CALL NO. 201

CONTRACT ID. 254301

FAYETTE COUNTY

FED/STATE PROJECT NUMBER 034GR25T010-HSIP, SLX, & FD05

DESCRIPTION RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418)

WORK TYPE GRADE & DRAIN WITH ASPHALT SURFACE

PRIMARY COMPLETION DATE 9/30/2026

LETTING DATE: May 22,2025

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME May 22,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 6.50%

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

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- FEDERAL CONTRACT NOTES
- NATIONAL HIGHWAY
- ASPHALT MIXTURE
- DGA BASE
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- LIQUIDATED DAMAGES
- WASTE AND BORROW SITES
- PIPELINE INSPECTION
- NON-TRACKING TACK COAT
- ELECTRONIC DELIVERY MANAGEMENT SYSTEM (E-TICKETING)
- EXPERIMENTAL KYCT AND HAMBURG TESTING
- DOLOMITIC POLISH-RESISTANT AGGREGATE CLASS A 0.38-IN AND 0.50-IN NOMINAL ASPHALT MIXTURES
- COORDINATION OF WORK WITH OTHER CONTRACTS
- GUARDRAIL
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- SIDEWALK RAMPS & DETECTABLE WARNINGS
- TRAFFIC CONTROL PLAN
- DURABLE PAVEMENT EDGE DETAILS
- RIGHT OF WAY CERTIFICATION
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- GENERAL UTILITY NOTES
- SEWER STANDARD UTILITY BID ITEMS
- SEWER SPECIFICATIONS
- KPDES STORM WATER PERMIT, BMP AND ENOI
- COMMUNICATING ALL PROMISES
- GEOTECHNICAL NOTES
- MATERIAL SUMMARY
- SUMMARY SHEET(S)
- DETAIL SHEET(S)
- GUARDRAIL DELIVERY VERIFICATION SHEET

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-1I] PORTABLE CHANGEABLE MESSAGE SIGNS
- [SN-11F] TURF REINFORCEMENT MAT
- [SN-11M] BARCODE LABEL ON PERMANENT SIGNS
- 2020 STANDARD DRAWINGS THAT APPLY
- INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS
- INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS

- INLAID PAVEMENT MARKER ARRANGEMENTS TWO-LANE ROADWAYS
- INLAID PAVEMENT MARKER ARRANGEMENTS TWO-WAY, LEFT-TURN LANE
- INLAID PAVEMENT MARKER ARRANGEMENT CHANNELIZED INTERSECTION
- CENTERLINE RUMBLE STRIPS 6 INCH SPACING
- EDGELINE RUMBLE STRIPS PLACEMENT DETAILS
- EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS
- RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- FEDERAL-AID CONSTRUCTION CONTRACTS - FHWA 1273
- NONDISCRIMINATION OF EMPLOYEES
- EXECUTIVE BRANCH CODE OF ETHICS
- PROJECT WAGE RATES LOCALITY 3 / FEDERAL

PART IV BID ITEMS

PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 07

CONTRACT ID - 254301

034GR25T010-HSIP, SLX, & FD05

COUNTY - FAYETTE

PCN - 0703400252501
HSIP 4181(033)

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) (MP 7.805) CONSTRUCTION OF RCUT INTERSECTIONS ALONG THE CORRIDOR FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD (MP 9.672), A DISTANCE OF 01.87 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 07-09012.50.

GEOGRAPHIC COORDINATES LATITUDE 37:58:53.61 LONGITUDE 84:25:20.50

ADT 36,905

PCN - 0703400252502
HSIP VRU 4181(033)

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) (MP 7.805) CONSTRUCTION OF A SHARED USE PATH AND OTHER VULNERABLE ROAD USER (VRU) IMPROVEMENTS FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD (MP 9.672), A DISTANCE OF 01.87 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 07-09012.50.

GEOGRAPHIC COORDINATES LATITUDE 37:58:53.61 LONGITUDE 84:25:20.50

ADT 36,905

PCN - 0703400252503
SLX 4181(033)

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) (MP 7.805) CONSTRUCTION OF TRAFFIC SIGNALS ALONG THE CORRIDOR FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD (MP 9.672), A DISTANCE OF 01.87 MILES.TRAFFIC SIGNAL SYSTEMS SYP NO. 07-09012.50.

GEOGRAPHIC COORDINATES LATITUDE 37:58:53.61 LONGITUDE 84:25:20.50

ADT 36,905

PCN - MP03400252501
FD05 034 0025 008-010

RICHMOND ROAD (US 25) (MP 8.144) FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO OLD RICHMOND ROAD (MP 9.485), A DISTANCE OF 01.34 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 37:59:28.00 LONGITUDE 84:26:04.00

ADT 36,905

PCN - MP03404182501
FD05 034 0418 000-002

ATHENS BOONESBORO ROAD (KY 418) (MP 0.00) FROM OLD RICHMOND ROAD EXTENDING SOUTH TO THE PAVEMENT JOINT NEAR ASHLEY WOODS ROAD (MP 1.87), A DISTANCE OF 01.87 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 37:58:39.00 LONGITUDE 84:24:55.00

ADT 22,277

COMPLETION DATE(S):

COMPLETED BY 09/30/2026 APPLIES TO ENTIRE PROJECT

CONTRACT NOTES

INSURANCE

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

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 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/construction-procurement). 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 state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, 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 agreement for the purpose of financial audit or program review. 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. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to KRS 45A.607, they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

LOBBYING PROHIBITIONS

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in KRS 11A.236 during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to KRS 45A.328, they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT 10/26/2023

1.0 BUY AMERICA REQUIREMENT.

Follow the "Buy America" provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

1) When the materials are not permanently incorporated into the project; or
2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or $2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

2.0 – BUILD AMERICA, BUY AMERICA (BABA)

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or $2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all "construction materials" as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials

incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

Finally, BABA permits the continuation of FHWA's current general applicability waivers for manufactured products, raw materials, and ferryboat parts, but these waivers are subject to reevaluation, specifically the general applicability waiver for manufactured products.

