH	24
1985	DELINEATOR FOR BARRIER - Y	EACH	140
2003	RELOCATE TEMP CONC BARRIER	LIN FT	5,600
2898	RELOCATE CRASH CUSHION	EACH	4
6586	PAVEMENT MARKER TY IVA-MY TEMP	EACH	350
8903	CRASH CUSHION TY VI CLASS BT TL3	EACH	1
3171	CONC MEDIAN BARRIER WALL TYPE 9T	LIN FT	1,400
10020NS	FUEL ADJUSTMENT	DOLLAR	345,518
10030NS	ASPHALT ADJUSTMENT	DOLLAR	352,404
2568	MOBILIZATION	LP SUM	1
2569	DEMOBILIZATION	LP SUM	1

① CARRIED OVER FROM PAVING SUMMARY  
② CARRIED OVER FROM GUARDRAIL SUMMARY  
③ CARRIED OVER FROM DRAINAGE SUMMARIES  
④ CARRIED OVER FROM PERF PIPE SUMMARY

⑤ CARRIED OVER FROM BRIDGE PIER DETAILS  
⑥ CARRIED OVER FROM RAMP EXTENSION CROSS SECTIONS  
EMB 1,660 CY + EMB BENCH 1,110 CY = 2,770 CY  
⑦ 640 CU YD FROM SLIDE REPAIR  
⑧ 20,687 SY PAVEMENT UNDERCUTS, 416 SY SLIDE REPAIR. SHEET 3 of 6



HOPKINS COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900

ITEM NO. 2-2082

GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
1	DGA BASE ① ⑦	TON	23,308
100	ASPHALT SEAL AGGREGATE ①	TON	339
103	ASPHALT SEAL COAT ①	TON	41
190	ASPHALT LEVELING AND WEDGING ①	TON	200
212	CL2 ASPH BASE 1.00D PG64-22 ①	TON	2,762
301	CL2 ASPH SURF 0.38D PG64-22 ①	TON	6,462
2073	JPC PAVEMENT - 9 IN ①	SQ YD	51,906
2082	JPC PAVEMENT - 9 IN SHLD ①	SQ YD	29,650
78	CRUSHED AGGREGATE SIZE NO. 2 ①⑥	TON	24,414
1890	ISLAND HEADER CURB TYPE 1 ②	LIN FT	150
1982	DELINEATOR FOR GR MONO DIRECTIONAL - W ②	EACH	135
1983	DELINEATOR FOR GR MONO DIRECTIONAL - Y ②	EACH	5
2352	GUARDRAIL - STEEL W BEAM - D FACE (7 FT POST) ②	LIN FT	275
2363	BRIDGE END CONNECTOR TYPE A ②	EACH	6
2929	CRASH CUSHION TYPE IX ②	EACH	4
2367	GUARDRAIL END TREATMENT TYPE 1 ②	EACH	16
2369	GUARDRAIL END TREATMENT TYPE 2A ②	EACH	4
2373	GUARDRAIL END TREATMENT TYPE 3 ②	EACH	6
2378	BRIDGE END CONNECTOR TYPE D ②	EACH	2
2381	REMOVE GUARDRAIL ②	LIN FT	8,612.5
2391	GUARDRAIL END TREATMENT TYPE 4A ②	EACH	2
2397	TEMPORARY GUARDRAIL ②	LIN FT	300
2365	CRASH CUSHION TYPE IX - A ②	EACH	2
21802EN	GUARDRAIL - STEEL W BEAM - S FACE (7 FT POST) ②	LIN FT	7,675
462	CULVERT PIPE - 18" ③	LIN FT	4
521	STORM SEWER PIPE - 15 IN ③	LIN FT	4
1202	PIPE CULVERT HEADWALL - 15 IN ③	EACH	1
1204	PIPE CULVERT HEADWALL - 18 IN ③	EACH	1
1310	REMOVE PIPE ③	LIN FT	8
1690	FLUME INLET TYPE 1 ③	EACH	1
1691	FLUME INLET TYPE 2 ③	EACH	5
1633	RECONSTRUCT MEDIAN BOX INLET ③	EACH	7
2165	REMOVE PAVED DITCH ③⑤	SQ YD	1,183
2483	CHANNEL LINING CLASS II ③	TON	240
2484	CHANNEL LINING CLASS III ③	TON	260
2625	REMOVE HEADWALL ③	EACH	2
8100	CONCRETE - CLASS A ③	CU YD	0.32
8150	STEEL REINFORCEMENT ③	LBS	35

CONTINUED ON NEXT SHEET

- ① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM DRAINAGE SUMMARIES

④ CARRIED OVER FROM PERF PIPE SUMMARY
- ⑤ 722 SY FROM MEDIAN GRADING DETAIL, 461 SY FROM DRAINAGE SUM.

⑥ 14,161 TONS FROM DITCH SLOPE DETAIL, PERF PIPE HDWL, AND PAVEMENT UNDERCUTS

⑦ 1,600 TONS ADDED FOR G.R. END TREATMENT GRADING.

HOPKINS COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900

ITEM NO. 2-2082

GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
22660EN	REPLACE GRATE ③	LBS	161
1831	STANDARD INTEGRAL CURB MODIFIED ③ ⑤	LIN FT	2,330
1000	PERFORATED PIPE - 4 IN ④	LIN FT	13,050
1001	PERFORATED PIPE - 6 IN ④	LIN FT	11,045
1010	NON-PERFORATED PIPE - 4 IN ④	LIN FT	564
1011	NON-PERFORATED PIPE - 6 IN ④	LIN FT	414
1012	NON-PERFORATED PIPE - 8 IN ④	LIN FT	2,495
1015	INSPECT AND CERTIFY EDGE DRAIN SYSTEM	LP SUM	1
1020	PERF PIPE HEADWALL TY 1 - 4 IN ④	EACH	18
1024	PERF PIPE HEADWALL TY 2 - 4 IN ④	EACH	2
1028	PERF PIPE HEADWALL TY 3 - 4 IN ④	EACH	7
1741	CORED HOLE DRAINAGE BOX CON - 6 IN ④	EACH	6
1742	CORED HOLE DRAINAGE BOX CON - 8 IN ④	EACH	5
20758ED	REMOVE AND RESET PERF PIPE HEADWALL	EACH	5
24189ER	DURABLE WATERBORNE MARKING - 6 IN W	LIN FT	23,826
24190ER	DURABLE WATERBORNE MARKING - 6 IN Y	LIN FT	19,061
6401	FLEXIBLE DELINEATOR POST - M/W	EACH	266
24489EC	INLAID PAVEMENT MARKERS	EACH	739
6511	PAVE STRIPING TEMP PAINT - 6 IN	LIN FT	75,000
22664EN	WATER BLASTING EXISTING STRIPE	LIN FT	30,000
2562	TEMPORARY SIGNS	SQ FT	1100
2655	CROSSOVERS #4	LP SUM	1
2650	MAINTAIN & CONTROL TRAFFIC	LP SUM	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	3
2775	ARROW PANEL	EACH	1
3225	TUBULAR MARKERS	EACH	200
2014	BARRICADE TYPE III	EACH	4
2200	ROADWAY EXCAVATION (PAVEMENT UNDERCUTS)	CU YD	6,328
2091	REMOVE PAVEMENT	SQ YD	18,988
2575	DITCHING AND SHOULDERING	LIN FT	9,530
2599	FABRIC - GEOTEXTILE TYPE IV	SQ YD	20,487
2726	STAKING	LP SUM	1
21451ED	FILL AND GRADE MEDIAN	LIN FT	7,091
2555	CONCRETE - CLASS B	CU YD	5
8016	REINF CONC SLOPE WALL - 6 IN ⑤	SQ YD	137
2545	CLEARING AND GRUBBING	LP SUM	1

CONTINUED ON NEXT SHEET

① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM DRAINAGE SUMMARIES

④ CARRIED OVER FROM PERF PIPE SUMMARY

⑤ TO BE USED IN LIEU OF ASPHALT WEDGE CURB



HOPKINS COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900  
ITEM NO. 2-2082  
GENERAL SUMMARY

ITEM NUMBER	ITEM	UNIT	QUANTITY
5952	TEMP MULCH	SQ YD	17,345
2703	SILT TRAP TYPE A	EACH	2
2706	CLEAN SILT TRAP TYPE A	EACH	2
2704	SILT TRAP TYPE B	EACH	2
2707	CLEAN SILT TRAP TYPE B	EACH	2
2705	SILT TRAP TYPE C	EACH	2
2708	CLEAN SILT TRAP TYPE C	EACH	2
2701	TEMP SILT FENCE	LIN FT	4,765
2159	TEMP DITCH	LIN FT	4,765
2160	CLEAN TEMP DITCH	LIN FT	2,383
5963	INITIAL FERTILIZER	TON	2.7
5964	20-10-10 FERTILIZER	TON	1.4
5992	AGRICULTURAL LIMESTONE	TON	16.2
5953	TEMPORARY SEEDING AND PROTECTION	SQ YD	13,009
2157	PAVED DITCH TYPE 1	SQ YD	722
5950	EROSION CONTROL BLANKET	SQ YD	26,017
6412	STEEL POST MILE MARKER	EACH	2
6549	PAVE STRIPING-TEMP REM TAPE-B	LIN FT	1,000
6550	PAVE STRIPING-TEMP REM TAPE-W	LIN FT	2,000
6551	PAVE STRIPING-TEMP REM TAPE-Y	LIN FT	2,000
1985	DELINEATOR FOR BARRIER - Y	EACH	28
2003	RELOCATE TEMP CONC BARRIER	LIN FT	1,400
2898	RELOCATE CRASH CUSHION	EACH	1
6586	PAVEMENT MARKER TY IVA-MY TEMP	EACH	70
10020NS	FUEL ADJUSTMENT	DOLLAR	55,534
10030NS	ASPHALT ADJUSTMENT	DOLLAR	36,844
2568	MOBILIZATION	LP SUM	1
2569	DEMOBILIZATION	LP SUM	1

① CARRIED OVER FROM PAVING SUMMARY

② CARRIED OVER FROM GUARDRAIL SUMMARY

③ CARRIED OVER FROM DRAINAGE SUMMARIES

④ CARRIED OVER FROM PERF PIPE SUMMARY

⑤ CARRIED OVER FROM CONCRETE SLOPE WALL DETAIL

## NORTHBOUND & SOUTHBOUND GUARDRAIL SUMMARY

\* CARRIED OVER TO GENERAL SUMMARY  
\*\* FOR LOCATION INFORMATION ONLY



## NORTHBOUND & SOUTHBOUND GUARDRAIL SUMMARY

BEGIN MP **	END MP **	GUARDRAIL-STEEL W BEAM-S FACE (7 FT POST) (LF)	GUARDRAIL-STEEL W BEAM-D FACE (7 FT POST) (LF)	TEMPORARY GUARDRAIL (LF)	REMOVE GUARDRAIL (LF)	GUARDRAIL END TREATMENT TY 1 (EACH)	GUARDRAIL END TREATMENT TY 2A (EACH)	GUARDRAIL END TREATMENT TY 3 (EACH)	GUARDRAIL END TREATMENT TY 4A (EACH)	BRIDGE END CONNECTOR TYPE A (EACH)	BRIDGE END CONNECTOR TYPE D (EACH)	ISLAND HEADER CURB TYPE 1 (LF)	CRASH CUSHION TYPE IX (EACH)	CRASH CUSHION TYPE IX-A (EACH)	DELINATOR FOR GR MONO DIRECTIONAL WHITE (EACH)	DELINATOR FOR GR MONO DIRECTIONAL YELLOW (EACH)	DESCRIPTION
ITEM NO.	21802EN	2352	2397	2381	2367	2369	2373	2391	2363	2378	1890	2929	2365	1982	1983		
SOUTHBOUND																	
18.96	19.19	1150			2	1									12		REMOVE & REPLACE GR
19.31	19.53	1125		1200	2	1									12		REMOVE & REPLACE GR
19.88	19.92	175		1175	2										5		REMOVE & REPLACE GR
20.24	20.66	2175		225	2	1									30		REMOVE & REPLACE GR
22.53	22.64	662.5		2225	2	1									7		S.B. ON RAMP
22.55	22.65	600		600		1									6		S.B. OFF RAMP
22.66	22.82	850		887.5				1							9		S.B. OFF RAMP
22.66	22.73	412.5		450				1							5		S.B. OFF RAMP
22.76	22.81	275		275	1	1		1							3		REMOVE & REPLACE GR
23.02	23.22	1000		1050	2	1									11		REMOVE & REPLACE GR
23.43	23.69	1400		1400	1	1	1								29		REMOVE & REPLACE GR
24.13	24.49	1875		1925	2	1									20		REMOVE & REPLACE GR
24.62	24.67	225		1925	2	1									3		REMOVE & REPLACE GR
24.80	24.97	912.5		912.5	1	1	1								10		REMOVE & REPLACE GR
25.24	25.59	1775		1825	2	1									19		REMOVE & REPLACE GR
25.76	25.99	1187.5		1237.5	2	1									13		REMOVE & REPLACE GR
26.09	26.34	1350		1350	1	1		1							14		REMOVE & REPLACE GR
26.40	26.60	1000		1050	2	1									11		REMOVE & REPLACE GR
26.89	27.05	825		825	1	1	1								9		REMOVE & REPLACE GR
27.19	27.53	1762.5		1801	1	1		1							18		REMOVE & REPLACE GR
27.63	27.77	687.5		725	1	1		1							7		REMOVE & REPLACE GR
28.00	28.07	325		362.5	1	1		1							7		REMOVE & REPLACE GR
MEDIAN																	
18.46													2				
19.71													2				
21.20													2				
22.64													2				
25.11													2				

## NORTHBOUND & SOUTHBOUND GUARDRAIL SUMMARY

BEGIN MP **	END MP **	GUARDRAIL-STEEL W BEAM-S FACE (7 FT POST) (LF)	GUARDRAIL-STEEL W BEAM-D FACE (7 FT POST) (LF)	TEMPORARY GUARDRAIL (LF)	REMOVE GUARDRAIL (LF)	GUARDRAIL END TREATMENT TY 1 (EACH)	GUARDRAIL END TREATMENT TY 2A (EACH)	GUARDRAIL END TREATMENT TY 3 (EACH)	GUARDRAIL END TREATMENT TY 4A (EACH)	BRIDGE END CONNECTOR TYPE A (EACH)	BRIDGE END CONNECTOR TYPE D (EACH)	ISLAND HEADER CURB TYPE 1 (LF)	CRASH CUSHION TYPE IX (EACH)	CRASH CUSHION TYPE IX-A (EACH)	DELINEATOR FOR GR MONO DIRECTIONAL WHITE (EACH)	DELINEATOR FOR GR MONO DIRECTIONAL YELLOW (EACH)	DESCRIPTION
ITEM NO.	21802EN	2352	2397	2381	2367	2369	2373	2391	2363	2378	1890	2329	2365	1982	1983		
NORTHBOUND																	
28.23	362.5			362.5	1			1									REMOVE & REPLACE GR
28.34	687.5			687.5	1			1							9		REMOVE & REPLACE GR
28.52	400			400	1			1							15		REMOVE & REPLACE GR
28.67	437.5			487.5	2										5		REMOVE & REPLACE GR
28.89	300			300	1			1							6		REMOVE & REPLACE GR
29.20	662.5			712.5	2										4		REMOVE & REPLACE GR
29.38	100	137.5		100					1	1	25		1		16		REMOVE & REPLACE GR
29.39	275			275					1		25				5	5	REMOVE & REPLACE GR
29.47	150		150		1					1							REMOVE & REPLACE GR
29.47	150				1						25				4		FOR MOT PURPOSES
																	REMOVE & REPLACE GR
SOUTHBOUND																	
28.25	237.5			287.5	2	1									6		REMOVE & REPLACE GR
28.39	1362.5			1362.5	1	1		1							21		REMOVE & REPLACE GR
28.71	1575			1575	1	1		1							16		REMOVE & REPLACE GR
29.24	1025			1025	1	1			1			25			21		REMOVE & REPLACE GR
29.41	29.44		150		1					1							REMOVE & REPLACE GR
29.47	29.53			350					1	1	25				7		REMOVE & REPLACE GR
29.47	100	137.5		287.5						1	25		1		5		REMOVE & REPLACE GR
MEDIAN																	
29.13				125								2					
29.56				125								2					



CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.556 TO 28.095

ITEM NO. 2-2082

PAVING SUMMARY

PAVING AREAS		PAVING AREAS	
ITEM	TOTAL	ITEM	TOTAL
MAINLINE & RAMP ACCEL/DECEL	S.Y.	RAMPS	S.Y.
9" JPC PAVEMENT NON-REINFORCED	330,883	6" CRUSHED STONE BASE	13,878
1⅜" CL2 ASPH SURF 0.38D PG64-22 ①	325,104	4" CL3 ASPH BASE 1.0D 64-22	13,584
PCC BASE - 9 IN	1,100	4" CL3 ASPH BASE 1.0D 64-22	13,250
MAINLINE SHOULDERS	S.Y.	8" CL3 ASPH BASE 1.0D 64-22 (4"+4") ⑧	4,186
9" JPC PAVEMENT NON-REINFORCED SHLD	187,871	1½" CL3 ASPH SURF 0.38B PG64-22	13,139
1⅜" CL2 ASPH SURF 0.38D PG64-22 ①	184,760	AVG 4.5" CRUSHED STONE BASE VERT TAPER	6,222
DGA WEDGE (CY) ④	43,882	CRUSHED STONE BASE SHOULDER WEDGE (CY) ④	892
		12" CRUSHED AGGREGATE SIZE NO 2	14,000
CROSSOVERS	S.Y.	ASPHALT SEAL COAT	S.Y.
4" DGA BASE	18,800	ASPHALT SEAL AGGREGATE (2 APPLICATIONS) ②	121,734
4" CL2 ASPH BASE 1.0D 64-22	18,800	ASPHALT SEAL COAT (2 APPLICATIONS) ③	121,734
4" CL2 ASPH BASE 1.0D 64-22	18,800	OVERLAY TAPERS	S.Y.
1½" CL2 ASPH SURF 0.38D PG64-22	18,800	4" DGA BASE	8,444
		12" CRUSHED AGGREGATE SIZE NO 2	5,777

PAVING SUMMARY			
CODE	ITEM	UNIT	SHEET TOTAL
1	DGA BASE ⑩	TON	104,602
3	CRUSHED STONE BASE	TON	8,307
100	ASPHALT SEAL AGGREGATE	TON	2,435
103	ASPHALT SEAL COAT	TON	292
190	ASPHALT LEVELING AND WEDGING ⑥	TON	9,500
212	CL2 ASPH BASE 1.00D PG64-22 ⑤	TON	14,172
214	CL3 ASPH BASE 1.00D PG64-22	TON	7,745
301	CL2 ASPH SURF 0.38D PG64-22 ⑨	TON	57,637
324	CL3 ASPH SURF 0.50B PG64-22	TON	1,084
2073	JPC PAVEMENT - 9 IN	S.Y.	330,883
2082	JPC PAVEMENT - 9 IN SHLD ⑦	S.Y.	187,871
0078	CRUSHED AGGREGATE SIZE NO 2	TON	10,680
2064	PCC BASE - 9 IN	S.Y.	1,100

① INCLUDES QUANTITIES TO CHANGE CROSS SLOPE TO 2% (1⅜" AVG.)

② ESTIMATED AT 20 LBS/S.Y. FOR ENTIRE AREA (X 2 APPLICATIONS)

③ ESTIMATED AT 2.4 LBS/S.Y. FOR ENTIRE AREA (X 2 APPLICATIONS)

④ ESTIMATED AT 2.07 TONS PER CY

⑤ 5,900 TONS ADDED FOR PERF PIPE INSTALLATION

⑥ INCLUDE 1000 TONS FOR PAVEMENT TO SHOULDER DROP-OFFS (MOT). INCLUDES 8,500 TONS TO WEDGE INTERMEDIATE CROSSOVERS AND TEMPORARY PAVEMENT TAPERS FOR (MOT).

⑦ SEE SPECIAL NOTE FOR SHOULDER PAVING ALTERNATES

⑧ TEMPORARY PAVEMENT FOR MOT

⑨ ADDITIONAL QUANTITIES ADDED FOR PROFILE AND CROSS SLOPE CORRECTIONS WHILE PLACING BOND BREAKER MATERIAL.

⑩ 7,500 TONS ADDED FOR GUARDRAIL END TREATMENT GRADING

HOPKINS COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900  
ITEM NO. 2-2082  
PAVING SUMMARY

PAVING AREAS		PAVING AREAS	
ITEM	TOTAL	ITEM	TOTAL
MAINLINE	S.Y.	RAMPS	S.Y.
9" JPC PAVEMENT NON-REINFORCED	51,906		
1 3/8" CL2 ASPH SURF 0.38D PG64-22 ①	34,828		
MAINLINE SHOULDERS	S.Y.		
9" JPC PAVEMENT NON-REINFORCED SHLD	29,650		
1 3/8" CL2 ASPH SURF 0.38D PG64-22 ①	20,317		
DGA WEDGE (CY) ④	6,870		
		ASPHALT SEAL COAT	S.Y.
CROSSOVERS	S.Y.	ASPHALT SEAL AGGREGATE (2 APPLICATIONS) ②	16,942
4" DGA BASE	4,800	ASPHALT SEAL COAT (2 APPLICATIONS) ③	16,942
4" CL2 ASPH BASE 1.0D 64-22	4,800		
4" CL2 ASPH BASE 1.0D 64-22	4,800	OVERLAY TAPERS & BRIDGE END DIGOUTS	S.Y.
1 1/2" CL2 ASPH SURF 0.38D PG64-22	4,800	4" DGA BASE	27,750
		CRUSHED AGGREGATE SIZE NO 2	18,987

PAVING SUMMARY			
CODE	ITEM	UNIT	SHEET TOTAL
1	DGA BASE ⑧	TON	23,308
100	ASPHALT SEAL AGGREGATE	TON	339
103	ASPHALT SEAL COAT	TON	41
190	ASPHALT LEVELING AND WEDGING ⑥	TON	200
212	CL2 ASPH BASE 1.00D PG64-22 ⑤	TON	2,762
301	CL2 ASPH SURF 0.38D PG64-22 ⑦	TON	6,462
2073	JPC PAVEMENT - 9 IN	S.Y.	51,906
2082	JPC PAVEMENT - 9 IN SHLD	S.Y.	29,650
0078	CRUSHED AGGREGATE SIZE NO 2	TON	10,253

① INCLUDES QUANTITIES TO CHANGE CROSS SLOPE TO 2% (1 3/8" AVG.)  
② ESTIMATED AT 20 LBS/S.Y. FOR ENTIRE AREA (X 2 APPLICATIONS)  
③ ESTIMATED AT 2.4 LBS/S.Y. FOR ENTIRE AREA (X 2 APPLICATIONS)  
④ ESTIMATED AT 2.07 TONS PER CY  
⑤ 650 TONS ADDED FOR P. PIPE TRENCH CAP  
⑥ INCLUDE 200 TONS FOR PAVEMENT TO SHOULDER DROP-OFFS (MOT)  
⑦ ADDITIONAL QUANITIES ADDED FOR PROFILE AND CROSS SLOPE CORRECTIONS WHILE PLACING BOND BREAKER MATERIAL.  
⑧ 1,600 TONS ADDED FOR GUARDRAIL END TREATMENT GRADING



CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
16.584			1	-- 500	12			1	-- 500	12	
16.679			1	-- 500	12			1	-- 500	12	
16.774			1	-- 250	12			1	-- 250	12	
16.821			1	-- 250	12			1	-- 250	12	
16.868			1	-- 150	12				-- 150	12	NB - Ditch Slope Mod
16.916			1	100 --	12				100 --	12	NB - Ditch Slope Mod
16.963			1	250 --	12			1	250 --	12	
17.010		1		250 --	12	1			250 --	12	
17.058	1			250 --	12				250 --	12	NB - Ditch Slope Mod
17.105	1			250 --	12				250 --	12	NB - High Side of Super
17.200				500 --	12				-- --	--	SB - Ditch Slope Mod NB - High Side of Super
17.295				500 --	12				-- --	--	SB - Ditch Slope Mod NB - High Side of Super
17.389	1			500 --	12				-- --	--	NB - High Side of Super
17.484	1			500 --	12				-- --	--	NB - High Side of Super
17.579	1			500 --	12				-- --	--	NB - High Side of Super
17.673	1			500 --	12				500 --	12	NB - Ditch Slope Mod
17.768		1		500 --	12				500 --	12	NB - Ditch Slope Mod
17.815		1		250 --	12	1			250 --	12	
17.863	1			250 250	12	1			250 250	12	
17.910	1			-- 250	12	1			-- 250	12	
17.957	1			-- 500	12	1			-- 500	12	
18.052	1			-- 500	12	1			-- 500	12	

Headwalls are not necessary in Ditch Slope Modification Areas

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
18.147	1			-- 500	12	1			-- 500	12	
18.241				-- 500	12				-- 500	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
18.336				-- --	--				-- 250	12	SB - High Side of Super NB - Ditch Slope Mod
18.384				-- --	--				-- 250	12	SB - High Side of Super NB - Ditch Slope Mod
18.431				-- --	--				-- 250	12	SB - High Side of Super NB - Ditch Slope Mod
18.478				-- --	--				-- 200	12	SB - High Side of Super NB - Ditch Slope Mod
18.573				-- --	--			1	300 --	12	SB - High Side of Super
18.620				-- --	--			1	250 --	12	SB - High Side of Super
18.668				-- --	--			1	250 --	12	SB - High Side of Super
18.715				-- --	--			1	250 --	12	SB - High Side of Super
18.810				-- --	--				500 --	12	SB - High Side of Super NB - Ditch Slope Mod
18.904				-- --	--	1			500 --	12	SB - High Side of Super
18.999	1			500 --	12	1			500 --	12	
19.046	1			250 --	12	1			250 --	12	
19.094	1			250 --	12	1			250 --	12	
19.141	1			250 250	12	1			250 250	12	
19.188	1			-- 250	12				-- 250	12	NB - Ditch Slope Mod
19.236				-- 250	12				-- 250	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
19.283				-- 250	12	1			-- 250	12	SB - Ditch Slope Mod
19.330				-- 250	12	1			-- 250	12	SB - Ditch Slope Mod
19.378	1			-- 250	12	1			-- 250	12	
19.425	1			-- 250	12				-- 250	12	NB - Ditch Slope Mod

Headwalls are not necessary in Ditch Slope Modification Areas



CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
19.473	1			-- 250	12				-- 250	12	NB - Ditch Slope Mod
19.520	1			-- 250	12				-- 250	12	NB - Ditch Slope Mod
19.567				-- 250	12				-- 250	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
19.615				-- 250	12				-- 250	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
19.662				-- 250	12				-- 250	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
19.709				-- 250	12				-- 250	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
19.757				-- 250	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
19.804				-- 250	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
19.851				-- 250	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
19.899	1			-- 250	12				-- 250	--	NB - High Side of Super
19.946			1	-- 250	12				-- 250	--	NB - High Side of Super
19.993			1	-- 250	12				-- 250	--	NB - High Side of Super
20.088				250 --	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
20.135				250 --	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
20.183				250 --	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
20.230				250 --	12				-- 250	--	SB - Ditch Slope Mod NB - High Side of Super
20.325	1			500 --	12				-- 250	--	NB - High Side of Super
20.420	1			500 --	12	1			500 --	12	
20.495	1			400 --	12	1			400 --	12	
20.543	1			250 --	12	1			250 --	12	
20.590	1			250 250	12	1			250 250	12	
20.637	1			-- 250	12		1		-- 250	12	

Headwalls are not necessary in Ditch Slope Modification Areas

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
20.685		1		-- 500	12			1	-- 500	12	
20.779			1	-- 450	12			1	-- 450	12	
20.865			1	-- 250	12		1		-- 250	12	
20.912			1	-- 250	12	1			-- 250	12	
21.007			1	250 --	12	1			250 --	12	
21.054			1	250 --	12		1		250 --	12	
21.101			1	250 --	12			1	250 --	12	
21.149			1	250 --	12			1	250 --	12	
21.196			1	250 --	12			1	250 --	12	
21.243			1	250 --	12			1	250 --	12	
21.291			1	250 250	12			1	250 250	12	
21.338			1	-- 250	12			1	-- 250	12	
21.385			1	-- 250	12			1	-- 250	12	
21.433			1	-- 250	12			1	-- 250	12	
21.527			1	250 --	12			1	250 --	12	
21.575			1	250 --	12			1	250 --	12	
21.622			1	250 --	12			1	250 --	12	
21.670			1	250 --	12			1	250 --	12	
21.717			1	250 --	12			1	250 --	12	
21.764			1	250 --	12			1	250 --	12	
21.812			1	250 --	12			1	250 --	12	
21.859			1	250 --	12			1	250 --	12	

Headwalls are not necessary in Ditch Slope Modification Areas



CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK	FT	TY 1	TY 2	TY 3	FT BACK	FT	
				FT AHEAD					FT AHEAD		
CHRISTIAN COUNTY											
21.897			1	200 250	12			1	200 250	12	
21.944			1	-- 250	12			1	-- 250	12	
21.991			1	-- 250	12			1	-- 250	12	
22.039			1	-- 250	12			1	-- 250	12	
22.086			1	-- 250	12			1	-- 250	12	
22.134			1	-- 250	12			1	-- 250	12	
22.181			1	-- 250	12			1	-- 250	12	
22.276			1	250 --	12			1	250 --	12	
22.323			1	250 --	12			1	250 --	12	
22.370			1	250 --	12			1	250 --	12	
22.418			1	250 --	12			1	250 --	12	
22.465			1	250 --	12			1	250 --	12	
22.512			1	250 --	12			1	250 --	12	
22.560			1	250 --	12			1	250 --	12	
22.607			1	250 --	12			1	250 --	12	
22.654			1	250 --	12			1	250 --	12	
22.702			1	250 --	12			1	250 --	12	
22.749			1	250 --	12			1	250 --	12	
22.796			1	250 --	12			1	250 --	12	
22.891				500 --	12				500 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
22.986				500 --	12				500 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.066	1			425 250	12	1			425 250	12	

Headwalls are not necessary in Ditch Slope Modification Areas

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
23.114	1			-- 250	12	1			-- 250	12	
23.208	1			-- 500	12				-- 500	12	NB - Ditch Slope Mod
23.303				-- 500	12				-- 500	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.398				-- --	--	1			-- 500	12	SB - High Side of Super
23.492				-- --	--	1			-- 500	12	SB - High Side of Super
23.540				-- --	--	1			-- 250	12	SB - High Side of Super
23.587				-- --	--	1			-- 250	12	SB - High Side of Super
23.634				-- --	--	1			-- 250	12	SB - High Side of Super
23.682				-- --	--				-- 250	12	SB - High Side of Super NB - Ditch Slope Mod
23.729				200 --	12				200 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.777				250 --	12				250 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.824				250 --	12				250 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.871				250 --	12				250 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
23.919				250 --	12			1	250 --	12	SB - Ditch Slope Mod
24.013				500 --	12				500 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
24.108				500 --	12	1			500 --	12	SB - Ditch Slope Mod
24.203	1			500 --	12		1		500 --	12	
24.288	1			450 --	12		1		450 0	12	
24.335	1			250 --	12	1			250 0	12	
24.383	1			250 250	12	1			250 250	12	
24.430	1			-- 250	12	1			-- 250	12	
24.477	1			-- 500	12	1			-- 500	12	

Headwalls are not necessary in Ditch Slope Modification Areas



CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK	FT	TY 1	TY 2	TY 3	FT BACK	FT	
				FT AHEAD					FT AHEAD		
CHRISTIAN COUNTY											
24.572				--	12				--	12	SB - Ditch Slope Mod
				500					500		NB - Ditch Slope Mod
24.667				--	12	1			--	12	SB - Ditch Slope Mod
				500					500		
24.761				--	12				--	12	SB - Ditch Slope Mod
				500					500		NB - Ditch Slope Mod
24.856	1			--	12	1			--	12	
				500					500		
24.951	1			--	12	1			--	12	
				250					250		
24.998	1			--	12			1	--	12	
				100					100		
25.045				150	12			1	150	12	SB - Ditch Slope Mod
				--					--		
25.093				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
25.140				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
25.235		1		500	12		1		500	12	
				--					--		
25.330	1			500	12	1			500	12	
				--					--		
25.424	1			500	12	1			500	12	
				--					--		
25.472	1			250	12	1			250	12	
				--					--		
25.519	1			250	12		1		250	12	
				--					--		
25.566	1			250	12			1	250	12	
				--					--		
25.614				250	12			1	250	12	SB - Ditch Slope Mod
				--					--		
25.661				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
25.708				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
25.756				250	12	1			250	12	SB - Ditch Slope Mod
				--					--		
25.803	1			250	12	1			250	12	
				--					--		
25.850	1			250	12	1			250	12	
				--					--		
25.898	1			250	12	1			250	12	
				--					--		

Headwalls are not necessary in Ditch Slope Modification Areas

CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095  
ITEM NO. 2-2082  
PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK	FT	TY 1	TY 2	TY 3	FT BACK	FT	
				FT AHEAD					FT AHEAD		
CHRISTIAN COUNTY											
25.945	1			250	12				250	12	NB - Ditch Slope Mod
				--					--		
25.992				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
26.040				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
26.087				250	12	1			250	12	SB - Ditch Slope Mod
				--					--		
26.134	1			250	12	1			250	12	
				--					--		
26.182	1			250	12	1			250	12	
				--					--		
26.229	1			250	12		1		250	12	
				250					250		
26.277	1			--	12			1	--	12	
				250					250		
26.324				--	12				--	12	SB - Ditch Slope Mod
				500					500		NB - Ditch Slope Mod
26.419				--	12	1			--	12	SB - Ditch Slope Mod
				500					500		
26.513	1			--	12	1			--	12	
				500					500		
26.608				--	12			1	--	12	SB - Ditch Slope Mod
				500					500		
26.703				--	12				--	12	SB - Ditch Slope Mod
				250					250		NB - Ditch Slope Mod
26.750				--	12				--	12	SB - Ditch Slope Mod
				250					250		NB - Ditch Slope Mod
26.845				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
26.892				250	12	1			250	12	SB - Ditch Slope Mod
				--					--		
26.939	1			250	12		1		250	12	
				--					--		
27.034				500	12				500	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
27.129				500	12				500	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
27.223	1			500	12	1			500	12	
				--					--		
27.318	1			500	12	1			500	12	
				--					--		
27.413	1			500	12	1			500	12	
				--					--		

Headwalls are not necessary in Ditch Slope Modification Areas



**CHRISTIAN & HOPKINS COUNTIES  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900  
ITEM NO. 2-2082  
PERF PIPE SUMMARY**

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON- PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
CHRISTIAN COUNTY											
27.508	1			500	12		1		500	12	
				--					--		
27.602				500	12			1	500	12	SB - Ditch Slope Mod
				--					--		
27.697	1			500	12		1		500	12	
				--					--		
27.792				500	12				500	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
27.886				500	12				500	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
27.981		1		500	12	1			500	12	
				--					--		
28.028	1			250	12				--	--	NB - High Side of Super
				250					--		
28.076		1		--	12				--	--	NB - High Side of Super
				500					--		
CHRISTIAN COUNTY TOTAL	60	7	49	56375	2016	53	11	54	54875	1992	
HOPKINS COUNTY											
28.170				--	12				--	--	SB - Ditch Slope Mod
				500					--		NB - High Side of Super
28.265	1			--	12				--	--	NB - High Side of Super
				500					--		
28.360				--	12				--	--	SB - Ditch Slope Mod
				300					--		NB - High Side of Super
28.417	1			--	12				--	--	NB - High Side of Super
				250					--		
28.464	1			--	12				--	--	NB - High Side of Super
				250					--		
28.511	1			--	12				--	--	NB - High Side of Super
				250					--		
28.559	1			--	12	1			--	12	
				100					100		
28.606	1			150	12				150	12	NB - Ditch Slope Mod
				--					--		
28.653				250	12				250	12	SB - Ditch Slope Mod
				--					--		NB - Ditch Slope Mod
28.701				250	12		1		250	12	SB - Ditch Slope Mod
				--					--		
28.748	1			250	12	1			250	12	
				250					250		
28.795	1			--	12				--	12	NB - Ditch Slope Mod
				250					250		

Headwalls are not necessary in Ditch Slope Modification Areas

HOPKINS COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	NORTHBOUND OUTSIDE HEADWALL TYPE			4" PERF PIPE	4" NON-PERF PIPE	REMARKS
	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	TY 1	TY 2	TY 3	FT BACK FT AHEAD	FT	
HOPKINS COUNTY											
28.843	1			-- 250	12				-- 250	12	NB - Ditch Slope Mod
28.938	1			100 --	12	1			100 --	12	
28.985	1			250 --	12				250 --	12	NB - Ditch Slope Mod
29.032				250 --	12				250 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
29.080				250 --	12				250 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
29.174				500 --	12				500 --	12	SB - Ditch Slope Mod NB - Ditch Slope Mod
29.269				-- --	--	1			500 --	12	SB - High Side of Super
29.326				-- --	--	1			300 --	12	SB - High Side of Super
29.373				-- --	--		1		250 --	12	SB - High Side of Super
29.420				-- --	--	1			250 --	12	SB - High Side of Super
29.468				-- --	--	1			250 --	12	SB - High Side of Super
29.515				-- --	--			1	250 --	12	SB - High Side of Super
29.563				-- --	--			1	250 250	12	SB - High Side of Super
29.610				-- --	--			1	-- 250	12	SB - High Side of Super
29.657				-- --	--			1	-- 250	12	SB - High Side of Super
29.705				-- 250	12			1	-- 250	12	SB - High Side of Super
29.752				-- 250	12			1	-- 250	12	SB - High Side of Super
29.799				-- 250	12			1	-- 250	12	SB - High Side of Super
29.847				-- 250	12						SB - High Side of Super
29.894				-- 250	12						SB - High Side of Super
HOPKINS COUNTY TOTAL	11	0	0	6400	276	7	2	7	6650	288	

Headwalls are not necessary in Ditch Slope Modification Areas



**CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095  
ITEM NO. 2-2082  
PERF PIPE SUMMARY**

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	
<b>CHRISTIAN COUNTY</b>									
16.716	475	18		475	18		--		
	--			--			--		
16.717	--	18		--	18		--		
	935			935			--		
16.996	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
17.095	525	18		525	18		525	1	Both - Tie to Trunkline
	--			--			--		
17.287	--			1000	18		--		SB - High Side of Super
	--			--			--		NB - Tie to Trunkline
17.343	--			280	18		280	1	SB - High Side of Super
	--			--			--		NB - Tie to Trunkline
17.533	--			1000	18		--		SB - High Side of Super
	--			--			--		NB - Tie to Trunkline
17.710	565	18		930	18		930	1	Both - Tie to Trunkline
	--			--			--		
17.807	500	18		500	18		290	1	Both - Tie to Trunkline
	--			--			--		
17.862	285	36	1	285	36	1	285	1	Both - Tie to Trunkline (Back)
	840			840			--		
18.024	--	18	1	--	18	1	--		
	840			840			--		
18.186	--	18		--	18		--	1	Both - Tie to Trunkline
	355			355			355		
18.254	--	18		--	18		--		Both - Tie to Trunkline
	1000			340			--		
18.571	500	18		--			--		Both - Tie to Trunkline
	--			--			--		
18.630	300	18		--			300	1	Both - Tie to Trunkline
	--			--			--		
18.763	690	18	1	--			--		
	--			--			--		
18.955	955	18	1	155	18	1	--		
	--			--			--		
19.051	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
19.141	470	36		470	36		470	2	Both - Tie to Trunkline
	290			290			290		
19.198	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
19.294	--	18		--	18		--	1	Both - Tie to Trunkline
	485			485			485		
19.386	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		

CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095  
ITEM NO. 2-2082  
PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	
CHRISTIAN COUNTY									
19.483	--	18		--	18		--	1	Both - Tie to Trunkline
	610			610			610		
19.600	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
19.729	--			--	18		--	1	SB - High Side of Super NB - Tie to Trunkline
	--			390			390		
19.804	--			--	18		--		SB - High Side of Super NB - Tie to Trunkline
	--			500			--		
19.900	--			--	18		--	1	SB - High Side of Super NB - Tie to Trunkline
	--			240			240		
19.946	--			--	18		--		SB - High Side of Super NB - Tie to Trunkline
	--			500			--		
20.135	--			500	18		--		SB - High Side of Super NB - Tie to Trunkline
	--			--			--		
20.249	--			600	18		600	1	SB - High Side of Super NB - Tie to Trunkline
	--			--			--		
20.420	235	18	1	890	18	1	--		
	--			--			--		
20.516	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
20.591	390	36		390	36		390	2	Both - Tie to Trunkline
	440			440			440		
20.674	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
20.770	--	18		--	18		--	1	Both - Tie to Trunkline
	490			490			490		
20.865	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
21.054	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
21.175	635	18		635	18		635	1	Both - Tie to Trunkline
	--			--			--		
21.300	400	36	1	400	36	1	--	1	Both - Tie to Trunkline (Ahead)
	390			390			390		
21.376	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
21.565	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
21.670	550	18		550	18		550	1	Both - Tie to Trunkline
	--			--			--		
21.766	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
21.898	690	36		690	36		690	2	Both - Tie to Trunkline
	495			495			495		



**CHRISTIAN COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095  
ITEM NO. 2-2082  
PERF PIPE SUMMARY**

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	
CHRISTIAN COUNTY									
21.991	-- 500	18		-- 500	18		-- --		Both - Tie to Trunkline
22.088	-- 285	18		-- 285	18		-- 285	1	Both - Tie to Trunkline
22.143	-- 500	18		-- 500	18		-- --		Both - Tie to Trunkline
22.332	500 --	18		500 --	18		-- --		Both - Tie to Trunkline
22.438	550 --	18		550 --	18		550 --	1	Both - Tie to Trunkline
22.534	500 --	18		500 --	18		-- --		Both - Tie to Trunkline
22.616	420 --	18		420 --	18		420 --	1	Both - Tie to Trunkline
22.756	500 --	18		500 --	18		-- --		Both - Tie to Trunkline
22.779	115 --	18		115 --	18		115 --	1	Both - Tie to Trunkline
22.971	1000 --	18		1000 --	18		-- --		Both - Tie to Trunkline
23.062	470 735	36	1	470 735	36	1	470 --	1	Both - Tie to Trunkline (Back)
23.203	-- 880	18	1	-- 980	18	1	-- --		
23.392	-- --			-- 735	18	1	-- --		SB - High Side of Super
23.534	-- --			-- 325	18		-- 325	1	SB - High Side of Super NB - Tie to Trunkline
23.597	-- --			-- 500	18		-- --		SB - High Side of Super NB - Tie to Trunkline
23.786	500 --	18		500 --	18		-- --		Both - Tie to Trunkline
23.884	510 --	18		510 --	18		510 --	1	Both - Tie to Trunkline
24.052	870 --	18	1	870 --	18	1	-- --		
24.215	850 --	18	1	850 --	18	1	-- --		
24.312	500 --	18		500 --	18		-- --		Both - Tie to Trunkline
24.384	375 235	36		375 235	36		375 235	2	Both - Tie to Trunkline
24.431	-- 500	18		-- 500	18		-- --		Both - Tie to Trunkline

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	
CHRISTIAN COUNTY									
24.527	--	18	1	--	18	1	--		
	560			560			--		
24.635	--	18	1	--	18	1	--		
	850			850			--		
24.801	--	18	1	--	18	1	--		
	635			635			--		
24.924	--	18		--	18		--	1	Both - Tie to Trunkline
	400			400			400		
25.002	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
25.206	390	18	1	390	18	1	--		
	--			--			--		
25.396	980	18	1	980	18	1	--		
	--			--			--		
25.492	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
25.565	375	18		375	18		375	1	Both - Tie to Trunkline
	--			--			--		
25.662	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
25.755	485	18		485	18		485	1	Both - Tie to Trunkline
	--			--			--		
25.851	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
25.926	390	18		390	18		390	1	Both - Tie to Trunkline
	--			--			--		
26.022	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
26.093	370	18		370	18		370	1	Both - Tie to Trunkline
	--			--			--		
26.189	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
26.232	220	36		220	36		220	2	Both - Tie to Trunkline
	370			370			370		
26.304	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
26.398	--	18	1	--	18	1	--		
	880			880			--		
26.568	--	18		--	18		--	1	Both - Tie to Trunkline
	700			700			700		
26.701	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
27.002	1000	18	1	1000	18	1	--		
	--			--			--		



CHRISTIAN & HOPKINS COUNTIES

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900

ITEM NO. 2-2082

PERF PIPE SUMMARY

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	
CHRISTIAN COUNTY									
27.173	880	18	1	880	18	1	--		
	--			--			--		
27.334	835	18	1	835	18	1	--		
	--			--			--		
27.506	890	18	1	890	18	1	--		
	--			--			--		
27.664	825	18	1	825	18	1	--		
	--			--			--		
27.806	735	18	1	735	18	1	--		
	--			--			--		
27.981	915	18		915	18		--		Both - Tie to Trunkline
	--			--			--		
28.037				290	36	1	290	1	SB - High Side of Super
	--			760			--		NB - Tie to Trunkline (Back)
CHRISTIAN COUNTY TOTAL	50315	1620	22	56105	1818	23	17015	40	
HOPKINS COUNTY									
28.182	--			--	18	1	--		SB - High Side of Super
	--			990			--		NB - Tie to Trunkline
28.369	--			--	18		--	1	SB - High Side of Super
	--			730			730		NB - Tie to Trunkline
28.512	--	18		--	18		--		Both - Tie to Trunkline
	340			340			--		
28.672	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
28.746	380	36		380	36		380	2	Both - Tie to Trunkline
	400			400			400		
28.824	--	18		--	18		--		Both - Tie to Trunkline
	500			500			--		
29.013	500	18		500	18		--		Both - Tie to Trunkline
	--			--			--		
29.115	525	18		525	18		525	1	Both - Tie to Trunkline
	--			--			--		
29.300	775	18	1	--			--		NB - High Side of Super
	--			--			--		
29.373	370	18	1	--			--		NB - High Side of Super
	--			--			--		
29.432	175	18	1	--			--		NB - High Side of Super
	--			--			--		
29.533	55	18	1	--			--		NB - High Side of Super
	--			--			--		
29.585	--	18		--			--	1	SB - Tie to Trunkline
	460			--			460		NB - High Side of Super

**HOPKINS COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900  
ITEM NO. 2-2082  
PERF PIPE SUMMARY**

MILE POINT	SOUTHBOUND INSIDE			NORTHBOUND INSIDE			TRUNKLINE		REMARKS
	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	6" PERF PIPE	6" NON -PERF PIPE	CORED BOX - 6 IN	8" NON -PERF PIPE	CORED BOX - 8 IN	
	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT AHEAD	LENGTH	EACH	FT BACK FT	EACH	

## HOPKINS COUNTY

[illegible]



CHRISTIAN & HOPKINS COUNTIES

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900

ITEM NO. 2-2082

PERF PIPE SUMMARY

	4" PERF PIPE	4" NON -PERF PIPE	6" PERF PIPE	6" NON -PERF PIPE	8" NON -PERF PIPE	CORED BOX - 6 IN	CORED BOX - 8 IN	PERF PIPE HDWL		
								TY 1	TY 2	TY 3
	LENGTH	LENGTH	LENGTH	LENGTH	LENGTH	EACH	EACH	EACH	EACH	EACH
CHRISTIAN COUNTY										
SOUTHBOUND OUTSIDE	56375	2016						60	7	49
NORTHBOUND OUTSIDE	54875	1992						53	11	54
SOUTHBOUND INSIDE			50315	1620		22				
NORTHBOUND INSIDE			56105	1818		23				
TRUNKLINE					17015		40			
CHRISTIAN COUNTY TOTAL	111250	4008	106420	3438	17015	45	40	113	18	103
HOPKINS COUNTY										
SOUTHBOUND OUTSIDE	6400	276						11	0	0
NORTHBOUND OUTSIDE	6650	288						7	2	7
SOUTHBOUND INSIDE			6180	252		5				
NORTHBOUND INSIDE			4865	162		1				
TRUNKLINE					2495		5			
HOPKINS COUNTY TOTAL	13050	564	11045	414	2495	6	5	18	2	7

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

DRAINAGE SUMMARIES

PIPE DRAINAGE SUMMARY

DIRECTION MILE POINT	CULVERT PIPE				MISCELLANEOUS							REMARKS
	CULVERT PIPE -18"	CULVERT PIPE -30"	REMOVE PIPE	REMOVE HW	S & F BOX I/O 30"	PIPE CULVERT HEADWALL -30 IN	S & F BOX I/O 18"	③ CONCRETE - CLASS A	③ STEEL REINFORCEMENT	① REPAIR HEADWALL	② REPLACE GRATE	
ITEM CODE	462	466	1310	2625	1452	1210	1450	8100	8150	23629 EC	22660EN	
UNIT TO BID	FEET				E A C H			CY	LBS	EACH	LBS	
SOUTHBOUND MP 16.65											581	30" S&F BOX I/O
NORTHBOUND MP 16.65		4	4	1	1			.28	27			30" S&F BOX I/O
NORTHBOUND MP 16.72											272	18" S&F BOX I/O
SOUTHBOUND MP 17.04										1		
NORTHBOUND MP 17.87										1		
NORTHBOUND MP 19.73											161	18" S&F BOX I/O
NORTHBOUND MP 20.77											454	24" S&F BOX I/O
SOUTHBOUND MP 20.77											454	24" S&F BOX I/O
SOUTHBOUND MP 20.99											156	18" S&F BOX I/O
MEDIAN MP 21.174			4									RELOCATE DBI
NORTHBOUND MP 22.44											161	15" I/O SAFETY HW
NORTHBOUND MP 22.74		4	4	1	1			.28	27			30" S&F BOX I/O
NORTHBOUND MP 23.88											454	24" S&F BOX I/O
NORTHBOUND MP 26.42		4	4	1		1		.28	27			30" S&F HW
SOUTHBOUND MP 22.45											161	15" I/O SAFETY HW
SOUTHBOUND MP 25.21	4		4	1			1	.17	19			18" S&F BOX I/O
TOTAL SHEET	4	12	20	4	2	1	1	1.01	100	2	2854	

① REPAIR BROKEN CONCRETE ON HEADWALL

② REPLACE DAMAGED OR MISSING GRATES.

