



CALL NO. 101

CONTRACT ID. 191013

WOLFE COUNTY

FED/STATE PROJECT NUMBER NHPP 0061(079)

DESCRIPTION MOUNTAIN PARKWAY(PW-9009)

WORK TYPE ASPHALT PAVEMENT & ROADWAY REHAB

PRIMARY COMPLETION DATE 10/31/2019

LETTING DATE: March 22,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME March 22,2019. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 11.50%

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

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PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 10

CONTRACT ID - 191013

NHPP 0061(079)

COUNTY - WOLFE

PCN - DE11990091913

NHPP 0061(079)

MOUNTAIN PARKWAY(PW-9009) ADDRESS PAVEMENT CONDITION OF BERT T. COMBS MOUNTAIN PARKWAY
BOTH DIRECTIONS FROM MP 46.8 TO MP 56.8, A DISTANCE OF 011.00 MILES.ASPHALT PAVEMENT &
ROADWAY REHAB SYP NO. 10-20012.00.

GEOGRAPHIC COORDINATES LATITUDE 37:43:00.00 LONGITUDE 83:30:00.00

COMPLETION DATE(S):

COMPLETED BY 10/31/2019

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

FEDERAL CONTRACT NOTES

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

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

CIVIL RIGHTS ACT OF 1964

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

NOTICE TO ALL BIDDERS

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

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

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

SECOND TIER SUBCONTRACTS

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

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **5** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

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

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

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

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

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

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

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

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

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

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

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

DEFAULT OR DECERTIFICATION OF THE DBE

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

1/27/2017

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

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

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

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

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

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.

ASPHALT PAVEMENT RIDE QUALITY CATEGORY A

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category A.

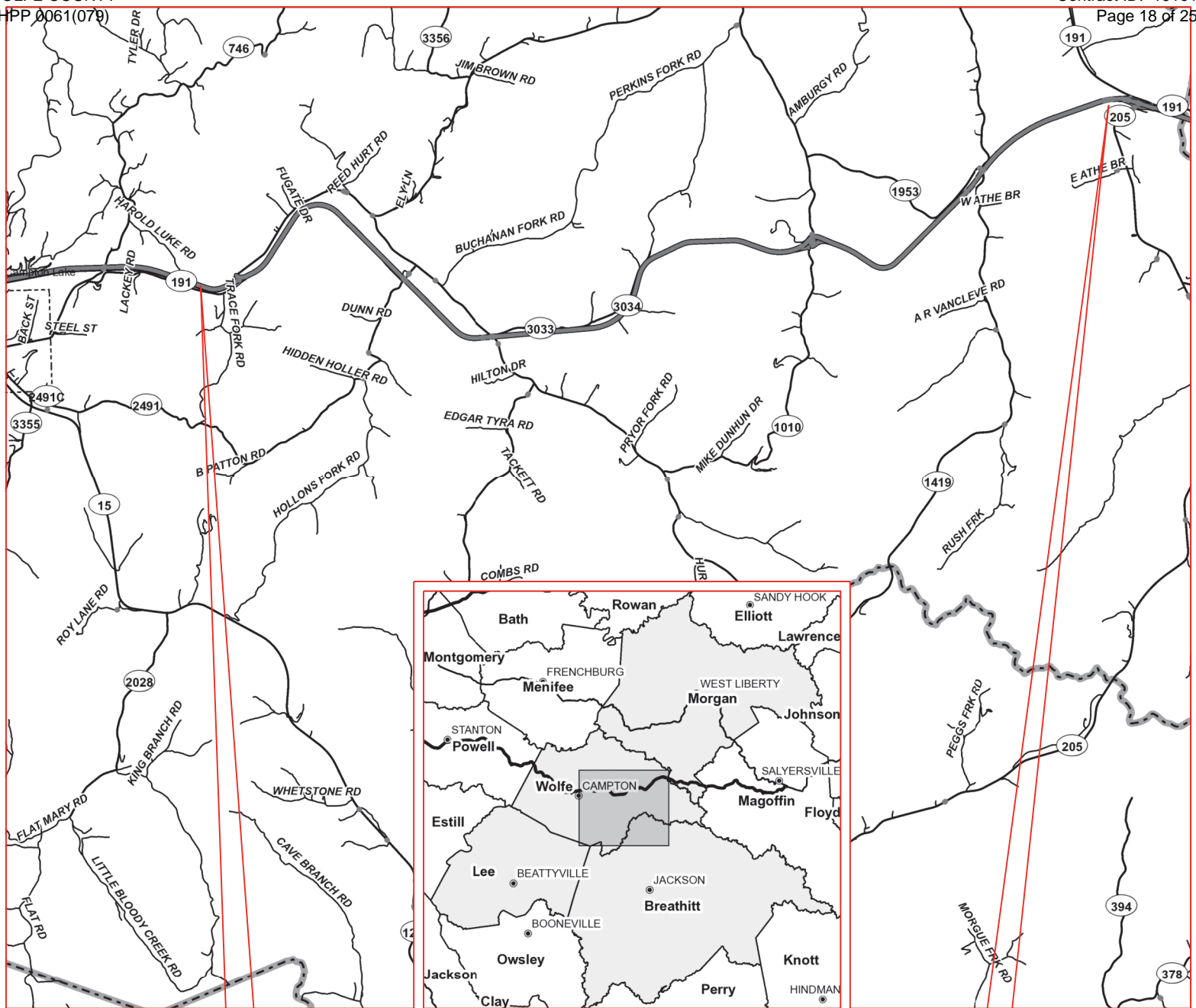
OPTION A

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

MATERIAL TRANSFER VEHICLE (MTV)

Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05.

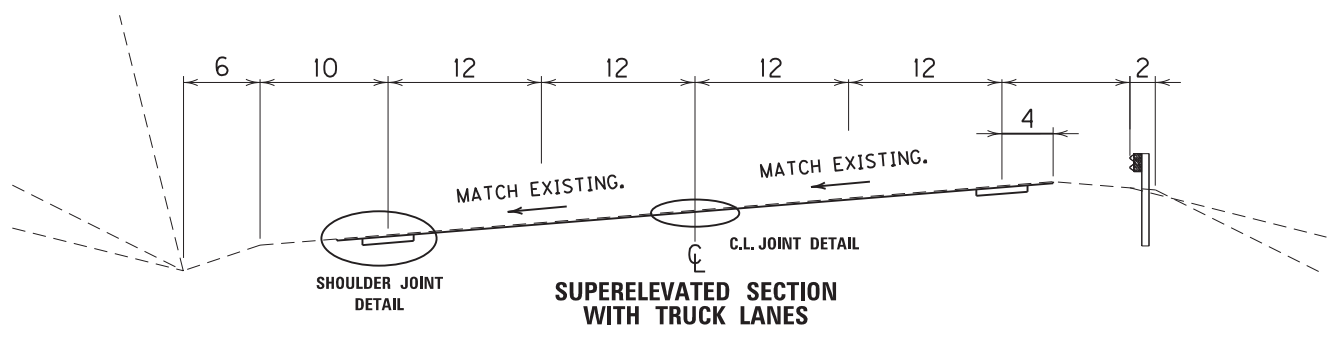
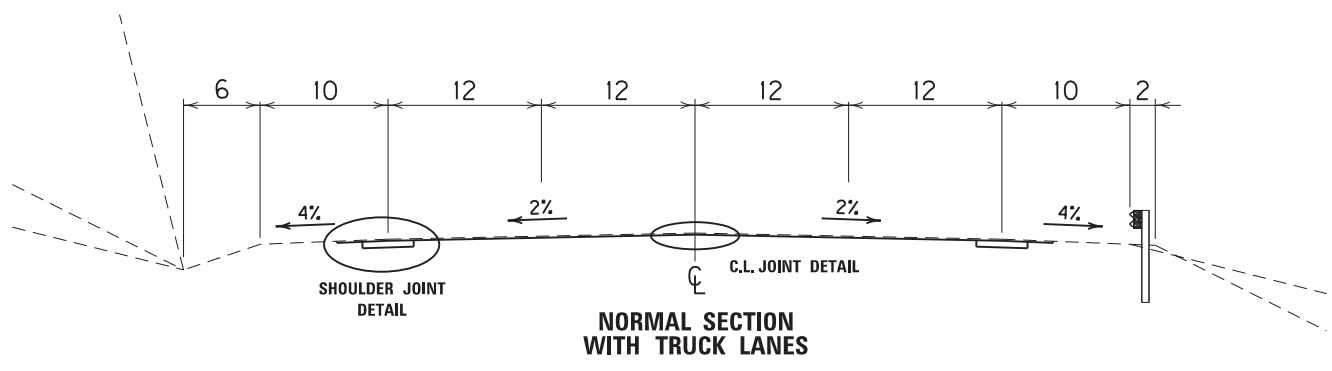
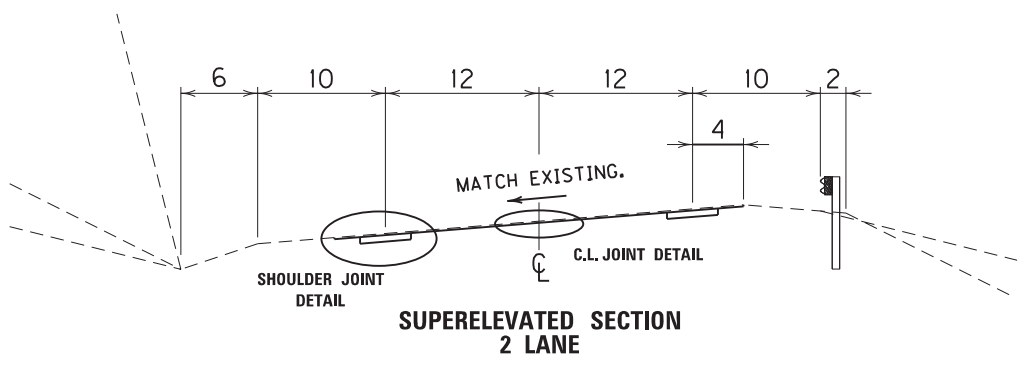
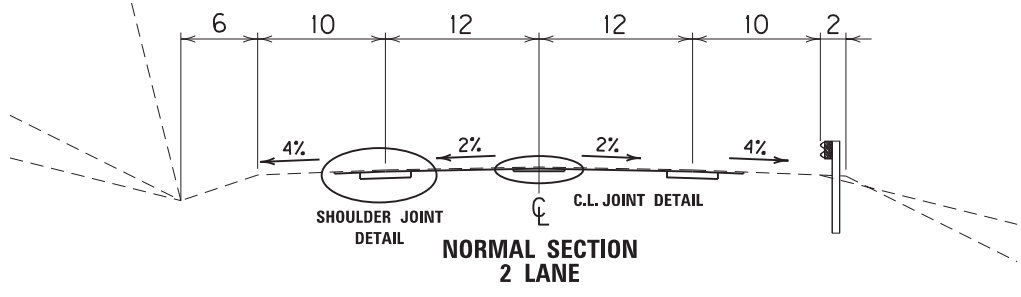
WOLFE COUNTY
MOUNTAIN PARKWAY
CAMPTON TO SALYERSVILLE
(M.P. 45.8 – M.P. 56.8)
ASPHALT PAVEMENT REHABILITATION
ITEM #: 10-20012.00
STATE #: FD52 119 9009 046-057
FEDERAL #: NHPP 0061(079)



10-20012.00
MOUNTAIN PARKWAY
PROJECT LOCATION

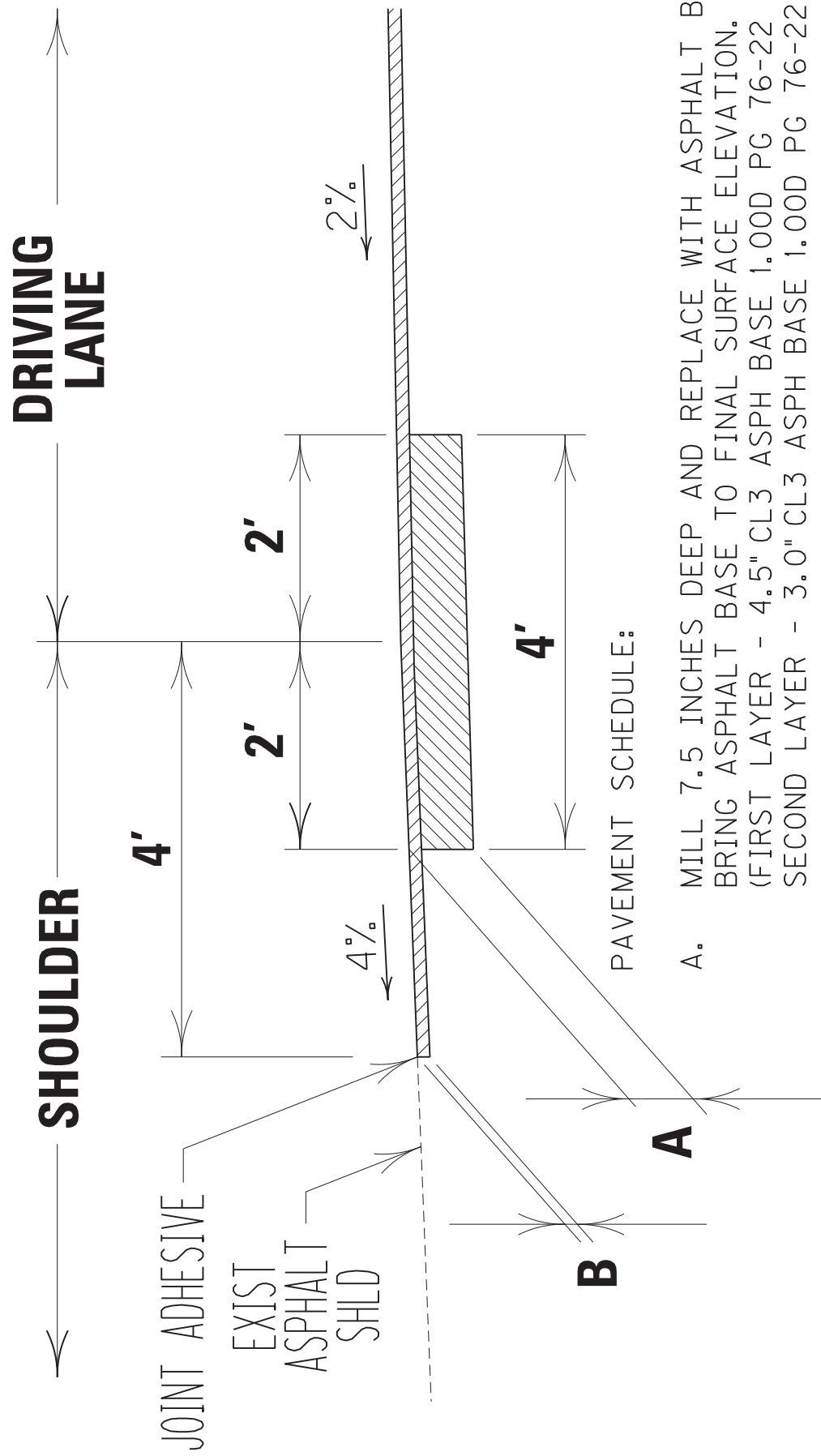
WOLFE COUNTY TYPICAL SECTIONS ITEM 10-20012.00

TYPICAL SECTIONS BERT T. COMBS MOUNTAIN PARKWAY KY 9009



WOLFE COUNTY PAVEMENT DETAIL SHOULDER JOINT ITEM 10-20012.00

THE CONTRACTOR SHALL USE 4-FOOT MILLING HEAD AND ROLLER ON JOINT REPAIRS. FINAL ASPHALT SURFACE SHALL MATCH EXISTING PAVEMENT CROSS-SLOPE. FOG SEAL TO BE APPLIED OVER EXISTING SHOULDERS (OUTER 6 FEET) AS DIRECTED BY THE ENGINEER.



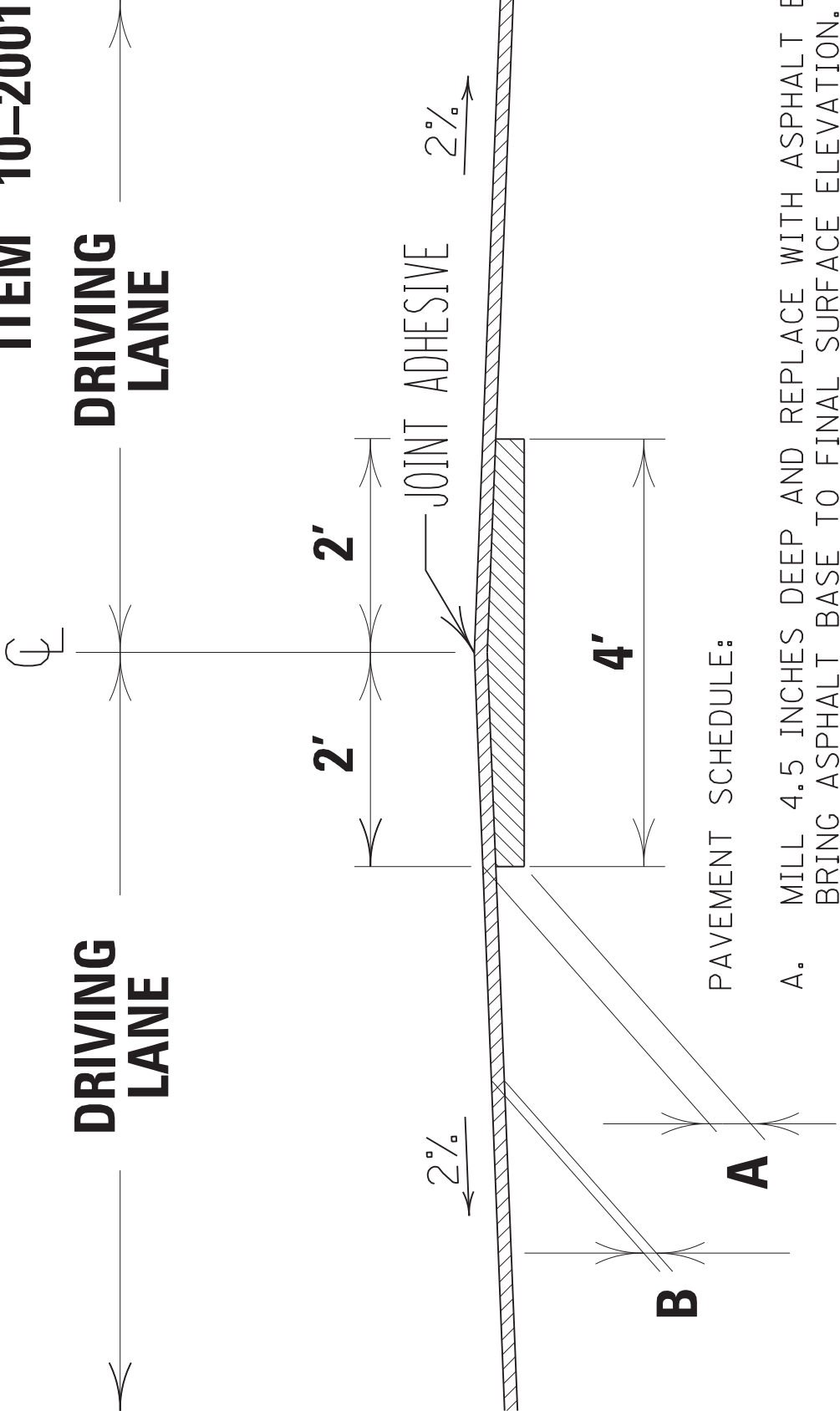
PAVEMENT SCHEDULE:

- A. MILL 7.5 INCHES DEEP AND REPLACE WITH ASPHALT BASE. BRING ASPHALT BASE TO FINAL SURFACE ELEVATION.
(FIRST LAYER - 4.5" CL3 ASPH BASE 1.00D PG 76-22
SECOND LAYER - 3.0" CL3 ASPH BASE 1.00D PG 76-22)
- B. MILL 1.5 INCHES DEEP AND REPLACE WITH ASPHALT SURFACE (1.5" CL3 ASPH SURF. 0.38B PG 76-22)

JOINT REPAIRS SHALL BE COMPLETED 14 DAYS PRIOR TO OTHER APSPHALT MILLING OPERATION.

WOLFE COUNTY PAVEMENT DETAIL CENTERLINE JOINT ITEM 10-20012.00

THE CONTRACTOR SHALL USE 4-FOOT MILLING HEAD AND ROLLER ON JOINT REPAIRS. FINAL ASPHALT SURFACE SHALL MATCH EXISTING PAVEMENT CROSS-SLOPE AND CROWN.



PAVEMENT SCHEDULE:

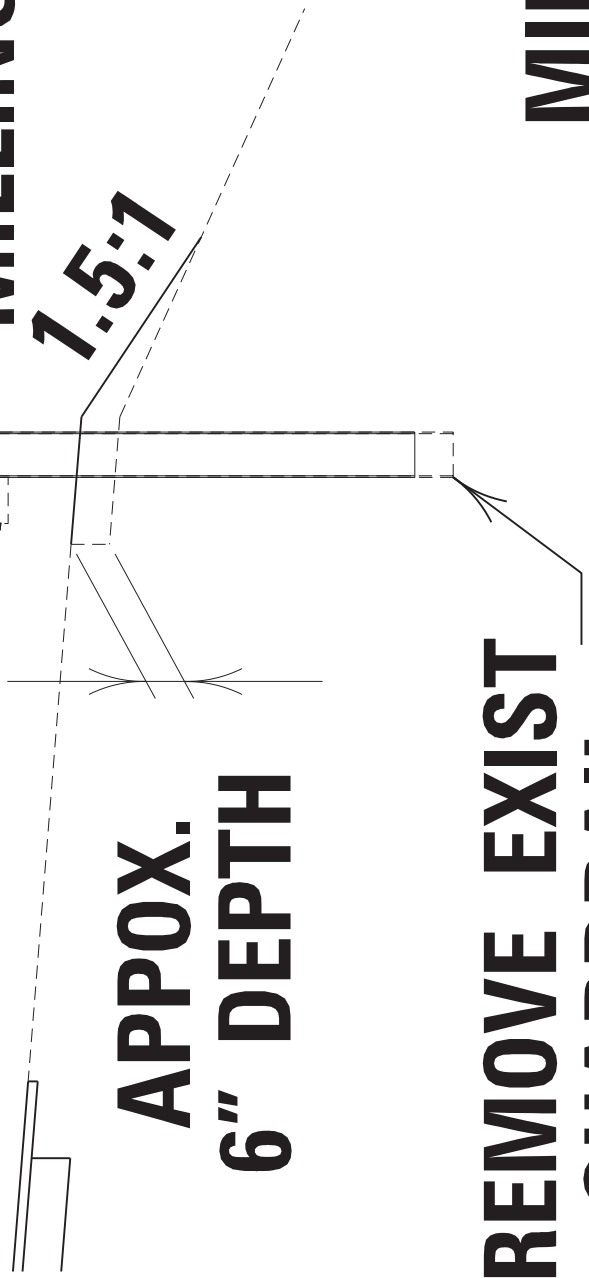
- A. MILL 4.5 INCHES DEEP AND REPLACE WITH ASPHALT BASE. BRING ASPHALT BASE TO FINAL SURFACE ELEVATION. (4.5" CL3 ASPH BASE 1.00D PG 76-22)
- B. MILL 1.5 INCHES DEEP AND REPLACE WITH ASPHALT SURFACE (1.5" CL3 ASPH SURF. 0.38B PG 76-22)

JOINT REPAIRS SHALL BE COMPLETED 14 DAYS PRIOR TO OTHER APSHALT MILLING OPERATION.

**WOLFE COUNTY
MILLING FILL CONDITION
NUMBER 1
ITEM NO. 10-20212.00**

ASPHALT SEAL AGGREGATE & ASPHALT SEAL COAT SHALL BE PLACED AT OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 3' DOWN THE DITCH OR FILL SLOPE, TWO APPLICATIONS.

**CONSTRUCT
GUARDRAIL
1.42 SO FT
MILLING FILL**



**APPOX.
6" DEPTH**

**REMOVE EXIST
GUARDRAIL**

**MILLING FILL
CONDITION
NUMBER 1**

**WOLFE COUNTY
MILLING FILL CONDITION
NUMBER 2
ITEM NO. 10-20212.00**

ASPHALT SEAL AGGREGATE & ASPHALT SEAL COAT
SHALL BE PLACED AT OUTSIDE EDGE OF PAVED
SHOULDER TO A POINT 3' DOWN THE DITCH OR
FILL SLOPE, TWO APPLICATIONS.

**CONSTRUCT
GUARDRAIL**

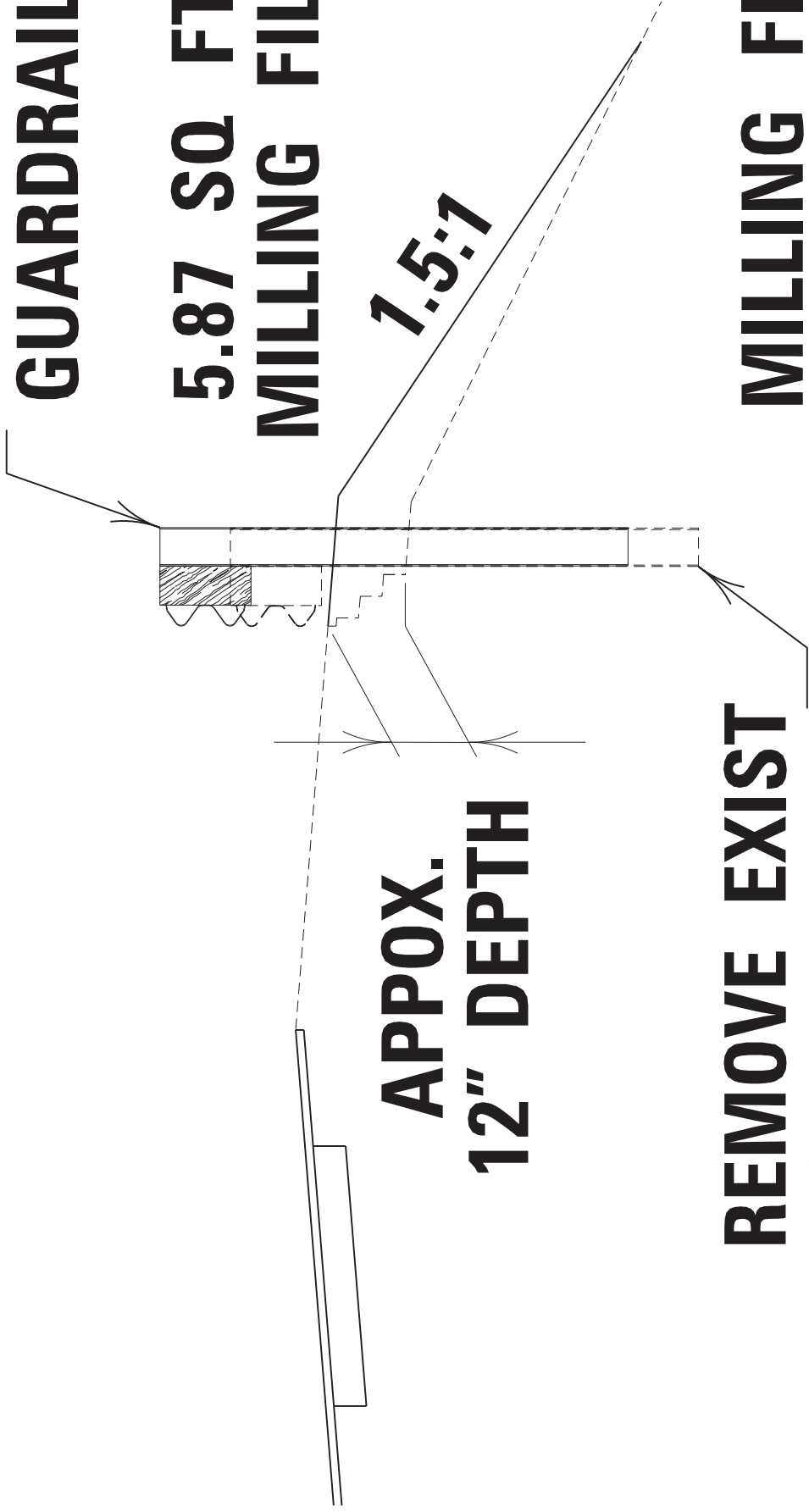
**5.87 SQ FT
MILLING FILL**

1.5:1

**APPOX.
12" DEPTH**

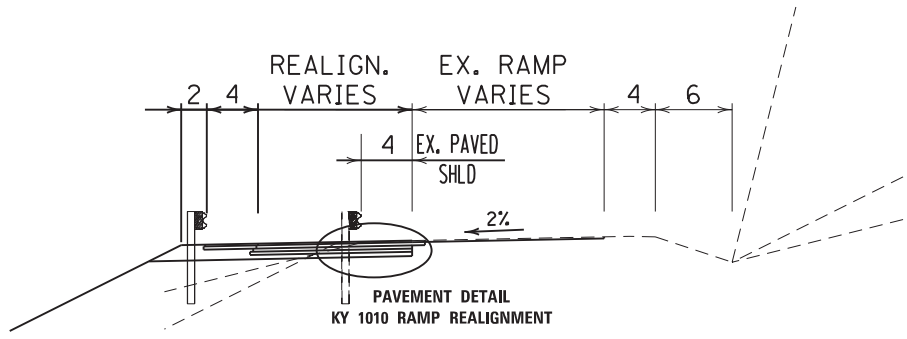
**REMOVE EXIST
GUARDRAIL**

**MILLING FILL
CONDITION
NUMBER 2**



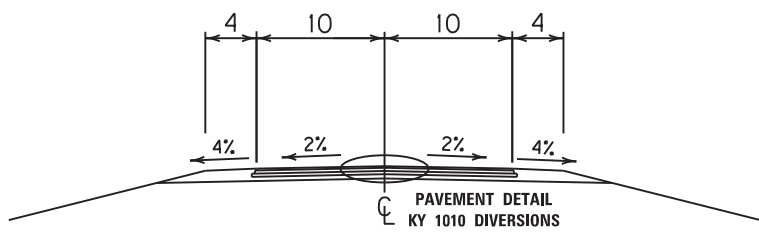
WOLFE COUNTY KY 1010 RAMPS & DIVERSION TYPICAL SECTIONS ITEM 10-20012.00

TYPICAL SECTIONS KY 1010 RAMPS



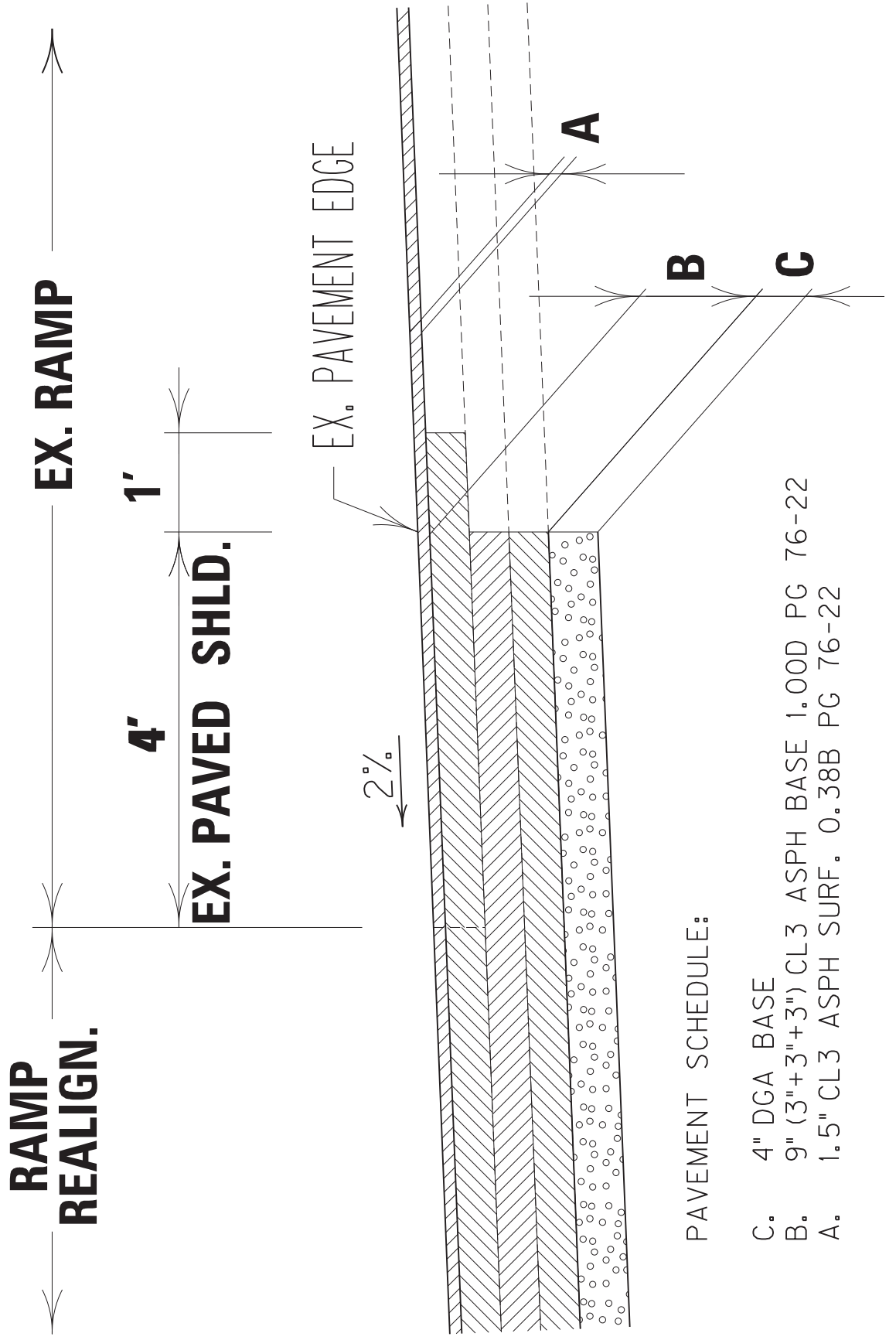
**NORMAL SECTION
RAMP**

TYPICAL SECTIONS KY 1010 DIVERSIONS



**NORMAL SECTION
DIVERSION**

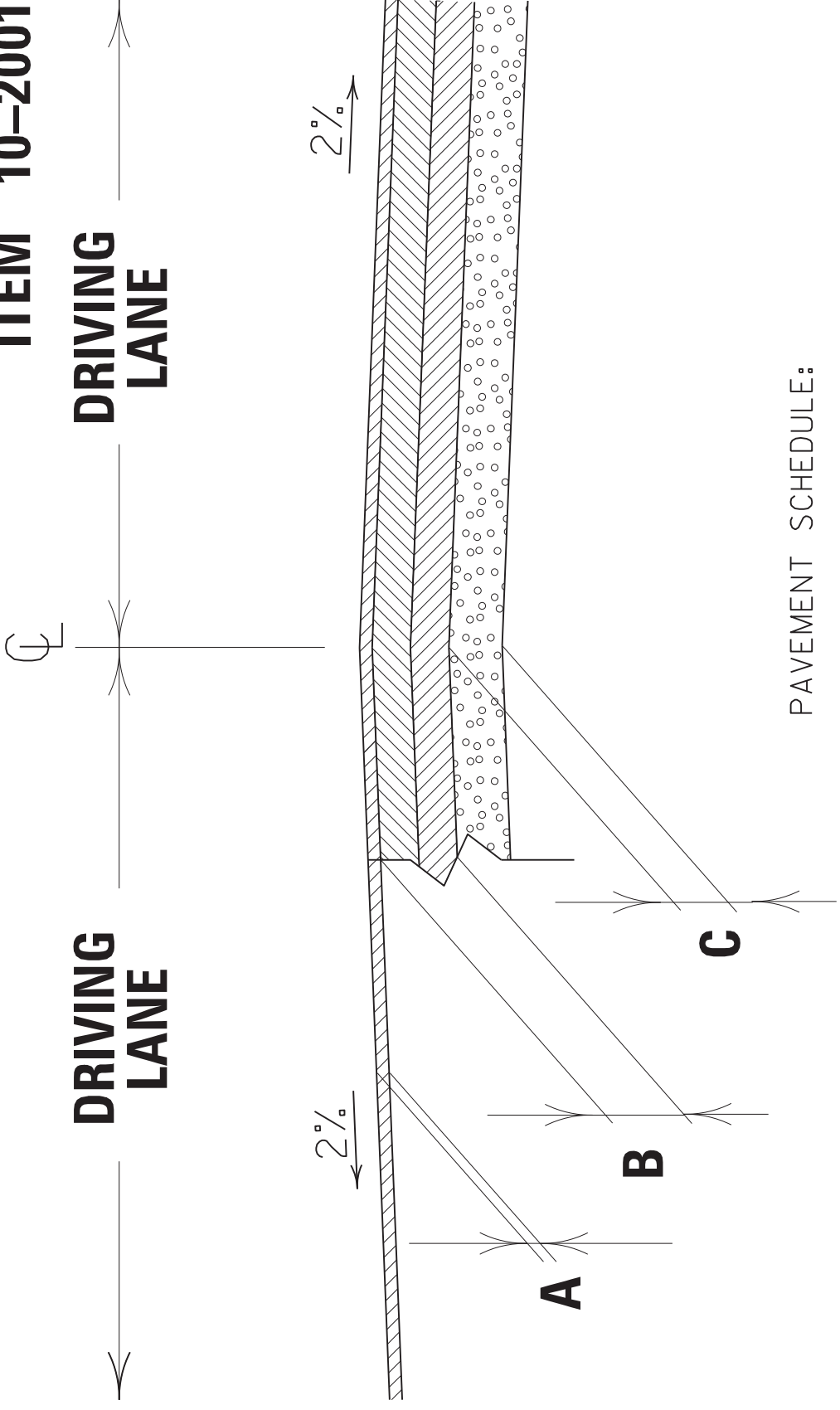
**WOLFE COUNTY
PAVEMENT DETAIL
KY 1010
RAMP REALIGNMENT
ITEM 10-20012.00**



PAVEMENT SCHEDULE:

- C. 4" DGA BASE
- B. 9" (3"+3"+3") CL3 ASPH BASE 1.00D PG 76-22
- A. 1.5" CL3 ASPH SURF. 0.38B PG 76-22

**WOLFE COUNTY
PAVEMENT DETAIL
KY 1010 DIVERSION
ITEM 10-20012.00**



PAVEMENT SCHEDULE:

- C. 4" DGA BASE
- B. 6" (3"+3") CL3 ASPH BASE 1.00D PG 76-22
- A. 1.5" CL3 ASPH SURF. 0.38B PG 76-22

WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet A

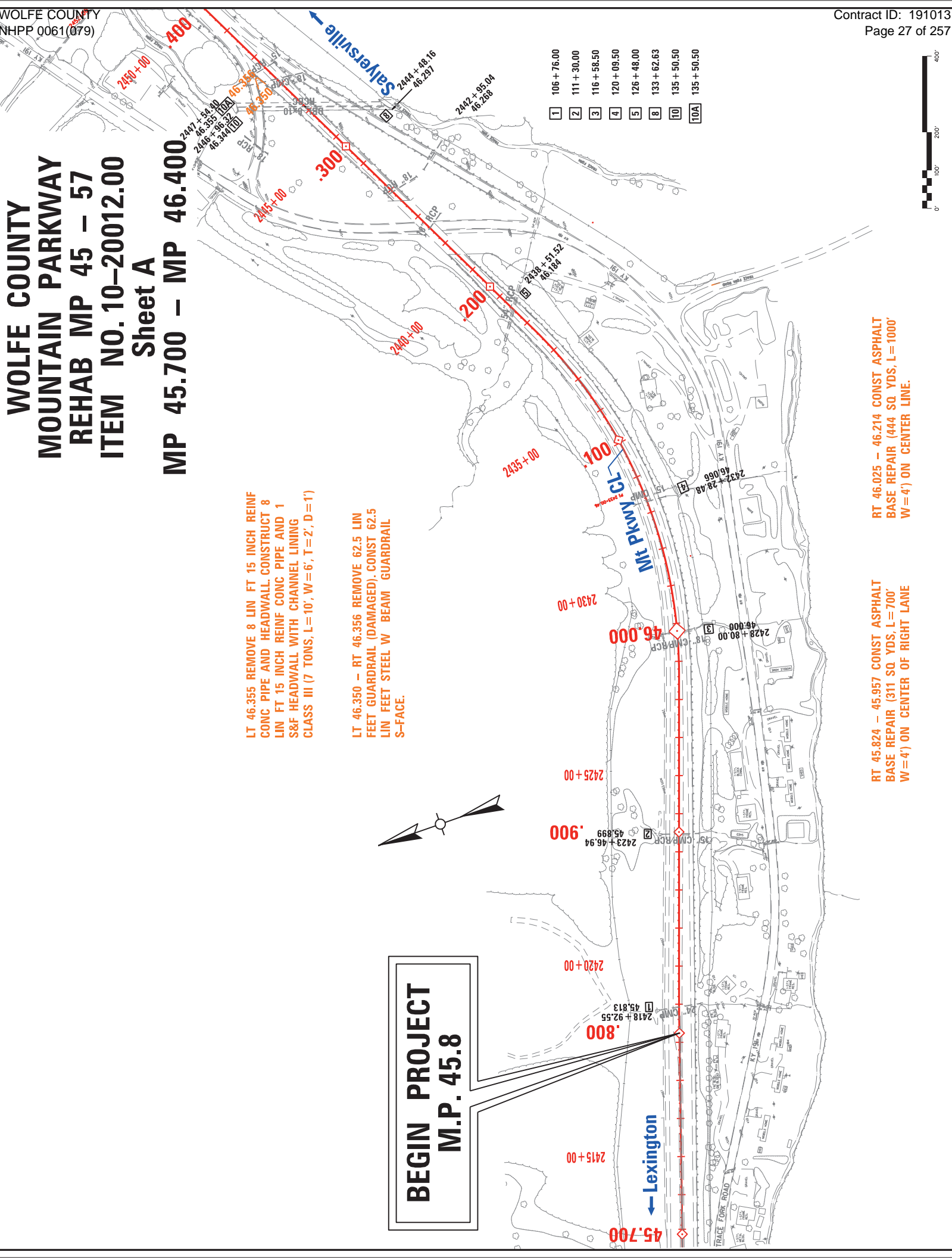
MP 45.700 - MP 46.400

- LT 46.355 REMOVE 8 LIN FT 15 INCH REINF CONC PIPE AND HEADWALL. CONSTRUCT 8 LIN FT 15 INCH REINF CONC PIPE AND 1 S&F HEADWALL WITH CHANNEL LINING CLASS III (7 TONS, L=10', W=6', T=2', D=1')
- LT 46.350 - RT 46.356 REMOVE 62.5 LIN FEET GUARDRAIL (DAMAGED). CONST 62.5 LIN FEET STEEL W BEAM GUARDRAIL S-FACE.

**BEGIN PROJECT
M.P. 45.8**

1	106 + 76.00
2	111 + 30.00
3	116 + 58.50
4	120 + 09.50
5	126 + 48.00
8	133 + 62.63
10	135 + 50.50
10A	135 + 50.50

- RT 46.025 - 46.214 CONST ASPHALT BASE REPAIR (444 SQ YDS, L=1000' W=4') ON CENTER LINE.
- RT 45.824 - 45.957 CONST ASPHALT BASE REPAIR (311 SQ YDS, L=700' W=4') ON CENTER OF RIGHT LANE.



GENERAL SUMMARY					
ITEM CODE	ITEM	UNIT			PROJECT TOTAL
461	CULVERT PIPE - 15 IN (10)	L.F.			32.00
462	CULVERT PIPE - 18 IN (10)	L.F.			160.00
464	CULVERT PIPE - 24 IN (10)	L.F.			32.00
1202	PIPE CULVERT HEADWALL 15 IN (11)	EACH			4.00
1204	PIPE CULVERT HEADWALL 18 IN (11)	EACH			7.00
1208	PIPE CULVERT HEADWALL 24 IN (11)	EACH			5.00
1310	REMOVE PIPE (10)	L.F.			124
1691	FLUME TYPE 2	EACH			8
1897	ASPHALT WEDGE CURB	L.F.			1,844
1984	DELINEATOR FOR BARRIER - WHITE (8)	EACH			8
1985	DELINEATOR FOR BARRIER - YELLOW (8)	EACH			8
1987	DELINEATOR FOR G/R-BI DIR. WHITE	EACH			298
2014	BARRICADE-TYPE III	EACH			12
2200	ROADWAY EXCAVATION	CU. YD.			738.8
2351	GUARDRAIL-STEEL W BEAM-S FACE	L.F.			14,913
2360	GUARDRAIL TERMINAL SECTION NO 1.				2
2367	GUARDRAIL END TREATMENT TYPE 1	EACH			15
2372	REMOVE GUARDRAIL CON TO BR END.	EACH			2
2377	GUARDRAIL CON TO BR END TYPE C	EACH			2
2381	REMOVE GUARDRAIL	L.F.			12,413
2396	REMOVE GUARDRAIL END TREATMENT	EACH			39
2483	CHANNEL LINING CLASS II	TON			816
2484	CHANNEL LINING CLASS III (2)	TON			533
2562	TEMPORARY SIGNS	SQ. FT.			1,569
2565	OBJECT MARKER TYPE 2 (6)	EACH			17
2568	MOBILIZATION	L.S.			1
2569	DEMOBILIZATION	L.S.			1
2575	DITCHING & SHOULDERING (9)	L.F.			116,160
2625	REMOVE HEADWALL	EACH			16
2650	MAINTAIN & CONTROL TRAFFIC	L.S.			1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH			6
2676	MOBILIZATION FOR MILL & TEXT.	L.S.			1
2696	SHOULDER RUMBLE STRIPS-SAWED	L.F.			116,160
2726	STAKING	L.S.			1
2775	ARROW PANEL	EACH			2
3262	CLEAN PIPE STRUCTURE (1) (12)	EACH			5
5950	EROSION CONTROL BLANKET (1)	SQ. YD.			2,000
5990	SODDING (14)	SQ. YD.			445
6511	PAVE STRIPING-TEMP PAINT-6 IN	L.F.			100,000
6515	PAVE STRIPING-PERM PAINT-6 IN	L.F.			204,495
6546	PAVE STRIPING-THERMO-12 IN W (4)(5)	L.F.			1,830
6547	PAVE STRIPING-THERMO-12 IN Y (5)	L.F.			500
20458ES403	CENTERLINE RUMBLE STRIPS	L.F.			58,080
24489EC	INLAID PAVEMENT MARKER (7)(15)	EACH			1,804

10020NS	FUEL ADJUSTMENT	DOLLAR			38,601
10030NS	ASPHALT ADJUSTMENT	DOLLAR			96,954
21415ND	EROSION CONTROL (3)	L.S.			1
20071EC	JOINT ADHESIVE (13)	L.F.			84,300
24984EC	TRANSVERSE IN-LANE RUMBLE STRIPS (16)	EACH			6
BRIDGE REHAB (SEE BRIDGE REHAB DRAWINGS, 119B00042N)					
2653	LANE CLOSURE	EACH			2
2898	RELOCATE CRASH CUSHION	EACH			2
3171	CONCRETE BARRIER WALL TYPE 9T	L.F.			360
3295	EXPANSION JOINT REPLACE 2 IN	L.F.			85
3299	ARMORED EDGE FOR CONCRETE	L.F.			85
3300	ELIMINATE TRANSVERSE JOINT	L.F.			91
4933	TEMP SIGNAL 2 PHASE	EACH			1
6549	PAVE STRIPING-TEMP REM TAPE B	L.F.			500
6550	PAVE STRIPING-TEMP REM TAPE W	L.F.			1000
6551	PAVE STRIPING -TEMP REM TAPE Y	L.F.			2000
8150	STEEL REINFORCEMENT	LBS			868.4
8504	EPOXY SAND SLURRY	SQ. YD.			117.8
8526	CONC CLASS M FULL DEPTH PATCH	CU. YD.			6.0
8534	CONCRETE OVERLAY-LATEX	CU. YD.			22.1
8549	BLASTING CLEANING	SQ. YD.			648
8551	MACHINE PREP OF SLAB (17)	SQ. YD.			530
8903	CRASH CUSHION TY VI CLASS BT TL3	EACH			2
22146EN	CONCRETE PATCHING REPAIR (1)	SQ. FT.			100
24094EC	PARTIAL DEPTH PATCHING	CU. YD.			14.7
BRIDGE REHAB (SEE BRIDGE PLANS AT KY 1010 INTERCHANGE, DRAWING NO. 27852)					
SEE BRIDGE PLANS FOR BID ITEMS.					
SIGNS (SEE SHEET SIGN SUMMARY, PANEL SIGN SUMMARY, AND PANEL SIGN DRAWINGS.)					
6400	GROUND MOUNT, SIGN SUPP. TYPE A (T1)	LBS.			9450.00
6441	GROUND MOUNT, SIGN SUPP. TYPE C (T1)	LBS.			928.80
6490	CONCRETE - CLASS "A" FOR SIGNS	CU. YD.			31.72
6491	REINFORCEMENT STEEL FOR SIGN (T11)	LBS			1658.25
6405	ALUMINUM PANEL SIGNS (T2)	SQ. FT.			2427
6406	ALUMINUM SHEET. SIGNS 0.080 GAUGE (T3)	SQ. FT.			102
6407	ALUMINUM SHEET. SIGNS 0.125 GAUGE (T3)	SQ. FT.			1376
6410	STEEL POST TYPE 1 (T4, T5)	L.F.			2195
21596ND	STEEL POST TYPE D (T4, T5, T6)	EACH			6
6412	STEEL POST MILE MARKERS (T4, T5, T7)	EACH			21
6451	REMOVE SIGN SUPPORT BEAMS (T8, T9, T10)	EACH			4
21373ND	REMOVE SIGN (T12)	EACH			11
8150	REINFORCEMENT STEEL (T13)	LBS.			948.00
24631EC	BARCODE LABEL	EACH			129

(1) AT LOCATIONS AS DIRECTED BY THE ENGINEER					
(2) ADDITIONAL 200 TONS TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER					
(3) SEE EROSION CONTROL SPECIAL NOTE					
(4) 1330 L.F. TO BE USED AT GORE AREAS.					
(5) ADDITIONAL 500 L.F. TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER.					
(6) SEE STD. DRAWING RBR-060					
(7) EXISTING PAVE. MARKER REMOVAL SHALL BE INCIDENTAL TO ASPHALT PAVEMENT MILLING & TEX.					
(8) FOR TEMP. BARRIER WALL. ESTIMATED AT 50' SPACING.					
(9) INCLUDES BOTH DIRECTIONS OF ROADWAY AND CLEANING OUT ALL PERFORATED PIPE HEADWALLS.					
(10) ADDITIONAL 24 L.F. OF PIPE TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER.					
(11) ADDITIONAL 3 HEADWALLS TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER.					
(12) THIS BID ITEM IS INTENDED FOR PIPES WITH DIAMETER EQUAL TO OR GREATER THAN 36". CLEANING PIPE STRUCTURES WITH DIAMETER SMALLER THAN 36" ARE INCIDENTAL TO BID ITEM "DITCHING & SHOULDERING".					
(13) SEE SHOULDER JOINT AND CENTERLINE JOINT DRAWINGS.					
(14) SODDING TO BE USED AFTER REMOVAL OF DIVERSIONS AT KY 1010.					
(15) 1452 BI-DIRECTION. (YELLOW), 333 BI-DIRECTION. (WHITE-RED), AND 19 BI-DIRECTION. (YELLOW-RED)					
(16) TO BE USED ON KY 1010 ON-RAMPS.					
(17) DEPTH TO BE DETERMINED BY THE ENGINEER.					
(T1) PAYMENT FOR GROUND MOUNTED SIGN SUPPORTS TYPE A AND C SHALL BE BASED ON THE NOMINAL WEIGHT OF THE BEAMS. THE NECESSARY GALVANIZING, HARDWARE, ETC. IS TO BE CONSIDERED INCIDENTAL. QUANTITIES FOR TYPE C SUPPORTS SHALL INCLUDE ALL NECESSARY HARDWARE TO FORM COMPLETE BREAK-AWAY BEAMS. SEE PANEL SIGN DETAIL SHEET.					
(T2) QUANTITY SHALL INCLUDE ALL COPY AND HARDWARE NECESSARY TO FROM COMPLETE SIGN. NO DEDUCTION IN AREA IS TO BE MADE FOR ROUNDING OF CORNERS.					
(T3) WITH PERMISSION OF THE ENGINEER, SHEETING SIGNS ON THE RAMPS AND SIDE ROADS MAY BE MOVED TO BE COMPATIBLE WITH THE EXISTING SIGNS.					
(T4) QUANTITY IS ESTIMATED. THE EXACT LENGTH SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.					
(T5) WHERE REQUIRED, BRACING FOR SHEETING SIGNS SHAL BE INCIDENTAL TO STEEL POST. SEE SHEETING SIGN DETAIL SHEET.					
(T6) QUANTITY SHALL INCLUDE ALL MATERIAL NECESSARY TO FORM A COMPLETE BREAK-AWAY ASSEMBLY. TYPE I POSTS AND CONCRETE SHALL BE PAID SEPARATELY. SEE SHEETING SIGN DETAIL SHEETS.					
(T7) QUANTITY SHALL INCLUDE SIGN AND POSTS.					
(T8) ALL MATERIALS REMOVED AND NOT REUSED, SUCH AS SIGNS, SIGN LIGHTS, SIGN SUPPORTS, ETC. SHALL BECOME THE PROPERTY OF THE CONTRACTOR.					
(T9) THE REMOVAL OF ALL TYPE I OR II POSTS AND ALL SHEETING SIGNS SHALL BE INCIDENTAL TO THE PROJECT WITH NO ADDITONAL PAYMENT BEING ALLOWED. ALL MATERIAL SHALL BE STORED IN ACCORDANCE WITH NOTE (T8) ABOVE.					
(T10) WHERE THE REMOVAL OF BEAM SIGN SUPPORTS IS CALLED FOR, THE BEAM AND ANY CONCRETE PROJECTING ABOVE THE GROUND LINE ARE TO BE CUT OFF A MINIMUM OF ONE FOOT (1') BELOW EXISTING GROUND LINE OR THE ENTIRE BEAM AND CONCRETE BASE ARE TO BE REMOVED COMPLETELY AND BACKFILLED TO EXISTING GROUND LINE.					
(T11) GALVANIZED STEEL TO BE USED FOR Z-BRACKETS.					
(T12) REMOVE PANEL SIGNS ONLY. DO NOT DAMAGE EXISTING STEEL BEAMS.					

(T13) FOR CONCRETE FOOTINGS.				
(T14) THE EXACT SIGN LOCATIONS SHALL BE FIELD VERIFIED AND DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. MILE POINTS PROVIDED ON THE SIGNING PLANS ARE FOR				
REFERENCE ONLY.				
(T15) THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROJECT MANAGER/ENGINEER TO DETERMINE IF TEMPORARY CONSTRUCTION SIGNS AT THE EASTERN END OF THE PROJECT SHOULD BE				
REMOVED OR RELOCATED.				
(T16) CLEARING AND GRUBBING, AND TREE TRIMMING, WHEN REQUIRED FOR CONSTRUCTION OR				
VISIBILITY OF SIGNS, SHALL BE INCIDENTAL TO THE CONTRACT. LOCATIONS TO BE DETERMINED BY THE				
ENGINEER.				

PAVING AREA													
Sheet	Lt Shld	Rt Shld	Traffic Lanes	Ramp A	Ramp B	Ramp C	Ramp D	Base Repair EB	Base Repair WB	CL Base Repair	Mill #1 CU. YD.	Mill #2 CU. YD.	Mill #2 CU. YD.
SQUARE YARDS													
A	972	965	9684					44	0	755	0	0	0
A-B	1718	1709	11184	2391	1091			0	178	0	0	0	0
C	1611	1582	11787					89	178	0	72	245	
D	1389	1389	8169					0	88	0	11	0	
E	1152	1160	6694					0	0	0	51	0	
F	1406	1410	8235					222	400	0	182	0	
G	1155	1165	6745					89	445	67	93	0	
H	1549	1549	9243					88	356	978	14	0	
I	1658	1673	9785					88	801	0	0	0	
J	1414	1398	12187					222	178	0	9	304	
K	1366	1356	13679					0	178	0	0	0	
L	1452	1458	9094					111	712	0	16	0	
M	1397	1380	9912	2113	1821	2263	1878	243	44	0	7	0	
N	1158	1186	12084					22	88	0	39	0	
O	1020	1021	8759					0	44	0	8	0	
P	1444	1443	8274					67	0	0	7	0	
Q	1338	2376	10443					22	0	133	114	0	
R	1294	1287	13778					0	133	0	22	0	
Total	24493	25507	179736	4504	2912	2263	1878	1307	3823	1933	645	549	

PAVING AREA (DIVERSIONS AT KY 1010 INTERCHANGE)						
Sheet	1.5" CL3 ASPH SURF 0.3B PG76-22	9" (3"+3"+3") ASPH BASE 1.0D PG76-22	CL3 CL3 ASPH BASE 1.0D PG76-22	6" (3"+3") CL3 ASPH BASE 1.0D PG76-22	SHLD 3.0" ASPH BASE 1.0D PG76- 22	DGA BASE*
SQUARE YARDS						
T						
Eastbound	293.9	293.9		284.09	125.4	
U						
Westbound	167.43	167.34		164.78	136.3	
V						
KY 1010 NorthB	228.98		228.98		79.34	
W						
KY 1010 SouthB	200.94		200.94		76.59	
* IN CUBIC YARD						
Total	891.25	461.24	429.92	448.87	417.63	

PAVING SUMMARY											
ITEM CODE		UNIT	LT SHLD	RT SHLD	TRAFFIC LANE	RAMP A	RAMP B	RAMP C	RAMP D	KY 1010 DIV	PROJECT TOTAL
1	DGA BASE (3) (11) (13)	TON									1,064
78	CRUSHED AGGREGATE SIZE NO. 2 (2)	TON									200
100	ASPHALT SEAL AGGREGATE (4)(7)(8)(13)	TON									200
103	ASPHALT SEAL COAT (5)(7)(8)(13)	TON									24
194	LEVELING AND WEDGING PG 76-22 (2)	TON									1,000
216	CL3 ASPH BASE 1.0D PG76-22 (13)	TON									3,039
356	ASPHALT MATERIAL FOR TACK (9)	TON									102
387	CL3 ASPH SURF 0.38B PG76-22 (13)	TON	2,021	2,104	14,828	372	240	187	155	74	19,980
2677	ASPH. PAVE MILL. & TEXTURING (6)	TON									22,501
24781EC	INTELLIGENT COMP. FOR ASPH. (10)	TON									19,907
24891EC	PAVE MOUNT INFR. TEMP EQUIP. (10)	S.F.									2,171,637
24878EC	ASPHALT EMUL. FOR FOG SEAL (12)	TON									52
(1) ALL ASPHALT MIXTURES ARE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH											
(2) TO BE PLACED AT LOCATIONS DIRECTED BY THE ENGINEER											
(3) ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH											
(4) ESTIMATED AT 20 LBS/SQ YD.											
(5) ESTIMATED AT 2.4 LBS/SQ. YD.											
(6) SEE PROJECT NOTES FOR MILLINGS.											
(7) TO BE PLACED AT OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 3' DOWN THE DITCH OR FILL SLOPE, TWO APPLICATIONS.											
(8) ASPHALT SEAL AGGREGATE AND SEAL COAT TO BE APPLIED AT LOCATIONS WITH NEW GUARDRAIL.											
(9) ESTIMATED AT 0.84 LBS (0.1 GAL) PER SQUARE YARD.											
(10) SEE THE SPECIAL NOTE FOR INTELLIGENT COMPACTION OF ASPHALT MIXTURES AND SPECIAL NOTE FOR PAVER MOUNTED TEMPERATURE PROFILES.											
(11) 200 TONS ADDED FOR REPAIR OF SHOULDERS WHEREVER NEEDED. USE AS DIRECTED BY THE ENG.											
(12) TO BE USED ON EXISTING SHOULDERS (OUTER 6 FEET) AS DIRECTED BY THE ENGINEER. SEE SPECIAL NOTE FOR FOG SEAL. FOR CALCULATION PURPOSE, ASSUMED 8.4 LBS/GAL											
(13) INCLUDED 865 TONS OF DGA, 7 TONS OF ASPHALT SEAL AGGREGATE, 1 TON OF ASPHALT SEAL COAT, 445 TONS OF CL3 ASPH BASE, 0.37 TON OF ASPH MAT. FOR TACK, AND 74 TONS OF ASPH SURF FOR THE PURPOSE OF CONSTRUCTING DIVERSIONS AT THE KY 1010 INTERCHANGE.											

GUARDRAIL & DRAINAGE SUMMARY																			
SHEET	REMOVE GR. END TREAT.	TERMINAL SECTION #1	GR. END TREATMENT TYPE 1	REMOVE GUARDRAIL	GUARDRAIL	REMOVE GR. CON. TO BR. END	GR. CON. TO BR. END TY C	ASPHALT WEDGE CURB	FLUME TYPE 2	CHANNEL LINING CLASS III	CHANNEL LINING CLASS II	REMOVE HEADWALL	REMOVE PIPE	CULVERT PIPE 15 INCH	CULVERT PIPE 18 INCH***	CULVERT PIPE 24 INCH	PIPE CULVERT HDWL 15 INCH	PIPE CULVERT HDWL 18 INCH	PIPE CULVERT HEADWALL 24 INCH
	EACH	EACH	EACH	L.F.	L.F.	EACH	EACH	L.F.	EACH	TON	TON	EACH	L.F.	L.F.	L.F.	L.F.	EACH	EACH	EACH
A				62.5	62.5					7		1	8	8			1		
B										32		1	8		8			1	
C	6		6	2200	2200			1175	5	39	816	1	20		20			1	
D	4			362.5	362.5					51		3	12		8	4		2	1
E	3		1	637.5	912.5					12									
F	4		4	3262.5	3262.5			669	3	55									
G	5		1	1250	1737.5	1	1												
H	2			262.5	262.5														
I																			
J	2			1400	1575					9									
K										10									
L	2				300					20									
M	2				137.5					5									
N	3		1	700	887.5					38									
O	2			150	150					10		1	4		4				1
P	2				137.5					10									
Q				2162.5	2162.5	1	1			35									
R	2		2	325	325														
S.T.U.V.W.		2		412.5	437.5										100				
*** 100 FEET OF 18" CULVERT PIPE TO BE USED AT KY 1010 TEMPORARY DIVERSIONS. TO BE PROPERTY OF CONTRACTOR AFTER CONSTRUCTION.																			
TOTAL	39	2	15	12412.5	14913	2	2	1844	8	333	816	7	52	8	136	8	1	4	2
*QUANTITIES ON THIS SHEET HAVE BEEN CARRIED OVER AND INCLUDED IN THE GENERAL SUMMARY SHEET																			

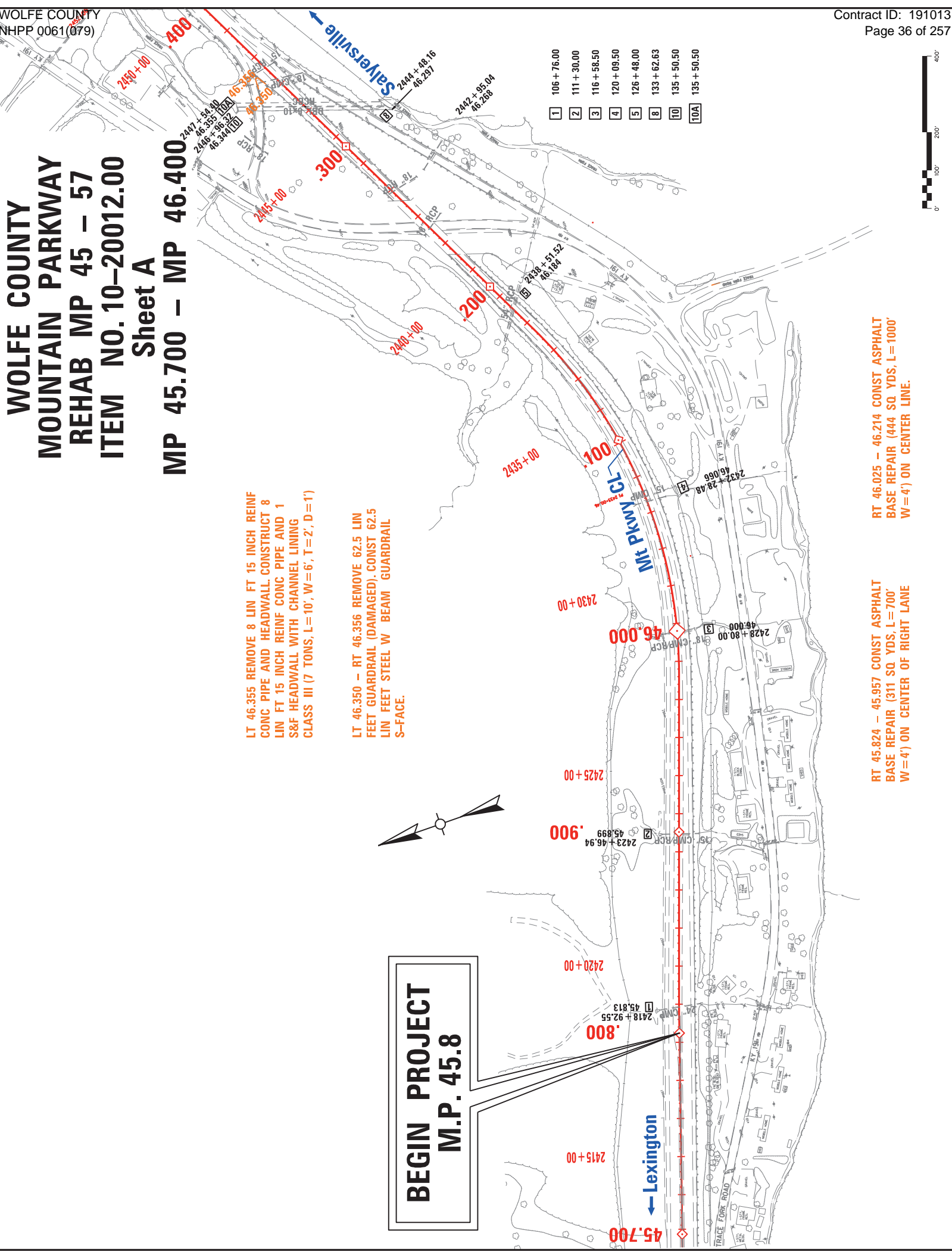
**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet A
MP 45.700 - MP 46.400**

LT 46.355 REMOVE 8 LIN FT 15 INCH REINF CONC PIPE AND HEADWALL. CONSTRUCT 8 LIN FT 15 INCH REINF CONC PIPE AND 1 S&F HEADWALL WITH CHANNEL LINING CLASS III (7 TONS, L=10', W=6', T=2', D=1')

LT 46.350 - RT 46.356 REMOVE 62.5 LIN FEET GUARDRAIL (DAMAGED). CONST 62.5 LIN FEET STEEL W BEAM GUARDRAIL S-FACE.

**BEGIN PROJECT
M.P. 45.8**

- 1 106 + 76.00
- 2 111 + 30.00
- 3 116 + 58.50
- 4 120 + 09.50
- 5 126 + 48.00
- 8 133 + 62.63
- 10 135 + 50.50
- 10A 135 + 50.50

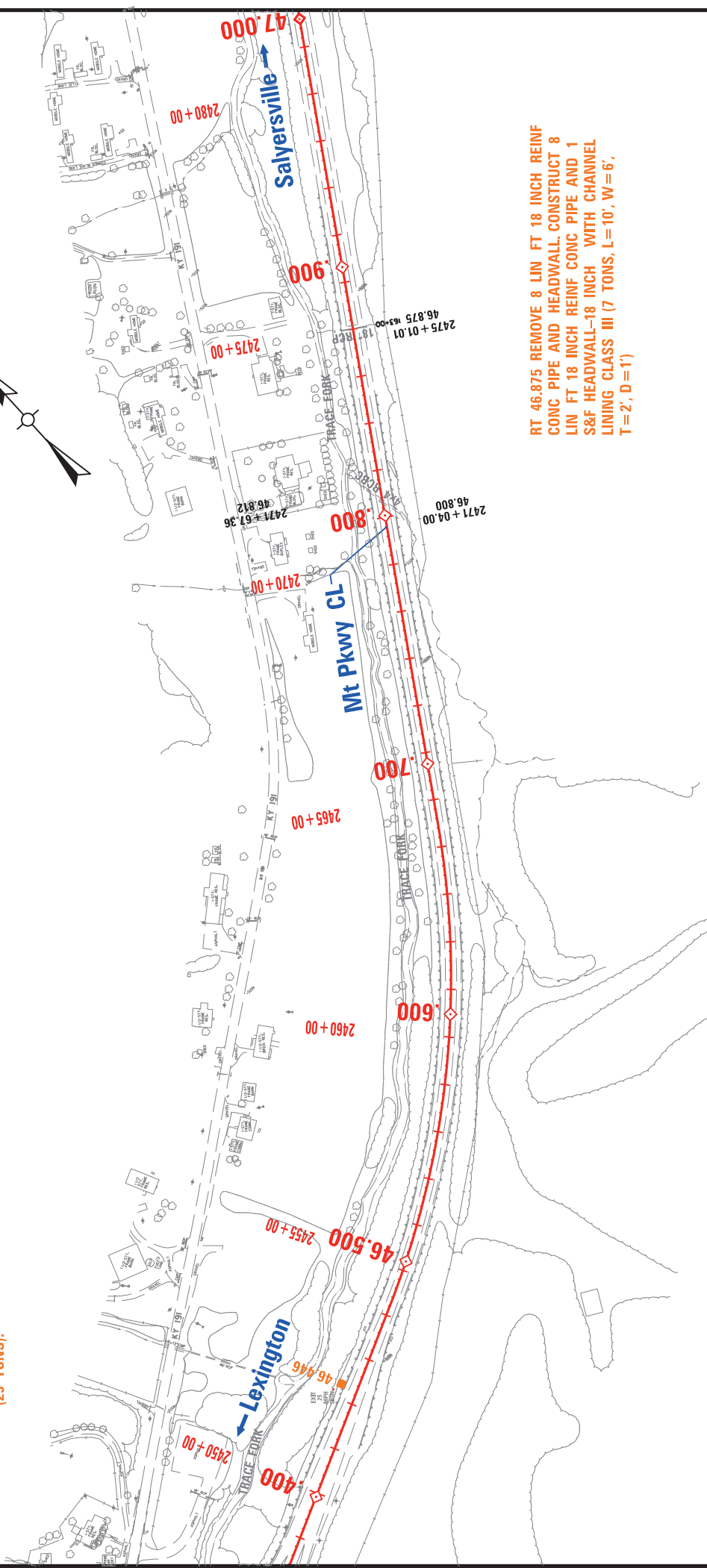
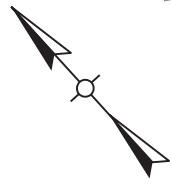


RT 45.824 - 45.957 CONST ASPHALT BASE REPAIR (311 SQ YDS, L=700' W=4') ON CENTER OF RIGHT LANE

RT 46.025 - 46.214 CONST ASPHALT BASE REPAIR (444 SQ YDS, L=1000' W=4') ON CENTER LINE.

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet B
MP 46.400 - MP 47.000**

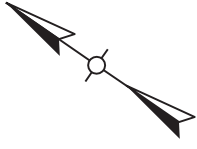
LT 46.446 CONST CHANNEL LINING
CLASS III IN WASHED-OUT AREA
(25 TONS).



RT 46.875 REMOVE 8 LIN FT 18 INCH REINF
CONC PIPE AND HEADWALL, CONSTRUCT 8
LIN FT 18 INCH REINF CONC PIPE AND 1
S&F HEADWALL-18 INCH WITH CHANNEL
LINING CLASS III (7 TONS, L=10', W=6',
T=2', D=1')



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet C MP 47.000 - MP 47.700



LT 47.199 REMOVE 20 LIN FT 18 IN CORRUGATED METAL PIPE. CONST 20 LIN FT 18 IN CORRUGATED METAL PIPE AND 1 S&F HEADWALL-18 INCH WITH CHANNEL LINING CLASS III (7 TONS, L=10', W=6', T=2', D=1') AT OUTLET.

LT 47.053 CONSTRUCT CHANNEL LINING CLASS III (22 TONS, L=20', W=10', T=2', D=1') AT OUTLET OF 30 INCH PIPE.

LT 47.260 - LT 47.469 REMOVE 2 GR END TREATMENTS TYPE 1 AND 1025 LIN FEET GUARDRAIL. CONSTRUCT 1025 LIN FEET STEEL W BEAM GUARDRAIL S-FACE AND 2 GR END TREATMENTS TYPE 1.
LT 47.260 - LT 47.469 REFILL BEHIND GUARDRAIL (CONDITION NO. 2) WITH ASPHALT MILLING (245 CU YDS, L=1125', END AREA 5.87 SQ. FT).

RT 47.263 - RT 47.435 CONSTRUCT CHANNEL LINING CLASS II (533 TONS L=800', W=6', T=2)
RT 47.263 - RT 47.435 REMOVE 2 GR END TREATMENTS TYPE 1 AND 800 LIN FEET GUARDRAIL AND CONST 800 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 2 GR END TREAT TYPE 1.

RT 47.263 - RT 47.435 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (47 CU YDS, L=900', END AREA 1.42 SQ. FT).

RT 47.263 - RT 47.435 CONST 822 LIN FT BITUMINOUS WEDGE CURB WITH FLUME INLETS TYPE 2 (3 EACH) AT 47.311, 47.358, AND 47.415

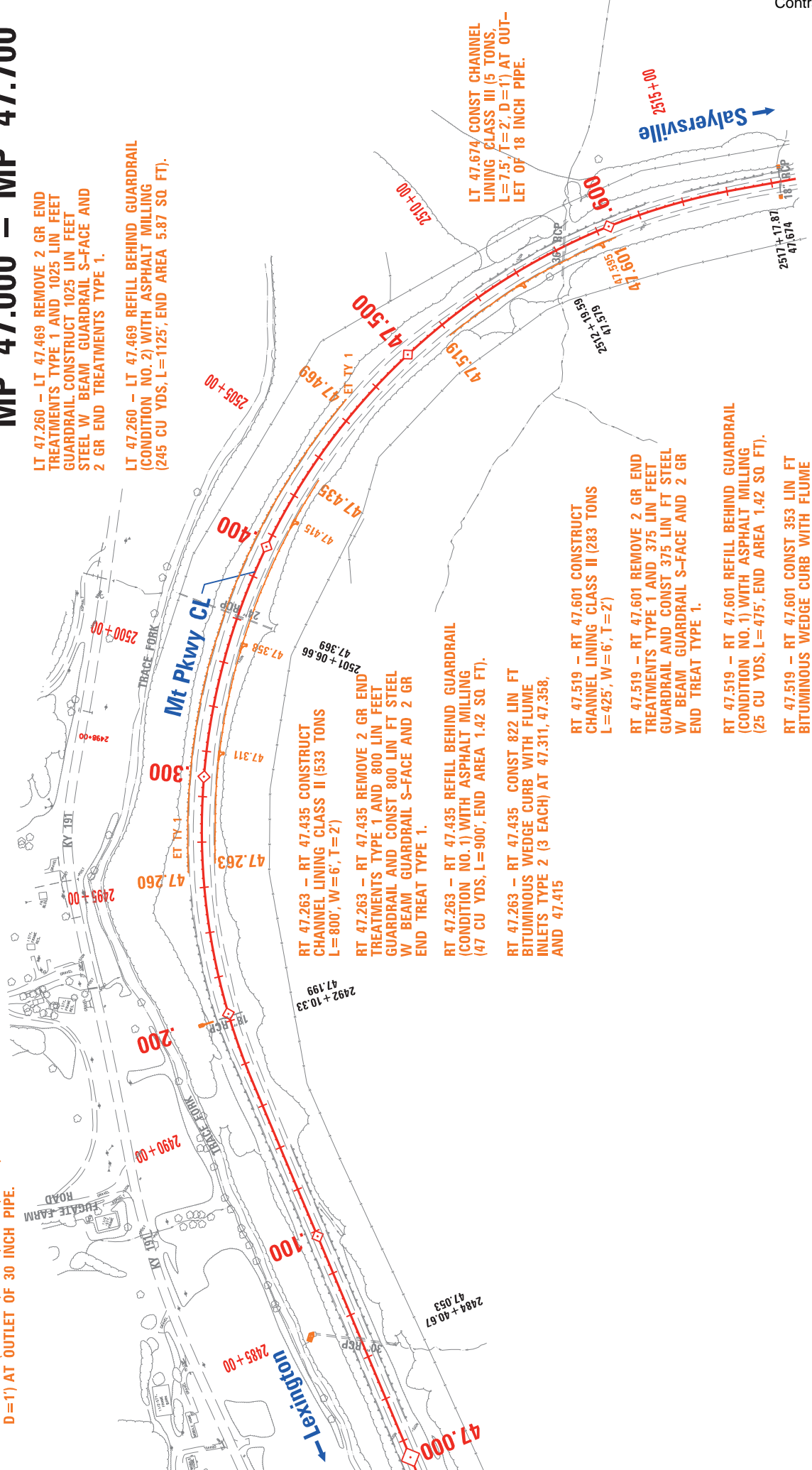
RT 47.519 - RT 47.601 CONSTRUCT CHANNEL LINING CLASS II (283 TONS L=425', W=6', T=2)

RT 47.519 - RT 47.601 REMOVE 2 GR END TREATMENTS TYPE 1 AND 375 LIN FEET GUARDRAIL AND CONST 375 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 2 GR END TREAT TYPE 1.

RT 47.519 - RT 47.601 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (25 CU YDS, L=475', END AREA 1.42 SQ. FT).

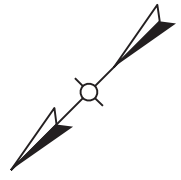
RT 47.519 - RT 47.601 CONST 353 LIN FT BITUMINOUS WEDGE CURB WITH FLUME INLETS TYPE 2 (2 EACH) AT 47.557, AND 47.595.

RT 47.674 CONST CHANNEL LINING CLASS III (5 TONS, L=7.5', T=2', D=1') AT INLET OF 18 INCH PIPE.



LT 47.674 CONST CHANNEL LINING CLASS III (5 TONS, L=7.5', T=2', D=1') AT OUTLET OF 18 INCH PIPE.

WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet D MP 47.700 - MP 48.250



LT 47.835 REMOVE 4 LIN FT 24 INCH REINF CONC PIPE AND HEADWALL. CONSTRUCT 4 LIN FT 24 INCH REINF CONC PIPE AND 1 S&F HEADWALL-24 INCH WITH CHANNEL LINING CLASS III (9 TONS, L=10', W=8', T=2', D=1') AT OUTLET.

LT 47.910 REMOVE 4 LIN FT 18 INCH REINF CONC PIPE AND HEADWALL. CONSTRUCT 4 LIN FT 18 INCH REINF CONC PIPE AND 1 S&F HEADWALL-18 INCH WITH CHANNEL LINING CLASS III (7 TONS, L=10', W=6', T=2', D=1') AT OUTLET.