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/ Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it is in compliance.

At the Contractor's request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration's Buy America webpage for more information.

Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration (dot.gov)

BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

Date Submitted:_____

Contractor:_____

Signature:_____

Printed Name:_____

Title:_____

NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.

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
102.13 Irregular Bid Proposals
102.09 Proposal Guaranty
102.08 Preparation and Delivery of Proposals
102.14 Disqualification of Bidders

CIVIL RIGHTS ACT OF 1964

The Kentucky Transportation Cabinet, Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, disability, income- level, or Limited English Proficiency (LEP)in consideration for an award.

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 are acceptable per Section 108.01 of the Standard Specifications for Road and Bridge Construction. S u b - Contractors fulfilling a disadvantaged business enterprise goal on a project may enter into a 2nd tier subcontract with a Non-DBE Subcontractor. However, in this instance, none of the work subcontracted to the Non-DBE Contractor will count toward fulfilling the established Disadvantaged Goal for the project.

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.

AFTER PROJECT AWARD AND BEFORE NOTICE TO PROCEED/WORK ORDER IS ISSUED (SEE SECTION 103.06, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

Prime Contractors awarded a federally funded project with a DBE Goal greater than zero will be required to submit a fully executed DBE Subcontract, along with the attached FHWA 1273 and Certificate of Liability Insurance for each DBE Firm submitted as part of the previously approved DBE Utilization Plan (TC 14-35). A signed quote or purchase order shall be attached when the DBE subcontractor is a material supplier or broker.

The Certificate of Liability Insurance submitted must meet the requirements outlined in Section 107.18 of the Standard Specifications for Road and Bridge Construction.

Changes to ***APPROVED*** DBE Participation Plans must be approved by the Office for Civil Rights & Small Business Development. 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 certainly 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 for 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:

- Suspension of Prequalification;
- 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 and Non-DBE Subcontractors 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 for Civil Rights and Small Business Development
6th Floor West 200 Mero Street
Frankfort, KY 40622

The prime contractor should notify the KYTC Office for 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. Tony Youssefi. Mr. Youssefi's current contact information is email address – tyousseffi@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.

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

ASPHALT MIXTURE

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

DGA BASE

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION A

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

Special Notes Applicable to Project – General Notes & Description of Work

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.

STATIONING

The contractor is advised that the planned locations of work were established from a beginning station number, which is STA 0+00 at the intersection of KY 418 and US 25 (at Old Richmond Road) and corresponds to Milepoint 0 along KY 418. This station has an equation which is Sta. 430+63.68 at this same intersection for Milepoint 8.16 along US 25. Note that the stationing for US 25 runs in the opposite direction of its milepoints, so it can be continuous with the direction of KY 418.

NOTE: The existing mile marker signs may not correspond to the proposed work locations.

EXISTING MAPPING AND SURVEY CONTROL

Survey information was obtained from a combination of available KYTC Aerial LIDAR data and some field survey information. It should be field verified as appropriate during construction and prior to incorporating the various project work items. Refer to the Special Note for Staking concerning staking operations required to control and construct the work.

ON-SITE INSPECTION

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 any claims for money or time extension resulting from site conditions.

RIGHT OF WAY LIMITS

The Department has not established the 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 and environmentally cleared 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.

Pavement and signing improvements are proposed for the Brenda Cowan School Entrance which are outside the right-of-way limits. The Department has obtained a Consent and Release from Fayette County Public Schools for this work. A copy can be provided upon request.

CONTROL

Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public

utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with 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 his/her decision shall be final and binding upon the Contractor.

DESCRIPTION OF WORK

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

Construction of RCUT (Restricted Crossing U-Turn) Intersections. The intent of this project is to construct a series of RCUT intersections at the following side road locations along US 25/KY 418 (Richmond Road/Athens Boonesboro Road):

- Yorkshire Boulevard/Squires Road
- Ellerslie Park Boulevard/New Jacobson Park Entrance
- Hays Boulevard/Aphids Way
- U-turn crossovers near the Athens Boonesboro Service Road
- Brenda Cowan Elementary School Entrance

This will be accomplished by constructing a Standard Barrier Median in the middle of the intersections with US 25 / KY 418, turn lanes, U-Turn crossovers (a short distance upstream and downstream from the main intersection), and loons across from the U-Turn crossovers.

Standard Barrier Median. Standard Barrier Median has been designed to prevent the thru and left turning movements from the side roads onto US 25 / KY 418, but still allow left turning movements from US 25 / KY 418 onto the side roads. Details within the Proposal show the design and layout for the Standard Barrier Median.

Turn Lanes and U-Turn Crossovers. Since the thru and left turning movements from the side roads onto US 25 / KY 418 are being prohibited in this design, Left Turn Lanes and U-Turns are being provided a short distance from the main intersections. Details within the Proposal show the design, layout and widening for the Turn Lanes and U-Turn Crossovers.