③ FOR PIPE COLLARS

THE CONTRACTOR SHALL FIELD VERIFY TYPES AND  
DIMENSIONS PRIOR TO ORDERING PIPE, FRAMES & GRATES.



## PIPE DRAINAGE SUMMARY

DIRECTION MILE POINT	CULVERT PIPE				MISCELLANEOUS							REMARKS
	STORM SEWER PIPE - 15 IN	CULVERT PIPE-30"	REMOVE PIPE	REMOVE INLET	JUNCTION BOX-15 IN	DROP BOX INLET TYPE 1	S & F BOX I/O 18"	CONCRETE - CLASS A	STEEL REINFORCEMENT	REPAIR HEADWALL	REPLACE GRATE	
ITEM CODE	521	466	1310	1718	1641	1490	1450	8100	8150	23629 EC	22660EN	
UNIT TO BID	FEET			E A C H				CY	LBS	EACH	LBS	
MEDIAN MP 21.174	40		4	1	1	1						RELOCATE DBI
TOTAL SHEET	40		4	1	1	1						

**SHEET 2 of 10**

**HOPKINS COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900  
ITEM NO. 2-2082  
DRAINAGE SUMMARIES  
PIPE DRAINAGE SUMMARY**

DIRECTION MILE POINT	CULVERT PIPE				MISCELLANEOUS					REMARKS	
	CULVERT PIPE -18"	STORM SEWER PIPE - 15 IN	REMOVE PIPE	REMOVE HW	PIPE CULVERT HEADWALL-15 IN	PIPE CULVERT HEADWALL-18 IN	CONCRETE- CLASS A ①	① STEEL REINFORCEMENT	REPLACE GRATE ②		
ITEM CODE	462	521	1310	2625	1202	1204	8100	8150	22660EN		
UNIT TO BID	FEET			E	A	C	H	CY	LBS	LBS	
SOUTHBOUND MP 28.746	4		4	1		1	.17	19		18" S&F HW	
APPR. RT MP 29.129									161	15" I/O SAFETY HW	
MEDIAN MP 29.440		4	4	1	1		.15	16		15" S&F HW	
TOTAL SHEET	4	4	8	2	1	1	.32	35	161		

- ① FOR PIPE COLLARS
- ② REPLACE DAMAGED OR MISSING GRATES.

THE CONTRACTOR SHALL FIELD VERIFY TYPES AND DIMENSIONS PRIOR TO ORDERING PIPE, FRAMES & GRATES.



CHRISTIAN & HOPKINS COUNTIES  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900  
ITEM NO. 2-2082  
DRAINAGE SUMMARIES  
RECONSTRUCT INLET LOCATIONS

MILE POINT	REMARKS
MP 16.718	
MP 17.096	
MP 17.343	
MP 17.711	IN A PAVED DITCH
MP 17.862	
MP 18.024	DBI W/TWO GRATES
MP 18.185	IN A PAVED DITCH
MP 18.630	IN A PAVED DITCH
MP 18.763	
MP 18.955	
MP 19.142	
MP 19.293	DBI W/TWO GRATES
MP 19.483	
MP 19.729	DBI W/TWO GRATES
MP 19.729	
MP 19.900	
MP 20.249	
MP 20.420	
MP 20.591	DBI W/TWO GRATES
MP 20.770	
MP 21.182	
MP 21.301	DBI W/TWO GRATES
MP 21.670	
MP 21.898	DBI W/TWO GRATES
MP 22.088	
MP 22.44	

CHRISTIAN & HOPKINS COUNTIES

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900

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DRAINAGE SUMMARIES

RECONSTRUCT INLET LOCATIONS

MILE POINT	REMARKS
MP 22.616	
MP 22.779	
MP 23.061	DBI W/TWO GRATES
MP 23.203	
MP 23.392	
MP 23.534	
MP 23.884	
MP 24.052	IN A PAVED DITCH
MP 24.215	IN A PAVED DITCH
MP 24.384	IN A PAVED DITCH
MP 24.527	IN A PAVED DITCH
MP 24.636	IN A PAVED DITCH
MP 24.801	IN A PAVED DITCH
MP 24.924	
MP 25.206	
MP 25.396	
MP 25.565	
MP 25.755	
MP 25.926	
MP 26.093	
MP 26.232	DBI W/TWO GRATES
MP 26.398	IN A PAVED DITCH
MP 26.568	IN A PAVED DITCH
MP 27.003	
MP 27.173	
MP 27.334	
	IN A PAVED DITCH

THE CONTRACTOR SHALL FIELD VERIFY TYPES AND DIMENSIONS.



CHRISTIAN & HOPKINS COUNTIES  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 16.566 TO 29.900  
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DRAINAGE SUMMARIES  
RECONSTRUCT INLET LOCATIONS

MILE POINT	REMARKS
MP 27.506	IN A PAVED DITCH
MP 27.664	IN A PAVED DITCH
MP 27.806	IN A PAVED DITCH
MP 28.037	DBI W/TWO GRATES
	CHRISTIAN COUNTY TOTAL RECONSTRUCT INLET - 56 EACH
MP 28.184	
MP 28.373	
MP 28.746	
MP 29.115	IN A PAVED DITCH
MP 29.301	
MP 29.373	
MP 29.432	
	HOPKINS COUNTY TOTAL RECONSTRUCT INLET - 7 EACH

CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

DRAINAGE SUMMARIES

CONCRETE CURB AND FLUME LOCATIONS

MILE POINT		WEDGE CURB (LF)	MILE POINT FLUME LOCATION	FLUME TYPE	CHANNEL LINING CLASS II (TONS)	REMARKS
FROM	TO					
17.777	18.157	2,010	17.863	1	40	NORTHBOUND
			18.005	2	40	NORTHBOUND
18.842	19.168	1,720	19.141	1	40	NORTHBOUND
			19.027	2	40	NORTHBOUND
			18.914	2	40	NORTHBOUND
22.996	23.194	1,050	23.066	1	40	NORTHBOUND
23.456	23.542	450	23.456	2	40	NORTHBOUND
24.380	24.450	370	24.380	1	40	NORTHBOUND
24.800	24.900	530	24.800	2	40	NORTHBOUND
27.140	27.360	1,160	27.360	2	40	NORTHBOUND
20.241	20.440	1,050	20.360	2	40	SOUTHBOUND
			20.440	2	40	SOUTHBOUND
24.383	24.460	460	24.383	1	40	SOUTHBOUND
24.620	24.675	290	24.620	2	40	SOUTHBOUND
25.300	25.460	840	25.460	2	40	SOUTHBOUND
25.753	25.970	1,150	25.970	2	40	SOUTHBOUND
			25.866	2	40	SOUTHBOUND
26.090	26.260	900	26.229	1	40	SOUTHBOUND
26.480	26.560	420	26.480	2	40	SOUTHBOUND
27.470	27.522	270	27.522	2	40	SOUTHBOUND
28.010	28.071	320	28.028	1	40	SOUTHBOUND
			FLUME TYPE 1	FLUME TYPE 2		
TOTALS		12,990	7	14	840	

THE CONTRACTOR SHALL FIELD VERIFY FLUME OUTLET LOCATIONS AND TYPES. CONSTRUCT CHANNEL LINED DITCH FROM THE FLUME OUTLET TO THE TOE OF SLOPE LOCATION. CONNECT OUTLET DITCHES TO EXISTING DRAINAGE SWALES WHEN POSSIBLE. CONSTRUCT STANDARD INTEGRAL CURB MODIFIED IF JPC SHOULDER IS USED, CONSTRUCT 4" HEADER CURB IF ASPHALT SHOULDERS ARE USED. SHEET 7 of 10





CHRISTIAN COUNTY

PENNYRILE PARKWAY (KY 9004)

PAVEMENT REHABILITATION, MILEPOST 16.566 TO 28.095

ITEM NO. 2-2082

DRAINAGE SUMMARIES

PAVE DITCH REMOVAL AND CHANNEL LINING INSTALLATION

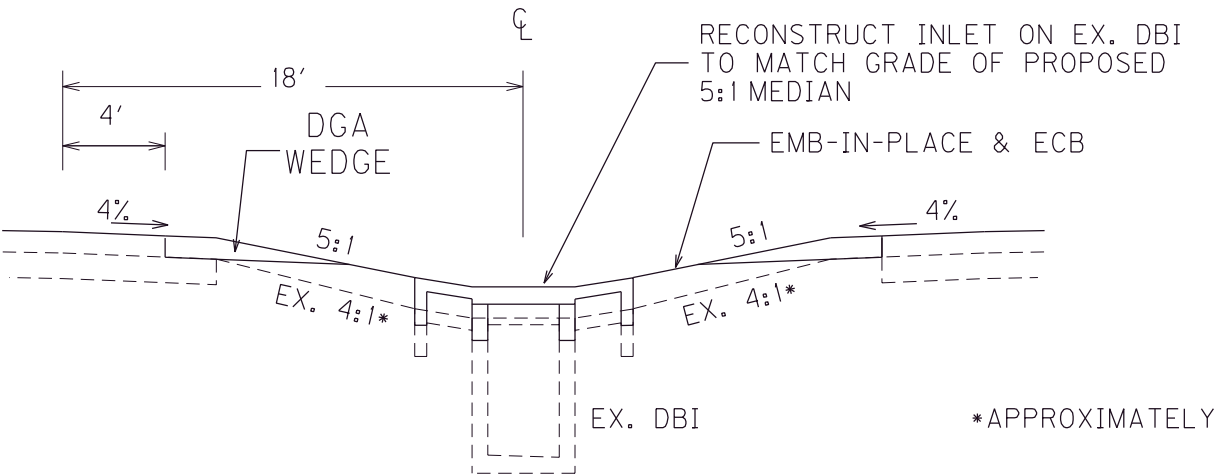
FROM MILEPOST	TO MILEPOST	PV DT REM SY	C.L. CL3 TONS	DIRECTION	REMARKS
17.711	17.711	0	28	SB	PIPE CULVERT OUTLET
18.023	18.023	0	44	NB	PIPE CULVERT OUTLET
18.929	18.939	38	19	SB	PAVED DITCH REMOVAL
19.121	19.133	0	139	NB	RCBC OUTLET
19.309	19.309	0	63	NB	PIPE CULVERT OUTLET
20.524	20.531	0	67	NB	RCBC OUTLET
20.590	20.590	0	27	NB	PIPE CULVERT OUTLET
23.071	23.078	0	81	NB	RCBC OUTLET
23.149	23.200	179	90	SB	PAVED DITCH REMOVAL
23.546	23.546	0	36	NB	PIPE CULVERT OUTLET
24.167	24.176	31	16	SB	PAVED DITCH REMOVAL
24.213	24.213	0	27	SB	PIPE CULVERT OUTLET
24.520	24.533	53	26	NB	PAVED DITCH REMOVAL
24.621	24.621	0	50	NB	PIPE CULVERT OUTLET
24.621	246.399	69	35	NB	PAVED DITCH REMOVAL
24.839	24.873	141	70	NB	PAVED DITCH REMOVAL
24.846	24.846	0	31	NB	PIPE CULVERT OUTLET
25.359	25.359	0	42	NB	PIPE CULVERT OUTLET
25.749	25.783	126	63	NB	PAVED DITCH REMOVAL
25.754	25.778	112	56	SB	PAVED DITCH REMOVAL
26.039	26.067	0	192	NB	CHANNEL LINING
26.067	26.112	0	168	NB	PAVED DITCH REMOVAL
26.121	26.127	23	11	SB	PAVED DITCH REMOVAL
26.409	26.463	196	98	NB	PAVED DITCH REMOVAL
26.900	26.900	0	35	NB	CHANNEL LINING
26.908	26.942	123	62	SB	PAVED DITCH REMOVAL
27.167	27.171	16	8	NB	PAVED DITCH REMOVAL
27.355	27.355	0	73	SB	PIPE CULVERT OUTLET
TOTALS		1106	1,658		



**HOPKINS COUNTY  
PENNYRILE PARKWAY (KY 9004)  
PAVEMENT REHABILITATION, MILEPOST 28.095 TO 29.900  
ITEM NO. 2-2082  
DRAINAGE SUMMARIES  
PAVE DITCH REMOVAL AND CHANNEL LINING INSTALLATION**

[illegible]

MEDIAN DETAIL



MEDIAN TREATMENT FOR  
OVERLAY & INLAY SECTIONS  
MP 16.566 TO MP 29.438 (BRIDGE END DIGOUT)

PAVED DITCH REPLACEMENT LOC.							
MP ST	MP END	UNIT	QUANTITY	MP ST	MP END	UNIT	QUANTITY
17.127	17.326	SY	700	24.801	24.915	SY	401
17.343	17.531	SY	662	26.232	26.388	SY	549
17.541	17.711	SY	598	26.398	26.558	SY	563
18.023	18.175	SY	535	26.568	26.605	SY	130
18.185	18.289	SY	366	27.012	27.173	SY	567
18.772	18.955	SY	644	27.183	27.334	SY	532
20.277	20.420	SY	503	27.343	27.506	SY	574
23.884	24.052	SY	591	27.514	27.664	SY	528
24.064	24.215	SY	532	27.674	27.806	SY	465
24.225	24.385	SY	563	29.045	29.116	SY	250
24.527	24.626	SY	348	29.158	29.292	SY	472
24.636	24.792	SY	549	TOTAL			11,623

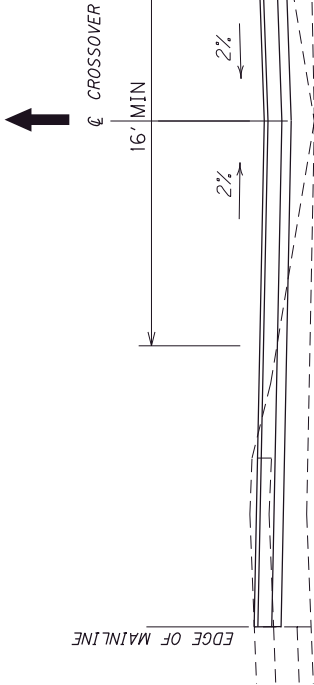
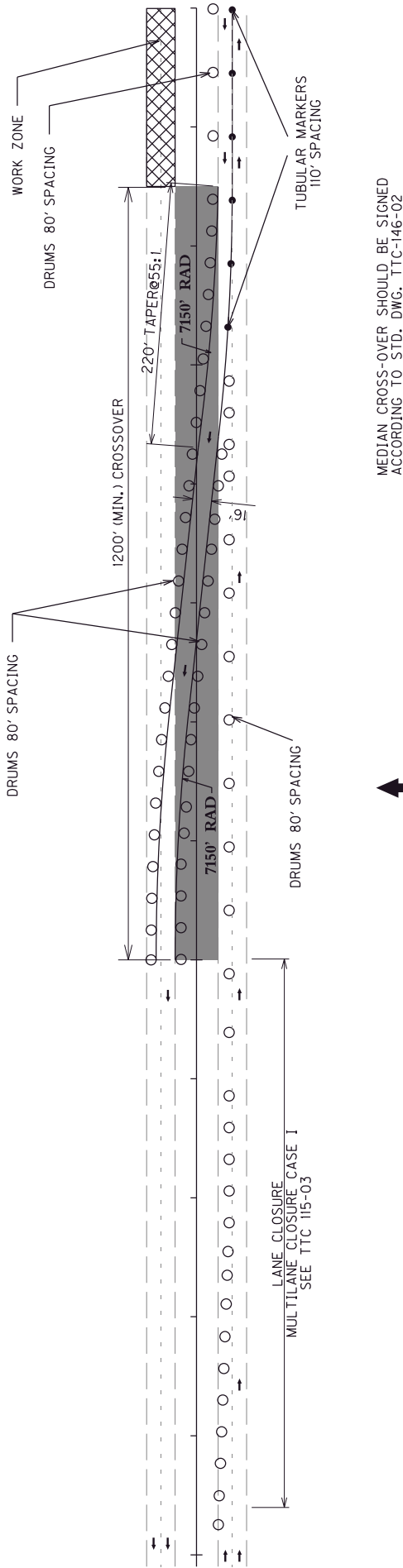
BID ITEMS	UNIT	CHRISTIAN QTY	HOPKINS QTY
EROSION CONTROL BLANKET	SY	125,280	16,942
REMOVE PAVED DITCH	SY	10,901	722
RECONSTRUCT INLET ①	EACH	56	7
FILL AND GRADE MEDIAN	LF	60,873	7,091
PAVED DITCH TYPE I	SY	10,901	722



1216R17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

MEDIAN CROSS OVER DETAILS



- ITEMS:
- EMBANKMENT SUBGRADE
  - 4" DGA
  - 8" CL.2 ASPH BASE 1.0D PG64-22 (4" + 4")
  - 1 1/2" CL.2 ASPH SURF 0.38D PG64-22

ITEM NUMBER	ITEM	UNIT	QUANTITY 1,200' LENGTH	QUANTITY 1,750' LENGTH
0001	DGA BASE	TON	1,104	1,610
0212	CLASS 2 ASPHALT BASE 1.00D PG64-22	TON	2,112	3,080
0309	CLASS 2 ASPHALT SURFACE 0.38D PG64-22	TON	396	578
3225	TUBULAR MARKERS	EACH	705	16

PAVING QUANTITIES PER CROSSOVER.  
QUANTITIES CARRIED OVER TO PAVING SUMMARY.  
TUBULAR MARKER QUANTITY IS FOR ENTIRE PROJECT. QUANTITIES OF TUBULAR MARKERS ARE CARRIED OVER TO THE GENERAL SUMMARY.  
PROPOSED CHANGES IN THE MOT THAT ELIMINATE MEDIAN CROSSOVERS WILL NOT BE CONSIDERED FOR VALUE ENGINEERING REMOVAL OF THE CROSSOVERS WILL BE INCIDENTAL TO THE BID ITEM "CROSSOVER". TEMPORARY DRAINAGE MEASURES WILL BE REQUIRED AS DESCRIBED IN THE MAINTENANCE OF TRAFFIC NOTES. INSTALLATION AND REMOVAL OF TEMPORARY DRAINAGE MEASURES WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM "CROSSOVER".

- TRAFFIC DRUM
- TUBULAR MARKER
- CROSSOVER PAVING AREA

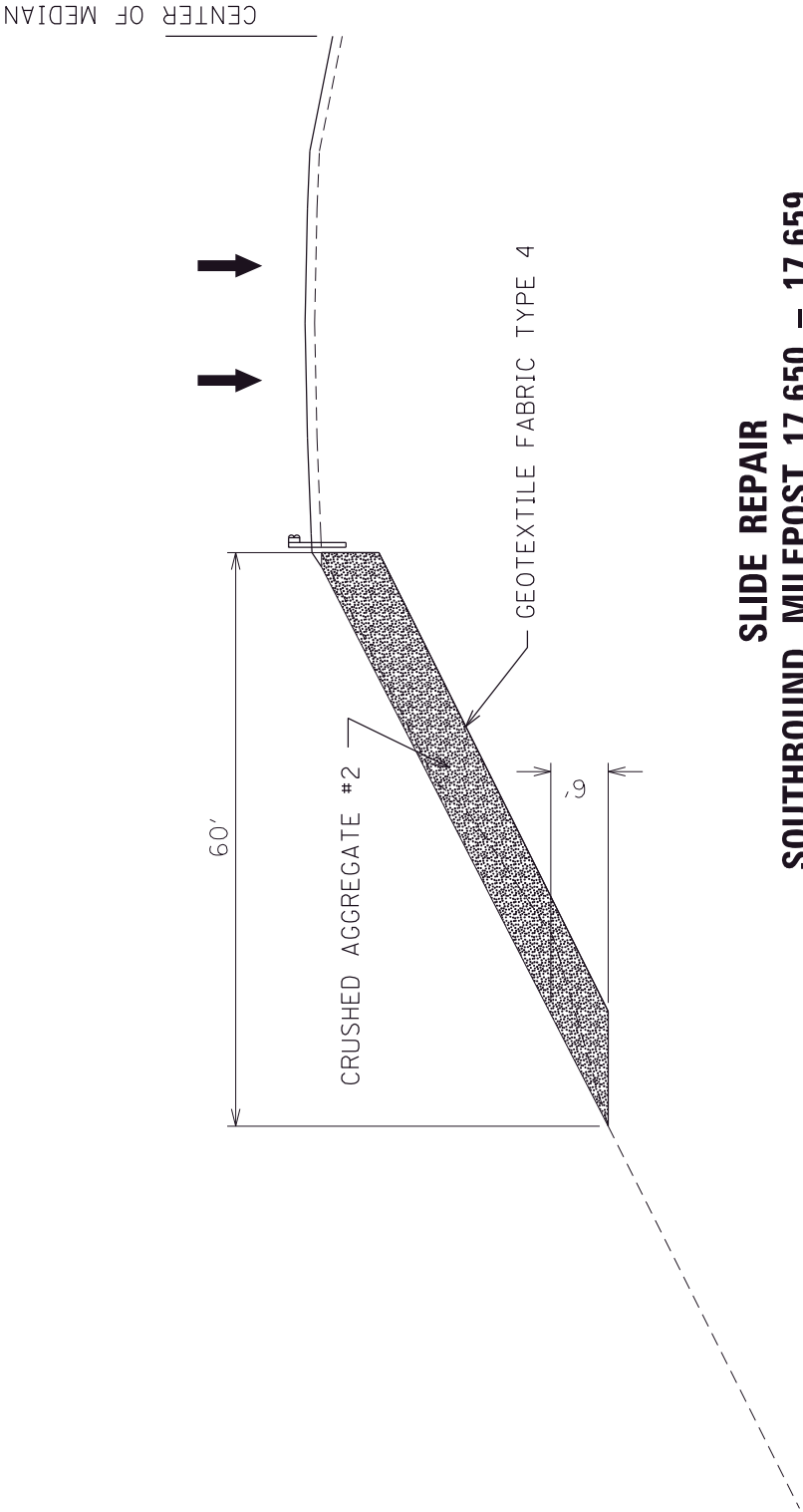
NOT TO SCALE

PENNYRILE PKWY  
MEDIAN CROSS OVER DETAILS

121GR17D060

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

# SLIDE REPAIR DETAIL



## SLIDE REPAIR SOUTHBOUND MILEPOST 17.650 – 17.659

NOTE:

SLIDE AREA IS APPROXIMATELY 50' IN LENGTH. DEPTH AND LENGTH OF EXCAVATION MAY BE ADJUSTED BY THE ENGINEER.

EXCAVATE TO THE APPROXIMATE DIMENSIONS SHOWN. DISPOSE OF WASTE MATERIAL OFF SITE. PLACE TYPE 4 GEOTEXTILE FABRIC AND STONE BACKFILL TO THE EXISTING GROUND SURFACE LINE. SLIDE EXCAVATION WILL BE PAID AS ROADWAY EXCAVATION MEASURED BY THE CU. YD.

ITEMS TO BID:

2200	ROADWAY EXCAVATION	640	C.Y.
2599	FABRIC-GEOTEXTILE TYPE IV	416	S.Y.
0078	CRUSHED AGGREGATE SIZE NO 2	1,000	TONS

NOT TO SCALE

PENNYRILE PKWY  
SLIDE REPAIR DETAIL  
MP 17.650 - MP 17.659



HOPKINS - CH  
121 GR17DQ60

HOPKINS - CH  
121 GR17DQ60



SAWCUT A NEAT LINE PRIOR TO REMOVAL OF THE EXISTING PAVEMENT. PAVEMENT REMOVAL WILL BE MEASURED AND PAID FOR BY THE SQUARE YARD AS "REMOVE PAVEMENT-REGARDLESS OF THE DEPTH OF EXISTING PAVEMENT" AND REGARDLESS OF WHETHER THE EXISTING PAVEMENT IS CONCRETE PAVEMENT OR ASPHALT PAVEMENT OR A COMBINATION OF BOTH.

BROADWAY EXCAVATION WILL BE MEASURED FROM THE BOTTOM OF THE EXISTING PAVEMENT, EITHER ASPHALT OR CONCRETE AND PAID FOR BY THE CUBIC YARD. THE ENGINEER MAY ADJUST THE DEPTH OF UNDERCUT IF FIELD CONDITIONS WARRANT. BACKFILLING WITH WRAPPED STONE, INSTALLATION OF PERFORATED PIPE, DCA, AND PAVING ITEMS WILL BE MEASURED BY THE INDIVIDUAL ITEM INSTALLED.

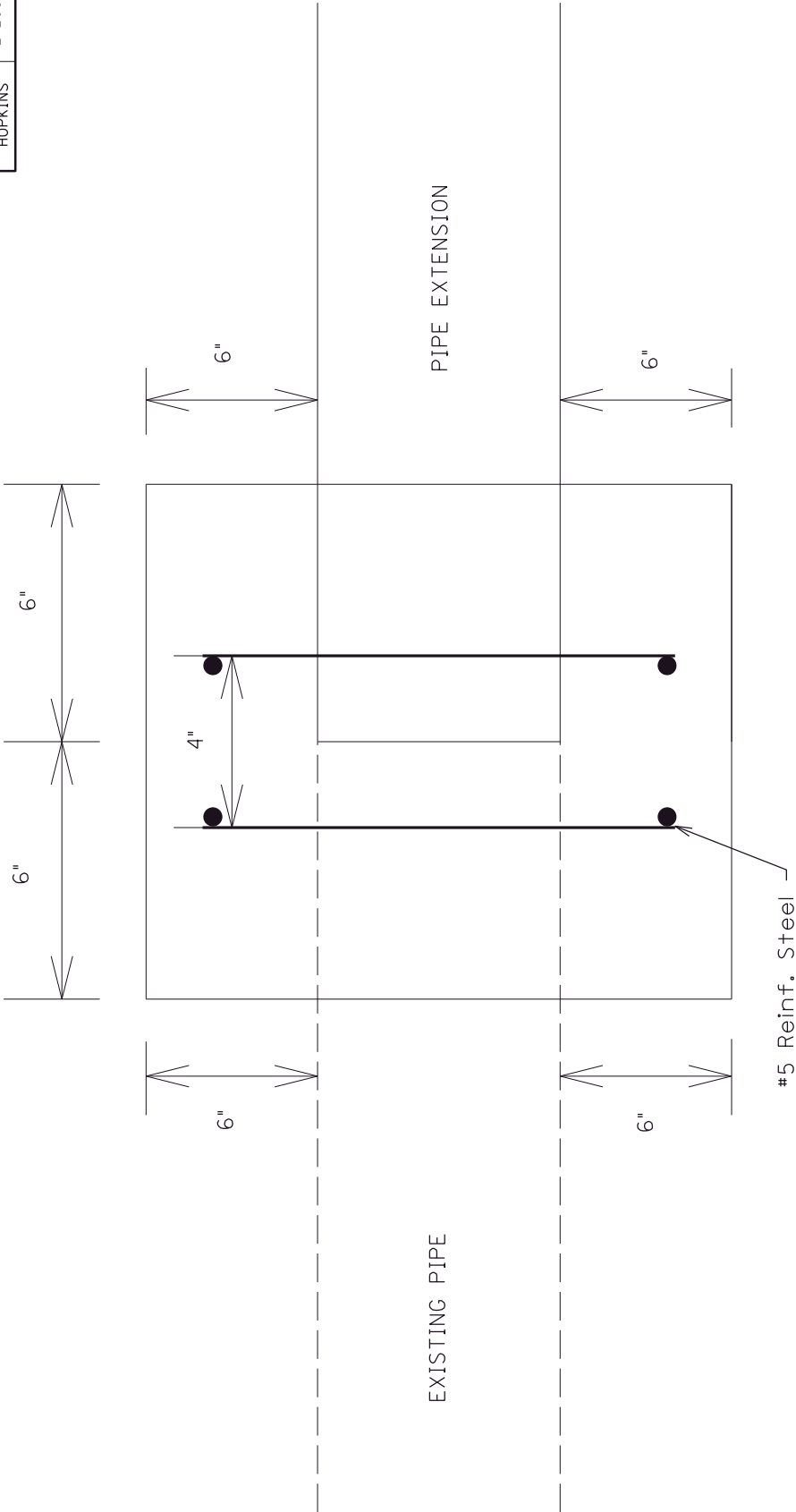
NOT TO SCALE

PENNYRILE PKWY

TAPERING OF OVERLAYS

NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



CONCRETE COLLAR  
AT PIPE EXTENSIONS

SIZE	CONCRETE	STEEL
15 IN	0.15 CY	16 LB
18 IN	0.17 CY	19 LB
24 IN	0.22 CY	23 LB
30 IN	0.28 CY	27 LB
36 IN	0.34 CY	31 LB

NOT TO SCALE

PENNYRILE PKWY  
CONCRETE COLLARS FOR  
PIPE EXTENSION DETAIL

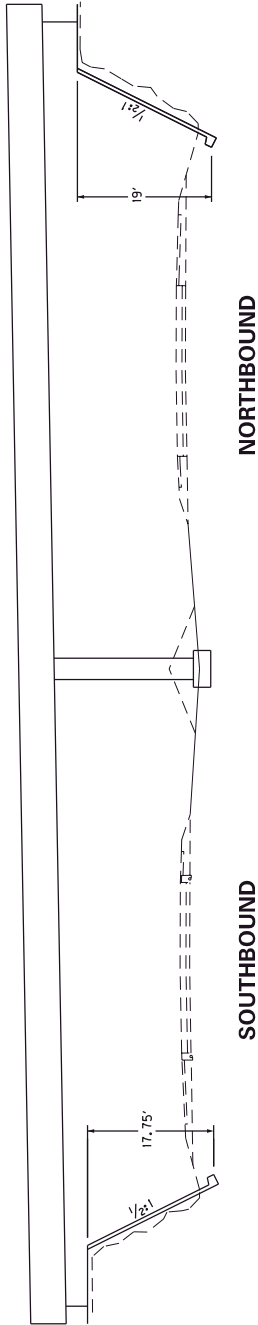
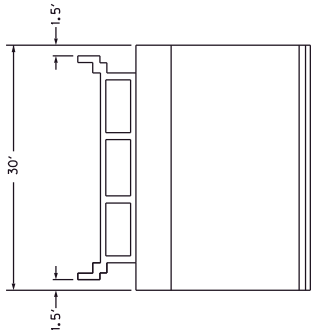


121GR17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

# CONCRETE SLOPEWALL DETAIL

MCINTOSH RD BRIDGE  
MP 29.14 NB & SB



ITEM TO BID:

8016 REINFORCED CONCRETE SLOPE WALL

SOUTHBOUND: 66.2 S.Y. (HOPKINS COUNTY)

NORTHBOUND: 70.8 S.Y. (HOPKINS COUNTY)

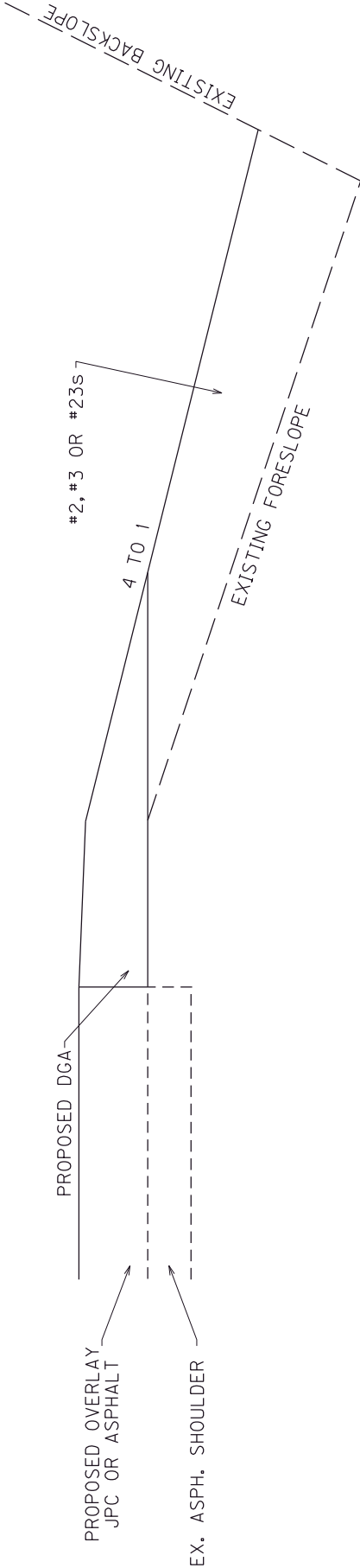
CONSTRUCT CONCRETE SLOPEWALLS ON THE ROCK FACE BELOW THE NORTHBOUND AND SOUTHBOUND ABUTMENTS IN ACCORDANCE WITH THE CURRENT STANDARD DRAWINGS. REMOVE SOIL, LOOSE ROCK, DEBRIS AND VEGETATION FROM FACE OF CUT PRIOR TO WALL CONSTRUCTION. CONSTRUCT SLOPEWALLS WITH A SMOOTH CONSTANT FACE. CONSTRUCT AT VARIABLE THICKNESS (MINIMUM OF 6") TO FILL EXISTING RILLS, VOIDS AND IRREGULARITIES IN SURFACE.

NOT TO SCALE

PENNYRILE PKWY  
SLOPEWALL DETAIL

121GR17D060

TYPICAL DITCH SLOPE MODIFICATION



CHRISTIAN COUNTY SLOPE REPAIR LOCATIONS (NORTHBOUND)				
MP START	MP END	LENGTH (L.F.)	TONS	
17.150	17.320	898	539	
18.190	18.920	3,854	2,313	
19.210	19.330	634	380	
19.523	19.854	1,748	1,049	
20.078	20.237	840	504	
22.856	22.996	739	443	
23.246	23.387	744	446	
23.653	24.147	2,609	1,565	
24.493	24.800	1,621	973	
25.035	25.200	871	523	
25.585	25.770	977	586	
25.955	26.093	729	437	
26.187	26.235	253	152	
26.322	26.421	522	314	
26.605	26.905	1,584	950	
27.029	27.200	903	542	
27.525	27.637	591	355	
27.782	27.900	623	374	
CHRISTIAN CO TOTAL (ESTIMATED QUANTITY)			12,445	

HOPKINS COUNTY SLOPE REPAIR LOCATIONS (NORTHBOUND)				
MP START	MP END	LENGTH (L.F.)	TONS	
28.165	28.248	438	263	
28.305	28.389	444	266	
28.631	28.718	459	276	
28.993	29.243	1,320	792	
HOPKINS CO TOTAL (ESTIMATED QUANTITY)			1,597	

HOPKINS COUNTY SLOPE REPAIR LOCATIONS (SOUTHBOUND)				
MP START	MP END	LENGTH (L.F.)	TONS	
28.166	28.244	412	247	
28.303	28.368	343	206	
28.468	28.551	438	263	
28.605	28.691	454	272	
28.769	28.918	787	472	
28.951	29.211	1,373	824	
HOPKINS CO TOTAL (ESTIMATED QUANTITY)			2,284	

CHRISTIAN COUNTY SLOPE REPAIR LOCATIONS (SOUTHBOUND)				
MP START	MP END	LENGTH (L.F.)	TONS	
16.833	16.947	602	361	
17.050	17.391	1800	1080	
17.663	17.797	708	425	
18.230	18.514	1498	899	
18.755	18.849	497	298	
19.160	19.270	581	348	
19.400	19.720	1690	1014	
22.856	23.034	940	564	
23.201	23.366	871	523	
23.666	23.879	1125	675	
23.922	24.094	908	545	
24.216	24.275	312	187	
24.537	24.600	333	200	
24.671	24.762	480	288	
25.057	25.229	908	545	
25.659	25.749	475	285	
25.919	26.051	697	418	
26.280	26.387	565	339	
26.630	26.870	1267	760	
26.942	27.146	1077	646	
27.744	27.913	892	535	
CHRISTIAN CO TOTAL (ESTIMATED QUANTITY)			10,935	

NOTES:

0.6 TON PER 1 FOOT USED TO ESTIMATE QUANTITIES  
EXISTING FORESLOPES AND BACKSLOPE HAVE VARYING SLOPES  
ACTUAL FIELD LOCATIONS WILL BE DETERMINED BY THE ENGINEER

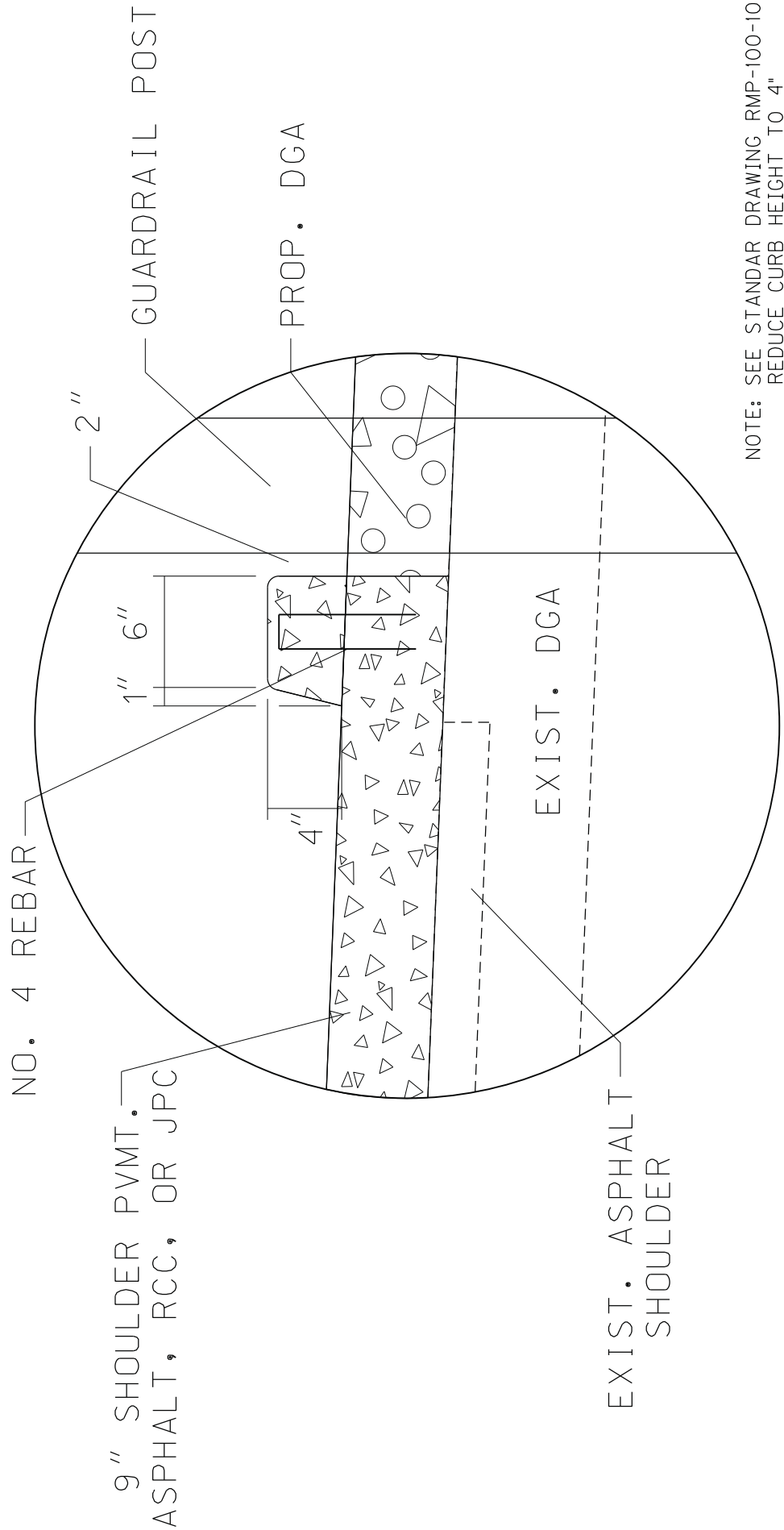
NOT TO SCALE

PENNYRILE PKWY  
DITCH SLOPE REPAIR  
DETAIL



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN HOPKINS	2-2082.00	

MODIFIED INTEGRAL CURB DETAIL  
PENNYRILE PARKWAY



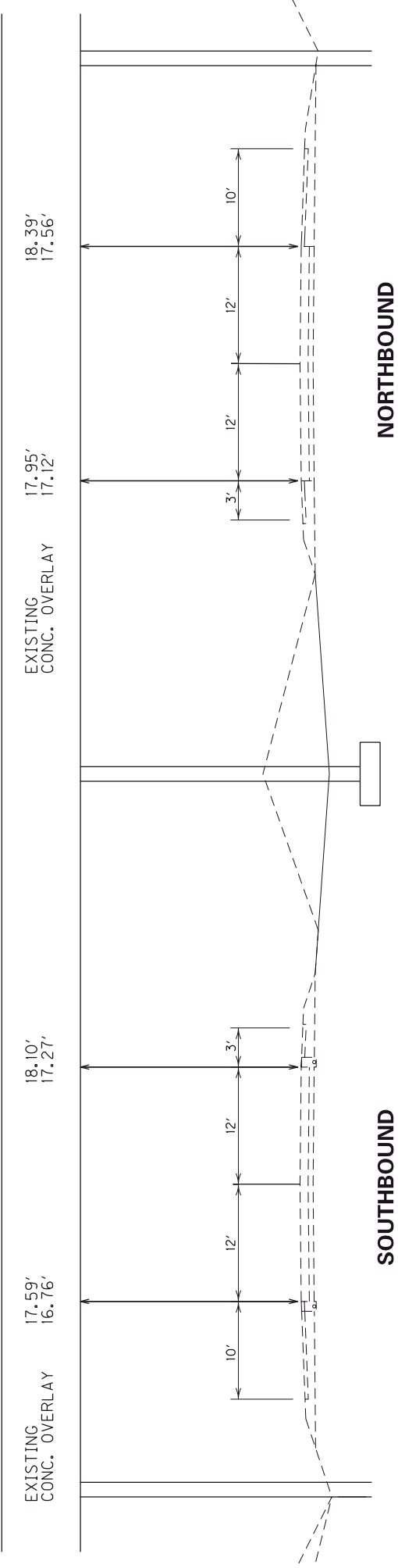
PENNYRILE PARKWAY  
MOD. INTEGRAL CURB  
DETAIL