LT 47.778 CONST CHANNEL LINING CLASS III (5 TONS, L=7.5', W=6', T=2', D=1') AT OUTLET OF 18 INCH PIPE.

RT 47.778 CONST CHANNEL LINING CLASS III (5 TONS, L=7.5', W=6', T=2', D=1') AT INLET OF 18 INCH PIPE.

LT 48.030 REMOVE 4 LIN FT 18 INCH REINF CONC PIPE AND HEADWALL. CONSTRUCT 4 LIN FT 18 INCH REINF CONC PIPE AND 1 S&F HEADWALL-18 INCH WITH CHANNEL LINING CLASS III (7 TONS, L=10', W=6', T=2', D=1') AT OUTLET.

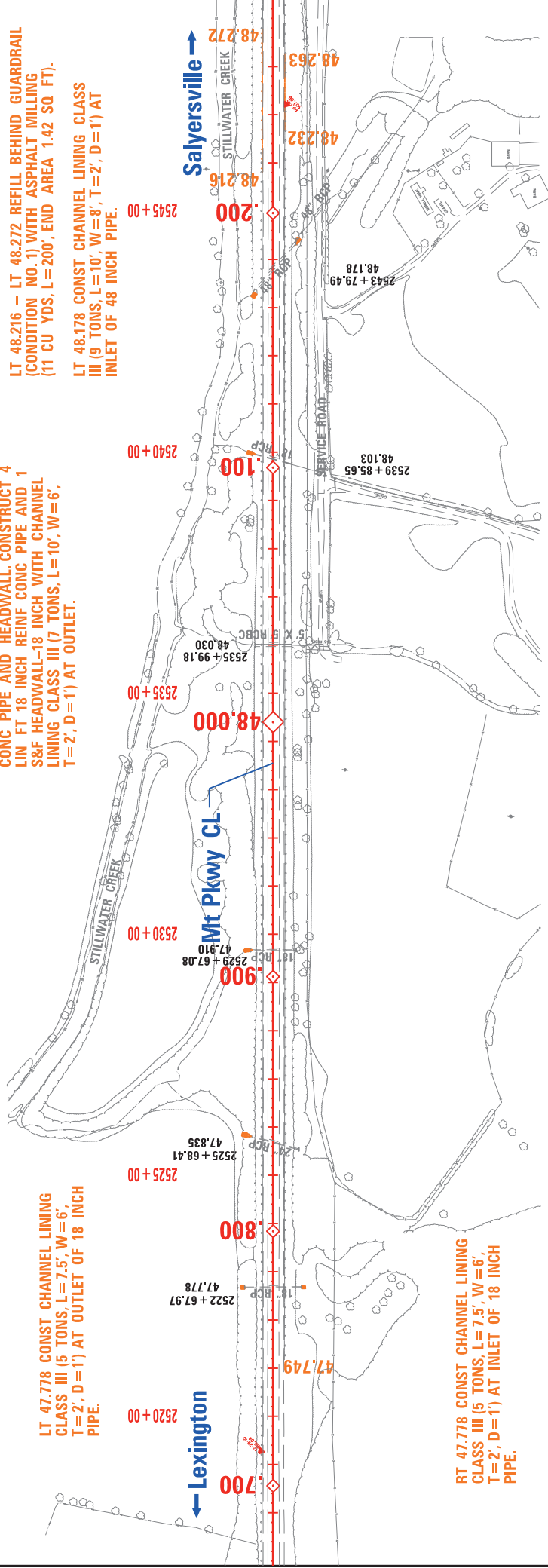
LT 48.216 - RT 48.272 REMOVE 2 GR END TREATMENTS TYPE 1. CONSTRUCT 200 LIN FT STEEL W BEAM GUARDRAIL S-FACE.

LT 48.216 - LT 48.272 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (11 CU YDS, L=200', END AREA 1.42 SQ. FT.).

LT 48.178 CONST CHANNEL LINING CLASS III (9 TONS, L=10', W=8', T=2', D=1') AT INLET OF 48 INCH PIPE.

RT 48.178 CONST CHANNEL LINING CLASS III (9 TONS, L=10', W=8', T=2', D=1') AT INLET OF 48 INCH PIPE.

RT 48.232 - RT 48.263 REMOVE 2 END TREATMENTS TYPE 1 AND CONSTRUCT 162.5 LIN FT STEEL W BEAM GUARDRAIL S-FACE.



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet E MP 48.250 - MP 48.800

LT 48.703 - RT 48.823 REMOVE 2 GR END TREATMENTS TYPE 1 AND 362.5 LIN FEET GUARDRAIL. CONSTRUCT 637.5 LIN FT STEEL W BEAM GUARDRAIL S-FACE.

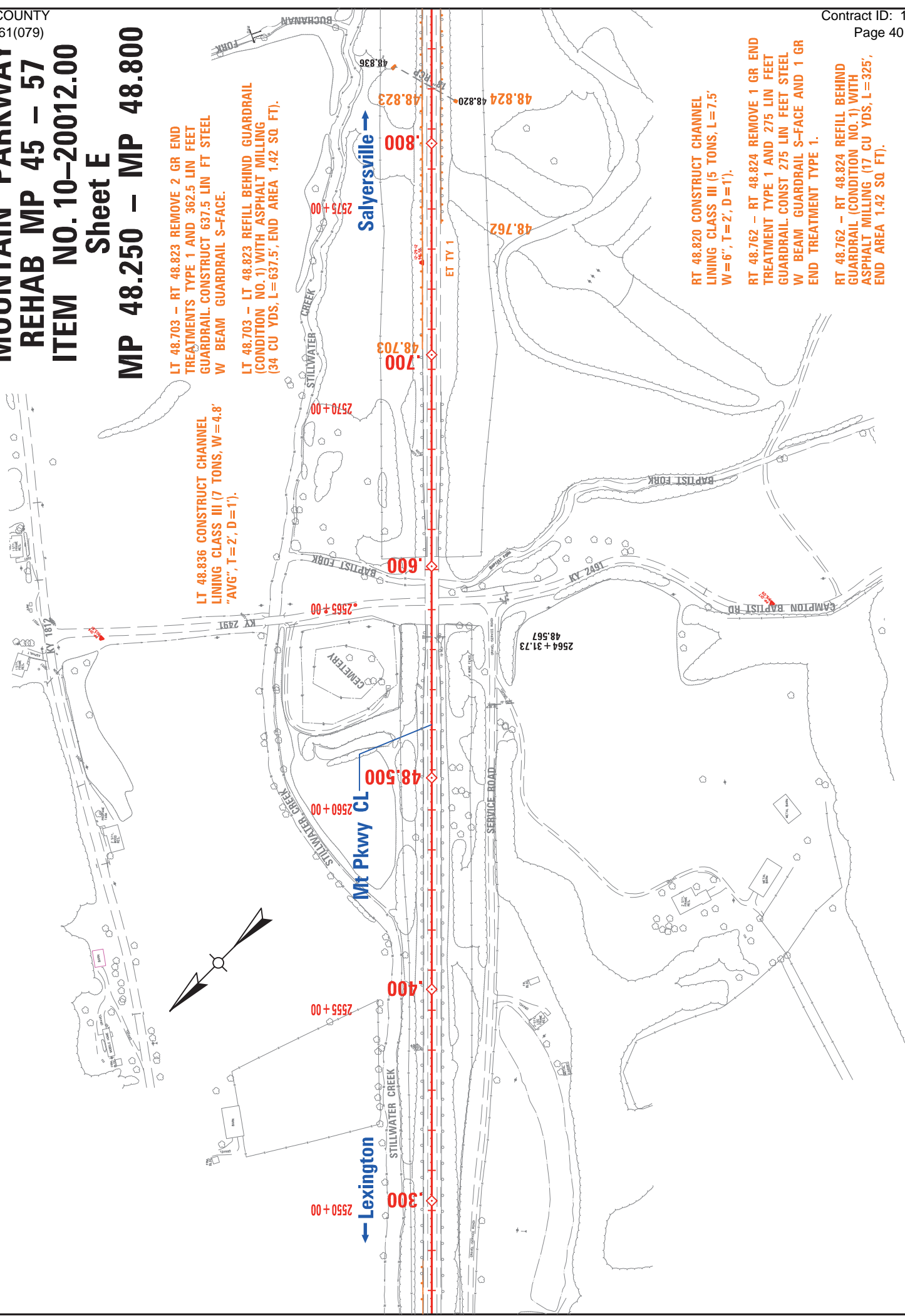
LT 48.703 - LT 48.823 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (34 CU YDS, L=637.5', END AREA 1.42 SQ FT).

LT 48.836 CONSTRUCT CHANNEL LINING CLASS III (7 TONS, W=4.8' "AVG", T=2', D=1).

RT 48.820 CONSTRUCT CHANNEL LINING CLASS III (5 TONS, L=7.5' W=6", T=2', D=1').

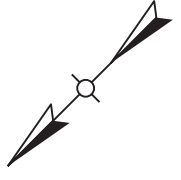
RT 48.762 - RT 48.824 REMOVE 1 GR END TREATMENT TYPE 1 AND 275 LIN FEET GUARDRAIL. CONSTRUCT 275 LIN FEET STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.

RT 48.762 - RT 48.824 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (17 CU YDS, L=325', END AREA 1.42 SQ FT).



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet F

MP 48.800 - MP 49.400



LT 49.226 - LT 49.362 CONST 669 LIN FT BITUMINOUS WEDGE CURB WITH FLUME INLETS TYPE 2 (3 EACH) AT 49.271, 49.317, AND 49.366. CONSTRUCT CHANNEL LINING AT EACH FLUME INLET (W=6', 49.271 - 21 TONS, 49.317, - 21 TONS, 49.366 - 13 TONS).

LT 49.226 - RT 49.389 REMOVE 2 GR END TREATMENTS TYPE 1 AND 750 LIN FT GUARDRAIL. CONSTRUCT 750 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 2 GR END TREATMENTS TYPE 1.

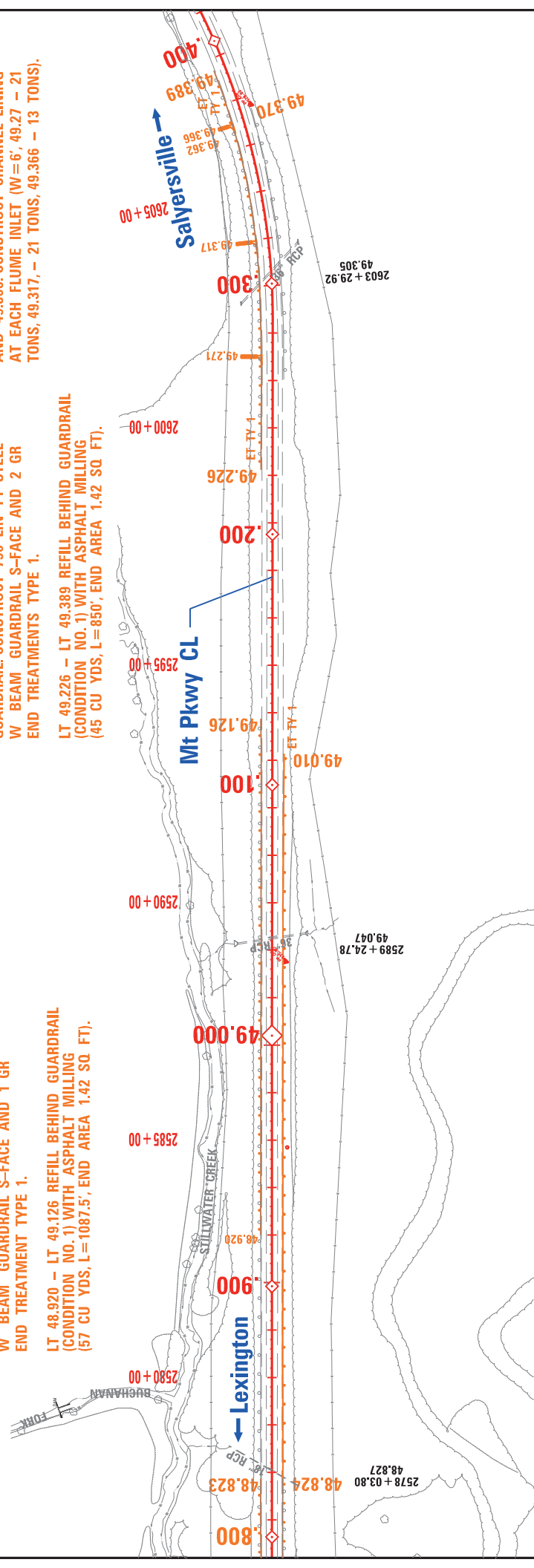
LT 49.226 - LT 49.389 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (45 CU YDS, L=850', END AREA 1.42 SQ FT).

LT 48.920 - RT 49.126 REMOVE 1 GR END TREATMENT TYPE 1 AND 1037.5 LIN FT GUARDRAIL. CONSTRUCT 1037.5 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.

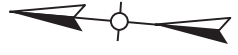
LT 48.920 - LT 49.126 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (57 CU YDS, L=1087.5', END AREA 1.42 SQ FT).

RT 48.824 - RT 49.010 REMOVE 1 GR END TREATMENT TYPE 1 AND 1475 LIN FEET GUARDRAIL. CONST 1475 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.

RT 48.824 - RT 49.010 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (80 CU YDS, L=1525', END AREA 1.42 SQ FT).



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 58 ITEM NO. 10-20012.00 Sheet G MP 49.900 - MP 49.930



LT 49.415 - LT 49.664 REMOVE 1 GR END TREATMENTS TYPE 1 AND 1250 LIN FT GUARDRAIL. CONSTRUCT 1250 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.

LT 49.664 REMOVE 1 GUARDRAIL CONNECTOR TO BRIDGE END. CONSTRUCT 1 GR. CONNECTOR TO BRIDGE END TY C.

LT 49.415 - LT 49.664 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (68 CU YDS, L=1300', END AREA 1.42 SQ. FT).

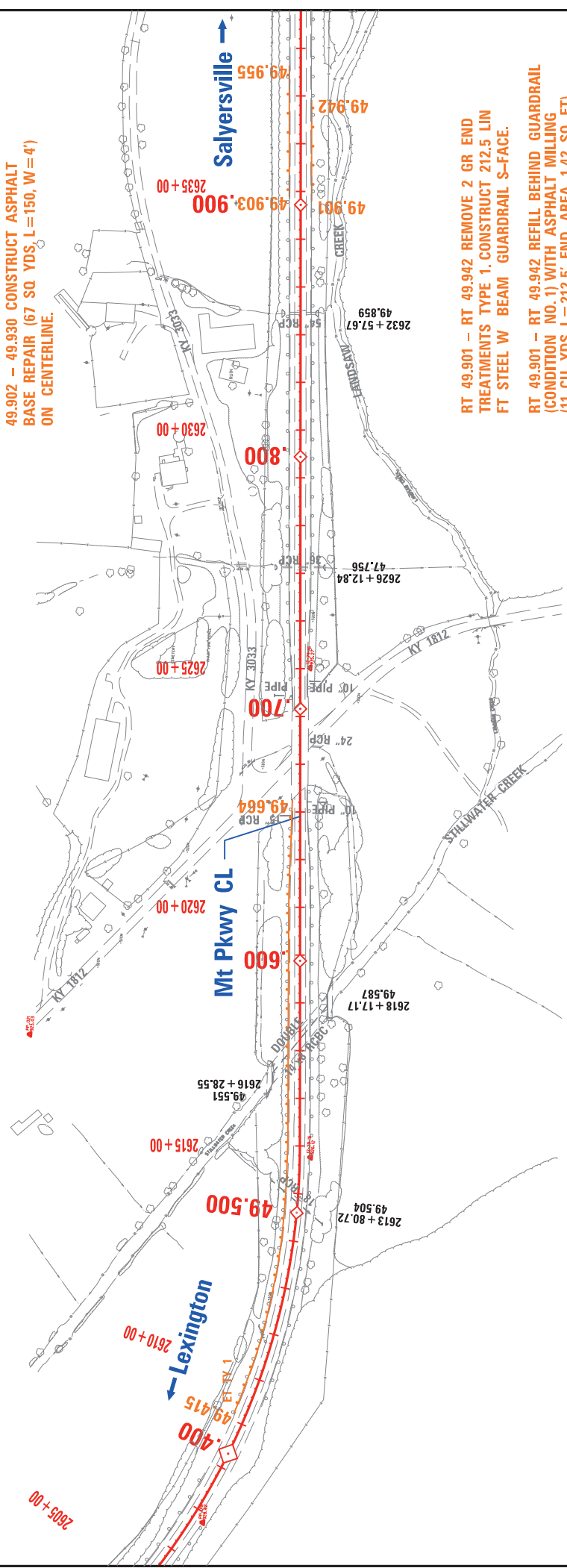
LT 49.903 - LT 49.995 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (14 CU YDS, L=275', END AREA 1.42 SQ. FT).

LT 49.903 - LT 49.995 REMOVE 2 GR END TREATMENTS TYPE 1. CONSTRUCT 275 LIN FT STEEL W BEAM GUARDRAIL S-FACE.

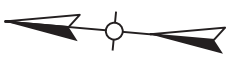
49.902 - 49.930 CONSTRUCT ASPHALT BASE REPAIR (67 SQ. YDS, L=150, W=4') ON CENTERLINE.

RT 49.901 - RT 49.942 REMOVE 2 GR END TREATMENTS TYPE 1. CONSTRUCT 212.5 LIN FT STEEL W BEAM GUARDRAIL S-FACE.

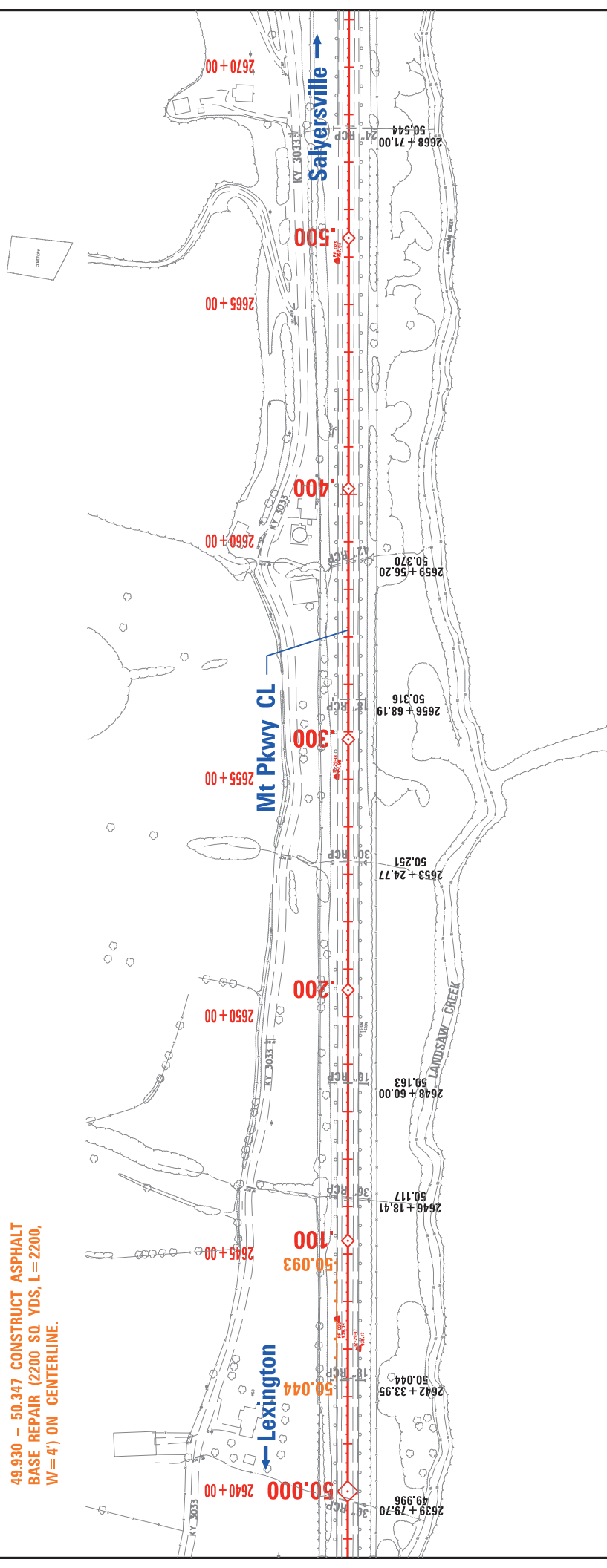
RT 49.901 - RT 49.942 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (11 CU YDS, L=212.5', END AREA 1.42 SQ. FT).



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet H MP 49.930 - MP 50.590



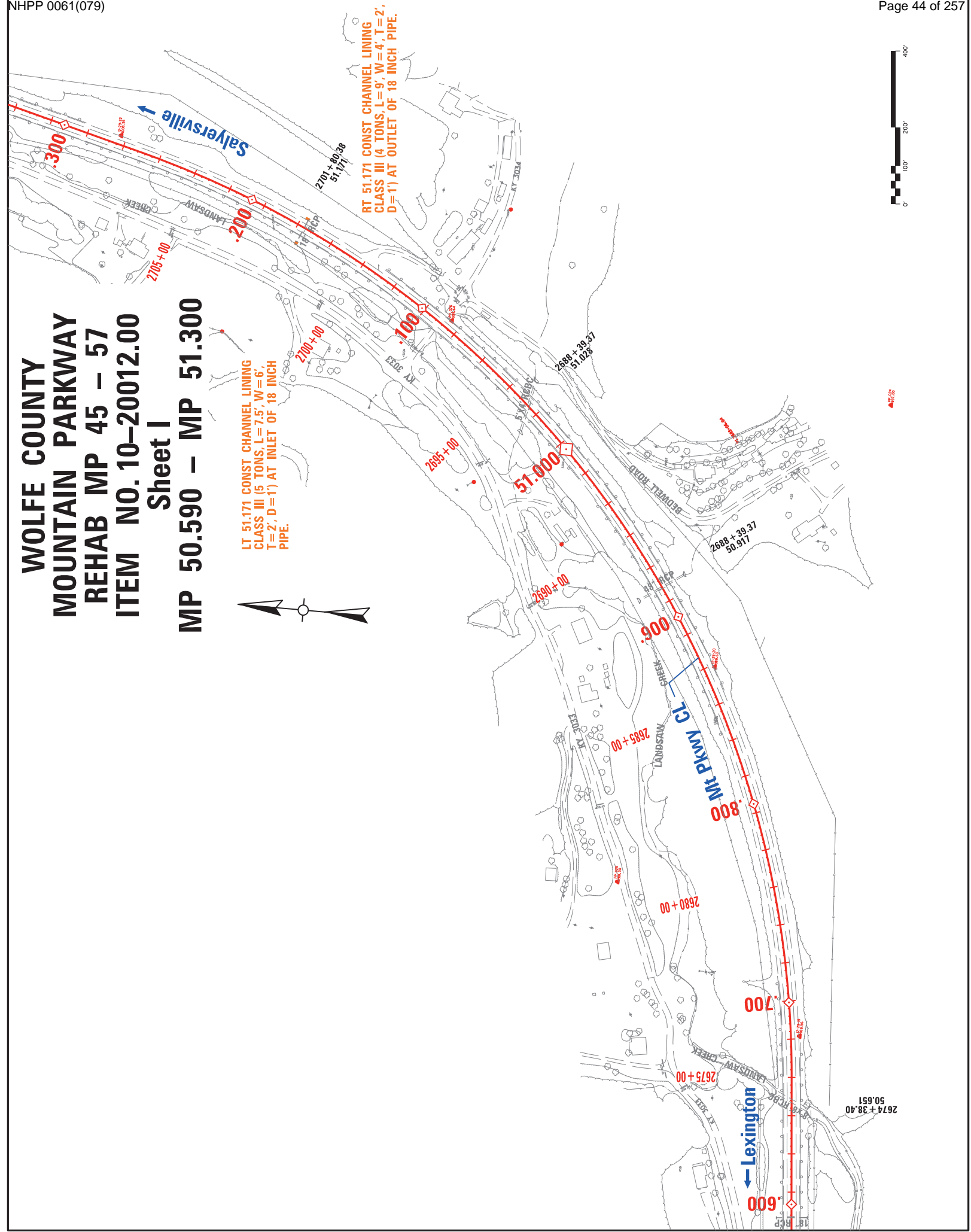
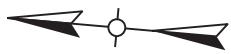
- LT 50.044 - LT 50.093 REMOVE 2 GR END TREATMENTS TYPE 1. CONSTRUCT 262.5 LIN FT STEEL W BEAM S-FACE.
- LT 50.044 - LT 50.093 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (14 CU YDS; L = 262.5', END AREA 1.42 SQ. FT).
- 49.930 - 50.347 CONSTRUCT ASPHALT BASE REPAIR (2200 SQ YDS, L = 2200, W = 4') ON CENTERLINE.



**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet I
MP 50.590 - MP 51.300**

LT 51.171 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT INLET OF 18 INCH
PIPE.

RT 51.171 CONST CHANNEL LINING
CLASS III (4 TONS, L=9', W=4', T=2',
D=1') AT OUTLET OF 18 INCH PIPE.



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet J MP 51.300 - MP 51.900

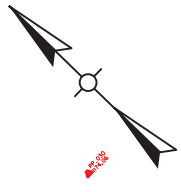
LT 51.412 - LT 51.673 REMOVE 1400 LIN
FT GUARDRAIL AND CONST 1400 LIN FT
STEEL W BEAM GUARDRAIL S-FACE.
LT 51.412 - LT 51.673 REFILL BEHIND GUARDRAIL
(CONDITION NO. 2) WITH ASPHALT MILLING
(304 CU YDS, L=1400', END AREA 5.87 SQ. FT).

LT 51.873 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF 24 INCH
PIPE.

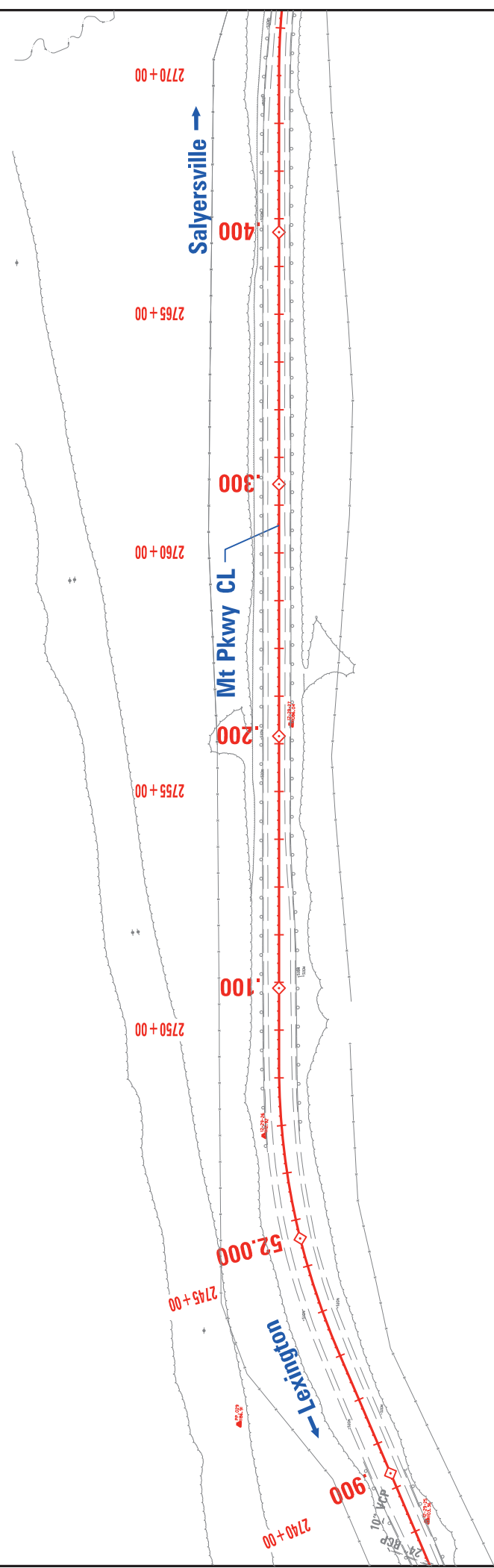
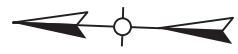
LT 51.809 - LT 51.842 REMOVE 2 GR
END TREATMENTS TY PE 1 AND
CONSTRUCT 175 LIN FT STEEL W
BEAM GUARDRAIL S-FACE.

LT 51.809 - LT 51.842 REFILL BEHIND
GUARDRAIL (CONDITION NO. 1) WITH
ASPHALT MILLING (9 CU YDS, L=175',
END AREA 1.42 SQ. FT).

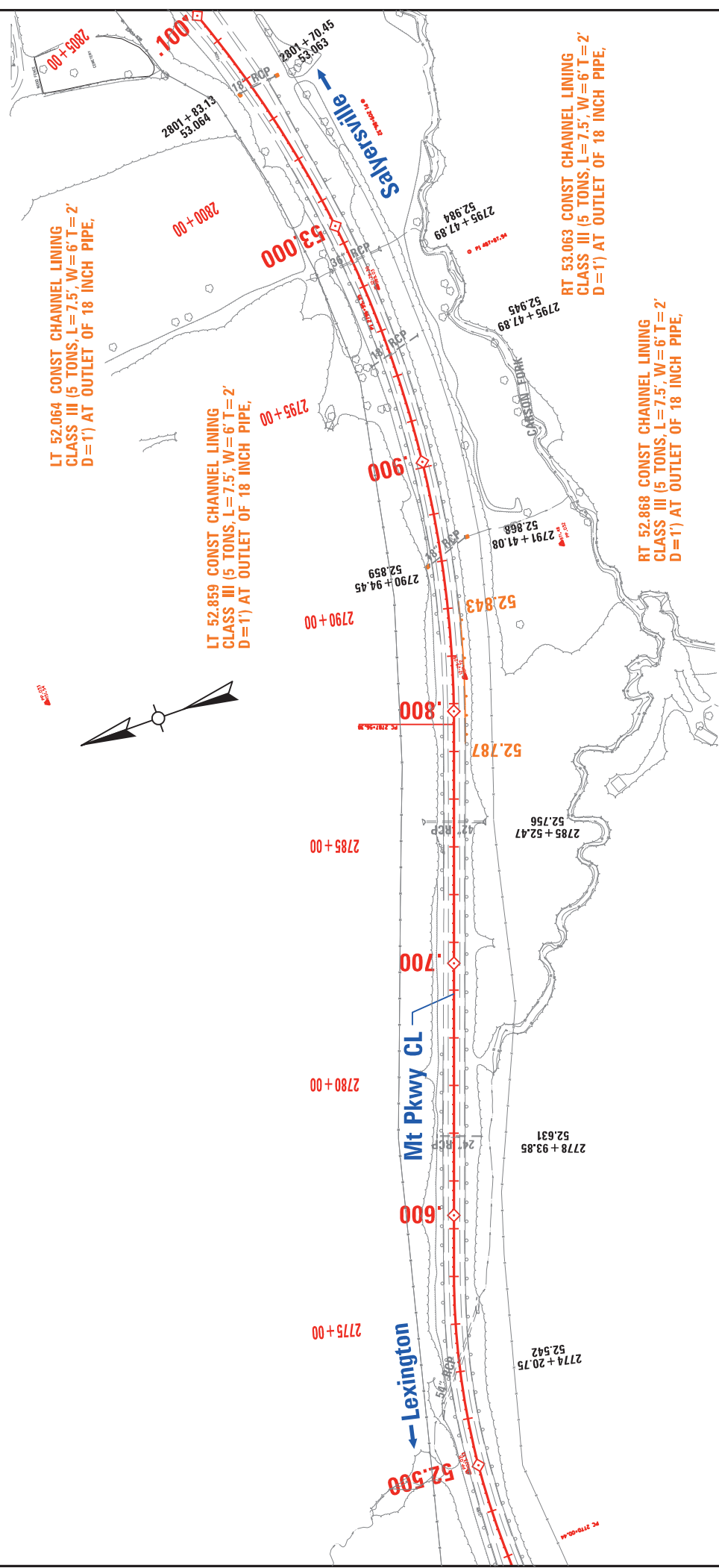
RT 51.845 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF 24 INCH
PIPE.



**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet K
MP 51.900 - MP 52.480**



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet L MP 52.480 - MP 53.700



LT 52.064 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6' T=2'
D=1') AT OUTLET OF 18 INCH PIPE;

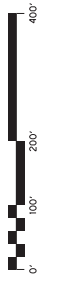
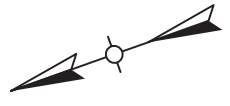
LT 52.859 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6' T=2'
D=1') AT OUTLET OF 18 INCH PIPE;

RT 53.063 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6' T=2'
D=1') AT OUTLET OF 18 INCH PIPE;

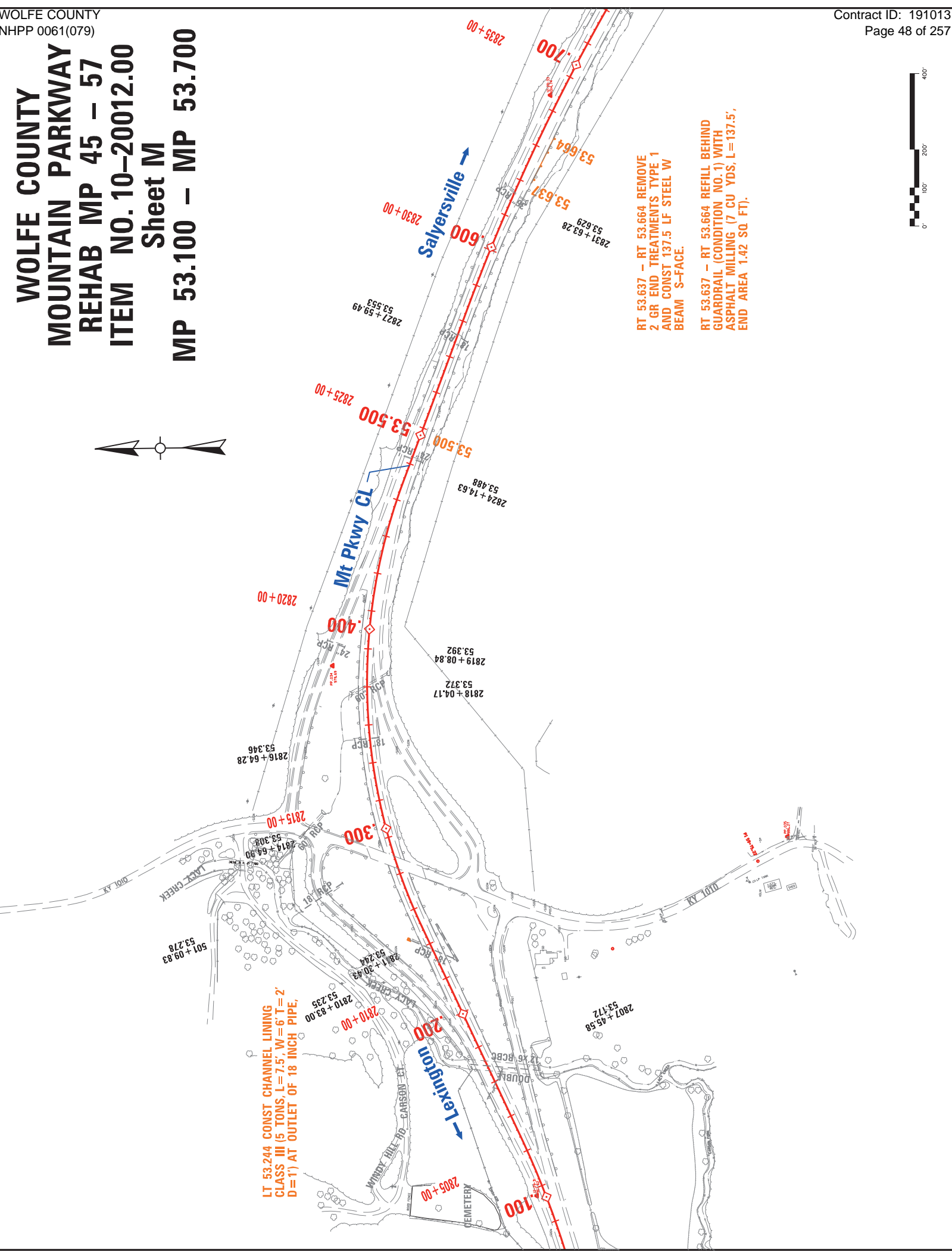
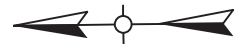
RT 52.868 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6' T=2'
D=1') AT OUTLET OF 18 INCH PIPE;

RT 52.787 - RT 52.843 REMOVE 2 GR END
TREATMENTS TYPE 1 AND CONSTRUCT 300
LIN FT STEEL W BEAM GUARDRAIL S-FACE.

RT 52.787 - RT 52.843 REFILL BEHIND GUARDRAIL
(CONDITION NO. 1) WITH ASPHALT MILLING
(16 CU YDS, L=300', END AREA 1.42 SQ. FT).



**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet M
MP 53.100 - MP 53.700**



LT 53.244 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6'T=2',
D=1') AT OUTLET OF 18 INCH PIPE,

RT 53.637 - RT 53.664 REMOVE
2 GR END TREATMENTS TYPE 1
AND CONST 137.5 LF STEEL W
BEAM S-FACE.

RT 53.637 - RT 53.664 REFILL BEHIND
GUARDRAIL (CONDITION NO.1) WITH
ASPHALT MILLING (7 CU YDS, L=137.5',
END AREA 1.42 SQ. FT).

2825+00
53.500
53.500

Salyersville →
2830+00
53.637
53.664

2820+00
53.400
53.400

2815+00
53.300
53.300

Lexington →
2810+00
53.200
53.200

2805+00
53.100
53.100

2835+00
53.700
53.700

2816+64.28
53.346

2814+64.90
53.308

2811+20.43
53.244

2810+83.00
53.235

2807+45.58
53.172

2819+08.84
53.392

2818+04.17
53.372

2824+14.63
53.488

2831+63.28
53.629

501+09.83
53.278

CEMETERY

WINDY HILL RD
CARSON CR

LACEY CREEK

LANTRY CREEK

DOUBLE

100 YD

WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet N MP 53.700 - MP 54.200



LT 54.197 CONST CHANNEL LINING CLASS III
(21 TONS, L=8', W=24', T=2', D=1') AT INTLET
OF 36 INCH PIPE.

2861 + 58.52
34.197
2860 + 63.15
54.179

2859 + 12.39
54.150
2860 + 00

LT 53.953 CONST CHANNEL LINING CLASS III
(5 TONS, L=7', W=6', T=2', D=1') AT OUTLET
OF 24 INCH PIPE.

2848 + 71.59
53.953

RT 53.948 CONST CHANNEL LINING CLASS III
(5 TONS, L=7', W=6', T=2', D=1') AT OUTLET
OF 24 INCH PIPE.

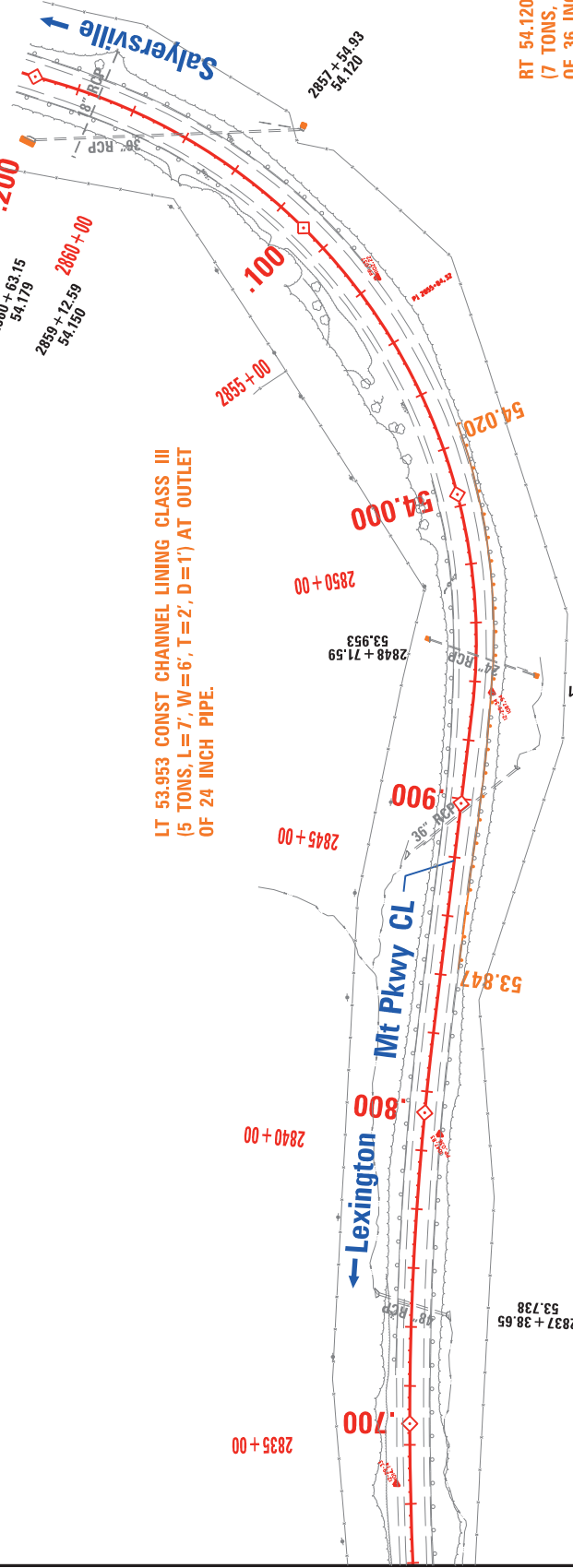
2848 + 16.01
53.948

RT 53.847 - RT 54.020 REMOVE 3 GR END TREATMENTS
TYPE 1 AND 700 LF GUARDRAIL AND CONST 887.5 LIN FT
STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END
TREATMENT TYPE 1.

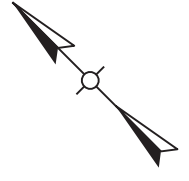
RT 53.847 - RT 54.020 REFILL BEHIND GUARDRAIL
(CONDITION NO. 1) WITH ASPHALT MILLING
(39 CU YDS, L=750', END AREA 1.42 SQ. FT).

RT 54.120 CONST CHANNEL LINING CLASS III
(7 TONS, L=8', W=8', T=2', D=1') AT OUTLET
OF 36 INCH PIPE.

2857 + 54.93
54.120

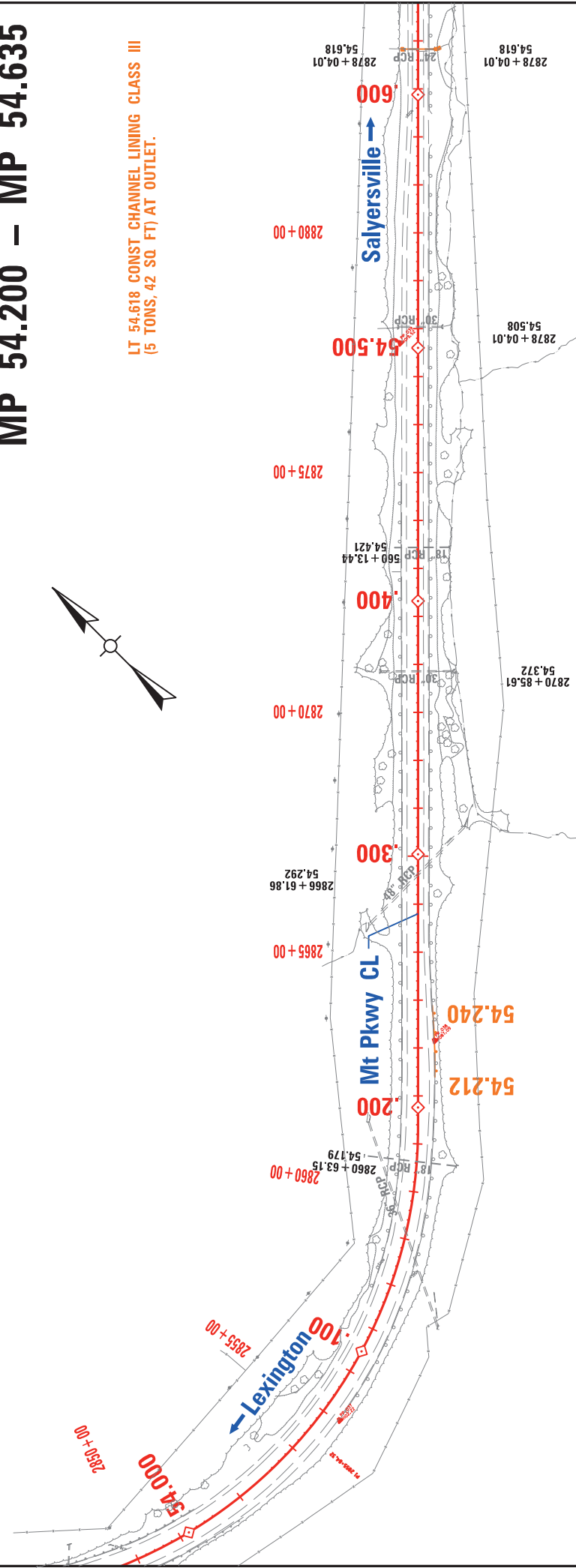


WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet 0 MP 54.200 - MP 54.635



LT 54.618 CONST CHANNEL LINING CLASS III
(5 TONS, 42 SQ. FT) AT OUTLET.

RT 54.618 REMOVE 4 LIN FT 24 INCH REINF.
CONC PIPE AND HEADWALL. CONST 4 LIN FT
24 INCH REINF CONC PIPE AND 1 S&F HDWL-
24 INCH. CONST CHANNEL LINING CLASS III
(5 TONS, L=8', W=6', T=2', D=1') AT OUTLET.



RT 54.212 - RT 54.240 REMOVE
2 GR END TREATMENTS TYPE 1
AND CONST 150 LF STEEL W
BEAM GUARDRAIL S-FACE.

RT 54.212 - RT 54.240 REFILL BEHIND
GUARDRAIL (CONDITION NO. 1) WITH
ASPHALT MILLING (8 CU YDS, L=150',
END AREA 1.42 SQ. FT).

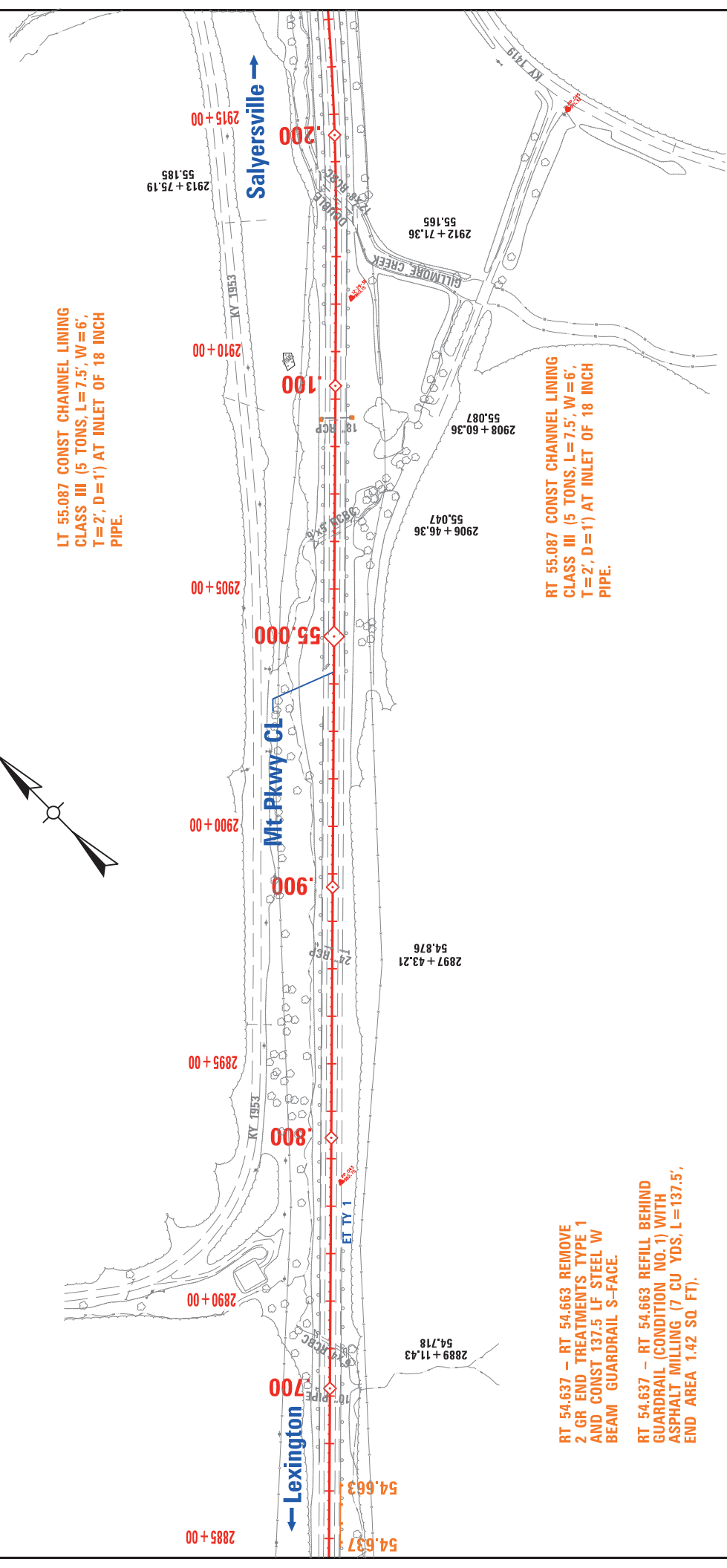
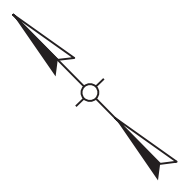


WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet P MP 54.635 - MP 55.250

LT 55.087 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT INLET OF 18 INCH
PIPE.

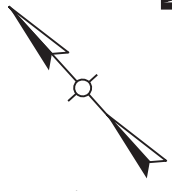
RT 55.087 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT INLET OF 18 INCH
PIPE.

RT 54.637 - RT 54.693 REMOVE
2 GR END TREATMENTS TYPE 1
AND CONST 137.5 LF STEEL W
BEAM GUARDRAIL S-FACE.
RT 54.637 - RT 54.693 REFILL BEHIND
GUARDRAIL (CONDITION NO. 1) WITH
ASPHALT MILLING (7 CU YDS, L=137.5',
END AREA 1.42 SQ. FT).



WOLFE COUNTY MOUNTAIN PARKWAY REHAB MP 45 - 57 ITEM NO. 10-20012.00 Sheet Q

MP 55.250 - MP 55.850



LT 55.420 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF PIPE.

LT 55.720 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT INLET OF 24 INCH
PIPE.

55.450 - 55.459 CONST ASPHALT
BASE REPAIR (133 SQ. YDS, L=50',
W=24') AT BRIDGE END.

LT 55.832 - LT 55.841 REFILL BEHIND
GUARDRAIL (CONDITION NO.1) WITH
ASPHALT MILLING (3 CU YDS, L=50',
END AREA 1.42 SQ. FT).

LT 55.832 - LT 55.841 REMOVE 50 LIN FT
GUARDRAIL. CONST 50 LIN FT STEEL W
BEAM GUARDRAIL S-FACE.

Lexington

2920+00

300

400

500

600

700

800

2940+00

2944+99.02

55.776

2944+04.32

55.758

2941+24.26

55.705

2938+95.36

55.662

2933+56.80

55.560

2935+00

2930+00

55.450

2925+17.60

55.420

2925+85.92

55.414

2921+59.50

55.333

2921+27.07

55.820

55.852

55.832

55.841

Salersville

RT 55.414 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF PIPE.

RT 55.450 - RT 55.852 REFILL BEHIND
GUARDRAIL (CONDITION NO.1) WITH
ASPHALT MILLING (111 CU YDS, L=2112.5',
END AREA 1.42 SQ. FT).

RT 55.450 - RT 55.852 REMOVE 2112.5
LIN FT GUARDRAIL. CONST 2112.5 STEEL
W BEAM GUARDRAIL S-FACE.

RT 55.450 REMOVE 1 GR. CONNECTOR
TO BRIDGE END. CONSTRUCT 1 GR.
CONNECTOR TO BRIDGE END TY. C.

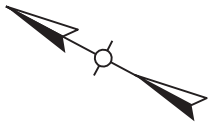
RT 55.705 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF 24 INCH
PIPE.

RT 55.758 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF 24 INCH
PIPE.

RT 55.820 CONST CHANNEL LINING
CLASS III (5 TONS, L=7.5', W=6',
T=2', D=1') AT OUTLET OF 24 INCH
PIPE.

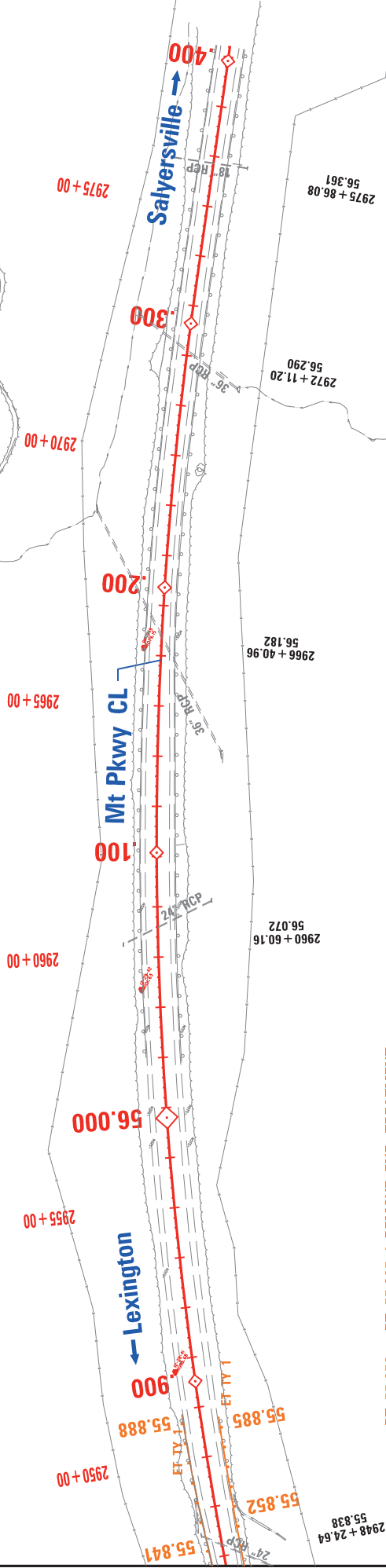


**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet R
MP 55.850 - MP 56.400**

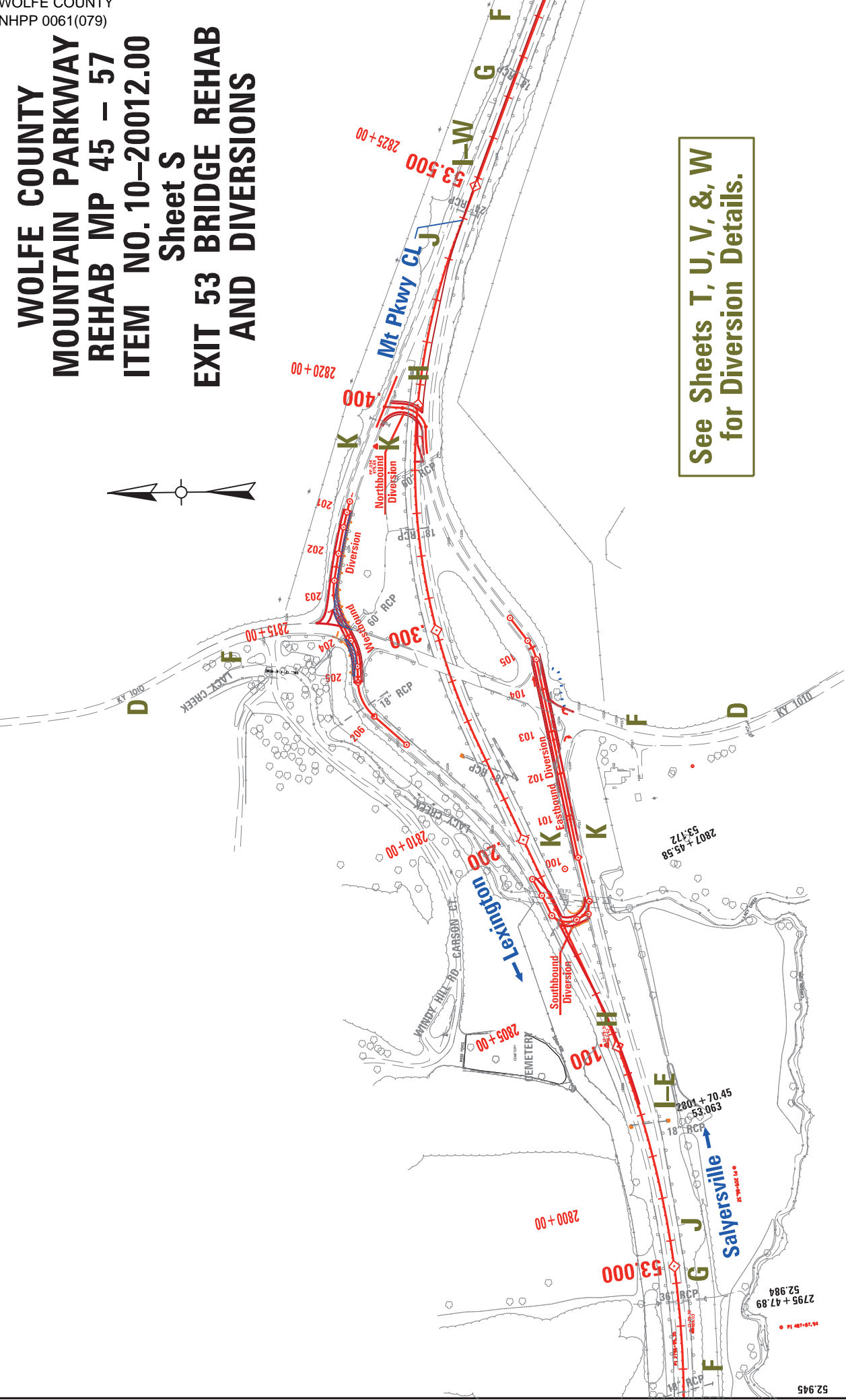
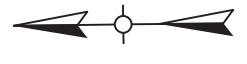


LT 55.841 - LT 55.888 1 REMOVE END TREATMENT TYPE 1 AND 200 LIN FT GUARDRAIL. CONST 200 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.
LT 55.841 - LT 55.888 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (13 CU YDS, L=250', END AREA 1.42 SQ. FT).

RT 55.852 - RT 55.885 1 REMOVE END TREATMENT TYPE 1 AND 125 LIN FT GUARDRAIL. CONST 125 LIN FT STEEL W BEAM GUARDRAIL S-FACE AND 1 GR END TREATMENT TYPE 1.
RT 55.852 - RT 55.885 REFILL BEHIND GUARDRAIL (CONDITION NO. 1) WITH ASPHALT MILLING (9 CU YDS, L=175', END AREA 1.42 SQ. FT).



**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet S
EXIT 53 BRIDGE REHAB
AND DIVERSIONS**



**See Sheets T, U, V, & W
for Diversion Details.**

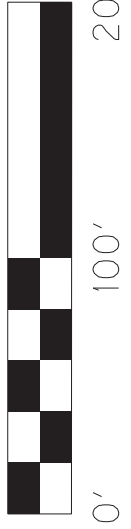
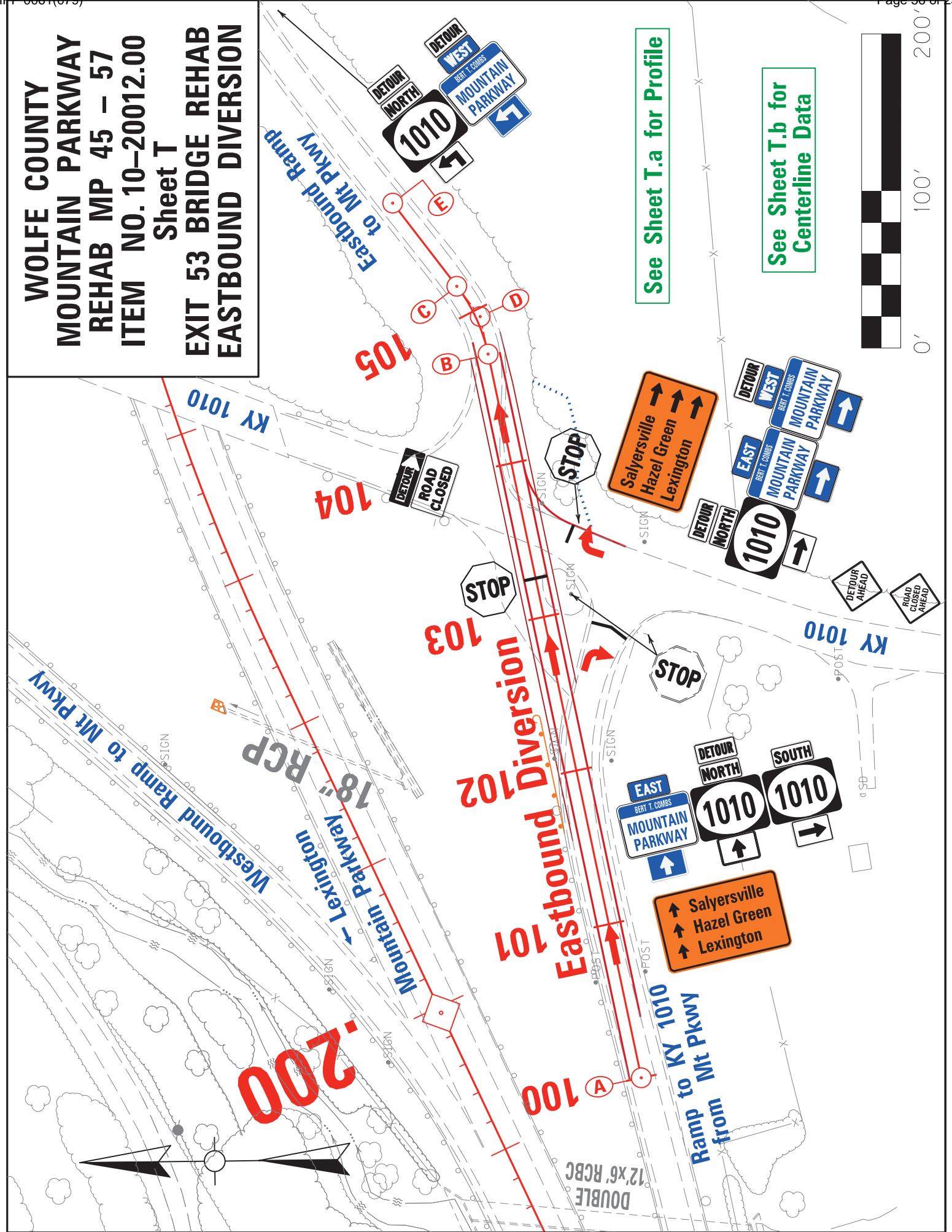
- A** 500' ROAD CLOSED 1500 FT
- B** 500' ROAD CLOSED 1000 FT
- C** 500' ROAD CLOSED 500 FT
- D** 500' ROAD CLOSED AHEAD
- F** 35 MPH DETOUR AHEAD
- G** 35 MPH DETOUR
- H** ROAD CLOSED
- I-E** EAST MOUNTAIN PARKWAY
- I-W** WEST MOUNTAIN PARKWAY
- J** EXIT 25 M.P.M.
- K** [Symbol: Arrow pointing up and right]

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 – 57
ITEM NO. 10–20012.00
Sheet S.a
EXIT 53 BRIDGE REHAB
COORDINATE CONTROL**

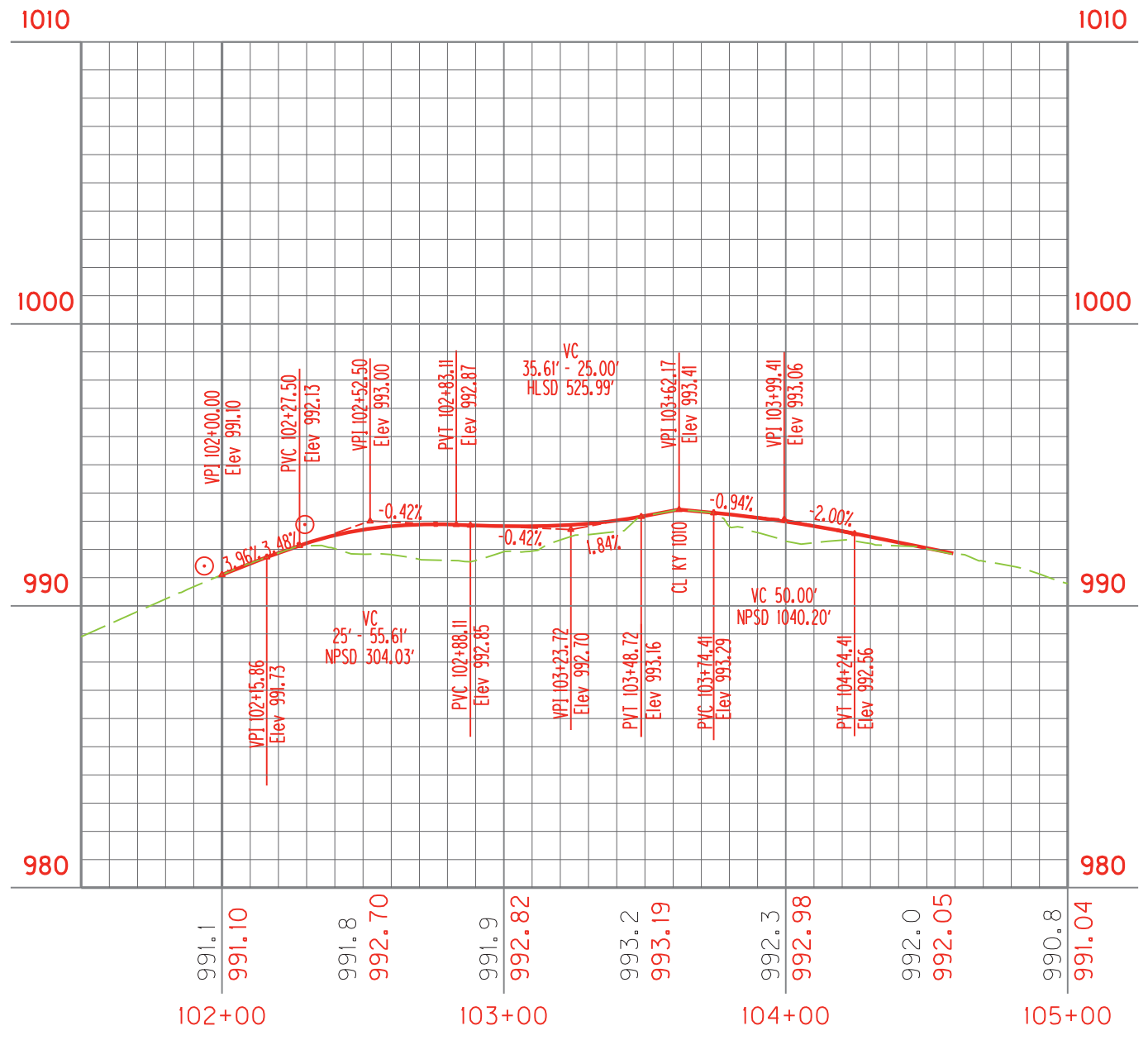
COORDINATE CONTROL POINTS

POINT	DESCRIPTION	State Plane Coordinates			STATION and OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)	
PP 36	Painted "L" w/Magnail	3803223.41	5602833.18	1047.83	2480 + 29.84, 25.53' Rt
12-29-30	Plastic "L" w/IPC	3803452.64	5598793.93	989.03	2596 + 87.79, 25.15' Rt
12-29-31	Plastic "L" w/IPC	3803642.35	5599459.14	967.62	2803 + 80.11, 22.64' Lt
12-29-32	Concrete Monument	3804161.80	5600856.83	979.69	2818 + 53.05, 91.60' Lt
12-29-33	Plastic "L" w/IPC	3803571.22	5602347.65	1014.74	2834 + 34.34, 24.07' Lt

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00**
Sheet T
**EXIT 53 BRIDGE REHAB
EASTBOUND DIVERSION**



WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
SHEET T.a



MOUNTAIN PARKWAY
EASTBOUND DIVERSION
PROFILE SHEET
STA. 101+50 TO STA. 105+00

Project Name: Wolfe County Item 10-20012.00
Description: Centerline Data
Alignment: Exit 53 Eastbound Diversion

Sheet T.b

Element: Linear

POB	(A)	100+00.00	3803703.22	5599895.66
PC	(B)	104+71.14	3803795.08	5600357.75
Tangential Direction:		N 78°45'24" E		
Tangential Length:		471.14		

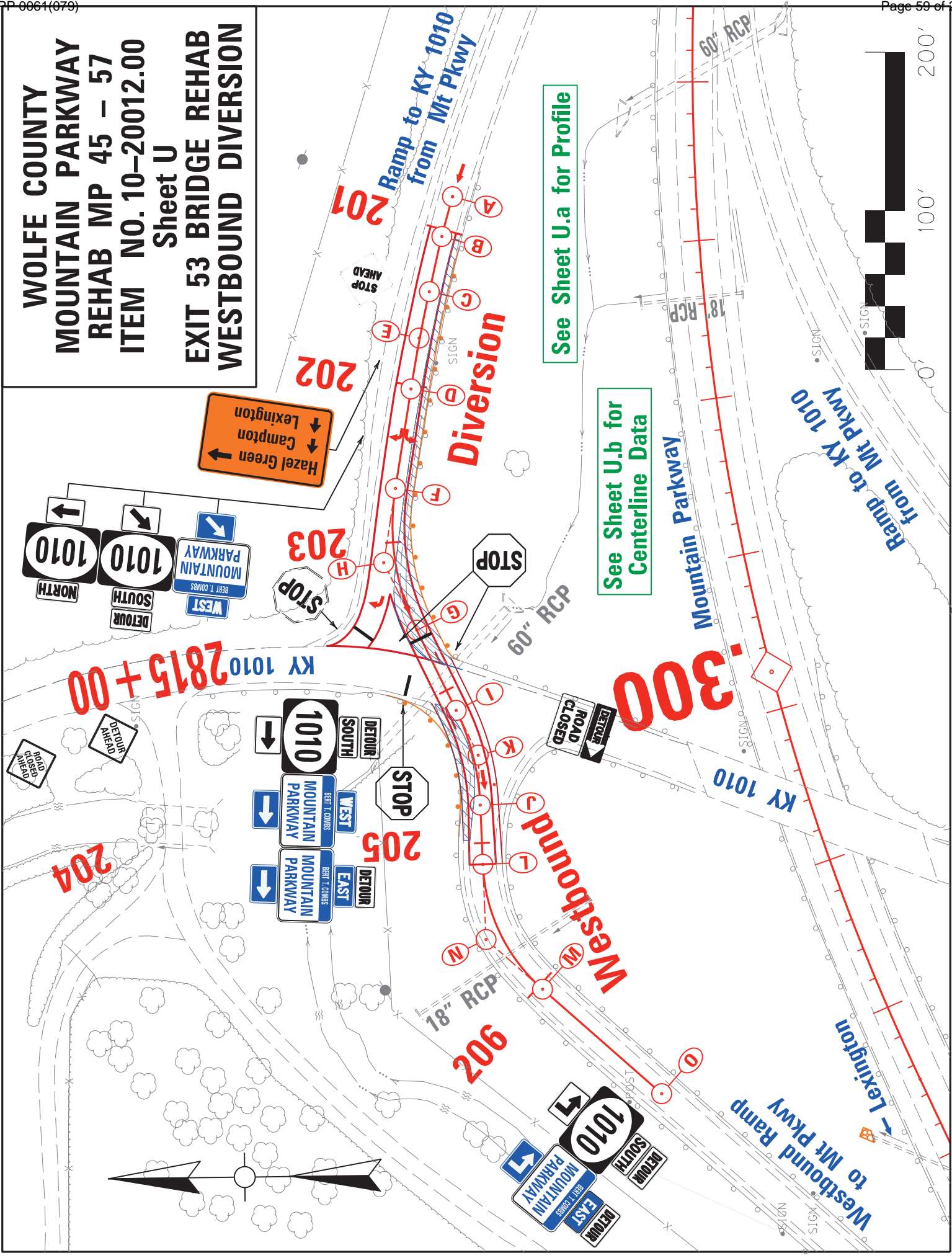
Element: Circular

PC	(B)	104+71.14	3803795.08	5600357.75
PI	(D)	104+95.53	3803799.84	5600381.67
CC	()		3803900.03	5600336.89
PT	(C)	105+19.09	3803814.49	5600401.17
Radius:		107.00		
Delta:		25°40'39" Left		
Degree of Curvature (Arc):		53°32'51"		
Length:		47.95		
Tangent:		24.39		
Chord:		47.55		
Middle Ordinate:		2.68		
External:		2.74		
Tangent Direction:		N 78°45'24" E		
Radial Direction:		S 11°14'36" E		
Chord Direction:		N 65°55'04" E		
Radial Direction:		S 36°55'15" E		
Tangent Direction:		N 53°04'45" E		

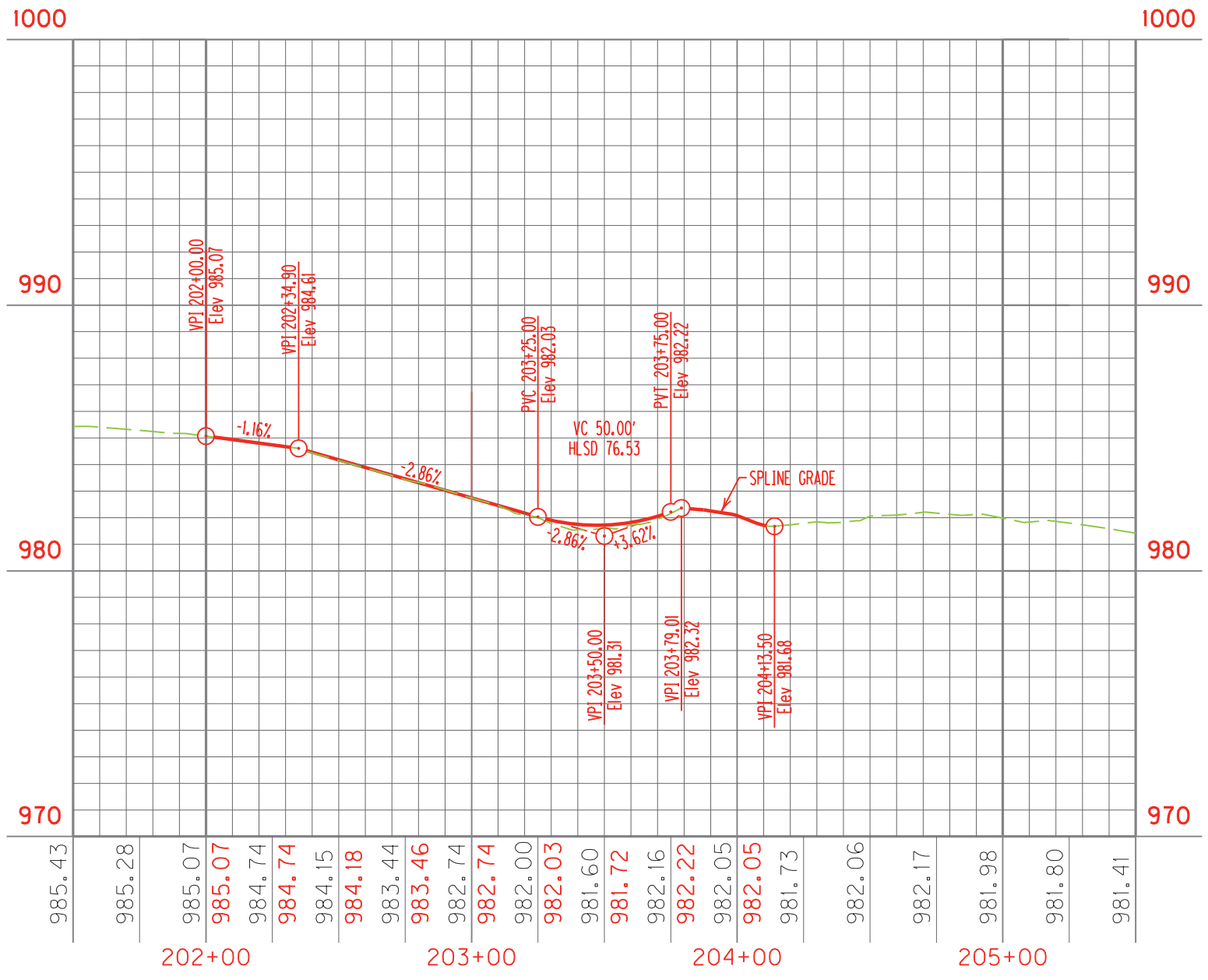
Element: Linear

PT	(C)	105+19.09	3803814.49	5600401.17
POE	(E)	105+85.96	3803854.65	5600454.62
Tangential Direction:		N 53°04'45" E		
Tangential Length:		66.87		

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet U
EXIT 53 BRIDGE REHAB
WESTBOUND DIVERSION**



WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
SHEET U.a



MOUNTAIN PARKWAY
WESTBOUND DIVERSION
PROFILE SHEET
STA. 201+50 TO STA. 205+50

20012 Sheet U_b

Project Name: wolfe County Item 10-20012.00
SHEET U.b
Description: Centerline Data
Horizontal Alignment Name: Exit 53 westbound Diversion
Description:
Style: Centerline/MOT

NOTE	STATION	NORTHING	EASTING
Element: Linear			
POB (A)	200+78.39	3804223.60	5600729.79
PI (B)	201+03.75	3804230.65	5600705.43
Tangent Direction:	N 73^50'42" W		
Tangent Length:	25.36		
Element: Linear			
PI (B)	201+03.75	3804230.65	5600705.43
PC (C)	201+40.02	3804238.94	5600670.11
Tangent Direction:	N 76^48'11" W		
Tangent Length:	36.27		
Element: Circular			
PC (C)	201+40.02	3804238.94	5600670.11
PI (E)	201+71.24	3804246.06	5600639.72
CC ()		3803265.34	5600441.82
PT (D)	202+02.44	3804251.28	5600608.94
Radius:	1000.00		
Delta:	3^34'34" Left		
Degree of Curvature(Arc):	5^43'46"		
Length:	62.42		
Tangent:	31.22		
Chord:	62.41		
Middle Ordinate:	0.49		
External:	0.49		
Tangent Direction:	N 76^48'11" W		
Radial Direction:	N 13^11'49" E		
Chord Direction:	N 78^35'28" W		
Radial Direction:	N 9^37'15" E		
Tangent Direction:	N 80^22'45" W		
Element: Linear			
PT (D)	202+02.44	3804251.28	5600608.94
PC (F)	202+65.92	3804261.89	5600546.35
Tangent Direction:	N 80^22'45" W		
Tangent Length:	63.48		
Element: Circular			
PC (F)	202+65.92	3804261.89	5600546.35
PI (H)	203+13.28	3804269.80	5600499.66
CC ()		3804114.00	5600521.29
PT (G)	203+57.67	3804249.47	5600456.88
Radius:	150.00		
Delta:	35^02'50" Left		
Degree of Curvature(Arc):	38^11'50"		
Length:	91.75		
Tangent:	47.36		
Chord:	90.33		
Middle Ordinate:	6.96		
External:	7.30		
Tangent Direction:	N 80^22'45" W		
Radial Direction:	N 9^37'15" E		
Chord Direction:	S 82^05'50" W		
Radial Direction:	N 25^25'35" W		