Loons. To accommodate vehicles that require a large turning radius at the U-Turns, Loons are to be constructed along US 25 / KY 418 at/near the U-Turn locations. Loons are not provided at all intersection locations. Details within the Proposal show the design and layout for the Loons.

Asphalt Pavement and Roadway Widening. Portions of the existing roadway are to be widened for turn lanes and entrances. Additionally, the roadway will be resurfaced (with milling and texturing and placement of asphalt surface course) within the project limits. This work will include: removal of existing pavement by milling and texturing, earthwork, longitudinal edge keys, placement of crushed stone base, placement of asphalt base, placement of an asphalt surface course, installation of edge line rumble strips,

and the application/installation of pavement markings. Details within the Proposal show the design and layout of the paving limits.

Pavement Removal. Pavement removal associated with reducing the length of existing left turn storage lanes, modifying turning radii, or the removal of Old Richmond Road will be measured and paid under the bid items for Pavement Removal and Sawcut.

Aphids Way Realignment. Aphids Way will be reconstructed and realigned to curve onto Old Richmond Road as the thru movement. The vertical grade will be lowered to achieve better sight distance, and full depth pavement will be constructed in this location. This work will include: removal of existing pavement, earthwork, placement of crushed stone base, placement of asphalt base, placement of an asphalt surface course, placement of concrete pavement, standard barrier median, installation of edge line rumble strips, and the application/installation of pavement markings. Details within the Proposal show the design and layout for the realignment.

New Jacobson Park Entrance. A new main entrance into Jacobson Park will be constructed across from Ellerslie Park Boulevard as an RCUT intersection. This will include the construction of a shared use path on either side of the entrance, and additional drainage work. Tie in the new entrance at the Jacobson Park Road, and level and wedge as needed to maintain positive drainage. The existing park Cul-de-Sac in the area will be removed to fit this new entrance, and the existing parking area will be restriped. The existing park entrance will remain as a right-in right-out entrance. Details within the Proposal show the design and layout for the new entrance.

Old Richmond Road Intersection Removal. The existing Old Richmond Road intersection will be removed and drivers from US 25 / KY 418 will use the newly realigned Aphids Way to connect to Old Richmond Road. Details within the Proposal show the design and layout for the intersection.

Shared Use Path. A 10-foot-wide shared use path will be constructed along the corridor. The first section is between Yorkshire Boulevard and Coys Lane and the second section is between the Lexington Reservoir and Hays Boulevard. Details within the Proposal show the design and layout for the shared use path.

DGA Wedge & Chip Seal. Some full depth sections along the corridor are set up to receive a DGA Wedge & Chip Seal with the full depth widening. Construct the DGA Wedge & Chip Seal at the locations identified on the Typical Sections, or at locations as directed by the Engineer. The proposed DGA Wedge dimensions are detailed on the Typical Sections.

Drainage. There are locations throughout the project where culvert pipes and storm sewer pipes are being replaced and/or extended. Locations are noted on the Plan Sheets, Pipe Drainage Summary and the Pipe Sections. Other items that may be associated with the pipe replacements and/or extensions include: Sloped Box Inlets/Outlets and Drop Box Inlets, Ditching, etc. Refer to the Special Note for Pipe Replacements / Extensions for more information on this item of work.

Guardrail. A small portion of existing guardrail and end treatment within the project will be replaced. Refer to the Plan Sheets and Typical Sections for the approximate locations for guardrail replacement. See the Special Note for Guardrail for more detail and information on this item of work.

NOTE: When the plans call for a Type 1 or Type 4A End Treatment, a MASH eligibility letter from FHWA is required for these end terminals. When a MASH tested eligibility letter is not available for the end terminal being utilized, the most recent NCHRP 350 eligibility letter from FHWA for that terminal will apply. Acceptance of the terminal will be at the discretion of the Engineer.

Striping and Pavement Marking. Install the proposed Striping and Pavement Markings, as detailed on the Pavement Marking Plans. The Contractor shall coordinate with the District Traffic Engineer to ensure that the District Traffic Engineer approves of the final layout.

Special Note for Ribbon Thermo Striping Application
Contrary to Section 714.02.05 of the Standard Specifications for Road and Bridge Construction, application of 6 inch and 12 inch white and yellow "long-line" thermoplastic striping will be required to be by ribbon-extrusion gun at all locations that are to be applied over milled rumble strips in lieu of an extrusion die application. Also, ribbon-extrusion gun application may be used for all other 6 inch and 12 inch white and yellow "long-line" thermoplastic striping on this project in lieu of an extrusion die application.

Signing. Install the proposed signing, as detailed on the Signing Plans. The Contractor shall coordinate with the District Traffic Engineer to ensure that the District Traffic Engineer approves of the final sign locations.

Signalization and Lighting. Install the proposed traffic signal system and lighting for the intersections and loons, as detailed on the Signalization Plans. This work will include installation of mast arm poles with signal heads, pedestrian signals, base-mounted signal controllers, radar presence detectors and fiber optic interconnection.

Temporary Striping. A quantity of Pave Striping – Temp Paint – 4 in has been included in the contract for potential use in the area of the project between Eagle Creek Drive and to Ashley Woods Road, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine any locations throughout the project requiring temporary pavement striping. The Engineer will make the final determination as to the quantities and placement of temporary pavement striping.

Sanitary Sewer Force Main Relocation. A section of existing 10" sanitary sewer force main will be relocated along Aphids Way, as detailed on the Utility Plans.

Install Pexco FG 300 Lane Separator Curb. A lane separator curb is to be added at certain locations along the edgelines of KY 418 as detailed on the plans.