NOT TO SCALE

121GR17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

CAVANAUGH LANE  
M.P. 18.479



\*NO ACTION NEEDED

NOT TO SCALE

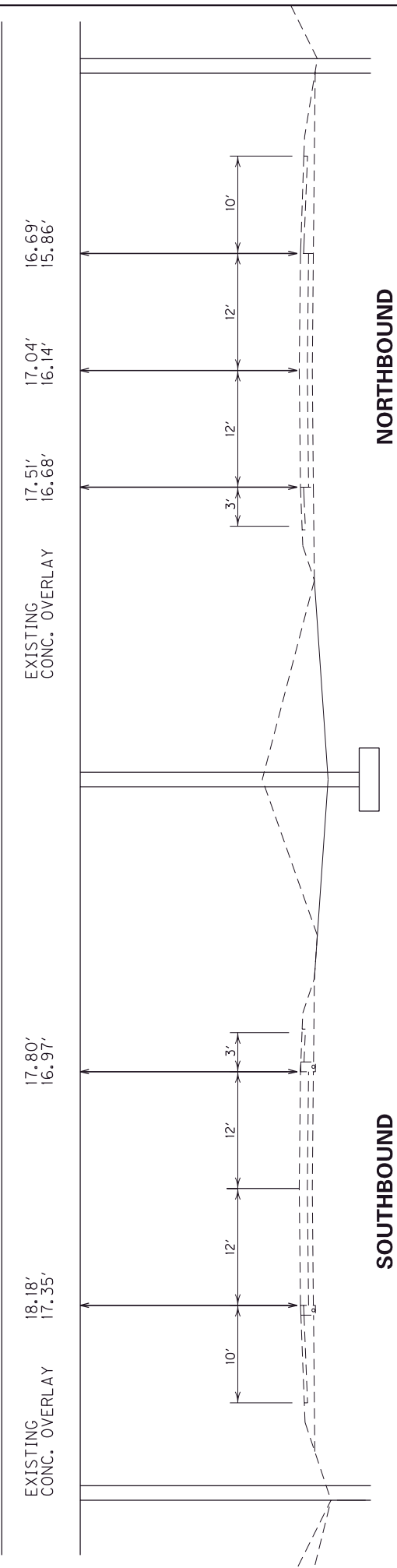
PENNYRILE PKWY  
VERTICAL CLEARANCE



121GR17D060

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

J. KNIGHT ROAD  
M.P. 19.725



\*NO ACTION NEEDED

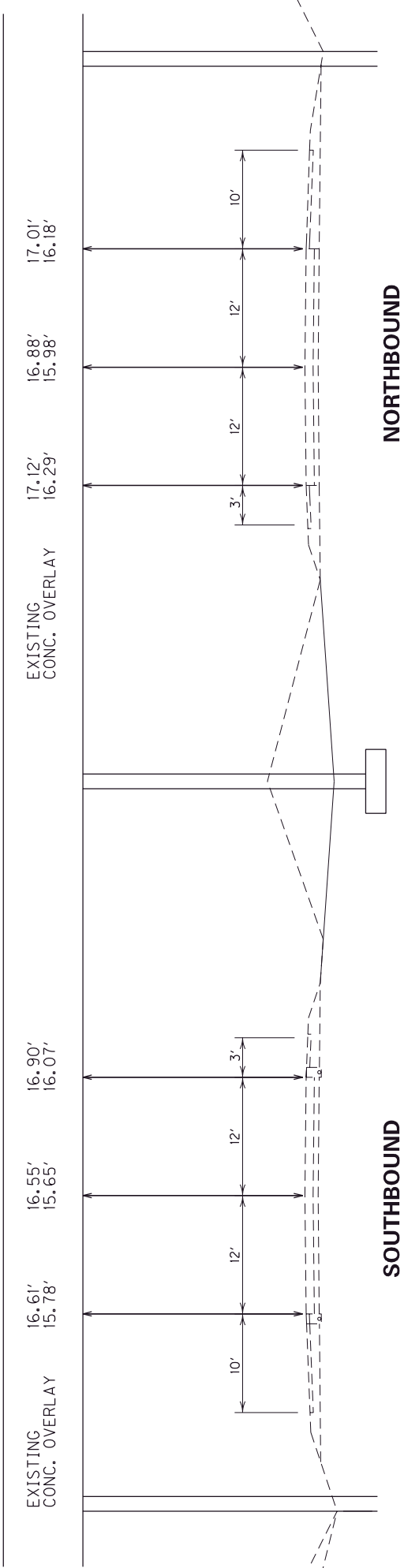
NOT TO SCALE

PENNYRILE PKWY  
VERTICAL CLEARANCE

1216R17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

WILLIAM LILE ROAD  
M.P. 21.219



\*NO ACTION NEEDED

NOT TO SCALE

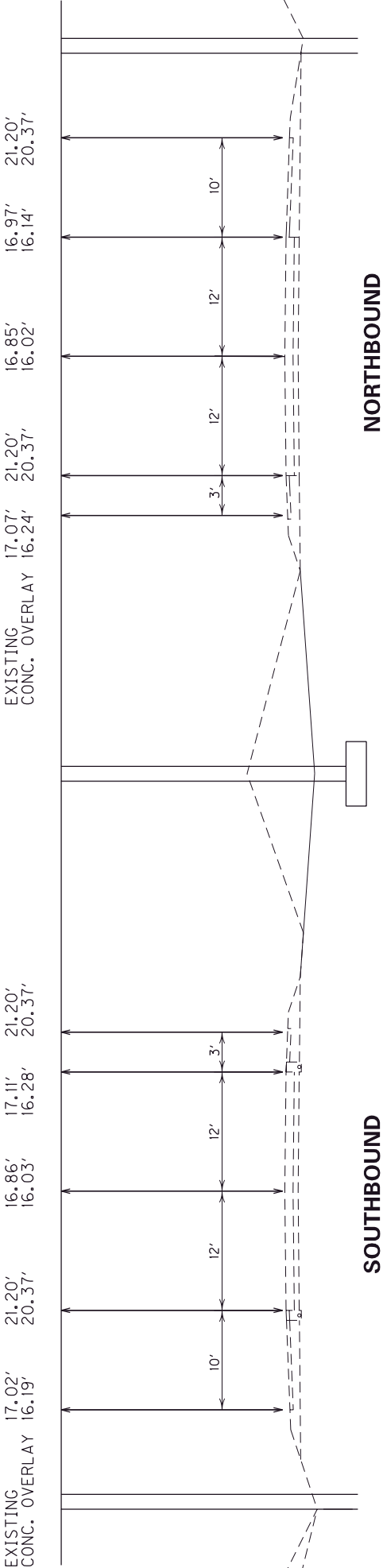
PENNYRILE PKWY VERTICAL CLEARANCE
--------------------------------------



1216R17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

KY 800  
MIP 22.642



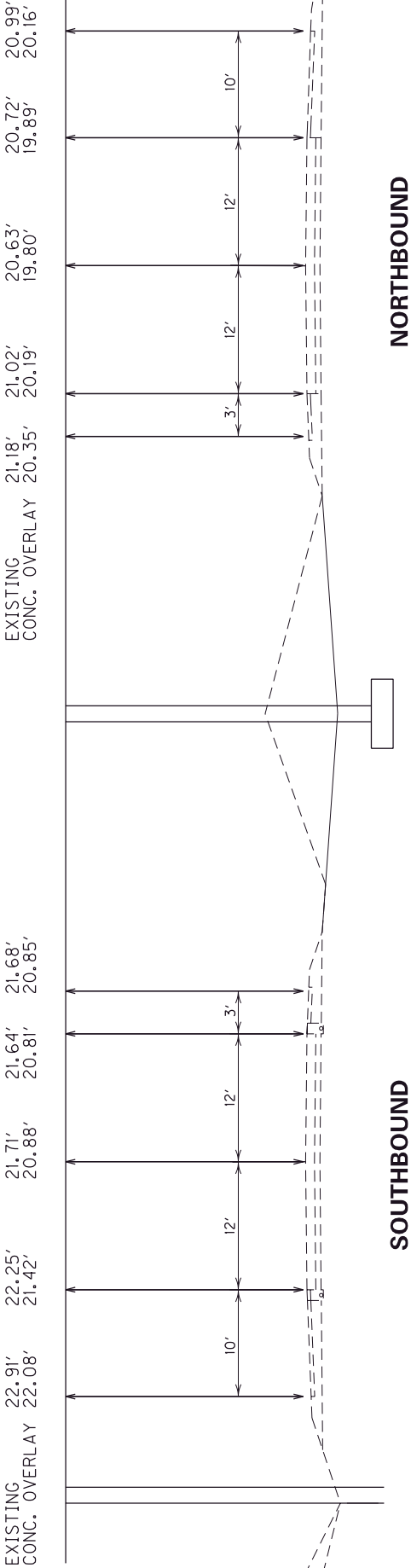
\*NO ACTION NEEDED

NOT TO SCALE  
PENNYRILE PKWY  
VERTICAL CLEARANCE

1216R17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

GRAPEVINE ROAD  
MP 25.111



\*NO ACTION NEEDED

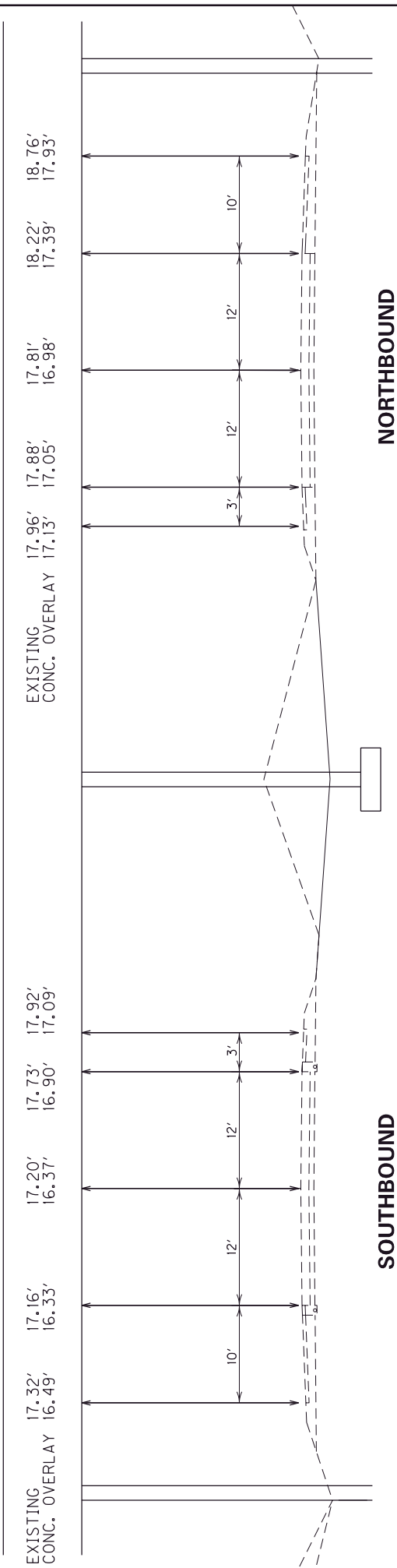
NOT TO SCALE

PENNYRILE PKWY  
VERTICAL CLEARANCE

1216R17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

MCINTOSH CHAPEL ROAD  
MP 29.134

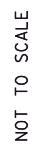


\*NO ACTION NEEDED

NOT TO SCALE  
PENNYRILE PKWY  
VERTICAL CLEARANCE



**\*NO ACTION NEEDED**

PENNYRILE PKWY  
VERTICAL CLEARANCE

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

# LONGITUDINAL EDGE DRAIN DETAIL

## SPECIAL NOTE FOR PAVEMENT SUBSURFACE DRAINAGE OUTLET

A QUANTITY OF CRUSHED AGGREGATE SIZE NO. 2 AS DEFINED IN THE CURRENT "KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" SHALL BE USED AT ALL PERFORATED PIPE HEADWALL OUTLETS AS ILLUSTRATED IN THE DETAIL AT RIGHT. CRUSHED AGGREGATE SIZE NO. 2 SHALL BE PLACED A MINIMUM DEPTH OF 4 INCHES AS DETAILED BELOW.

DENSE GRADED AGGREGATE (DGA) REMOVED DURING PLACEMENT OF THE CRUSHED AGGREGATE SIZE NO. 2 SHALL BE USED TO DRESS THE EXISTING SHOULDERS WHERE DGA IS EXPOSED. OTHER MATERIALS REMOVED DURING PLACEMENT OF THE CRUSHED AGGREGATE SIZE NO. 2 SHALL BE WASTED AS DIRECTED BY THE ENGINEER. NO DIRECT PAYMENT WILL BE ALLOWED FOR DISPOSAL OF WASTED MATERIAL.

THE CONTRACT UNIT PRICE FOR "CRUSHED AGGREGATE SIZE NO. 2" SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO PLACE CRUSHED AGGREGATE SIZE NO. 2 FOR CONTROL OF VEGETATION AND/OR EROSION CONTROL AT PAVEMENT EDGE DRAIN OUTLETS.

SEE CURRENT STANDARD DRAWING RDP-010 FOR DIMENSIONS AND OTHER DETAILS. ESTIMATE ONE TON OF CRUSHED AGGREGATE SIZE NO. 2 FOR EACH PERFORATED PIPE HEADWALL OUTLET.

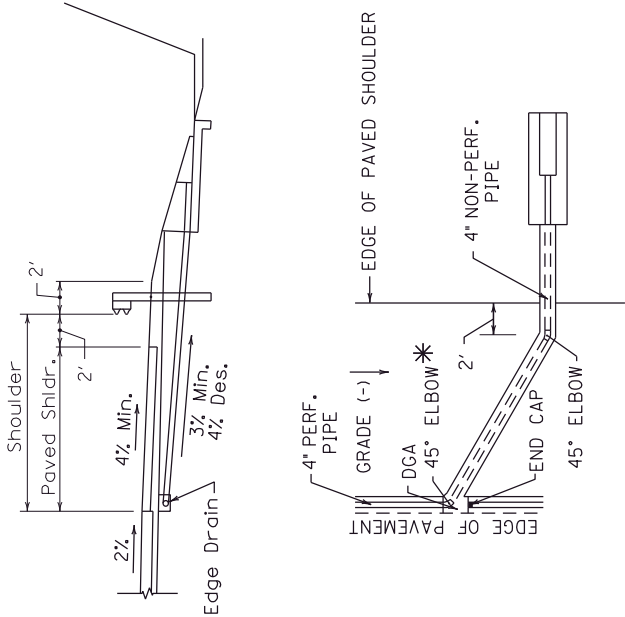
### NOTES :

(1) EXISTING LONGITUDINAL EDGE DRAINS ALONG THE EDGE OF EXISTING PAVEMENT SHALL BE REMOVED. ASPHALT BASE QUANTITIES HAVE BEEN ADDED FOR THE CAP REPLACEMENT.

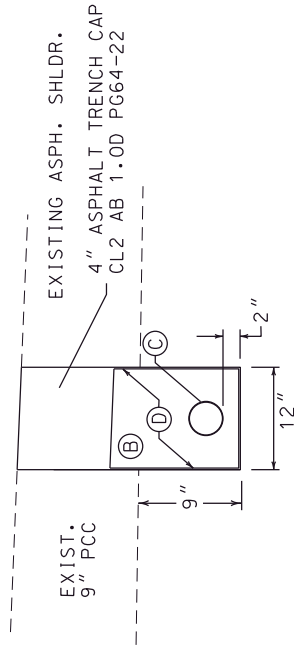
ALL LONGITUDINAL PIPE DRAINAGE SYSTEMS FOR THE PAVEMENT SHALL BE OUTLETTED TO A HEADWALL OR MEDIAN BOX INLET OR TRUNK LINE. OUTLETS SHALL BE IN FILL SECTION WHENEVER POSSIBLE. OUTLET SPACING FOR THE 4" PIPE ON THE OUTSIDE EDGE OF EXIST. PAVMT. SHALL NOT EXCEED 500 FEET EXCEPT GRADES 1% OR LESS, THEN THE SPACING SHALL NOT EXCEED 250 FEET. ALL SAGS SHALL HAVE AN OUTLET. USE EXISTING OUTFALL LOCATIONS WHERE POSSIBLE. REUSE EXISTING PERFORATED PIPE HEADWALLS WHERE POSSIBLE. 6" PERF. PIPE LENGTHS SHALL NOT EXCEED 1000 FEET WITHOUT AN OUTFALL EXCEPT FOR GRADES LESS THAN 1% PLACE OUTFALLS AT NO GREATER DISTANCE THAN 500 FEET. INSTALL AN 8 INCH TRUNKLINE IN THE MEDIAN TO COLLECT INSIDE EDGE DRAINS WHERE OUTFALL DISTANCES ARE EXCEEDED. 4" OUTLETS WILL EMPTY DIRECTLY INTO THE #2 CRUSHED STONE WHERE #2 CRUSHED STONE IS USED FOR EMBANKMENT TO CORRECT TYPICAL DITCH SLOPES.

REMOVE AND RESET PERF PIPE HEADWALLS BID ITEM INCLUDES: 1. REMOVING, REUSING, AND RESETTNG EXISTING HEADWALLS. 2. REPLACING SCREENS IF NEEDED, 3. CLEANING OUT PIPE IF NEEDED, 4. MAKING LOCATION AND GRADE ADJUSTMENTS BASED ON PROPOSED WORK

FABRIC GEOTEXTILE TYPE IV AND CRUSHED AGGREGATE SIZE NO. 57 ARE INCIDENTAL TO PERFORATED PIPE-4". REMOVAL OF EXISTING EDGE DRAIN ON THE INSIDE AND OUTSIDE SHOULDER SHALL BE INCLUDED IN THE UNIT PRICE BID FOR NEW PERFORATED PIPE. WASTE THE EXISTING UNDERDRAIN PIPE. EXISTING PERFORATED PIPE HEADWALLS NOT BEING USED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



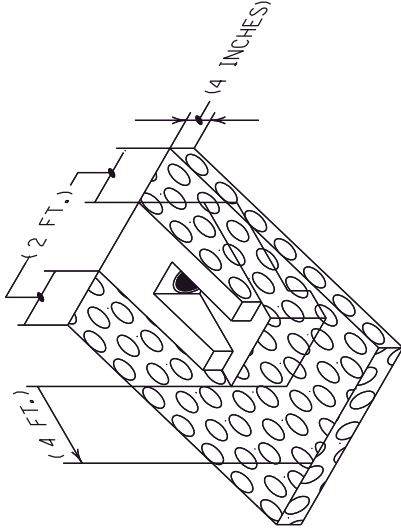
\* Use Tee in Lieu of Elbow at Sump Conditions  
( OUTSIDE SHOULDER )



- (B) CRUSHED AGGREGATE SIZE NO. 57 (NO SAND)
- (C) PERFORATED PIPE - 4" OR 6" (NO SOCK)
- (D) TYPE IV GEOTEXTILE FABRIC

PERFORATED PIPE  
DRAIN PLACEMENT

SEE PERFORATED PIPE SUMMARIES FOR LOCATIONS.



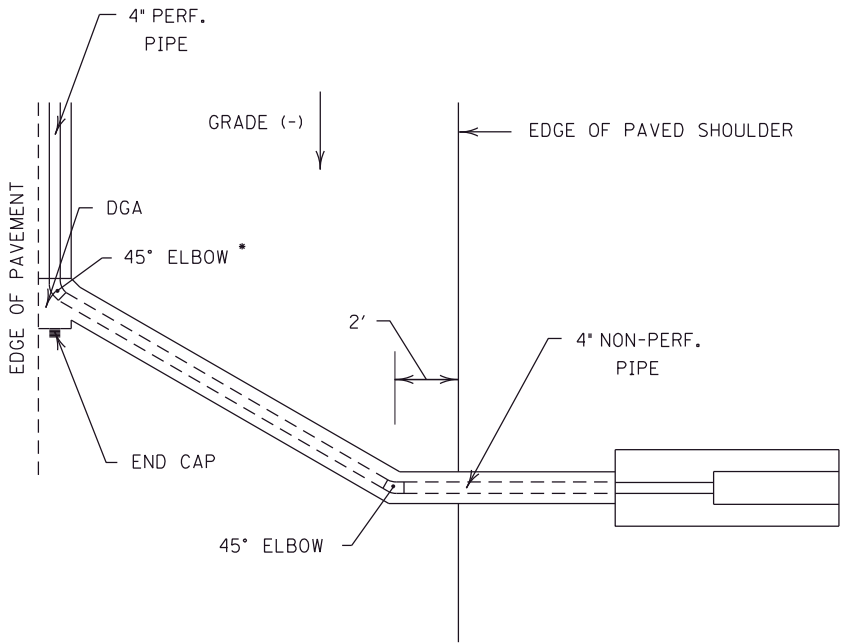
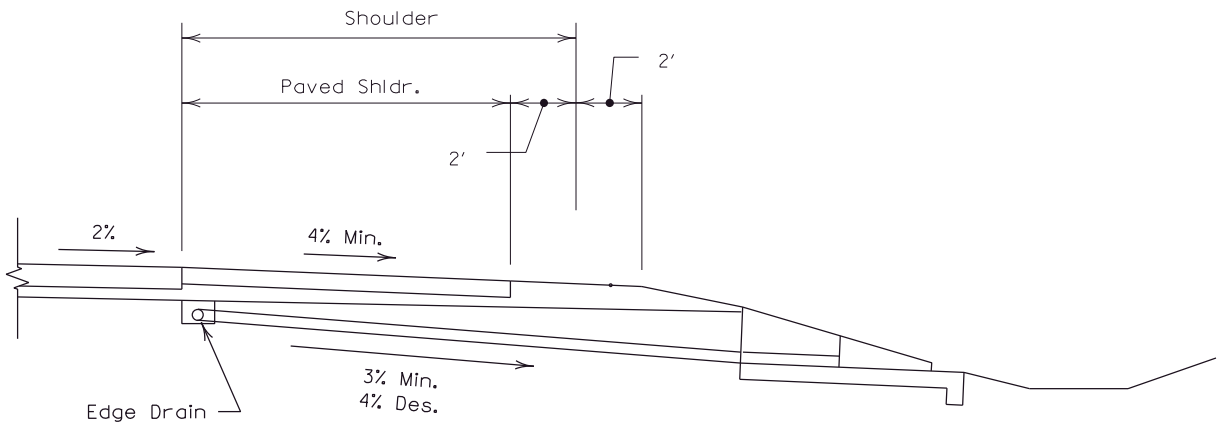
PAVEMENT SUBSURFACE DRAINAGE OUTLET

PENNYRILE PKWY  
EDGE DRAIN DETAIL

NOT TO SCALE

121GR17D060	COUNTY OF	ITEM NO.	SHEET NO.
	CHRISTIAN/ HOPKINS	2-2082.00	

# PENNYRILE PARKWAY EDGE DRAIN DETAIL



\* Use Tee in Lieu of Elbow at Sump Conditions

( OUTSIDE SHOULDER )

NOT TO SCALE

PENNYRILE PKWY  
EDGE DRAIN DETAIL

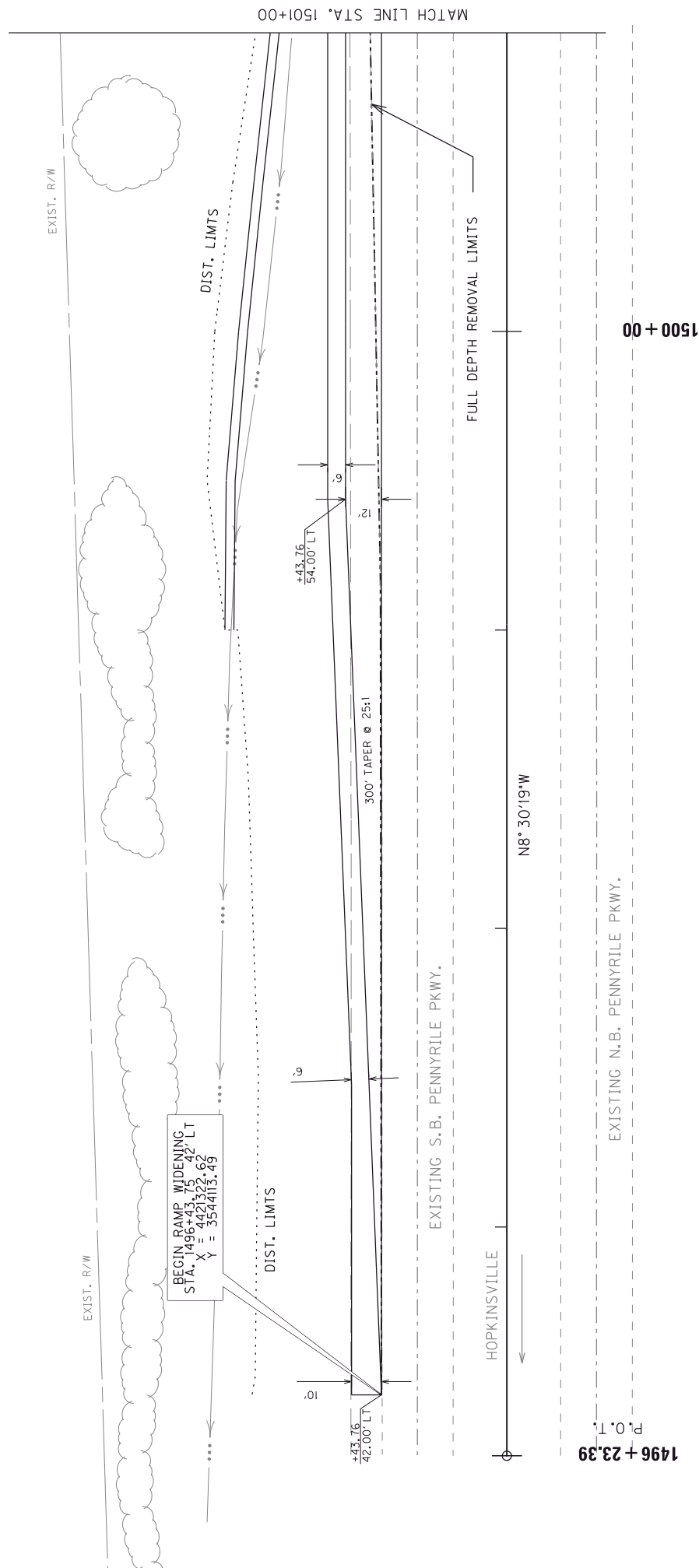


COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

CENTERLINE DATA  
MAINLINE  
P.O.T. STA 1496+23.39  
X = 4421367.17  
Y = 3544099.56



**PI 1496 + 23.39**

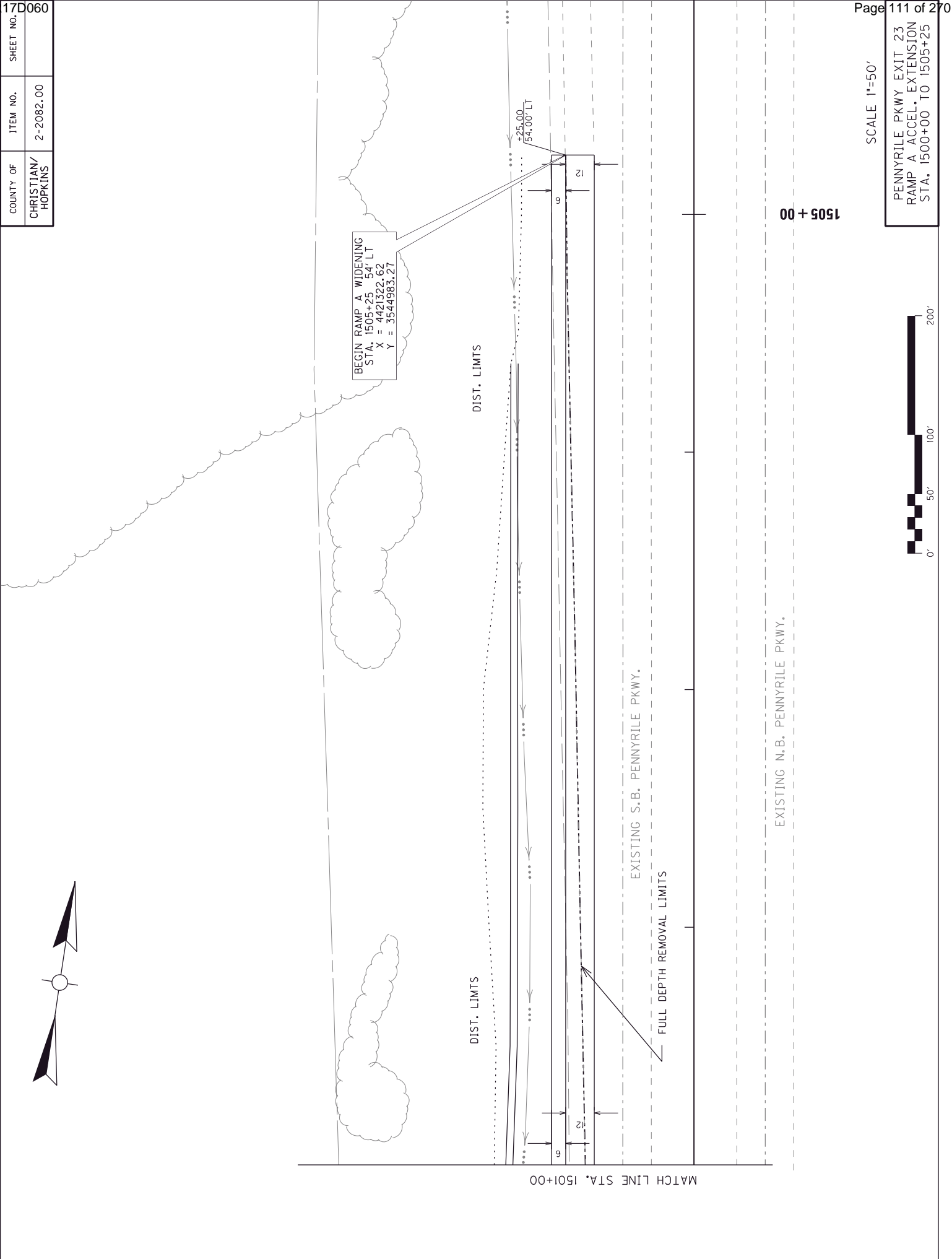


SCALE 1"=50'

PENNYRILE PKWY EXIT 23  
RAMP A ACCEL. EXTENSION  
STA. 1496+43.76 TO 1500+00



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



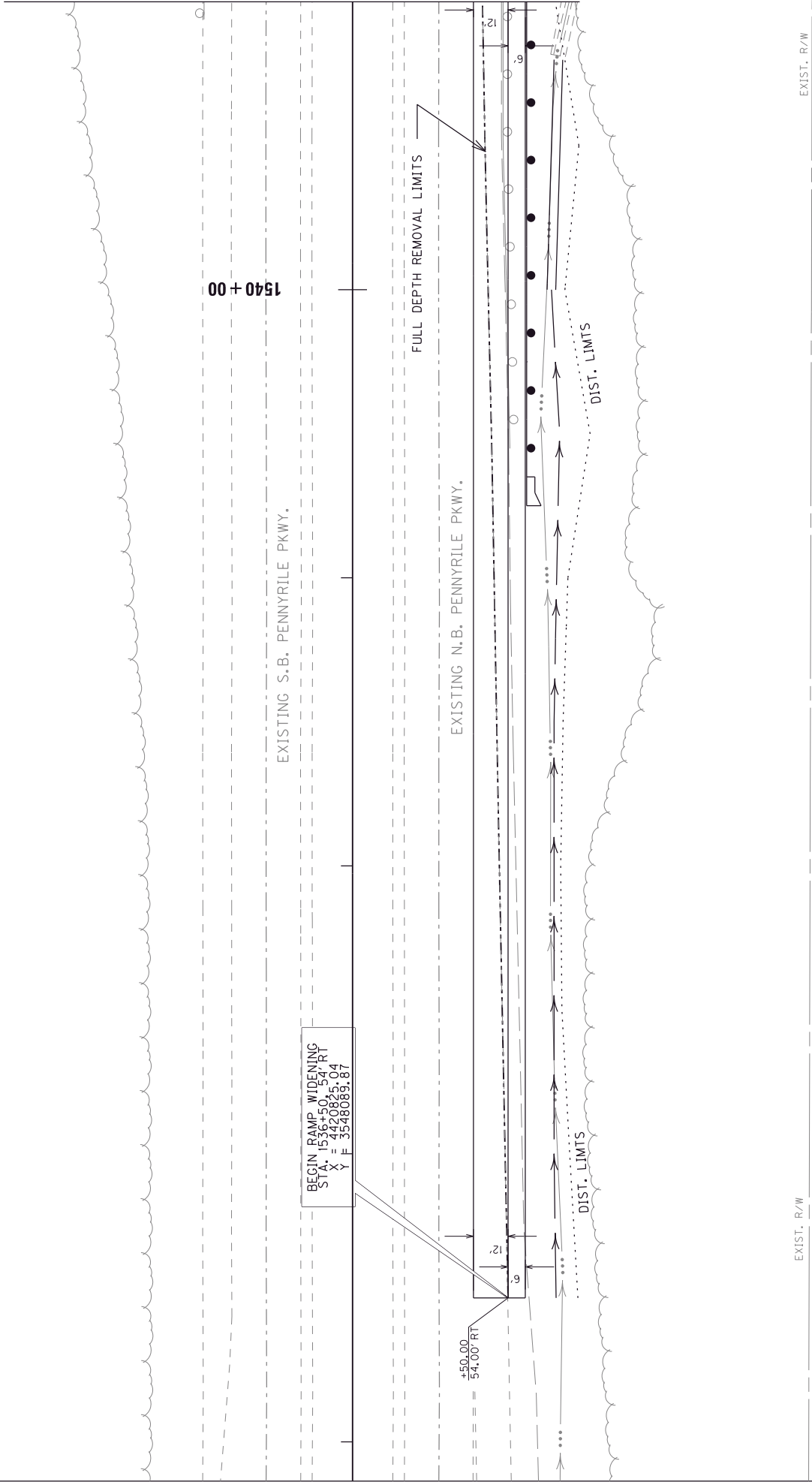
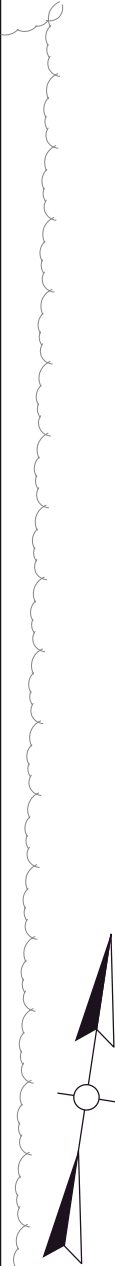
1505 + 00

SCALE 1"=50'

PENNYRILE PKWY EXIT 23  
RAMP A ACCEL. EXTENSION  
STA. 1500+00 TO 1505+25



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



SEE GUARDRAIL SUMMARY FOR ITEMIZATION OF REMOVAL AND REPLACEMENT OF GUARDRAIL.



SCALE 1"=50'

PENNYRILE PKWY EXIT 23  
RAMP D ACCEL. EXTENSION  
STA. 1536+50 TO 1541+00



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

CENTERLINE DATA  
MAINLINE  
P.O.T. STA 1545+11.76  
X = 4420644.18  
Y = 3548934.17

END RAMP WIDENING  
STA 1545+04.63 42' RT  
X = 4420686.78  
Y = 3548933.33

1545 + 00  
P.O.T.  
1545 + 11.76

EXISTING S.B. PENNYRILE PKWY.

MADISONVILLE

EXISTING N.B. PENNYRILE PKWY.

DIST. LIMITS

EXIST. R/W

MATCH LINE STA. 1541+00

FULL DEPTH REMOVAL LIMITS

300' TAPER @ 25:1

+04.63  
54.00' RT

DIST. LIMITS

REMOVE PAVED DITCH  
SEE SUMMARY FOR QUANTITIES

EXIST. R/W

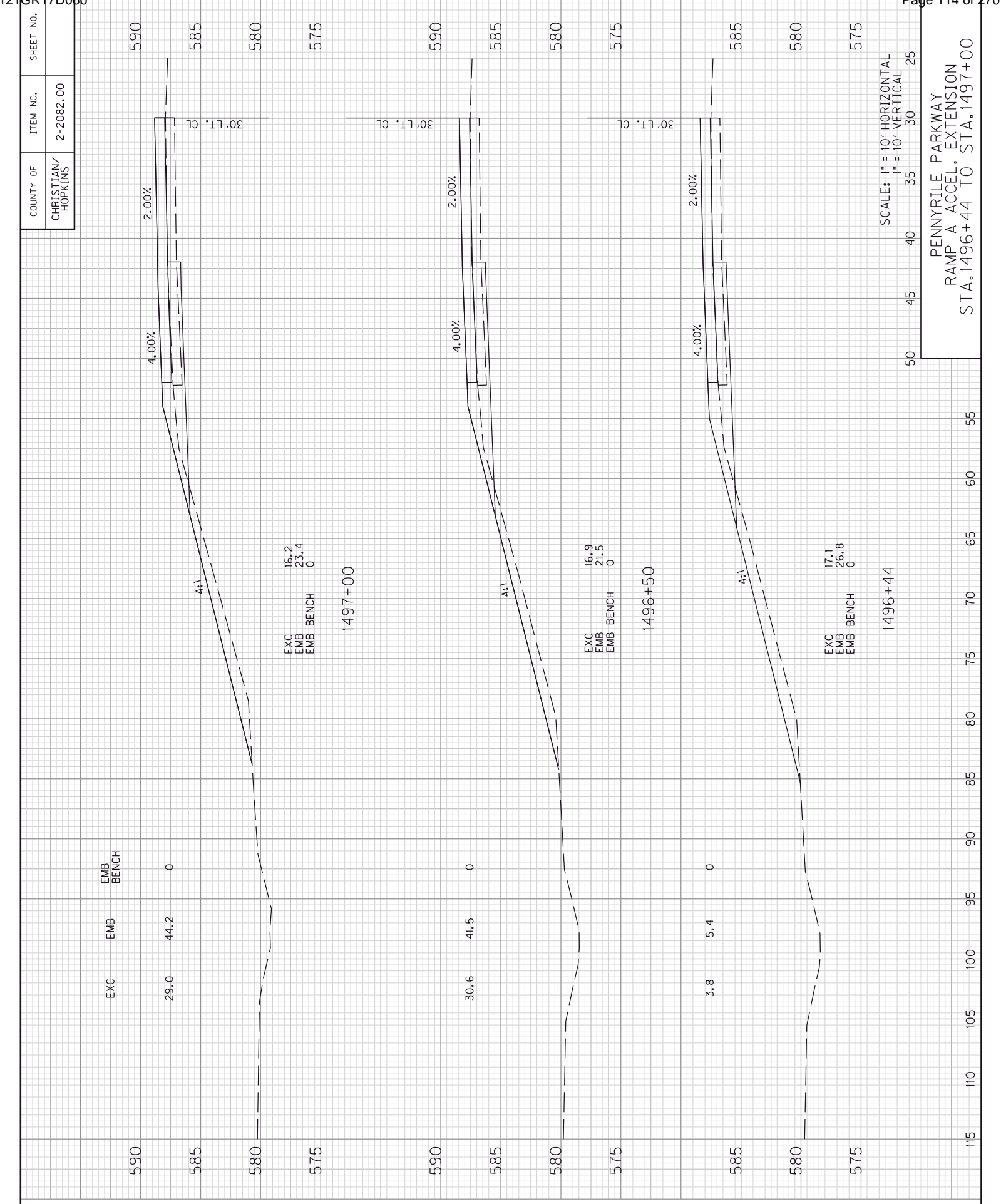
SEE GUARDRAIL SUMMARY FOR ITEMIZATION OF REMOVAL AND  
REPLACEMENT OF GUARDRAIL.



