



CALL NO. 108

CONTRACT ID. 204123

PULASKI COUNTY

FED/STATE PROJECT NUMBER HSIP 5181 (006)

DESCRIPTION KY HIGHWAY 39 (KY 39)

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 8/1/2021

LETTING DATE: September 25,2020

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 am EASTERN DAYLIGHT TIME September 25,2020. Bids will be publicly announced at 10:00 am EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 16%

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

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PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 08

CONTRACT ID - 204123

HSIP 5181 (006)

COUNTY - PULASKI

PCN - 0810000392001

HSIP 5181 (006)

KY HIGHWAY 39 (KY 39) (MP 3.535) FROM 0.118 MILES SOUTH OF TALON WAY EXTENDING NORTH TO KY 934.
(MP 12.809) ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 08-09007.00.

GEOGRAPHIC COORDINATES LATITUDE 37:11:59.00 LONGITUDE -84:32:26.00

COMPLETION DATE(S):

COMPLETED BY 11/30/2020

SEE COMPLETION DATE NOTE

COMPLETED BY 08/01/2021

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 Rating | 102.08 Preparation and Delivery of Proposals |
| 102.13 Irregular Bid Proposals | 102.14 Disqualification of Bidders |
| 102.09 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 Proposal Line Number, 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, along with the DBE's certificate of insurance. If the DBE is a supplier of materials for the project, a signed purchase order 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 (hard copy along with an electronic copy) of this information must be received in 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 Disadvantaged Enterprise Business Liaison Officer (DEBLO) in the Office of Civil Rights and Small Business Development 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 of Subcontractor Payment (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 completed and signed within 7 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.

******* IMPORTANT *******

Please mail the original, signed and completed TC (18-7) Affidavit of Subcontractor Payment form and all copies of checks for payments listed above to the following address:

Office of Civil Rights and Small Business Development
6th Floor West 200 Mero Street
Frankfort, KY 40622

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 in this office is Mr. Melvin Bynes. Mr. Bynes' current contact information is email address – melvin.bynes2@ky.gov and the telephone number is (502) 564-3601.

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.

PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES

In accordance with the FY 2019 National Defense Authorization Act (NDAA), 2 CFR 200.216, and 2 CFR 200.471, Federal agencies are prohibited, after August 13, 2020, from obligating or expending financial assistance to obtain certain telecommunications and video surveillance services and equipment from specific producers. As a result of these regulations, contractors and subcontractors are prohibited, on projects with federal funding participation, from providing telecommunication or video surveillance equipment, services, or systems produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities)

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

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

SECTION 7 is expanded by the following new Article:

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

Pursuant to Title 46CFR Part 381, the Contractor agrees

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

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

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

ASPHALT MIXTURE

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

OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

SPECIAL NOTES APPLICABLE TO THE PROJECT PULASKI COUNTY – KY 39

Item 8-9007.00

DESCRIPTION OF WORK

Perform all work in accordance with the Department's 2019 Standard Specifications, Supplemental Specifications, Applicable Special Provisions, and Applicable Standard and Sepia Drawings, except as hereafter specified. Furnish all materials, labor, equipment, and incidentals for the following work:

This proposal is set up with eight spots of various work along the corridor (Areas 3-10) which are described below. There are also various general improvements that occur along the entire corridor and are defined as follows.

Shoulder Improvements. Areas have been identified along the route with excessive pavement drop-offs. Corrective work will include the placement of a one foot width of crushed stone base shoulder (with one foot of depth) outside of the edge of pavement with a 3:1 traversable side slope not to extend beyond the existing right-of-way. A maximum slope of 2:1 can be used where warranted to stay within existing right-of-way. Other items required for this work include asphalt seal coat and aggregate slope protection, placement of geotextile fabric and tree removal.

It is anticipated that additional earthwork (over and above the Roadway Excavation quantity) will be required to bring the proposed side slopes to the grades shown on the Plans at the specified locations. This item will be bid as Embankment-In-Place. An estimate of these anticipated quantities is included in the Proposal. The Engineer will make final determination as to quantities required to complete the work based on the existing conditions encountered during construction. It is also anticipated that embankment benching may be required at certain locations. Embankment benching will be required when the existing groundline has an incline greater than 15% (approx. 6:1). Any and all required embankment benching shall be incidental to the bid item Embankment-In-Place. This is applicable to multiple areas throughout the project. The following are guidelines for embankment benching on this project:

- The typical height (or rise) is expected to be between 1' – 6'
- The typical width (or run) will vary based on the height of the bench
- Multiple small benches may be used, and may be more advantageous as this will require processing less earthwork.

Culvert and Pipe Extensions. Existing pipes and box culverts will be extended to due to other improvements being made at the following locations:

- Sta. 390+52 – 24" RCP
- Sta. 448+67 – 18" RCP
- Sta. 572+60 – 4'x4' RCBC

Special Notes Applicable To The Project
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- Sta. 573+57 – 18” RCP

The work will include removal and replacement of existing pipe and headwalls and minor modifications to roadside drainage channels to accommodate the extensions. As noted in the Specifications, all existing pipes and culverts will be cleaned of sediment and other debris. See Special Note for Pipe Replacements & Extensions.

Tree Trimming & Removal. Trees will be trimmed 15 feet from the white edge line as directed by the Engineer in the following general locations and as directed by the Engineer:

- Area 7: Approx. Rt. Sta. 473+00 to Sta. 491+50
- Area 8: Approx. Lt. Sta. 522+50 to Sta. 548+50; Approx. Rt. Sta. 522+50 to Sta. 542+00

It is noted that Tree Trimming and Removal shall not occur within 100 feet either side of the Buck Creek Bridge crossing.

Payment for this work will be under the Bid Item “Trim & Remove Trees & Brush”. It is believed that the majority of this work will involve tree canopy trimming; however, to achieve the tree trimming/clearing dimensions shown on the Tree Trimming Detail, the complete removal of some trees may be necessary. The Department’s expectation is that if the trunk, or any portion of the trunk, of any tree is within the tree trimming/clearing dimensions shown on the Tree Trimming Detail, any such tree will be cut and removed, and the tree’s stump removed or sprayed with herbicide, as detailed in the Special Note for Tree Stump & Brush Removal. Additionally, if there are trees whose main trunk is not within the tree trimming/clearing dimensions, but more than approximately 50% of the tree’s canopy is removed, any such tree will be cut and removed, and the tree’s stump removed or sprayed with herbicide, as detailed in the Special Note for Tree Stump & Brush Removal. The Consultant and Engineer should work together to identify the trees requiring removal. The Engineer will make the final determination on the decision to remove or leave any trees in question.

Guardrail Improvements. All guardrail on the project is to be removed and replaced according to the most recent KYTC standards. Construct all Cribbing as detailed in the Guardrail Cribbing Detail, Plan sheets, and summaries and as directed by the Engineer.

Superelevation Improvements. Superelevation improvements are being proposed at four locations along the route - Area’s 5, 6, 7, and 8. Refer to the Area Summaries for locations and approximate quantities. The intent of this work is to bring a consistent pavement cross slope through the identified curves. The improvements are set up and quantified for the Contractor to utilize Leveling & Wedging to achieve the desired superelevation improvements at the identified location(s). The Area Summaries list the estimated quantities of Leveling & Wedging for each curve; however, the Engineer will make the final determination as to which Leveling & Wedging mix design will be

Special Notes Applicable To The Project

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required at each superelevation improvement area, as well as the appropriate lift thicknesses and number of lifts based on the existing conditions encountered at the time of construction. After the superelevation improvements have been constructed, the full width of the identified curves will overlaid with a surface course. As a result of the superelevation improvements and surfacing operations, the roadside shoulders, fill slopes, and/or ditches will have to be modified to match the final pavement elevations and tie in with the existing ground lines. Representative cross sections are provided for each curve showing the proposed superelevation improvements and the resulting roadside grading.

Signing. Additional signing has been proposed along the corridor to improve safety conditions and provide additional route information. The work includes removal of existing sheet signs, installation of new signs and delineator posts. See Special Note for Staking for additional information regarding installation of curve signing. In addition to the signs shown on the plans, additional quantities have been provided for signs which may be impacted along the corridor. This work will be provided as directed by the Engineer and including the following items:

- No Passing Zone signs along the project – as needed
- Object markers for improvement to drainage structures
- Remove and relocate sign assemblies - as needed
- Remove signs - as needed
- Additional posts to replace sign assemblies within the project with channel posts, anchors not installed to current standard, and with damaged posts

Area 3. Raise the grade of the roadway and install a new 8'9"x2'6" Aluminum Box Culvert (ABC) at the sag near Station 231+00. This work will include the removal of the existing pipe, and full depth pavement in this area. The rest of the roadway will include an asphalt overlay with leveling and wedging as well as asphalt base layer to build up to the proposed grade. Other items required for this work include a crushed stone base shoulders with asphalt seal coat and aggregate slope protection, placement of geotextile fabric, and re-grading the ditches to the new culvert. An additional 20 feet of 24 inch pipe has been included for temporary pipe extensions for the ABC. There is one entrance that will need to be tied into due to raising the pavement.

Area 4. Raise the grade on West Coleman Road to create a flatter landing at the intersection and improve sight distance. This will include an asphalt overlay with leveling and wedging as well as asphalt base layer to build up to the proposed grade. Other items required for this work include a crushed stone base shoulders with asphalt seal coat and aggregate slope protection, placement of geotextile fabric, and re-grading the ditch. Adding advanced warning signs to warn drivers on KY 39 of cross road traffic are also included.

Area 5. Improve superelevation through the curve as described above. This area includes the construction of new guardrail with 7 foot posts, with a full depth paved shoulder to the face of guardrail. Widen the pavement of KY 39 in the curve with full depth pavement, but do not extend beyond existing right-of-way. Other items required for this

Special Notes Applicable To The Project

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work include crushed stone base shoulders with asphalt seal coat and aggregate slope protection, and placement of geotextile fabric. Add enhanced signing on KY 39 to warn of sharp curvature.

Area 6. Improve superelevation through the curve as described above. Slopes on the inside of the curve will be cut back in order to improve sight distance, with a maximum 1:1 slope. In areas where the slope exceeds 2:1, channel lining class II will be used for slope protection. Flattening slopes within the existing right-of-way will also occur inside the curve where the road drops off.

Area 7. Improve superelevation through the curve as described above. This area includes the construction of new guardrail with extra length posts, with a full depth paved shoulder to the face of guardrail. Other items required for this work include a crushed stone base shoulders with asphalt seal coat and aggregate slope protection, and placement of geotextile fabric on either side of the roadway. Trees will be cleared on the right side of the roadway, 15 feet from the white edge line. Removing trees on the left side of the road where possible in the existing right-of-way.

Area 8. Improve superelevation through the curve as described above. Extend existing pipes as needed due to the superelevation improvements. Slopes on the inside of the curve will be cut back in order to improve sight distance, with a maximum 1:1 slope. In areas where the slope exceeds 2:1, channel lining class II will be used for slope protection. Trees will be cleared on the left side of the roadway, 15 feet from the white edge line.

Area 9. Restripe the roadway as a no passing zone and add advanced signing for a congested area.

Area 10. Cut back slopes along the east side of KY 39 south of KY 934 to improve sight distance. A minimum 2 foot ditch with a maximum 1:1 back slope will be constructed. Channel lining class II will be used for slope protection due to steeper slopes. Other items required for this work will be replacing existing signs that will be disturbed.

CAUTION

The information in this proposal shown on the Plan Sheets, Cross Section Sheets, and other Detail Sheets, and as summarized in the various Summary Sheets, as well as the type of work listed herein are approximate only and are not to be taken as a completely accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

ON-SITE INSPECTION

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

STATIONING

The contractor is advised that the planned locations of work were established from a beginning station number which is Sta. 132+66 at MP 3.535 (south of Talon Way). The existing reference mile markers may not correspond to the established work locations.

PROPERTY DAMAGE

The contractor shall be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

UTILITIES

The contractor is advised that there are locations of overhead and underground utilities on the project. These utilities should be avoided on the project. If any utility is impacted, it will be the contractor's responsibility to contact the affected utility and cover any costs associated with the impact.

BUCK CREEK

Buck Creek is critical habitat for three federally listed mussel species. Because of this designation, Buck Creek is also considered an outstanding state resource water. Sediment and erosion controls shall be in place during construction so that no direct impacts occur to Buck Creek. No construction materials shall be allowed to fall into the stream. Due to the importance of the Buck Creek crossing within the project limits, an ENHANCED BMP which contains more stringent erosion control measures than the Standard BMP shall be prepared for the project.

Direct impacts to the bankfull area of Buck Creek must be avoided and riparian trees shall not be cut. Tree removal shall not occur within 100 feet either side of the Buck Creek Bridge crossing. Any direct impacts to Buck Creek will require an individual Water Quality Certification from the Kentucky Division of Water and coordination with the US Fish and Wildlife Service for potential impacts to endangered species.

SPECIAL NOTE FOR STAKING

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

1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer.
2. Using the proposed pavement superelevation rates, runout, and runoff lengths, determine the necessary changes in pavement edge elevation along the curves and the transitions leading into and out of the curve to achieve the proposed superelevation improvements. The intent is to provide a consistent superelevation throughout the curves and smooth transitions into and out of the curves. Once the proposed changes in pavement edge elevations are determined and prior to starting paving operations, verify the proposed roadside re-grading along the curve can be constructed so that the new roadside is flush with the new pavement edge elevation and the new toe of slope, or top of cut, will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. If necessary, and with the approval of the Engineer, reduce the proposed superelevation rate of a curve if the new edge of pavement elevation will cause the new roadside grading to extend beyond the Right-of-Way and/or impact a sensitive obstruction. Alternatively, with the approval of the Engineer and to the extent allowable by the "Roadside Regrading and Benching Details" and within the estimated amounts of excavation and embankment, the Contractor may be allowed to make adjustments to the roadside grading so the proposed roadside re-grading will remain within the existing Right-of-Way and/or not impact a sensitive obstruction. After the final proposed changes in pavement edge elevations are determined and before paving operations begin, submit to the Engineer and obtain approval for the number of asphalt lifts, each asphalt lift's thickness, estimated quantities of excavation and embankment, and the mix design of each lift of Leveling & Wedging the contractor plans to use to achieve the superelevation improvement. Ensure positive drainage upon completion of the work.
3. Verify the dimensions, type, and quantities of the culvert pipes, entrance pipes, and/or box culverts as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the drainage structures with existing and/or proposed ditches, stream channels, swales, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.
4. Using stakes, paint marks on the pavement, mag nails, and/or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: The proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall

Staking
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refer to and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. The MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Once the proposed sign locations have been staked, notify and coordinate with the District Traffic Engineer, and perform a review of the staked locations. Adjust the staked locations, as directed by the District Traffic Engineer and obtain approval of the final staked locations. This review will also be used to determine if there are any existing signs that require removal and/or relocation. Provide the District Traffic Engineer with 2 weeks of notice when a route will be ready for a review of the staked locations. NOTE: The District Traffic Engineer may determine that the proposed signing, including sign types and messages, needs to be adjusted and/or modified from what is shown in the proposal. Therefore, the Contractor shall not order any sign material for a route until the route has been staked and final sign location approval has been given by the District Traffic Engineer.

5. Produce and furnish to the Engineer "As Built" information for the superelevation improvements and the drainage improvements. For superelevation improvements, as built information will consist of a record of the final pavement cross slopes every 50 feet, for each lane of travel along the curves and the transitions into and out of the curves. Elevation data of the curve improvements is not necessary; simply the cross slope percentage every 50 feet. For the drainage improvements, as built information will consist of a final record of the actual types, sizes, and locations of the drainage structures (i.e. box inlets, headwalls, junction boxes, etc.), culvert pipes, and/or box culverts constructed. Final elevation data of the drainage improvements is not necessary.
6. Using paint marks on the pavement, and/or any other means approved by the Engineer, the Contractor shall layout and pre-mark the proposed striping, pavement markings, etc. Adjust as necessary to accommodate the existing site conditions and to provide proper alignment of the proposed thru and turning lanes. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to installing the striping and/or pavement markings.
7. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
8. Perform any and all other staking operations required to control and construct the work.

SPECIAL NOTES FOR PIPE REPLACEMENTS / EXTENSIONS

I. DESCRIPTION

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

- (1) Maintaining and Controlling Traffic; (2) Constructing pipe replacements and/or pipe extensions; (3) Embankment and/or Excavation; (4) Erosion Control; and (6) Any other work as specified by this contract.

II. MATERIALS

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

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Culvert Pipe.** Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to the applicable Standard or Sepia Drawings, current editions. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls.
- C. Flowable Fill.** Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).
- D. Erosion Control.** See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Be responsible for all site preparation including, but not limited to, saw cutting and removing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct the drainage features. Perform all site preparation only as approved or directed by the Engineer.

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- D. Removing Headwalls, Pipe, and Excavation.** Remove existing headwalls and lengths of culvert and/or entrance pipes at the approximate locations noted on the summary. The Engineer will determine the exact locations and lengths of pipe to be removed at the time of construction. When removing pipe, or any portion of pipe under the roadway, saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. NOTE: Saw cutting the pavement shall be incidental. Obtain the Engineer's approval of trench width and/or saw cutting limits prior to saw cutting the pavement. Excavate the trench and remove the pipe as directed, or approved, by the Engineer without disturbing existing underground utilities.
- E. Constructing Pipe, Headwalls, and Drainage Boxes.** Construct culvert and/or entrance pipes, pipe extensions, headwalls, drainage boxes, and other drainage structures at the locations shown in the proposal or as designated by the Engineer. The contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing and/or proposed ditches and other proposed improvements. (See the Special Note for Staking.) Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings, current editions. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.
- F. Pipe Backfill.** Backfill entrance pipes according to Section 701.03.06. Contrary to Section 701.03.06, backfill culvert pipes with flowable fill for the width of the roadway and as shown on the Pipe Replacement Detail. Steel plates will likely be required to maintain traffic while the flowable fill cures. Once the flowable fill has sufficiently cured, place the Asphalt Base in lifts with thicknesses of 3-4 inches, up to the surface of the existing pavement. Seal with Leveling & Wedging. Allow the asphalt base and leveling & wedging to be exposed to traffic for a minimum of 14 days to allow for settlement. During the waiting period, level & wedge any settlement as directed by the Engineer. After the waiting period has been met for the last pipe replacement constructed, the final milling and/or surfacing operations can begin, unless directed otherwise by the Engineer.
- G. Embankments.** Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. The contractor shall bench into the existing slope and apply proper compaction according to Section 206. For more information and details on benching, refer to Note 2 on the detail sheet titled: DITCHING & SHOULDERING AND EMBANKMENT BENCHING DETAILS, found elsewhere in the Proposal. Provide positive drainage of ditches, shoulders, and slopes at all times during, and upon completion of construction.
- H. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design, as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

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- I. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.
- J. Right-of-Way Limits.** The Department has not established exact limits of the Right-of-Way. Unless a consent and release form is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.
- K. Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- L. Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- M. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to culvert and/or entrance pipe bid items, as applicable.

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- C. Remove Headwall.** The Department will measure the removal of existing headwalls as Each. Any excavation, including rock excavation, necessary to remove existing headwalls will NOT be measured for payment, but shall be incidental to the bid item "Remove Headwall".
- D. Remove Pipe.** Removal of existing culvert and entrance pipe shall be measured according to Section 701.04.14. Any excavation, including rock excavation, necessary to remove existing pipe will NOT be measured for payment, but shall be incidental to the bid item "Remove Pipe".
- E. Culvert and Entrance Pipe.** The Department will measure the quantities according to Section 701.04. Any excavation, including rock excavation, necessary to install culvert or entrance pipe shall be incidental to the corresponding pipe bid items.
- F. Headwalls, Drainage Boxes.** The Department will measure according to Section 710. Any excavation, including rock excavation, necessary to construct headwalls and/or drainage boxes will NOT be measured for payment, but shall be incidental to the applicable bid item.
- G. Excavation, Pipe Backfill, Embankments.** The Department will NOT measure for payment the following items: any excavation, including rock excavation, necessary to remove the existing pipe and/or install the proposed culvert or entrance pipe, pipe backfill material, flowable fill, and re-constructing shoulder embankments, but shall considered these items incidental to the bid items for culvert and entrance pipe.
- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Remove Headwall.** The Department will make payment for the completed and accepted quantities of Each headwall removed. Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing headwall.
- C. Remove Pipe.** The Department will make payment according to Section 701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.
- D. Culvert and Entrance Pipe.** The Department will make payment according to Section

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701.05. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.

E. Headwalls, Drainage Boxes. The Department will make payment according to Section 710.

F. Erosion Control. See the Special Note for Erosion Control.

SPECIAL NOTE FOR ALUMINUM BOX CULVERT REPLACEMENTS

I. DESCRIPTION

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

- (1) Site preparation; (2) Removal of existing structure; (3) Drilling and blasting, if required, and common and solid rock excavation; (4) Constructing aluminum or steel structure plate box culverts; (5) Erosion Control; (6) Maintenance of traffic; and (7) Any other work as specified by this contract.

II. MATERIALS

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

A. Aluminum Box Culvert. The following lengths and sizes of Aluminum Box Culverts are preliminary and used for estimating purposes.

- 45'3" of 8'-9" Span x 2'-6" Rise at Station 231+11.79, 15° skew

Prior to fabrication, furnish the Engineer shop drawings approved by a "Registered Professional Engineer" licensed in Kentucky that replaces the existing box culverts with aluminum box culverts. The aluminum box culverts shall be constructed according to the approved design including head walls or end walls, corner panels, wing walls, and toe walls, and meeting the requirement of Special Note for Aluminum and Steel Structural Plate Culverts 9V. With each shipment of the structural plates and accessories, provide a certification that all materials furnished comply with the applicable specifications and these special notes. Prior to acceptance, the Department reserves the right to sample and test the structural plates and accessories at any time. Materials not conforming to contract requirements are subject to rejection, whether in place or not.

B. Foundation Preparation and Bedding. See Special Note 9V.

C. Culvert Backfill. See Special Note 9V.

D. Erosion Control. See Special Note for Erosion Control.

E. Maintain and Control Traffic. See Traffic Control Plan

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III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Erosion Control.** See Special Note for Erosion Control.
- C. Site Preparation.** Be responsible for all site preparation including, but not limited to, saw cutting and removing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; pumping or trenching a way for water divert around the work area; removal of existing culvert; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct the drainage features.

Clear and Grub only the minimum area required for construction and/or as directed by the Engineer. Limit clearing and grubbing to the absolute minimum required to construct the Aluminum Box Culverts. Obtain the Engineer's approval before removing trees and stumps from the cleared areas. Perform all site preparation only as approved or directed by the Engineer.

- D. Excavation and Removal of Existing Structures.** Sawcut pavement to a neat edge and remove the existing culvert. Be responsible for all common and solid rock excavation, pavement removal, and removal of existing structure. Removal of existing structure will be considered incidental to the associated Aluminum Box Culvert bid item. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials at sites off the right of way obtained by the Contractor at no additional cost to the Department. Perform all excavation and removal of existing structure only as approved or directed by the Engineer.
- E. Structure Excavation.** Be responsible for all excavation required for foundation preparation, box culvert, head walls or end walls, wing walls, toe walls, and all other excavation required by the work. Excavate rock in channel as required to allow for installation of bedding and culvert with the designed fill cover height. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all excavation at sites off the right way obtained by the Contractor at no additional cost to the Department. Perform all structure excavation only as approved or directed by the Engineer.
- F. Foundation Preparation and Bedding.** Perform foundation preparation and construct bedding as outlined in Special Note 9V.
- G. Aluminum Box Culvert.** Construct the box culvert in accordance with Special Note 9V, except as specified in these notes.
- H. Head Walls, End Walls, Wing Walls, Toe Walls.** Construct head walls, end walls, wing walls, and toe walls according to the box culvert manufacturer's approved design or as approved by the

Aluminum Box Culvert Replacements
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Engineer.

- I. Backfill and Embankment.** Construct granular backfill and embankments as directed by the Engineer. Warp finished slopes to match existing undisturbed slopes as directed by the Engineer.
- J. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.
- K. Right-of-Way Limits.** As noted in the "Special Notes Applicable to the Project", all work is to be done within the right-of-way shown on the plans. Additional Right-of-Way has been acquired by the Department as part of this project for installation of the ABC at this location. This ROW has been shown on the construction drawings as well as the ROW plans included in the project proposal. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the newly acquired Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements.
- L. Clean Up, Disposal of Waste.** Clean up the project area as work progresses. Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste at approved sites off the Right of Way obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- M. Final Dressing, Seeding and Protection.** Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- N. Erosion Control.** See the Special Note for Erosion Control.

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IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Site Preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to Foundation Preparation.
- C. Foundation Preparation.** The Department will measure Foundation Preparation of aluminum box culverts as Lump Sum. Except for the Foundation Preparation bid items listed, the Department will NOT measure Foundation Preparation for any other items of work and shall consider it incidental to the other items of work, as applicable.
- D. Clearing and Grubbing, Excavation, and Embankment.** Contrary to Sections 202, 204, 205, 206 and Special Note 9V, Clearing and Grubbing, Roadway Excavation, Structure Excavation, Borrow Excavation, Embankment in Place, and granular backfill will NOT be measured for separate payment, but shall be incidental to Foundation Preparation.
- E. Aluminum Box Culvert.** See Special Note 9V; however, contrary to Special Note 9V, culvert design, manufacture's technical representative, headwalls, end walls, wing walls, corner panels, and toe walls will not be measured for separate payment, but shall be incidental to the box culvert.
- F. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental to the project bid items. Seeding and Protection shall be measured according to Section 212.
- G. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Aluminum Box Culvert.** Payment at the contract unit price per linear foot shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for culvert design and manufacturer's representative, structural plate box culvert, headwalls, end walls, corner panels, wing walls, and toe walls.
- C. Foundation Preparation.** Payment at the Lump Sum unit price shall be full compensation for furnishing all labor, materials, and equipment necessary for Foundation Preparation of the aluminum box culverts and all other items of work incidental to the bid item Foundation Preparation.
- D. Erosion Control.** See the Special Note for Erosion Control.

SPECIAL NOTE FOR SIGNAGE

All sign sheeting shall be from the Cabinet's List of Approved Materials.

All permanent signs and sign components shall be fabricated using Type XI sheeting:

The following signs and sign components shall be fabricated using Type XI fluorescent yellow sheeting:

- Horizontal Alignment Signs and Plaques, including signs shown in Figure 2C-1 of the MUTCD
- All Advisory Speed (W13-1P) plaques

The following signs shall be fabricated using Type XI fluorescent yellow-green sheeting:

- School and school bus warning signs, including the fluorescent yellow-green signs shown in Figures 7B-1 and 7B-6 of the MUTCD and other school-related warning signs that are not included in the MUTCD.
- Bicycle Warning (W11-1) signs and SHARE THE ROAD (W16-1P) plaques or diagonal downward pointing arrow (W16-7P) plaques that supplement Bicycle Warning signs.
- Pedestrian Warning signs and diagonal downward pointing arrow plaques that supplement Pedestrian Warning signs.
- In-Street Pedestrian Crossing (R1-6) signs and Overhead pedestrian Crossing (R1-9) signs
- Supplemental plaques to any of the previously listed signs

SPECIAL NOTE FOR SIGNING

I. DESCRIPTION

Except as provided herein, this work shall be performed in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the Department's current Standard Specifications and Interim Supplemental Specifications, applicable Standard and Sepia Drawings, and applicable Special Provisions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

- (1) Maintaining and Controlling Traffic; (2) Furnish, Fabricate, and Erect Signs; and
- (3) All other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be 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. **Erosion Control.** See Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Be responsible for all site preparation including, but not limited to: clearing and grubbing, staking, excavation, backfill, and removal of obstructions or any other material not covered by other items. Perform all site preparation only as approved, or directed, by the Engineer.
- C. **Staking.** See Special Note for Staking.
- D. **Signs and Posts.** Before beginning installation, the Contractor shall furnish to the Engineer drawings, descriptions, manufacturer's cuts, etc. covering all material to be used. Mill test reports for beams, steel panels, and each different gauge of aluminum or steel sheeting used must be submitted to the Division of Construction and approved prior to erection.

Fabricate sheet signs from .080 or .125 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209, and to the size and shape specified. Prepare the side of the sheet to be used as the sign face to receive the retroreflective background material

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according to the recommendations of the sheeting and retroreflective material manufacturer(s). Sheeting used as background material for sign faces is to be the color specified and visually in accordance with the standard requirements of ASTM D-4956, and meet the requirements of Section 830 of the Standard Specifications. Contrary to Section 830.02.06, only the types and colors of sheeting as specified in the proposal will be accepted. All retroreflective material shall be fabricated and assembled in accordance with the specifications and/or recommendations of the manufacturer(s).

All hardware for the erection of sheeting signs shall be rust resistant: stainless steel, zinc coated, aluminum, or an Engineer approved material. All beams and posts shall be of sufficient lengths to extend from the top of the sign to the required embedment in the anchor. Splicing of the sign post shall NOT be allowed. For installations in soil, Type I steel posts shall be mounted on either a standard anchor, with soil stabilizer plate, or on a Type D breakaway sign support. Refer to Sheeting Sign Detail Sheet 1 of 2 for installation details for a standard anchor with soil stabilizer plate. When installing a standard anchor with soil stabilizer plate, if solid rock is encountered, the Contractor shall drill a hole to the required depth into the rock, install the anchor into the hole, and backfill the anchor post with concrete, or other method approved by the Engineer. The cost shall be incidental to Type I steel post, and a soil stabilizer plate will not be required. Refer to Standard Drawing RGX-065, current edition, for installation details of Type D breakaway sign supports. Approved manufacturers for Type D breakaway sign supports have been placed on the list of approved materials. For installations on existing concrete, such as a sidewalk, concrete median, etc., Type I steel posts shall be mounted on a Type D surface mount. For Type D surface mounts there are two permissible alternatives: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL or Snap n Safe Model S200s for 2" Sign Post by Designovations Inc. of Stilman Valley, IL. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D surface mount(s). Install the Type D surface mount(s) according to all the applicable requirements of the manufacturer (see shop drawings). All steel post shall meet the requirements of Section 832. All hardware including, but not limited to, sign post anchors, soil stabilizer plates, nuts, bolts, washers, fasteners, fittings, and bracing, or any other incidentals necessary to erect the signs shall be furnished by the Contractor and will be incidental to the work.

New concrete bases, posts, support anchors, signs, etc. are to be installed prior to dismantling any existing sign(s). The removal of existing signs, posts, and support anchors is to be performed concurrently with the installation of new signs, posts, and support anchors, under the same lane closure during the same work shift. Completely remove existing sign support anchors or remove them to a minimum depth of six (6) inches below existing ground line and backfill the disturbed area to the existing ground line.

When listed in the summaries, Reflective Sign Post Panels shall be 2" wide x 60" tall (or 84" tall for urban installations) and shall have three 3/8" holes (one hole in the top 3", one hole near the center, and one hole in the bottom 3") that align with the holes on the Type I

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steel post. Sheeting for the Reflective Sign Post Panels shall be the same Type and color as the sign installed on the post. Examples include:

- Red, fluorescent yellow, and fluorescent yellow-green (Type IX Sheeting)
- White and yellow (Type III and/or IV Sheeting).

All manufactured sheeting signs shall be free of visual defects including, but not limited to: cracks, tears, ridges, humps, discoloration, etc., and defective signs shall be replaced at no additional cost to the Department.

All sign blanks shall be hole punched by the manufacturer for either horizontal or vertical installation. Attach all aluminum sheeting signs to square post with 3/8" all steel rivets and nylon washers.

Post will be attached to the anchor with 5/16" corner bolts and 5/16" flanged nuts, and all post and anchor cuts shall be treated with a Cold Galvanizing Compound spray.

Sign posts shall be erected vertically by using a bubble level. The tolerance shall be a two (2) degree angle in any direction. For locations where there are more than one sign is mounted beside each other, the posts shall be spaced to provide approximately six inches (6") of spacing between signs.

- E. Property Damage.** The Contractor shall be responsible for all damage to public and/or private property resulting from the Contractor's activities. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.
- F. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs due to the Contractor's operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S) IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY UTILITY CONFLICT COULD DELAY THE CONTRACTOR'S OPERATIONS. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however, no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated as specified.

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

H. Control. Perform all work under the absolute control of the Department. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces, and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension created by the operations of such other parties.

Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and the Engineer's decision shall be final and binding upon the Contractor.

I. Clean Up, Disposal of Waste. Clean up the project area as work progresses. Dispose of all removed concrete, debris, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for disposal of waste and debris from the project. Existing anchors, signs, posts, and any other hardware or material removed from the site are to become the property of the Contractor. See Special Provision for Waste and Borrow Sites.

J. Final Dressing, Seeding and Protection. Grade all disturbed areas to blend with the adjacent roadways features and to provide a suitable seed bed. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

K. Erosion Control. See Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

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

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- B. Site Preparation.** Other than the bid items listed, the Department will NOT measure Site Preparation for payment, but shall be incidental to the project bid items.
- C. Signs.** The Department will measure the finished in-place area of signs in Square Feet.
- D. Sign Posts.** The Department will measure the finished in-place length of sign posts in Linear Feet, from the top of the anchor, or top of the sign support, to the top of the sign post. Laps, cutoffs, excess, and waste will NOT be measured for payment.
- E. Type D Breakaway Sign Supports.** The Department will measure Type D sign supports as Each support installed.
- F. Type D Surface Mounts.** The Department will measure Type D Surface Mounts as Each surface mount installed.
- G. Class A Concrete for Signs.** The Department will measure the Class A Concrete used in conjunction with Type D breakaway sign support installations in Cubic Yards. Any concrete that is required as backfill due to hitting rock during a standard installation shall be incidental to the bid item STEEL POST TYPE I, and soil stabilizers will not be required.
- H. Clean Up, Disposal of Waste, Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the following activities: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection shall be measured according to Section 212.
- I. Erosion Control.** See Special Note for Erosion Control.
- J. Remove Sign.** The Department will consider all signs attached to one or more connected posts as a single sign. The Department will measure as Each sign assembly removed and NOT each individual sign removed.
- K. Items Provided by KYTC.** The Department will NOT measure for payment the installation of signs and/or surface mounts provided by KYTC. These activities shall be incidental to the bid item STEEL POST TYPE I.
- L. Removal and Relocation of Existing Sign Assemblies.** A total quantity of 20 “Remove and Relocate Sign Assembly” has been included in the contract for any existing sign assemblies that may need to be removed and reinstalled. The need to remove and reinstall an existing sign assembly could occur for multiple reasons. One reason is when an existing sign assembly obstructs or interferes with proposed construction activities. Another reason to remove and relocate an existing sign assembly is when the existing sign falls within 200 feet of a proposed sign. An example would be an existing “School Bus Stop Ahead” sign that is within 200 feet of a proposed

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horizontal alignment sign. Situations such as this should become apparent during Staking operations. Therefore, during Staking operations the Contractor shall work with the Engineer and/or District Traffic Engineer to determine the best location to relocate any existing signs so the final signing meets the 200 foot spacing guideline, or is relocated as directed by the Engineer and/or District Traffic Engineer. (NOTE: chevrons are not included in the 200 foot minimum spacing guideline). Once it is determined that an existing sign is to be removed and reinstalled, the sign should be removed and reinstalled as soon as possible. The intent is for the sign to be “down” the minimum length of time necessary.

NOTE: The Department will consider all signs attached to one or more connected posts as a single sign assembly. The Department will measure and pay for “Remove and Relocate Sign Assembly” as each sign assembly removed and relocated; NOT each individual sign removed and relocated.

Prior to actually removing and relocating a sign, the Contractor should review the sheet sign and sign post for damage. It is the Contractor’s responsibility to notify the Engineer of any sheet sign or sign post damage prior to removal and relocation of the sign, so that it can be documented that the existing sheet sign and/or sign post had pre-existing damage. If the Contractor does not make the Department aware of pre-existing damage prior to removing the sign from its existing location, the Department will have to assume the damage was the result of the Contractor’s removal and relocation efforts. The Contractor shall replace any components of a sign that are damaged during removal and relocation. Replacement of the damaged components shall be incidental to the bid item “Remove and Relocate Sign Assembly”.

If the existing sheet sign is found to have pre-existing damage, the Department will provide the Contractor with a new sheet sign to replace the sheet sign with pre-existing damage. Detaching the damaged sheet sign from the existing post and attaching the new sheet sign to the existing post shall be incidental to the bid item “Remove and Relocate Sign Assembly”.

If any of the existing hardware components (bracing, brackets, bolts, rivets, etc.) are found to have pre-existing damage, the Contractor shall provide the necessary replacement hardware for proper re-installation of the sign. These components shall be incidental to the bid item “Remove and Relocate Sign Assembly”.

If an existing sign that is being relocated is found to not have an existing soil stabilizer plate, or if the soil stabilizer plate and/or anchor is damaged during removal, then a new soil stabilizer plate and/or anchor shall be provided by the Contractor and shall be incidental to the bid item “Remove & Relocate Sheet Signs”.

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If an existing sign that is being relocated requires a Type D slip base, providing and installing a new Type D slip base shall be incidental to the bid item "Remove and Relocate Sign Assembly".

If an existing sign that is being relocated is found to have pre-existing damage to the sign post, the Department will NOT utilize the bid item "Remove and Relocate Sign Assembly" for removing and relocating such a sign. Instead, the Department will require the Contractor to install a new sign post(s) at the new location, and pay for the new post(s) under the bid item "Steel Post Type I". Detaching the existing sheet sign from the existing, damaged post and attaching the existing sheet sign to the new post shall be incidental to the bid item "Steel Post Type I". Any hardware that is needed to complete the installation shall also be incidental to the bid item "Steel Post Type I". Removal of the existing damaged post(s) and any other sign components not needed will be paid under the bid item "Remove Sign".

V. BASIS OF PAYMENT

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

B. Signs. The Department will make payment for the completed and accepted quantities under the bid item SBM ALUM SHEET SIGNS .125 IN or .080 IN. The Department will consider payment full compensation for all work and incidentals necessary to install the signs, as required by these notes and the details found elsewhere in the proposal, at the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.

C. Sign Posts. The Department will make payment for the completed and accepted quantities under the bid item STEEL POST TYPE I. The Department will consider payment full compensation for all work and incidentals necessary to install the sign posts as required by these notes and the details found elsewhere in the proposal.

D. Type D Breakaway Sign Supports. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D breakaway sign supports as required by Standard Drawing RGX-065, current edition.

E. Type D Surface Mounts. The Department will make payment for the completed and accepted quantities under the bid item GMSS TYPE D Surface Mount. The Department will consider payment full compensation for all work and incidentals necessary to install the Type D surface mounts according to all applicable manufacturer requirements.

NOTE: There are two permissible Type D Surface Mount alternatives: Kleen Break Model 425 for Surface Mount Concrete Installations by Xcessories Squared of Auburn, IL

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or Snap n Safe Model S200s for 2" Sign Post by Designovations Inc. of Stilman, Valley, IL.

- F. Class A Concrete for Signs.** The Department will make payment for the completed and accepted quantities, used in conjunction with Type D breakaway sign support installations, under the bid item CLASS A CONCRETE FOR SIGNS. The Department will consider payment full compensation for all work and incidentals necessary to install the concrete as required by Standard Drawing RGX-065, current edition.
- G. Remove Sign.** The Department will make payment for the completed and accepted quantities under the bid item REMOVE SIGN. The Department will consider payment full compensation for all work and incidentals necessary to remove the existing signs, posts, anchors, and any other sign material or hardware, from the locations indicated on the summary sheets, plans, and/or as directed by the Engineer.
- H. Erosion Control.** See Special Note for Erosion Control.

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with any other notes in the Proposal, the Department's Standard and Interim Supplemental Specifications, the Special Provisions and Special Notes, and the Standard and Sepia Drawings, current editions, or 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, applicable Special Provisions and Special Notes, and the 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 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, the construction phasing, methods, and the 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 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 Provisions and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

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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. All silt control devices shall be sized to retain a volume of 3,600 cubic feet per disturbed contributing acre. 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 the Special Provision for Waste and Borrow Sites.

As work progresses, add or remove erosion control measures as required by the BMP, applicable to the Contractor's project phasing, 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.

The required volume at each Silt Trap shall be computed based on the Up Gradient Contributing Areas that are disturbed and/or 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 feet per linear foot of Silt Fence
- Up Gradient Areas that have been protected by Silt Traps (acres)

The use of Temporary Mulch is encouraged.

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 flow exists, a Silt Fence or other filter devices may be used.

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

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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

The Department will measure the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

V. BASIS OF PAYMENT

The Department will make payment for the various erosion control items according to Section 212.04 and Section 213.04, as applicable.

SPECIAL NOTE FOR TREE, STUMP, AND BRUSH REMOVAL

I. DESCRIPTION

All work shall be performed in accordance with the Department's current Standard Specifications for Road and Bridge Construction and applicable Special Provisions, except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist furnishing all equipment, labor, materials, and incidentals for the following: (1) Site Preparation; (2) Maintaining and controlling traffic; (3) Temporary erosion control and temporary pollution control; (4) Cutting, trimming, and/or removing trees, stumps, and/or brush as specified or directed by the Project Engineer; (5) Treating all cut stumps required by Project Engineer to prevent re-sprouting; (6) Clean up and disposal of waste; (7) Final dressing and seeding and protection; and (8) all other work specified in the Contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be 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.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Seeding and Protection.** Use applicable Seed Mixture as specified per Section 212.03.03.
- C. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Cutting, Trimming, and/or Removing Trees, Stumps, and/or Brush.** The Contractor shall cut trees and/or bushes as close to the ground as possible; three inches (3") or less from ground line. The tree trimming listed in the summary shall be cleared as shown on the Tree Trimming Detail. Grinding of all tree stumps within the mowing zone shall be required as directed by the Engineer. All stumps that are listed on the summary and/or directed by the Engineer to be removed, are to be removed via mechanical grinding, or other methods approved by the Engineer, to a minimum depth of four (4) inches below the surrounding grade line. For trees that are cut, but will not be required to have their stump removed, treat the stump, within one hour of cutting, with the specified herbicide solution.

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Replace and level any and all soil disturbed during the tree, stump, and brush removal and trimming operations. Leave the soil in a condition suitable for seeding that is level with surrounding soil grade, with no holes or indentions to catch water or present unsafe mowing conditions. This work will be incidental to the bid items “Trim and Remove Trees and Brush.”

NOTE: Tree cutting restrictions apply. Trees that are five (5) inches or greater (diameter at breast height) shall NOT be cut or trimmed between June 1ST and July 31ST. See the Special Note for Completion Dates & Liquidated Damages concerning damages if trees and/or bushes are cut outside of the specified time frame.

- C. Removal of Tree, Stump, and Brush Debris.** The Contractor will remove all debris and biomass from the trimming and/or removal of trees, stumps, and/or brush from the work site and dispose of such off the right-of-way in accordance with local, state, and federal solid waste laws and regulations. Cleanup and remove all existing down trees and brush located within the designated areas. At the discretion of the Project Engineer, the contractor may be permitted to chip and blow biomass onto non-mowing zones. Chips shall not be blown onto areas that would potentially restrict the flow of water in drainage ditches. All un-chipped biomass must be removed from roadway right-of-ways.

The Contractor shall keep the work zone free of accumulated waste material and debris at all times. Remove and dispose of all tree, stump, and brush chips off the right-of-way. Remove and dispose of all debris and waste material off the right-of-way as work is completed and at the end of each workday. Remove desirable wood pieces from the right-of-way at the end of each workday. Stockpile trees and brush off the right-of-way. At the discretion of the Project Engineer, the Contractor may be permitted to stockpile trees and brush at approved locations along the right-of-way.

The Contractor shall immediately correct any disturbance to all drainage features and structures caused by the Contractor’s work.

- D. Stump Treatment.** Within one hour of cutting, the Contractor shall apply a stump treatment mix consisting of fifty percent (50%) Glyphosate (EPA Reg. No. 524-579) with water and add twelve (12) ounces of Imazapyr (EPA Reg. No. 241-431), as specified, per gallon of solution. The addition of a non-ionic surfactant 5% (v/v) shall be added to the solution to increase uptake of the herbicide solution into the root system. Generic formulations are not acceptable. Mix the herbicide solution in the presence of the Inspector. Include a color indicator in the herbicide solution to mark the treated stumps. Spray or paint the herbicide solution onto all cut stumps within one hour after cutting. Apply the herbicide solution in a manner to avoid drift onto surrounding vegetative ground cover. Stumps in the mowing zone, designated for mechanical grinding treatment, need not receive the herbicide treatment.

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Provide herbicide material for the treatment of cut stumps meeting the following criteria:

a. Glyphosate

Active ingredient: **(Glyphosate)**

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its potassium salt.....	48.7%
Inert ingredients	51.3%
Total	100.0%

* Contains 660 grams per liter or 5.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of the acid, glyphosate.
EPA Reg. No. 524-579

b. Imazapyr

Active ingredient: **(Imazapyr)**

*Isopropylamine salt of Imazapyr 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid	26.7%
Inert ingredients	73.3%
Total	100%

* Equivalent to 21.8 percent 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazolyl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.
EPA Reg. No. 241-431

KRS 217B requires that any individual who applies pesticides to Kentucky Highway Right-of-Way areas must be certified as a Pesticide Applicator under Category 6 guidelines. Comply with all current laws and regulations established by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and by KRS 217B that regulate the handling, use, and application of pesticides.

E. Property Damage. The Contractor will be responsible for all damage to public and/or private property resulting from his work.

F. Coordination with Utility Companies. NOTICE: Utility locations shown in the plans are approximate and have not been specifically located by the Department. Locate all underground, above ground and overhead utilities prior to beginning construction. The Contractor shall have the responsibility for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Utility Owner while they relocate their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his operations.

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- G. Right-of-Way Limits.** The exact limits of the Right-of-Way have not been established by the Department. The Contractor shall limit his activities to obvious Right-of-Way, permanent or temporary easements, and any work areas secured by consent and release of the adjacent property owners. The Contractor shall be responsible for all encroachments onto private lands.
- H. Clean Up, Disposal of Waste.** Clean up and dispose of all removed debris by the end of each work day, and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for clean up or disposal of waste and debris from the project. See the Special Provision for Waste and Borrow Sites.
- I. Final Dressing, Seeding and Protection.** Apply final dressing, class A to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the appropriate Seed Mixture as specified in Section 212.03.03.
- J. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See the Traffic Control Plan.
- B. Site preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to the bid items or "Trim & Remove Trees & Brush".
- C. Trim & Remove Trees & Brush.** The Department will measure the quantity as per linear foot, per side of the highway. See the Tree Trimming Detail for the horizontal and vertical trimming dimensions. The horizontal width is taken from the edge of pavement measured perpendicular to the roadway but not to extend beyond the obvious Right-of-Way limits, or as directed by the Engineer.
- D. Stump Treatment.** The Department will NOT measure for payment the operation of Stump Treatment. This activity shall be incidental to the bid items "Trim & Remove Trees & Brush".
- E. Clean Up, Disposal of Waste.** The Department will NOT measure for payment the operations of Clean Up and Disposal of Waste. These activities shall be incidental to the project bid items.
- F. Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operations of Final Dressing. Seeding and Protection will be measured according to Section 212.

Tree, Stump, & Brush Removal
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G. Erosion Control. See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

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

B. Trim & Remove Trees & Brush. The Department will make payment for the completed and accepted quantities per linear foot. The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete the work of trimming and removing the trees and/or brush.

C. Erosion Control. See the Special Note for Erosion Control.

SPECIAL NOTE

For Tree Removal

**Pulaski County
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 39
BEGINNING AT MP 3.535 AND ENDING AT MP 12.809 IN
PULASKI COUNTY
Item No. 8-9007**

NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST
HEIGHT) FROM JUNE 1- JULY 31.

**If there are any questions regarding this note, please contact Danny Peake, Director,
Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone:
(502) 564-7250.**

SPECIAL NOTES FOR COMPLETION DATES & LIQUIDATED DAMAGES

The ultimate fixed completion date for this project will be **August 1, 2021**. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of **\$1,000** per hour for each hour, or fraction of an hour, for any and all road closures that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

Trees and/or bushes that are **5 inches** or greater (diameter at breast height) shall not be cut or trimmed between June 1ST and July 31ST. Any trees and/or bushes that are cut or trimmed between June 1ST and July 31ST will **NOT** receive payment at the contract unit price. Tree removal shall not occur within 100 feet either side of the Buck Creek bridge crossing. Furthermore, failure to adhere to these restrictions shall result in Liquidated Damages in the amount of **\$344** per affected tree as mitigation to the Indiana Bat Conservation Fund for the loss of habitat. Activities that are a part of this contract that do not involve the initial trimming and/or cutting of trees and/or bushes will be permitted under the ultimate fixed completion date.

Wood debris from the tree trimming must be cleared within a week. The assessed damages if incomplete will be \$1,000 per day.

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

Contrary to Section 108.09, Liquidated Damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

COORDINATION OF WORK WITH OTHER CONTRACTS

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

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR DOUBLE ASPHALT SEAL COAT

Use RS-2 or RS-2C asphalt material that is compatible with the seal aggregate. Apply the first course of asphalt seal coat at the rate of 3.2 lbs/sy of asphalt and 30 lbs/sy of size #78 seal coat aggregate. Apply the second course at 2.8 lbs/sy of asphalt and 20 lbs/sy of size #9M seal coat aggregate. The Engineer may adjust the rate of application as conditions warrant. Use caution in applying liquid asphalt material to avoid over spray getting on curbs, gutter, barrier walls, bridges, guardrail, and other roadway appurtenances.

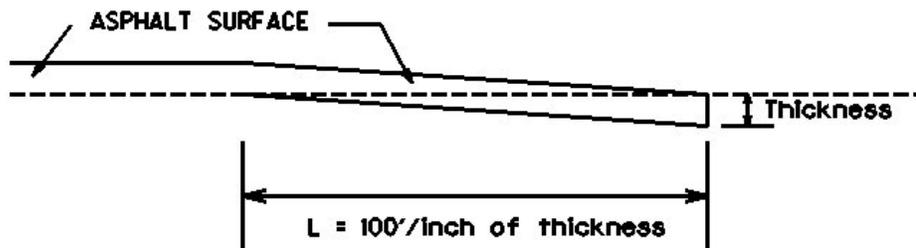
The Department will not measure any surface preparation required prior to applying the asphalt seal coat, but shall be incidental to “Asphalt Material for Asphalt Seal Coat”.

1-3215 Double Asphalt Seal Coat
01/02/2012

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will make payment for this work at the Contract unit price per ton for Asphalt Pavement Milling and Texturing, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Thickness = 1.25 Inches

L = 125 LF

L= Length of Edge Key

SPECIAL NOTES FOR GUARDRAIL

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications, Special Notes and Special Provisions, and the Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

(1) Site preparation; (2) Remove existing guardrail systems; (3) Construct Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (4) Delineators for guardrail; (5) Maintain and Control Traffic; and (6) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and 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.

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail.** Furnish guardrail system components according to Section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates. Furnish approximately 520 Extra Length Post (9 foot length, steel, no alternates).
- C. Delineators for Guardrail.** Furnish white and/or yellow Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- D. DGA.** Furnish Dense Graded Aggregate as per Section 805.
- E. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site Preparation.** Remove existing guardrail system, including the guardrail end treatments, Bridge End connectors and all other elements of the existing guardrail system as per Section 719, except that the Contractor will take possession of all concrete posts and all concrete associated with the existing bridge and/or guardrail end treatments. Locate all disposal areas off the Right of Way. Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all

Guardrail
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obstructions or any other items; regrading, reshaping, and adding and compacting suitable materials on the existing shoulders to provide proper template or foundation for the guardrail; filling voids left as the result of removing existing guardrail and guard posts with dry sand; temporary pollution and erosion control; disposal of excess, waste materials, and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the engineer.

- C. Guardrail.** . Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings, current editions. Locations listed on the summary and/or shown on the drawings are approximate only. The Engineer will determine the exact termini for individual guardrail installations and locations for Extra Length Posts at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Erect guardrail to the lines and grades shown on the current Standard and Sepia Drawings, or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When removing existing guardrail and installing new guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- D. DGA.** Place and compact DGA along and under the guardrail as shown on the Typical Section(s). Place a Double Asphalt Seal Coat over the entire width of the DGA along and under the guardrail. See the Special Note for Double Asphalt Seal Coat.
- E. Delineators for Guardrail.** Construct Delineators for Guardrail according to Standard Drawing RBR-055 – Delineators for Guardrail, current edition.
- F. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- G. Coordination with Utility Companies.** Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require utilities to be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be

Guardrail
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responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

- H. Right of Way Limits.** The Department has not established the exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- I. Clean Up, Disposal of Waste.** Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See the Special Provision for Waste and Borrow Sites.
- J. Final Dressing, Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.
- K. Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Site preparation.** Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to the Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable.
- C. Guardrail, Extra Length Post, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will measure according to Section 719.04.
- D. DGA.** The Department will measure according to Section 302.04.
- E. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- F. Clean Up, Disposal of Waste, Final Dressing, and Seeding and Protection.** The Department will NOT measure for payment the operations of: Clean Up, Disposal of Waste, and Final Dressing. These activities shall be incidental. Seeding and Protection will be measured according to Section 212.
- G. Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

Guardrail
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- A. Maintain and Control Traffic.** See Traffic Control Plan.
- B. Guardrail, Extra Length Post, End Treatments, Bridge End Connectors, Terminal Sections, and Remove Guardrail.** The Department will make payment according to Section 719.05.
- C. DGA.** The Department will make payment according to Section 302.05.
- D. Delineators for Guardrail.** See Standard Drawing RBR-055 – Delineators for Guardrail.
- E. Erosion Control.** See the Special Note for Erosion Control.

**SPECIAL NOTE FOR
ASPHALT MILLING AND TEXTURING**

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

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

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

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

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

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to the current MUTCD. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the Contractor unless otherwise addressed, when no longer needed.

Reduce the speed limit in work areas by 10 miles per hour. The extent of these areas within the project limits will be restricted to the proximity of actual work areas as determined by the Engineer. Any relocation or covering of signs will be incidental to “Maintain and Control Traffic” lump sum.

Except as noted herein, maintain access to all entrances, side streets and roads, schools, churches and commercial properties at all times during construction. Access to fire hydrants must also be maintained at all times. The Contractor shall provide reasonable egress and ingress to adjacent properties when actual operations are not in progress at that location. Limit the time during which a residential or farm entrance is blocked to the minimum length of time required for actual operations, do not extend the time for the Contractor’s convenience, and in no case allow the blockage to exceed six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Except during specific closure periods noted below, maintain alternating one-way traffic at all times during construction. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

As part of the overall safety improvements to the corridor, superelevation and vertical curve improvements are proposed along KY 39 and W. Coleman Road (Areas 3 – 8). These improvements are to be completed during the summer months when Northern Elementary School is not in session and must be complete by August 1st, 2020 or as directed by the Engineer.

In order to facilitate the Area 3 Aluminum Box Culvert construction, a temporary road closure with diversion will be used in the work area, while maintaining one lane of traffic. Substantial completion of Area 3 improvements must be completed within 7 days from start of construction, which includes

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placement of the roadway's asphalt base. Work in Area 3 will only be permitted between June 15th and August 1st. The Contractor shall coordinate all road closures with the Department and Emergency Medical Services. The Contractor shall provide passage for emergency vehicles. The Department will provide public notification regarding approved road closures.

In order to facilitate the Area 4 construction, W. Coleman Road may be closed to through traffic for periods not to exceed three days and nights. However, KY 39 is to remain open. Temporary detours will be maintained for these closures. Provide the Engineer with a two week notice prior to scheduling these closures to allow for proper public notification. A detour plan shall also be provided by the Contractor with this two week notice indicating proposed travel routes and temporary signage. All signing and traffic control measures shall be in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, and the Standard Drawings.

The Contractor shall submit proposed lane closures, and partial lane closure days and times to the Engineer at least 7 calendar days in advance for approval.

The Contractor shall completely cover any signs, existing, permanent, or temporary, which do not properly apply to the current traffic phasing, and shall maintain the covering until signs are applicable or are removed.

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.

No lane closures will be allowed on the following dates:

Labor Day Weekend	Friday, September 4, 2020 – Monday, September 7, 2020
Thanksgiving Holiday	Thursday, November 26, 2020 – Monday, November 30, 2020
Christmas Holiday	Wednesday, December 23, 2020 – Sunday, December 27, 2020
New Year's Holiday	Thursday, December 31, 2020 – Sunday, January 3, 2021
Memorial Day Weekend	Friday, May 28, 2021 – Monday, May 31, 2021
Independence Day Weekend	Friday, July 2, 2021 – Monday, July 5, 2021

At the discretion of the Engineer, additional days and hours may be specified when lane and/or road closures will not be allowed due to unforeseen events.

Liquidated Damages will be assessed for any and all lane closures that exceed the approved time limits in accordance with the Special Note for Completion Dates & Liquidated Damages.

TEMPORARY SIGNAL 2 PHASE

A Temporary Signal 2 Phase has been included in the project for possible use during the extension of the Aluminum Box Culvert (ABC). This device may be useful for other areas. The Contractor and the

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Engineer should work together to determine the best use of this device. If used, the Department will measure the Temporary Signal 2 Phase only once for payment, regardless of how many times it is set, reset, removed, and relocated during the duration of the project. The Department will not measure for payment any replacements of the Temporary Signal 2 Phase if it becomes damaged or non-functioning, nor it the Engineer directs that it be replaced due to poor condition or visibility. The Contractor shall retain possession of the Temporary Signal 2 Phase upon completion of construction.

LANE CLOSURES

When the road is open to through traffic, do not leave lane closures in place during non-working hours. Maintain lane closures only during hours of actual operations. Reduce lane closures to a shoulder closure, or remove as appropriate, when active operations do not require a lane closure. The Engineer will permit shoulder closures during non-working hours; however do not park equipment or store materials on a closed shoulder during non-working hours. The Engineer may designate days and hours when lane and/or shoulder closures will not be allowed.

Provide a minimum distance of 1 mile between lane closures when closing lanes to traffic in more than one location.

Contrary to Section 112.04.17, lane closures, whether long term or short term, will not be measured for payment and will be incidental to the bid item "Maintain and Control Traffic".

TEMPORARY SIGNS

Temporary sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Temporary signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to Section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment, but will be incidental to Maintain and Control Traffic. Individual signs will be measured only once for payment, regardless of how many times they are set, reset, relocated, and removed during the duration of the project. Replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity will not be measured for payment.

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed may include, but are not limited to, signage for reduced speed limits and will be furnished, relocated and maintained by the Contractor.

CHANGEABLE MESSAGE SIGNS

Provide portable changeable message signs (PCMS) in advance of and within the project at locations to be determined by the Engineer. The locations designated may vary as the work progresses. The messages

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required to be provided will be designated by the Engineer. The PCMS will be in operation at all times. In the event of damage or mechanical/electrical failure, the Contractor will repair or replace the PCMS immediately. PCMS will be paid for once, no matter how many times they are removed or relocated. The Department will **not** take possession of the signs upon completion of the work.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used for road closures and to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure for payment any replacements for damaged barricades, or any barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

PAVEMENT MARKINGS

Install Temporary and Permanent Striping according to Section 112. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After resurfacing, replace the markings at their approximate existing locations or as directed by Engineer. Place markings not existing prior to resurfacing as directed by the Engineer.

PAVEMENT EDGE DROP-OFFS

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

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu

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of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the Engineer.

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. road work ahead), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver – e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related)

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Messages

Basic principles that are important to providing proper messages and insuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the sign is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent theft (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

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Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS:

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Access	ACCS	ACCIDENT AHEAD/ USE ACCS RD NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/ USE ALT RTE NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/ DETOUR NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/ MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/ USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/ USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/ MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/ USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/ EXPECT DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/ DETOUR EXIT 20
Emergency	EMER	EMER VEH AHEAD/ PREPARE TO STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/ DETOUR EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/ DETOUR EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ ALL TRAF EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/ EXPECT DELAYS
Hour	HR	ACCIDENT ON AA HWY/ 2 HR DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/ DETOUR EXIT 20
Lane	LN	LN CLOSED MERGE LEFT
Left	LFT	LANE CLOSED MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/ SLOW
Major	MAJ	MAJ DELAYS I75/ USE ALT RTE
Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/ 30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/ DETOUR EXIT 60
Prepare	PREP	ACCIDENT 3 MI/ PREP TO STOP
Right	RGT	EVENT PKING NEXT RGT
Road	RD	HAZMAT IN RD/ ALL TRAF EXIT 25
Roadwork	RDWK	RDWK NEXT 4 MI/ POSSIBLE DELAYS
Route	RTE	MAJ DELAYS I75/ USE ALT RTE
Shoulder	SHLDR	SHLDR CLOSED NEXT 5 MI
Slippery	SLIP	SLIP COND POSSIBLE/ SLOW SPD
Southbound	S-BND	S-BND I75 CLOSED/ DETOUR EXIT 50
Speed	SPD	SLIP COND POSSIBLE/ SLOW SPD

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Standard Abbreviations (cont)

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Street	ST	MAIN ST CLOSED/ USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/ DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/ USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/ DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/ POSSIBLE DELAYS

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NO USE THESE ABBREVIATIONS:

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

Typical Messages

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

<u>Reason/Problem</u>	<u>Action</u>
ACCIDENT	ALL TRAFFIC EXIT RT
ACCIDENT/XX MILES	AVOID DELAY USE XX
XX ROAD CLOSED	CONSIDER ALT ROUTE
XX EXIT CLOSED	DETOUR
BRIDGE CLOSED	DETOUR XX MILES
BRIDGE/(SLIPPERY, ICE, ETC.)	DO NOT PASS
CENTER/LANE/CLOSED	EXPECT DELAYS
DELAY(S), MAJOR/DELAYS	FOLLOW ALT ROUTE
DEBRIS AHEAD	KEEP LEFT
DENSE FOG	KEEP RIGHT
DISABLED/VEHICLE	MERGE XX MILES
EMER/VEHICLES/ONLY	MERGE LEFT
EVENT PARKING	MERGE RIGHT
EXIT XX CLOSED	ONE-WAY TRAFFIC
FLAGGER XX MILES	PASS TO LEFT
FOG XX MILES	PASS TO RIGHT

Traffic Control Plan
Page 10 of 10

Typical Messages (cont)

Reason/Problem

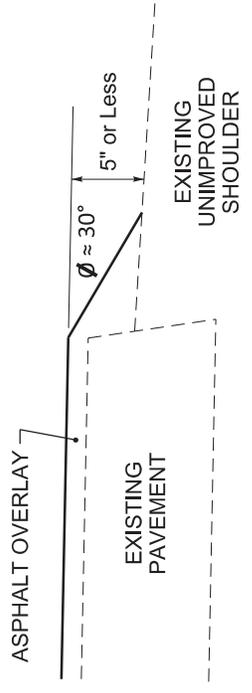
FREEWAY CLOSED
FRESH OIL
HAZMAT SPILL
ICE
INCIDENT AHEAD
LANES (NARROW, SHIFT, MERGE, ETC.)
LEFT LANE CLOSED
LEFT LANE NARROWS
LEFT 2 LANES CLOSED
LEFT SHOULDER CLOSED
LOOSE GRAVEL
MEDIAN WORK XX MILES
MOVING WORK ZONE, WORKERS IN ROADWAY
NEXT EXIT CLOSED
NO OVERSIZED LOADS
NO PASSING
NO SHOULDER
ONE LANE BRIDGE
PEOPLE CROSSING
RAMP CLOSED
RAMP (SLIPPERY, ICE, ETC.)
RIGHT LANE CLOSED
RIGHT LANE NARROWS
RIGHT SHOULDER CLOSED
ROAD CLOSED
ROAD CLOSED XX MILES
ROAD (SLIPPERY, ICE, ETC.)
ROAD WORK
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)
ROAD WORK XX MILES
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)
NEW SIGNAL XX MILES
SLOW 1 (OR 2) - WAY TRAFFIC
SOFT SHOULDER
STALLED VEHICLES AHEAD
TRAFFIC BACKUP
TRAFFIC SLOWS
TRUCK CROSSING
TRUCKS ENTERING
TOW TRUCK AHEAD
UNEVEN LANES
WATER ON ROAD
WET PAINT
WORK ZONE XX MILES
WORKERS AHEAD

Action

PREPARE TO STOP
REDUCE SPEED
SLOW
SLOW DOWN
STAY IN LANE
STOP AHEAD
STOP XX MILES
TUNE RADIO 1610 AM
USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE
USE NEXT EXIT
USE RIGHT LANE
WATCH FOR FLAGGER

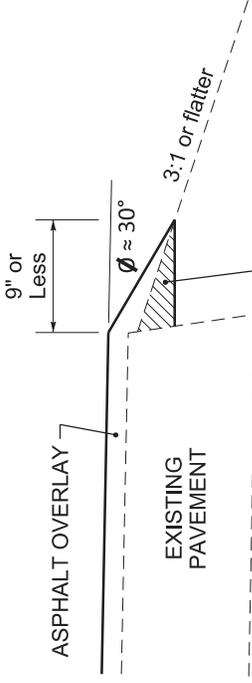
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of 5 inches or less)



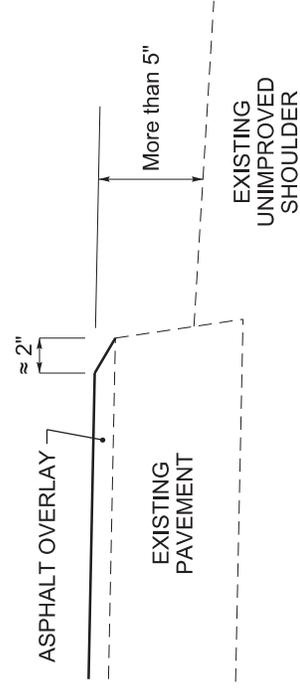
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to fill slope or ditch foreslope that is 3:1 or less)



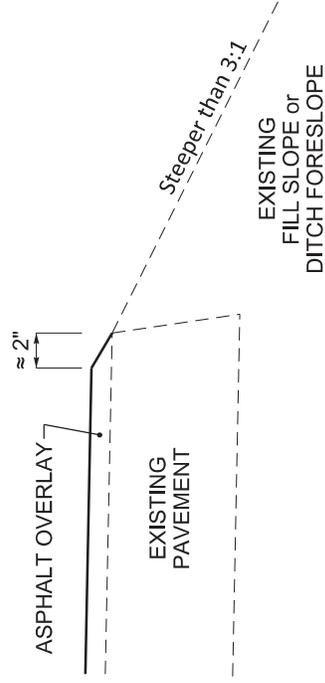
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to low shoulder with dropoff of more than 5 inches)



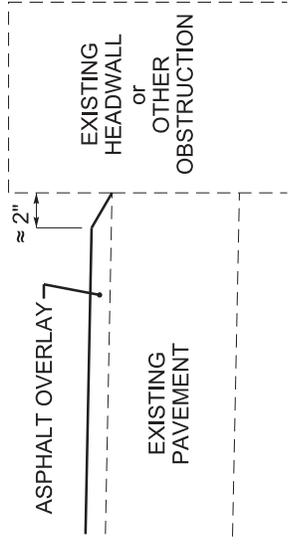
DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to fill slope or ditch foreslope that is steeper than 3:1)



DURABLE PAVEMENT EDGE DETAIL

(Resurfacing adjacent to an obstruction, such as an existing headwall)



NOTES

1. DETAILS DO NOT APPLY TO OVERLAYS LESS THAN 1 INCH THICK.
2. THE DURABLE PAVEMENT EDGE DEVICE MAY BE DISENGAGED AT DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT, AS APPROVED BY THE ENGINEER.

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

	KENTUCKY TRANSPORTATION CABINET Department of Highways DIVISION OF RIGHT OF WAY & UTILITIES RIGHT OF WAY CERTIFICATION	TC 62-226 Rev. 01/2016 Page 1 of 1
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<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION			
ITEM #	COUNTY		PROJECT # (STATE)		PROJECT # (FEDERAL)		
08-9007.00	Pulaski		12F0 FD52 100 9248801R		HSIP 5181 006		
PROJECT DESCRIPTION		KY 39					

No Additional Right of Way Required
 Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.

Condition # 1 (Additional Right of Way Required and Cleared)
 All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.

Condition # 2 (Additional Right of Way Required with Exception)
 The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract

Condition # 3 (Additional Right of Way Required with Exception)
 The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.

Total Number of Parcels on Project	2	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired			
Signed Deed	2		
Condemnation			
Signed ROE			

Notes/ Comments (Use Additional Sheet if necessary)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name	Leigh A. Karr, SRWA	Printed Name	
Signature	<i>Leigh A. Karr</i>	Signature	<i>Charles Hale</i>
Date	1/29/2020	Date	2020.01.29 13:17:31 -05'00'
Right of Way Director		FHWA	
Printed Name	DM Loy	Printed Name	No Signature Required
Signature	<i>DM Loy</i>	Signature	as per FHWA-KYTC
Date	13:29:26 -05'00'	Date	Current Stewardship Agreement

UTILITIES AND RAIL CERTIFICATION NOTE

Pulaski County - HSIP 5181 (006)
FD52 100 0039 003-013
Corridor Improvements along KY 39
Item No. 8-9007.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

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.

UTILITIES AND RAIL CERTIFICATION NOTE

**Pulaski County - HSIP 5181 (006)
FD52 100 0039 003-013
Corridor Improvements along KY 39
Item No. 8-9007.00**

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

The following utility companies have facilities in the general project area.

Water/Sewer – City of Somerset

City of Somerset has existing water and sewer mains within the limits of the project areas. These facilities are to remain and are **not to be disturbed**.

Water/Sewer – Southeastern Water Association

Southeastern Water Association has existing water and sewer mains within the limits of the project areas. These facilities are to remain and are **not to be disturbed**.

Internet – Windstream

Windstream has existing facilities within the limits of the project areas. These facilities are to remain and are **not to be disturbed**.

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

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

- South KY RECC – Overhead Electric poles may be adjusted
- AT&T – Overhead Electric poles may be adjusted
- Time Warner/Spectrum/Charter – Overhead Electric poles may be adjusted

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

Not Applicable

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

Not Applicable

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

- No Rail Involved**

 Minimal Rail Involved (See Below)

 Rail Involved (See Below)

UTILITIES AND RAIL CERTIFICATION NOTE

Pulaski County - HSIP 5181 (006)
FD52 100 0039 003-013
Corridor Improvements along KY 39
Item No. 8-9007.00

UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation.