Tubular Markers. The Pexco City Post Embedded Anchor Cup system has been specified for supplemental delineation of the Standard Barrier Median. No substitute will be allowed. Refer to Special Note for Tubular Markers – Pexco City Post (Embedded Anchor Cup).

Install Wooden Plank Fence. A wooden plank fence shall be constructed along the shared use path in the section between the Lexington Reservoir and the new Jacobson Park entrance. This fence should match the existing fence in the area. See Plan Sheets for location.

Clearing and Grubbing. This shall include removal of items within the construction limits, including trees,

pavement, etc. that was not quantified separately on the plan sheets but is necessary to complete the work. The removal of bollards at the right-in right-out near Squires Blvd. will be incidental to clearing and grubbing.

Gravity Retaining Wall. There are two gravity retaining walls along the corridor. Sta. 389+90 to Sta. 391+25 over the 48" pipe. Retaining wall should be no higher than 4' over the pipe without the direction of the engineer. Sta. 3+50 to Sta. 4+50 over the 5' x 7' RCBC. Retaining wall shall be behind the existing headwall and on top of the existing structure. If the path or wall shall need adjustments in the field due to the existing elevations, it should be no higher than 3.5' over the culvert without the direction of the engineer.

SPECIAL NOTE

For Tree Removal

Fayette County
Intersection and Corridor Improvements to Reduce Conflict Points and Enhance Safety along Richmond Rd and Athens Boonesboro Rd. Includes minor widening of Aphids Way.
Item No. 07-9012.5

NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST HEIGHT) FROM **MAY 15 THROUGH 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 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 201.03.01, perform items 1 & 2 usually performed by the Engineer.
2. 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.
3. 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 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.
4. Produce and furnish to the Engineer "As Built" information for the drainage improvements. 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.
5. 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.
6. Prior to incorporating into the work, obtain the Engineers approval of all revisions determined by the Contractor.
7. Perform any and all other staking operations required to control and construct the work.
8. Determine elevations along the proposed pavement, matching existing pavement slope where

possible. Leveling and wedging shall be utilized as needed to grade the roadway slope to drain. Areas where leveling and wedging may be needed are shown on the Paving Plans included in the proposal, but not limited to those locations. Ensure positive drainage along the roadway and roadside ditch. Cross Sections show approximate elevations of ditch lines but should be verified in the field.

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.
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 steam.

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 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 Pipe Replacements and 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 existing 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.

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 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, regardless of cover height, backfill culvert pipes with flowable fill as shown on the Culvert Pipe Replacement Detail from the outside edge of shoulder or back of curb to outside edge of shoulder or back of curb. 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. For culvert pipe beyond the outside edge of shoulder or back of curb, backfill according to Section 701.03.06.

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: ROADSIDE REGRADING 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.

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.

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, geotextile fabric, 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 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 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. describing and/or detailing 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 aluminum sheet to receive the retroreflective background material 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 sign posts shall be of sufficient lengths so that a single, continuous length of sign post extends 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 to be installed on sufficiently cured 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 use only Redi-Torque Model 280 Surface Mount Slip Base Assembly (part number SMSB) by Xcessories Squared of Auburn, IL. Prior to installation, the Contractor shall submit to the Engineer shop drawings of the Type D Surface Mount. Install the Type D Surface Mount according to all the applicable requirements of the manufacturer (see shop drawings). During installation of the Type D Surface Mount, if the existing concrete surface is not flat (i.e. has a slope), galvanized metal shims may be required to ensure the surface mount base is level and plumb. If a Type D breakaway sign support is specified for a location that has an asphalt surface, the Contractor shall install the Type D breakaway sign support detailed on Standard Drawing RGX-065, current edition. 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, shims, 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 on the plans and/or summaries, fabricate Reflective Sign Post Panels from .080 gauge aluminum alloy 5052-H38 or 6061-T6, in accordance with ASTM B-209 and to the size(s) specified. Prepare the side of the aluminum sheet to receive the retroreflective background material according to the recommendations of the sheeting and retroreflective material manufacturer(s). 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 XI Sheeting)
- White and yellow (Type XI Sheeting)

Reflective Sign Post Panels shall be 2 inches wide and will typically have a height of 60 inches for rural installations and typically have a height of 84 inches for urban installations. There will be certain instances where a proposed Reflective Sign Post Panel will have a height dimension less than 60 inches; typically, this will be when the bottom of the bottom-most sign is mounted lower than the standard 5 ft minimum mounting height (e.g. 3 ft or 4 ft mount heights). In those cases, the height of the Reflective Sign Post Panel is expected to closely match (within 1-2 inches) the distance between the top of the anchor or support to the bottom edge of the bottom-most sign. Reflective Sign Post Panels 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 steel post.

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. Use bracing as indicated on the plans, summaries, and/or standard signing detail sheets, and/or when directed by the Engineer and/or District Traffic Engineer.

All sign posts shall be attached to anchors 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 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. Remove & Relocate Sheet Signs. When listed on the plans and/or summaries, and/or as directed by the Engineer and/or District Traffic Engineer, remove the specified existing sheet sign(s) from the existing post(s) and reinstall on a new sign post. Once the specified existing sheet sign(s) have been removed and relocated, and if the existing sign post(s) are no longer needed to support other existing signs, removal of the existing sign post(s) will be paid under the bid item REMOVE SIGN. If any of the existing hardware components (bracing, brackets, bolts, rivets, etc.) are found to have pre-existing damage or are damaged during the Contractor's removal and reinstallation efforts, the Contractor shall provide the necessary replacement hardware for proper re-installation of the sheet sign. These components shall be incidental to the bid item REMOVE AND RELOCATE SHEET SIGNS.