		20012 Sheet U_b	
Tangent Direction:		S 64^34'25" W	
Element: Linear			
PT (G)	203+57.67	3804249.47	5600456.88
PC (I)	204+13.98	3804225.29	5600406.02
Tangent Direction:		S 64^34'25" W	
Tangent Length:	56.31		
Element: Circular			
PC (I)	204+13.98	3804225.29	5600406.02
PI (K)	204+45.43	3804211.79	5600377.63
CC ()		3804360.76	5600341.62
PT (J)	204+75.97	3804210.83	5600346.20
Radius:	150.00		
Delta:	23^40'44"	Right	
Degree of Curvature(Arc):	38^11'50"		
Length:	61.99		
Tangent:	31.44		
Chord:	61.55		
Middle Ordinate:	3.19		
External:	3.26		
Tangent Direction:		S 64^34'25" W	
Radial Direction:		N 25^25'35" W	
Chord Direction:		S 76^24'47" W	
Radial Direction:		N 1^44'51" W	
Tangent Direction:		S 88^15'09" W	
Element: Linear			
PT (J)	204+75.97	3804210.83	5600346.20
PC (L)	205+13.40	3804209.69	5600308.79
Tangent Direction:		S 88^15'09" W	
Tangent Length:	37.43		
Element: Circular			
PC (L)	205+13.40	3804209.69	5600308.79
PI (N)	205+60.83	3804208.24	5600261.38
CC ()		3804098.74	5600312.17
PT (M)	206+03.05	3804172.99	5600229.66
Radius:	111.00		
Delta:	46^16'22"	Left	
Degree of Curvature(Arc):	51^37'04"		
Length:	89.65		
Tangent:	47.43		
Chord:	87.23		
Middle Ordinate:	8.93		
External:	9.71		
Tangent Direction:		S 88^15'09" W	
Radial Direction:		N 1^44'51" W	
Chord Direction:		S 65^06'58" W	
Radial Direction:		N 48^01'13" W	
Tangent Direction:		S 41^58'47" W	
Element: Linear			
PT (M)	206+03.05	3804172.99	5600229.66
POE (O)	207+02.89	3804098.77	5600162.88
Tangent Direction:		S 41^58'47" W	
Tangent Length:	99.84		

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet V
EXIT 53 BRIDGE REHAB
KY 1010 NORTHBOUND
DIVERSION**

400
2820+00

202
201

**Westbound
Diversion**

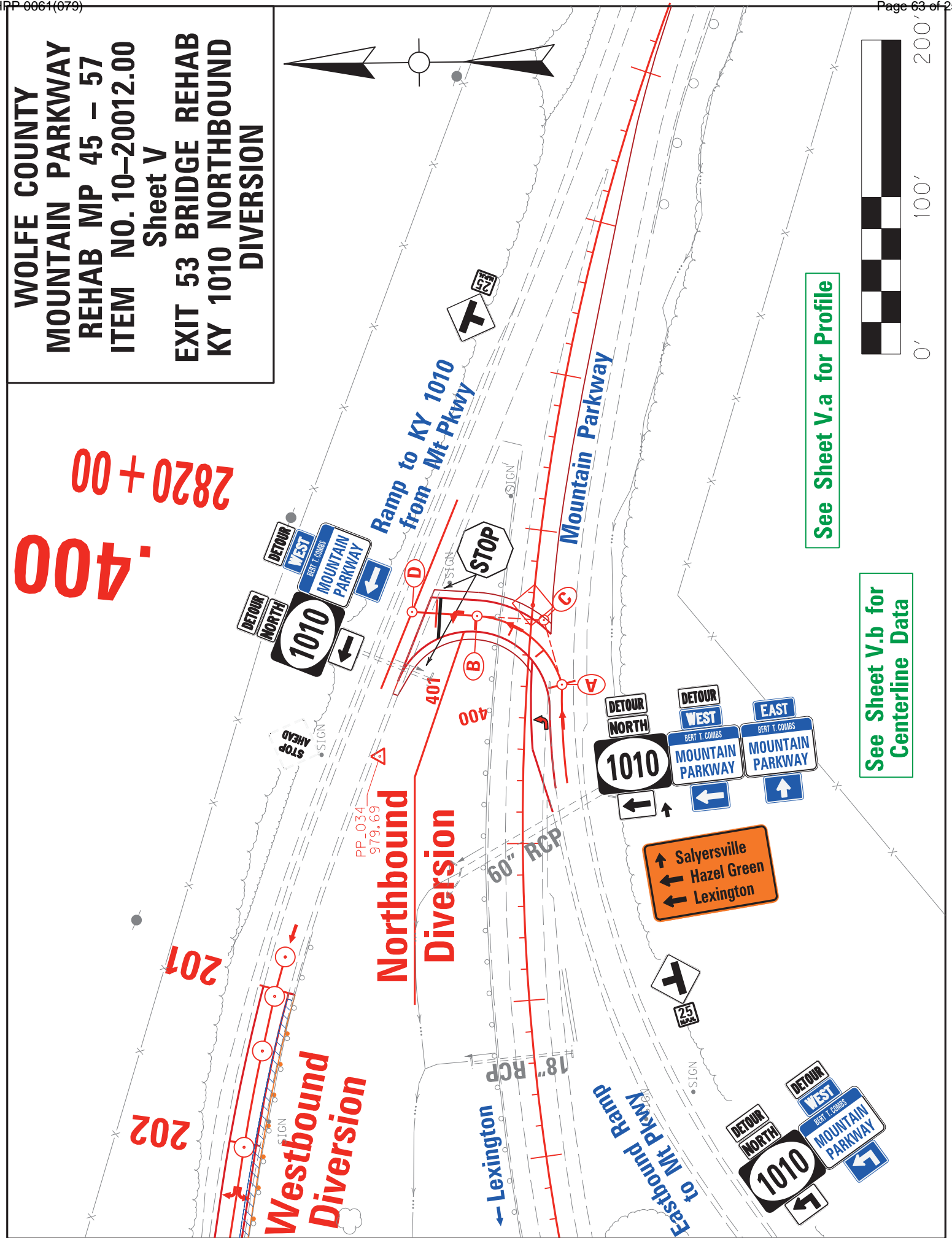
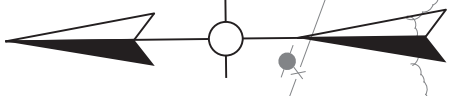
**Northbound
Diversion**

PP_034
979.69

400

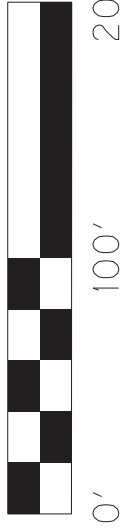
60" RCP

18" RCP

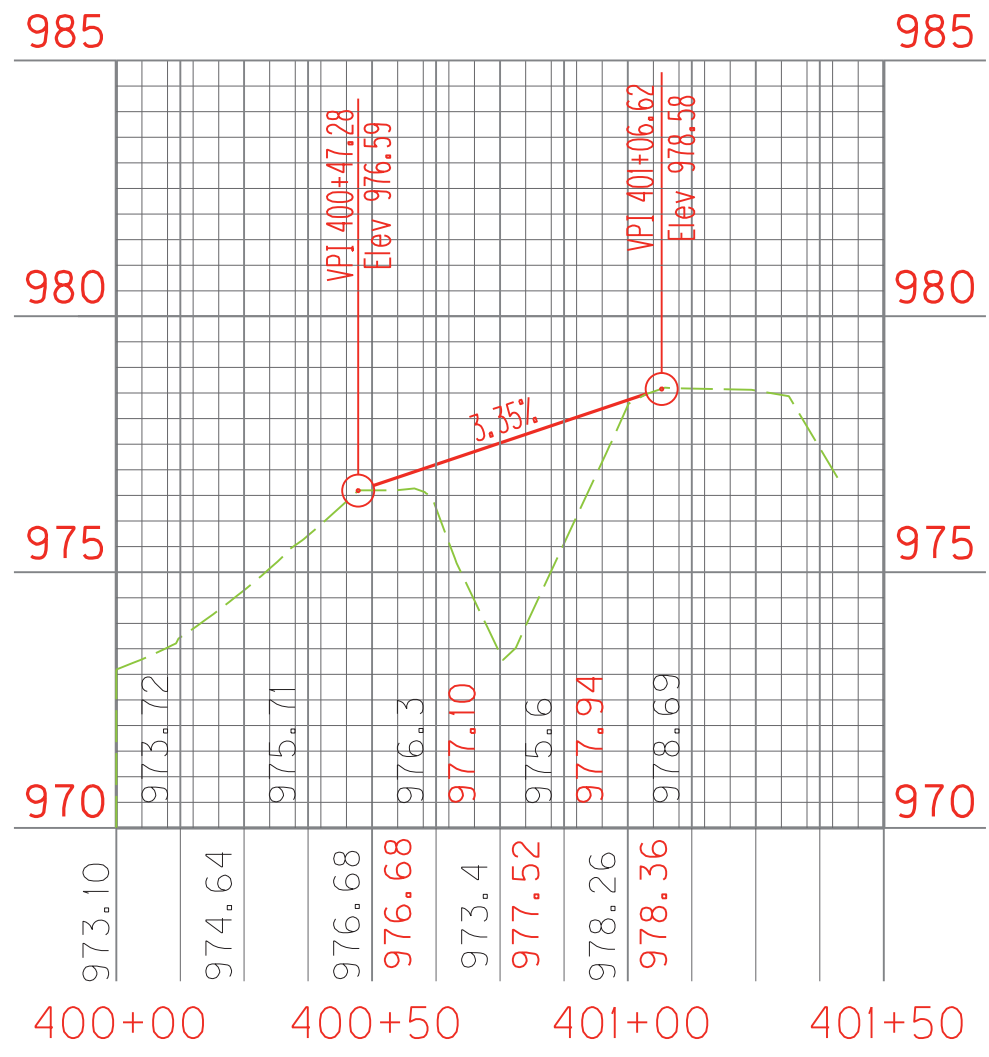


See Sheet V.a for Profile

See Sheet V.b for
Centerline Data



WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
SHEET V.a



KY 1010
NORTHBOUND DIVERSION
PROFILE SHEET
STA. 400+00 TO STA. 401+50

20012 Sheet v_b

Project Name: wolfe County Item 10-20012.00

Sheet v.b

Description: Exit 53 Bridge Rehab

Horizontal Alignment Name: KY 1010 Southbound Diversion

Description:

Style: Centerline/MOT

	STATION	NORTHING	EASTING
Element: Linear			
POB (A)	299+98.78	3803810.36	5599847.14
PI (B)	300+42.88	3803788.83	5599808.66
Tangent Direction:	S 60^46'15" W		
Tangent Length:	44.10		
Element: Linear			
PI (B)	300+42.88	3803788.83	5599808.66
PI (C)	300+93.90	3803766.87	5599762.61
Tangent Direction:	S 64^30'23" W		
Tangent Length:	51.02		
Element: Linear			
PI (C)	300+93.90	3803766.87	5599762.61
PC (C1)	300+95.86	3803765.46	5599761.24
Tangent Direction:	S 44^18'48" W		
Tangent Length:	1.96		
Element: Circular			
PC (C1)	300+95.86	3803765.46	5599761.24
PI (E)	301+30.12	3803740.95	5599737.30
CC ()		3803730.54	5599797.01
PT (D)	301+55.93	3803709.78	5599751.52
Radius:	50.00		
Delta:	68^50'20" Left		
Degree of Curvature(Arc):	114^35'30"		
Length:	60.07		
Tangent:	34.26		
Chord:	56.52		
Middle Ordinate:	8.75		
External:	10.61		
Tangent Direction:	S 44^18'48" W		
Radial Direction:	N 45^41'12" W		
Chord Direction:	S 9^53'38" W		
Radial Direction:	S 65^28'28" W		
Tangent Direction:	S 24^31'32" E		
Element: Linear			
PT (D)	301+55.93	3803709.78	5599751.52
PC (F)	301+58.30	3803707.63	5599752.51
Tangent Direction:	S 24^31'32" E		
Tangent Length:	2.37		
Element: Circular			
PC (F)	301+58.30	3803707.63	5599752.51
PI (H)	301+87.72	3803680.86	5599764.72
CC ()		3803728.38	5599798.00
PT (G)	302+11.48	3803678.54	5599794.04
Radius:	50.00		
Delta:	60^56'12" Left		
Degree of Curvature(Arc):	114^35'30"		
Length:	53.18		
Tangent:	29.42		
Chord:	50.71		
Middle Ordinate:	6.90		

20012 Sheet v_b

External:	8.01
Tangent Direction:	S 24^31'32" E
Radial Direction:	S 65^28'28" W
Chord Direction:	S 54^59'38" E
Radial Direction:	S 4^32'16" W
Tangent Direction:	S 85^27'44" E

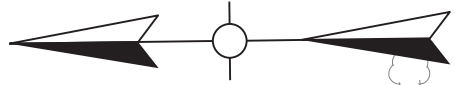
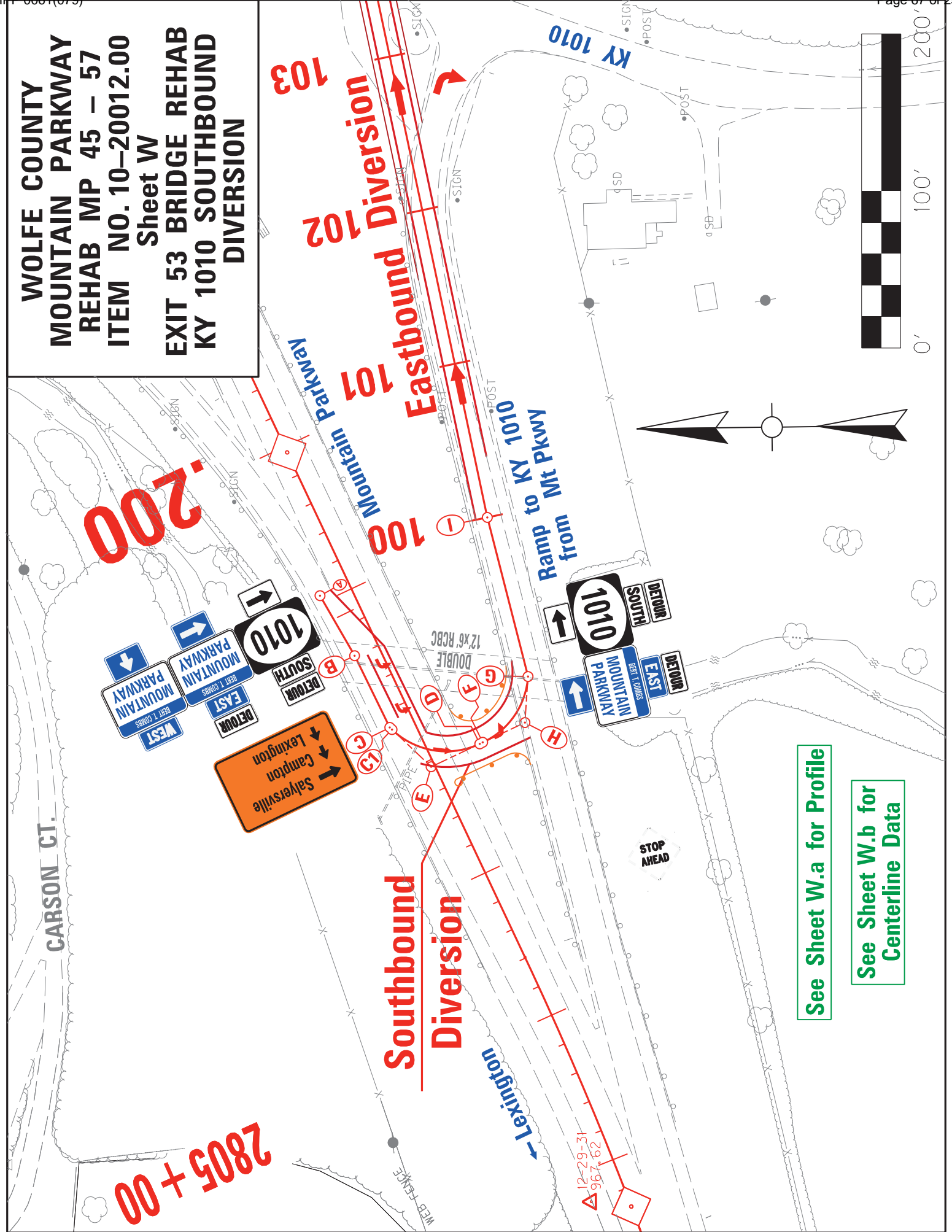
Non-collinear

Element: Linear

PT (G)	302+11.48	3803678.54	5599794.04
POE (I)	303+16.05	3803703.22	5599895.66
Tangent Direction:	N 76^20'47" E		
Tangent Length:	104.57		

**WOLFE COUNTY
MOUNTAIN PARKWAY
REHAB MP 45 - 57
ITEM NO. 10-20012.00
Sheet W**

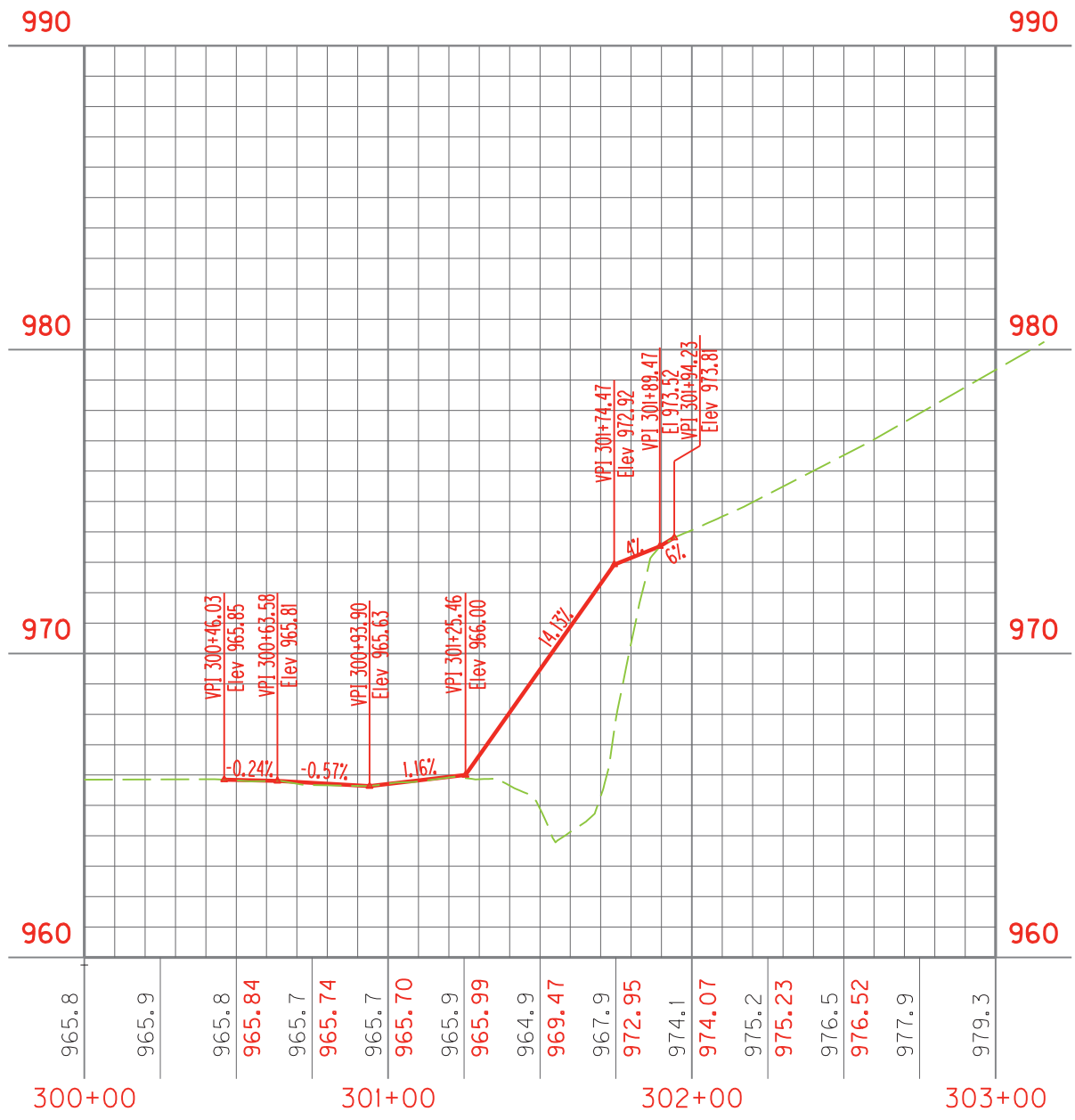
**EXIT 53 BRIDGE REHAB
KY 1010 SOUTHBOUND
DIVERSION**



See Sheet W.a for Profile

See Sheet W.b for Centerline Data

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
SHEET W.a



20012 Sheet w_b

Project Name: wolfe County Item 10-20012.00

Sheet v.b

Description: Exit 53 Bridge Rehab
Horizontal Alignment Name: KY 1010 Southbound Diversion

Description:
Style: Centerline/MOT

	STATION	NORTHING	EASTING
Element: Linear			
POB (A)	299+98.78	3803810.36	5599847.14
PI (B)	300+42.88	3803788.83	5599808.66
Tangent Direction:	S 60^46'15" W		
Tangent Length:	44.10		
Element: Linear			
PI (B)	300+42.88	3803788.83	5599808.66
PI (C)	300+93.90	3803766.87	5599762.61
Tangent Direction:	S 64^30'23" W		
Tangent Length:	51.02		
Element: Linear			
PI (C)	300+93.90	3803766.87	5599762.61
PC (C1)	300+95.86	3803765.46	5599761.24
Tangent Direction:	S 44^18'48" W		
Tangent Length:	1.96		
Element: Circular			
PC (C1)	300+95.86	3803765.46	5599761.24
PI (E)	301+30.12	3803740.95	5599737.30
CC ()		3803730.54	5599797.01
PT (D)	301+55.93	3803709.78	5599751.52
Radius:	50.00		
Delta:	68^50'20" Left		
Degree of Curvature(Arc):	114^35'30"		
Length:	60.07		
Tangent:	34.26		
Chord:	56.52		
Middle Ordinate:	8.75		
External:	10.61		
Tangent Direction:	S 44^18'48" W		
Radial Direction:	N 45^41'12" W		
Chord Direction:	S 9^53'38" W		
Radial Direction:	S 65^28'28" W		
Tangent Direction:	S 24^31'32" E		
Element: Linear			
PT (D)	301+55.93	3803709.78	5599751.52
PC (F)	301+58.30	3803707.63	5599752.51
Tangent Direction:	S 24^31'32" E		
Tangent Length:	2.37		
Element: Circular			
PC (F)	301+58.30	3803707.63	5599752.51
PI (H)	301+87.72	3803680.86	5599764.72
CC ()		3803728.38	5599798.00
PT (G)	302+11.48	3803678.54	5599794.04
Radius:	50.00		
Delta:	60^56'12" Left		
Degree of Curvature(Arc):	114^35'30"		
Length:	53.18		
Tangent:	29.42		
Chord:	50.71		
Middle Ordinate:	6.90		

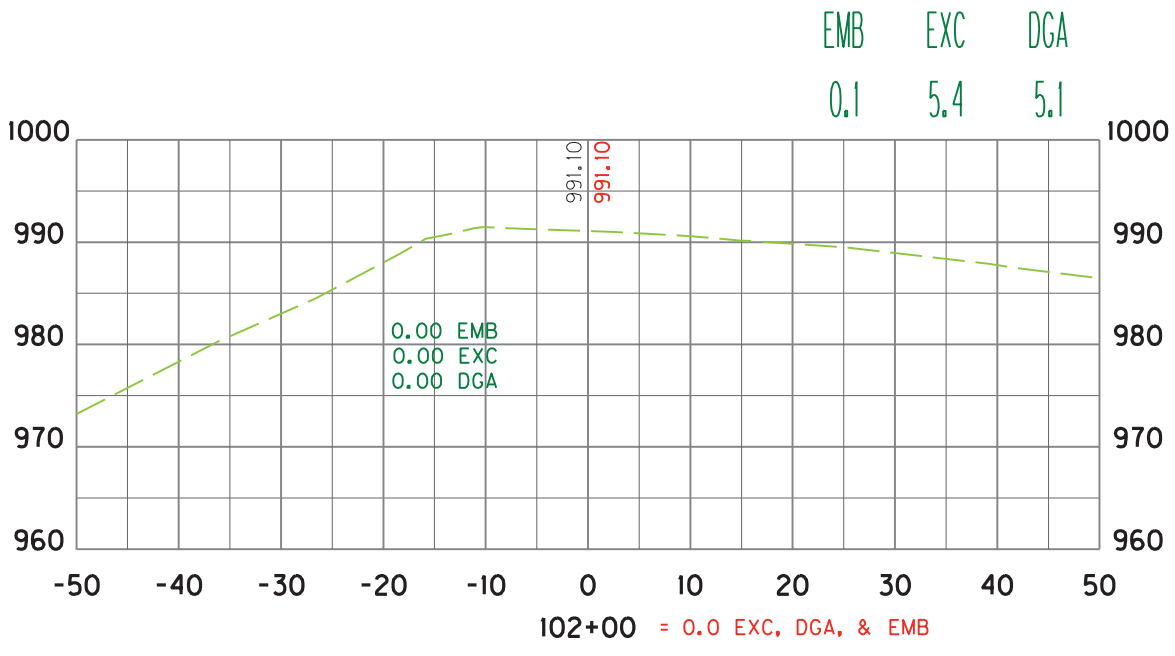
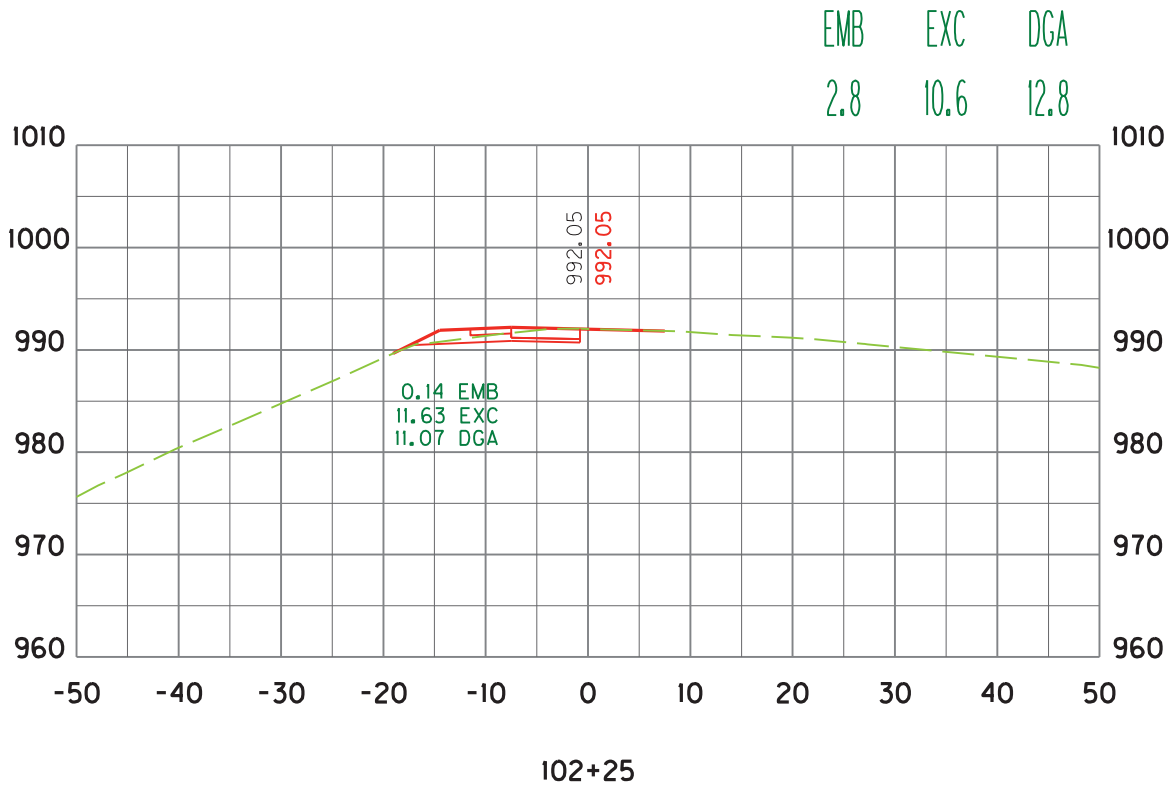
20012 Sheet w_b

External: 8.01
Tangent Direction: S 24^31'32" E
Radial Direction: S 65^28'28" W
Chord Direction: S 54^59'38" E
Radial Direction: S 4^32'16" W
Tangent Direction: S 85^27'44" E

Non-collinear

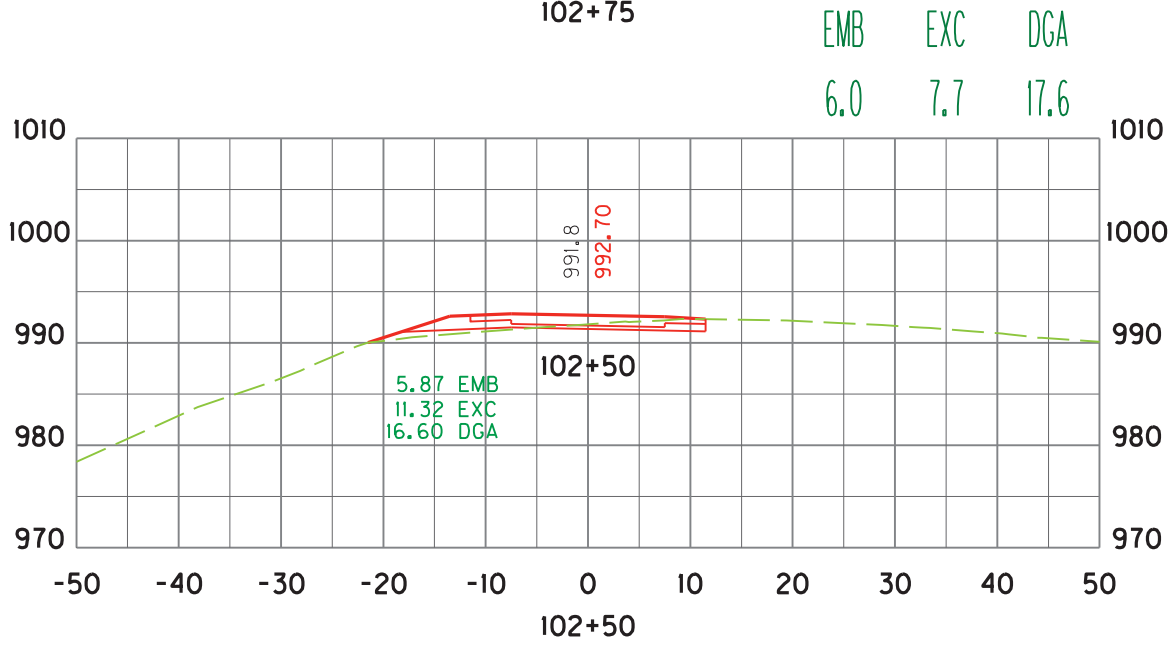
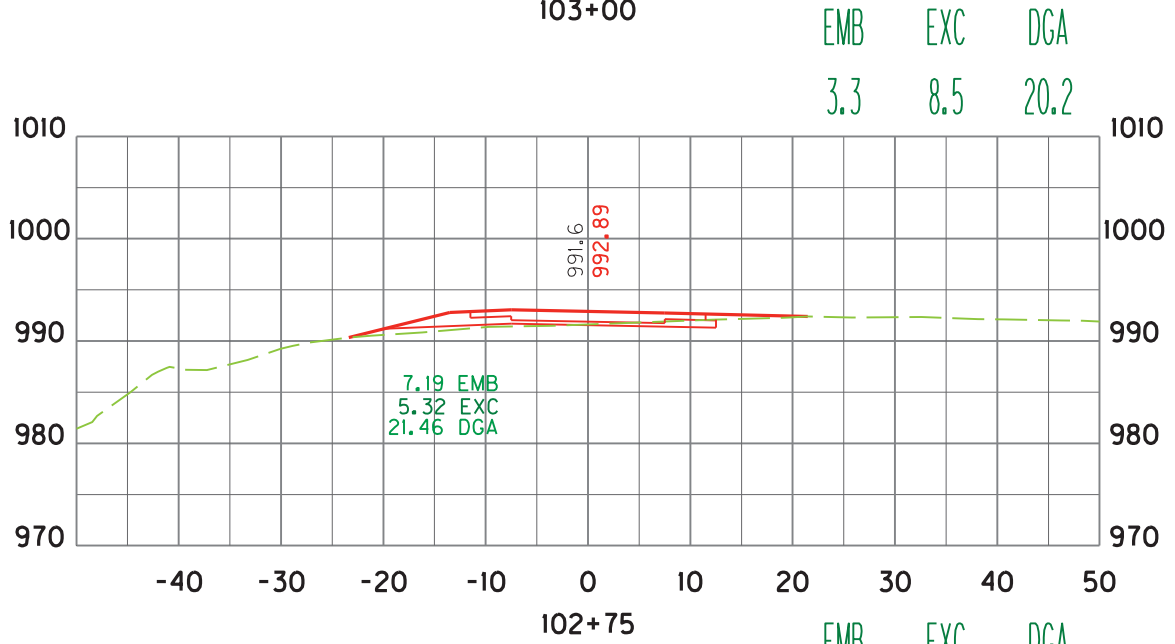
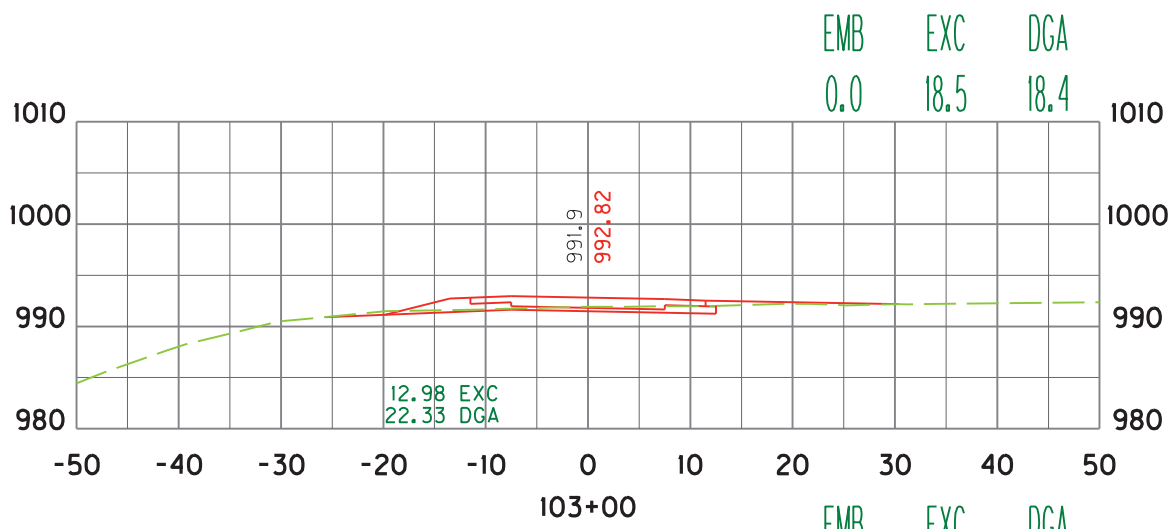
Element: Linear
PT (G) 302+11.48 3803678.54 5599794.04
POE (I) 303+16.05 3803703.22 5599895.66
Tangent Direction: N 76^20'47" E
Tangent Length: 104.57

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 1



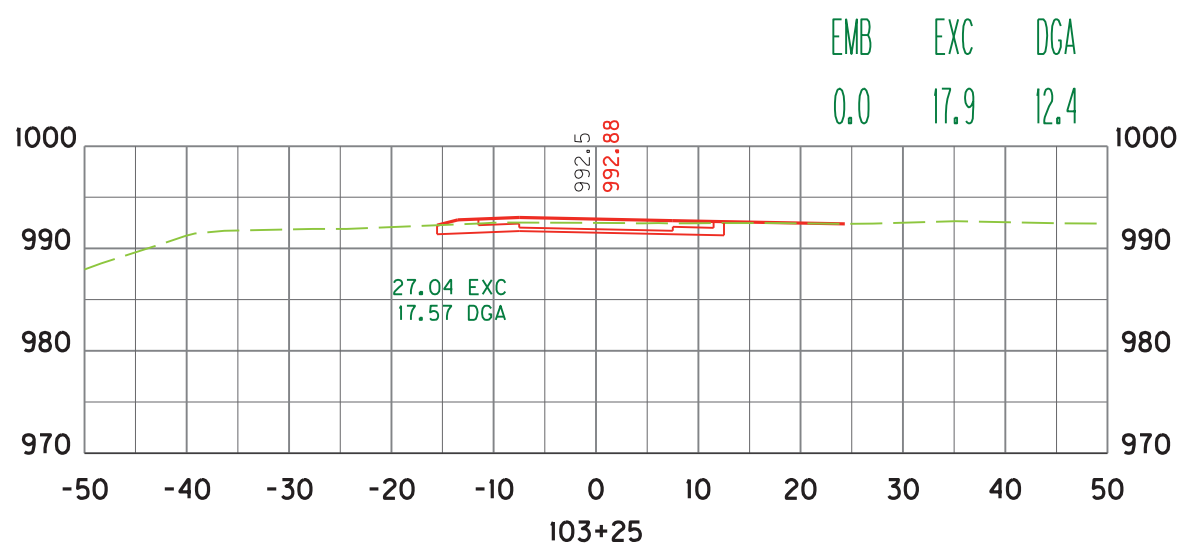
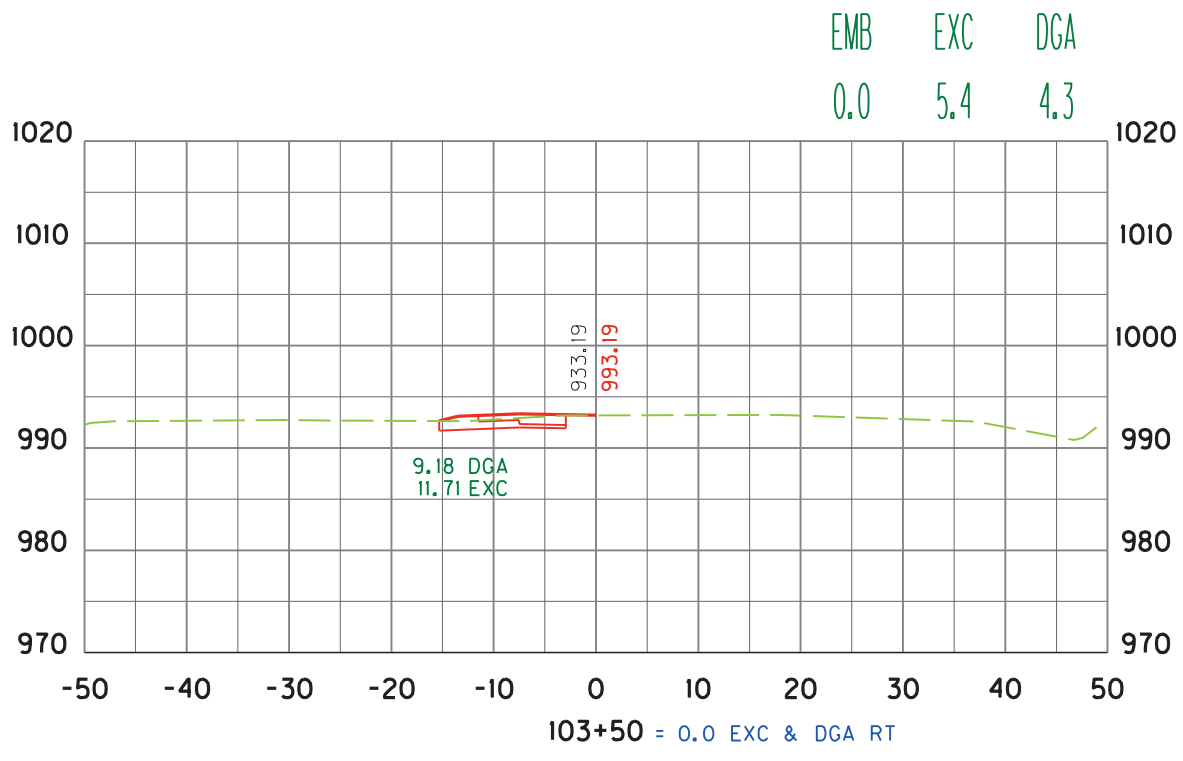
EXIT 53 EASTBOUND DIVERSION
STA.102+00 TO STA.102+25

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 2



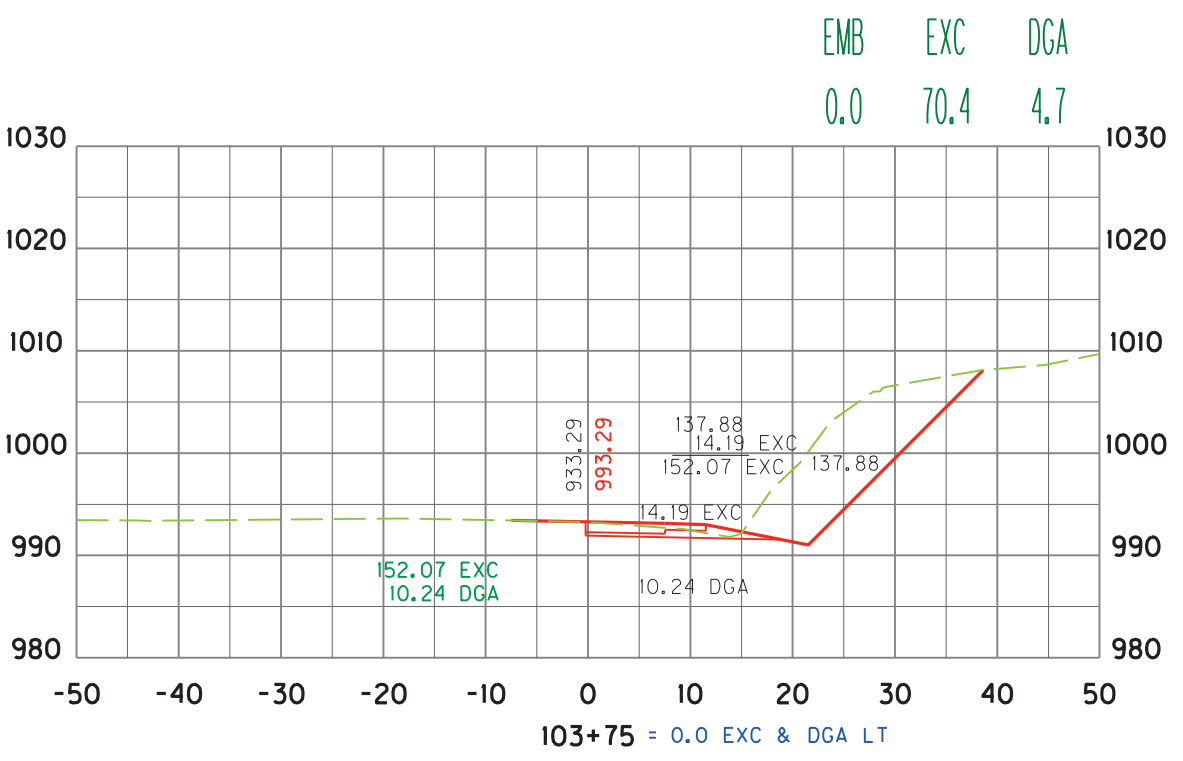
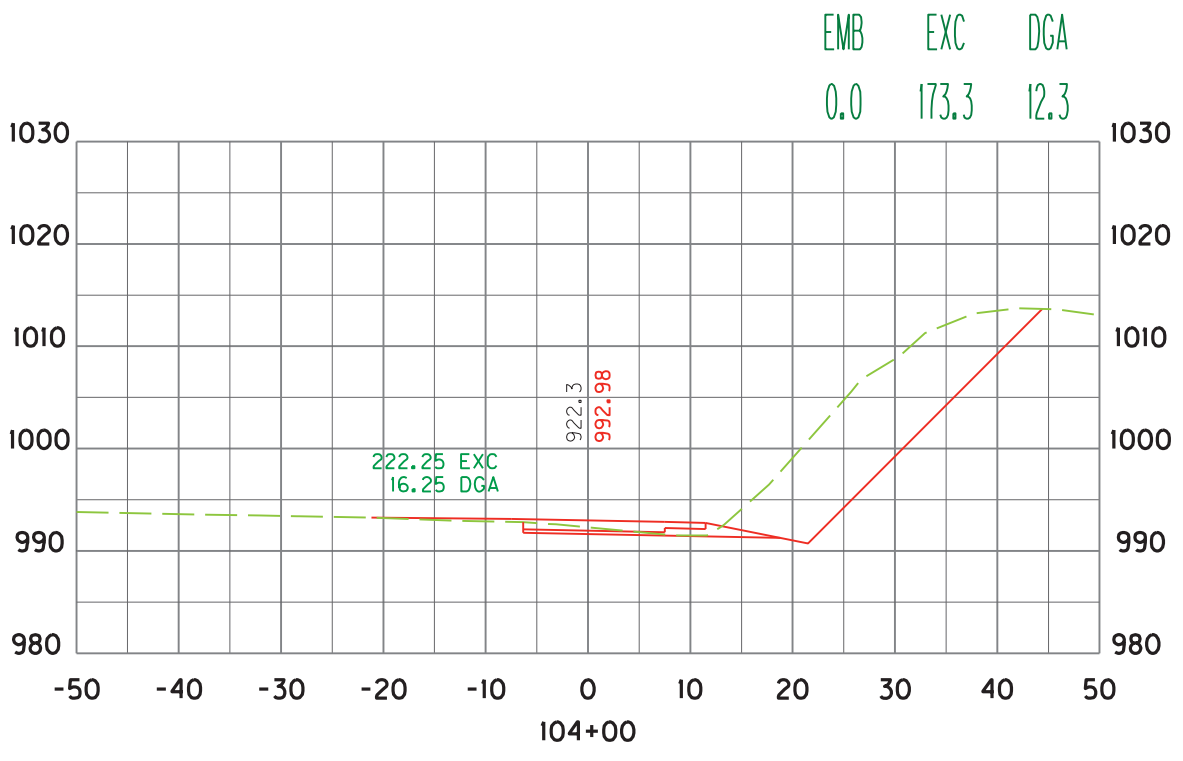
EXIT 53 EASTBOUND DIVERSION
STA.102+50 TO STA.103+00

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 3



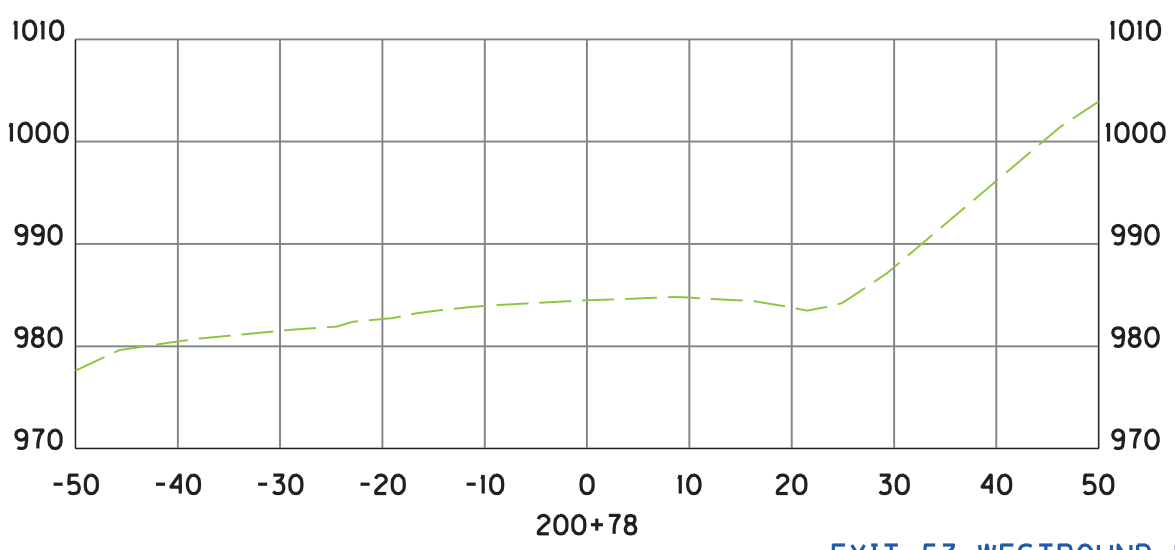
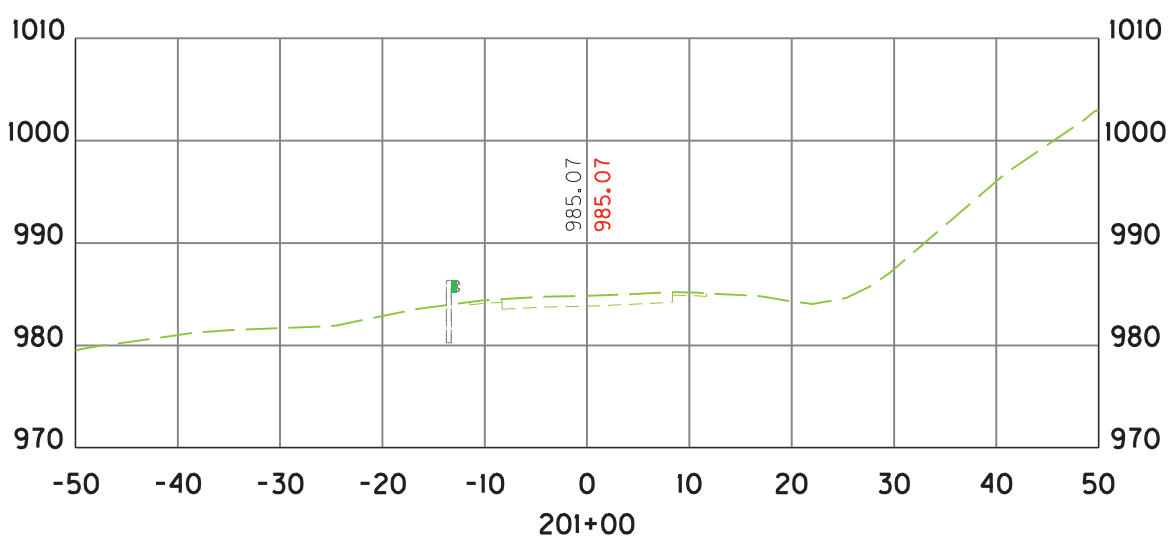
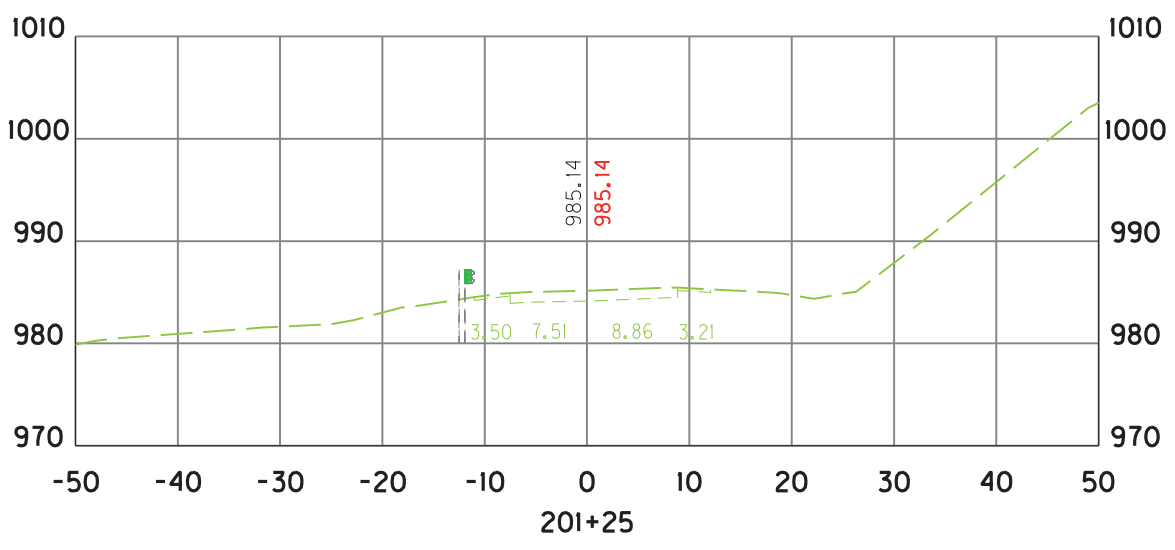
EXIT 53 EASTBOUND DIVERSION
STA.103+25 TO STA.103+50

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 4



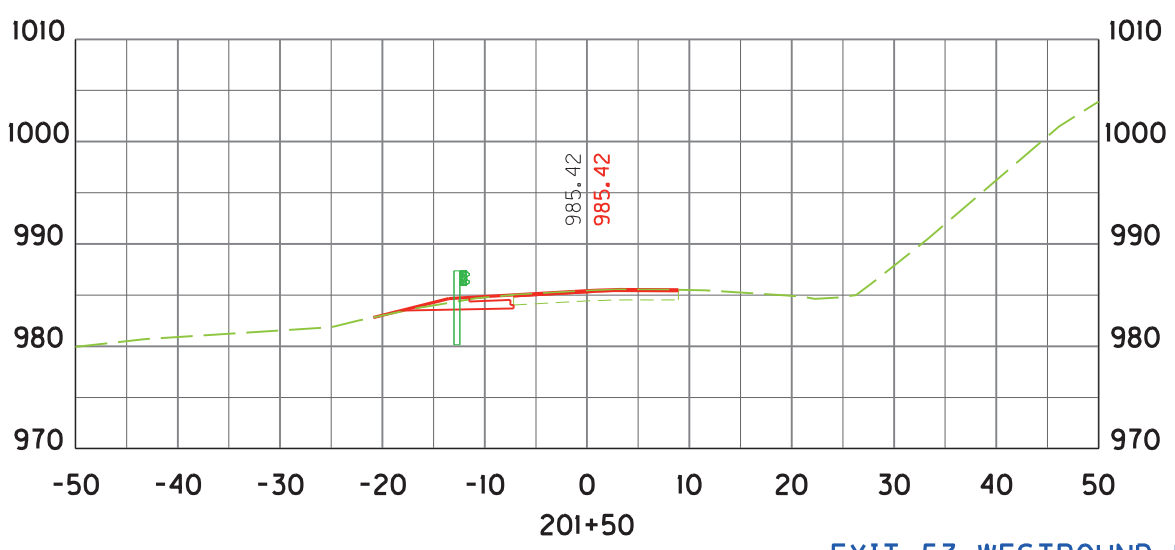
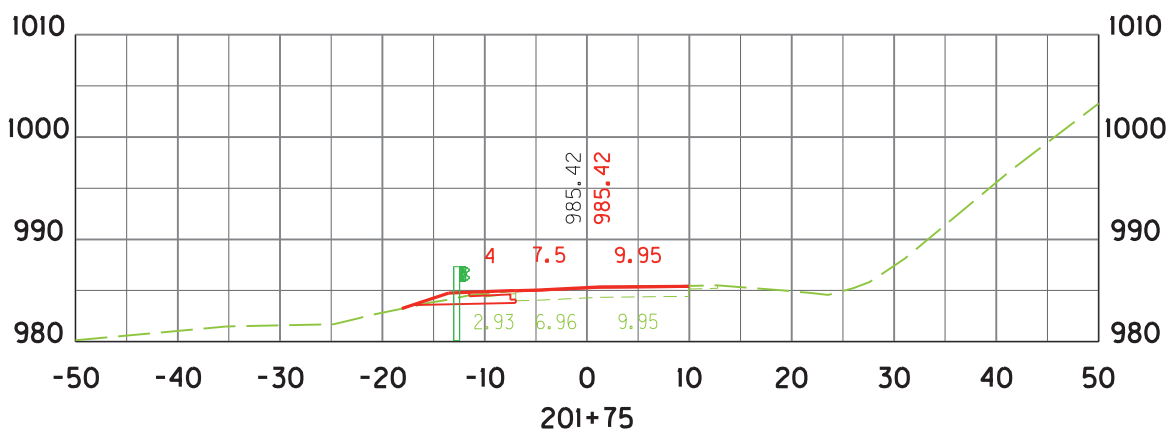
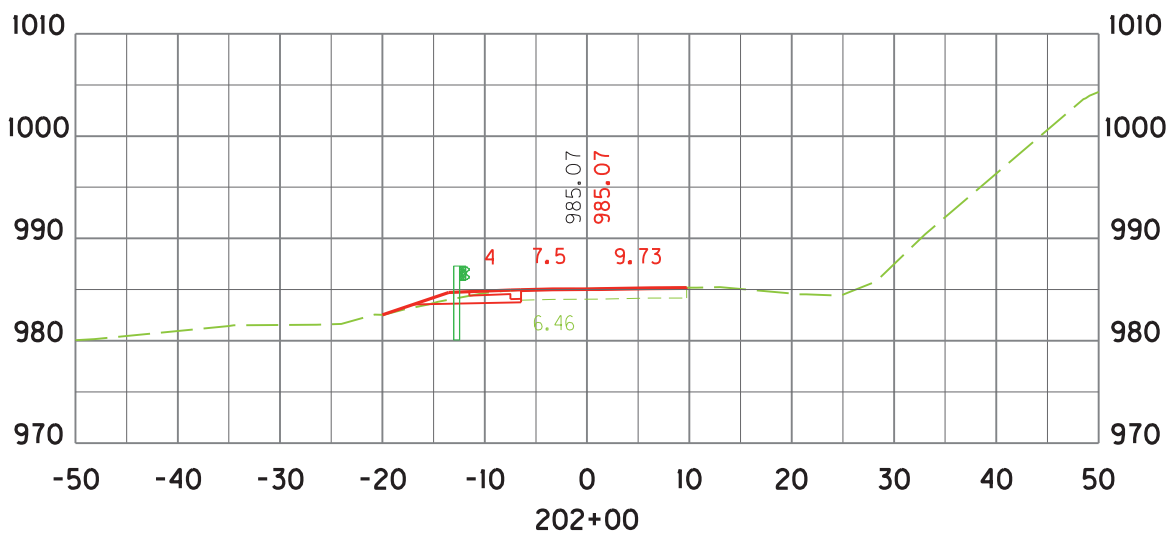
EXIT 53 EASTBOUND DIVERSION
STA.103+75 TO STA.104+00

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 6



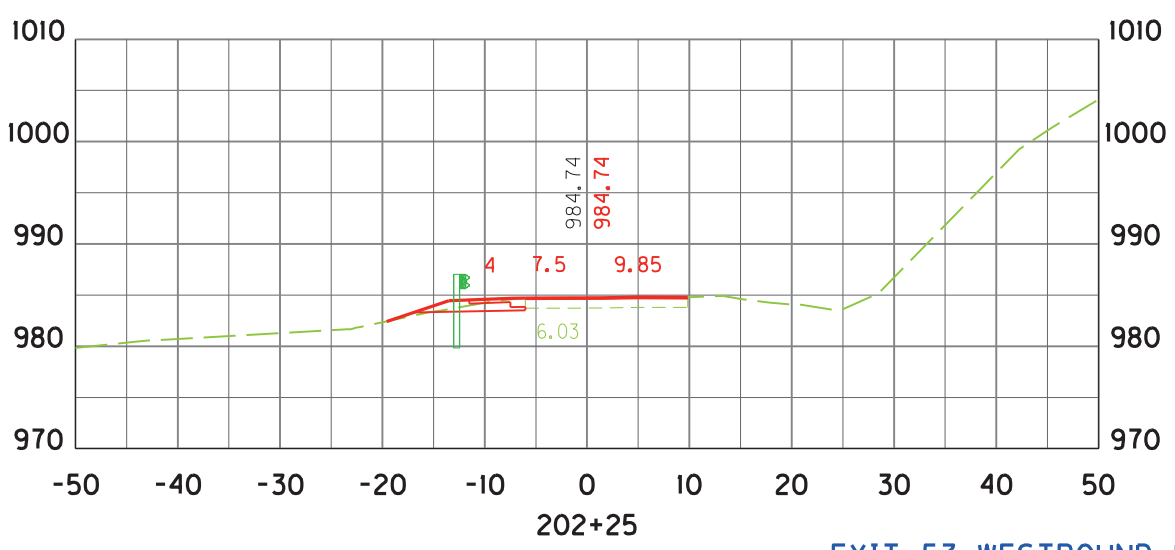
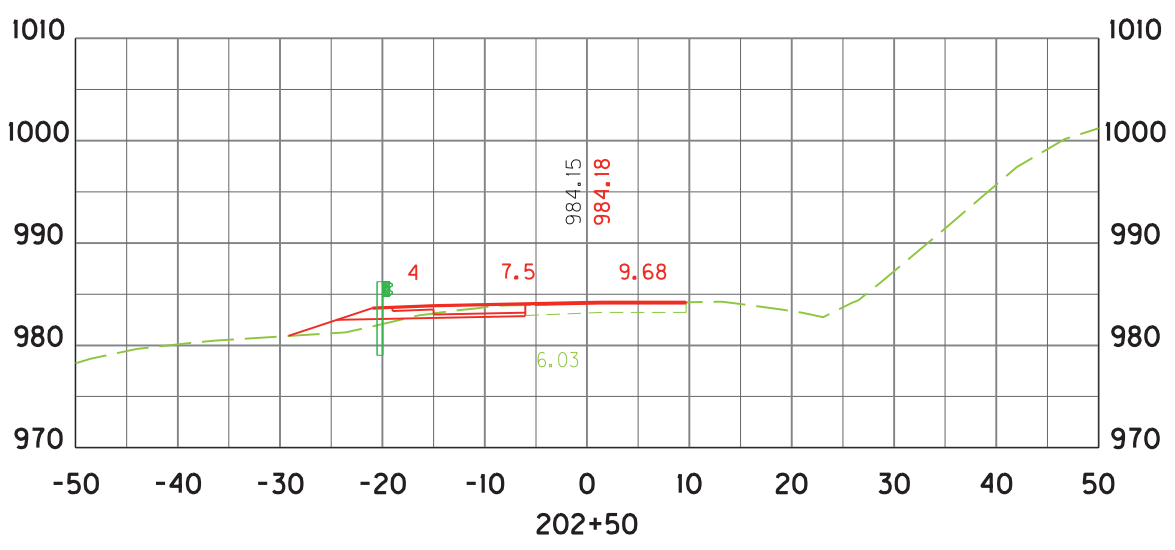
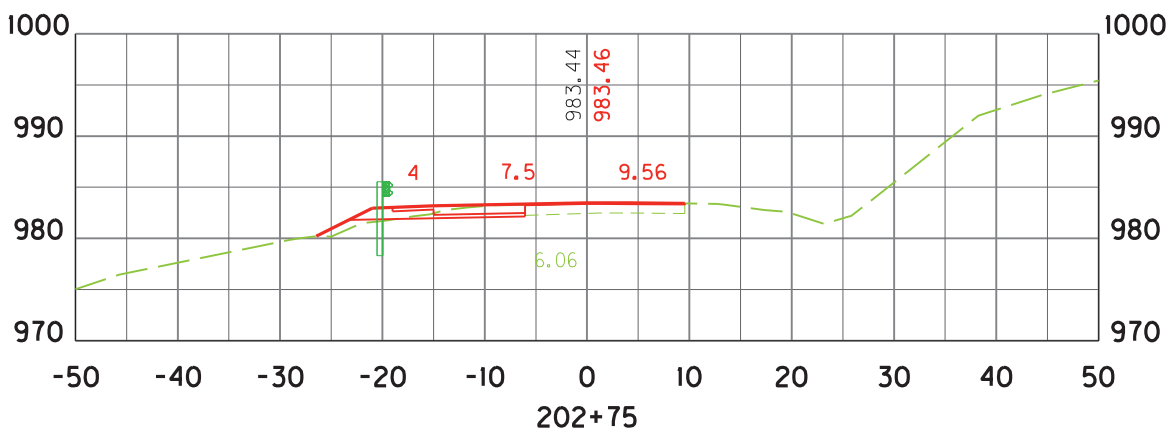
EXIT 53 WESTBOUND DIVERSION
STA. 200+78 TO STA. 201+25

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 7



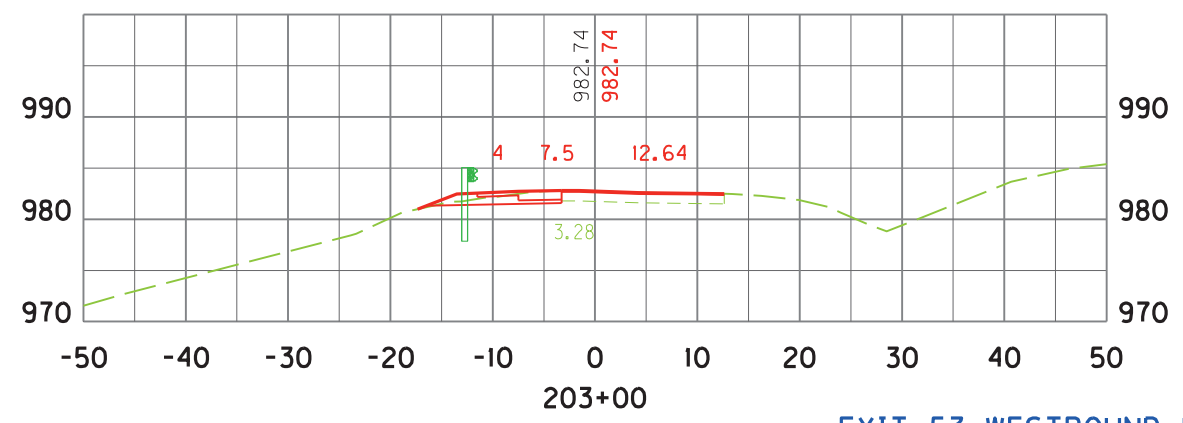
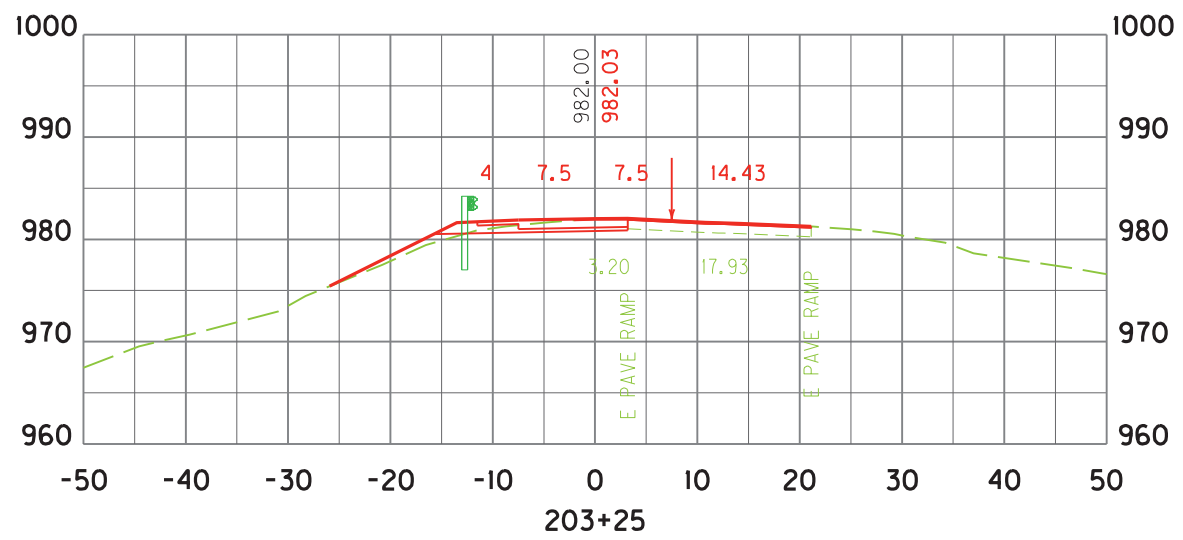
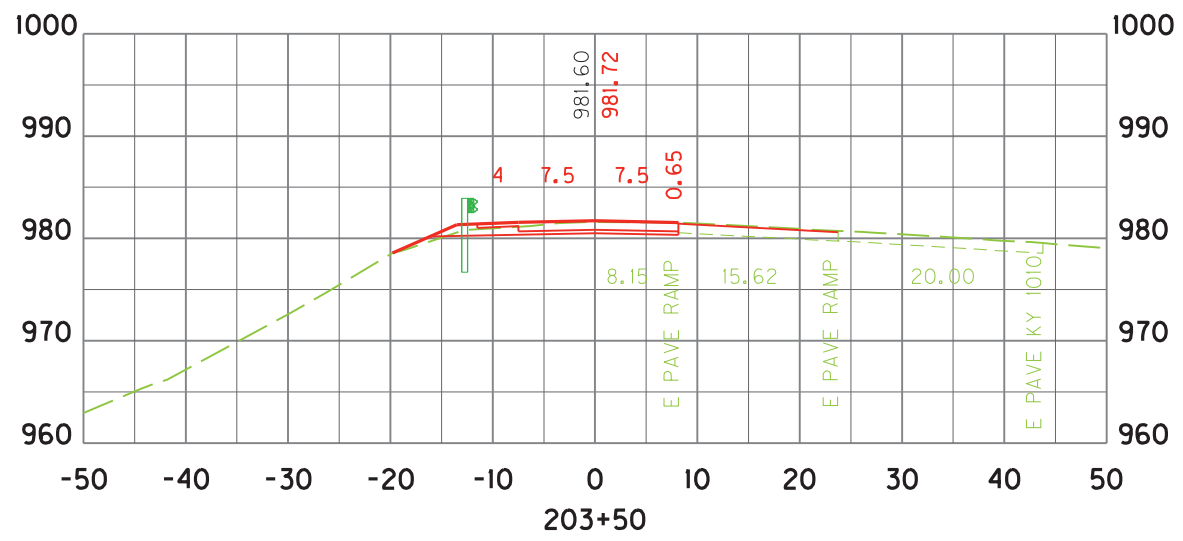
EXIT 53 WESTBOUND DIVERSION
STA. 201+50 TO STA. 200+00

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 8



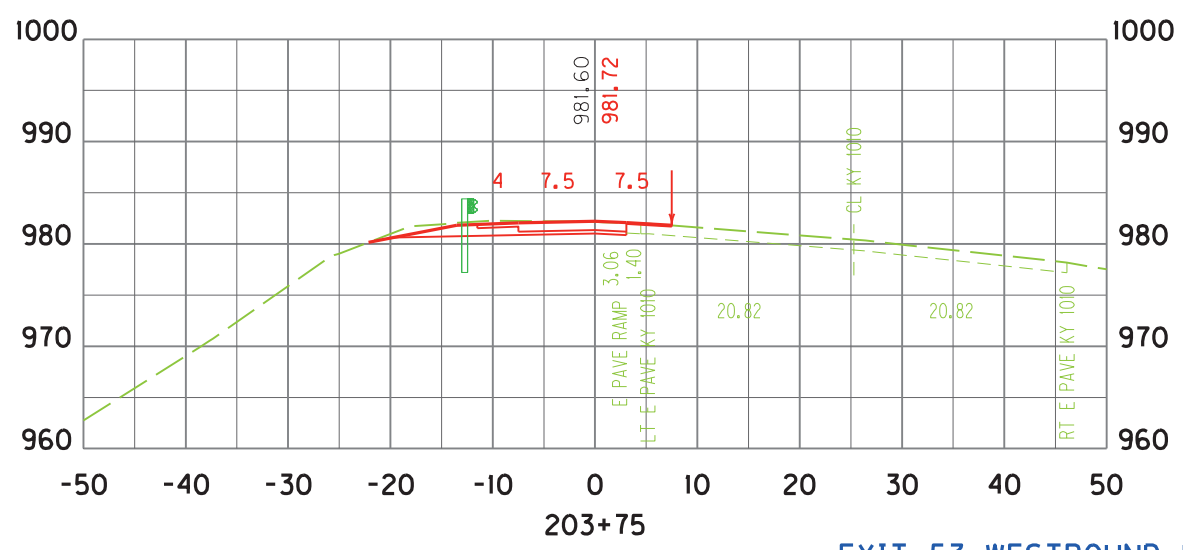
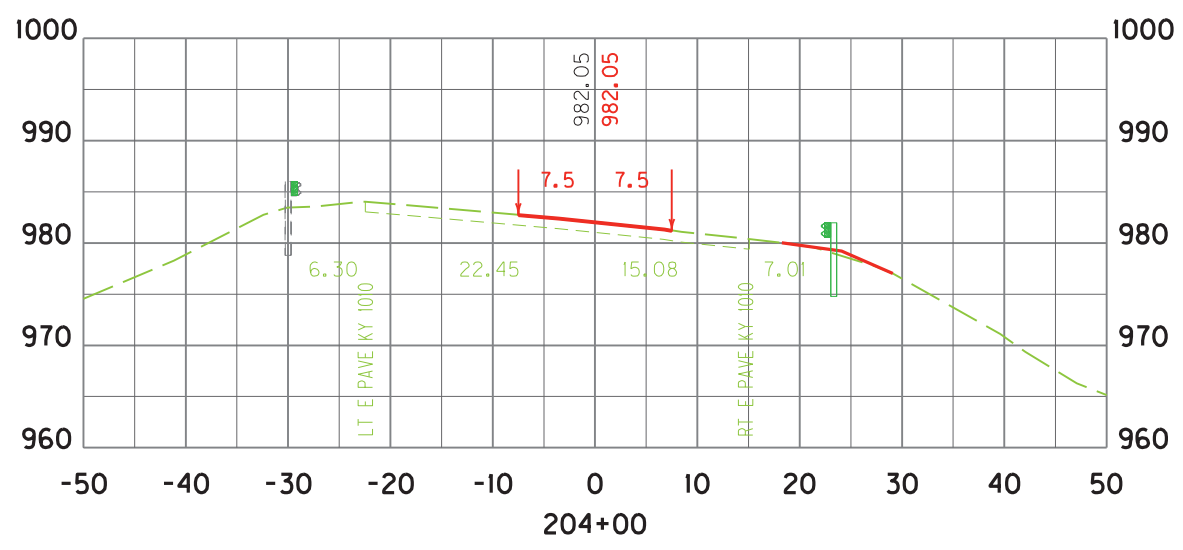
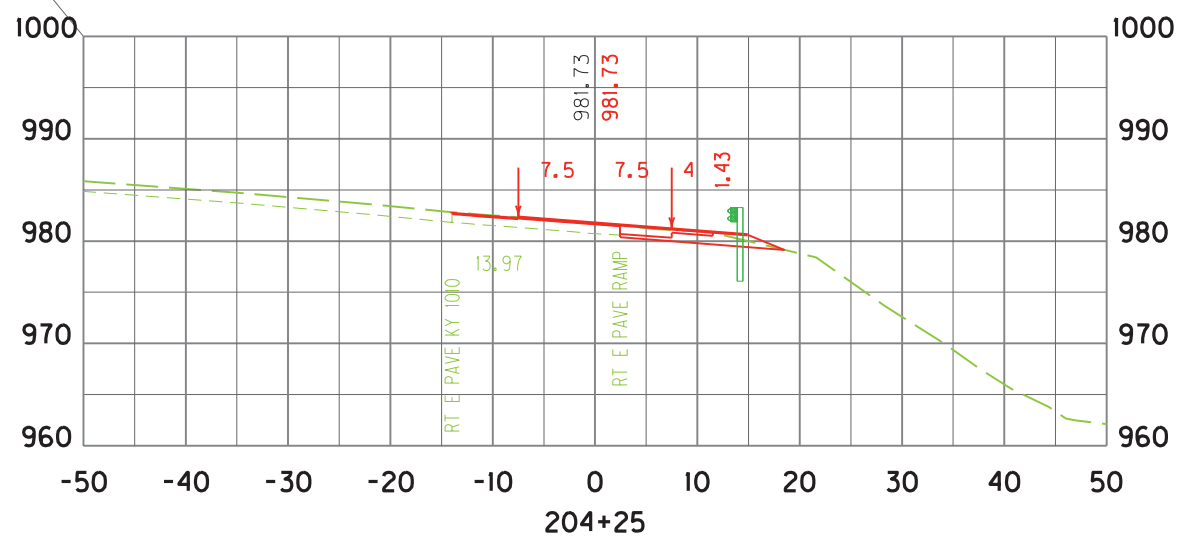
EXIT 53 WESTBOUND DIVERSION
STA.202+25 TO STA.202+75