The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

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

UTILITIES AND RAIL CERTIFICATION NOTE

Pulaski County - HSIP 5181 (006)
FD52 100 0039 003-013
Corridor Improvements along KY 39
Item No. 8-9007.00

AREA UTILITIES CONTACT LIST

<u>Utility Company/Agency</u>	<u>Contact Name</u>	<u>Contact Information</u>
1. Time Warner/Spectrum/Charter	Terry Spaw	(513) 644-8933 terry.spaw@level3.com
2. AT&T	Matt Fierro	(574) 707-2663 fm6489@att.com
3. City of Somerset	Dana Whitis	306 East Mt. Vernon St. PO Box 989 Somerset, KY 42502 (606) 425-5364
4. South KY RECC	Kevin Newton	200 Electric Avenue Somerset, KY 42501 (606) 678-4121
5. Southeastern Water Association	Morris Vaughn	147 E. Somerset Church Rd. Somerset, KY 42503 (606) 678-5501
6. Windstream	David Ackerman	(319) 790-1464 david.f.ackerman@windstream.com

NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.

N O T I C E

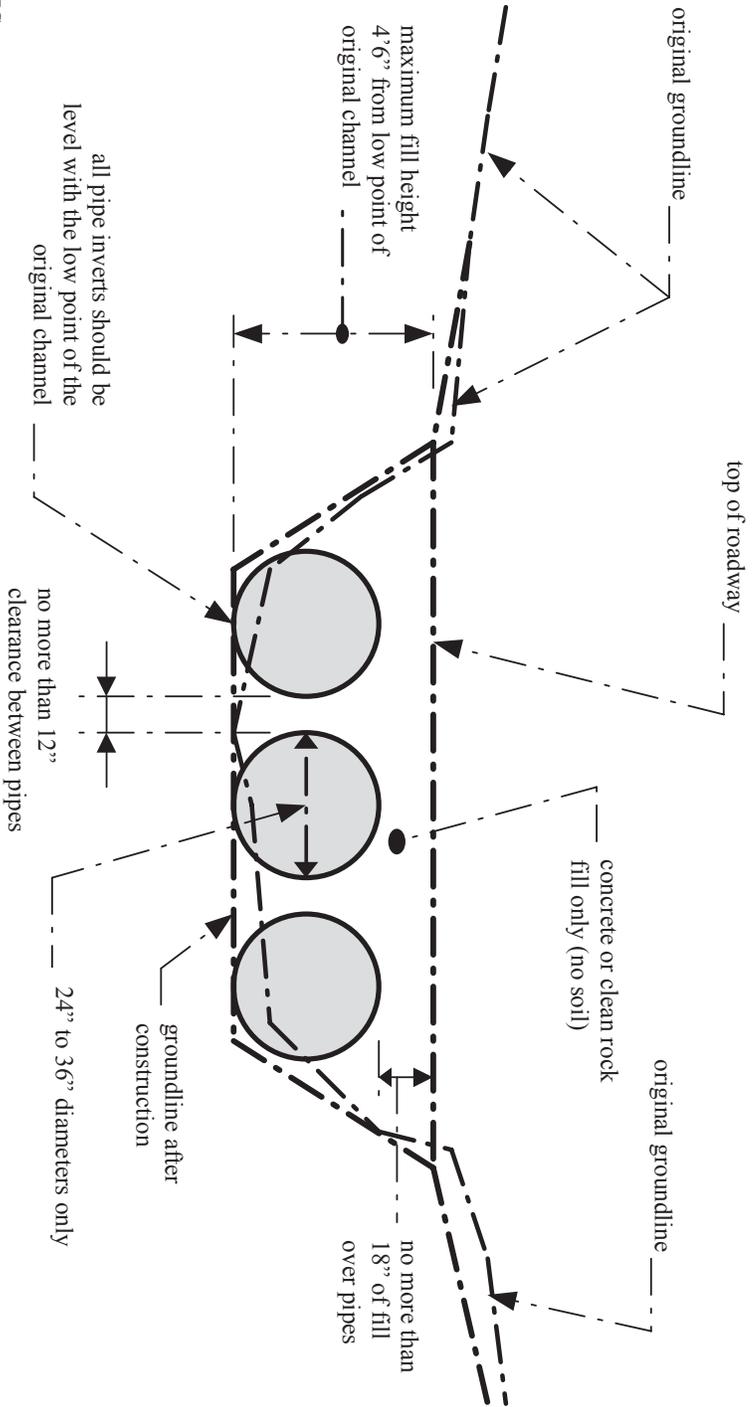
**DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
(NATIONWIDE PERMIT & GENERAL WQC AUTHORIZATION)**

PROJECT: Pulaski County, KY Item No. 8-9007.00
KY 39 Low cost Safety Improvements

The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 “Linear Transportation Projects” & Division of Water General Water Quality Certification. In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Corps of Engineers. A copy of any request to the Corps of Engineers to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

ATTACHMENT 1



NOTES:

1. This is a conceptual drawing. The number and size of pipes and other details will vary depending on specific site conditions.
2. The pipes and backfill must be contained within the stream channel as shown above. During the construction of the approaches and access roadway across the floodplain, unstable and unconsolidated materials unsuitable for roadways may be excavated and replaced with riprap, crushed stone, or other stable road construction materials. This may only be done, however, with the following provisions: (1) the disposal of excess, unconsolidated materials thus excavated must be outside of the floodplain and (2) the finished surface of the completed road may be no more than three inches (3") above the pre-construction surface of the floodplain at any point beyond the top of banks.

LOW-WATER CROSSING

STANDARD DRAWING
Not to Scale



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

R. BRUCE SCOTT
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
3. The activity will impact less than 1/2 acre of wetland/marsh.

General Certification--Nationwide Permit # 14
Linear Transportation Projects
Page 2

4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet and in-stream stormwater detention/retention basins are not covered under this general water quality certification.
5. For complete linear transportation projects, all impacts shall not exceed a cumulative length of 500 linear feet within each Hydrologic Unit Code (HUC) 14.
6. Any crossings must be constructed in a manner that does not impede natural water flow.
7. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
8. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
9. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
10. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to,

General Certification--Nationwide Permit # 14
Linear Transportation Projects
Page 3

upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.

- Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
- To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

Terms for Nationwide Permit No. 14
Linear Transportation Projects

Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

KYTC BMP Plan for Project CID 20-4123



Kentucky Transportation Cabinet

Highway District 8

And

_____ (2), Construction

**Kentucky Pollutant Discharge Elimination System
Permit KYR10
Best Management Practices (BMP) plan**

Groundwater protection plan

For Highway Construction Activities

For

**Highway Safety Improvement Project on KY-39 in
Pulaski County**

Project: CID 20-4123

KYTC BMP Plan for Project CID 20-4123

Project information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District __ (1)
2. Resident Engineer: (2)
3. Contractor name: (2)
Address: (2)

Phone number: (2)
Contact: (2)
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number: (2)
5. Route (Address): KY-39
6. Latitude/Longitude (project mid-point): 37° 11' 59", -84° 32' 26"
7. County (project mid-point): Pulaski
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

A. Site description:

1. Nature of Construction Activity (from letting project description): Highway Safety Improvement Project consisting of various improvements such as Vertical Realignment, installation of Aluminum Box Culvert, Improvement

KYTC BMP Plan for Project CID 20-4123

of Roadside Slope, Ditching, Tree Trimming, Signing, Box Culvert Extensions, and Pipe Replacement.

2. Order of major soil disturbing activities: (2) and (3)
3. Projected volume of material to be moved: *This project does not involve significant cut and fill.*
4. Estimate of total project area (acres): 72.5
5. Estimate of area to be disturbed (acres): 3.2
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7. Data describing existing soil condition: (1) & (2)
8. Data describing existing discharge water quality (if any): (1) & (2)
9. Receiving water name: Buck Creek, Clear Creek, and Flat Lick Creek.
10. TMDLs and Pollutants of Concern in Receiving Waters: *No TDML's were involved on this project.*
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.

12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

KYTC BMP Plan for Project CID 20-4123

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - Clearing and Grubbing – The following BMP's will be considered and used where appropriate.

KYTC BMP Plan for Project CID 20-4123

- Leaving areas undisturbed when possible.
- Silt basins to provide silt volume for large areas.
- Silt Traps Type A for small areas.
- Silt Traps Type C in front of existing pipes and drop inlets which are to be saved
- Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
- Brush and/or other barriers to slow and/or divert runoff.
- Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
- Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
- Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes and drop inlets after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probable changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection

KYTC BMP Plan for Project CID 20-4123

- Placing Sod
- Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: *This project does not include storm water BMPs or flow controls for post-construction use.*

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Section Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

- **Good Housekeeping:**

KYTC BMP Plan for Project CID 20-4123

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

➤ **Hazardous Products:**

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

➤ **Petroleum Products:**

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

KYTC BMP Plan for Project CID 20-4123

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

➤ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

➤ **Paints:**

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

➤ **Concrete Truck Washout:**

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

➤ **Spill Control Practices**

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

KYTC BMP Plan for Project CID 20-4123

- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. *There are no other local (MS4) requirements that are expected to be necessary for this project.*

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
 - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. *There are no such BMP's for this project.*

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

KYTC BMP Plan for Project CID 20-4123

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water from cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).

KYTC BMP Plan for Project CID 20-4123

- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

- Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

_____ 2. (e) land treatment or land disposal of a pollutant;

_____ 2. (f) Storing, ..., or related handling of hazardous waste, solid waste or special waste, ..., in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

_____ 2. (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

_____ 2. (j) Storing or related handling of road oils, dust suppressants,, at a central location;

_____ 2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ 2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

KYTC BMP Plan for Project CID 20-4123

The contractor is responsible for the preparation of a plan that addresses the

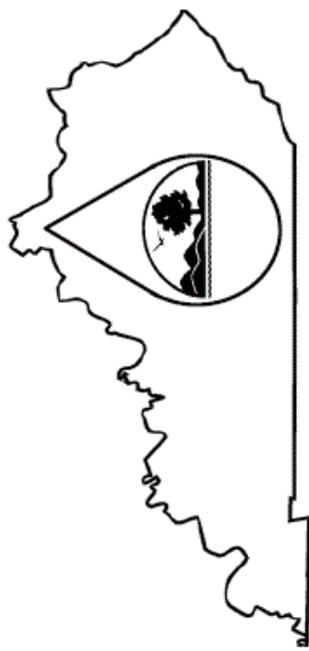
401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

CID 20-4123
Pulaski County
Highway Safety Improvement Project along KY-39
from MP 3.535 – 12.809
Item No.: 8-9007

An electronic Notice of Intent (eNOI) for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, a copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the “Building Contractor” and the eNOI will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work within this contract in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control, as well as meeting the requirements of the KYR10 permit and the KDOW.

eForm Submittal ID: 184794



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

Notice of Intent (NOI) for coverage of Storm Water Discharge
Associated with Construction Activities Under the KPDES Storm
Water General Permit KYR100000

[Click here for Instructions
\(Controls/KPDES_FormKYR10_Instructions.htm\)](#)

Click here to obtain information and a copy of the KPDES General Permit.
(<http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf>)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an
optionally required field

Agency Interest ID:

Permit Number:(✓)

Reason for Submittal:(*)

If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓)

ELIGIBILITY:
Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.

EXCLUSIONS:
The following are excluded from coverage under this general permit:
 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan;
 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation;
 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.

SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)

Company Name:(✓) Kentucky Transportation Cabinet, District 8	First Name:(✓) Tamara	M.I.: MI	Last Name:(✓) Wilson
Mailing Address:(*) 1660 South US 27	City:(*) Somerset	State:(*) Kentucky	Zip:(*) 42502

eMail Address:(*) Tamara.Wilson@ky.gov	Business Phone:(*) 606-677-4017	Alternate Phone: Phone
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SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*) KYTC Project: 204123		Status of Owner/Operator(*) State Government	SIC Code(*) 1611 Highway and Street Constr
Company Name:(✓) KYTC	First Name:(✓) First Name	M.I.: MI	Last Name:(✓) Last Name
Site Physical Address:(*) KY-39			
City:(*) Dabney	State:(*) Kentucky	Zip:(*) 42503	
County:(*) Pulaski	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal) 37.199722	Longitude(decimal degrees)(*) -84.540556	

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*) Highway Safety Improvement Project consisting of various improvements such as Vertical Realignment, installation of Aluminum Box Culvert, Improvement of Roadside Slop	
a. For single projects provide the following information	
Total Number of Acres in Project:(✓) 72.5	Total Number of Acres Disturbed:(✓) 3.2
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)
b. For common plans of development provide the following information	
Total Number of Acres in Project:(✓) # Acre(s)	Total Number of Acres Disturbed:(✓) # Acre(s)
Number of individual lots in development, if applicable:(✓)	Number of lots in development:(✓)

# lot(s)	# lot(s)
Total acreage of lots intended to be developed:(✓)	Number of acres intended to be disturbed at any one time:(✓)
Project Acres	Disturbed Acres
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

List Building Contractor(s) at the time of Application:(*)

Company Name	
--------------	--

SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED ?

Discharge Point(s):

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	
1	Yes	37.218969	-84.536584	Buck Creek	Delete
2	Yes	37.229540	-84.531114	Buck Creek	Delete
3	Yes	37.229681	-84.531389	Buck Creek	Delete
4	Yes	37.240543	-84.527392	Buck Creek	Delete
5	Yes	37.248677	-84.519917	Clear Creek	Delete
6	Yes	37.248784	-84.520252	Clear Creek	Delete
7	Yes	37.259645	-84.516759	Clear Creek	Delete
8	Yes	37.166607	-84.564631	Flat Lick Creek	Delete
9	Yes	37.166767	-84.564909	Flat Lick Creek	Delete
10	Yes	37.172636	-84.561555	Flat Lick Creek	Delete

SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED ?

Name of MS4:

Date of application/notification to the MS4 for construction site permit coverage:

Discharge Point(s):(*)

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SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?

Will the project require construction activities in a water body or the riparian zone?:(*)

No

If Yes, describe scope of activity: (✓)

describe scope of activity

Is a Clean Water Act 404 permit required?:(*)

Yes

Is a Clean Water Act 401 Water Quality Certification required?:(*)

Yes

SECTION VII -- NOI PREPARER INFORMATION

First Name:(*)

Last Name:(*)

M.I.:

MI

Mailing Address:(*)

City:(*)

State:(*)

Zip:(*)

Company Name:(*)

Company Name

Business Phone:(*)

Phone

Alternate Phone:

Phone

SECTION VIII -- ATTACHMENTS

Facility Location Map:(*)

Upload file

Supplemental Information:

Upload file

SECTION IX -- CERTIFICATION

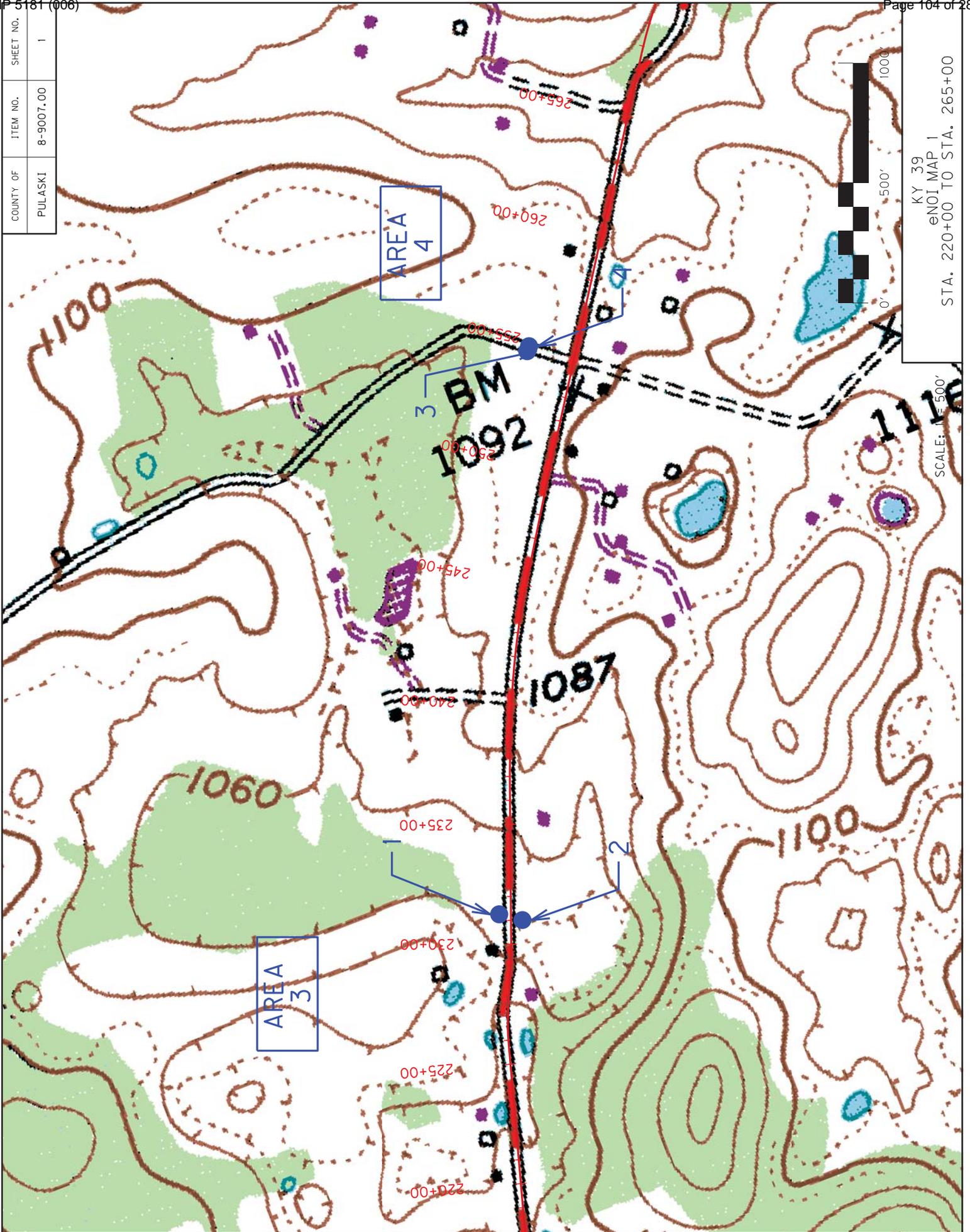
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly

responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: (*) Signature		Title: (*) Title	
First Name: (*) First Name	M.I.: MI	Last Name: (*) Last Name	
eMail Address: (*) eMail Address		Business Phone: (*) Phone	Alternate Phone: Phone
		Signature Date: (*) Date	

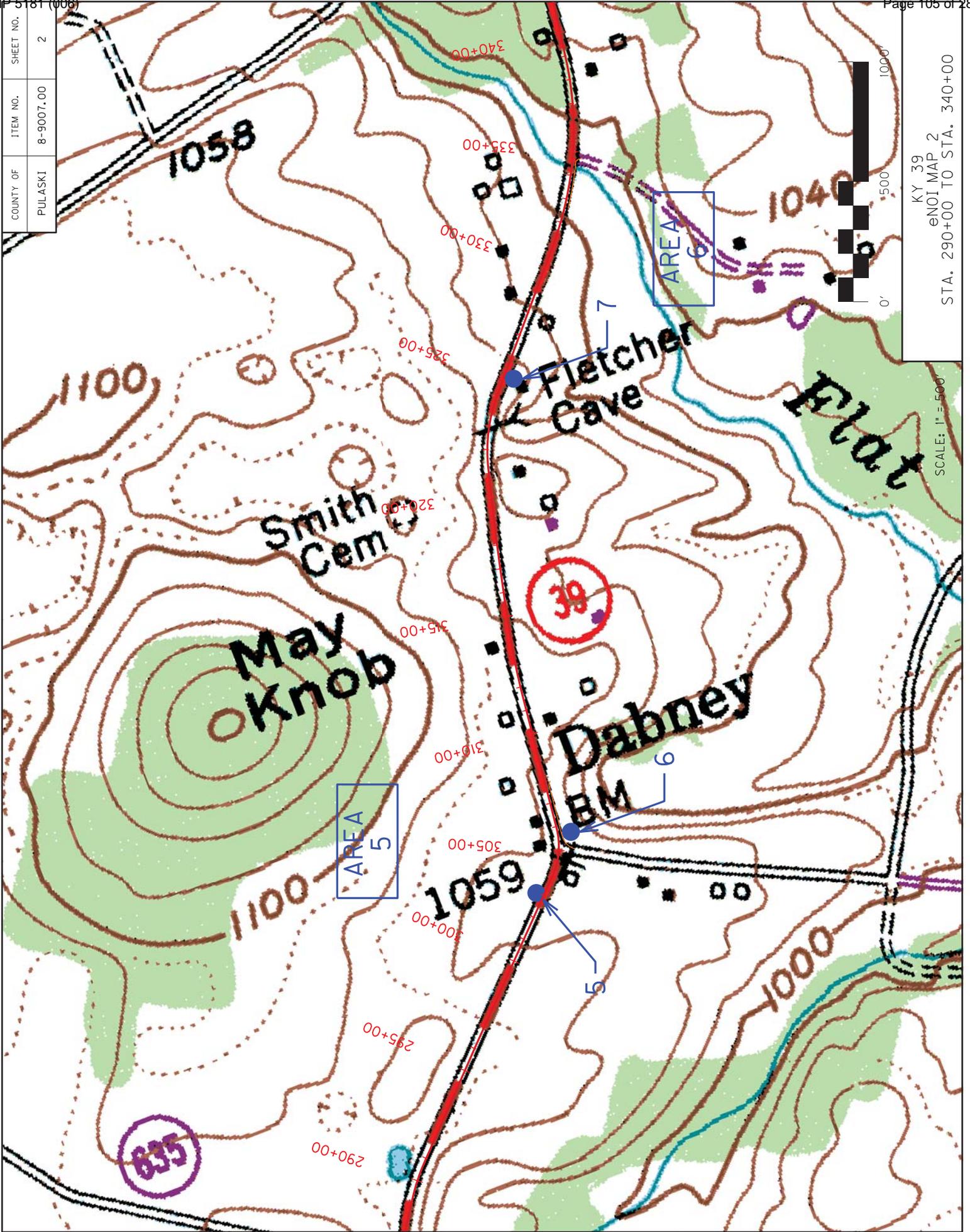
[Click to Save Values for Future Retrieval](#) [Click to Submit to EEC](#)

COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	1



SCALE: 1" = 500'
 KY 39
 eNOI MAP 1
 STA. 220+00 TO STA. 265+00

COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	2



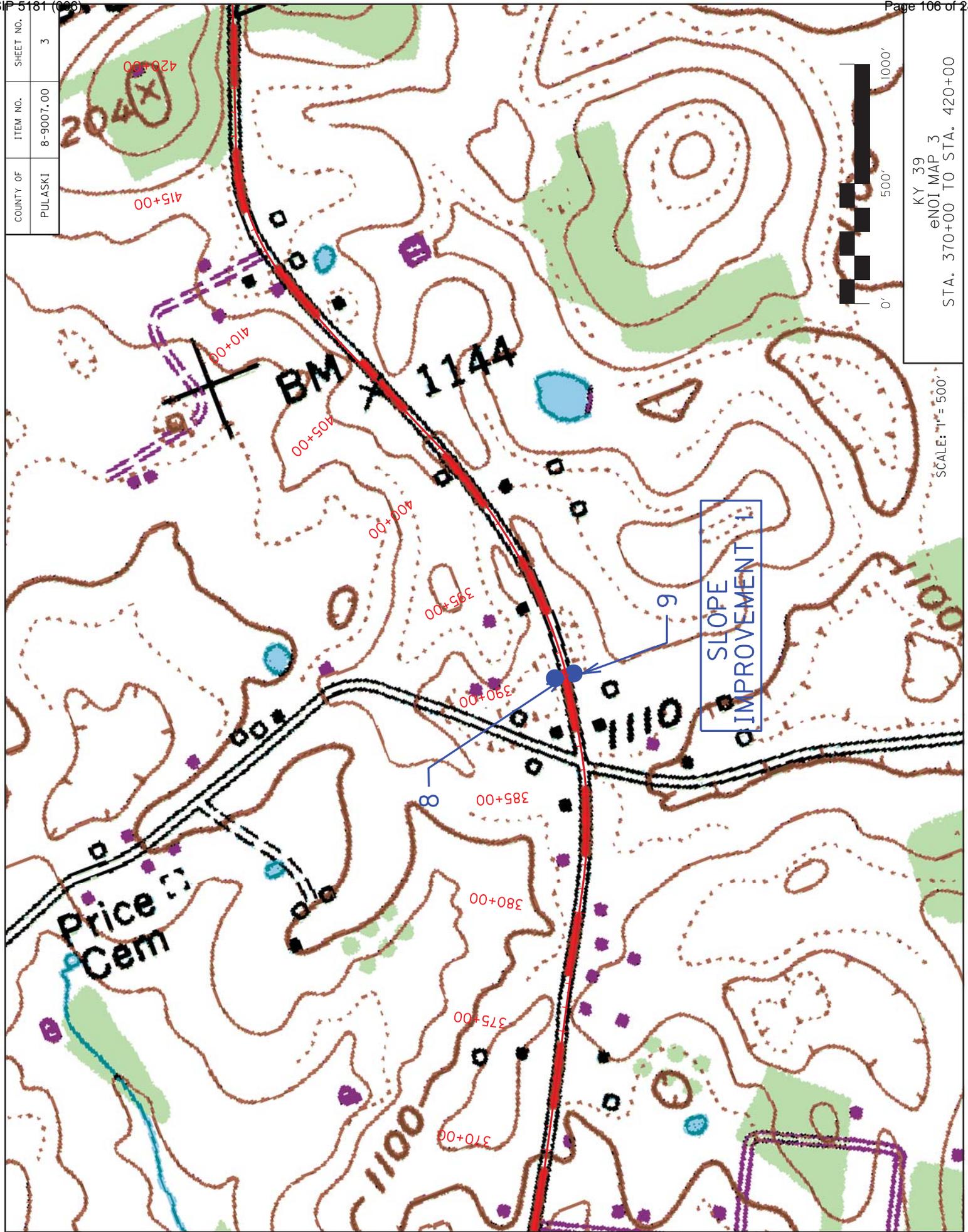
KY 39

EN01 MAP 2

STA. 290+00 TO STA. 340+00

SCALE: 1" = 500'

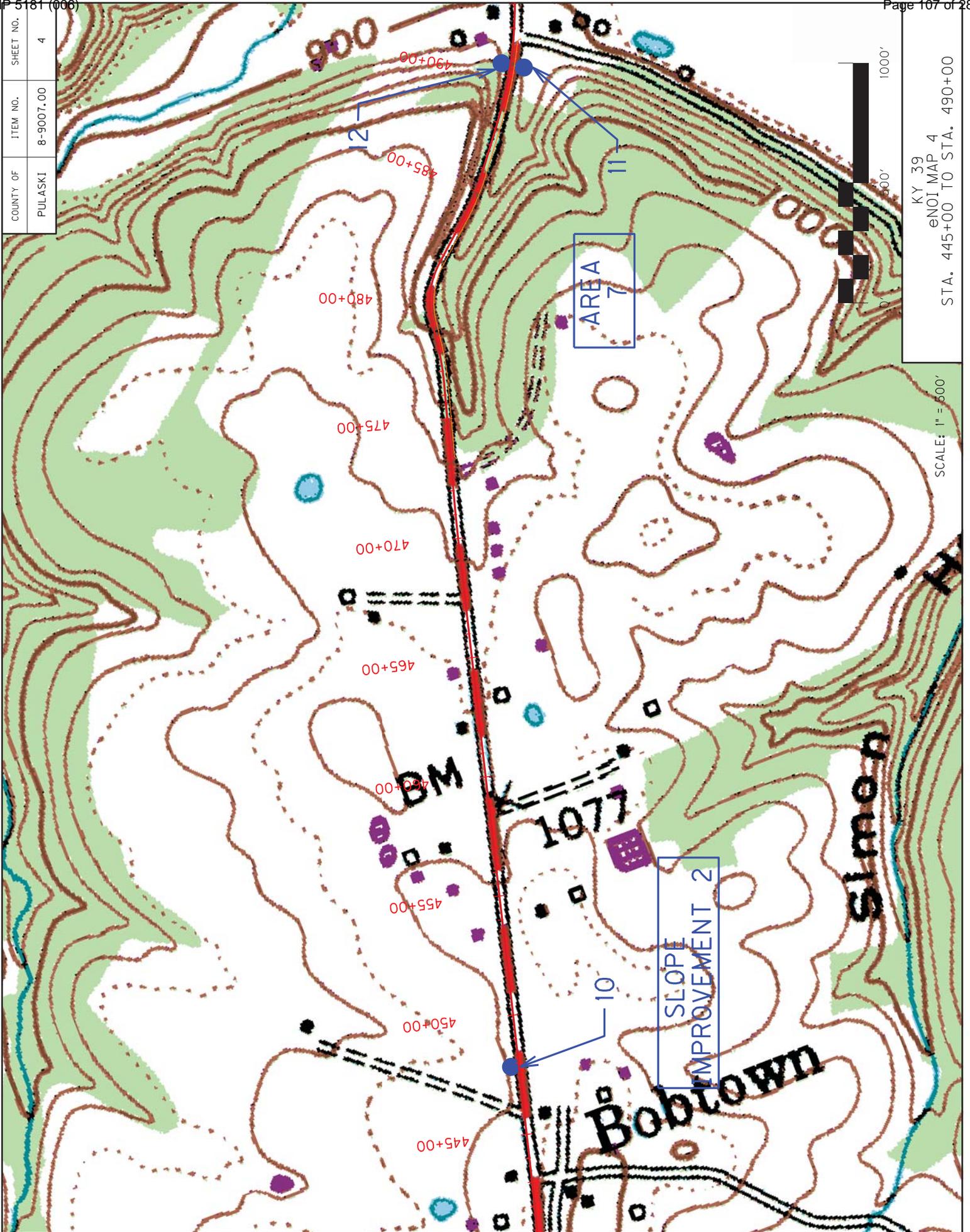
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	3



KY 39
ENVI MAP 3
STA. 370+00 TO STA. 420+00

SCALE: 1"=500'

COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	4

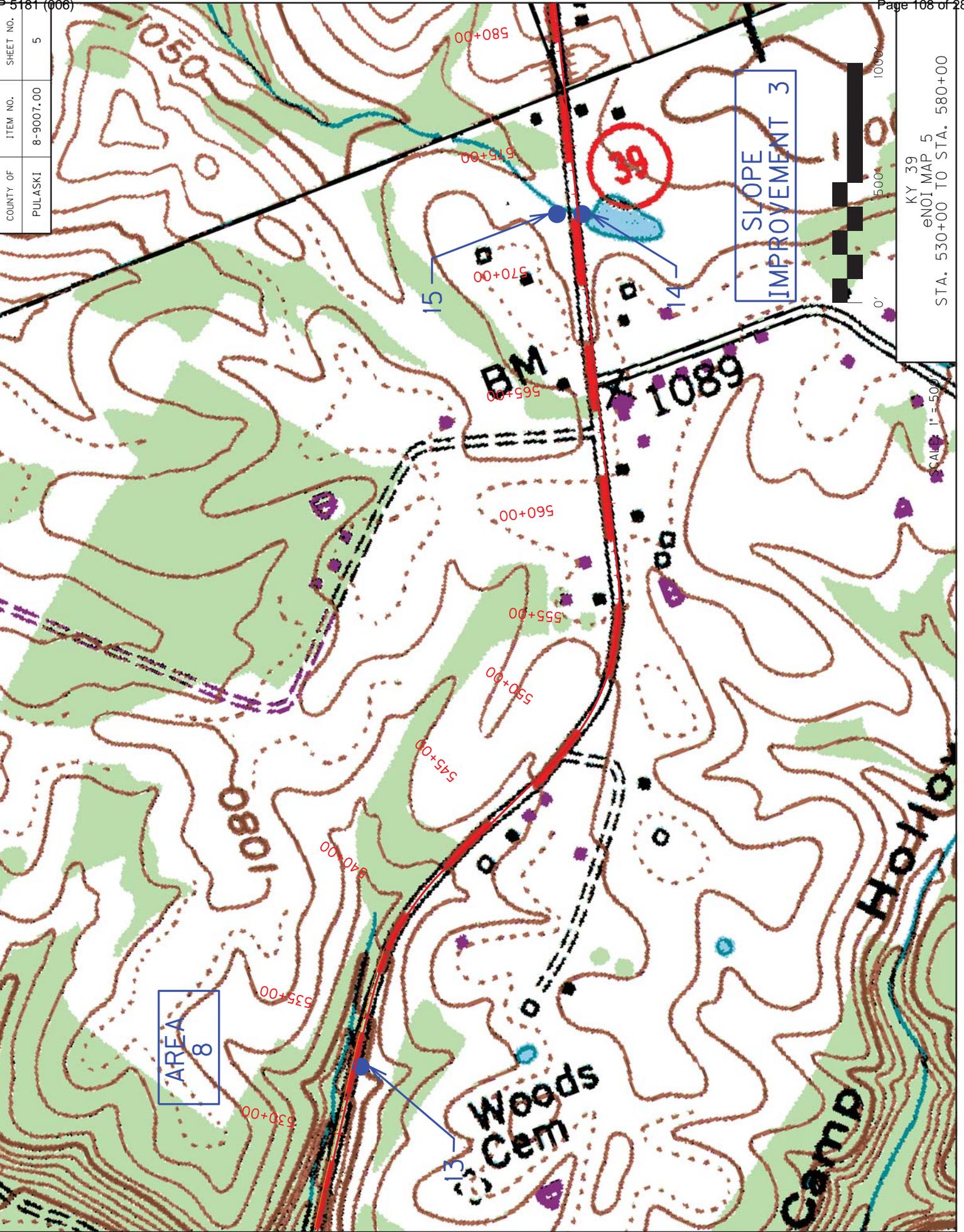


KY 39
ENVI MAP 4

STA. 445+00 TO STA. 490+00

SCALE: 1" = 500'

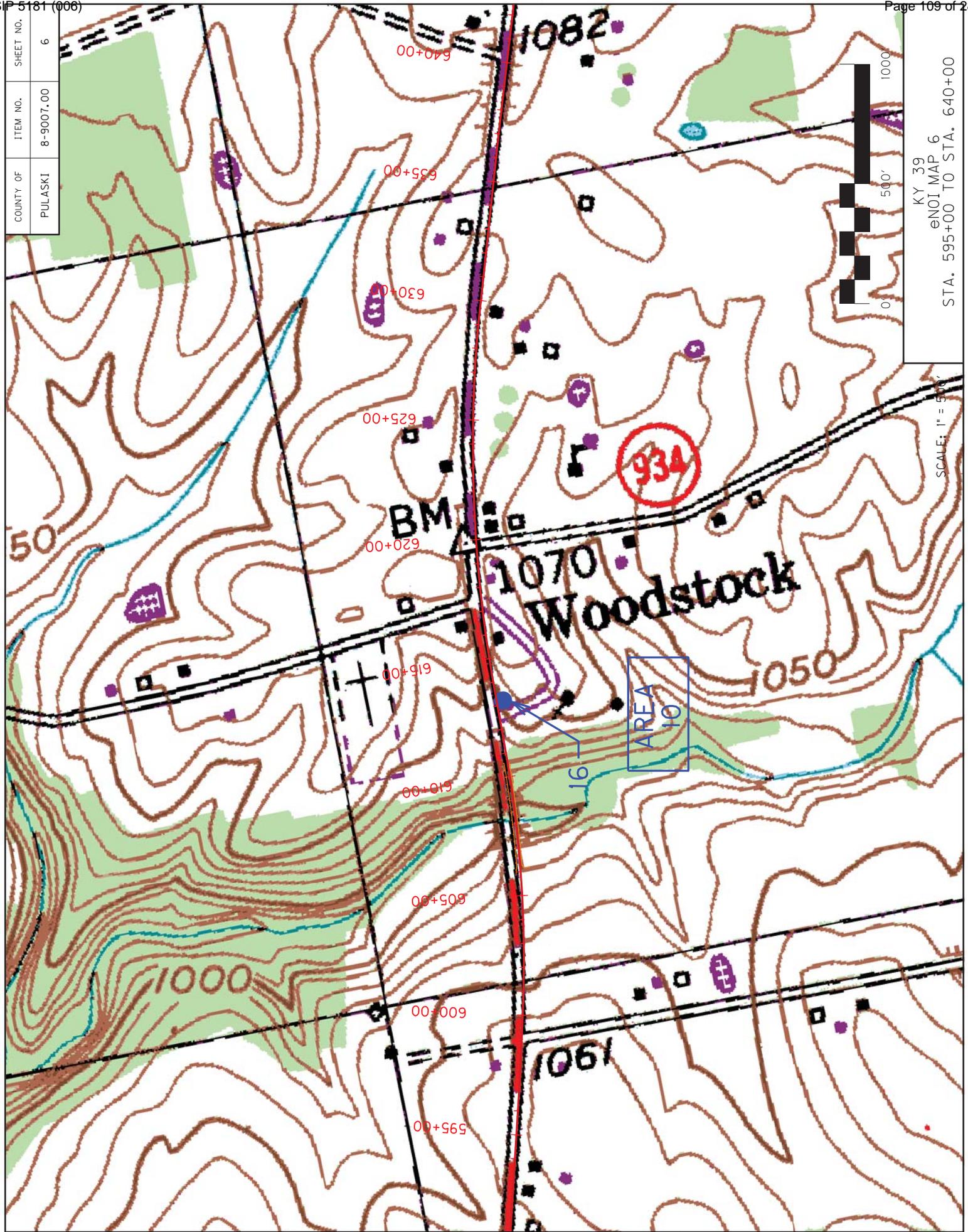
COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	5



KY 39
 ENOI MAP 5
 STA. 530+00 TO STA. 580+00

SCALE 1" = 500'

COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	6



SCALE: 1" = 500'
 KY 39
 ENOI MAP 6
 STA. 595+00 TO STA. 640+00



Highway Safety Improvement Program

Item No: 8-9007.00

County: Pulaski

Route: KY 39

PROPOSAL BID ITEMS

Item No.	Item	Unit	Quantity
00003	Crushed Stone Base	TON	5,773
00078	Crushed Aggregate No 2	TON	1,406
00100	Asphalt Seal Aggregate	TON	150.4
00103	Asphalt Seal Coat	TON	20.6
00190	Level and Wedging PG 64-22	TON	745
00212	CL2 Asph Base 1.00D PG64-22	TON	1,237
00301	CL2 Asph Surf 0.38D PG64-22	TON	675
00356	Asphalt Material for Tack	TON	9.4
02101	Cem Conc Ent Pavement - 8 IN	SQYD	123
02676	Mobilization for Mill and Text	LS	1
02677	Asphalt Pave Milling & Texturizing	TON	668
01987	Delineator for Guardrail B/W	EA	198
02200	Roadway Excavation	CUYD	3,308
02230	Embankment in Place	CUYD	1,900
02351	Guardrail-Steel W Beam-S Face	LF	9,537.5
21802EN	Guardrail-Steel W Beam-S Face (7 FT Post)	LF	350
02360	Guardrail Terminal Section No. 1	EA	15
02367	Guardrail End Treatment Type 1	EA	9
02371	Guardrail End Treatment Type 7	EA	2
02373	Guardrail End Treatment Type 3	EA	1
02377	Guardrail Connector to Bridge End TY C	EA	4
02381	Remove Guardrail	LF	10,338
02399	Extra Length Guardrail Post	EA	520
02429	Right of Way Monument Type 1	EA	8
02483	Channel Lining Class II	TON	2,376
02602	Fabric-Geotextile Class 1	SQYD	82
02603	Fabric-Geotextile Class 2	SQYD	12,277
02650	Maintain and Control Traffic	LS	1
02671	Portable Changeable Message Signs	EA	4
02697	Edgeline Rumble Strips	LF	7,752
02701	Silt Fence	LF	3,090
02704	Silt Trap Type B	EA	21
02705	Silt Trap Type C	EA	10
02707	Clean Silt Trap Type B	EA	21
02708	Clean Silt Trap Type C	EA	10
02726	Staking	LS	1
03236	Cribbing	SQFT	6,200
03269	Trim & Remove Trees & Brush	LF	7,150
04933	Temp Signal 2 Phase	EA	1
05950	Erosion Control Blanket	SY	465
05953	Temp Seeding and Protection	SY	490
05963	Initial Fertilizer	TON	0.7
05964	Maintenance Fertilizer	TON	0.9
05985	Seeding and Protection	SY	8,840
05992	Agricultural Limestone	TON	5.8
06403	Flexible Delineator Post - B/W	EA	9
06406	SMB Alum Sheet Signs .080 IN	SF	318.3



Highway Safety Improvement Program

Item No: 8-9007.00
 County: Pulaski
 Route: KY 39

PROPOSAL BID ITEMS

Item No.	Item	Unit	Quantity
06407	SMB Alum Sheet Signs .125 IN	SF	55.5
06410	Steel Post Type 1	LF	1,186
06510	Pave Stiping-Temp Paint-4 IN	LF	17,808
06514	Pave Stiping-Perm Paint-4 IN	LF	20,608
06568	Pave Marking - Thermo Stop Bar 24 IN	LF	24
21373ND	Remove Signs	EA	29
22400NN	Remove and Relocate Sign Assembly	EA	20
24683ED	Pave Marking - Thermo Dotted Lane Extension (6 IN WIDTH)	LF	31
24631EC	Barcode Sign Inventory	EA	96
00441	Entrance Pipe - 18 IN	LF	20
00462	Culvert Pipe - 18 IN	LF	46
00464	Culvert Pipe - 24 IN	LF	66
01310	Remove Pipe	LF	20
02403	Remove Concrete Masonry	CY	1
08003	Foundation Preparation (Sta. 231+12)	LS	1
08003	Foundation Preparation (Sta. 572+60)	LS	1
08100	Concrete - Class A	CY	30
08150	Steel Reinforcement	LBS	3,300
20694EN	Aluminum Structural Plate Box Culvert (8'9"x2'6")	LF	45.25
24575ES610	Headwall (Sloped & Mitered Concrete For - 18" Pipe	EA	3
24575ES610	Headwall (Sloped & Mitered Concrete For - 24" Pipe	EA	6
2569	Demobilization	LS	1



Highway Safety Improvement Program

Item No: 8-9007.00
County: Pulaski
Route: KY 39

Guardrail Replacement

Dir.	Begin			End			Length (LF)	Dir.	Begin			End			Length (LF)
	Mile Point	Station	End Treat.	Mile Point	Station	End Treat.			Mile Point	Station	End Treat.	Mile Point	Station	End Treat.	
NB*	6.810	305+10	--	6.866	308+00	TS 1*	350*	SB	12.620	610+60	TY 1	12.525	605+90	TY 1	375.0
NB	7.248	332+10	TY 1	7.380	334+80	TY 7	212.5	SB***	11.154	538+00	TY 3	10.886	523+60	TY 7	1,400.0
NB	7.816	357+60	TS 1	7.915	362+80	TS 1	550.0	SB	10.835	520+60	TS 1	10.800	518+50	TS 1	250.0
NB	9.120	425+80	TS 1	9.216	430+70	TS 1	525.0	SB	10.795	518+20	TS 1	10.638	508+90	BR C	937.5
NB**	10.038	473+30	TS 1**	10.346	491+60	TS 1**	1850**	SB	10.597	506+50	BR C	10.442	497+30	TS 1	962.5
NB	10.434	496+80	TY 1	10.564	504+50	TS 1	737.5	SB	9.212	430+50	TY 1	9.122	425+90	TY 1	450.0
NB	10.567	504+70	TY 1	10.597	506+50	BR C	137.5	SB	7.884	361+20	TS 1	7.814	357+50	TY 1	337.5
NB	10.638	508+90	BR C	10.699	512+50	TS 1	387.5								
NB	12.531	606+20	TS 1	12.620	610+60	TY 1	425.0								
				TOTAL			2,975.0					TOTAL			4,712.5

* Area 5 - Quantity included in area calculations	BR C - Bridge End Connector Type C
** Area 7 - Quantity included in area calculations	TY 1 - End Treatment Type 1
*** This section will have extra length posts and cribbing	TY 3 - End Treatment Type 3
	TY 7 - End Treatment Type 7
	TS 1 - Terminal Section No. 1

Item No	Item	Unit	Quantity
1987	Delineator for Guardrail B/W	EA	154
2351	Guardrail -Steel W Beam-S Face	LF	7,687.5
2360	Guardrail Terminal Section No. 1	EA	12
2367	Guardrail End Treatment Type 1	EA	9
2371	Guardrail End Treatment Type 7	EA	2
2373	Guardrail End Treatment Type 3	EA	1
2377	Guardrail Connector to Bridge End TY C	EA	4
2381	Remove Guardrail	LF	8,138
2399	Extra Length Guardrail Post	EA	224
3236	Cribbing ¹	SQFT	6,200
0003	Crushed Stone Base ^{1,2}	TON	2,650
0078	Crushed Aggregate No 2 ¹	TON	1,360
0100	Asphalt Seal Aggregate ²	TON	70
0103	Asphalt Seal Coat ²	TON	9
2603	Fabric-Geotextile Class 2 ^{1,2}	SQYD	6,080
2483	Channel Lining Class II ³	TON	10

¹ See Cribbing Detail in the Special Notes for further detail on bid items
² Bid item used for CSB Shoulder with guardrail replacement
³ Channel Lining for erosion repair behind existing guardrail Sta. 275+40-283+80. See plans for further detail



Highway Safety Improvement Program

Item No: 8-9007.00
County: Pulaski
Route: KY 39

Proposed Shoulder Improvements

Dir.	Begin		End		Length (LF)	Dir.	Begin		End		Length (LF)
	Mile Point	Station	Mile Point	Station			Mile Point	Station	Mile Point	Station	
NB	8.434	390+00	8.454	391+00	100	SB	8.454	391+00	8.430	389+75	125
NB	11.800	570+00	11.901	575+00	500	SB	9.576	449+25	9.552	448+00	125
						SB	11.901	575+00	11.807	570+35	465
TOTAL					600	TOTAL					715

Item No	Item	Unit	Quantity
003	Crushed Stone Base	TON	263
100	Asphalt Seal Aggregate	TON	8.8
103	Asphalt Seal Coat	TON	1.1
2200	Roadway Excavation	CY	150
2230	Embankment in Place	CY	1,300
2603	Fabric-Geotextile Class 2	SY	616
2701	Silt Fence	LF	1,320
2704	Silt Trap Type B	EA	5
2705	Silt Trap Type C	EA	4
2707	Clean Silt Trap Type B	EA	5
2708	Clean Silt Trap Type C	EA	4
5953	Temp Seeding and Protection	SY	140
5963	Initial Fertilizer	TON	0.1
5964	Maintenance Fertilizer	TON	0.2
5985	Seeding and Protection	SY	2,630
5992	Agricultural Limestone	TON	1.7

Pipe Extensions

	Culvert Pipe 18 IN		Culvert Pipe 24 IN		Mitered Sloped Concrete Headwall - 18 IN	Mitered Sloped Concrete Headwall - 24 IN	Class II Lining	Remove Pipe
Unit	LF		LF		EA	EA	TON	LF
Item No.	462		464		24575ES610	24575ES610	2483	1310
Station	Lt.	Rt.	Lt.	Rt.				
390+52			15	15		2	4	8
448+67	11				1		2	4
573+57	20	15			2		4	8
TOTALS	46		30		3	2	10	20

RCBC Extension - Sta. 572+60 - 4'x4'

Item No.	Item	Unit	Quantity
0078	Crushed Aggregate No 2 ¹	TONS	46
2403	Remove Concrete Masonry	CY	1
2483	Class II Lining	TONS	18
2602	Fabric-Geotextile Class 1 ¹	SY	82
8003	Foundation Preparation (Sta. 572+60)	LS	1
8100	Concrete - Class A	CY	30
8150	Steel Reinforcement	LBS	3,300

Note: See Special Note for Pipe Replacement/Extensions for additional information.

Removal of existing pipe and headwall is incidental to installation

¹ Quantity is for undercut area at the inlet



Highway Safety Improvement Program

Item No: 8-9007.00
County: Pulaski
Route: KY 39

Signing

Item No					6406		6410	24631EC	
Dir.	Station	Side of Road	SIGN CODE	TEXT / DESCRIPTION	SIZE-INCHES		SBM Alum Sheet Signs .080 IN (S.F.)	Steel Post TY 1 (LF)	Barcode Sign Inv. (EA)
					W	H			
W. Coleman Road									
EB	47+75	RT	W3-1		30	30	6.3	15	1
EB	49+75	RT	R1-1	STOP	36	36	7.5	14	1
WB	49+75	LT	R5-2a(Mod)	NO THRU TRUCKS	24	30	5.0	14	1
KY 39									
NB	251+30	RT	W2-1		30	30	6.3	15	1
SB	257+85	LT	W2-1		30	30	6.3	15	1
NB	298+05	RT	M2-1	JCT	21	15	2.2	15	1
NB	298+05	RT	M1-5	1317	30	24	5.0		1
NB	300+00	RT	W1-10L(Mod)		36	36	9.0	17	1
NB	300+00	RT	W13-1P	'XX'	18	18	2.3		1
NB	302+00	RT	M1-5	1317	30	24	5.0	15	1
NB	302+00	RT	M5-1R		21	15	2.2		1
NB	304+00	RT	W1-1aL	'XX'	36	36	9.0	16	1
SB	304+00	RT	W1-8R		18	24	3.0		1
NB	304+62	RT	W1-8L		18	24	3.0	13	1
WB	305+04	238' RT	M1-5	39	24	24	4.0	15	1
WB	305+04	238' RT	M6-4		21	15	2.2		1
WB	305+24	RT	R1-1	STOP	36	36	7.5	14	1
SB	305+51	RT	W1-8R		18	24	3.0	13	1
NB	305+95	RT	W1-8RL		18	24	3.0	13	1
SB	306+00	LT	W1-2aR	'XX'	36	36	9.0	16	1
SB	308+00	LT	M1-5	1317	30	24	5.0	15	1
SB	308+00	LT	M5-1L		21	15	2.2		1
SB	310+00	LT	W1-10R		36	36	9.0	17	1
SB	310+00	LT	W13-1P	'XX'	18	18	2.3		1
SB	312+00	LT	M2-1	JCT	21	15	2.2	15	1
SB	312+00	LT	M1-5	1317	30	24	5.0		1
NB	318+20	RT	W1-2R		36	36	9.0	16	1
SB	326+90	LT	W13-1P	'XX'	18	18	2.3		1
NB	330+98	RT	W1-8L		18	24	3.0	13	1
NB	332+10	RT	W1-8L		18	24	3.0	13	1
NB	333+22	RT	W1-8L		18	24	3.0	13	1
NB	334+34	RT	W1-8L		18	24	3.0	13	1
NB	335+46	RT	W1-8L		18	24	3.0	13	1
NB	336+58	RT	W1-8L		18	24	3.0	13	1
NB	337+70	RT	W1-8L		18	24	3.0	13	1
NB	338+81	RT	W1-8L		18	24	3.0	13	1
SB	345+44	LT	W1-8L		18	24	3.0	13	1
SB	346+54	LT	W1-8L		18	24	3.0	13	1
SB	347+65	LT	W1-8L		18	24	3.0	13	1
SB	350+04	LT	W1-8L		18	24	3.0	13	1
SB	351+00	LT	W1-8L		18	24	3.0	13	1
NB	409+65	LT	W1-8R		18	24	3.0	13	1
NB	411+75	LT	W1-8R		18	24	3.0	13	1
NB	412+75	LT	W1-8R		18	24	3.0	13	1
NB	413+75	LT	W1-8R		18	24	3.0	13	1
NB	414+75	LT	W1-8R		18	24	3.0	13	1
NB	415+75	LT	W1-8R		18	24	3.0	13	1
NB	416+75	LT	W1-8R		18	24	3.0	13	1
SHEET 1 TOTAL							197.4	543	48



Highway Safety Improvement Program

Item No: 8-9007.00
County: Pulaski
Route: KY 39

Signing

Item No					6406		6410	24631EC	
Dir.	Station	Side of Road	SIGN CODE	TEXT / DESCRIPTION	SIZE-INCHES		SBM Alum Sheet Signs .080 IN (S.F.)	Steel Post TY 1 (LF)	Barcode Sign Inv. (EA)
					W	H			
KY 39									
NB	430+15	RT	M1-5	452	30	24	5.0	15	1
NB	430+15	RT	M6-1		21	15	2.2		1
EB	430+35	RT	M1-5	39	24	24	4.0	15	1
EB	430+35	RT	M6-4		21	15	2.2		1
EB	430+37	LT	R1-1	STOP	36	36	7.5	14	1
SB	431+30	LT	M1-5	452	30	24	5.0	15	1
SB	431+30	LT	M6-1		21	15	2.2		1
NB	471+85	RT	W7-1a	7%	36	36	9.0	16	1
NB	471+85	RT	W7-2p	USE LOW GEAR	24	18	3.0		1
NB	477+30	RT	W1-8L		18	24	3.0	13	1
NB	478+10	RT	W1-8L		18	24	3.0	13	1
NB	506+52	LT	OM2-2V		6	12	0.5	9	1
NB	506+52	RT	OM2-2V		6	12	0.5	9	1
SB	508+85	LT	OM2-2V		6	12	0.5	9	1
SB	508+85	RT	OM2-2V		6	12	0.5	9	1
SB	518+58	LT	W1-8L		18	24	3.0	13	1
SB	519+77	LT	W1-8L		18	24	3.0	13	1
SB	521+56	LT	W1-8L		18	24	3.0	13	1
SB	522+50	LT	W1-8L		18	24	3.0	13	1
SB	523+90	LT	W1-8L		18	24	3.0	13	1
SB	525+00	LT	W1-8L		18	24	3.0	13	1
SB	526+00	LT	W1-8L		18	24	3.0	13	1
NB	558+00	RT		CONGESTED AREA ²	36	36		14	
SB	582+20	LT		CONGESTED AREA ²	36	36		14	
NB	614+00	RT	M2-1	JCT	21	15	2.2	15	1
NB	614+00	RT	M1-5	934	30	24	5.0		1
NB	619+05	RT	M1-5	934	30	24	5.0	15	1
NB	619+05	RT	M6-1		21	15	2.2		1
WB	620+20	LT	M1-5	39	24	24	4.0	15	1
WB	620+20	LT	M6-4		21	15	2.2		1
SB	620+45	LT	M1-5	934	30	24	5.0	15	1
SB	620+45	LT	M6-1		21	15	2.2		1
Miscellaneous Items									
Additional Post ¹									
	10 Signs		W14-3	NO PASSING ZONE	48	36	55.5 *	140	10
	8 Signs		OM3-L/R		12	36	24.0	112	8

* Sign is SBM Alum Sheet Signs .125 IN as shown below, with additional miscellaneous quantities. See Special Notes for further information on these miscellaneous items.

SHEET 1 TOTAL	197.4	543	48
SHEET 2 TOTAL	120.8	643	48
TOTAL	318.3	1186	96

ITEM NO.	ITEM	UNIT	
6407	SBM Alum Sheet Signs .125 IN	SF	55.5
22400NN	Remove and Relocate Sign Assembly ³	EA	20

¹ Additional quantity is to be used as directed by the engineer.

² This sign will be provided and installed by state forces.

³ Quantity for Area 7 with additional to be used as directed by the engineer.

⁴ Designated speeds on advisory signs to be determined by the District (see Special Note Signage (KYTC Ball Banks))



Highway Safety Improvement Program

Item No: 8-9007.00
 County: Pulaski
 Route: KY 39

Area 4 - MP 5.85

Item No	Item	Unit	Quantity
003	Crushed Stone Base	TON	100
100	Asphalt Seal Aggregate	TON	3
103	Asphalt Seal Coat	TON	1
190	Level and Wedging PG 64-22	TON	20
212	CL2 Asph Base 1.00D PG64-22	TON	160
301	CL2 Asph Surf 0.38D PG64-22	TON	30
356	Asphalt Material for Tack	TON	0.4
2200	Roadway Excavation	CY	10
2603	Fabric-Geotextile Class 2	SY	185
2677	Asphalt Pave Milling & Texturing	TON	11
2701	Silt Fence	LF	190
2704	Silt Trap Type B	EA	2
2707	Clean Silt Trap Type B	EA	2
5950	Erosion Control Blanket	SF	103
5953	Temp Seeding and Protection	SY	30
5963	Initial Fertilizer	TON	0.1
5964	Maintenance Fertilizer	TON	0.1
5985	Seeding and Protection	SY	420
5992	Agricultural Limestone	TON	0.3



Highway Safety Improvement Program

Item No: 8-9007.00
 County: Pulaski
 Route: KY 39

Area 5 - MP 6.7 - 6.9

Item No	Item	Unit	Quantity
003	Crushed Stone Base	TON	380
100	Asphalt Seal Aggregate	TON	8
103	Asphalt Seal Coat	TON	1
190	Leveling & Wedging PG 64-22	TON	210
212	CL2 Asph Base 1.00D PG64-22	TON	180
301	CL2 Asph Surf 0.38D PG64-22	TON	130
356	Asphalt Material for Tack	TON	2.3
1987	Delineator for Guardrail B/W	EA	7
2101	Cem Conc Ent Pavement - 8"	SY	98
2200	Roadway Excavation	CY	70
2230	Embankment in Place	CY	80
21802EN	Guardrail - Steel W Beam - S Face (7 FT Post)	LF	350
2360	Guardrail Terminal Section No. 1	EA	1
2381	Remove Guardrail	LF	350
2483	Channel Lining Class II	TON	160
2603	Fabric-Geotextile Class 2	SY	670
2677	Asphalt Pave Milling & Texturing	TON	242
2697	Edgeline Rumble Strips	LF	1,158
2701	Silt Fence	LF	580
2704	Silt Trap Type B	EA	2
2707	Clean Silt Trap Type B	EA	2
5953	Temp Seeding and Protection	SY	90
5963	Initial Fertilizer	TON	0.1
5964	Maintenance Fertilizer	TON	0.1
5985	Seeding and Protection	SY	1,730
5992	Agricultural Limestone	TON	1.1
6403	Flexible Delineator Post - B/W	EA	4
6510	Pavement Striping - Temp Paint - 4 IN	LF	2,316
6514	Pavement Striping - Perm Paint - 4 IN	LF	2,316
6568	Pave Marking - Thermo Stop Bar	LF	24
24683ED	Pave Marking - Thermo Dotted Lane Extension (6 IN WIDTH)	LF	31



Highway Safety Improvement Program

Item No: 8-9007.00
 County: Pulaski
 Route: KY 39

Area 6 - MP 7.0 - 7.2

Item No	Item	Unit	Quantity
003	Crushed Stone Base	TON	295
100	Asphalt Seal Aggregate	TON	9
103	Asphalt Seal Coat	TON	1
190	Leveling & Wedging PG 64-22	TON	80
301	CL2 Asph Surf 0.38D PG64-22	TON	110
356	Asphalt Material for Tack	TON	1.3
2200	Roadway Excavation	CY	148
2230	Embankment in Place	CY	30
2483	Channel Lining Class II	TON	240
2603	Fabric-Geotextile Class 2	SY	607
2677	Asphalt Pave Milling & Texturing	TON	132
2697	Edgeline Rumble Strips	LF	1,240
2704	Silt Trap Type B	EA	2
2707	Clean Silt Trap Type B	EA	2
3269	Trim & Remove Trees & Brush	LF	250
5953	Temp Seeding and Protection	SY	30
5963	Initial Fertilizer	TON	0.1
5964	Maintenance Fertilizer	TON	0.1
5985	Seeding and Protection	SY	420
5992	Agricultural Limestone	TON	0.3
6510	Pave Striping - Temp Paint - 4"	LF	2,480
6514	Pave Striping - Perm Paint - 4"	LF	2,480



Highway Safety Improvement Program

Item No: 8-9007.00
 County: Pulaski
 Route: KY 39

Area 8 - MP 11.1 - 11.2

Item No	Item	Unit	Quantity
003	Crushed Stone Base	TON	335
100	Asphalt Seal Aggregate	TON	13
103	Asphalt Seal Coat	TON	2
190	Leveling & Wedging PG 64-22	TON	110
301	CL2 Asph Surf 0.38D PG64-22	TON	153
356	Asphalt Material for Tack	TON	1.9
464	Culvert Pipe - 24 IN	LF	16
2200	Roadway Excavation	CY	1,460
2483	Channel Lining Class II	TON	610
2603	Fabric-Geotextile Class 2	SY	666
2677	Asphalt Pave Milling & Texturing	TON	175
2697	Edgeline Rumble Strips	LF	1,816
2704	Silt Trap Type B	EA	2
2705	Silt Trap Type C	EA	3
2707	Clean Silt Trap Type B	EA	2
2708	Clean Silt Trap Type C	EA	3
3269	Trim & Remove Trees & Brush	LF	4,550
5953	Temp Seeding and Protection	SY	30
5963	Initial Fertilizer	TON	0.1
5964	Maintenance Fertilizer	TON	0.1
5985	Seeding and Protection	SY	510
5992	Agricultural Limestone	TON	0.4
6510	Pave Striping - Temp Paint - 4"	LF	3,632
6514	Pave Striping - Perm Paint - 4"	LF	3,632
24575ES610	Mitered Sloped Concrete Headwalls - 24"	EA	4

*See Guardrail Replacement for quantities associated with cribbing and guardrail replacement in the area



Highway Safety Improvement Program

Item No: 8-9007.00
County: Pulaski
Route: KY 39

Area 9 - MP 11.6 - 11.8

Item No	Item	Unit	Quantity
6514	Pavement Striping - Perm. Paint 4"	LF	2,800





Highway Safety Improvement Program

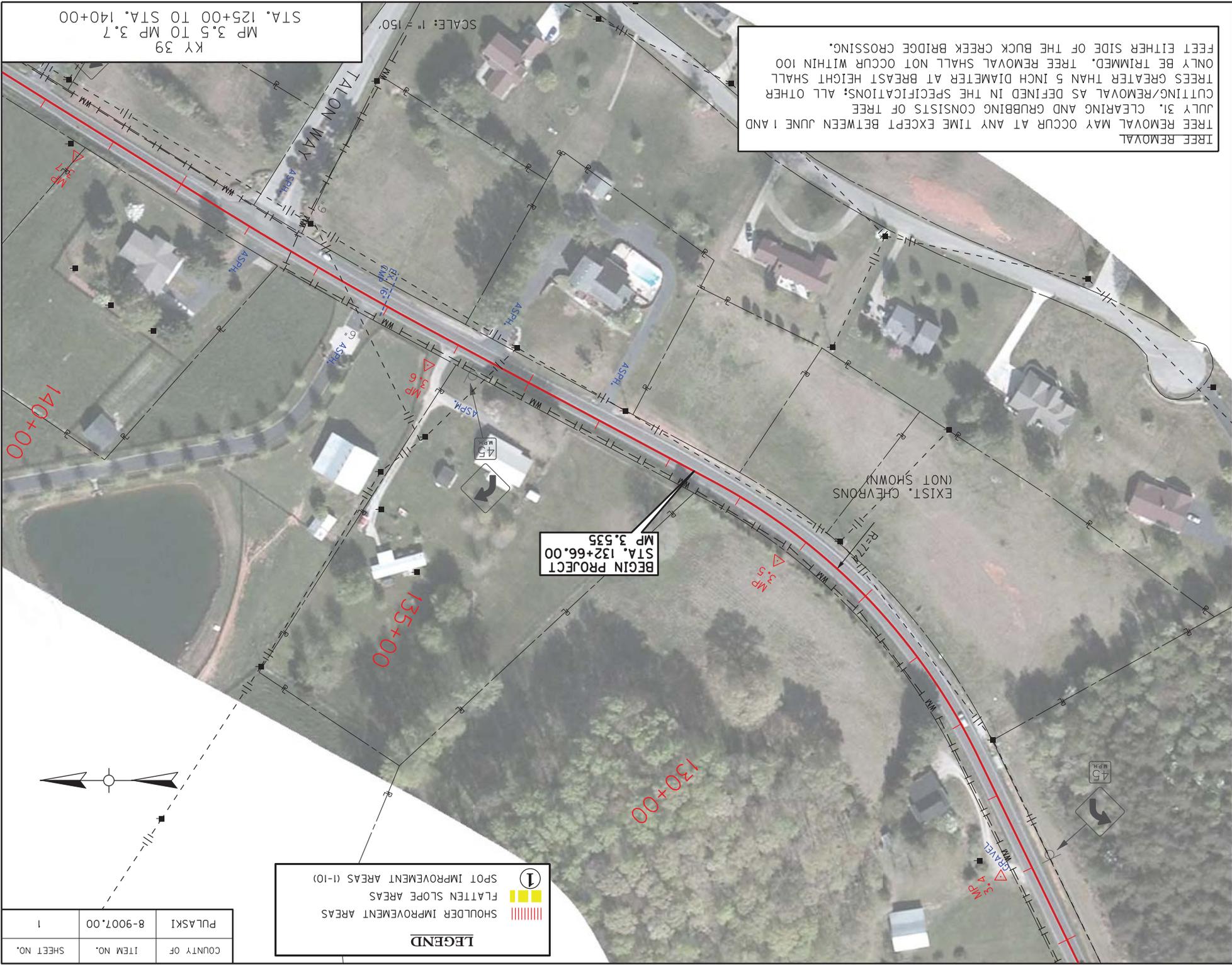
Item No: 8-9007.00
County: Pulaski
Route: KY 39

Area 10 - MP 12.7 - 12.8

Item No	Item	Unit	Quantity
2200	Roadway Excavation	CY	930
2483	Channel Lining Class II	TON	1,010
2704	Silt Trap Type B	EA	2
2707	Clean Silt Trap Type B	EA	2
3269	Trim & Remove Trees & Brush	LF	50

TREE REMOVAL
TREE REMOVAL MAY OCCUR AT ANY TIME EXCEPT BETWEEN JUNE 1 AND
JULY 31. CLEARING AND GRUBBING CONSISTS OF TREE
CUTTING/REMOVAL AS DEFINED IN THE SPECIFICATIONS; ALL OTHER
TREES GREATER THAN 5 INCH DIAMETER AT BREAK HEIGHT SHALL
ONLY BE TRIMMED. TREE REMOVAL SHALL NOT OCCUR WITHIN 100
FEET EITHER SIDE OF THE BUCK CREEK BRIDGE CROSSING.