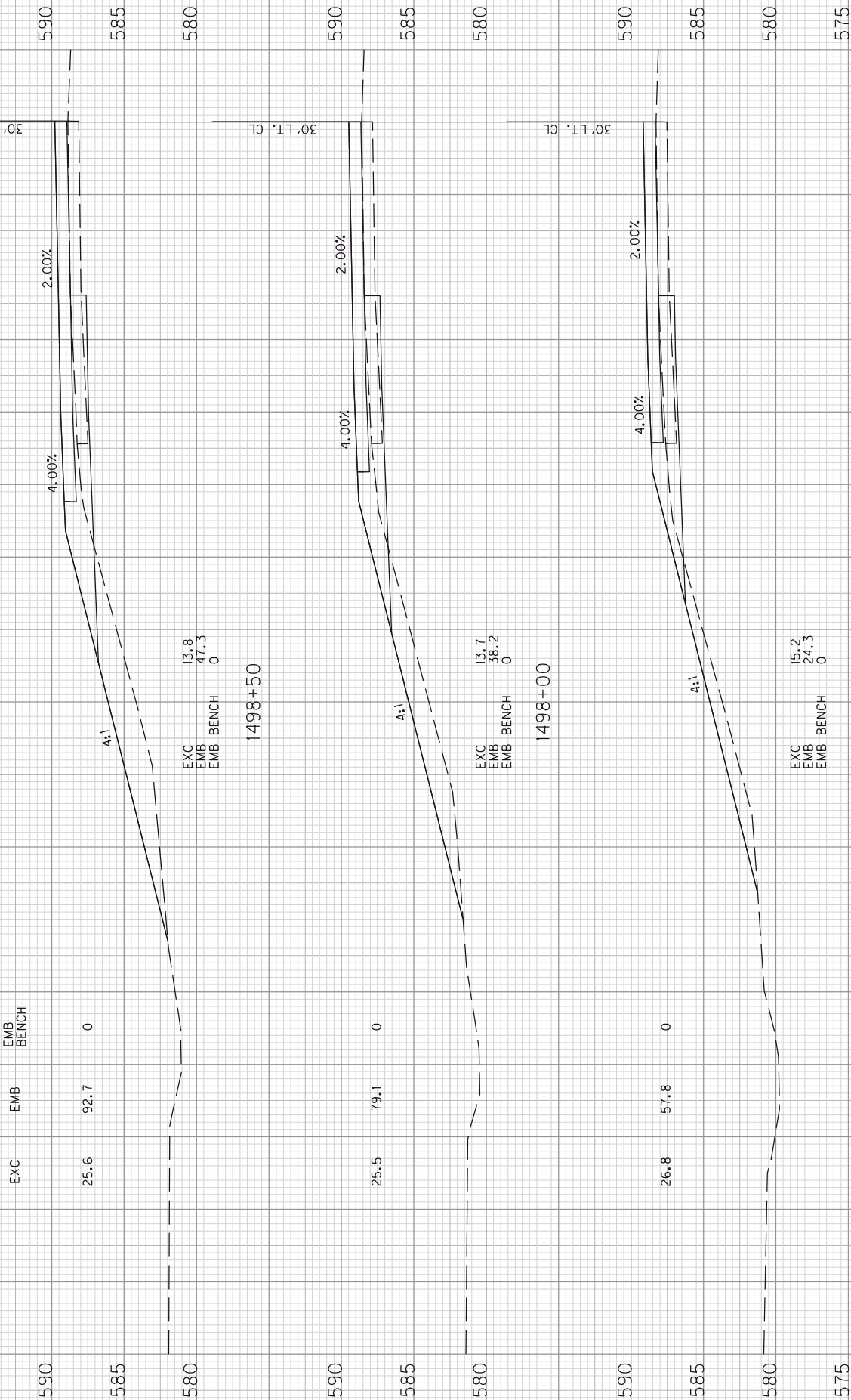
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PENNYRILE PKWY EXIT 23  
RAMP D ACCEL. EXTENSION  
STA. 1541+00 TO 1545+04.63

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



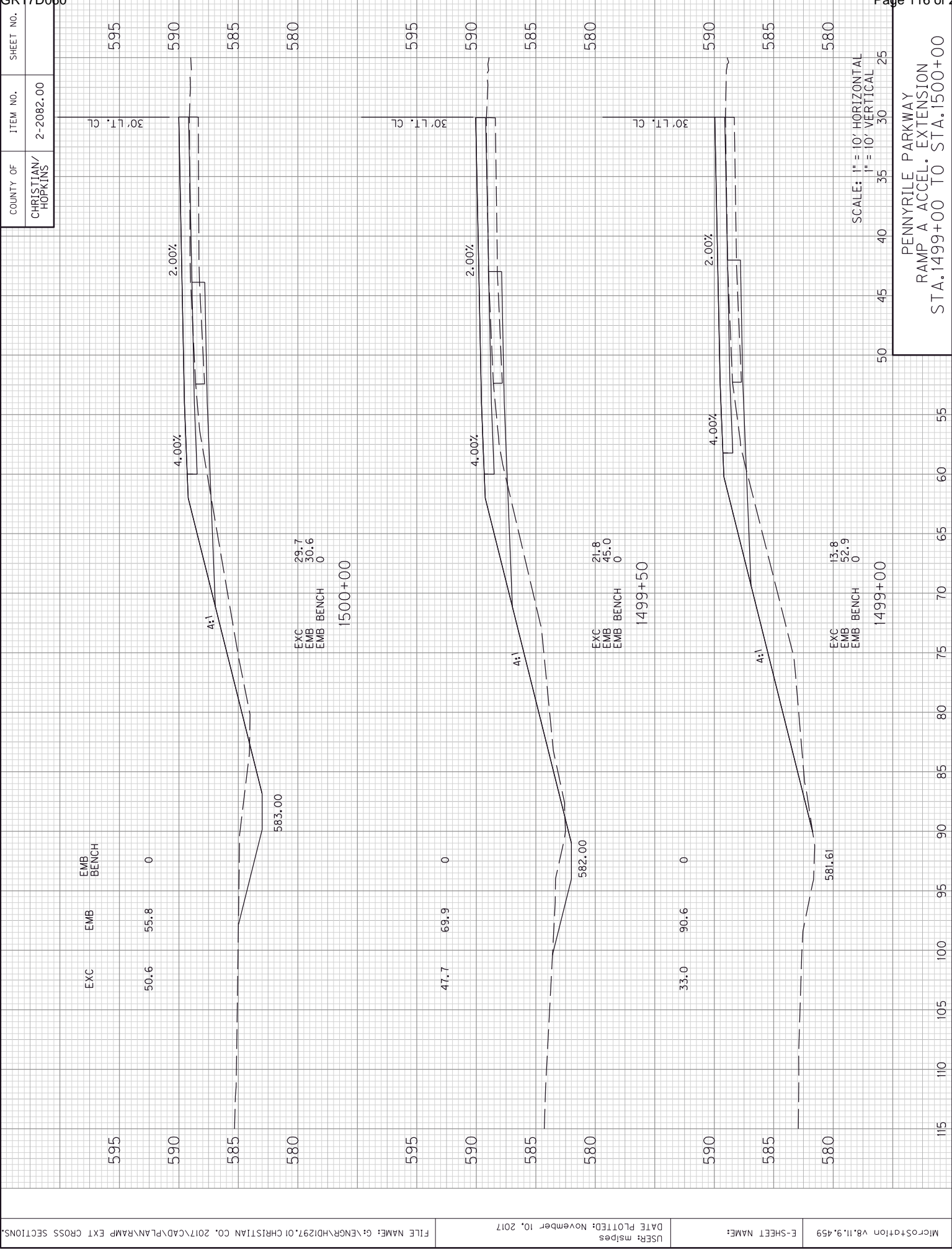
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



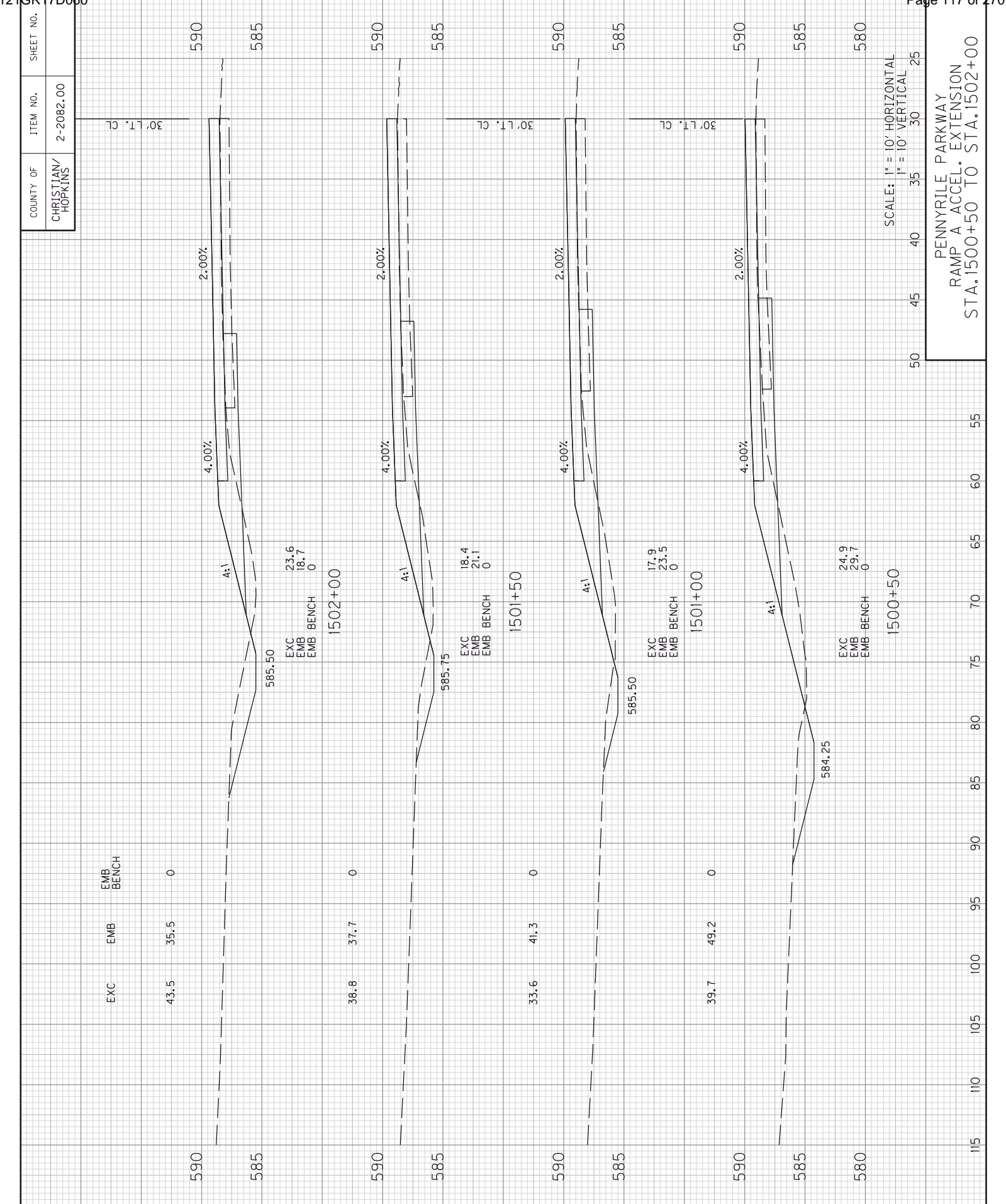
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1" = 10' VERTICAL

PENNYRILE PARKWAY  
RAMP A ACCEL. EXTENSION  
STA. 1497+50 TO STA. 1498+50



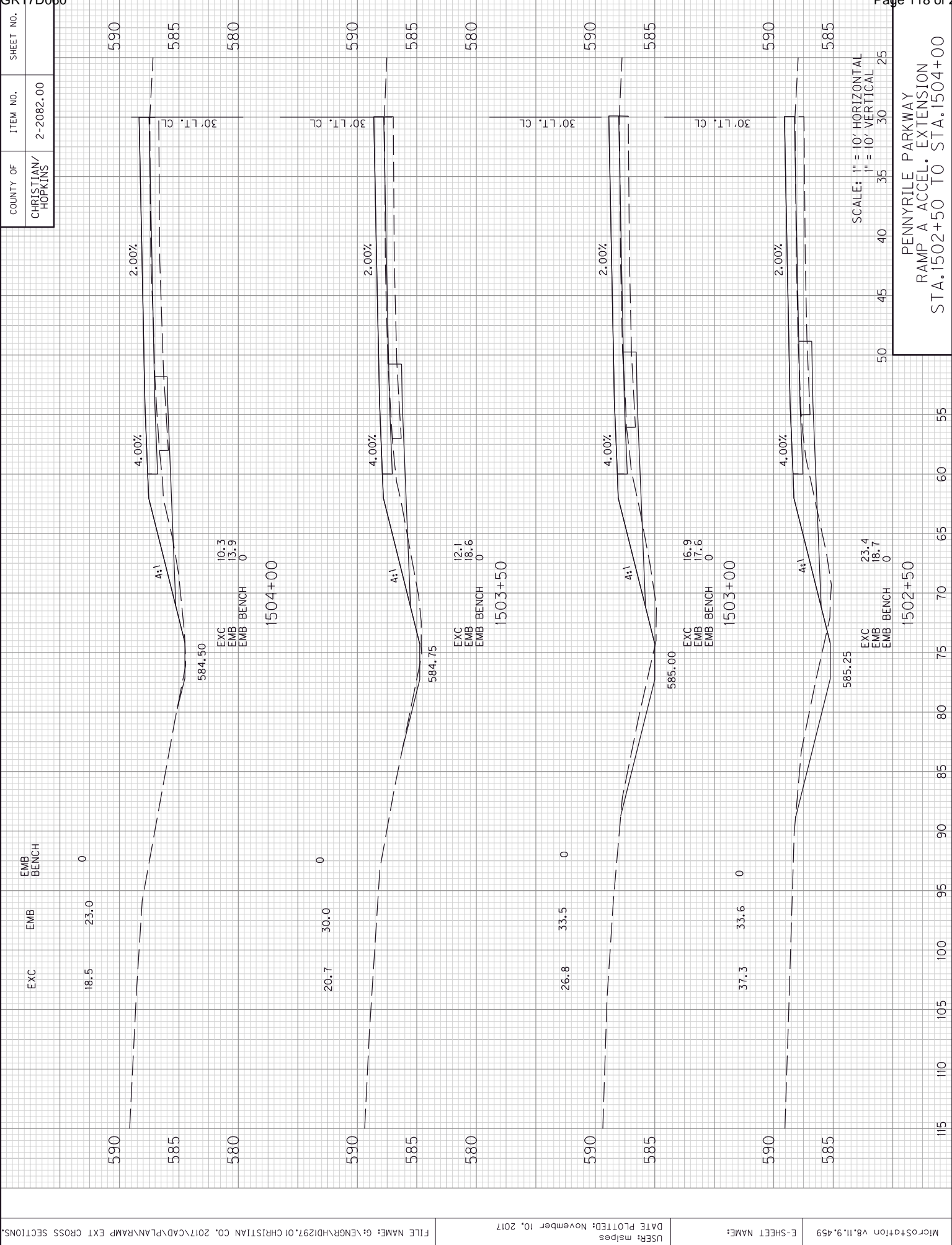


COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



SCALE: 1" = 10' HORIZONTAL  
1" = 10' VERTICAL

PENNYRILE PARKWAY  
RAMP A ACCEL. EXTENSION  
STA. 1500+50 TO STA. 1502+00



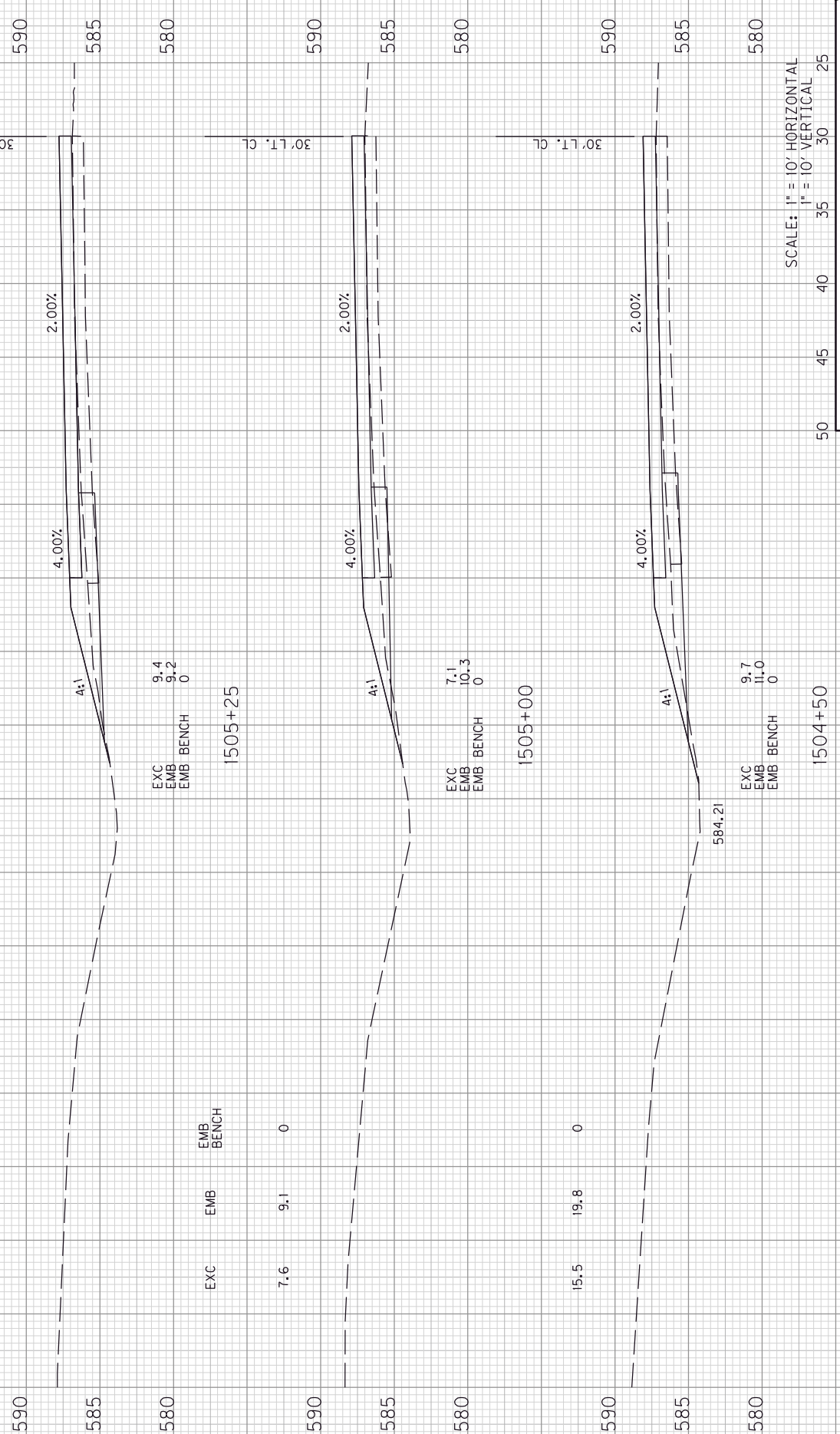


121GR17D060

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

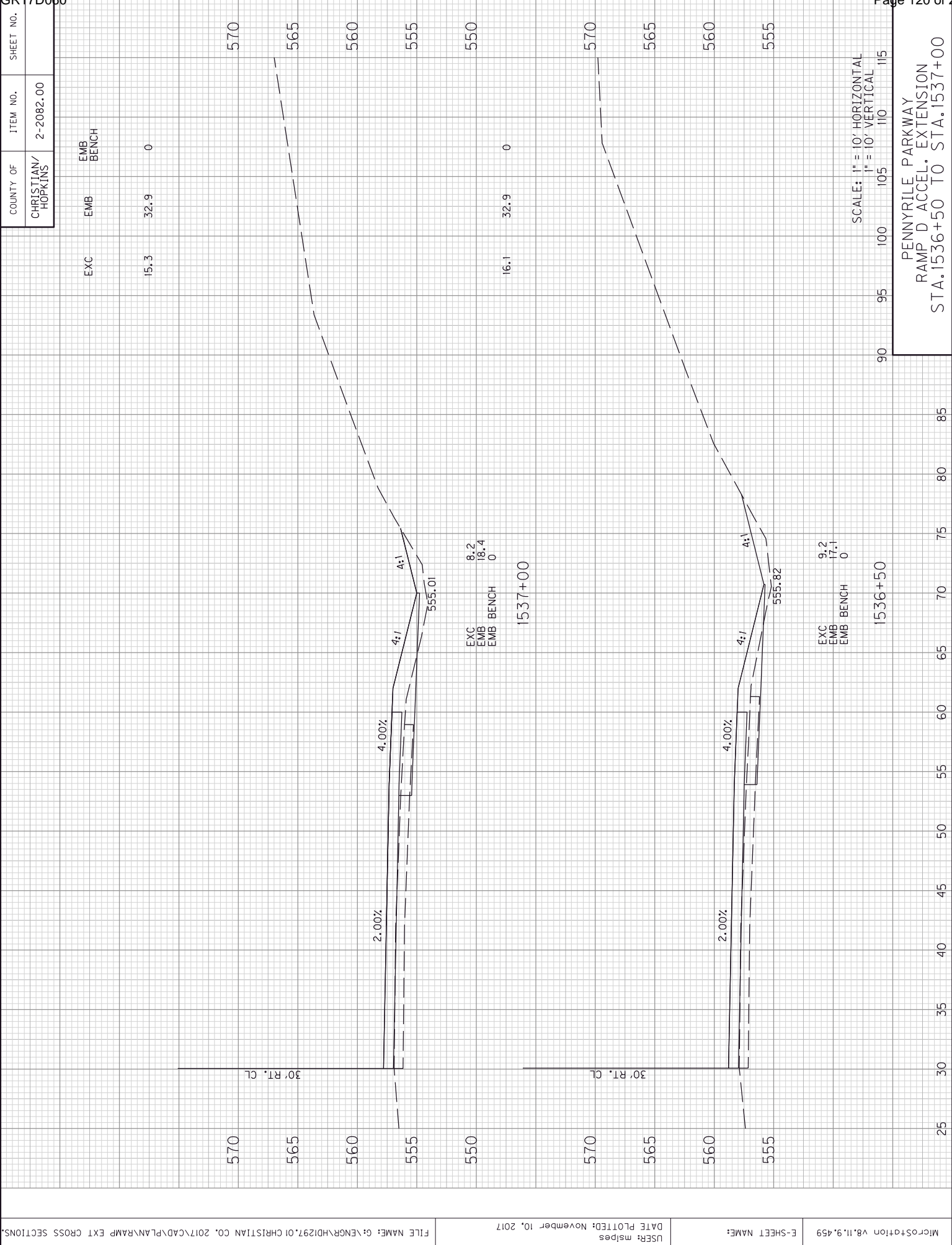
RAMP A TOTALS

EXC	EMB	EMB BENCH
554.5	849.6	0



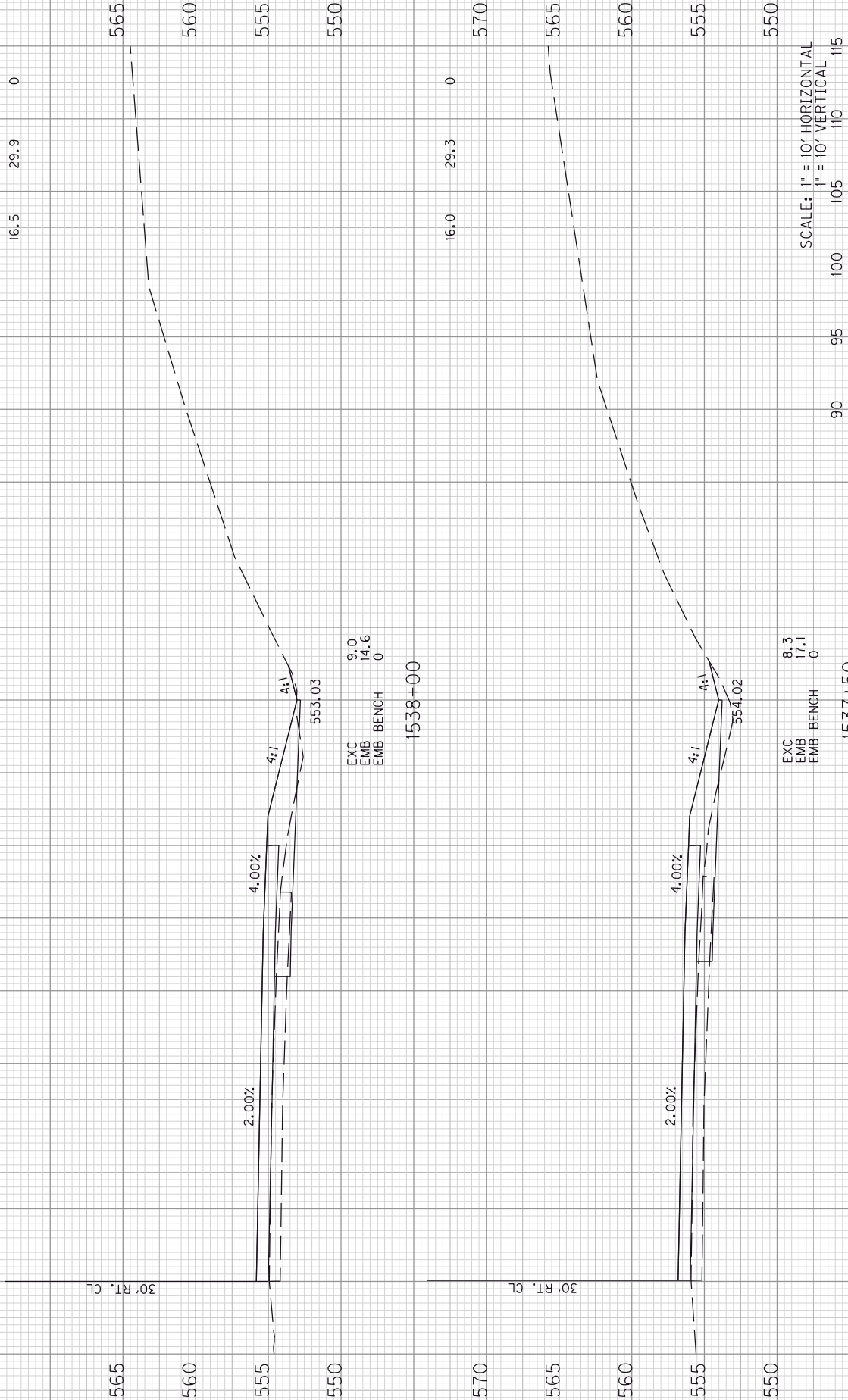
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1" = 10' VERTICAL

PENNYRILE PARKWAY  
RAMP A ACCEL. EXTENSION  
STA. 1504+50 TO STA. 1505+25



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

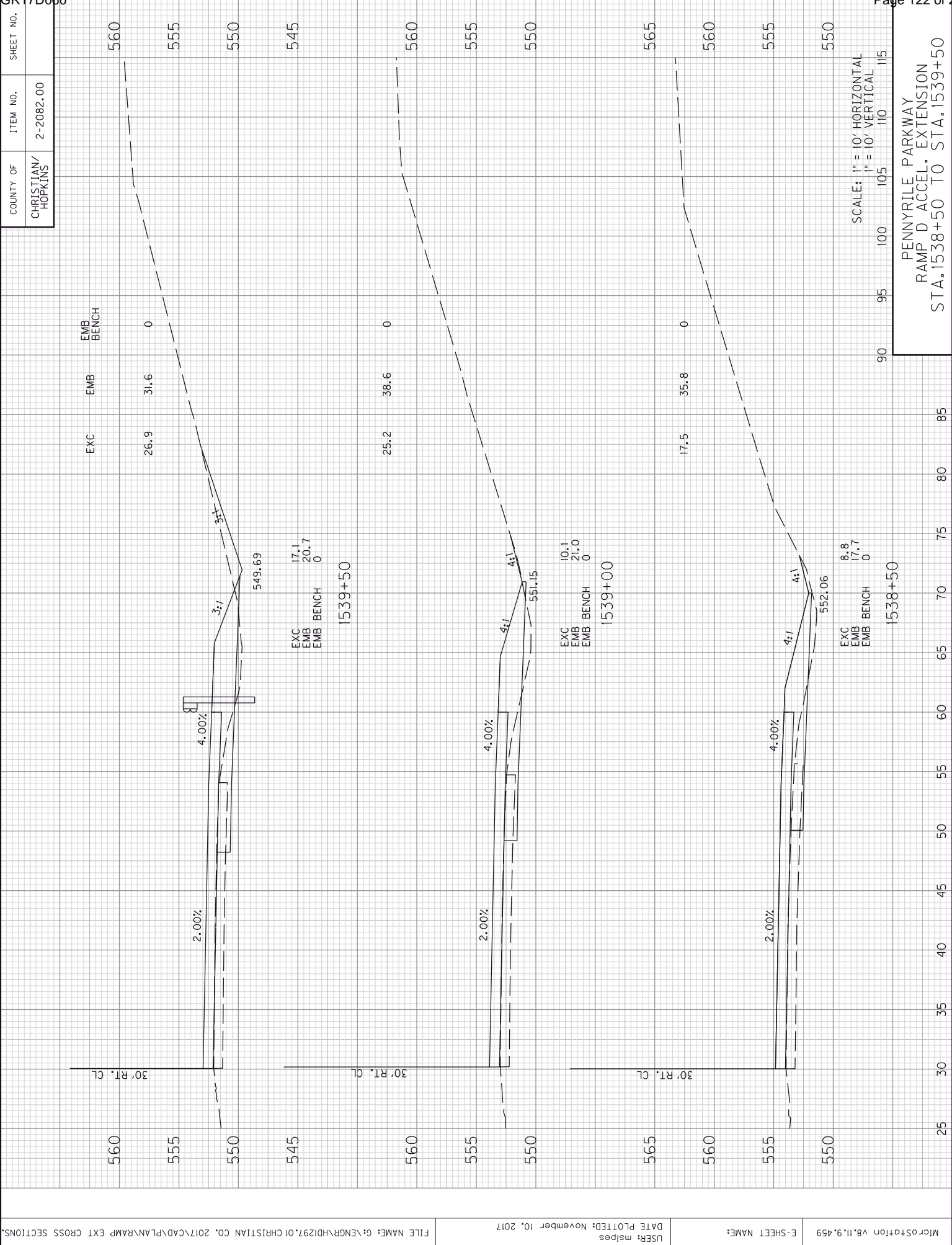
EXC	EMB	EMB BENCH
16.5	29.9	0

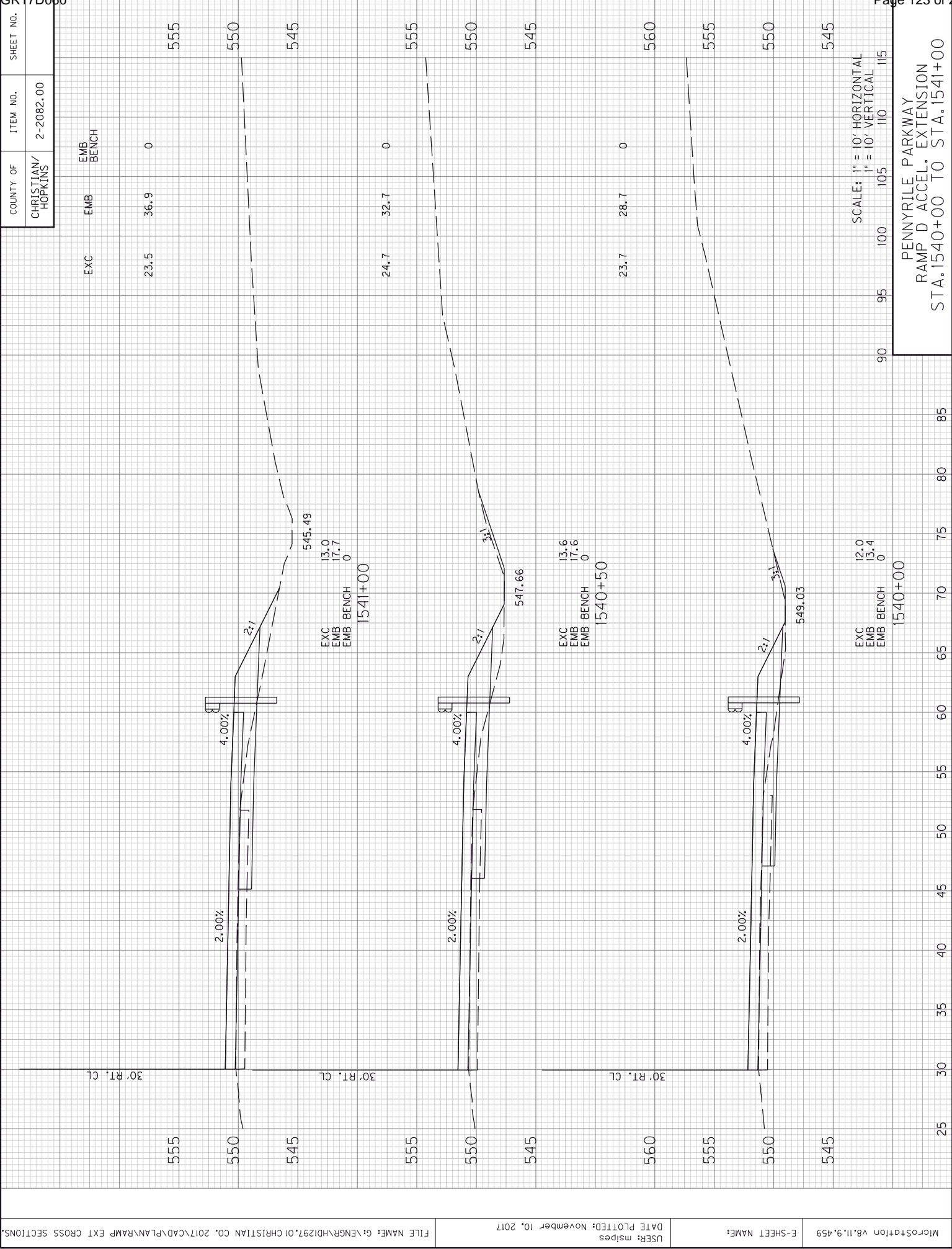


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1" = 10' VERTICAL

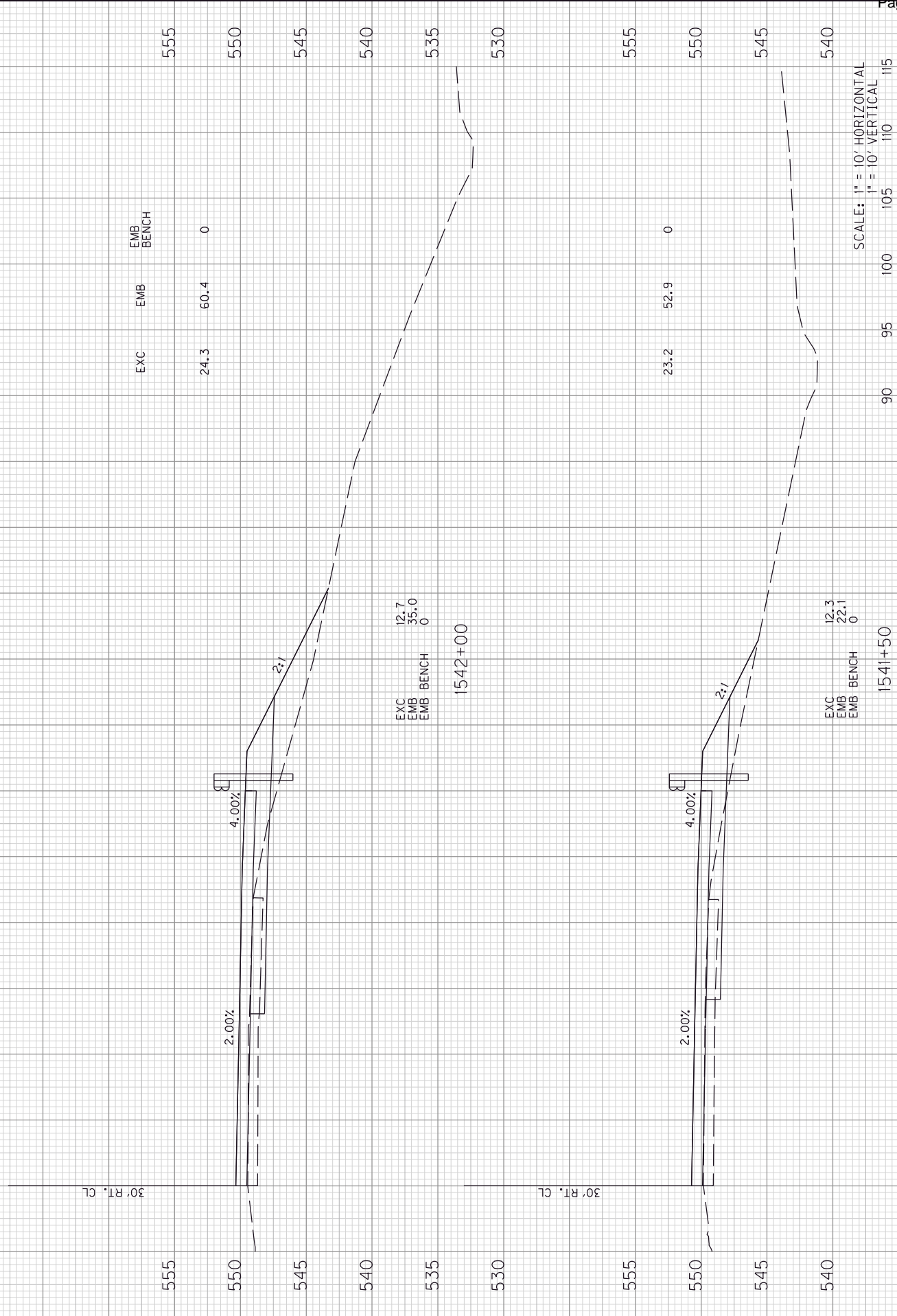
PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1537+50 TO STA. 1538+00







COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

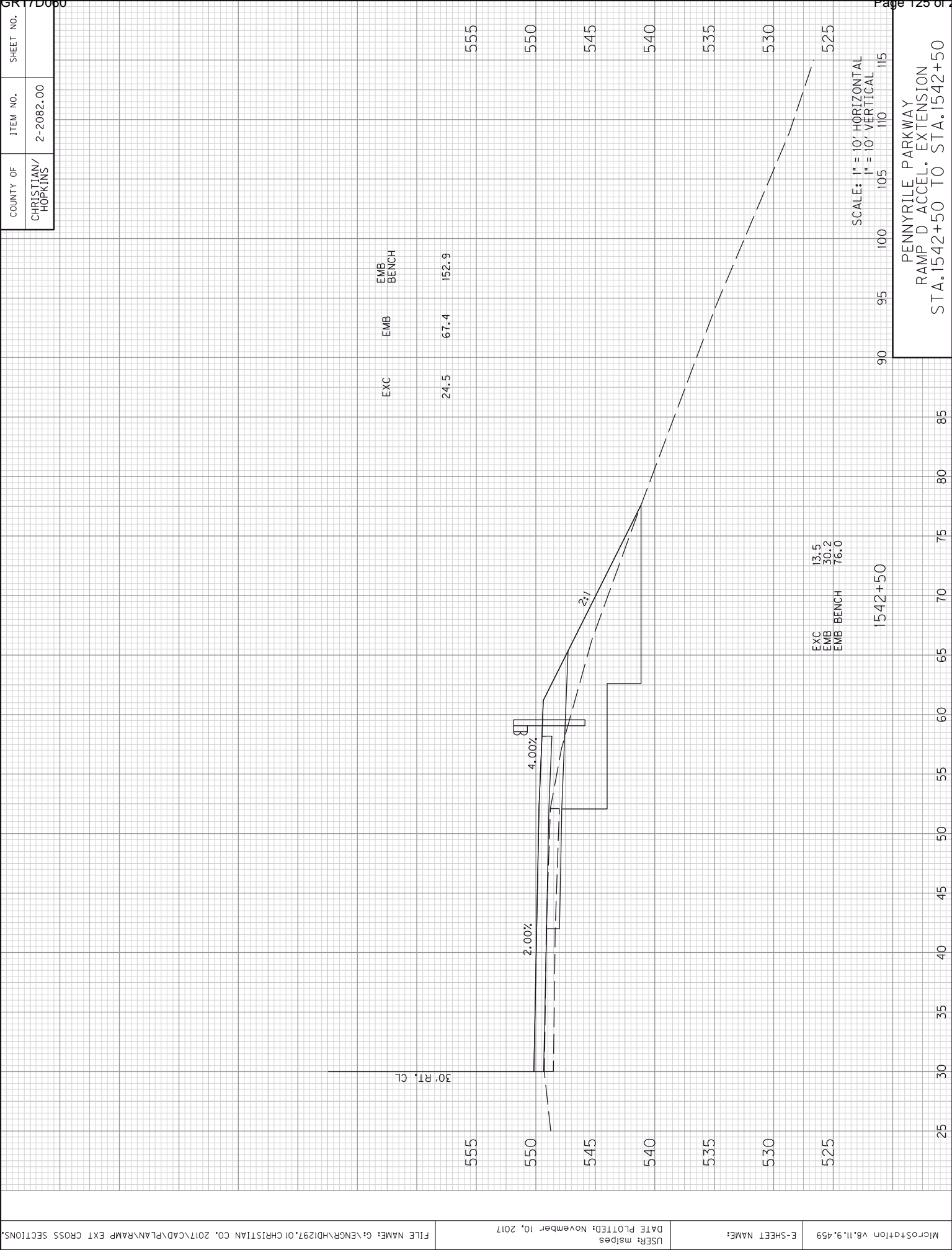


SCALE: 1" = 10' HORIZONTAL  
1" = 10' VERTICAL

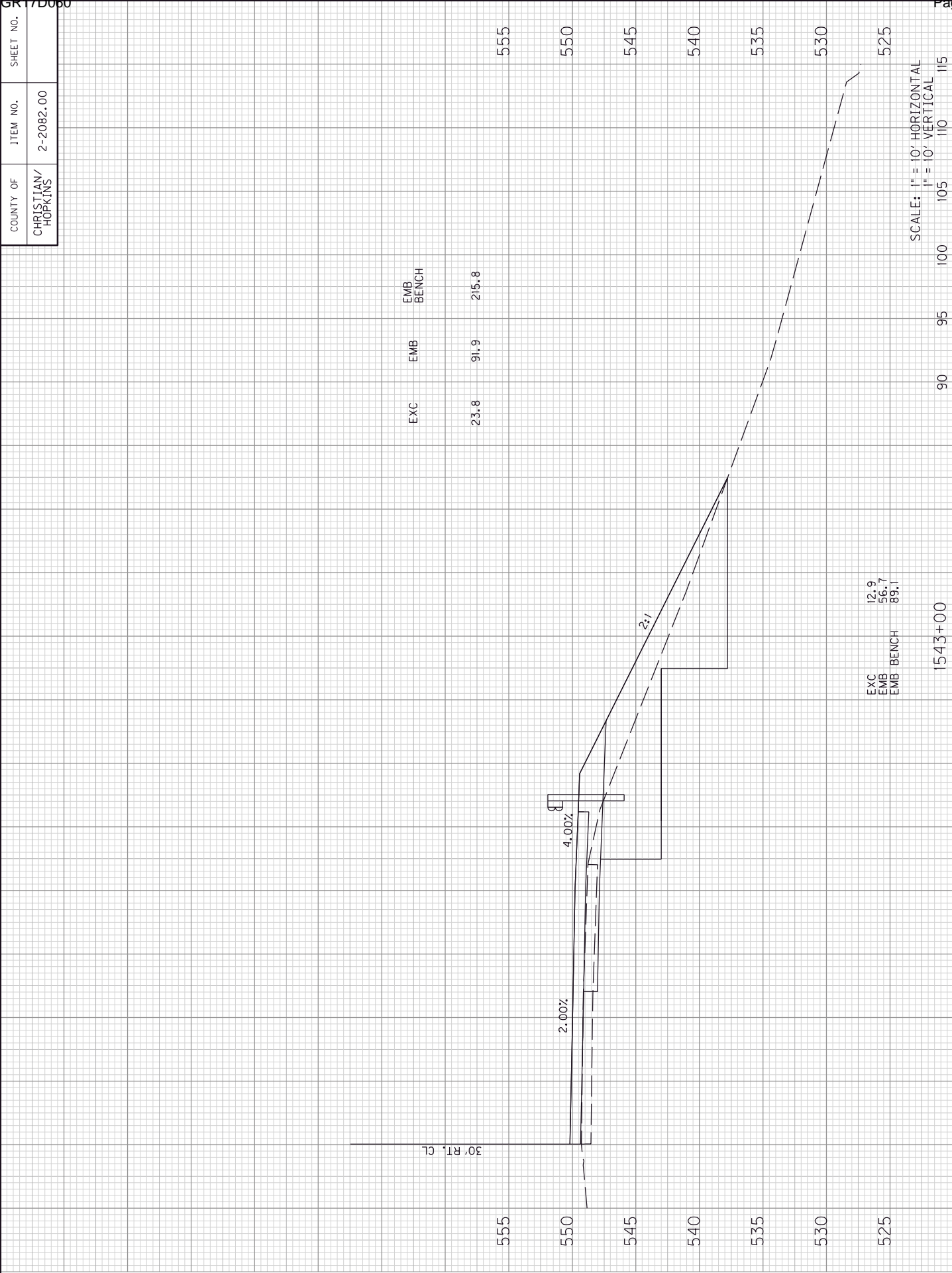
PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1541+50 TO STA. 1542+00



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



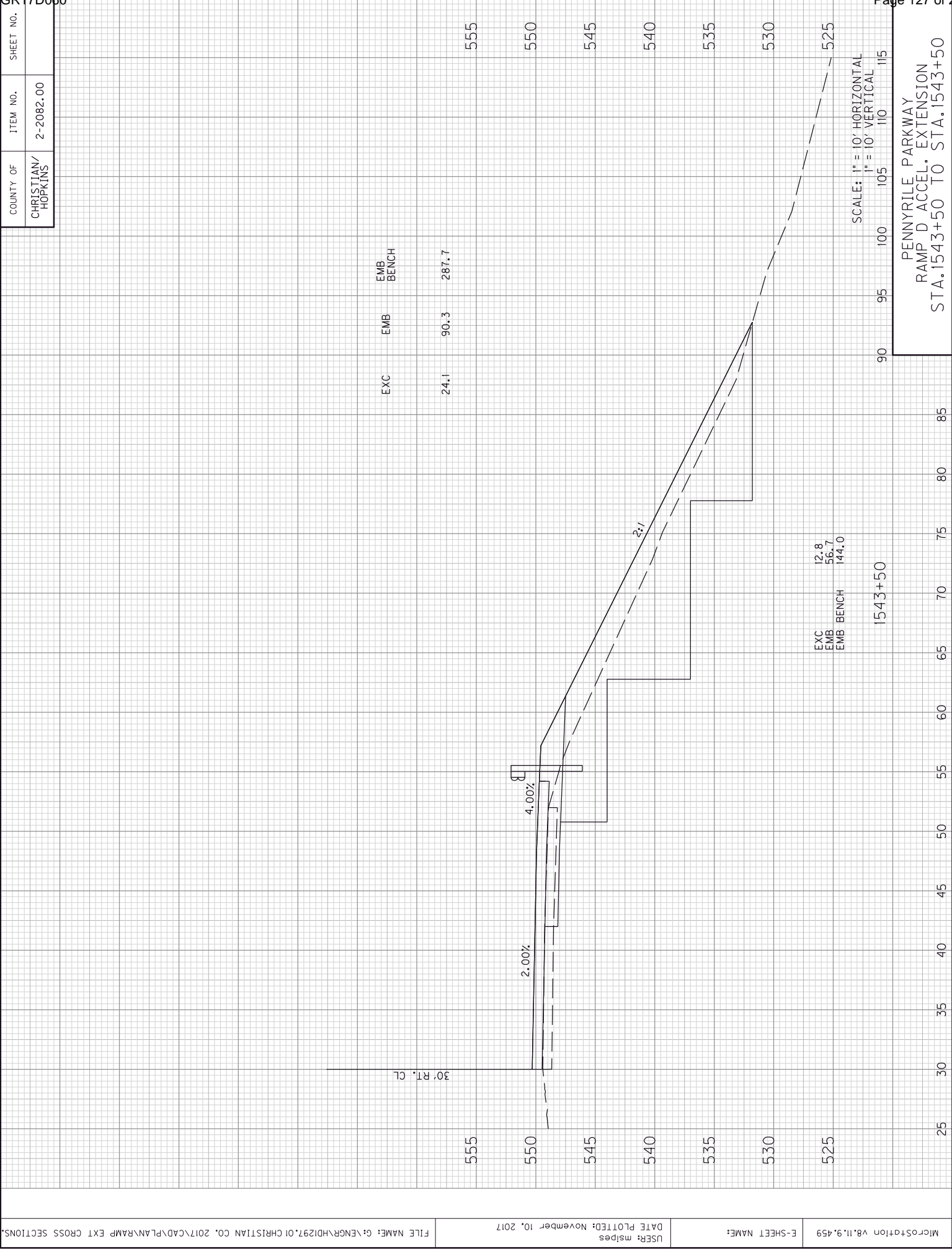
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