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 9



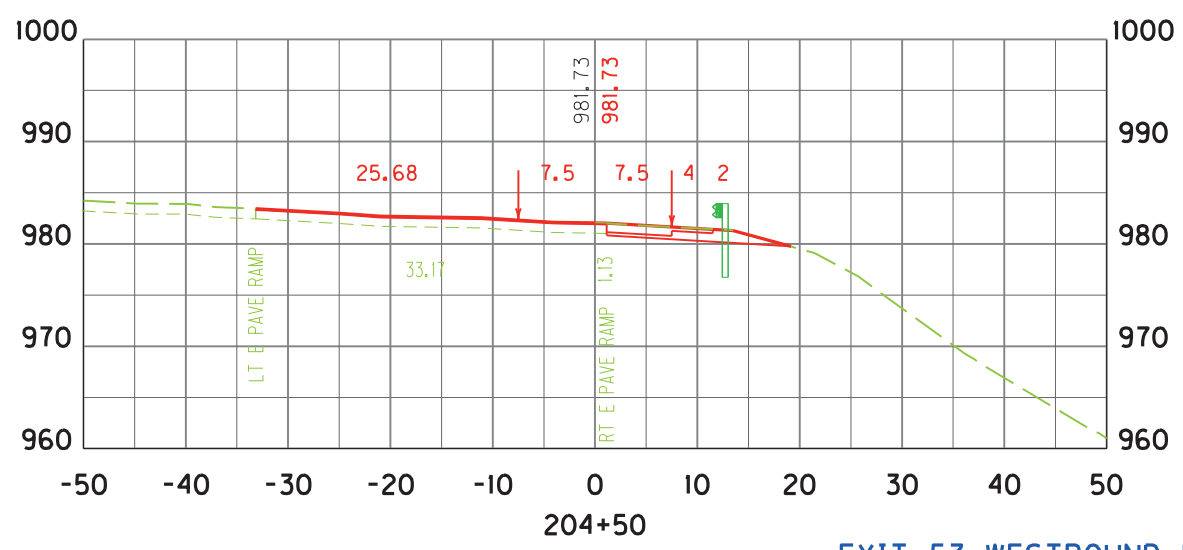
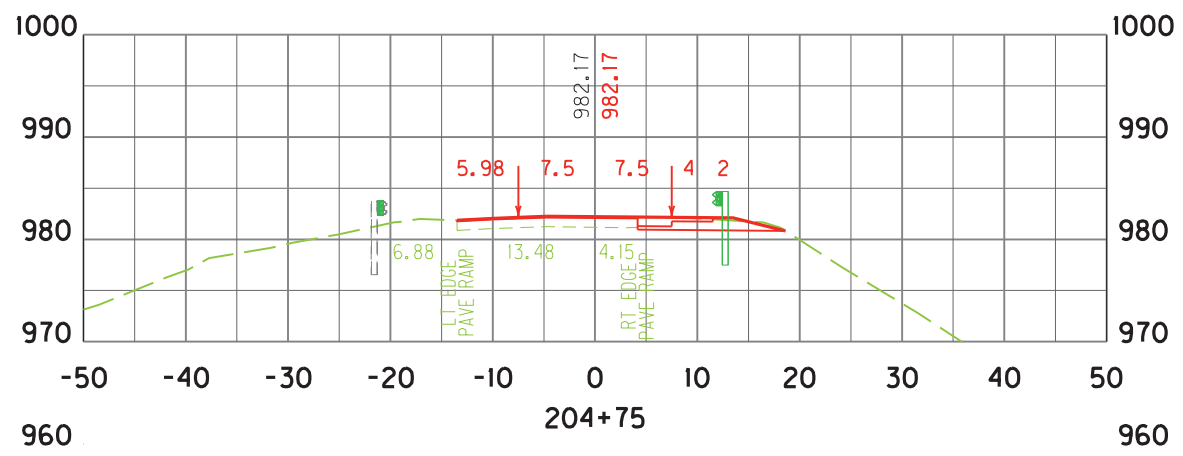
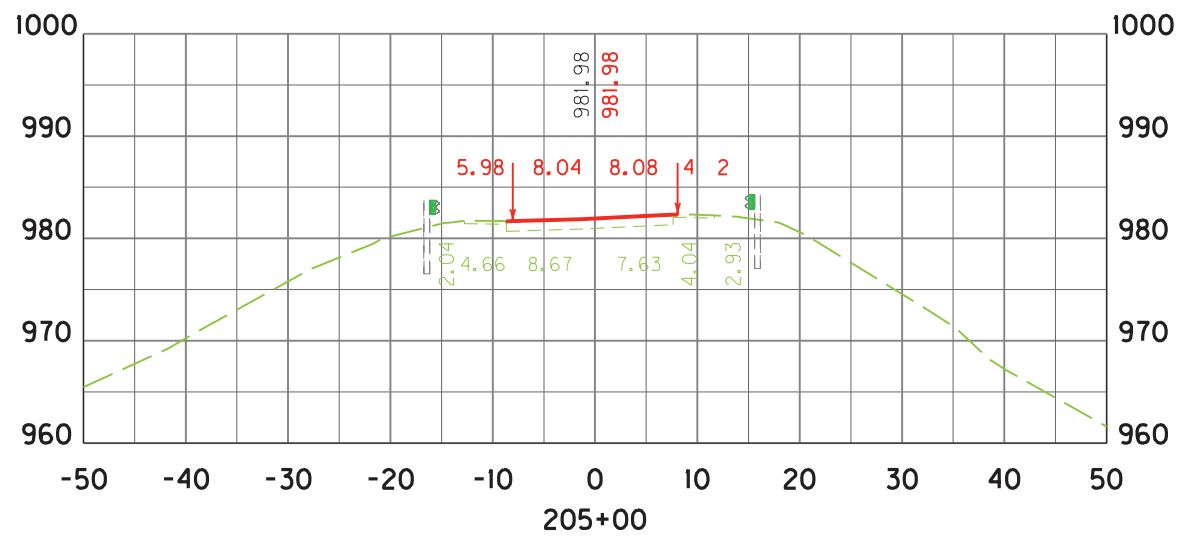
EXIT 53 WESTBOUND DIVERSION
STA.203+00 TO STA.203+50

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 10



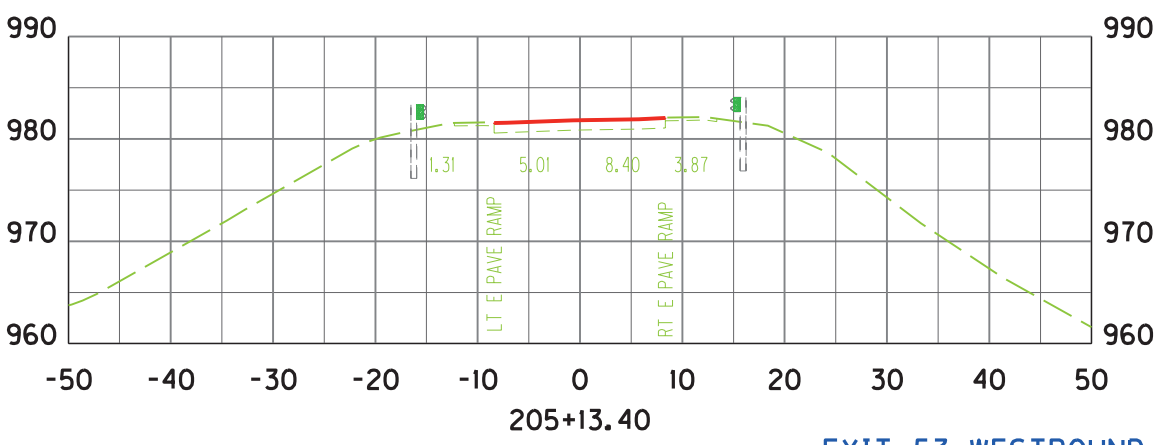
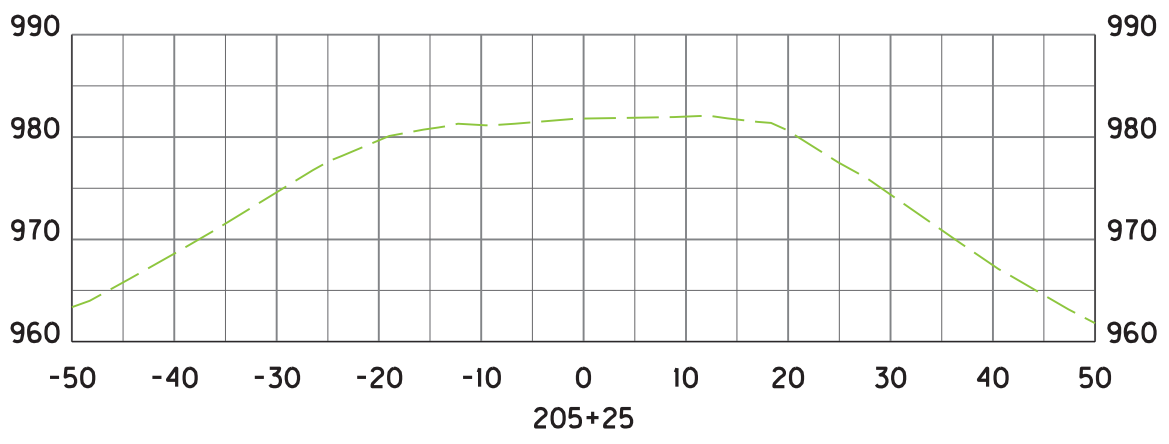
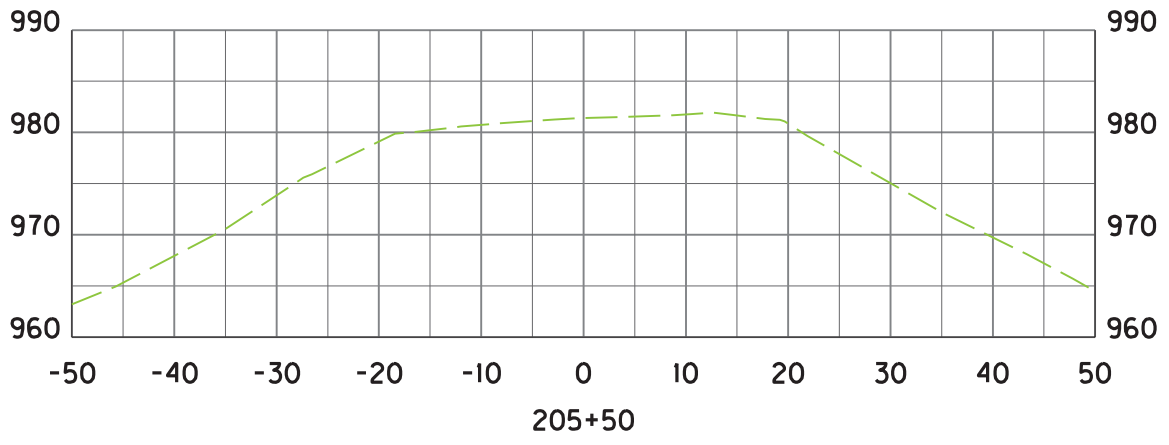
EXIT 53 WESTBOUND DIVERSION
STA.203+75 TO STA.204+25

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 11



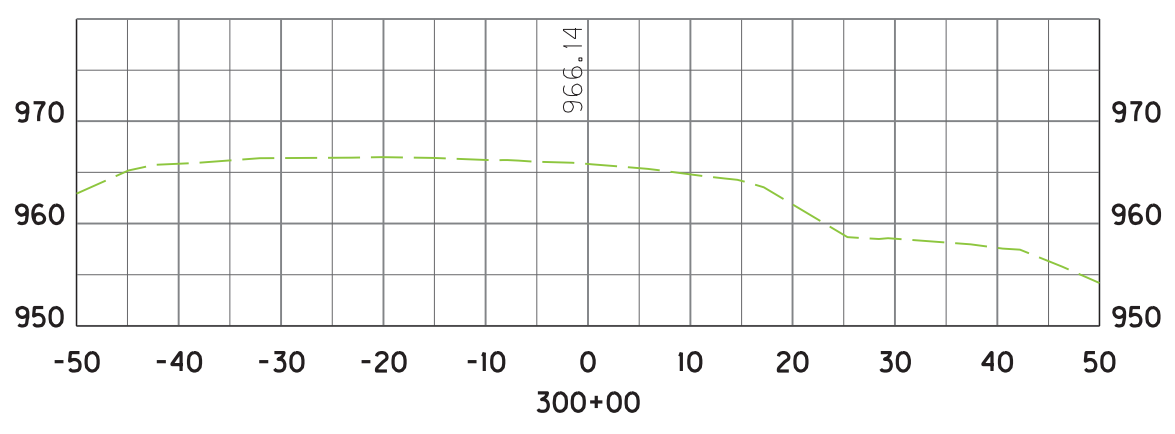
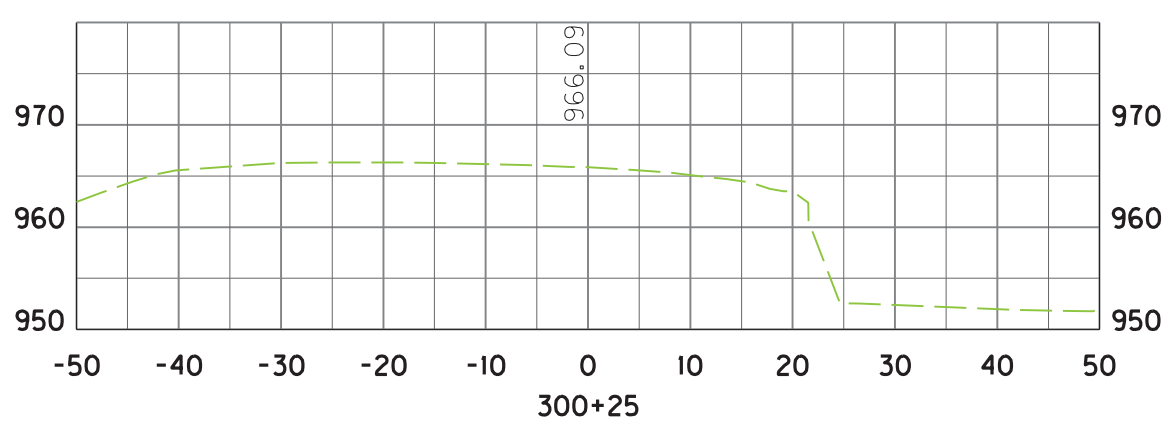
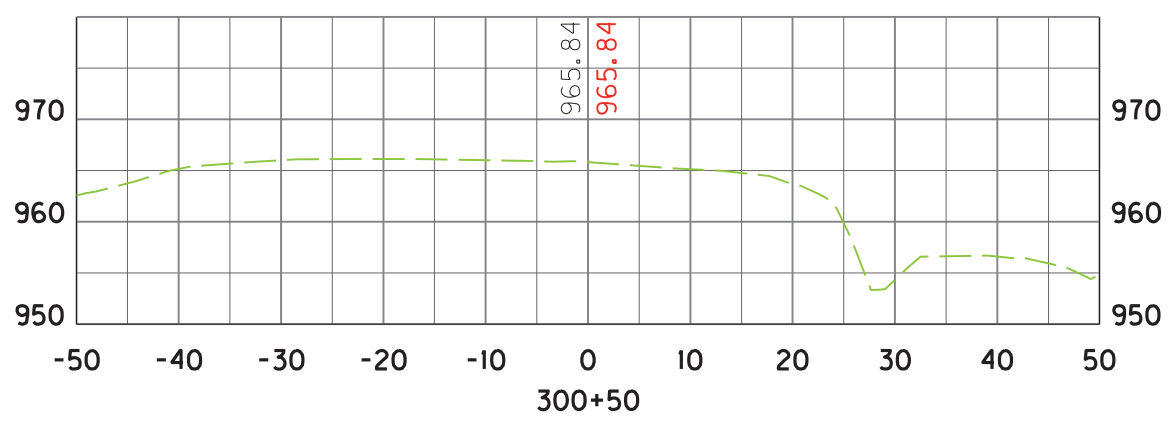
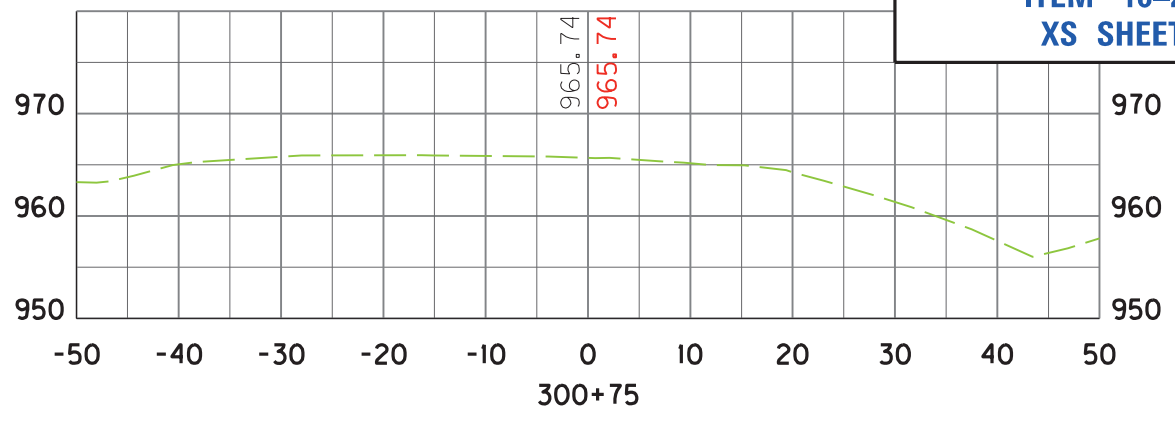
EXIT 53 WESTBOUND DIVERSION
STA.204+50 TO STA.205+00

WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 12

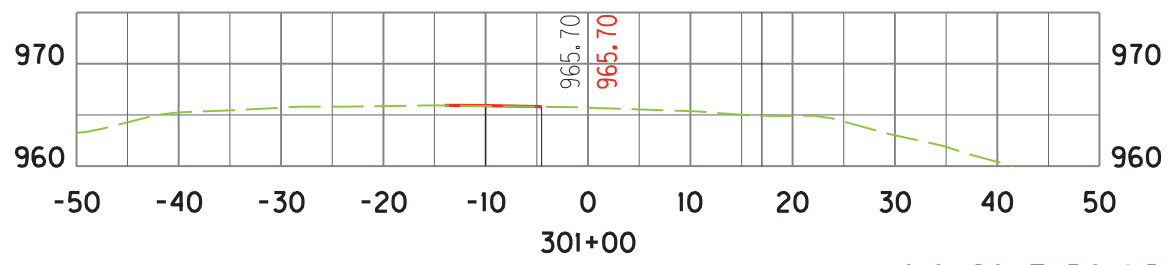
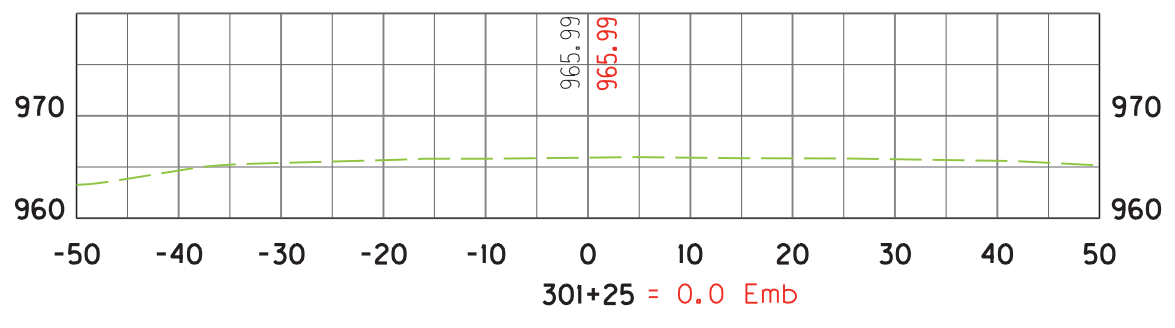
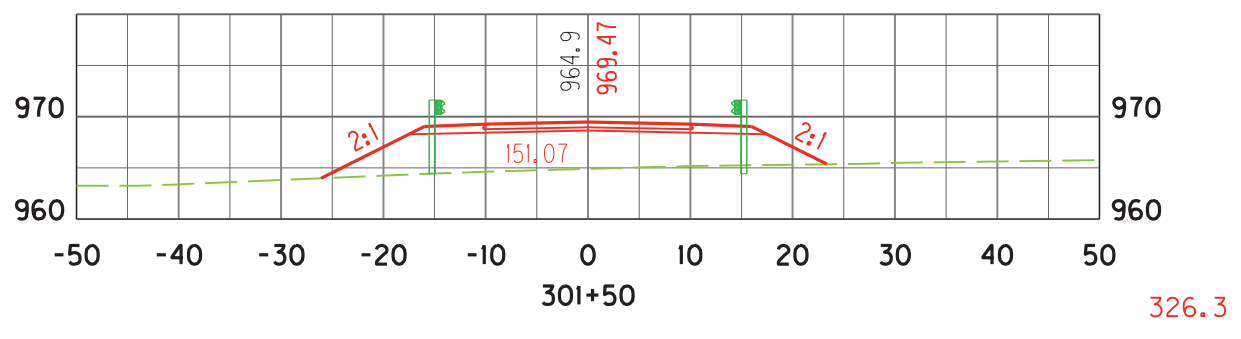
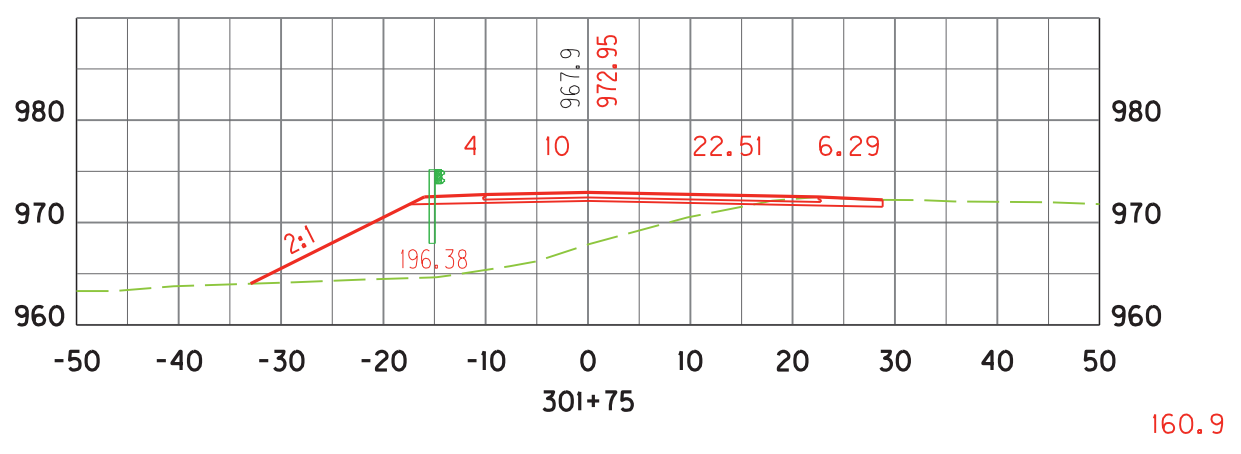
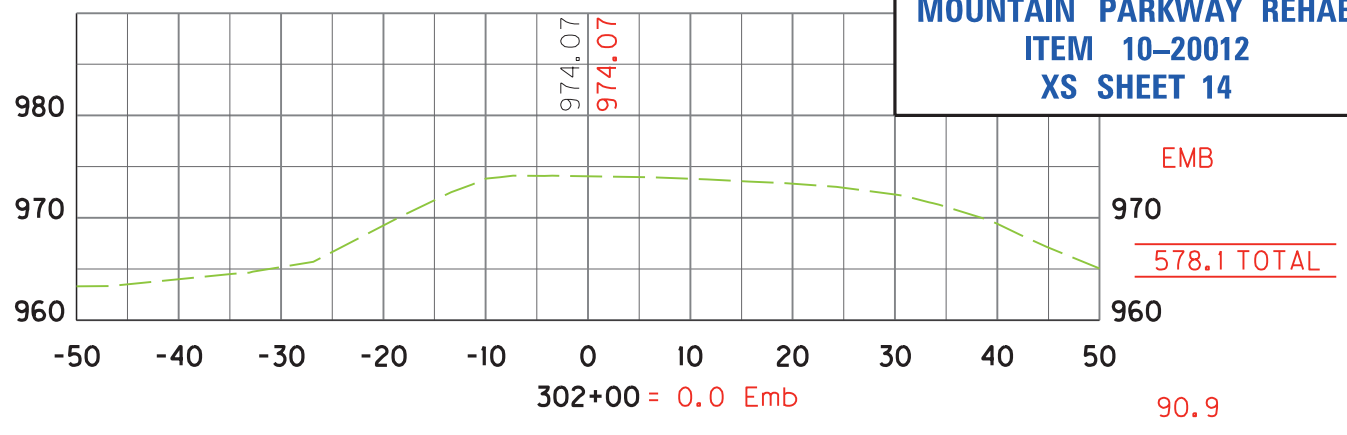


EXIT 53 WESTBOUND DIVERSION
STA.205+13.40 TO STA.205+50

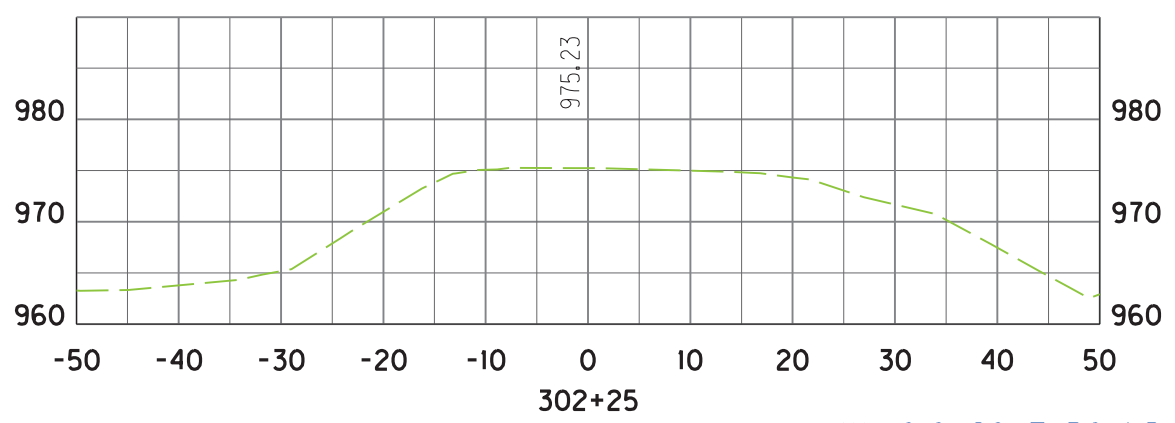
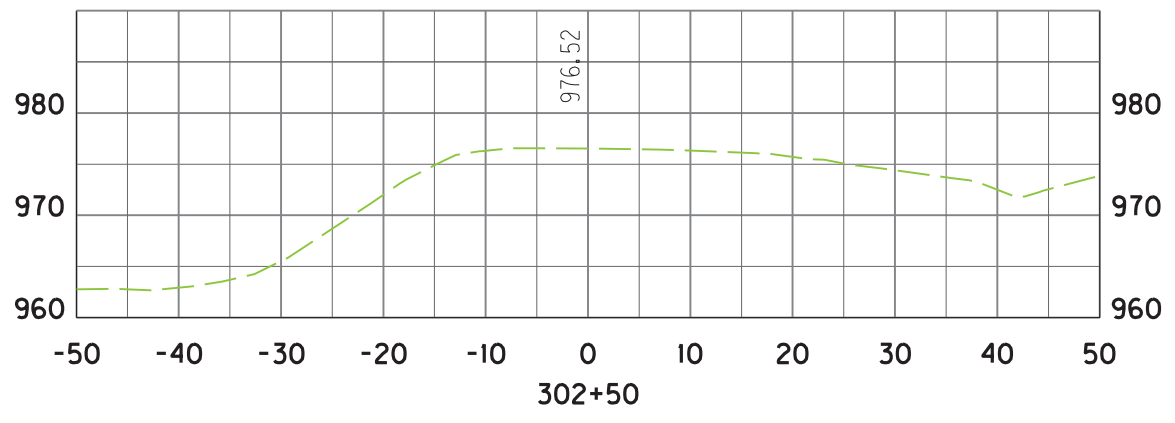
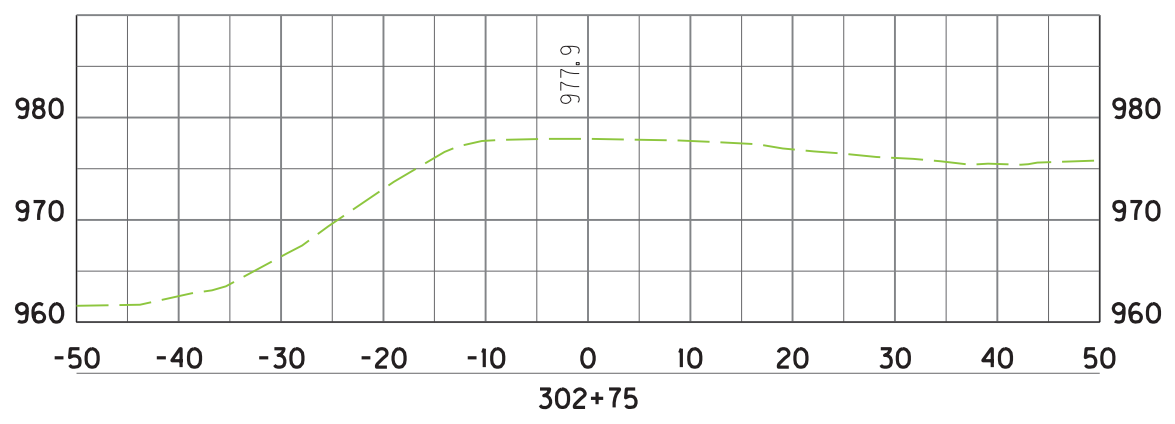
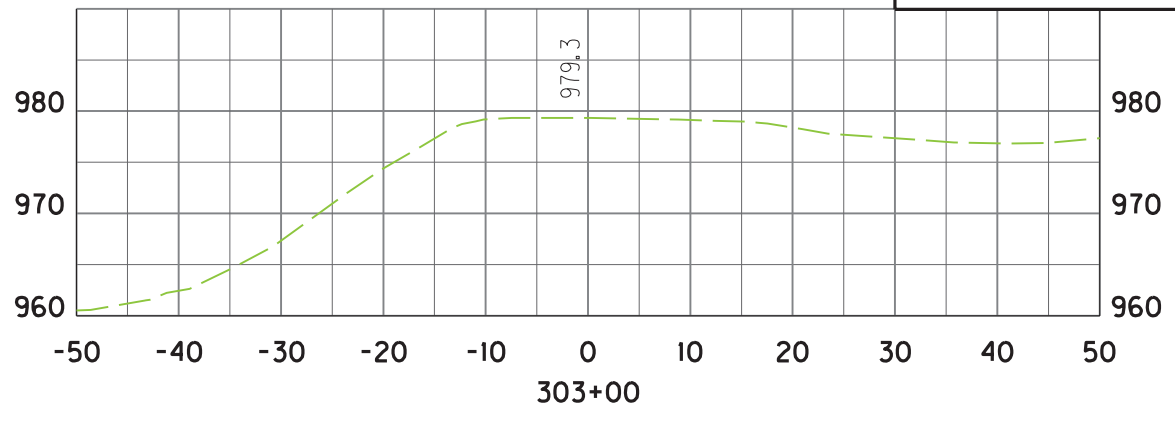
WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 13



WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 14



WOLFE COUNTY
KY 1010 BRIDGE RECONST
MOUNTAIN PARKWAY REHAB
ITEM 10-20012
XS SHEET 15




KY 1010 SOUTHBOUND DIVERSION
STA. 302+25 TO STA. 303+00

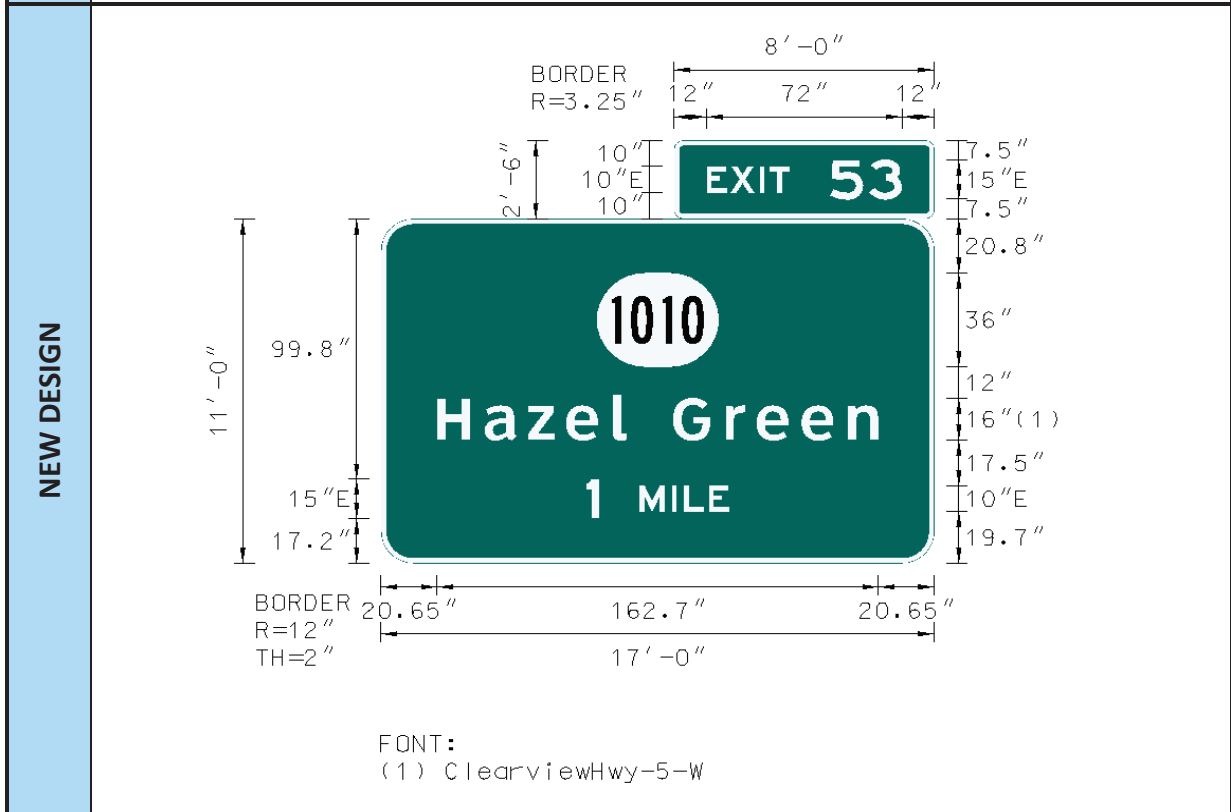
Westbound - Panel Signs

#	DIRECTION	SIDE OF ROAD	MILE POST	PANEL SIGNS SQ FT	STEEL BEAMS			CONCRETE			REINFORCING REINFORCING LBS.	REMOVE BEAMS EACH	REMOVE SIGN EACH	SHEETING SIGNS 0.125 GAUGE SQ. FT.	STEEL POST TYPE 1 L.F.	TYPE D BREAK-AWAY EACH			
					WEIGHT LBS.	LENGTH L.F.	TYPE "A" FIX. L.F.	TYPE "C" BRK LBS.	Z-Brack. * LBS.	DIA. FT.							DEP. FT.	BASE EACH	VOL CU. YD
#1	WEST	RIGHT	56.42																
#2	SEE SHEETING SIGN SUMMARY																		
#3	WEST	RIGHT	54.45	207															
#4	WEST	RIGHT	53.96	207	W10X26	26	57	1482		110.55	3	8	2	4.19	110.00	1			
#5	WEST	RIGHT	53.58	232.5						110.55						1			
#6	WEST	GORE	53.46								1.5	3.5	2	0.46	50.00	30	41	2	
#7	WEST	RIGHT	52.6													1			
#8	SEE SHEETING SIGN SUMMARY																		
#9	WEST	RIGHT	48.7	36.75						110.55						1			
#10	WEST	RIGHT	48.4	163						110.55						1			
#11	WEST	RIGHT	47.25	163	W8X18	18	51.6		928.8	110.55	3	8	2	4.19	110.00				
#12	WEST	RIGHT	46.83	163	W10X26	26	59.3	1541.8		110.55	3	8	2	4.19	110.00				
#13	WEST	RIGHT	46.43	163	W8X18	18	58.8	1058.4		110.55	3	8	2	4.19	110.00				
#14	WEST	GORE	46.36								1.5	3.5	2	0.46	50.00		30	41	2
TOTAL				1335.25				4082.2	928.8	994.95			2	17.66	540.00	6	60	82	4
* GALVANIZED STEEL: 5'-6" LONG Z-BRACKETS 3' X 2.3/4" @ 6.7 LBS PER FT. LOCATION OF SIGN MAY BE FIELD ADJUSTED AT THE ENGINEER'S DISCRETION. QUANTITIES ON THIS SHEET HAVE BEEN CARRIED OVER AND INCLUDED IN THE GENERAL SUMMARY SHEET																			

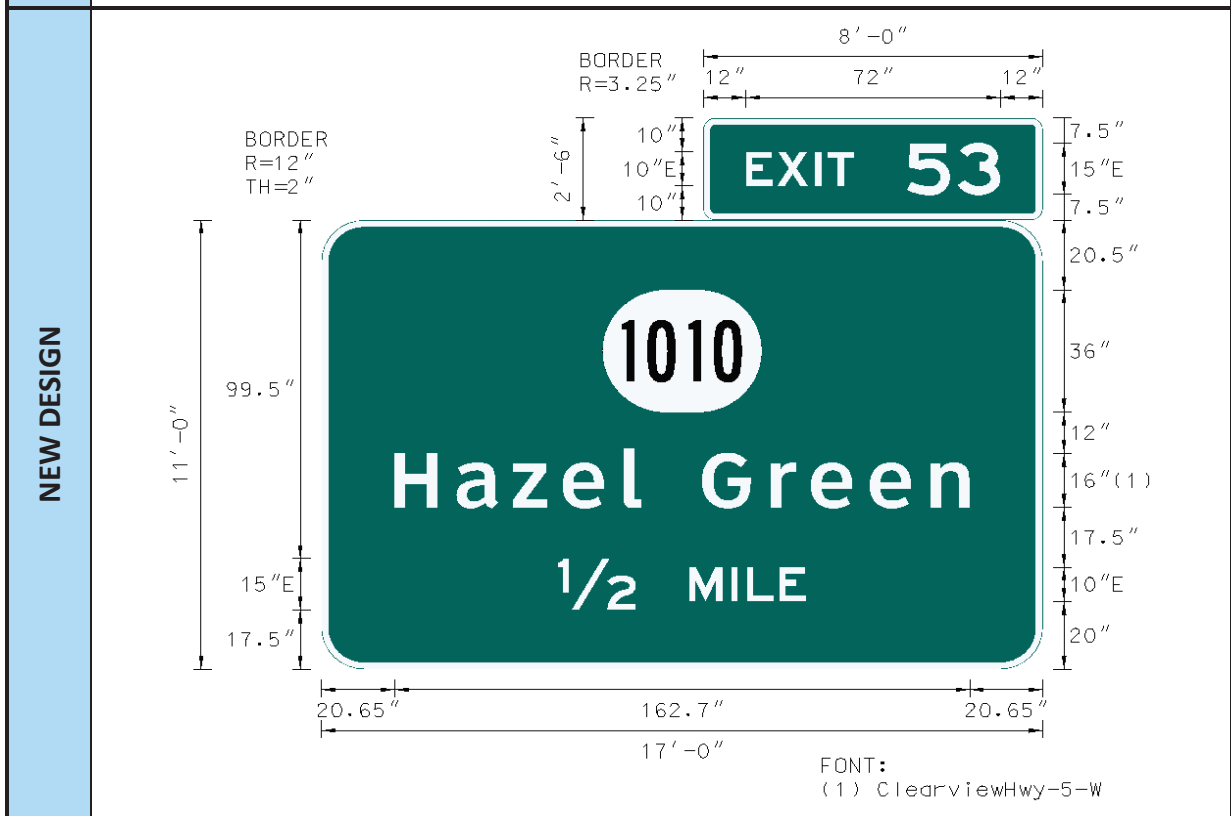
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			1
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	50.2		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and supports completely.
		2	Remove concrete bases to a point 1' below the ground level.

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>

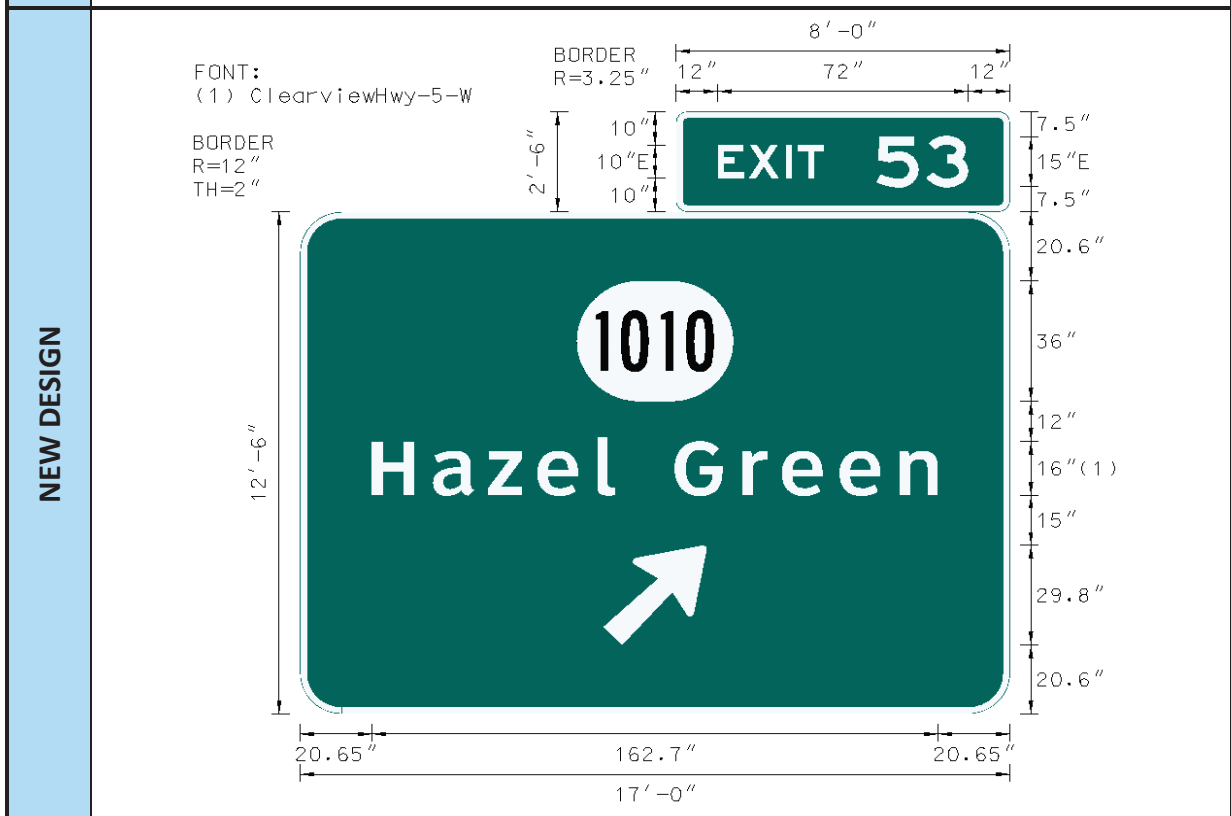
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			2
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	52.14		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.
		2	Remove the bottom panels showing the message for "NEXT EXIT 5 MILES" from the sign assembly completely..
		3	Tree Trimming may be necessary.



SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			3									
District	10	<table border="1"> <thead> <tr> <th colspan="2">SPECIAL INSTRUCTIONS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Install new sign and supports near <u>MP 52.75</u></td> </tr> <tr> <td>2</td> <td>Clearing and grubbing incidental to installation of the panel sign.</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	SPECIAL INSTRUCTIONS		1	Install new sign and supports near <u>MP 52.75</u>	2	Clearing and grubbing incidental to installation of the panel sign.				
SPECIAL INSTRUCTIONS												
1	Install new sign and supports near <u>MP 52.75</u>											
2	Clearing and grubbing incidental to installation of the panel sign.											
County	Wolfe											
Route	9009											
Road Name	Mountain Parkway											
Traveling Direction	East											
Mile Point	52.75											
Side of Roadway	Right - Behind Guard Rail											
Type of Supports	Type "A" Fixed											
# of Supports & Size	2 - 10 x 26 lbs per ft.											
Concrete Dimensions	3' dia x 8 ft deep											



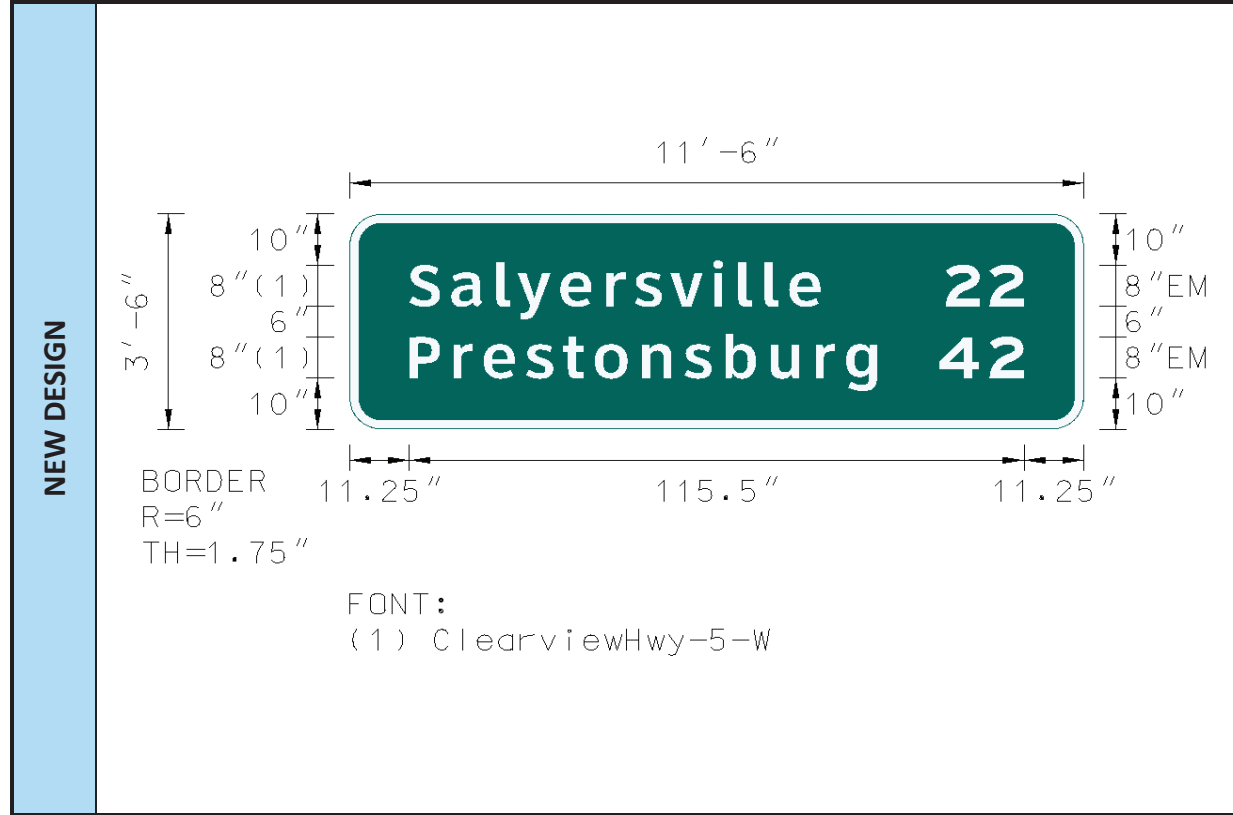
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			4
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	53.05		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.




SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			5
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	53.17		
Side of Roadway	Gore Area		
Type of Supports	Type "D" Break-a-way		
# of Supports & Size	See Details Sheets		
Concrete Dimensions	See Details Sheets		
		1	Remove existing sign and old Type I Posts and install the new gore sign onto a new Type "D" break-a-way sign support system.



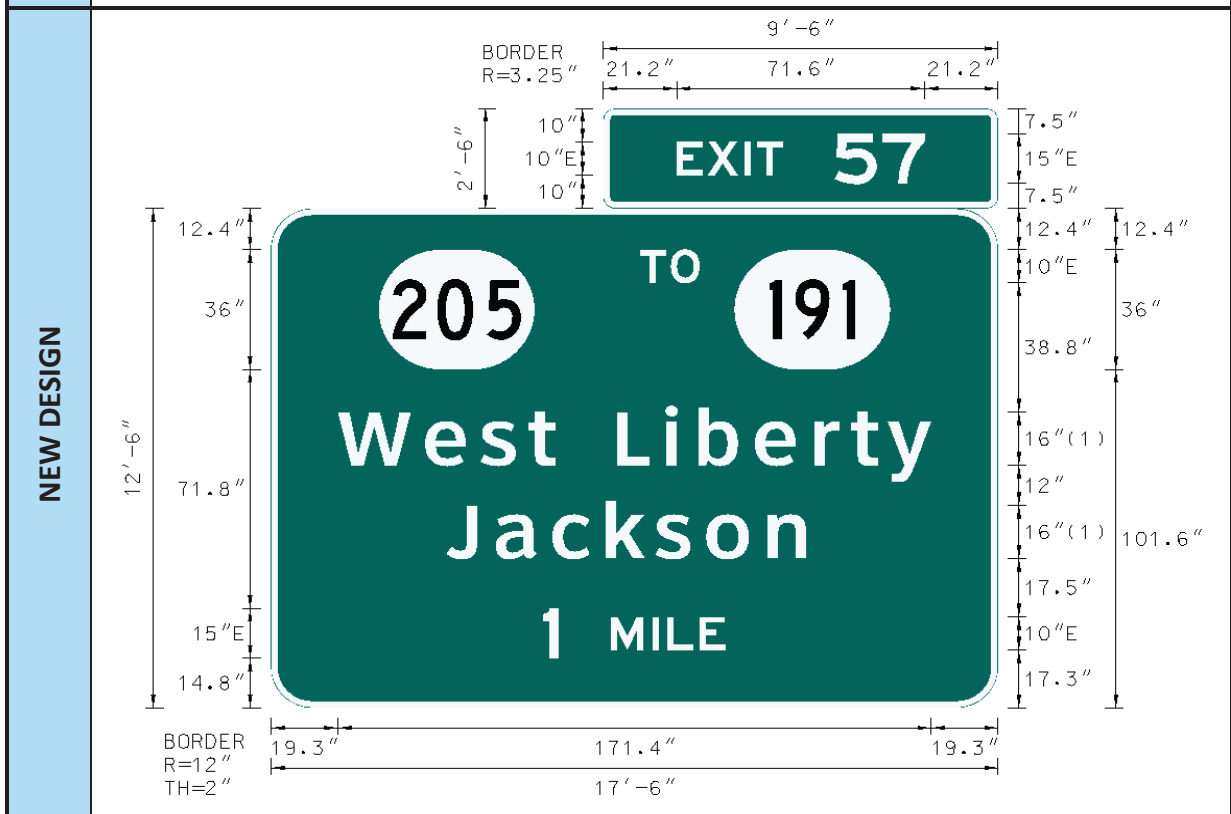
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			6
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	54.03		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.



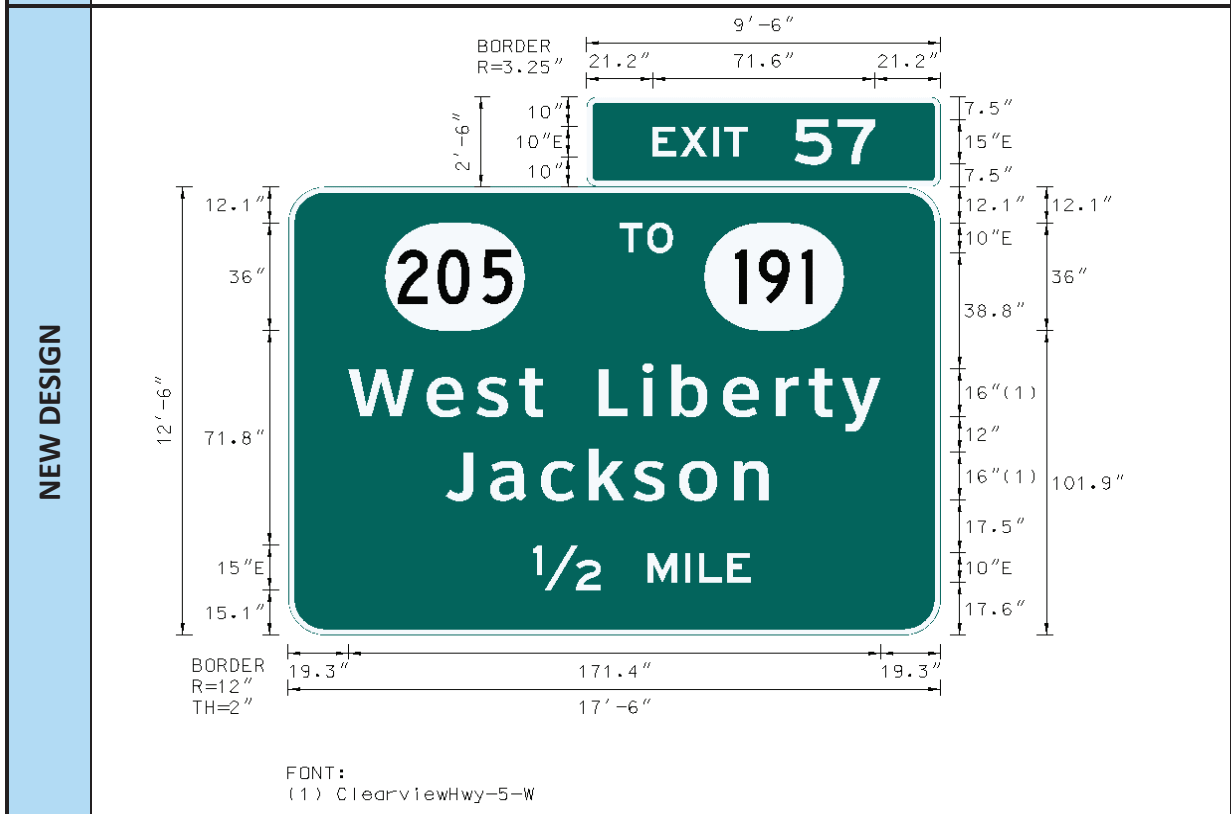
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			7
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	56.16		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and supports completely.

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>


SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			8
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	55.4		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	Type "A" Fixed		
# of Supports & Size	2 - W12x26 beams		
Concrete Dimensions	a = 9' deep, b = 3' dia		
		1	Install new signs and supports near <u>MP 55.4</u>




SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			9
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	East		
Mile Point	55.85		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	Type "A" Fixed		
# of Supports & Size	2 - W14 x 30 beams		
Concrete Dimensions	a = 9' deep, b = 3' dia		
		1	Install new signs and supports near <u>MP 55.85</u>



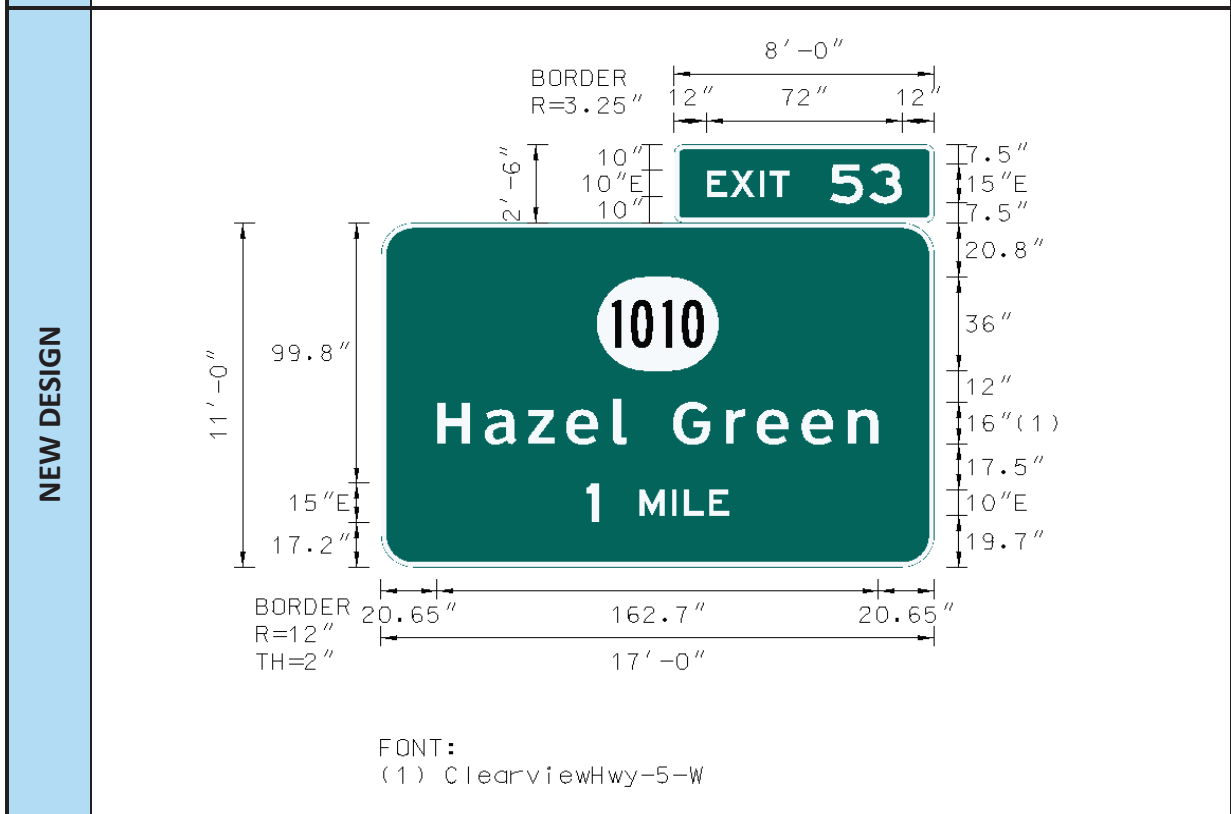
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			1	
District	10		SPECIAL INSTRUCTIONS	
County	Wolfe			
Route	9009		1	Remove existing sign and supports completely.
Road Name	Mountain Parkway		2	Remove concrete bases to a point 1' below the ground level.
Traveling Direction	West			
Mile Point	56.42			
Side of Roadway	Right - Behind Guard Rail			
Type of Supports	N/A			
# of Supports & Size	N/A			
Concrete Dimensions	N/A			

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>

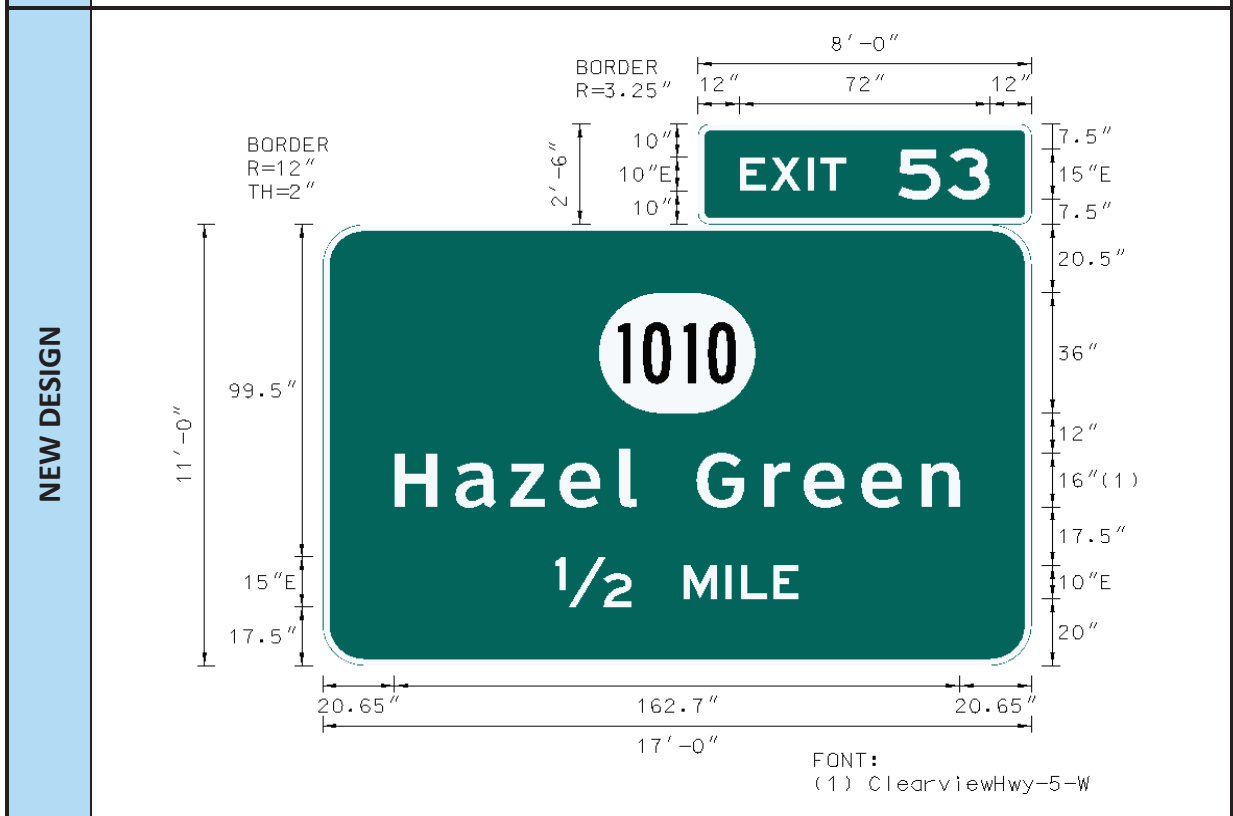
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			2										
District	10		<table border="1"> <thead> <tr> <th colspan="2">SPECIAL INSTRUCTIONS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>See Sheeting Signs</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	SPECIAL INSTRUCTIONS		1	See Sheeting Signs						
SPECIAL INSTRUCTIONS													
1	See Sheeting Signs												
County	Wolfe												
Route	9009												
Road Name	Mountain Parkway												
Traveling Direction	West												
Mile Point	55.81												
Side of Roadway	Right - Behind Guard Rail												
Type of Supports	N/A												
# of Supports & Size	N/A												
Concrete Dimensions	N/A												

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>

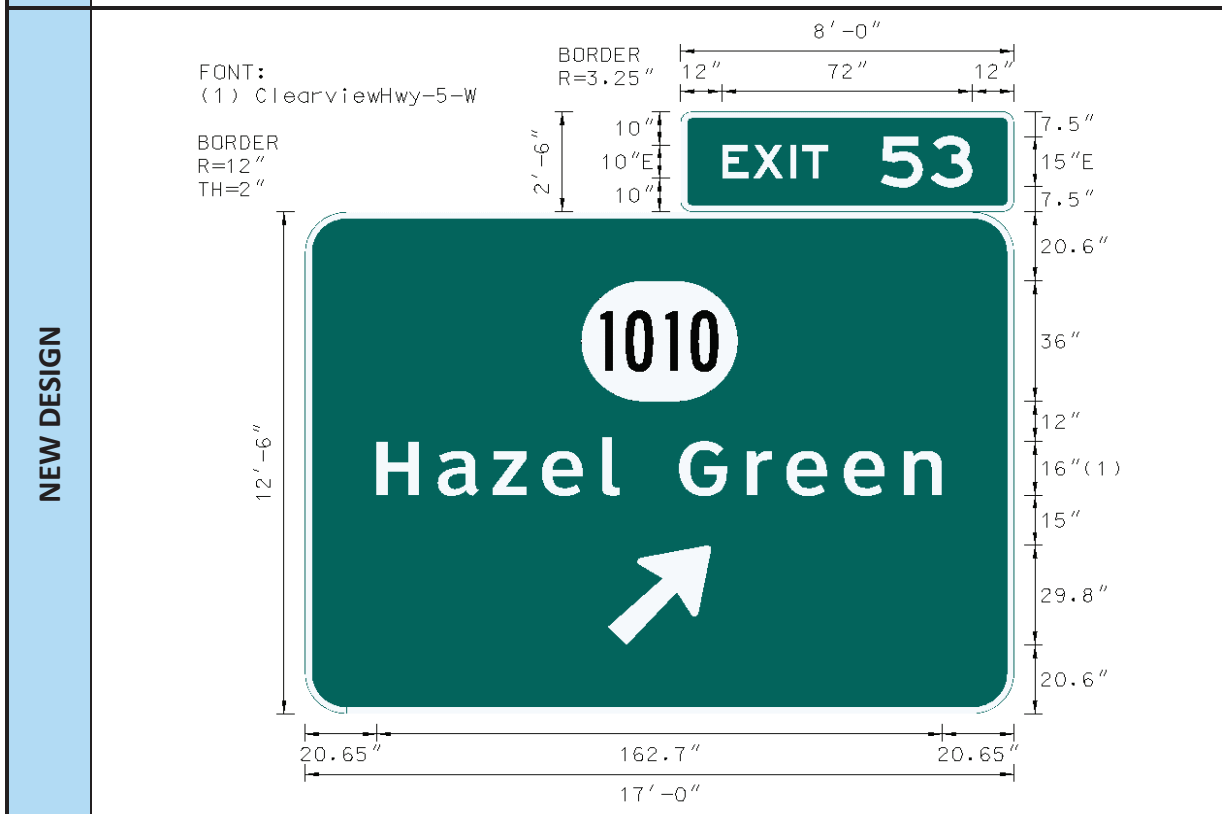
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			3
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	54.45		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.
		2	Remove the bottom panels showing the message for "NEXT EXIT 5 MILES" from the sign assembly completely..



SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			4										
District	10	<table border="1"> <thead> <tr> <th colspan="2">SPECIAL INSTRUCTIONS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Install new sign near MP 53.96 onto new sign supports.</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	SPECIAL INSTRUCTIONS		1	Install new sign near MP 53.96 onto new sign supports.							
SPECIAL INSTRUCTIONS													
1	Install new sign near MP 53.96 onto new sign supports.												
County	Wolfe												
Route	9009												
Road Name	Mountain Parkway												
Traveling Direction	West												
Mile Point	53.96												
Side of Roadway	Right - Behind Guard Rail												
Type of Supports	Type "A" Fixed												
# of Supports & Size	2 - 10 x 26 lbs per ft.												
Concrete Dimensions	3' dia x 8 ft deep												




SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			5
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	53.58		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.




SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			6
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	53.46		
Side of Roadway	Gore Area		
Type of Supports	Type "D" Break-a-way		
# of Supports & Size	See Details Sheets		
Concrete Dimensions	See Details Sheets		
		1	Remove existing sign and old Type I Posts and install the new gore sign onto a new Type "D" break-a-way sign support system.



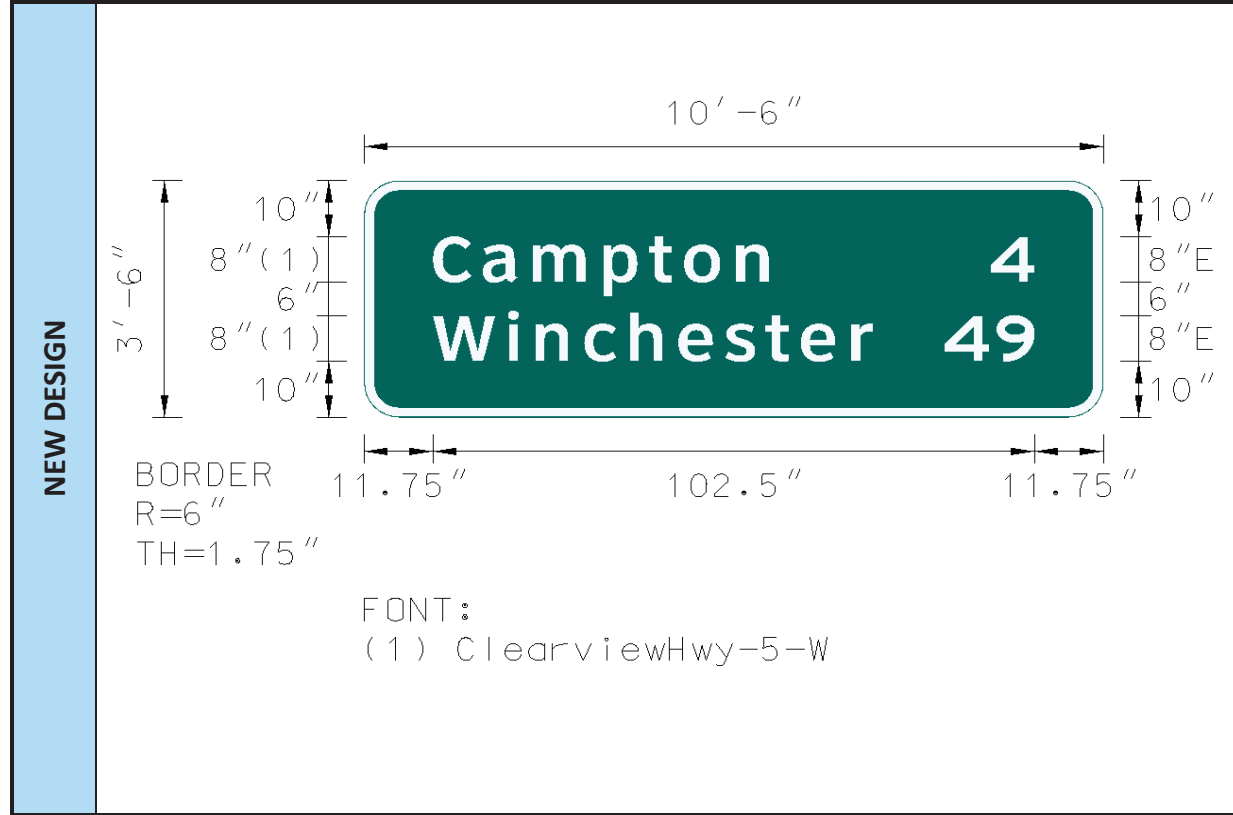
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			7
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	52.6		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and supports completely.
		2	Remove concrete bases to a point 1' below the ground level.

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>

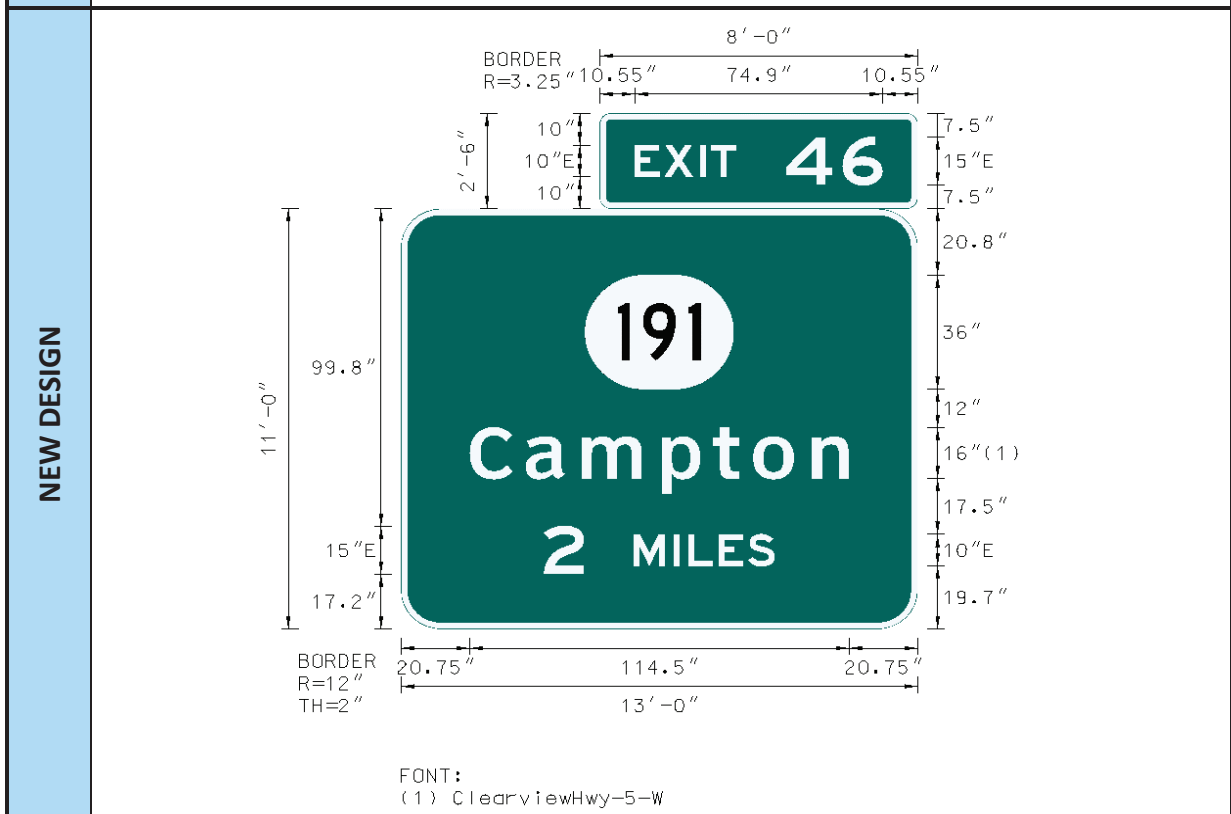
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			8	
District	10		SPECIAL INSTRUCTIONS	
County	Wolfe			
Route	9009		1	See Sheeting Signs
Road Name	Mountain Parkway			
Traveling Direction	West			
Mile Point	50.87			
Side of Roadway	Right - Behind Guard Rail			
Type of Supports	N/A			
# of Supports & Size	N/A			
Concrete Dimensions	N/A			

EXISTING CONDITIONS	
NEW DESIGN	<p>See Special Instructions Above.</p>

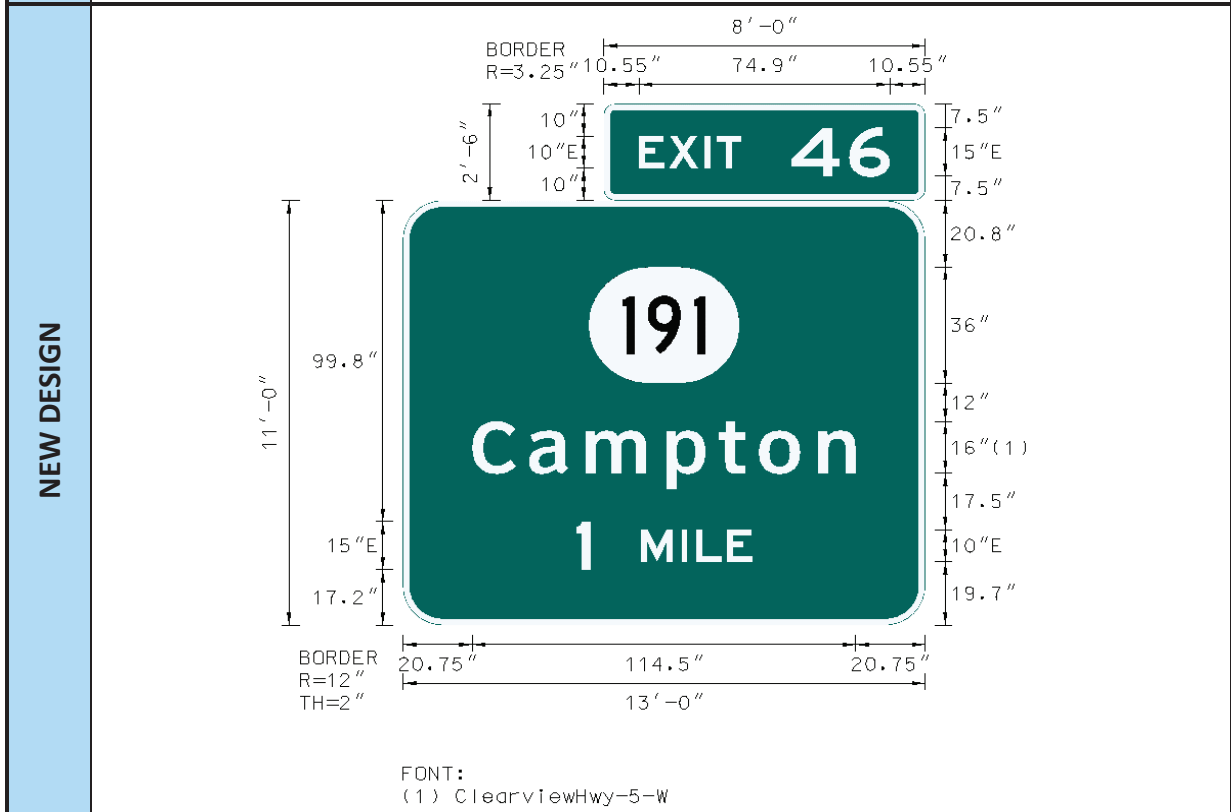
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			9
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	48.7		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A		
		1	Remove existing sign and install new sign onto existing sign supports.



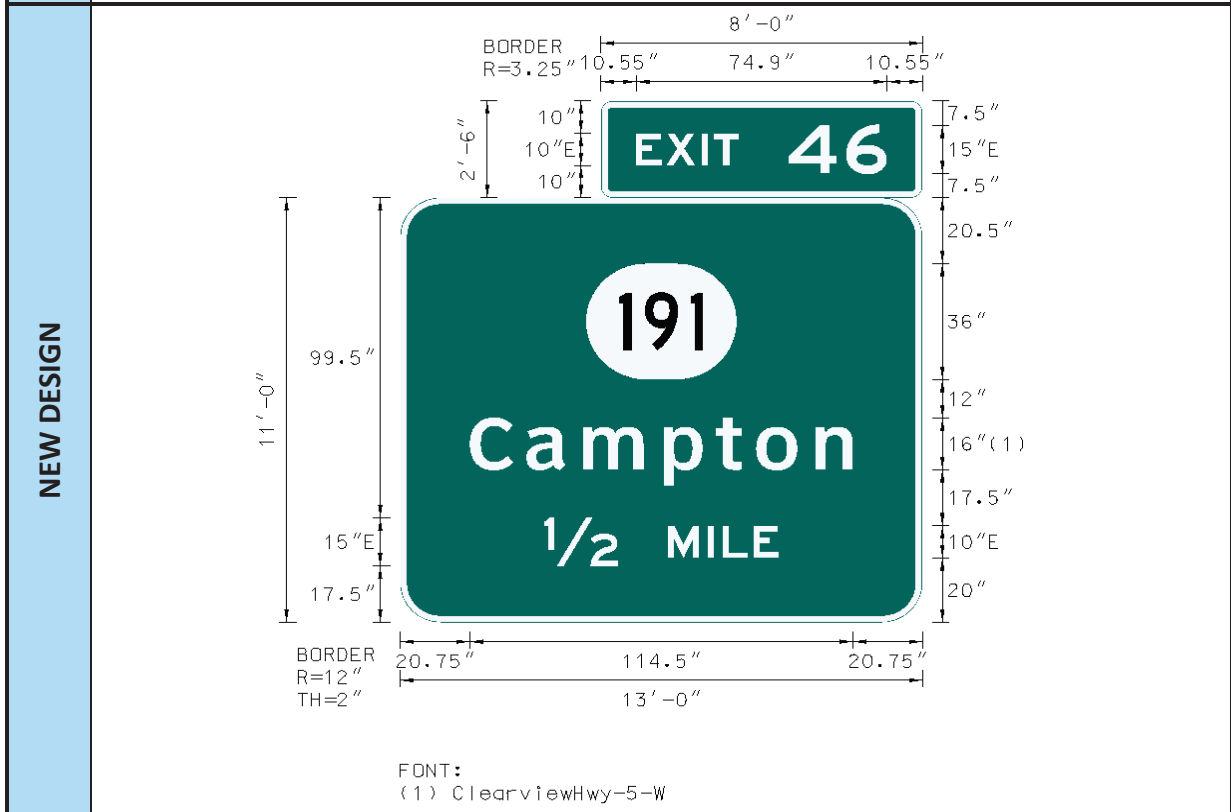
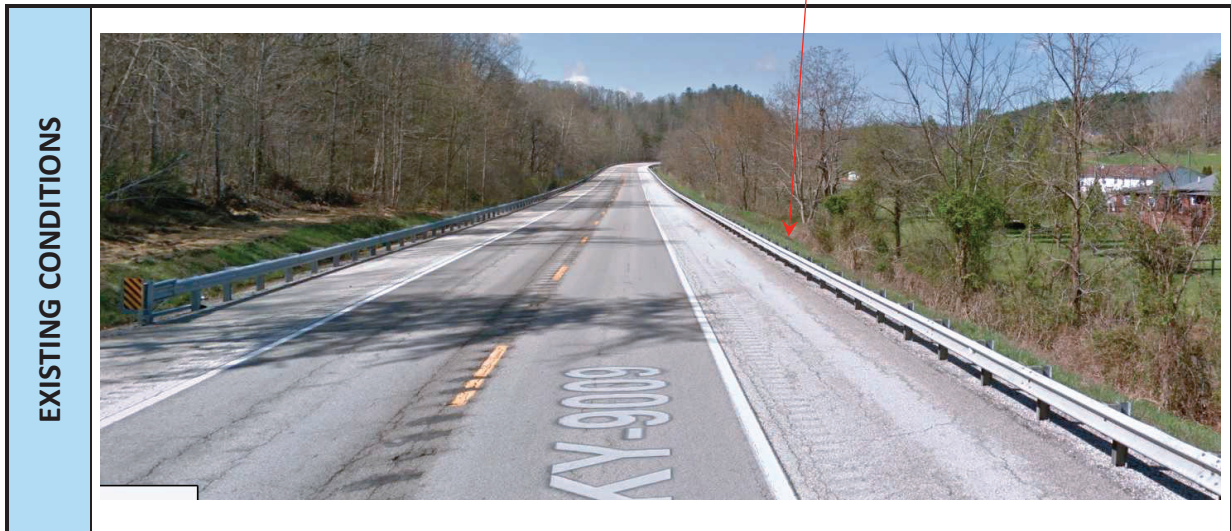
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			10
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	48.4		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	N/A		
# of Supports & Size	N/A		
Concrete Dimensions	N/A	1	Remove existing sign and install new sign onto existing sign supports.
		2	Remove the bottom panels showing the message for "NEXT EXIT 8 MILES" from the sign assembly completely..
		3	Tree Trimming may be necessary.