KY 39
MP 3.5 TO MP 3.7
STA. 125+00 TO STA. 140+00



BEGIN PROJECT
STA. 132+66.00
MP 3.535

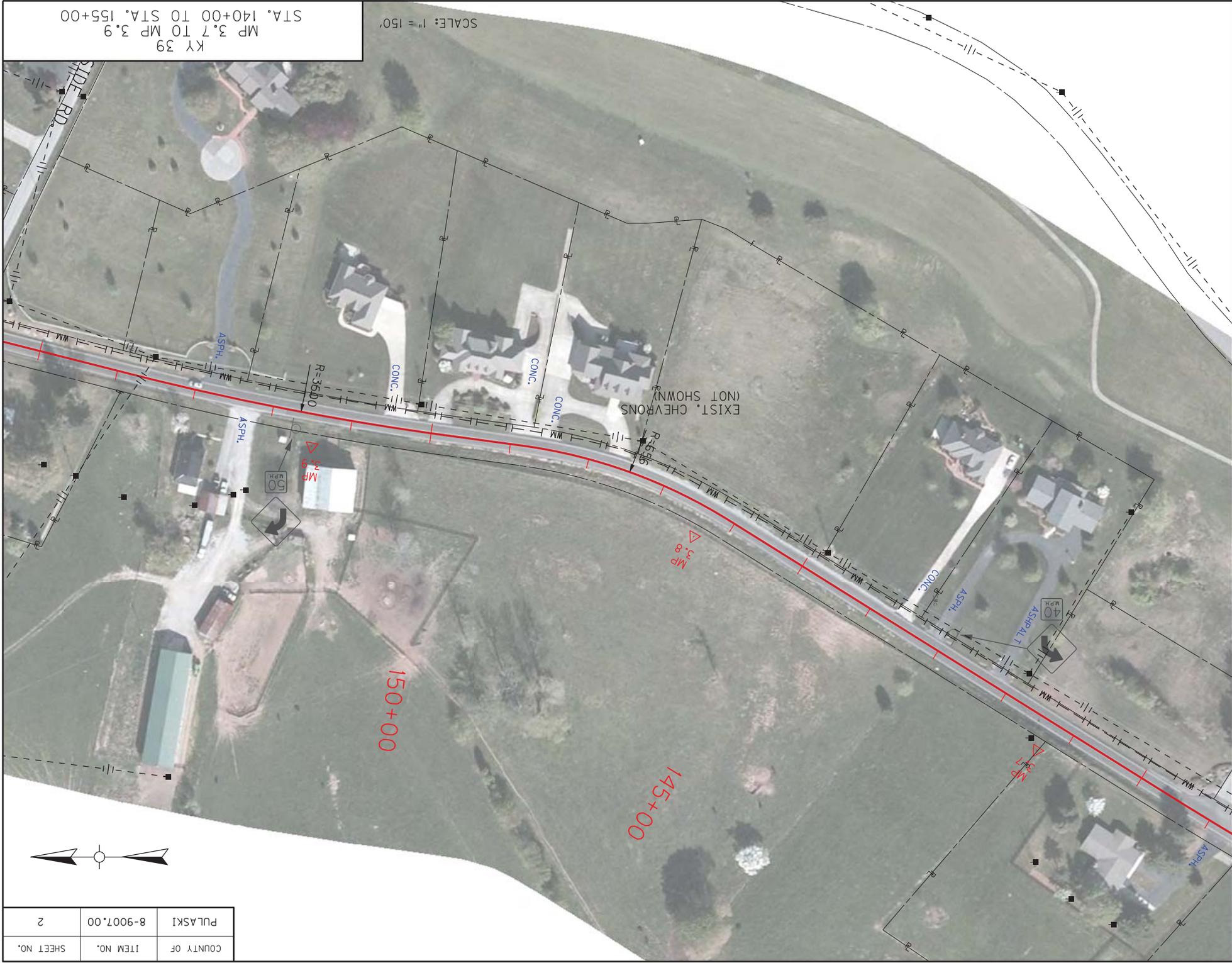
LEGEND

	SHOULDER IMPROVEMENT AREAS
	FLATTEN SLOPE AREAS
	SPOT IMPROVEMENT AREAS (I-10)

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	1

KY 39
MP 3.7 TO MP 3.9
STA. 140+00 TO STA. 155+00

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	2
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KY 39
 MP 3.9 TO MP 4.2
 STA. 155+00 TO STA. 165+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	3
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KY 39
 MP 4.2 TO MP 4.4
 STA. 165+00 TO STA. 180+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	4
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KY 39
MP 4.4 TO MP 4.7
STA. 180+00 TO STA. 195+00

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	5
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COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	6
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KY 39
 MP 4.7 TO MP 5.0
 STA. 195+00 TO STA. 210+00

SCALE: 1" = 150'



KY 39
 MP 5.0 TO MP 5.2
 STA. 210+00 TO STA. 225+00

SCALE: 1" = 150'

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	7

SEE AREA 3 EXHIBIT
FOR DESIGN DETAILS

PIPE REPLACEMENT
W/8"x2'6" ALUMINUM
BOX CULVERT

EXISTING SIGN
TO REMAIN

EXISTING SIGN
TO REMAIN

SEE RIGHT OF
WAY PLANS FOR
FURTHER DETAIL
VERTICAL
REALIGNMENT

KY 39
MP 5.2 TO MP 5.5
STA. 225+00 TO STA. 235+00

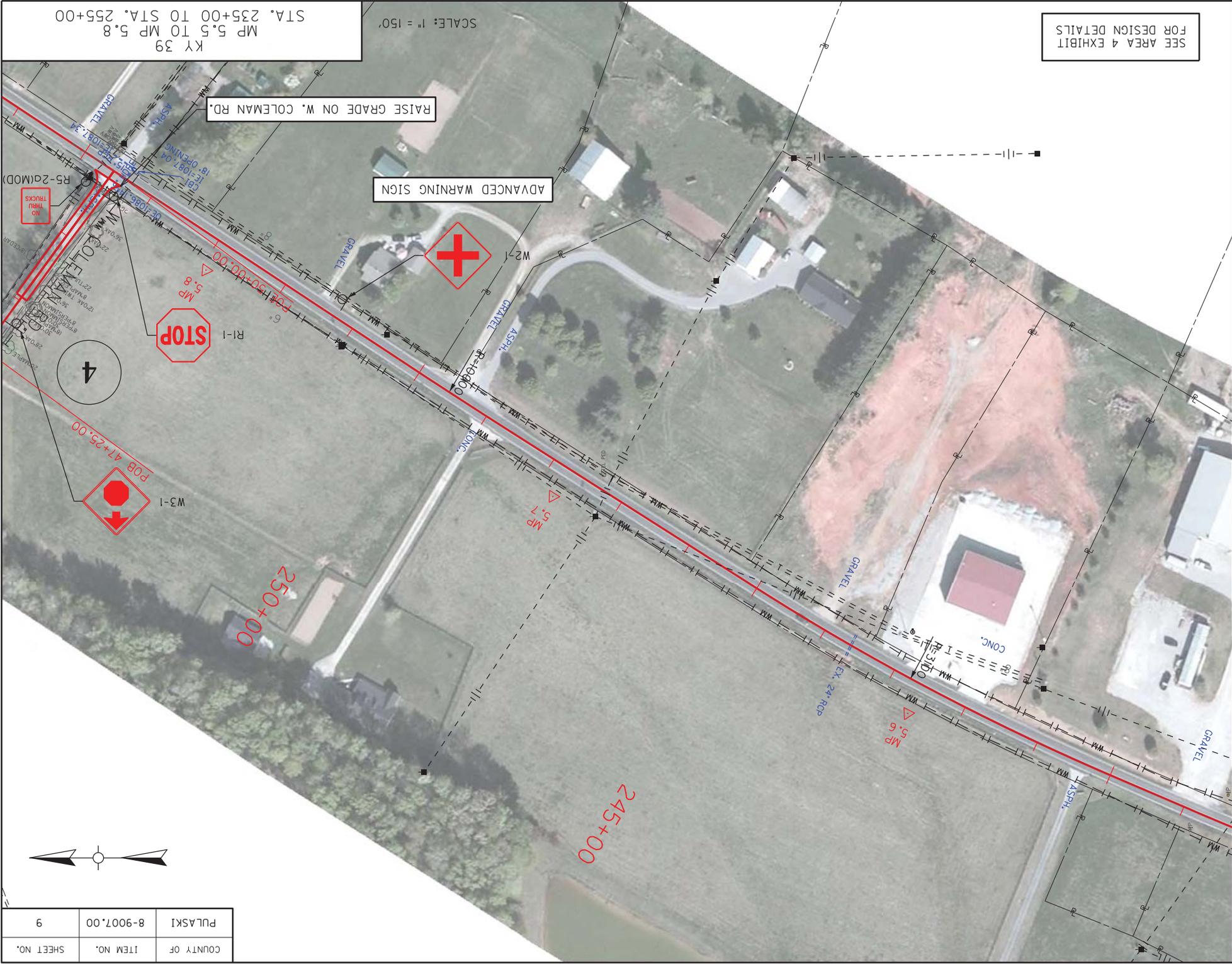
SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	8
SHEET NO.				

SEE AREA 4 EXHIBIT
FOR DESIGN DETAILS

SCALE: 1" = 150'
MP 5.5 TO MP 5.8
STA. 235+00 TO STA. 255+00
KY 39



RAISE GRADE ON W. COLEMAN RD.

ADVANCED WARNING SIGN

STOP

W3-1

4

NO TRUCKS

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	9
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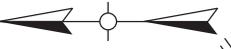
SEE AREA 4 EXHIBIT
FOR DESIGN DETAILS



KY 39
MP 5.8 TO MP 6.1
STA. 255+00 TO STA. 270+00

SCALE: 1" = 150'

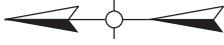
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	10
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4

KY 39
MP 6.1 TO MP 6.4
STA. 270+00 TO STA. 285+00

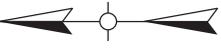
SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	11
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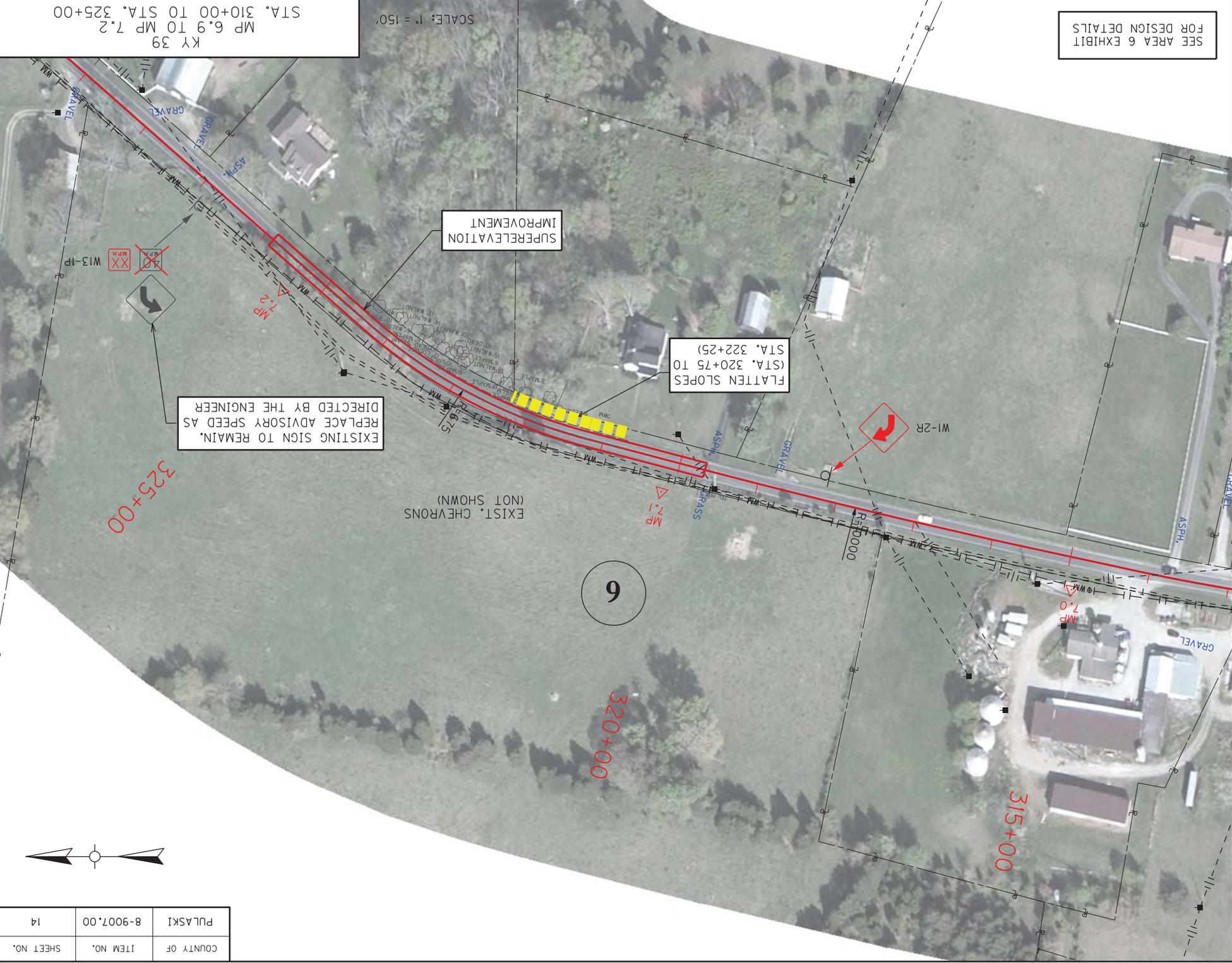


SCALE: 1" = 150'
 KY 39
 MP 6.4 TO MP 6.7
 STA. 285+00 TO STA. 300+00

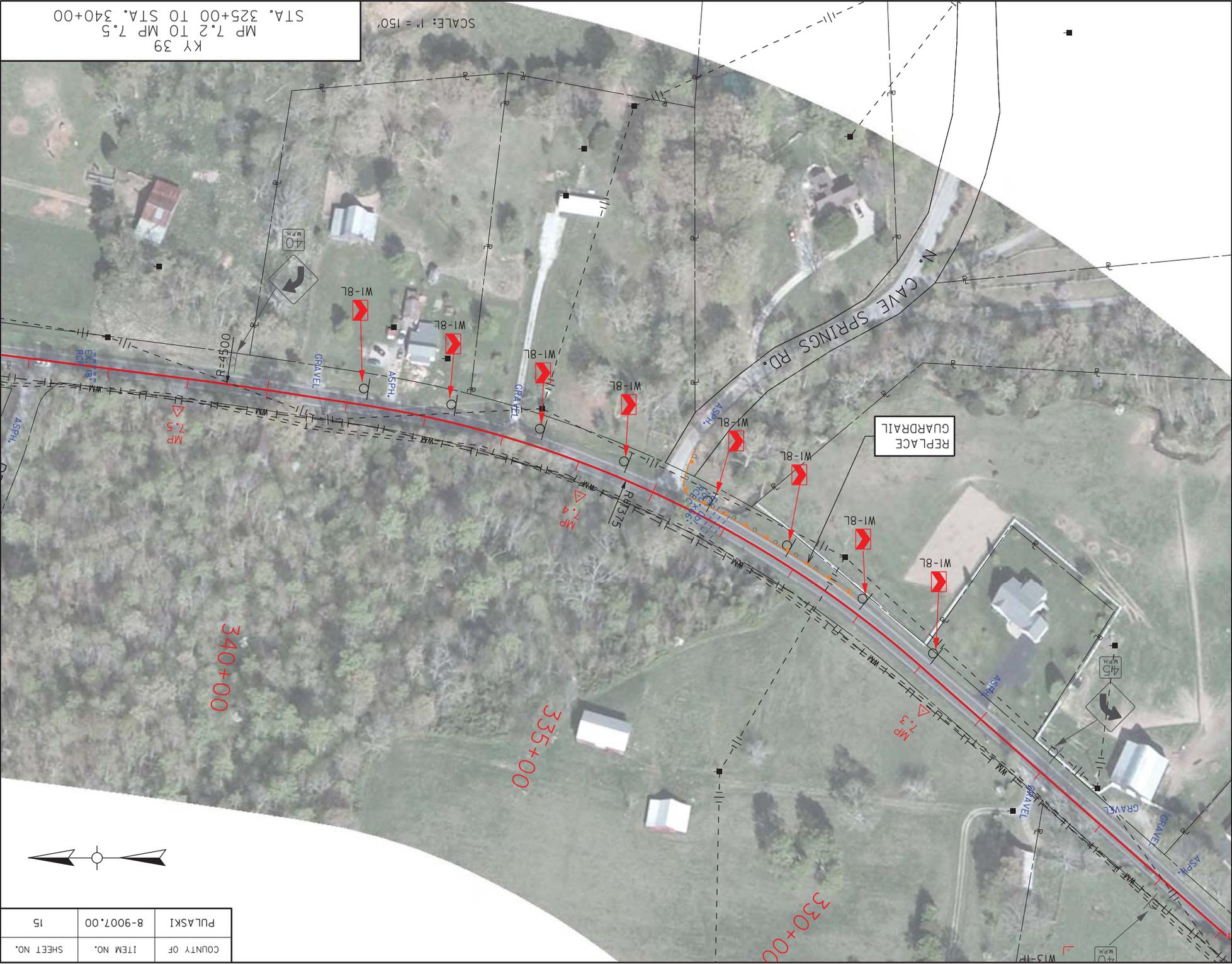


COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	12
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SEE AREA 6 EXHIBIT
FOR DESIGN DETAILS



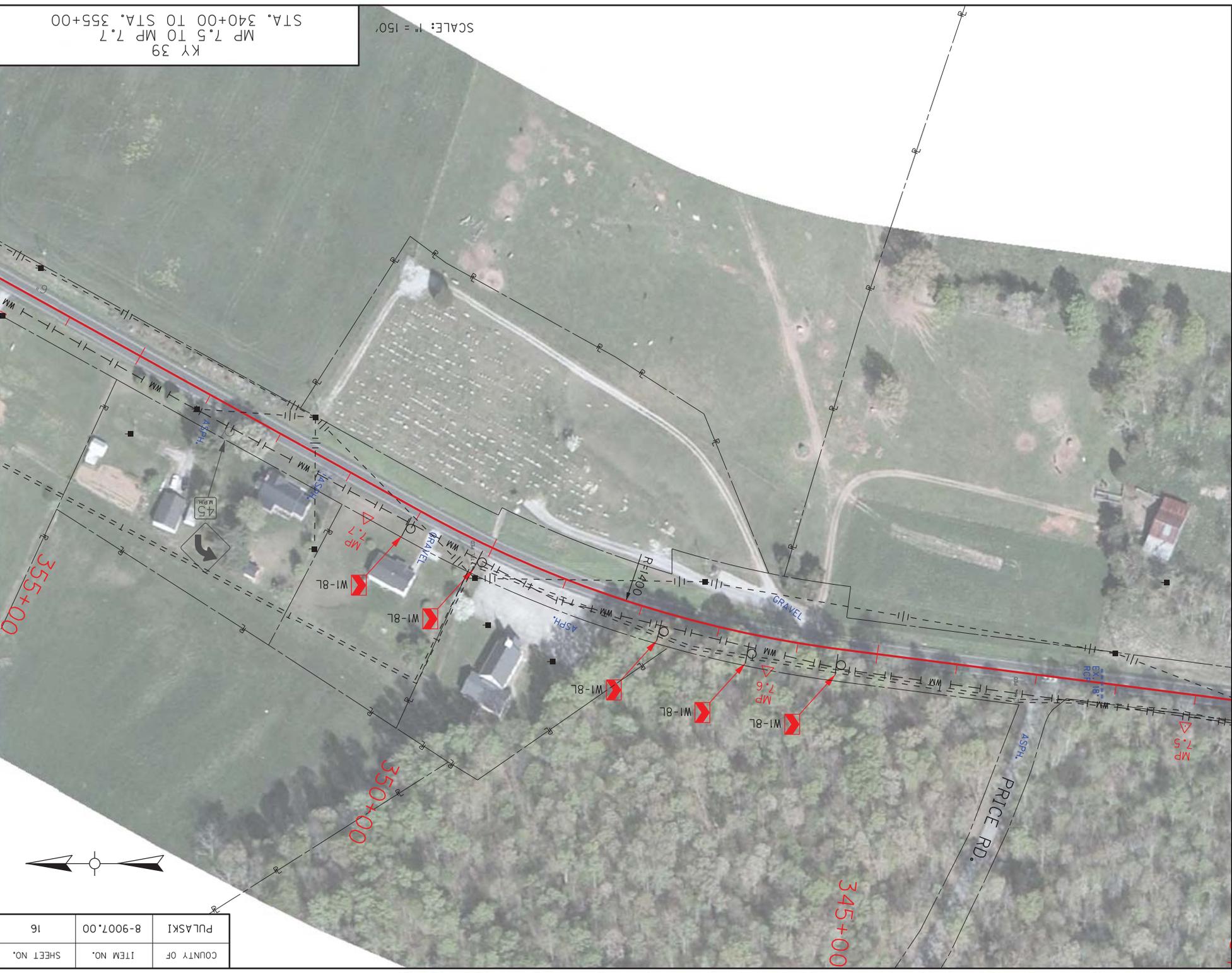
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	14
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KY 39
 MP 7.2 TO MP 7.5
 STA. 325+00 TO STA. 340+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	15
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KY 39
MP 7.5 TO MP 7.7
STA. 340+00 TO STA. 355+00

SCALE: 1" = 150'



SCALE: 1" = 150'
 STA. 355+00 TO STA. 370+00
 MP 7.7 TO MP 8.0
 KY 39

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	17
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KY 39
MP 8.0 TO MP 8.3
STA. 370+00 TO STA. 385+00

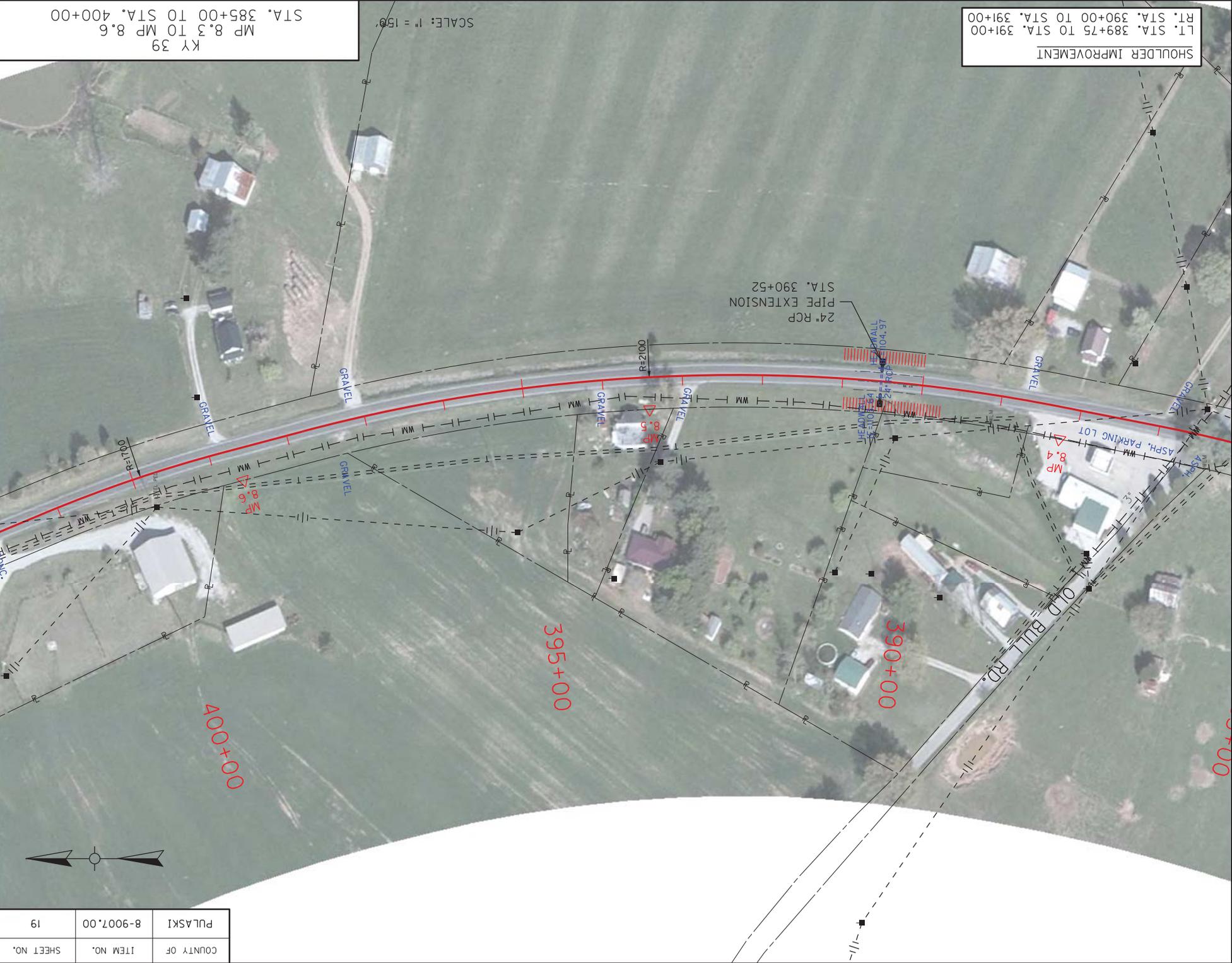
SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	18
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SHOULDER IMPROVEMENT
 LT. STA. 389+75 TO STA. 391+00
 RT. STA. 390+00 TO STA. 391+00

KY 39
 MP 8.3 TO MP 8.6
 STA. 385+00 TO STA. 400+00



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	19
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KY 39
MP 8.6 TO MP 8.8
STA. 400+00 TO STA. 415+00

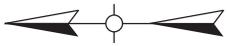
SCALE: 1" = 150'

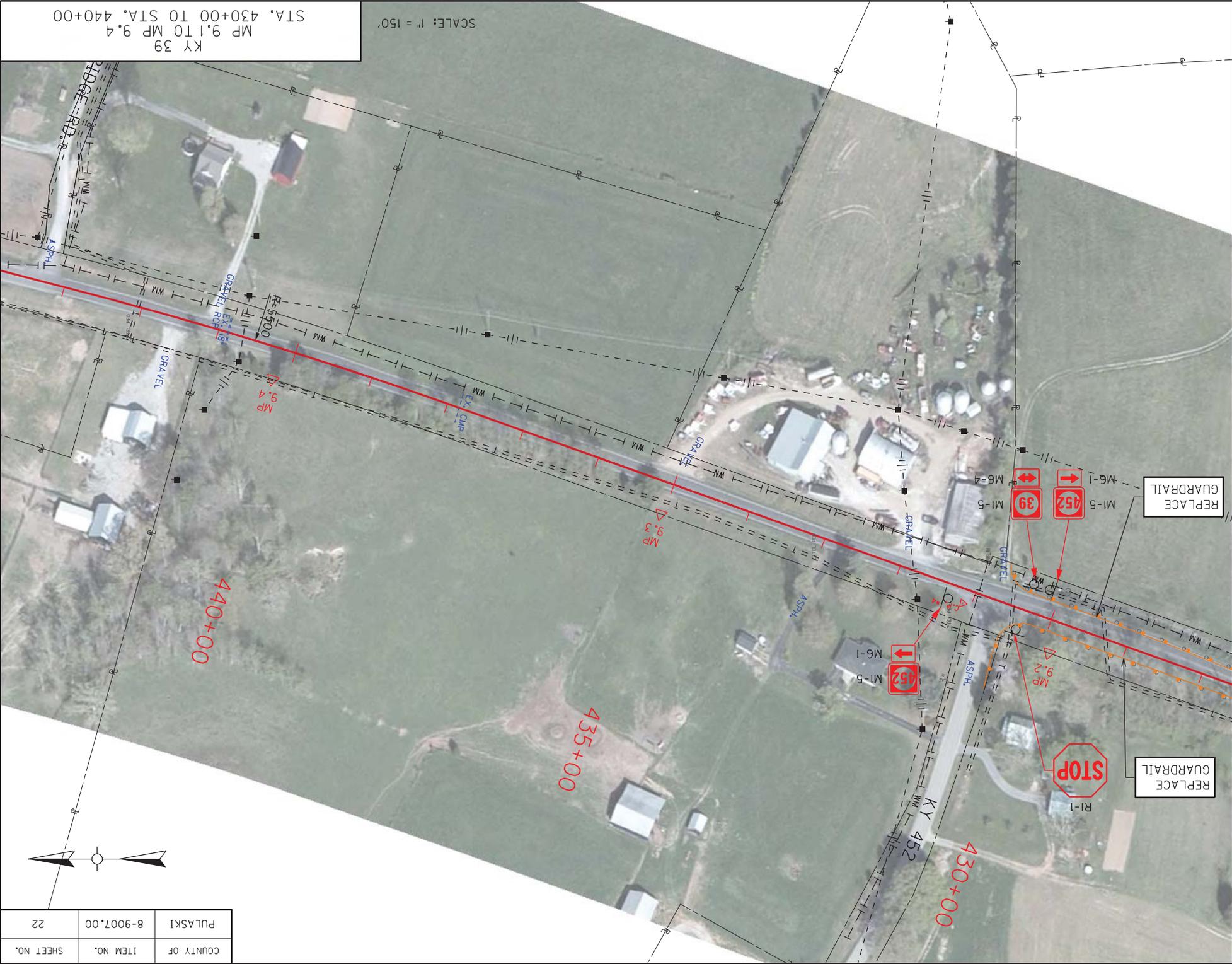


COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	20



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	21
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COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	22
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SCALE: 1" = 150'

KY 39
MP 9.1 TO MP 9.4
STA. 430+00 TO STA. 440+00

SHOULDER IMPROVEMENT
LT. STA. 448+00 TO STA. 449+25

KY 39
MP 9.4 TO MP 9.7
STA. 440+00 TO STA. 455+00

SCALE: 1" = 150'



COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	23



KY 39
 MP 9.7 TO MP 9.9
 STA. 455+00 TO STA. 470+00

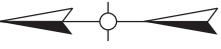
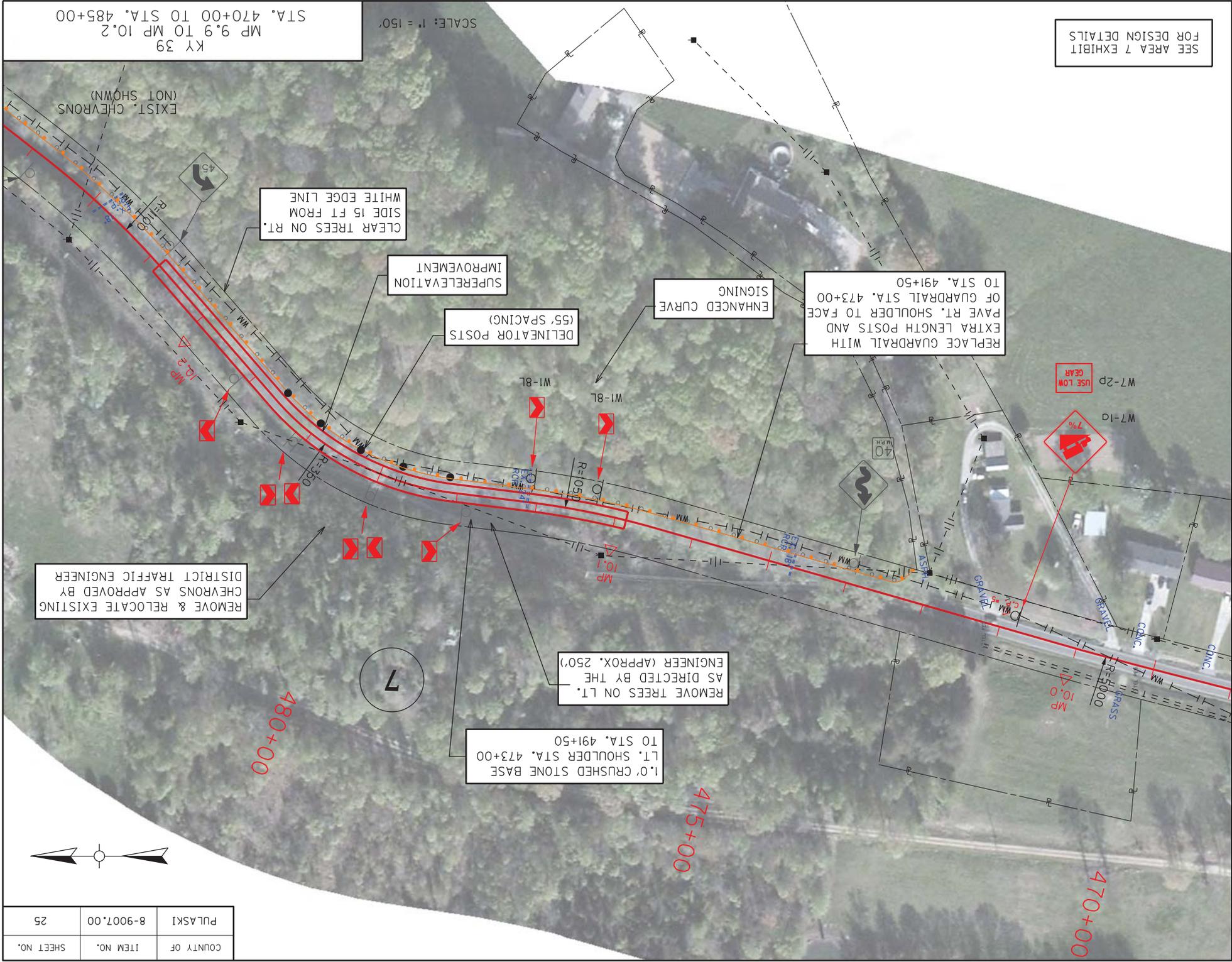
SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	24
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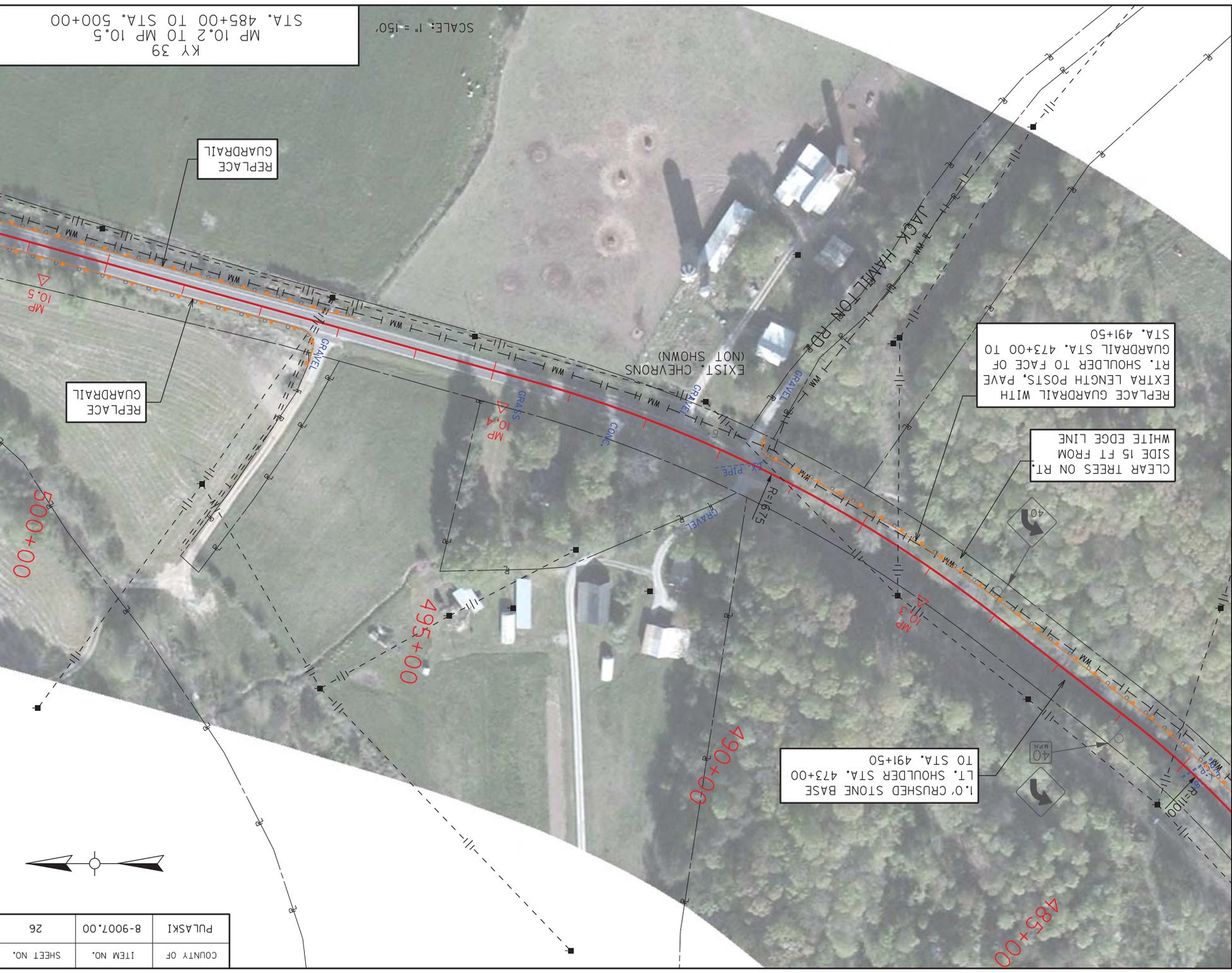
SEE AREA 7 EXHIBIT
FOR DESIGN DETAILS

KY 39
MP 9.9 TO MP 10.2
STA. 470+00 TO STA. 485+00

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	25
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REPLACE GUARDRAIL WITH
 EXTRA LENGTH POSTS, PAVE
 RT. SHOULDER TO FACE OF
 GUARDRAIL STA. 473+00 TO
 STA. 491+50

CLEAR TREES ON RT.
 SIDE 15 FT FROM
 WHITE EDGE LINE

1.0' CRUSHED STONE BASE
 LT. SHOULDER STA. 473+00
 TO STA. 491+50

REPLACE
 GUARDRAIL

REPLACE
 GUARDRAIL

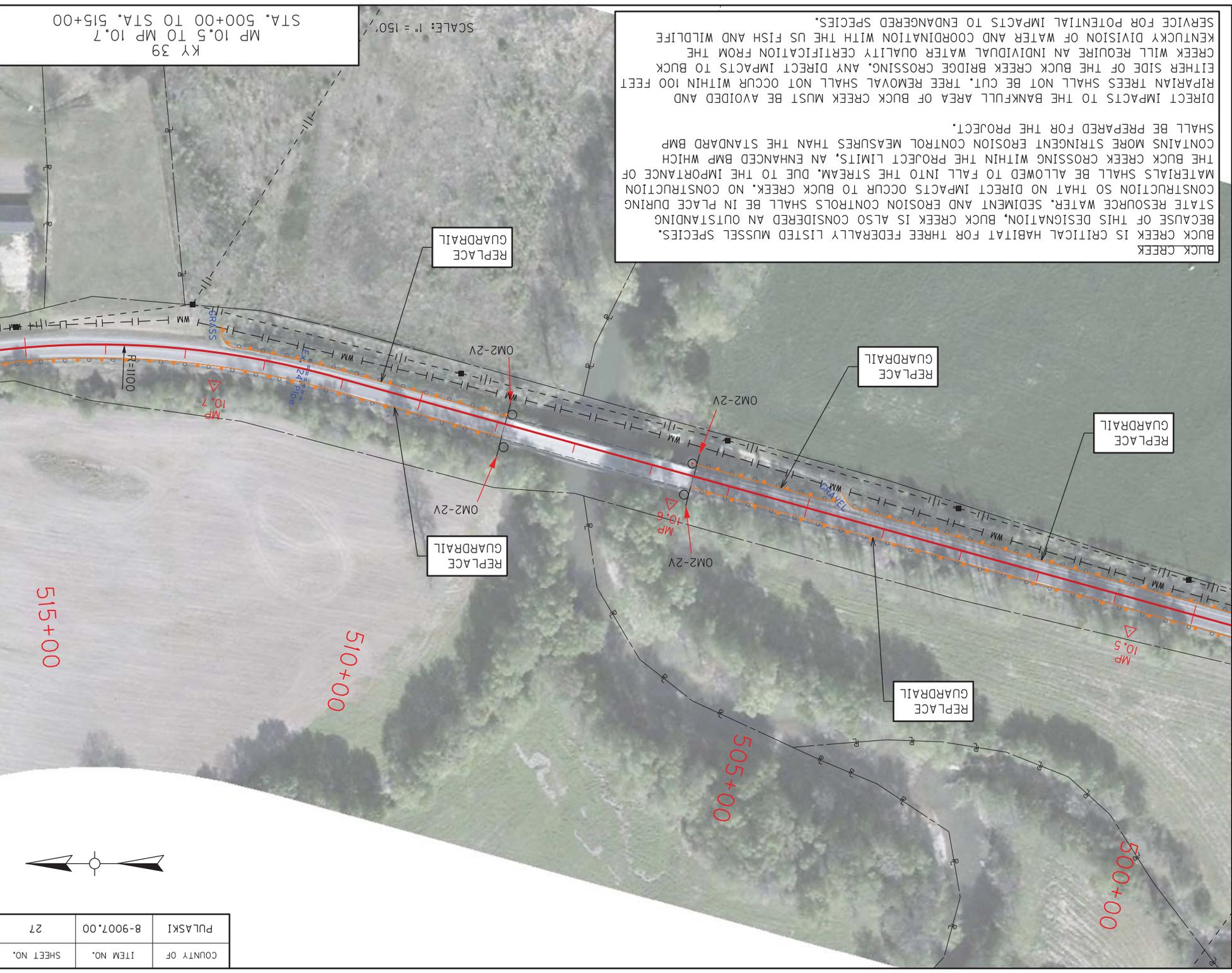
KY 39
 MP 10.2 TO MP 10.5
 STA. 485+00 TO STA. 500+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	26
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BUCK CREEK IS CRITICAL HABITAT FOR THREE FEDERALLY LISTED MUSSEL SPECIES. BECAUSE OF THIS DESIGNATION, BUCK CREEK IS ALSO CONSIDERED AN OUTSTANDING STATE RESOURCE WATER, SEDIMENT AND EROSION CONTROLS SHALL BE IN PLACE DURING CONSTRUCTION SO THAT NO DIRECT IMPACTS OCCUR TO BUCK CREEK. NO CONSTRUCTION MATERIALS SHALL BE ALLOWED TO FALL INTO THE STREAM. DUE TO THE IMPORTANCE OF THE BUCK CREEK CROSSING WITHIN THE PROJECT LIMITS, AN ENHANCED BMP WHICH CONTAINS MORE STRINGENT EROSION CONTROL MEASURES THAN THE STANDARD BMP SHALL BE PREPARED FOR THE PROJECT.

DIRECT IMPACTS TO THE BANKFULL AREA OF BUCK CREEK MUST BE AVOIDED AND RIPARIAN TREES SHALL NOT BE CUT. TREE REMOVAL SHALL NOT OCCUR WITHIN 100 FEET EITHER SIDE OF THE BUCK CREEK BRIDGE CROSSING. ANY DIRECT IMPACTS TO BUCK CREEK WILL REQUIRE AN INDIVIDUAL WATER QUALITY CERTIFICATION FROM THE KENTUCKY DIVISION OF WATER AND COORDINATION WITH THE US FISH AND WILDLIFE SERVICE FOR POTENTIAL IMPACTS TO ENDANGERED SPECIES.



REPLACE GUARDRAIL

REPLACE GUARDRAIL

REPLACE GUARDRAIL

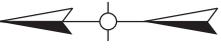
REPLACE GUARDRAIL

REPLACE GUARDRAIL

KY 39
MP 10.5 TO MP 10.7
STA. 500+00 TO STA. 515+00

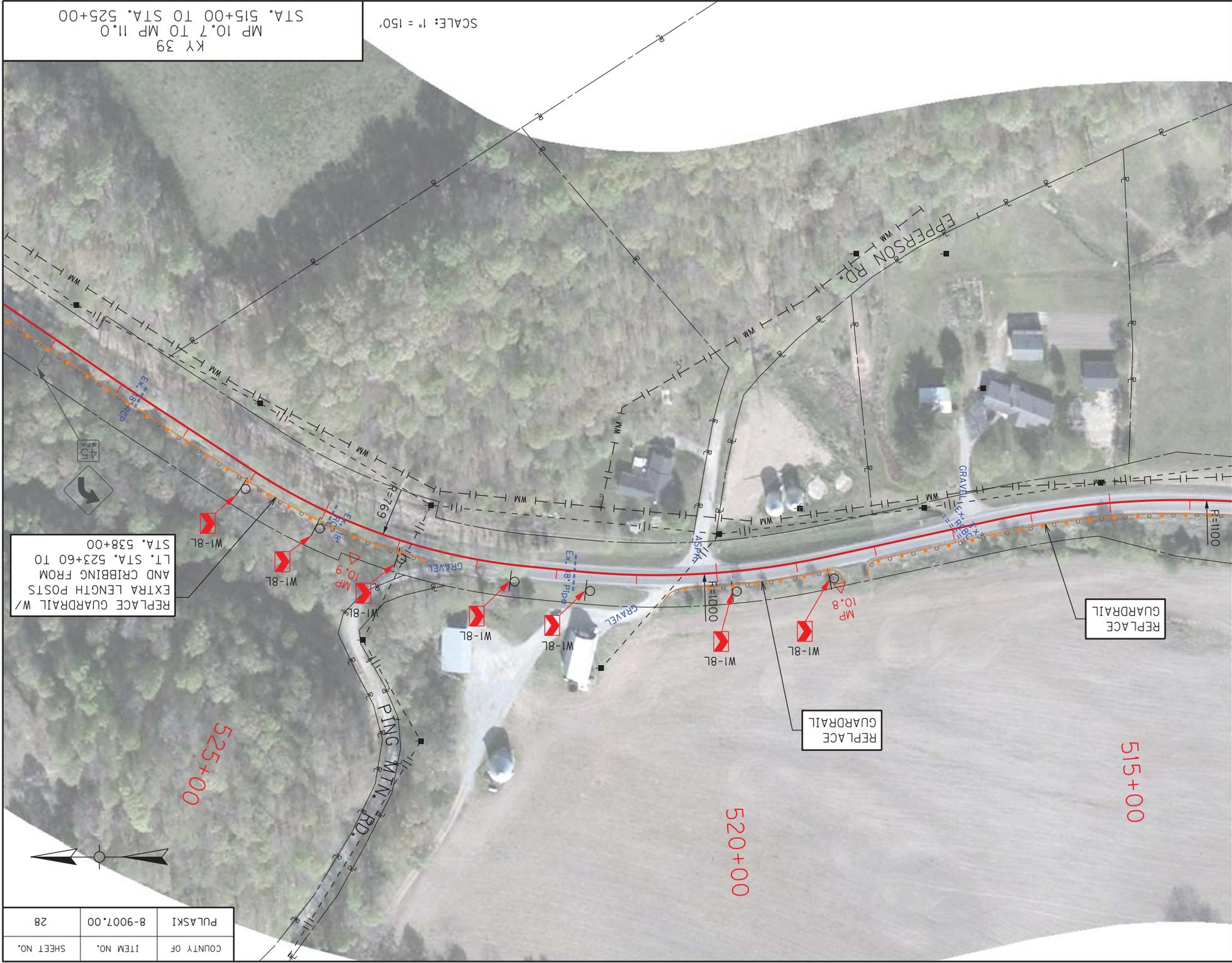
SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	27
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KY 39
MP 10.7 TO MP 11.0
STA. 515+00 TO STA. 525+00

SCALE: 1" = 150'



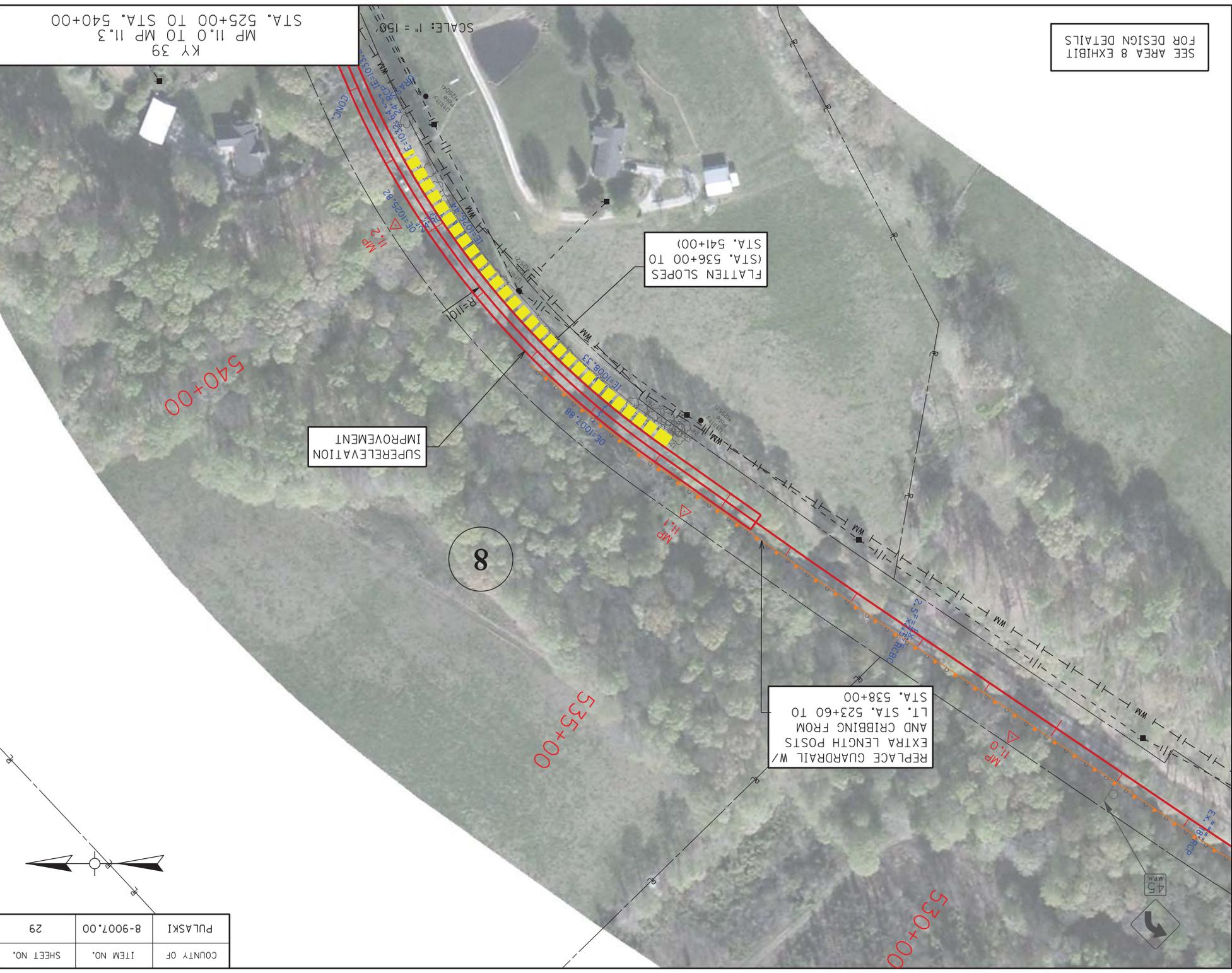
REPLACE GUARDRAIL W/
EXTRA LENGTH POSTS
AND CRIBBING FROM
LT. STA. 523+60 TO
STA. 538+00

REPLACE
GUARDRAIL

REPLA CE
GUARDRAIL

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	28
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SEE AREA 8 EXHIBIT
FOR DESIGN DETAILS



KY 39
MP 11.0 TO MP 11.3
STA. 525+00 TO STA. 540+00

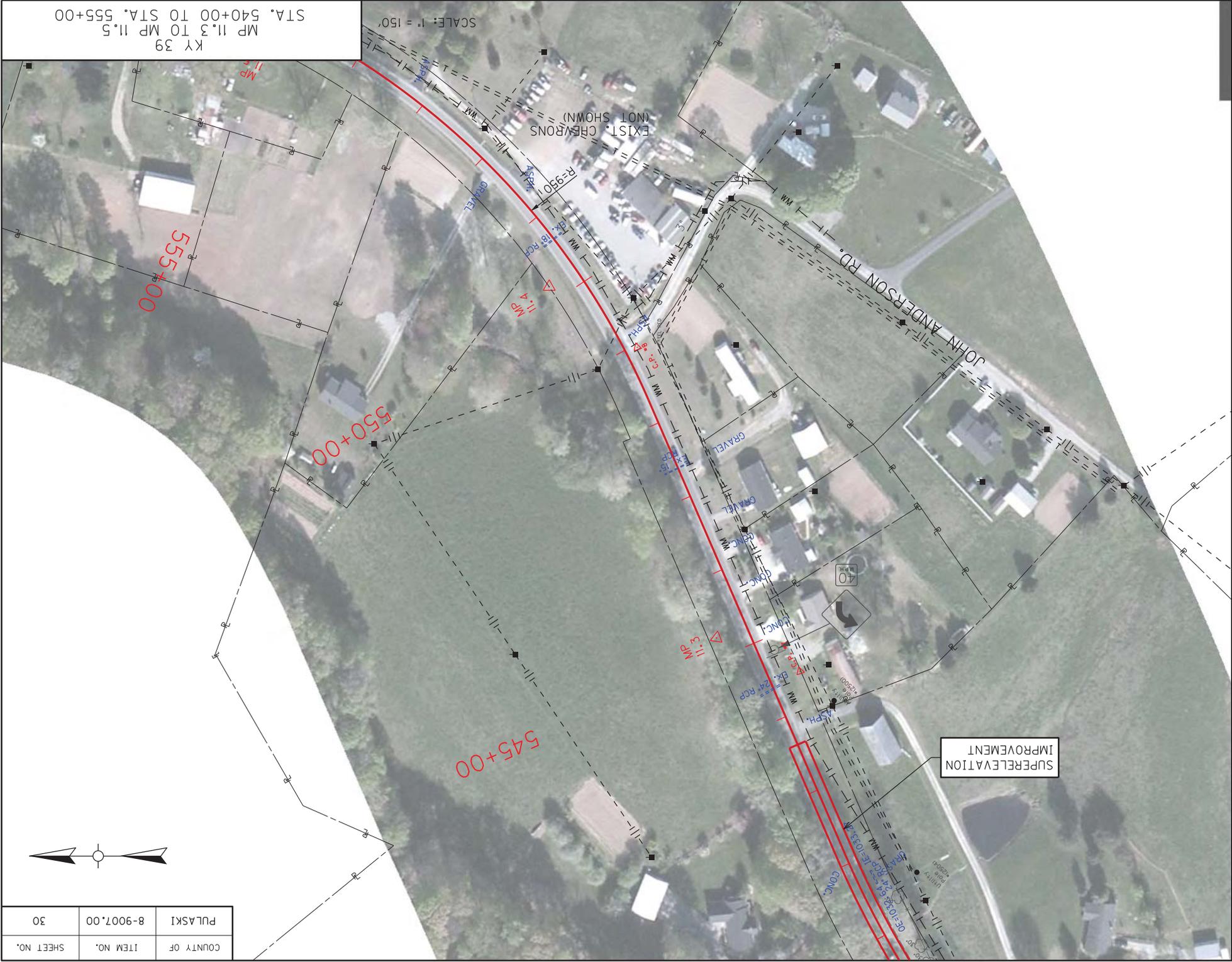
SCALE: 1" = 150'

SUPERELEVATION
IMPROVEMENT

FLATTEN SLOPES
(STA. 536+00 TO
STA. 541+00)

REPLACE GUARDRAIL W/
EXTRA LENGTH POSTS
AND CRIBBING FROM
LT. STA. 523+60 TO
STA. 538+00

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	29
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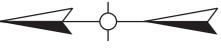


KY 39
MP 11.3 TO MP 11.5
STA. 540+00 TO STA. 555+00

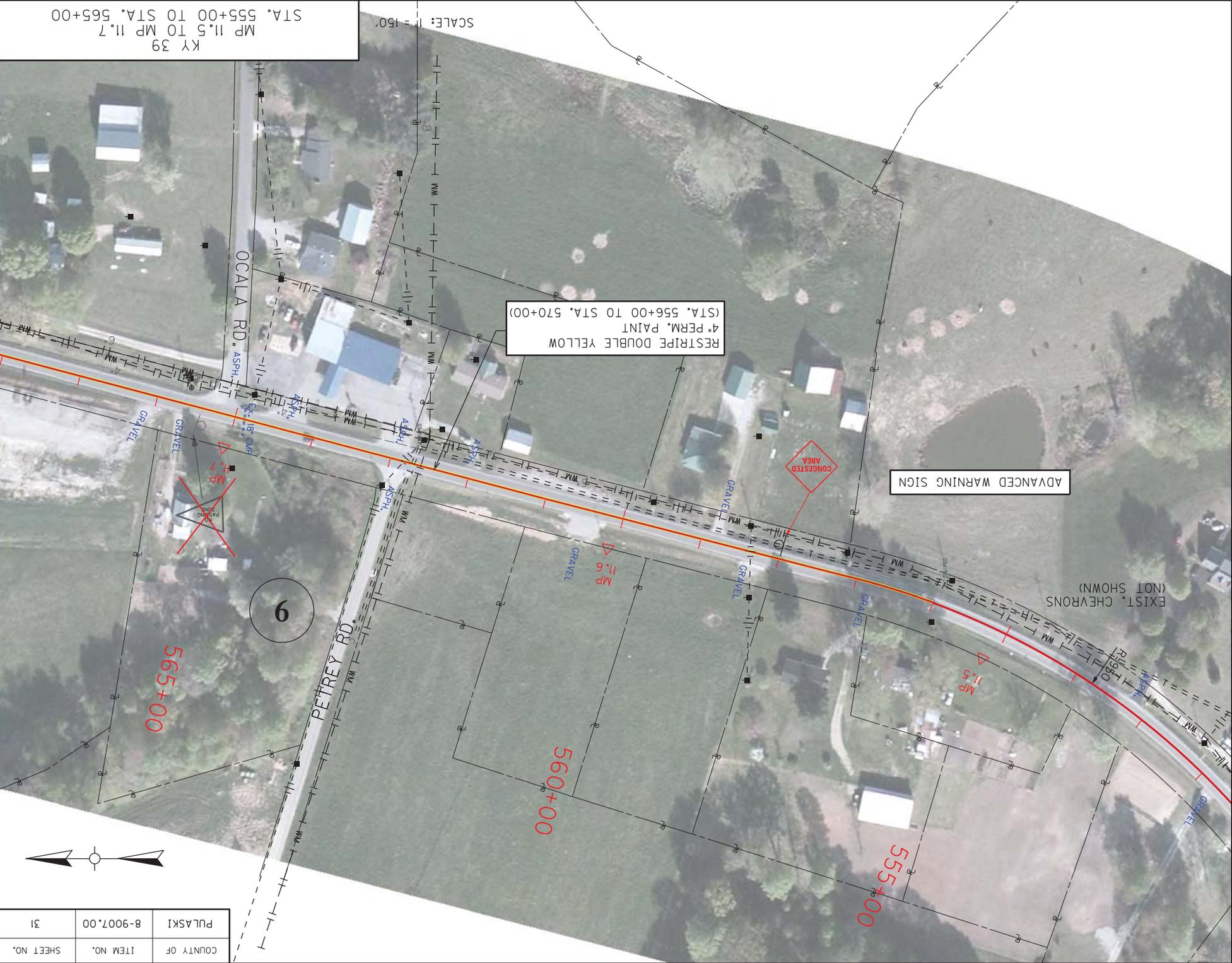
SCALE: 1" = 150'

EXIST. CURBS/RONS
(NOT SHOWN)

SUPERELEVATION
IMPROVEMENT



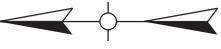
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	30
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KY 39
 MP 11.5 TO MP 11.7
 STA. 555+00 TO STA. 565+00

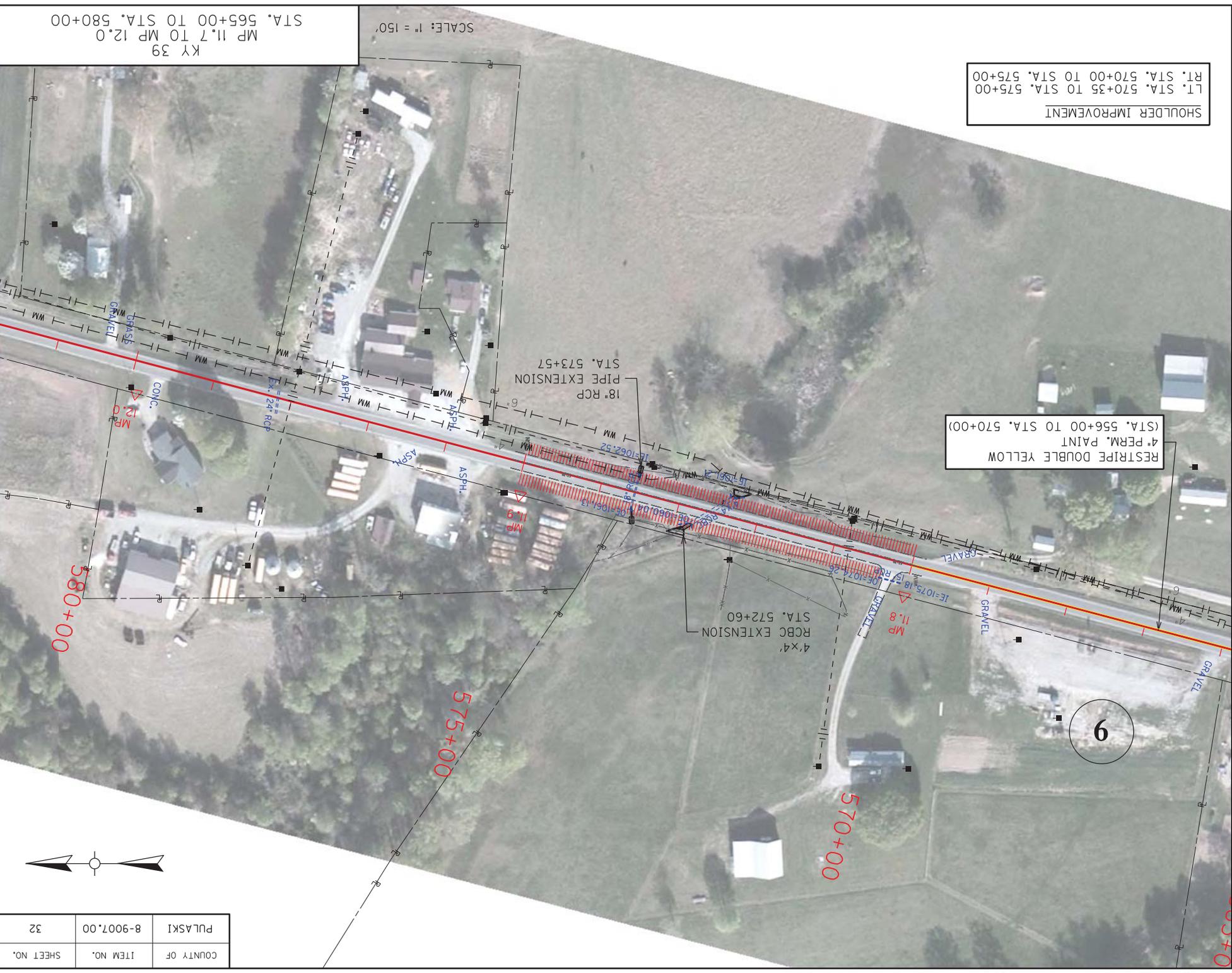
SCALE: 1" = 150'

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	31



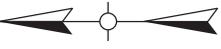
SHOULDER IMPROVEMENT
LT. STA. 570+35 TO STA. 575+00
RT. STA. 570+00 TO STA. 575+00

RESTRIPE DOUBLE YELLOW
(STA. 556+00 TO STA. 570+00)
4" PERM. PAINT



KY 39
MP 11.7 TO MP 12.0
STA. 565+00 TO STA. 580+00

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	32
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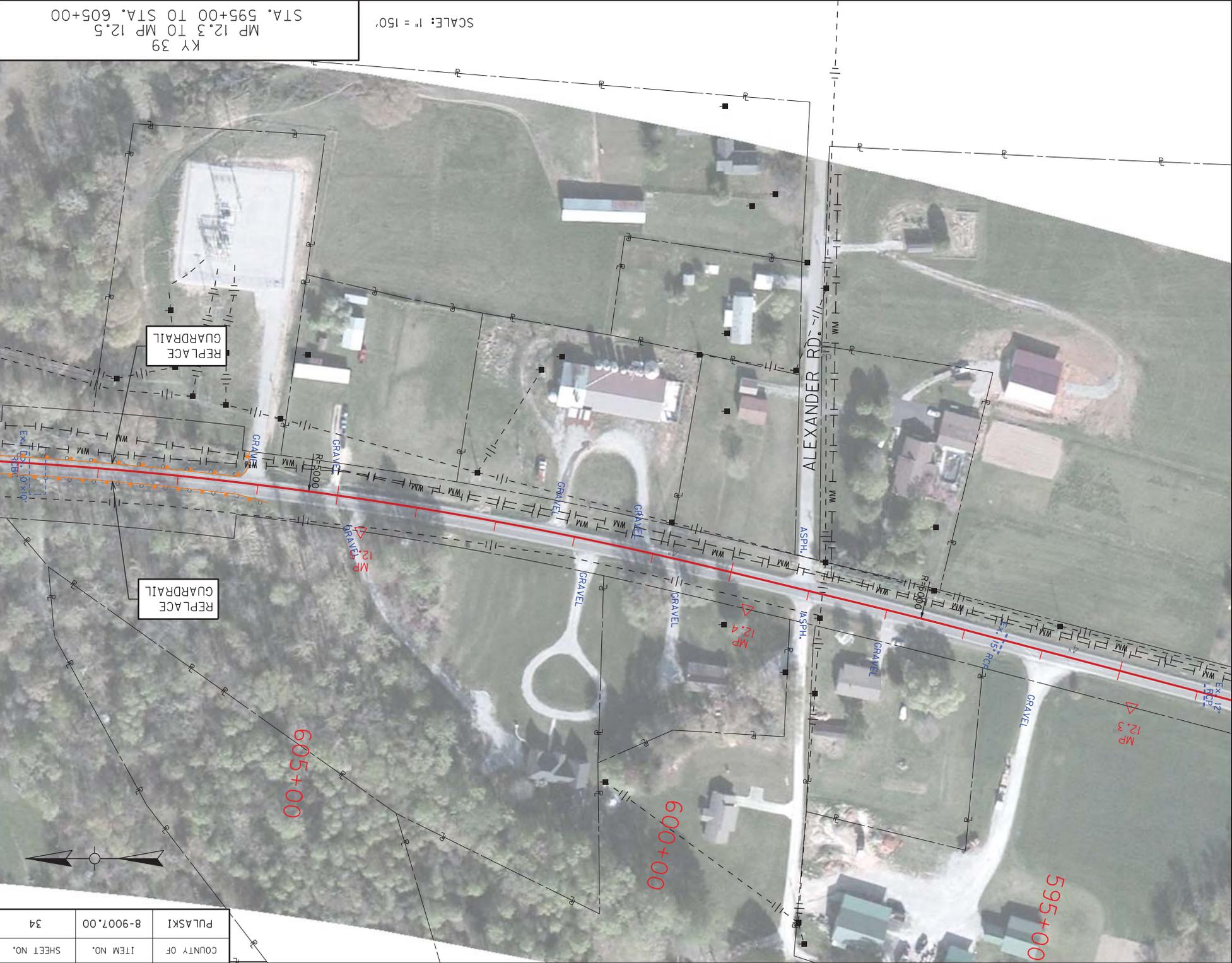
KY 39
 MP 12.0 TO MP 12.3
 STA. 580+00 TO STA. 595+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	33
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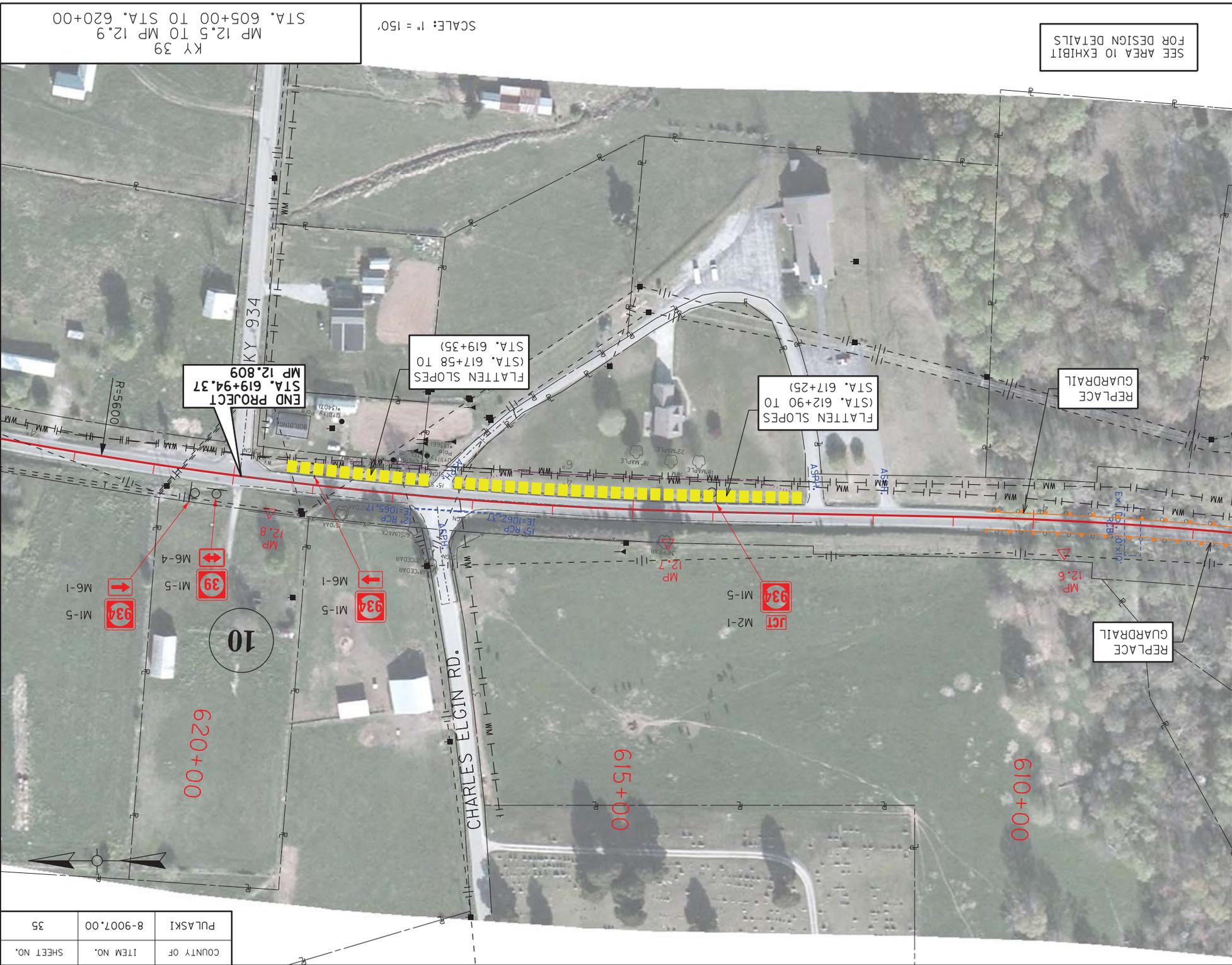
KY 39
 MP 12.3 TO MP 12.5
 STA. 595+00 TO STA. 605+00

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	34
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SEE AREA 10 EXHIBIT
FOR DESIGN DETAILS



KY 39
MP 12.5 TO MP 12.9
STA. 605+00 TO STA. 620+00

SCALE: 1" = 150'

END PROJECT
STA. 619+94.37
MP 12.809

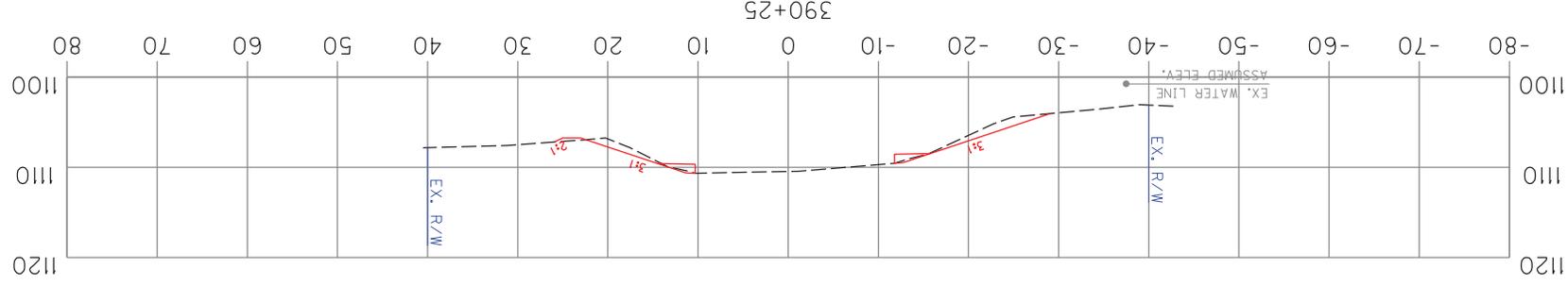
FLATTEN SLOPES
(STA. 617+58 TO
STA. 619+35)

FLATTEN SLOPES
(STA. 612+90 TO
STA. 617+25)

REPLACE
GUARDRAIL

REPLACE
GUARDRAIL

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	35
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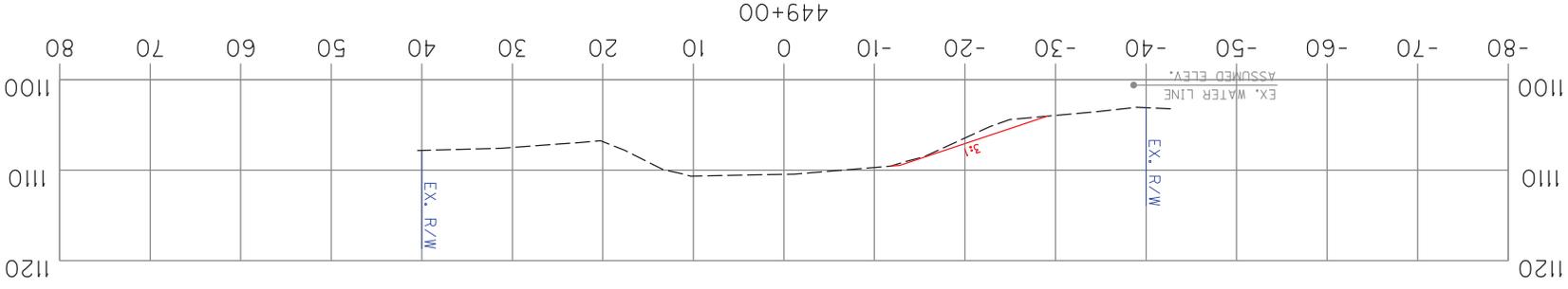
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

SHOULDER IMPROVEMENTS
KY 39

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	XI
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SHOULDER IMPROVEMENTS
KY 39

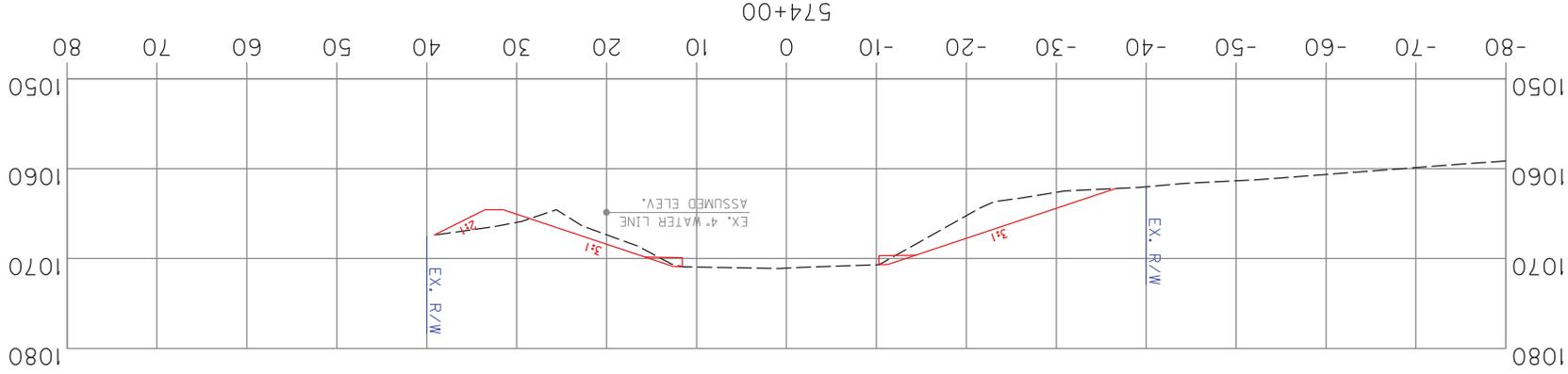
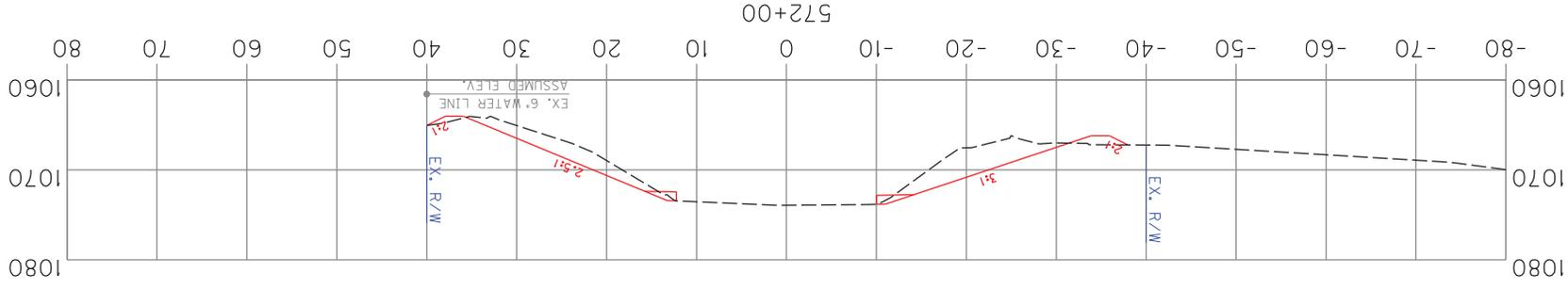
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL



COUNTY OF	PULASKI	8-9007.00	X2
ITEM NO.			
SHEET NO.			