Prior to removing and reinstalling a sheet sign, the Contractor shall first review the existing sheet sign for damage. It is the Contractor's responsibility to notify the Engineer of any existing sheet sign damage prior to removal and relocation of the sheet sign, so that it can be documented that the existing sheet sign had pre-existing damage. If the Contractor does not make the Engineer aware of pre-existing damage prior to detaching the sheet sign from its existing post, the Department will assume the damage was the result of the Contractor's removal and reinstallation efforts. The Contractor shall replace any sheet signs that are damaged during the removal and reinstallation efforts. Replacement of sheet signs damaged by the Contractor shall be incidental to the bid item REMOVE AND RELOCATE SHEET SIGNS.

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 existing, damaged sheet sign from the existing post and attaching the new, Department-provided sheet sign to the new sign post shall be incidental the bid item REMOVE AND RELOCATE SHEET SIGNS.

F. Remove & Relocate Sign Assemblies. When listed on the plans and/or summaries, and/or as directed by the Engineer and/or District Traffic Engineer, remove the specified existing sign assemblies from the existing location and reinstall in a new location. The Department will consider all signs attached to one or more connected posts as a single sign assembly, no matter how many signs are attached to the existing sign assembly. If any of the existing hardware components (bracing, brackets, bolts, rivets, etc.) are found to have pre-existing damage or are damaged during the Contractor's removal and reinstallation efforts, the Contractor shall provide the necessary replacement hardware for proper re-installation of the sign assembly. These components shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

Prior to removing and relocating a sign assembly, the Contractor shall review the existing sign(s) and sign post(s) for damage. It is the Contractor's responsibility to notify the Engineer of any sign or sign post damage prior to removal and relocation of the sign assembly, so that it can be documented that the existing 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 a sign assembly from its existing location, the Department will assume the damage was the result of the Contractor's removal and reinstallation efforts. The Contractor shall replace any components of a sign assembly that are damaged during removal and relocation. Replacement of any components damaged by the Contractor shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

If an existing sign that is part of a sign assembly to be removed and relocated is found to have pre-existing damage, the Department will provide the Contractor with a new sign to replace the sign with pre-existing damage. Detaching the existing, damaged sign from the existing post and attaching the new, Department-provided sign to the relocated existing post shall be incidental to the bid item REMOVE AND RELOCATE SIGN ASSEMBLY.

If an existing sign assembly that is to be removed and 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 AND RELOCATE SIGN ASSEMBLY.

If an existing sign assembly that is being relocated is not currently mounted on a Type D breakaway sign support, but the plans and/or summaries indicate, or wind load standards dictate, a Type D breakaway sign support or a Type D Surface Mount is required, provide and install the specified Type D support as part of the removal and reinstallation efforts. Type D breakaway sign supports shall be paid under the bid item GMSS TYPE D and Type D Surface Mount supports shall be paid under the bid item GMSS TYPE D (SURFACE MOUNT).

If an existing sign that is being relocated is found to have pre-existing damage to one or more of the sign post, the Department will <u>NOT</u> utilize the bid item REMOVE AND RELOCATE SIGN ASSEMBLY for removing and relocating such a sign assembly. 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 sign(s) from the existing, damaged post(s) and attaching the existing sign(s) to the new sign post(s) 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.

G. 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.

H. 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.

I. 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.

J. 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.

K. 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.

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 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 payment, but shall be incidental to the project bid items.

C. Signs and Reflective Sign Post Panels. 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 breakaway 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. Remove & Relocate Sheet Signs. The Department will measure sheet signs removed from an existing sign post and reinstalled on a new sign post as Each sheet sign removed and reinstalled. as indicated in the contract documents, or as directed by the Engineer. The new sign post shall be measured as indicated in paragraph D. of this section.

L. Remove & Relocate Sign Assemblies. The Department will consider all signs attached to one or more connected posts as a single sign assembly. When the contract documents indicate that an existing sign assembly is to be removed from its existing location and reinstalled in a new location, 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.

M. 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.

V. BASIS OF PAYMENT

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

B. Signs and Reflective Sign Post Panels. 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 plans/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 plans/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: The permissible Type D Surface Mount alternative is: Redi-Torque Model 280 Surface Mount Slip Base Assembly (part number SMSB) by Xcessories Squared of Auburn, 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. Remove & Relocate Sheet Signs. The Department will make payment for the completed and accepted quantities under the bid item REMOVE AND RELOCATE SHEET SIGNS. Any hardware that is needed to complete the removal and reinstallation shall be incidental. The Department will consider payment full compensation for all work and incidentals necessary to remove and reinstall the existing sheet signs as indicated on the plans, summaries, and/or as directed by the Engineer.