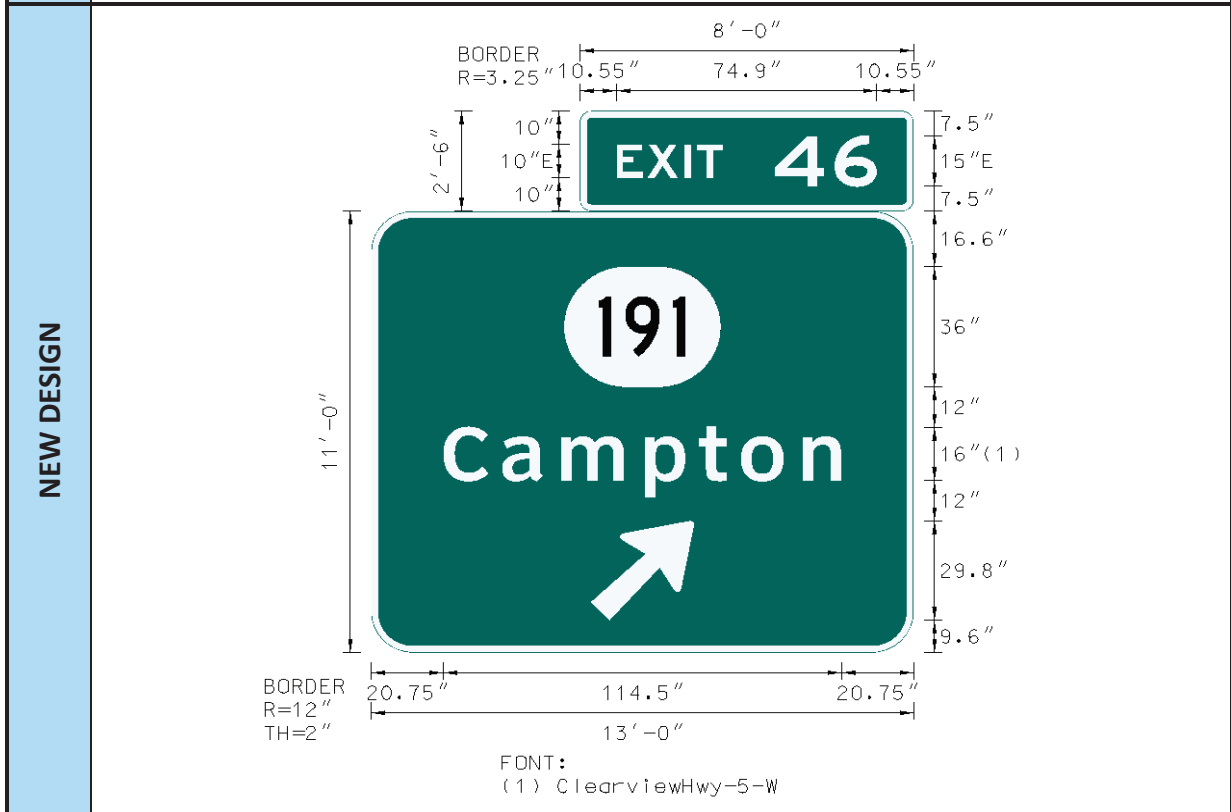
SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			11
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	47.25		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	Type "C" Break-a-way		
# of Supports & Size	2 - 8 x 18 lbs per ft.		
Concrete Dimensions	3' dia x 8 ft deep		
		1	Install new sign near MP 47.25 onto new sign supports.



SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			12									
District	10	<table border="1"> <thead> <tr> <th colspan="2">SPECIAL INSTRUCTIONS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Install new sign near MP 46.83 onto new sign supports.</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	SPECIAL INSTRUCTIONS		1	Install new sign near MP 46.83 onto new sign supports.						
SPECIAL INSTRUCTIONS												
1	Install new sign near MP 46.83 onto new sign supports.											
County	Wolfe											
Route	9009											
Road Name	Mountain Parkway											
Traveling Direction	West											
Mile Point	46.83											
Side of Roadway	Right - Behind Guard Rail											
Type of Supports	Type "A" Fixed											
# of Supports & Size	2 - 10 x 26 lbs per ft.											
Concrete Dimensions	3' dia x 8 ft deep											



SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			13
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	46.43		
Side of Roadway	Right - Behind Guard Rail		
Type of Supports	Type "A" Fixed		
# of Supports & Size	2 - 8 x 18 lbs per ft.		
Concrete Dimensions	3' dia x 8 ft deep		
		1	Install new sign near MP 46.43 onto new sign supports.



SPECIFIC SIGN INFO - LOCATION - DETAILS - DESIGN			14
District	10		SPECIAL INSTRUCTIONS
County	Wolfe		
Route	9009		
Road Name	Mountain Parkway		
Traveling Direction	West		
Mile Point	46.36		
Side of Roadway	Gore Area		
Type of Supports	Type "D" Break-a-way		
# of Supports & Size	See Details Sheets		
Concrete Dimensions	See Details Sheets		
		1	Remove existing sign and supports completely.
		2	Install the new gore sign onto a new Type "D" break-a-way sign support system behind the guard rail near the old signs location.



SIGNING SPECIFICATION NOTES

THE FOLLOWING PUBLICATIONS ARE APPLICABLE TO THE WORK DESCRIBED HEREIN:

- EDUCATION DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION)
- STANDARD HIGHWAY SIGNS AND MARKINGS (CURRENT EDITION) -- FEDERAL HIGHWAY ADMINISTRATION
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION) -- FEDERAL HIGHWAY ADMINISTRATION

SCOPE OF WORK

TO FINISH, FABRICATE AND ERECT IN PLACE ALL MATERIALS NECESSARY TO FORM COMPLETE SIGNS AS INDICATED AT LOCATIONS DESCRIBED ELSEWHERE IN THESE PLANS, NEW SIGNS ARE TO BE INSTALLED AT EXISTING LOCATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

SIGN SUBSTRATES

SIGN SUBSTRATES SHALL CONFORM TO SECTION 031 OF THE UNIVERSITY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THESE PLANS. PANEL SIGNS SHALL BE LABELLED AS "P-"; SHEETLIKE SIGNS SHALL BE LABELLED AS "S-".

SIGN MATERIALS

SIGN SHEETING

SIGN SHEETING SHALL CONFORM TO SECTION 130 OF UNIVERSITY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT EDITION) AND THESE PLANS. ONLY SHEETING ON THE DEPARTMENT'S LIST OF APPROVED MATERIALS SHALL BE USED.

ALL RETROREFLECTIVE MATERIALS SHALL BE FABRICATED AND ASSEMBLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATIONS.

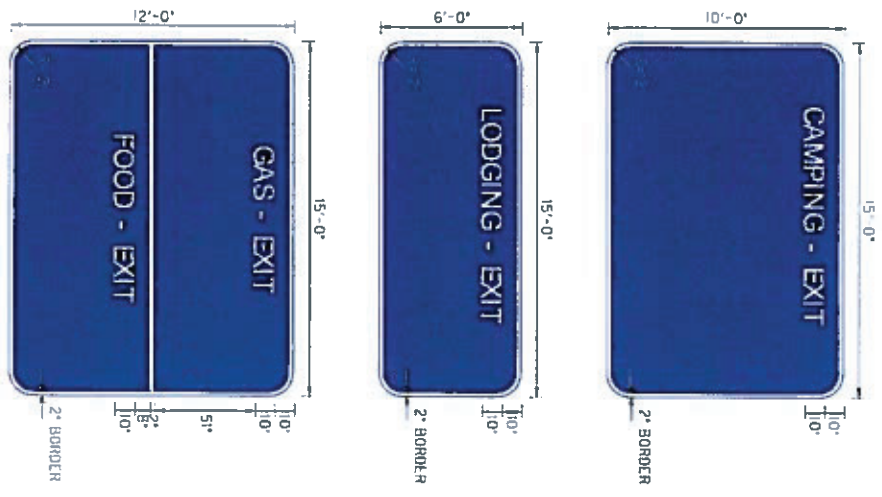
THE FOLLOWING SIGNS AND SIGN COMPONENTS SHALL BE FABRICATED USING TYPE "H" SHEETING:

- SIGN SUBSTRATES INCLUDING ROUTE MARKERS ON PANEL SIGNS
- ALL 8-1/2" x 11" SIGNS
- ALL 12" x 24" SIGNS
- ALL 18" x 24" SIGNS
- ALL 24" x 36" SIGNS
- ALL 36" x 48" SIGNS
- ALL 48" x 72" SIGNS
- ALL 72" x 96" SIGNS
- ALL 96" x 144" SIGNS
- ALL 144" x 216" SIGNS
- ALL 216" x 324" SIGNS
- ALL 324" x 486" SIGNS
- ALL 486" x 729" SIGNS
- ALL 729" x 1080" SIGNS
- ALL 1080" x 1620" SIGNS
- ALL 1620" x 2430" SIGNS
- ALL 2430" x 3645" SIGNS
- ALL 3645" x 5467" SIGNS
- ALL 5467" x 8200" SIGNS
- ALL 8200" x 12300" SIGNS
- ALL 12300" x 18450" SIGNS
- ALL 18450" x 27675" SIGNS
- ALL 27675" x 41512" SIGNS
- ALL 41512" x 62268" SIGNS
- ALL 62268" x 93402" SIGNS
- ALL 93402" x 140103" SIGNS
- ALL 140103" x 210154" SIGNS
- ALL 210154" x 315231" SIGNS
- ALL 315231" x 472846" SIGNS
- ALL 472846" x 709269" SIGNS
- ALL 709269" x 1063903" SIGNS
- ALL 1063903" x 1595855" SIGNS
- ALL 1595855" x 2393783" SIGNS
- ALL 2393783" x 3590674" SIGNS
- ALL 3590674" x 5386011" SIGNS
- ALL 5386011" x 8079017" SIGNS
- ALL 8079017" x 12118525" SIGNS
- ALL 12118525" x 18177788" SIGNS
- ALL 18177788" x 27266682" SIGNS
- ALL 27266682" x 40900023" SIGNS
- ALL 40900023" x 61350034" SIGNS
- ALL 61350034" x 92025051" SIGNS
- ALL 92025051" x 138037576" SIGNS
- ALL 138037576" x 207056364" SIGNS
- ALL 207056364" x 310584546" SIGNS
- ALL 310584546" x 465876819" SIGNS
- ALL 465876819" x 698815228" SIGNS
- ALL 698815228" x 1048222842" SIGNS
- ALL 1048222842" x 1572334263" SIGNS
- ALL 1572334263" x 2358501394" SIGNS
- ALL 2358501394" x 3537752091" SIGNS
- ALL 3537752091" x 5306628136" SIGNS
- ALL 5306628136" x 7959942204" SIGNS
- ALL 7959942204" x 11939913306" SIGNS
- ALL 11939913306" x 17909870059" SIGNS
- ALL 17909870059" x 26864805088" SIGNS
- ALL 26864805088" x 40297207632" SIGNS
- ALL 40297207632" x 60445811448" SIGNS
- ALL 60445811448" x 90668717171" SIGNS
- ALL 90668717171" x 136003075756" SIGNS
- ALL 136003075756" x 204004613634" SIGNS
- ALL 204004613634" x 306006920451" SIGNS
- ALL 306006920451" x 459010380676" SIGNS
- ALL 459010380676" x 688515571014" SIGNS
- ALL 688515571014" x 1032773356521" SIGNS
- ALL 1032773356521" x 1549160034781" SIGNS
- ALL 1549160034781" x 2323740052171" SIGNS
- ALL 2323740052171" x 3485610078256" SIGNS
- ALL 3485610078256" x 5228415117384" SIGNS
- ALL 5228415117384" x 7842622676076" SIGNS
- ALL 7842622676076" x 11763934014114" SIGNS
- ALL 11763934014114" x 17645891021171" SIGNS
- ALL 17645891021171" x 26468836531756" SIGNS
- ALL 26468836531756" x 39703254797634" SIGNS
- ALL 39703254797634" x 59554882196451" SIGNS
- ALL 59554882196451" x 89332323294676" SIGNS
- ALL 89332323294676" x 134003484942014" SIGNS
- ALL 134003484942014" x 201005227413031" SIGNS
- ALL 201005227413031" x 301507841119546" SIGNS
- ALL 301507841119546" x 452261761679319" SIGNS
- ALL 452261761679319" x 678392642518978" SIGNS
- ALL 678392642518978" x 1017588963778467" SIGNS
- ALL 1017588963778467" x 1526383445667700" SIGNS
- ALL 1526383445667700" x 2290175168501550" SIGNS
- ALL 2290175168501550" x 3435262752752325" SIGNS
- ALL 3435262752752325" x 5152894129128487" SIGNS
- ALL 5152894129128487" x 7729341193682730" SIGNS
- ALL 7729341193682730" x 11594011790524095" SIGNS
- ALL 11594011790524095" x 17391017685786142" SIGNS
- ALL 17391017685786142" x 26086526528679213" SIGNS
- ALL 26086526528679213" x 39129789793018819" SIGNS
- ALL 39129789793018819" x 58694684689528228" SIGNS
- ALL 58694684689528228" x 88032027034292342" SIGNS
- ALL 88032027034292342" x 132048040551438513" SIGNS
- ALL 132048040551438513" x 198072060827157770" SIGNS
- ALL 198072060827157770" x 297108091240736655" SIGNS
- ALL 297108091240736655" x 445662136861104982" SIGNS
- ALL 445662136861104982" x 668493205291657473" SIGNS
- ALL 668493205291657473" x 1002739807937486210" SIGNS
- ALL 1002739807937486210" x 1504109711906229215" SIGNS
- ALL 1504109711906229215" x 2256164567859343822" SIGNS
- ALL 2256164567859343822" x 3384246851789015733" SIGNS
- ALL 3384246851789015733" x 5076370277683523599" SIGNS
- ALL 5076370277683523599" x 7614555416525285399" SIGNS
- ALL 7614555416525285399" x 11421833124787928098" SIGNS
- ALL 11421833124787928098" x 17132749687181892147" SIGNS
- ALL 17132749687181892147" x 25699124530772838220" SIGNS
- ALL 25699124530772838220" x 38548686796159257330" SIGNS
- ALL 38548686796159257330" x 57822030194238885995" SIGNS
- ALL 57822030194238885995" x 86733045291358328992" SIGNS
- ALL 86733045291358328992" x 129100067937037493488" SIGNS
- ALL 129100067937037493488" x 193650101905556240232" SIGNS
- ALL 193650101905556240232" x 290475152858334360348" SIGNS
- ALL 290475152858334360348" x 435712729287501530522" SIGNS
- ALL 435712729287501530522" x 653569093931252295783" SIGNS
- ALL 653569093931252295783" x 980353640896878443674" SIGNS
- ALL 980353640896878443674" x 1470530461345317665511" SIGNS
- ALL 1470530461345317665511" x 2205795692018026498266" SIGNS
- ALL 2205795692018026498266" x 3308693538027039747400" SIGNS
- ALL 3308693538027039747400" x 4963040307040559622100" SIGNS
- ALL 4963040307040559622100" x 7344560460560839433150" SIGNS
- ALL 7344560460560839433150" x 1091684069084125904950" SIGNS
- ALL 1091684069084125904950" x 16375261036261888574250" SIGNS
- ALL 16375261036261888574250" x 24562891554392832861375" SIGNS
- ALL 24562891554392832861375" x 36844337331589249292062" SIGNS
- ALL 36844337331589249292062" x 54726505997383873938093" SIGNS
- ALL 54726505997383873938093" x 82089758996075810907139" SIGNS
- ALL 82089758996075810907139" x 123134638494113716360709" SIGNS
- ALL 123134638494113716360709" x 184701957741170574540063" SIGNS
- ALL 184701957741170574540063" x 277052936611755861820094" SIGNS
- ALL 277052936611755861820094" x 415579404917133792730141" SIGNS
- ALL 415579404917133792730141" x 623369107375670689095171" SIGNS
- ALL 623369107375670689095171" x 935053661063506033642756" SIGNS
- ALL 935053661063506033642756" x 1402580491595259050464134" SIGNS
- ALL 1402580491595259050464134" x 2103870737392888575696201" SIGNS
- ALL 2103870737392888575696201" x 3155806106089332863544301" SIGNS
- ALL 3155806106089332863544301" x 4733709159134000295031601" SIGNS
- ALL 4733709159134000295031601" x 7090563738701000442547401" SIGNS
- ALL 7090563738701000442547401" x 10635845608051500663821101" SIGNS
- ALL 10635845608051500663821101" x 15953768412077250995731501" SIGNS
- ALL 15953768412077250995731501" x 239306526181158764935971001" SIGNS
- ALL 239306526181158764935971001" x 358964789271738147403955001" SIGNS
- ALL 358964789271738147403955001" x 538352183907607221105932501" SIGNS
- ALL 538352183907607221105932501" x 807528275861410731658900001" SIGNS
- ALL 807528275861410731658900001" x 1211192413792115527488350001" SIGNS
- ALL 1211192413792115527488350001" x 181728862068817334118250001" SIGNS
- ALL 181728862068817334118250001" x 272643293103211001827750001" SIGNS
- ALL 272643293103211001827750001" x 409010939654816512711250001" SIGNS
- ALL 409010939654816512711250001" x 6135003494821247901750001" SIGNS
- ALL 6135003494821247901750001" x 920250514218187185250001" SIGNS
- ALL 920250514218187185250001" x 1380375766327781278750001" SIGNS
- ALL 1380375766327781278750001" x 207056364949167191750001" SIGNS
- ALL 207056364949167191750001" x 31058454642375028750001" SIGNS
- ALL 31058454642375028750001" x 465876819635625431250001" SIGNS
- ALL 465876819635625431250001" x 698815228954538143750001" SIGNS
- ALL 698815228954538143750001" x 104822284214182021250001" SIGNS
- ALL 104822284214182021250001" x 15723342632127303750001" SIGNS
- ALL 15723342632127303750001" x 235850139431909556250001" SIGNS
- ALL 235850139431909556250001" x 353775209147814343750001" SIGNS
- ALL 353775209147814343750001" x 53066281367072151250001" SIGNS
- ALL 53066281367072151250001" x 795994220410607768750001" SIGNS
- ALL 795994220410607768750001" x 119399133061591173250001" SIGNS
- ALL 119399133061591173250001" x 1790987005917867600001" SIGNS
- ALL 1790987005917867600001" x 2686480508826814400001" SIGNS
- ALL 2686480508826814400001" x 4029720763240212200001" SIGNS
- ALL 4029720763240212200001" x 6044581144860316600001" SIGNS
- ALL 6044581144860316600001" x 9066871717190469900001" SIGNS
- ALL 9066871717190469900001" x 136003075756136948500001" SIGNS
- ALL 136003075756136948500001" x 204004613634204427500001" SIGNS
- ALL 204004613634204427500001" x 3060069204513066412500001" SIGNS
- ALL 3060069204513066412500001" x 45901038067645996187500001" SIGNS
- ALL 45901038067645996187500001" x 688515571014689942812500001" SIGNS
- ALL 688515571014689942812500001" x 1032773356521103490437500001" SIGNS
- ALL 1032773356521103490437500001" x 15491600347811551856562500001" SIGNS
- ALL 15491600347811551856562500001" x 2323740052171233784500001" SIGNS
- ALL 2323740052171233784500001" x 34856100782563506767500001" SIGNS
- ALL 34856100782563506767500001" x 5152894129128487336112500001" SIGNS
- ALL 5152894129128487336112500001" x 77293411936827305037500001" SIGNS
- ALL 77293411936827305037500001" x 115940117905240975562500001" SIGNS
- ALL 115940117905240975562500001" x 1739101768578614133437500001" SIGNS
- ALL 1739101768578614133437500001" x 26086526528679212000001" SIGNS
- ALL 26086526528679212000001" x 39129789793018812500001" SIGNS
- ALL 39129789793018812500001" x 586946846895282137500001" SIGNS
- ALL 586946846895282137500001" x 8803202703429231500001" SIGNS
- ALL 8803202703429231500001" x 13204804055143817500001" SIGNS
- ALL 13204804055143817500001" x 198072060827157187500001" SIGNS
- ALL 198072060827157187500001" x 2971080912407362000001" SIGNS
- ALL 2971080912407362000001" x 445662136861104212500001" SIGNS
- ALL 445662136861104212500001" x 668493205291657237500001" SIGNS
- ALL 668493205291657237500001" x 1002739807937482500001" SIGNS
- ALL 1002739807937482500001" x 150410971190622262500001" SIGNS
- ALL 150410971190622262500001" x 225616456785934287500001" SIGNS
- ALL 225616456785934287500001" x 3435262752752323000001" SIGNS
- ALL 3435262752752323000001" x 515289412912848312500001" SIGNS
- ALL 515289412912848312500001" x 772934119368273337500001" SIGNS
- ALL 772934119368273337500001" x 11594011790524035000001" SIGNS
- ALL 11594011790524035000001" x 17391017685786137500001" SIGNS
- ALL 17391017685786137500001" x 2608652652867924000001" SIGNS
- ALL 2608652652867924000001" x 391297897930188412500001" SIGNS
- ALL 391297897930188412500001" x 586946846895282437500001" SIGNS
- ALL 586946846895282437500001" x 8803202703429234500001" SIGNS
- ALL 8803202703429234500001" x 13204804055143847500001" SIGNS
- ALL 13204804055143847500001" x 198072060827157487500001" SIGNS
- ALL 198072060827157487500001" x 2971080912407365000001" SIGNS
- ALL 2971080912407365000001" x 445662136861104512500001" SIGNS
- ALL 445662136861104512500001" x 668493205291657537500001" SIGNS
- ALL 668493205291657537500001" x 1002739807937485500001" SIGNS
- ALL 1002739807937485500001" x 150410971190622562500001" SIGNS
- ALL 150410971190622562500001" x 225616456785934587500001" SIGNS
- ALL 225616456785934587500001" x 3435262752752326000001" SIGNS
- ALL 3435262752752326000001" x 515289412912848612500001" SIGNS
- ALL 515289412912848612500001" x 772934119368273637500001" SIGNS
- ALL 772934119368273637500001" x 1159401179052406500001" SIGNS
- ALL 1159401179052406500001" x 1739101768578616500001" SIGNS
- ALL 1739101768578616500001" x 2608652652867927000001" SIGNS
- ALL 2608652652867927000001" x 391297897930188712500001" SIGNS
- ALL 391297897930188712500001" x 586946846895282737500001" SIGNS
- ALL 586946846895282737500001" x 8803202703429237500001" SIGNS
- ALL 8803202703429237500001" x 1320480405514387500001" SIGNS
- ALL 1320480405514387500001" x 198072060827157762500001" SIGNS
- ALL 198072060827157762500001" x 29710809124073677500001" SIGNS
- ALL 29710809124073677500001" x 445662136861104787500001" SIGNS
- ALL 445662136861104787500001" x 6684932052916578000001" SIGNS
- ALL 6684932052916578000001" x 1002739807937487900001" SIGNS
- ALL 1002739807937487900001" x 150410971190622800001" SIGNS
- ALL 150410971190622800001" x 225616456785934812500001" SIGNS
- ALL 225616456785934812500001" x 34352627527523282500001" SIGNS
- ALL 34352627527523282500001" x 515289412912848837500001" SIGNS
- ALL 515289412912848837500001" x 7729341193682738500001" SIGNS
- ALL 7729341193682738500001" x 115940117905240862500001" SIGNS
- ALL 115940117905240862500001" x 173910176857861862500001" SIGNS
- ALL 173910176857861862500001" x 2608652652867929000001" SIGNS
- ALL 2608652652867929000001" x 391297897930188912500001" SIGNS
- ALL 391297897930188912500

MicroStation v8.7.5.032 C SHEET NAME: USER: mlr/eng DATE PLOTTED: January 3, 2019 FILE NAME: C:\PROGRA~1\BENTLEY\BROOT\DRAWING\PLAN.DWG

SAMPLES OF TYPICAL SPECIFIC SERVICE (LOGO) SIGNS

MAINLINE SIGNS



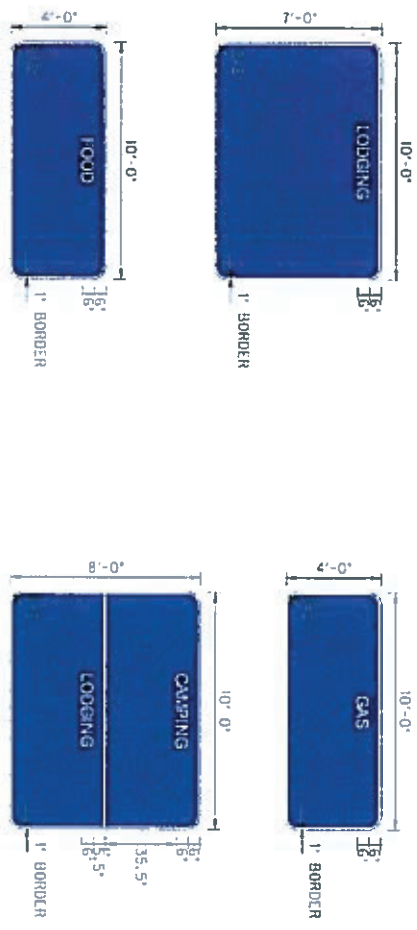
ALL SIGNS SHALL BE PANEL TYPE SIGNS AND THE BACKGROUND COLOR SHALL BE WHITE. THE SIGNS SHALL BE FABRICATED AND CONSTRUCTED IN A NEAT, SUBSTANTIAL MANNER. SIGNS SHALL BE FREE OF CRACKS, TEARS, SCRATCHES, BUBBLES, MARKS, DISCOLORATION, ABRADES, AND BLEMISHES AND SHALL PRESENT A SMOOTH LIGHT SLEAKET OR UNIFORM COLOR.

NOTIFY THE FOLLOWING CONTRACTOR WHEN WORK BEGINS ON SPECIFIC SERVICE LOGO SIGNS:

LEADERSY LOGOS, INC.
2177 COMMERCIAL DRIVE
FALMOUTH, VT 05401
800-663-5646
9531-271-0002

SPECIAL NOTES

RAMP SIGNS



ALL SIGNS SHALL BE POSITIONED AS SHOWN ON THE SIGNING POSITIONING DETAIL SHEET. ALL SIGNS SHALL BE OF SUFFICIENT LENGTH TO EXTEND FROM THE TOP OF THE SIGN TO THE REQUIRED BASE CLEARANCE.

WHERE THERE ARE CURBS OR RAILS, THE LATERAL CLEARANCE "C" SHALL BE AT LEAST 6 FEET BEYOND THE FACE OF THE CURB.

ALL SIGNS ARE TO BE LOCATED AT THE APPROXIMATE STATIONS LISTED, AND THE EXACT LOCATION FOR EACH SIGN SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. SIGNS LOCATED BEHIND COLUMBINE SHALL BE INDENTED OR TYPE "B" BEHIND OTHERS. THE "C" DIMENSION SHALL BE UTILIZED.

SIGNS ERECTED ON THE MAINLINE SHOULD HAVE AT LEAST 600 FEET (600 FT) CLEARANCE FROM THE SIGN. SIGNS ERECTED ON THE RAMP SHOULD BE SPACED AT LEAST 200 FEET (200 FT) FROM THE SIGN. SIGNS SHOULD BE SPACED AT LEAST 200 FEET (200 FT) FROM THE SIGN. SIGNS SHOULD BE SPACED AT LEAST 200 FEET (200 FT) FROM THE SIGN.

IF ANY SIGN IS LOCATED NEAR A LUMBERPILE OR OTHER HAZARD, IT SHALL BE INSTALLED IN ADVANCE OF THE PILE SO THAT THE SIGN IS NOT OBSCURED BY THE PILE.

IF ANY EXISTING SIGNS ARE TO BE OUT OF SERVICE FOR MORE THAN ONE HOUR, THEY SHALL BE TEMPORARILY RELOCATED AT THE SAME FUNCTIONAL LOCATION BY THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER AND AT NO ADDITIONAL COST TO THE DEPARTMENT.

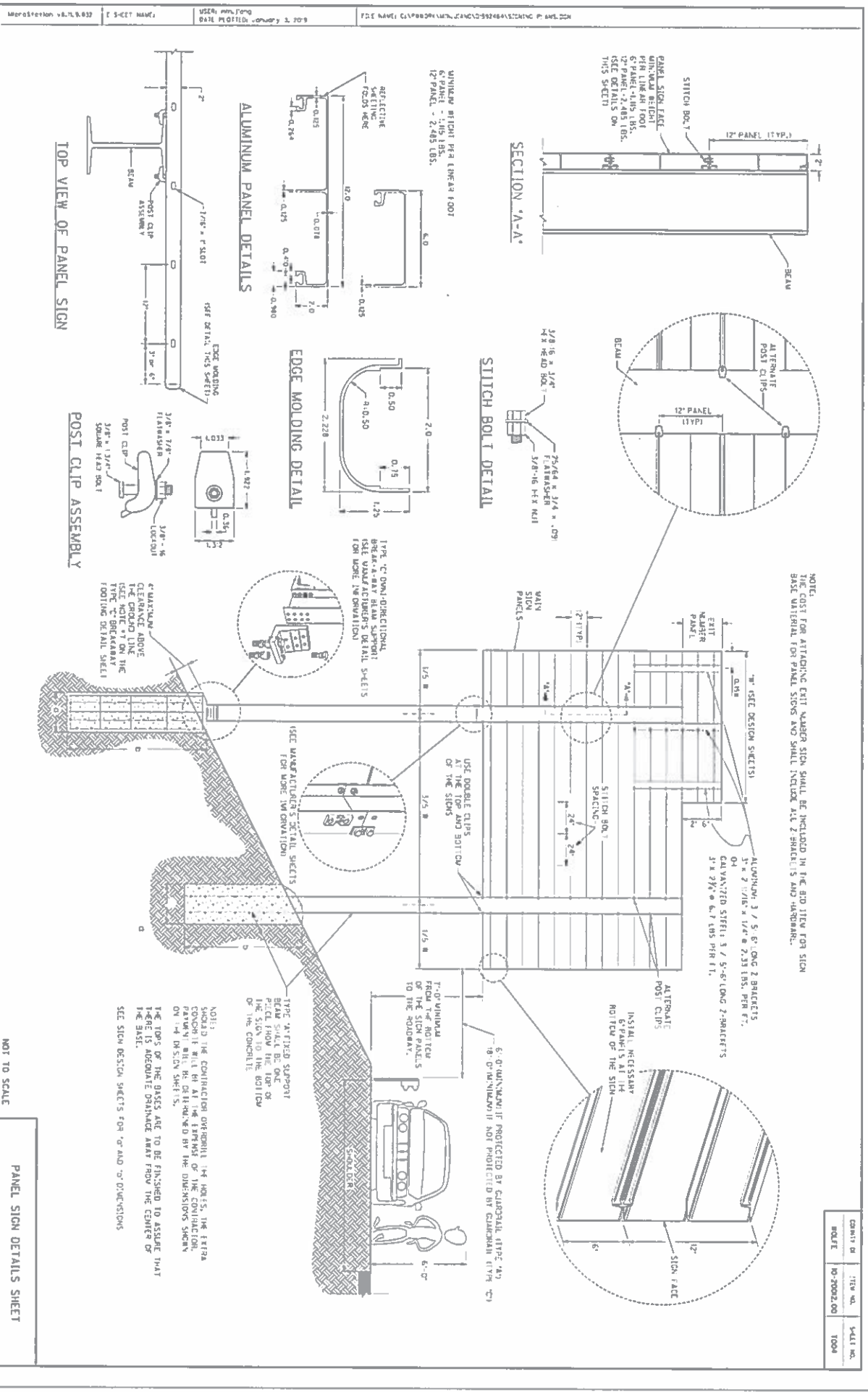
THE EXISTING LOGO PANELS SHALL BE REMOVED AND AFFIXED TO THE NEW PANEL SIGN, WITH THE COST INCURRED TO PANEL SIGNS. INSTALLATION OF PERMANENT SIGNS SHALL BE PAID FOR AS:

GAS 119¢ 12.4831
OR GAS 119¢ 12.4831
OR GAS 119¢ 12.4831
AND PANEL SIGNS 192.711

QTY	UNIT	PRICE	TOTAL
1	LOGO SIGN	100.00	100.00

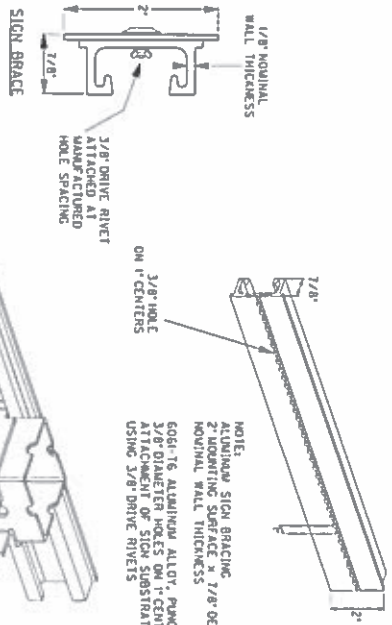
NOT TO SCALE

SPECIFIC SERVICE (LOGO) SIGNS



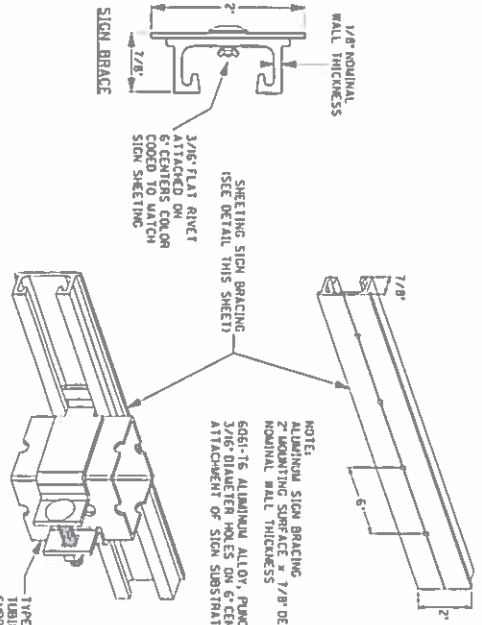
DATE	REV.	SHEET NO.
10/20/02	00	1004

Revision: 0.1.9.8.13 SHEET NAME: 05000A DATE PUBLISHED: January 3, 2019 FILE NAME: G:\PROJECTS\NHPP\05000A\05000A.DWG P. AYS.DGN



FOR ATTACHMENT OF SIGNS
USING MANUFACTURED 3/8" HOLES
ACCORDING TO 2004 STANDARD
HIGHWAY SIGNS BLANK
STANDARDS
POS 7-11 AND 7-6

NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8"
NOMINAL WALL THICKNESS
6061-T6 ALUMINUM ALLOY, PUNCHED WITH
3/8" DIA. HOLES ON 6" CENTERS FOR
ATTACHMENT OF SIGN SUBSTRATE
USING 3/8" DRIVE RIVETS



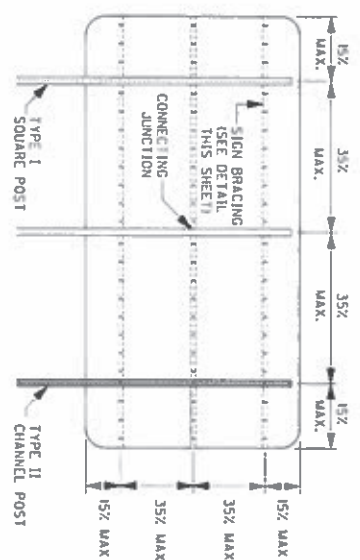
FOR ATTACHMENT OF SIGNS
GREATER THAN, OR EQUAL TO,
72" IN WIDTH.

RIVETS SHALL BE COLOR CODED
TO MATCH SHEETING IN ORDER
TO MINIMIZE CLARE FROM RIVETS

NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8"
NOMINAL WALL THICKNESS
6061-T6 ALUMINUM ALLOY, PUNCHED WITH
3/16" DIA. HOLES ON 6" CENTERS FOR
ATTACHMENT OF SIGN SUBSTRATE USING RIVETS

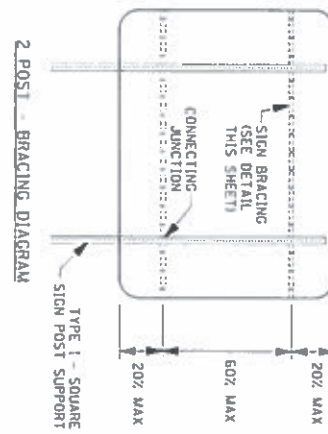
SHEETING SIGN BRACING
(SEE DETAIL THIS SHEET)

3/16" FLAT RIVET
ATTACHED ON
6" CENTERS COLOR
CODED TO MATCH
SIGN SHEETING



3 POST - BRACING DIAGRAM

NOTE:
1. MAXIMUM AREA
BETWEEN CONNECTING
JUNCTION = 16 SQ. FT.
2. BRACING SHOULD NOT BE
SPACED WITHIN 6' OF A BRACE
TO POST JUNCTION.



2 POST - BRACING DIAGRAM

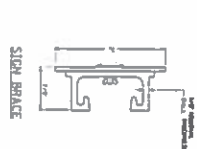
NOTE:
SIGN BRACING NOT SHOWN ON THIS SHEET MAY BE PERMITTED
BY PROJECT ENGINEER AND/OR DISTRICT TRAFFIC ENGINEER.

SHEET NO. 1008
DATE 05/20/04
SCALE

SHEETING SIGN DETAIL
SHEET 2 OF 2

NOT TO SCALE

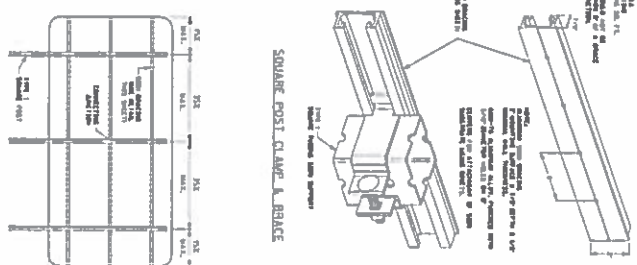
Revision: v6.1.0.032 C SHEET NAME: USG, msh, jmg DATE PLOTTED: January 3, 2019



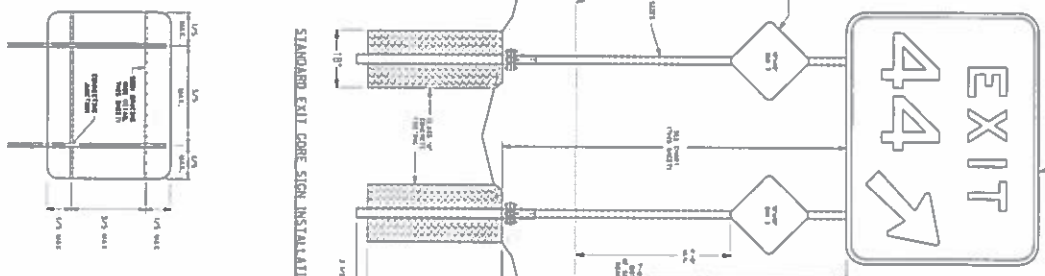
Sign Brace
The sign brace is used to support the sign post. It is attached to the side of the post and extends to the ground. The brace is made of galvanized steel and is painted to match the sign post.

SQUARE POST CLAMP

SQUARE POST CLAMP & BRACE

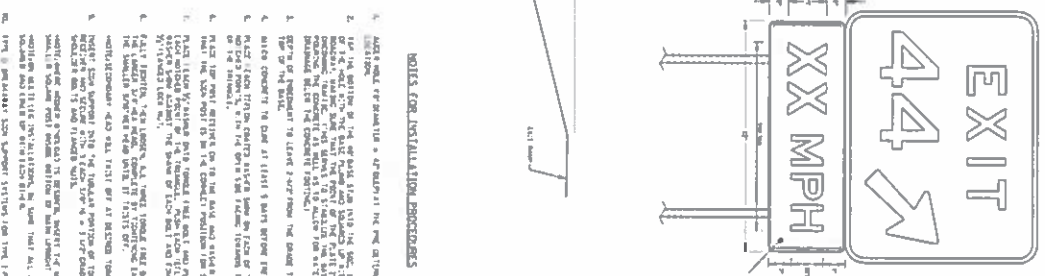


1 POST - BRACING DIAGRAM



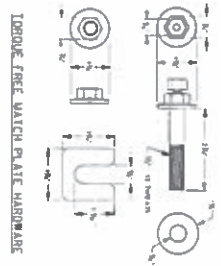
STANDARD EXIT SIGN INSTALLATION

2 POST - BRACING DIAGRAM

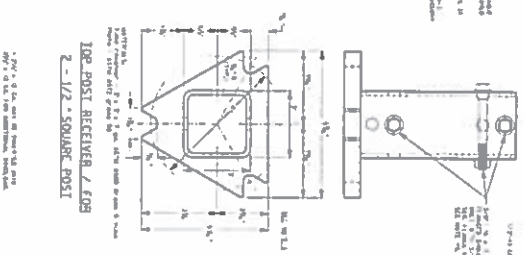


NOTES FOR INSTALLATION PROCEDURES

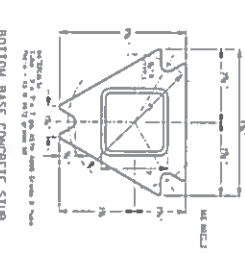
1. ALL SIGN POSTS SHALL BE INSTALLED IN THE POST DIRECTION.
2. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.
3. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.
4. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.
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8. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.
9. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.
10. THE SIGN POST SHALL BE INSTALLED IN THE POST DIRECTION.



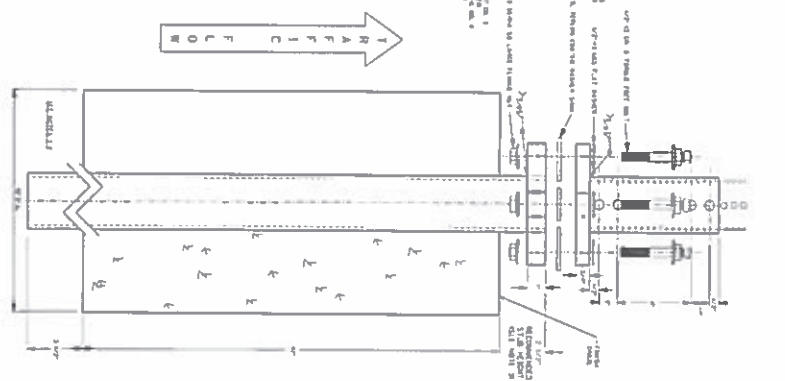
TORQUE-FREE WATCH PLATE HARDWARE



1/2" SQUARE POST RECEIVER & POST



BOTTOM BASE CONCRETE SLAB



TYPE 10R315 DIRECTIONAL BREAKAWAY POST FOR TYPE 10R315

EXIT SIGN DATA

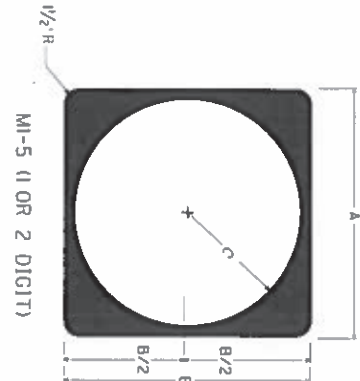
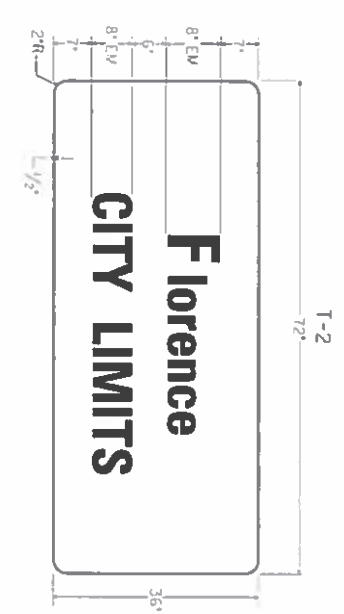
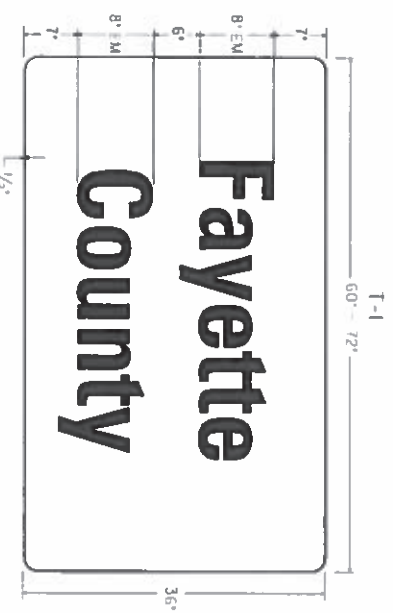
TYPE	HEIGHT	WIDTH	DEPTH	WEIGHT	INSTALLATION
1	18"	18"	18"	15 LBS	POST
2	18"	18"	18"	15 LBS	POST
3	18"	18"	18"	15 LBS	POST
4	18"	18"	18"	15 LBS	POST
5	18"	18"	18"	15 LBS	POST
6	18"	18"	18"	15 LBS	POST
7	18"	18"	18"	15 LBS	POST
8	18"	18"	18"	15 LBS	POST
9	18"	18"	18"	15 LBS	POST
10	18"	18"	18"	15 LBS	POST

EXIT GONE DETAIL SHEET 1 of 2

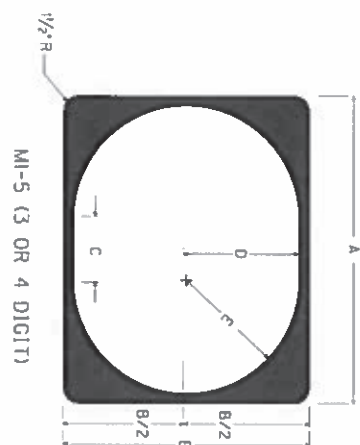
NOT TO SCALE

<p>Revision: 18.03.2020 SHEET NAME: 20000000 DATE PLOTTED: January 3, 2019 FILE NAME: C:\PROGRAMS\PLANT\20000000\20000000.PLT</p>	<h3 style="text-align: center;">CHANNEL POST DETAILS</h3> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>TYPE 'B' CONCRETE BASE</p> </div> <div style="width: 45%;"> <p>TYPE 'C' DRIVEN BASE</p> </div> </div> <div style="margin-top: 20px;"> <p>TYPE 'D' PIPE BASE</p> <p>WOOD SHIMS AS NEEDED GROUT TO SECURE FINISH GRADE</p> <p>THE COST FOR 4.0" I.D. GALVANIZED STEEL PIPE FOR TYPE 'D' BASE AND THE WORK FOR THE INSTALLATION SHALL BE INCLUDED IN THE BID ITEM FOR STEEL POST TYPE 2.</p> </div>	<h3 style="text-align: center;">PANEL DETAILS</h3> <p>MINIMUM WEIGHT PER LINEAR FOOT 6" PANEL - 1.115 LBS. 12" PANEL - 2.485 LBS.</p>
<p>ALUMINUM: 3-5/8" LONG Z-BRACKETS OR X 2 1/2" @ 2-3/8 LBS. PER FT. GALVANIZED STEEL: 3-5/8" LONG Z-BRACKETS 3" X 2 1/2" @ 6.7 LBS PER FT.</p> <p>USE ALTERNATE POST CLIPS</p> <p>USE DOUBLE POST CLIPS AT TOP AND BOTTOM OF SIGN</p> <p>NOTES: THE COST FOR ATTACHING AN EXIT NUMBER SIGN SHALL BE INCLUDED IN THE BID ITEM FOR SIGN BASE MATERIAL FOR PANEL SIGNS AND SHALL INCLUDE ALL Z-BRACKETS AND HARDWARE. THE EXIT NUMBER SIGN SHALL BE INSTALLED OVER THE LEFT OR RIGHT SIDE OF THE SIGN AS SHOWN ON THE PLANS.</p>	<h3 style="text-align: center;">DETAIL FOR EXIT NUMBER SIGN ATTACHMENT AND TYPICAL POST CLIP ARRANGEMENT</h3> <p>POST CLIPS EXIT NUMBER SIGN SHALL BE INSTALLED TOWARD THE LEFT OR RIGHT SIDE OF MAIN SIGN</p> <p>PANELS</p> <p>BEAM</p> <p>BACK VIEW</p> <p>SIDE VIEW</p>	<h3 style="text-align: center;">TYPICAL SECTIONS</h3> <p>ALUMINUM SIGN PANEL EXTRUSIONS</p> <p>6" x 1/2" x 1/8" SLOTS ON 24" CENTERS 1/2" L.R. TYP. 161 PLACES</p> <p>TYPICAL SECTIONS STEEL SIGN PANEL EXTRUSIONS</p> <p>6" x 1/2" x 1/8" SLOTS ON 24" CENTERS 1/2" L.R. TYP. 141 PLACES</p>
<p>NOTE: SHOULD THE CONTRACTOR OVERDRILL THE HOLE, EXTRA CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE. PAYMENT WILL BE DETERMINED BY THE "D" DIMENSION.</p> <p>TOPS OF BASES TO BE FINISHED TO ASSURE THERE IS DRAINAGE FROM CENTER OF BASE.</p>	<h3 style="text-align: center;">TYPICAL BEAM WITH TYPE 'A' CONCRETE BASE DETAIL</h3> <p>TOP VIEW</p> <p>FRONT VIEW</p> <p>PANEL SIGN</p>	<p>NOTE: NOT TO SCALE</p> <p style="text-align: center;">SIGNING MISCELLANEOUS DETAIL SHEET</p>

Revision: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
SHEET NAME: 02370028 USA, Min. Font DATE PLOTTED: January 3, 2019 PLT. NAME: C:\PROGRAMS\PLANTING\52484\52484\STATION P. AHS.DGN



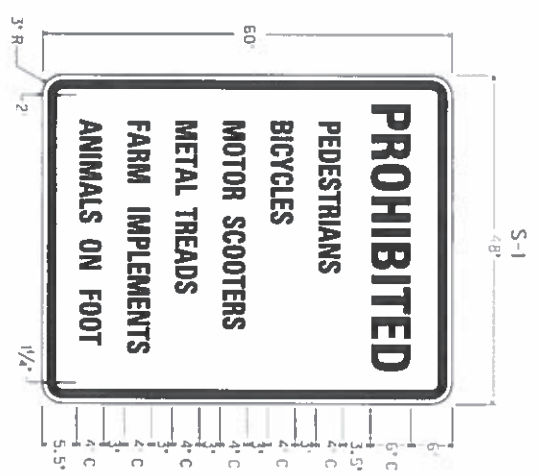
	A	B	C	FONT
CONVENTIONAL	24"	24"	11"	12D
EXPRESSWAY/ FREEWAY	36"	36"	17"	18D



	A	B	C	D	E	FONT	
						3 digit	4 digit
CONVENTIONAL	30"	24"	6"	11"	11"	12D	12B
EXPRESSWAY/ FREEWAY	45"	36"	9"	16.5"	16.5"	18D	18B

NOTE: FOR ROUTE MARKERS, IF NECESSARY, ADJUSTMENTS TO THE DIGIT LAYOUT AND/OR FONT TYPE MAY BE MADE TO ENSURE VISUAL ACUITY

NOTE: EXPRESSWAY/FREEWAY DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL OR FULL CONTROL OF ACCESS



NOT TO SCALE


























TYPICAL SIGNS

COMMITTEE	ITEM NO.	SCALE
ROUTE	NO-2002.00	1/80

SIGN/SIGN ASSEMBLY NUMBER		SIZES IN INCHES HEIGHT, WIDTH		MESSAGES		SPECIFICATION		SIGN LOCATION		COUNT	
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
1	2	3	4	5	6	7	8	9	10	11	12
2701											
2702											
2703											
2704											
2705											
2706											
2707											
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2800											

SHEETING SIGNS DETAIL SHEET

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

SHEET SIGN DETAIL SHEET		ROUTE	FILE NO.	SHEET NO.
		0-2002.00		102
2720	48 48 30 30	MESSAGE ID  	SPECIFICATION NOT USED	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2721	48 48 30 30	MESSAGE ID  	SPECIFICATION W1-20 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2722	48 48	MESSAGE ID  	SPECIFICATION W1-20	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2723	48 48	MESSAGE ID  	SPECIFICATION W1-20	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2724	48 48 30 30	MESSAGE ID  	SPECIFICATION W1-20 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2725	48 48 30 30	MESSAGE ID  	SPECIFICATION W1-20 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2726	48 48	MESSAGE ID  	SPECIFICATION W1-20	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2727	24 30	MESSAGE ID 	SPECIFICATION W1-2	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2728	24 30	MESSAGE ID  	SPECIFICATION W1-2 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2729	24 30	MESSAGE ID  	SPECIFICATION W1-2 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2730	24 30	MESSAGE ID  	SPECIFICATION W1-2 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2731	24 30	MESSAGE ID  	SPECIFICATION W1-2 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND
2732	24 30	MESSAGE ID  	SPECIFICATION W1-2 W1-30	SIGN LOCATION SIDE OF ROAD TRAVELING ON ROAD AT STATION MOUNTAIN PARKWAY WESTBOUND

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

SIGN/STATION ASSIGNED NUMBER	SIZES IN INCHES (HORIZONTAL, VERTICAL)	MESSAGE(S)	SPECIFICATION	SIGN LOCATION			
				SIDE OF ROAD	TRAVELING	OR ADJACENT	STATION
2728	36 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 54.30
2729	24 30		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 53.80
2730	24 30		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 53.30
2731	48 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 54.25
2732	48 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 53.20
2733	36 48		CUSTOM - STATE LAW W/ SEAT BELT	RIGHT	WESTBOUND	WITH FRONT	M.P. 52.80
2734	12 36		WILE MARKED 53	RIGHT	WESTBOUND	WITH FRONT	M.P. 52.00
2735	36 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 52.00
2736	36 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 52.50
2737	36 48		NOT USED	RIGHT	WESTBOUND	WITH FRONT	M.P. 52.40

SHEETING SIGNS DETAIL SHEET

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

DATE: 01-20-2020
TIME: 10:53 AM

Project: Mountain Parkway Westbound
User: [Name]
Date Plotted: January 1, 2020





















SIGN/SIGN ASSEMBLY NUMBER		SIZES IN INCHES (HGT. x WGT.)		MESSAGE(S) (1)	SPECIFICATION	SIDE OF ROAD	TRAFFIC TRAVELING	ON ROAD	AT STATION	UNOBTAINED
SIGN/SIGN ASSEMBLY NUMBER		SIZES IN INCHES (HGT. x WGT.)		MESSAGE(S) (1)	SPECIFICATION	SIDE OF ROAD	TRAFFIC TRAVELING	ON ROAD	AT STATION	UNOBTAINED
2731		48	36	EMERGENCY PARKING ONLY	RD-4	RIGHT	WESTBOUND	WTL. PREV.	46 P. 52.40	
2732		48	48		RD-21	RIGHT	WESTBOUND	WTL. PREV.	46 P. 54.083	
2733		48	48		RD-21	LEFT	WESTBOUND	WTL. PREV.	46 P. 54.083	
2734		48	48		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2735		48	48		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2736		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2737		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2738		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2739		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2740		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2741		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2742		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2743		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2744		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2745		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2746		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2747		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2748		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2749		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2750		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2751		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2752		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2753		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2754		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2755		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2756		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2757		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2758		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2759		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2760		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2761		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2762		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2763		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2764		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2765		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2766		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2767		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2768		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2769		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2770		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2771		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2772		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2773		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2774		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2775		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2776		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2777		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2778		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2779		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2780		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2781		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2782		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2783		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2784		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2785		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2786		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2787		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2788		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2789		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2790		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2791		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2792		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2793		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2794		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2795		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2796		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2797		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2798		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2799		48	36		RD-2	LEFT	WESTBOUND	WTL. PREV.	46 P. 56.031	
2800		48	36		RD-2	RIGHT	WESTBOUND	WTL. PREV.	46 P. 56.031	

SHEETING SIGNS DETAIL SHEET









SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

DATE: 01-20-2022 00
SHEET NO: 104

SHEETING SIGNS DETAIL SHEET

SIGN/SHEET NUMBER	SIZES IN INCHES H x W	MESSAGE ID	SPECIFICATION	SIGN LOCATION	
				TYPE OF TRAFFIC	ON ROAD
2181	36 x 48		W-1 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2182	36 x 48		W-2 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2183	36 x 48		W-3 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2184	36 x 48		W-4 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2185	36 x 48		W-5 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2186	36 x 48		W-6 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2187	36 x 48		W-7 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2188	36 x 48		W-8 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2189	36 x 48		W-9 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2190	36 x 48		W-10 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2191	36 x 48		W-11 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2192	36 x 48		W-12 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2193	36 x 48		W-13 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2194	36 x 48		W-14 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2195	36 x 48		W-15 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2196	36 x 48		W-16 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2197	36 x 48		W-17 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2198	36 x 48		W-18 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2199	36 x 48		W-19 (SEE DETAIL SHEET)	RIGHT	WESTBOUND
2200	36 x 48		W-20 (SEE DETAIL SHEET)	RIGHT	WESTBOUND

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

SIGN/SECTION NUMBER		SIZES IN INCHES HGT. X WGT.	MESSAGE(S)	SPECIFICATION	SIGN LOCATION			
TYPE OF ROAD	TRAVELING				W/TH. PARK.	W/TH. PARK.	W/TH. PARK.	W/TH. PARK.
2188		48		M-2	LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.42
		48			RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.42
2189		48		M-2	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.33
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.33
2190		48		M-2	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.33
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.33
2191		48		M-2	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.00
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.00
2192		48		M-3	LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.33
		48			RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.33
2193		36		M-3-2	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.44
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.44
2194		36		M-3-4	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.50
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.50
2195		36		M-3-4	RIGHT	WESTBOUND	W/TH. PARK.	M.P. 45.50
		48			LEFT	WESTBOUND	W/TH. PARK.	M.P. 45.50

SHEETING SIGNS DETAIL SHEET

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY WESTBOUND

DATE: 01-08-2019
TIME: 10:00
TOS

SHEET SIGN DETAIL SHEET		DATE	REV	BY	CHKD	APP'D	DATE
2188		48	48				
2189		48	48				
2190		48	48				
2191		48	48				
2192		48	48				
2193		48	48				
2194		48	48				
2195		56	48				
2196		48	56				
2197		48	56				
2198		48	56				
2199		48	56				
2200		48	56				

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY EASTBOUND

SIGN/SIGN ASSUMER'S NUMBER		SIZES IN INCHES HEIGHT WIDTH		MESSAGE ID	SPECIFICATION	TYP OF ROAD	TYP OF TRAFFIC	TRAVELING	ON ROAD	AT STATION	UNCOMPART
2804		48	48	KY 1010		RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.364		
2805		48	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.449		
2806		48	24			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.443		
2807		42	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.469		
2808		36	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.551		
2809		36	18			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.605		
2810		48	36			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.605		
2811		36	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.364		
2812		36	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.659		
2813		48	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.590		
2814		30	30			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.590		
2815		48	48			RIGHT	EASTBOUND	W/LK. PREV.	M.P. 51.600		

SHEETING SIGNS DETAIL SHEET

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY EASTBOUND

SIGN/SIGN ASSOCIATED NUMBER		SIZES IN INCHES HORIZ. VERT.		MESSAGE(S) ID	SPECIFICATION	SIDE OF TRAFFIC		SIGN LOCATION ON ROAD		M.P. LOCATION	
2806		48	48	WIDE LOAD MERGE LEFT	W9-25	LEFT	EASTBOUND	W/TL. P/RT.	M.P. 54.076		
2807		48	48	WIDE LOAD MERGE LEFT	W9-25	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.076		
2808		48	48	WIDE LOAD MERGE LEFT	W9-2	LEFT	EASTBOUND	W/TL. P/RT.	M.P. 54.076		
2809		48	48	WIDE LOAD MERGE LEFT	W9-2	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.076		
2810		72	48	EMERGENCY PARKING ONLY	CUSTOM	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.076		
2811		36	48	EMERGENCY PARKING ONLY	W9-4	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.136		
2812		36	48	PASS ONLY WHEN CENTER LANE IS CLEAR	CUSTOM	LEFT	EASTBOUND	W/TL. P/RT.	M.P. 54.253		
2813		36	48	PASS ONLY WHEN CENTER LANE IS CLEAR	CUSTOM	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.253		
2814		42	36	WIDE LOAD MERGE LEFT	W11-USED	LEFT	EASTBOUND	W/TL. P/RT.	M.P. 54.300		
2815		42	36	WIDE LOAD MERGE LEFT	W11-USED	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 54.300		
2816		36	48	TRUCK LANE 500 FEET	W11-4	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 55.376		
2817		36	48	TRUCK LANE 500 FEET	W11-3	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 55.476		
2818		36	48	SLOWER TRAFFIC KEEP RIGHT	W11-7	RIGHT	EASTBOUND	W/TL. P/RT.	M.P. 55.476		

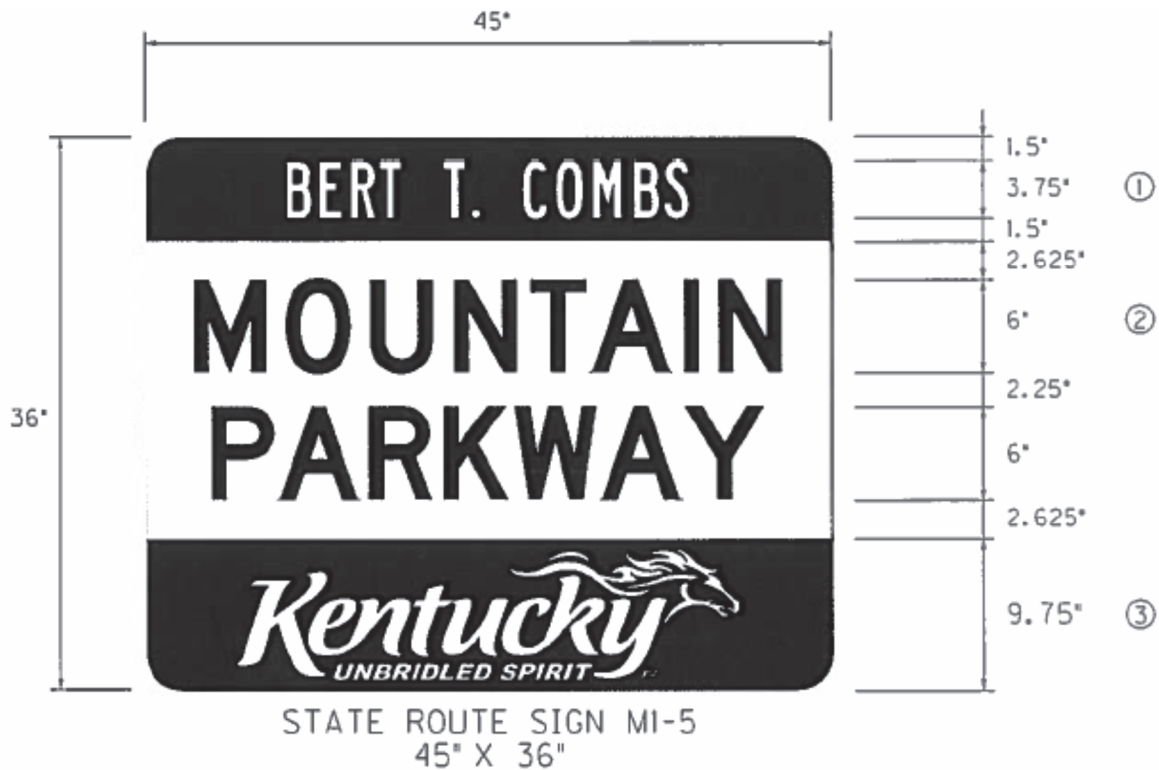
SHEETING SIGNS DETAIL SHEET

SHEET SIGN DETAIL SHEET
MOUNTAIN PARKWAY EASTBOUND

COUNT OF	TOTAL	SHEET NO.
87/12	10-20922.00	1071

MicroStation v8.0.3.032 F SHEET NAME: T05220P USER: MHL2100 DATE PLOTTED: January 1, 2019 PLOT NAME: C:\P8030\WOLFE\NHPP\0061\079\ASSTG\SIGN PLANS.DGN

SIGN/STATION ASSSEMBLY NUMBER	SIZES IN INCHES (HORIZONTAL, VERTICAL)	MESSAGE(S)	SPECIFICATION	SIGN LOCATION		SHEET NO.	SHEET TOTAL		
				TYPE OF TRAFFIC	ON ROAD				
2818	48 48		RS-23 48"x72"x1/4"	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.386	1	1
2819			NOT USED						
2820			NOT USED						
2821	48 48		RS-21	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.391	1	1
2822			NOT USED						
2823	48 48		RS-22	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.391	1	1
2824			NOT USED						
2825	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2826			NOT USED						
2827			NOT USED						
2828	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2829			NOT USED						
2830	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2831			NOT USED						
2832	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2833			NOT USED						
2834	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2835			NOT USED						
2836	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2837			NOT USED						
2838	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2839			NOT USED						
2840	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2841			NOT USED						
2842	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2843			NOT USED						
2844	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2845			NOT USED						
2846	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2847			NOT USED						
2848	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2849			NOT USED						
2850	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2851			NOT USED						
2852	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2853			NOT USED						
2854	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2855			NOT USED						
2856	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2857			NOT USED						
2858	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2859			NOT USED						
2860	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2861			NOT USED						
2862	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2863			NOT USED						
2864	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2865			NOT USED						
2866	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2867			NOT USED						
2868	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2869			NOT USED						
2870	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2871			NOT USED						
2872	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2873			NOT USED						
2874	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2875			NOT USED						
2876	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2877			NOT USED						
2878	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2879			NOT USED						
2880	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2881			NOT USED						
2882	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2883			NOT USED						
2884	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2885			NOT USED						
2886	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2887			NOT USED						
2888	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2889			NOT USED						
2890	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2891			NOT USED						
2892	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2893			NOT USED						
2894	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2895			NOT USED						
2896	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2897			NOT USED						
2898	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2899			NOT USED						
2900	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2901			NOT USED						
2902	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2903			NOT USED						
2904	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2905			NOT USED						
2906	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2907			NOT USED						
2908	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2909			NOT USED						
2910	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2911			NOT USED						
2912	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2913			NOT USED						
2914	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2915			NOT USED						
2916	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2917			NOT USED						
2918	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2919			NOT USED						
2920	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2921			NOT USED						
2922	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2923			NOT USED						
2924	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2925			NOT USED						
2926	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2927			NOT USED						
2928	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2929			NOT USED						
2930	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2931			NOT USED						
2932	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2933			NOT USED						
2934	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2935			NOT USED						
2936	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2937			NOT USED						
2938	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2939			NOT USED						
2940	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2941			NOT USED						
2942	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2943			NOT USED						
2944	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2945			NOT USED						
2946	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2947			NOT USED						
2948	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2949			NOT USED						
2950	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2951			NOT USED						
2952	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2953			NOT USED						
2954	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2955			NOT USED						
2956	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2957			NOT USED						
2958	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2959			NOT USED						
2960	48 48		RS-24	LEFT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	1
2961			NOT USED						
2962	48 48		RS-24	RIGHT	EASTBOUND	WITH PEFT.	M.P. 55.399	1	



NOTES:

- ① WHITE TEXT ON INTERSTATE BLUE BACKGROUND
3.75" HIGHWAY "B" FONT FOR THE 36" x 45" SHIELD
2.5" HIGHWAY "B" FONT FOR THE 24" x 30" SHIELD
- ② INTERSTATE BLUE TEXT ON WHITE BACKGROUND
6" HIGHWAY "D" FONT FOR THE 36" x 45" SHIELD
4" HIGHWAY "D" FONT FOR THE 24" x 30" SHIELD
- ③ BACKGROUND OF THE LOGO IS INTERSTATE BLUE
WITH THE LETTERS AND HORSE HEAD IMAGE IN
WHITE. CONTACT THE DIVISION OF HIGHWAY
DESIGN AT (502) 564-3280 TO ACQUIRE THE OFFICIAL
KENTUCKY LOGO IMAGE PRIOR TO SHOP DRAWINGS
AND SIGN FABRICATION.

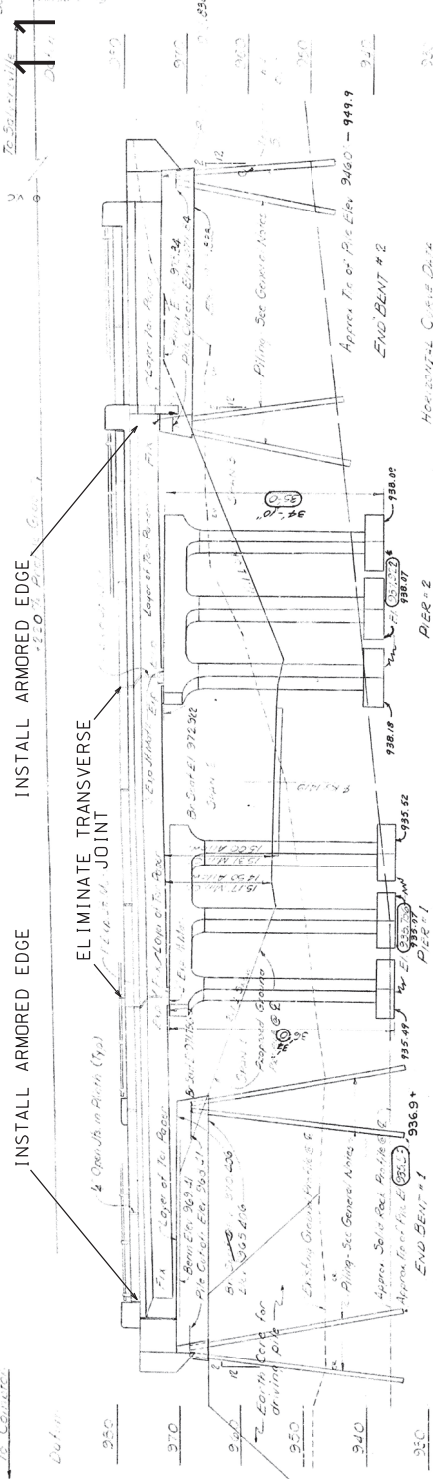
M

DATE	BY	REVISION

119B00042N

GENERAL NOTES

1. All concrete shall be placed in accordance with the specifications and shall be cured for a minimum of 14 days.
2. All steel reinforcement shall be placed in accordance with the specifications and shall be protected with a minimum of 1 inch of concrete cover.
3. All concrete shall be placed in accordance with the specifications and shall be cured for a minimum of 14 days.
4. All steel reinforcement shall be placed in accordance with the specifications and shall be protected with a minimum of 1 inch of concrete cover.
5. All concrete shall be placed in accordance with the specifications and shall be cured for a minimum of 14 days.
6. All steel reinforcement shall be placed in accordance with the specifications and shall be protected with a minimum of 1 inch of concrete cover.
7. All concrete shall be placed in accordance with the specifications and shall be cured for a minimum of 14 days.
8. All steel reinforcement shall be placed in accordance with the specifications and shall be protected with a minimum of 1 inch of concrete cover.
9. All concrete shall be placed in accordance with the specifications and shall be cured for a minimum of 14 days.
10. All steel reinforcement shall be placed in accordance with the specifications and shall be protected with a minimum of 1 inch of concrete cover.



AS BUILT PLAN CHANGES

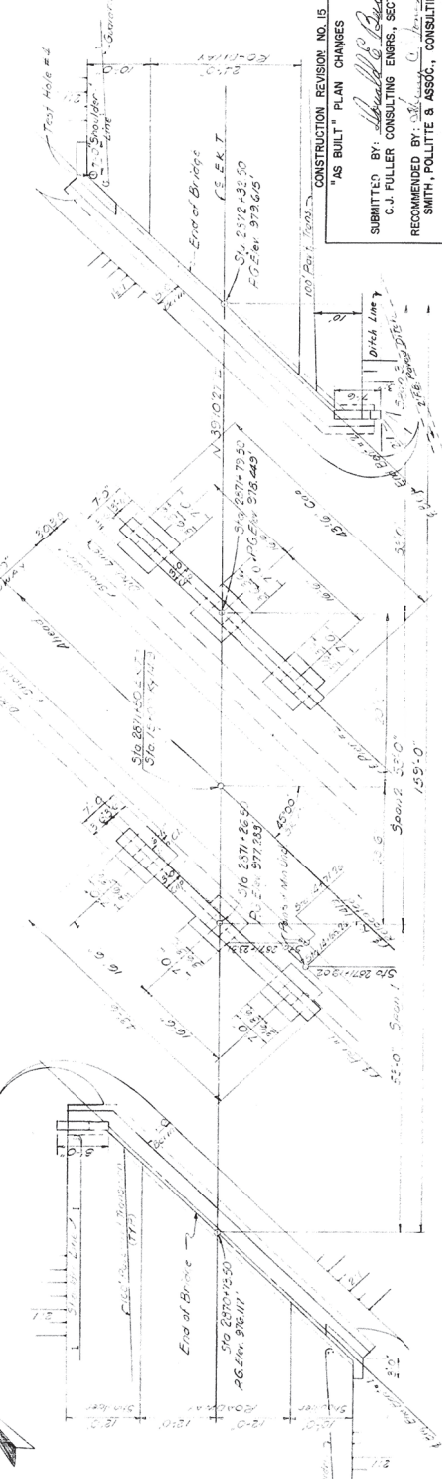
CONSTRUCTION REVISION NO. 15

SUBMITTED BY: *[Signature]*

RECOMMENDED BY: *[Signature]*

RECOMMENDED BY: *[Signature]*

APPROVED BY: *[Signature]*



INSTALL ARMORED EDGE

ELIMINATE TRANSVERSE JOINT

INSTALL ARMORED EDGE

REFERENCE AND ESTIMATE OF QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	CONCRETE	100	CU YD	120.00	12000.00
2	STEEL REINFORCEMENT	100	TONS	100.00	10000.00
3	FORMWORK	100	SQ YD	10.00	1000.00
4	LABOR	100	HOURS	10.00	1000.00
5	EARTHWORK	100	CY	10.00	1000.00
6	PAVING	100	SQ YD	10.00	1000.00
7	UTILITIES	100	LINEAL FT	10.00	1000.00
8	STRUCTURE	100	SQ YD	10.00	1000.00
9	FINISHES	100	SQ YD	10.00	1000.00
10	PAINT	100	SQ YD	10.00	1000.00
11	CONCRETE	100	CU YD	120.00	12000.00
12	STEEL REINFORCEMENT	100	TONS	100.00	10000.00
13	FORMWORK	100	SQ YD	10.00	1000.00
14	LABOR	100	HOURS	10.00	1000.00
15	EARTHWORK	100	CY	10.00	1000.00
16	PAVING	100	SQ YD	10.00	1000.00
17	UTILITIES	100	LINEAL FT	10.00	1000.00
18	STRUCTURE	100	SQ YD	10.00	1000.00
19	FINISHES	100	SQ YD	10.00	1000.00
20	PAINT	100	SQ YD	10.00	1000.00



CONSTRUCTION REVISION CAUSES

Change in pier column concrete due to adjustments in footing elevations to bear on firm solid rock.