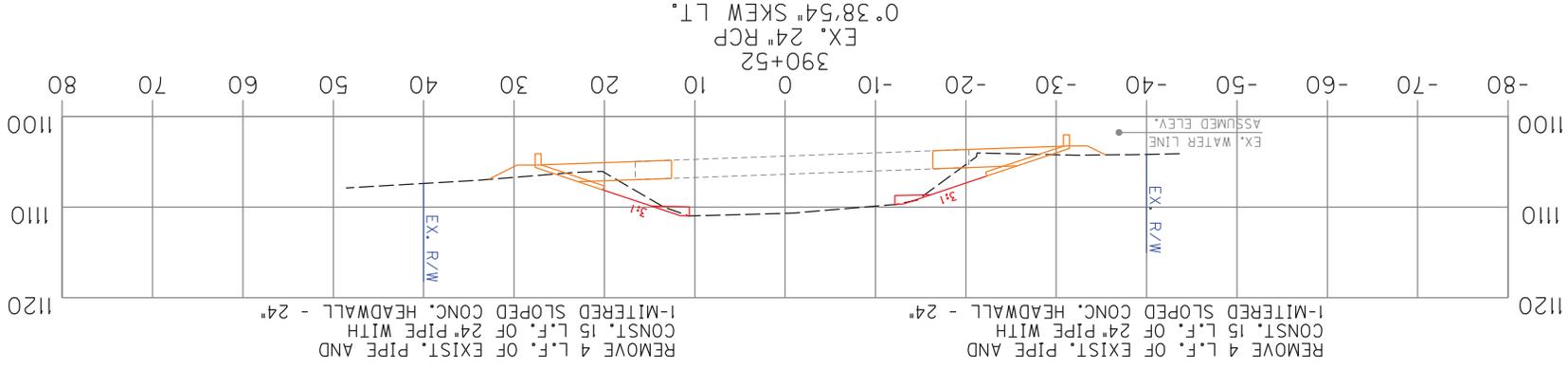
SHOULDER IMPROVEMENTS
KY 39

SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL



COUNTY OF	PULASKI	8-9007.00	X3
ITEM NO.			
SHEET NO.			

NOTE: UTILITIES SHOWN ARE THE APPROX. LOCATIONS AND SHOULD BE VERIFIED IN THE FIELD



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

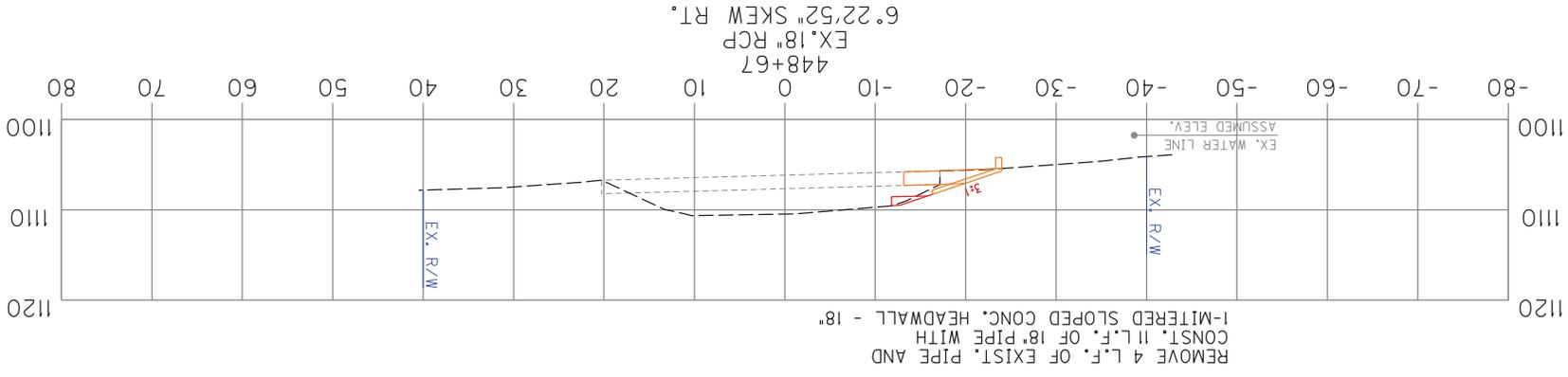
PIPE EXTENSIONS
KY 39

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1
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NOTE: UTILITIES SHOWN ARE
THE APPROX. LOCATIONS AND
SHOULD BE VERIFIED IN THE FIELD

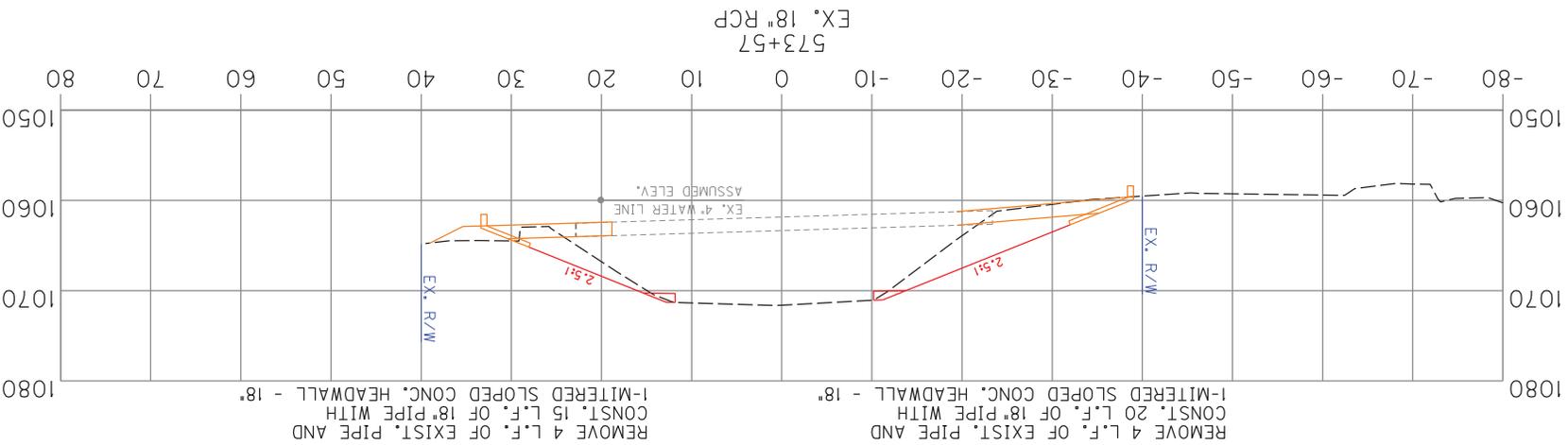
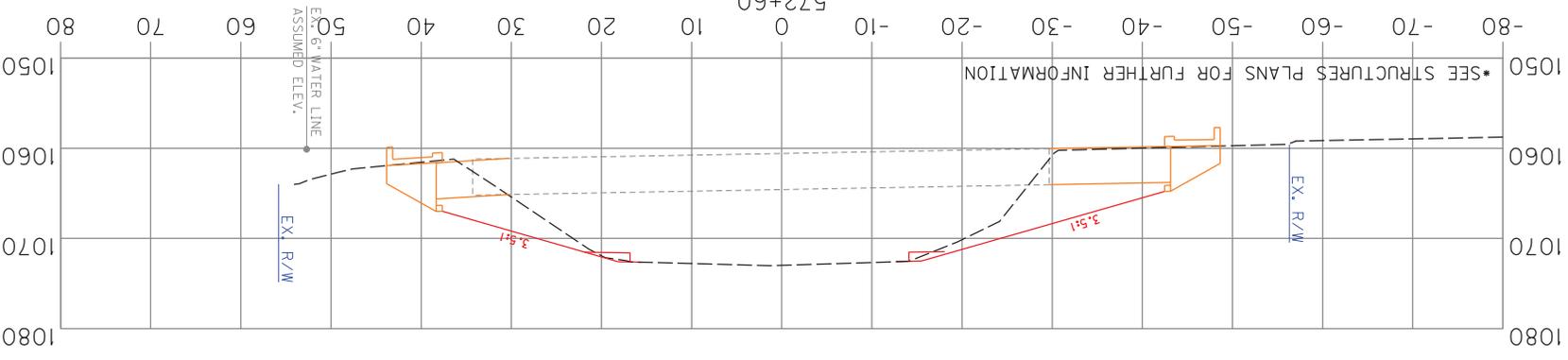
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

PIPE EXTENSIONS
KY 39



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	2
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NOTE: UTILITIES SHOWN ARE THE APPROX. LOCATIONS AND SHOULD BE VERIFIED IN THE FIELD

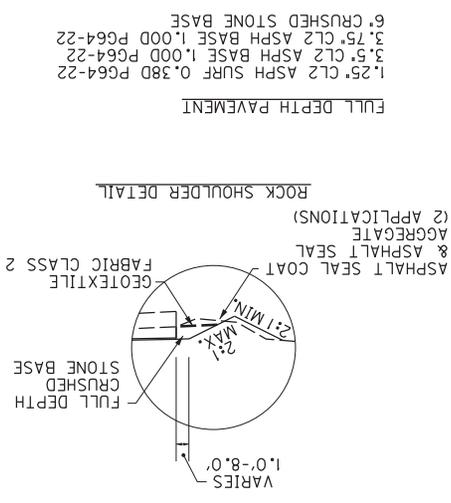


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

UNDERCUTTING AROUND THE INLET OF THE RCBC EXTENSION WAS ASSUMED DUE TO POTENTIAL POOR SOIL CONDITIONS, FOR QUANTITY PURPOSES, AN AREA 15 FT WIDE AND 2 FT DEEP WAS ASSUMED FOR CRUSHED AGGREGATE NO. 2 AND GEOTEXTILE FABRIC CLASS 1. ACTUAL AREA TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

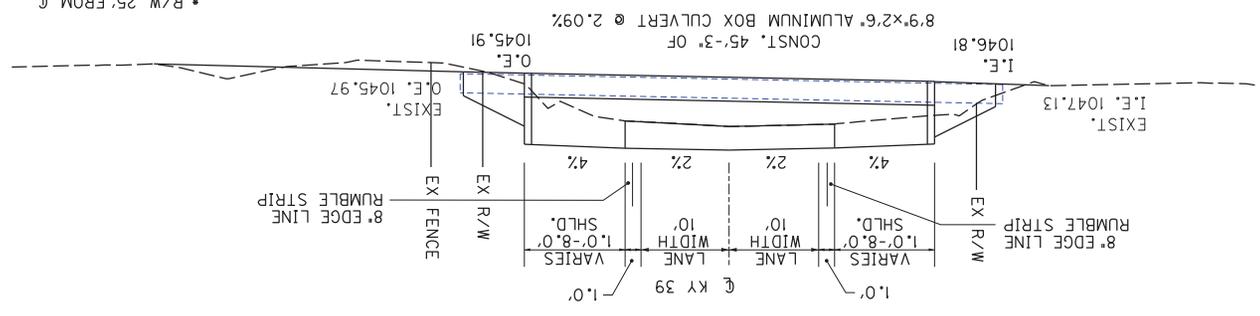
PIPE EXTENSIONS
KY 39

COUNTY OF	PULASKI	8-9007.00	3
ITEM NO.			
SHEET NO.			



ROCK SHOULDER DETAIL

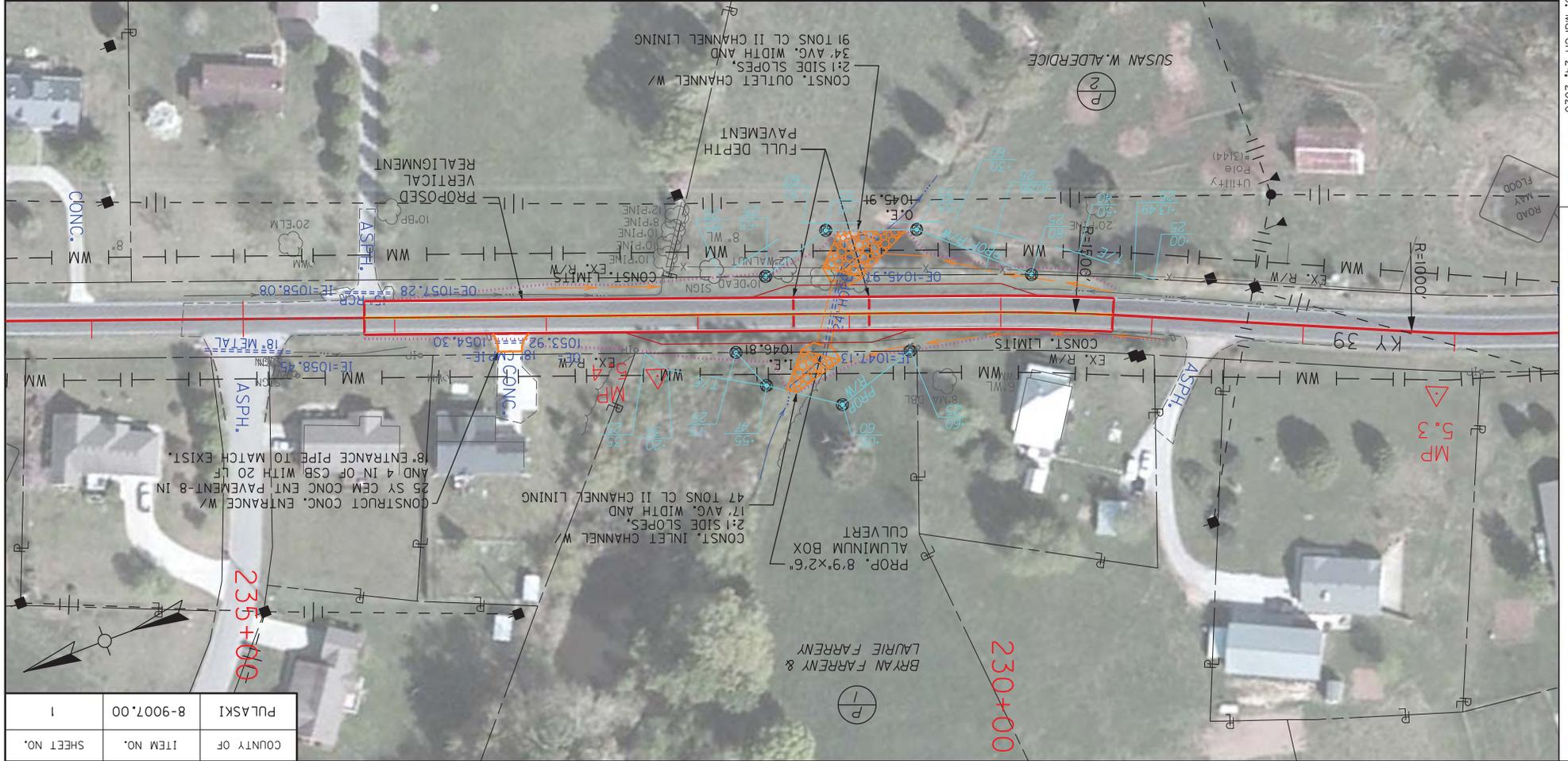
TYPICAL SECTION



AREA 3
MP 5.3 TO MP 5.4
STA. 225+00 TO STA. 235+00

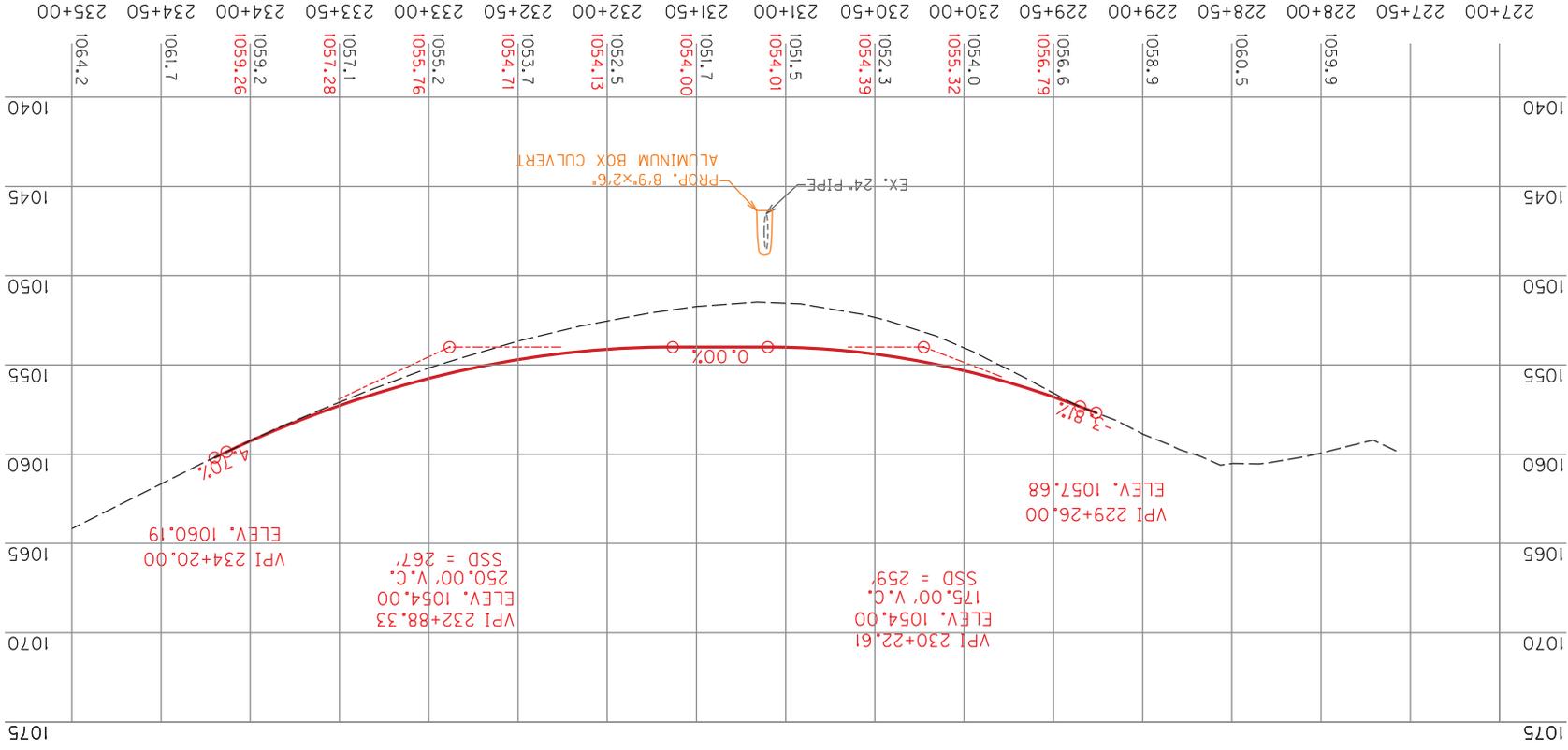
SCALE: 1" = 100'

* R/W 25' FROM C (50' TOTAL) TYP. IN THIS AREA



COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	1

KY 39 VERTICAL REALIGNMENT



SCALE: 1" = 100'

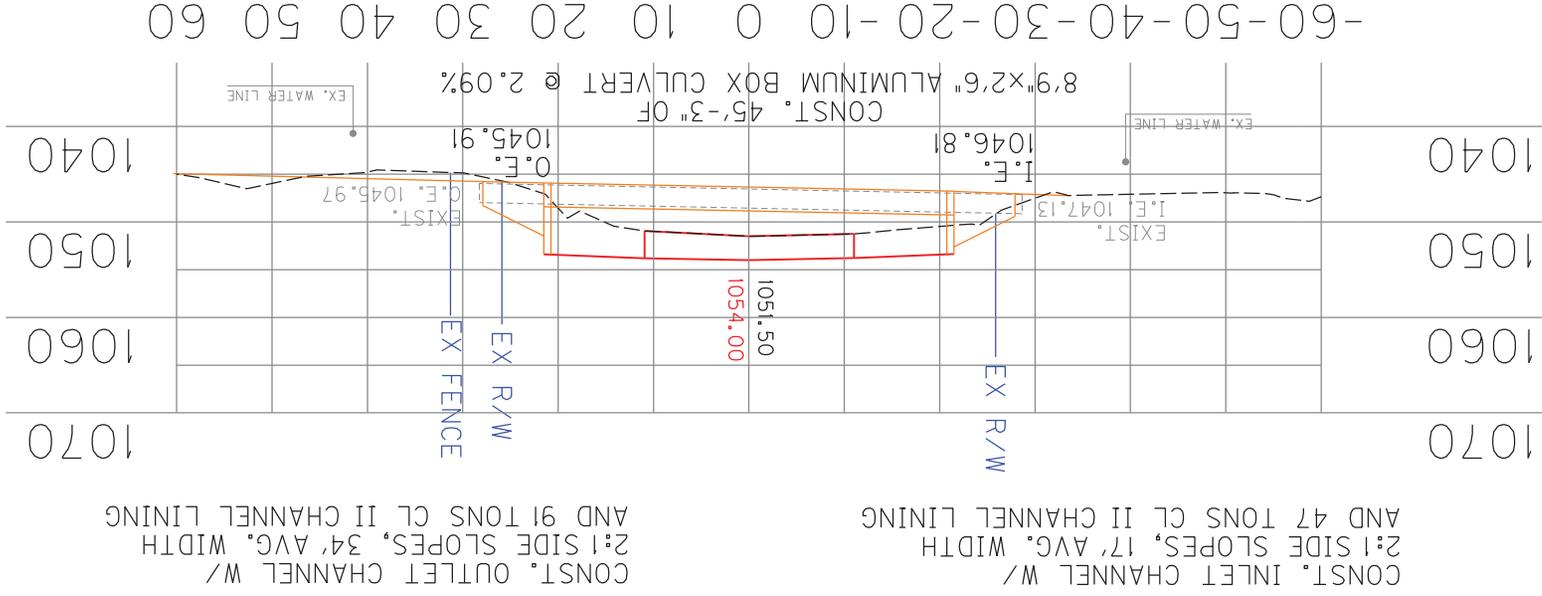
AREA 3
MP 5.3 TO MP 5.4
STA. 225+00 TO STA. 235+00

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	2

NOTE: UTILITIES SHOWN ARE THE APPROX. LOCATIONS AND SHOULD BE VERIFIED IN THE FIELD

*EXCAVATION OF EXIST. PIPE IS INCIDENTAL TO INSTALLATION OF NEW CULVERT

Sta. 231+11.79
15° Skew Rt.

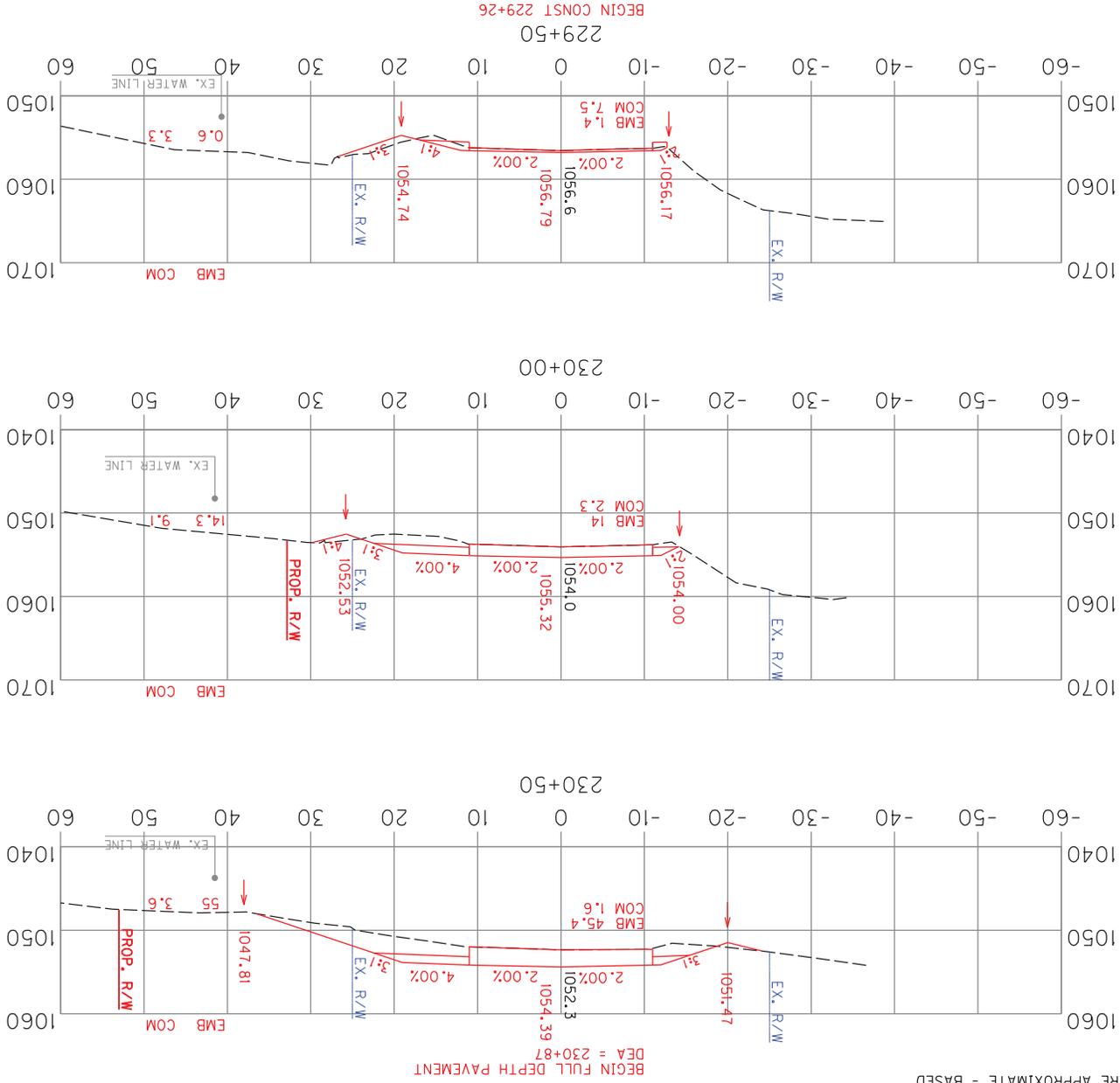


AREA 3
MP 5.3 TO MP 5.4
STA. 225+00 TO STA. 235+00

SCALE: 1" = 20'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	3
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NOTES:
1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY ENGINEER.
SEE SPECIAL NOTES APPLICABLE TO THE PROJECT.
2. CROSS SECTION QUANTITIES ARE APPROXIMATE - BASED ONLY ON LIDAR DATA.



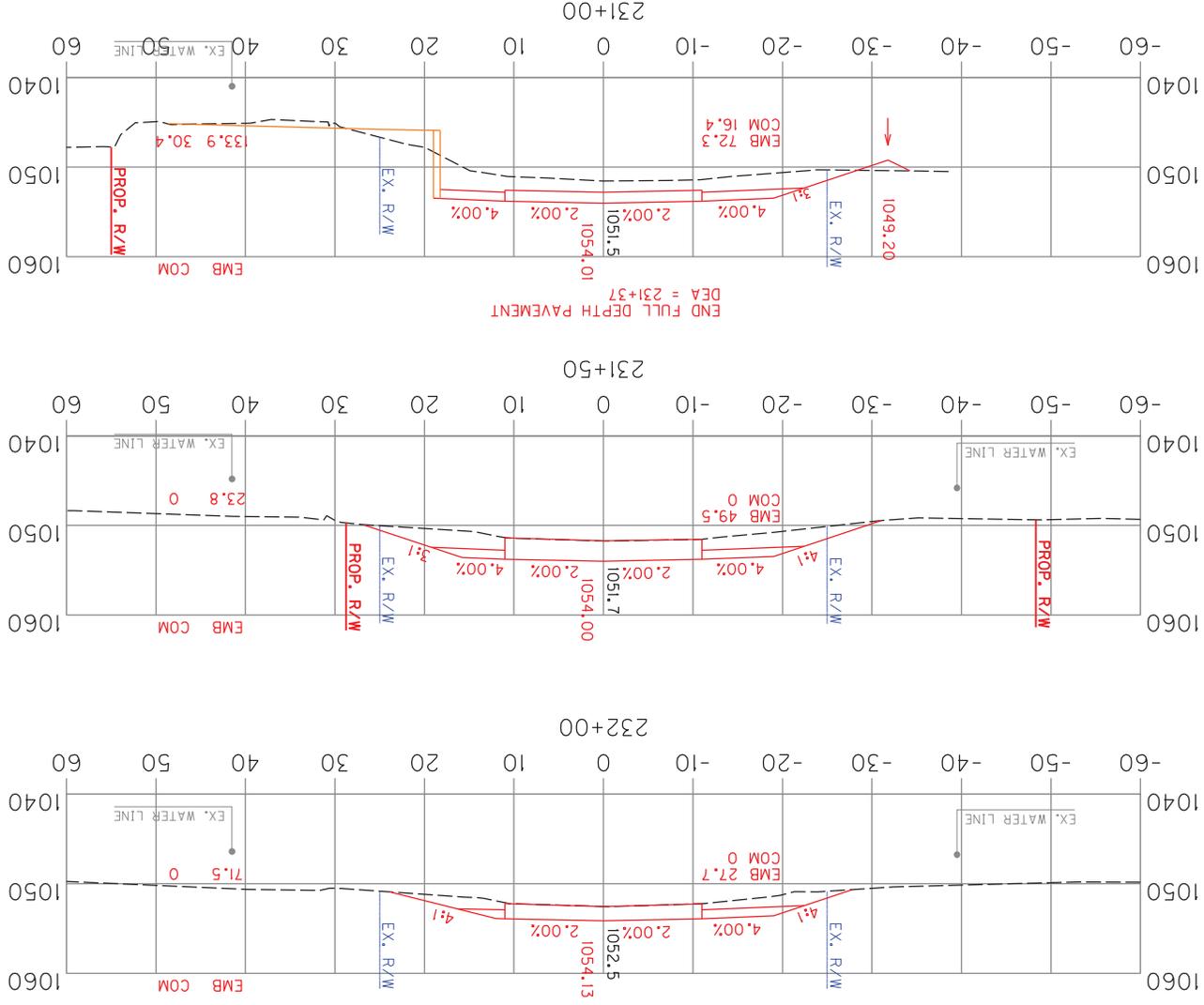
BEGIN FULL DEPTH PAVEMENT

DEA = 230+87

AREA 3
MP 5.3 TO MP 5.4
STA. 229+50 TO STA. 230+50

SCALE: 1" = 20'

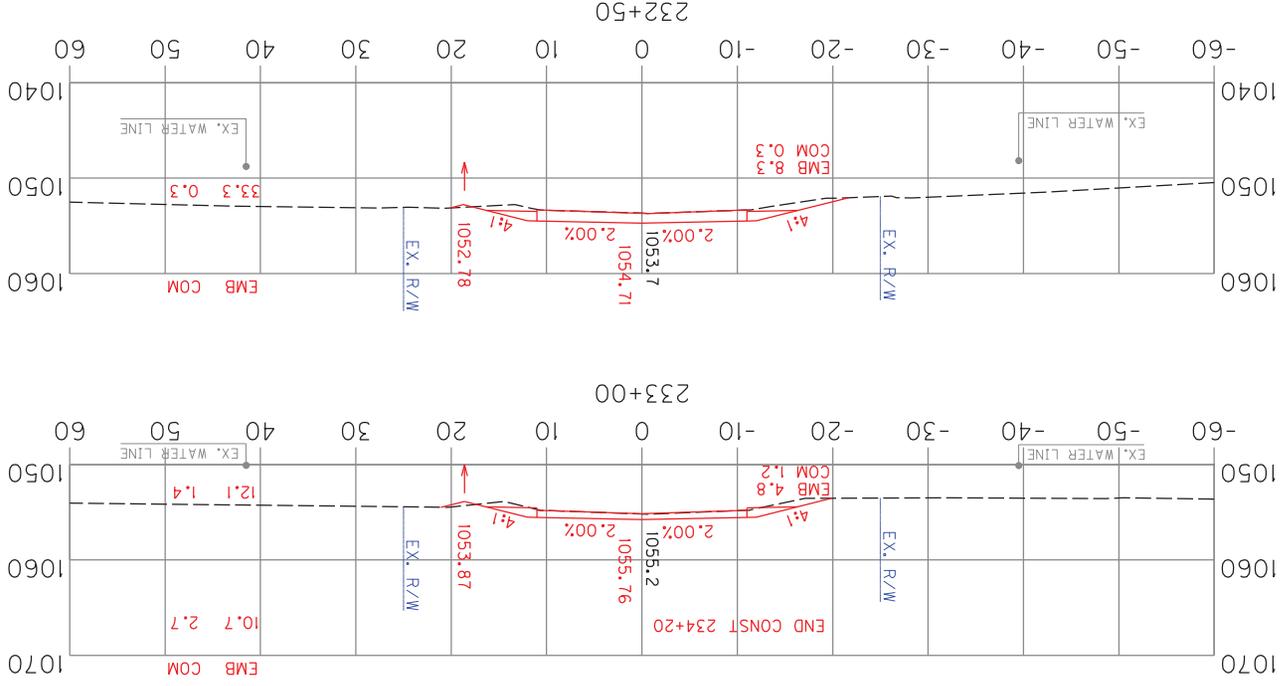
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	4
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AREA 3
MP 5.3 TO MP 5.4
STA. 231+00 TO STA. 232+00

SCALE: 1" = 20'

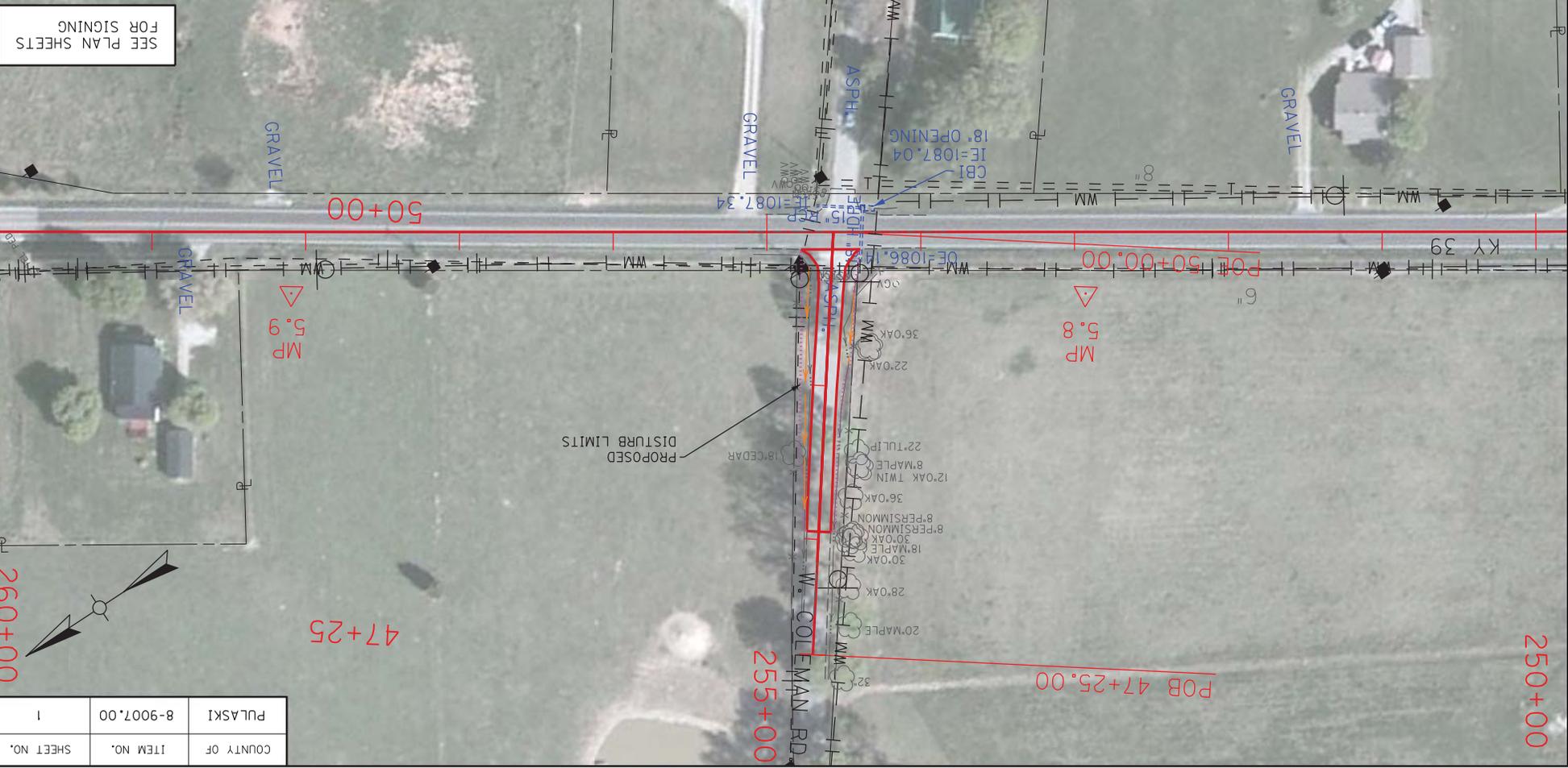
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	5
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SCALE: 1" = 20'

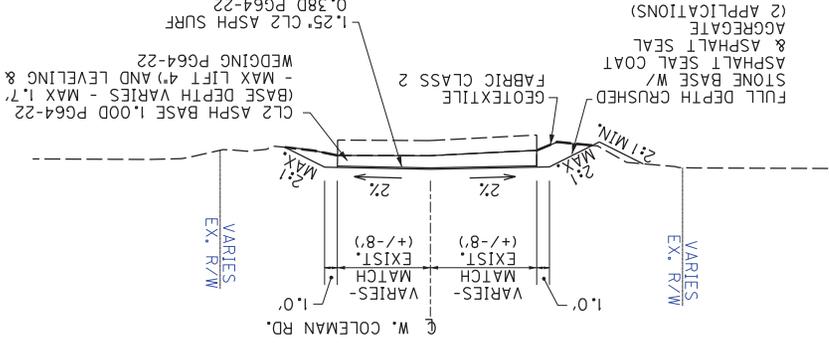
AREA 3
MP 5.3 TO MP 5.4
STA. 232+50 TO STA. 233+00

COUNTY OF	PULASKI	8-9007.00	6
ITEM NO.			
SHEET NO.			



SEE PLAN SHEETS
FOR SIGNING

TYPICAL SECTION



SCALE: 1" = 100'

AREA 4
MP 5.85
STA. 254+50

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1
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250+00

POB 47+25.00

255+00

47+25

50+00

260+00

GRAVEL

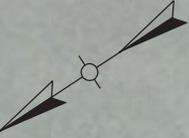
GRAVEL

GRAVEL

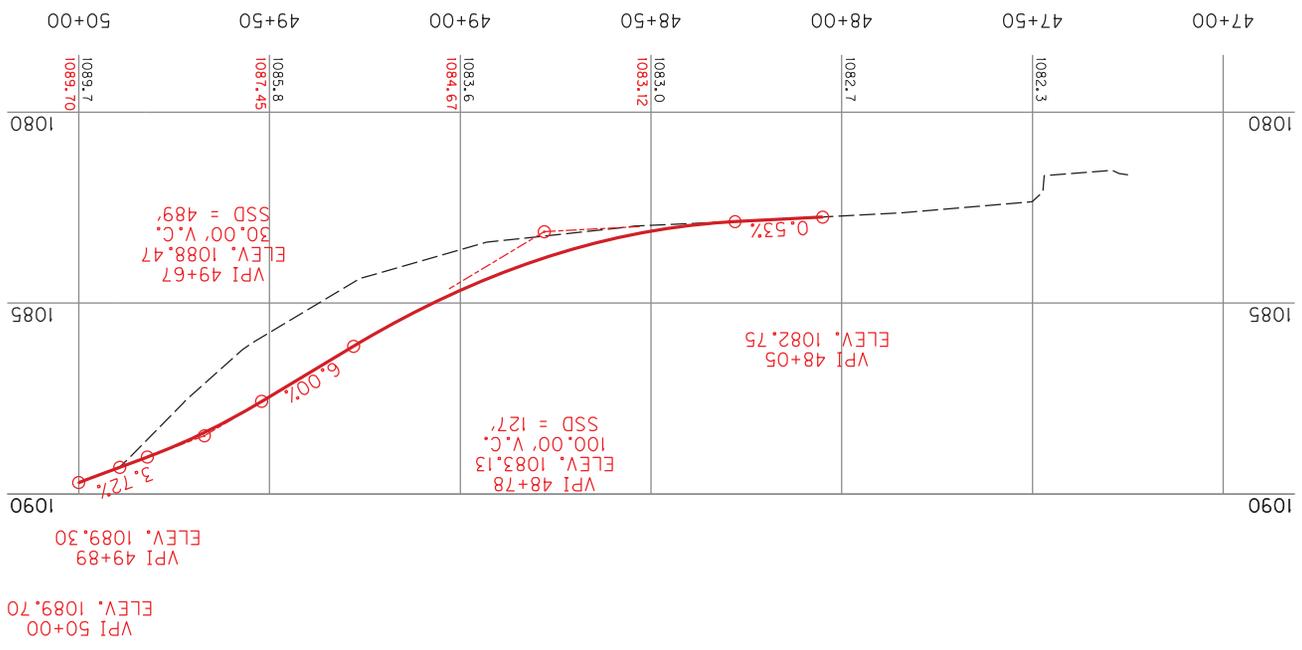
MP 5.9

MP 5.8

PROPOSED
DISTURB LIMITS



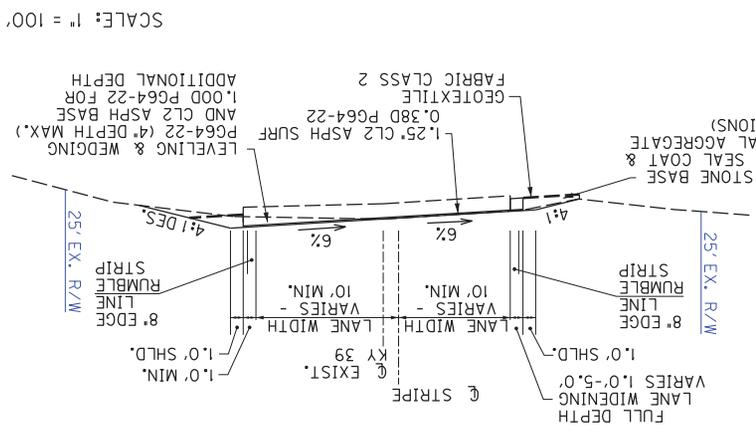
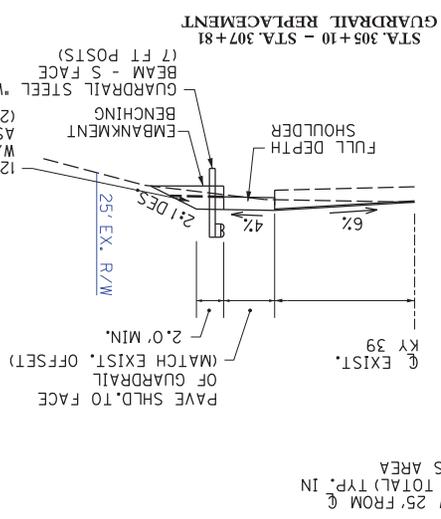
W. COLEMAN RD.



SCALE: 1" = 50'

AREA 4
MP 5.85
STA. 254+50

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	2

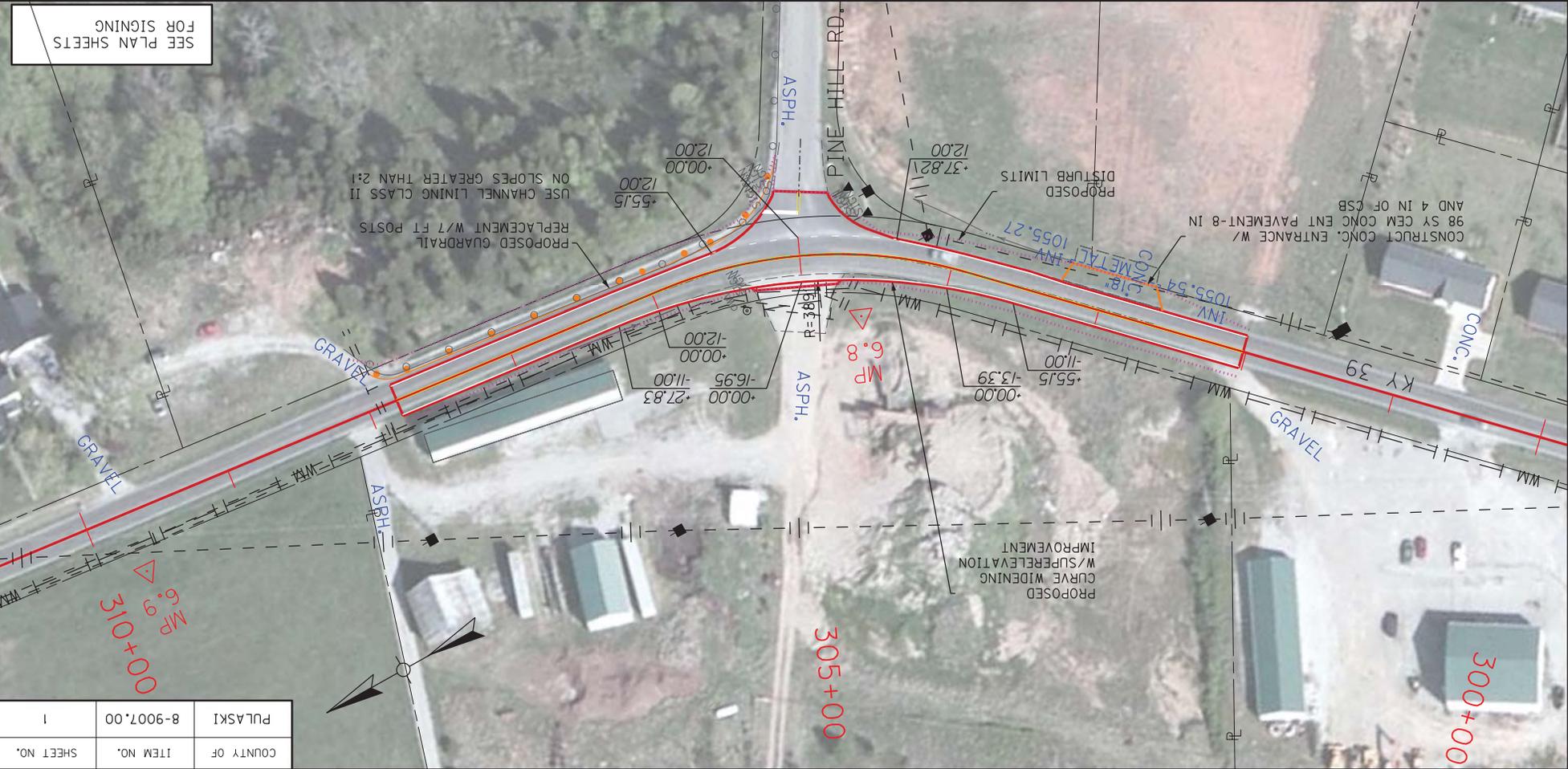


TYPICAL SECTION

SCALE: 1" = 100'

AREA 5
MP 6.7 TO MP 6.9
STA. 302+02 TO STA. 307+81

- NOTES:
1. EMBANKMENT BENCHING IS INCIDENTAL WHEN SLOPES REQUIRE IT. SEE SPECIAL NOTE APPLICABLE TO PROJECT.
 2. IN AREAS WHERE THE LEVELLING & WEDGING IS 4" OR GREATER IN DEPTH, UTILIZE CL2 ASPH BASE 1.00D PG64-22 IN ADDITION TO THE LEVELLING & WEDGING.
 3. HOLD CROWN POINT AND USE ASPHALT PAVE MILLING & TEXTURING FOR SUPERELEVATION IMPROVEMENTS AS NEEDED
 - FULL DEPTH LANE WIDENING/SHOULDER 1.25" CL2 ASPH SURF 0.38D PG64-22
 - 3.5" CL2 ASPH BASE 1.00D PG64-22
 - 3.75" CL2 ASPH BASE 1.00D PG64-22
 - 6" CRUSHED STONE BASE



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1
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SUPERELEVATION IMPROVEMENT

- STA. 302+02 - SUPERELEVATION TRANSITION
- STA. 302+53 - END RUNOUT, BEGIN RUNOFF
- STA. 303+04 - REVERSE CROWN
- STA. 303+55 - P.C.
- STA. 304+06 - FULL SUPERELEVATION (6.0%)
- STA. 305+78 - FULL SUPERELEVATION (6.0%)
- STA. 306+28 - P.T.
- STA. 306+79 - REVERSE CROWN
- STA. 307+30 - END RUNOFF, BEGIN RUNOUT
- STA. 307+81 - NORMAL CROWN, END RUNOUT

STA. 302+02 - BEGIN
 SUPERELEVATION
 TRANSITION

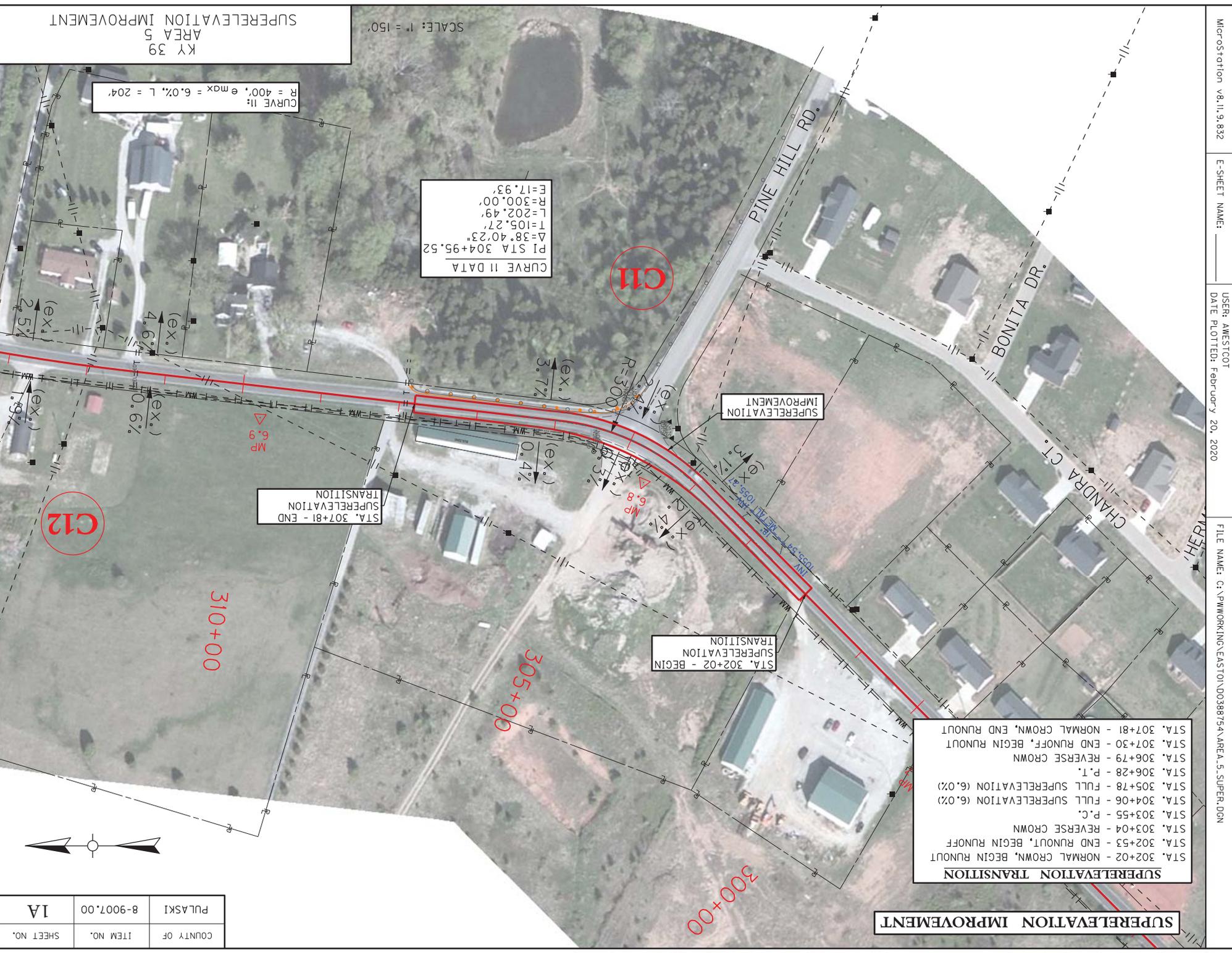
STA. 307+81 - END
 SUPERELEVATION
 TRANSITION

CURVE II DATA
 PI STA 304+95.52
 $\Delta = 38.40'23"$
 $T = 105.27'$
 $L = 202.49'$
 $R = 300.00'$
 $E = 17.93'$

CURVE II:
 $R = 400'$, $\theta_{max} = 6.0\%$, $L = 204'$

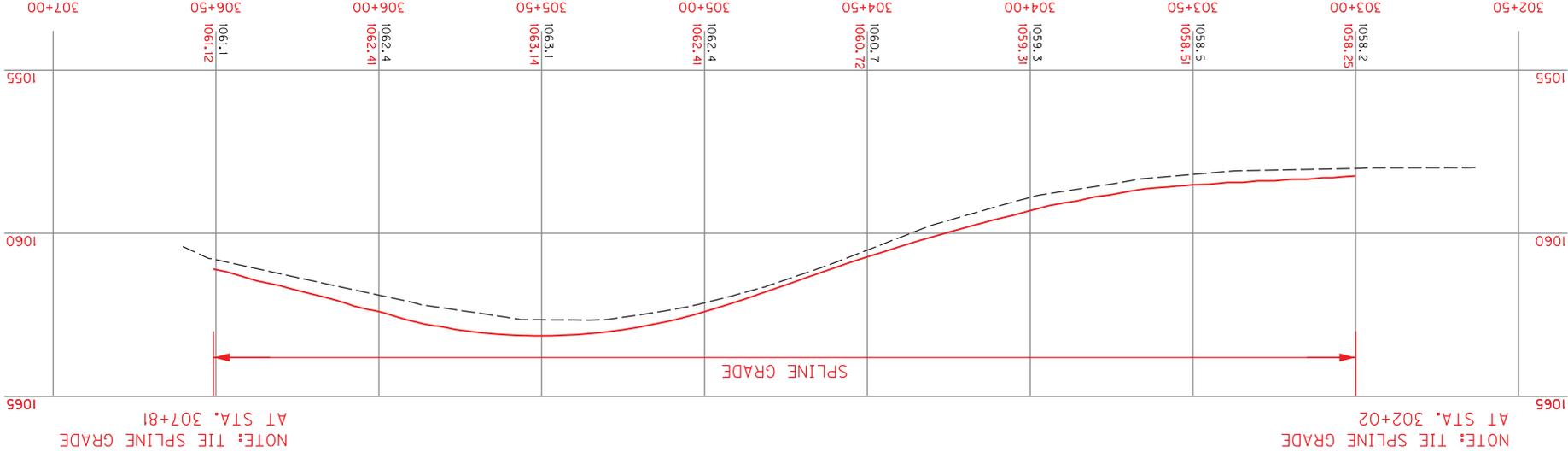
KY 39
 AREA 5
 SUPERELEVATION IMPROVEMENT

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1A
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CURVE WIDENING PROFILE

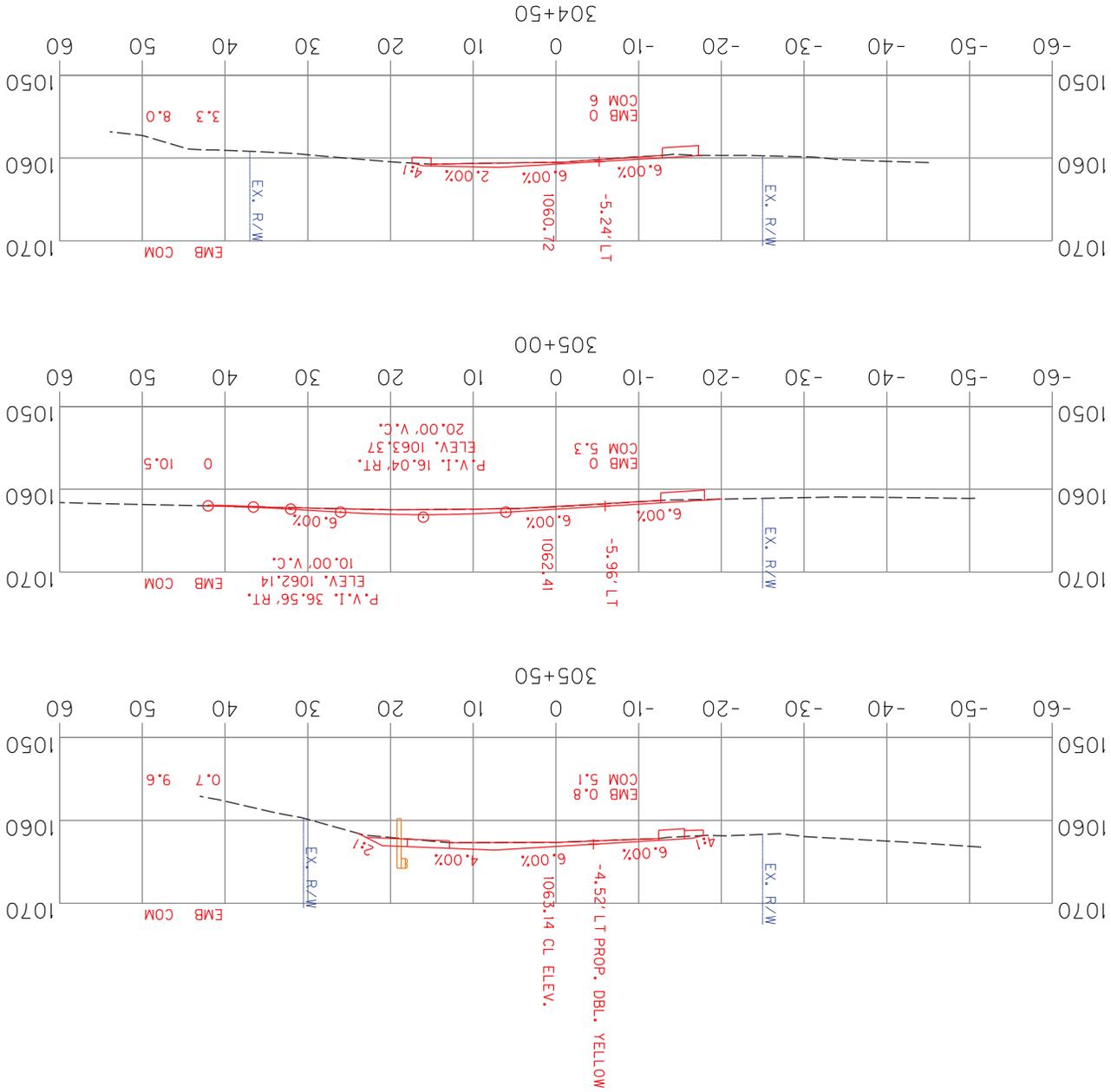


NOTE: TIE SPLINE GRADE
AT STA. 302+02

NOTE: TIE SPLINE GRADE
AT STA. 307+81

AREA 5
MP 6.7 TO MP 6.9
STA. 302+02 TO STA. 307+81

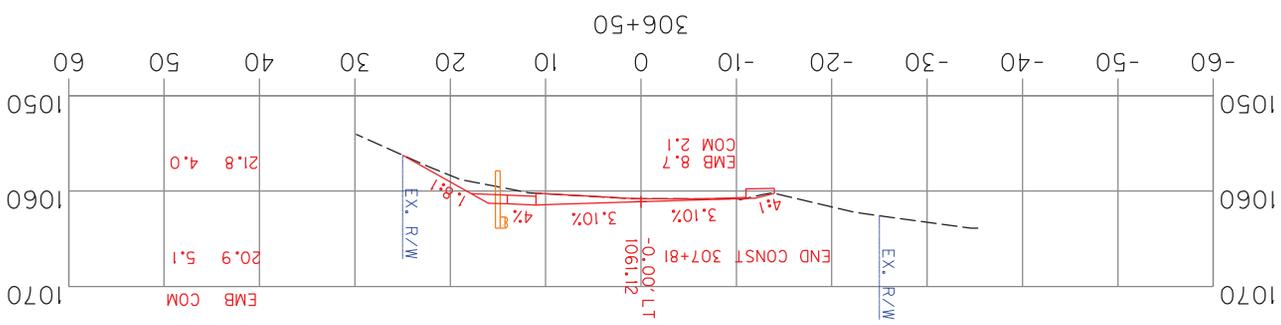
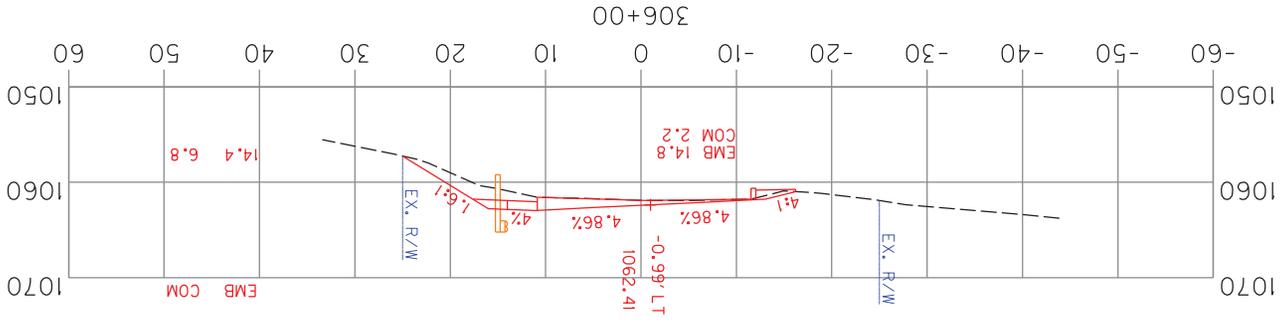
COUNTRY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	2



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 5
MP 6.7 TO MP 6.9
STA. 304+50 TO STA. 305+50

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	4



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 5
MP 6.7 TO MP 6.9
STA. 306+00 TO STA. 306+50

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	5
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SUPERELEVATION IMPROVEMENT

SUPERELEVATION TRANSITION

STA. 319+68 - NORMAL CROWN, BEGIN RUNOUT
STA. 320+19 - END RUNOUT, BEGIN RUNOFF
STA. 320+70 - REVERSE CROWN
STA. 321+21 - P.C.
STA. 321+72 - FULL SUPERELEVATION (6.0%)
STA. 323+84 - FULL SUPERELEVATION (6.0%)
STA. 324+35 - P.T.
STA. 324+86 - REVERSE CROWN
STA. 325+37 - END RUNOFF, BEGIN RUNOUT
STA. 325+88 - NORMAL CROWN, END RUNOUT

325+00

320+00

C13

STA. 325+88 - END SUPERELEVATION TRANSITION

SUPERELEVATION IMPROVEMENT

STA. 319+68 - BEGIN SUPERELEVATION TRANSITION

CURVE 13 DATA
 PI STA 322+80.91
 $\Delta = 26.3958'$
 $T = 159.97'$
 $L = 314.15'$
 $R = 675.00'$
 $E = 18.70'$

CURVE 13:
 $R = 675'$, $e_{max} = 6.0\%$, $L = 204'$

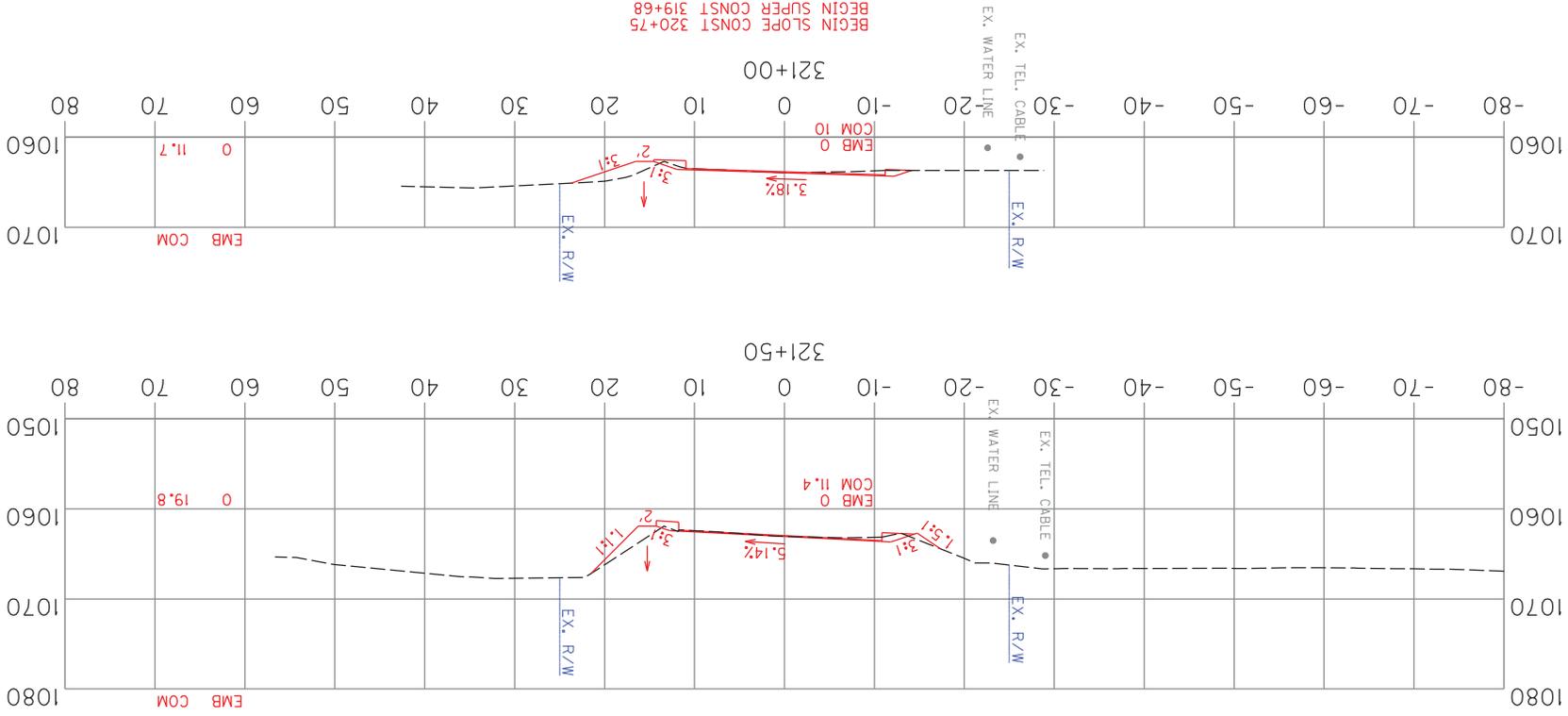
KY 39
 AREA 6
 SUPERELEVATION IMPROVEMENT

SCALE: 1" = 150'



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1A
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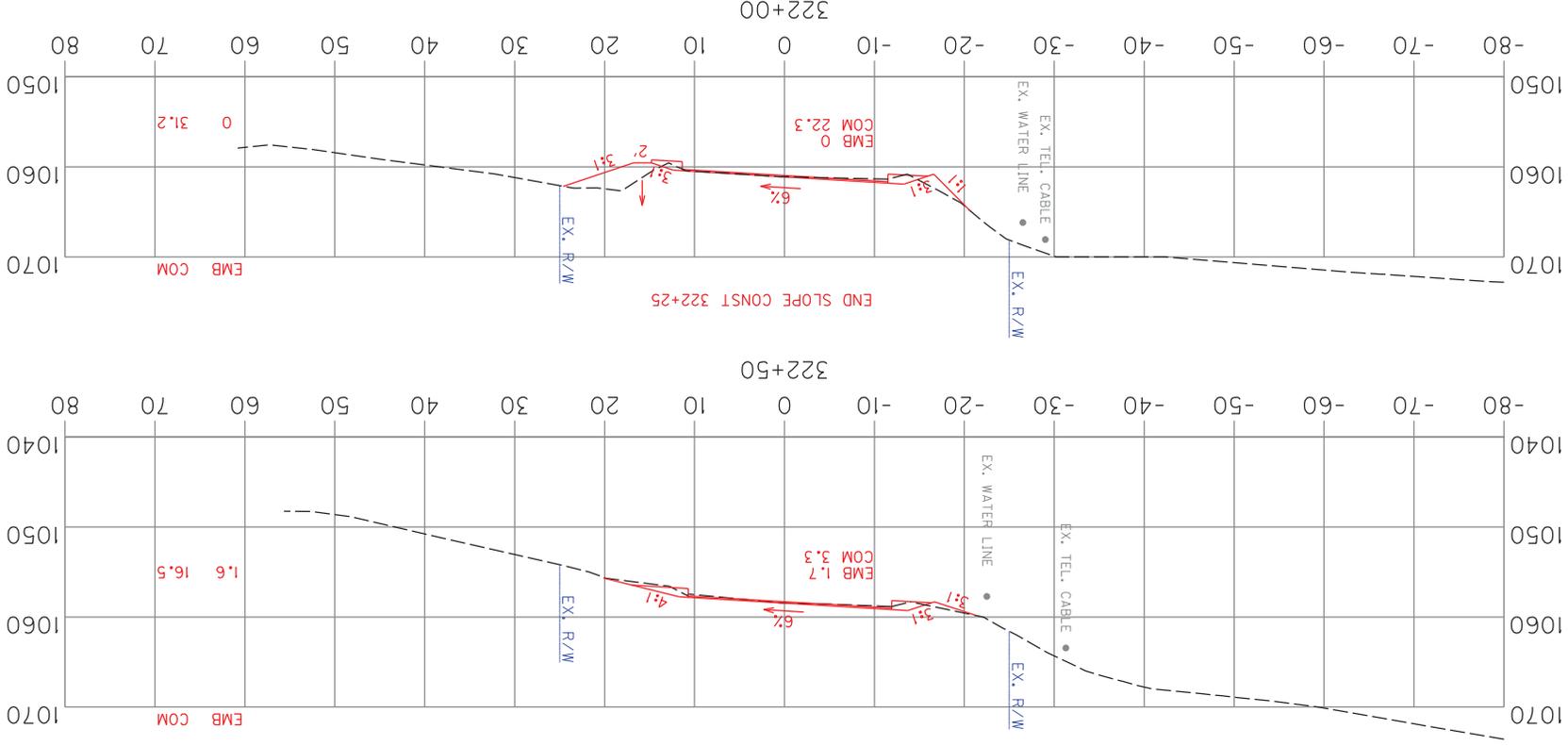
- NOTES:
1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY ENGINEER.
 2. EMBANKMENT BENCHMARKING NOT SHOWN. SEE TYPICAL SECTION.
 3. CROSS SECTION QUANTITIES ARE APPROXIMATE - BASED ONLY ON LIDAR DATA.