I. Remove & Relocate Sign Assemblies. The Department will make payment for the completed and accepted quantities under the bid item REMOVE AND RELOCATE SIGN ASSEMBLY. Any hardware that is needed to complete the removal and reinstallation shall be incidental. The Department will consider payment full compensation for all work and incidentals necessary to remove and reinstall the existing sign assembly as indicated on the plans, summaries, and/or as directed by the Engineer

J. Erosion Control. See Special Note for Erosion Control.

Special Note for Tubular Markers – Pexco City Post (Embedded Anchor Cup)

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) Installing Pexco City Post (Embedded Anchor Cup); 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. Tubular Markers. Furnish Pexco City Post Embedded Anchor Cup Tubular Marker which includes delineator posts/panels, adhesive shield, rubber gasket, and anchor cup. The complete system shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. System color shall match the adjacent pavement marking color. The upright delineator posts **shall be 18 inches in height and 3 inches in diameter**. The upright delineator posts are to be uniformly spaced according the Detail Sheets found elsewhere in the Proposal. Post color shall match the adjacent pavement marking color. Each post shall have a "double wrap" of retroreflective sheeting of color matching the post and adjacent pavement marking. Upright posts should be easily replaceable under traffic conditions and shall be fabricated to withstand repeated impacts and return to a complete upright position with minimal maintenance to the unit.

III. CONSTRUCTION METHODS

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

B. Staking. See the Special Note for Staking.

C. Site Preparation. Be responsible for all site preparation recommended by the manufacturer or as directed by the Engineer.

D. Pexco City Post Embedded Anchor Cup. Install the tubular markerd according to the manufacturer's recommendations at the location(s) and spacing indicated on the Detail Sheets found elsewhere in the Proposal.

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. 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.

IV. METHOD OF MEASUREMENT

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

B. Staking. See the Special Note for Staking.

C. 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.

D. Tubular Markers. The Department will measure Pexco City Post Embedded Anchor Cup as EACH.

V. BASIS OF PAYMENT

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

B. Staking. See the Special Note for Staking.

C. Tubular Markers. The Department will make payment for the completed and accepted quantities under the bid item TUBULAR MARKERS (PEXCO CITY POST EMBEDDED ANCHOR CUP). Payment at the Contract unit price of EACH shall be full compensation for furnishing all materials, equipment, tools, hardware, labor, and incidentals necessary to properly install the Pexco City Post Embedded Anchor Cup according to the manufacturer's installation instructions, these notes, and/or as directed by the Engineer.

Special Note for Completion Date & Liquidated Damages

I. COMPLETION DATE

The ultimate fixed completion date for this project will be September 30, 2026. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

II. LIQUIDATED DAMAGES

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 lane closures and/or road closures, and/or any non-compliant maintenance of traffic that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

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.

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. Should any trees and/or bushes be cut or trimmed between June 1st and July 31st, then 25% of the Clearing and Grubbing bid item will NOT be paid. Furthermore, failure to adhere to these restrictions shall result in Liquidated Damages in the amount of **$425** per affected tree. 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.

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

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

SPECIAL NOTE FOR PIPELINE INSPECTION

1.0 DESCRIPTION. The Department will perform visual inspections on all pipe on the project. A video inspection will be required on projects having more than 250 linear feet of storm sewer and/or culvert pipe and on routes with an ADT of greater than 1,000 vehicles. Conduct video inspections on all pipe located under the roadway and 50 percent of the remaining pipe not under the roadway. Storm sewer runs and outfall pipes not under the roadway take precedence over rural entrance pipes. Contractors performing this item of work must be prequalified with the Department in the work type J51 (Video Pipe Inspection and Cleaning). Deflection testing shall be completed using a mandrel in accordance with the procedure outlined below or by physical measurement for pipes greater than 36inches in diameter. Mandrel testing for deflection must be completed prior to the video inspection testing. Unless otherwise noted, Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

2.0 VIDEO INSPECTION. Ensure pipe is clear of water, debris or obstructions. Complete the video inspection and any necessary measurement prior to placing the final surface over any pipe. When paving will not be delayed, take measurements 30 days or more after the completion of earthwork to within 1 foot of the finished subgrade. Notify the Engineer a minimum of 24 hours in advance of inspection and notify the Engineer immediately if distresses or locations of improper installation are logged.

2.1 INSPECTION FOR DEFECTS AND DISTRESSES

A) Begin at the outlet end and proceed through to the inlet at a speed less than or equal to 30 ft/minute. Remove blockages that will prohibit a continuous operation.

B) Document locations of all observed defects and distresses including but not limited to: cracking, spalling, slabbing, exposed reinforcing steel, sags, joint offsets, joint separations, deflections, improper joints/connections, blockages, leaks, rips, tears, buckling, deviation from line and grade, damaged coatings/paved inverts, and other anomalies not consistent with a properly installed pipe.

C) During the video inspection provide a continuous 360 degree pan of every pipe joint.

D) Identify and measure all cracks greater than 0.1" and joint separations greater than 0.5".

E) Video Inspections are conducted from junction to junction which defines a pipe run. A junction is defined as a headwall, drop box inlet, curb box inlet, manhole, buried junction, or other structure that disturbs the continuity of the pipe. Multiple pipe inspections may be conducted from a single set up location, but each pipe run must be on a separate video file and all locations are to be referenced from nearest junction relative to that pipe run.

F) Record and submit all data on the TC 64-765 and TC 64-766 forms.

3.0 MANDREL TESTING. Mandrel testing will be used for deflection testing. For use on Corrugated Metal Pipe, High Density Polyethylene Pipe, and Polyvinyl Chloride Pipe, use a mandrel device with an odd number of legs (9 minimum) having a length not less than the outside diameter of the mandrel. The diameter of the mandrel at any point shall not be less than the diameter specified in Section 3.6. Mandrels can be a fixed size or a variable size.

3.1 Use a proving ring or other method recommended by the mandrel manufacturer to verify mandrel diameter prior to inspection. Provide verification documentation for each size mandrel to the Engineer.