ITEM	NO.	DESCRIPTION	LOCATION
1	1	6" x 39" G	Between Spans
2	2	14" x 14" S	Between Spans
3	3	14" x 14" S	Between Spans
4	4	14" x 14" S	Between Spans
5	5	14" x 14" S	Between Spans
6	6	14" x 14" S	Between Spans
7	7	14" x 14" S	Between Spans
8	8	14" x 14" S	Between Spans
9	9	14" x 14" S	Between Spans
10	10	14" x 14" S	Between Spans
11	11	14" x 14" S	Between Spans
12	12	14" x 14" S	Between Spans
13	13	14" x 14" S	Between Spans
14	14	14" x 14" S	Between Spans
15	15	14" x 14" S	Between Spans
16	16	14" x 14" S	Between Spans
17	17	14" x 14" S	Between Spans
18	18	14" x 14" S	Between Spans
19	19	14" x 14" S	Between Spans
20	20	14" x 14" S	Between Spans

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS

SECTION 401 - BRIDGES

401.01 - GENERAL

401.02 - MATERIALS

401.03 - CONSTRUCTION

401.04 - MAINTENANCE

401.05 - UTILITIES

401.06 - FINISHES

401.07 - PAINT

401.08 - SIGNAGE

401.09 - LIGHTING

401.10 - SAFETY

401.11 - UTILITIES

401.12 - FINISHES

401.13 - PAINT

401.14 - SIGNAGE

401.15 - LIGHTING

401.16 - SAFETY

401.17 - UTILITIES

401.18 - FINISHES

401.19 - PAINT

401.20 - SIGNAGE

401.21 - LIGHTING

401.22 - SAFETY

401.23 - UTILITIES

401.24 - FINISHES

401.25 - PAINT

401.26 - SIGNAGE

401.27 - LIGHTING

401.28 - SAFETY

401.29 - UTILITIES

401.30 - FINISHES

401.31 - PAINT

401.32 - SIGNAGE

401.33 - LIGHTING

401.34 - SAFETY

401.35 - UTILITIES

401.36 - FINISHES

401.37 - PAINT

401.38 - SIGNAGE

401.39 - LIGHTING

401.40 - SAFETY

401.41 - UTILITIES

401.42 - FINISHES

401.43 - PAINT

401.44 - SIGNAGE

401.45 - LIGHTING

401.46 - SAFETY

401.47 - UTILITIES

401.48 - FINISHES

401.49 - PAINT

401.50 - SIGNAGE

401.51 - LIGHTING

401.52 - SAFETY

401.53 - UTILITIES

401.54 - FINISHES

401.55 - PAINT

401.56 - SIGNAGE

401.57 - LIGHTING

401.58 - SAFETY

401.59 - UTILITIES

401.60 - FINISHES

401.61 - PAINT

401.62 - SIGNAGE

401.63 - LIGHTING

401.64 - SAFETY

401.65 - UTILITIES

401.66 - FINISHES

401.67 - PAINT

401.68 - SIGNAGE

401.69 - LIGHTING

401.70 - SAFETY

401.71 - UTILITIES

401.72 - FINISHES

401.73 - PAINT

401.74 - SIGNAGE

401.75 - LIGHTING

401.76 - SAFETY

401.77 - UTILITIES

401.78 - FINISHES

401.79 - PAINT

401.80 - SIGNAGE

401.81 - LIGHTING

401.82 - SAFETY

401.83 - UTILITIES

401.84 - FINISHES

401.85 - PAINT

401.86 - SIGNAGE

401.87 - LIGHTING

401.88 - SAFETY

401.89 - UTILITIES

401.90 - FINISHES

401.91 - PAINT

401.92 - SIGNAGE

401.93 - LIGHTING

401.94 - SAFETY

401.95 - UTILITIES

401.96 - FINISHES

401.97 - PAINT

401.98 - SIGNAGE

401.99 - LIGHTING

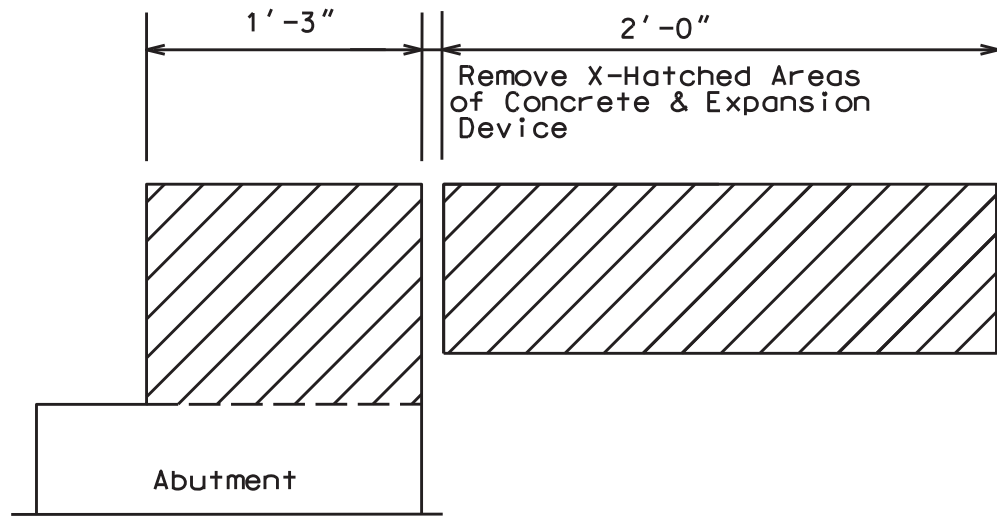
401.100 - SAFETY

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
WOLFE
EASTERN KENTUCKY TURNPIKE
WINCHESTER - SALYERSVILLE
ROAD

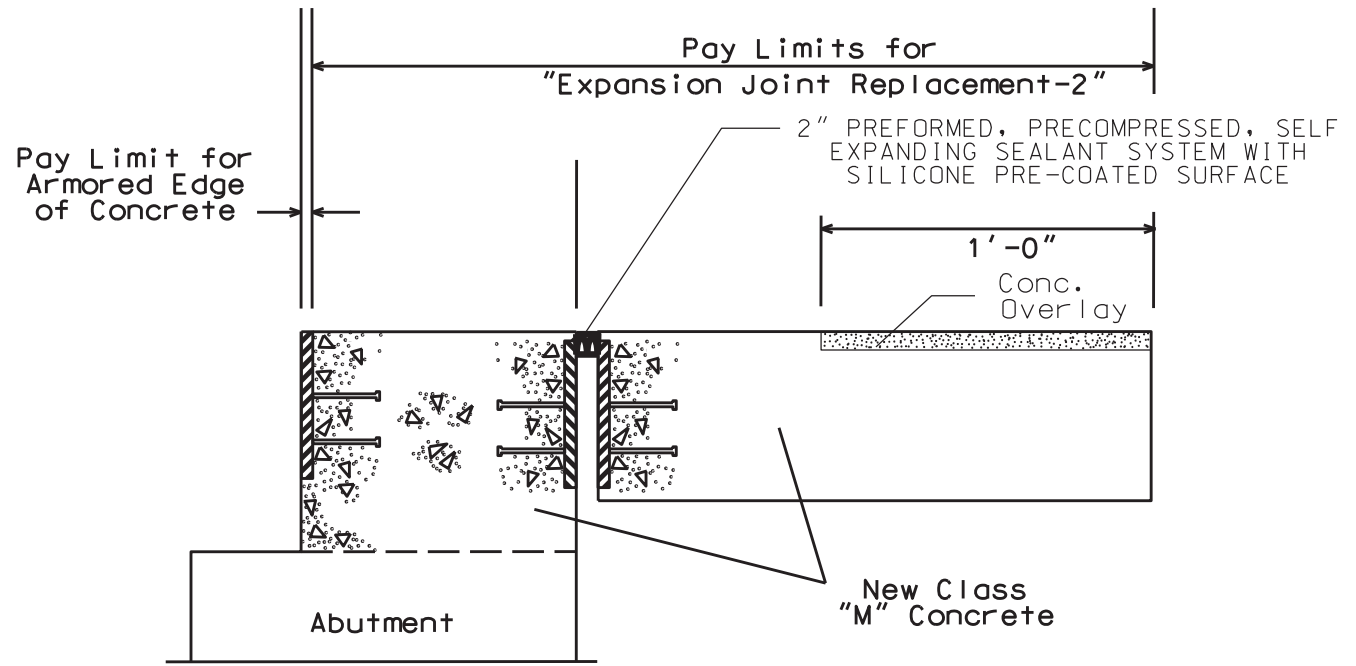
STATION 2871+50.00
BRIDGE NUMBER E.K. 4-1-11
SECTION 5056
SHEET 1 OF 8

EXPANSION DAM DETAIL

Abutments #1 and #2



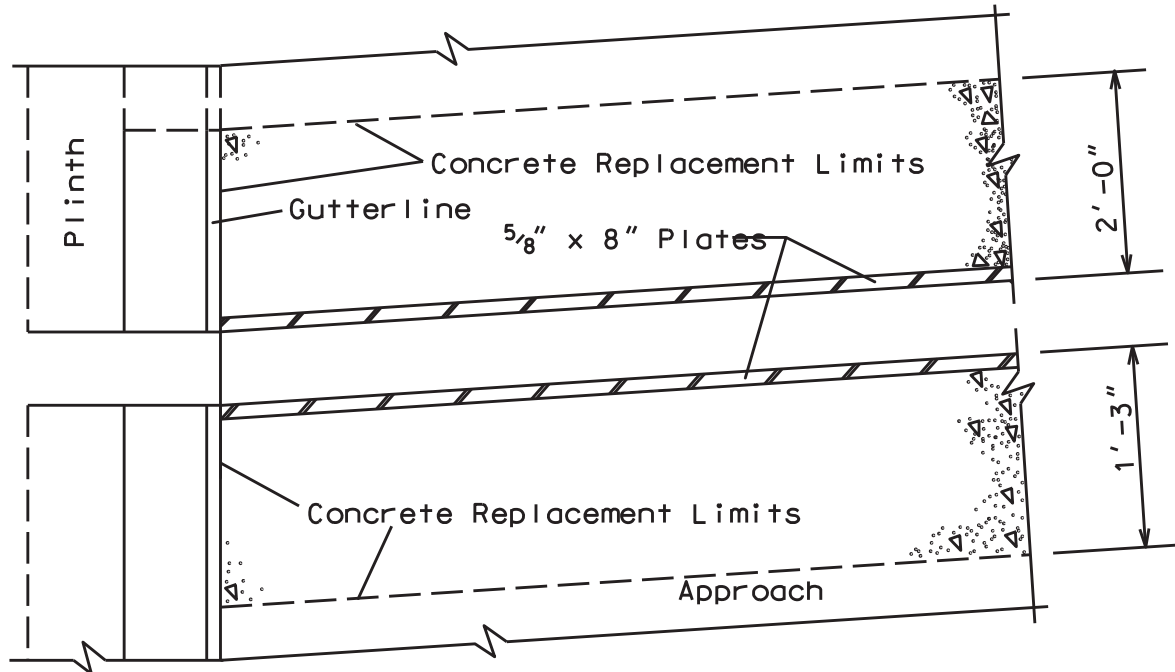
Clean & Leave
Steel Reinf.
in place.



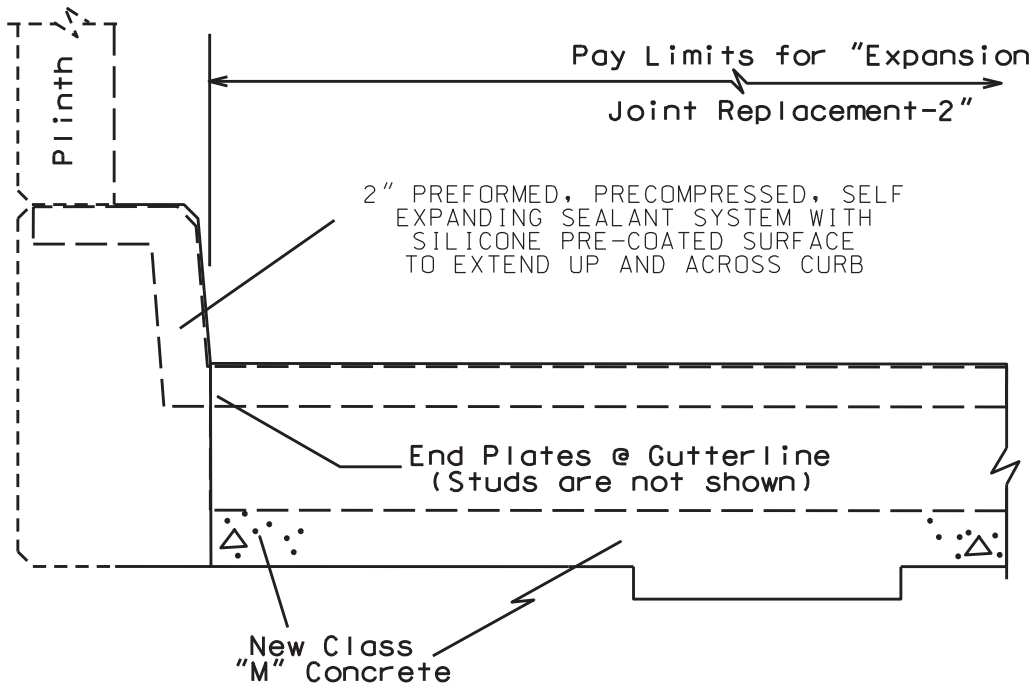
PROPOSED SECTION

CURB SECTION

Abutments #1 and #2

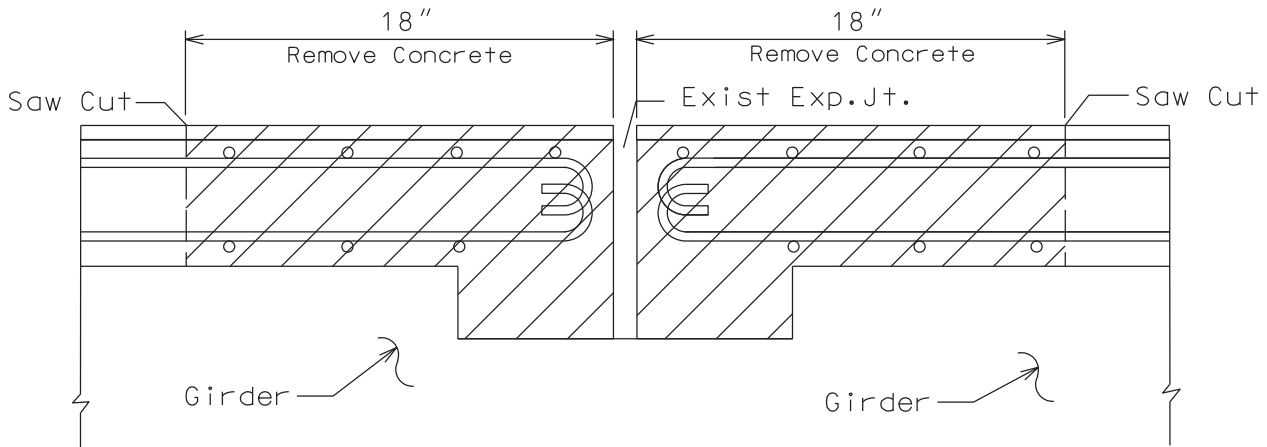


PLAN VIEW @ CURB



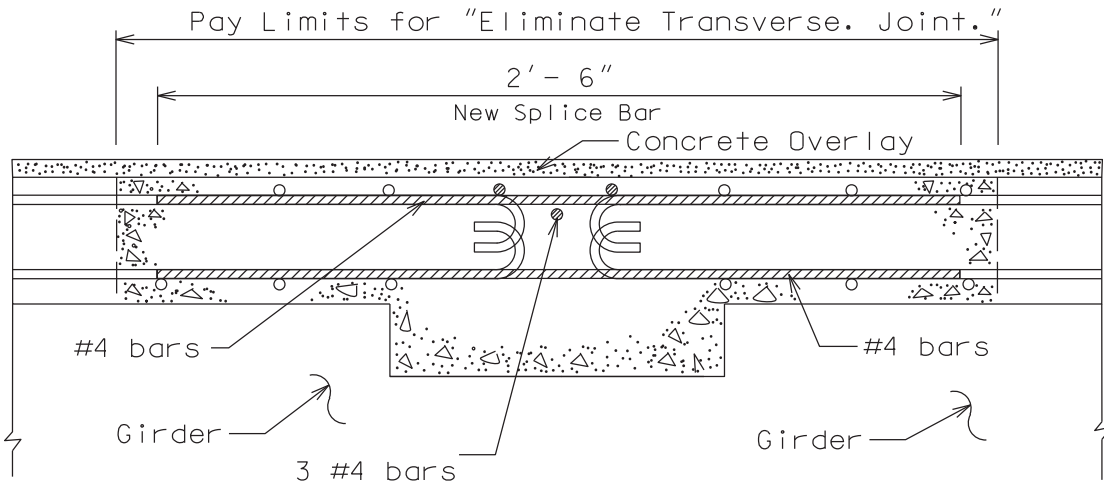
PROPOSED SECTION @ CURB

ELIMINATE TRANSVERSE JOINT DETAIL



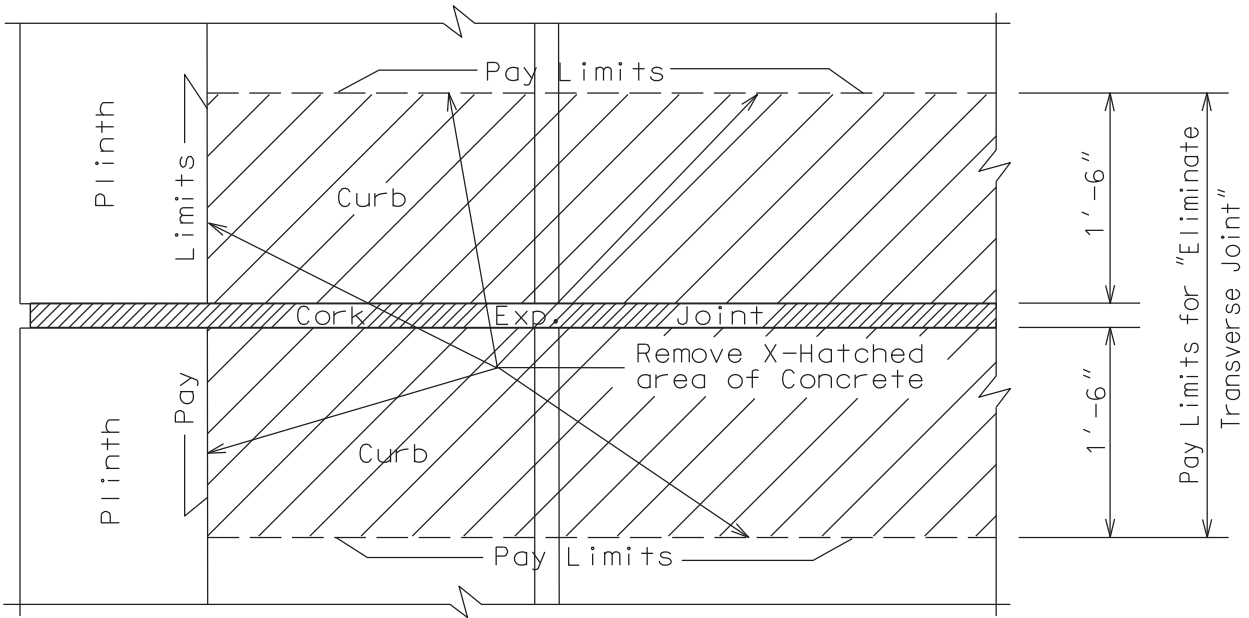
NOTE: Do not disturb existing Steel Reinforcement

EXISTING SECTION @ Transverse Joint

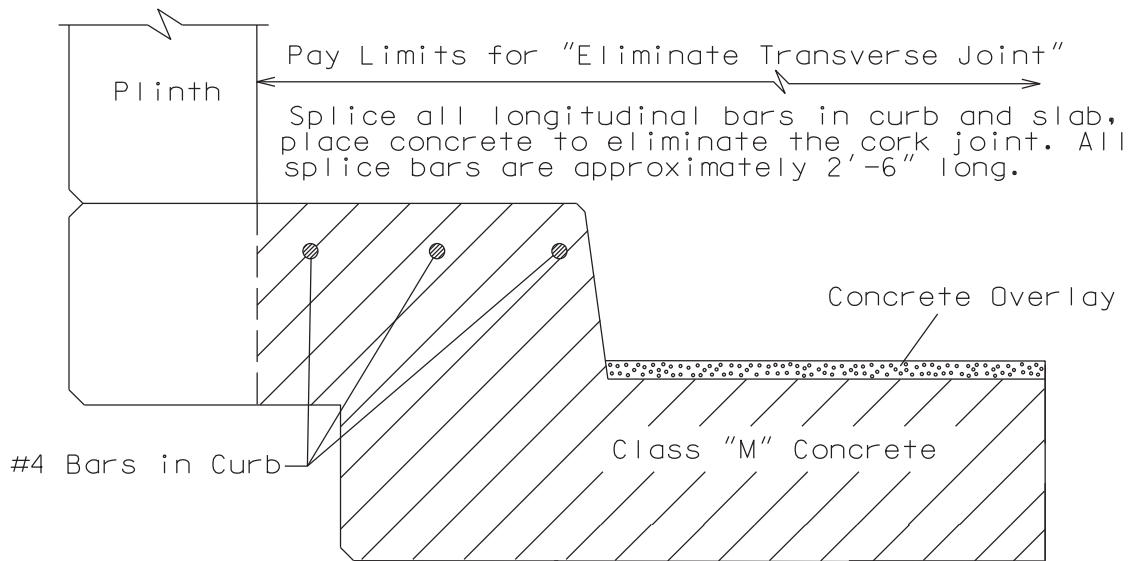


PROPOSED SECTION @ Transverse Joint

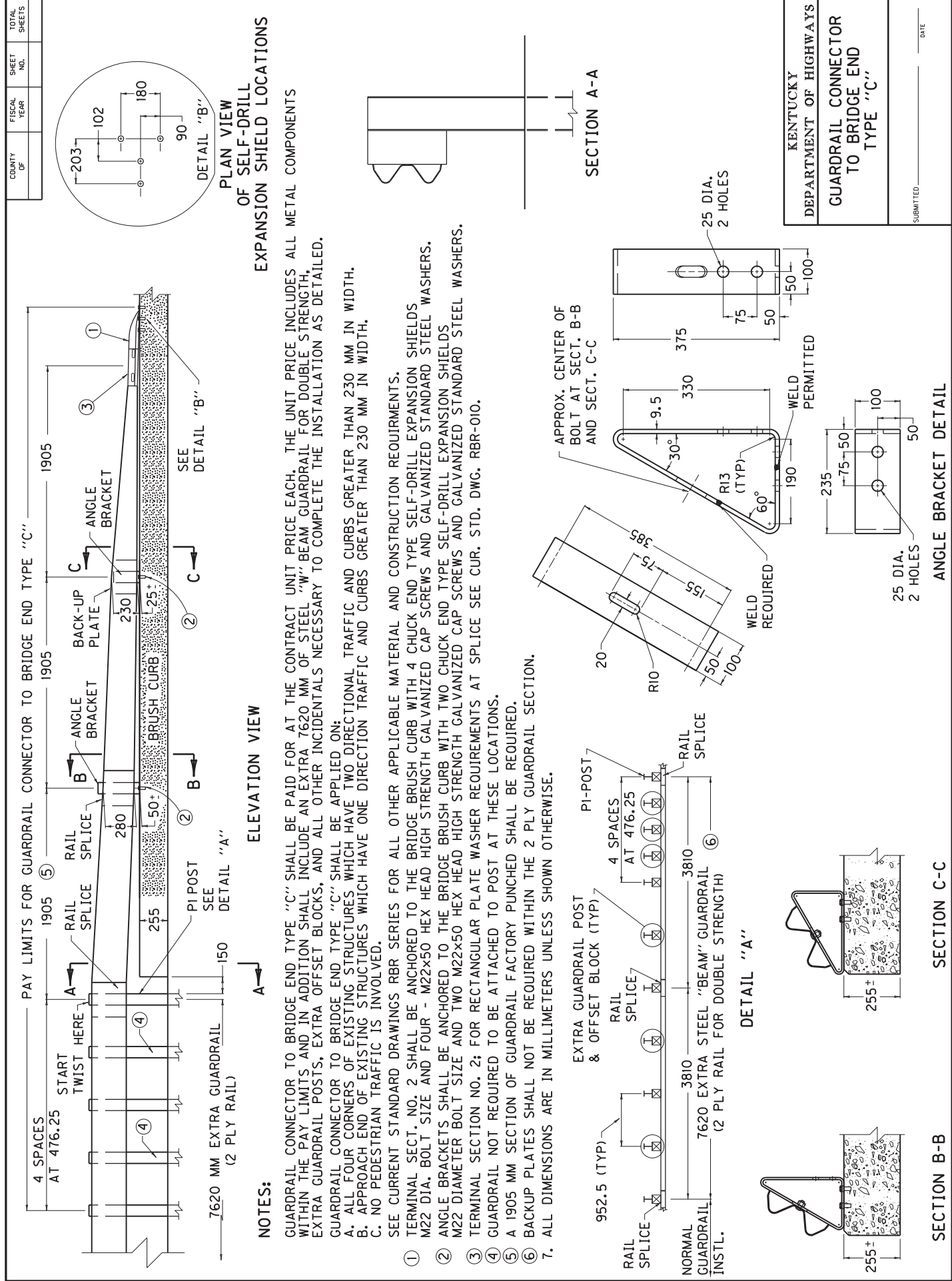
ELIMINATE TRANSVERSE JOINT DETAIL



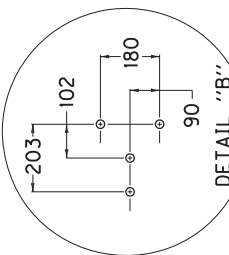
EXISTING PLAN VIEW @ CURB



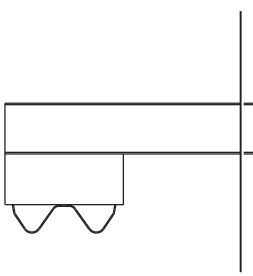
PROPOSED SECTION @ CURB



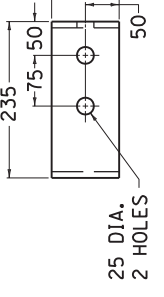
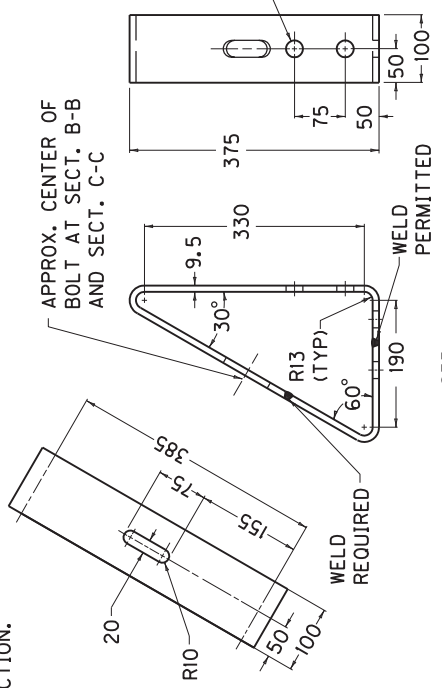
COUNTY OF	FISCAL YEAR	SHEET NO.	TOTAL SHEETS



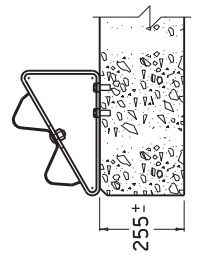
PLAN VIEW OF SELF-DRILL EXPANSION SHIELD LOCATIONS



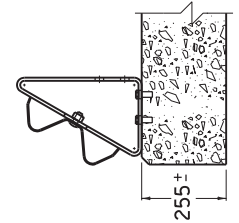
SECTION A-A



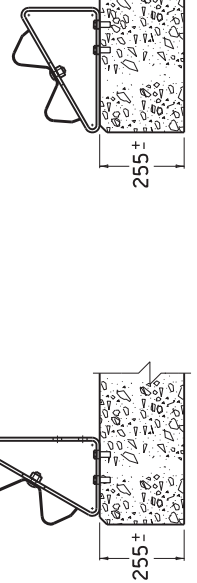
ANGLE BRACKET DETAIL



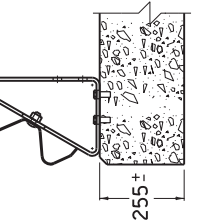
SECTION C-C



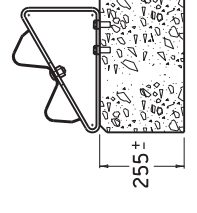
SECTION B-B



SECTION A-A



SECTION C-C



SECTION B-B

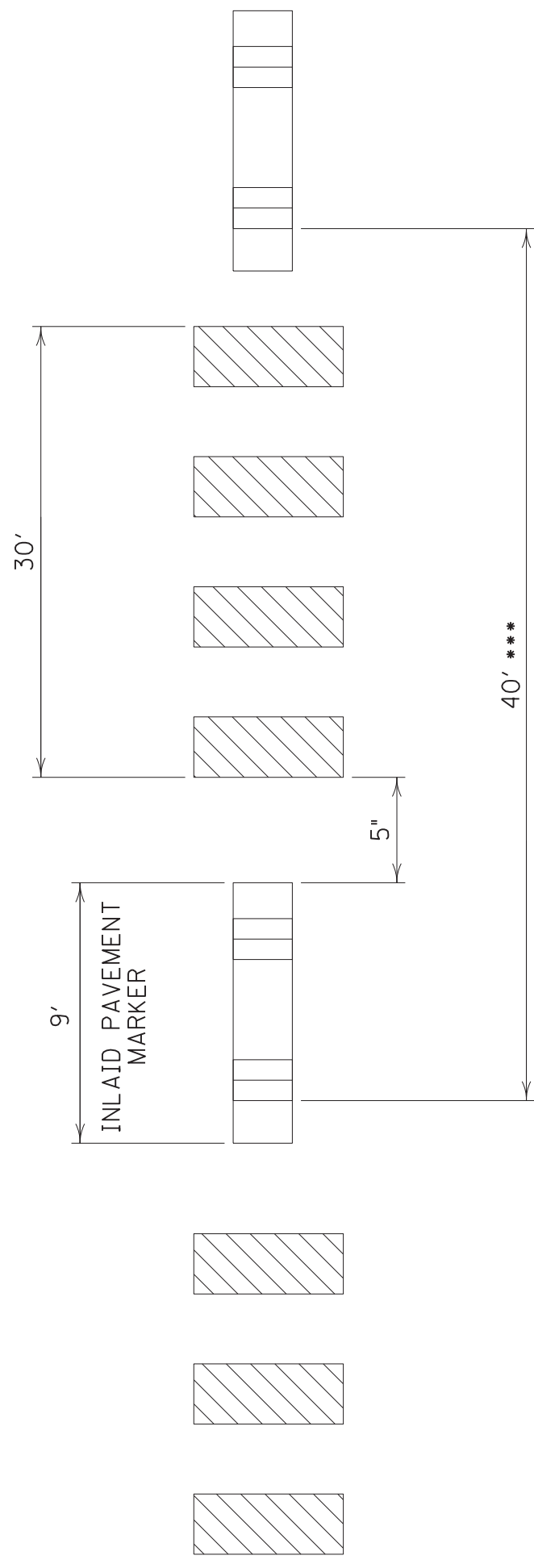


DETAIL 'A'

NOTES:

1. GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C" SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH. THE UNIT PRICE INCLUDES ALL METAL COMPONENTS WITHIN THE PAY LIMITS AND IN ADDITION SHALL INCLUDE AN EXTRA 7620 MM OF STEEL "W" BEAM GUARDRAIL FOR DOUBLE STRENGTH, EXTRA GUARDRAIL POSTS, EXTRA OFFSET BLOCKS, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AS DETAILED.
2. GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C" SHALL BE APPLIED ON:
 - A. ALL FOUR CORNERS OF EXISTING STRUCTURES WHICH HAVE TWO DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 230 MM IN WIDTH.
 - B. APPROACH END OF EXISTING STRUCTURES WHICH HAVE ONE DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 230 MM IN WIDTH.
 - C. NO PEDESTRIAN TRAFFIC IS INVOLVED.
3. SEE CURRENT STANDARD DRAWINGS RBR SERIES FOR ALL OTHER APPLICABLE MATERIAL AND CONSTRUCTION REQUIREMENTS.
4. TERMINAL SECT. NO. 2 SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH 4 CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS M22 DIA. BOLT SIZE AND FOUR - M22x50 HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
5. ANGLE BRACKETS SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH TWO CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS M22 DIAMETER BOLT SIZE AND TWO M22x50 HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
6. TERMINAL SECTION NO. 2; FOR RECTANGULAR PLATE WASHER REQUIREMENTS AT SPLICE SEE CUR. STD. DWG. RBR-010.
7. GUARDRAIL NOT REQUIRED TO BE ATTACHED TO POST AT THESE LOCATIONS.
8. A 1905 MM SECTION OF GUARDRAIL FACTORY PUNCHED SHALL BE REQUIRED.
9. BACKUP PLATES SHALL NOT BE REQUIRED WITHIN THE 2 PLY GUARDRAIL SECTION.
10. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SHOWN OTHERWISE.

KENTUCKY DEPARTMENT OF HIGHWAYS
GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C"
SUBMITTED _____ DATE _____



*****CONTRARY TO THE STANDARD DRAWINGS
THE CENTERLINE INLAID PAVEMENT
MARKERS ARE TO MATCH EXISTING
SPACING OF 40'.**

NOT TO SCALE

**INFORMATION ONLY
INLAID PAVEMENT MARKER**

PROJECT NOTES

1. SECTIONS WHERE EXISTING GUARDRAIL WILL REMAIN IN PLACE, CONTRACTOR IS RESPONSIBLE TO REMOVE MINIMAL PIECES OF GUARDRAIL TO ALLOW EQUIPMENT ACCESS BEHIND THE GUARDRAIL FOR SHOULDERING AND DITCHING OPERATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL UNWANTED MATERIALS FROM SHOULDER AND DITCH, SUCH AS TREES, DEBRIS, LARGE BOULDERS AND OTHER MATERIALS, AND ARE CONSIDERED PART OF THE 'DITCHING AND SHOULDERING" BID ITEM.
3. GUARDRAIL REMOVED FROM THE PROJECT IN LOCATIONS INDICATED IN THE PROPOSAL SHALL BE DELIVERED TO THE CENTRAL SIGN SHOP AND RECYCLE CENTER AT 1224 WILKINSON BLVD. IN FRANKFORT, KY. (502)-564-8187
4. ALL MATERIALS REMOVED, EXCEPT ASPHALT MILLINGS, SHALL BE WASTED OFF THE PROJECT AT SITES SELECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER, AND SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK. THE CABINET IS NOT RESPONSIBLE FOR FINDING A WASTE SITE FOR EXCESS MATERIALS.
5. MILLINGS, IN LIEU OF DGA WILL BE USED TO CONSTRUCT/RESHAPE THE OUTSIDE SHOULDER WEDGES THROUGHOUT THE PROJECT AS DIRECTED BY THE ENGINEER. COMPACT AND SHAPE THE ASPHALT MILLINGS AS DIRECTED BY THE ENGINEER. ALL SHOULDERS ARE TO RECEIVE TWO APPLICATIONS OF ASPHALT SEAL COAT. THE WIDTH OF THE ASPHALT SEAL MAY VARY THROUGHOUT THE PROJECT. THE ACTUAL WIDTH SHALL BE AS DIRECTED BY THE ENGINEER. QUANTITIES OF ASPHALT SEAL COAT AND ASPHALT SEAL AGGREGATE ARE INCLUDED IN THE GENERAL SUMMARY FOR THE PROJECT WIDE SHOULDER WEDGING/RESHAPING. THE DEPARTMENT WILL RETAIN 10,000 TON OF ASPHALT MILLINGS. ASPHALT MILLINGS ARE TO BE DELIVERED TO THE WOLFE COUNTY MAINTENANCE LOT.
6. EXISTING PAVEMENT MARKERS ON THE PROJECT SHALL BE REMOVED PRIOR TO THE PAVING OPERATION. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF THE PAVEMENT MARKERS AND THE REMOVED CONCRETE/ASPHALT MATERIALS. REMOVAL OF PAVEMENT MARKERS SHALL BE INCIDENTAL TO MILLING.
7. INLAID PAVEMENT MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

8. A SUMMARY OF PAVEMENT REPAIR LOCATIONS IS PROVIDED IN THE PROPOSAL. THE ENGINEER WILL DETERMINE THE ULTIMATE LOCATIONS THAT WILL BE REPAIRED BASED UPON THE CONDITION OF THE PAVEMENT AT THE TIME THE REPAIRS ARE ACCOMPLISHED. THE REPAIR LOCATIONS LISTED MAY BE LENGTHENED, SHORTENED, OR ELIMINATED COMPLETELY IF THE CONDITIONS ARE SUCH THAT MODIFICATION OF THE LOCATIONS WOULD BE DEEMED DESIRABLE BY THE CABINET.
9. INLAID PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH THE "SPECIAL NOTE FOR INLAID PAVEMENT MARKERS."
10. THE EXISTING EDGE DRAIN SYSTEM IS TO BE PRESERVED. CARE SHOULD BE TAKEN WHEN ASPHALT IS REMOVED AND REPLACED, ANY EDGE DRAINS DAMAGED DURING THESE ACTIVITIES WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. A PILOT VEHICLE IS REQUIRED DURING PAVING OPERATION AND SHALL BE INCIDENTAL TO BID ITEM "MAINTAIN & CONTROL TRAFFIC."
12. THE CONTRACTOR SHALL NOT SIMULTANEOUSLY PERFORM PAVING & MILLING OPERATIONS AND OTHER PAVEMENT WORK ON BOTH THE EASTBOUND AND WESTBOUND LANES. MILLING & PAVING AND OTHER PAVEMENT WORK SHALL BE COMPLETED ON WESTBOUND LANES BEFORE WORK CAN BE PERFORMED ON EASTBOUND LANES, OR VICE VERSA. THE CONTRACTOR SHALL REPAVE ALL MILLED SURFACES ON THE SAME DAY THE PAVEMENT SURFACE WAS MILLED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
13. POSITIVE DRAINAGE OF ROADWAY SHALL BE MAINTAINED AT ALL TIME.
14. WHEN INSTALLING CENTERLINE RUMBLE STRIPS, A 10 FEET GAP SHALL BE PLACED EVERY 40 FEET TO ACCOMMODATE FOR THE INLAID PAVEMENT MARKERS. THE CENTERLINE RUMBLE STRIPS SHALL BE SPACED AT LEAST 5 INCHES FROM THE INLAID PAVEMENT MARKER.

STANDARD DRAWINGS APPLICABLE TO PROJECT

RBI-002-07	TYPICAL GUARDRAIL INSTALLATIONS
RBM-020-09	DELINEATORS FOR CONCRETE BARRIERS
RBM-115-10	CONCRETE BARRIER WALL TYPE 9T (TEMPORARY)
RBR-005-10	GUARDRAIL RAIL COMPONENTS
RBR-010-05	GUARDRAIL TERMINAL SECTIONS
RDX-225	SILT TRAP TYPE B
RDX-101-04	SILT TRAP TYPE C
RDD-020-06	FLUME INLET TYPE 1
RDD-021-07	FLUME INLET TYPE 2
RDD-040-04	CHANNEL LINING CLASS II AND III
RDI-001-10	CULVERT, ENT, AND S.S. PIPE TYPE AND COVER HEIGHT.
RDI-020-09	PIPE BEDDING FOR CULVERTS, ENTRANCE & S.S. PIPE
RDI-021-01	PIPE BEDDING FOR CULV, ENT & S.S. REINFOR. CONC. PIPE.
RDI-040-01	PIPE BEDDING TRENCH CONDITION
RDI-41-01	PIPE BEDDING TRENCH CONDITION REINFOR. CONC. PIPE.
RDI-035-02	COATINGS, LININGS AND PAVINGS NON-STRUCT. PLAT PIPE.
RGX-060-01	BREAKAWAY SIGN SUPPORT SYSTEM FOR TYPE C BEAM
RGX-061-01	FOOTING DETAILS FOR TYPE C BEAM
RGX-065-02	TYPE D BREAKAWAY SIGN SUPPORT
RMP-100-09	CURB AND GUTTER, CURB AND VALLEY GUTTER
TPM-115-03	PAVE MARKER ARRANGE. TWO-LANE, TWO-WAY RDWY.
TMP-125-03	PAVE MARKER ARRANGE EXIT GORE AND OFF-RAMP
TMP-130-03	PAVE MARKER ARRANGE ON-RAMP WITH TAPERED ACCELERATION LANE
TTC-100-04	LANE CLOSURE TWO –LANE HIGHWAY
TTC-110-03	LANE CLOSURE USING TRAFFIC SIGNALS

TTC-135-02	SHOULDER CLOSURE
TTC-155-02	TEMPORARY PAVE MARKER ARRANGE. FOR CONST. ZONE.
TTC-160-02	TEMPORARY PAVE MARKER ARRANGE FOR LANE CLOSURES.
TTD-120-01	WORK ZONE SPEED LIMIT AND DOUBLE FINE SIGNS
TTD-125-02	PAVEMENT CONDITION WARNING SIGNS
TTS-100-02	MOBILE OPERATION FOR PAINT STRIPING CASE I
TTS-105-02	MOBILE OPERATION FOR PAINT STRIPING CASE II
RGS-002-05	SUPERELEVATION FOR MULTI-LANE PAVEMENT
RGS-001-06	CURVE WIDENING AND SUPERELEVATION TRANSITIONS

SEPIA LIST

1. SEPIA 002 CENTERLINE RUMBLE STRIPS
2. SEPIA 004 CENTERLINE RUMBLE STRIPS 6 INCH STRIPING
3. SEPIA 005 SHOULDER AND EDGELINE RUMBLE STRIP DETAILS
4. SEPIA 007 SHOULDER RUMBLE STRIP DETAILS TWO LANE ROADWAYS.
5. SEPIA 008 RUMBLE STRIP DETAILS MULTI-LANE RDWYS AND RAMPS
6. SEPIA 024 TYPICAL GUARDRAIL INSTALLATIONS
7. SEPIA 025 INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1
8. SEPIA 027 STEEL BEAM GUARDRAIL "W" BEAM
9. SEPIA 028 STEEL GUARDRAIL POSTS
10. SEPIA 029 GUARDRAIL END TREATMENT TYPE 1
11. SEPIA 032 DELINEATOR FOR GUARDRAIL
12. SEPIA 033 GUARDRAIL SYSTEM TRANSITION
13. SEPIA 039 TYPICAL ENTRANCE RAMP MARKINGS
14. SEPIA 040 TYPICAL EXIT RAMP MARKINGS
15. SEPIA 041 TYPICAL EXIT RAMP MARKINGS
16. SEPIA 045 TYPICAL MARKINGS FOR GORE AREAS

GENERAL NOTE:

165 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.

444 ASPHALT PAVEMENT RIDE QUALITY

PAVEMENT RIDEABILITY REQUIREMENTS, IN ACCORDANCE WITH SECTION 410 OF THE STANDARD SPECIFICATIONS, SHALL APPLY ON THIS PROJECT. CATEGORY A SHALL APPLY.

650 STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-3670

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

THE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS 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 SPECIFIED ELSEWHERE IN THE PROPOSAL.

SPECIAL NOTES INCLUDED IN THE PROPOSAL

1. EROSION CONTROL
2. INLAID PAVEMENT MARKERS
3. LONGITUDINAL PAVEMENT JOINT ADHESIVE
4. COMPACTION OF ASPHALT MIXTURE
5. BARCODE LABEL

6. FIXED COMPLETION DATE
7. FOG SEAL
8. INTELLIGENT COMPACTION
9. INFRARED TEMP. EQUIPMENT
10. CHANGEABLE MESSAGE BOARD
11. ELIMINATE TRANSVERSE JOINTS
12. EXPANSION DAM
13. LMC OVERLAY
14. WASTE AND BORROW SITE

TRAFFIC CONTROL PLAN

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STANDARD DRAWINGS, SPECIAL NOTES AND PROPOSAL.
2. THE ENGINEER AND THE CONTRACTOR, OR THEIR AUTHORIZED REPRESENTATIVES, SHALL REVIEW THE SIGNING BEFORE TRAFFIC IS ALLOWED TO USE ANY LANE CLOSURES, CROSSOVERS OR DETOURS. ALL SIGNING SHALL BE APPROVED BY THE ENGINEER BEFORE WORK CAN BE STARTED BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL SCHEDULE A REVIEW OF FINAL STRIPING PLANS PRIOR TO PLACEMENT WITH PROJECT TRAFFIC ENGINEER.
4. 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" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:
 - A. ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AND MARKINGS.
 - B. ALL FLAG PERSONS AND TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC AS SPECIFIED IN THESE NOTES, THE PLANS, THE MUTCD OR THE ENGINEER.
 - C. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, ALL GRADING AND NECESSARY DRAINAGE FOR THE TEMPORARY ROADWAY AND REMOVAL THEREOF WHEN IT IS NO LONGER NEEDED.
 - D. LANE CLOSURES, AT LOCATIONS OTHER THAN BRIDGE REHAB, AND ALL NECESSARY ITEMS AND WORK NECESSARY TO PERFORM THIS WORK.

5. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
6. THE CONTRACTOR SHALL MAINTAIN A TWO-LANE TRAVELED WAY WITH A MINIMUM LANE WIDTH OF 11 FEET. HOWEVER, DURING WORKING HOURS, ONE-WAY TRAFFIC MAY BE ALLOWED AT THE DISCRETION OF THE ENGINEER, PROVIDED ADEQUATE SIGNING AND A FLAG PERSON ARE AT THE LOCATION. THE CONTRACTOR SHALL USE TEMPORARY SIGNALS AND MAINTAIN ONE-LANE TRAVELED WAY WITH A MINIMUM LANE WIDTH OF 11 FEET AT THE BRIDGE REHAB.
7. THE CONTRACTOR SHALL COMPLETELY COVER ANY SIGNS, EITHER EXISTING, PERMANENT OR TEMPORARY, WHICH DO NOT PROPERLY APPLY TO THE CURRENT TRAFFIC PHASING, AND SHALL MAINTAIN THE COVERING UNTIL THE SIGNS ARE APPLICABLE OR ARE REMOVED.
8. IN GENERAL, ALL TRAFFIC CONTROL DEVICES SHALL BE PLACED STARTING AND PROCEEDING IN THE DIRECTION OF THE FLOW OF TRAFFIC AND REMOVED STARTING AND PROCEEDING IN THE DIRECTION OPPOSITE THE FLOW OF TRAFFIC.
9. ALL KENTUCKY DEPARTMENT OF HIGHWAYS SIGNS SHALL BE REMOVED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS ADVISED TO SCHEDULE SIGN REMOVAL WITH THE ENGINEER. SIGNS AND POSTS SHALL BE SEPARATED, BONDED ON PALLETS AND DELIVERED TO THE BREATHITT TRAFFIC BARN.
10. IF TRAFFIC SHOULD BE STOPPED DUE TO CONSTRUCTION OPERATIONS AND AN EMERGENCY VEHICLE ON AN OFFICIAL EMERGENCY RUN ARRIVES AT THE SCENE, THE CONTRACTOR SHALL MAKE THE PROVISIONS FOR THE PASSAGE OF THAT VEHICLE AS QUICKLY AS POSSIBLE.
11. THE CONTRACTOR'S VEHICLES SHALL ALWAYS MOVE WITH AND NOT AGAINST THE FLOW OF TRAFFIC. VEHICLES SHALL ENTER AND LEAVE WORK AREAS IN A MANNER WHICH NOT BE HAZARDOUS TO OR INTERFERE WITH NORMAL TRAFFIC. VEHICLES SHALL NOT PARK OR STOP EXCEPT WITHIN WORK AREAS DESIGNATED BY THE ENGINEER.
12. REMOVE ALL PAVEMENTS MARKING BY WATER BLASTING PROCESS TO THE SATISFACTION OF THE ENGINEER. THIS WORK IS INCIDENTAL TO BID ITEM "ASPHALT PAVEMENT MILLING & TEXTURING."

13. PAVEMENT DROP-OFF

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

- LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.
- TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE DROP-OFF, THEN DRUMS, PANEL, OR POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS. BARRICADES MAY BE USED IF THE DROP-OFF IS GREATER THAN 12 INCHES.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

14. PAYMENT WILL BE ALLOWED FOR DGA, CSB AND OTHER SUITABLE MATERIALS USED FOR WEDGING.

15. THE CONTRACTOR SHALL PROVIDE PORTABLE FLASHING ARROW PANEL AT THE LOCATIONS INDICATED ON THE STANDARD DRAWING "LANE CLOSURE TWO-LANE HIGHWAY" AND SHALL MEET THE REQUIREMENTS SPECIFIED IN THE CURRENT STANDARD DRAWINGS. THE PORTABLE FLASHING ARROWS SHALL BE MOUNTED ON TRAFFIC-WORTHY CARRIAGES THAT MEET ALL APPLICABLE SAFETY STANDARDS.

16. THE CONTRACTOR SHALL HAVE AVAILABLE ONE RESERVE FLASHING ARROW TO BE PLACED IN OPERATION IN THE EVENT OF DAMAGE OR MECHANIC/ELECTRICAL FAILURE. NO DIRECT PAYMENT WILL BE ALLOWED FOR THE RESERVE UNIT. ALL FLASHING ARROWS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.

17. THE CONTRACTOR SHALL PROVIDE TWO WEEKS NOTIFICATION PRIOR TO ANY BRIDGE REHABILITATION WORK OR LANE CLOSURE. MESSAGE BOARDS SHALL BE PLACED AT CAMPTON AND HELECHEWA INTERCHANGES TO NOTIFY OVER-DIMENSION VEHICLES OF NARROW LANE AHEAD.

18. IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TRAFFIC CONTROL SCHEME AND CONSTRUCTION SCHEDULE AS OUTLINED IN THE PROJECT MAINTAIN OF TRAFFIC PLAN, HE/SHE SHALL PREPARE AN ALTERNATE PLAN AND PRESENT IT IN WRITING TO THE ENGINEER. THIS ALTERNATE PLAN CAN BE USED ONLY AFTER REVIEWED AND APPROVED BY THE DIVISION OF TRAFFIC, DESIGN AND CONSTRUCTION AND OTHER AGENCIES WHERE APPLICABLE.

EROSION CONTROL NOTES

1. ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.
2. THE CONTRACTOR SHALL CONDUCT HIS OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS/FENCES MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN.
3. THE REQUIRED VOLUME AT EACH SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:
 - UP GRADIENT AREAS NOT DISTURBED (ACRES).
 - UP GRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH (ACRES).
 - UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
 - UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT TRAPS (ACRES).
 - THE USE OF TEMPORARY MULCH IS ENCOURAGED.
4. SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOWS EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED. EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.
5. THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER BECOME ONE
 - HALF FULL AND PROPERLY DISPOSE OF MATERIAL AT SITES APPROVED BY THE RESIDENT ENGINEER.

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

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

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

II. MATERIALS

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

III. CONSTRUCTION

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

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

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

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

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

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

IV. MEASUREMENT

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

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

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

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

V. Basis of Payment

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

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

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

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

06/08/2012

SPECIAL NOTE FOR BRIDGE RESTORATION AND WATERPROOFING WITH CONCRETE OVERLAYS

- I. DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Machine prep the existing slab; (3) Complete full-depth and partial depth repairs as directed by the Engineer; (4) Repair/replace damaged and corroded reinforcing bars; (5) Place new concrete overlay and epoxy-sand slurry in accordance with Section 606; (6) Complete asphalt approach pavement; (7) Maintain and control traffic; and (8) Any other work specified as part of this contract.

All construction will be in accordance with Section 606 unless otherwise specified.

II. MATERIALS.

A. Latex Concrete. See Section 606.03.17.

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

C. Bituminous Asphalt. N/A. SEE PAVING SUMMARY

D. Epoxy-Sand Slurry. See Section 606.03.10.

III. CONSTRUCTION.

A. Machine prep of existing slab. Remove concrete from existing slab to a depth of at least ¼" below the existing surface, and remove all patches completely, in accordance with the requirements of Section 606.03.03.

B. Partial Depth Slab Repair and Latex Overlay. Remove areas determined to be unsound by the Engineer via hydrodemolition or via hand held jackhammers weighing less than 45lbs in accordance with Section 606.02.10 D. Repair/Replace all damaged or severely corroded reinforcing bars prior to partial depth repair operation. The Department will not measure material removal and will consider this work incidental to the bid item "PARTIAL DEPTH PATCHING". Mix and place Latex Modified Concrete Overlay in accordance with Sections 606.03.08 and 606.03.17.

C. Asphalt Approach Pavement. Mill each existing asphalt approach for a distance of 100' from the bridge end. Remove the bituminous material uniformly by making an edge key, so as to provide a smooth transition to the finished bridge when a new bituminous overlay of compacted depth of approximately 1½" is added to the approaches. The grinding depth may vary depending of the condition of the existing approach and final elevation of bridge end. Dispose of all removed material away from the site.

D. Surface Texturing. Texture the concrete surface of the overlay in accordance with Section 609.03.10.

IV. MEASUREMENT. See Section 606 and the following:

- A. Latex Modified Concrete for Overlay.** The Department will measure the quantity in cubic yards using the theoretical volume as follows for each bridge:
119B00042N (159'x 30'x 1.50") = 22.1 cuyd
- B. Latex Modified Concrete for Partial Depth Patching and variable thickness of Overlay.** The Department will measure the quantity in cubic yards by deducting the theoretical volume of bridge deck overlay (LMC) from the total volume (as indicated by the batch quantity tickets) of Concrete required to obtain the finished grade shown on the Plans or established by the Engineer.
- C. Machine Prep of Slab.** The Department will measure the machine preparation of the existing bridge deck in square yards, which shall include all labor, equipment, and material needed to complete this work.
- D. Steel Reinforcement.** The Department will measure any reinforcing steel necessary for the partial or full depth patch in pounds, which shall include all labor, equipment, and material needed to complete this work.
- E. Asphalt Approach Pavement.** The Department will measure the quantity in square yards, which shall include all labor, equipment, and material needed to complete this work. SEE PAVING SUMMARY.
- V. PAYMENT.** See Section 606 and the following:
- A. Latex Modified Concrete for Overlay.** The Department will make payment for the Latex Modified Concrete under bid item #08534 "CONCRETE OVERLAY – LATEX" for the quantity in cubic yards complete in place.
- B. Latex Modified Concrete for Partial Depth Patching and variable thickness of Overlay.** The Department will make payment for the Partial Depth Patching under bid item #24094EC "PARTIAL DEPTH PATCHING". Payment will be for the quantity per cubic yard complete in place.
- C. Machine Prep of Slab.** The Department will make payment for the removal of the existing overlay under bid item #08551 "MACHINE PREP OF SLAB". Payment will be for the square yard complete.
- D. Steel Reinforcement.** The Department will make payment for steel reinforcement, if necessary, under bid item #08150 "STEEL REINFORCEMENT". Payment will be at the unit price per pound.
- E. Asphalt Approach Pavement.** N/A. PAVEMENT QUANTITIES FOR APPROACH PAVEMENT ARE INCLUDED IN THE PAVING SUMMARY SHEET.

SPECIAL NOTE FOR ELIMINATING TRANSVERSE JOINTS ON BRIDGES

- I. **DESCRIPTION.** Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction.

Remove existing concrete and existing joint material to eliminate the transverse joint. Install additional reinforcing steel and place concrete.

- II. **MATERIALS.**
 - A. **Class "M" Concrete.** Use either "M1" or "M2". See Section 601.
 - B. **Steel Reinforcement.** Use Grade 60. See Section 602.
 - C. **Epoxy Bond Coat.** See Section 511.

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

- IV. **CONSTRUCTION.**
 - A. **Remove Existing Materials.** Remove the existing transverse joints, joint filler, and specified areas of concrete as shown on the plans, in accordance with Section 606.02.10 and 606.03.03, and as directed by the Engineer. Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department. Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Eliminate Transverse Joint".
 - B. **Additional Steel Reinforcement.** Furnish for this work steel reinforcing bars as shown on the plans. Splice these bars to the existing longitudinal reinforcement in the deck and curb/sidewalk in the areas of removed concrete to tie the slabs together as shown on the plans. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete.
 - C. **Place New Concrete.** Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

Place new Class "M" Concrete to the specified grade and finish to receive the new overlay or as shown on the plans. On the sidewalk and curb, place the new concrete to original grade and finish to match the existing curb/sidewalk.

- V. **MEASUREMENT.**
 - A. **Eliminate Transverse Joint.** The Department will measure the quantity in linear feet from plinth to plinth perpendicular to the centerline of the bridge.

B. Steel Reinforcement. See Section 602.

VI. PAYMENT.

A. Eliminate Transverse Joint. Payment at the contract unit price per linear foot is full compensation for furnishing equipment, labor, tools and materials needed to complete removal and disposal of the specified existing materials, cleaning and straightening of existing steel reinforcement, furnishing and installing the concrete, and all incidental items necessary to complete the work (except the overlay material if specified elsewhere in the contract) within the specified pay limits as indicated on the drawings.

B. Steel Reinforcement. See Section 602.

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

I. DESCRIPTION. Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highway's 2012 Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the attached detail drawings. Section references are to the Standard Specifications.

This work consists of the following: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing concrete and expansion device(s) and/or bridge ends; (3) Install armored edges and new concrete as specified and in accordance with the attached detail drawings; (4) Install new joint seals (where required); (5) Maintain and control traffic; and (6) Any other work specified as part of this contract.

II. MATERIALS.

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

B. Structural Steel. Use new, commercial grade steel suitable for welding. The Engineer will base acceptance on visual inspection. For armored edges that make up the 4" neoperene joint, use Steelflex Strip Seal expansion joint by DS Brown, or approved equal. To be approved, armored edge extrusions must be embedded.

C. Stud Anchors. The armored edge stud anchors are 3/4" x 6" embedded stud shear connectors conforming to ASTM A108, Grade 1015 (Nelson Studs or equal).

D. Steel Reinforcement. Use Grade 60. See Section 602.

E. Epoxy Bond Coat. See Section 511.

F. Pre-Compressed Horizontal Expansion Joint System. It shall have a cellular, or micro-cell, polyurethane foam impregnated with a hydrophobic acrylic emulsion, or a hydrophobic polymer. The polyurethane foam external facing shall be factory coated and cured with highway-grade, fuel resistant silicone or a highway-grade elastomeric coating at a width greater than the maximum joint expansion.

III. EQUIPMENT.

A. Hammers. See Section 606.02.10 B.

B. Sawing Equipment. See Section 606.02.10 C.

C. Hydraulic Impact Equipment. See Section 606.02.10 D.

IV. CONSTRUCTION.

A. Remove Existing Materials. Remove existing Expansion Dam, Bridge End, Armored Edges and specified areas of concrete as shown on the attached sketches. Remove debris and/or expansion joint filler as directed by the Engineer. . Clean and leave all existing steel reinforcement encountered in place. Damaged steel reinforcement will be repaired/replaced as directed by the Engineer at no additional cost to the Department.

Dispose of all removed material entirely away from the job site. This work is incidental to the contract unit price for "Expansion Joint Replacement" or "Armored Edge for Concrete".

B. Place New Concrete and Armored Edges. After all specified existing materials have been removed; place new armored edges to match the grade of the proposed overlay or to match the original grade (See attached detail drawings). Place the new Class "M" concrete to the scarified grade and finish to receive the new overlay or place the new Class "M" concrete to the original grade and finish with broom strokes drawn transversely from curb to curb.

All new structural steel shall be cleaned and painted in accordance with requirements of Section 607.03.23, except that surfaces to come in contact with concrete are not to be painted.

Blast clean all areas of existing concrete and structural steel to come in contact with new concrete until free of all laitance and deleterious substances immediately prior to the placement of the Class "M" Concrete. The surface areas of existing concrete to come in contact with the new Class "M" Concrete are to be coated with an epoxy bond coat immediately prior to placing new concrete in accordance with Section 511. The interfaces of the new and old concrete shall be as nearly vertical and horizontal as possible.

C. Additional Steel Reinforcement. Furnish for replacement, as directed by the Engineer, 1300 linear feet of #4 steel reinforcing bars in 20' lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Do not place any additional steel reinforcement above the height of the top row of Nelson Studs on the armored edges. Ensure that all exposed steel reinforcement is tied in accordance with Section 602.03.04 prior to pouring the new Class "M" concrete. Deliver unused bars to the Local County Maintenance Barn. Payment will be made in accordance with Section 602.

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

E. Pre-Compressed Horizontal Expansion Joint System. System shall be supplied in pre-compressed sticks for easy installation. System shall be installed in accordance with manufacturer's recommendations concerning approved adhesives, welds between sticks and appurtenances, and adhesion to concrete deck or armored edges. Joint seal is to be installed ½" recessed from the surface.

F. Shop Plans. Shop plans will not be required. The Contractor is responsible for obtaining field measurements and supplying properly sized materials to complete the work.

V. MEASUREMENT.

A. Expansion Joint Replacement – 2". The Department will measure the quantity in linear feet from gutterline to gutterline along the centerline of the joint.

B. Armored Edge for Concrete. The Department will measure the quantity in linear feet from gutterline to gutterline along the face of the bridge end.

C. Steel Reinforcement. See Section 602.

VI. PAYMENT.

A. Expansion Joint Replacement – 2". Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and

installing the new armored edges, concrete, neoprene strip seal or pre-compressed horizontal expansion joint system, and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.

- B. Armored Edge for Concrete.** Payment at the contract unit price per linear foot is full compensation for removing specified existing materials, furnishing and installing the new armored edges, concrete and all incidental items necessary to complete the work (except the overlay material) within the specified pay limits as specified by this note and as shown on the attached detail drawings.
- C. Steel Reinforcement.** See Section 602.

NOTES FOR BRIDGE PIER AND SOFFIT CONCRETE PATCHING

These Notes or designated portions thereof, apply where so indicated on the plans, proposals or bidding instruction.

- I. DESCRIPTION.** Perform all work in accordance with the Department's 2012 Standard Specifications, and applicable Supplemental Specifications, the attached sketches, and these Notes. Section references are to the Standard Specifications.

This work consists of: (1) Furnish all labor, materials, tools, and equipment; (2) Remove existing spalled/delaminated concrete; (3) Prepare the existing surface for concrete patching; (4) Place hook fasteners and welded wire fabric over surfaces to be repaired (where applicable); (5) Apply concrete patching as specified by this note and as shown on the attached detail drawings; (6) Finish and cure the new Concrete Patches; (7) Maintain & control traffic; and, (8) Any other work specified as part of this contract.

II. MATERIALS.

- A. Concrete.** Approved Concrete Product for Vertical and Overhead Repair Patch.
B. Steel Reinforcement. Use Grade 60. See Section 602
C. Welded Steel Wire Fabric (WWF). Conform to Section 811
D. Hook Fasteners. Use commercial grade galvanized hook fasteners. Minimum 3/16" diameter.

III. CONSTRUCTION.

- A. Concrete Removal and Preparation.** The Contractor, as directed by the Engineer shall locate and remove all loose, spalled, deteriorated and delaminated concrete. Sounding shall be used to locate delaminated areas. Care shall be exercised not to damage areas of sound concrete or reinforcing steel during concrete removal operations. Unless specifically *directed by the Engineer*, depth of removal shall not exceed 6 inches. Concrete removal shall be in accordance with a sequence approved by the Engineer.

Concrete removal shall be accomplished by chipping with hand picks, chisels or light duty pneumatic or electric chipping hammers (not to exceed 15 lbs.). If sound concrete is encountered before existing reinforcing steel is exposed, the surface shall be prepared and repaired without further removal of the concrete. When corroded reinforcing steel is exposed, concrete removal shall continue until there is a minimum $\frac{3}{4}$ inch clearance around the exposed, corroded reinforcing bar. Care shall be taken to not damage bond to adjacent non-exposed reinforcing steel during concrete removal processes.

The perimeter of all areas where concrete is removed shall be tapered at an approximately 45° angle, except that the outer edges of all chipped areas shall be saw cut to minimum depth of $\frac{3}{4}$ inch to prevent featheredging unless otherwise approved by the Engineer.

After all deteriorated concrete has been removed; the repair surface to receive concrete patching shall be prepared by abrasive blast cleaning. Abrasive blast cleaning shall remove all fractured surface concrete and all traces of any unsound

material or contaminants such as oil, grease, dirt, slurry, or any materials which could interfere with the bond of freshly placed concrete.

The Contractor shall dispose all removed material off State Right Of Way in an approved site.

- B. Steel Reinforcement.** All corroded reinforcing steel exposed during concrete removal shall have corrosion products removed by abrasive grit blasting or wire brush whichever is more appropriate. Furnish for replacement, as directed by the Engineer, additional linear feet of steel reinforcing bars ½” diameter by 20-foot lengths. Place these bars in areas deemed by the Engineer to require additional reinforcement. Field cutting and bending is permitted. Deliver unused bars to the nearest County Maintenance Barn. Payment will be made in accordance with Section 602.

Reinforcing steel displaying deep pitting or loss of more than 20 percent of cross-sectional area shall be removed and replaced. Such bars shall be placed in accordance with the recommendations of ACI 506R, Sections 5.4 and 5.5. In particular, bars shall not be bundled in lapped splices, but shall be placed such that the minimum spacing around each bar is three times the maximum aggregate size to allow for proper encapsulation with concrete patching.

Intersecting reinforcing bars shall be tightly secured to each other using tie wire and adequately supported to minimize movement during concrete placement.

Welded wire fabric (WWF) shall be provided as shown on the attached sketches and at each repair area larger than 1 square foot if the depth of the repair exceeds 3 inches from the original dimension of the repaired member. Sheets of adjoining WWF shall be lapped by at least one and one-half spaces at all intersections, in both directions, and be securely fastened. WWF fabric shall be supported no closer than ½ inch to the prepared concrete surface and shall have a minimum concrete cover of 1.5 inches.

WWF shall be fastened to preset anchors on a grid not more than 12 inches square. Large knots of tie wire which could result in sand pockets and voids during patching shall be avoided.

- C. Hook Fasteners.** Hook fasteners shall be positioned at the spacing as stated above or as directed by the Engineer. Any given area shall have a minimum of four anchors. The WWF shall not move or deform excessively during concrete patching. Maximum hook fastener spacing shall not exceed 2 feet on a grid pattern over the entire repair area.

Hook fasteners shall be of commercial grade galvanized steel with a minimum diameter of 3/16”. They may be mechanically set or grouted, as approved by the Engineer.

The Department will randomly select hook fasteners to be tested to verify pullout force is sufficient. If any anchors fail to meet the minimum acceptable pullout value, corrective measures shall be taken by the Contractor and further testing will be conducted.

- D. Concrete Patching.** Place and finish the new concrete for the patching area in accordance with the manufacturer's recommendations, as shown on the attached detail drawings, or as directed by the Engineer. The Engineer shall approve the Contractor's method of placing and consolidating the concrete prior to the beginning of this operation.
- E. Curing.** On completion of finishing operation, patching concrete shall immediately be prevented from drying out and cracking by fogging, wetting, and/or any appropriate method approved by the Engineer. Curing shall continue for duration recommended by the product manufacturer.

Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall 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. Quantities given are approximate. The quantity for "Concrete Patching Repair" shall be bid with the contingency that quantities may be increased, decreased, or eliminated by the Engineer. Dispose of all removed material entirely away from the job site as approved by the Engineer. This work is incidental to the contract unit price for "Concrete Patching Repair".

IV. MEASUREMENT

- A. Concrete Patching.** The Department will measure the quantity per square feet of each area restored.
- B. Steel Reinforcement.** See Section 602.
- C. Welded Wire Fabric & Hook Fasteners.** Welded Wire Fabric and Hook Fasteners will not be measured for payment, but shall be considered incidental to "Concrete Patching Repair".

V. PAYMENT

- A. Concrete Patching Repair.** Payment at the contract unit price per square feet is full compensation for the following: (1) Furnish all labor, materials, tools, equipment; (2) preparation of specified bents including removing and disposing of specified existing materials; (3) place, finish and cure new concrete patches; and (4) all incidentals necessary to complete the work as specified by this note and as shown on the attached detail drawings.
- B. Steel Reinforcement.** See Section 602.

The Department will consider payment as full compensation for all work required by these notes and detail drawings.

SPECIAL NOTE FOR INLAID PAVEMENT MARKERS

I. DESCRIPTION

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

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

II. MATERIALS

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

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

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

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

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

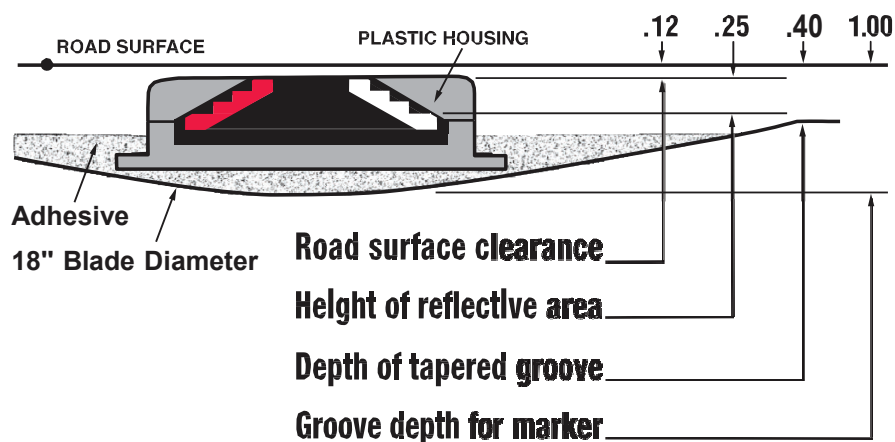
III. CONSTRUCTION

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

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

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

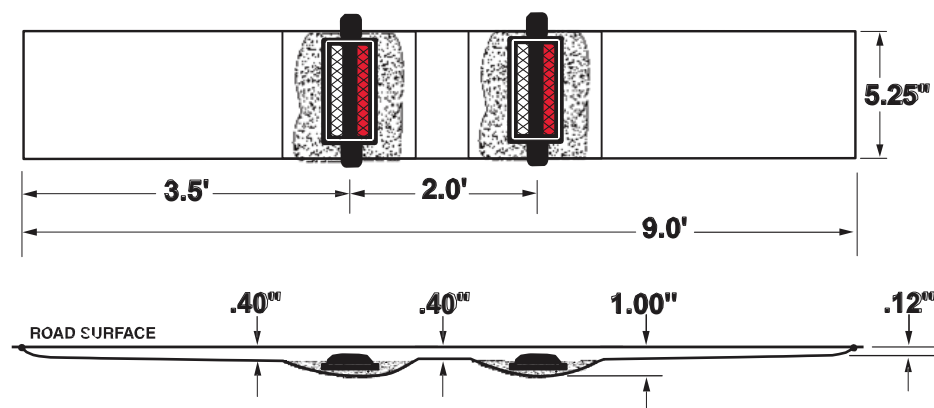
Prepare the pavement surfaces, and install the markers in the recessed groove according to the drawing below. Use an approved snowplowable epoxy adhesive. Ensure that the adhesive bed area is equal to the bottom area of the marker, and apply adhesive in sufficient quantity to force excess out around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



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

Inlaid Pavement Markers
Page 3 of 4

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

Inlaid Pavement Markers
Page 4 of 4

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.

October, 2018

SPECIAL NOTE FOR FOG SEAL

Except as provided herein, conform to all requirements of the current Standard Specifications for Road and Bridge Construction. Section references are to the Standard Specifications. For chip seal applications, use an approved fog seal material applied in two passes in opposite directions at a rate of 0.05 – 0.08 gallons per square yard with a total rate of 0.10-0.16 gallons per square yard. The emulsion used for fog sealing chip application shall be diluted between 28-32%.

For all other applications, use undiluted approved fog seal material at a rate of 0.12-0.16 gallons per square yard. The recommended emulsions are to be in accordance with AASHTO M208 or M140.

Before applying the fog seal, sweep the chip seal or roadway to remove any loose aggregate, mud, dirt, dust, and other caked material or loose foreign material that may have accumulate on the roadway. Uniformly apply the asphalt emulsion with an asphalt distributor or approved equipment in accordance with Section 406.03.03b except apply at the rates specified herein. Contrary to section 406 of the Standard Specification, material shall maintain a temperature range of 120° to 180° F during application. The fog seal shall be applied when air temperature is at least 50 degrees F and rising and a minimum surface temperature of 70 degrees F.

Any water added to the emulsion must meet the requirements of Section 803 of the Standard Specifications. If placed over a chip/scrub seal treatment, the application shall be a minimum of 5 to a maximum of 10 calendar days after the treatment application.

Adjust operations as necessary and as directed by the engineer to achieve complete, uniform coverage of the application. Correct areas of incomplete coverage by hand spraying or by a second application of material as approved by the engineer. Any fog seal material applied in excess of the requirements shall be covered or removed with a blotter course dry sand as directed by the Engineer.

Payment will be based on the accepted, weighed tons of diluted emulsion applied as specified. Payment per ton of “Asphalt Emulsion for Fog Seal” will be full compensation for all labor, materials, and equipment necessary to prepare the surface for treatment, application of the emulsion, corrective work, and protection of the emulsion until cured. Dry sand used as a blotter course due to excessive use of fog seal will not be considered for payment. Liquid asphalt and fuel adjustments will not be considered for payment for all fog seal applications.

Application Rates of Material.

Properties	Minumum	Maximium
Application rate of emulsion for chip seal Fog seal application required in both directions	0.05	0.08
Application rate of emulsion for non chip seal	0.12	0.16
Emulsion temperature, F	120	180

SPECIAL NOTE FOR INTELLIGENT COMPACTION OF ASPHALT MIXTURES

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

1.0 DESCRIPTION. Provide and use Intelligent Compaction (IC) Rollers for compaction of all asphalt mixtures.

2.0 MATERIALS AND EQUIPMENT. In addition to the equipment specified in Subsection 403.02, a minimum of one (1) IC roller is to be used on the project at all times, two (2) IC rollers will be required when the paving train consists of three (3) or more rollers. The Contractor is to only the IC roller(s) for compaction as the breakdown and/or intermediate roller(s). All IC rollers will meet the following minimum characteristics:

- 1) Are self propelled double-drum vibratory rollers equipped with accelerometers mounted in or about the drum to measure the interactions between the rollers and compacted materials in order to evaluate the applied compactive effort. The IC rollers must have the approval of the Engineer prior to use. Examples of rollers equipped with IC technology can be found at www.IntelligentCompaction.com.
- 2) Are equipped with non-contact temperature sensors for measuring pavement surface temperatures.
- 3) The output from the roller is designated as the IC-MV which represents the stiffness of the materials based on the vibration of the roller drums and the resulting response from the underlying materials.
- 4) Are equipped with integrated on-board documentation systems that are capable of displaying real-time color-coded maps of IC measurement values including the stiffness response values, location of the roller, number of roller passes, machine settings, together with the material temperature, speed and the frequency and amplitude of roller drums. Ensure the display unit is capable of transferring the data by means of a USB port.
- 5) Are equipped with a mounted Global Positioning System GPS radio and receiver either a Real Time Kinematic (RTK-GPS) or Global Navigational Satellite System (GNSS) units that monitor the location and track the number of passes of the rollers. Accuracy of the positioning system is to be a minimum of 12 inches.

3.0 WORK PLAN. Submit to the Engineer an IC Work Plan at the Preconstruction Conference and at least 2 weeks prior to the beginning construction. Describe in the work plan the following:

1. Compaction equipment to be used including:

- Vendor(s)
- Roller model(s),
- Roller dimensions and weights,
- Description of IC measurement system,
- GPS capabilities,
- Documentation system,
- Temperature measurement system, and
- Software.

2. Roller data collection methods including sampling rates and intervals and data file types.

3. Transfer of data to the Engineer including method, timing, and personnel responsible. Data transfer shall be provided by a real time cloud data collecting and distribution system (ex. Visionlink). The Contractor will provide the Cabinet with any vendor specific software, user id, passwords, etc. needed to access the data through this service, cost of this access is incidental to the IC bid item.

4. Training plan and schedule for roller operators, project foreman, project surveyors, and Cabinet personnel; including both classroom and field training. Training should be conducted at least 1 week before beginning IC

construction. The training is to be performed by a qualified representative(s) from the IC Roller manufacture(s) to be used on the project. This training shall include how to access and use the data from the cloud data source.

4.0 CONSTRUCTION. Do not begin work until the Engineer has approved the IC submittals and the IC equipment.

Follow requirements established in Section 400 for production and placement, materials, equipment, acceptance plans and adjustments except as noted or modified in this Specification. Provide the Engineer at least one day's notice prior to beginning construction or prior to resuming production if operations have been temporarily suspended. Ensure paving equipment complies with all requirements specified in Section 400. The IC roller temperatures will be evaluated by the Department with the data from a Paver Mounted Infrared Temperature Gauge.

A. Pre-Construction Test Section(s) Requirements

1. Prior to the start of production, ensure the proper setup of the GPS, IC roller(s) and the rover(s) by conducting joint GPS correlation and verification testing between the Contractor, GPS representative and IC roller manufacturer using the same datum.

1. Ensure GPS correlation and verification testing includes the following minimum processes:

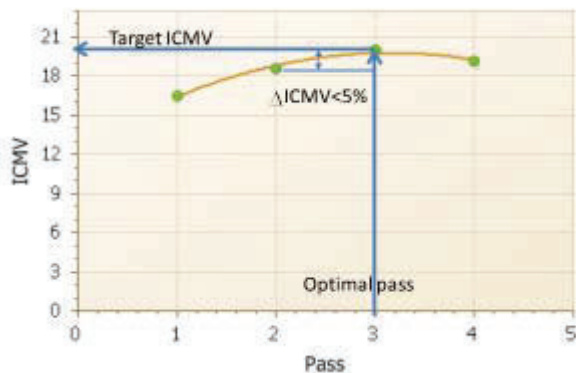
- a. Establish the GPS system to be used either one with a base station or one with mobile receivers only. Ensure all components in the system are set to the correct coordinate system; then,
 - b. Verify that the roller and rover are working properly and that there is a connection with the base station; then,
 - c. Record the coordinates of the two edges where the front drum of the roller is in contact with the ground from the on-board, color-coded display; then,
 - d. Mark the locations of the roller drum edges and move the roller, and place the mobile receiver at each mark and record the readings; then,
2. Compare coordinates between the roller and rover receivers. If the coordinates are within 12.0 in. of each other, the comparison is acceptable. If the coordinates are not within 12.0 in., diagnose and perform necessary corrections and repeat the above steps until verification is acceptable.
3. Do not begin work until acceptable GPS correlation and verification has been obtained.
4. The Contractor and the Department should conduct random GPS verification testing during production to ensure data locations are accurate. The recommended rate is once per day with a requirement of at least once per week.
5. All acceptance testing shall be as outlined in Standard Specifications section 400.

B. Construction Test Section(s) Requirements

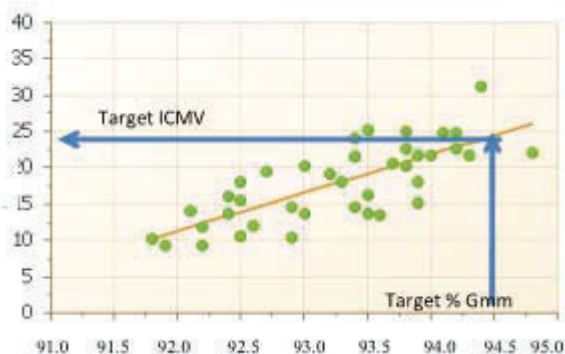
Construct test section(s) at location(s) agreed on by the Contractor and the Engineer within the project limits. The test section is required to determine a compaction curve of the asphalt mixtures in relationship to number of roller passes and to the stiffness of mixture while meeting the Department in-place compaction requirements. All rollers and the respective number of passes for each is to be determined via control strip each time a material change, equipment change or when the Engineer deems necessary.

Conduct test section(s) on every lift and every asphalt mixture. Ensure test section quantities of 500 to 1,000 tons of mainline mixtures. Operate IC rollers in the low to medium amplitude range and at the same settings (speed, frequency) throughout the section while minimizing overlapping of the roller, **the settings are to be used throughout the project with no changes.** After each roller pass, the qualified technician from the contractor observed by the Department will use a nondestructive nuclear gauge that has been calibrated to the mixture to estimate the density of the asphalt at 10 locations uniformly spaced throughout the test section within the width of a single roller pass. The density readings and the number

of roller passes needed to achieve the specified compaction will be recorded. The estimated target density will be the peak of the average of the nondestructive readings within the desired compaction temperature range for the mixture. The IC roller data in conjunction with the Veda software will create an IC compaction curve for the mixture. The target IC-MV is the point when the increase in the IC-MV of the material between passes is less than 5 percent on the compaction curve. The IC compaction curve is defined as the relationship between the IC-MV and the roller passes. A compaction curve example is as follows:



Subsequent to the determination of the target IC-MV, compact an adjoining > 250 < 500 tons section using same roller settings and the number of estimated roller passes and allow the Department to verify the compaction with the same calibrated nondestructive nuclear gauge following the final roller pass. **The Department will obtain density readings at 10 locations (No cores for calibration are to be taken in the surface layer, use non-destructive density results only!!)** uniformly spaced throughout the test section within the width of the single roller. Obtain GPS measurement of the core locations with a GPS rover. Use the Veda software to perform least square linear regression between the core data and IC-MV in order to correlate the production IC-MV values to the Department specified in-place air voids. A sample linear regression curve example is as follows.