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 6
MP 7.0 TO MP 7.2
STA. 321+00 TO STA. 321+50

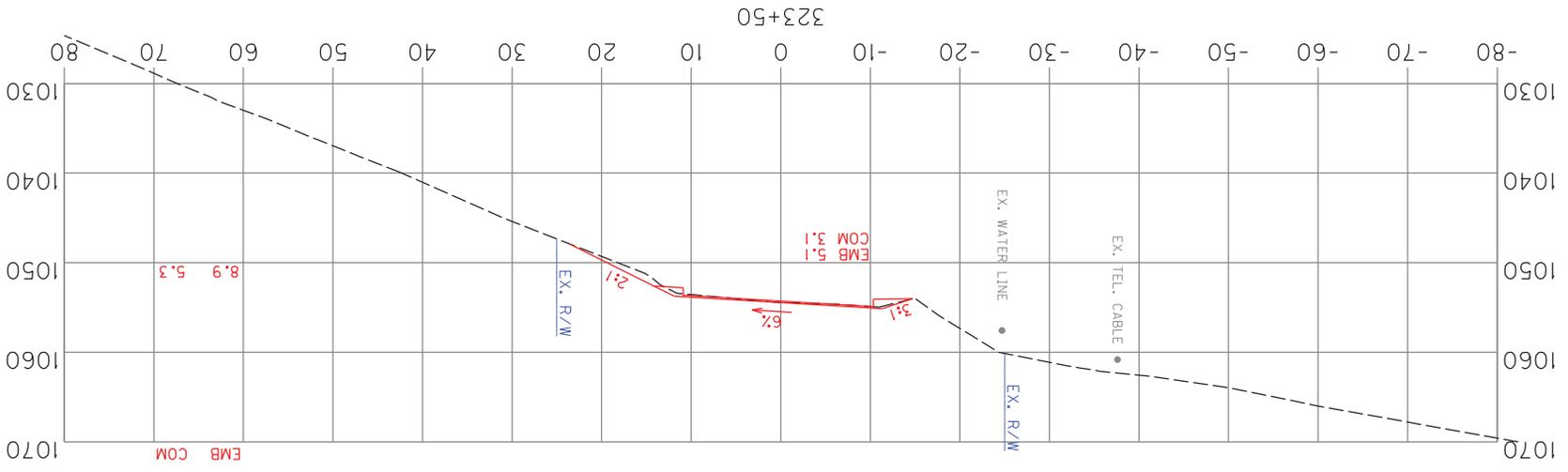
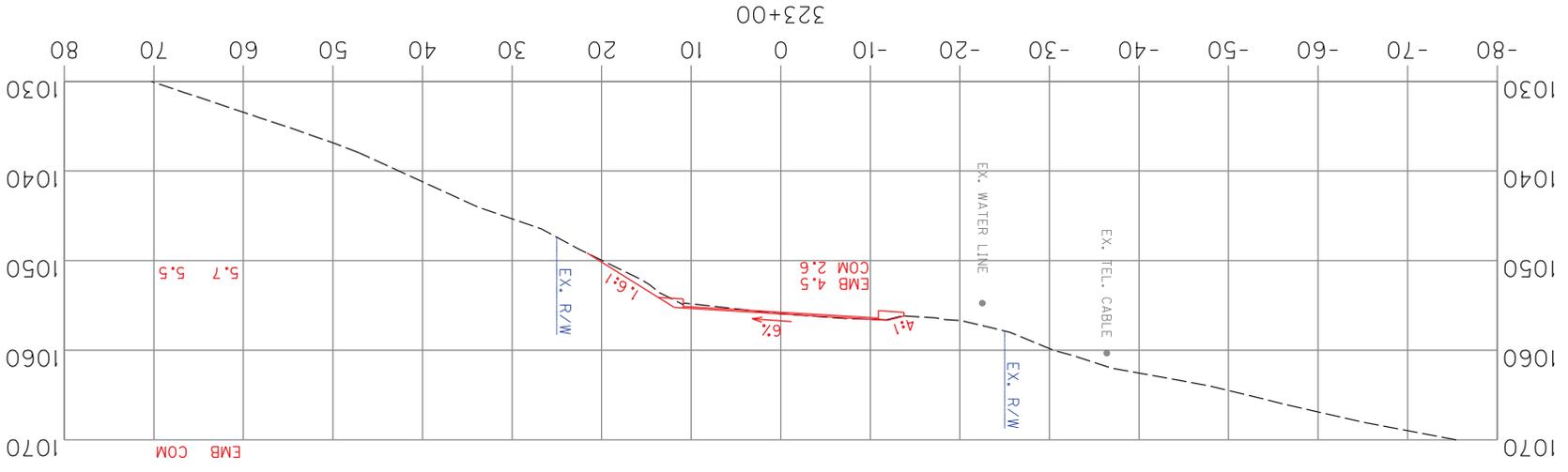
COUNTRY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	2
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 6
MP 7.0 TO MP 7.2
STA. 322+00 TO STA. 322+50

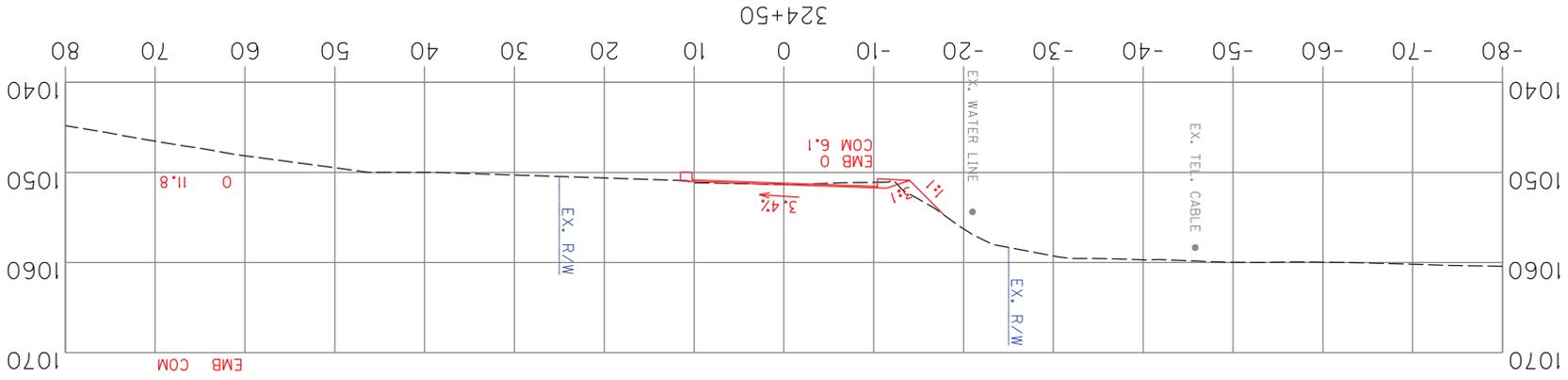
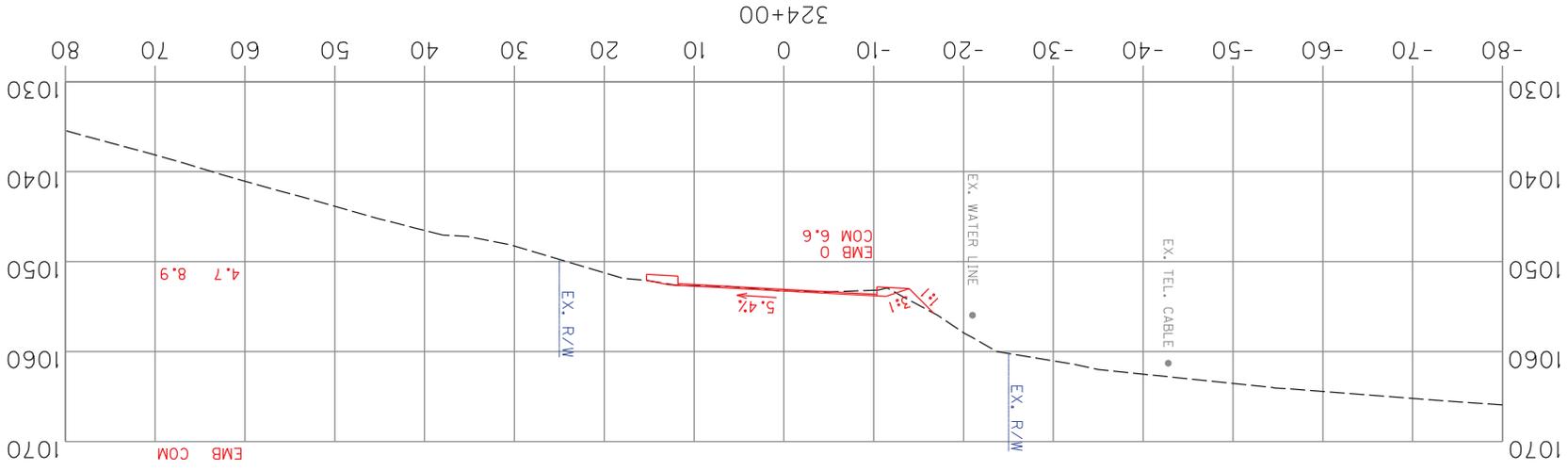
COUNTRY OF	PULASKI	8-9007.00	3
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 6
MP 7.0 TO MP 7.2
STA. 323+00 TO STA. 323+50

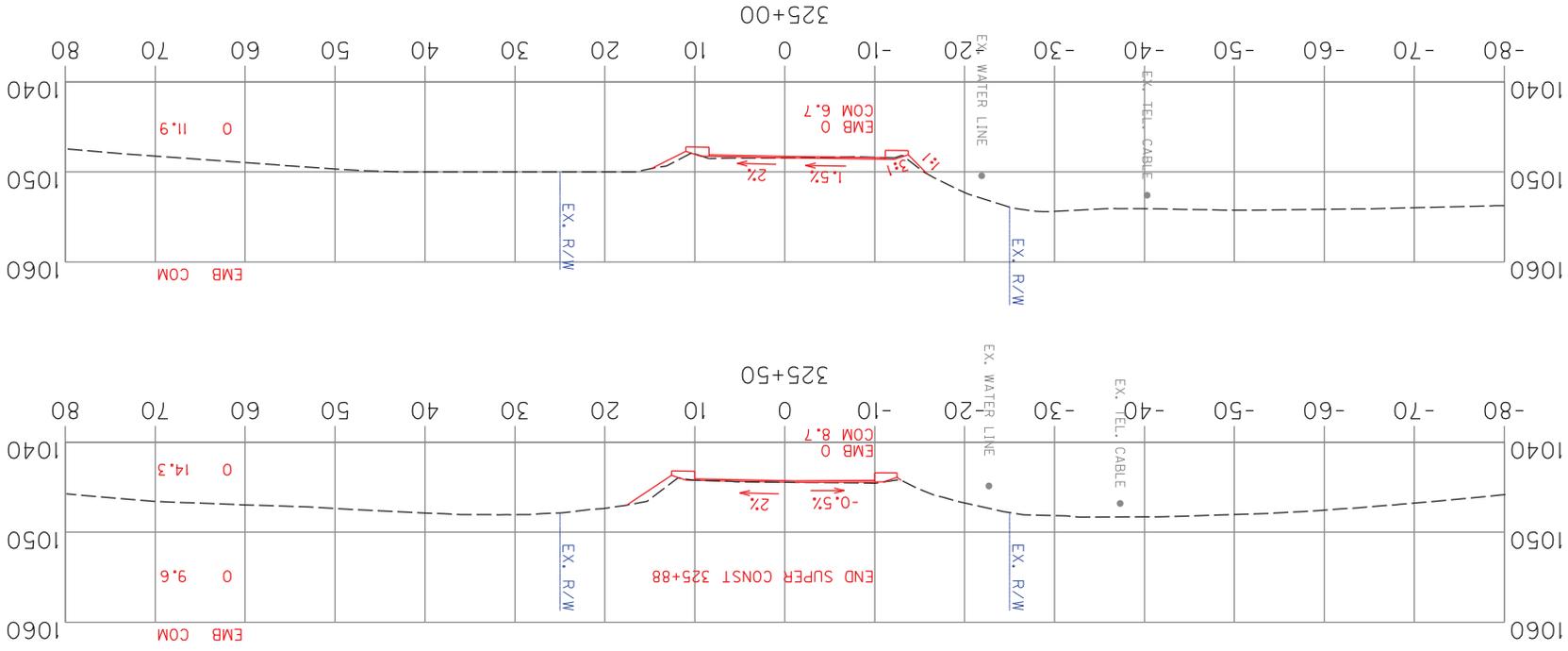
COUNTRY OF	PULASKI	8-9007.00	4
ITEM NO.			
SHEET NO.			



SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 6
MP 7.0 TO MP 7.2
STA. 324+00 TO STA. 324+50

COUNTY OF	PULASKI	8-9007.00	5
SHEET NO.	ITEM NO.		

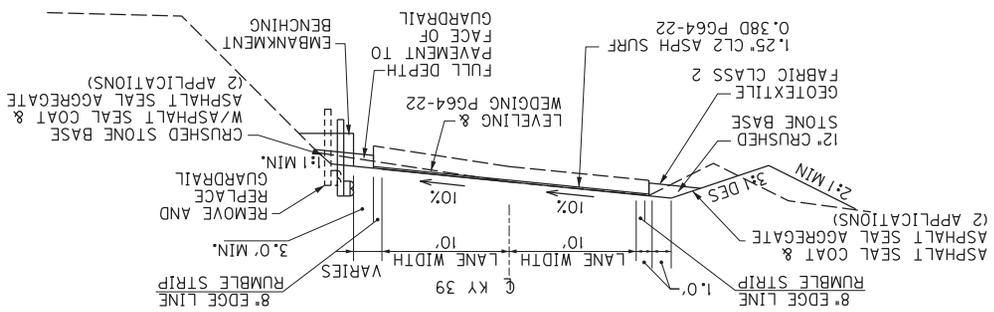


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 6
MP 7.0 TO MP 7.2
STA. 325+00 TO STA. 325+50

COUNTY OF	PULASKI	8-9007.00	6
ITEM NO.			
SHEET NO.			

- NOTES:
1. CHANNEL LINING CLASS II WILL BE USED FOR SLOPE PROTECTION WHEN SLOPES ARE GREATER THAN 2:1.
 2. EMBANKMENT BENCHING IS INCIDENTAL WHEN SLOPES REQUIRE IT, SEE SPECIAL NOTE APPLICABLE TO PROJECT.
 3. HOLD CROWN POINT AND USE ASPHALT PAVE MILLING & TEXTURING FOR SUPERELEVATION IMPROVEMENTS AS NEEDED



SCALE: 1" = 150'

AREA 7
MP 10.0 TO MP 10.2
STA. 474+00 TO STA. 485+00

* R/W 40' FROM C
(80' TOTAL TYP. IN
THIS AREA



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1
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SUPERELEVATION IMPROVEMENT

SUPERELEVATION TRANSITION

STA. 476+86 - NORMAL CROWN, BEGIN RUNOUT
STA. 477+37 - END RUNOUT, BEGIN RUNOFF
STA. 477+88 - REVERSE CROWN
STA. 479+07 - P.C.
STA. 479+92 - FULL SUPERELEVATION (10.0%)
STA. 480+78 - FULL SUPERELEVATION (10.0%)
STA. 481+63 - P.T.
STA. 482+82 - REVERSE CROWN
STA. 483+33 - END RUNOFF, BEGIN RUNOUT
STA. 483+84 - NORMAL CROWN, END RUNOUT

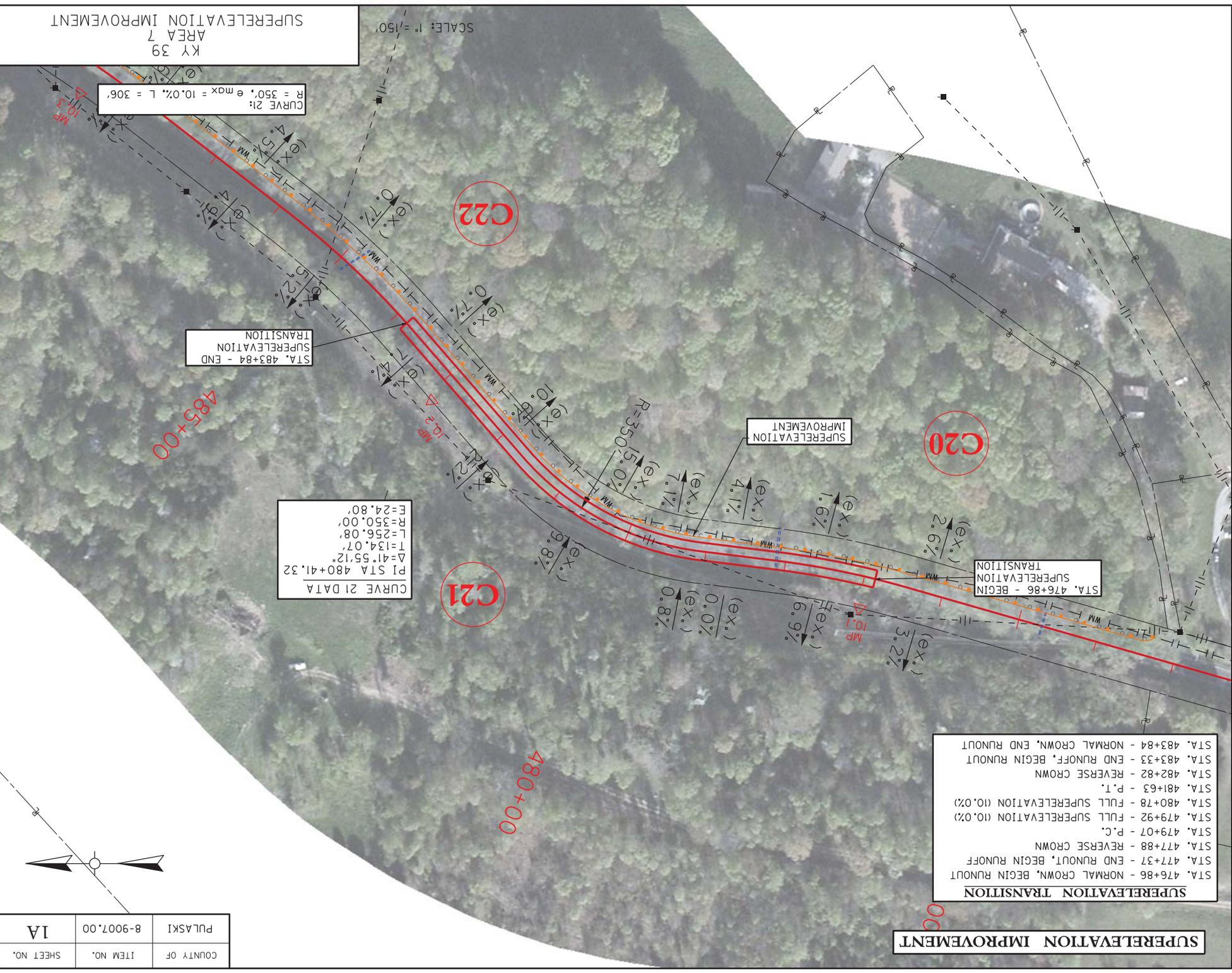
CURVE 21 DATA

PI STA 480+41.32
Δ=41.5512'
T=134.07'
L=256.08'
R=350.00'
E=24.80'

STA. 483+84 - END SUPERELEVATION TRANSITION

SUPERELEVATION IMPROVEMENT

STA. 476+86 - BEGIN SUPERELEVATION TRANSITION



KY 39
 AREA 7
 SUPERELEVATION IMPROVEMENT

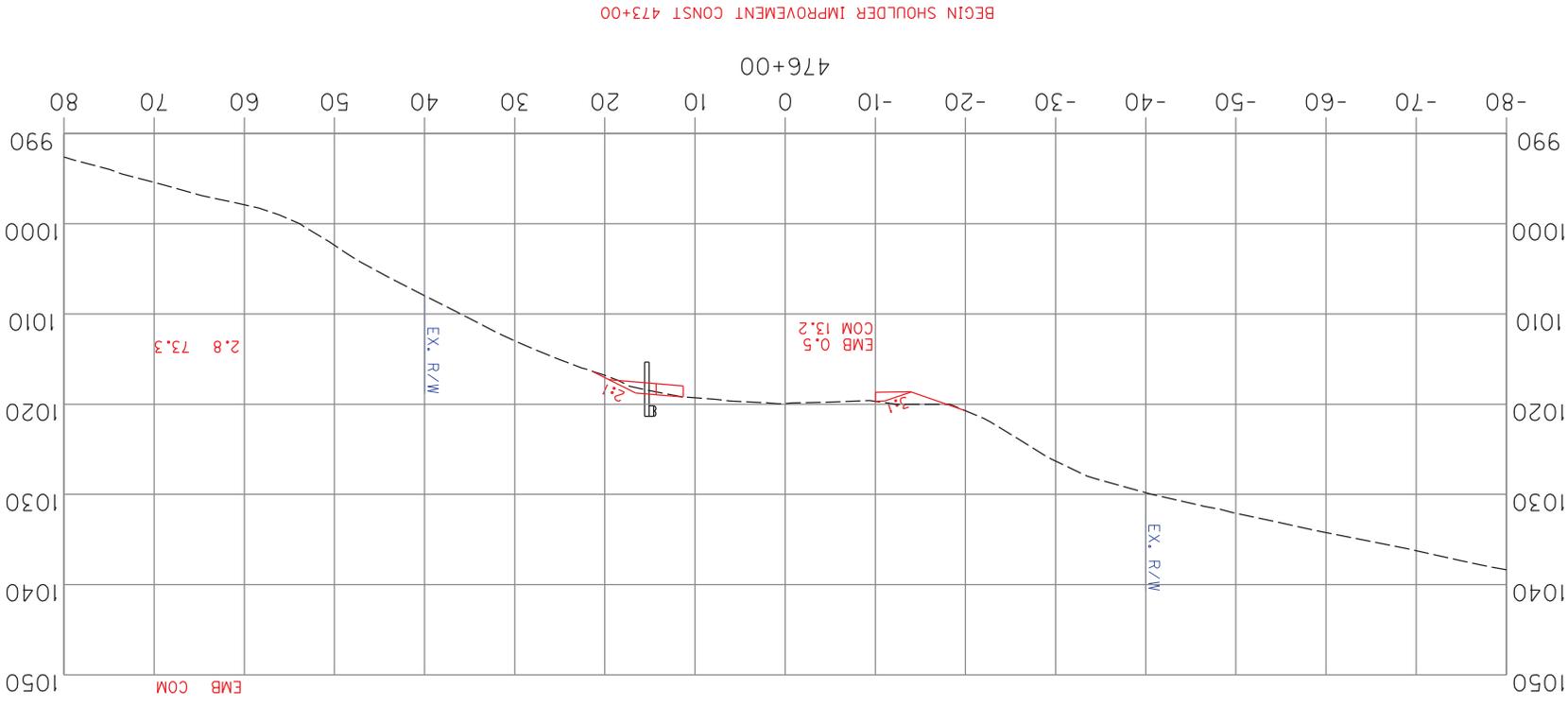
SCALE: 1" = 150'

CURVE 21:
 R = 350', e max = 10.0%, L = 306'

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	1A



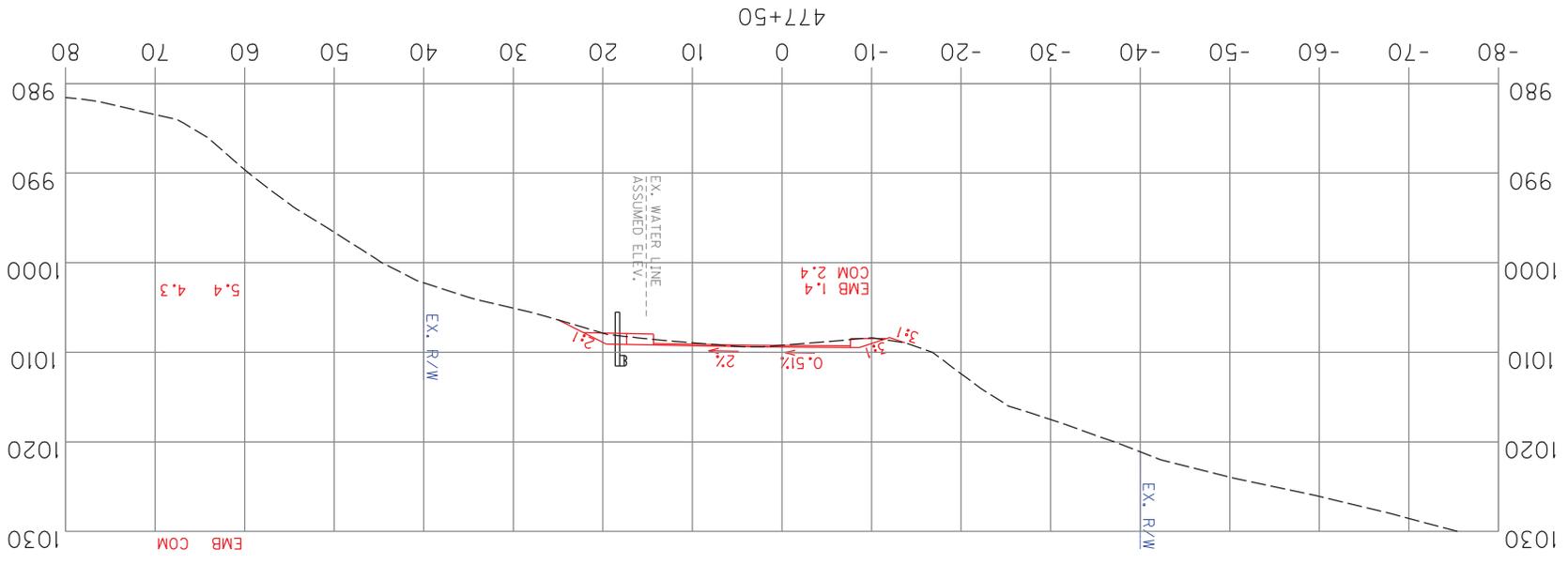
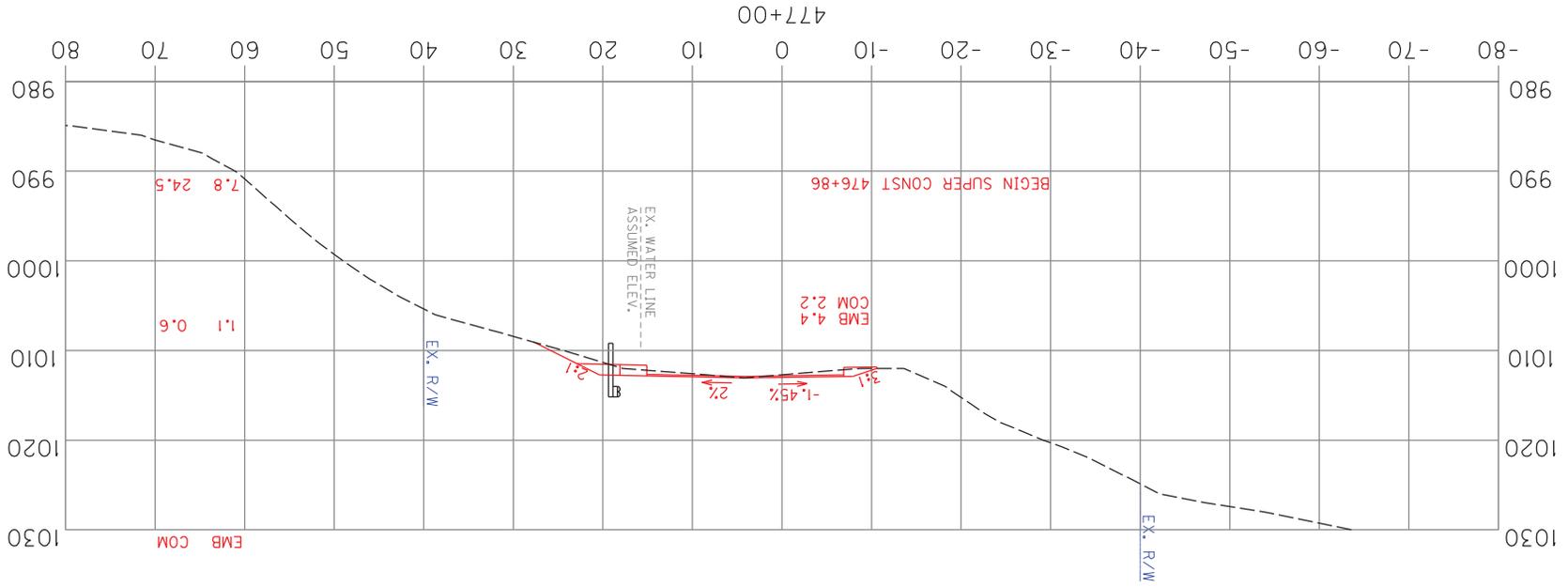
- NOTES:
1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY ENGINEER.
 - SEE SPECIAL NOTES APPLICABLE TO THE PROJECT.
 2. EMBANKMENT BENCHING NOT SHOWN. SEE TYPICAL SECTION.
 3. CROSS SECTION QUANTITIES ARE APPROXIMATE - BASED ONLY ON LIDAR DATA.



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 476+00

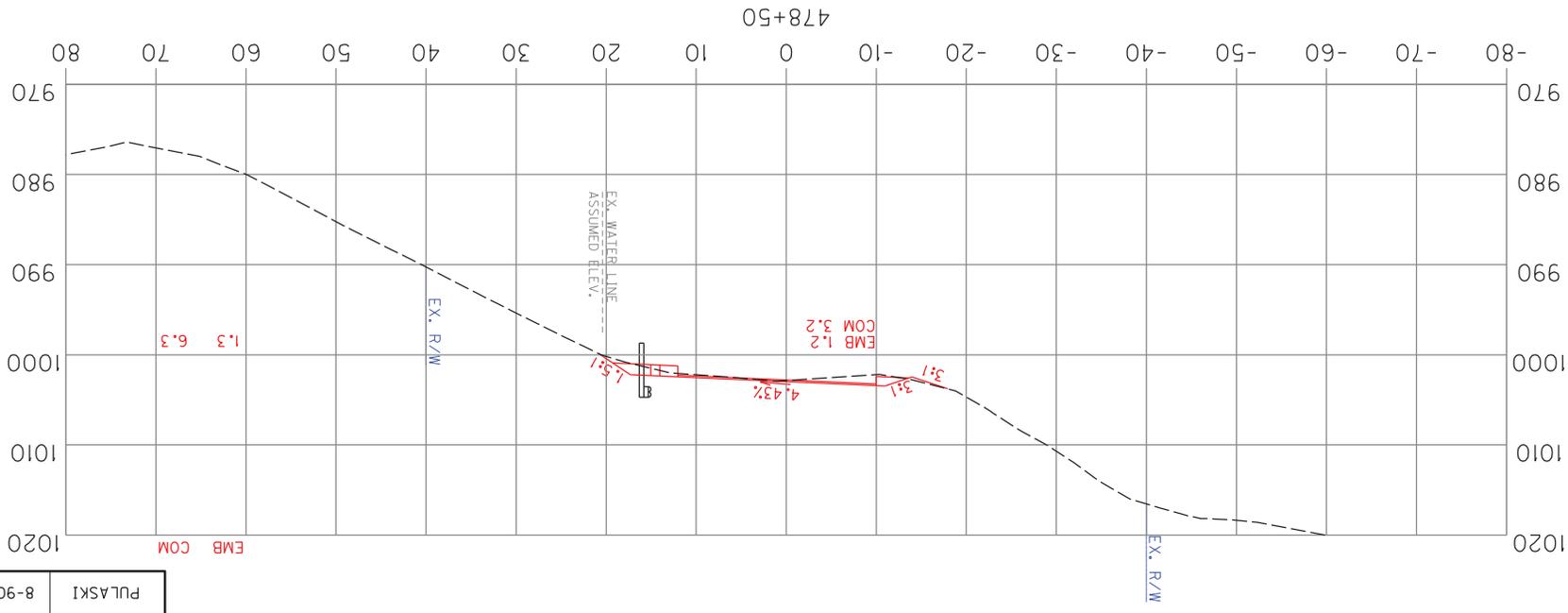
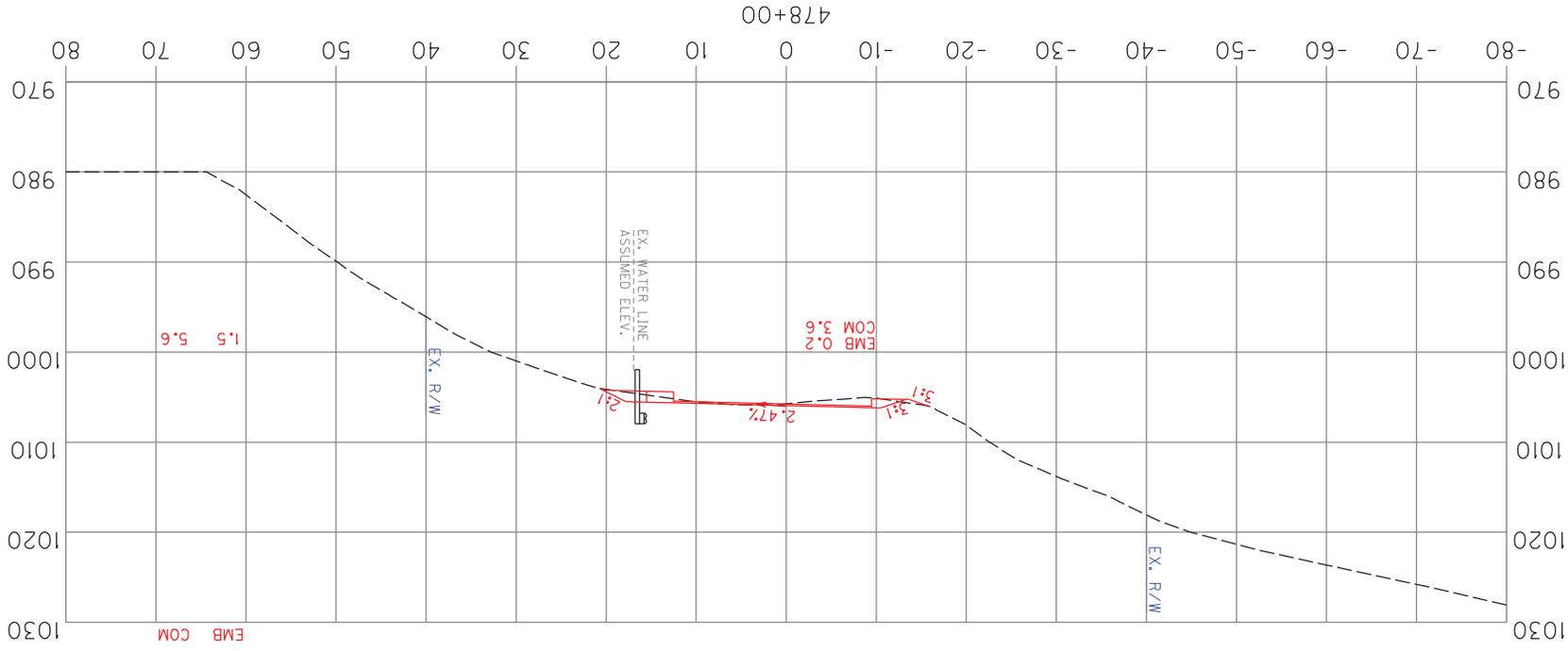
COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	2



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 477+00 TO STA. 477+50

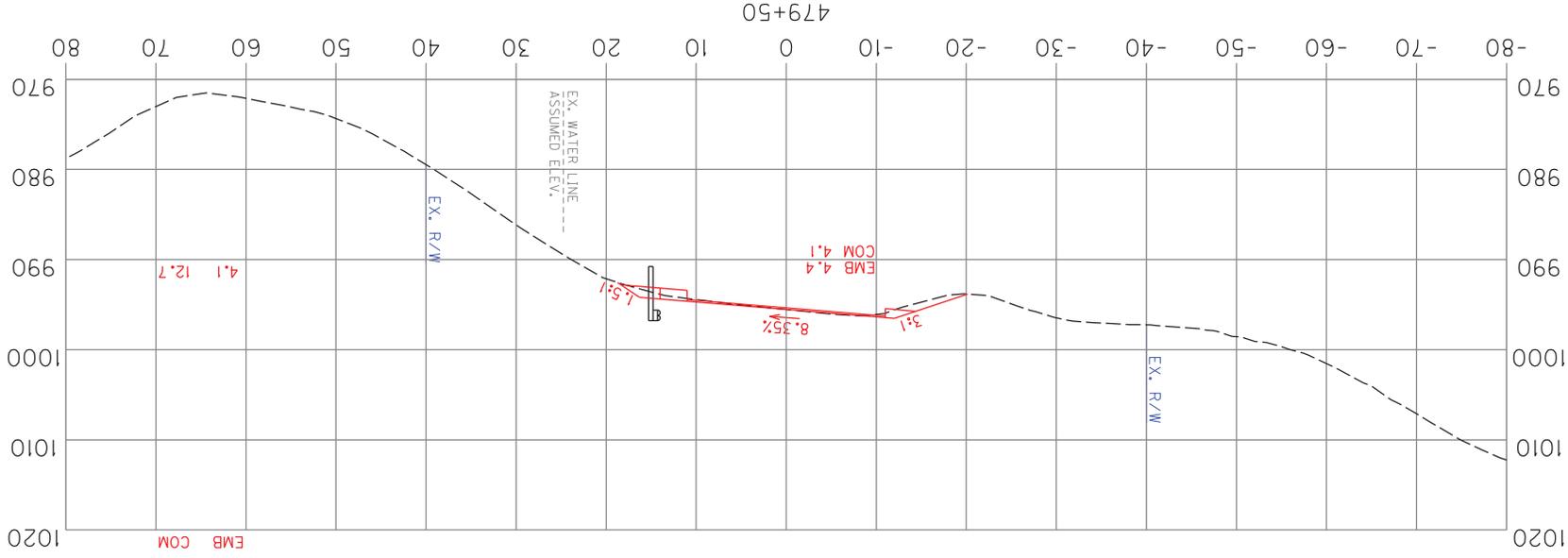
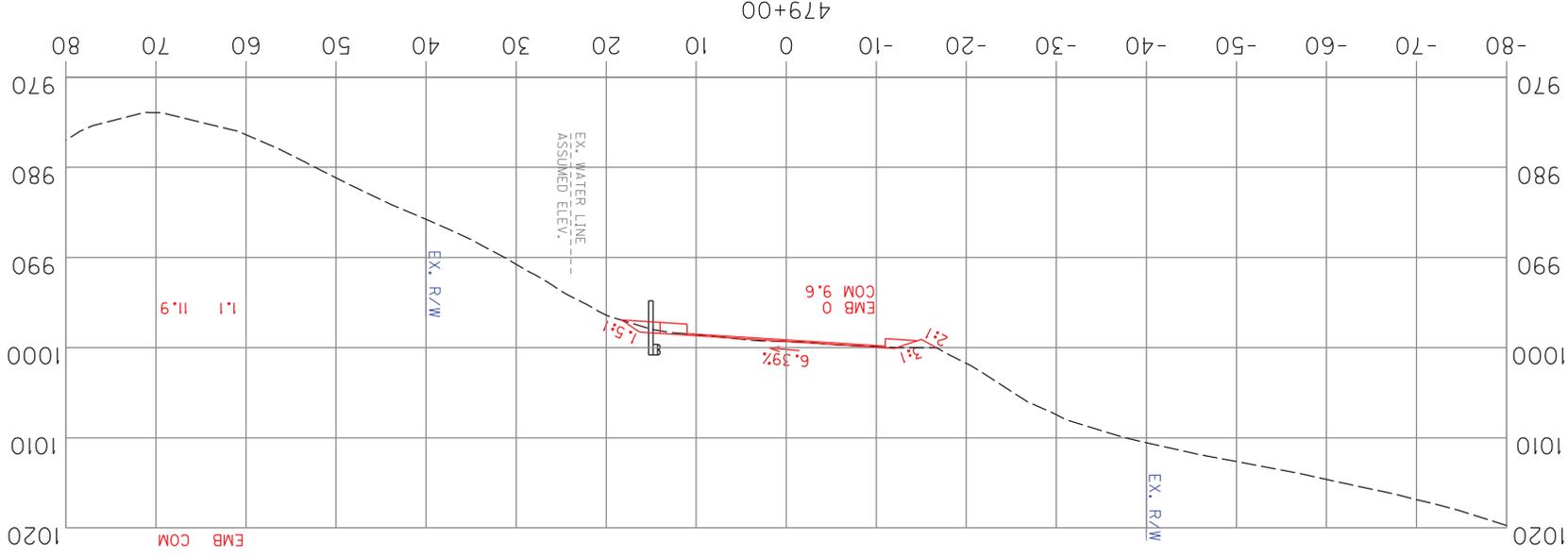
COUNTY OF	PULASKI	8-9007.00	3
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 478+00 TO STA. 478+50

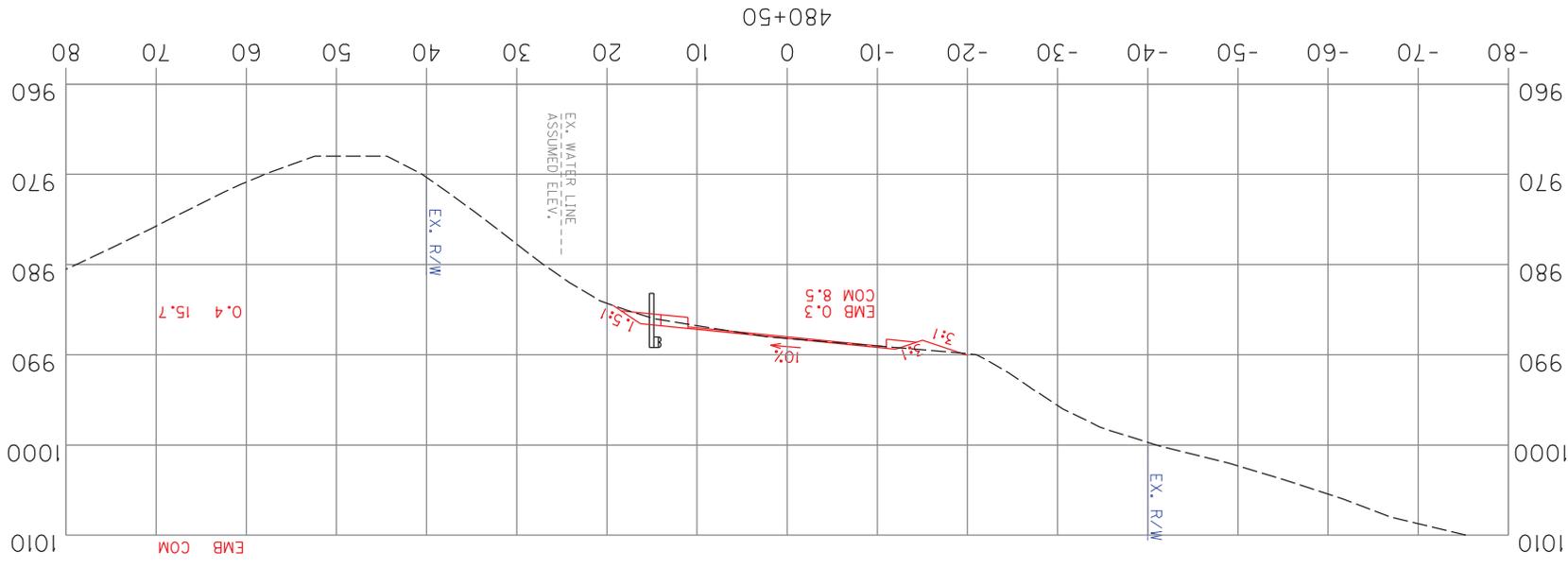
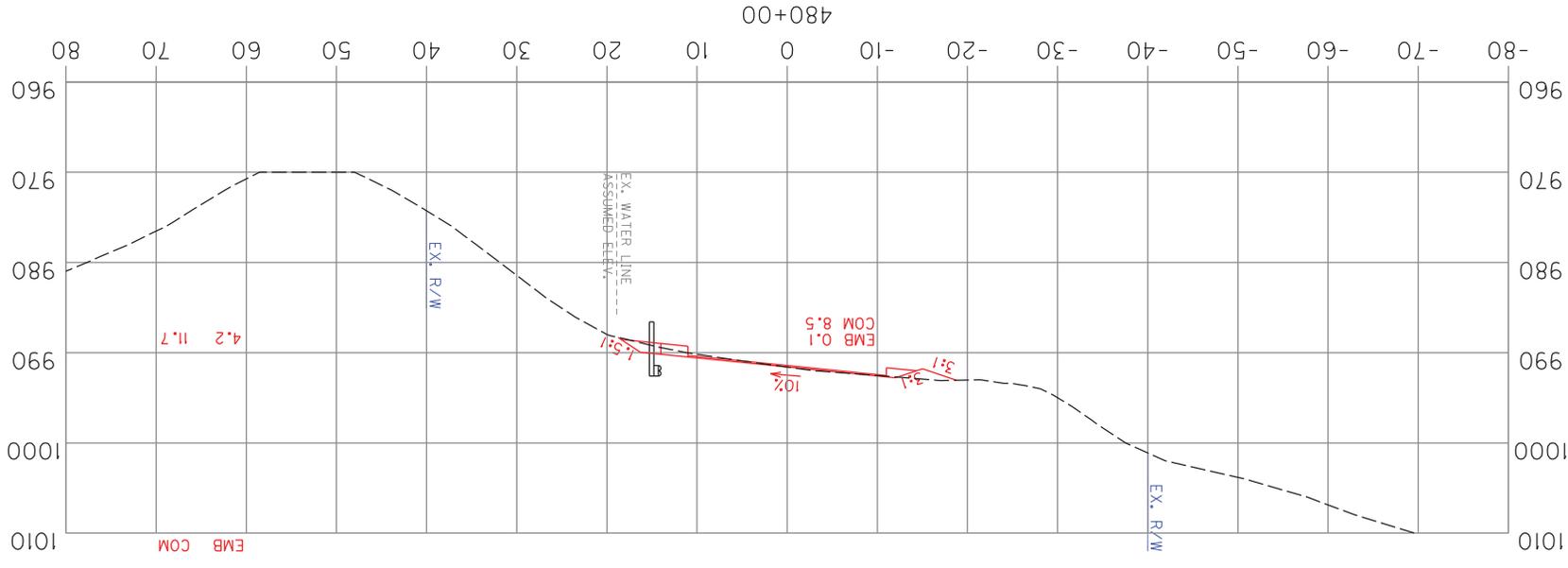
COUNTRY OF	PULASKI	8-9007.00	4
ITEM NO.			
SHEET NO.			



SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 479+00 TO STA. 479+50

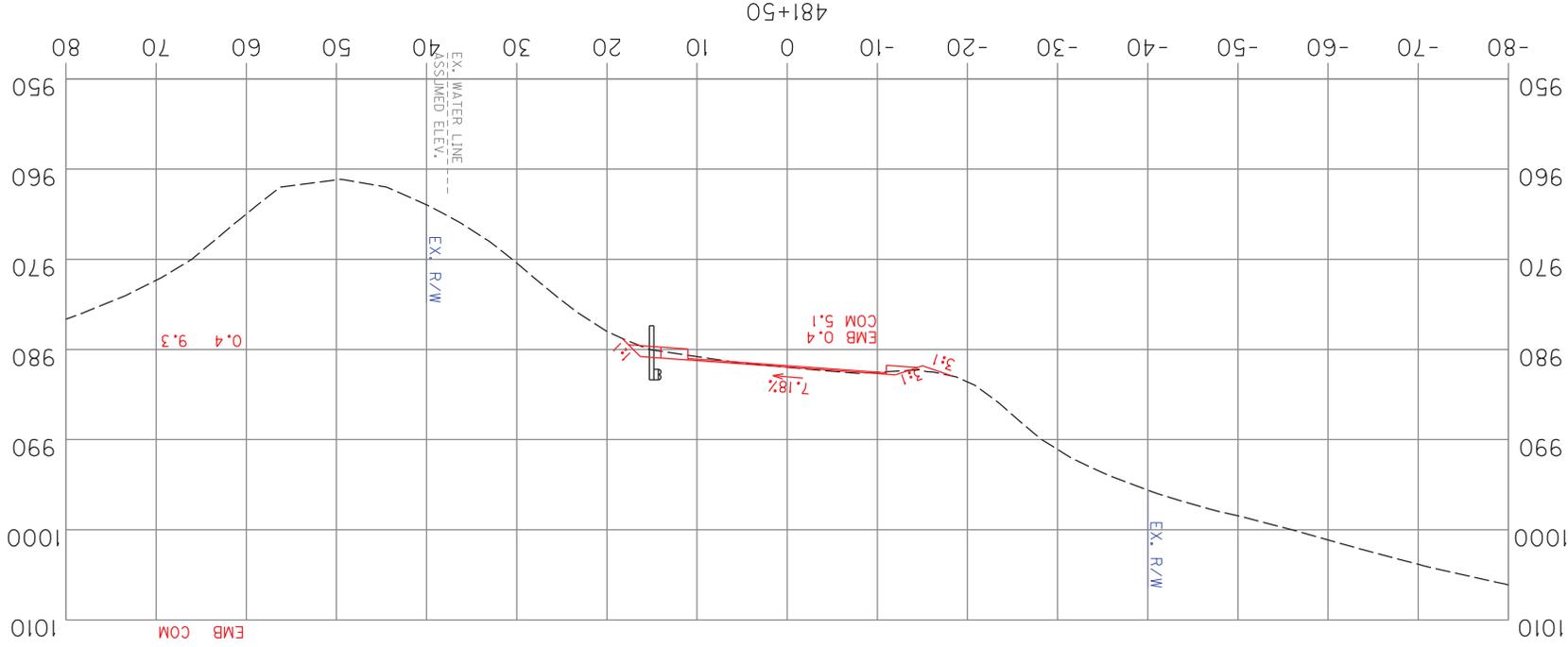
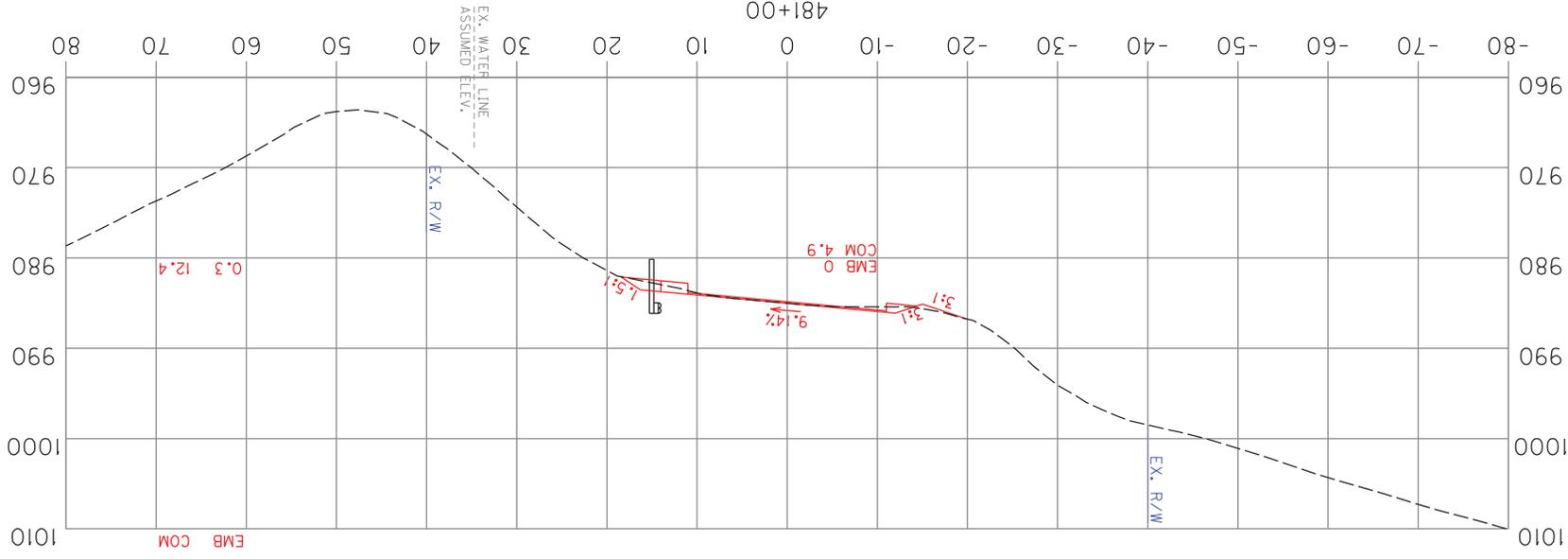
COUNTRY OF	PULASKI	8-9007.00	5
ITEM NO.			SHEET NO.



SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 480+00 TO STA. 480+50

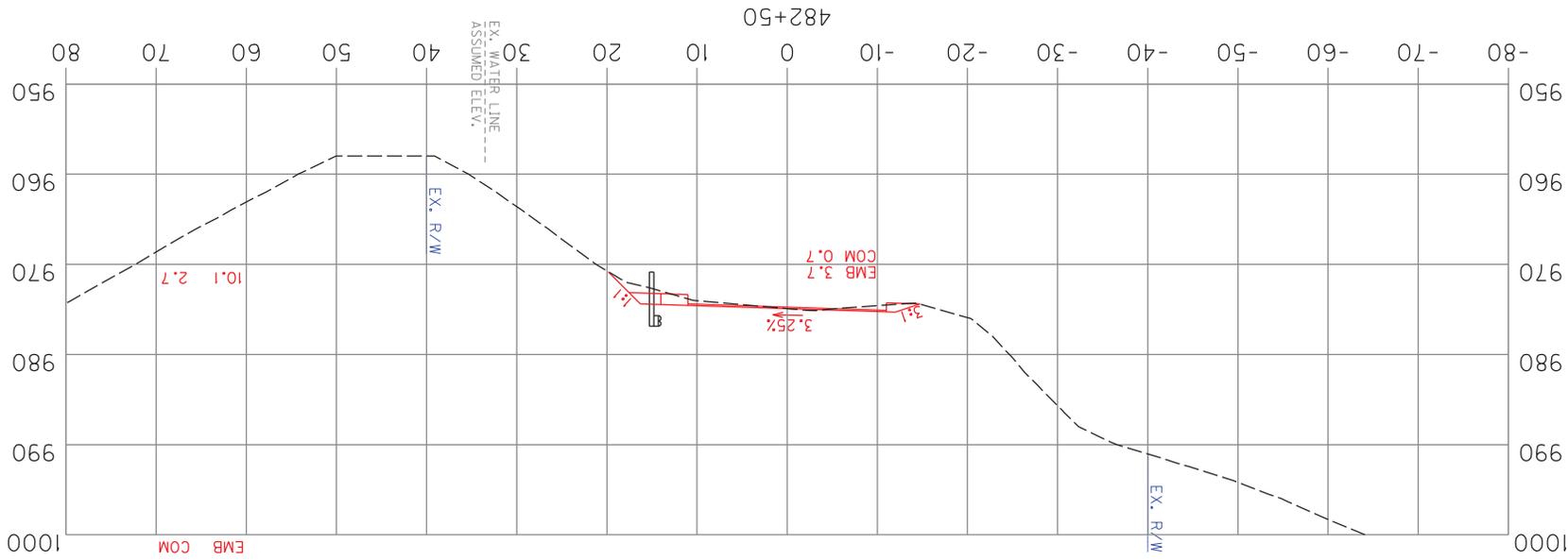
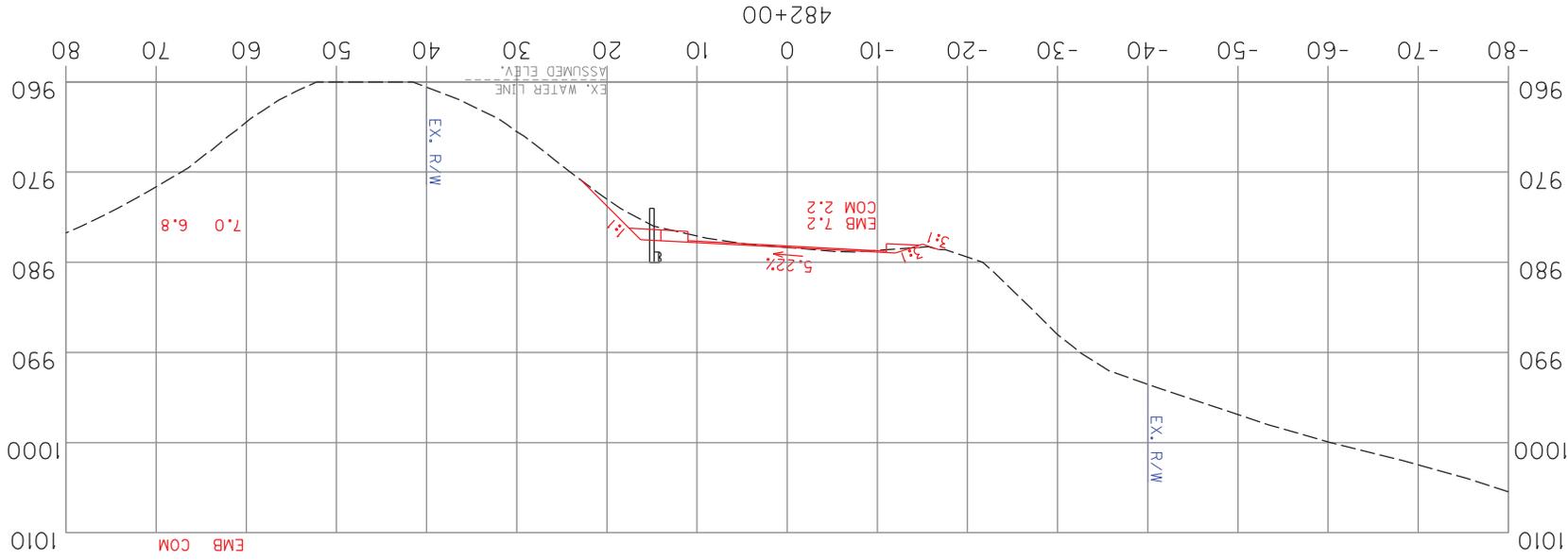
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	6
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SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 481+00 TO STA. 481+50

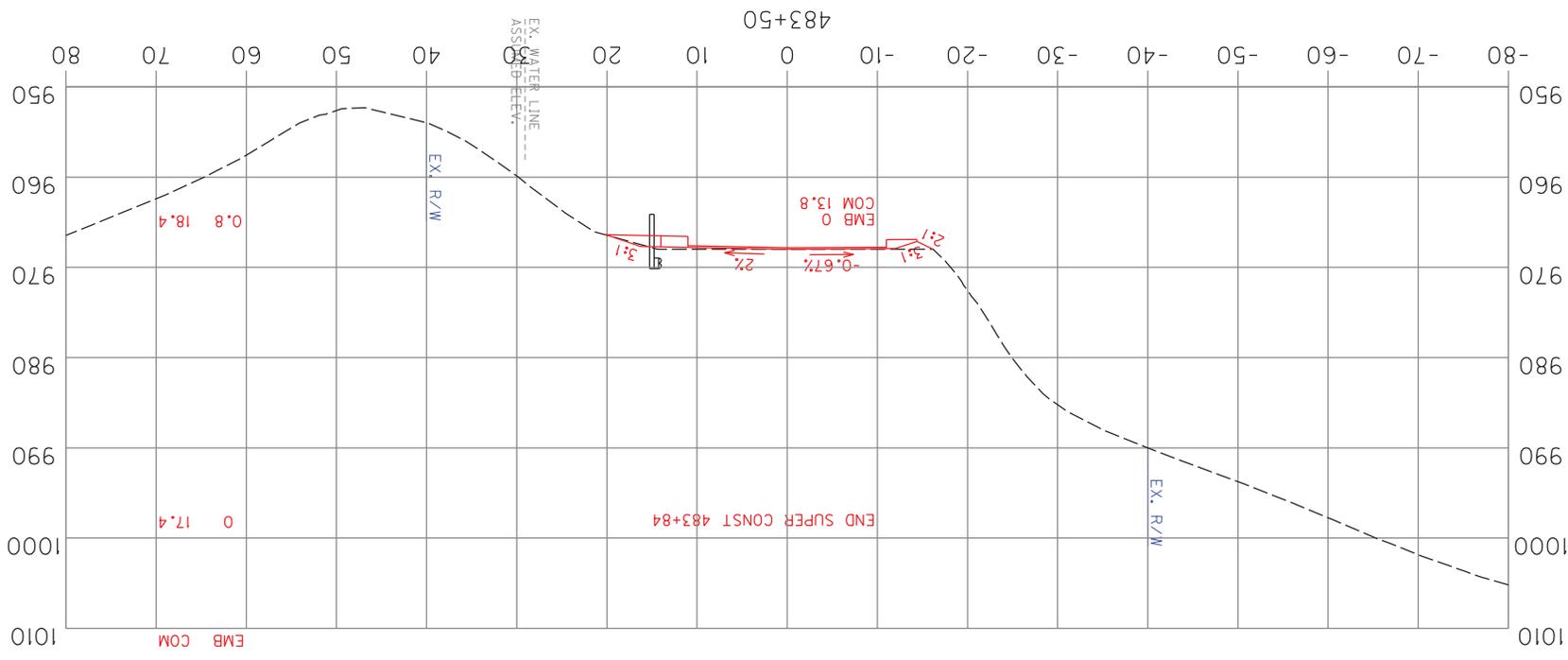
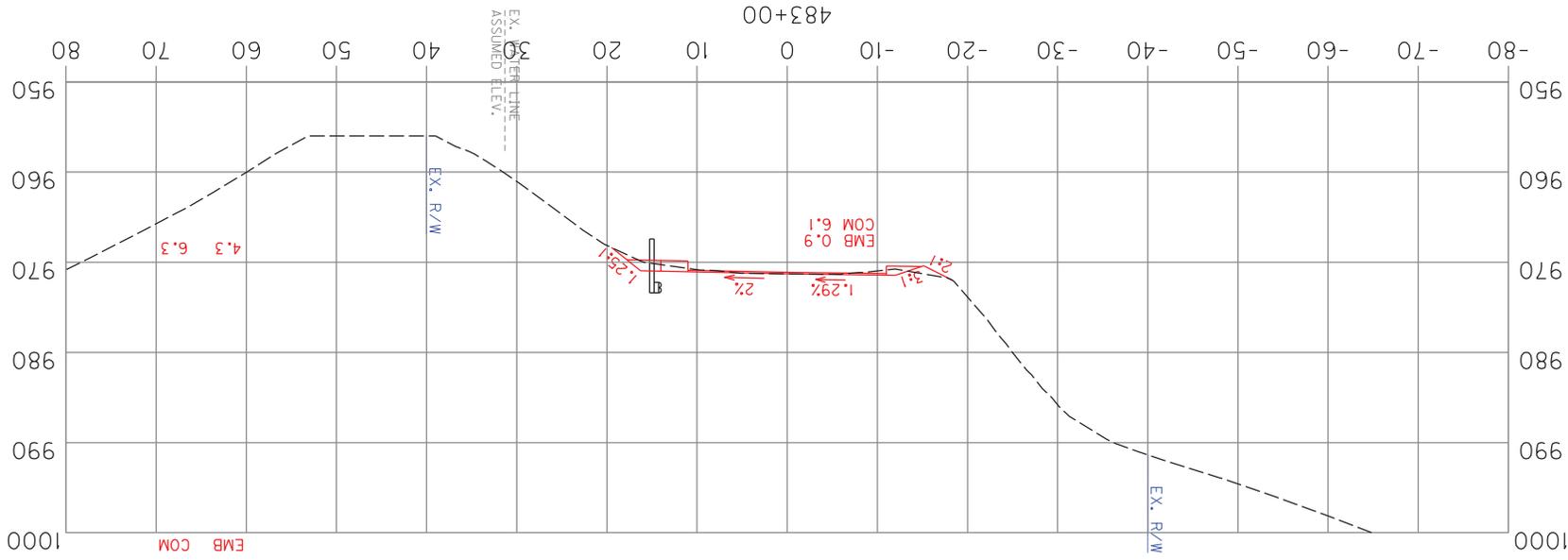
COUNTRY OF	PULASKI	8-9007.00	7
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 30' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 482+00 TO STA. 482+50