SCALE: 1" = 10' HORIZONTAL  
1" = 10' VERTICAL

PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1543+00 TO STA. 1543+00

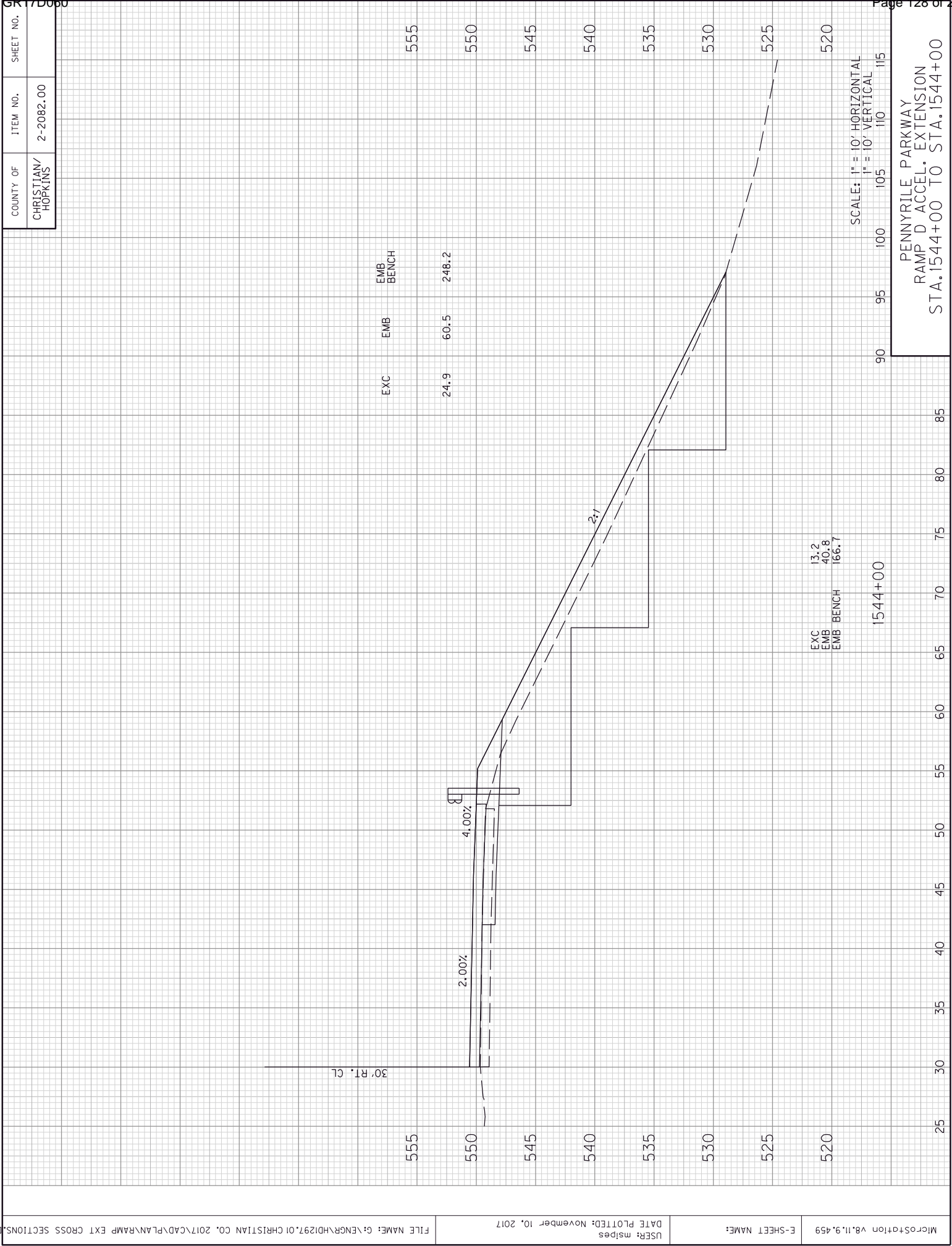
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	



PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1543+50 TO STA. 1543+50



COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

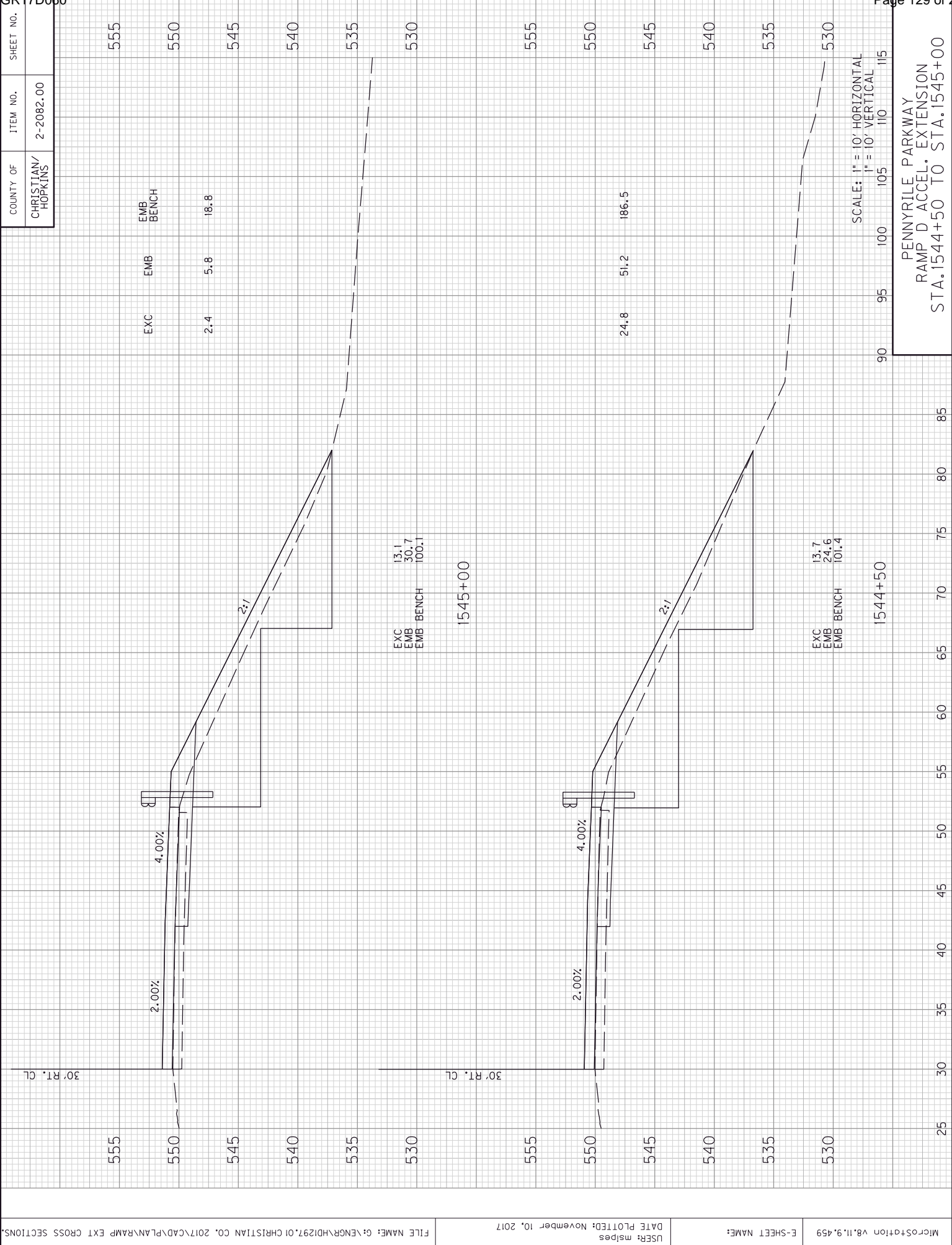


EXC 13.2  
EMB 40.8  
EMB BENCH 166.7

1544+00

SCALE: 1" = 10' HORIZONTAL  
1" = 10' VERTICAL

PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1544+00 TO STA. 1544+00

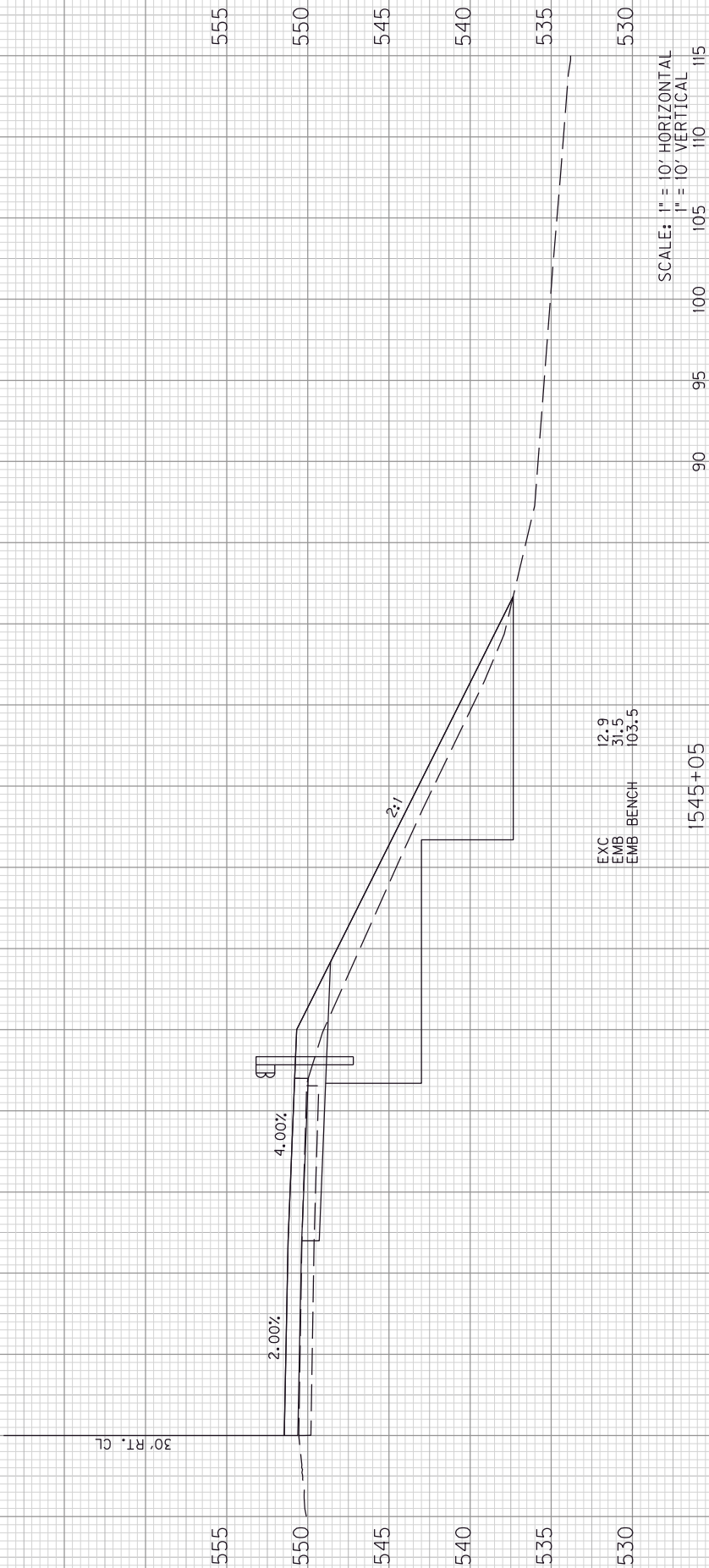


COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

RAMP D TOTALS

EXC	EMB	EMB BENCH
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377.3	809.6	1110.0
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EXC 12.9  
EMB 31.5  
EMB BENCH 103.5

SCALE: 1" = 10' HORIZONTAL  
1" = 10' VERTICAL

1545+05

PENNYRILE PARKWAY  
RAMP D ACCEL. EXTENSION  
STA. 1545+05 TO STA. 1545+05





MP 18.5

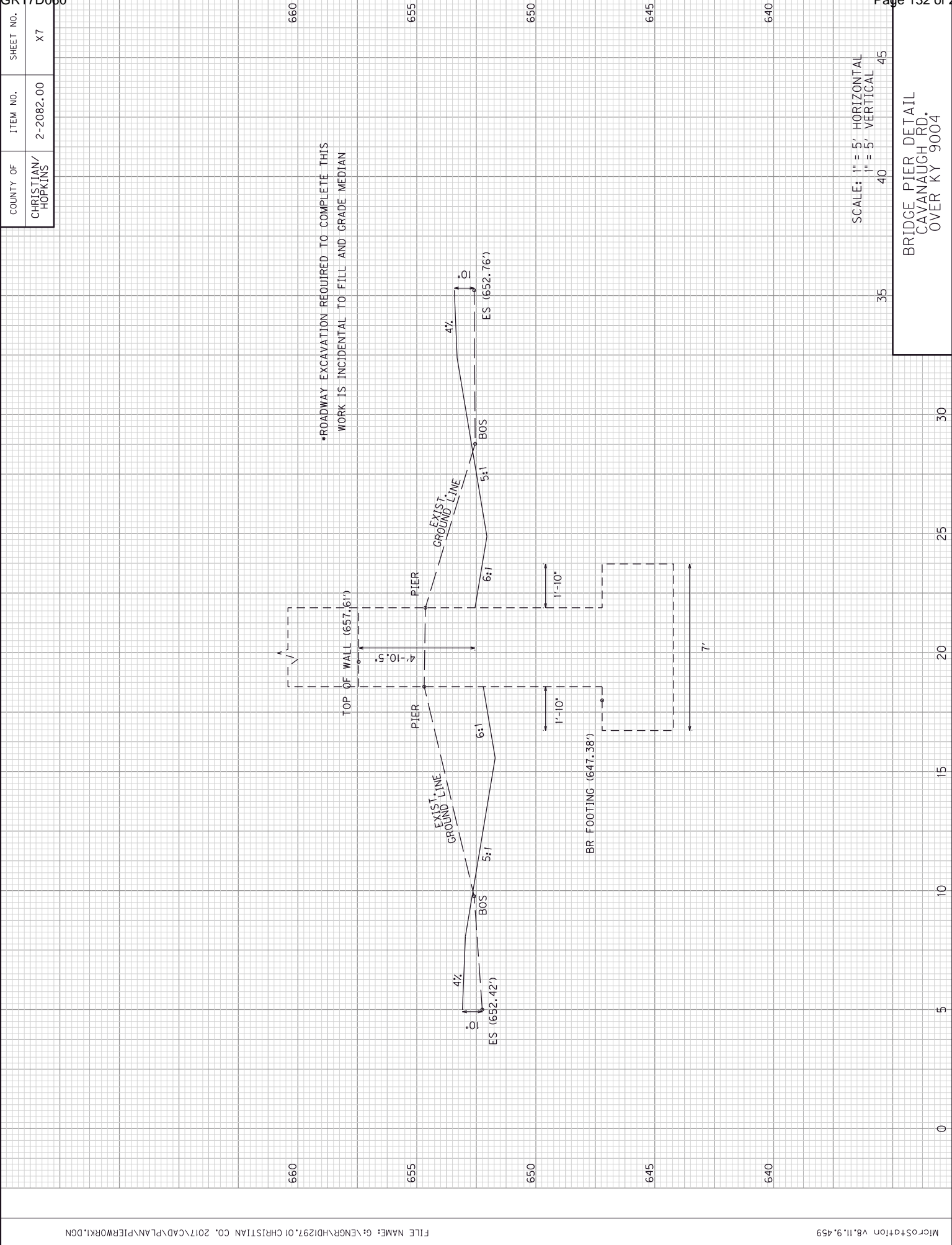
CAVANAUGH RD.

CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	-	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

SCALE : 1" = 50'

BRIDGE PIER DETAIL  
CAVANAUGH RD.  
OVER KY 9004

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	X7



SCALE: 1" = 5' HORIZONTAL  
1" = 5' VERTICAL

BRIDGE PIER DETAIL  
CAVANAUGH RD.  
OVER KY 9004



MP 19.7

J. KNIGHT RD.

CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	-	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

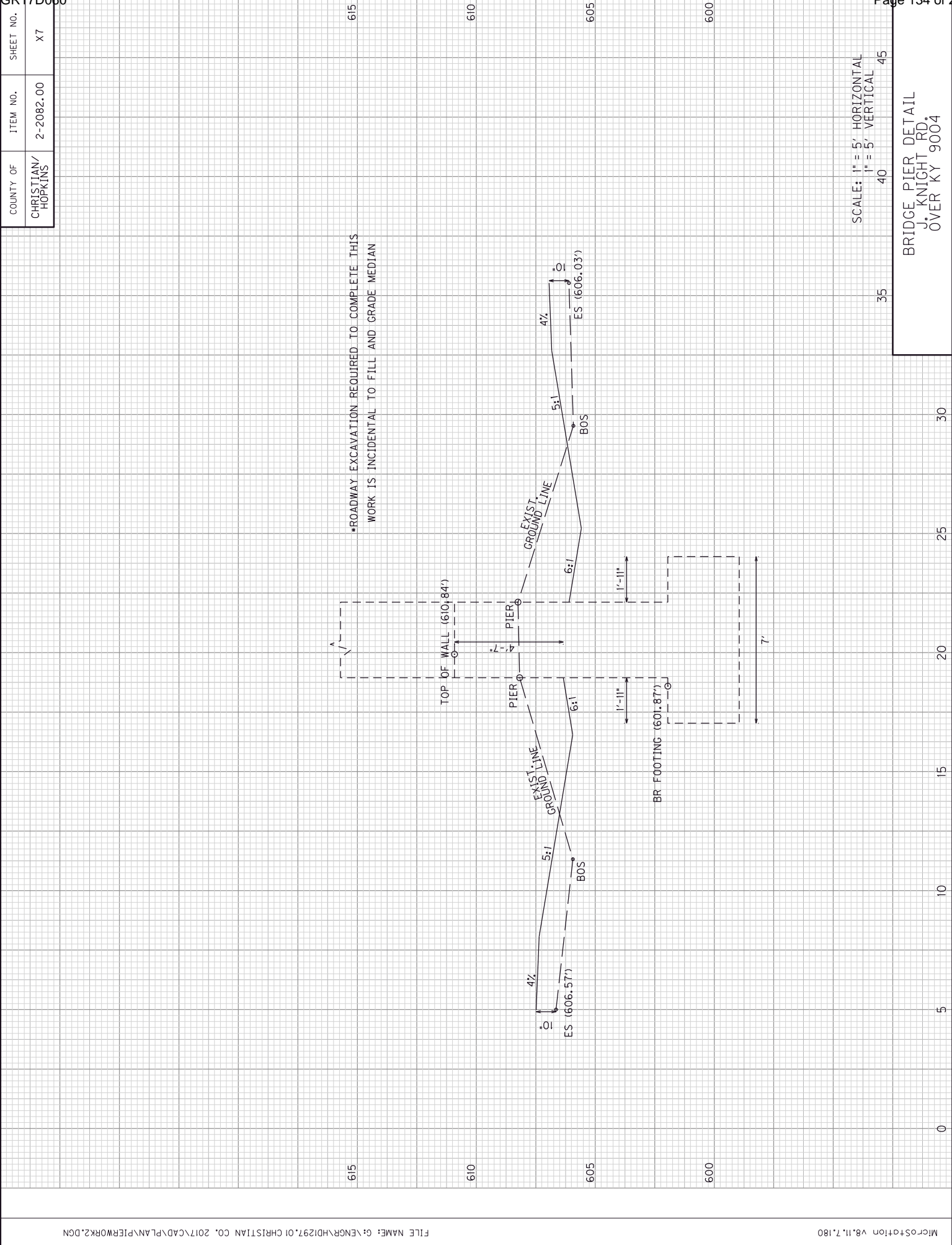
SCALE : 1" = 50'

BRIDGE PIER DETAIL  
J. KNIGHT RD.  
OVER KY 9004



121GR17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	X7



SCALE: 1" = 5' HORIZONTAL  
1" = 5' VERTICAL

BRIDGE PIER DETAIL  
J. KNIGHT RD.  
OVER KY 9004



WILLIAM LILE RD.

MP 21.2

42.75' @ 12:1  
(BOTH SIDES)

42.75' @ 12:1  
(BOTH SIDES)

15"

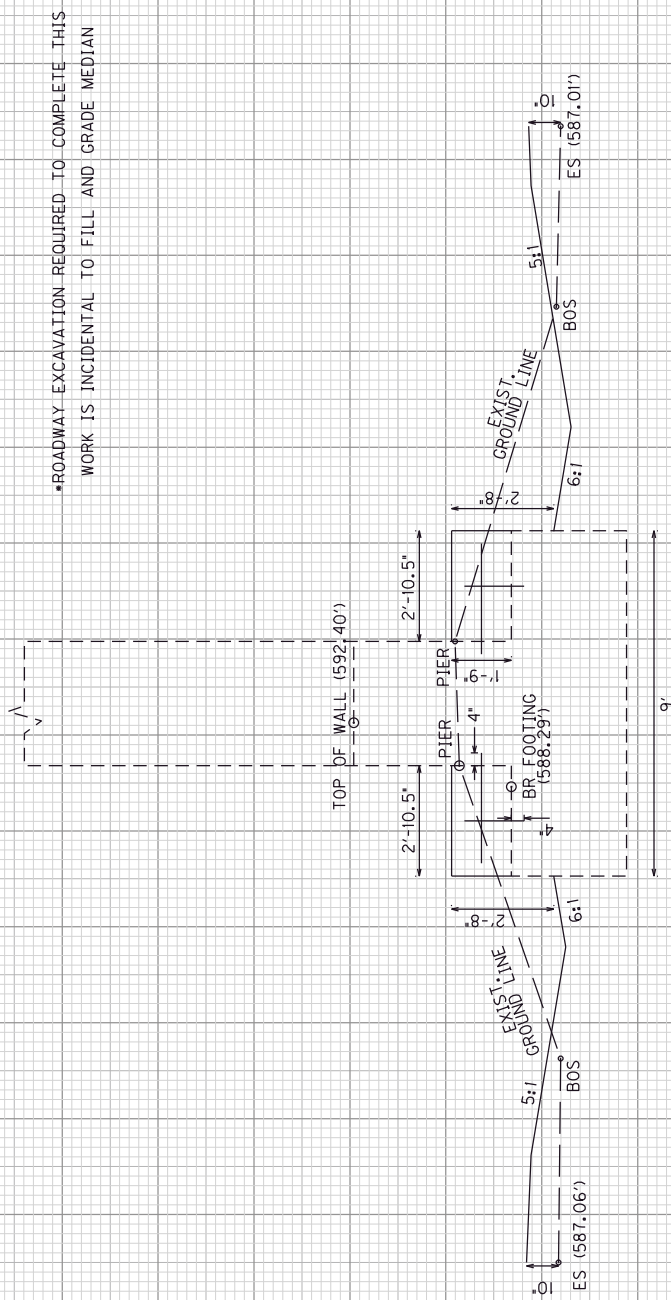
CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	-	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

SCALE : 1" = 50'

• BE AWARE OF HIGH MAST LIGHTING AROUND RAMPS

BRIDGE PIER DETAIL  
WILLIAM LILE RD.  
OVER KY 9004

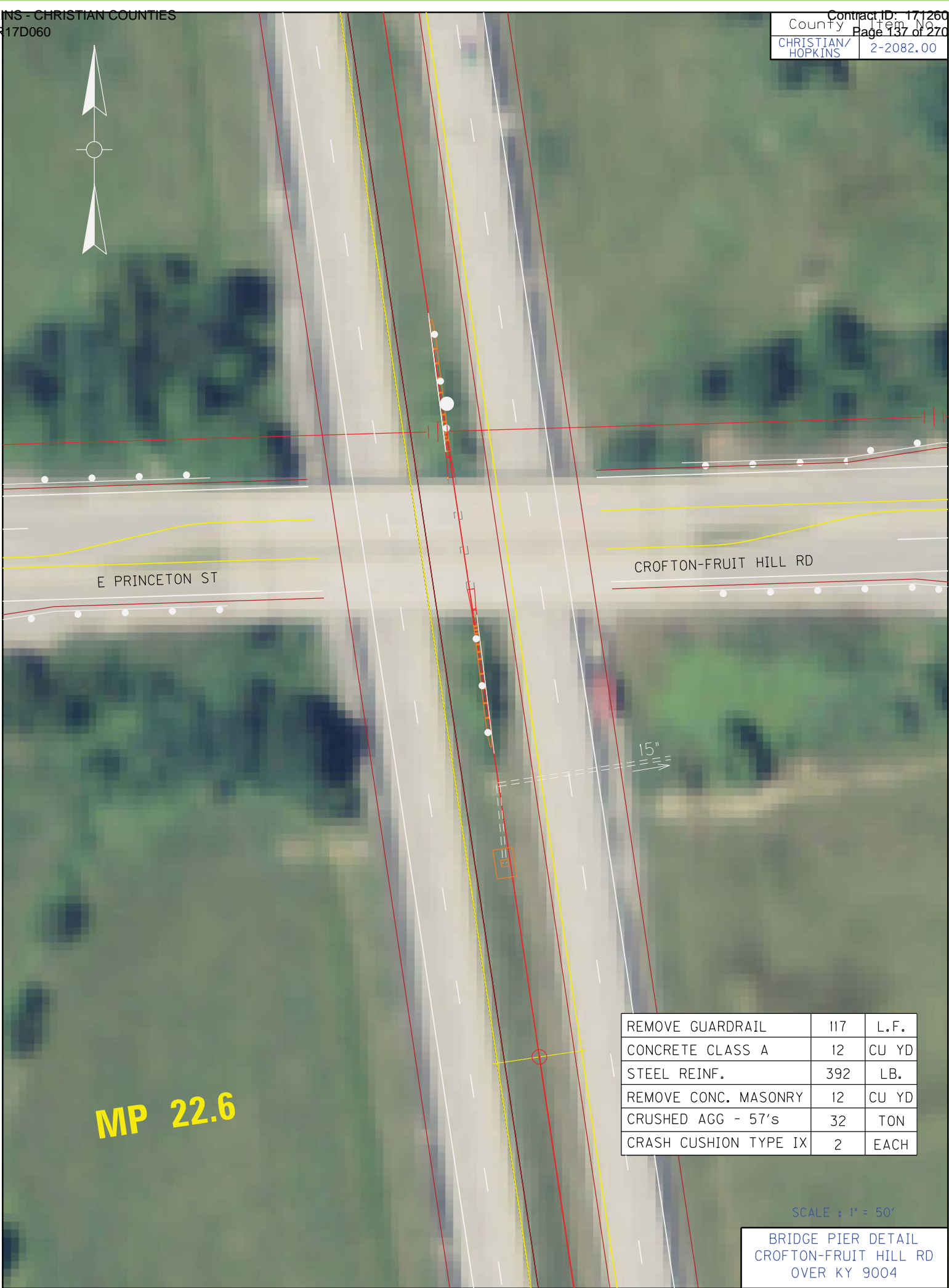
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	X7



SCALE: 1" = 5' HORIZONTAL  
1" = 5' VERTICAL

BRIDGE PIER DETAIL  
WILLIAM LILE RD.  
OVER KY 9004





**MP 22.6**

REMOVE GUARDRAIL	117	L.F.
CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	12	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

SCALE : 1" = 50'

BRIDGE PIER DETAIL  
CROFTON-FRUIT HILL RD  
OVER KY 9004



GRAPEVINE RD

MP 25.1

REMOVE GUARDRAIL	117	L.F.
CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	12	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

SCALE = 1" = 50'

BRIDGE PIER DETAIL  
GRAPEVINE RD  
OVER KY 9004





C.P. 5

MCINTOSH CHAPEL RD

MP 29.1

REMOVE GUARDRAIL	117	L.F.
CONCRETE CLASS A	12	CU YD
STEEL REINF.	392	LB.
REMOVE CONC. MASONRY	12	CU YD
CRUSHED AGG - 57's	32	TON
CRASH CUSHION TYPE IX	2	EACH

SCALE : 1" = 50'

BRIDGE PIER DETAIL  
MCINTOSH CHAPEL RD  
OVER KY 9004





MP 29.6

US 41 RAMP

42.75' ± (2x)  
(BOTH SIDES)

42.75' ± (2x)  
(BOTH SIDES)

REMOVE GUARDRAIL	117	L.F.
CONCRETE CLASS A	92	CU YD
STEEL REINF.	3136	LB.
REMOVE CONC. MASONRY	92	CU YD
CRUSHED AGG - 57's	45	TON
CRASH CUSHION TYPE IX	2	EACH

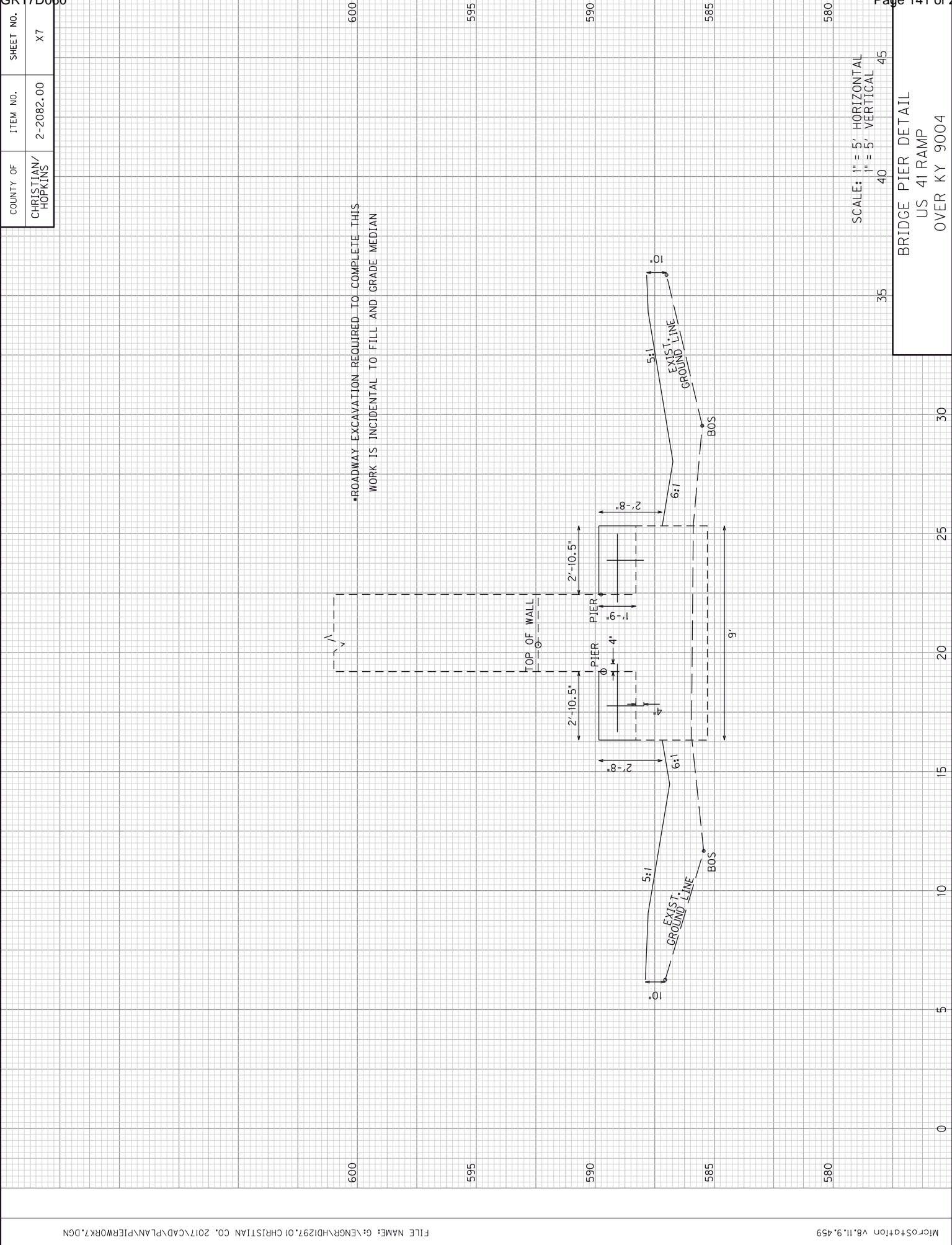
SCALE : 1" = 50'

BRIDGE PIER DETAIL  
US 41 RAMP  
OVER KY 9004

MP 29.5

121GR17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	X7



SCALE: 1" = 5' HORIZONTAL  
1" = 5' VERTICAL

BRIDGE PIER DETAIL  
US 41 RAMP  
OVER KY 9004

**TRAFFIC CONTROL PLAN  
CHRISTIAN AND HOPKINS COUNTIES  
PENNYRILE PARKWAY  
Item No. 2-2082**

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<b>THIS PROJECT IS A FULLY CONTROLLED ACCESS HIGHWAY</b>
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**TRAFFIC CONTROL GENERAL**

Except as provided herein, "Maintain and Control Traffic" shall be 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 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 24 hours prior to using the double fine signs. At the beginning of the work zone, the "WARNING FINE DOUBLED IN WORK ZONE" signs will be dual mounted. At the end of the work zone, the "END DOUBLE FINE" signs will be dual mounted as well. Remove or cover the signs when the highway work zone does not have workers present for more than a two-hour period of time. Payment for the signs will be at the unit bid price for signs erected. Any relocation or covering of the signs will be incidental to "Maintain and Control Traffic," lump sum.

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



## **TRAFFIC PHASING**

The clear lane width will be 12 feet. Wide loads on the parkway during construction shall be prohibited. See special note. Use a lane closure at all times when work is performed in the adjacent lane or adjacent shoulder.

The overall concept of traffic control for this project is to provide median crossovers, maintaining two-way traffic on one side while constructing the opposite lanes under complete closure.

Construction of the project will be broken into 3 segments in order to minimize the time traffic is impacted by construction at the Crofton interchange (Exit 23), and to limit the overall distance that traffic is placed in a two-way traffic scheme. The 3 segments are as follows:

- Segment 1: From the project beginning at the south end (MP 16.566) to MP 22.25.
- Segment 2: From MP 22.25 to MP 23.05, including the Crofton interchange ramps.
- Segment 3: From MP 23.05 to the project end (MP 29.900)

Temporary median crossovers will be installed at each end of the project and in the vicinity of both the north and south ends of the Exit 23 interchange. Each side of the Exit 23 interchange (both ramps on either the east or west side) will be closed for a period of no longer than 14 days during construction of Segment 3. While crossover traffic is isolated to the area between the two interchange crossovers, the opposing side of the interchange will be closed until the mainline paving is complete as well as pavement replacement of the ramps is complete. These closures may not exceed two 14 days per each side of the interchange.

Temporary median Crossovers will be hereafter be referred to as the following:

- Crossover 1: Crossover at the south end of the project (MP 16.339 to MP 16.566)
- Crossover 2: Crossover immediately south of the Exit 23 interchange. (MP 22.099 to MP 22.430)
- Crossover 3: Crossover immediately north of the Exit 23 interchange. (MP 22.827 to MP 23.159)
- Crossover 4: Crossover at the north end of the project. (MP 29.900 to MP 30.127)

Close inside shoulders for the duration of the project.

## **CONSTRUCTION**

### **PHASE I**

Install project signs. Using alternating lane closures, place Leveling and Wedging at select areas on the southbound inside and outside shoulders in Sections 1 and Section 3, and on the northbound shoulders in Section 2, to eliminate pavement edge to shoulder drop-offs. Install guardrail end treatments Type 1 on the trailing ends of the existing guardrail locations in the southbound lane in Section 1 and Section 3, and in the northbound lanes in Section 2, in preparation for two way traffic. Using inside lane closures, construct all temporary median crossovers at the limits shown on the plan sheets and in accordance with the detail for median crossovers and current Standard Drawings.

**NOTE:** Installation of temporary drainage facilities will be required for these crossovers. The contractor will be responsible for installation of temporary storm pipe required to drain the median upstream of the median crossovers, tying into the existing median drop box inlets. Existing drop box inlets within the crossover limits will be required to be adjusted as necessary and traffic worthy grates installed as necessary. Temporary grates on drop box inlets in the Exit 23 interchange crossovers will require multiple adjustments as wedging of the crossover is necessary to shift traffic onto the new pavement. The contractor shall submit a plan for the temporary drainage for approval by the engineer. In accordance with the specifications, all temporary drainage facilities required as well as removal of the crossovers will be considered incidental to the item "Crossover" Each.

## **PHASE II – SECTION 1 PAVING**

### **Phase IIa**

Install median crossover signage, and using alternating lane closures and flaggers when necessary, reconfigure approach striping to shift the northbound traffic onto the southbound lanes between MP 16.566 and MP 22.25. Shift traffic in a two-way configuration between MP 16.566 and MP 22.25, crossing over and restoring 4 lane traffic prior to the Exit 23 interchange and keeping the interchange in its current configuration.

Construct mainline pavement tapers and JPC overlay northbound from MP 16.566 to approximate MP 22.25. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place temporary striping on the new northbound concrete in a two-way configuration for the next phase.

Place a 250' long temporary asphalt wedge off the north end of the newly constructed northbound lanes.

### **Phase IIb**

Using alternating lane closures and flaggers when necessary, reconfigure crossover 1 and 2 striping and approach striping and shift traffic onto the newly paved northbound lanes in a two-way configuration from MP 16.566 to MP 22.25, crossing over and restoring 4 lane traffic prior to the Exit 23 interchange and keeping the interchange in its current configuration.

Construct mainline pavement tapers and JPC overlay southbound from MP 16.566 to approximate MP 22.25. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place permanent one-way southbound striping.

Using alternating lane closures and flagging, construct additional wedging over crossover 2 matching newly constructed pavement grades providing vertical transition for the next proposed traffic shift.

## **PHASE III – SECTION 2 PAVING**

### **Phase IIIa**

Using alternating lane closures and flaggers when necessary, reconfigure crossover 1 and approach striping, and reconfigure the northbound striping, installing permanent one-way striping from MP 16.566 to approximate MP 22.25. Restore traffic to one-way, 4-lanes from MP 16.566 to approximate MP 22.25. Reconfigure crossover 2 striping and install crossover 3 striping in preparation to shift southbound lanes to the northbound lanes in a two-way configuration between crossover 2 and crossover 3. Install signage in advance of the US41 interchange (Exit 30) warning of the closure of Exit 23. Close the west side ramps of Exit 23 and place traffic in the northbound lanes, two-way, between crossover 2 and crossover 3.

Complete the mainline paving southbound from MP 22.25 to MP 23.05. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place temporary striping on the new southbound concrete between crossover 2 and crossover 3 in a two-way configuration for the next phase. Complete all work required on the west side ramps including ramp acceleration widening.

**ATTENTION:** Ramp closures during this phase may not exceed 14 days without penalty.

### **Phase IIIb**

Using alternating lane closures and flaggers, reconfigure crossover 2 striping and crossover 3 striping in preparation to shift northbound lanes to the southbound lanes in a two-way configuration between crossover 2 and crossover 3. Install signage in advance of the Hopkinsville (Exit 11) interchange warning of the closure of Exit 23. Close the east side ramps of Exit 23 and place traffic in the southbound lanes, two-way, between crossover 2 and crossover 3.

Remove the temporary northbound asphalt wedge and complete the mainline paving northbound from MP 22.25 to MP 23.05. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place permanent striping on the new northbound concrete between crossover 2 and crossover 3 in a one-way configuration for the next phase. Complete all work required on the east side ramps including ramp acceleration widening.



Place a 250' long temporary asphalt wedge at the north end of the new southbound JPC pavement.

**ATTENTION:** Ramp closures during this phase may not exceed 14 days without penalty.

## **PHASE IV**

### **Phase IVa**

Using alternating lane closures and flagging, reconfigure striping southbound between crossover 3 and crossover 4 for one-way traffic. Install pavement wedging over crossover 3 areas to provide the necessary vertical tapers and reconfigure crossover 3 striping to shift northbound traffic to the southbound lanes. Configure striping for crossover 4 and approach to crossover 4 to shift traffic northbound traffic to the southbound lanes two-way between crossover 3 and crossover 4.

Construct mainline pavement tapers and JPC overlay and inlay northbound from MP 23.05 to MP 29.900. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place temporary striping on the new northbound concrete in a two-way configuration for the next phase.

### **Phase IVb**

Using alternating lane closures and flagging, place temporary wedging over crossover 3 to provide the necessary vertical taper. Reconfigure crossover 3 striping and crossover 4 striping to shift southbound traffic to the northbound lanes two-way between crossover 3 and crossover 4.

Remove the temporary asphalt wedge and construct mainline pavement tapers and JPC overlay and inlay southbound from MP 23.05 to MP 29.900. Complete edge drains, outside guardrail and shoulder wedging, and other items of work required adjacent the outside lanes. Construct enough median embankment adjacent to the inside shoulder in order to complete the installation of the inside DGA wedge and asphalt seal coat. Place permanent striping on the new southbound concrete in a one-way configuration. Using alternating lane closures and flaggers, reconfigure northbound striping to one-way. Restore 4 lane traffic for the entire length of the project.

## **PHASE V**

Using alternating lane closures, complete construction of any remaining items of work. Remove crossovers and complete grading of the median, crash cushion installations, final grading and seeding of all areas, completion of final pavement markings, and delineators, etc.

## **LANE CLOSURES**

Contrary to section 112, lane closures lasting more than 3 days will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic,” lump sum. Signs and arrow panels shall be paid per sq. ft. and each, except for lane closures installed for the contractors convenience.

Lane closures may be established to perform work in local areas provided each lane closure is at least one mile from other adjacent lane closures or crossovers. Lane closures shall not exceed 6 miles in length.

## **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 may be needed for lane closures. Signage for reduced speed limits and double fine work zones will be furnished, relocated, and maintained by the Contractor.

Quantities for signage of lane closures will be paid per square foot. 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.

Quantities for Road Work ½ Mile (48” x 48”), Road Work 1500 Feet (48” x 48”), Road Work 1000 Feet (48” x 48”), Speed Limit 55 MPH (48” x 60”), Warning Fine Doubled in Work Zone (60”x 48”), End Road Work ( 48” x 48”) and End Double Fine (48”x 60”) signs have been included in the proposal. These signs shall be constructed on each end of the proposed project as directed by the Engineer. Additional quantities have been added for any additional signs required by the Engineer.

Advance signs warning of exit closures will be required one mile in advance of the Hopkinsville exit (Exit 11) and one mile in advance of the KY41 exit (Exit 30) when applicable. These signs shall be 48” x 96” stating exit 23 closed, use alternate route.

A quantity of signs has been included for two-way traffic, lane shifts, “Road Work Ahead” signs on entrance ramps, and extra double fine signs and speed limit signs. Signs are to be paid only once no matter how many times they are moved or relocated.

## **FLASHING ARROWS**

Flashing arrows will be paid for once, no matter how many times they are moved or relocated. Contrary to Section 112 of the Standard Specifications, the Department **WILL** take possession of the flashing arrows upon completion of the work.

## **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message signs (PCMS) in advance of and within the project at locations

to be determined by the Engineer. If work is in progress concurrently in both directions, or if more than one lane closure is in place in the same direction of travel, provide additional PCMS. Place PCMS one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens relocate or provide additional PCMS so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The locations designated may vary as the work progresses. The messages required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are moved or relocated. Contrary to the Special Note for Portable Changeable Message Signs, the Department **WILL** take possession of the signs upon completion of the work.

Place PCMS signs in advance of Exit 23, in advance of Exit 30, and in advance of Exit 11, advising of the future closure of the ramps for a period of 1 week prior to the closure. Also place a PCMS sign approximately ½ mile in advance of each exit while exit 23 is closed, and place an additional PCMS approximately 5 miles in advance of Exit 11 and Exit 30 while Exit 23 is closed to provide additional advance warning.

## **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," lump sum.

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

1. Temporary striping will be 6" in width, permanent striping will be 6" in width and gore area markings and chevrons will be 12" in width.
2. Temporary markings will be removed by waterblasting methods only. Temporary markings will be required on ultimate pavement in many applications. Removal of these markings will be required by waterblasting and must be conducted in a non-destructive manner. Contractor will be required to adjust his operations to ensure no damage results to ultimate pavement due to striping removal efforts.
3. Existing, temporary, or permanent striping will be in place before a lane is opened to traffic.

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration especially if no work is anticipated for a period of time.



## **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, vertical panels, or barricades as shown on the Standard Drawings.

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

Less than 2" – Protect with a lane closure.

2" to 4" – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time.

Greater than 4" – Protect with a lane closure. Barrels are to be placed @ 45' intervals 3' from the drop-off area. Install vertical panels at 75' intervals within the drop-off area.

In areas where pavement is to be removed adjacent to a traffic lane, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Barrel spacing should be 50 feet and appropriate lighting should be utilized to illuminate the area during nighttime operations.

Guardrail Installation – All areas from which guardrail is removed shall be protected by a shoulder closure or other method approved by the Engineer until the new guardrail is installed. A maximum of seven calendar days will be allowed between the removal of a guardrail section or end treatment and the installation of new guardrail and end treatments at that same location.