C. Construction Requirements

Use the IC roller on all lifts and types of asphalt within the limits of the project, with the exception of asphalt drainage blanket.

Ensure the optimal number of roller passes determined from the test sections has been applied to a minimum coverage of 80% of the individual IC Construction area. Ensure a minimum of 75% of the individual IC Construction area meets the target IC-MV values determined from the test sections.

Do not continue paving operations if IC Construction areas not meeting the IC criteria are produced until they have been investigated by the Department. Obtain the Engineer's approval to resume paving operations. Non-IC rollers are allowed to be used as the third roller on the project; one of the breakdown or the finish rollers is to be equipped with IC technology.

IC Construction areas are defined as subsections of the project being worked continuously by the Contractor. The magnitude of the IC Construction areas may vary with production but must be at least 750 tons per mixture for evaluation. Partial IC Construction areas of < 750 tons will be included in the previous area evaluation. IC Construction areas may extend over multiple days depending on the operations.

The IC Construction Operations Criteria does not affect the Department's acceptance processes for the materials or construction operations

5.0 MEASUREMENT. The Department will measure the total tons of asphalt mixtures compacted using the IC roller(s). Compaction is to be performed by a minimum of one (1) IC roller for a two (2) roller operation and a minimum of two (2) IC rollers when three (3) or more rollers are used for compaction. Material compacted by rollers not equipped with properly functioning IC equipment will not be accepted for payment of the bid item asphalt mixtures IC rolled. Use of non-IC rollers can be accepted on small areas due to equipment malfunctions at the written approval of the Engineer. Paving operations should be suspended for equipment malfunctions that will extend over three days of operation.

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

1. Payment is full compensation for all work associated with providing IC equipped rollers, transmission of electronic data files, two copies of IC roller manufacturer software, and training.
2. Delays due to GPS satellite reception of signals to operate the IC equipment or IC roller breakdowns will not be considered justification for contract modifications or contract extensions.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24781EC	Intelligent Compaction for Asphalt	TON

SPECIAL NOTE FOR PAVER MOUNTED TEMPERATURE PROFILES

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

1.0 DESCRIPTION. Provide a paver mounted infrared temperature equipment to continually monitor the temperature of the asphalt mat immediately behind all paver(s) during the placement operations for all mainline pavements (including ramps for Interstates and Parkways) within the project limits. Provide thermal profiles that include material temperature and measurement locations.

2.0 MATERIALS AND EQUIPMENT. In addition to the equipment specified in Subsection 403.02 Utilize a thermal equipment supplier that can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verification, and data management and processing as needed during the Project to maintain equipment within specifications and requirements.

Provide operator settings, user manuals, required viewing/export software for analysis. Ensure the temperature equipment will meet the following:

(A) A device with one or more infrared sensors that is capable of measuring in at least 1 foot intervals across the paving width, with a minimum width of 12 feet, or extending to the recording limits of the equipment, whichever is greater. A **Maximum of two (2)** brackets are allowed in the influence area under the sensors. A temperature profile must be made on at least 1 foot intervals longitudinally down the road:

(B) Infrared sensor(s):

(1) Measuring from 32°F to 400°F with an accuracy of $\pm 2.0\%$ of the sensor reading.

(C) Ability to measure the following:

(1) The placement distance using a Global Positioning System (GPS) or a Distance Measuring Instrument (DMI) and a Global Positioning System (GPS).

(2) Stationing

(D) GPS: Accuracy ± 4 feet in the X and Y Direction

(E) Latest version of software to collect, display, retain and analyze the mat temperature readings during placement. The software must have the ability to create and analyze:

(1) Full collected width of the thermal profiles,

(2) Paver speed and

(3) Paver stops and duration for the entire Project.

(F) Ability to export data automatically to a remote data server ("the cloud").

At the preconstruction meeting, provide the Department with rights to allow for web access to the data file location.

This web-based software must also provide the Department with the ability to download the raw files and software and to convert them into the correct format.

(G) The thermal profile data files must provide the following data in a neat easy to read table format.

(1) Project information including Road Name and Number, PCN, Beginning and Ending MPs.

(2) IR Bar Manufacturer and Model number

(3) Number of Temperature Sensors (N)

(4) Spacing between sensors and height of sensors above the asphalt mat

(5) Total number of individual records taken each day (DATA BLOCK)

(a) Date and Time reading taken

(b) Latitude and Longitude

(c) Distance paver has moved from last test location

(d) Direction and speed of the paver

(e) Surface temperature of each of the sensors

3.0 CONSTRUCTION. Provide the Engineer with all required documentation at the pre-construction conference.

(A) Install and operate equipment in accordance with the manufacturer's specifications.

(B) Verify that the temperature sensors are within $\pm 2.0\%$ using an independent temperature device on a material of known temperature. Collect and compare the GPS coordinates from the equipment with an independent measuring device.

(1) Ensure the independent survey grade GPS measurement device is calibrated to the correct coordinate system (using a control point), prior to using these coordinates to validate the equipment GPS.

(2) The comparison is considered acceptable if the coordinates are within 4 feet of each other in the X and Y direction.

(C) Collect thermal profiles on all Driving Lanes during the paving operation and transfer the data to the "cloud" network or if automatic data transmission is not available, transfer the data to the Engineer at the end of daily paving.

(D) Contact the Department immediately when System Failure occurs. Daily Percent Coverage will be considered zero when the repairs are not completed within two (2) working days of System Failure. The start of this two (2) working day period begins the next working day after System Failure.

(E) Evaluate thermal profile segments, every 150 feet, and summarize the segregation of temperature results. Results are to be labeled as Minimal 0°-25°F, Moderate 25.1°-50°F and Severe >50°. Severe readings over 3 consecutive segments or over 4 or more segments in a day warrant investigation on the cause of the differential temperature distribution.

4.0 MEASUREMENT. The Department will measure the total area of the pavement lanes mapped by the infrared scanners. Full payment will be provided for all lanes with greater than 85% coverage. Partial payment will be made for all areas covered from 50% coverage to 85% coverage at the following rate Coverage area percentage X Total bid amount. And area with less than 50% coverage will not be measured for payment.

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

1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.
2. Delays due to GPS satellite reception of signals or equipment breakdowns will not be considered justification for contract modifications or contract extensions.

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT

GENERAL NOTES

SPECIFICATIONS: All references to the Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO Specifications are to the current edition of the AASHTO LRFD Bridge Design Specs, with Interims.

DESIGN LOAD: This bridge superstructure is designed for KY HL-93 Live Load. The KY HL-93 Live Load is arrived at by increasing the standard HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%. The substructures are designed for a H20-44 Live load.

REINFORCEMENT: Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2", unless otherwise noted. Epoxy coat bars designated by suffix (e) in accordance with Section 81.10 of the Standard Specifications. Use stirrup bend diameters for bars designated by suffix (s) in a Bill of Reinforcement.

CONCRETE: Class "AA" is to be used throughout the new superstructure. Class "A" is to be used on the End Bents and Piers.

BEVELED EDGES: Bevel all exposed edges $\frac{3}{4}$ ", unless otherwise noted.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the structure in accordance with the plans and specifications. Material, labor or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor or anything else required to complete the structure.

SHOP DRAWINGS: Submit shop drawings that are required by the plans and specifications directly to the Division of Structural Design. If any changes in the design plans are proposed by a fabricator or supplier, submit those changes to the Department through the Contractor.

DIMENSIONS: Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal dimensions.

SUPERSTRUCTURE SLAB: Ensure the entire superstructure slab is poured continuously, out to out, before allowing any concrete to set.

FUTURE WEARING SURFACE: This structure is designed for a 60 psf future wearing surface load.

DESIGN STRESSES: Concrete Class "A": 3500 psi.
Concrete Class "AA": 4000 psi.
Steel Reinforcement: 60000 psi.

DESIGN METHOD: All reinforced concrete members are designed by the LRFD method as specified in the current AASHTO Specifications.

ON-SITE INSPECTION: Each contractor submitting a bid for this work shall make a thorough inspection of the project site prior to submitting a bid and shall be thoroughly familiarized with existing conditions so that 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 of Highway.

DAMAGE TO THE SUBSTRUCTURES: The contractor is responsible for any and all damages to the existing substructures during reconstruction even to the replacement of the entire substructure, should they be damaged due to this actions.

CONCRETE REMOVAL: The pier columns and other concrete where the existing reinforcement is to be reused, the contractor shall use hand held jack hammers or hydro-demolition techniques to remove concrete with out damaging the existing reinforcement that is to remain in place. Any concrete removed outside the detailed limits shall be replaced at the contractor's expense. The contractor shall make a saw cut at the removal limits to form a neat construction joint. All costs of this procedure are included in the price bid for Remove Superstructure.

DRILLING AND GROUTING: In accordance with Section 826 of the specifications, drill holes to a depth as shown herein these holes and apply a Type V epoxy bonding adhesive in the holes. Also apply a Type V epoxy bonding material to the interface between the existing concrete and the new concrete prior to placing the new concrete. All costs associated with this work shall be incidental to the unit price bid for Class "A" concrete.

EXISTING REINFORCING STEEL: The cost of cutting, bending and cleaning existing reinforcing steel is to be incidental to the lump sum bid for Remove Existing Superstructure.

REMOVE SUPERSTRUCTURE: Include in the lump sum bid for Remove Superstructure the cost of labor, materials, and equipment with the following exceptions of the existing superstructure as detailed herein in accordance with Section 203 of the Specifications. Also include in this lump sum bid the cost of any required excavation and subsequent backfilling (including materials, labor, equipment, etc.) behind the end bents. The cost of removing portions of the piers shall be included in the unit price bid for Remove Superstructure.

MASONRY SURFACE FINISH: All areas identified in the specifications shall receive a masonry coating. All areas of existing concrete shall be blast clean before applying a masonry coating. All cost to blast clean shall be included in the unit price bid for masonry coating.

ORIGINAL DRAWING NUMBER: Refer to Drawing Number 15360 for original plans.

DIMENSIONS AND ELEVATIONS: All dimensions and elevations given in these plans are based on field surveyed data and dimensions from the old plans. Prior to beginning work or ordering any materials, the contractor shall verify all dimensions and elevations. No claim shall be honored by KYTC regarding site conditions.

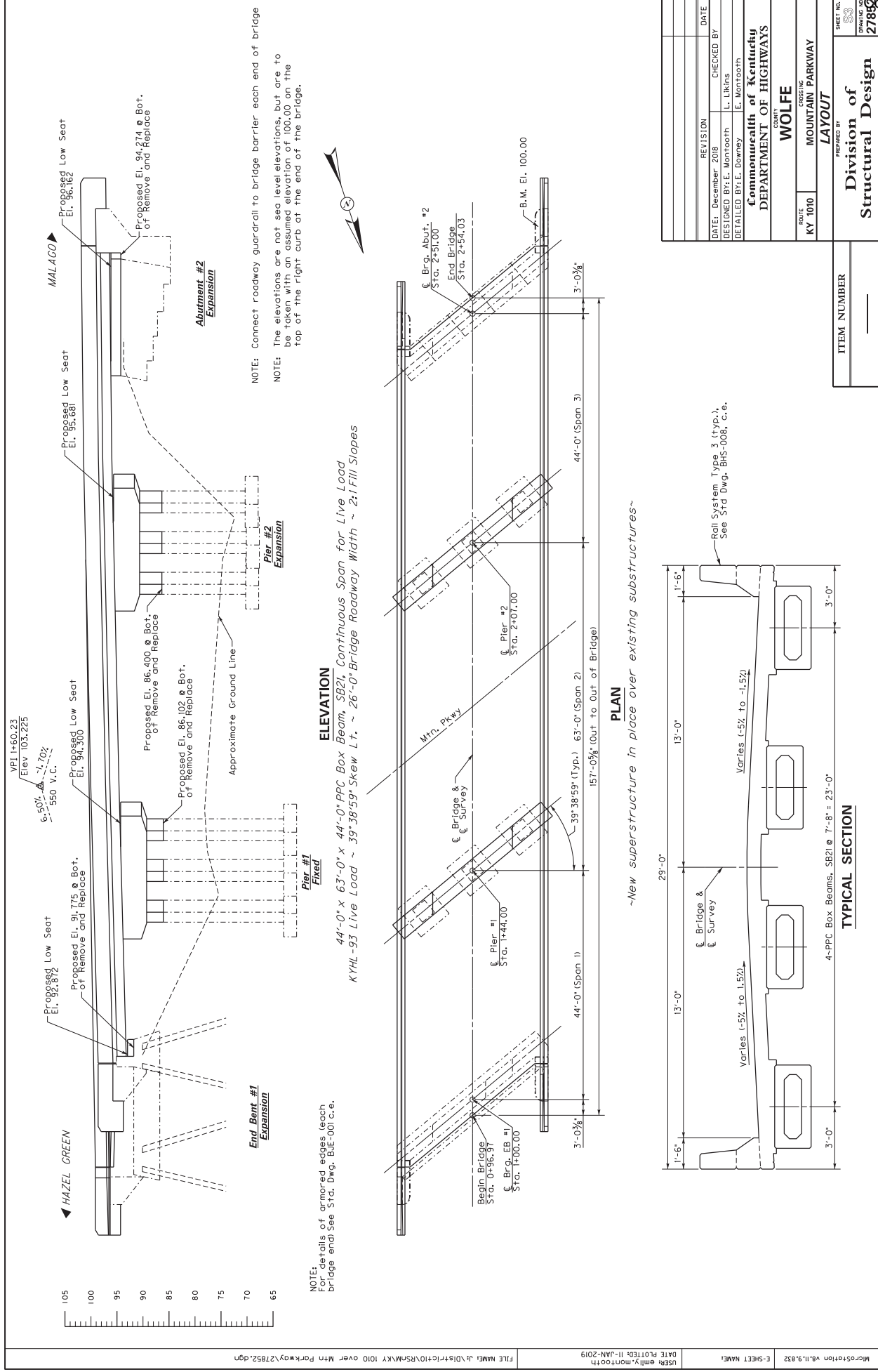
EXISTING HANDRAIL: Remove and relocate the existing aluminum handrail as directed by the Engineer. All costs to remove, deliver to a location as specified by the Engineer, or disposal fees shall be incidental to the lump sum bid for Remove Existing Superstructure.

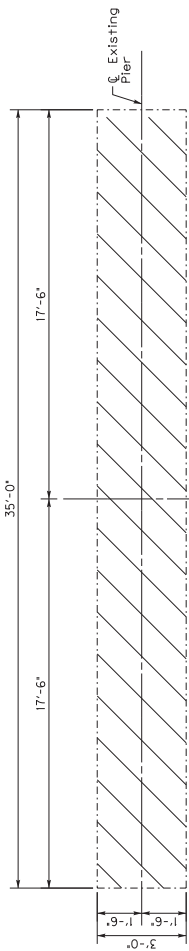
BRIDGE OVERLAY APPROACH PAVEMENT: The unit price bid for bridge overlay approach pavement shall include all rock, DGA, leveling and wedging, edge keys, and the base and surface courses of asphalt pavement as directed by the Engineer to bring the roadway pavement structure back to the surface of the bridge deck and provide a smooth riding surface and transition from the roadway to the bridge. This work in the unit price bid for this bid item.

The following abbreviations may have been used in the preparation of these plans:

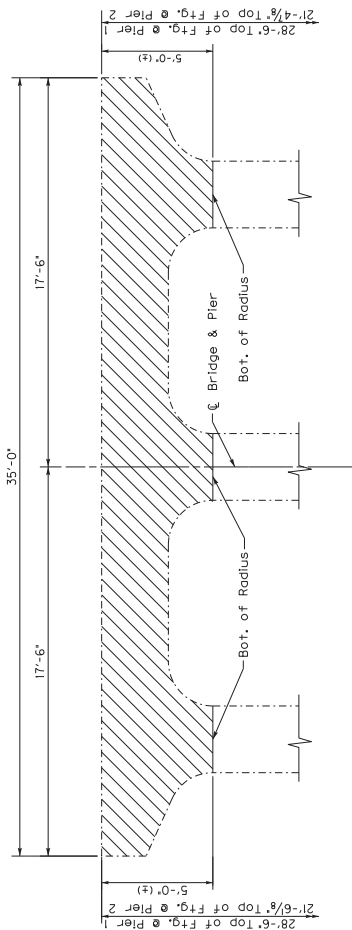
bet. Between
b. f. Back Face
b. o. f. Bottom of Footing
bot. Bottom
brg. Bearing
brg. to Center Bearing to Center
C. to C. Current Edition
C. Y. Cubic Yard
Chd. Chord
CL Center Line
Clear Clear
Cl. Concrete
Conc. Concrete
Cu. Cubic
Dwg. Drawing
Each Face Each Face
Elev. Elevation
Eq. Equal
Est. Estimate
Ext. Exterior
F. for Face Face
f. f. Front Face
f. f. s. Front Side
ft. Feet
ft. Inside Diameter
Inch Inch
Int. Interior
Left Left
L Low Bridge Seat
LBS. Pounds
Meter Meter
Miles per Hour Miles per Hour
Mph Miles per Hour
Outside Diameter Outside Diameter
Opp. Opposite
Point of Curve Point of Curve
Perp. Perpendicular
Point of Intersection Point of Intersection
PPC Precast Prestressed Concrete
PPCDU Precast Prestressed Concrete Deck Unit
PSI Pounds per Square Inch
PT Point of Tangent
R Radius
Right Right
Reinforced Concrete Box Culvert Reinforced Concrete Deck Girder
Reinforced Concrete Deck Girder Reinforced Concrete Deck Girder
Road Road
Shoulder Shoulder
Spa. Spaces
Sta. Station
Std. Standard
Str. Straight
Tangent Tangent
Through Through
Top of Footing Top of Footing
Tot. Total
Typ. Typical
W.P. Working Point
Yd. Yard

SHEET NO. 27859	DRAWING NO. 27859
PREPARED BY GENERAL NOTES	
COUNTY WOLFE	
ROUTE KY 1010	
PROJECT MOUNTAIN PARKWAY	
DATE: December 2018 DESIGNED BY: E. Montooth CHECKED BY: L. Likins DETAILED BY: E. Montooth L. Likins	
DEPARTMENT OF HIGHWAYS COMMONWEALTH OF KENTUCKY	
ITEM NUMBER _____	



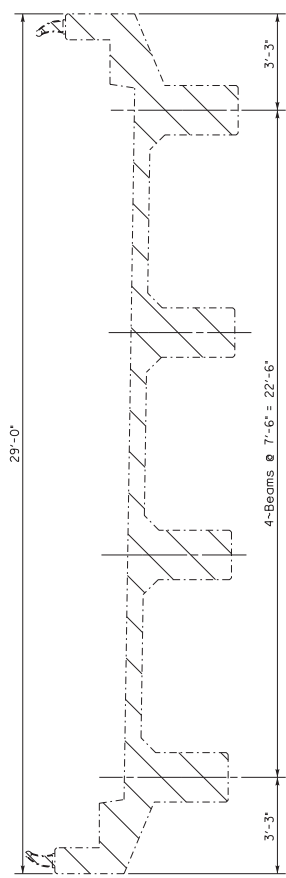


PIER PLAN
(Showing Typ. removal
at Pier caps 1 & 2)

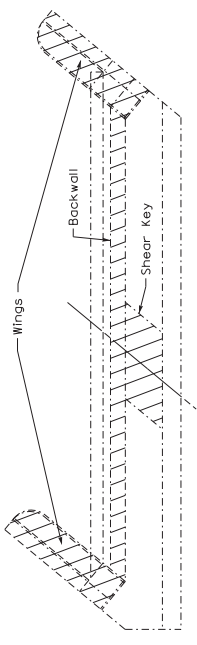


PIER ELEVATION
(Showing Typ. removal
at Pier caps 1 & 2)

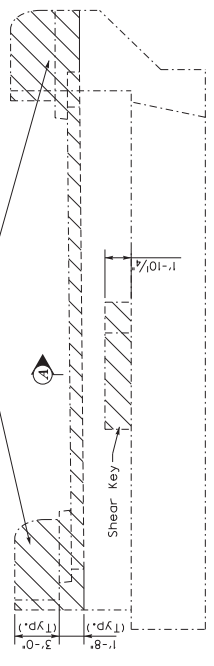
Note: Remove crosshatched portion of existing concrete as detailed for existing wings and abutment. Remove existing concrete in the pier columns and the wings on the End Bent & Abutment. This reinforcement in the pier columns and the wings on the End Bent & Abutment must be cleaned, straightened, and embedded in the new concrete as detailed in these plans.



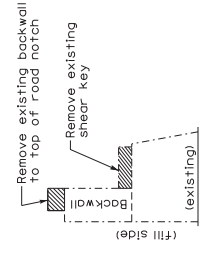
SUPERSTRUCTURE ELEVATION
(Remove Existing Superstructure)



END BENT & ABUTMENT PLAN
(Showing Typ. removal at
End Bent 1 & Abutment 2)



END BENT & ABUTMENT ELEVATION
(Showing Typ. removal at
End Bent 1 & Abutment 2)



**SECTION A-A THROUGH
END BENT & ABUTMENT**

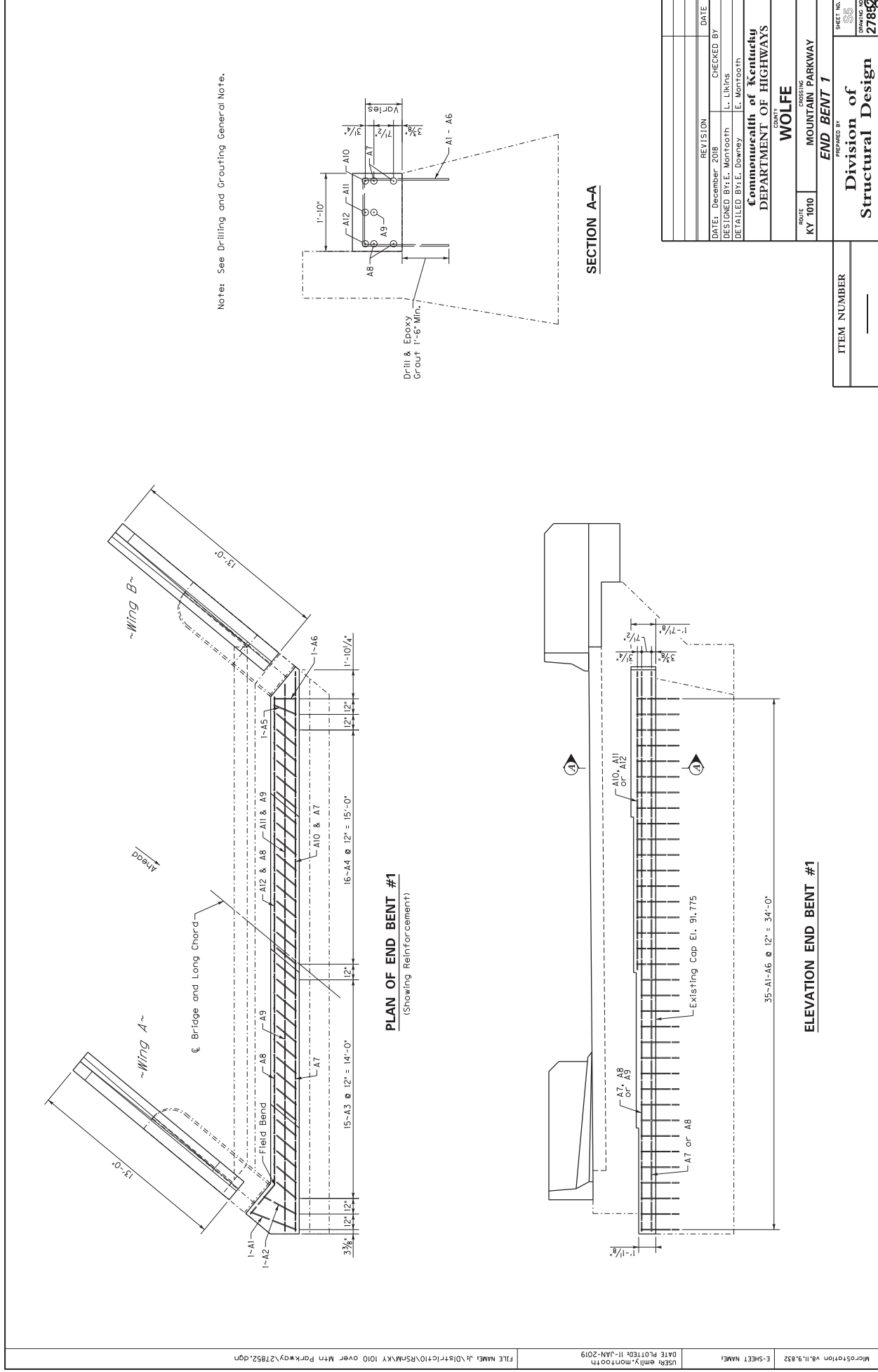
REVISION	DATE	CHECKED BY
	December 2018	L. Likins
		E. Montooth

DESIGNED BY: E. Montooth
DETAILED BY: E. Montooth

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY: **WOLFE**
ROUTE: **KY 1010**
PROJECT: **MOUNTAIN PARKWAY**

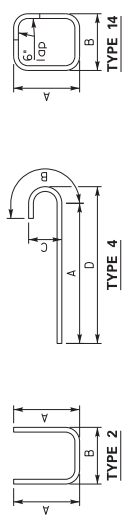
PREPARED BY: **REMOVAL DETAILS**
SHEET NO.: **27852**
DRAWING NO.: **27852**

ITEM NUMBER



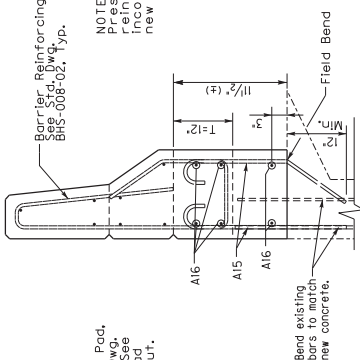
BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
A16	2S	1	5	7'-11"	Cap	2'-6"	3'-2"		
A16	2S	1	5	7'-7"	Cap	2'-6"	3'-2"		
A16	2S	15	5	6'-5"	Cap	2'-6"	1'-1"		
A16	2S	16	5	7'-2"	Cap	2'-9"	1'-11"		
A16	2S	1	5	6'-10"	Cap	2'-9"	1'-7"		
A16	2S	1	5	6'-9"	Cap	2'-9"	1'-6"		
A16	2S	2	5	35'-10"	Cap				
A16	2S	2	5	33'-8"	Cap				
A16	2S	1	5	35'-0"	Cap				
A16	2S	1	5	19'-0"	Cap				
A16	2S	1	5	16'-3"	Cap				
A16	2S	12	5	6'-2"	Wing Footing	1'-8"	1'-2"		
A16	2S	4	5	6'-9"	Wing Footing	1'-7 1/2"	0'-10"	0'-5"	1'-10"
A16	2S	12	5	12'-8"	Wing Footing				



Barrier Reinforcing, See Std. Dwg. BHS-008-02, Typ.

NOTE: Preserve existing reinforcing and incorporate into new barrier walls.

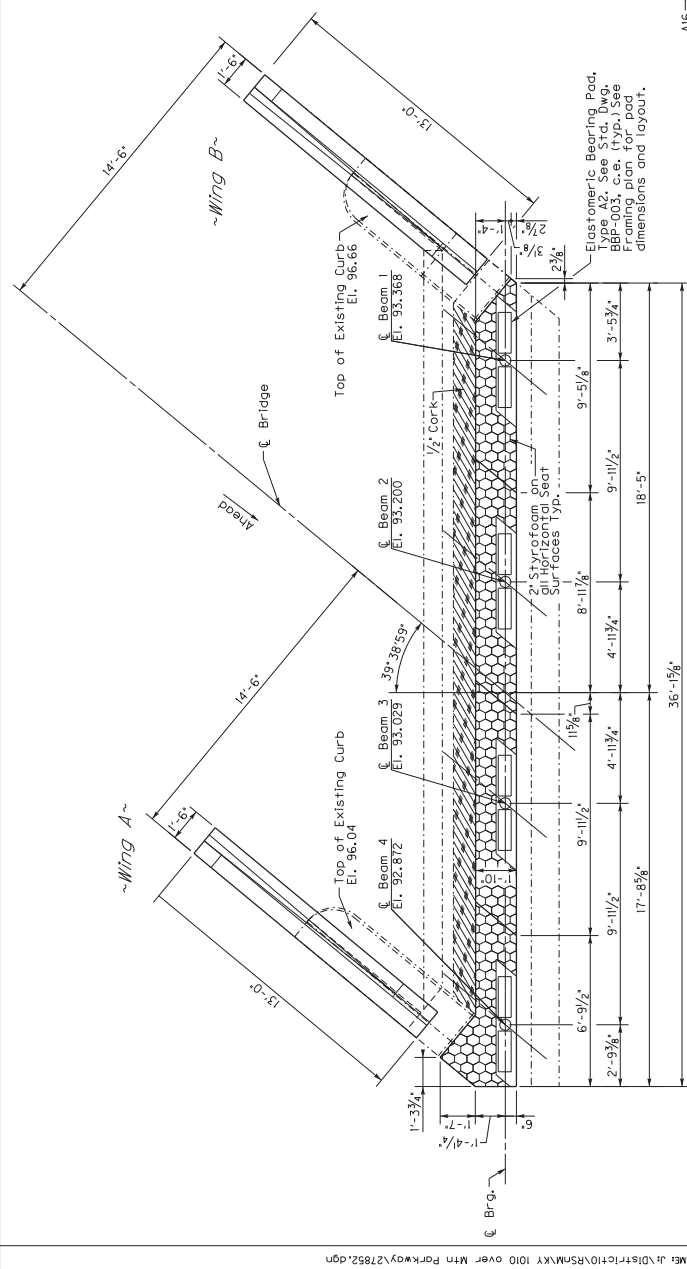


WING ELEVATION SECTION B-B
(Showing Reinf. over Existing Curb)

WING ELEVATION SECTION C-C
(Showing Reinf. & Footing)

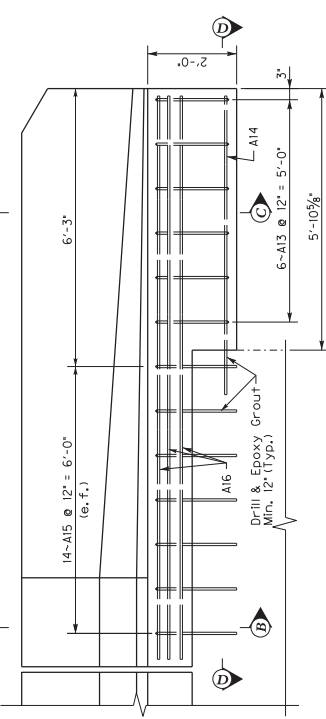
REVISION	DATE	CHECKED BY
DESIGNED BY: E. Montooth	December 2018	L. Links
DETAILED BY: E. Montooth		E. Montooth

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY: WOLFE
ROUTE: KY 1010
PROJECT: MOUNTAIN PARKWAY
SHEET NO.: END BENT 1
DRAWING NO.: 27852

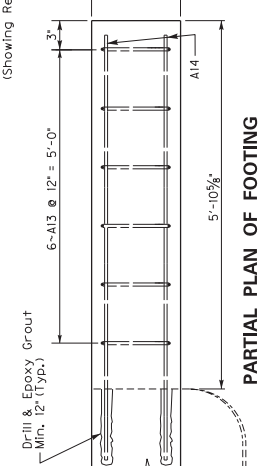


PLAN OF END BENT #1
(Showing Cap Details)

Note: Beam Elevations are given at the top of concrete.



WING ELEVATION
(Showing Reinf. over Existing Curb)



PARTIAL PLAN OF FOOTING
@ WINGS - SECTION D-D

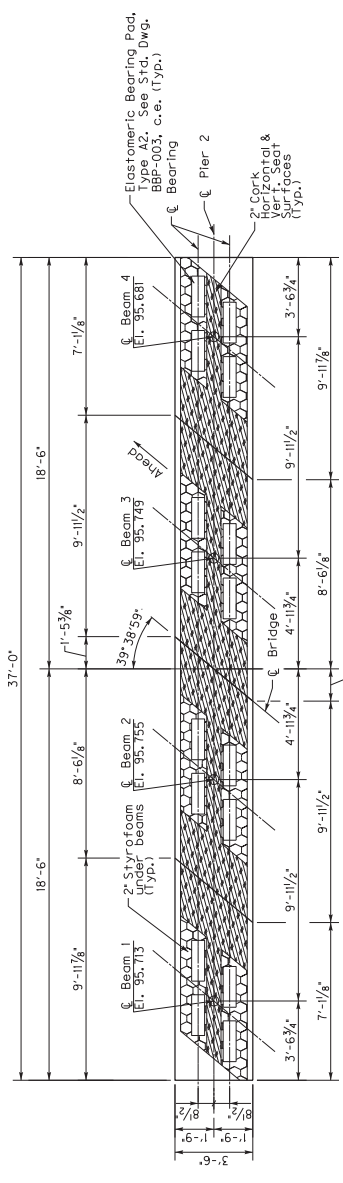
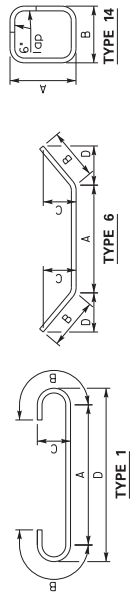
Notes: See Drilling and Grouting General Note.

ITEM NUMBER

PREPARED BY: **Division of Structural Design**

BILL OF REINFORCEMENT

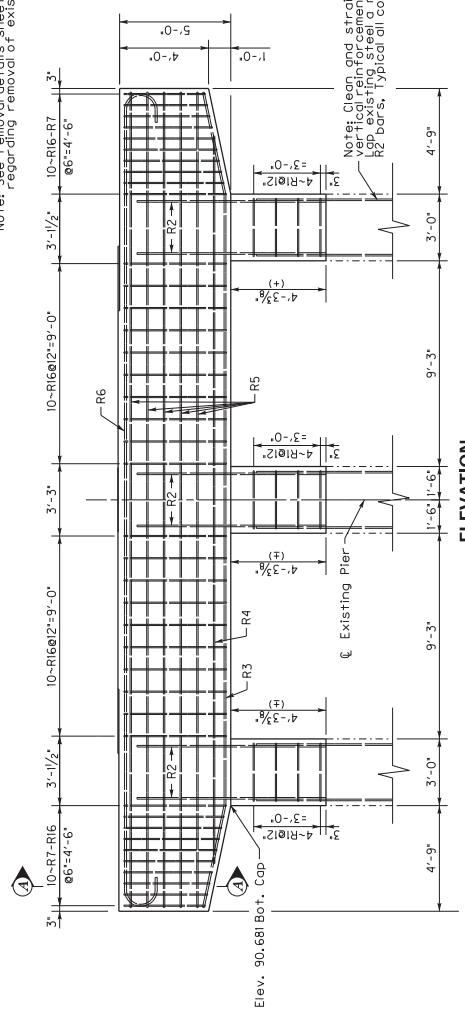
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
R1	14s	12	4	11-3	Column	2-8	2-8		
R2	5s	36	7	7-6	Column Cap	27-5 1/2	4-8 1/2	0-11 1/8	4-1 1/4
R3	6	8	8	36-10	Bottom Cap				
R4	5s	2	6	32-8	Cap Side				
R5	5s	10	6	36-8	Cap Side				
R6	1	6	9	39-5	Cap Top	35-6 1/4	1-11	0-11 1/8	36-6
R7	14s	2	5	14-3	Cap Stirrup	3-8	3-2		
R8	14s	2	5	14-5	Cap Stirrup	3-9	3-2		
R9	14s	2	5	14-8	Cap Stirrup	3-11 1/8	3-2		
R10	14s	2	5	15-10	Cap Stirrup	4-0	3-2		
R11	14s	2	5	15-3	Cap Stirrup	4-2 1/8	3-2		
R12	14s	2	5	15-6	Cap Stirrup	4-4 1/4	3-2		
R13	14s	2	5	15-8	Cap Stirrup	4-5 1/4	3-2		
R14	14s	2	5	15-11	Cap Stirrup	4-6 1/4	3-2		
R15	14s	22	5	16-2	Cap Stirrup	4-8	3-2		



Note: For additional Bearing & Dowel Details, see Std. Dwg. BBP-002 C.E.
Note: See removal details sheet for details regarding removal of existing concrete.

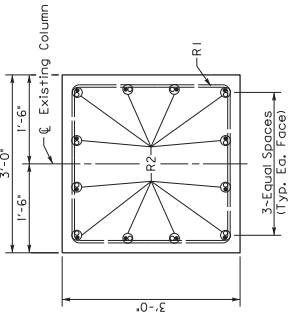
PLAN OF CAP

Note: Beam elevations are given at the top of concrete.

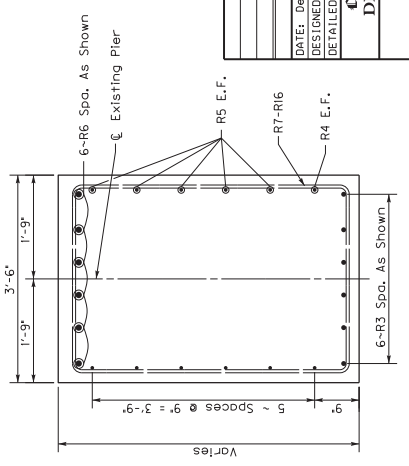


ELEVATION

Note: Stirrup bar locations may need to be adjusted slightly to avoid interactions from existing vertical bars from column.



SECTION THROUGH PIER COLUMN



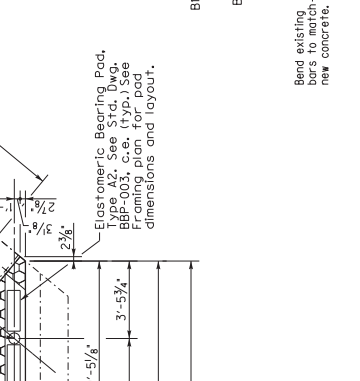
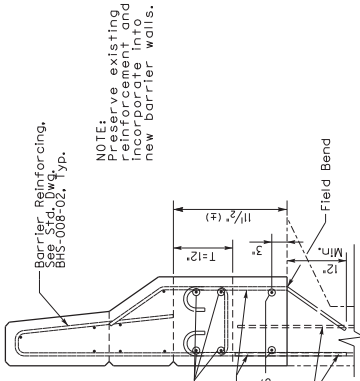
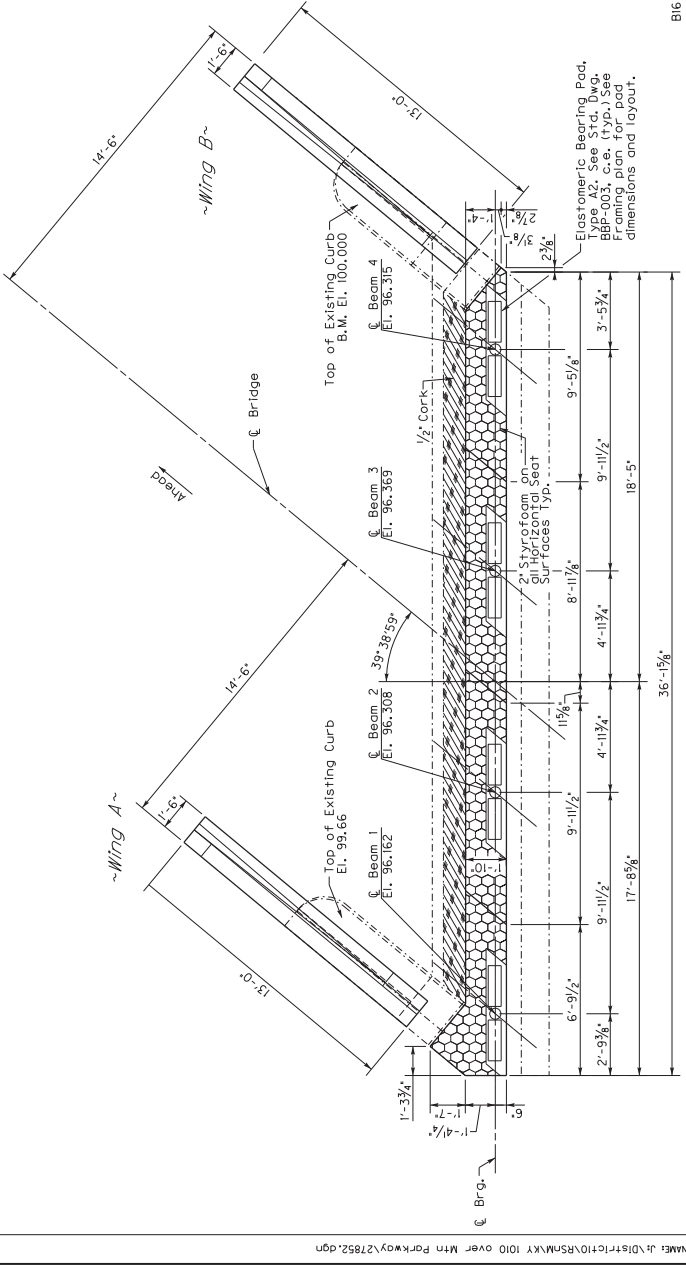
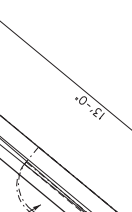
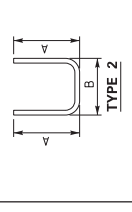
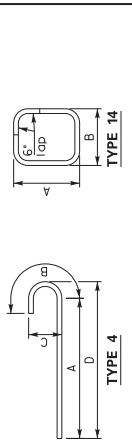
SECTION A-A

DATE: December 2018	CHECKED BY: L. Likins
DESIGNED BY: E. Montooth	EMILY MONTOOH
DETAILED BY: E. Montooth	EMILY MONTOOH
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS	
COUNTY: WOLFE	
ROUTE: KY 1010	
PROJECT: MOUNTAIN PARKWAY	
PIER: PIER 2	
REVISION	DATE

SHEET NO. 33	DRAWING NO. 27852
Division of Structural Design	
ITEM NUMBER	

BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
B16	2S	1	5	9'-5"	Cap Stirrup	3'-3"	3'-2"		
B16	2S	1	5	8'-2"	Cap Stirrup	3'-3"	2'-3"		
B16	2S	15	5	8'-2"	Cap Stirrup	3'-3"	1'-1"		
B16	2S	16	5	8'-2"	Cap Stirrup	3'-3"	1'-1"		
B16	2S	1	5	7'-10"	Cap Stirrup	3'-3"	1'-7"		
B16	2S	1	5	7'-9"	Cap Stirrup	3'-3"	1'-6"		
B16	2S	1	5	35'-10"	Cap				
B16	2S	3	5	33'-8"	Cap				
B16	2S	1	5	35'-0"	Cap				
B106					NOT USED				
B126					NOT USED				
B136	14S	12	5	6'-2"	Wing Footing	1'-8"	1'-2"		
B146	14S	4	5	6'-9"	Wing Footing				
B156	4	28	5	2'-6"	Wing Footing	1'-7/8"	0'-10"	0'-5"	1'-10"
B166	14S	12	5	12'-8"	Wing Footing				



REVISION

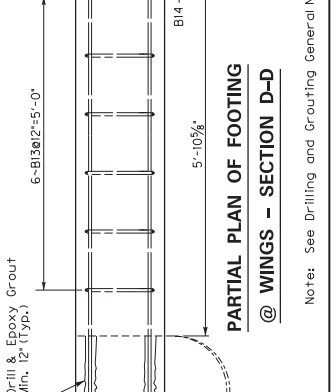
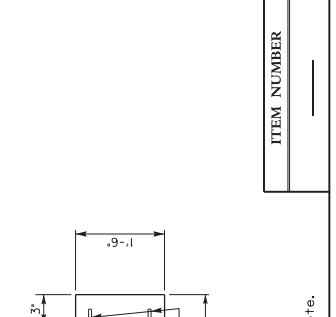
DATE	REVISION	CHECKED BY
December 2018		L. Likins
	DESIGNED BY: E. Montooth	E. Montooth
	DETAILED BY: B. Miller	E. Montooth

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

ROUTE KY 100
COUNTY WOLFE
PROJECT MOUNTAIN PARKWAY
ABUTMENT 2

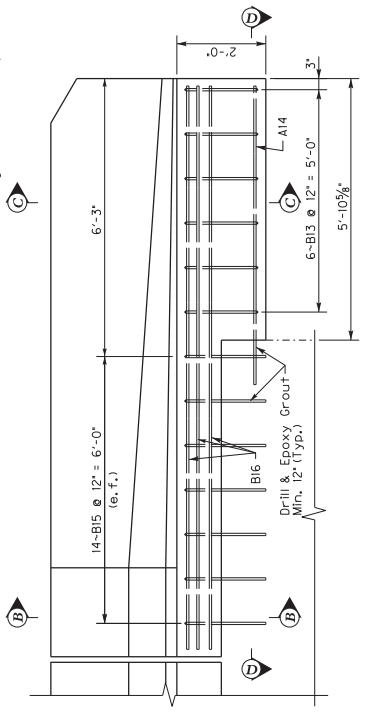
PREPARED BY
Division of Structural Design

SHEET NO. S10
DRAWING NO. 27852



PLAN OF ABUTMENT #2

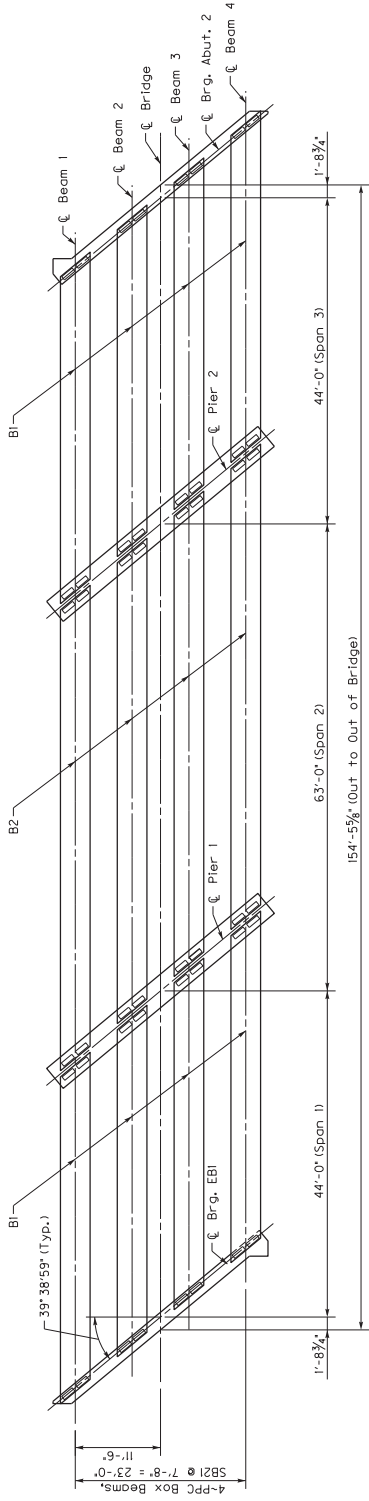
(Showing Cap Details)
Note: Beam Elevations are given at the top of concrete.



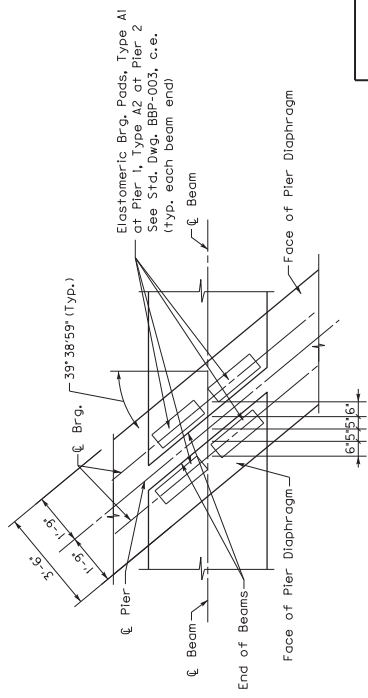
WING ELEVATION

(Showing Reinf. over Existing Curb)

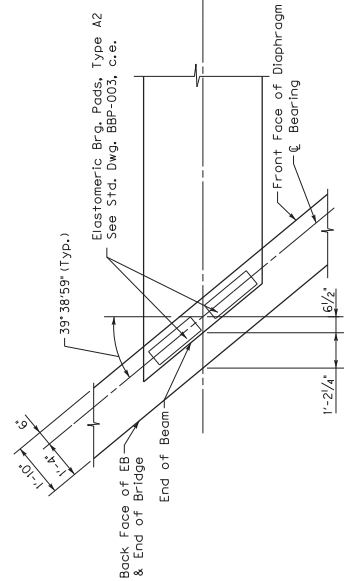
ITEM NUMBER



FRAMING PLAN



END OF BEAM DETAIL @ PIERS



END OF BEAM DETAIL @ END BENT 1 & ABUTMENT 2

REVISION	DATE
DESIGNED BY: E. Montooth	L. Likins
DATE: December 2018	CHECKED BY:
DETAILED BY: E. Montooth	L. Likins

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY: **WOLFE**
 ROUTE: **KY 1010**
 PROJECT: **MOUNTAIN PARKWAY**
FRAMING PLAN
 PREPARED BY: **Structural Design**
 SHEET NO. **27852**
 DRAWING NO. **27852**

ITEM NUMBER	
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General Notes

CONCRETE: Ensure prestressed girder concrete is in accordance with these plans and the specifications.

MATERIALS DESIGN SPECIFICATIONS: For prestressed beams:
FY = 60,000 psi F'c = 270,000 psi

PRESTRESSING REINFORCEMENT: Ensure that strands are 0.5" oversized diameter, 0.167 sq. in., uncoated seven-wire stress relieved, low-relaxation conforming to AASHTO M 203, Grade 270. Billing of the cost for redesign of beam and subsequent plan modifications will be made for any request of alternate strand type or arrangement. The designer of the original plans is responsible for the billing and work.

CONSTRUCTION METHOD: Pre-tension all beams. Ensure concrete has attained 75% strength in the upper standard test cylinders that are made and tested before the concrete is placed in the beams. Obtain f'c values in the field or prior to 28 days. Apply an initial force of 33,817 lbs. per low-relaxation strand to develop a stress of 202,500 psi. No beam will be accepted that is non-combined to the extent that strength of the beam or resistance to deterioration has been affected. An allowance of 0.0005l is made for shortening of beams due to shrinkage and elastic change and is included in the beam dimensions on this sheet. Payment will be made for plan quantities, which is the anticipated delivered length of the beams (length before 0.0005l allowance). Show a detensioning plan by sequential numbering of the strand pattern on the shop plans.

LIFTING DEVICES: Detail lifting devices on the shop plans. Loads are to be distributed equally to each device.

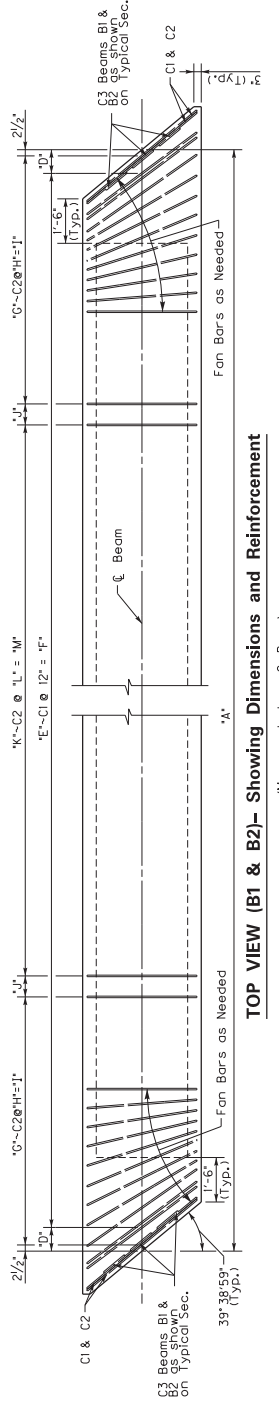
BEARING DEVICES: Include the price for bearing pads, cork, and styrofoam and any necessary galvanized metal shims in the bid for precast beams.

FABRICATION: The "Maximum Allowable Camber" shown on the beam sheet is the maximum camber to be allowed in the beams. The contractor shall ensure the beam will begin to encroach into the slab if the measured camber is greater than the "Maximum Allowable Camber" the contractor will be responsible for any necessary adjustments to assure a minimum slab thickness as shown in the plans. This work will be considered incidental to the completion of the structure and have the approval of the Engineer.

REINFORCEMENT: Dimensions shown from the face of concrete to reinforcement are clear dimensions. Location of reinforcement shall be in accordance with Section 811.10 of the Specifications. All bars marked "C" shall be considered a stirrup for purposes of bend diameters.

Strand Data with number indicated in rows		Box Beam Data																		
Mark	Midspan Fully Stressed	End Fully Stressed	Total # of Strands	Concrete Stress (psi)	Hold Down (lbs)	Total # of Beams	Approx. Weight (lbs)	Dimensions										Straight Reinforcement	Maximum Allowable Camber	
								A	D	E	F	G	H	I	J	K	L			M
B1	12 21 2	① 12 21 2	37	7000	8000	8	29664	44'-1"	0'-6 1/2"	44'-4 3/4"	0'-5"	6'-8"	0'-8"	30	1'-0"	29'-0"	A1	#5	43'-9"	2 1/4"
B2	12 21 2	① 12 21 2	37	7000	8000	4	41833	62'-2"	0'-7"	62'-6 1/4"	0'-4"	7'-8"	0'-8 1/2"	46	1'-0"	45'-0"	A2	#5	32'-0"	4"

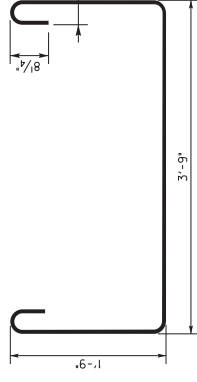
Note: A2 bars ~ 2 lengths, 2'-2" Min. Lap



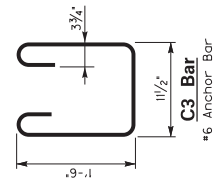
TOP VIEW (B1 & B2) - Showing Dimensions and Reinforcement
(Measured along L Beam)



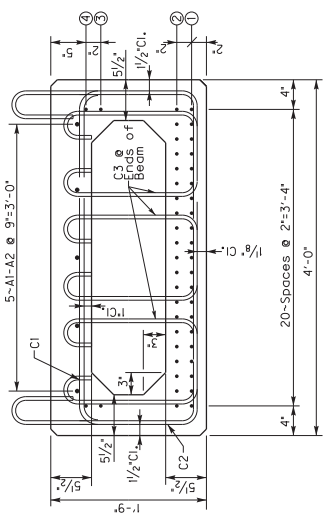
C1 Bars
#5 Top Slab Bar



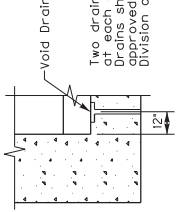
C2(e) Bars
#5 Stirrup Bar



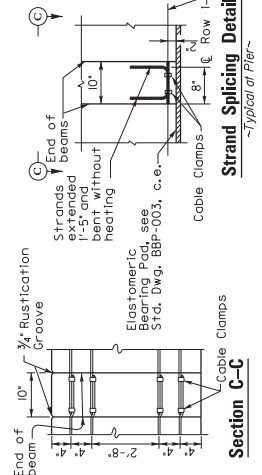
C3 Bar
#6 Anchor Bar



TYPICAL SECTION THROUGH BOX BEAM



VOID DRAIN DETAIL



Strand Splicing Detail
~Typical at Pier~

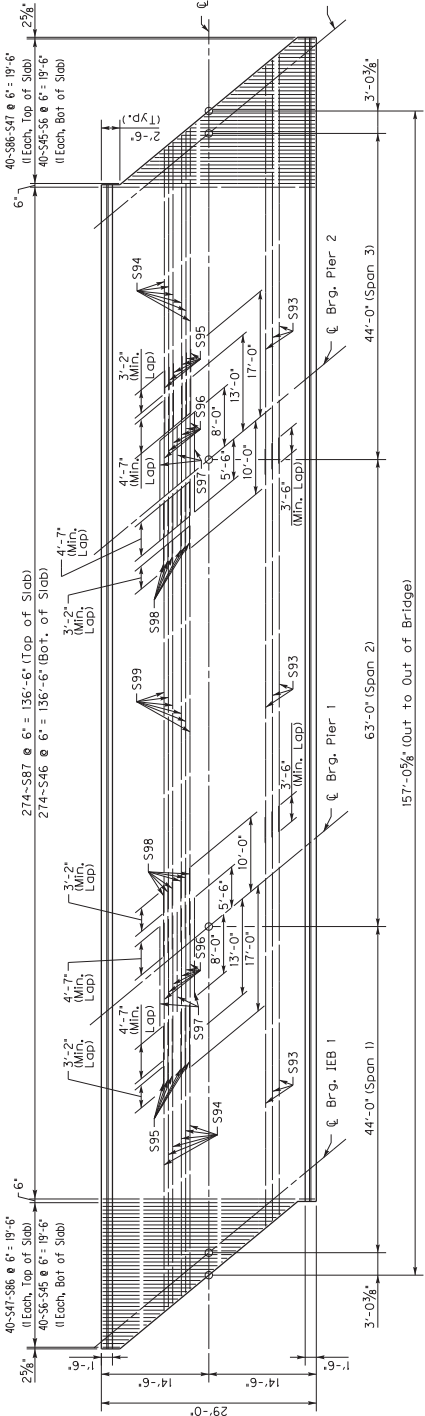
DATE	REVISION	CHECKED BY
December 2018		L. Likins
DESIGNED BY		L. Likins
DETAILED BY		L. Likins

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
 COUNTY: **WOLFE**
 ROUTE: **KY 1010**
 PROJECT: **MOUNTAIN PARKWAY**
PPC BOX BEAM SB21 DETAILS
 SHEET NO. **S12**
 DRAWING NO. **27852**

ITEM NUMBER

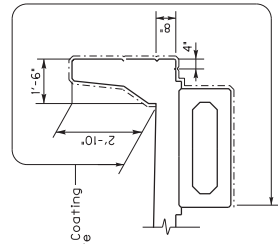
Division of Structural Design

27852

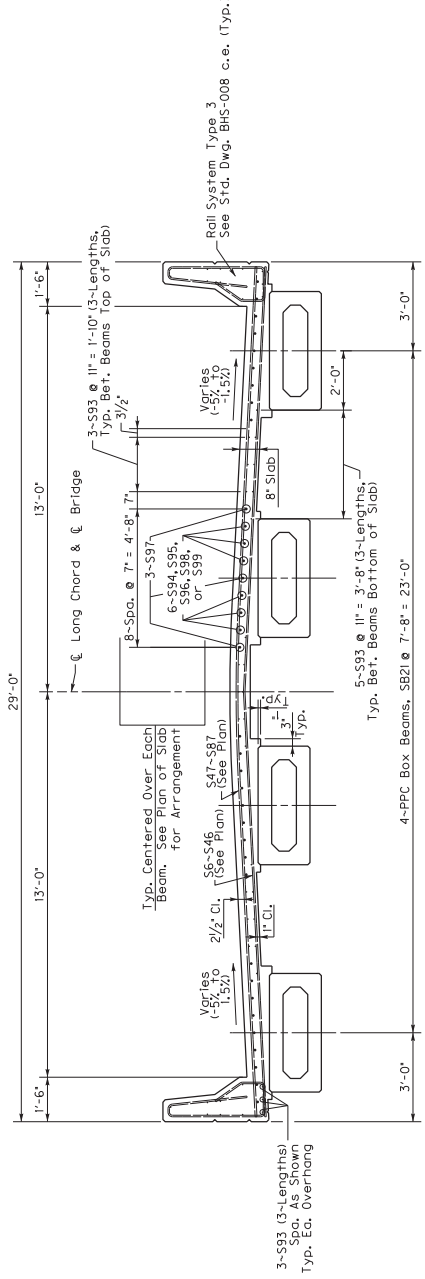


PLAN OF SLAB

- Notes:
- 3-Lengths S93, Min. Lap 3'-6"
 - Lap S94 & S95, Min. Lap 3'-2"
 - Lap S96 & S97, Min. Lap 3'-2"
 - Lap S98 & S99, Min. Lap 4'-7"
 - Lap S98 & S99, Min. Lap 3'-2"



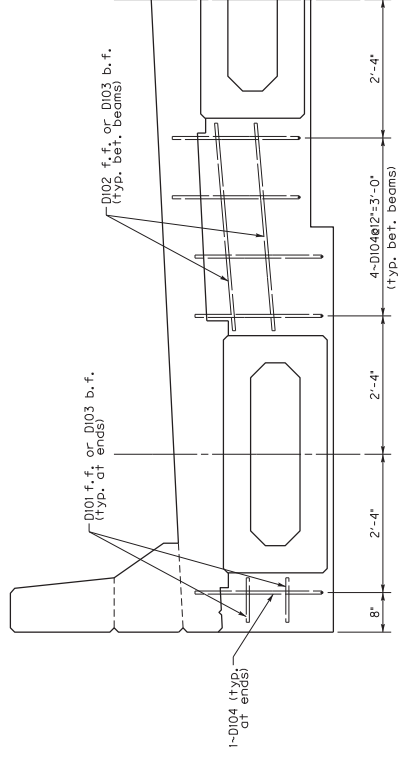
MASONRY COATING DETAIL
(Typical Each Overhang)



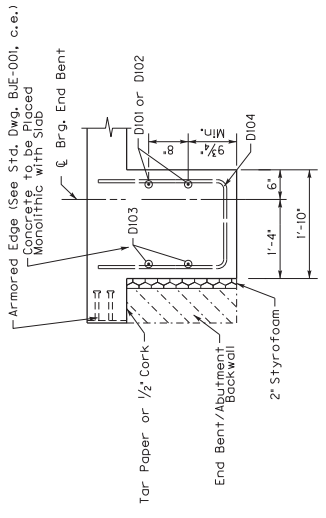
TYPICAL SECTION

DATE	REVISION	CHECKED BY	DATE
June 2018		Emily Montooth	
DESIGNED BY: Carl Van Zee		EMILY MONTOOTH	
DETAILED BY: Carl Van Zee		EMILY MONTOOTH	
Commonwealth of Kentucky			
DEPARTMENT OF HIGHWAYS			
COUNTY			
WOLFE			
DISTRICT			
EIGHTEEN MILE CREEK			
ROUTE			
KY 524			
SUPERSTRUCTURE			
PREPARED BY			
Division of			
Structural Design			
SHEET NO.		DRAWING NO.	
S13		27852	
ITEM NUMBER			

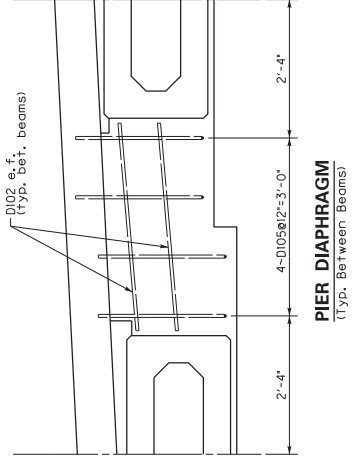
- Notes: 1.) Diaphragm stirrups are to project into slab, less of slab forming method.
2.) Place stirrup bars parallel to beams.



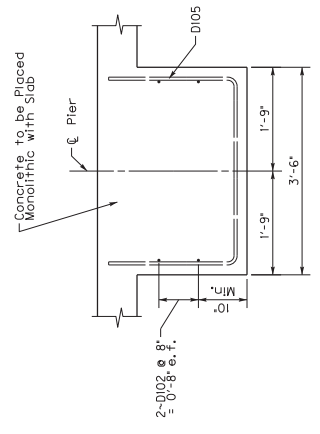
END BENT 1 & ABUTMENT 2 DIAPHRAGM



SECTION THROUGH END BENT 1 & ABUTMENT 2 DIAPHRAGMS



PIER DIAPHRAGM
(Typ. Between Beams)



SECTION THROUGH PIER DIAPHRAGMS

REVISION	DATE	CHECKED BY
DESIGNED BY: E. Montooth	L. Likins	
DETAILED BY: E. Montooth	L. Likins	

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

COUNTY: **WOLFE**
ROUTE: **KY 1010**
PROJECT: **MOUNTAIN PARKWAY**

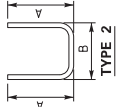
PREPARED BY: **SUPERSTRUCTURE**

SHEET NO. **514**
DRAWING NO. **27852**

ITEM NUMBER

BILL OF REINFORCEMENT

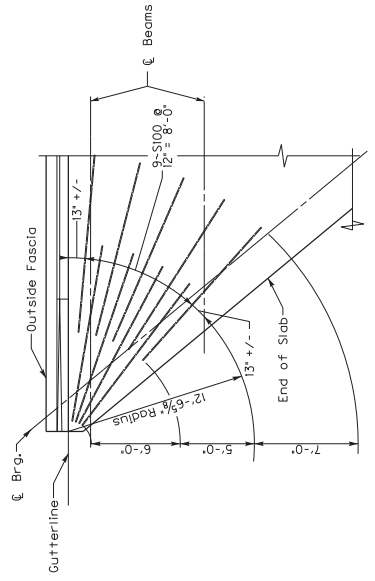
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	MARK	TYPE	NO.	SIZE	LENGTH	LOCATION
S16	Str.	-	-	-	NOT USED			S45B	Str.	2	5	25-10	Bottom of Slab
S20	Str.	-	-	-	NOT USED			S45C	Str.	2	5	25-10	Bottom of Slab
S24	Str.	-	-	-	NOT USED			S45D	Str.	2	5	25-10	Bottom of Slab
S28	Str.	-	-	-	NOT USED			S46	Str.	2	6	2-4	Top of Slab
S32	Str.	-	-	-	NOT USED			S47E	Str.	2	6	2-4	Top of Slab
S36	Str.	-	-	-	NOT USED			S48B	Str.	2	6	2-11	Top of Slab
S40	Str.	-	-	-	NOT USED			S49B	Str.	2	6	3-6	Top of Slab
S44	Str.	-	-	-	NOT USED			S50B	Str.	2	6	4-1	Top of Slab
S48	Str.	-	-	-	NOT USED			S51B	Str.	2	6	4-9	Top of Slab
S52	Str.	-	-	-	NOT USED			S52B	Str.	2	6	5-4	Top of Slab
S56	Str.	-	-	-	NOT USED			S53B	Str.	2	6	5-11	Top of Slab
S60	Str.	-	-	-	NOT USED			S54B	Str.	2	6	7-5	Top of Slab
S64	Str.	-	-	-	NOT USED			S55B	Str.	2	6	7-5	Top of Slab
S68	Str.	-	-	-	NOT USED			S56B	Str.	2	6	7-9	Top of Slab
S72	Str.	-	-	-	NOT USED			S57B	Str.	2	6	8-4	Top of Slab
S76	Str.	-	-	-	NOT USED			S58B	Str.	2	6	8-11	Top of Slab
S80	Str.	-	-	-	NOT USED			S59B	Str.	2	6	9-7	Top of Slab
S84	Str.	-	-	-	NOT USED			S60B	Str.	2	6	10-2	Top of Slab
S88	Str.	-	-	-	NOT USED			S61B	Str.	2	6	10-9	Top of Slab
S92	Str.	-	-	-	NOT USED			S62B	Str.	2	6	11-4	Top of Slab
S96	Str.	-	-	-	NOT USED			S63B	Str.	2	6	12-1	Top of Slab
S100	Str.	-	-	-	NOT USED			S64B	Str.	2	6	12-7	Top of Slab
S104	Str.	-	-	-	NOT USED			S65B	Str.	2	6	13-2	Top of Slab
S108	Str.	-	-	-	NOT USED			S66B	Str.	2	6	13-9	Top of Slab
S112	Str.	-	-	-	NOT USED			S67B	Str.	2	6	14-4	Top of Slab
S116	Str.	-	-	-	NOT USED			S68B	Str.	2	6	15-0	Top of Slab
S120	Str.	-	-	-	NOT USED			S69B	Str.	2	6	15-7	Top of Slab
S124	Str.	-	-	-	NOT USED			S70B	Str.	2	6	16-2	Top of Slab
S128	Str.	-	-	-	NOT USED			S71B	Str.	2	6	16-10	Top of Slab
S132	Str.	-	-	-	NOT USED			S72B	Str.	2	6	18-3	Top of Slab
S136	Str.	-	-	-	NOT USED			S73B	Str.	2	6	18-7	Top of Slab
S140	Str.	-	-	-	NOT USED			S74B	Str.	2	6	18-7	Top of Slab
S144	Str.	-	-	-	NOT USED			S75B	Str.	2	6	19-2	Top of Slab
S148	Str.	-	-	-	NOT USED			S76B	Str.	2	6	19-10	Top of Slab
S152	Str.	-	-	-	NOT USED			S77B	Str.	2	6	20-5	Top of Slab
S156	Str.	-	-	-	NOT USED			S78B	Str.	2	6	21-0	Top of Slab
S160	Str.	-	-	-	NOT USED			S79B	Str.	2	6	21-7	Top of Slab
S164	Str.	-	-	-	NOT USED			S80B	Str.	2	6	22-3	Top of Slab
S168	Str.	-	-	-	NOT USED			S81B	Str.	2	6	22-10	Top of Slab
S172	Str.	-	-	-	NOT USED			S82B	Str.	2	6	22-10	Top of Slab
S176	Str.	-	-	-	NOT USED			S83B	Str.	2	6	24-0	Top of Slab
S180	Str.	-	-	-	NOT USED			S84B	Str.	2	6	24-8	Top of Slab
S184	Str.	-	-	-	NOT USED			S85B	Str.	2	6	25-3	Top of Slab
S188	Str.	-	-	-	NOT USED			S86B	Str.	2	6	25-10	Top of Slab
S192	Str.	-	-	-	NOT USED			S87B	Str.	2	6	28-8	Top of Slab
S196	Str.	-	-	-	NOT USED			S88B	Str.	-	-	-	NOT USED
S200	Str.	-	-	-	NOT USED			S89B	Str.	-	-	-	NOT USED
S204	Str.	-	-	-	NOT USED			S90B	Str.	-	-	-	NOT USED
S208	Str.	-	-	-	NOT USED			S91B	Str.	-	-	-	NOT USED
S212	Str.	-	-	-	NOT USED			S92B	Str.	-	-	-	NOT USED
S216	Str.	-	-	-	NOT USED			S93B	Str.	90	5	53-3	Slab Longitudinal
S220	Str.	-	-	-	NOT USED			S94B	Str.	48	5	33-1	Slab Longitudinal
S224	Str.	-	-	-	NOT USED			S95B	Str.	48	7	8-7	Slab Longitudinal
S228	Str.	-	-	-	NOT USED			S96B	Str.	48	9	18-6	Slab Longitudinal
S232	Str.	-	-	-	NOT USED			S97B	Str.	24	9	13-6	Slab Longitudinal
S236	Str.	-	-	-	NOT USED			S98B	Str.	48	7	9-1	Slab Longitudinal
S240	Str.	-	-	-	NOT USED			S99B	Str.	24	2	49-4	Slab Longitudinal
S244	Str.	-	-	-	NOT USED			S100B	Str.	8	5	0-9	End Bent Diaphragm
S248	Str.	-	-	-	NOT USED			D102B	Str.	36	5	3-6	EB & Pter Diaphragm
S252	Str.	-	-	-	NOT USED			D103B	Str.	4	5	28-8	End Bent Diaphragm
S256	Str.	-	-	-	NOT USED			D104B	Str.	28	5	5-7	End Bent Diaphragm
S260	Str.	-	-	-	NOT USED			D105B	Str.	28	5	7-3	Pter Diaphragm
S264	Str.	-	-	-	NOT USED								



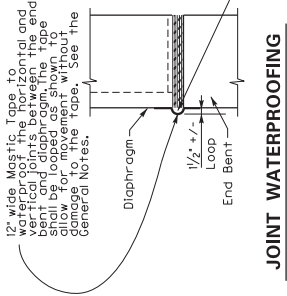
MASTIC TAPE: Mastic Tape used to seal joints is to meet the requirements of ASTM C-877 Type I, or III. The joint is to be covered with 1/2 inch wide mastic tape. Prior to application, the joint surface shall be clean and free of dirt, debris, or deleterious material. Primer, if required by the tape mfg., shall be applied for a minimum width of nine inches on each side of the joint.

Mastic Tape shall be either:
EZ-WRAP RUBBER by PRESS-SEAL CASKET CORPORATION,
SEAL WRAP by MAR MAC MANUFACTURING CO. INC.,
CADILLOC by the UP RUBBER CO. INC.,
or approved equal.

Mastic Tape shall cover the joint continuously unless otherwise shown in the plans. Mastic Tape shall be spliced by lapping a minimum of six inches and in accordance with the mfgs. recommendations with the overlap running downhill.
The cost of labor, materials, and incidental items for furnishing and installing Mastic Tape shall be considered incidental to the unit price bid for Concrete Class 'AA' and no separate measurement or payment shall be made.



CORNER REINFORCEMENT DETAIL



JOINT WATERPROOFING DETAIL

12" wide Mastic Tape to waterproof the horizontal and vertical joints. The tape shall be applied as shown to the joint and shall be applied for a minimum width of nine inches on each side of the joint. See the General Notes.

BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	MARK	TYPE	NO.	SIZE	LENGTH	LOCATION
S16	Str.	-	-	-	NOT USED			S45B	Str.	2	5	25-10	Bottom of Slab
S20	Str.	-	-	-	NOT USED			S45C	Str.	2	5	25-10	Bottom of Slab
S24	Str.	-	-	-	NOT USED			S45D	Str.	2	5	25-10	Bottom of Slab
S28	Str.	-	-	-	NOT USED			S46	Str.	2	6	2-4	Top of Slab
S32	Str.	-	-	-	NOT USED			S47E	Str.	2	6	2-4	Top of Slab
S36	Str.	-	-	-	NOT USED			S48B	Str.	2	6	2-11	Top of Slab
S40	Str.	-	-	-	NOT USED			S49B	Str.	2	6	3-6	Top of Slab
S44	Str.	-	-	-	NOT USED			S50B	Str.	2	6	4-1	Top of Slab
S48	Str.	-	-	-	NOT USED			S51B	Str.	2	6	4-9	Top of Slab
S52	Str.	-	-	-	NOT USED			S52B	Str.	2	6	5-4	Top of Slab
S56	Str.	-	-	-	NOT USED			S53B	Str.	2	6	5-11	Top of Slab
S60	Str.	-	-	-	NOT USED			S54B	Str.	2	6	7-5	Top of Slab
S64	Str.	-	-	-	NOT USED			S55B	Str.	2	6	7-5	Top of Slab
S68	Str.	-	-	-	NOT USED			S56B	Str.	2	6	7-9	Top of Slab
S72	Str.	-	-	-	NOT USED			S57B	Str.	2	6	8-4	Top of Slab
S76	Str.	-	-	-	NOT USED			S58B	Str.	2	6	8-11	Top of Slab
S80	Str.	-	-	-	NOT USED			S59B	Str.	2	6	9-7	Top of Slab
S84	Str.	-	-	-	NOT USED			S60B	Str.	2	6	10-2	Top of Slab
S88	Str.	-	-	-	NOT USED			S61B	Str.	2	6	10-9	Top of Slab
S92	Str.	-	-	-	NOT USED			S62B	Str.	2	6	11-4	Top of Slab
S96	Str.	-	-	-	NOT USED			S63B	Str.	2	6	12-1	Top of Slab
S100	Str.	-	-	-	NOT USED			S64B	Str.	2	6	12-7	Top of Slab
S104	Str.	-	-	-	NOT USED			S65B	Str.	2	6	13-2	Top of Slab
S108	Str.	-	-	-	NOT USED			S66B	Str.	2	6	13-9	Top of Slab
S112	Str.	-	-	-	NOT USED			S67B	Str.	2	6	14-4	Top of Slab
S116	Str.	-	-	-	NOT USED			S68B	Str.	2	6	15-0	Top of Slab
S120	Str.	-	-	-	NOT USED			S69B	Str.	2	6	15-7	Top of Slab
S124	Str.	-	-	-	NOT USED			S70B	Str.	2	6	16-2	Top of Slab
S128	Str.	-	-	-	NOT USED			S71B	Str.	2	6	16-10	Top of Slab
S132	Str.	-	-	-	NOT USED			S72B	Str.	2	6	18-3	Top of Slab
S136	Str.	-	-	-	NOT USED			S73B	Str.	2	6	18-7	Top of Slab
S140	Str.	-	-	-	NOT USED			S74B	Str.	2	6	18-7	Top of Slab
S144	Str.	-	-	-	NOT USED			S75B	Str.	2	6	19-2	Top of Slab
S148	Str.	-	-	-	NOT USED			S76B	Str.	2	6	19-10	Top of Slab
S152	Str.	-	-	-	NOT USED			S77B	Str.	2	6	20-5	Top of Slab
S156	Str.	-	-	-	NOT USED			S78B	Str.	2	6	21-0	Top of Slab
S160	Str.	-	-	-	NOT USED			S79B	Str.	2	6	21-7	Top of Slab
S164	Str.	-	-	-	NOT USED			S80B	Str.	2	6	22-3	Top of Slab
S168	Str.	-	-	-	NOT USED			S81B	Str.	2	6	22-10	Top of Slab
S172	Str.	-	-	-	NOT USED			S82B	Str.	2	6	22-10	Top of Slab
S176	Str.	-	-	-	NOT USED			S83B	Str.	2	6	24-0	Top of Slab
S180	Str.	-	-	-	NOT USED			S84B	Str.	2	6	24-8	Top of Slab
S184	Str.	-	-	-	NOT USED			S85B	Str.	2	6	25-3	Top of Slab
S188	Str.	-	-	-	NOT USED			S86B	Str.	2	6	25-10	Top of Slab
S192	Str.	-	-	-	NOT USED			S87B	Str.	2	6	28-8	Top of Slab
S196	Str.	-	-	-	NOT USED			S88B	Str.	-	-	-	NOT USED
S200	Str.	-	-	-	NOT USED			S89B	Str.	-	-	-	NOT USED
S204	Str.	-	-	-	NOT USED			S90B	Str.	-	-	-	NOT USED
S208	Str.	-	-	-	NOT USED			S91B	Str.	-	-	-	NOT USED
S212	Str.	-	-	-	NOT USED			S92B	Str.	-	-	-	NOT USED
S216	Str.	-	-	-	NOT USED			S93B	Str.	90	5	53-3	Slab Longitudinal
S220	Str.	-	-	-	NOT USED			S94B	Str.	48	5	33-1	Slab Longitudinal
S224	Str.	-	-	-	NOT USED			S95B	Str.	48	7	8-7	Slab Longitudinal
S228	Str.	-	-	-	NOT USED			S96B	Str.	48	9	18-6	Slab Longitudinal
S232	Str.	-	-	-	NOT USED			S97B	Str.	24	9	13-6	Slab Longitudinal
S236	Str.	-	-	-	NOT USED			S98B	Str.	48	7	9-1	Slab Longitudinal
S240	Str.	-	-	-	NOT USED			S99B	Str.	24	2	49-4	Slab Longitudinal
S244													

CONSTRUCTION ELEVATIONS											
LOCATION	CL BEAM 1		CL BEAM 2		CENTER LINE BRIDGE		CL BEAM 3		CL BEAM 4		RIGHT GUTTER
	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	TOP OF BEAM	DIM. "X"	CONSTR. ELEV.	
Skew Line AA	96.052	96.020	95.856	95.771	95.685	95.525	95.496				
Skew Line BB	96.158	96.125	95.958	95.872	95.787	95.629	95.601				
Skew Line CC	97.349	97.324	97.218	97.178	97.112	96.991	96.969				
Skew Line DD	98.466	98.470	98.512	98.547	98.507	98.438	98.427				
Skew Line EE	98.896	98.920	99.066	99.152	99.127	99.072	99.061				
Skew Line FF	98.915	98.940	99.093	99.183	99.156	99.099	99.087				
Grid Line 1	96.527	96.449	96.053	96.131	95.940	95.845	95.772				
Grid Line 2	96.754	96.683	96.316	96.393	96.212	96.120	96.052				
Grid Line 3	96.959	96.894	96.562	96.637	96.466	96.377	96.313				
Grid Line 4	97.145	97.087	96.789	96.861	96.702	96.615	96.555				
Grid Line 5	97.314	97.262	96.996	97.068	96.918	96.835	96.779				
Grid Line 6	97.530	97.472	97.188	97.294	97.123	97.059	96.995				
Grid Line 7	97.744	97.693	97.429	97.548	97.386	97.326	97.265				
Grid Line 8	97.935	97.892	97.665	97.779	97.630	97.572	97.516				
Grid Line 9	98.097	98.062	97.876	97.983	97.849	97.791	97.741				
Grid Line 10	98.228	98.202	98.059	98.157	98.038	97.981	97.937				
Grid Line 11	98.330	98.311	98.211	98.300	98.197	98.140	98.102				
Grid Line 12	98.405	98.395	98.334	98.416	98.327	98.271	98.239				
Grid Line 13	98.462	98.457	98.431	98.510	98.432	98.379	98.351				
Grid Line 14	98.573	98.562	98.510	98.511	98.432	98.379	98.351				
Grid Line 15	98.676	98.672	98.646	98.632	98.533	98.498	98.462				
Grid Line 16	98.761	98.763	98.771	98.773	98.682	98.652	98.619				
Grid Line 17	98.826	98.835	98.877	98.896	98.816	98.789	98.760				
Grid Line 18	98.874	98.889	98.964	99.000	98.931	98.906	98.882				
Grid Line 19	-----	-----	99.034	99.086	99.027	99.004	98.983				
Grid Line 20	-----	-----	-----	-----	99.106	99.004	98.983				

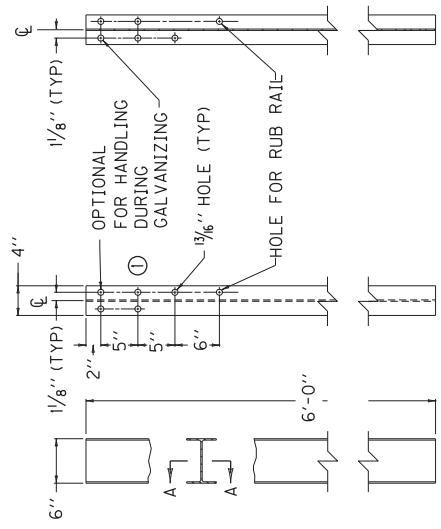
NOTES FOR ELEVATIONS TAKEN ON PRESTRESSED CONCRETE BEAMS

Take elevations on top of beam at points indicated by the grid layout. The beam elevations are to be read to three decimals, and entered in tables under "Top of Beam Elevations."
 Compute dimension "X" as follows: "Construction Elevation" minus "Top of Beam" elevation equals dimension "X". Construction Elevations include camber due to weight of the concrete slab and barrier. Measuring of dimension "X" gives the final check on beam tolerances for camber, beam damage, and errors in erection that produce reverse cambers, sags, and unsightly fascia beams.
 For setting templates, measure dimension "X" above top of beams for top of template. Do not set template by elevations. Temporary supports or shoring will not be permitted under the griders when turning the concrete floor slab or when taking "Top of Beam" elevations.