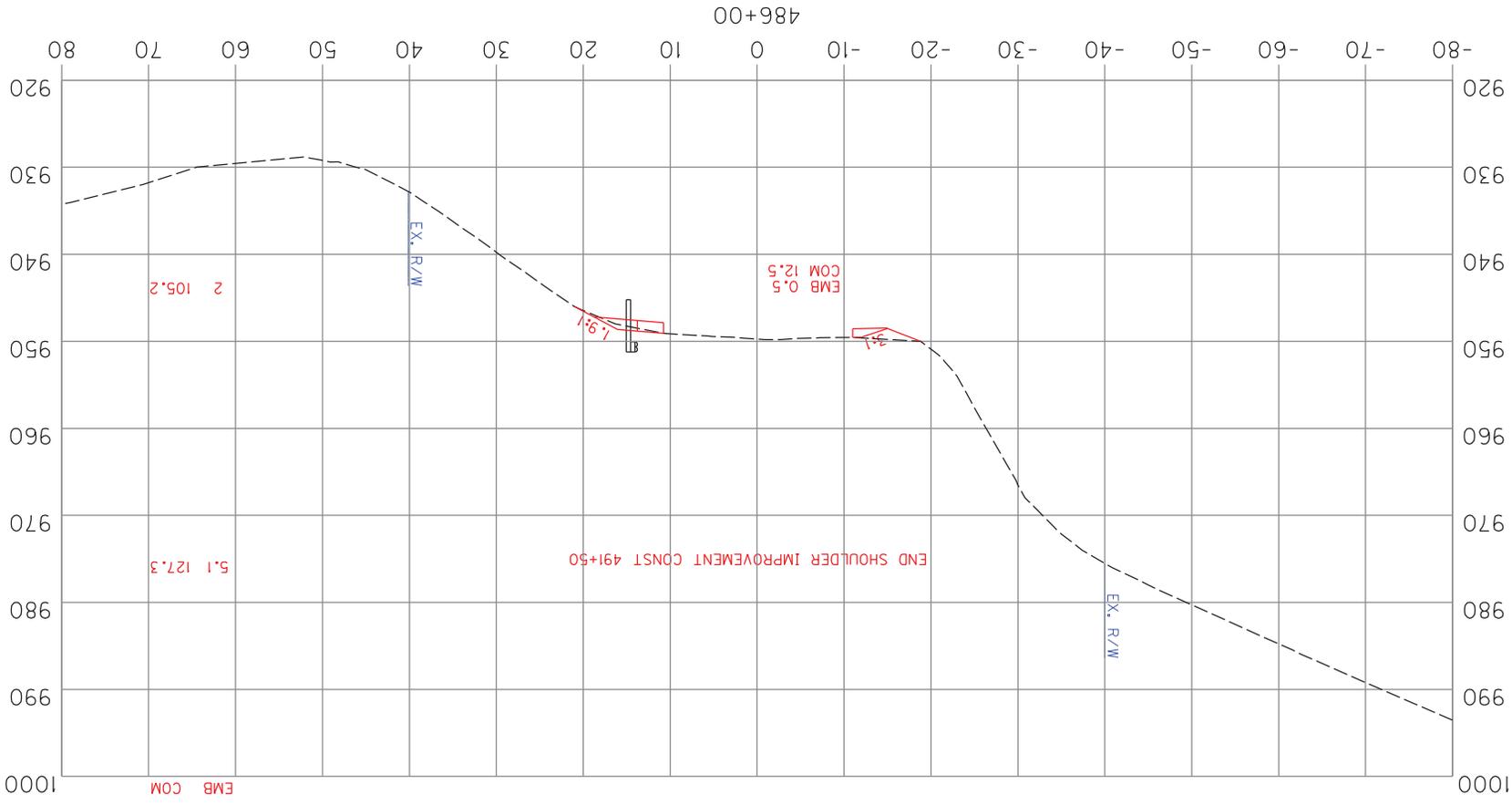
COUNTRY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	8
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SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 483+00 TO STA. 483+50

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	9
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SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 7
MP 10.0 TO MP 10.2
STA. 486+00

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	10
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SUPERELEVATION IMPROVEMENT

SUPERELEVATION TRANSITION

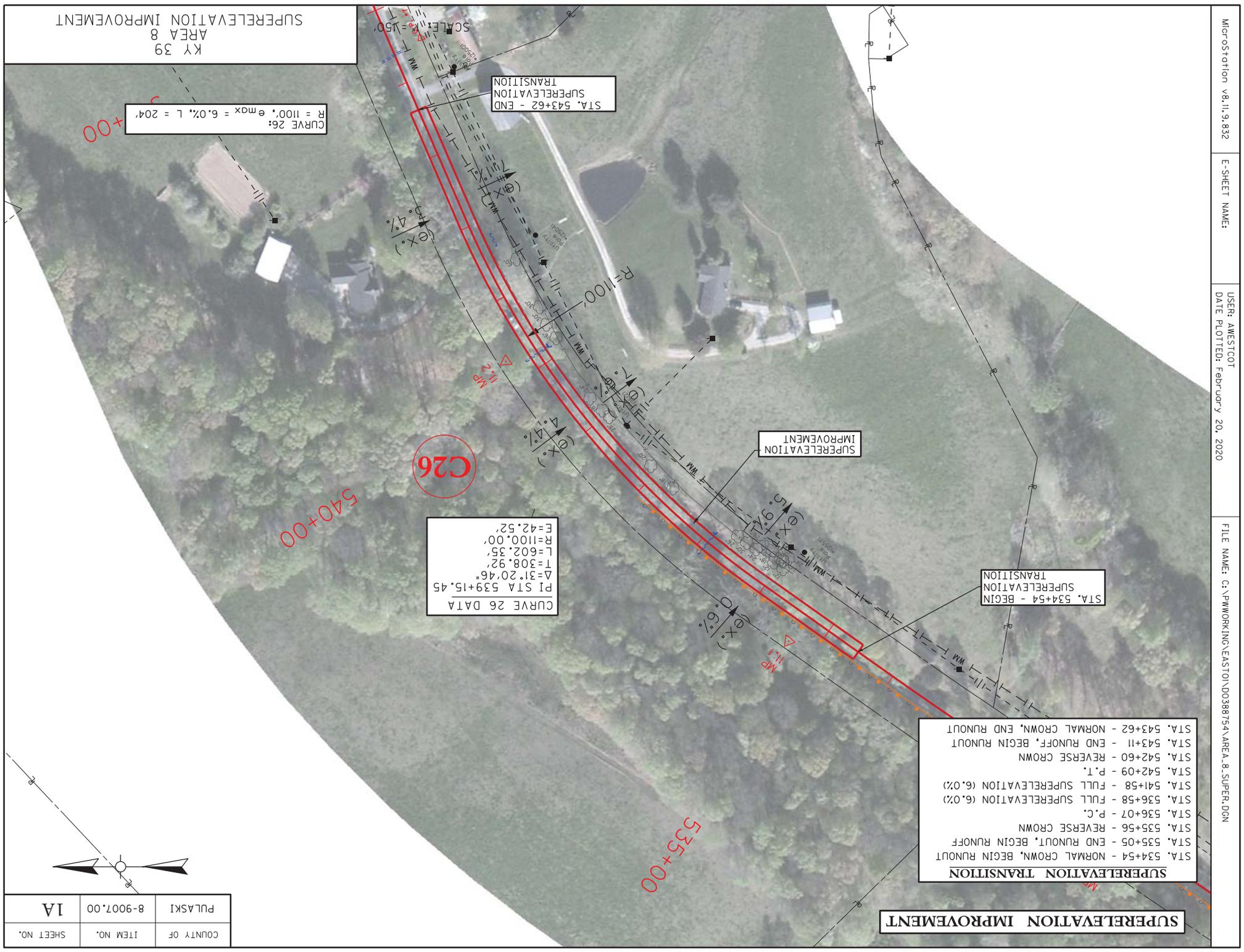
STA. 534+54 - NORMAL CROWN, BEGIN RUNOUT
STA. 535+05 - END RUNOUT, BEGIN RUNOFF
STA. 535+56 - REVERSE CROWN
STA. 536+07 - P.C.
STA. 536+58 - FULL SUPERELEVATION (6.0%)
STA. 541+58 - FULL SUPERELEVATION (6.0%)
STA. 542+09 - P.T.
STA. 542+60 - REVERSE CROWN
STA. 543+11 - END RUNOFF, BEGIN RUNOUT
STA. 543+62 - NORMAL CROWN, END RUNOUT

CURVE 26 DATA

PI STA 539+15.45
Δ=31°20'46"
T=308.92'
L=602.35'
R=1100.00'
E=42.52'

CURVE 26:
R = 1100', e_{max} = 6.0%, L = 204'

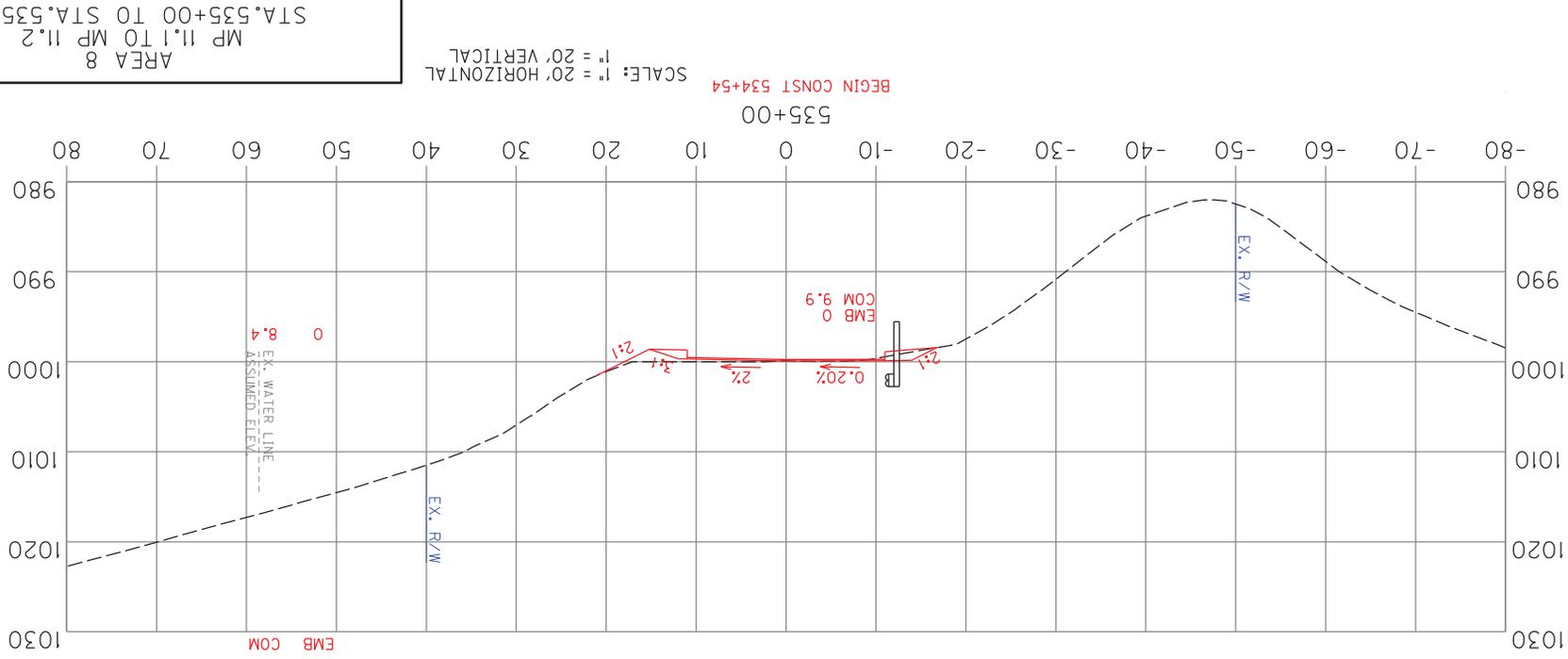
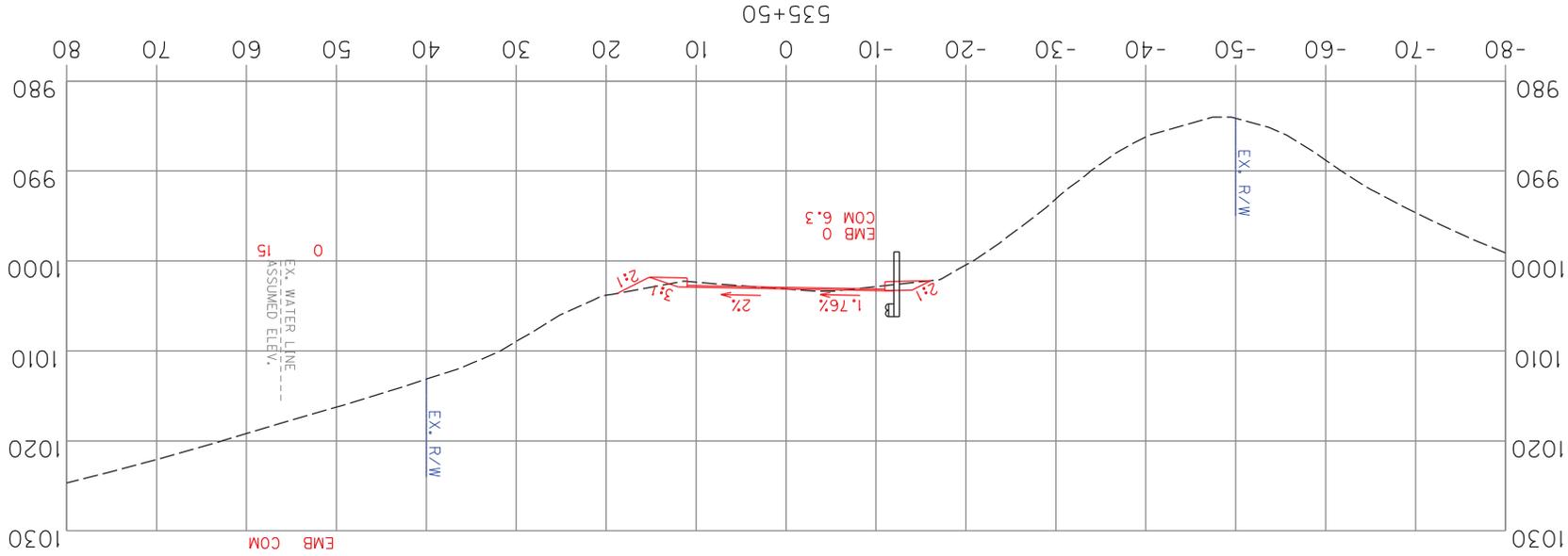
KY 39
AREA 8
SUPERELEVATION IMPROVEMENT



COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	1A
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NOTES:
 1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY ENGINEER.
 SEE SPECIAL NOTES APPLICABLE TO THE PROJECT.
 2. EMBANKMENT BENCHING NOT SHOWN, SEE TYPICAL SECTION.

3. CROSS SECTION QUANTITIES ARE APPROXIMATE - BASED ONLY ON LIDAR DATA.



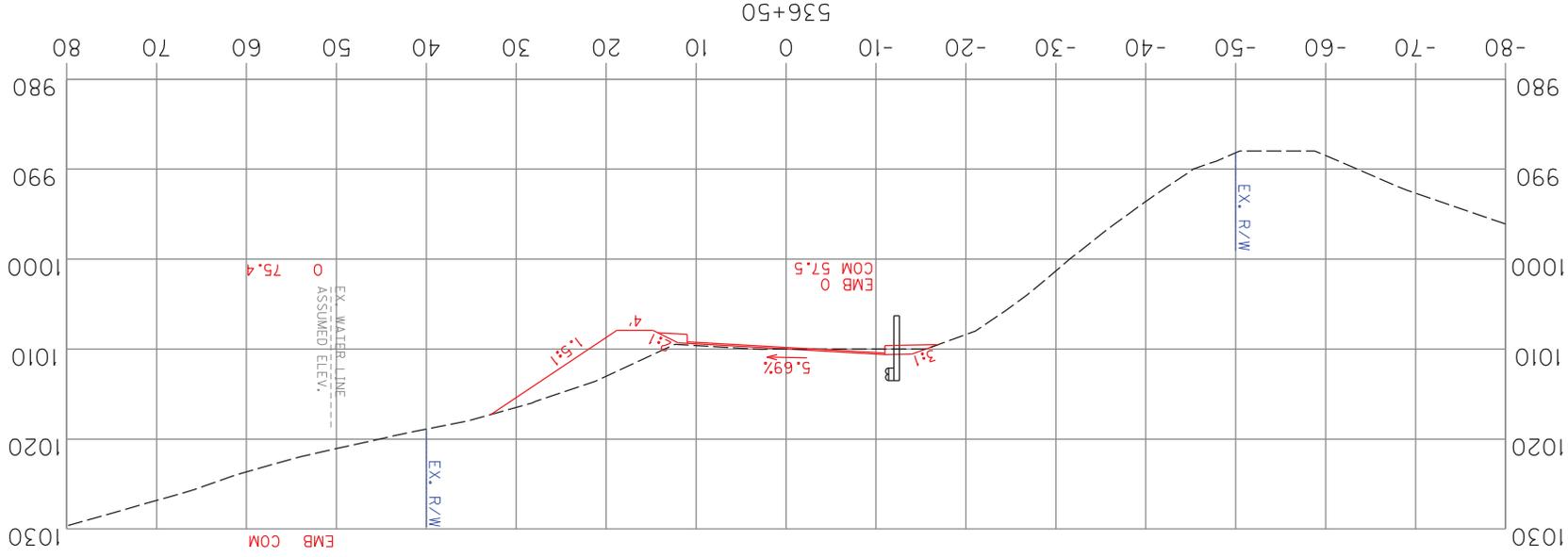
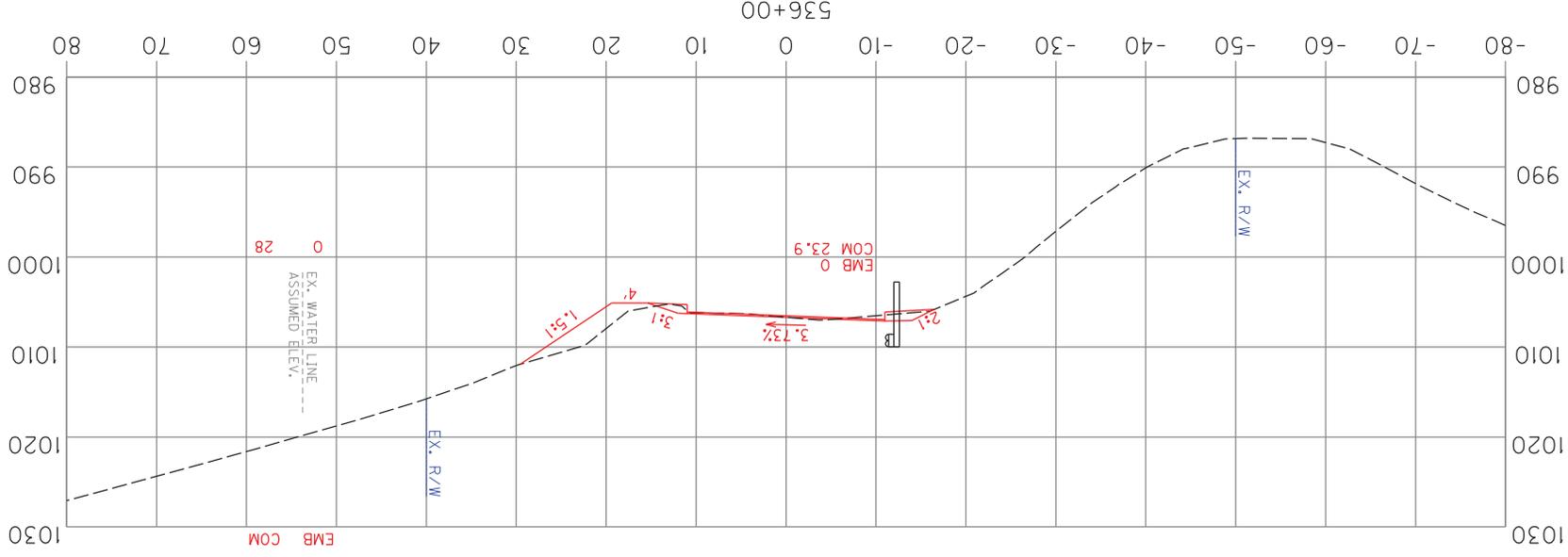
SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

BEGIN CONST 534+54

535+00

AREA 8
 MP 11.1 TO MP 11.2
 STA. 535+00 TO STA. 535+50

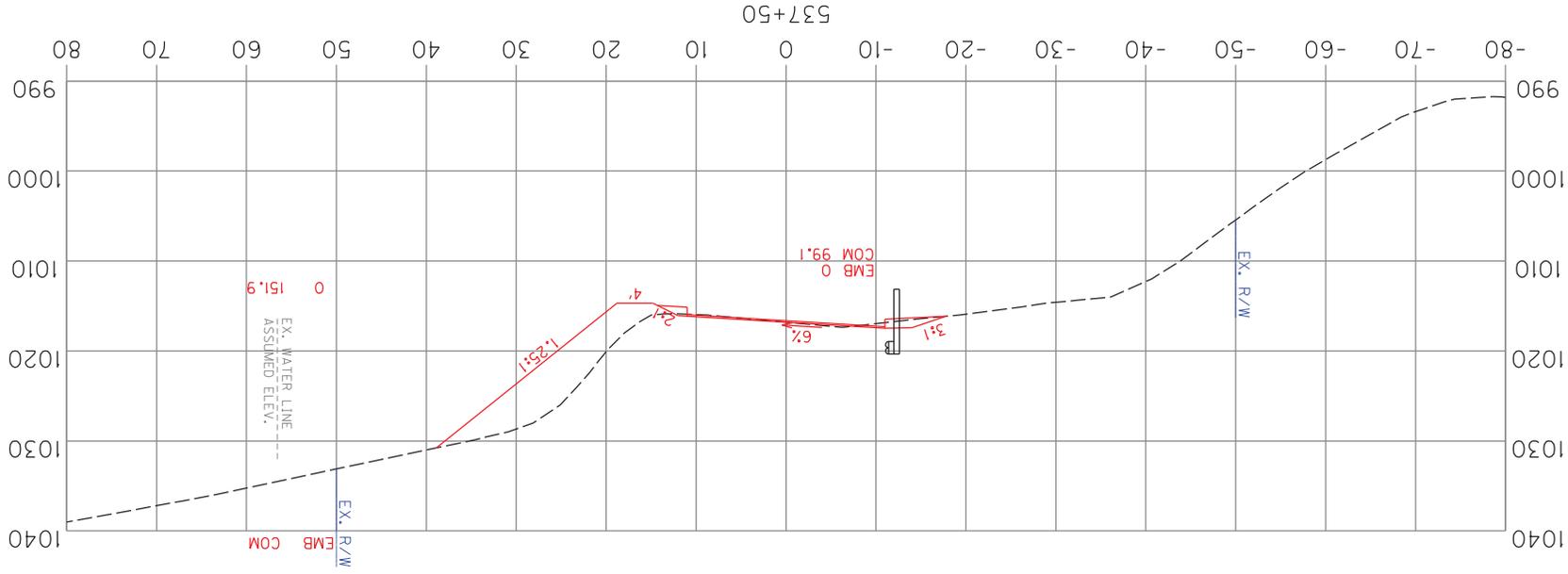
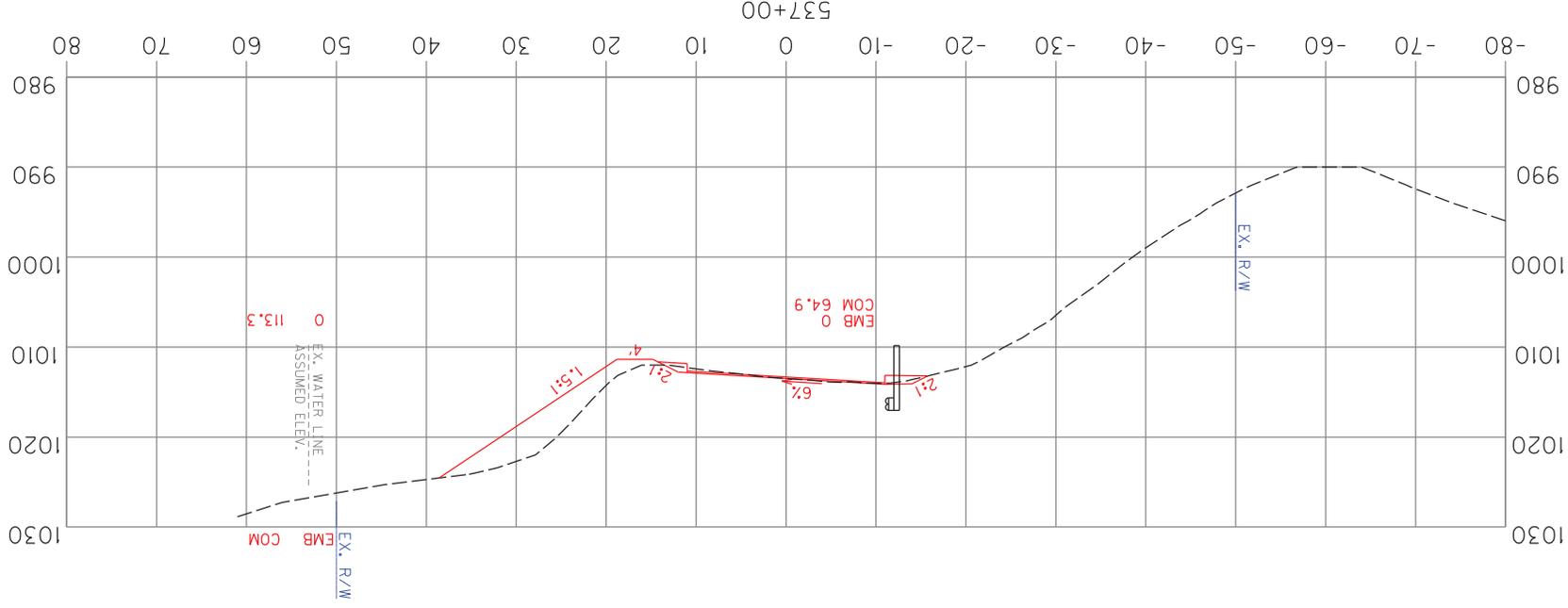
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	2
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SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 536+00 TO STA. 536+50

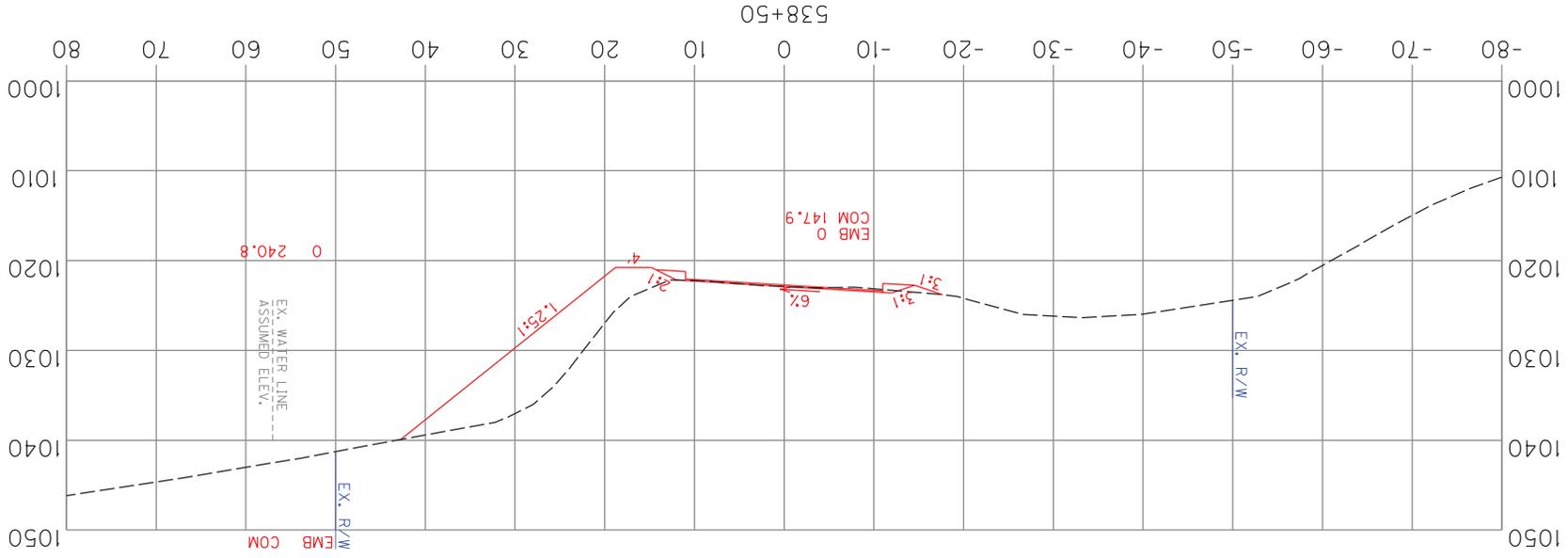
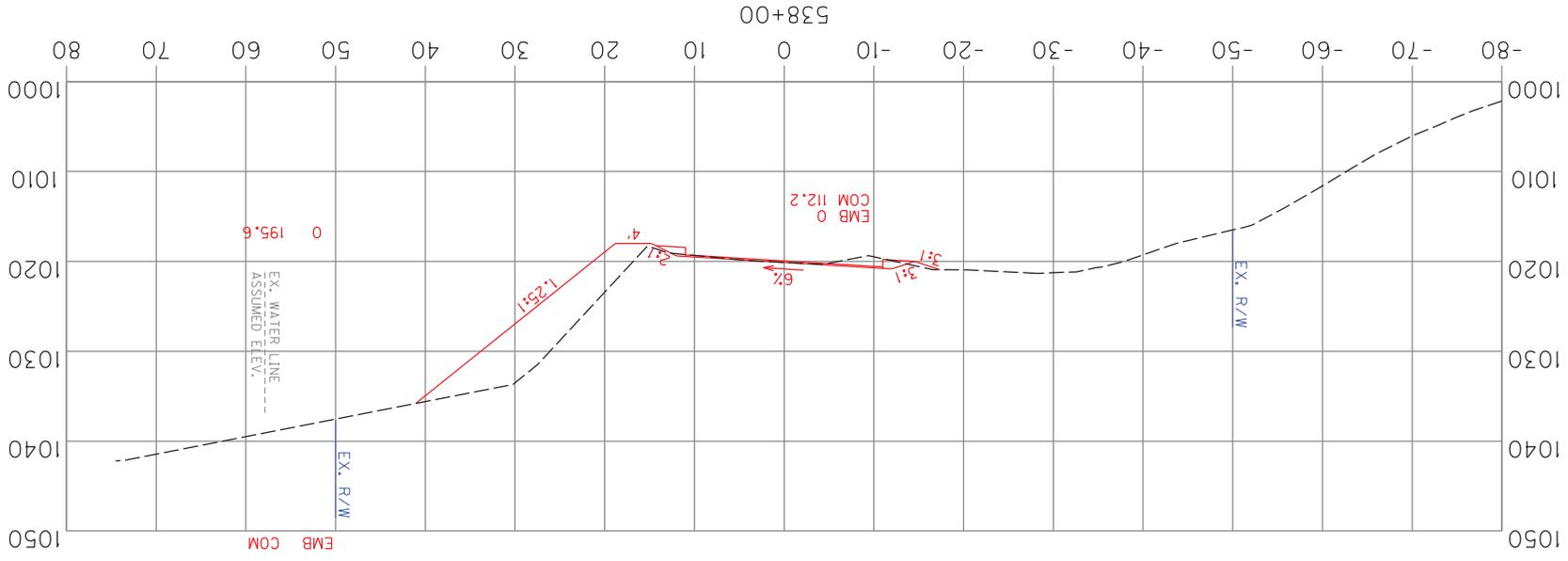
COUNTY OF	PULASKI	8-9007.00	3
ITEM NO.			
SHEET NO.			



SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 537+00 TO STA. 537+50

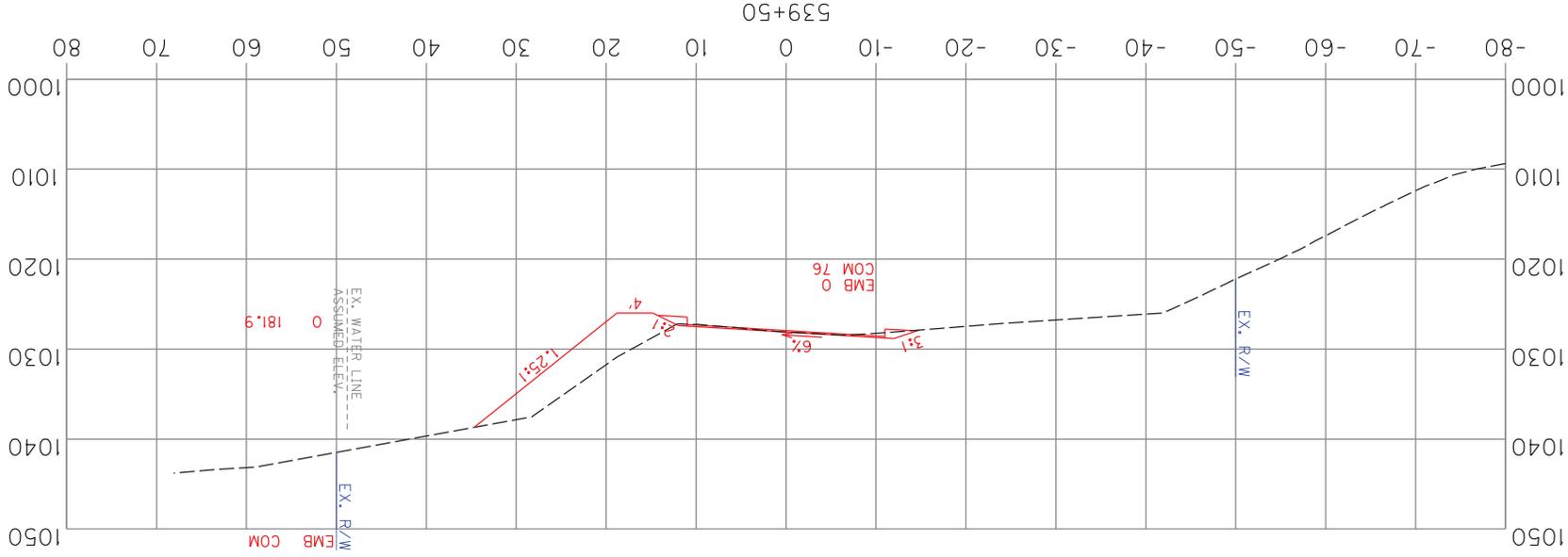
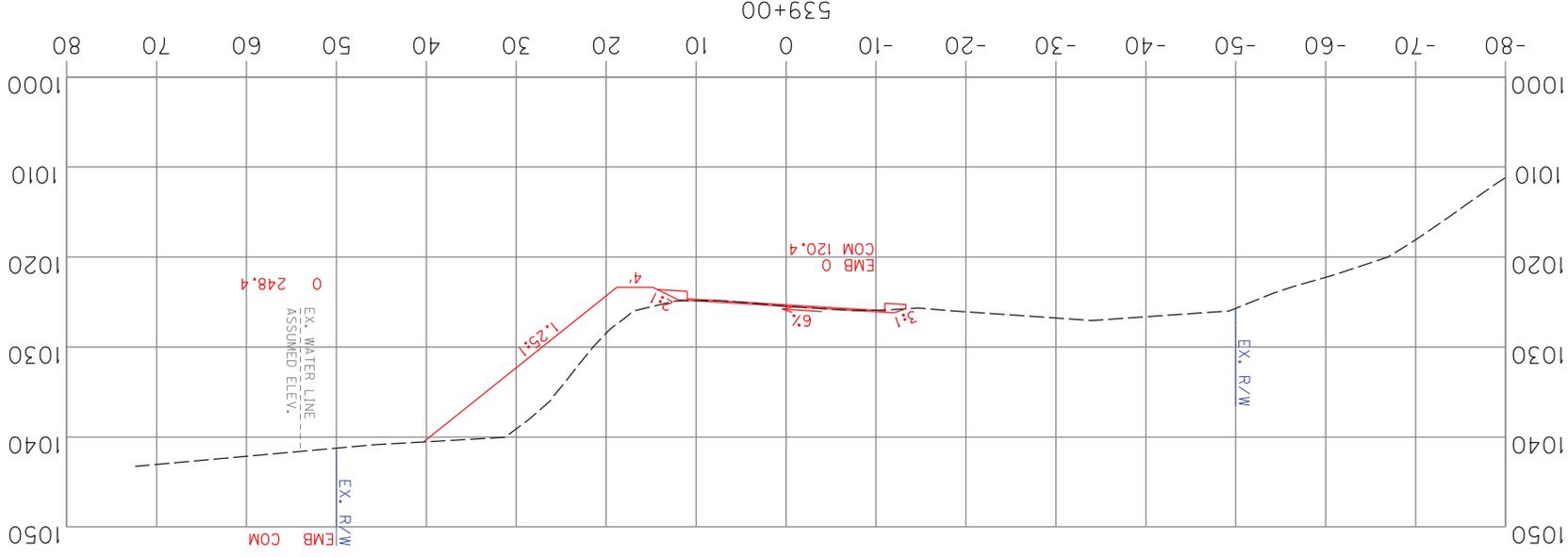
COUNTRY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	4
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 538+00 TO STA. 538+50

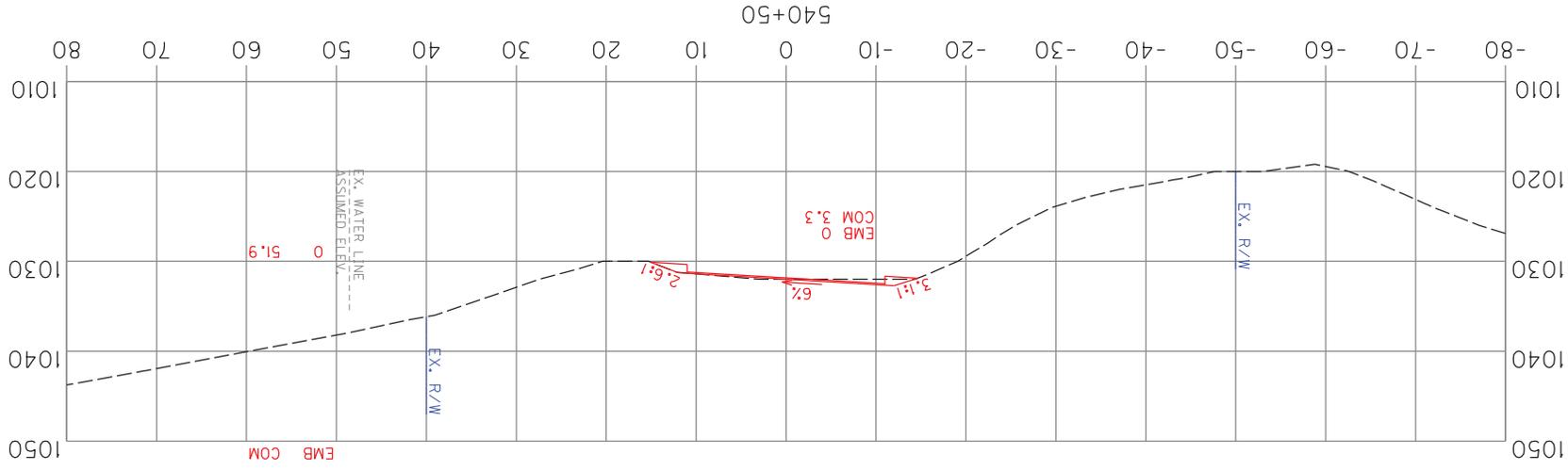
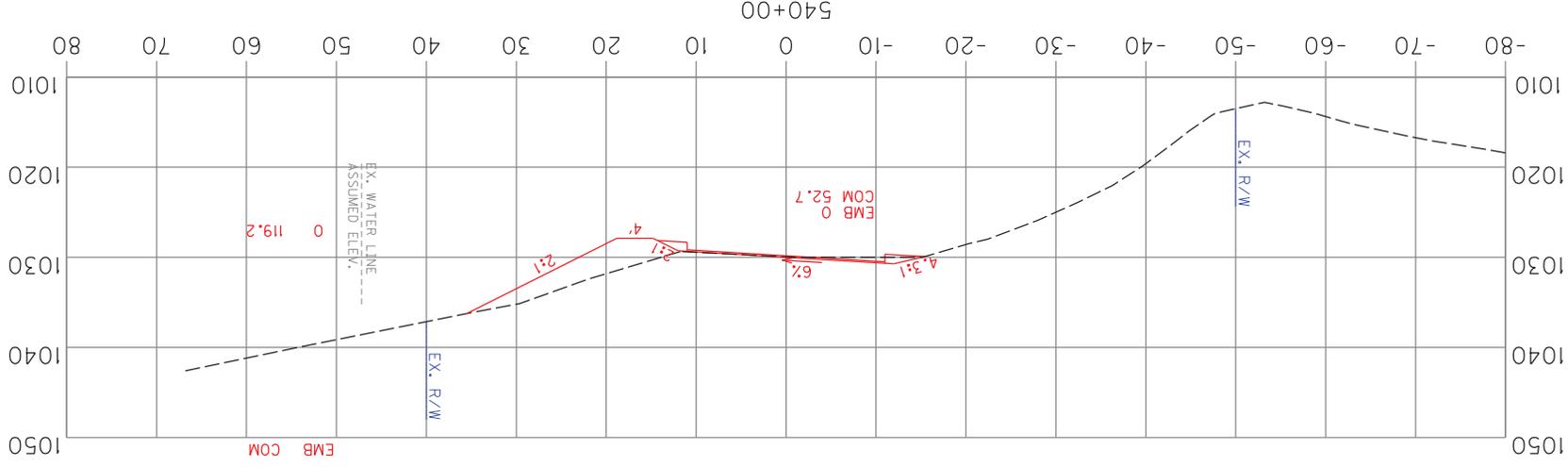
COUNTRY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	5
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SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 539+00 TO STA. 539+50

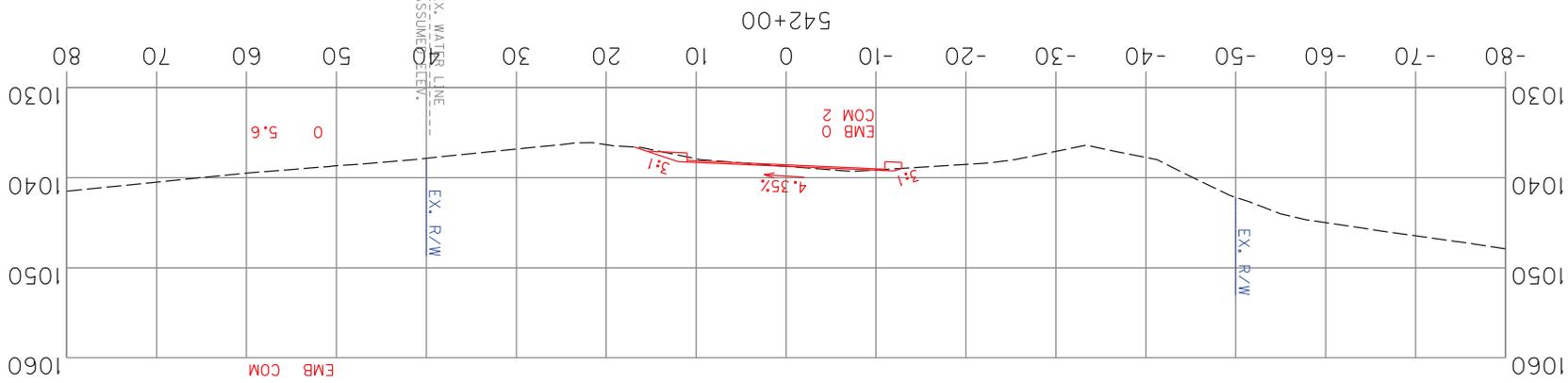
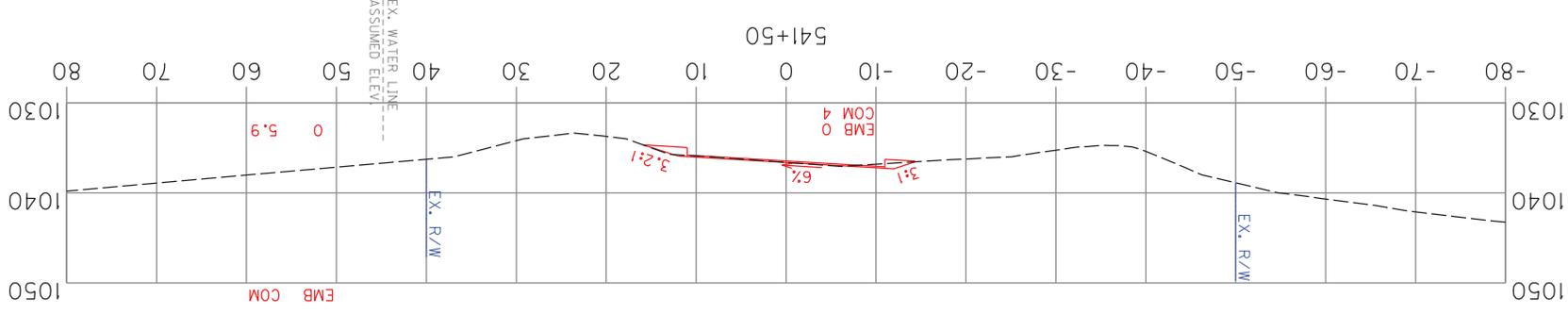
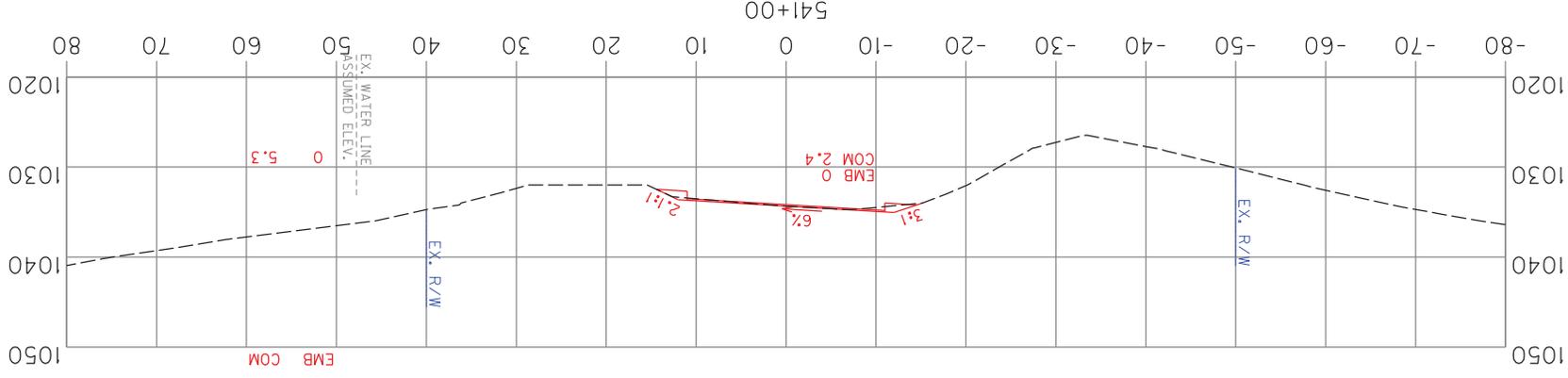
COUNTY OF	PULASKI	8-9007.00	6
ITEM NO.			SHEET NO.



SCALE: H = 20' HORIZONTAL
V = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 540+00 TO STA. 540+50

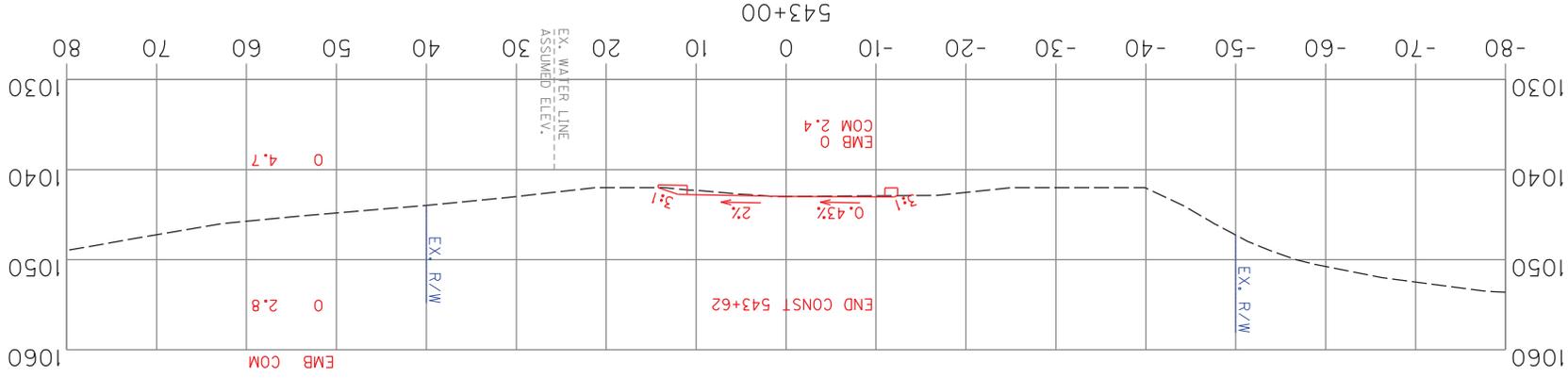
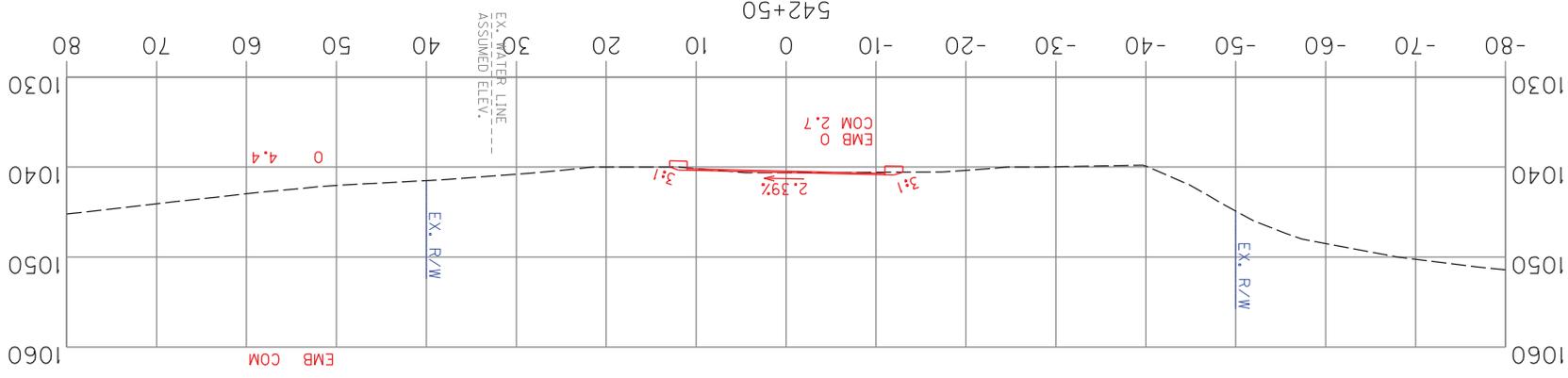
COUNTRY OF	PULASKI	8-9007.00	7
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

AREA 8
MP 11.1 TO MP 11.2
STA. 541+00 TO STA. 542+00

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	8
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

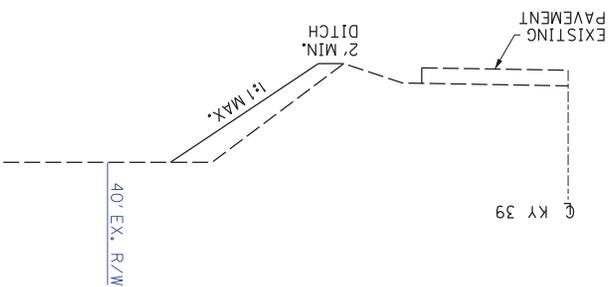
AREA 8
MP 11.1 TO MP 11.2
STA. 542+50 TO STA. 543+00

COUNTY OF	PULASKI	8-9007.00	9
ITEM NO.			SHEET NO.

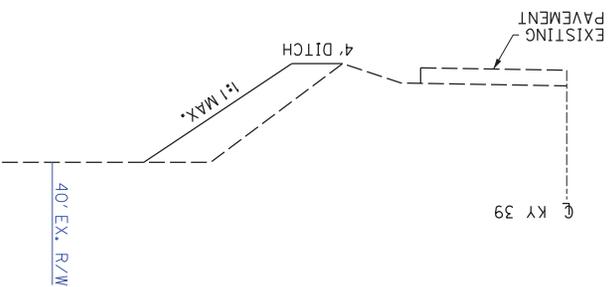
1. CHANNEL LINING CLASS II
WILL BE USED TO LINE THE DITCH AS
WELL AS FOR SLOPE PROTECTION
WHEN SLOPES ARE GREATER THAN 2:1.

NOTES:

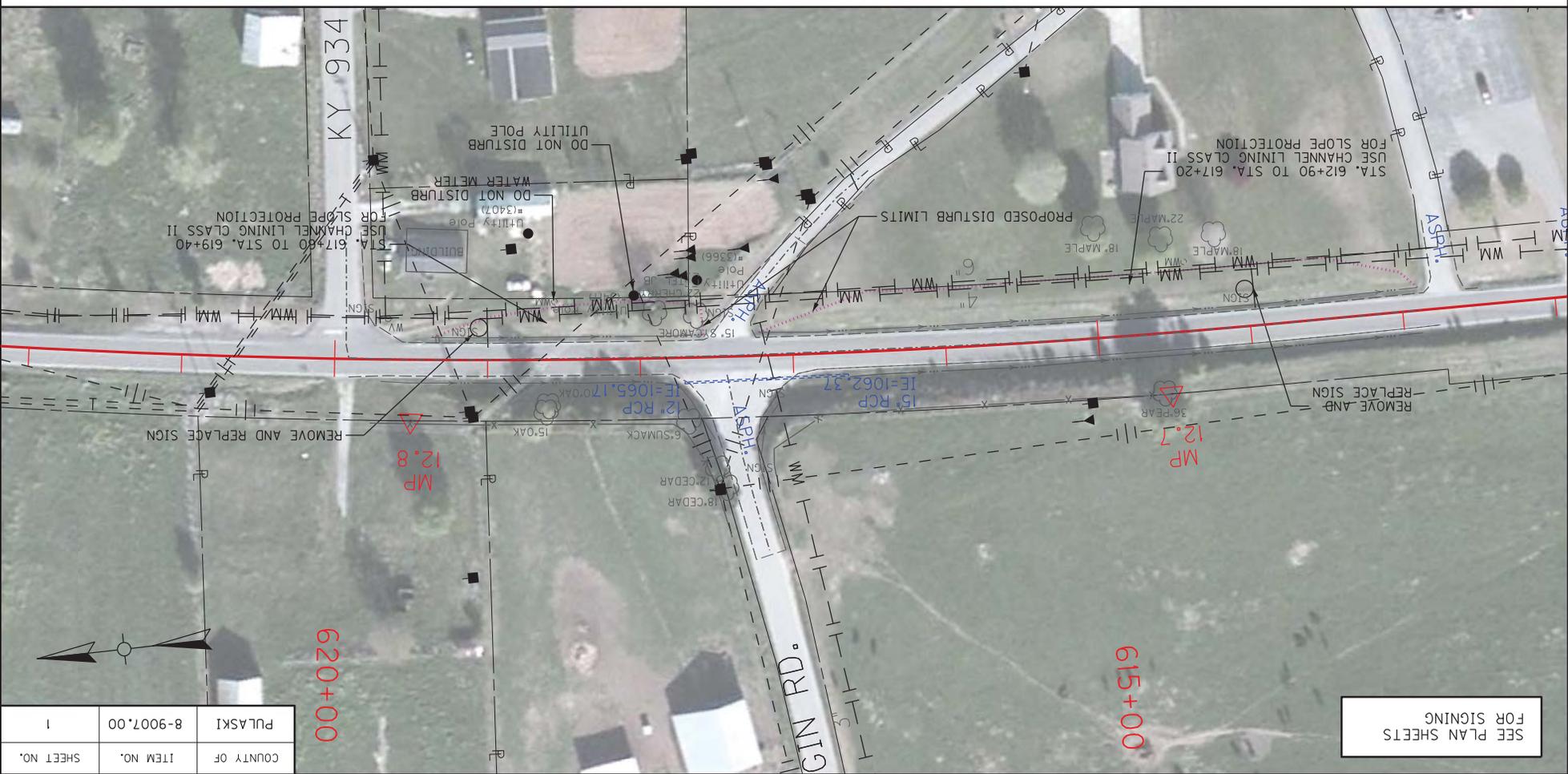
STA. 612+90 TO STA. 617+20



STA. 617+60 TO STA. 619+40



TYPICAL SECTIONS



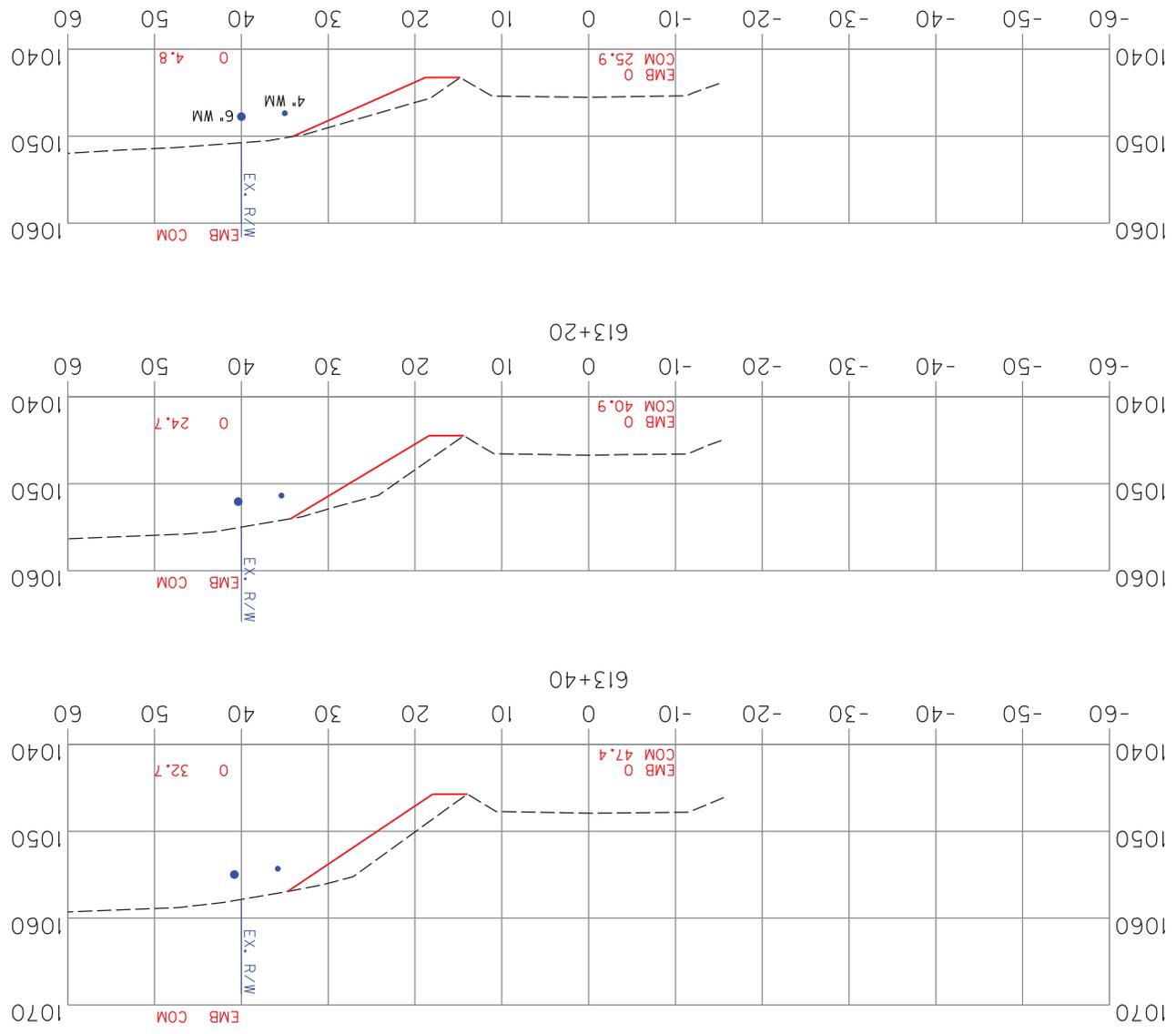
SEE PLAN SHEETS
FOR SIGNING

COUNTY OF	PULASKI
ITEM NO.	8-9007.00
SHEET NO.	1

AREA 10
MP 12.7 TO MP 12.8
STA. 615+00 TO STA. 620+00

SCALE: 1" = 100'

NOTES:
 1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY ENGINEER.
 SEE SPECIAL NOTES APPLICABLE TO THE PROJECT.
 2. CROSS SECTION QUANTITIES ARE APPROXIMATE - BASED ONLY ON LIDAR DATA.

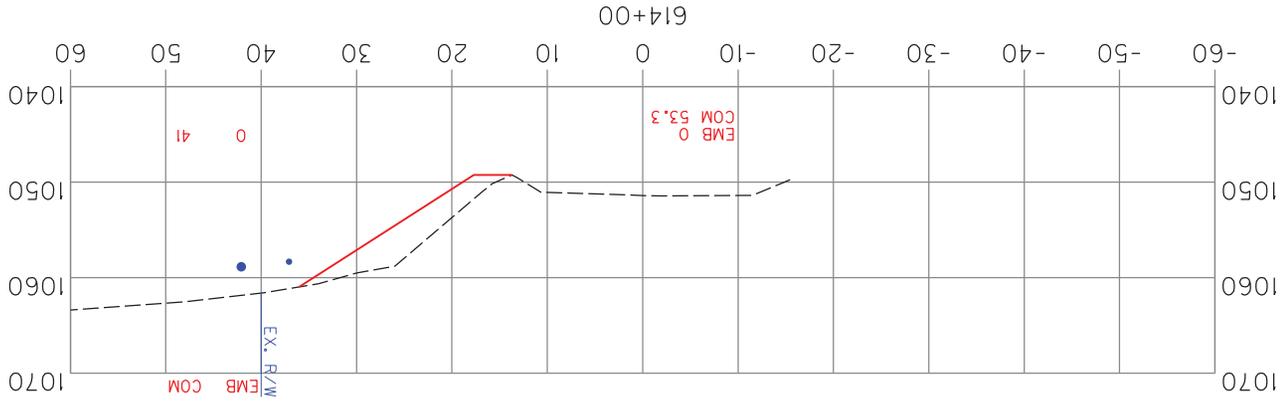
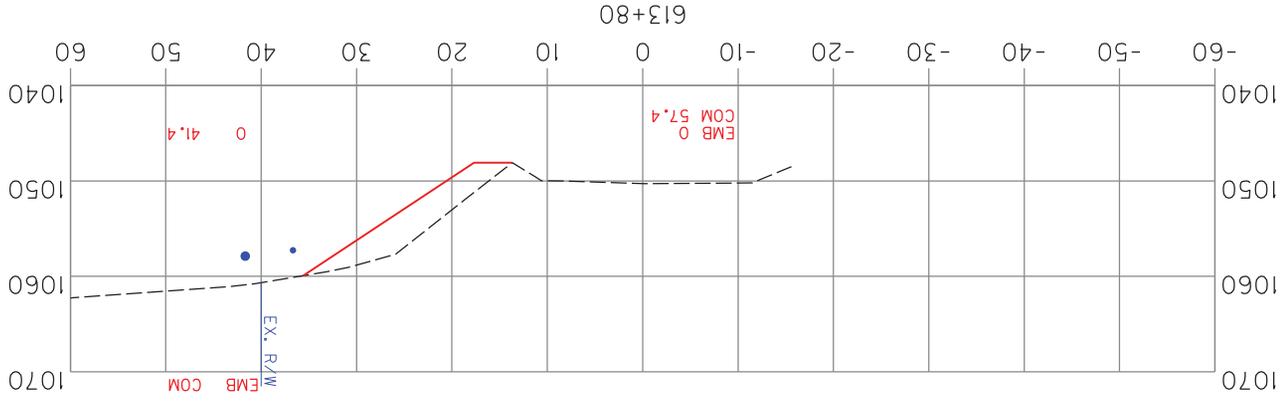
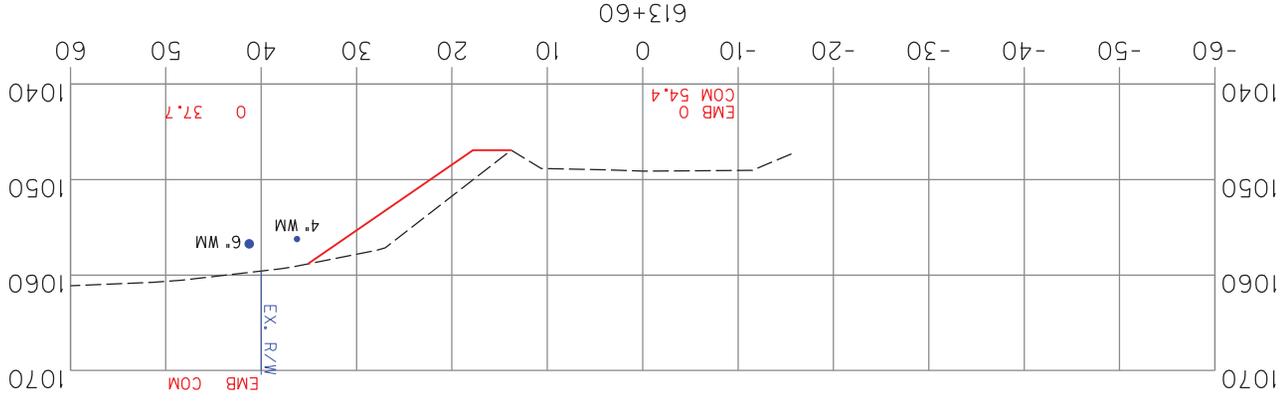


SCALE: 1" = 20' HORIZONTAL
 1" = 20' VERTICAL

STA. 613+00 TO STA. 613+40
 AREA 10
 KY 39

NOTE: CUT SLOPES VARY FROM 1:1 TO 3:1 TO MAINTAIN 2.5' MINIMUM COVER OVER THE WATERLINE.