## **TRAFFIC COORDINATOR**

This project has been designated a significant project.

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must meet the requirements of section 112.03.12 of the 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 telephone number where the Traffic Coordinator can be contacted at all times.

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

During any period when two-way traffic is present (Phase II – Phase IV), 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 maintain the tubular markers. Tubular markers that are damaged beyond use or missing shall be replaced within 24 hours. Liquidated damages shall be \$500 per marker when these conditions are not met.

## **COORDINATION OF WORK**

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

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

Do not allow contractors equipment or employees to park in the median crossover areas hindering sight distance for crossing vehicles.

## **IMPLEMENTATION OF CROSSOVERS AND TWO LANE TRAFFIC**

Guardrail on this project must be modified at different stages to accept two lane traffic. Non-crashworthy end treatments are to be removed and replaced with Type 1 end treatments prior to introduction of two way traffic. The requirement for the site grading for Type 1 end treatments will be waived for temporary installations. When permanent guardrail is installed after JPC pavement has been placed, the trailing ends of the guardrail will require installation of Type 1 end treatments if introduced to two way traffic. These end treatments will be left in place after the project is completed. Guardrail must be installed on the trailing ends of the bridge at MP 29.45.

Tubular markers are to be installed at 110' spacing per the Standard Drawings for the entire length of two traffic.

## **RAMP CLOSURES**

The contractor will be allowed to close the ramps on each side of the Exit 23 interchange for a period of no more than 14 days in order to complete the mainline pavement through the interchange area and complete the ramp pavement work.

While completing work described in Phase IIIa and Phase IIIb herein, the contractor will be allowed to close the ramps on the side opposite of the each phase's two-way traffic scheme. All work required for each phase, including both ramps, and mainline pavement, must be substantially complete including shoulder wedging and guardrail necessary to reopen ramp traffic within the allowable 14 days per side.

Install tubular markers on a 20' spacing on the open side ramps in the gore area to deter left turn traffic from occurring while the opposing side of the interchange is closed.

## **LIQUIDATED DAMAGES**

Liquidated damages in the amount of \$5,000/day will be assessed for each day or part of a day that ramp closures exceed the allowable 14 days per each side of the interchange.

These damages are to be applied concurrently with any other applicable penalties or damages and will be applied cumulatively.

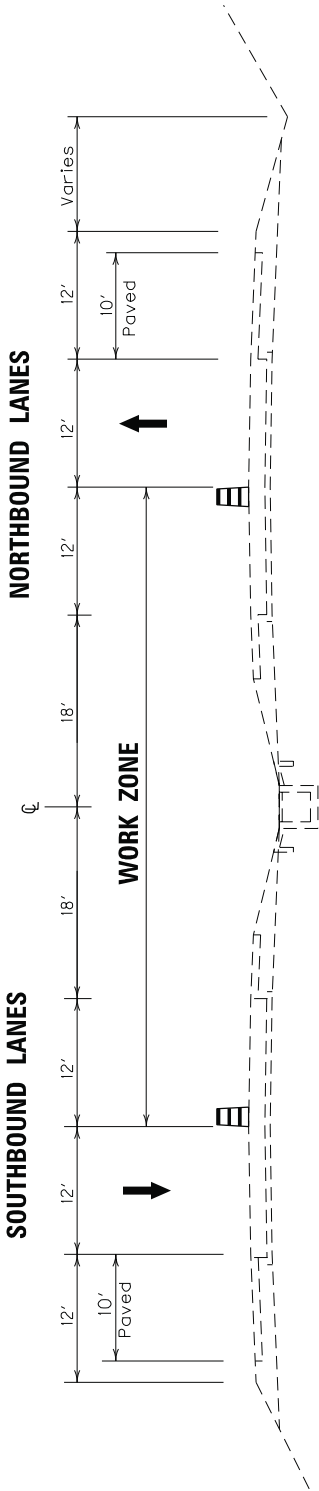


121GR17D000

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

# MOT TYPICAL SECTIONS PENNYRILE PARKWAY

MP 16.566 to MP 29.900



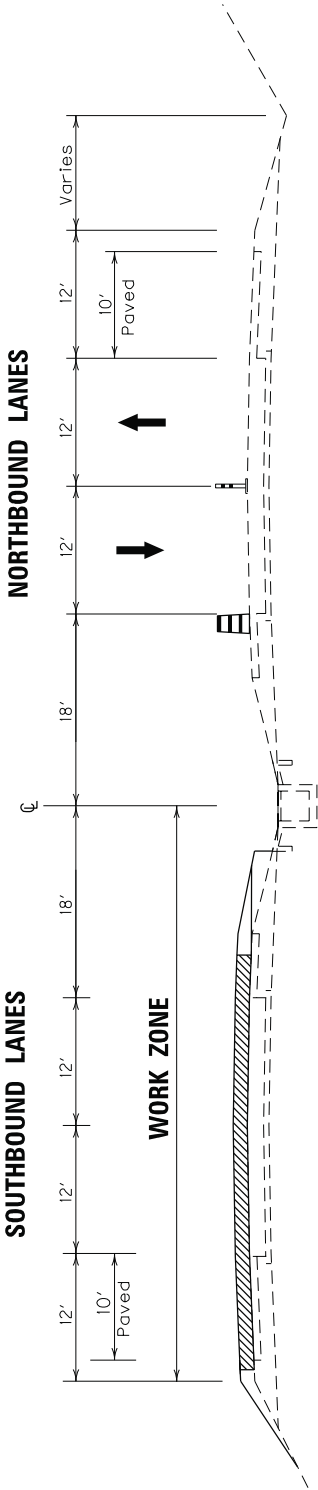
NOT TO SCALE

PENNYRILE PKWY  
TRAFFIC PHASES

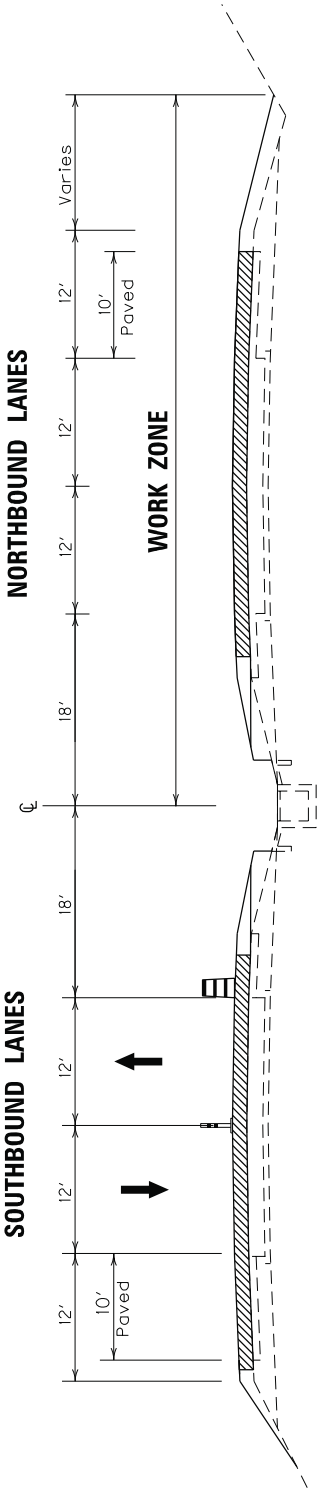
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/ HOPKINS	2-2082.00	

MOT TYPICAL SECTIONS  
PENNYRILE PARKWAY

MP 22.25 to MP 23.05



PHASE IIIa



PHASE IIIb

NOT TO SCALE

PENNYRILE PKWY  
TRAFFIC PHASES

**MP 16.566 to MP 22.25**

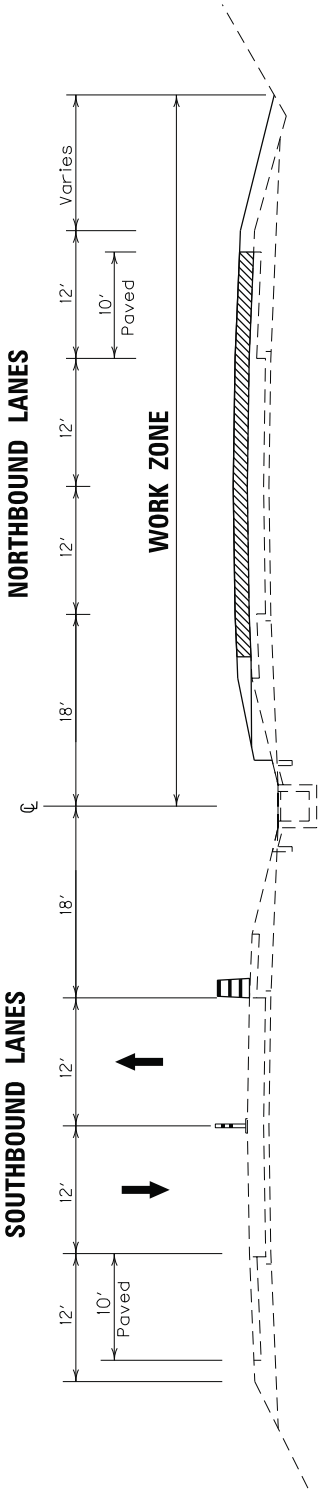
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TRAFFIC PHASES



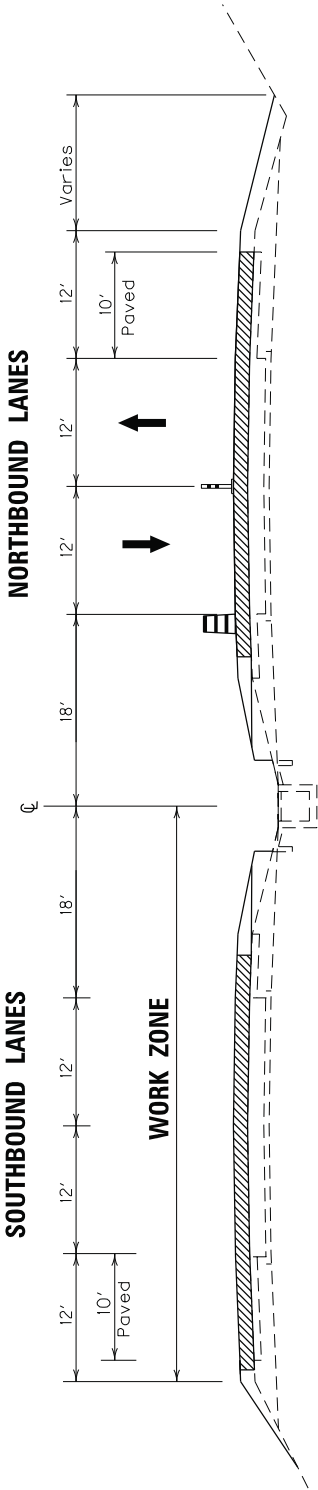
COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/	2-2082.00	

# MOT TYPICAL SECTIONS PENNYRILE PARKWAY

MP 23.05 to MP 29.900



PHASE IVa



PHASE IVb

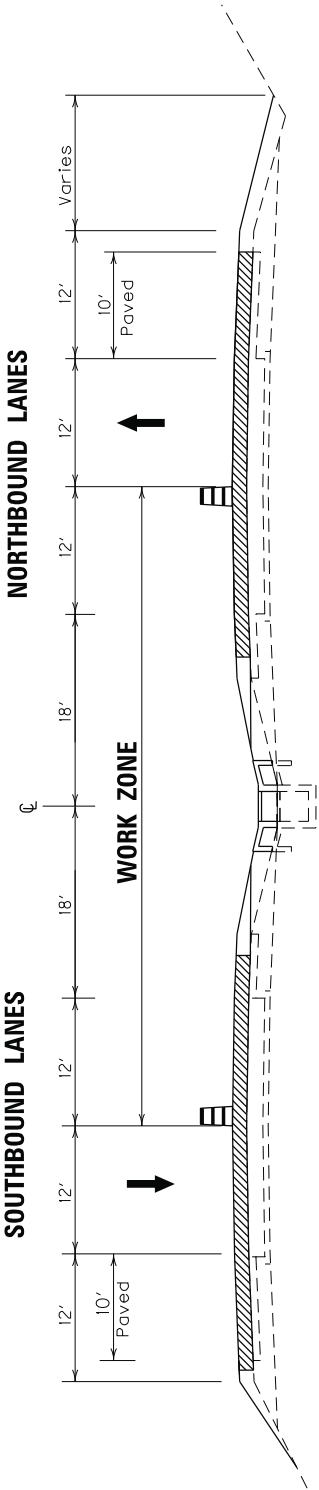
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PENNYRILE PKWY  
TRAFFIC PHASES

COUNTY OF	ITEM NO.	SHEET NO.
CHRISTIAN/	2-2082.00	

MOT TYPICAL SECTIONS  
PENNYRILE PARKWAY

MP 16.566 to MP 23.900



PHASE V

NOT TO SCALE

PENNYRILE PKWY  
TRAFFIC PHASES

MP 22.4

MP 22.3

MP 22.2

MP 22.1

LEGEND

MEDIAN CROSSOVER TRAFFIC MOTION

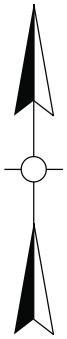
NEWLY CONSTRUCTED PAVEMENT

CURRENT PHASE PAVEMENT CONSTRUCTION

TEMPORARY ASPHALT WEDGE

TEMPORARY MEDIAN CROSSOVER

EXISTING PAVEMENT



BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.099



MP 22.4

MP 22.3

MP 22.2

MP 22.1

LEGEND

MEDIAN CROSSOVER TRAFFIC MOTION

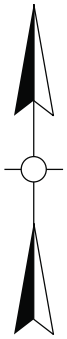
NEWLY CONSTRUCTED PAVEMENT

CURRENT PHASE PAVEMENT CONSTRUCTION

TEMPORARY ASPHALT WEDGE

TEMPORARY MEDIAN CROSSOVER

EXISTING PAVEMENT



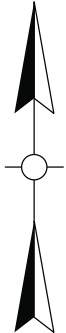
BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.099

MP 22.4

MP 22.3

MP 22.2

MP 22.1



LEGEND

MEDIAN CROSSOVER TRAFFIC MOTION

NEWLY CONSTRUCTED PAVEMENT

CURRENT PHASE PAVEMENT CONSTRUCTION

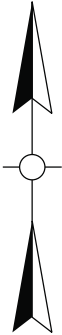
TEMPORARY ASPHALT WEDGE

TEMPORARY MEDIAN CROSSOVER

EXISTING PAVEMENT

BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.099

**BEGIN TEMPORARY  
MEDIAN CROSSOVER  
M.P. 22.827**



**MP 22.8**

**MP 22.7**

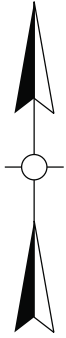
**MP 22.6**

**MP 22.5**

SCALE 1"=200'

KY 9004 PENNYRILE PKWY  
MOT - PHASE IIIa  
SHEET 2 OF 3





MP 23.2

MP 23.1

MP 23.0

MP 22.9

END TEMORARY  
MEDIAN CROSSOVER  
M.P. 23.159

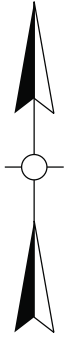
SCALE 1"=200'

MP 22.4

MP 22.3

MP 22.2

MP 22.1



LEGEND

MEDIAN CROSSOVER TRAFFIC MOTION

NEWLY CONSTRUCTED PAVEMENT

CURRENT PHASE PAVEMENT CONSTRUCTION

TEMPORARY ASPHALT WEDGE

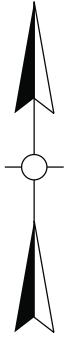
TEMPORARY MEDIAN CROSSOVER

EXISTING PAVEMENT

BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.099

SCALE 1"=200'

**BEGIN TEMPORARY  
MEDIAN CROSSOVER  
M.P. 22.827**



**MP 22.8**

**MP 22.7**

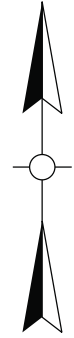
**MP 22.6**

**MP 22.5**

SCALE 1"=200'

KY 9004 PENNYRILE PKWY  
MOT - PHASE IIId  
SHEET 2 OF 3





MP 23.2

MP 23.1

MP 23.0

MP 22.9

END TEMORARY  
MEDIAN CROSSOVER  
M.P. 23.159

SCALE 1"=200'

MP 23.2

MP 23.1

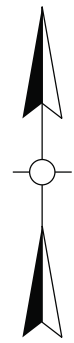
MP 23.0

MP 22.9

END TEMORARY  
MEDIAN CROSSOVER  
M.P. 23.159

LEGEND

- MEDIAN CROSSOVER TRAFFIC MOTION
- NEWLY CONSTRUCTED PAVEMENT
- CURRENT PHASE PAVEMENT CONSTRUCTION
- TEMPORARY ASPHALT WEDGE
- TEMPORARY MEDIAN CROSSOVER
- EXISTING PAVEMENT



BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.827

SCALE 1"=200'

MP 23.2

MP 23.1

MP 23.0

MP 22.9

END TEMORARY  
MEDIAN CROSSOVER  
M.P. 23.159

BEGIN TEMORARY  
MEDIAN CROSSOVER  
M.P. 22.827

LEGEND

MEDIAN CROSSOVER TRAFFIC MOTION

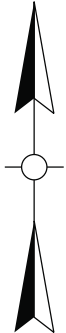
NEWLY CONSTRUCTED PAVEMENT

CURRENT PHASE PAVEMENT CONSTRUCTION

TEMPORARY ASPHALT WEDGE

TEMPORARY MEDIAN CROSSOVER

EXISTING PAVEMENT



SCALE 1"=200'



**PENNYRILE PARKWAY  
CHRISTIAN AND HOPKINS COUNTIES  
NHPP 0411(026)  
FD52 024 9004 016-028  
FD52 054 9004 028-030  
Item No. 2-2082**

**MP 16.566 TO MP 29.900 NORTHBOUND and SOUTHBOUND**

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

**I. DESCRIPTION**

Perform all work in accordance with the Department's 2012 Standard Specifications, Supplemental Specifications, Applicable Special Provisions, Special Notes, and Applicable Standard and Sepia Drawings, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

- (1) Maintain and Control Traffic; (2) Drainage Structure Work; (3) Remove and Replace Guardrail and Guardrail End Treatments; (4) JPC Pavement Overlay and Inlays and JPC Shoulders; (5) Exit 23 Ramp Acceleration Lane Extensions; (6) Ramp Pavement Removal and Replacement; (7) Longitudinal Edge Drains; (8) Bridge Slopewall Construction; (9) Slide Repair; (10) Median Grading and Inlet Adjustments; (11) Installation of Crash Cushions at Median Piers; and (12) All other work specified as part of this contract.

**II. SCOPE OF WORK**

This project consists of a JPC overlay from MP 16.566 in Christian County to MP 29.900 in Hopkins County. Longitudinal edge drains will be replaced as part of this contract. Reshaping of the median and adjustment of median drainage structures, replacement of all guardrail, and significant wedging of slopes and adjustment of slopes adjacent to the outside shoulders are required as a result of the revised vertical grade. Ramp pavement at the Exit 23 interchange will be removed and replaced with full depth asphalt pavement as part of this project. Ramp acceleration lengths on both the northbound and southbound on ramps are deficient and will be extended as part of this contract. Alternates will be allowed for paving on the outside shoulders of mainline as detailed in the Special Note for Shoulder Paving Alternates. Substantial erosion of the existing cut under the McIntosh Road Bridge in Hopkins County poses a threat of future undercutting of the existing overhead bridge abutments. Slope protection will be installed on the slopes under each abutment.

### III. MATERIALS

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

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Dense Graded Aggregate.** Crushed Stone Base may not be furnished in lieu of DGA where specified
- C. **Crushed Stone Base.** DGA may not be furnished in lieu of CSB where specified.
- D. **Pavement Markings -6 inch.** Use Durable Waterborne Markings for permanent striping (12 inch at entrance and exit ramp tapers).
- E. **Crushed Aggregate Size No. 2's, 3's or 23's.** Crushed Aggregate Size No. 2, No. 3 and No. 23 will be limestone.
- F. **Channel Lining Class II & III.** Channel lining will be limestone and is to be placed at pipe outlets and in ditch repair locations as directed by the Engineer. Also, a quantity of Class B Concrete has been included to partially or fully grout the channel lining in some areas where Class III is placed as the Engineer directs.
- G. **Erosion Control Blanket.** Erosion control blanket is to be placed in all ditching areas when ditching is complete, on slope stabilization areas, median grading, or as directed by the Engineer. Use Seed Mixture No. 1. Apply erosion control blanket to areas requiring seeding.
- H. **Type V High Strength Geotextile Fabric.** Conform to section 843 of the Standard Specifications.

### IV. CONSTRUCTION METHODS

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Be responsible for all site preparation. Do not disturb existing signs unless required by the work. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration, temporary and permanent erosion and pollution control; and all incidentals. Site preparation will be only as approved or directed by the Engineer. Other than the bid items listed, no direct payment will be made for site preparation, but will be incidental

to the other items of work.

- C. **Disposal of Waste.** Dispose of all cuttings, debris, and other waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. The contractor will be responsible for obtaining any necessary permits for this work. Temporary openings in the right of way fence for direct access to waste sites off the right of way or for access to other public roads will not be allowed. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits, but will be incidental to the other items of the work.
- D. **Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. I (incidental to "Erosion Control Blanket"). These items are incidental to other items in the contract unless associated with a prescribed item of work.
- E. **Guardrail.** Remove, replace and extend guardrail and guardrail End Treatments listed in the Guardrail Summary or as directed by the Engineer. Quantities are approximate only. Actual locations will be determined by the Engineer at the time of construction. Grade and reshape shoulders to proper template for new End Treatment. Utilize DGA for embankment when required for new end treatments. 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. Use 7' posts for all guardrail installed on the project.
- F. **Pavement Striping and Inlaid Pavement Markers.** Permanent striping will be in accordance with Section 112, except that:
  - (1). Striping will be 6" in width, except 12" in gore area, splitter islands and chevrons.
  - (2). Permanent striping will be in place before a lane is opened to traffic; and
  - (3). Permanent striping will be Durable Waterborne Markings.
  - (4). Pavement Markers shall be installed per Standard Drawings TPM-105-03 (Arrangement C), TPM-125-03, TPM-130-03 and TPM-135-03.
- G. **On-Site Inspection.** In accordance with section 102.06, each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.



- H. **Caution:** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information above.
- I. **Utility Clearance.** It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.
- J. **Waterblasting Striping Removal.** Contrary to Section 713.03.04 of the Standard Specifications, the abrasive method for removing striping shall not be permitted on this project. All striping removal required on this project will be by Waterblasting methods.
- K. **Longitudinal Edge Drains.** Edge drains will be replaced on this project prior to paving. An outlet schedule has been provided. Outside drains will outlet in headwall in fill sections and in ditch sections with wide ditches. For typical ditch sections scheduled to receive slope correction treatment by installation of #2 Crushed Stone, the non-perforated pipe outlets may outlet directly into the #2 Crushed Stone fill. Median side edge drains will be 6" perforated pipe and will either outlet directly to a median box inlet, or to an 8" trunk line which will ultimately outlet into the median boxes. A quantity of remove and reset perforated pipe headwalls has been established to be used at the engineer's discretion to be used in lieu of new installations. For perforated pipe headwalls requiring removal but will not be reused, the contractor will take possession of these headwalls and dispose of them off site. Debris generated from the perforated pipe trenching operation, including excavated pipe debris is to be disposed of by the contractor off site. Perforated pipe will not be required on the high sides of superelevated curves. Field verify locations and types of all headwall prior to ordering.
- L. **Signs.** Remove all sheeting signs in conflict with the work. Protect and store signs in a safe, dry environment, free of contact with potentially damaging objects. Replace any signs damaged by the storage and handling process at no additional expense to the Department. Reinstall all signs as soon as practical and after completion of the work.
- M. **Joint Sealing.** Hot poured elastic joint seal material will be used for joint sealing, no alternates.

- N. **Fill and Grade Median.** Median Slopes will be revised from the shoulder break to a 5:1 slope to the median ditch. Furnish soil embankment capable of sustaining vegetation. Construct a 2' wide full depth DGA wedge adjacent to the new JPC pavement as shown in the typical sections. Adjust grades of existing median boxes with similar materials by methods as approved by the engineer. Grading of the median will not be required north of the bridge at MP 29.45, pavement is to be replaced at grade.
- O. **Type V High Strength Geotextile Fabric.** Place High Strength Fabric on the prepared subgrade prior to application of the stone base under driving lanes and shoulder for Exit 23 ramp construction.

## V. METHOD OF MEASUREMENT

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of work.
- C. **Crushed Aggregate Size No. 2.** Payment will be based on the tons used around perforated pipe outlet headwalls, slope repair areas, slide repair area, backfill for undercut, and other areas as directed by the Engineer.
- D. **Pavement Markers and Permanent Striping.** Permanent striping Durable Waterborne Markings (6" and 12") is measured per linear foot. See Traffic Control Plan. Inlaid Pavement Markers are measured as each per installation. No direct payment will be made for the removal of the existing pavement markers prior to the milling operation and shall be considered incidental to milling and texturing.
- E. **Temporary Striping.** Permanent striping will be applied prior to shifting traffic when possible. Only temporary striping necessary to place traffic in temporary traffic schemes will be measured for payment. No measurement for payment will be made for temporary striping for the Contractor's convenience.
- F. **Pavement Striping Removal.** Striping removal required for Maintenance of Traffic will be measured by the linear foot.
- G. **Erosion Control.** Erosion control items will be measured and paid in accordance with the Standard Specifications for Road and Bridge Construction.
- H. **Erosion Control Blanket.** Erosion Control Blanket is measured by square yard. Seeding is considered incidental to the Erosion Control Blanket in accordance with the Specifications.
- I. **Remove Paved Ditch.** Existing paved ditches on the outside slopes encountered within limits of Ditch Correction locations shall be broken and replaced/capped with Class III Channel Lining and Concrete Class B where indicated. Quantities for Channel Lining Class III, Remove Paved Ditch, and Concrete Class B have

been included in the general summary. Existing paved ditches designated for removal shall be broken (rubblized) and left in place. Existing concrete is to be broken with no fragments over a 2 feet diameter, and are to be reshaped to fill any undercutting or cavities. Apply Class III Channel Lining at an approximate thickness of 1 foot, in order to supplement the protection provided by the broken concrete and to fill any voids and cavities.

Paved ditches in the median requiring removal shall be removed and disposed of by the contractor off the project. These ditches will be replaced with new Type 1 Paved Ditches and must be removed and discarded prior to median grading.

- J. **Existing Pavement Markers.** All existing pavement markers will be removed prior to installing the asphalt bond breaker. Contrary to the Specifications pavement marker removal will not be measured for payment and will be considered incidental to other items of work.
- K. **Joint Sealing.** Sealing JPC Pavement joints is considered incidental to construction of the JPC Pavement in accordance with the specifications.
- L. **Restoration.** Restore any damaged roadway features or private property disturbed by the work or the contractor's operations in like kind materials and design as directed by the engineer at no additional cost to the Department or the property owner.
- M. **Longitudinal Edge Drains.** Payment for individual items installed will be measured in accordance with the Standard Specifications.
- N. **Fill and Grade Median.** Fill and Grade Median will be measured by the linear foot along centerline for the length of median in which embankment is placed and reshaped acceptably to the proposed cross slope.
- O. **Remove Paved Ditch.** Paved ditch removal will be measured and paid by the square yard and will include both the ditches that are removed and disposed of by the contractor off site, and the ditches that can be broken reshaped and left in place with supplemental channel lining.
- P. **Milling and Texturing.** Removal of temporary pavements may be performed by milling and texturing at the discretion of the contractor. The contractor will take possession of all excavated, milled, or otherwise removed temporary asphalt. No direct measurement or payment of Milling and Texturing for this item of work will be made. Removal of existing asphalt patches on the existing concrete will be required if present. No direct measurement for this item of work will be made.
- Q. **Type V High Strength Geotextile Fabric.** High Strength Geotextile Fabric will be measured by the square yards in accordance with the Specifications.



## VI. BASIS OF PAYMENT

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

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Other than the bid items listed, no direct payment will be allowed for site preparation, but will be incidental to the other items of work.
- C. **Dense Grade Aggregate.** See Section 302 of the Standard Specifications.
- D. **Pavement Markers and Permanent Striping.** See Traffic Control Plan.
- E. **Temporary Striping.** See Section 112 of the Standard Specifications.
- F. **Lane Closures.** Contrary to Section 112, lane closures will not be measured for payment but will be incidental to the bid item "Maintain and Control Traffic". Arrow boards, portable message boards, and signs shall be paid for one time regardless of how many times they are moved.
- G. **Ditching and Shouldering.** In accordance with Section 209 of the Standard Specifications, the bid item "Ditching and Shouldering" includes ditching on both sides of the roadway, the median and the ramps. Cleaning all drainage structures, including perforated pipe headwalls and pipe structures 36 inches in diameter or less is also included in this bid item.
- H. **Remove Paved Ditch.** The removal of the existing paved ditch shall be paid for as "square yards" and shall include the breaking and reshaping of the existing concrete in preparation for installation of the Class III Channel Lining where applicable, or removal and disposal off site where applicable.
- I. **Milling and Texturing.** No direct payment for Milling and Texturing or Mobilization for Milling and Texturing will be made.
- J. **Pavement Removal.** Removal of existing mainline pavement, existing ramp pavement and existing shoulders required for full depth pavement replacement will be measured by the square yard and will include removal of either asphalt pavement or concrete pavement. Removal of temporary pavement used in diversions, crossovers, or temporary pavement tapers will not be measured for payment. Removal of existing patches over existing concrete and removal of temporary pavement wedges will not be measured for payment.
- K. **Waterblasting Striping Removal.** Removal of striping required by the maintenance of traffic plan will be measured for payment on this project.
- L. **Fill and Grade Median.** The item Fill and Grade Median will be measured by the

linear feet of median along centerline adjusted to the revised grade and cross slope.

- M. **Portable Changeable Message Signs.** Portable Changeable Message Signs will be paid as each, and contrary to the Special Note for Portable Changeable Message Signs, **WILL** become the property of the Department upon completion of the project.
- N. **Permanent Sheeting Signs.** Sheeting signs removed and reinstalled will not be measured for payment but will be considered incidental to other items of work.
- O. **Type V High Strength Geotextile Fabric.** Type V High Strength Geotextile Fabric will be paid by the square yard as “High Strength Geotextile Fabric”.

**PENNYRILE PARKWAY  
CHRISTIAN AND HOPKINS COUNTIES  
NHPP 0411(026)  
FD52 024 9004 016-028  
FD52 054 9004 028-030  
Item No. 2-2082**

**MP 16.566 TO MP 29.900 NORTHBOUND and SOUTHBOUND**

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1. 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 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 otherwise specified in the Proposal.
2. The contractor is to be advised of the locations of overhead utility wires on the project. The following locations are approximate:

MP. 18.454  
M.P. 19.703  
MP. 21.208  
M.P. 22.858  
M.P. 24.769  
M.P. 29.145

**CAUTION:** Other overhead utility 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.

3. The contractor is advised that the planned locations of work established by milepoints are referenced from the Kentucky Transportation Cabinet's Official Route Log. The existing reference markers may not correspond to the established work locations.
4. Existing pavement slopes were designed at 3/16" per foot of cross slope in normal crown sections. Apply bondbreaker asphalt at variable depth, 1" minimum, to increase pavement cross slopes to 2% in normal crown sections. Construct superelevated sections to the original superelevation rate and consistently through the superelevated sections. Provide a uniform transition, consistent with AASHTO and KYTC Standard Drawings between normal crown sections and superelevated sections. A detailed plan of proposed profile and cross slope grades will be required. See Special Note for Proposed Pavement Grades.



5. Temporary guardrail end treatments are to be installed on the existing trailing ends where traffic is to be placed in two-way traffic schemes on existing pavement. All guardrail on this project is scheduled for replacement. Locations given are approximate and may be adjusted by the engineer.
6. The Contractor shall deliver existing salvaged guardrail system materials to the Central Sign Shop and Recycle center at 1224 Wilkinson Blvd in Frankfort, KY. Contact Section Supervisor at (502) 564-8187 to schedule the delivery of material. Deliver the material between the hours of 8:00AM and 3:30PM, Monday through Friday. There is a Guardrail Delivery Verification Sheet which must be completed and signed by the Contractor, Engineer and a representative of the Central Sign Shop and Recycle Center. A copy of this sheet is included elsewhere in the proposal.
7. Delineators shall meet the requirements of Section 830 and 838 of the Standard Specifications, and be placed in accordance with Section 3D of the M.U.T.C.D., current edition.
8. The speed limit on the project will be reduced to 55 mph while lane closures are in place. Any time work is suspended and four lane traffic is restored the speed limit will revert back to 70 mph. Also, double fine signs are set up in the project to be installed while workers are present in the work zone.
9. Typical ditch slope modifications. Typical ditch slopes will be flattened to 4:1 by filling with #2 crushed aggregate. A detail has been provided. Perform ditching operations to clean the existing ditch and ensure the ditch will positively drain after application of the #2 crushed aggregate. Non perforated pipe from the edge drain system will outlet directly into the crushed aggregate.
10. The existing edge drain system will be replaced. All existing edge drains and the non-perforated pipe outlet pipes, as well as perforated pipe headwalls are to be removed and disposed of off site. Field verify the locations and types of headwalls listed in the summary prior to ordering materials. A 4" perforated pipe will be installed adjacent the outside lanes and outlet to the fill slopes and to the wider cut slopes by headwalls. Outlets in typical ditches receiving Crushed Aggregate #2 for slope modification can be installed directly into the #2 Stone. Ditches must be cleaned of debris prior to application of the #2 Stone. 6" perforated pipe will be installed adjacent the inside lanes and outlet either directly to median box inlets or into a proposed 8" trunkline.
11. A bid item for "Remove and Reset Perforated Pipe Headwalls" has been established to be used at the engineer's discretion in lieu of replacing and installing a new headwall. "Remove and Reset Perforated Pipe Headwalls" will be full compensation in order to remove the existing headwall, cleaning the headwall of debris, install a new rodent screen, and reinstall the headwall to slope 4% to insure positive outflow. The existing

pipe and headwalls to be removed and replaced instead of removed and reset shall become the property of the contractor and disposed of off the project. Outlet pipes and headwalls are to be located where existing perforated pipe headwalls occur in the field if practical. Some headwalls were not discovered during the initial survey. The contractor shall space outfall pipes and headwalls per notes on the edge drain detail. Removal and disposal of existing perforated pipe outlets is incidental to other items of work. There are quantities of Crushed Aggregate Size No. 2 to be utilized in accordance with standard drawing RDP-010-08 around the headwall for both new headwalls and re-installed headwalls.

12. Perforated pipe headwall types are to be field verified prior to ordering. Class 2 Asphalt Base 1.0D PG64-22 shall be used in the trench cap to bring the top of trench elevation back to the original grade prior to milling and resurfacing (See Typical Section). Separate quantities for the asphalt cap have been included in the summaries.
13. The existing paved median U-turns will be overlaid throughout the project. Unpaved gravel crossings will not be paved. Ensure median box inlets in the vicinity of a paved median U-turn are adjusted to meet requirement of RPM 001-04.
14. The contractor will be allowed to access the project and cross the median provided proper lane closures of the inside lanes and flaggers are utilized at the entry and exit locations.
15. Quantities of Channel Lining Class II and Class III have been included to be used in eroded areas around pipe inlet/outlets or in ditches to be repaired as directed and/or approved by the Engineer. The actual limits of the channel lining will be as directed and/or approved by the Engineer. Geotextile Fabric Type I, as outlined in Section 214 of the Standard Specifications, will not be measured for payment and will be considered incidental to channel lining.
16. The contractor is to take care not to damage any existing roadway signs. Any roadway signs that are damaged during construction are to be replaced at the contractor's expense in accordance with section 105.08 of the standard specifications.
17. The contractor is to take care not to damage any existing light poles and wiring. Any light poles or wiring that is damaged during construction is to be replaced at the contractor's expense in accordance with section 105.08 of the standard specifications. High mast lighting is present at the KY800 interchange. The contractor is responsible for identifying the location of conduit and conductors prior to excavation. Excavation for ramp shoulder construction may be modified from the typical sections to eliminate daylighting of the stone wedge if necessary to avoid conflict with high mast lighting circuits. As-built lighting plans are available for this interchange and will be provided.

18. The cleaning of existing pipe culvert inlets and outlets 36 inches or less in diameter are incidental to the bid item for "Ditching and Shouldering" in accordance with Section 209 of the 2012 Edition of the Standard Specifications for Road and Bridge Construction. This includes the cleaning of existing perforated pipe headwalls.
19. Any embankment and backfill for "Culvert Pipe – 15 IN", "Culvert Pipe – 18 IN", "Culvert Pipe – 24 IN", "Culvert Pipe – 30 IN", and "Culvert Pipe – 36 IN" installation is incidental to the respective bid item.
20. Apply "Joint Adhesive" in accordance with "Special Note for Joint Adhesive". Additionally, apply the adhesive immediately prior to paving the adjoining lane. Re-apply the "Joint Adhesive" when paving is not completed within 48 hours of the initial application. No additional payment will be considered for the re-application of the joint adhesive.
21. Any embankment and backfill for the culvert pipe installation is incidental to the respective bid item.
22. Connect proposed pipe to the existing pipe with a concrete collar. Payment for the concrete collar will be to the neat lines specified in the Concrete Collar detail. Concrete Class – A, per cubic yard and Steel Reinforcement by the LB.
23. A detail has been provided for the installation of slopewalls under the McIntosh Road Bridge. The existing cut slopes under the existing abutments are experiencing significant erosion jeopardizing the long term stability of the abutments. Construct a slopewall per the detail included and in accordance with the current Standard Drawings for the cut slope adjacent to both the northbound lane and the southbound lane. Construct the slopewall with a smooth constant face. Per the Standard Drawings, the thickness of the slopewall will vary with the undulations of the existing underlying rock layer, filling voids, and rills with a minimum thickness of 6". Remove any loose rock, vegetation or soil prior to forming and casting the slopewalls. Consult with the engineer for approval prior to performing any excavation that will modify the existing rock cut surface.
24. A detail has been provided for the repair of an existing slide at southbound milepost 17.650 – 17.659. This slide is approximately 45 feet in length. Remove the soil material to the limits shown on the Slide Repair Detail, or as directed by the engineer. Disposed of excavated soil off the project. All excavation and other work necessary to prepare the site for installation of the geotextile fabric and #2 stone backfill will be considered incidental to other items of work. Only the items established for bid in the Slide Repair Detail will be considered for payment.
25. Striping in exit gore areas and striping intended to outline exit ramp splitter islands will be 12" in width. Existing raised splitter island at the Exit 23 ramp termini will be paved flush and outlined with 12" paint. Install chevrons with 12" paint in the gore areas on 10' spacing. Install chevrons in the splitter islands with 12" paint on 12" spacing. Consult with District 2 Traffic for locations and orientation of chevrons. Chevrons will be paid for as Durable Waterborne Marking 12- In W.

## 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 – 2009 Edition.
3. Kentucky Department of Highways Standard Drawings, current editions, as applicable:
  - BGX-004-09 CONCRETE SLOPEWALLS FOR GRADE SEPARATION BRIDGES
  - BGX-005-09 CONCRETE SLOPEWALLS FOR GRADE SEPARATION BRIDGES
  - RBB-002-09 GUARDRAIL AND BRIDGE END DRAINAGE FOR TWIN STRUCTURES
  - RBB-003-03 LAYOUT OF GUARDRAIL AT TWIN STRUCTURES-DEPRESSED  
MEDIAN
  - RBB-010-05 GUARDRAIL TRANSITION FROM NORMAL SHOULDER TO NARROW  
BRIDGE
  - RBC-002-03 GUARDRAIL CONNECTOR TO BRIDGE END TYPE A COMPONENTS
  - RBC-003-08 GUARDRAIL CONNECTOR TO BRIDGE END TYPE A AND A1  
COMPONENTS
  - RBC-004-07 GUARDRAIL CONNECTOR TO BRIDGE END TYPE D
  - RBC-005 GUARDRAIL CONNECTOR TO BRIDGE END TYPE A
  - RBC-006 GUARDRAIL CONNECTOR TO BRIDGE END TYPE A-1
  - RBE-070-06 CONCRETE MEDIAN BARRIER END FOR CRASH CUSHION TYPE IX
  - RBE-100-10 CRASH CUSHION TYPE VI-BT & CT
  - RBE-200-06 CRASH CUSHION TYPE IX
  - RBE-205-06 CRASH CUSHION TYPE IX-A
  - RBI-001-011 TYPICAL GUARDRAIL INSTALLATIONS
  - RBI-002-07 TYPICAL GUARDRAIL INSTALLATIONS
  - RBI-003-09 TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A
  - RBI-004-05 INSTALLATION FOR GUARDRAIL END TREATMENT TYPE I
  - RBI-007-09 CRASH CUSHION TYPE IX INSTALLATION AT MEDIAN PIERS  
(DEPRESSED MEDIAN)
  - RBM-115-10 CONCRETE BARRIER WALL TYPE 9T (TEMPORARY)
  - RBR-001-12 STEEL BEAM GUARDRAIL (W-BEAM)
  - RBR-005-11 GUARDRAIL COMPONENTS
  - RBR-010-06 GUARDRAIL TERMINAL SECTIONS
  - RBR-015-05 GUARDRAIL POSTS
  - RBR-020-06 GUARDRAIL END TREATMENT TYPE 1
  - RBR-025-05 GUARDRAIL END TREATMENT TYPE 2A
  - RBM-030-05 GUARDRAIL END TREATMENT TYPE 3
  - RBR-035-11 GUARDRAIL END TREATMENT TYPE 4A
  - RBR-055 DELINEATORS FOR GUARDRAIL
  - RDB-001-11 DROP BOX INLET TYPE 1
  - RDB-105-06 SLOPED AND FLARED BOX INLET-OUTLET 18"-24"-30"-36"
  - RDB-106-05 GRATES FOR SLOPED AND FLARED BOX INLET-OUTLET
  - RDD-001-06 PAVED DITCH TYPE 1



RDD-020-07	FLUME INLET TYPE 1
RDD-021-07	FLUME INLET TYPE 2
RDD-040-05	CHANNEL LINING CLASS II AND III
RDI-001-10	CULVERT, ENTRANCE, & STORM SEWER PIPE TYPES AND COVER HEIGHTS
RDI-002-05	CULVERT, ENTRANCE, & STORM SEWER PIPE TYPES AND COVER HEIGHTS
RDI-020-09	PIPE BEDDING FOR CULVERTS ENTRANCE AND STORM SEWER PIPE
RDI-021-01	PIPE BEDDING FOR CULVERTS ENTRANCE AND STORM SEWER REINFORCED CONC. PIPE
RDI-025-05	PIPE BEDDING TRENCH CONDITION
RDI-026-01	PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE
RDI-035-02	COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE
RDI-040-01	EROSION CONTROL BLANKET SLOPE INSTALLATION
RDI-041-01	EROSION CONTROL BLANKET CHANNEL INSTALLATION
RDP-001-06	PERFORATED PIPE TYPES AND COVER HEIGHTS
RDP-010-09	PERFORATED PIPE HEADWALLS
RDX-001-06	JUNCTION BOX
RDX-002-04	JUNCTION BOX (DIMENSIONS & QUANTITIES)
RDX-160-06	SECURITY DEVICES FOR FRAMES, GRATES AND LIDS
RDX-210-03	TEMPORARY SILT FENCE
RDX-220-05	SILT TRAP - TYPE A
RDX-225-01	SILT TRAP - TYPE B
RDX-230-01	SILT TRAP - TYPE C
RGS-001-07	CURVE WIDENING AND SUPERELEVATION TRANSITIONS
RGS-002-06	SUPERELEVATION FOR MULTI-LANE PAVEMENT
RPM-100-10	CURB AND GUTTER, CURBS AND VALLEY GUTTER
RPM-120-07	ISLAND CURB CONSTRUCTION DETAILS
RPN-001-07	JOINTED PLAIN CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS
RPN-010-07	PAVEMENT TRANSITIONS & JOINT DETAILS FOR JOINTED PLAIN CONCRETE PAVEMENT AT BRIDGE ENDS
RPN-015-05	JOINTED PLAIN CONCRETE
RPN-020-04	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-010-11	CONCRETE PAVEMENT JOINT DETAILS
RPS-020-14	EXPANSION AND CONTRACTION JOINT LOAD TRANSFER ASSEMBLIES
RPS-030-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-031-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-032-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-033-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-034-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-035-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-036-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING
RPS-037-06	CONCRETE PAVEMENT JOINTS TYPES AND SPACING

- RPS-038-06 CONCRETE PAVEMENT JOINTS TYPES AND SPACING
- RPS-039-06 CONCRETE PAVEMENT JOINTS TYPES AND SPACING
- RPX-001-04 STATION MARKINGS CONCRETE PAVEMENT
- RPX-015-04 HOT-POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT
- TPM-105-03 PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- TPM-125-03 PAVEMENT MARKER ARRANGEMENT EXIT-GORE AND OFF-RAMP
- TPM-130-03 PAVEMENT MARKER ARRANGEMENTS ON-RAMP WITH TAPERED ACCELERATION LANE
- TPM-135-03 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 INTERCHANGE RAMPS AND CROSSEOVERS
- TTC-115-02 LANE CLOSURE MULTI-LANE HIGHWAY CASE I
- TTC-120-02 LANE CLOSURE MULTI-LANE HIGHWAY CASE II
- TTC-135-01 SHOULDER CLOSURE
- TTC-145-03 MEDIAN Crossover CASE II
- TTC-146-03 MEDIAN Crossover CASE II
- TTD-110-01 POST SPLICING DETAIL
- TTD-120 WORK ZONE SPEED LIMIT AND DOUBLE FINE SIGNS
- TTD-125 PAVEMENT CONDITION WARNING SIGNS
- TTS-110-01 MOBILE OPERATION FOR PAINT STRIPING CASE III
- 4TTS-115-01 MOBILE OPERATION FOR PAINT STRIPING CASE IV

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

- Special Note 1I Portable Changeable Message Signs *attached*
- Special Note Typical Section Dimensions *attached*
- Special Note Before You Dig *attached*
- Special Note Guardrail Delivery Verification Sheet *attached*
- Special Note Fixed Completion Date and Liquidated Damages *attached*
- Special Note Longitudinal Pavement Joint Adhesive *attached*
- Special Note Inlaid Pavement Markers *attached*
- General Note 555 JPC Pavement Ride Quality *attached*
- General Note 447 Compaction of Asphalt Mixtures *attached*
- Special Note Longitudinal Pavement Joint Adhesive *attached*
- Special Note Special Note for Significant Project-Project Traffic Coordinator *attached*
- Special Note Special Note for Shoulder Paving Alternates *attached*
- Special Note Special Note for Roller Compacted Concrete *attached*
- Special Note Special Note for Channel Lining and Paved Ditch Removal *attached*
- Special Note Special Note for JPC Pavement Joint Sealant
- Special Note Special Note for Staking *attached*
- Public Inf. Plan Public Information Plan *attached*
- Special Note Special Note for Surface Preparation (Waterblasting) *attached*
- Special Note Special Note for Dowel Bar & Tie Bar Placement in JPC Pavement *attached*
- Special Note Special Note for Longitudinal Texturing of Concrete Pavement *attached*
- Special Note Special Note for Pavement Types *attached*

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

### **PENNYRILE PARKWAY CHRISTIAN AND HOPKINS COUNTIES ITEM NO. 2-2082**

**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.
  - 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 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

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

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed 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 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.