3.2 All deflection measurements are to be based off of the AASHTO Nominal Diameters. Refer to the chart in section 3.6.

3.3 Begin by using a mandrel set to the 5.0% deflection limit. Place the mandrel in the inlet end of the pipe and pull through to the outlet end. If resistance is met prior to completing the entire run, record the maximum distance achieved from the inlet side, then remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.

3.4 If no resistance is met at 5.0% then the inspection is complete. If resistance occurred at 5.0% then repeat 3.1 and 3.2 with the mandrel set to the 10.0% deflection limit. If the deflection of entire pipe run cannot be verified with the mandrel then immediately notify the Engineer.

3.5 Care must be taken when using a mandrel in all pipe material types and lining/coating scenarios. Pipe damaged during the mandrel inspection will be video inspected to determine the extent of the damage. If the damaged pipe was video inspected prior to mandrel inspection then a new video inspection is warranted and supersedes the first video inspection. Immediately notify the Engineer of any damages incurred during the mandrel inspection and submit a revised video inspection report.

3.6 AASHTO Nominal Diameters and Maximum Deflection Limits.

Base Pipe Diameter	AASHTO Nominal Diameter	Max. Deflection Limit	
		5.0%	10.0%
(inches)	(inches)	(inches)	
15	14.76	14.02	13.28
18	17.72	16.83	15.95
24	23.62	22.44	21.26
30	29.53	28.05	26.58
36	35.43	33.66	31.89
42	41.34	39.27	37.21
48	47.24	44.88	42.52
54	53.15	50.49	47.84
60	59.06	56.11	53.15

4.0 PHYSICAL MEASUREMENT OF PIPE DEFLECTION. Alternate method for deflection testing when there is available access or the pipe is greater than 36 inches in diameter, as per 4.1. Use a contact or non-contact distance instrument. A leveling device is recommended for establishing or verifying vertical and horizontal control.

4.1 Physical measurements may be taken after installation and compared to the AASHTO Nominal Diameter of the pipe as per Section 3.6. When this method is used, determine the smallest interior diameter of the pipe as measured through the center point of the pipe (D2). All measurements are to be taken from the inside crest of the corrugation. Take the D2 measurements at the most deflected portion of the pipe run in question and at intervals no greater than ten (10) feet through the run. Calculate the deflection as follows:

% Deflection = [(AASHTO Nominal Diameter - D2) / AASHTO Nominal Diameter] x 100%

Note: The Engineer may require that preset monitoring points be established in the culvert prior to backfilling. For these points the pre-installation measured diameter (D1) is measured and recorded. Deflection may then be calculated from the following formula:

$$\% \text{ Deflection} = [(D1 - D2) / D1] (100\%)$$

4.2 Record and submit all data.

5.0 DEDUCTION SCHEDULE. All pipe deductions shall be handled in accordance with the tables shown below.

FLEXIBLE PIPE DEFLECTION	
Amount of Deflection (%)	Payment
0.0 to 5.0	100% of the Unit Bid Price
5.1 to 9.9	50% of the Unit Bid Price [(1)]
10 or greater	Remove and Replace [(2)]

[(1)] Provide Structural Analysis for HDPE and metal pipe. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price. [(2)] The Department may allow the pipe to remain in place with no pay to the Contractor in instances where it is in the best interest to the public and where the structural analysis demonstrates that the pipe should function adequately.

RIGID PIPE REMEDIATION TABLE PIPE	
Crack Width (inches)	Payment
≤ 0.1	100% of the Unit Bid Price
Greater than 0.1	Remediate or Replace [(1)]

(1) Provide the Department in writing a method for repairing the observed cracking. Do not begin work until the method has been approved.

6.0 PAYMENT. The Department will measure the quantity in linear feet of pipe to inspect. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
24814EC	Pipeline Inspection	Linear Foot
10065NS	Pipe Deflection Deduction	Dollars

SPECIAL NOTE FOR NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can "break" within 15 minutes under conditions listed in 3.2.

2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ˚ F	20 – 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue[1], %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ˚ F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ˚ C	1.0 min.	AASHTO T 315
Softening Point, ˚ F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

[1] Bring sample to 212 ˚F over a 10-15 minute period. Maintain 212 ˚F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 ˚F and 180 ˚F. Do not exceed 180 ˚F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14" and 18" from the roadway.

2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40˚F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 ˚F. After the initial heating, between 170 – 180 ˚F, the material may be sprayed between 165 ˚F and 180 ˚F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.

3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.

5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ˚ F	20 – 100	19 - 102	17 - 18 103 - 105	15 - 16 106 - 107	14 108 - 109	≤13 ≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38
Original Dynamic Shear (G*/sin δ), 82 ˚ C	1.0 min.	≥0.95	0.92 – 0.94	0.90 – 0.91	0.85 - 0.89	≤ 0.84
Softening Point, º F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

Code	Pay Item	Pay Unit
24970EC	Asphalt Material for Tack Non-Tracking	Ton

Revised: May 23, 2022

SPECIAL NOTE FOR ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing)

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

1.0 DESCRIPTION. Incorporate an e-Ticketing Delivery Software for weighed asphalt material delivered to the project to report loads and provide daily running totals of weighed asphalt material for pay items and incidental work during the construction processes from the point of measurement and loading to the point of incorporation to the project.