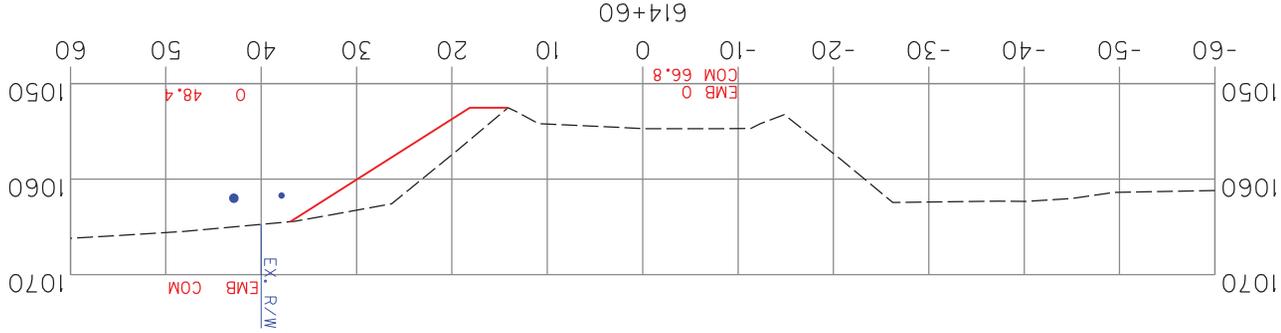
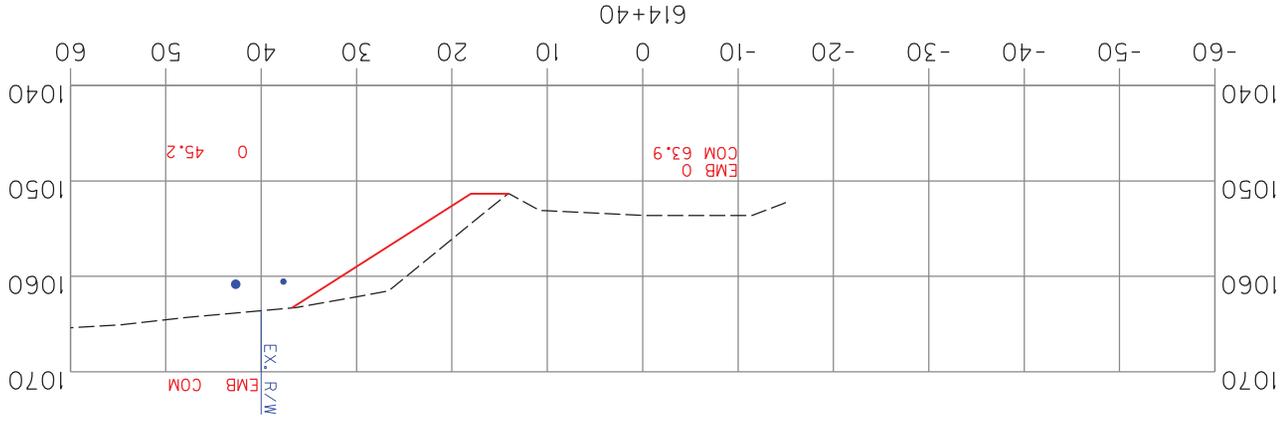
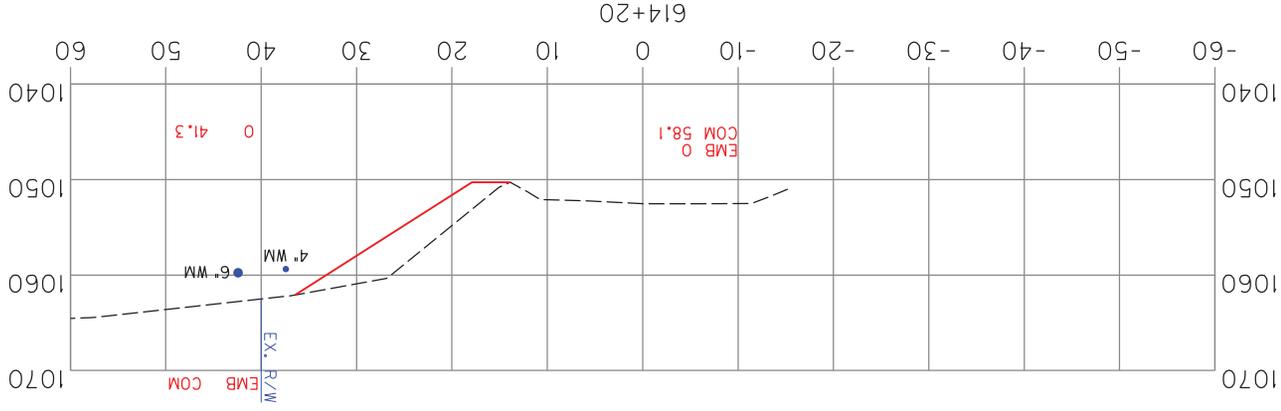
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	2
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

KY 39
AREA 10
STA. 613+60 TO STA. 614+00

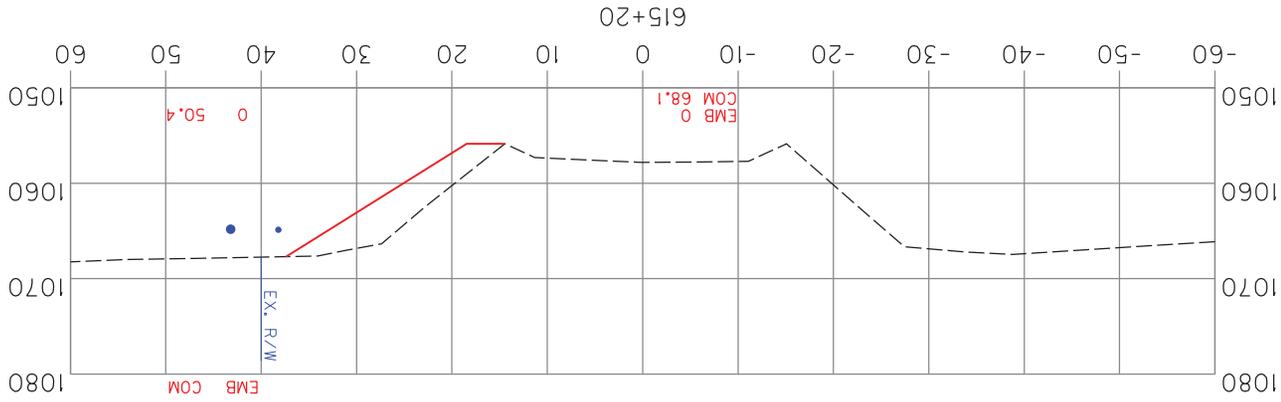
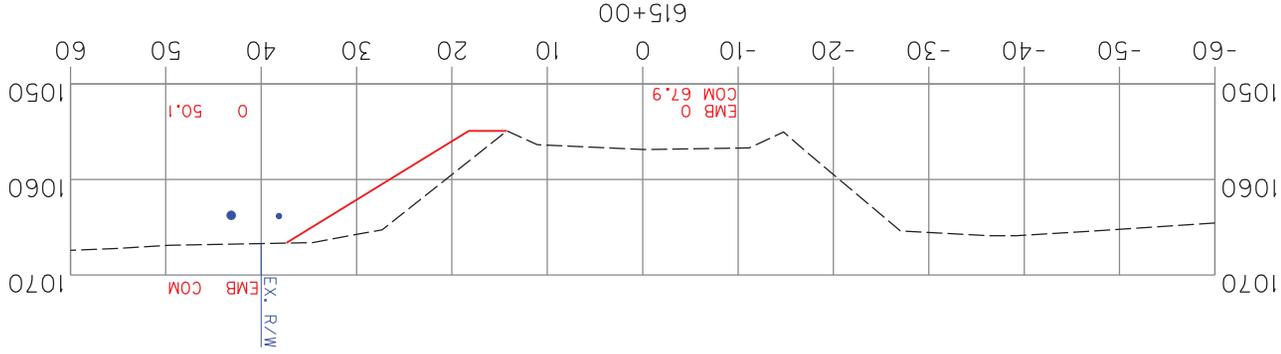
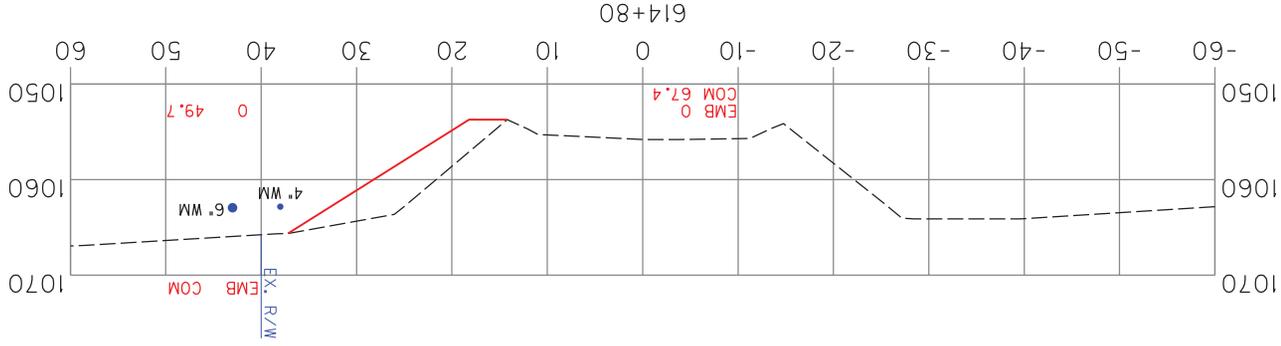
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	3
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

STA. 614+20 TO STA. 614+60
AREA 10
KY 39

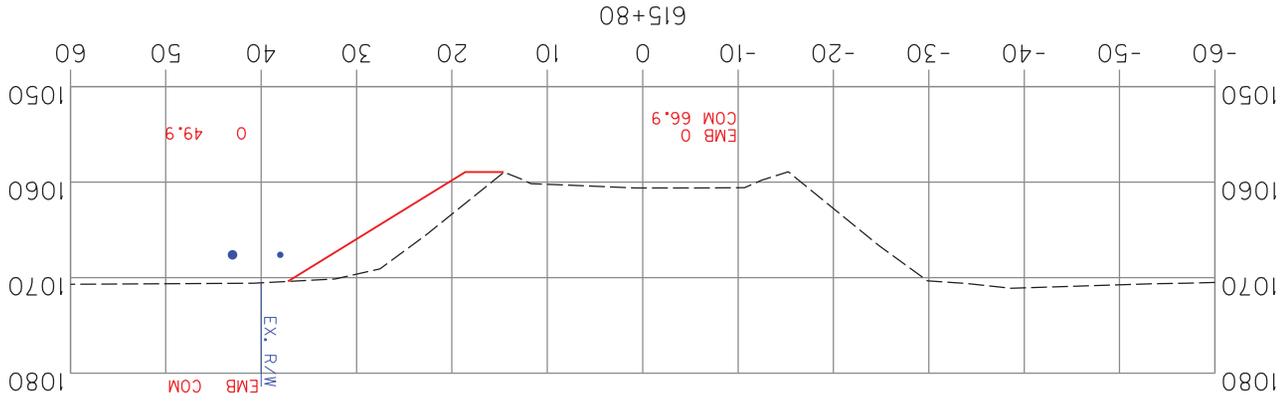
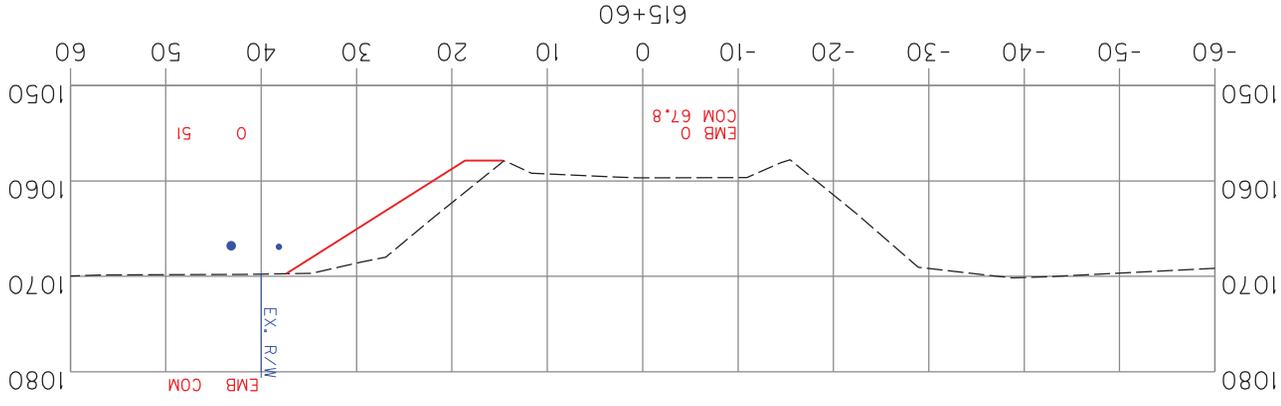
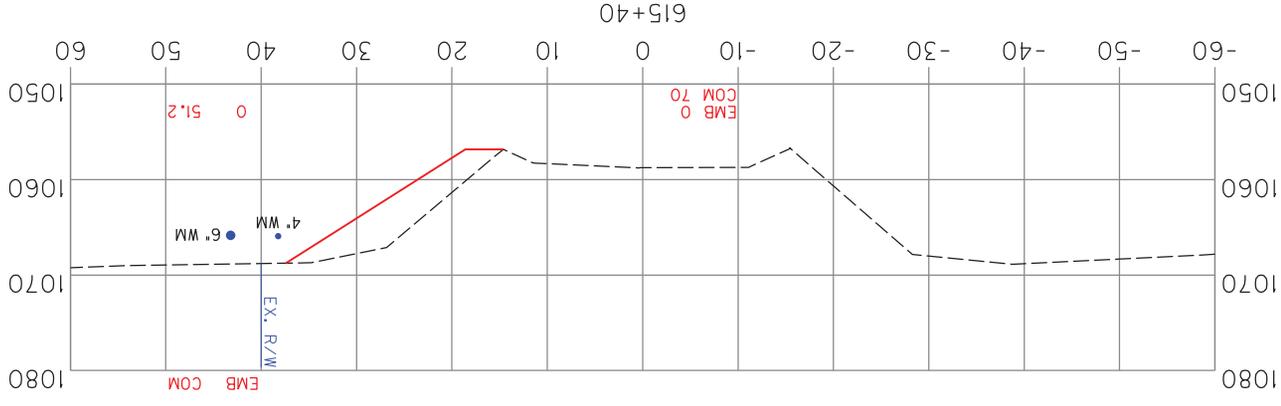
COUNTY OF	PULASKI	8-9007.00	4
ITEM NO.			
SHEET NO.			



SCALE: 1\" = 20' HORIZONTAL
1\" = 20' VERTICAL

STA. 614+80 TO STA. 615+20
AREA 10
KY 39

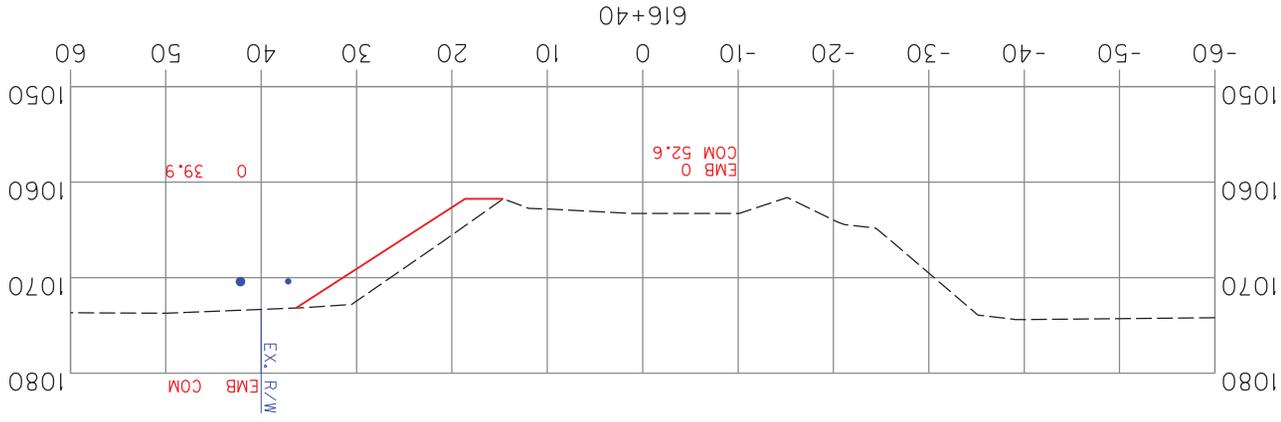
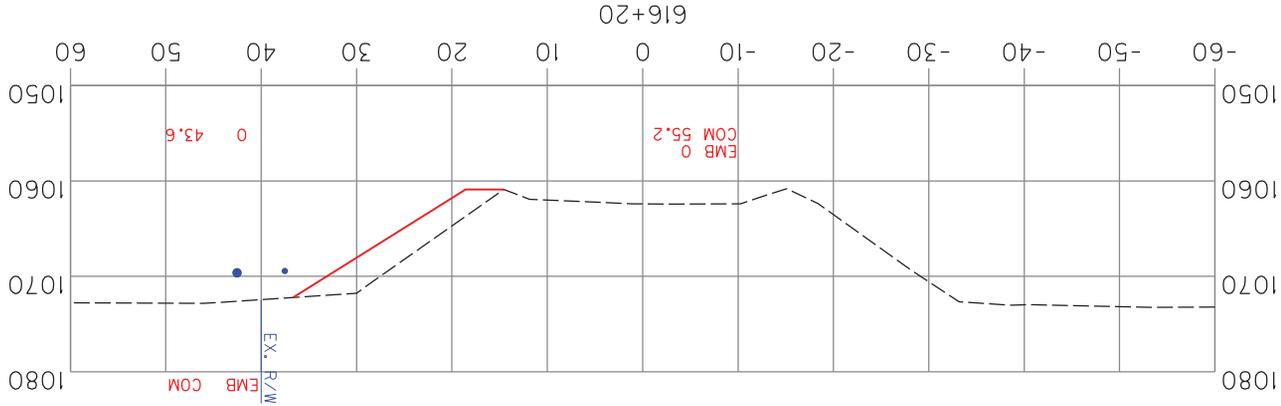
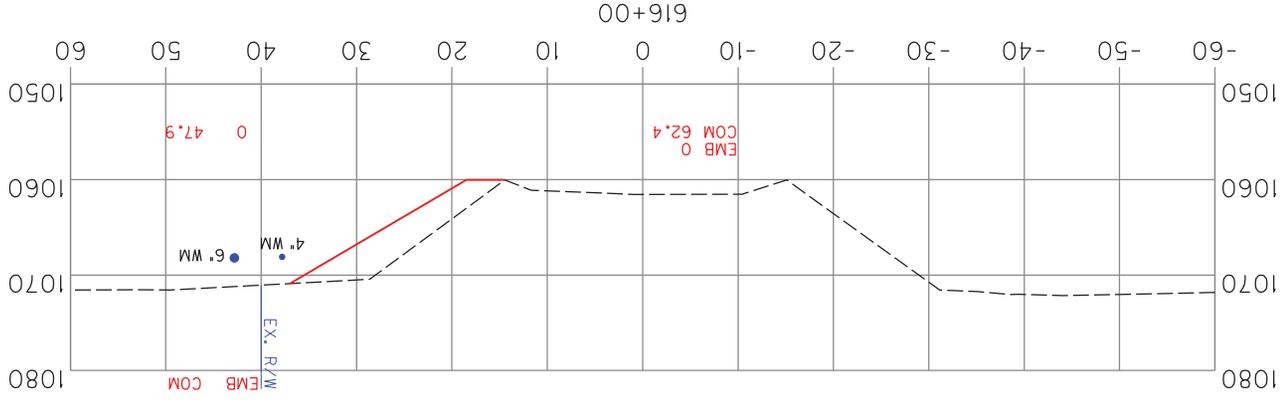
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	5
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

STA. 615+40 TO STA. 615+80
AREA 10
KY 39

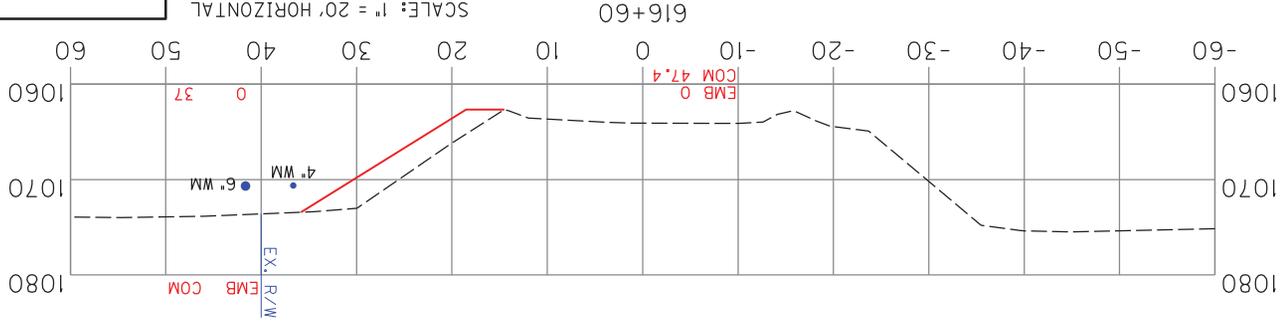
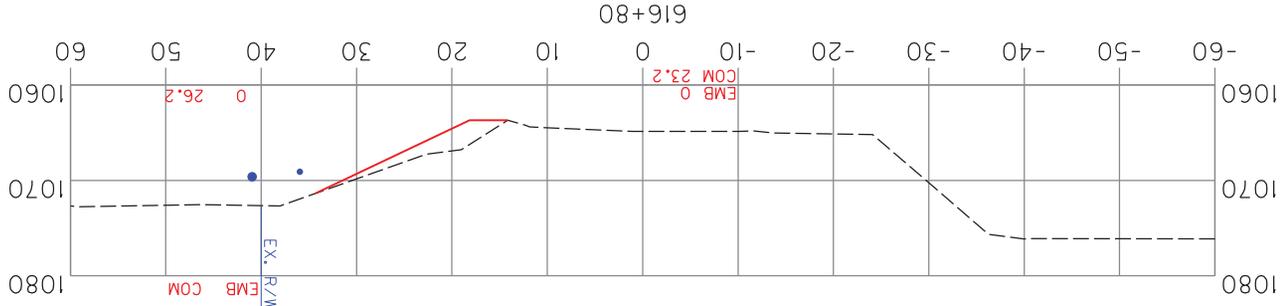
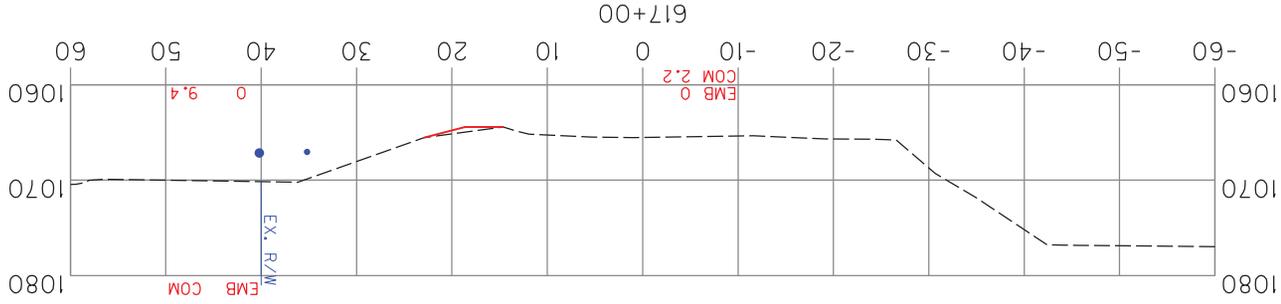
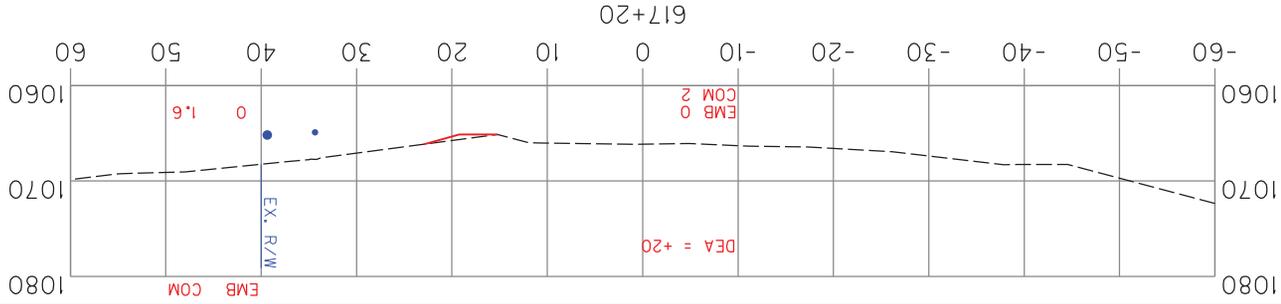
COUNTY OF	PULASKI	8-9007.00	6
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

STA. 616+00 TO STA. 616+40
AREA 10
KY 39

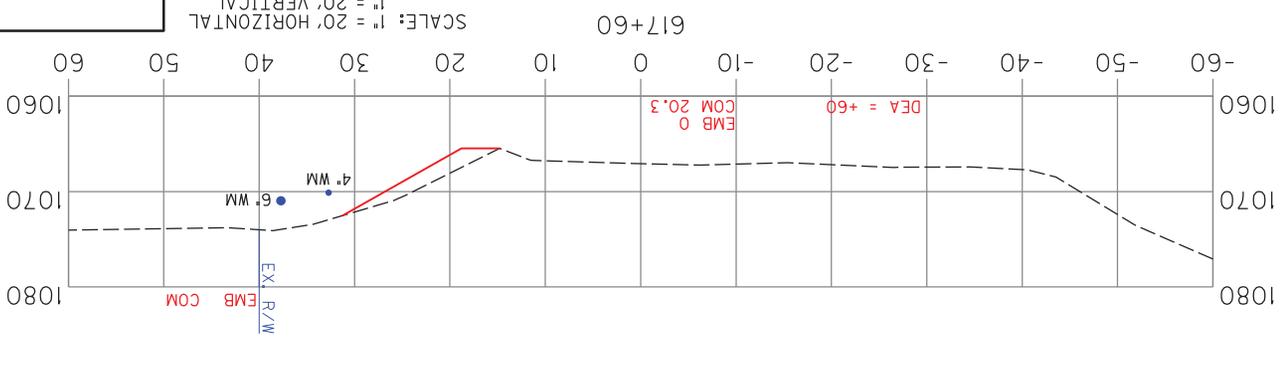
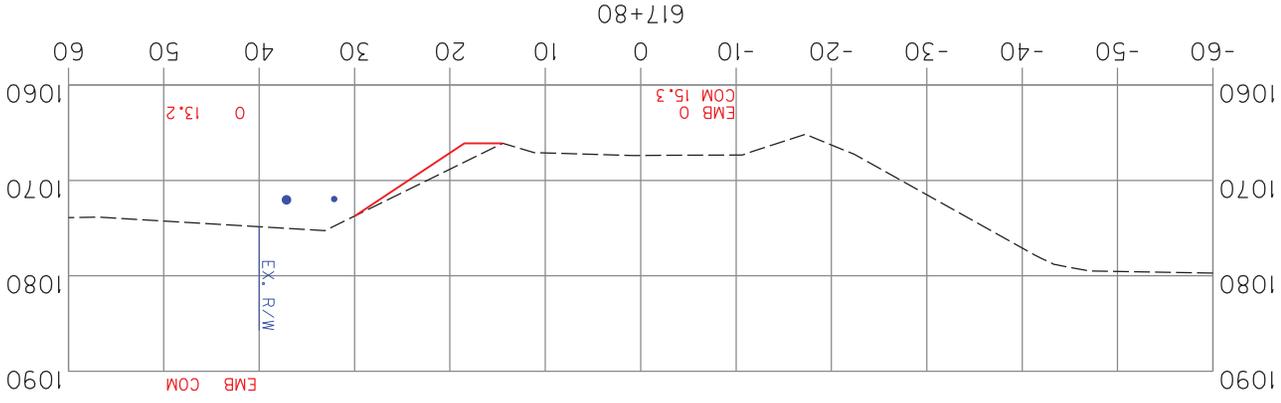
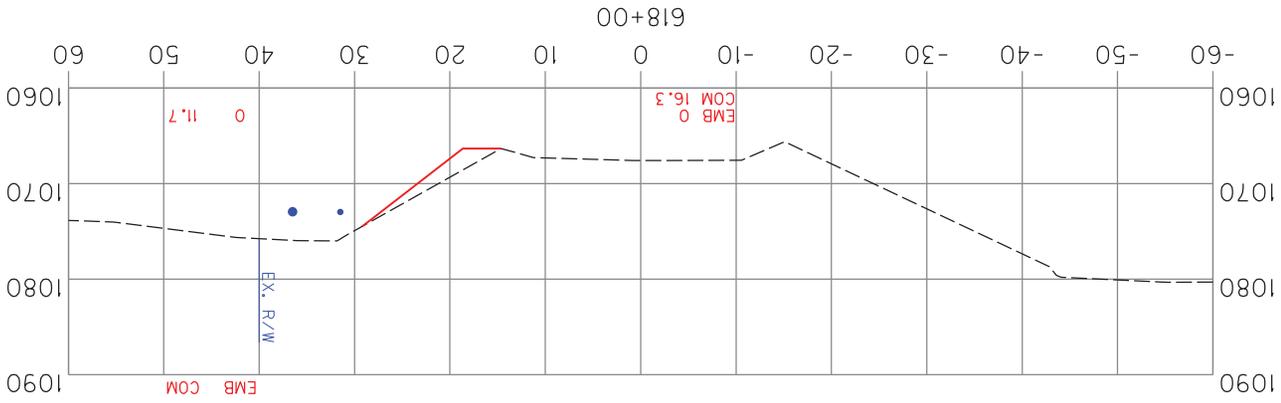
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	7
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

STA. 616+60 TO STA. 617+20
AREA 10
KY 39

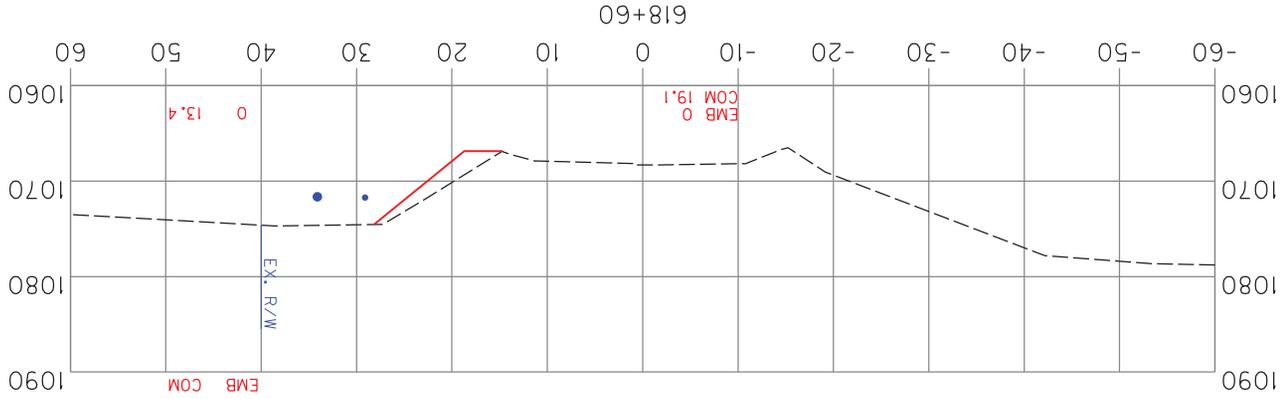
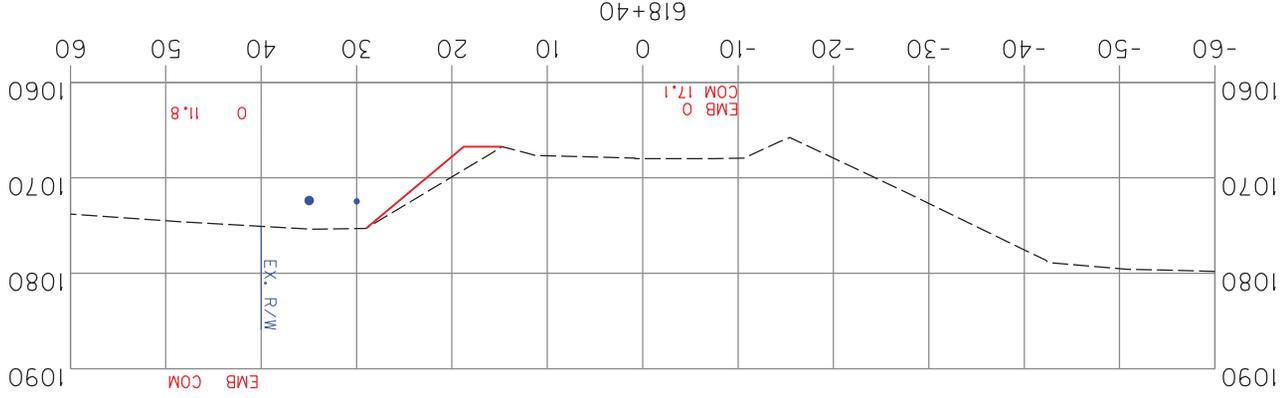
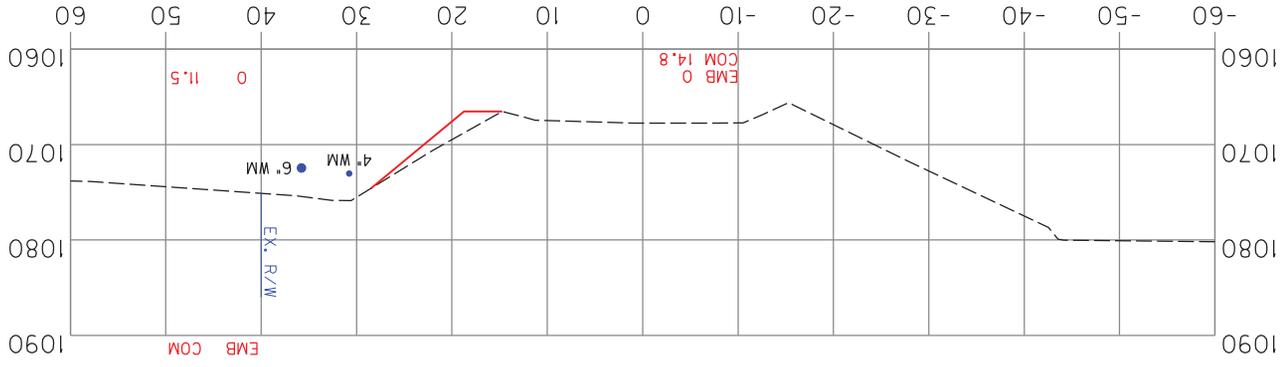
COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	8
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SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

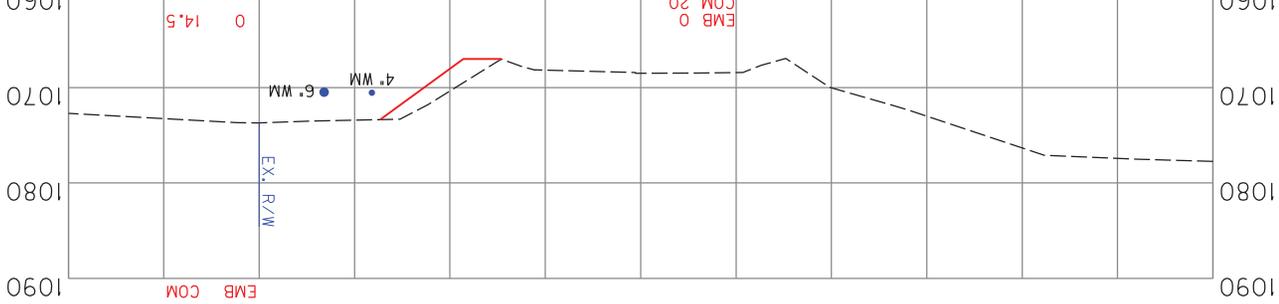
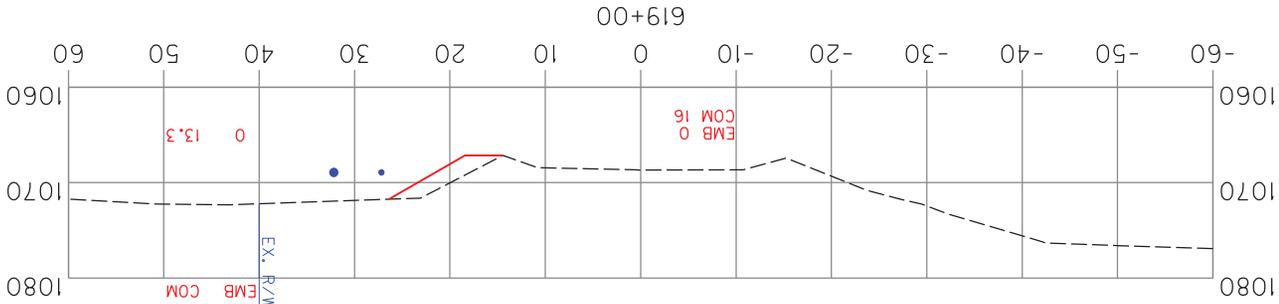
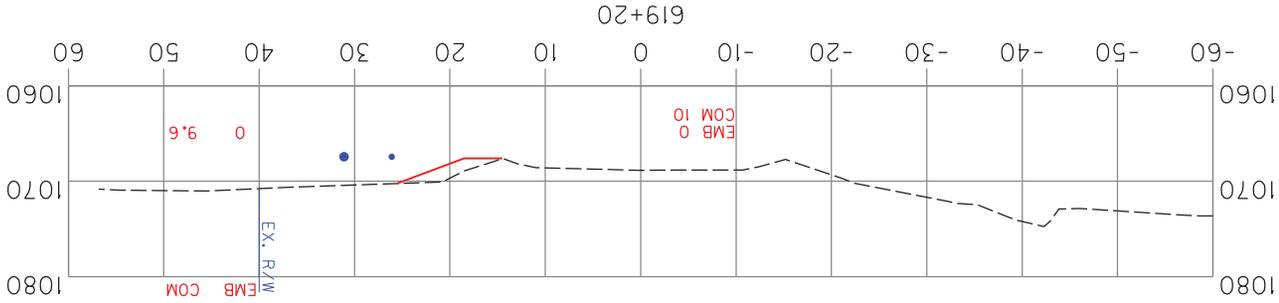
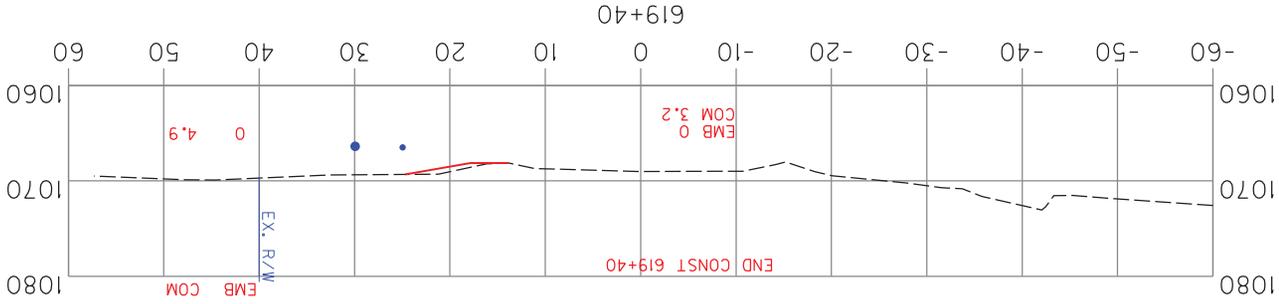
KY 39
AREA 10
STA. 617+60 TO STA. 618+00

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	9
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STA. 618+20 TO STA. 618+60
AREA 10
KY 39

COUNTY OF	PULASKI	8-9007.00	10
ITEM NO.			
SHEET NO.			



SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

STA. 618+80 TO STA. 619+40
AREA 10
KY 39

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	11
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GENERAL NOTES

SPECIFICATIONS

References to the Specifications are to the 2019 Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction including any current Supplemental Specifications.

DESIGN LOAD

These culvert extensions are designed for HS20 live load. The assumed weight of normal fill material is 120 lbs per cubic foot.

CULVERT FOUNDATIONS

The contractor shall excavate to 2 feet below the bottom of the proposed bottom slab and wing footings and backfill with "Granular Embankment" meeting the requirements of Section 805 of the Standard Specifications, except that the maximum size shall be 4 inches. All materials and labor are incidental to Foundation Preparation.

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. The clear distance to the face of concrete is 2 inches unless noted otherwise.

BEVELED EDGES

All exposed edges shall be beveled $\frac{3}{4}$ " unless otherwise noted.

KEEP HOLES

Provide weep holes in the sidewalls and wingwalls of the culvert in accordance with Section 610.03.03 of the Specifications.

DESIGN STRESSES

Concrete Class "A" - 3,500 psi
Steel Reinforcement - 60,000 psi

CONCRETE

Class "A" Concrete shall be used throughout.

FLOWLINE REINFORCEMENT

Construct the 6 inch paved flowline using #4 bars at 18" on centers in each direction or an equivalent area of welded deformed steel fabric. The bars shall extend a minimum of 12 inches into wing footings and/or the bottom slab. The cost of this reinforcement shall be incidental to the unit price bid for Concrete, Class "A".

SAWCUTTING EXISTING CONCRETE

Prior to the removal of the existing concrete masonry, cut the surface with a concrete saw to a depth of one inch to facilitate a neat line. Care shall be taken to prevent damage to the existing structure that is to remain. The cost of cutting concrete shall be included in the unit price bid for Remove Concrete Masonry.

TEMPORARY SHORING

Temporary Sheeting, Shoring, and/or Dewatering Method may be required for the installation of the culvert extension, wingwalls, and footings. Payment for this work shall be included in the Lump Sum Bid for Foundation Preparation.

COMPLETION OF STRUCTURE

The Contractor is required to complete the structure in accordance with the Plans and Specifications. Material, Labor and/or Construction Operations not otherwise specified, are to be included in the Bid Item most appropriate to the work involved. This may include Cofferdams, Shorings, Excavations, Backfilling, Removal of All or Parts of Existing Structures, Phase Construction, Incidental Materials, Labor or anything else required to complete the structure.

DOWELING REINFORCEMENT IN HARDENED CONCRETE

Where required, drill and use an epoxy adhesive for bonding new reinforcement into existing concrete using a two component epoxy resin system conforming to Section 826 of the Specifications. Embedment of the reinforcing steel shall be sufficient to develop the full tensile strength of the reinforcing bar in accordance with the Manufacturer's recommendations. In no case shall the embedment be less than 8". The cost of drilling holes and applying adhesive shall be incidental to the Unit Price Bid for Class "A" Concrete.

COUNTY OF	ITEM NO.	TAB NO.
PULASKI	8-9007.00	

BONDING NEW CONCRETE TO EXISTING CONCRETE

New concrete shall be bonded to existing concrete with a two-component epoxy resin system conforming to Section 826 of the Specifications.

VERIFY EXISTING DIMENSIONS

Dimensions shown in the Plans are based on rudimentary field measurements. Prior to beginning any work or ordering any materials, the Contractor shall verify all dimensions.

PROPOSED FLOWLINE

The slope of the proposed culvert bottom slab shall match the existing culvert.

ESTIMATE OF QUANTITIES

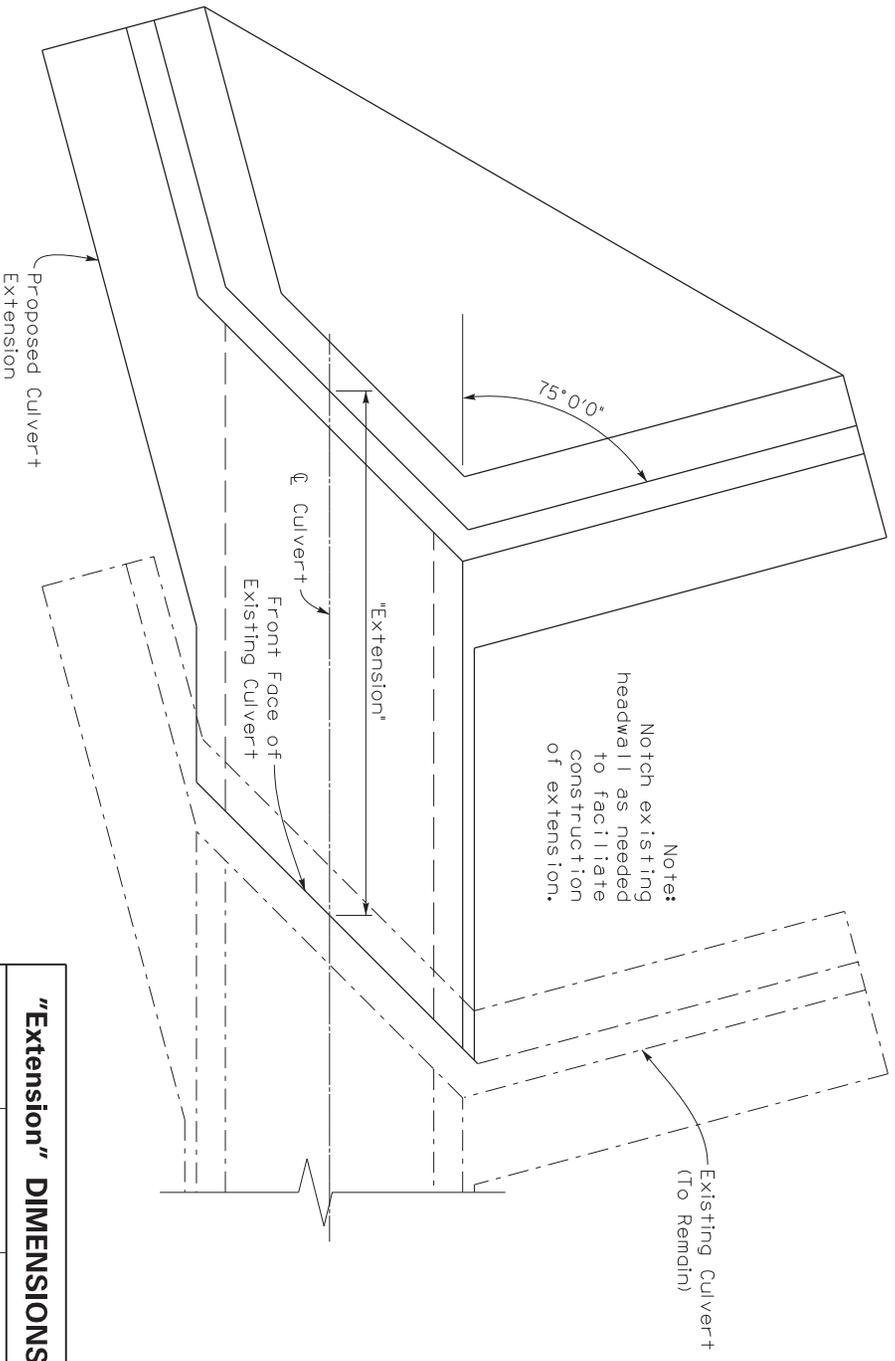
Culvert	08100 - Concrete, Class "A" (C.Y.)	08150 - Steel Reinforcement (LBS.)	08003 - Foundation Prep. (L.S.)	02483 - Class II Channel Lining (TONS)	02403 - Remove Concrete Masonry (C.Y.)
1	30	3,300	1	18	1

CULVERT EXTENSIONS

Culvert	Station	Clear Span	Clear Height	Skewed Headwall
1	572+60	4'-0"	4'-0"	Y

KY 39
CULVERT EXTENSIONS
(1 OF 4)

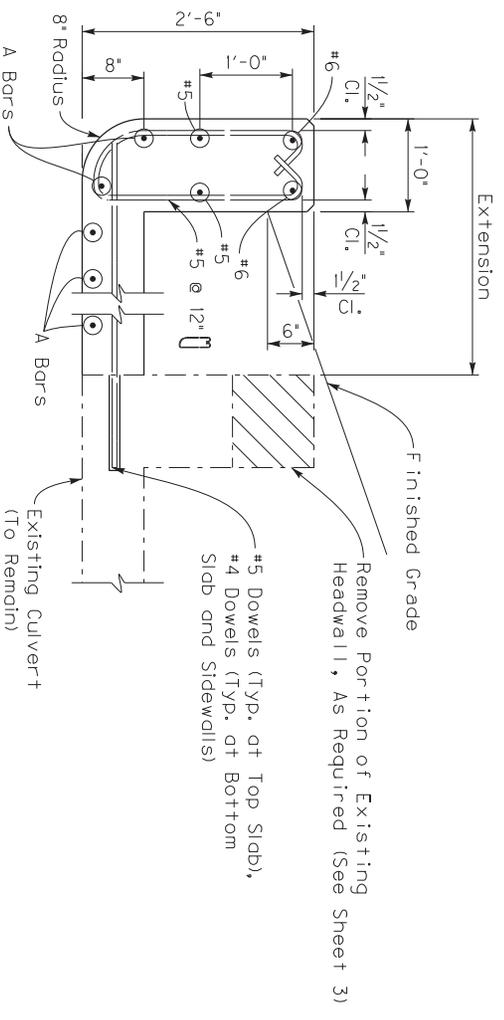
COUNTY OF	ITEM NO.	TAB NO.
PULASKI	8-9007.00	



EXTENSION PLAN

(Contractor shall match existing headwall skew)

"Extension" DIMENSIONS		
Culvert+	West End	East End
1	14' - 0"	8' - 0"



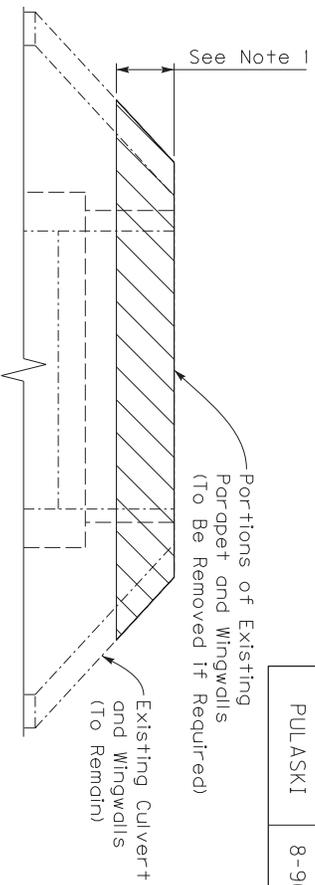
PARAPET DETAIL

(Typ. Both Ends)

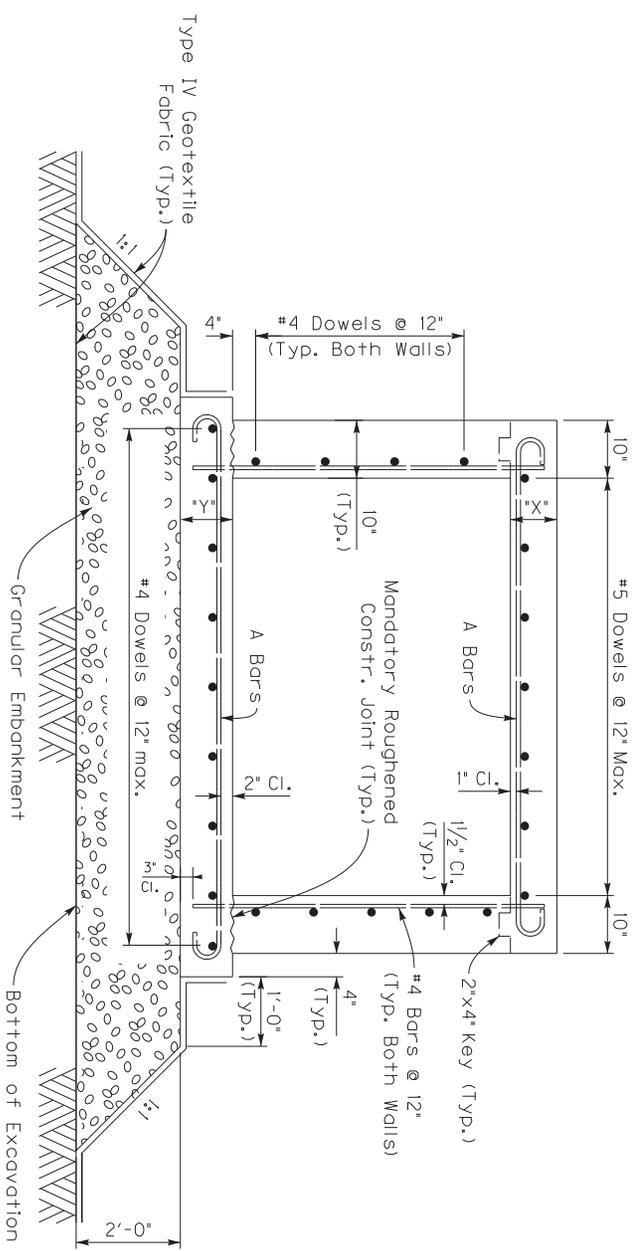
Note: See Sheet 3 for A Bars.

KY 39
CULVERT EXTENSIONS
(2 OF 4)

COUNTY OF	ITEM NO.	TAB NO.
PULASKI	8-9007.00	



PARAPET REMOVAL DETAIL



TYPICAL SINGLE BARREL EXTENSION SECTION

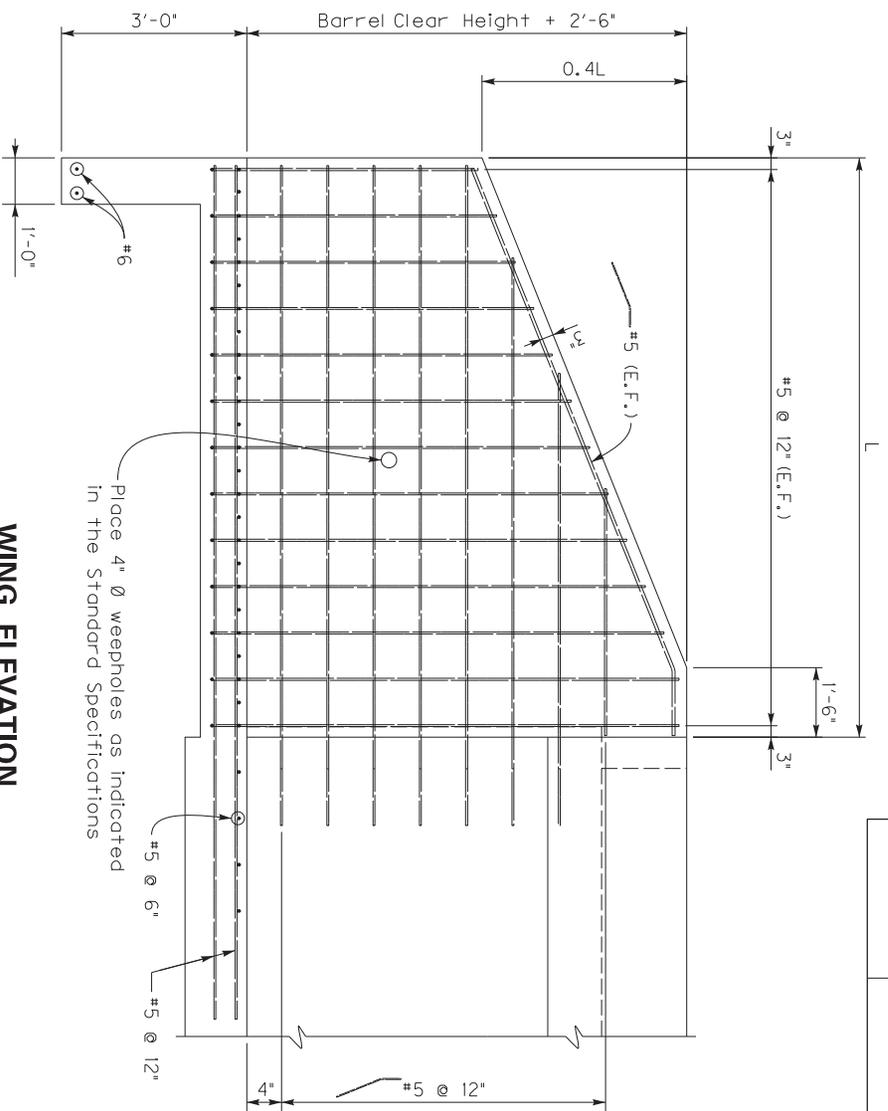
NOTES:

1. The Contractor shall remove portions of the existing headwall and wingwalls as required to provide a minimum of 1'-0" of fill over the remaining portions of the existing culvert headwall and wingwalls.
2. The Contractor shall not remove any portions of the existing headwall until construction of the new culvert extension is complete including connecting the new top slab to the existing culvert headwall using dowels and construction of the new culvert headwall. Only the minimum amount necessary to provide 1'-0" of fill shall be removed. Full depth saw cuts should be used for removal.
3. If partial removal of the existing headwall or wingwalls is required, all exposed steel shall be coated with a bituminous paint capable of protecting the steel from moisture. All labor and materials associated with this work shall be considered incidental to the bid for Foundation Preparation.
4. All labor and materials associated with the Type IV Geotextile fabric shall be incidental to Foundation Preparation.

BARREL DIMENSIONS				
Culvert	X	Y	A Bars	N Bars
1	8"	9"	#6 @ 6"	—

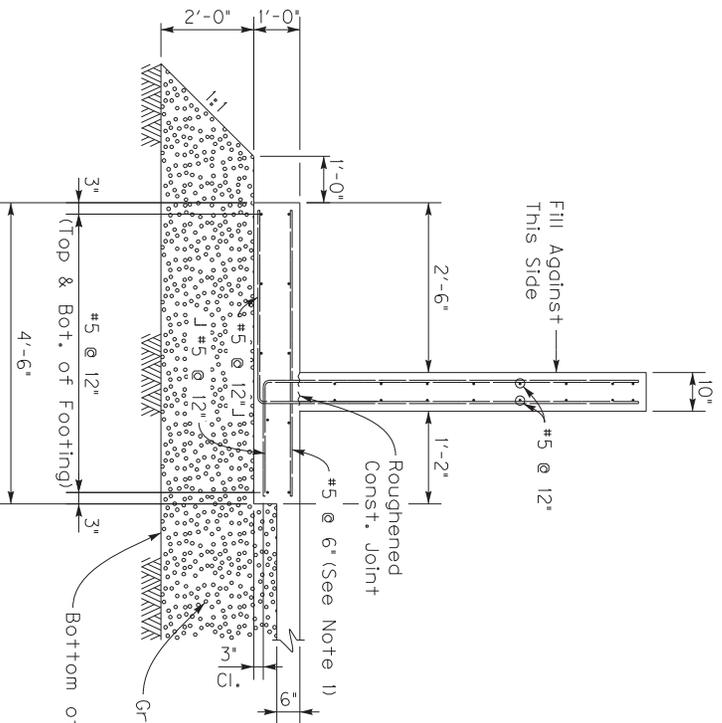
* Bars shall be placed parallel to headwall.
Two additional A Bars shall be placed at the connection to the existing culvert.

COUNTY OF	ITEM NO.	TAB NO.
Pulaski	8-9007.00	



WING ELEVATION

Wing Length (L)				
Culvert	Northeast	Southeast	Southwest	Northwest
1	10'-0"	12'-0"	10'-0"	12'-0"



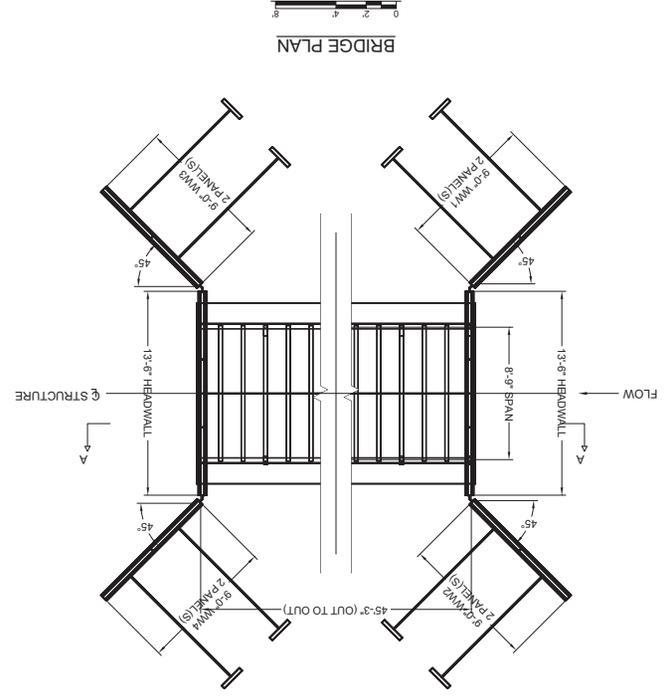
NOTES:

Footing reinforcement dowelled into existing footing shall be cut to fit in accordance with epoxy manufacturers required embedment depth.

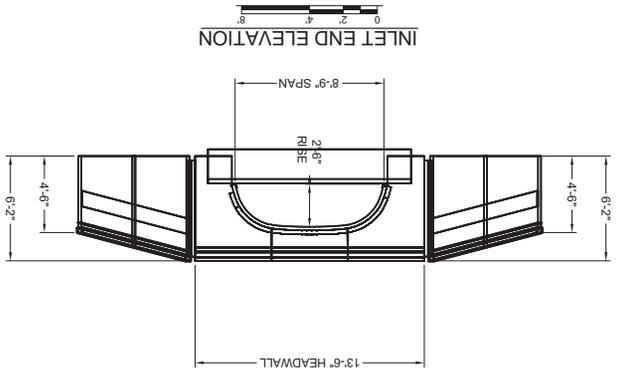
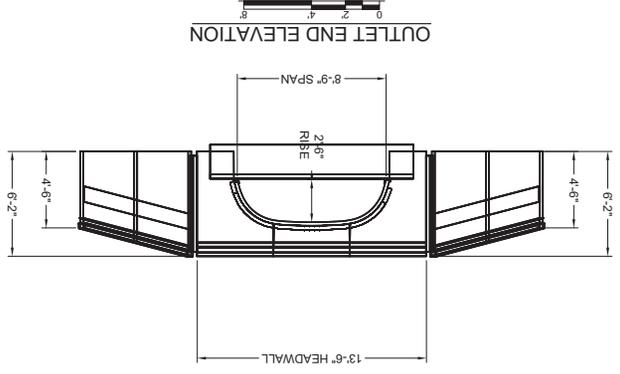
WING SECTION

KY 39
 CULVERT EXTENSIONS
 (4 OF 4)

PRELIMINARY
NOT FOR CONSTRUCTION



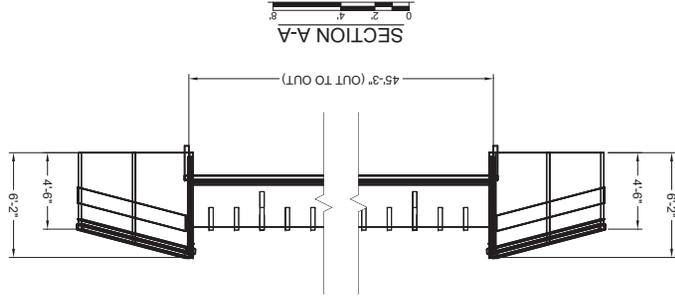
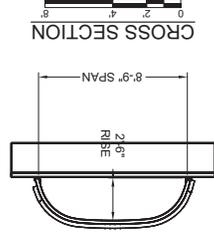
PRELIMINARY
NOT FOR CONSTRUCTION



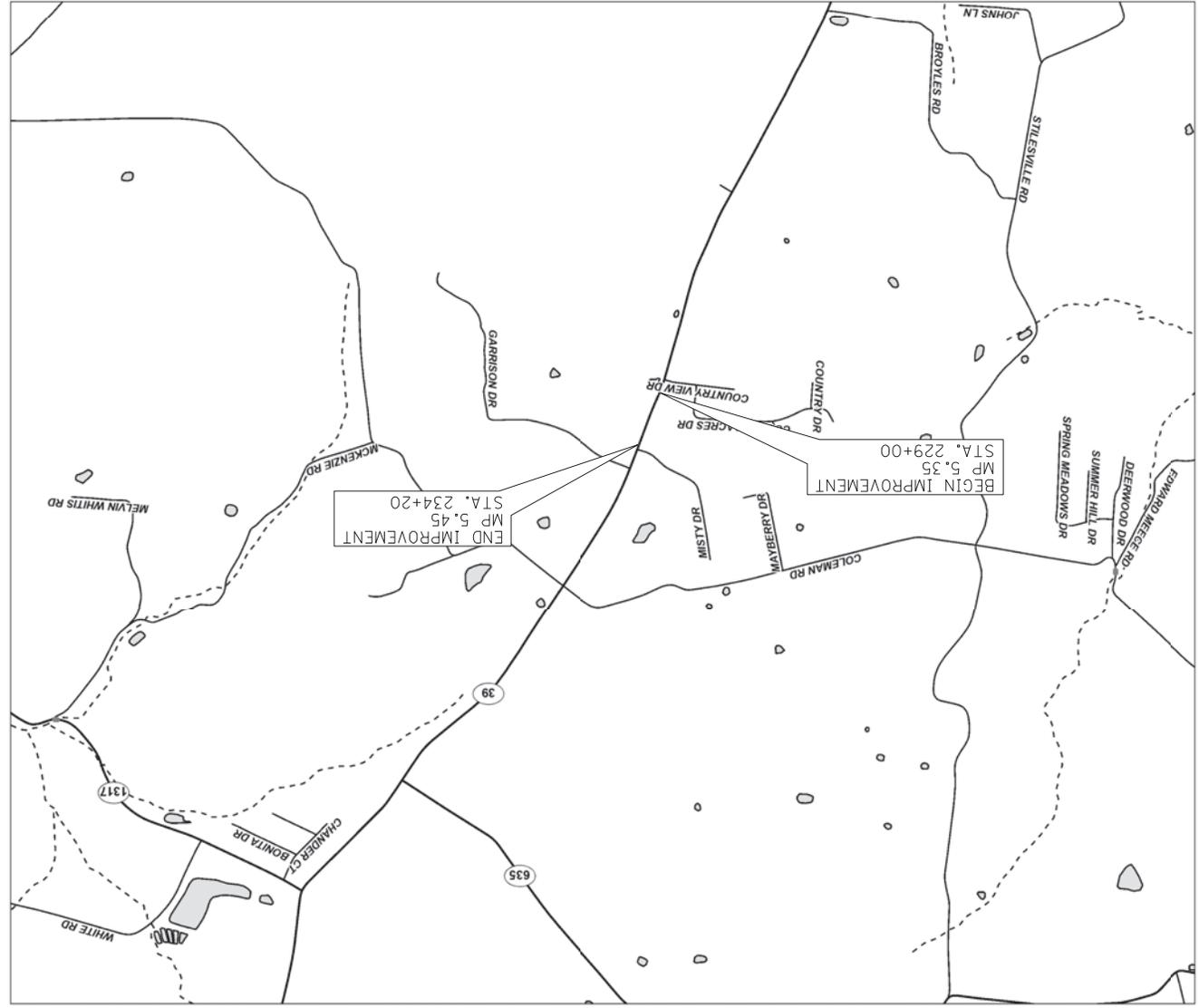
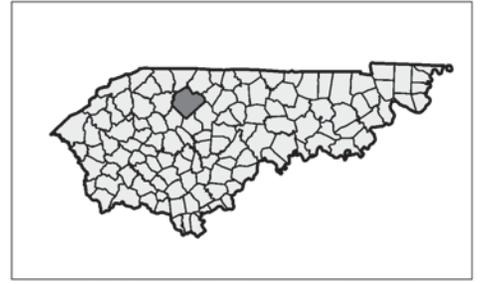
ALBC 1, 8'-9" Span x 2'-6" Rise
KY 39 Sta. 231+11.79
Dabney, Kentucky

SHEET NO. 3 OF 3

PRELIMINARY
NOT FOR CONSTRUCTION



Commonwealth of Kentucky
 DEPARTMENT OF HIGHWAYS
 PLANS OF
 PROPOSED PROJECT
 KY 39 - PULASKI COUNTY
 RIGHT OF WAY PLANS
 MARCH 25, 2019



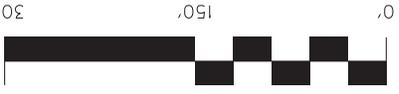
**RIGHT OF WAY
 PLANS**



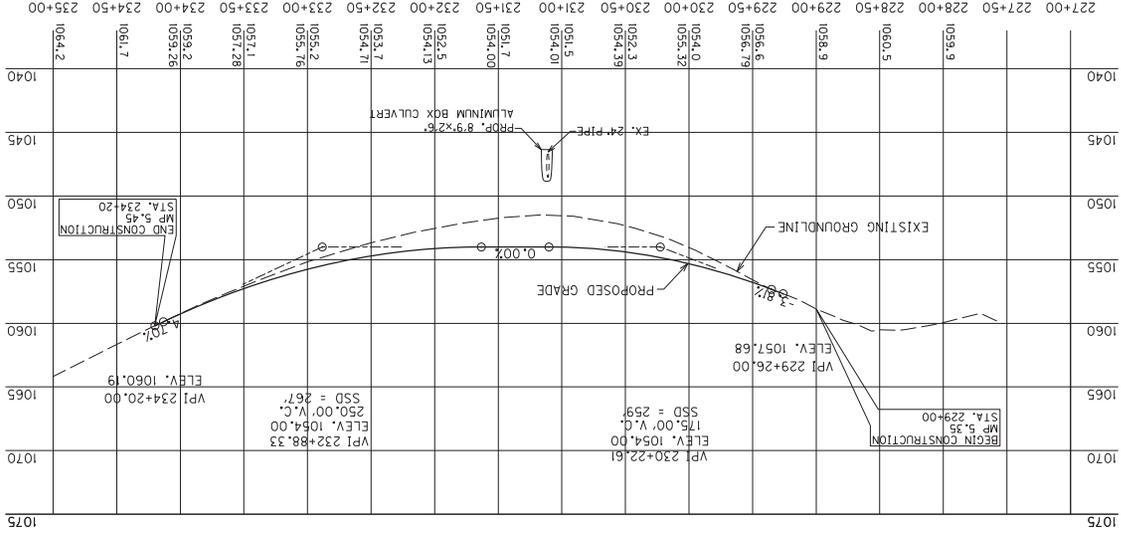
8-9007.00	PULASKI
ITEM NO.	COUNTY OF

KY 39
PLAN SHEET
STA. 225+00 TO STA. 235+00

SCALE: 1" = 150'



KY 39 VERTICAL REALIGNMENT



AREA 3
PROFILE SHEET
STA. 225+00 TO STA. 235+00

SCALE: 1" = 150'

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	TAB NO.	2
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NOTE: PERMANENT R/W ACQUIRED + AREA ACQUIRED + AREA SEVERED = TOTAL AREA OF TRACT.

TYPE SEWER SYSTEM
1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE
C - COMMERCIAL
R - RESIDENTIAL
F - FARM
S - STORAGE

*INCLUDES HAZARDOUS WASTE
TUST - UNDERGROUND STORAGE TANKS)

RIGHT OF WAY SUMMARY SHEET

RIGHT OF WAY SUMMARY

PARCEL NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED		EXCESS PURCHASED	PORTION REMAINING	SEWER SYSTEM AFFECTED TYPE	YES	NO	BUILDINGS ACQUIRED			SOURCE OF TITLE	REMARKS*
		ACRES	SO. FT.	ACRES	SO. FT.	ACRES	SO. FT.	ACRES	SO. FT.						C	R	F		
1	BRYAN FARENY & LAURIE FARENY	3.857	168,012	0.06	2,433	935	3,797	165,579			3,797	165,579						D.B. 979, P. 322	
2	SUSAN W. ALDERDICE	47.213	2,056,607	0.08	3,524	3,323	47,133	2,053,083			47,133	2,053,083						D.B. 1003, P. 563	

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	3
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COORDINATE CONTROL SHEET

POINT	DESCRIPTION	NORTH (Y)	EAST (X)	ELEV. (Z)
C.P. #1	MAG NAIL	3575463.160	5260385.568	899.96
C.P. #3	IP W/CAP	3602960.680	5273743.256	1157.32

POINT	NAME	NORTH (Y)	EAST (X)
P.C.	225 + 86.08	3385980.0748	5266405.5842
P.I.	226 + 57.43	3386048.6495	5266425.3054
P.T.	227 + 28.55	3386113.7293	5266454.5034
P.C.	229 + 13.49	3386282.4142	5266530.3991
P.I.	229 + 62.19	3386326.8302	5266550.3873
P.T.	230 + 10.85	3386372.4479	5266567.4124
P.C.	236 + 50.63	3386671.7562	5266791.3454
P.I.	237 + 72.27	3387085.6971	5266833.9197
P.T.	238 + 93.86	3387197.4330	5266881.9840



ROADWAY STATION	OFFSET	NORTH (Y)	EAST (X)
KY 39			
STA. 229+00.00	25.00 RT	3386259.8568	5266547.6682
STA. 229+13.49	25.00 RT	3386272.1633	5266553.2008
STA. 229+50.00	40.00 RT	3386300.3812	5266581.8329
STA. 229+80.00	25.00 RT	3386334.4275	5266579.5498
STA. 230+10.85	25.00 RT	3386365.6975	5266590.8310
STA. 230+30.00	60.00 RT	3386369.3809	5266630.3181
STA. 230+55.00	55.00 RT	3386394.5495	5266634.3848
STA. 230+60.00	25.00 LT	3386427.2366	5266561.1954
STA. 231+05.00	60.00 LT	3386481.6386	5266544.1601
STA. 231+30.00	60.00 RT	3386465.0552	5266665.3198
STA. 231+55.00	47.00 LT	3386523.9256	5266573.8386
STA. 231+75.00	25.00 RT	3386498.7244	5266641.2841
STA. 231+85.00	25.00 LT	3386534.9601	5266601.4473
STA. 231+20.00	36.00 LT	3386580.9637	5266606.8939
STA. 232+35.00	25.00 LT	3386591.1647	5266622.4483

COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83/FBN System.

Coordinates are based on State Plane Coordinate System Kentucky Single Zone and in U.S. Survey Feet.