Contract Id: \_\_\_\_\_ Contractor: \_\_\_\_\_

Section Engineer: \_\_\_\_\_ District & County: \_\_\_\_\_

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 MAINT. FACILITY	LF	_____	_____
DAMAGED POSTS TO MAINT. FACILITY	EACH	_____	_____

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

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

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

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

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

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

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

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

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

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

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



### **SPECIAL NOTE FOR FIXED COMPLETION DATE AND LIQUIDATED DAMAGES**

Contrary to Section 108.09 of the Standard Specifications, Liquidated Damages of \$5,000 per calendar day will be assessed for each day work remains incomplete beyond the Specified Completion Date. This project has a Fixed Completion Date of August 31, 2019.

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.**

Contractor should also be aware of the Liquidated Damages notes for the MOT phasing and replacement of the Tubular Markers. (See Traffic Control Plan)

All applicable liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

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## **SPECIAL NOTE FOR LONGITUDINAL PAVEMENT JOINT ADHESIVE**

1. **DESCRIPTION.** This specification covers the requirements and practices for applying an asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement. Apply the adhesive to the face of longitudinal joint between driving lanes for the first lane paved. Then, place and compact the adjacent lane against the treated face to produce a strong, durable, waterproof longitudinal joint.
2. **MATERIALS, EQUIPMENT, AND PERSONNEL.**

2.1 Joint Adhesive. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide an adhesive conforming to the following requirements:

Property	Specification	Test Procedure
Viscosity, 400 ° F (Pa·s)	4.0 – 10.0	ASTM D 4402
Cone Penetration, 77 ° F	60 – 100	ASTM D 5329
Flow, 140 ° F (mm)	5.0 max.	ASTM D 5329
Resilience, 77 ° F (%)	30 min.	ASTM D 5329
Ductility, 77 ° F (cm)	30.0 min.	ASTM D 113
Ductility, 39 ° F (cm)	30.0 min.	ASTM D 113
Tensile Adhesion, 77 ° F (%)	500 min.	ASTM D 5329, Type II
Softening Point, ° F	171 min.	AASHTO T 53
Asphalt Compatibility	Pass	ASTM D 5329

Ensure the temperature of the pavement joint adhesive is between 380 and 410 °F when the material is extruded in a 0.125-inch-thick band over the entire face of the longitudinal joint.

2.2. Equipment.

2.2.1 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with any needed agitation and recirculating systems.

2.2.2 Applicator System. Provide a pressure-feed-wand applicator system with an applicator shoe attached.

2.3 Personnel. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

3. **CONSTRUCTION.**

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air.

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Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face.

3.2 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40 ° F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the cold joint. Apply the adhesive in a continuous band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Ensure the edge of the extruded adhesive material is flush with the surface of the pavement. Then, place and compact the adjacent lane against the joint face. Remove any excessive material extruded from the joint after compaction (a small line of material may remain).

3.3 Pavement Joint Adhesive Certification. Furnish the joint adhesive's certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a random sample of pavement joint adhesive from each manufacturer's lot of material. Extrude two 5 lb. samples of the heated material and forward the sample to the Division of Materials for testing. Reynolds oven bags, turkey size, placed inside small cardboard boxes or cement cylinder molds have been found suitable. Ensure the product temperature is 400°F or below at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of Pavement Joint Adhesive in linear feet. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of Pavement Joint Adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the Pavement Joint Adhesive.
5. PAYMENT. The Department will pay for the Pavement Joint Adhesive at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

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Pavement Joint Adhesive Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Joint Adhesive Referenced in Subsection 2.1.1						
Viscosity, 400 ° F (Pa•s)			3.0-3.4	2.5-2.9	2.0-2.4	≤1.9
ASTM D 3236	4.0-10.0	3.5-10.5	10.6-11.0	11.1-11.5	11.6-12.0	≥ 12.1
Cone Penetration, 77 ° F			54-56	51-53	48-50	≤ 47
ASTM D 5329	60-100	57-103	104-106	107-109	110-112	≥ 113
Flow, 140 ° F (mm) ASTM D 5329	≤ 5.0	≤ 5.5	5.6-6.0	6.1-6.5	6.6-7.0	≥ 7.1
Resilience, 77 ° F (%) ASTM D 5329	≥ 30	≥ 28	26-27	24-25	22-23	≤ 21
Tensile Adhesion, 77 ° F (%) ASTM D 5329	≥ 500	≥ 490	480-489	470-479	460-469	≤ 459
Softening Point, ° F AASHTO T 53	≥ 171	≥ 169	166-168	163-165	160-162	≤ 159
Ductility, 77 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9
Ductility, 39 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9

Code  
20071EC

Pay Item  
Joint Adhesive

Pay Unit  
Linear Foot

May 7, 2014



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.

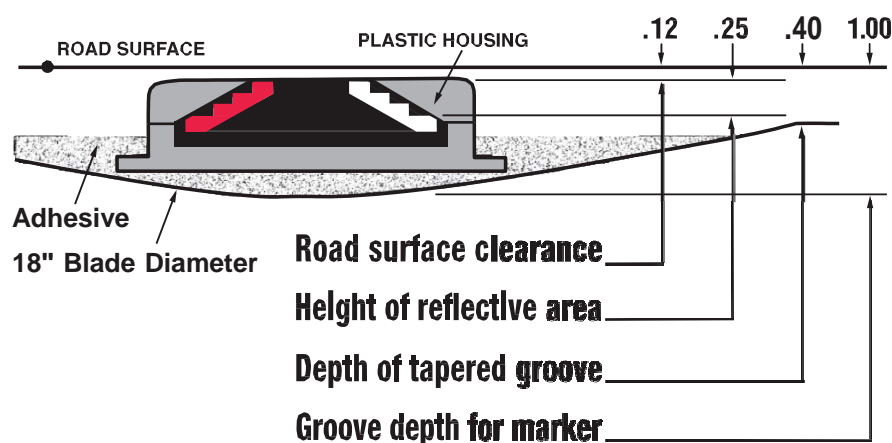
SPECIFICATIONS FOR HOUSING AND REFLECTOR	
Material:	Polycarbonate Plastic
Weight:	Housing 2.00 oz.
	Reflector 2.00 oz.
Housing Size:	5.00" x 3.00" x 0.70" high
Specific Intensity of Reflectivity at 0.2° Observation Angle	
White:	3.0 at 0° entrance angle
	1.2 at 20° entrance angle
Yellow:	60% of white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

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

### III. CONSTRUCTION

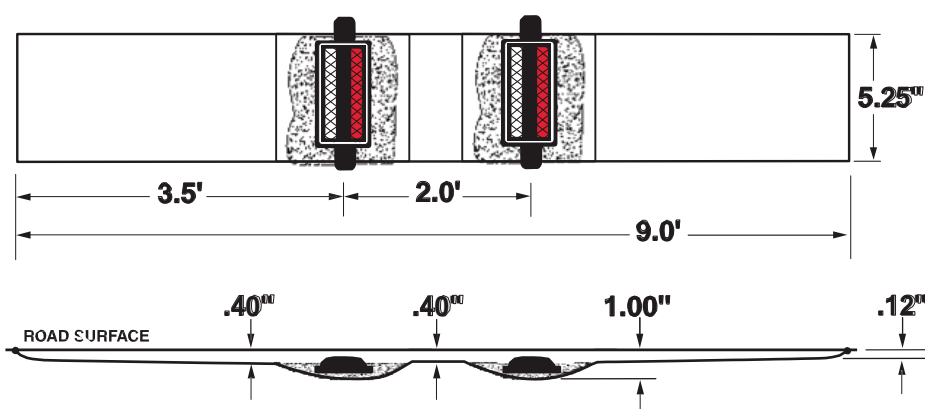
- A. Experimental Evaluation.** The University of Kentucky Transportation Center will be evaluating this installation of IPMs. Notify the Engineer a minimum of 14 calendar days prior to beginning work. The Engineer will coordinate the University's activities with the Contractor's work.
- B. Maintain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



**GENERAL NOTE 555**  
**JPC PAVEMENT RIDE QUALITY**

Apply JPC Pavement smoothness requirements, in accordance with subsection 501.03.19 of the Standard Specifications, on this project. Category A shall apply.

**GENERAL NOTE 447**  
**COMPACTION OF ASPHALT MIXTURES**

Will accept the compaction of asphalt mixtures furnished for the driving lanes and ramps at one inch or greater on this project by option A according to subsections 402 and 403 of the Standard Specifications, Current Edition. Use joint cores as described in subsection 402.03.02 for surface mixtures only. Will accept the compaction of all other asphalt mixtures by option B.

**Significant Project- Project Traffic Coordinator (PTC)**

Be advised this project is a significant project pursuant to section 112.03.12.

## SPECIAL NOTE FOR SHOULDER PAVING ALTERNATES

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

**1.0 DESCRIPTION.** Alternate paved shoulder materials will be allowed to be used on this project for the outside shoulders (right side in the direction of travel) only. The contractor may choose between JPC Pavement – 9 in Shld, RCC Shoulders – 9 in, and asphalt mixes for shoulders. Inside shoulders and all other pavement and shoulder applications shall be installed using the materials specified (no alternates). Inside mainline shoulders will be JPC Pavement – 9 in Shld (no alternates).

### 2.0 MATERIALS AND EQUIPMENT.

**2.1 JPC Pavement – 9 in Shld.** Conform to KYTC Standard Specifications.

**2.2 RCC Pavement – 9 in.** See Special Note for Roller Compacted Concrete *attached*.

**2.3 Asphalt .** For use of asphalt mixes for outside shoulder paving, use the following mixes and thicknesses. Conform to KYTC Standard Specifications.

3.75" CL2 Asph Base 1.00D PG64-22

3.75" CL2 Asph Base 1.00D PG64-22

1.50" CL2 Asph Surf 0.38D PG64-22

**3.0 CONSTRUCTION.** Prepare the shoulder surface for paving in accordance with the KYTC Standard Specifications. Place SS1H and extend the 1" CL2 Asph Surf .38D bond breaker across the existing shoulder regardless of shoulder materials used to provide a uniform platform. Shoulder paving alternates will only be accepted for the mainline outside shoulders (right side in the direction of travel). The contractor may choose to use any of the three materials at the thicknesses specified herein. Construct the appropriate shoulder rumble strips in accordance with the KYTC Standard Specifications, Standard Drawings, current Sepias or Special Note, and in sequence with the Traffic Control plan for the chosen alternate.

**3.1 JPC Pavement – 9 in Shld.** Conform to Section 501 of the Standard Specifications and applicable Standard Drawings. Finish and cure concrete and construct and seal joints as required.

**3.2 RCC Pavement – 9 in.** See Special Note for Roller Compacted Concrete *attached*.

**3.3 Asphalt.** Place mixes specified herein at the compacted depths specified. Conform to Section 400 of the Standard Specifications.

**4.0 MEASUREMENT.** The Department will measure the quantity in square yards. Regardless of the materials alternate chosen, the square yards of outside shoulders acceptably constructed will be measured as square yards of JPC Pavement – 9 in Shld. In accordance with Section 501.04.04, no payment will be made for Type 3 Rumble Strips, or any shoulder rumble strips required by a chosen paving alternate, on the outside shoulders in areas not used to maintain traffic. If asphalt pavement is chosen, construct concrete header instead of standard integral curb. Quantity measured will be "Standard Integral Curb Modified" regardless of the type curb constructed. Per Section 501.01.04, measurement and payment of Type 3 rumble strips will be the actual quantity required by the maintenance of traffic plan measured for JPC shoulders or the theoretical quantity required for JPC shoulders if other alternates are chosen.

**5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following regardless of the paving alternate chosen:

Code 2082 JPC PAVEMENT – 9 IN SHLD

per SQ. YD.

10/4/10



## SPECIAL NOTE FOR ROLLER COMPACTED CONCRETE (RCC)

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** Roller Compacted Concrete (RCC) consists of aggregate, Portland cement, possibly mineral admixtures, and water. RCC is proportioned, mixed, placed, compacted, and cured in accordance with these specifications. Ensure that the RCC conforms to the lines, grades, thickness, and typical cross section shown in the plans or otherwise established by the Engineer. When used as base course, it will be covered with one or more lifts of asphalt as shown on the Plans. Otherwise, the RCC will provide the final riding surface.

### 2.0 MATERIALS AND EQUIPMENT.

**2.1 Portland Cement.** Use Type I or II Portland cement conforming to Section 801.

**2.2 Mineral Admixtures.** Conform to Section 844. The Department will allow up to 40 percent, by weight, of the total cementitious content to be mineral admixtures with individual limits on each type as follows:

Mineral Admixture	Maximum by Weight of Cementitious Content
Class F Fly Ash	20%
Class C Fly Ash	30%
Ground Granulated Blast Furnace Slag	30%
Microsilica	10%

**2.3 Aggregate.** Conform to Sections 804 and 805. Use well-graded aggregate without gradation gaps and conforming to the following:

Sieve Size	Percent Passing by Weight
1 inch	100
3/4 inch	90-100
1/2 inch	70-100
3/8 inch	60-85
No. 4	40-60
No. 16	20-40
No. 100	6-18
No. 200	2-8

**2.4 Water.** Conform to Section 803.

**2.5 Curing Compound.** Conform to Section 823.

**2.6 Concrete Plant.** Conform to Section 601. Ensure the mixing plant is within a 30-minute haul time from the point of RCC placement. Use only plants capable of producing an RCC pavement mixture in the proportions defined by the final approved mix design and within the

specified tolerances. The capacity of the plant must be sufficient to produce a uniform mixture at a rate compatible with the placement equipment. If the plant is unable to produce material at a rate adequate to prevent unnecessary cold joints and frequent paver stoppages, the Engineer may halt production until such time that a plant of appropriate capacity is used.

**2.7 Paver.** For placing lifts 6 inches or less in depth, conform to 403.02.07 and ensure that the paver is of suitable weight and stability to spread and finish the RCC material, without segregation, to the required thickness, smoothness, surface texture, cross-section, and grade. For lifts greater than 6 inches, use only high-density asphalt-type pavers approved by the Engineer. Use only high-density pavers equipped with compacting devices that are capable of producing an RCC pavement with a minimum of 90 percent of the maximum density in accordance with AASHTO T 180, Method D prior to any additional compaction.

**2.8 Compactors.** Use self-propelled steel drum vibratory rollers having a minimum static weight of 10 tons for primary compaction. For final compaction, use either a steel drum roller, operated in a static mode, or a rubber-tired roller of equal or greater weight. Only use walk-behind vibratory rollers or plate tampers for compacting areas inaccessible to large rollers.

**2.9 Haul Trucks.** Use dump trucks equipped with retractable protective covers for protection from rain or excessive evaporation. Use a sufficient number of trucks to ensure an adequate and continuous supply of RCC material to the paver. If the number of trucks is inadequate to prevent frequent starts and stops of the paver, cease production until additional trucks are obtained.

**2.10 Water Trucks.** Keep at least one water truck, or other similar equipment, on-site and available for use throughout the paving and curing process. Equip such equipment with a spreader pipe containing fog spray nozzles capable of evenly applying a fine spray of water to the surface of the RCC without damaging the final surface.

### **3.0 CONSTRUCTION.**

**3.1 RCC Mix Design.** At least 45 days prior to the beginning of placing of RCC in the roadway, submit a proposed mix design to the Engineer. If RCC has not been provided to the Department under the submitted mix design a trial batch will be required. Perform batch mixture preparation and testing in the presence of representatives of the District Materials Engineer and the Central Office Division of Materials. Deliver no concrete to the project until an approved mix design has been obtained.

**3.2 Trial Batch.** Use a mix design that demonstrates a compressive strength of 3500 psi within 28 days. If the pavement is to be opened earlier than 28 days, base the trial batch strengths on the proposed schedule of opening. If the concrete mixture is a design that the producer has not previously furnished to a Department project, have the producer provide trial batches of at least 4 cubic yards to demonstrate that the mixture will conform to the requirements for slump, density, and strength at the placement time frames the project will require. Have the producer make the trial batches using the ingredients, proportions, and equipment (including batching, mixing and delivery time with pavers and proposed rollers) to be used on this project. Have the producer make at least 2 consecutive trial batches conforming to all specified

requirements. Trial batches may be placed on the project, but at a quantity not to exceed 20 cubic yards. Central Office Materials will observe all phases of the trial batches. Provide cores and batch tickets along with a report containing mix proportions and actual gradations for each trial batch to the Engineer for Central Office Materials review and approval.

**3.3 Preparation of Subgrade.** Before the RCC processing begins, prepare the subgrade in accordance with Section 207. Prior to RCC placement, ensure that the surface of the subbase is clean and free of foreign material, ponded water, and frost. Ensure that the subbase is uniformly moist at the time of RCC placement. If sprinkling of water is required to remoisten certain areas, ensure that the method of sprinkling will not form mud or pools of freestanding water.

**3.4 Weather Limitations and Protection.** Conform to 501.03.05. Additionally, conduct no placement of RCC pavement during rain conditions. Placement may continue during very light rain or mists provided the surface of the RCC pavement is not eroded, diluted, or damaged in any way. Use dump truck covers during these periods. The Engineer may terminate paving at any time when, in the Engineer's judgement, the rain is detrimental to the finished product.

**3.5 Mixing.** Mix according to 601.03.08. Use the same mixture for the entire project unless otherwise stated in the Contract. If, during production, a material source of is changed, then suspend production and submit a new mix design to the Engineer for approval. Do not exceed the manufacturer's rated capacity for dry concrete mixtures in the mixing chamber. Keep the sides of the mixer and mixer blades free of hardened RCC or other buildups. Routinely check mixer blades for wear and replace if wear is sufficient to cause inadequate mixing.

Ensure that the mixing plant receives the quantities of individual ingredients to within the following tolerances:

Material	Variation by Weight
Cementious Materials	$\pm 1.0\%$ (-0 to +4 for Continuous Mixers)
Water	$\pm 1.0\%$
Aggregates	$\pm 2.0\%$

**3.6 Transportation.** Transport the RCC pavement material from the plant to the areas to be paved in dump trucks equipped with retractable protective covers for protection from rain or excessive evaporation. Ensure that the trucks are dumped clean with no buildup or hanging of RCC material in the corners. Have the dump trucks deposit the RCC material directly into the hopper of the paver or into a secondary material distribution system that deposits the material into the paver hopper. Dump truck delivery must be timed and scheduled so that RCC material is spread and compacted within the specified time limits.

The Department will also allow delivery by performance tested mixer trucks.

**3.7 Paving.** Do not allow the quantity of RCC material in the paver to approach empty between loads. Maintain the material above the auger at all times during paving. Ensure that the paver proceeds in a steady, continuous operation with minimal starts and stops, except to begin a new lane. Maximum paver speed during laydown is 10 feet per minute. Higher paver speeds may be allowed at the discretion of the Engineer if the higher speeds may be obtained without

distress to the final product or cause additional starts and stops. Ensure that the surface of the RCC pavement is smooth, uniform, and continuous without excessive tears, ridges, or aggregate segregation once it leaves the paver.

Broadcasting or fanning the RCC material across areas being compacted is not permissible. Such additions of materials may only be done immediately behind the paver and before any compaction has taken place. Remove any segregated coarse aggregate from the surface before rolling.

If segregation occurs in the RCC during paving operations, stop placement until the cause is determined and corrected to the satisfaction of the Engineer. If the segregation is judged by the Engineer to be severe, remove and replace the segregated area at no additional cost to the Department.

Pave all areas inaccessible to either roller or paver with cast-in-place Class A concrete.

**3.8 Compaction.** Ensure that compaction begins with the placement process and is completed within 60 minutes of the start of the mixing at the plant. The time may be increased or decreased at the discretion of the Engineer depending on ambient conditions of temperature and humidity. Do not permit delays in rolling unless approved by the Engineer. Plan operations and supply sufficient equipment to ensure that these criteria are met.

Determine the sequence and number of passes by vibratory and non-vibratory rollers to obtain the specified density and surface finish. Only operate rollers in the vibratory mode while in motion. Rubber-tire rollers may be used for final compaction. Use additional rollers if specific density requirements are not obtained or if placing operations get ahead of the rolling operations. Mark all areas where roller compaction operations do not begin within 15 minutes after spreading the RCC mix.

**3.9 Quality Control Testing.** Continuously monitor the compaction operation and make cylinders as necessary.

**3.9.1 Nuclear Density Gauges.** Conduct Field density tests using a nuclear moisture-density gauge as soon as possible, but no later than 30 minutes after the completion of the rolling. Calibrate the gauge for moisture content at the beginning of the work and at any time conditions change during the work. The required minimum density is 98 percent of the maximum laboratory density obtained according to AASHTO T 180 (Method D). If field density readings below 95% of the maximum laboratory density are obtained, stop production until the cause is determined and corrective are made to the Engineer's satisfaction. The Department will use cores to determine the acceptance density.

**3.9.2 Concrete Cylinders.** When opening to traffic prior to coring will be necessary, prepare at least two sets of test specimens in accordance with ASTM C 1435 under the direct observation of the Department for each day's production. A set of specimens consists of three cylinders.



### **3.10 Joints.**

**3.10.1 Fresh Vertical Joints.** A joint is considered a fresh joint when RCC is placed within 60 minutes of placing the previous material or as specified by the Engineer based on ambient conditions. Fresh joints do not require special treatment.

**3.10.2 Cold Vertical Joints.** Any planned or unplanned construction joints that do not qualify as fresh joints are considered cold joints. Prior to placing fresh RCC mixture against a compacted cold vertical joint, thoroughly clean the cold joint of loose or foreign material. Wet the vertical joint face and maintain it in a moist condition immediately prior to placement the fresh material.

For uncompacted surfaces or slopes more than 15 degrees from the vertical, cut the joint vertically for the full depth. Within 2 hours of final compaction, the edge of a cold joint may be cut with approved mechanical equipment. For edges cut after 2 hours, saw cut to the full depth of the pavement. Demonstrate any modification or substitution of the saw cutting procedure to the Engineer for approval prior to use. In no case allow cutting of the edge to cause raveling or tearing of the surface. Moisten the cut edge immediately prior to placement of the fresh material.

**3.10.3 Joints at Structures.** Place 1/2-inch expansion joint material against all box inlets, manholes, concrete barriers, retaining walls, bridge abutments, concrete gutter, and similar structures that project through, into, or against the pavement.

**3.10.4 Control Joints.** Construct transverse contraction joints in the RCC pavement by sawing. The Department will allow soft-cut or green-cut saws used as soon as possible behind the rolling operation and set to manufacturer's recommendations. Conventional cut saws must be used as soon as the sawing operation will not result in raveling or other damage to the RCC pavement, but no later than 18 hours after RCC placement. Cut all joints to 1/4 the depth of the RCC pavement to a single saw blade width. Joints should be spaced at maximum intervals equal to 24 times the nominal pavement thickness unless otherwise indicated on the Plans or directed by the Engineer. Ensure the joints are offset from the JPC pavement joints, as closely to mid-panel as possible.

**3.10.5 Longitudinal Construction Joints.** Saw cut 1 1/2-inch deep joints and seal with hot-pour elastic joint seal according to the Standard Drawings.

**3.11 Finishing.** Ensure that the finished surface of the RCC pavement, when tested with a 10-foot straightedge or crown surface template, does not vary from the straightedge or template by more than 1/4 inch at any one point and shall be within 5/8 inch of the specified finished grade. When surface irregularities are outside these tolerances, diamond-grind the surface to meet the tolerance at no additional cost.

**3.12 Curing.** Immediately after final rolling and compaction testing, cure according to Subsection 501.03.15. Do not use curing compounds when the RCC material is to be promptly covered with asphalt.

**3.11 Opening to Traffic.** Protect the RCC from vehicular traffic during the curing period. Completed portions of the RCC pavement may be opened for use as shoulder when cylinders or cores attain 2,500-psi strength and for traffic lane use at 3,000-psi strength.

**3.12 Thickness and Strength.** Take 2 cores to represent each 1,000 linear foot section, or portion thereof, at the locations the Engineer directs. Additionally, core all areas marked for delayed rolling. Immediately provide the cores to the Engineer at the coring site. Repair the core holes using a non-shrink grout or rapid patch material from the Department's List of Approved Materials. The Engineer will determine the thickness according to KM 64-309 and Strength according to Part 5 of KM 64-314. The Engineer will evaluate areas found deficient in thickness or strength. When the Engineer deems the areas warrant removal, remove and replace the areas with conforming concrete.

#### **4.0 MEASUREMENT.**

**4.1 Roller Compacted Concrete (RCC).** The Department will measure the quantity in square yards according to the Plan dimensions as shown in the Record Plans. The Department will determine the final quantity based on the design quantity with increases or decreases by authorized adjustments. Authorized adjustments include changes in the Record Plan dimensions, additional areas not shown in the Record Plans, and errors and omissions in the design quantity in excess of one percent.

The Department will not measure nuclear density testing, coring, or patching of core holes for payment and will consider them incidental to this item of work.

The Department will not measure rumble strips for payment, unless they are constructed in a separate operation because the shoulder was used to maintain traffic, and will consider them incidental to this item of work.

**4.2 Rumble Strips, Type 3.** The Department will not measure Type 3 rumble strips for payment unless they are constructed in a separate operation because the shoulder was used to maintain traffic. If constructed in a separate operation to maintain traffic, the Department will measure the quantity in linear feet.

**4.3 Thickness.** The Department will measure the pavement thickness tolerance according to KM 64-309. The Department will not measure the pavement thickness tolerance as a separate pay unit, but will use the pavement thickness tolerance to calculate an adjusted Contract unit price. The Department will adjust the Contract unit price for by the Schedule for Adjusted Payment for Thickness Deficiency. The Department will not measure coring for payment and will consider it incidental to the concrete pay items.

**4.4 Strength.** The Department will measure core strength tolerance according to Part 5 of KM 64-314. The Department will not measure the core strength as a separate pay unit, but will use the strength tolerance to calculate an adjusted Contract unit price. The Department will not measure coring for payment and will consider it incidental to the concrete pay items.

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

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
-----	RCC Shoulders, thickness	Square Yard
02695	Rumble Strips, Type 3	Linear Foot

**Schedule for Adjusted Payment for  
Thickness Deficiency**

<u>Thickness Deficiency (inches)</u>	<u>Deduction (Percent of Contract Unit Bid Price)</u>
0.00 to 0.20	0
0.21 to 0.30	20
0.31 to 0.40	28
0.41 to 0.50	32
0.51 to 0.75	43
0.76 to 1.00	50
Greater than 1.00	(1)

(1) Remove and replace these areas with concrete of the specified thickness at no expense to the Department when the Engineer directs.

**Schedule for Adjusted Payment for  
Compressive Strength Deficiency**

<u>Strength (psi)</u>	<u>Deduction (Percent of Contract Unit Bid Price)</u>
≥ 3325	0
3150 to 3324	15
2975 to 3149	25
2800 to 2974	35
< 2800	(1)

(1) Remove and replace these areas with concrete no expense to the Department when the Engineer directs.

**SPECIAL NOTE FOR CHANNEL LINING AND PAVED DITCH  
REMOVAL  
PENNYRILE PARKWAY  
CHRISTIAN AND HOPKINS COUNTIES  
ITEM NO. 2-2082  
MP 16.566 TO MP 29.900 NB & SB**

**DESCRIPTION.** A quantity of Class III Channel Lining has been established for the mitigation of ditch erosion, erosion at pipe inlets and outlets, and for the removal of paved ditches. Locations for the installation of Class III Channel Lining are suggested in the plans and listed herein, however final determination of locations of removal of paved ditches as well as erosion mitigation will be determined in the field during construction by the engineer.

**PAVED DITCH REMOVAL.** Existing paved ditches selected for removal will be broken into fragments of no larger than 2 feet in diameter. Broken paved ditch fragments are to be reshaped to fill any undercutting or cavities. Apply Class III Channel Lining at an approximate thickness of 1 foot, in order to supplement the protection provided by the broken concrete and to fill any voids.

**DITCH EROSION.** Reshape selected eroded ditches as directed by the engineer. Excavate and dispose of ditch soil and debris off right of way, to the depth required to accept the installed channel lining. Place Class B Concrete at an average thickness of 6" over Class III Channel Lining where indicated as grouted, working concrete into the voids in the aggregate.

**MATERIALS.** Use Class III Channel Lining meeting requirements of Section 805 of the KYTC Standard Specifications for Road and Bridge Construction. Use Class B Concrete meeting requirements of Section 601 of the KYTC Standard Specifications where required.

**MEASUREMENT AND PAYMENT.** Class III Channel Lining will be measured and paid for in accordance with KYTC Standard Specifications for Road and Bridge Construction for the weighed quantity acceptably placed. The contract unit price per ton of Class III Channel Lining will be full compensation for any ditch excavation or grading, ditch repair grading, and disposal of excess material. A quantity of Remove Paved Ditch has been established for the paved ditch removal or rubblization and shaping of existing paved ditches. No direct payment for the grading of ditches or the rubblization of existing paved ditches will be made. Class B Concrete used for grouting channel lining will be paid by the quantity indicated on the delivery ticket for quantities accepted in the field.



### **SPECIAL NOTE FOR JPC PAVEMENT JOINT SEALANT**

Seal all JPC Pavement joints in accordance with the Standard Specifications and current Standard Drawings. Contrary to Section 501.03 of the Standard Specifications, use only Hot-Poured Elastic joint sealing material, no alternates.

### **SPECIAL NOTE FOR STAKING**

In addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201.03.01, the Department will provide the survey control utilized for the existing pavement survey. Any necessary supplemental control will be the responsibility of the contractor.
2. The Department will provide an existing and proposed digital terrain model (DTM) for the length of the project. A proposed profile grade and cross sections at 50 foot intervals will be provided to the winning contractor. These items will be provided by 2/1/2018.
3. Any depth corrections due to fluctuation of the existing surface will be corrected utilizing bond breaker and will be paid for at unit price. The proposed profile will be set to maintain the proposed concrete depth throughout.
4. Subsequent to the final paving, the Department's engineer will collect check cross sections at various locations for verification of construction tolerances for JPC Pavement.
5. Locate the existing lighting conduit or wires prior to any excavation or trenching adjacent to the lighting system; and
6. The contractor shall be responsible for placing the outlets of the perforated pipe edge drain system in order to insure positive drainage; and
7. Perform any and all other staking operations required to control and construct the work.



**Breathitt-Pennyrile Parkway Rehabilitation  
MP 16.5 to 29.91  
Item No. 2-2082.00  
Christian-Hopkins Co.**



**PUBLIC INFORMATION PLAN**

The primary goal of this Public Information Plan (PIP) is to inform the motoring public and area stakeholders of project information including Maintenance of Traffic (MOT) which includes lane restrictions, reducing lane width, and/or ramp closures that may be required for a concrete pavement repair and rehabilitation project along the Breathitt-Pennyrile Parkway from Mile Point 16.5 about a mile north of the KY 2641 Overpass in Christian County extending northward to Mile Point 29.91 near the Crab Orchard Creek Bridge in Hopkins County.

The contractor is required to work through KYTC District 2 engineers to work with the Public Information Officer (PIO) to coordinate and disseminate appropriate information regarding construction plans to stakeholders, the public, and the news media in a timely manner.

**STAKEHOLDERS**

- Legislators
  - State Senator Whitney Westerfield
  - State Senator C. B. Embry
  - State Representative Myron Dossett
  - State Representative Melinda Prunty
  - State Representative Lynn Bechler
  - State Representative Jim Gooch
- State & Federal Agencies
  - KSP Henderson Post 16-Trooper Cory King
  - KSP Madisonville Post 2- Trooper Sean Wint
  - CVE Henderson- Lt. Kevin Rogers
  - KY Tourism Gil Lawson- Frankfort
  - KY Area 2 Emergency Management-Patrick Hardesty
  - State Emergency Management-Monica French
  - Kentucky Transportation Operations Center (GoKY.ky.gov) 502-564-2080
  - KY Over Dimensional Permits-Joe Craig (joe.craig@ky.gov)

- Hopkins County Agencies & Officials
  - Hopkins Co. Judge-Executive Donnie Carroll
  - Hopkins County Sheriff Matt Sanderson
  - Hopkins County Schools Transportation
  - Baptist Health/Hospital Madisonville
  - Hopkins Co. Ambulance Service
  - Hopkins Co. Emergency Management-Nick Bailey
- Christian County Agencies & Officials
  - Christian Co. Judge-Executive Steve Tribble
  - Christian Co. Hopkinsville Mayor Carter Hendricks
  - Christian County Hopkinsville Police Dept.
  - Christian Co. Sheriff- Captain Chris Miller
  - Christian Co. 911 Center- Joan Cowherd
  - Christian County Schools Transportation- Mike Brumley
  - Jenny Stuart Hospital-Regional Medical Center
  - Christian Co. Ambulance Service
  - Christian Co. Emergency Management Mgt.- Randy Graham
  - Ft. Campbell Military Base
- Webster County Agencies & Officials
  - Webster County Judge Executive Stephen Henry
  - Webster County Emergency Management Dir. Jeremy Moore
  - Webster County Sheriff Frankie Springfield
  - Webster County 911 Call Center Dir. Doug Sauls
  - Webster County Schools Transportation Dir. Jill Simpson
  - Webster County Court Clerk Val Franklin
  - Webster County – Sebree City Hall/Mayor
- Utility Companies
  - Kentucky Utilities
  - AT&T
  - Pennyrile Rural Electric Co-op.
- Local and Regional News Media
- KYTC Social Media



## **TRUCKING FIRMS AND OUT OF STATE STAKEHOLDERS**

- Trucking Trade Publication Web sites
  - E-Trucker Magazine Max Heine [MHeine@rrpub.com](mailto:MHeine@rrpub.com)
  - The Trucker Magazine Lyndon Finney [editor@thetrucker.com](mailto:editor@thetrucker.com)
  - Truck Landline Magazine Clarissa Kell-Holland [clarissa\\_kell-holland@landlinemag.com](mailto:clarissa_kell-holland@landlinemag.com)
- Area Trucking Companies/Shippers
  - Trucking Company KYTC District 2 Regional List
  - UPS- Louisville-Bill Sprigg [bsprigg@ups.com](mailto:bsprigg@ups.com)
  - Fed Ex Local and Regional Centers
  - Kentucky Trucker's Association
  - Federal Express-Heather Montgomery [hmontgomery@fedex.com](mailto:hmontgomery@fedex.com)
  - Kentucky Department of Vehicle Regulation Rick Taylor [rick.taylor@ky.gov](mailto:rick.taylor@ky.gov)
  - Information posted at GoKY.ky.gov

## **PRESENTATIONS**

A project description including anticipated schedule will be provided to the media, stakeholders and other emergency service agencies via e-mail prior to the start of work. Information will be provided to these groups via traffic advisories, and/or press releases approximately one week prior to the start of work with additional advisories as appropriate for traffic shifts, lane restrictions, closures, etc.

## **MEDIA RELATIONS**


The District 2 Public Information Officer will prepare an initial news release regarding the contract award for the project. The PIO will conduct interviews with the media throughout the project duration to keep the public informed of construction progress. Traffic advisories will be submitted to the media when a change in the MOT occurs. The contractor must provide to the PIO via the Resident Engineer notification of any change in the MOT at least three (3) days prior to the change.

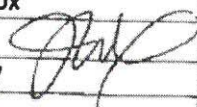
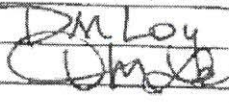
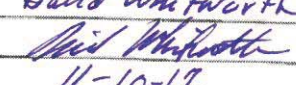
### **SPECIAL NOTE FOR SURFACE PREPARATION (WATERBLASTING)**

Prior to application of all types of pavement striping materials on newly constructed concrete surfaces, thoroughly clean the width of surface required to receive the striping, by waterblasting methods, to remove curing compound from the concrete surface.


Perform waterblasting for removal of the curing compound for both temporary striping and for permanent striping, all widths and applications.

No additional payment will be considered for surface preparation of concrete pavement for striping. Preparation of the new concrete surface for striping applications, by waterblasting to remove curing compound, will be considered incidental to each striping application.

	<b>KENTUCKY TRANSPORTATION CABINET</b> Department of Highways <b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b>	TC 62-226 Rev. 01/2016 Page 1 of 1
<b>RIGHT OF WAY CERTIFICATION</b>		

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	<b>RIGHT OF WAY CERTIFICATION</b>	
<b>ITEM #</b>	<b>COUNTY</b>	<b>PROJECT # (STATE)</b>		<b>PROJECT # (FEDERAL)</b>	
2-2082.00	Christian/Hopkins	FDS2 024 9004 016-028 FDS2 054 9004 028-030		NHPP 0411(026)	
<b>PROJECT DESCRIPTION</b>					
Pavement rehabilitation on Interstate 69 (Pennyrile Parkway) between MP 16.5 to MP 29.91.					
<input checked="" type="checkbox"/> <b>No Additional Right of Way Required</b>					
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.					
<input type="checkbox"/> <b>Condition # 1 (Additional Right of Way Required and Cleared)</b>					
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.					
<input type="checkbox"/> <b>Condition # 2 (Additional Right of Way Required with Exception)</b>					
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					
<input type="checkbox"/> <b>Condition # 3 (Additional Right of Way Required with Exception)</b>					
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 (5) 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)					
<b>LPA RW Project Manager</b>			<b>Right of Way Supervisor</b>		
Printed Name			Printed Name	Jennifer K. Cox	
Signature			Signature		
Date			Date	10/30/2017	
<b>Right of Way Director</b>			<b>FHWA</b>		
Printed Name	DM Loy		Printed Name	David Whitworth	
Signature			Signature		
Date	30 OCT 17		Date	11-10-17	



	<b>KENTUCKY TRANSPORTATION CABINET</b> Department of Highways <b>DIVISION OF RIGHT OF WAY &amp; UTILITIES</b>	TC 62-226 Rev. 01/2016 Page 1 of 1
<b>RIGHT OF WAY CERTIFICATION</b>		

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	<b>RIGHT OF WAY CERTIFICATION</b>	
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)**

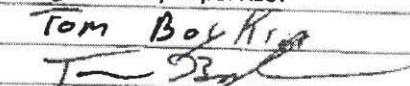
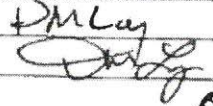
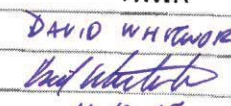
The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, 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)

<b>LPA RW Project Manager</b>		<b>Right of Way Supervisor</b>	
Printed Name		Printed Name	Tom Boykin
Signature		Signature	
Date		Date	11-7-17
<b>Right of Way Director</b>		<b>FHWA</b>	
Printed Name	DM Lay	Printed Name	DAVID WHITWORTH
Signature		Signature	
Date	09 Nov 17	Date	11-10-17



UTILITIES AND RAIL CERTIFICATION NOTE

Christian/Hopkins County  
Pavement Rehabilitation on Pennyryle Parkway  
from MP 16.5 to MP 29.91  
Item Number 2-2082

GENERAL PROJECT NOTE ON UTILITY PROTECTION

N/A

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

N/A

\*The Contractor is fully responsible for protection of all utilities listed above\*

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY’S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

N/A

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

N/A

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)

## UTILITIES AND RAIL CERTIFICATION NOTE

**Christian/Hopkins County  
Pavement Rehabilitation on Pennyryle Parkway  
from MP 16.5 to MP 29.91  
Item Number 2-2082**

### **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.

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.