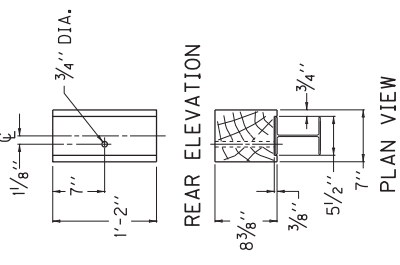
Construct barrier to roadway grade. Do not add camber to the barrier.
 Note to Engineer: The "Maximum Allowable Camber" shown on the beam sheet is the amount of camber, measured prior to casting the deck, above which the beam will begin to encroach into the slab. If the measured camber is greater than the "Maximum Allowable Camber," the contractor will be responsible for any necessary adjustments to assure a minimum slab thickness of 8 inches as shown in the plans. This work will be considered incidental to the completion of the structure and must have the approval of the Engineer.
 The minimum allowable X-dimension on a beam is that which results in the design deck thickness (8") at the edge of the beam flange. This is calculated as the deck thickness + 1/2" of the top flange width. For ex. 8" + 24" x 0.049 = 9.16" ± 0.765". Any necessary modifications to some or all of the X-dimensions must meet the approval of the Engineer.

DATE: December 2018	REVISION	CHECKED BY
DESIGNED BY: E. Montooth	L. Likins	
DETAILED BY: E. Montooth	L. Likins	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY: WOLFE ROUTE: KY 1010 PROJECT: MOUNTAIN PARKWAY CONSTRUCTION ELEVATIONS PREPARED BY: Division of Structural Design SHEET NO. 27852 DRAWING NO. 27852		

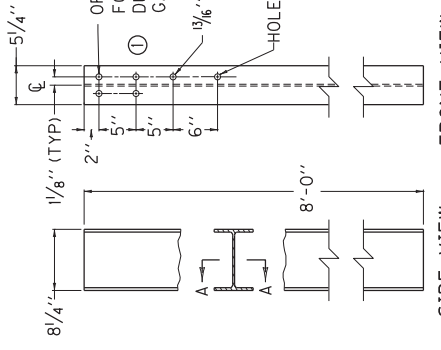
COUNTY OF	ITEM NO.	SHEET NO.
WOLFE		S18



SECTION A-A
FRONT VIEW
SIDE VIEW
~ W6 X 9.0 STEEL GUARDRAIL POST ~
(USED WITH C6 X 8.2 RUB RAIL)

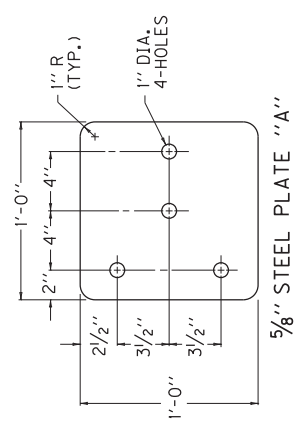


REAR ELEVATION
PLAN VIEW
OFFSET BLOCK TYPE 6
(TIMBER OR APPROVED COMPOSITE)
(FOR USE WITH W8 X 21 STEEL POST ONLY)

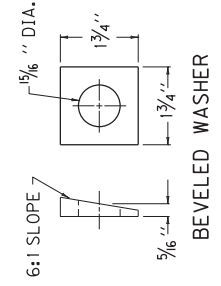


SECTION A-A
FRONT VIEW
SIDE VIEW
~ W8 X 21 STEEL GUARDRAIL POST ~

~ NOTES ~
① THESE HOLES ARE REQUIRED FOR ATTACHING RAIL.



5/8" STEEL PLATE "A"

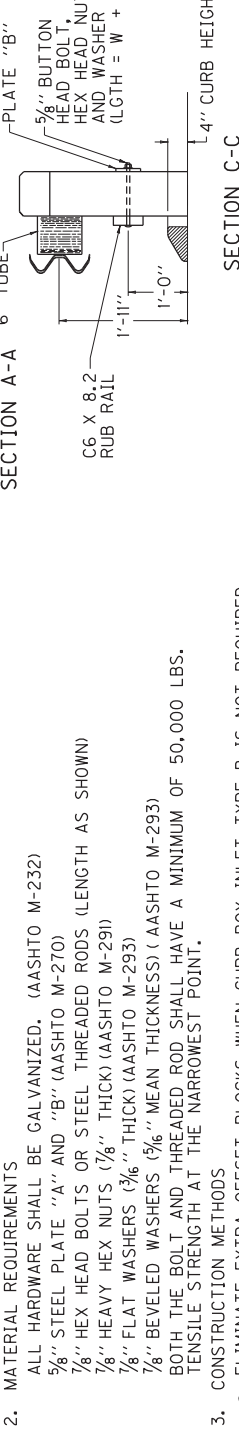
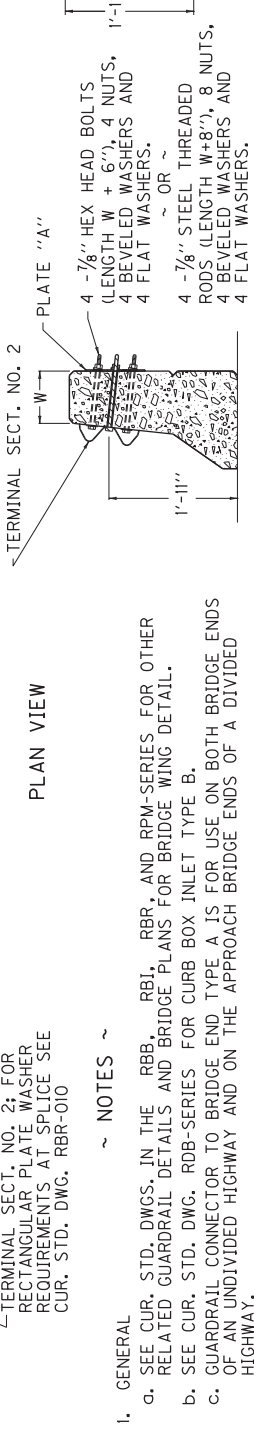
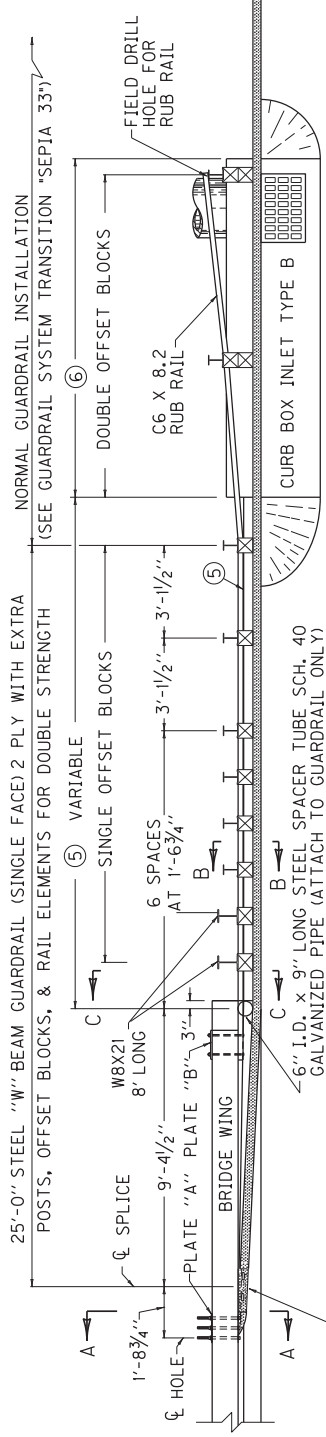


BEVELED WASHER

USE WITH CUR. STD. DWGS.
RBC-002, RBC-005, RBC-006
KENTUCKY
DEPARTMENT OF HIGHWAYS
GUARDRAIL CONNECTOR
TO BRIDGE END
TYPE A AND A-1
COMPONENTS

SUBMITTED: *[Signature]* 11-17-17
DATE: 11-17-17
DIRECTOR DIVISION OF DESIGN

COUNTY OF	WOLFE
ITEM NO.	
SHEET NO.	519



PLAN VIEW

1. GENERAL
- SEE CUR. STD. DWGS. IN THE RBB, RBI, RBR, AND RPM-SERIES FOR OTHER RELATED GUARDRAIL DETAILS AND BRIDGE PLANS FOR BRIDGE WING DETAIL.
 - SEE CUR. STD. DWG. RDB-SERIES FOR CURB BOX INLET TYPE B.
 - GUARDRAIL CONNECTOR TO BRIDGE END TYPE A IS FOR USE ON BOTH BRIDGE ENDS OF AN UNDIVIDED HIGHWAY AND ON THE APPROACH BRIDGE ENDS OF A DIVIDED HIGHWAY.

2. MATERIAL REQUIREMENTS
- ALL HARDWARE SHALL BE GALVANIZED. (AASHTO M-232)
 - 5/8" STEEL PLATE "A" AND "B" (AASHTO M-270)
 - 7/8" HEX HEAD BOLTS OR STEEL THREADED RODS (LENGTH AS SHOWN)
 - 7/8" HEAVY HEX NUTS (1/8" THICK) (AASHTO M-291)
 - 7/8" FLAT WASHERS (3/16" THICK) (AASHTO M-293)
 - 7/8" BEVELED WASHERS (5/16" MEAN THICKNESS) (AASHTO M-293)
 - BOTH THE BOLT AND THREADED ROD SHALL HAVE A MINIMUM OF 50,000 LBS. TENSILE STRENGTH AT THE NARROWEST POINT.

3. CONSTRUCTION METHODS
- ELIMINATE EXTRA OFFSET BLOCKS WHEN CURB BOX INLET TYPE B IS NOT REQUIRED.
 - HOLES TO BE FORMED THROUGH BRIDGE WING WITH 1" I.D. PLASTIC PIPE FOR 7/8" BOLTS AND 3/4" I.D. PLASTIC PIPE FOR 5/8" BOLTS. PIPE SHALL REMAIN IN PLACE.

4. METHOD OF MEASUREMENT AND BASIS OF PAYMENT
- GUARDRAIL CONNECTOR TO BRIDGE END TYPE A SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, AND INCLUDES: TERMINAL SECTION NO. 2; ALL ITEMS WHICH ARE IN ADDITION TO THE NORMAL INSTALLATION OF STEEL BEAM GUARDRAIL (EXTRA POSTS, OFFSET BLOCKS, RAIL ELEMENTS, SPACER TUBE, HARDWARE, RUB RAIL, ETC.) AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AS DETAILED. STEEL "W" BEAM GUARDRAIL (SINGLE FACE) AND ISLAND HEADER CURB ARE SEPARATE BID ITEMS WHICH ARE ALWAYS REQUIRED. CURB BOX INLET TYPE B IS A SEPARATE BID ITEM THAT WILL BE USED WHEN REQUIRED FOR BRIDGE END DRAINAGE.
 - ITEMS AND UNIT TO BID
 - GUARDRAIL CONNECTOR TO BRIDGE END TYPE A EACH LF
 - ISLAND HEADER CURB TYPE 1 OR 2 LF
 - CURB BOX INLET TYPE B (AS REQUIRED) EACH

- THE PLASTIC PIPE AND COST OF FORMING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BRIDGE SUPERSTRUCTURE CONCRETE.

NORMAL GUARDRAIL INSTALLATION
(SEE GUARDRAIL SYSTEM TRANSITION "SEPIA 33")

25'-0" STEEL "W" BEAM GUARDRAIL (SINGLE FACE) 2 PLY WITH EXTRA POSTS, OFFSET BLOCKS, & RAIL ELEMENTS FOR DOUBLE STRENGTH

DOUBLE OFFSET BLOCKS

FIELD DRILL HOLE FOR RUB RAIL

DOUBLE OFFSET BLOCKS

DOUBLE OFFSET BLOCKS

C6 X 8.2 RUB RAIL

C6 X 8.2 RUB RAIL

C6 X 8.2 RUB RAIL

SINGLE OFFSET BLOCKS

SINGLE OFFSET BLOCKS

SINGLE OFFSET BLOCKS

CURB BOX INLET TYPE B

CURB BOX INLET TYPE B

CURB BOX INLET TYPE B

OFFSET BLOCK

OFFSET BLOCK

OFFSET BLOCK

TERMINAL SECT. NO. 2

TERMINAL SECT. NO. 2

TERMINAL SECT. NO. 2

PLATE "A"

PLATE "A"

PLATE "A"

4 - 7/8" HEX HEAD BOLTS (LENGTH W + 6"), 4 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

4 - 7/8" HEX HEAD BOLTS (LENGTH W + 6"), 4 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

4 - 7/8" HEX HEAD BOLTS (LENGTH W + 6"), 4 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

4 - 7/8" STEEL THREADED RODS (LENGTH W+8"), 8 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

4 - 7/8" STEEL THREADED RODS (LENGTH W+8"), 8 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

4 - 7/8" STEEL THREADED RODS (LENGTH W+8"), 8 NUTS, 4 BEVELED WASHERS AND 4 FLAT WASHERS.

6" TUBE

6" TUBE

6" TUBE

5/8" BUTTON HEAD BOLT, HEX HEAD NUT AND WASHER (LGTH = W + 4")

5/8" BUTTON HEAD BOLT, HEX HEAD NUT AND WASHER (LGTH = W + 4")

5/8" BUTTON HEAD BOLT, HEX HEAD NUT AND WASHER (LGTH = W + 4")

4" CURB HEIGHT

4" CURB HEIGHT

4" CURB HEIGHT

SECTION A-A

SECTION B-B

SECTION C-C

ISLAND HEADER CURB. TRANSITION FROM ISLAND CURB SHAPE TO SHAPE ON BRIDGE WING WITHIN 7'-3". LENGTH OF CURB VARIABLE (22'-3" WHEN L=5'-0") (17'-3" WHEN L=10'-0") (12'-3" WHEN L=15'-0") (7'-3" WHEN L=20'-0"). ON APPROACH END CONSTRUCT 25'-0" OF ISLAND AND HEADER CURB EVEN WHEN CURB BOX INLET TYPE B IS NOT REQUIRED.

USE WITH CUR. STD. DWGS. BHS-008, RBC-002, RBC-003 RBR-010

6'-4" WHEN L=5'-0" ☆
11'-4" WHEN L=10'-0" ☆
16'-4" WHEN L=15'-0" ☆
21'-4" WHEN L=20'-0" ☆
5/8" X 3/2" BUTTON HEAD BOLT, HEX HEAD NUT.

CURB BOX NOT REQUIRED UNLESS NEEDED FOR DRAINAGE.

10'-0" LENGTH IS REQUIRED UNLESS OTHERWISE NOTED.

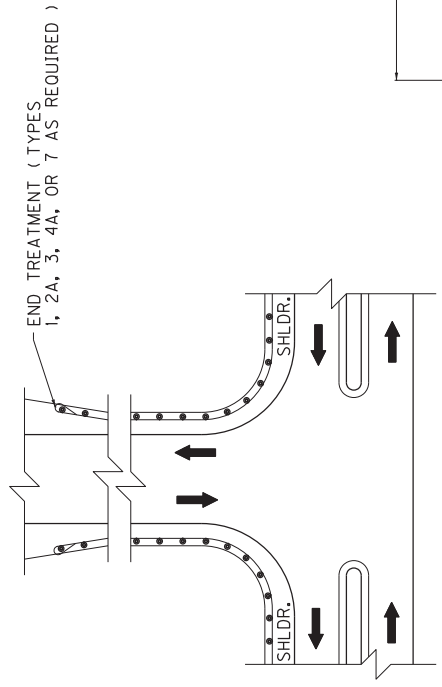
L EQUALS THROAT LENGTH OF BOX.

KENTUCKY	
DEPARTMENT OF HIGHWAYS	
GUARDRAIL CONNECTOR TO BRIDGE END TYPE A	
DATE	4-04-18
SUBMITTED	DIRECTOR BRUNSON W. RESNA

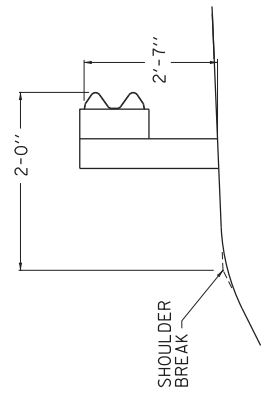
COUNTY OF	ITEM NO.	SHEET NO.
WOLFE		S20

~ NOTES ~

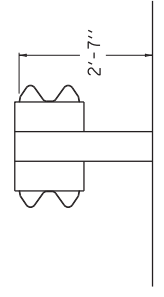
1. FOR END TREATMENT TYPE 4A USE CUR. STD. DWG. RBR-035 FOR OFFSETS.
2. THE MINIMUM LENGTH OF GUARDRAIL, INCLUDING THE END TREATMENT, PRECEDING A FIXED OBJECT IS 200 FEET: (LENGTH MAY BE REDUCED SHOULD FIELD CONDITIONS WARRANT).



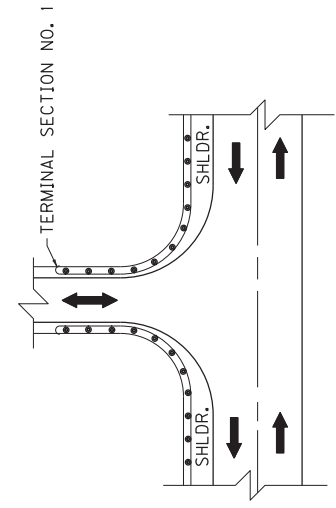
APPROACH ROADS



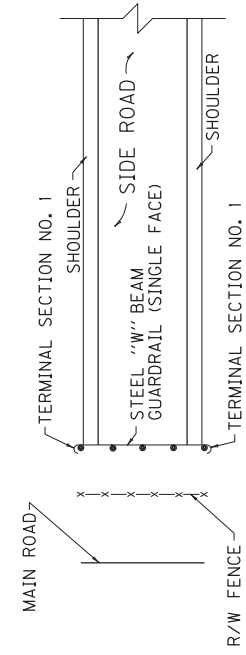
NORMAL GUARDRAIL INSTALLATION



TYPICAL DOUBLE FACE GUARDRAIL INSTALLATION



ENTRANCES



GUARDRAIL USED AS A BARRICADE

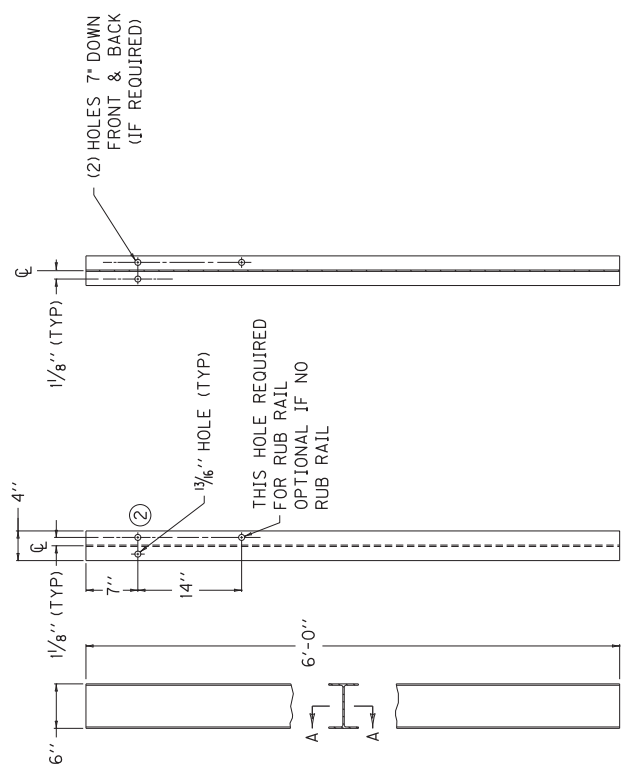
USE WITH CUR. STD. DWG.
RBI-002, RBR-035

KENTUCKY
DEPARTMENT OF HIGHWAYS
TYPICAL GUARDRAIL
INSTALLATIONS

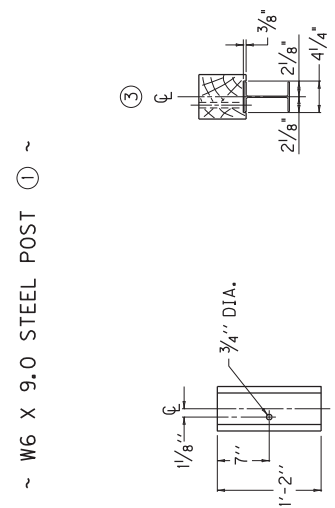
SUBMITTED: *[Signature]* DIRECTOR DIVISION OF DESIGN
11-17-17 DATE

ITEM NO.	SHEET NO.
COUNTY OF WOLFE	SZ1

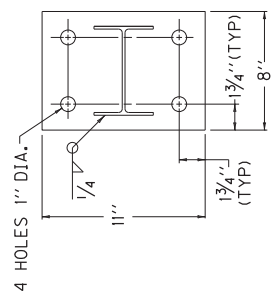
- ~ NOTES ~
- ① W6 X 8.5 IS AN ACCEPTABLE ALTERNATE.
 - ② THESE HOLES ARE REQUIRED FOR ATTACHING RAIL.
 - ③ TIMBER OR COMPOSITE BLOCKOUTS MAY BE USED WITH STEEL POST.



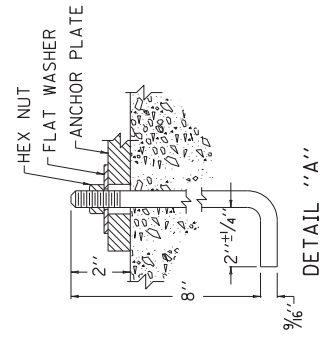
~ W6 X 9.0 STEEL POST ① ~



OFFSET BLOCK TYPE 4
6" X 8" (Nominal Size)
(TIMBER OR APPROVED COMPOSITE)
(FOR USE WITH STEEL POST ONLY)



ANCHOR PLATE



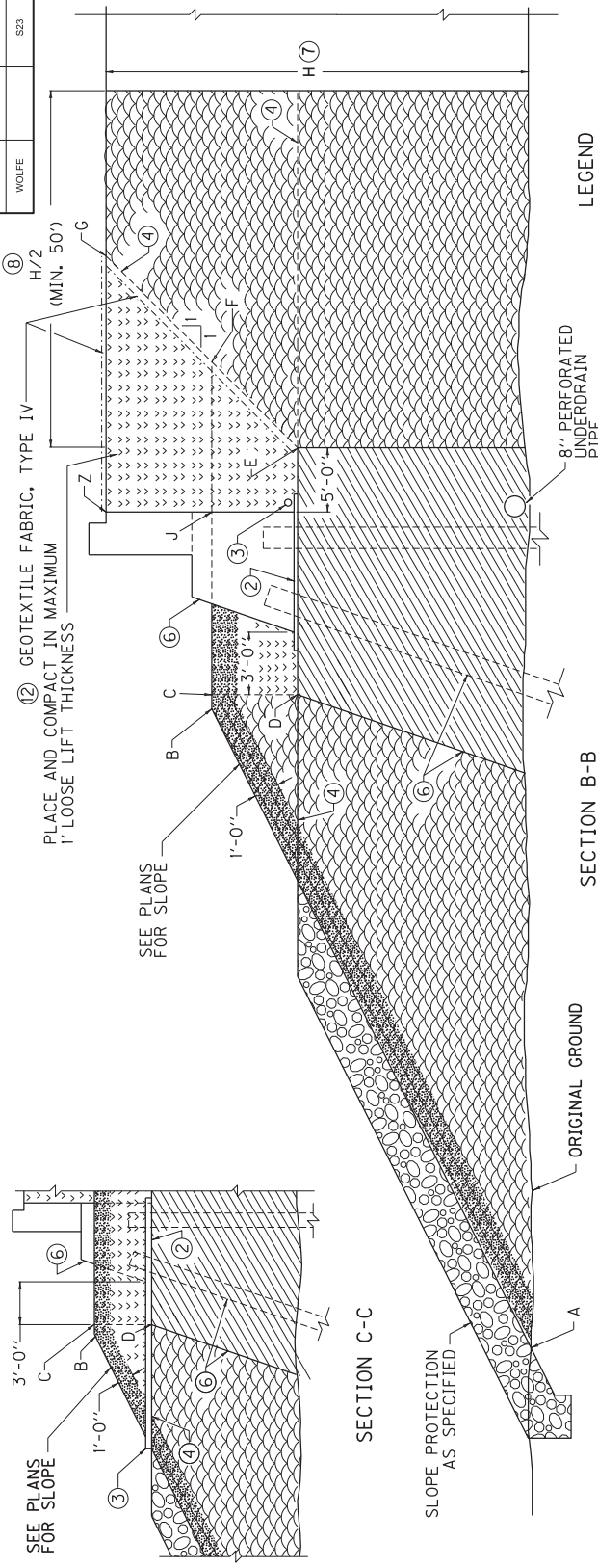
KENTUCKY
DEPARTMENT OF HIGHWAYS

STEEL
GUARDRAIL POSTS

SUBMITTED: *William S. Stetson*
DATE: 3-06-18
DIRECTOR, DIVISION OF DESIGN

028

ITEM NO.	COUNTY OF	SHEET NO.
	WOLFE	SZ3



FILE NAME: C:\PWORK\JEFF.L\AL\009126313EPA 010.DGN	DATE PLOTTED: January 30, 2017	USER: jrlm
BID ITEMS AND UNIT TO BID		
GRANULAR EMBANKMENT	CUYD	
STRUCTURE GRANULAR BACKFILL	CUYD	

- CONSTRUCTION SEQUENCE "A"**
1. CONSTRUCT EMBANKMENT TO SLOPES A, B, F, AND G SUCH THAT NO UNCOMPACTED OR LOOSE MATERIAL SHALL REMAIN.
 2. EXCAVATE FOR END-BENT TO C, D, E, AND F.
 3. INSTALL PILES (OR OTHER FOUNDATION).
 4. PLACE 2" MORTAR BED OR ANY CLASS CONCRETE.
 5. CONSTRUCT CONCRETE END-BENT.
 6. INSTALL 4" PERFORATED UNDERDRAIN PIPE AND BACKFILL TO C, D, E, F, G, Z, AND J WITH COMPACTED STRUCTURE GRANULAR BACKFILL.
- CONSTRUCTION SEQUENCE "B"**
1. CONSTRUCT EMBANKMENT TO TEMPORARY SLOPE (4).
 2. INSTALL PILES (OR OTHER FOUNDATION).
 3. PLACE 2" MORTAR BED OR ANY CLASS CONCRETE.
 4. CONSTRUCT CONCRETE END-BENT.
 5. INSTALL 4" PERFORATED UNDERDRAIN PIPE AND BACKFILL TO BACKFILL TO FINISHED GRADE IN ACCORDANCE WITH SPECIAL PROVISION NO. 69.

- NOTES**
1. CONSTRUCTION SEQUENCE "B" IS A PERMITTED ALTERNATE ONLY WHEN GRANULAR OR ROCK EMBANKMENT IS UTILIZED.
 2. 2" MORTAR BED OR ANY CLASS CONCRETE.
 3. 4" PERFORATED UNDERDRAIN PIPE WRAPPED WITH GEOTEXTILE FABRIC FOR DRAINING THE EXCAVATED TRENCH AND STRUCTURE GRANULAR BACKFILL.
 4. ACCEPTABLE ALTERNATES FOR TEMPORARY SLOPE (CONSTRUCTION SEQUENCE "B").
 5. SHADED PORTIONS AND REPRESENT LIMITS OF NON-ERODIBLE GRANULAR EMBANKMENT IN ACCORDANCE WITH SPECIAL PROVISION NO. 69.
 6. SLOPES ARE EQUAL.
 7. "H" = EMBANKMENT HEIGHT MEASURED FROM SUBGRADE ELEVATION AT POINT (2) TO THE LOWEST ELEVATION AT THE TOE OF THE SLOPE.
 8. LIMITS OF EMBANKMENT CONSTRUCTION (H/2 OR 50' MIN.) REQUIRING 2' MAXIMUM LIFT THICKNESS FOR GRANULAR OR ROCK EMBANKMENTS.
 9. SEE CURRENT SPECIAL PROVISION NO. 69 FOR CONSTRUCTION AND MATERIAL REQUIREMENTS, METHOD OF MEASUREMENT AND BASIS OF PAYMENT.
 10. STRUCTURE GRANULAR BACKFILL PLACED AS A COMPLETE SEPARATE OPERATION AFTER CONSTRUCTION OF ALL OTHER EMBANKMENT.
 11. NO INDIVIDUAL FRAGMENTS LARGER THAN 4 INCHES IN ANY DIMENSION PERMITTED WITHIN 3'-0" OF THE STRUCTURE.
 12. PLACE GEOTEXTILE FABRIC, TYPE IV PRIOR TO PLACING STRUCTURE GRANULAR BACKFILL AND AGGREGATE BASE COURSE.

USE WITH SEPIA 009

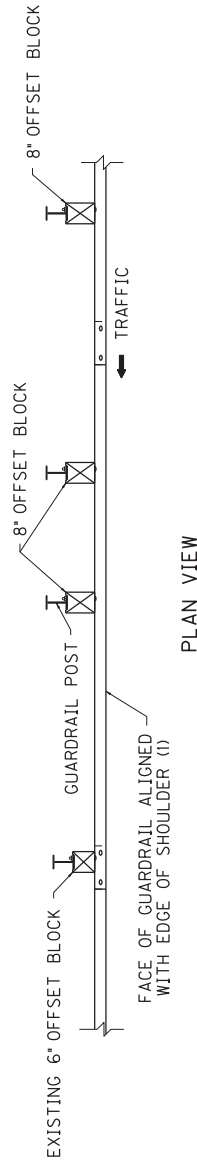
KENTUCKY
DEPARTMENT OF HIGHWAYS

TREATMENT OF
EMBANKMENTS AT
END-BENTS - DETAILS

SUBMITTED: *Richard P. Seibel*
DATE: 1-30-17

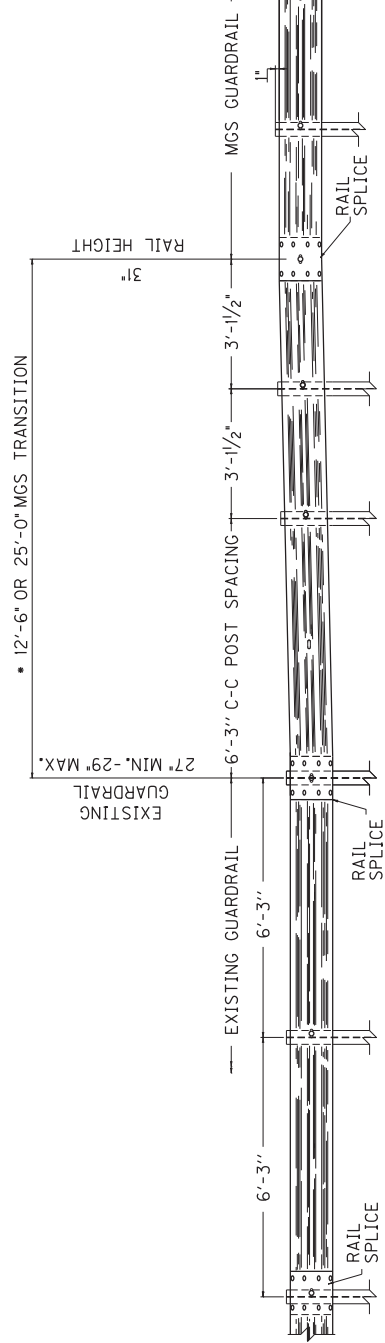
010

COUNTY OF	ITEM NO.	SHEET NO.
WOLFE		S24



PLAN VIEW

• 12'-6" TRANSITION FROM 29" TO 31" SHOWN,
25'-0" REQUIRED FOR 27" TO 31" TRANSITION.



ELEVATION VIEW

~ NOTES ~

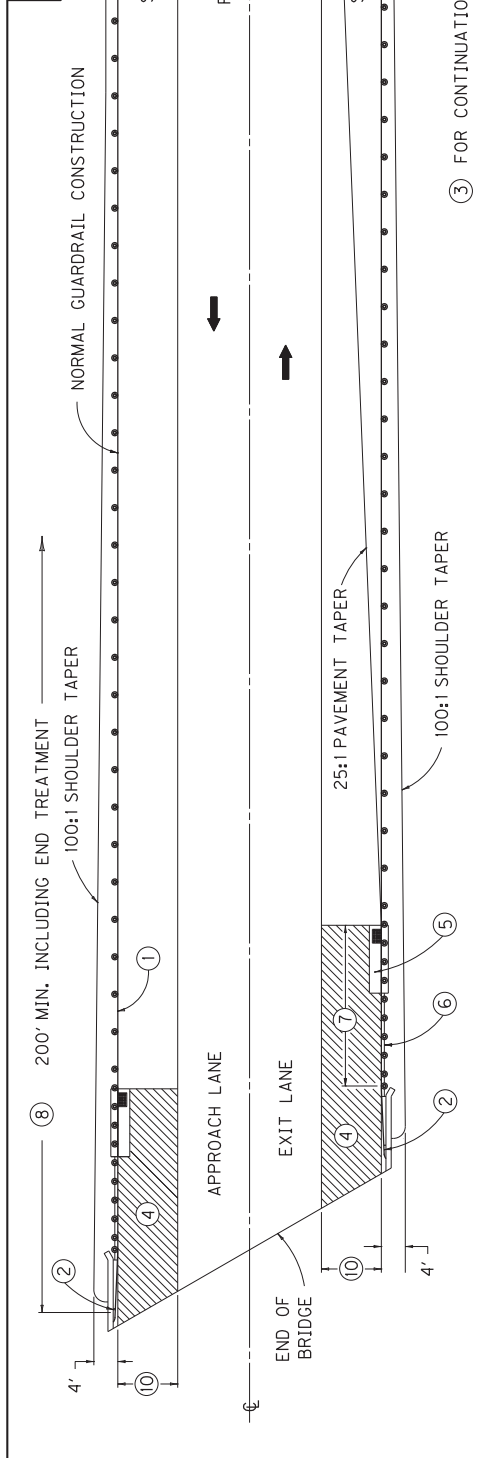
- 1) WHERE POST OFFSET IS CONSTRAINED, AND WHEN THE EXISTING SHOULDER IS WIDER THAN 4 FEET, THE EXISTING SHOULDER MAY BE REDUCED UP TO 2 INCHES TO ACCOMMODATE THE 8 INCH BLOCKS OF THE MCS GUARDRAIL. WHERE SITE CONSTRAINTS PROHIBIT THE POST FROM BEING PLACED AT LEAST 6 INCHES IN FRONT OF THE SLOPE BREAK POINT, USE 7 FOOT POSTS.
- 2) MCS TRANSITION FROM EXISTING GUARDRAIL SHALL BE COMPLETED OUTSIDE THE 50 FEET MCS END TERMINAL LIMITS.

KENTUCKY
DEPARTMENT OF HIGHWAYS

GUARDRAIL SYSTEM
TRANSITION

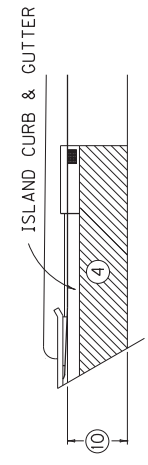
SUBMITTED: *William J. Bales*
DIRECTOR DIVISION OF DESIGN 4-04-18
DATE

COUNTY OF	ITEM NO.	SHEET NO.
WOLFE		SZ5



ITEM	STD. DWG. NO. (CURRENT EDITION)
(1) STEEL W BEAM GUARDRAIL - S FACE	RBR-001
(2) BRIDGE END CONNECTORS	RBC-SERIES
(3) END TREATMENT TYPE 1, 2A, 3 OR 4A (NOTE 9)	RBR-SERIES
DRAINAGE ITEMS (WHEN REQUIRED)	
(4) BRIDGE END DRAINAGE AREA (NOTE 10)	RDB-SERIES
(5) CURB BOX INLET TYPE B	RPM-SERIES
(6) ISL. HEADER CURB OR ISL. CURB AND GUTTER	RPM-SERIES

- ~ NOTES ~
- (7) VARIABLE LENGTH, SEE APPLICABLE "BRIDGE END CONNECTOR" DRAWINGS.
 - (8) SHOWN FOR FILL CONDITION. LENGTH MAY BE REDUCED SHOULD FIELD CONDITIONS WARRANT.
 - 9. TO TERMINATE GUARDRAIL INSTALLATION:
 - A. ALL FILLS; ALSO SOLID ROCK CUTS WITH ADEQUATE VEHICLE RECOVERY ZONE BEHIND GUARDRAIL, USE END TREATMENT TYPE 1 OR 4A.
 - B. SOLID ROCK CUTS WITHOUT ADEQUATE VEHICLE RECOVERY ZONE BEHIND GUARDRAIL, USE END TREATMENT TYPE 2A.
 - C. EARTH CUTS AND SOFT ROCK CUTS, USE END TREATMENT TYPE 3.
 - (10) USE ISLAND CURB AND GUTTER AND SAME PAVEMENT AS SHOWN ON MAINLINE DESIGN, (SEE DETAIL A).
 - 11. NO ANGLES PERMITTED IN NORMAL GUARDRAIL ALIGNMENT.
 - 12. THIS ILLUSTRATION IS FOR TWO-WAY TRAFFIC FLOW. FOR ONE-WAY TRAFFIC FLOW, MAKE THE FOLLOWING ALTERATIONS:
 - APPROACH END OF STRUCTURE-
 - A. NO PAVEMENT TAPER REQUIRED
 - B. ALIGN FACE OF GUARDRAIL WITH STRUCTURE GUTTERLINE
 - EXIT END OF STRUCTURE-
 - A. PAVEMENT TAPER REQUIRED FOR BOTH OUTSIDE LANES
 - B. FOR GUARDRAIL ALIGNMENT SEE BRIDGE END CONNECTOR DRAWINGS



USE WITH CUR. STD. DWGS.
RBC-005, RBC-006, RBR-001

KENTUCKY
DEPARTMENT OF HIGHWAYS
GUARDRAIL AND
BRIDGE END DRAINAGE
FOR SINGLE STRUCTURES

SUBMITTED *William S. Galt* 02-5-18
DIRECTOR DIVISION OF DESIGN DATE

037

**Special Note for Fixed Completion Date and
Liquidated Damages
Mountain Parkway
Wolfe County
Item No. 10-20012.00**

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day will be assessed for each day work remains uncompleted beyond the Specified Completion Date. This project has an Ultimate Fixed Completion Date of October 31, 2019.

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

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

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

The Mountain Parkway may be closed at the KY 1010 interchange for 90 consecutive days to replace the overpass structure on KY 1010. See Structural Plans and MOT Plans at this location.

All liquidated damages will be applied cumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

Special Note for Bridge Demolition, Renovation and Asbestos Abatement

If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.

Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.



Matthew G. Bevin
Governor

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

Greg Thomas
Secretary

Asbestos Inspection Report

To: Brandon Baker

District: 10

Date: December 14, 2018

Conducted By: O'Dail Lawson

Report Prepared By: O'Dail Lawson

Project and Structure Identification

Project Number: Wolfe 10-20012.00

Structure ID: 119B00042N

Structure Location: MTN Parkway (KY-9009) over Gilmore Road

Sample Description: The samples collected were negative for asbestos.

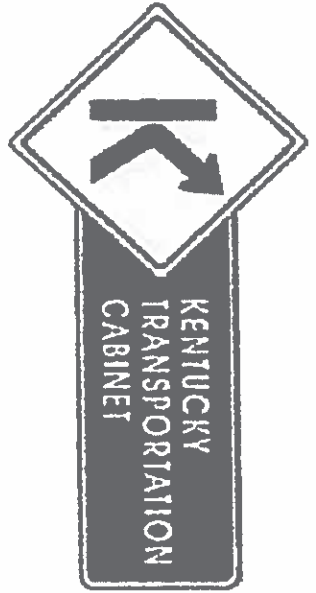
Inspection Date: December 3, 2018

Results and Recommendations

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

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





Chain of Custody Record

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

149-9009 (min pks) over Baltimore Road

O'Dail Lawson odail.lawson@ky.gov KYTC 200 Metro Street Frankfort KY Phone: 502-564-7250 Fax: 502-564-5655 PG#:		Client Information KY TRANS CABINET Results Code: ND = None Detected FTD = Filler Tampering or Damaged N/A = Not Applicable		Project or Subject Reference White 10-20012.00 119 B00042A Samplers (signature): <i>[Signature]</i>				
Sample ID	Sample Description	Collected		Analysis Requested	Grab/Comp.	No. of Cont.	Type	Preservative
		Date	Time					
42-1	Guano Rail Mastz	12/3/18	12:48	Adhesive bulk	grey	1	sealant	N/A
42-2	Travel on Sealant				black	1	sealant	
42-3	Joint Compound (older)							
42-4	Joint Compound (newer)							
Relinquished By:		Date/Time:						
Received By: <i>[Signature]</i>		Date/Time: 12/5/18						
Relinquished By:		Date/Time:						
Received at Lab By:		Date/Time:						

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

Certification Number: ETC-AIR-060518-00303

O'Dail Lawson

has on 06-05-2018, attended and successfully completed the requirements and passed the examination with a score of 70% of better on the entitled course.

ASBESTOS INSPECTOR REFRESHER

Training was in accordance with 40 CFR Part 763 (AHERA) approved by the Commonwealth of Kentucky, the Indiana Department of Environmental Management, Tennessee Department of Environment & Conservation and the Arkansas Department of Environmental Quality. The above student received requisite training for Asbestos Accreditation under Title II of the Toxic Substance Act (TSCA).

Conducted at: ~~2660~~ Technology Drive, Louisville, KY


Name - Training Manager

Expiration Date: 06-05-2019



Name - Instructor



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

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

RIGHT OF WAY CERTIFICATION

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION		
ITEM #		COUNTY		PROJECT # (STATE)		PROJECT # (FEDERAL)
10-20012.00		Wolfe		1100 FD04 119 9479701R		
PROJECT DESCRIPTION						
ADDRESS PAVEMENT CONDITION OF BERT T. COMBS MOUNTAIN PARKWAY BOTH DIRECTION(S) FROM MILEPOINT 46.208 TO MILEPOINT 56.8. (COMBINED ITEM NO. 10-20011)						
<input checked="" type="checkbox"/> 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.						
<input type="checkbox"/> 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.						
<input type="checkbox"/> 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						
<input type="checkbox"/> 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		0	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) All RW acquired by signed deed.						
LPA RW Project Manager				Right of Way Supervisor		
Printed Name				Printed Name		Aric Skaggs
Signature				Signature		
Date				Date		October 9, 2018
Right of Way Director				FHWA		
Printed Name				Printed Name		
Signature				Signature		
Date				Date		

UTILITIES AND RAIL CERTIFICATION NOTE

<p style="text-align: center;">Wolfe County No federal number available FD04 119 9009 046-057 Mile point: 46.208 TO 56.800 ADDRESS PAVEMENT CONDITION OF BERT T. COMBS MOUNTAIN PARKWAY BOTH DIRECTION(S) FROM MILEPOINT 46.8 TO MILEPOINT 56.8. (COMBINED ITEM NO. 10-20011) ITEM NUMBER: 10-20012.00</p>

PROJECT NOTES ON UTILITIES

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

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.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

Utility coordination efforts determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

UTILITIES AND RAIL CERTIFICATION NOTE

Wolfe County
No federal number available
FD04 119 9009 046-057
Mile point: 46.208 TO 56.800
ADDRESS PAVEMENT CONDITION OF BERT T. COMBS MOUNTAIN PARKWAY BOTH DIRECTION(S)
FROM MILEPOINT 46.208 TO MILEPOINT 56.8. (COMBINED ITEM NO. 10-20011)
ITEM NUMBER: 10-20012.00

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

Licking Valley RECC – Electric
East Kentucky Power Corporation – Electric
American Electric Power - Electric
Mountain Telephone Cooperative – Telecommunication
AT&T - Telecommunication
City of Campton - Water

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

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

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

Not Applicable

UTILITIES AND RAIL CERTIFICATION NOTE

Wolfe County
No federal number available
FD04 119 9009 046-057
Mile point: 46.208 TO 56.800
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FROM MILEPOINT 46.208 TO MILEPOINT 56.8. (COMBINED ITEM NO. 10-20011)
ITEM NUMBER: 10-20012.00

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involvement
 Rail Involved
 Rail Adjacent

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
City of Campton - Water	PO Box 35 Campton KY 41301	Raymond Banks	6066683574	denarice870@yahoo.com
East Kentucky Power Cooperative – Electric	P.O. Box 707 Winchester, KY 40391	Garry Harvey	8597444812	Garry.harvey@ekpc.coop
American Electric Power – Electric	23000 Highway 23 Louisa, KY 41230	Bill Johnson	6064373823	wmjohnson@aep.com
AT&T – Communication	250 Williams St. NW Suite 5000 Atlanta, GA 30303	Jack Salyer	6064249328	Js2299@att.com
Licking Valley RECC - Electric	271 Main Street West Liberty KY 41472	Wes McKinney	6067433179	wesm@lvrecc.com
Mountain Telephone Cooperative - Telephone	P.O. Box 399 West Liberty KY 41472	Steve Gullett	6067433121	sgullett@mountaintelephone.com

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____

Contractor: _____

Section Engineer: _____

District & County: _____

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

***Required Signatures before Leaving Project Site**

Printed Section Engineer's Representative _____ & Date _____

Signature Section Engineer's Representative _____ & Date _____

Printed Contractor's Representative _____ & Date _____

Signature Contractor's Representative _____ & Date _____

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

Printed Bailey Bridge Yard Representative _____ & Date _____

Signature Bailey Bridge Yard Representative _____ & Date _____

Printed Contractor's Representative _____ & Date _____

Signature Contractor's Representative _____ & Date _____

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

Completed Form Submitted to Section Engineer Date: _____ By: _____

PART II
SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

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

SUPPLEMENTAL SPECIFICATIONS

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

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

- 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

11

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

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

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

Effective June 15, 2012

SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

1.0 DESCRIPTION. Install barcode label on sheeting signs. Section references herein are to the Department’s 2012 Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS. The Department will provide the Contractor with a 2 inch x 1 inch foil barcode label for each permanent sheeting sign. A unique number will be assigned to each barcode label.

The Contractor shall contact the Operations and Pavement Management Branch in the Division of Maintenance at (502) 564-4556 to obtain the barcode labels.

3.0 CONSTRUCTION. Apply foil barcode label in the lower right quadrant of the sign back. Signs where the bottom edge is not parallel to the ground, the lowest corner of the sign shall serve as the location to place the barcode label. The barcode label shall be placed no less than one-inch and no more than three inches from any edge of the sign. The barcode must be placed so that the sign post does not cover the barcode label.

Barcodes shall be applied in an indoor setting with a minimum air temperature of 50°F or higher. Prior to application of the barcode label, the back of the sign must be clean and free of dust, oil, etc. If the sign is not clean, an alcohol swab shall be used to clean the area. The area must be allowed to dry prior to placement of the barcode label.

Data for each sign shall include the barcode number, MUTCD reference number, sheeting manufacturer, sheeting type, manufacture date, color of primary reflective surface, installation date, latitude and longitude using the North American Datum of 1983 (NAD83) or the State Plane Coordinates using an x and y ordinate of the installed location.

Data should be provided electronically on the TC 71-229 Sign Details Information and TC 71-230 Sign Assembly Information forms. The Contractor may choose to present the data in a different format provided that the information submitted to the Department is equivalent to the information required on the Department TC forms. The forms must be submitted in electronic format regardless of which type of form is used. The Department will not accept PDF or handwritten forms. These completed forms must be submitted to the Department prior to final inspection of the signs. The Department will not issue formal acceptance for the project until the TC 71-229 and TC-230 electronic forms are completed for all signs and sign assemblies on the project.

4.0 MEASUREMENT. The Department will measure all work required for the installation of the barcode label and all work associated with completion and submission of the sign inventory data (TC 71-229 and TC 71-230).

The installation of the permanent sign will be measured in accordance to Section 715.

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

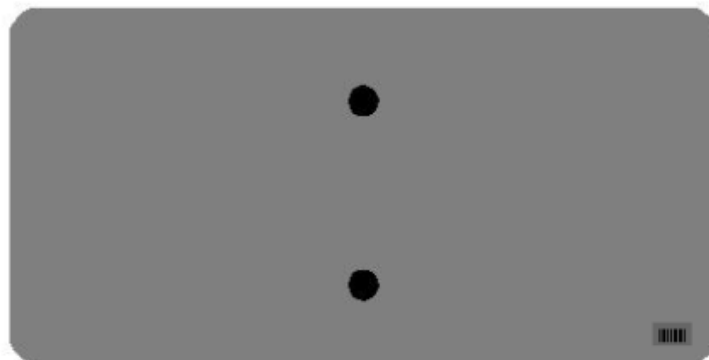
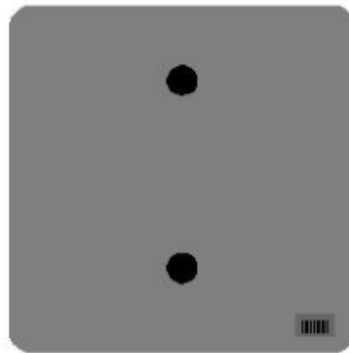
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment as full compensation for all work required under this special note.

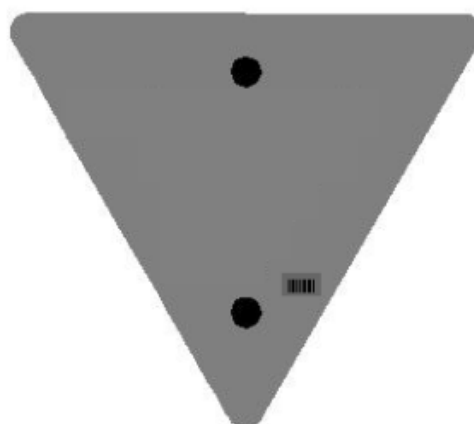
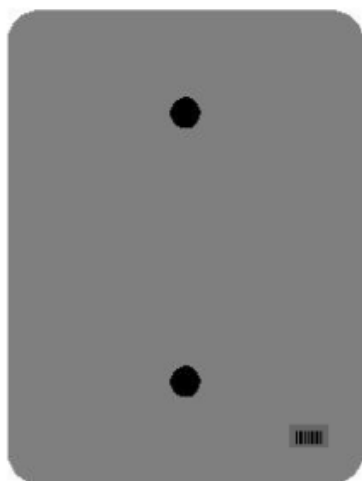
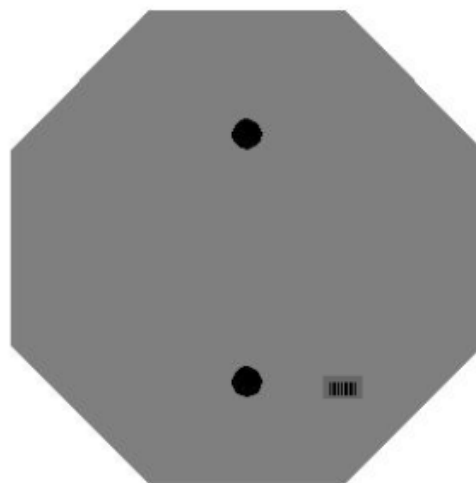
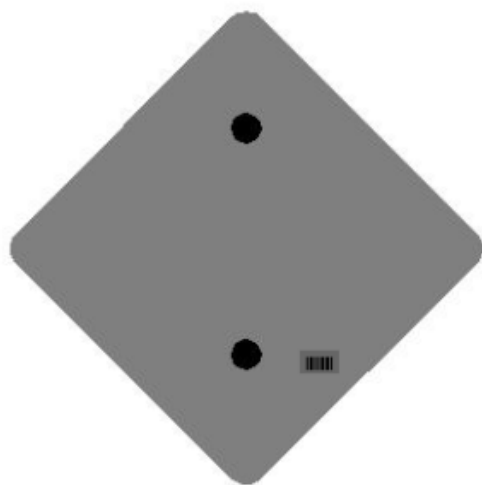
One Sign Post



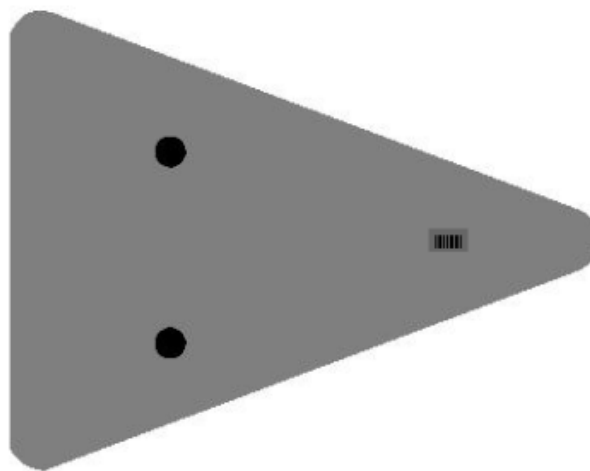
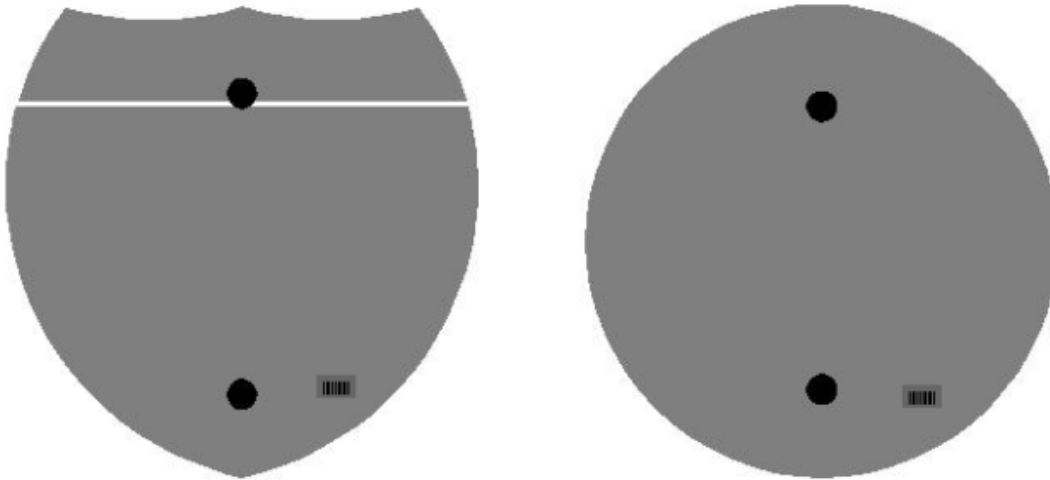
↑
2" Wide Post



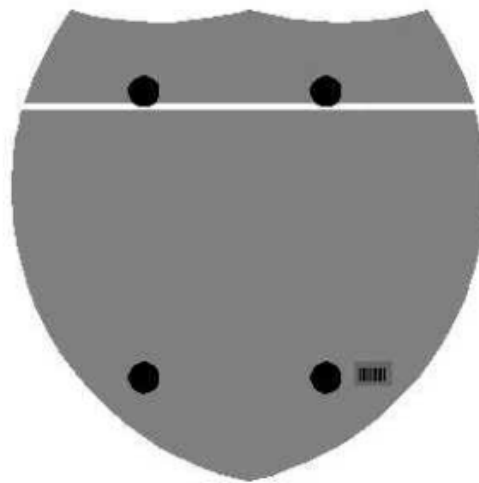
One Sign Post



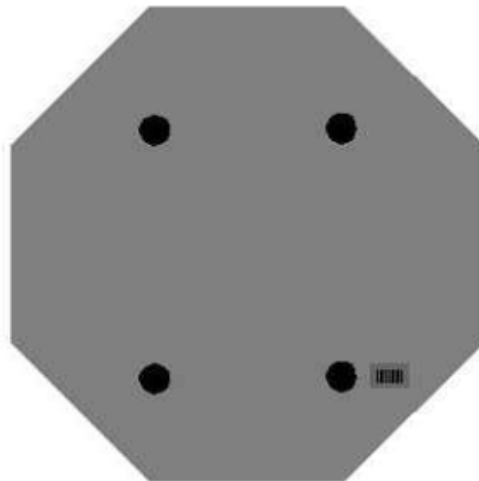
One Sign Post



Double Sign Post



Interstate
Shield

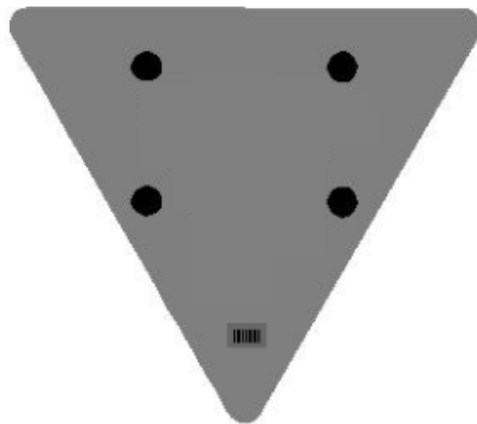


48" Stop

2 Post Signs



↑
2" Wide Post



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.

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.

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) ASTM D 3236	4.0-10.0	3.5-10.5	3.0-3.4 10.6-11.0	2.5-2.9 11.1-11.5	2.0-2.4 11.6-12.0	≤1.9 ≥ 12.1
Cone Penetration, 77 ° F ASTM D 5329	60-100	57-103	54-56 104-106	51-53 107-109	48-50 110-112	≤ 47 ≥ 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

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

ATTACHMENTS

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

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**EMPLOYMENT REQUIREMENTS
RELATING TO
NONDISCRIMINATION OF EMPLOYEES
(APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)**

**AN ACT OF THE KENTUCKY GENERAL ASSEMBLY
TO PREVENT DISCRIMINATION IN EMPLOYMENT**

**KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

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

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

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

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

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

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*)

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (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.

Stone Mason.....	\$ 21.50	8.50
CARPENTER		
Carpenter.....	\$ 24.90	14.50
Piledriver.....	\$ 24.55	14.50

CEMENT MASON.....	\$ 21.25	8.50
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ELECTRICIAN		
Electrician.....	\$ 29.36	10.55
Equipment Operator.....	\$ 26.90	10.31
Groundsman.....	\$ 17.79	8.51
Lineman.....	\$ 30.09	10.94

When workmen are required to work from bosum chairs, trusses, stacks, tanks, scaffolds, catwalks, radio and T.V. towers, structural steel (open, unprotected, unfloored raw steel), and bridges or similar hazardous locations where workmen are subject to fall, except where using JLG's and bucket trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet, and add 50% to workman's base rate for over 75 feet.

IRONWORKER.....	\$ 27.56	20.57
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LABORER		
Group 1.....	\$ 21.80	12.36
Group 2.....	\$ 22.05	12.36
Group 3.....	\$ 22.10	12.36
Group 4.....	\$ 22.70	12.36

GROUP 1: Aging and Curing of Concrete (Any Mode or Method), Asbestos Abatement Worker, Asphalt Plant Laborers, Asphalt Laborers, Batch Truck Dumpers, Carpenter Tenders, Cement Mason Tenders, Cleaning of Machines, Concrete Laborers, Demolition Laborers, Dredging Laborers, Drill Tender, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level D, Flagmen, Grade Checkers, All Hand Digging and Hand Back Filling, Highway Marker Placers, Landscaping Laborers, Mesh Handlers and Placers, Puddler, Railroad Laborers, Rip-rap and Grouters, Right of Way Laborers, Sign, Guard Rail and Fence Installers (All Types), Signalmen, Sound Barrier Installer, Storm and Sanitary Sewer Laborers, Swampers, Truck Spotters and Dumpers, Wrecking of Concrete Forms, General Cleanup

GROUP 2: Batter Board Men (Sanitary and Storm Sewer), Brickmason Tenders, Mortar Mixer Operator, Scaffold Builders, Burner and Welder, Bushammers, Chain Saw Operator, Concrete Saw Operators, Deckhand Scow Man, Dry Cement Handlers, Environmental Laborers - Nuclear, Radiation, Toxic and Hazardous Waste - Level C, Forklift Operators for Masonry, Form Setters, Green Concrete Cutting, Hand Operated Grouter and Grinder Machine Operator, Jack Hammers, Lead Paint Abatement, Pavement Breakers, Paving Joint Machine, Pipe Layers - Laser Operators (Non-metallic), Plastic Pipe Fusion, Power Driven Georgia Buggy and Wheel Barrow, Power Post Hole Diggers, Precast Manhole Setters, Walk-behind Tampers, Walk-behind Trenchers, Sand Blasters, Concrete Chippers, Surface Grinders, Vibrator Operators, Wagon Drillers

GROUP 3: Air Track Driller (All Types), Asphalt Luteman and Rakers, Gunnite Nozzleman, Gunnite Operators and Mixers, Grout

Pump Operator, Powderman and Blaster, Side Rail Setters, Rail Paved Ditches, Screw Operators, Tunnel Laborers (Free Air), Water Blasters

GROUP 4: Caisson Workers (Free Air), Cement Finishers, Environmental Laborer - Nuclear, Radiation, Toxic and Hazardous Waste - Level A and B, miners and Drillers (Free Air), Tunnel Blasters, and Tunnel Mockers (Free Air), Directional and Horizontal Boring, Air Track Drillers (All Types), Powder Man and Blasters, Troxler and Concrete Tester if Laborer is Utilized

PAINTER

All Excluding Bridges.....	\$ 19.92	9.57
Bridges.....	\$ 23.92	10.07

PLUMBER.....\$ 22.52 7.80

POWER EQUIPMENT OPERATOR:

Group 1.....	\$ 29.95	14.40
Group 2.....	\$ 29.95	14.40
Group 3.....	\$ 27.26	14.40
Group 4.....	\$ 26.96	14.40

GROUP 1: Auto Patrol, Batch Plant, Bituminous Paver, Cable-Way, Clamshell, Concrete Mixer (21 cu ft or over), Concrete Pump, Crane, Crusher Plant, Derrick, Derrick Boat, Ditching and Trenching Machine, Dragline, Dredge Engineer, Elevator (regardless of ownership when used for hoisting any building material), Elevating Grader and all types of Loaders, Hoe-type Machine, Hoisting Engine, Locomotive, LeTourneau or Carry-all Scoop, Bulldozer, Mechanic, Orangepeel Bucket, Piledriver, Power Blade, Roller (Bituminous), Roller (Earth), Roller (Rock), Scarifier, Shovel, Tractor Shovel, Truck Crane, Well Point, Winch Truck, Push Dozer, Grout Pump, High Lift, Fork Lift (regardless of lift height), all types of Boom Cats, Multiple Operator, Core Drill, Tow or Push Boat, A-Frame Winch Truck, Concrete Paver, Grade-All, Hoist, Hyster, Material Pump, Pumpcrete, Ross Carrier, Sheepfoot, Sideboom, Throttle-Valve Man, Rotary Drill, Power Generator, Mucking Machine, Rock Spreader attached to Equipment, Scoopmobile, KeCal Loader, Tower Cranes, (French, German and other types), Hydrocrane, Tugger, Backfiller Gurries, Self-propelled Compactor, Self-Contained Hydraulic Percussion Drill

GROUP 2: All Air Compressors (200 cu ft/min or greater), Bituminous Mixer, Concrete Mixer (21 cu. ft. or over), Welding Machine, Form Grader, Tractor (50 hp and over), Bull Float, Finish Machine, Outboard Motor Boat, Brakeman, Mechanic Tender, Whirly Oiler, Tract-air, Road Widening Trencher, Articulating Trucks

GROUP 3: Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4: Bituminous Distributor, Cement Gun, Conveyor, Mud Jack, Paving Joint Machine, Pump, Tamping Machine, Tractor (under 50 hp), Vibrator, Oiler, Air Compressor (under 200 cu ft per minute), Concrete Saw, Burlap and Curing Machine, Hydro Seeder, Power Form Handling Equipment, Deckhand Oiler, Hydraulic Post Driver

SHEET METAL WORKER.....	\$ 20.40	7.80
TRUCK DRIVER		
Driver (3 Tons and Over), Driver (Truck Mounted Rotary Drill).....	\$ 23.74	14.50
Driver (3 Tons and Under), Tire Changer and Truck Mechanic Tender.....	\$ 23.53	14.50
Driver (Semi-Trailer or Pole Trailer), Driver (Dump Truck, Tandem Axle), Driver of Distributor.....	\$ 23.40	14.50
Driver on Mixer Trucks (All Types).....	\$ 23.45	14.50
Driver on Pavement Breakers.	\$ 23.55	14.50
Driver, Euclid and Other Heavy Earth Moving Equipment and Low Boy.....	\$ 24.31	14.50
Driver, Winch Truck and A- Frame when used in Transporting Materials.....	\$ 23.30	14.50
Greaser on Greasing Facilities.....	\$ 24.40	14.50
Truck Mechanic.....	\$ 23.50	14.50
Truck Tender and Warehouseman.....	\$ 23.20	14.50

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

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

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29CFR 5.5 (a) (1) (ii)).

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage

determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

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

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

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END OF GENERAL DECISION

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

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

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

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

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

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

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

OVERTIME:

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

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

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

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

**Evelyn Teague, Regional Director
Office of Federal Contract Compliance Programs
61 Forsyth Street, SW, Suite 7B75
Atlanta, Georgia 30303-8609**

4. As used in this Notice, and in the contract resulting from this solicitation, the "**covered area**" is Wolfe County.

PART IV
INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form – not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) **KENTUCKY WORKMEN'S COMPENSATION INSURANCE.** The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V
BID ITEMS

PROPOSAL BID ITEMS

191013

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Report Date 2/26/19

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	1,064.00	TON		\$	
0020	00078		CRUSHED AGGREGATE SIZE NO 2	200.00	TON		\$	
0030	00100		ASPHALT SEAL AGGREGATE	200.00	TON		\$	
0040	00103		ASPHALT SEAL COAT	24.00	TON		\$	
0050	00194		LEVELING & WEDGING PG76-22	1,000.00	TON		\$	
0060	00216		CL3 ASPH BASE 1.00D PG76-22	3,039.00	TON		\$	
0070	00356		ASPHALT MATERIAL FOR TACK	102.00	TON		\$	
0080	00387		CL3 ASPH SURF 0.38B PG76-22	19,980.00	TON		\$	
0090	02677		ASPHALT PAVE MILLING & TEXTURING	22,501.00	TON		\$	
0100	24781EC		INTELLIGENT COMPACTION FOR ASPHALT	19,907.00	TON		\$	
0110	24878EC		ASPHALT EMULSION FOR FOG SEAL	52.00	TON		\$	
0120	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	2,171,637.00	SF		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0130	00461		CULVERT PIPE-15 IN	32.00	LF		\$	
0140	00462		CULVERT PIPE-18 IN	160.00	LF		\$	
0150	00464		CULVERT PIPE-24 IN	32.00	LF		\$	
0160	01202		PIPE CULVERT HEADWALL-15 IN	4.00	EACH		\$	
0170	01204		PIPE CULVERT HEADWALL-18 IN	7.00	EACH		\$	
0180	01208		PIPE CULVERT HEADWALL-24 IN	5.00	EACH		\$	
0190	01310		REMOVE PIPE	124.00	LF		\$	
0200	01691		FLUME INLET TYPE 2	8.00	EACH		\$	
0210	01897		ASPHALT WEDGE CURB	1,844.00	LF		\$	
0220	01984		DELINEATOR FOR BARRIER - WHITE	8.00	EACH		\$	
0230	01985		DELINEATOR FOR BARRIER - YELLOW	8.00	EACH		\$	
0240	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	298.00	EACH		\$	
0250	02014		BARRICADE-TYPE III	12.00	EACH		\$	
0260	02200		ROADWAY EXCAVATION	738.80	CUYD		\$	
0270	02351		GUARDRAIL-STEEL W BEAM-S FACE	14,913.00	LF		\$	
0280	02360		GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH		\$	
0290	02367		GUARDRAIL END TREATMENT TYPE 1	15.00	EACH		\$	
0300	02372		REMOVE GUARDRAIL CON TO BR END	2.00	EACH		\$	
0310	02377		GUARDRAIL CONNECTOR TO BRIDGE END TY C	2.00	EACH		\$	
0320	02381		REMOVE GUARDRAIL	12,413.00	LF		\$	
0330	02396		REMOVE GUARDRAIL END TREATMENT	39.00	EACH		\$	
0340	02483		CHANNEL LINING CLASS II	816.00	TON		\$	
0350	02484		CHANNEL LINING CLASS III	533.00	TON		\$	
0360	02562		TEMPORARY SIGNS	1,569.00	SQFT		\$	
0370	02565		OBJECT MARKER TYPE 2	17.00	EACH		\$	
0380	02575		DITCHING AND SHOULDERING	116,160.00	LF		\$	
0390	02625		REMOVE HEADWALL	16.00	EACH		\$	
0400	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	

PROPOSAL BID ITEMS

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Report Date 2/26/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	02671		PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH		\$	
0420	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0430	02696		SHOULDER RUMBLE STRIPS	116,160.00	LF		\$	
0440	02726		STAKING	1.00	LS		\$	
0450	02775		ARROW PANEL	2.00	EACH		\$	
0460	03262		CLEAN PIPE STRUCTURE	5.00	EACH		\$	
0470	05950		EROSION CONTROL BLANKET	2,000.00	SQYD		\$	
0480	05990		SODDING	445.00	SQYD		\$	
0490	06511		PAVE STRIPING-TEMP PAINT-6 IN	100,000.00	LF		\$	
0500	06515		PAVE STRIPING-PERM PAINT-6 IN	204,495.00	LF		\$	
0510	06546		PAVE STRIPING-THERMO-12 IN W	1,830.00	LF		\$	
0520	06547		PAVE STRIPING-THERMO-12 IN Y	500.00	LF		\$	
0530	10020NS		FUEL ADJUSTMENT	38,601.00	DOLL	\$1.00	\$	\$38,601.00
0540	10030NS		ASPHALT ADJUSTMENT	96,954.00	DOLL	\$1.00	\$	\$96,954.00
0550	20071EC		JOINT ADHESIVE	84,300.00	LF		\$	
0560	20458ES403		CENTERLINE RUMBLE STRIPS	58,080.00	LF		\$	
0570	21415ND		EROSION CONTROL	1.00	LS		\$	
0580	24489EC		INLAID PAVEMENT MARKER	1,804.00	EACH		\$	
0590	24984EC		TRANSVERSE IN-LANE RUMBLE STRIPS	6.00	EACH		\$	

Section: 0003 - BRIDGE- KY-1493

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0600	02653		LANE CLOSURE	2.00	EACH		\$	
0610	02898		RELOCATE CRASH CUSHION	2.00	EACH		\$	
0620	03171		CONCRETE BARRIER WALL TYPE 9T	360.00	LF		\$	
0630	03295		EXPAN JOINT REPLACE 2 IN	85.00	LF		\$	
0640	03299		ARMORED EDGE FOR CONCRETE	85.00	LF		\$	
0650	03300		ELIMINATE TRANSVERSE JOINT	91.00	LF		\$	
0660	04933		TEMP SIGNAL 2 PHASE	1.00	EACH		\$	
0670	06549		PAVE STRIPING-TEMP REM TAPE-B	500.00	LF		\$	
0680	06550		PAVE STRIPING-TEMP REM TAPE-W	1,000.00	LF		\$	
0690	06551		PAVE STRIPING-TEMP REM TAPE-Y	2,000.00	LF		\$	
0700	08150		STEEL REINFORCEMENT	868.40	LB		\$	
0710	08504		EPOXY SAND SLURRY	117.08	SQYD		\$	
0720	08526		CONC CLASS M FULL DEPTH PATCH	6.00	CUYD		\$	
0730	08534		CONCRETE OVERLAY-LATEX	22.10	CUYD		\$	
0740	08549		BLAST CLEANING	648.00	SQYD		\$	
0750	08551		MACHINE PREP OF SLAB	530.00	SQYD		\$	
0760	08903		CRASH CUSHION TY VI CLASS BT TL3	2.00	EACH		\$	
0770	22146EN		CONCRETE PATCHING REPAIR	100.00	SQFT		\$	
0780	24094EC		PARTIAL DEPTH PATCHING	14.70	CUYD		\$	

Section: 0004 - BRIDGE-KY-1010

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0790	01825		ISLAND CURB AND GUTTER	100.00	LF		\$	

PROPOSAL BID ITEMS

191013

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0800	02351		GUARDRAIL-STEEL W BEAM-S FACE	100.00	LF		\$	
0810	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH		\$	
0820	02372		REMOVE GUARDRAIL CON TO BR END	1.00	EACH		\$	
0830	02381		REMOVE GUARDRAIL	100.00	LF		\$	
0840	02998		MASONRY COATING	739.00	SQYD		\$	
0850	03299		ARMORED EDGE FOR CONCRETE	66.30	LF		\$	
0860	03304		BRIDGE OVERLAY APPROACH PAVEMENT	288.90	SQYD		\$	
0870	08100		CONCRETE-CLASS A	67.80	CUYD		\$	
0880	08104		CONCRETE-CLASS AA	148.00	CUYD		\$	
0890	08150		STEEL REINFORCEMENT	6,775.00	LB		\$	
0900	08151		STEEL REINFORCEMENT-EPOXY COATED	39,283.00	LB		\$	
0910	08301		REMOVE SUPERSTRUCTURE	1.00	LS		\$	
0920	08667		PRECAST PC BOX BEAM SB12	601.30	LF		\$	
0930	21532ED		RAIL SYSTEM TYPE III	367.00	LF		\$	

Section: 0005 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0940	06400		GMSS GALV STEEL TYPE A	9,450.00	LB		\$	
0950	06405		SBM ALUMINUM PANEL SIGNS	2,427.00	SQFT		\$	
0960	06406		SBM ALUM SHEET SIGNS .080 IN	102.00	SQFT		\$	
0970	06407		SBM ALUM SHEET SIGNS .125 IN	1,376.00	SQFT		\$	
0980	06410		STEEL POST TYPE 1	2,195.00	LF		\$	
0990	06412		STEEL POST MILE MARKERS	21.00	EACH		\$	
1000	06441		GMSS GALV STEEL TYPE C	928.80	LB		\$	
1010	06451		REMOVE SIGN SUPPORT BEAM	4.00	EACH		\$	
1020	06490		CLASS A CONCRETE FOR SIGNS	31.72	CUYD		\$	
1030	06491		STEEL REINFORCEMENT FOR SIGNS	1,658.25	LB		\$	
1040	08150		STEEL REINFORCEMENT	948.00	LB		\$	
1050	21373ND		REMOVE SIGN	11.00	EACH		\$	
1060	21596ND		GMSS TYPE D	6.00	EACH		\$	
1070	24631EC		BARCODE SIGN INVENTORY	129.00	EACH		\$	

Section: 0006 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1080	02568		MOBILIZATION	1.00	LS		\$	
1090	02569		DEMOBILIZATION	1.00	LS		\$	