COUNTY OF	PULASKI	ITEM NO.	8-9007.00	SHEET NO.	4
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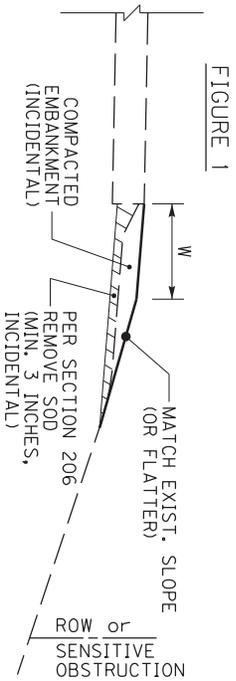


FIGURE 1

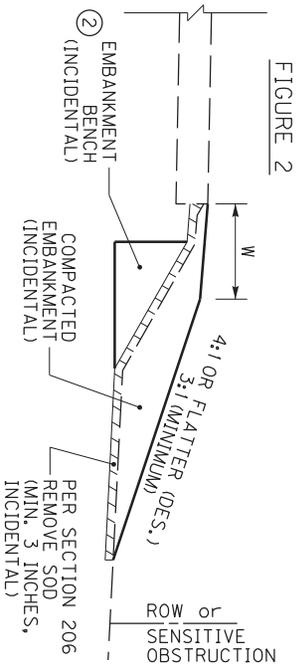


FIGURE 2

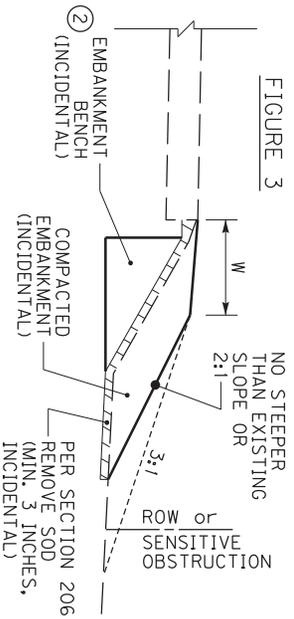


FIGURE 3

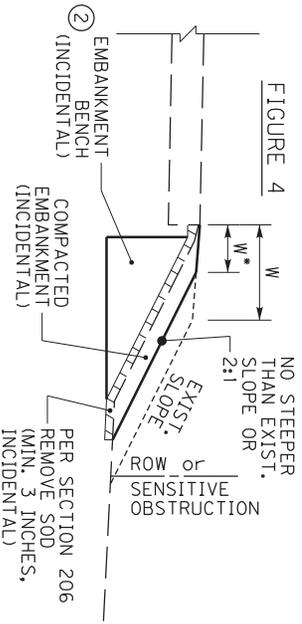


FIGURE 4

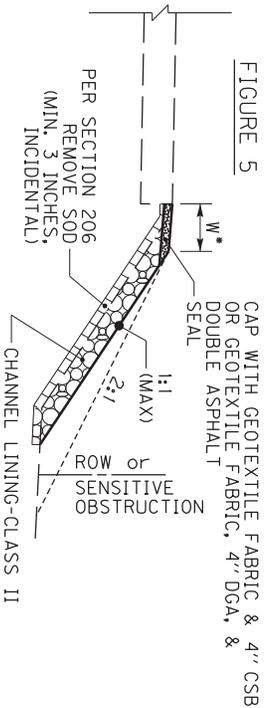


FIGURE 5

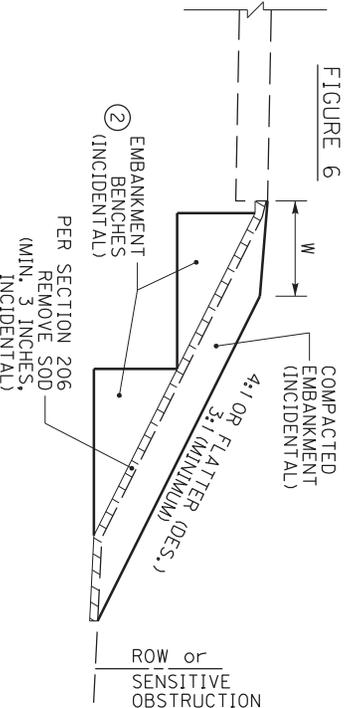


FIGURE 6

~ NOTES ~

BID ITEMS AND UNITS TO BID:
 2200 - ROADWAY EXCAVATION - CU YD
 2230 - EMBANKMENT IN PLACE - CU YD

1. THE BID ITEMS 'ROADWAY EXCAVATION' AND 'EMBANKMENT IN PLACE' SHALL CONSIST OF ANY AND ALL NECESSARY EARTHWORK REQUIRED TO GRADE AND/OR RESHAPE THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. MEASUREMENT AND FINAL PAYMENT SHALL BE BASED ON SECTIONS 204 & 206.

2. EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERING'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERING':
 - THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
 - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
 - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.
3. AS SHOWN IN FIGURE 1, IN SOME SITUATIONS, MINOR SHOULDERING, WITH MINIMAL ADDITIONAL EARTH MATERIAL, MAY BE ALL THAT IS REQUIRED TO RESHAPE THE EARTH SHOULDER TO THE PROPOSED WIDTH AND BRING IT FLUSH WITH THE EDGE OF PAVEMENT.
4. AS SHOWN IN FIGURE 2, MOST SITUATIONS WILL REQUIRE ADDITIONAL EARTH MATERIAL TO ACHIEVE THE PROPOSED EARTH SHOULDER WIDTH. IT IS DESIRED THAT THE RESULTING FILL SLOPE BE INSTALLED AS FLAT AS POSSIBLE AND REMAIN WITHIN THE RIGHT-OF-WAY AND/OR AVOID SENSITIVE OBSTRUCTIONS.
5. AS SHOWN IN FIGURE 3, IF A 3:1 FILL SLOPE WILL RESULT IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR IMPACT A SENSITIVE OBSTRUCTION, THEN THE FILL SLOPE MAY BE INSTALLED STEEPER THAN 3:1, BUT NO STEEPER THAN THE EXISTING FILL SLOPE, OR A 2:1, WHICHEVER IS FLATTER.
6. AS SHOWN IN FIGURE 4, IF MATCHING THE EXISTING FILL SLOPE OR INSTALLING A 2:1 FILL SLOPE (WHICHEVER IS FLATTER) STILL RESULTS IN THE TOE OF SLOPE EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE RESULTING TOE OF SLOPE WILL REMAIN WITHIN THE RIGHT-OF-WAY AND/OR NOT IMPACT THE SENSITIVE OBSTRUCTION.
7. AS SHOWN IN FIGURE 5, IF THE EXISTING FILL SLOPE IS STEEPER THAN 2:1 AND THERE IS NOT ENOUGH SPACE TO INSTALL A 2:1 FILL SLOPE WITHOUT EXTENDING BEYOND THE RIGHT-OF-WAY AND/OR IMPACTING A SENSITIVE OBSTRUCTION, THEN CLASS II CHANNEL LINING MAY BE INSTALLED ALONG THE STEEP EXISTING SLOPE IN ORDER TO ESTABLISH A WIDTH OF AGGREGATE SHOULDER. THESE LOCATIONS WILL BE NOTED ELSEWHERE IN THE PROPOSAL AS SLOPE PROTECTION. THE CHANNEL LINING IS TO BE CARPED WITH GEOTEXTILE FABRIC TYPE IV AND 4" OF CRUSHED STONE BASE, OR 4" OF DGA WITH DOUBLE ASPHALT SEAL COAT.
8. AS SHOWN IN FIGURE 6, AS THE HEIGHT OF THE FILL INCREASES, MULTIPLE EMBANKMENT BENCHES MAY BE REQUIRED.

SEE SHEET 2 FOR NOTES 9 THRU 13

NOT TO SCALE

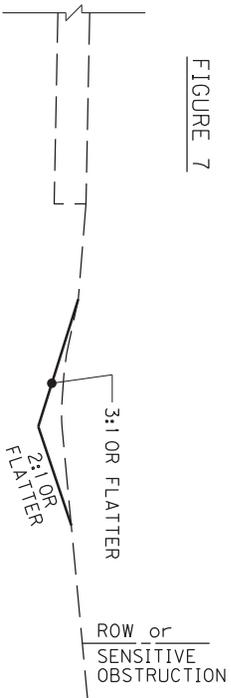


FIGURE 7

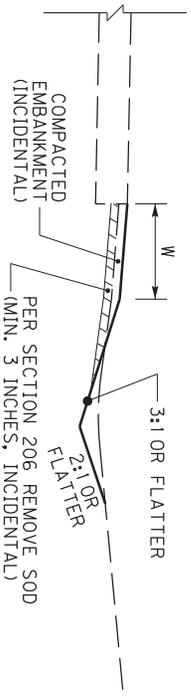


FIGURE 8

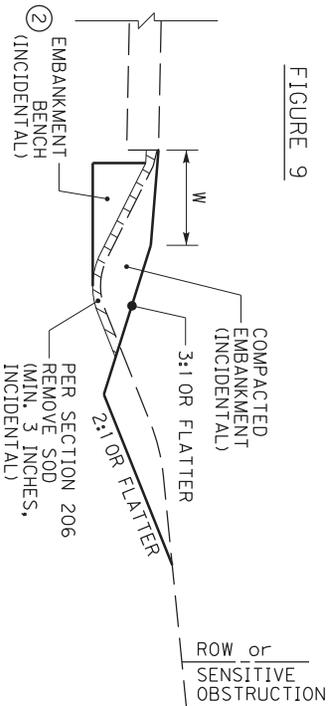


FIGURE 9

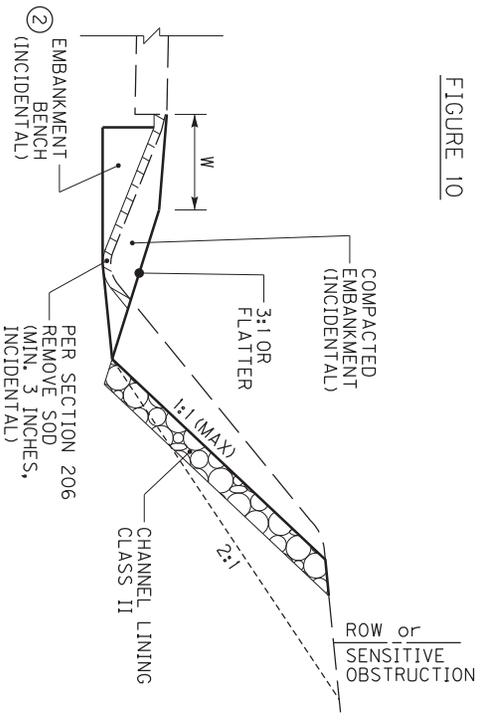


FIGURE 10

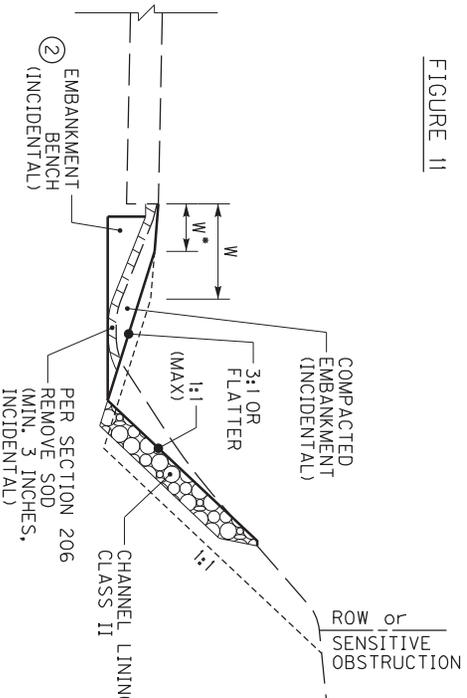


FIGURE 11

~ NOTES ~

BID ITEMS AND UNITS TO BID:
 2200 - ROADWAY EXCAVATION - CU YD
 2230 - EMBANKMENT IN PLACE - CU YD

1. THE BID ITEMS 'ROADWAY EXCAVATION' AND 'EMBANKMENT IN PLACE' SHALL CONSIST OF ANY AND ALL NECESSARY EARTHWORK REQUIRED TO GRADE AND/OR RESHAPE THE EXISTING SHOULDER, DITCH, AND/OR ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS, AS DETAILED ON THE TYPICAL SECTIONS. MEASUREMENT AND FINAL PAYMENT SHALL BE BASED ON SECTIONS 204 & 206.

2. EMBANKMENT BENCHING WILL BE REQUIRED WHEN THE EXISTING GROUNDLINE HAS AN INCLINE GREATER THAN 15% (APPROX. 6:1). ANY AND ALL REQUIRED EMBANKMENT BENCHING SHALL BE INCIDENTAL TO THE BID ITEM 'DITCHING AND SHOULDERS'. THE FOLLOWING ARE GUIDELINES FOR EMBANKMENT BENCHING USED IN CONJUNCTION WITH THE BID ITEM 'DITCHING AND SHOULDERS':
 - THE TYPICAL HEIGHT (OR RISE) IS 1' TO 6'
 - THE TYPICAL WIDTH (OR RUN) WILL VARY BASED ON THE HEIGHT OF THE BENCH
 - MULTIPLE SMALL BENCHES MAY BE USED, AND MAY BE MORE ADVANTAGEOUS AS THIS WILL REQUIRE PROCESSING LESS EARTHWORK.
 SEE SHEET 1 FOR NOTES 3, THRU 8.

9. AS SHOWN IN FIGURE 7, IN SOME SITUATIONS, ALL THAT MAY BE REQUIRED IS TO CLEAN OUT THE EXISTING DITCH AND RESHAPE IT TO THE PROPOSED DIMENSIONS. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE RE-USED ELSEWHERE ON THE PROJECT, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR THE INTENDED RE-USE.

10. AS SHOWN IN FIGURE 8, IN SOME SITUATIONS, THE DITCH AND SHOULDER MAY ONLY NEED MINOR REGRADE AND/OR RESHAPING. THE MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO RESHAPE THE EARTH SHOULDER, PROVIDED THE ENGINEER DETERMINES THE MATERIAL REMOVED FROM THE DITCH IS SUITABLE FOR SHOULDERS. IF THE MATERIAL IS NOT SUITABLE, ADDITIONAL EARTH MATERIAL MAY BE REQUIRED.

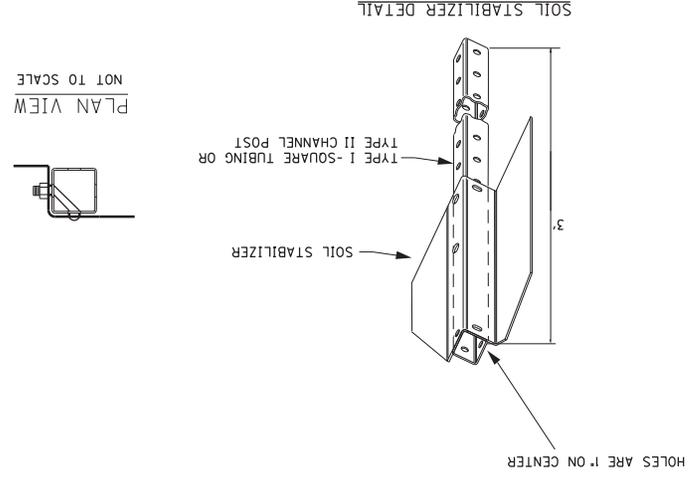
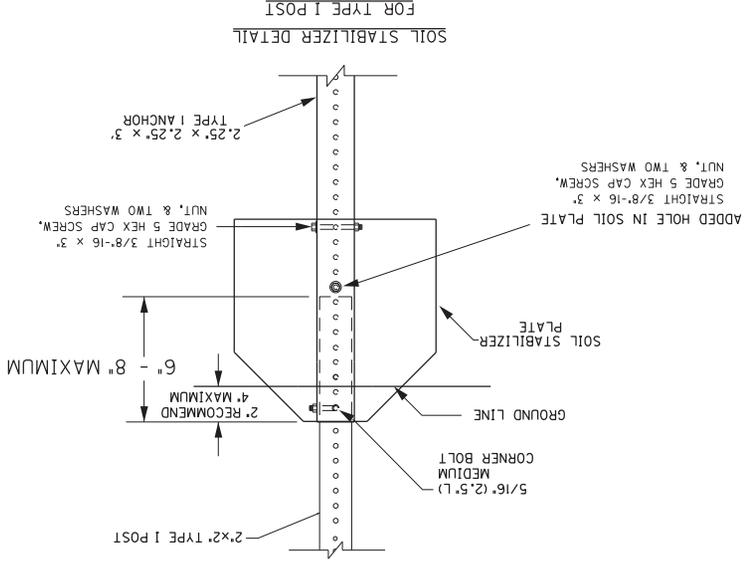
11. AS SHOWN IN FIGURE 9, IN MOST SITUATIONS, REGRADE AND RESHAPING THE ROADSIDE TO ACHIEVE THE PROPOSED SHOULDER, DITCH, AND/OR ROADSIDE DIMENSIONS WILL RESULT IN MOVING THE DITCH FURTHER AWAY FROM THE ROADWAY. IT IS DESIRED THAT DITCH FORESLOPES BE 3:1 OR FLATTER AND DITCH BACKSLOPES BE 2:1 OR FLATTER.

12. AS SHOWN IN FIGURE 10, IF INSTALLING A 2:1 DITCH BACKSLOPE WILL RESULT IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTING A SENSITIVE OBSTRUCTION, THEN THE DITCH BACK SLOPE MAY BE INSTALLED STEEPER THAN 2:1, UP TO 1:1 MAXIMUM. IN THIS SITUATION, THE DITCH BACKSLOPE SHALL HAVE CLASS II CHANNEL LINING INSTALLED FOR SLOPE PROTECTION.

13. AS SHOWN IN FIGURE 11, IF USING A 1:1 DITCH BACKSLOPE STILL RESULTS IN THE TOP OF CUT EXTENDING BEYOND THE RIGHT-OF-WAY OR STILL IMPACTS A SENSITIVE OBSTRUCTION, THEN THE PROPOSED EARTH SHOULDER WIDTH MAY BE REDUCED SO THAT THE STEEP DITCH BACKSLOPE CAN BE INSTALLED WITHIN THE RIGHT-OF-WAY AND/OR TO AVOID A SENSITIVE OBSTRUCTION.

NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.



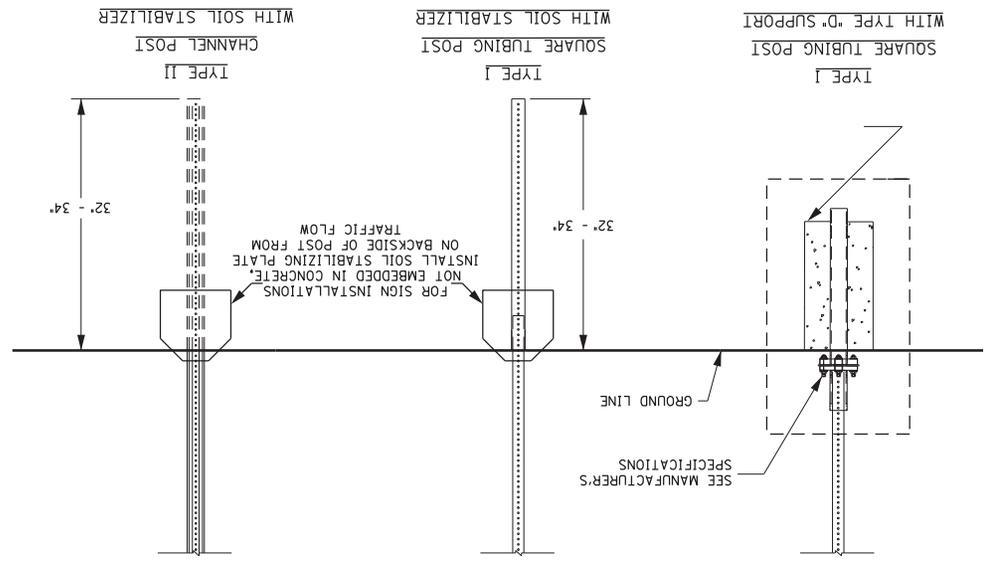
PLAN VIEW
NOT TO SCALE

M O L D I N G

NOT TO SCALE



PLAN VIEW
NOT TO SCALE



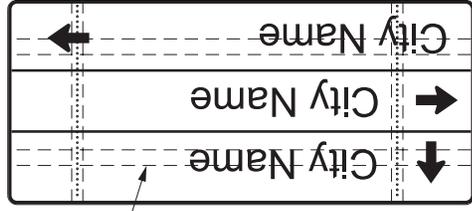
PLAN VIEW
NOT TO SCALE

PLAN VIEW
NOT TO SCALE

PLAN VIEW
NOT TO SCALE

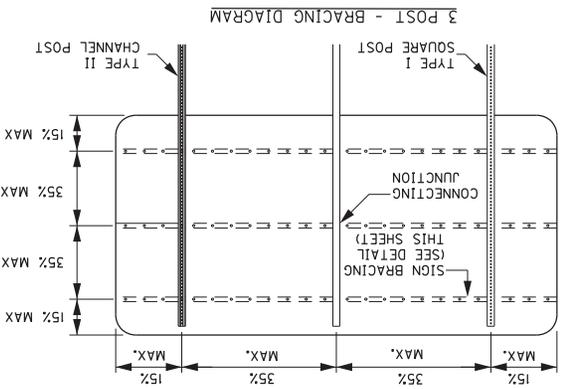
M O L D I N G

SEE SHEETING SIGN DETAIL SHEET 2 OF 2 FOR BRACING REQUIREMENTS



NOTE: SEE SIGN DETAIL SHEETS FOR QUANTITY, LENGTH, SIZE AND GAUGE OF TYPE I POSTS

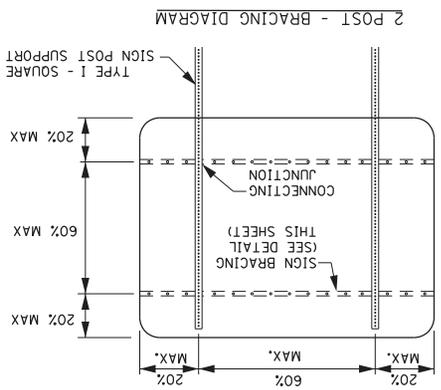
COUNTY OF	ITEM NO.	SHEET NO.
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3 POST - BRACING DIAGRAM

NOTE:
1. MAXIMUM AREA PER CONNECTING JUNCTION = 16 SQ. FT.

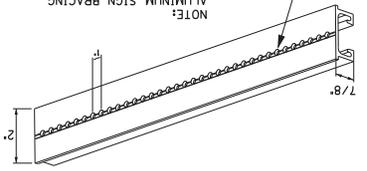
2. BRACING SHOULD NOT BE SPLICED WITHIN 6' OF A BRACE TO POST JUNCTION.



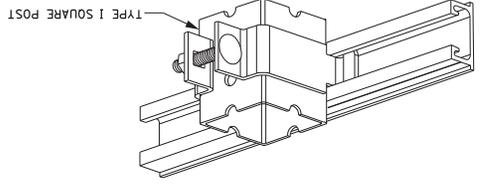
2 POST - BRACING DIAGRAM

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

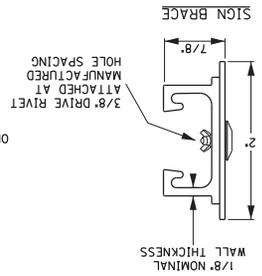
FOR ATTACHMENT OF SIGNS LESS THAN 72" IN WIDTH USING MANUFACTURED 3/8" HOLES ACCORDING TO 2004 STANDARD HIGHWAY SIGNS BLANK STANDARDS PCS T-1 THRU T-6



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" DIAMETER HOLES ON 6" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING 3/8" DRIVE RIVETS

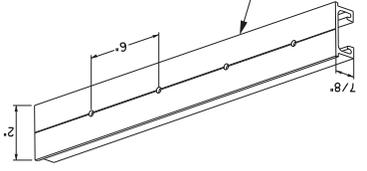


SQUARE POST CLAMP & BRACE

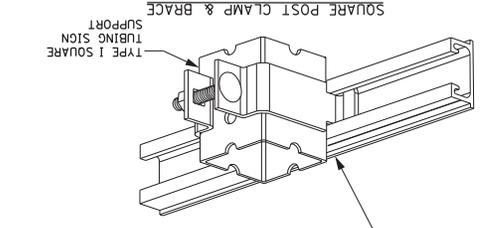


3/8" DRIVE RIVET ATTACHED AT MANUFACTURED HOLE SPACING

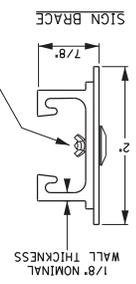
FOR ATTACHMENT OF SIGNS GREATER THAN, OR EQUAL TO, 72" IN WIDTH, RIVETS SHALL BE COLOR CODED TO MATCH SHEETING IN ORDER TO MINIMIZE CLARE FROM RIVETS



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" DIAMETER HOLES ON 6" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING RIVETS

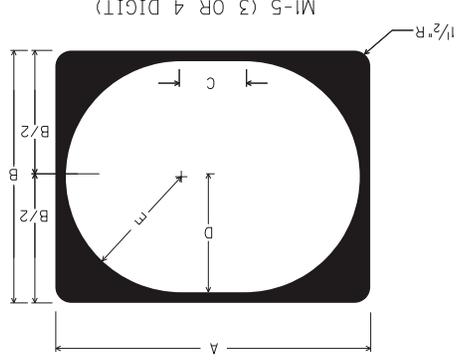
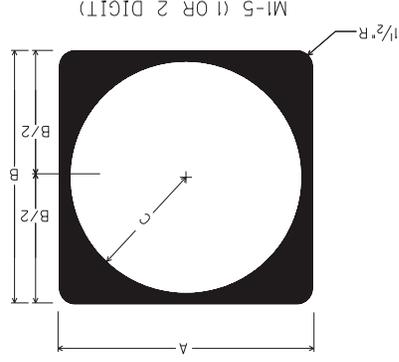
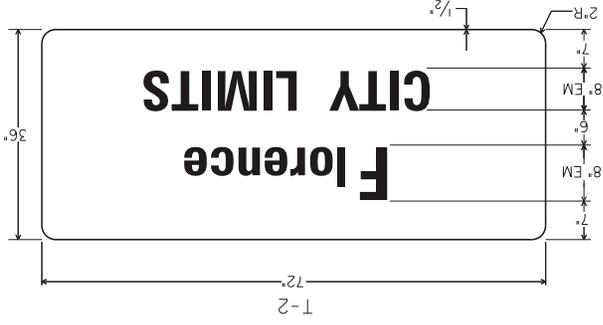


SQUARE POST CLAMP & BRACE



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

COUNTY OF	ITEM NO.	SHEET NO.



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

CONVENTIONAL	30"	24"	6"	11"	11"	12D	12B
A	B	C	D	E		3 DIGIT 4 DIGIT	FONT
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 OR FULL CONTROL OF ACCESS AS A DIVIDED HIGHWAY WITH PARTIAL EXPRESSWAY/FREEWAY DEFINED



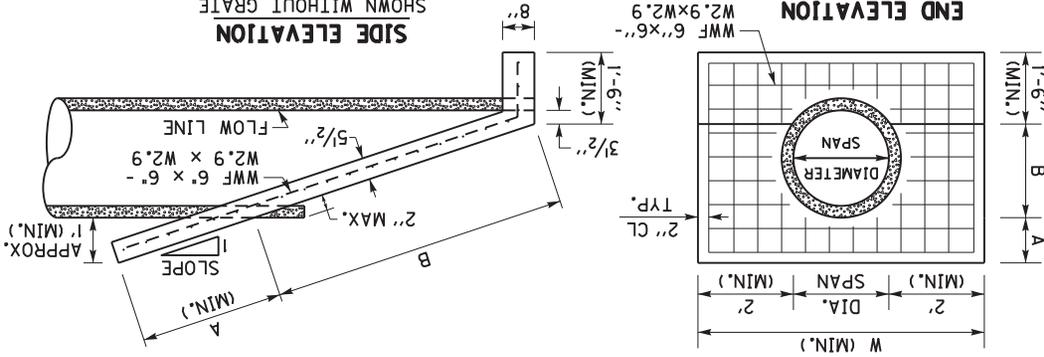
TYPICAL SIGNS

NOT TO SCALE

SHEET NO.	ITEM NO.	COUNT OF

~ NOTES ~

- FOR PIPES THAT RECEIVE THE SLOPED & MITERED CONCRETE HEADWALL, THE PIPE LENGTH SHALL BE MEASURED TO THE FURTHEST POINT ALONG THE MITERED END OF THE PIPE.
- THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
- THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING.
- WHEN THE PIPE IS ON A SKEW, INSTALL THE HEADWALL AND MITER THE PIPE SO THAT THE CONCRETE SLOPE PAVING IS PERPENDICULAR TO THE ROADWAY. FOR HEADWALLS ON SKEWED PIPES, THE HEADWALL WIDTH, W, SHALL BE WIDENED, AS NEEDED, SO THAT THE OUTSIDE EDGE OF THE CONCRETE SLOPE PAVING IS A MINIMUM OF 2' FROM THE OUTER MOST EDGE OF THE PIPE. THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. THE FINAL HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
- WOVEN WIRE REINFORCEMENT (WRF 6"x6"- W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
- DIMENSIONS AND CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL, INSTALLED ON A PIPE WITH SKEW = 0°.
- AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7' LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURER. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.
- THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE: 24" DIAMETER PIPE ON GREATER THAN 15° SKEW 30" DIAMETER PIPE ON GREATER THAN 15° SKEW PIPE WITH GREATER THAN 30" DIAMETER. ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER. SEE SHEET 2 FOR GRATE DETAILS.
- ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.



SIDE ELEVATION
SHOWN WITHOUT GRATE

END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT

ISOMETRIC VIEW
SHOWN WITH WOVEN WIRE REINFORCEMENT AND WEDGE ANCHORS

PLAN VIEW
SHOWN WHEN THE PIPE IS ON A SKEW

PIPE SIZE	3:1 SLOPE			4:1 SLOPE			6:1 SLOPE		
	A	B	W	A	B	W	A	B	W
15"	3'-7 1/2"	5'-3"	0.74	4'-8 3/4"	5'-3"	0.93	6'-11 3/4"	5'-3"	1.29
18"	3'-4'-5 3/4"	5'-6"	0.85	4'-5'-10"	5'-6"	1.05	8'-7'-7/4"	5'-6"	1.48
24"	3'-6'-2 1/2"	6'-0"	1.05	4'-8'-1"	6'-0"	1.32	6'-11'-11"	6'-0"	1.87
30"	3'-7'-10 3/4"	6'-6"	1.43	4'-10'-3 3/4"	6'-6"	1.80	6'-15'-2 1/2"	6'-6"	2.28

CONCRETE CU. YDS. A B W
CONCRETE CU. YDS. A B W
CONCRETE CU. YDS. A B W

GRATE REQUIRED

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) (4)

DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND LISTED FOR INFORMATIONAL PURPOSES ONLY

BID ITEM AND UNIT TO BID: 245755610 HEADWALL (SLOPED & MITERED CONCRETE-FOR - INCH PIPE) - EACH

SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER

DEPARTMENT OF HIGHWAYS
KENTUCKY
NOT TO SCALE

SLOPED & MITERED
CONCRETE HEADWALL
(SHEET 1 OF 2)

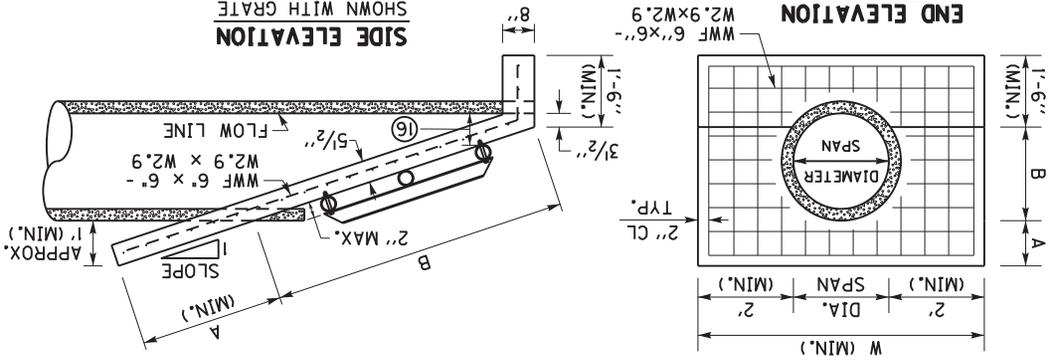
SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER

COUNTY OF	ITEM NO.	SHEET NO.

SEE SHEET 1 THRU 8

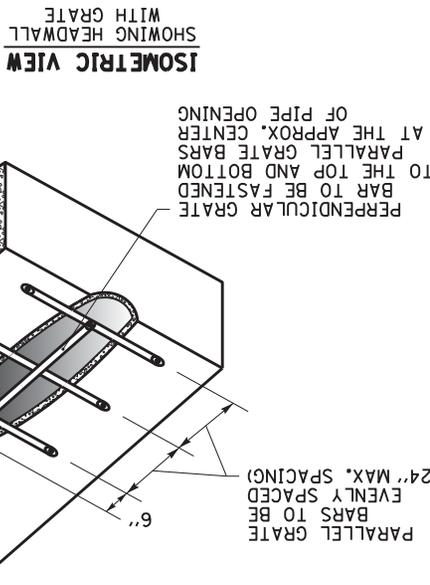
9. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
 10. -30" DIAMETER PIPE ON GREATER THAN 15° SKEW
 11. -30" DIAMETER PIPE WITH GREATER THAN 30" DIAMETER ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
 12. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT; ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH ASTM M 232.
 13. THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH ASTM M 232.
 14. ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
 15. FASTEN PARALLEL BARS TO HEADWALL WITH $\frac{5}{8}$ " DIA. x $\frac{4}{12}$ " LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = $2\frac{3}{4}$ " HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE.
 16. CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
 17. FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH $\frac{1}{2}$ " DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
 18. THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.

~ NOTES ~

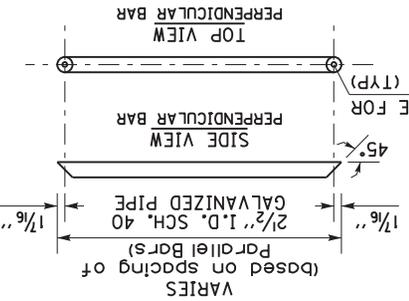


END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT

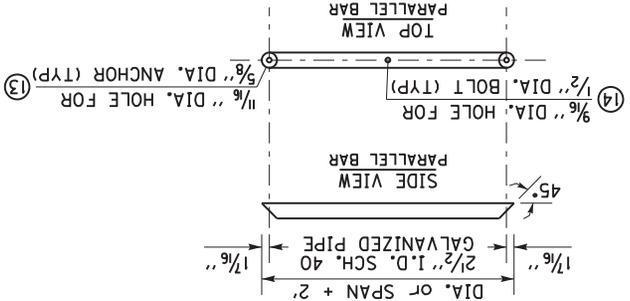
SIDE ELEVATION
SHOWN WITH GRATE



ISOMETRIC VIEW
SHOWING HEADWALL WITH GRATE



PIPE FOR GRATE DETAILS
SEE NOTE 9 TO DETERMINE IF GRATE IS REQUIRED



DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) (4)

PIPE SIZE	3:1 SLOPE			4:1 SLOPE			6:1 SLOPE			
	A	B	W	A	B	W	A	B	W	
42"	3'	11'-4"	7'-6"	4'	14'-9 $\frac{1}{4}$ "	7'-6"	6'	21'-9 $\frac{1}{2}$ "	7'-6"	3.19
36"	3'	9'-7 $\frac{1}{2}$ "	7'-0"	4'	12'-6 $\frac{1}{2}$ "	7'-0"	6'	18'-6"	7'-0"	2.42
GRATE REQUIRED	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE

DIMENSIONS AND CONCRETE QUANTITIES ARE APPROXIMATE AND LISTED FOR INFORMATIONAL PURPOSES ONLY

BID ITEM AND UNIT TO BID: 245755610 HEADWALL (SLOPED & MITERED CONCRETE-FOR - INCH PIPE) - EACH

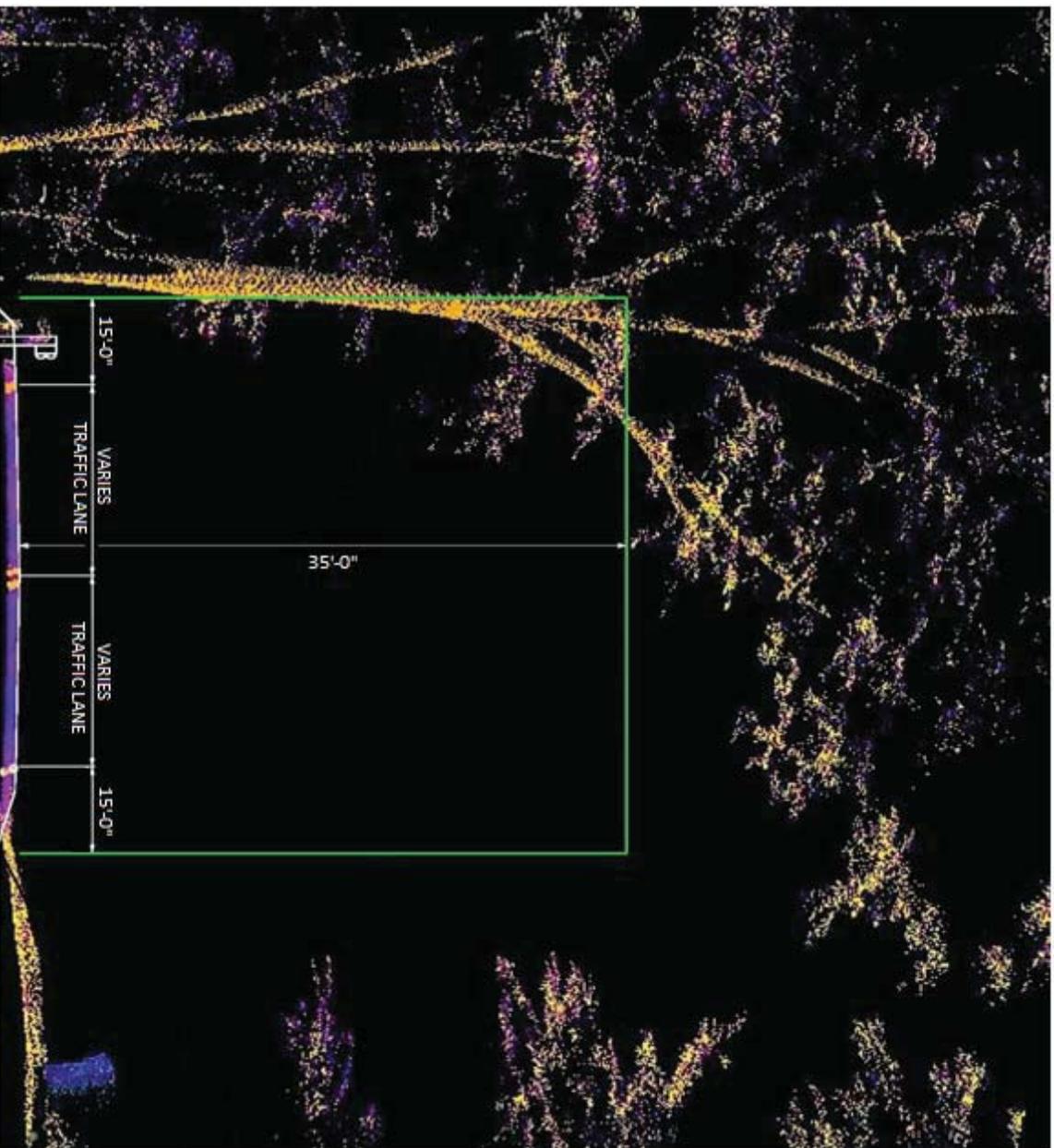
SEE SHEET 1 FOR DIMENSIONS OF HEADWALLS FOR PIPE 30" DIAMETER & LESS

DEPARTMENT OF HIGHWAYS
KENTUCKY
SLOPED & MITERED CONCRETE HEADWALL
(SHEET 2 OF 2)

NOT TO SCALE

TREE CLEARING DETAIL

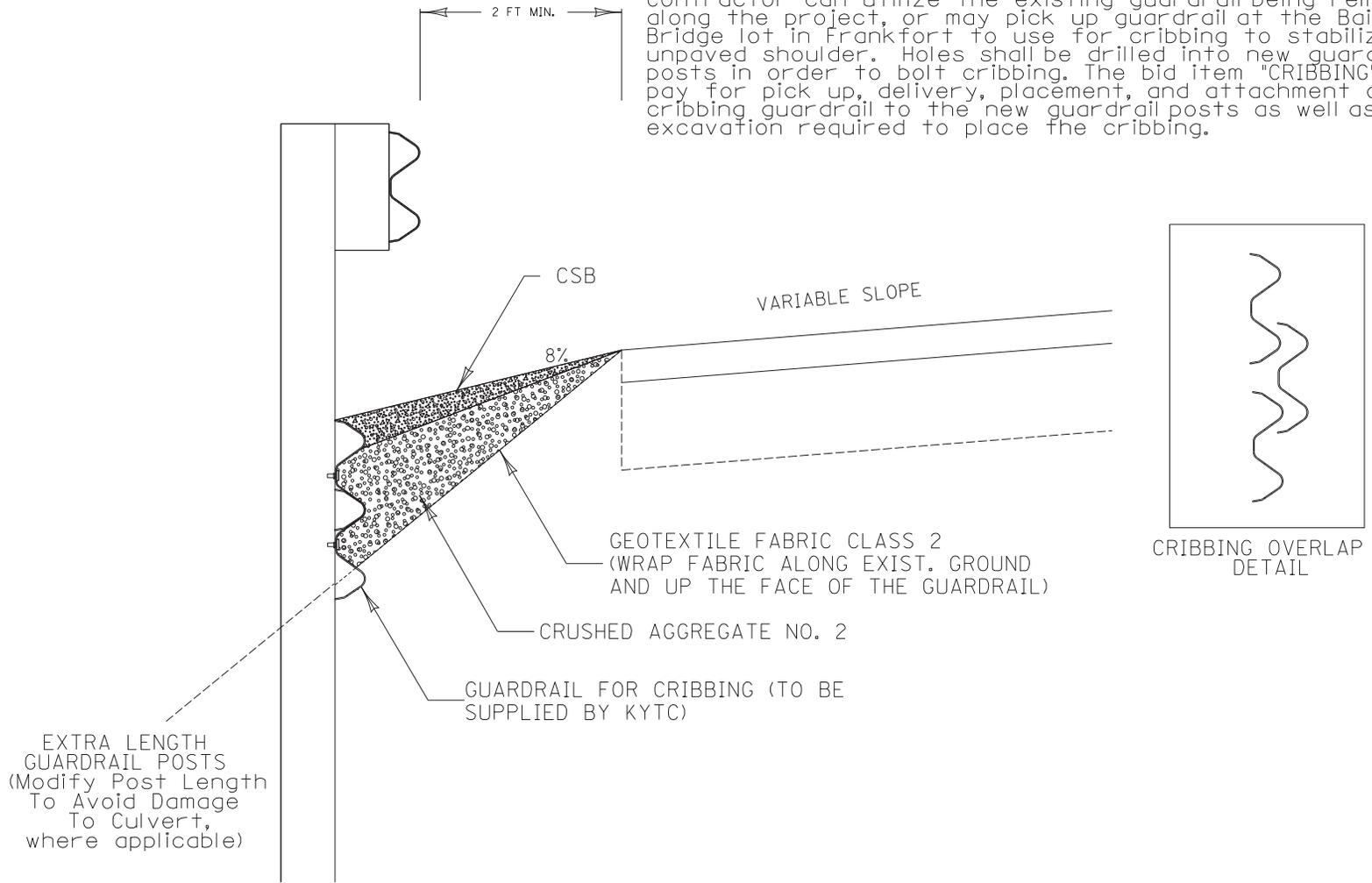
Clearing offset: 15 feet from edge of pavement, both sides, cutting with a vertical reach of 35 feet



COUNTY OF	ITEM NO.	SHEET NO.
PULASKI	8-9007.00	

CRIBBING

Contractor can utilize the existing guardrail being removed along the project, or may pick up guardrail at the Bailey Bridge lot in Frankfort to use for cribbing to stabilize the unpaved shoulder. Holes shall be drilled into new guardrail posts in order to bolt cribbing. The bid item "CRIBBING" shall pay for pick up, delivery, placement, and attachment of the cribbing guardrail to the new guardrail posts as well as any excavation required to place the cribbing.



EXTRA LENGTH
GUARDRAIL POSTS
(Modify Post Length
To Avoid Damage
To Culvert,
where applicable)

GUARDRAIL CRIBBING

DATE _____
 APPROVED BY _____
 DD-MM-YY HH:MM

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 _____

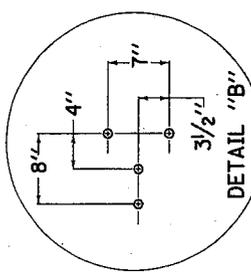
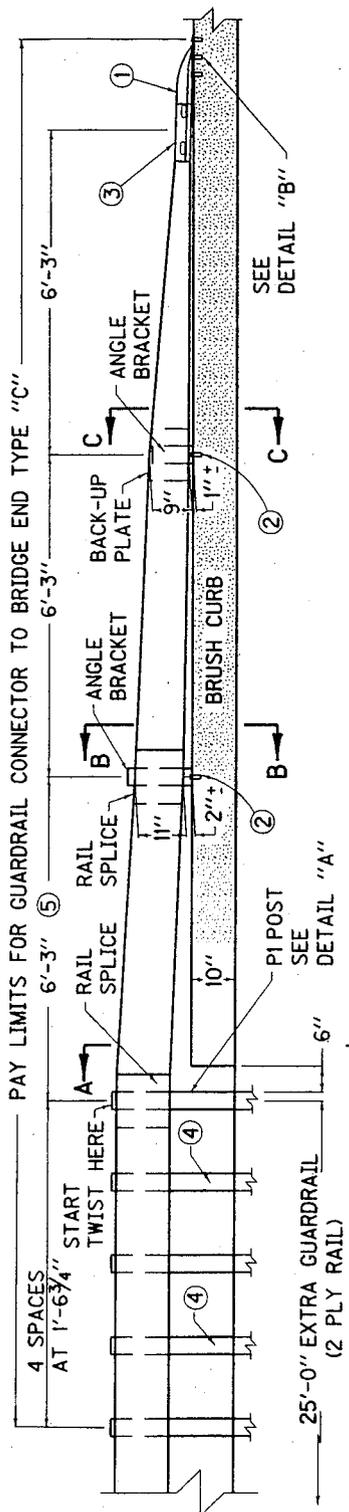
Signature Bailey Bridge Yard Representative _____ & Date _____

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: _____



EXPANSION SHIELD LOCATIONS

NOTES:

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 25'-0" 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.

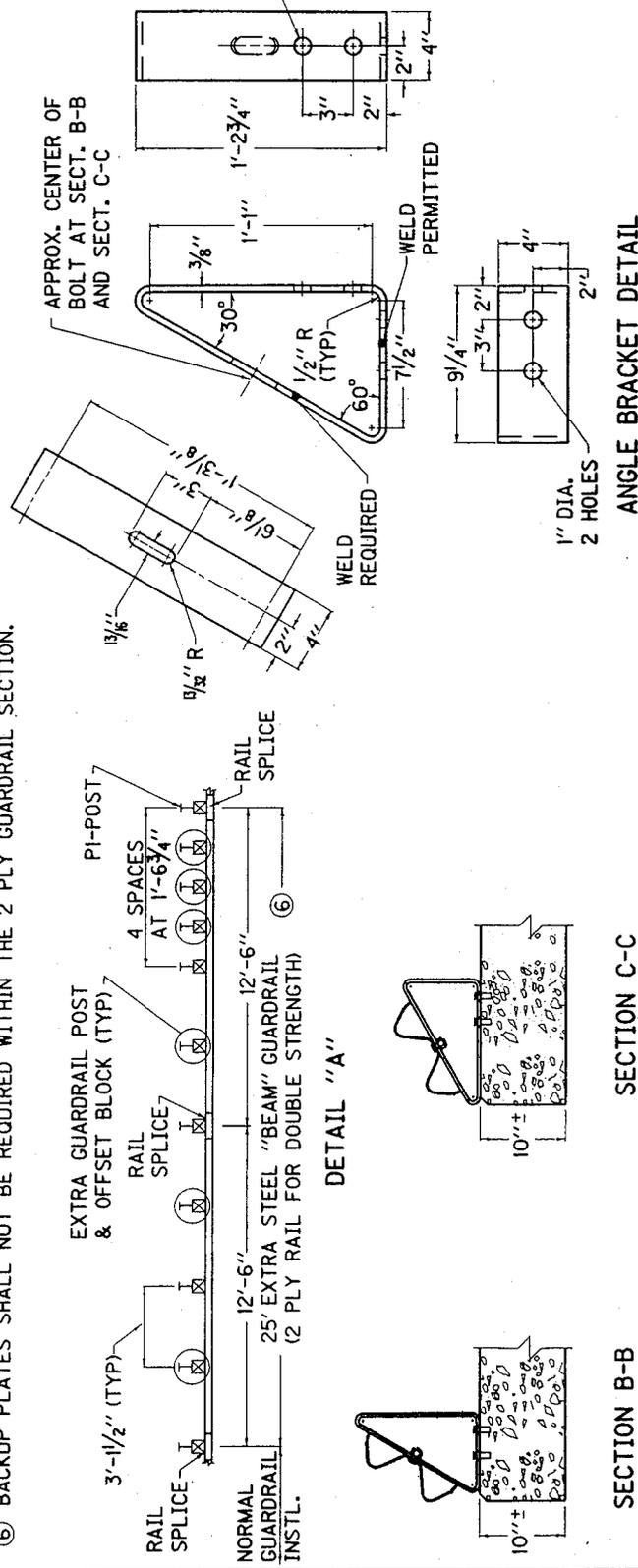
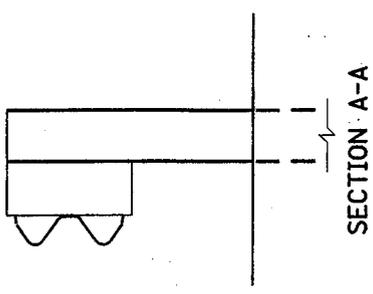
GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C" SHALL BE APPLIED ON:

A. ALL FOUR CORNERS OF EXISTING STRUCTURES WHICH HAVE TWO DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 9" IN WIDTH.

B. APPROACH END OF EXISTING STRUCTURES WHICH HAVE ONE DIRECTIONAL TRAFFIC AND CURBS GREATER THAN 9" IN WIDTH.

C. NO PEDESTRIAN TRAFFIC IS INVOLVED.

- ① SEE CURRENT STANDARD DRAWINGS RBR SERIES FOR ALL OTHER APPLICABLE MATERIAL AND CONSTRUCTION REQUIREMENTS.
- ② TERMINAL SECT. NO. 2 SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH 4 CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS 7/8" DIA. BOLT SIZE AND FOUR 7/8"x2" HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
- ③ ANGLE BRACKETS SHALL BE ANCHORED TO THE BRIDGE BRUSH CURB WITH TWO CHUCK END TYPE SELF-DRILL EXPANSION SHIELDS 7/8" DIAMETER BOLT SIZE AND TWO 7/8"x2" HEX HEAD HIGH STRENGTH GALVANIZED CAP SCREWS AND GALVANIZED STANDARD STEEL WASHERS.
- ④ TERMINAL SECTION NO. 2; FOR RECTANGULAR PLATE WASHER REQUIREMENTS AT SPLICE SEE CUR. STD. DWG. RBR-010.
- ⑤ GUARDRAIL NOT REQUIRED TO BE ATTACHED TO POST AT THESE LOCATIONS.
- ⑥ A 6'-3" SECTION OF GUARDRAIL FACTORY PUNCHED SHALL BE REQUIRED.
- ⑦ BACKUP PLATES SHALL NOT BE REQUIRED WITHIN THE 2 PLY GUARDRAIL SECTION.



KENTUCKY
DEPARTMENT OF HIGHWAYS

GUARDRAIL CONNECTOR TO BRIDGE END TYPE "C"

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 2019* and *Standard Drawings, Edition of 2020*.

SUPPLEMENTAL SPECIFICATIONS

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

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

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 Standard Specifications for Road and Bridge Construction, current edition.

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:

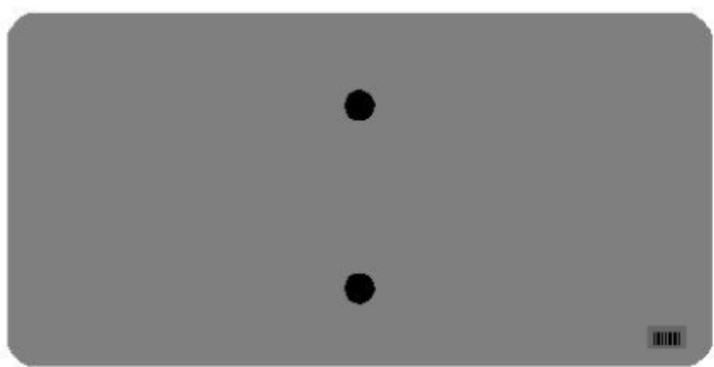
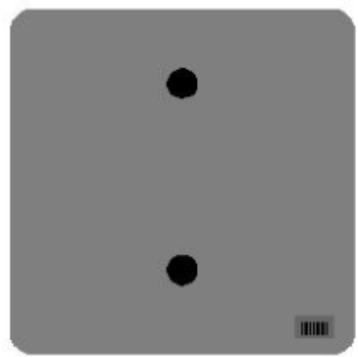
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

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.

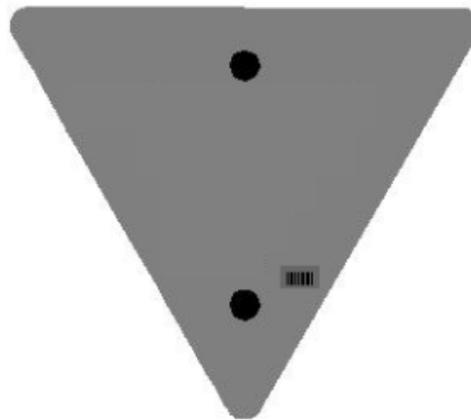
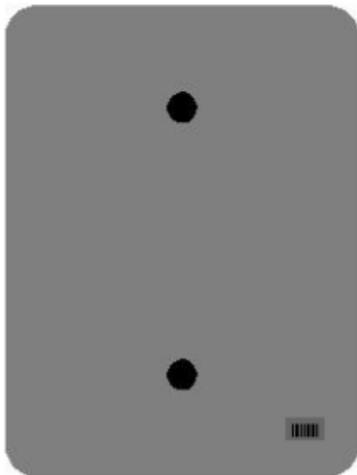
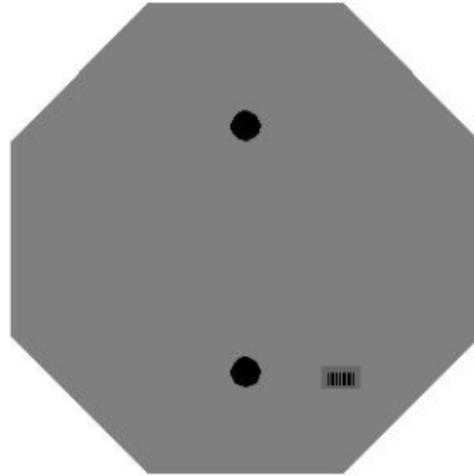
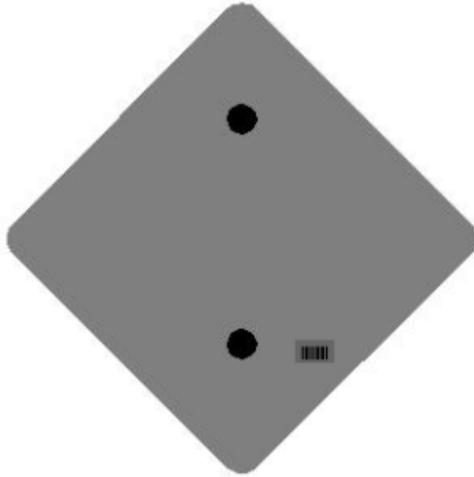
One Sign Post



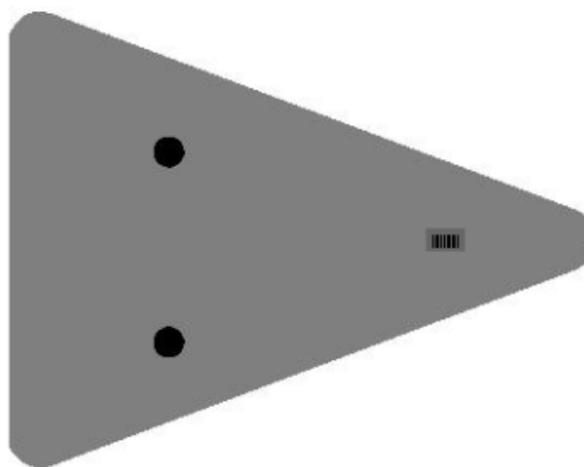
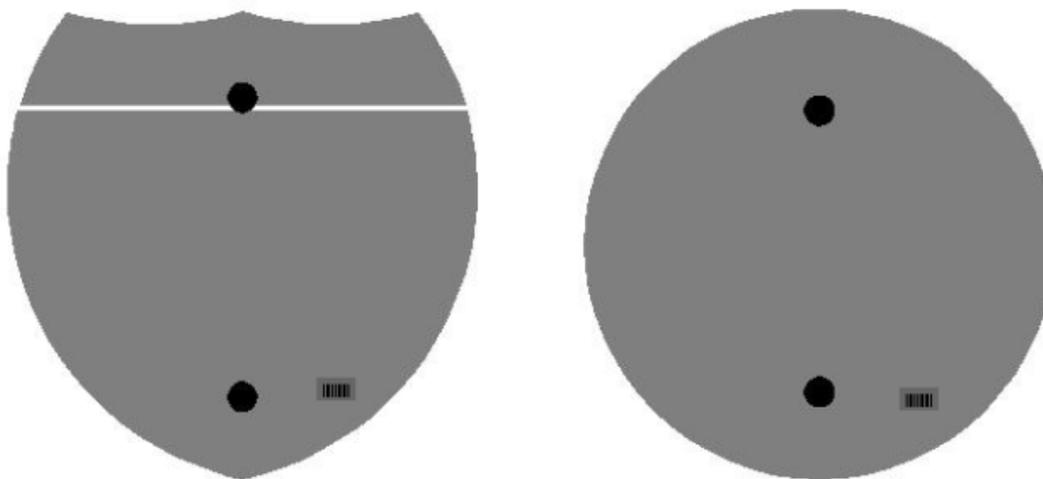
↑
2" Wide Post



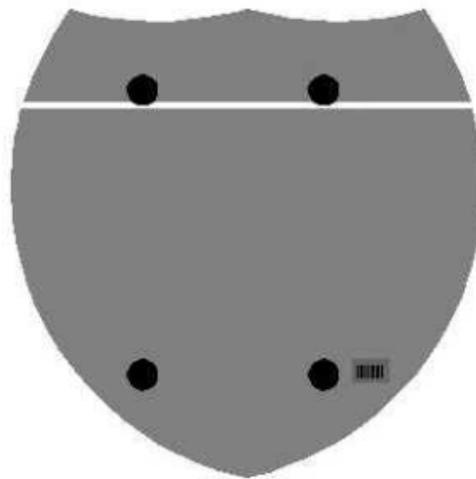
One Sign Post



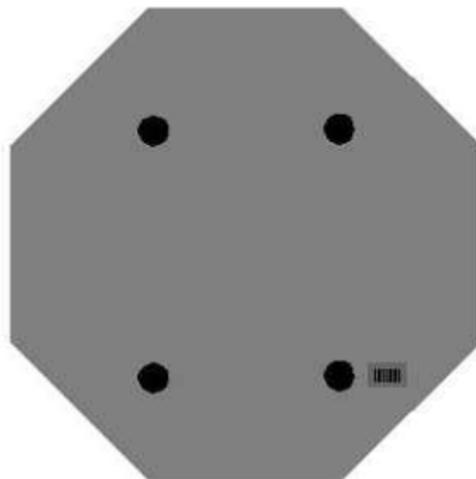
One Sign Post



Double Sign Post



Interstate
Shield

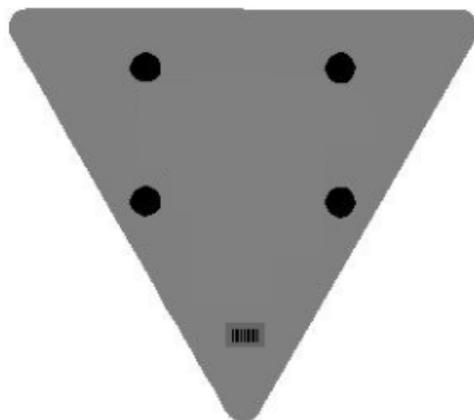


48" Stop

2 Post Signs



↑
2" Wide Post



2020 STANDARD DRAWINGS THAT APPLY

TRAFFIC ~ *PERMANENT* ~ MARKERS

PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS	TPM-175
TYPICAL ENTRANCE RAMP MARKINGS.....	TPM-200
TYPICAL EXIT RAMP MARKINGS PAGE 1.....	TPM-201
TYPICAL EXIT RAMP MARKINGS PAGE 2.....	TPM-202
TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS.....	TPM-203
TYPICAL MARKINGS FOR GORE AREAS.....	TPM-204
TYPICAL MARKINGS FOR ISLANDS AND MEDIANS.....	TPM-205
TYPICAL MARKINGS FOR TURN LANES PAGE 1.....	TPM-206
TYPICAL MARKINGS FOR TURN LANES PAGE 2.....	TPM-207

~ *TEMPORARY* ~ TRAFFIC CONTROL

LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-05
LANE CLOSURE USING TRAFFIC SIGNALS	TTC-110-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE I.....	TTC-115-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE II.....	TTC-120-04
DOUBLE LANE CLOSURE	TTC-125-04
SHOULDER CLOSURE.....	TTC-135-03
MEDIAN CROSSOVER CASE I	TTC-140-04
MEDIAN CROSSOVER CASE I	TTC-141-04
MEDIAN CROSSOVER CASE II	TTC-145-04
MEDIAN CROSSOVER CASE II	TTC-146-04
ROAD CLOSURE WITH DIVERSION.....	TTC-150-04
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR CONSTRUCTION ZONES	TTC-155-02
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR LANE CLOSURES.....	TTC-160-02
AUTOMATED FLAGGING ASSISTANCE DEVICES.....	TTC-165

STRIPING OPERATIONS

MOBILE OPERATION FOR PAINT STRIPING CASE I.....	TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02
MOBILE OPERATION FOR PAINT STRIPING CASE III	TTS-110-02
MOBILE OPERATION FOR PAINT STRIPING CASE IV	TTS-115-02
MOBILE OPERATION FOR DURABLE STRIPING CASE I.....	TTS-120-02
MOBILE OPERATION FOR DURABLE STRIPING CASE II	TTS-125-02
MOBILE OPERATION FOR DURABLE STRIPING CASE III.....	TTS-130-02
MOBILE OPERATION FOR DURABLE STRIPING CASE IV	TTS-135-02

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.

"General Decision Number: KY20200107 01/03/2020

Superseded General Decision Number: KY20190107

State: Kentucky

Construction Type: Highway

Counties: Adair, Barren, Bell, Breathitt, Casey, Clay,
Clinton, Cumberland, Estill, Floyd, Garrard, Green, Harlan,
Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee,
Leslie, Letcher, Lincoln, Magoffin, Martin, McCreary, Menifee,
Metcalf, Monroe, Morgan, Owsley, Perry, Pike, Powell, Pulaski,
Rockcastle, Russell, Taylor, Wayne, Whitley and Wolfe Counties
in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on

the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

SUKY2015-047 10/20/2015

	Rates	Fringes
BOILERMAKER.....	\$ 24.65	12.94
BRICKLAYER		
Bricklayer.....	\$ 22.90	8.50
Stone Mason.....	\$ 21.50	8.50
CARPENTER		
Carpenter.....	\$ 24.90	14.50
Piledriver.....	\$ 24.55	14.50
CEMENT MASON.....	\$ 21.25	8.50
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
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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

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

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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 to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. 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 Pulaski County.

PART IV
INSURANCE

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

PART V
BID ITEMS

PROPOSAL BID ITEMS

204123

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Report Date 9/18/20

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190		LEVELING & WEDGING PG64-22	745.00	TON		\$	
0020	00212		CL2 ASPH BASE 1.00D PG64-22	1,237.00	TON		\$	
0030	00301		CL2 ASPH SURF 0.38D PG64-22	675.00	TON		\$	
0040	00356		ASPHALT MATERIAL FOR TACK	9.40	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0050	00003		CRUSHED STONE BASE	5,773.00	TON		\$	
0060	00078		CRUSHED AGGREGATE SIZE NO 2	1,406.00	TON		\$	
0070	00100		ASPHALT SEAL AGGREGATE	150.40	TON		\$	
0080	00103		ASPHALT SEAL COAT	20.60	TON		\$	
0090	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	198.00	EACH		\$	
0100	02101		CEM CONC ENT PAVEMENT-8 IN	123.00	SQYD		\$	
0110	02200		ROADWAY EXCAVATION	3,308.00	CUYD		\$	
0120	02230		EMBANKMENT IN PLACE	1,900.00	CUYD		\$	
0130	02351		GUARDRAIL-STEEL W BEAM-S FACE	9,537.50	LF		\$	
0140	02360		GUARDRAIL TERMINAL SECTION NO 1	15.00	EACH		\$	
0150	02367		GUARDRAIL END TREATMENT TYPE 1	9.00	EACH		\$	
0160	02371		GUARDRAIL END TREATMENT TYPE 7	2.00	EACH		\$	
0170	02373		GUARDRAIL END TREATMENT TYPE 3	1.00	EACH		\$	
0180	02377		GUARDRAIL CONNECTOR TO BRIDGE END TY C	4.00	EACH		\$	
0190	02381		REMOVE GUARDRAIL	10,338.00	LF		\$	
0200	02399		EXTRA LENGTH GUARDRAIL POST	520.00	EACH		\$	
0210	02429		RIGHT-OF-WAY MONUMENT TYPE 1	8.00	EACH		\$	
0220	02483		CHANNEL LINING CLASS II	2,376.00	TON		\$	
0225	02562		TEMPORARY SIGNS (ADDED: 9-18-20)	250.00	SQFT		\$	
0230	02602		FABRIC-GEOTEXTILE CLASS 1	82.00	SQYD		\$	
0240	02603		FABRIC-GEOTEXTILE CLASS 2	12,277.00	SQYD		\$	
0250	02650		MAINTAIN & CONTROL TRAFFIC (KY 39)	1.00	LS		\$	
0255	02651		DIVERSIONS (BY-PASS DETOURS) (ADDED: 9-18-20)	1.00	LS		\$	
0260	02671		PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH		\$	
0270	02676		MOBILIZATION FOR MILL & TEXT (KY 39)	1.00	LS		\$	
0280	02677		ASPHALT PAVE MILLING & TEXTURING	668.00	TON		\$	
0290	02697		EDGELINE RUMBLE STRIPS	7,752.00	LF		\$	
0300	02701		TEMP SILT FENCE	3,090.00	LF		\$	
0310	02704		SILT TRAP TYPE B	21.00	EACH		\$	
0320	02705		SILT TRAP TYPE C	10.00	EACH		\$	
0330	02707		CLEAN SILT TRAP TYPE B	21.00	EACH		\$	
0340	02708		CLEAN SILT TRAP TYPE C	10.00	EACH		\$	
0350	02726		STAKING (KY 39)	1.00	LS		\$	

PROPOSAL BID ITEMS

204123

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Report Date 9/18/20

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0360	03236		CRIBBING	6,200.00	SQFT		\$	
0370	03269		TRIM & REMOVE TREES & BRUSH	7,150.00	LF		\$	
0380	04933		TEMP SIGNAL 2 PHASE	1.00	EACH		\$	
0390	05950		EROSION CONTROL BLANKET	465.00	SQYD		\$	
0400	05953		TEMP SEEDING AND PROTECTION	490.00	SQYD		\$	
0410	05963		INITIAL FERTILIZER	.70	TON		\$	
0420	05964		MAINTENANCE FERTILIZER	.90	TON		\$	
0430	05985		SEEDING AND PROTECTION	8,840.00	SQYD		\$	
0440	05992		AGRICULTURAL LIMESTONE	5.80	TON		\$	
0450	06403		FLEXIBLE DELINEATOR POST-B/W	9.00	EACH		\$	
0460	06406		SBM ALUM SHEET SIGNS .080 IN	318.30	SQFT		\$	
0470	06407		SBM ALUM SHEET SIGNS .125 IN	55.50	SQFT		\$	
0480	06410		STEEL POST TYPE 1	1,186.00	LF		\$	
0490	06510		PAVE STRIPING-TEMP PAINT-4 IN	17,808.00	LF		\$	
0500	06514		PAVE STRIPING-PERM PAINT-4 IN	20,608.00	LF		\$	
0510	06568		PAVE MARKING-THERMO STOP BAR-24IN	24.00	LF		\$	
0520	21373ND		REMOVE SIGN	29.00	EACH		\$	
0530	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	350.00	LF		\$	
0540	22400NN		REMOVE AND RELOCATE SIGN ASSEMBLY	20.00	EACH		\$	
0550	24631EC		BARCODE SIGN INVENTORY	96.00	EACH		\$	
0560	24683ED		PAVE MARKING-THERMO DOTTED LANE EXTEN (6 IN WIDTH)	31.00	LF		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0570	00441		ENTRANCE PIPE-18 IN	20.00	LF		\$	
0580	00462		CULVERT PIPE-18 IN	46.00	LF		\$	
0590	00464		CULVERT PIPE-24 IN	66.00	LF		\$	
0600	01310		REMOVE PIPE	20.00	LF		\$	
0610	02403		REMOVE CONCRETE MASONRY	1.00	CUYD		\$	
0620	08003		FOUNDATION PREPARATION (STA 231+12)	1.00	LS		\$	
0630	08003		FOUNDATION PREPARATION (STA 572+60)	1.00	LS		\$	
0640	08100		CONCRETE-CLASS A	30.00	CUYD		\$	
0650	08150		STEEL REINFORCEMENT	3,300.00	LB		\$	
0660	20694EN		ALUMINUM STRUCTURAL PLATE BOX CULVERT (8'9" x 2'6")	45.25	LF		\$	
0670	24575ES610		HEADWALL (SLOPED & MITERED CONCRETE - FOR 18 INCH PIPE)	3.00	EACH		\$	
0680	24575ES610		HEADWALL (SLOPED & MITERED CONCRETE - FOR 24 INCH PIPE)	6.00	EACH		\$	

Section: 0004 - DEMOBILIZATION

204123

PROPOSAL BID ITEMS

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Report Date 9/18/20

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0690	02569		DEMOBILIZATION	1.00	LS		\$	