### **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.

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***Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.***

**UTILITIES AND RAIL CERTIFICATION NOTE**

**Christian/Hopkins County  
Pavement Rehabilitation on Pennyrite Parkway  
from MP 16.5 to MP 29.91  
Item Number 2-2082**

**AREA UTILITIES CONTACT LIST**

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
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MATERIAL SUMMARY

CONTRACT ID: 171260

121GR17D060

DE02490041760

PENNYRILE PARKWAY (EB 9004 IN CHRISTIAN COUNTY) REMOVE AND REPLACE CONCRETE PAVEMENT ON PENYRILE PARKWAY (EB 9004) NORTH/SOUTHBOUND IN CHRISTIAN COUNTY JPC PAVEMENT, A DISTANCE OF 11.54 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	104,602.00	TON
0010	00003	CRUSHED STONE BASE	8,307.00	TON
0015	00078	CRUSHED AGGREGATE SIZE NO 2	45,972.00	TON
0020	00100	ASPHALT SEAL AGGREGATE	2,435.00	TON
0025	00103	ASPHALT SEAL COAT	292.00	TON
0030	00190	LEVELING & WEDGING PG64-22	9,500.00	TON
0035	00212	CL2 ASPH BASE 1.00D PG64-22	14,172.00	TON
0040	00214	CL3 ASPH BASE 1.00D PG64-22	7,745.00	TON
0045	00301	CL2 ASPH SURF 0.38D PG64-22	57,637.00	TON
0050	00324	CL3 ASPH SURF 0.50B PG64-22	1,084.00	TON
0055	02064	PCC BASE-9 IN	1,100.00	SQYD
0060	02073	JPC PAVEMENT-9 IN	330,883.00	SQYD
0065	02082	JPC PAVEMENT-9 IN SHLD	187,871.00	SQYD
0070	20071EC	JOINT ADHESIVE	5,000.00	LF
0075	00071	CRUSHED AGGREGATE SIZE NO 57	237.00	TON
0080	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	622.00	EACH
0085	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	27.00	EACH
0090	02014	BARRICADE-TYPE III	8.00	EACH
0095	02091	REMOVE PAVEMENT	18,917.00	SQYD
0100	02157	PAVED DITCH TYPE 1 - (REVISED: 12-1-17)	10,901.00	SQYD
0105	02159	TEMP DITCH	35,235.00	LF
0110	02160	CLEAN TEMP DITCH	17,618.00	LF
0115	02200	ROADWAY EXCAVATION	7,192.00	CUYD
0120	02230	EMBANKMENT IN PLACE	2,770.00	CUYD
0125	02367	GUARDRAIL END TREATMENT TYPE 1	68.00	EACH
0130	02369	GUARDRAIL END TREATMENT TYPE 2A	25.00	EACH
0135	02373	GUARDRAIL END TREATMENT TYPE 3	9.00	EACH
0140	02381	REMOVE GUARDRAIL	53,500.00	LF
0145	02391	GUARDRAIL END TREATMENT TYPE 4A	13.00	EACH
0150	02403	REMOVE CONCRETE MASONRY	128.00	CUYD
0155	02545	CLEARING AND GRUBBING - (APPROXIMATELY 1.1 ACRES IN CHRISTIAN COUNTY)	1.00	LS
0160	02555	CONCRETE-CLASS B	20.00	CUYD
0165	02562	TEMPORARY SIGNS	1,500.00	SQFT
0170	02575	DITCHING AND SHOULDERING	60,873.00	LF
0175	02587	HOOK BOLT WITH EXPAN ANCHOR	940.00	EACH
0180	02599	FABRIC-GEOTEXTILE TYPE IV	21,103.00	SQYD
0185	02650	MAINTAIN & CONTROL TRAFFIC - (CHRISTIAN COUNTY)	1.00	LS
0190	02655	CROSSOVER - (CROSSOVER 1, CHRISTIAN COUNTY)	1.00	LS
0195	02655	CROSSOVER - (CROSSOVER 2, CHRISTIAN COUNTY)	1.00	LS
0200	02655	CROSSOVER - (CROSSOVER 3, CHRISTIAN COUNTY)	1.00	LS



MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0205	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH
0210	02695	RUMBLE STRIPS TYPE 3	1,578.00	LF
0215	02701	TEMP SILT FENCE	35,235.00	LF
0220	02703	SILT TRAP TYPE A	40.00	EACH
0225	02704	SILT TRAP TYPE B	40.00	EACH
0230	02705	SILT TRAP TYPE C	40.00	EACH
0235	02706	CLEAN SILT TRAP TYPE A	40.00	EACH
0240	02707	CLEAN SILT TRAP TYPE B	40.00	EACH
0245	02708	CLEAN SILT TRAP TYPE C	40.00	EACH
0250	02726	STAKING - (CHRISTIAN COUNTY)	1.00	LS
0255	02775	ARROW PANEL	1.00	EACH
0260	02929	CRASH CUSHION TYPE IX	10.00	EACH
0265	03225	TUBULAR MARKERS	2,000.00	EACH
0270	05950	EROSION CONTROL BLANKET	189,848.00	SQYD
0275	05952	TEMP MULCH	126,566.00	SQYD
0280	05953	TEMP SEEDING AND PROTECTION	94,925.00	SQYD
0285	05963	INITIAL FERTILIZER	19.70	TON
0290	05964	20-10-10 FERTILIZER	9.90	TON
0295	05992	AGRICULTURAL LIMESTONE	117.70	TON
0300	06401	FLEXIBLE DELINEATOR POST-M/W	672.00	EACH
0305	06404	FLEXIBLE DELINEATOR POST-M/Y	83.00	EACH
0310	06412	STEEL POST MILE MARKERS	24.00	EACH
0315	06511	PAVE STRIPING-TEMP PAINT-6 IN	450,000.00	LF
0320	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF
0325	06550	PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF
0330	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF
0335	10020NS	FUEL ADJUSTMENT	345,518.00	DOLL
0340	10030NS	ASPHALT ADJUSTMENT	352,404.00	DOLL
0345	21451ED	FILL AND GRADE MEDIAN	60,873.00	LF
0350	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	51,587.50	LF
0355	22664EN	WATER BLASTING EXISTING STRIPE	175,000.00	LF
0360	22861EN	HIGH STRENGTH GEOTEXTILE FABRIC TY V	13,140.00	SQYD
0365	24189ER	DURABLE WATERBORNE MARKING-6 IN W	169,398.00	LF
0370	24190ER	DURABLE WATERBORNE MARKING-6 IN Y	133,836.00	LF
0375	24191ER	DURABLE WATERBORNE MARKING-12 IN W	3,110.00	LF
0380	24489EC	INLAID PAVEMENT MARKER	1,461.00	EACH
0385	00462	CULVERT PIPE-18 IN	4.00	LF
0390	00466	CULVERT PIPE-30 IN	12.00	LF
0395	00521	STORM SEWER PIPE-15 IN	40.00	LF
0400	01000	PERFORATED PIPE-4 IN	111,250.00	LF
0405	01001	PERFORATED PIPE-6 IN	106,420.00	LF
0410	01010	NON-PERFORATED PIPE-4 IN	4,008.00	LF
0415	01011	NON-PERFORATED PIPE-6 IN	3,438.00	LF
0420	01012	NON-PERFORATED PIPE-8 IN	17,015.00	LF
0425	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM - (CHRISTIAN COUNTY)	1.00	LS
0430	01020	PERF PIPE HEADWALL TY 1-4 IN	113.00	EACH
0435	01024	PERF PIPE HEADWALL TY 2-4 IN	18.00	EACH
0440	01028	PERF PIPE HEADWALL TY 3-4 IN	103.00	EACH
0445	01210	PIPE CULVERT HEADWALL-30 IN	1.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0450	01310	REMOVE PIPE	24.00	LF
0455	01450	S & F BOX INLET-OUTLET-18 IN	1.00	EACH
0460	01452	S & F BOX INLET-OUTLET-30 IN	2.00	EACH
0465	01490	DROP BOX INLET TYPE 1	1.00	EACH
0470	01633	RECONSTRUCT MEDIAN BOX INLET	56.00	EACH
0475	01641	JUNCTION BOX-15 IN	1.00	EACH
0480	01690	FLUME INLET TYPE 1	7.00	EACH
0485	01691	FLUME INLET TYPE 2	14.00	EACH
0490	01718	REMOVE INLET	1.00	EACH
0495	01741	CORED HOLE DRAINAGE BOX CON-6 IN	45.00	EACH
0500	01742	CORED HOLE DRAINAGE BOX CON-8 IN	40.00	EACH
0505	01831	STANDARD INTEGRAL CURB MOD	12,990.00	LF
0510	02165	REMOVE PAVED DITCH - (REVISED: 12-1-17)	12,007.00	SQYD
0515	02483	CHANNEL LINING CLASS II	840.00	TON
0520	02484	CHANNEL LINING CLASS III	1,658.00	TON
0525	02625	REMOVE HEADWALL	4.00	EACH
0530	08100	CONCRETE-CLASS A	165.01	CUYD
0535	08150	STEEL REINFORCEMENT	5,588.00	LB
0540	20758ED	REMOVE AND RESET PERF PIPE HEADWALL	25.00	EACH
0545	22660EN	REPLACE GRATE	2,854.00	LB
0550	23629EC	REPAIR HEADWALL	2.00	EACH
0555	02568	MOBILIZATION	1.00	LS
0560	02569	DEMOBILIZATION	1.00	LS
0565	02742	TRAINEE PAYMENT REIMBURSEMENT - GROUP 2, 3, OR 4 OPERATOR	1,400.00	HOUR

CONTRACT ID: 171260

121GR17D060

DE05490041760

PENNYRILE PARKWAY (EB 9004 IN HOPKINS COUNTY) REMOVE AND REPLACE CONCRETE PAVEMENT ON PENNYRILE PARKWAY (EB 9004) NORTH/SOUTHBOUND IN HOPKINS COUNTY JPC PAVEMENT, A DISTANCE OF 1.81 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0570	00001	DGA BASE	23,308.00	TON
0575	00078	CRUSHED AGGREGATE SIZE NO 2	24,414.00	TON
0580	00100	ASPHALT SEAL AGGREGATE	339.00	TON
0585	00103	ASPHALT SEAL COAT	41.00	TON
0590	00190	LEVELING & WEDGING PG64-22	200.00	TON
0595	00212	CL2 ASPH BASE 1.00D PG64-22	2,762.00	TON
0600	00301	CL2 ASPH SURF 0.38D PG64-22	6,462.00	TON
0605	02073	JPC PAVEMENT-9 IN	51,906.00	SQYD
0610	02082	JPC PAVEMENT-9 IN SHLD	29,650.00	SQYD
0615	01890	ISLAND HEADER CURB TYPE 1	150.00	LF
0620	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	135.00	EACH
0625	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	5.00	EACH
0630	02014	BARRICADE-TYPE III	4.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0635	02091	REMOVE PAVEMENT	18,988.00	SQYD
0640	02157	PAVED DITCH TYPE 1 - (REVISED: 12-1-17)	722.00	SQYD
0645	02159	TEMP DITCH	4,765.00	LF
0650	02160	CLEAN TEMP DITCH	2,383.00	LF
0655	02200	ROADWAY EXCAVATION	6,328.00	CUYD
0660	02352	GUARDRAIL-STEEL W BEAM-D FACE	275.00	LF
0665	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	6.00	EACH
0670	02365	CRASH CUSHION TYPE IX-A	2.00	EACH
0675	02367	GUARDRAIL END TREATMENT TYPE 1	16.00	EACH
0680	02369	GUARDRAIL END TREATMENT TYPE 2A	4.00	EACH
0685	02373	GUARDRAIL END TREATMENT TYPE 3	6.00	EACH
0690	02378	GUARDRAIL CONNECTOR TO BRIDGE END TY D	2.00	EACH
0695	02381	REMOVE GUARDRAIL	8,612.50	LF
0700	02391	GUARDRAIL END TREATMENT TYPE 4A	2.00	EACH
0705	02397	TEMP GUARDRAIL	300.00	LF
0710	02545	CLEARING AND GRUBBING - (APPROXIMATELY 0.5 ACRES IN HOPKINS COUNTY)	1.00	LS
0715	02555	CONCRETE-CLASS B	5.00	CUYD
0720	02562	TEMPORARY SIGNS	1,100.00	SQFT
0725	02575	DITCHING AND SHOULDERING	9,530.00	LF
0730	02599	FABRIC-GEOTEXTILE TYPE IV	20,487.00	SQYD
0735	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0740	02655	CROSSOVER - (CROSSOVER 4, HOPKINS COUNTY)	1.00	LS
0745	02671	PORTABLE CHANGEABLE MESSAGE SIGN	3.00	EACH
0750	02701	TEMP SILT FENCE	4,765.00	LF
0755	02703	SILT TRAP TYPE A	2.00	EACH
0760	02704	SILT TRAP TYPE B	2.00	EACH
0765	02705	SILT TRAP TYPE C	2.00	EACH
0770	02706	CLEAN SILT TRAP TYPE A	2.00	EACH
0775	02707	CLEAN SILT TRAP TYPE B	2.00	EACH
0780	02708	CLEAN SILT TRAP TYPE C	2.00	EACH
0785	02726	STAKING	1.00	LS
0790	02775	ARROW PANEL	1.00	EACH
0795	02929	CRASH CUSHION TYPE IX	4.00	EACH
0800	03225	TUBULAR MARKERS	200.00	EACH
0805	05950	EROSION CONTROL BLANKET	26,017.00	SQYD
0810	05952	TEMP MULCH	17,345.00	SQYD
0815	05953	TEMP SEEDING AND PROTECTION	13,009.00	SQYD
0820	05963	INITIAL FERTILIZER	2.70	TON
0825	05964	20-10-10 FERTILIZER	1.40	TON
0830	05992	AGRICULTURAL LIMESTONE	16.20	TON
0835	06401	FLEXIBLE DELINEATOR POST-M/W	266.00	EACH
0840	06412	STEEL POST MILE MARKERS	2.00	EACH
0845	06511	PAVE STRIPING-TEMP PAINT-6 IN	75,000.00	LF
0850	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF
0855	06550	PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF
0860	06551	PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF
0865	08016	REINF CONC SLOPE WALL-6 IN	137.00	SQYD
0870	10020NS	FUEL ADJUSTMENT	55,534.00	DOLL
0875	10030NS	ASPHALT ADJUSTMENT	36,844.00	DOLL

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0880	21451ED	FILL AND GRADE MEDIAN	7,091.00	LF
0885	21802EN	G/R STEEL W BEAM-S FACE (7 FT POST)	7,675.00	LF
0890	22664EN	WATER BLASTING EXISTING STRIPE	30,000.00	LF
0895	24189ER	DURABLE WATERBORNE MARKING-6 IN W	23,826.00	LF
0900	24190ER	DURABLE WATERBORNE MARKING-6 IN Y	19,061.00	LF
0905	24489EC	INLAID PAVEMENT MARKER	739.00	EACH
0910	00462	CULVERT PIPE-18 IN	4.00	LF
0915	00521	STORM SEWER PIPE-15 IN	4.00	LF
0920	01000	PERFORATED PIPE-4 IN	13,050.00	LF
0925	01001	PERFORATED PIPE-6 IN	11,045.00	LF
0930	01010	NON-PERFORATED PIPE-4 IN	564.00	LF
0935	01011	NON-PERFORATED PIPE-6 IN	414.00	LF
0940	01012	NON-PERFORATED PIPE-8 IN	2,495.00	LF
0945	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS
0950	01020	PERF PIPE HEADWALL TY 1-4 IN	18.00	EACH
0955	01024	PERF PIPE HEADWALL TY 2-4 IN	2.00	EACH
0960	01028	PERF PIPE HEADWALL TY 3-4 IN	7.00	EACH
0965	01202	PIPE CULVERT HEADWALL-15 IN	1.00	EACH
0970	01204	PIPE CULVERT HEADWALL-18 IN	1.00	EACH
0975	01310	REMOVE PIPE	8.00	LF
0980	01633	RECONSTRUCT MEDIAN BOX INLET	7.00	EACH
0985	01690	FLUME INLET TYPE 1	1.00	EACH
0990	01691	FLUME INLET TYPE 2	5.00	EACH
0995	01741	CORED HOLE DRAINAGE BOX CON-6 IN	6.00	EACH
1000	01742	CORED HOLE DRAINAGE BOX CON-8 IN	5.00	EACH
1005	01831	STANDARD INTEGRAL CURB MOD	2,330.00	LF
1010	02165	REMOVE PAVED DITCH - (REVISED: 12-1-17)	1,183.00	SQYD
1015	02483	CHANNEL LINING CLASS II	240.00	TON
1020	02484	CHANNEL LINING CLASS III	260.00	TON
1025	02625	REMOVE HEADWALL	2.00	EACH
1030	08100	CONCRETE-CLASS A	.32	CUYD
1035	08150	STEEL REINFORCEMENT	35.00	LB
1040	20758ED	REMOVE AND RESET PERF PIPE HEADWALL	5.00	EACH
1045	22660EN	REPLACE GRATE	161.00	LB
1050	02568	MOBILIZATION	1.00	LS
1055	02569	DEMOBILIZATION	1.00	LS



**PART II**

**SPECIFICATIONS AND STANDARD DRAWINGS**

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2012* and *Standard Drawings, Edition of 2016*.

## **SUPPLEMENTAL SPECIFICATIONS**

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>

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## **SPECIAL NOTE FOR LONGITUDINAL PAVEMENT JOINT ADHESIVE**

1. **DESCRIPTION.** This specification covers the requirements and practices for applying an asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement. Apply the adhesive to the face of longitudinal joint between driving lanes for the first lane paved. Then, place and compact the adjacent lane against the treated face to produce a strong, durable, waterproof longitudinal joint.
2. **MATERIALS, EQUIPMENT, AND PERSONNEL.**

2.1 Joint Adhesive. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide an adhesive conforming to the following requirements:

Property	Specification	Test Procedure
Viscosity, 400 ° F (Pa·s)	4.0 – 10.0	ASTM D 4402
Cone Penetration, 77 ° F	60 – 100	ASTM D 5329
Flow, 140 ° F (mm)	5.0 max.	ASTM D 5329
Resilience, 77 ° F (%)	30 min.	ASTM D 5329
Ductility, 77 ° F (cm)	30.0 min.	ASTM D 113
Ductility, 39 ° F (cm)	30.0 min.	ASTM D 113
Tensile Adhesion, 77 ° F (%)	500 min.	ASTM D 5329, Type II
Softening Point, ° F	171 min.	AASHTO T 53
Asphalt Compatibility	Pass	ASTM D 5329

Ensure the temperature of the pavement joint adhesive is between 380 and 410 °F when the material is extruded in a 0.125-inch-thick band over the entire face of the longitudinal joint.

2.2. Equipment.

2.2.1 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with any needed agitation and recirculating systems.

2.2.2 Applicator System. Provide a pressure-feed-wand applicator system with an applicator shoe attached.

2.3 Personnel. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

3. **CONSTRUCTION.**

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air.



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Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face.

3.2 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40 ° F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the cold joint. Apply the adhesive in a continuous band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Ensure the edge of the extruded adhesive material is flush with the surface of the pavement. Then, place and compact the adjacent lane against the joint face. Remove any excessive material extruded from the joint after compaction (a small line of material may remain).

3.3 Pavement Joint Adhesive Certification. Furnish the joint adhesive's certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a random sample of pavement joint adhesive from each manufacturer's lot of material. Extrude two 5 lb. samples of the heated material and forward the sample to the Division of Materials for testing. Reynolds oven bags, turkey size, placed inside small cardboard boxes or cement cylinder molds have been found suitable. Ensure the product temperature is 400°F or below at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of Pavement Joint Adhesive in linear feet. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of Pavement Joint Adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the Pavement Joint Adhesive.
5. PAYMENT. The Department will pay for the Pavement Joint Adhesive at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

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Pavement Joint Adhesive Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Joint Adhesive Referenced in Subsection 2.1.1						
Viscosity, 400 ° F (Pa•s)			3.0-3.4	2.5-2.9	2.0-2.4	≤1.9
ASTM D 3236	4.0-10.0	3.5-10.5	10.6-11.0	11.1-11.5	11.6-12.0	≥ 12.1
Cone Penetration, 77 ° F			54-56	51-53	48-50	≤ 47
ASTM D 5329	60-100	57-103	104-106	107-109	110-112	≥ 113
Flow, 140 ° F (mm) ASTM D 5329	≤ 5.0	≤ 5.5	5.6-6.0	6.1-6.5	6.6-7.0	≥ 7.1
Resilience, 77 ° F (%) ASTM D 5329	≥ 30	≥ 28	26-27	24-25	22-23	≤ 21
Tensile Adhesion, 77 ° F (%) ASTM D 5329	≥ 500	≥ 490	480-489	470-479	460-469	≤ 459
Softening Point, ° F AASHTO T 53	≥ 171	≥ 169	166-168	163-165	160-162	≤ 159
Ductility, 77 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9
Ductility, 39 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9

Code

20071EC

Pay Item

Joint Adhesive

Pay Unit

Linear Foot

May 7, 2014

## **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

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### 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).

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.

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.

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).

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.

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.

### 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.

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 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.

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.

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.

**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

KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS  
**TRAINING SPECIAL PROVISIONS**

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under these special provisions and in this contract is shown in "Special Notes Applicable to Project" in the bid proposal.

In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction the contractor shall submit to the Kentucky Transportation Cabinet, Department of Highways for its approval, an acceptable training program on forms provided by the Cabinet indicating the number of trainees to be trained in each selected classification. Failure to provide the Cabinet with the proper documentation evidencing an acceptable training program prior to commencing construction shall cause the Cabinet to suspend the operations of the contractor with (if applicable) working days being charged as usual against the contract time or (if applicable), no additional contract time being granted for the suspension period. The Cabinet will not be liable for the payment of any work performed during the suspension period due to the failure of the contractor to provide an acceptable training program. Said suspension period shall be terminated when an acceptable training program is received by the Cabinet. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case. The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Kentucky Transportation Cabinet, Department of Highways and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs

registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed for each hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

General Decision Number: KY170102 10/13/2017 KY102

Superseded General Decision Number: KY20160102

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster 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](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/06/2017
1	03/10/2017
2	05/19/2017
3	07/14/2017
4	07/28/2017
5	08/04/2017
6	08/11/2017
7	09/08/2017
8	09/15/2017
9	09/29/2017
10	10/13/2017

\* BRIN0004-002 06/01/2017

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

Rates                      Fringes

BRICKLAYER

Ballard, Caldwell, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, and McCracken Counties.....	\$ 30.50	15.16
Butler, Edmonson, Hopkins, Muhlenberg, and Ohio Counties.....	\$ 26.80	12.38
Daviess, Hancock, Henderson, McLean, Union, and Webster Counties.....	\$ 30.00	15.16

\* BRTN0004-005 06/01/2017

ALLEN, CALLOWAY, CHRISTIAN, LOGAN, SIMPSON, TODD, TRIGG, and  
WARREN COUNTIES

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

CARP0357-002 04/01/2016

	Rates	Fringes
CARPENTER.....	\$ 27.70	17.03
Diver.....	\$ 41.93	17.03
PILEDRIVERMAN.....	\$ 27.95	17.03

ELEC0369-006 05/31/2017

BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 31.07	16.60

ELEC0429-001 06/01/2015

ALLEN & SIMPSON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 24.84	11.90

ELEC0816-002 06/01/2017

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,  
FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES,  
HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 32.11	25.5%+6.95

Cable spicers receive \$.25 per hour additional.



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ELEC1701-003 06/01/2017

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO,  
UNION & WEBSTER COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 30.55	15.49

Cable spicers receive \$.25 per hour additional.

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ELEC1925-002 06/01/2017

FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):

	Rates	Fringes
CABLE SPLICER.....	\$ 25.80	12.16
ELECTRICIAN.....	\$ 25.30	12.14

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ENGI0181-017 07/01/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 31.95	15.15
GROUP 2.....	\$ 29.09	15.15
GROUP 3.....	\$ 29.54	15.15
GROUP 4.....	\$ 28.77	15.15

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float;

Concrete Mixer (Under 21 cu. ft.); Dredge Engineer;  
Electric Vibrator; Compactor/Self-Propelled Compactor;  
Elevator (One Drum or Buck Hoist); Elevator (When used to  
Hoist Building Material); Finish Machine; Firemen & Hoist  
(One Drum); Flexplane; Forklift (Regardless of Lift  
Height); Form Grader; Joint Sealing Machine; Outboard Motor  
Boat; Power Sweeper (Riding Type); Roller (Rock); Ross  
Carrier; Skid Mounted or Trailer Mounted Concrete Pump; Skid  
Steer Machine with all Attachments; Switchman or Brakeman;  
Throttle Valve Person; Tractair & Road Widening Trencher;  
Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger;  
Welding Machine; Well Points;& Whirley Oiler

GROUP 3 -All Off Road Material Handling Equipment, including  
Articulating Dump Trucks; Greaser on Grease Facilities  
servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine;  
Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout  
Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler;  
Paving Joint Machine; Power Form Handling Equipment; Pump;  
Roller (Earth); Steerman; Tamping Machine; Tractor (Under  
50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where  
the length of the boom in combination with the length of  
the piling equals or exceeds 150 ft. - \$1.00 above Group 1  
rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID  
10% ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT  
WORK.

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IRON0070-005 06/01/2017

BUTLER COUNTY (Eastern eighth, including the Townships of  
Decker, Lee & Tilford);  
EDMONSON COUNTY (Northern three-fourths, including the  
Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff,  
Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda,  
Sunfish & Sweden)

	Rates	Fringes
IRONWORKER		
Structural; Ornamental;		
Reinforcing; Precast		
Concrete Erectors.....	\$ 28.30	21.85

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IRON0103-004 08/01/2017

DAVISS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION &  
WEBSTER COUNTIES  
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey,  
Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport,  
Monford, Morgantown, Provo, Rochester, South Hill & Welchs  
Creek);  
CALDWELL COUNTY (Northeastern third, including the Township of

Creswell);  
CHRISTIAN COUNTY (Northern third, including the Townships of  
Apex, Crofton, Kelly, Mannington & Wynns);  
CRITTENDEN COUNTY (Northeastern half, including the Townships  
of Grove, Mattoon, Repton, Shady Grove & Tribune);  
MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction,  
Benton, Brennen, Browder, Central City, Cleaton, Depoy,  
Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City,  
Martwick, McNary, Millport, Moorman, Nelson, Paradise,  
Powderly, South Carrollton, Tarina & Weir)

	Rates	Fringes
Ironworkers:.....	\$ 28.64	21.385
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IRON0492-003 05/01/2017		

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES  
BUTLER COUNTY (Southern third, including the Townships of  
Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar  
Grove & Woodbury);  
CHRISTIAN COUNTY (Eastern two-thirds, including the Townships  
of Bennettstown, Casky, Herndon, Hopkinsville, Howell,  
Masonville, Pembroke & Thompsonville);  
EDMONSON COUNTY (Southern fourth, including the Townships of  
Chalybeate & Rocky Hill);  
MUHLENBERG COUNTY (Southern eighth, including the Townships of  
Dunnior, Penrod & Rosewood)

	Rates	Fringes
Ironworkers:.....	\$ 25.31	13.82
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IRON0782-006 08/01/2017		

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN,  
LIVINGSTON, LYON, MARSHALL, MCCracken & TRIGG COUNTIES  
CALDWELL COUNTY (Southwestern two-thirds, including the  
Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown,  
Dulaney, Farmersville, Fredonia, McGowan, Otter Pond &  
Princeton);  
CHRISTIAN COUNTY (Western third, Excluding the Townships of  
Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky,  
Herndon, Hopkinsville, Howell, Masonville, Pembroke &  
Thompsonville);  
CRITTENDEN COUNTY (Southwestern half, including the Townships  
of Crayne, Dycusburg, Frances, Marion, Mexico, Midway,  
Sheridan & Told)

	Rates	Fringes
Ironworkers:		
Projects with a total contract cost of \$20,000,000.00 or above.....	\$ 28.32	23.00
All Other Work.....	\$ 26.73	23.00
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LABO0189-005 07/01/2017

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN,  
LIVINGSTON, LYON, MARSHALL & MCCracken 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

LABORER 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; Blaster; 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

LABO0189-006 07/01/2017

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK,  
HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG  
& WARREN 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

LABORER 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; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0561-001 07/01/2017

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 22.36	14.50
GROUP 2.....	\$ 22.61	14.50

GROUP 3.....	\$ 22.66	14.50
GROUP 4.....	\$ 23.26	14.5

LABORER 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; Blaster; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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PAIN0032-002 05/01/2017

BALLARD COUNTY

	Rates	Fringes
Painters:		
Bridges.....	\$ 33.56	16.23
All Other Work.....	\$ 31.26	16.23

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - \$1.00 Premium

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PAIN0118-003 06/01/2014

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller.....	\$ 18.50	11.97
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....	\$ 19.50	11.97
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PAIN0156-006 04/01/2015		

DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER  
COUNTIES

	Rates	Fringes
Painters:		
BRIDGES		
GROUP 1.....	\$ 27.60	12.85
GROUP 2.....	\$ 27.85	12.85
GROUP 3.....	\$ 28.60	12.85
GROUP 4.....	\$ 29.60	12.85
ALL OTHER WORK:		
GROUP 1.....	\$ 26.45	12.85
GROUP 2.....	\$ 26.70	12.85
GROUP 3.....	\$ 27.45	12.85
GROUP 4.....	\$ 28.45	12.85

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast;  
Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch  
Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal  
Tar Epoxy

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PAIN0456-003 01/01/2015		

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN  
COUNTIES:

	Rates	Fringes
Painters:		
BRIDGES		
Brush & Roller.....	\$ 23.25	9.95
Spray; Sandblast; Power Tools; Waterblast & Steam Cleaning.....	\$ 24.25	9.95
ALL OTHER WORK		
Brush & Roller.....	\$ 19.25	9.95

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TEAM0089-003 03/26/2017

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES

	Rates	Fringes
Truck drivers:		
Zone 1:		
Group 1.....	\$ 19.88	21.04
Group 2.....	\$ 20.06	21.04
Group 3.....	\$ 20.14	21.04
Group 4.....	\$ 20.16	21.04

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

TEAM0215-003 03/26/2017

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO & WEBSTER COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 21.43	21.04
Group 2.....	\$ 21.66	21.04
Group 3.....	\$ 21.73	21.04
Group 4.....	\$ 21.74	21.04

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4: Euclid and other heavy earth moving equipment; Low Boy; Articulator Cat; 5 Axle Vehicle; Winch and A- Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker

TEAM0236-001 03/26/2017

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN,  
FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL,  
MCCRACKEN,TODD & TRIGG COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 19.88	21.04
Group 2.....	\$ 20.06	21.04
Group 3.....	\$ 20.06	21.04
Group 4.....	\$ 20.16	21.04
Group 5.....	\$ 20.14	21.04

GROUP 1: Greaser, Tire Changer

GROUP 2: Truck Mechanic

GROUP 3: Single Axle Dump; Flat Bed; All Terrain Vehicle when  
used to haul materials; Semi Trailer or Pole Trailer when  
used to pull building materials and equipment; Tandem Axle  
Dump; Drivers of Distributors

GROUP 4: Euclid and other heavy earth moving equipment; Low  
Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame  
when used in transporting materials; Ross Carrier

GROUP 5: Mixer All Types

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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](http://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)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative



Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

**TO: EMPLOYERS/EMPLOYEES**

**PREVAILING WAGE SCHEDULE:**

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

**OVERTIME:**

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director  
Division of Construction Procurement  
Frankfort, Kentucky 40622  
502-564-3500

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
18.2%	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 Christian County.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION  
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY  
(Executive Order 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<b>GOALS FOR MINORITY PARTICIPATION IN EACH TRADE</b>	<b>GOALS FOR FEMALE PARTICIPATION IN EACH TRADE</b>
3.5%	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 Hopkins 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**

Report Date 12/5/17

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	127,910.00	TON		\$	
0020	00003		CRUSHED STONE BASE	8,307.00	TON		\$	
0030	00078		CRUSHED AGGREGATE SIZE NO 2	70,386.00	TON		\$	
0040	00100		ASPHALT SEAL AGGREGATE	2,774.00	TON		\$	
0050	00103		ASPHALT SEAL COAT	333.00	TON		\$	
0060	00190		LEVELING & WEDGING PG64-22	9,700.00	TON		\$	
0070	00212		CL2 ASPH BASE 1.00D PG64-22	16,934.00	TON		\$	
0080	00214		CL3 ASPH BASE 1.00D PG64-22	7,745.00	TON		\$	
0090	00301		CL2 ASPH SURF 0.38D PG64-22	64,099.00	TON		\$	
0100	00324		CL3 ASPH SURF 0.50B PG64-22	1,084.00	TON		\$	
0110	02064		PCC BASE-9 IN	1,100.00	SQYD		\$	
0120	02073		JPC PAVEMENT-9 IN	382,789.00	SQYD		\$	
0130	02082		JPC PAVEMENT-9 IN SHLD	217,521.00	SQYD		\$	
0140	20071EC		JOINT ADHESIVE	5,000.00	LF		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0150	00071		CRUSHED AGGREGATE SIZE NO 57	237.00	TON		\$	
0160	01890		ISLAND HEADER CURB TYPE 1	150.00	LF		\$	
0170	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	757.00	EACH		\$	
0180	01983		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	32.00	EACH		\$	
0182	01985		DELINEATOR FOR BARRIER - YELLOW (ADDED: 12-5-17)	168.00	EACH		\$	
0184	02003		RELOCATE TEMP CONC BARRIER (ADDED: 12-5-17)	7,000.00	LF		\$	
0190	02014		BARRICADE-TYPE III	12.00	EACH		\$	
0200	02091		REMOVE PAVEMENT	37,905.00	SQYD		\$	
0210	02157		PAVED DITCH TYPE 1 (REVISED: 12-1-17)	11,623.00	SQYD		\$	
0220	02159		TEMP DITCH	40,000.00	LF		\$	
0230	02160		CLEAN TEMP DITCH	20,001.00	LF		\$	
0240	02200		ROADWAY EXCAVATION	13,520.00	CUYD		\$	
0250	02230		EMBANKMENT IN PLACE	2,770.00	CUYD		\$	
0260	02352		GUARDRAIL-STEEL W BEAM-D FACE	275.00	LF		\$	
0270	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	6.00	EACH		\$	
0280	02365		CRASH CUSHION TYPE IX-A	2.00	EACH		\$	
0290	02367		GUARDRAIL END TREATMENT TYPE 1	84.00	EACH		\$	
0300	02369		GUARDRAIL END TREATMENT TYPE 2A	29.00	EACH		\$	
0310	02373		GUARDRAIL END TREATMENT TYPE 3	15.00	EACH		\$	
0320	02378		GUARDRAIL CONNECTOR TO BRIDGE END TY D	2.00	EACH		\$	
0330	02381		REMOVE GUARDRAIL	62,112.50	LF		\$	
0340	02391		GUARDRAIL END TREATMENT TYPE 4A	15.00	EACH		\$	
0350	02397		TEMP GUARDRAIL	300.00	LF		\$	



171260

PROPOSAL BID ITEMS

REVISED ADDENDUM #2: 12-5-17

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Report Date 12/5/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0360	02403		REMOVE CONCRETE MASONRY	128.00	CUYD		\$	
0370	02545		CLEARING AND GRUBBING (APPROXIMATELY 0.5 ACRES IN HOPKINS COUNTY)	1.00	LS		\$	
0380	02545		CLEARING AND GRUBBING (APPROXIMATELY 1.1 ACRES IN CHRISTIAN COUNTY)	1.00	LS		\$	
0390	02555		CONCRETE-CLASS B	25.00	CUYD		\$	
0400	02562		TEMPORARY SIGNS	2,600.00	SQFT		\$	
0410	02575		DITCHING AND SHOULDERING	70,403.00	LF		\$	
0420	02587		HOOK BOLT WITH EXPAN ANCHOR	940.00	EACH		\$	
0430	02599		FABRIC-GEOTEXTILE TYPE IV	41,590.00	SQYD		\$	
0440	02650		MAINTAIN & CONTROL TRAFFIC (HOPKINS COUNTY)	1.00	LS		\$	
0450	02650		MAINTAIN & CONTROL TRAFFIC (CHRISTIAN COUNTY)	1.00	LS		\$	
0460	02655		CROSSOVER (CROSSOVER 1, CHRISTIAN COUNTY)	1.00	LS		\$	
0470	02655		CROSSOVER (CROSSOVER 2, CHRISTIAN COUNTY)	1.00	LS		\$	
0480	02655		CROSSOVER (CROSSOVER 3, CHRISTIAN COUNTY)	1.00	LS		\$	
0490	02655		CROSSOVER (CROSSOVER 4, HOPKINS COUNTY)	1.00	LS		\$	
0500	02671		PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH		\$	
0510	02695		RUMBLE STRIPS TYPE 3	1,578.00	LF		\$	
0520	02701		TEMP SILT FENCE	40,000.00	LF		\$	
0530	02703		SILT TRAP TYPE A	42.00	EACH		\$	
0540	02704		SILT TRAP TYPE B	42.00	EACH		\$	
0550	02705		SILT TRAP TYPE C	42.00	EACH		\$	
0560	02706		CLEAN SILT TRAP TYPE A	42.00	EACH		\$	
0570	02707		CLEAN SILT TRAP TYPE B	42.00	EACH		\$	
0580	02708		CLEAN SILT TRAP TYPE C	42.00	EACH		\$	
0590	02726		STAKING (HOPKINS COUNTY)	1.00	LS		\$	
0600	02726		STAKING (CHRISTIAN COUNTY)	1.00	LS		\$	
0610	02775		ARROW PANEL	2.00	EACH		\$	
0615	02898		RELOCATE CRASH CUSHION (ADDED: 12-5-17)	5.00	EACH		\$	
0620	02929		CRASH CUSHION TYPE IX	14.00	EACH		\$	
0625	03171		CONCRETE BARRIER WALL TYPE 9T (ADDED: 12-5-17)	1,400.00	LF		\$	
0630	03225		TUBULAR MARKERS	2,200.00	EACH		\$	
0640	05950		EROSION CONTROL BLANKET	215,865.00	SQYD		\$	
0650	05952		TEMP MULCH	143,911.00	SQYD		\$	
0660	05953		TEMP SEEDING AND PROTECTION	107,934.00	SQYD		\$	
0670	05963		INITIAL FERTILIZER	22.40	TON		\$	
0680	05964		20-10-10 FERTILIZER	11.30	TON		\$	
0690	05992		AGRICULTURAL LIMESTONE	133.90	TON		\$	
0700	06401		FLEXIBLE DELINEATOR POST-M/W	938.00	EACH		\$	
0710	06404		FLEXIBLE DELINEATOR POST-M/Y	83.00	EACH		\$	
0720	06412		STEEL POST MILE MARKERS	26.00	EACH		\$	

Report Date 12/5/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0730	06511		PAVE STRIPING-TEMP PAINT-6 IN	525,000.00	LF		\$	
0740	06549		PAVE STRIPING-TEMP REM TAPE-B	2,000.00	LF		\$	
0750	06550		PAVE STRIPING-TEMP REM TAPE-W	4,000.00	LF		\$	
0760	06551		PAVE STRIPING-TEMP REM TAPE-Y	4,000.00	LF		\$	
0765	06586		PAVEMENT MARKER TY IVA-MY TEMP (ADDED: 12-5-17)	420.00	EACH		\$	
0770	08016		REINF CONC SLOPE WALL-6 IN	137.00	SQYD		\$	
0775	08903		CRASH CUSHION TY VI CLASS BT TL3 (ADDED: 12-5-17)	1.00	EACH		\$	
0780	10020NS		FUEL ADJUSTMENT	401,052.00	DOLL	\$1.00	\$	\$401,052.00
0790	10030NS		ASPHALT ADJUSTMENT	389,248.00	DOLL	\$1.00	\$	\$389,248.00
0800	21451ED		FILL AND GRADE MEDIAN	67,964.00	LF		\$	
0810	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	59,262.50	LF		\$	
0820	22664EN		WATER BLASTING EXISTING STRIPE	205,000.00	LF		\$	
0830	22861EN		HIGH STRENGTH GEOTEXTILE FABRIC TY V	13,140.00	SQYD		\$	
0840	24189ER		DURABLE WATERBORNE MARKING-6 IN W	193,224.00	LF		\$	
0850	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	152,897.00	LF		\$	
0860	24191ER		DURABLE WATERBORNE MARKING-12 IN W	3,110.00	LF		\$	
0870	24489EC		INLAID PAVEMENT MARKER	2,200.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0880	00462		CULVERT PIPE-18 IN	8.00	LF		\$	
0890	00466		CULVERT PIPE-30 IN	12.00	LF		\$	
0900	00521		STORM SEWER PIPE-15 IN	44.00	LF		\$	
0910	01000		PERFORATED PIPE-4 IN	124,300.00	LF		\$	
0920	01001		PERFORATED PIPE-6 IN	117,465.00	LF		\$	
0930	01010		NON-PERFORATED PIPE-4 IN	4,572.00	LF		\$	
0940	01011		NON-PERFORATED PIPE-6 IN	3,852.00	LF		\$	
0950	01012		NON-PERFORATED PIPE-8 IN	19,510.00	LF		\$	
0960	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM (HOPKINS COUNTY)	1.00	LS		\$	
0970	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM (CHRISTIAN COUNTY)	1.00	LS		\$	
0980	01020		PERF PIPE HEADWALL TY 1-4 IN	131.00	EACH		\$	
0990	01024		PERF PIPE HEADWALL TY 2-4 IN	20.00	EACH		\$	
1000	01028		PERF PIPE HEADWALL TY 3-4 IN	110.00	EACH		\$	
1010	01202		PIPE CULVERT HEADWALL-15 IN	1.00	EACH		\$	
1020	01204		PIPE CULVERT HEADWALL-18 IN	1.00	EACH		\$	
1030	01210		PIPE CULVERT HEADWALL-30 IN	1.00	EACH		\$	
1040	01310		REMOVE PIPE	32.00	LF		\$	
1050	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		\$	
1060	01452		S & F BOX INLET-OUTLET-30 IN	2.00	EACH		\$	
1070	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	
1080	01633		RECONSTRUCT MEDIAN BOX INLET	63.00	EACH		\$	
1090	01641		JUNCTION BOX-15 IN	1.00	EACH		\$	
1100	01690		FLUME INLET TYPE 1	8.00	EACH		\$	
1110	01691		FLUME INLET TYPE 2	19.00	EACH		\$	
1120	01718		REMOVE INLET	1.00	EACH		\$	

Report Date 12/5/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1130	01741		CORED HOLE DRAINAGE BOX CON-6 IN	51.00	EACH		\$	
1140	01742		CORED HOLE DRAINAGE BOX CON-8 IN	45.00	EACH		\$	
1150	01831		STANDARD INTEGRAL CURB MOD	15,320.00	LF		\$	
1160	02165		REMOVE PAVED DITCH (REVISED: 12-1-17)	13,190.00	SQYD		\$	
1170	02483		CHANNEL LINING CLASS II	1,080.00	TON		\$	
1180	02484		CHANNEL LINING CLASS III	1,918.00	TON		\$	
1190	02625		REMOVE HEADWALL	6.00	EACH		\$	
1200	08100		CONCRETE-CLASS A	165.33	CUYD		\$	
1210	08150		STEEL REINFORCEMENT	5,623.00	LB		\$	
1220	20758ED		REMOVE AND RESET PERF PIPE HEADWALL	30.00	EACH		\$	
1230	22660EN		REPLACE GRATE	3,015.00	LB		\$	
1240	23629EC		REPAIR HEADWALL	2.00	EACH		\$	

Section: 0004 - TRAINEES

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1250	02742		TRAINEE PAYMENT REIMBURSEMENT GROUP 2, 3, OR 4 OPERATOR	1,400.00	HOURL		\$	

Section: 0005 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1260	02568		MOBILIZATION	1.00	LS		\$	
1270	02569		DEMOBILIZATION	1.00	LS		\$	

**Special Note for**  
**Longitudinal Texturing of Concrete Pavement**

Provide concrete pavement with longitudinal texturing. Depth, spacing, and any other details in regards to texturing will be completed as per Specification 501.03.13 H) with the exception of the direction of texturing, and the spacing of longitudinal grooves. Spacing for the longitudinal grooves will be 3/4 inch. Obtain the Resident Engineer's approval as per the method of construction. A test area will not be necessary, but the Engineer does retain the authority to stop work if a problem occurs.

Diamond grinding will not be considered an acceptable alternative. Ride Quality will also not be waived.

No direct payment will be made for texturing of the pavement and it will be considered incidental to JPC Pavement.

SPECIAL NOTE FOR DOWEL BAR AND TIE BAR PLACEMENT IN JPC PAVEMENT

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

**1.0 DESCRIPTION.** This Special Note applies when new JPC pavement is placed on a project. Allowable tolerances are outlined for both dowel bar and tie bar placement in driving lanes and shoulders. Concrete patches will not be tested under this special note unless they are required as corrective work under subsection 3.1. Testing applies to all joints except that transverse joints in the shoulders will not be tested. *Working with concrete requires at least seven days or more of curing time. The concrete should be dry for at least 24 hrs prior to testing.*

This Special Note specifies the allowable tolerances for placement of dowel bars and tie bars in JPC pavement.

**2.0 MATERIALS.** Conform to Subsection 501 or 502 of the current Standard Specifications. Consistent with Standard Drawing RPS-020-13, dowel baskets will be manufactured with the mid-point of the dowel bar at T/2.

3.0 CONSTRUCTION.

**3.1 Dowel Bars.** Transverse dowel bars, which are generally in baskets, should be located in the center of the slab vertically. They should not be skewed or rotated. Contrary to Section 501 of the Standard Specification and Standard Drawing RPS-020-13, place dowel bars to the tolerances shown in the table below.

Dimension	Tolerance
Horizontal offset	± 1 inch
Longitudinal translation	± 3 inches
Horizontal skew	½ inch, max
Vertical skew	½ inch, max
Vertical depth	<div>The minimum distance below the concrete pavement surface must be: DB=T/3 + ½ inch</div> <div>Where: DB = vertical distance in inches, measured from the concrete pavement surface to any point along the top of dowel bar; and T = actual concrete pavement thickness at joint location, in inches.</div> <div>The maximum distance below the surface to any point along the dowel bar should be 2T/3.</div>



Dowel bars determined to be out of tolerance are to be marked in the field with marking paint. Corrective work will be required for the following circumstances:

- if 3 or more bars are higher than  $T/3 + \frac{1}{2}$  inch from the top of the slab or lower than  $2T/3$  (as measured from the top) for the bottom of the slab
- if 3 or more bars are translated longitudinally 3 inches or more
- if more than two consecutive joints have any bars that are skewed vertically or horizontally

Any corrective work shall be completed in accordance with the current special note 11J – Special Note for Full Depth Concrete Pavement Repair. Contrary to Special Note 11J, all joint repairs completed due to corrective work shall be sealed with silicone rubber unless approved by the Engineer.

**3.2 Tie Bars.** Install tie bars at a depth equal to  $\frac{1}{2}$  of the slab thickness. Tie bars shall be perpendicular to the longitudinal joint and parallel with the concrete pavement surface. Installation shall be to the tolerances outlined below.

- Not less than  $\frac{1}{2}$  inch below the saw cut depth of the joints
- 2" clearance from the tie bar and bottom of pavement

Corrective action will be required for the following circumstances:

- 2 consecutive tie bars are missing or outside of the tolerance listed above
- 4 or more bars in a slab are missing or outside of the tolerances listed (does not have to be consecutive)

The correction shall be made by cross stitching to place the new tie bars accordingly.

**4.0 MEASUREMENT**

**4.1 Testing Limits.** All driving lanes requiring load transfer assemblies will be tested with Ground Penetrating Radar (GPR) equipment. All longitudinal joints will be tested. The Kentucky Transportation Center (KTC) will perform all testing.

**4.2 Validation.** A minimum of one location per lane mile will be cored to verify GPR testing. Two 4 inch cores shall be obtained at each location. One core will be taken on each dowel bar end to expose both ends and allow physical measurements. KTC will conduct coring while the contractor shall patch all core holes.

November 5, 2014

**SPECIAL NOTE FOR PAVEMENT TYPES  
PENNYRILE PARKWAY  
CHRISTIAN AND HOPKINS COUNTIES  
ITEM NO. 2-2082  
MP 16.566 TO MP 29.900 NB & SB**

**PAVEMENT TYPE**

Mainline Pennyrile Parkway pavement will be JPC Pavement-9 in, no alternates. Mainline Pennyrile Parkway inside shoulder will be JPC Pavement-9 in Shld, no alternates. Proposals for use of alternate pavements for the mainline Pennyrile Parkway and the mainline Pennyrile Parkway inside shoulder will not be considered.

**VALUE ENGINEERING**

In accordance with Section 111.03.03 of the KY Standard Specifications, the Department will not consider any Value Engineering Change Proposal. The Department will not accept any Value Engineering Change Proposal that includes the substitution or elimination of JPC Pavement on the mainline Pennyrile Parkway or mainline Pennyrile Parkway inside shoulder, by use of an alternate paving material.