2.0 MATERIALS AND EQUIPMENT. Contractor shall supply material data in JavaScript Object Notation (JSON) documents to the KYTC e-Ticketing Delivery Software (KYTC e-Ticketing Portal) via Application Programming Interface (API) or direct connection. Test and verify that ticket data can be shared from the original source no fewer than 30 days prior to material placement activities. An e-Ticketing Delivery Software supplier can provide a qualified representative for on-site technical assistance during the initial setup, pre-construction verifications, and data management and processing as needed during the Project to maintain material data delivery capabilities. Virtual meetings may be hosted in lieu of on-site meetings when deemed appropriate by the Engineer.

Provide e-Ticketing Delivery Software that will meet the following:

1. The e-Ticketing Delivery Software shall be fully integrated with the Contractor's Load Read-Out scale system at the material source location.

2. The e-Ticketing Delivery Software shall provide real-time delivery to KYTC e-Ticketing Portal.

3. Transmit any updates to the ticket data within 5 minutes of a change.

3.0 CONSTRUCTION. Provide the Engineer with the manufacturer's specifications and all required documentation for data access at the pre-construction conference.

A. Construction Requirements

1. Install and operate software in accordance with the manufacturer's specifications.

2. Verify that all pertinent information is provided by the software within the requirements of this Special Note.

B. Data Deliverables

Provide to the Engineer a means in which to gather report summaries by way of iOS apps, web pages, or any other method at the disposal of the Engineer. The Engineer may request data at any time during the project.

1. Asphalt Material

a. **Real-time Continuous Data Items**

Provide the Engineer access to JSON documents capable of being transmitted through the KYTC's e-Ticketing Portal that displays the following information in real-time with a web-based system compatible with iOS and Windows environments.

- Each Truck
  - Supplier Name
  - Supplier Address
  - Supplier Phone
  - Plant location
  - Date
  - Time at source
  - Project Location

- Contract ID#
- Carrier Name
- Unique Truck ID
- Description of Material
- Mix Design Number
- Gross, Tare and Net Weight
- Weighmaster

4.0 MEASUREMENT. The Department will measure the electronic delivery management system as a lump sum item.

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

1. Payment is full compensation for all work associated with providing all required equipment, training, and documentation.

2. Payment will be full compensation for costs related to providing the e-Ticketing Delivery Software, including integration with plant load-out systems, and report viewing/exporting process. All quality control procedures including the software representative's technical support and on-site training shall be included in the Contract lump sum price.

Code	Pay Item	Pay Unit
26228EC	ELECTRONIC DELIVERY MGMT SYSTEM	LS

January 2024

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

1.1 Description. The KYCT (Kentucky Method for Cracking Test) and the Hamburg test results will help determine if the mixture is susceptible to cracking and rutting. During the experimental phase, data will be gathered and analyzed by the Department to determine the durability of the bituminous mixes. Additionally, the data will help the Department to create future performance-based specifications which will include the KYCT and Hamburg test methods.

2.0 Equipment

2.1 KYCT Testing Equipment. The Department will require a Marshall Test Press with digital recordation capabilities. Other CT testing equipment may be used for testing with prior approval by the Department.

2.2 Water Baths. One or more water baths will be required that can maintain a temperature of 77^{o} +/- 1.8^{o} F with a digital thermometer showing the water bath temperature. Also, one water bath shall have the ability to suspend gyratory specimen fully submerged in water in accordance with AASHTO T-166, current edition.

2.3 Hamburg Wheel Track Testing. The department encourages the use of the PTI APA/Hamburg Jr. test equipment to perform the loaded wheel testing. The Department will allow different equipment for the Hamburg testing, but the testing device must be approved by the Department prior to testing.

2.4 Gyratory Molds. Gyratory molds will be required to assist in the production of gyratory specimens in accordance with AASHTO T-312, current edition.

2.5 Ovens. Adequate (minimum of two ovens) will be required to accommodate the additional molds and asphalt mixture necessary to perform the acceptance testing as outlined in Section 402 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

2.6 Department Equipment. The Department will provide gyratory molds, PINE 850 Test Press with digital recordation, and CT testing equipment to assist during this experimental phase so data can be gathered. Hamburg test specimens will be submitted to the Division of Materials for testing on the PTI APA/Hamburg Jr if the asphalt contractor or district materials office does not have an approved Hamburg testing device.

3.0 Testing Requirements

3.1 Acceptance Testing. Perform all acceptance testing and aggregate gradation as according with Section 402 and Section 403 of the Kentucky Standard Specifications for Road and Bridge Construction, current edition.

3.2 KYCT Testing. Perform crack resistance analysis (KYCT) in accordance with the current Kentucky Method for KYCT Index Testing during the mix design phase and during the plant production of all surface mixtures. For mix design approvals, submit KYCT results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for verification.

3.2.1 KYCT Frequency. Obtain an adequate sample of hot mix asphalt to ensure the acceptance testing, gradation, and KYCT gyratory samples can be fabricated and is representative of the bituminous mixture. Acceptance specimens shall be fabricated first, then immediately after, fabricate the KYCT samples with the gyratory compactor in accordance with Section 2.4 of this Special Note. Analysis of the KYCT specimens and gradation will be required one per sublot produced from the same asphalt material and at the same time as the acceptance specimen is sampled and tested.

3.2.2 Number of Specimens and Conditioning. Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, for field specimens, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance with KM 64-411. KYCT mix design specimens shall be short-term conditioned uncovered for four hours at compaction temperature in accordance with KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with KM 64-411. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned in a 77 °F water bath for 30 minutes +/- 5 minutes. To ensure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is prohibited.

3.2.3 Record Times. For each sublot, record the time required between drying aggregates in the plant to KYCT specimen fabrication. The production time may vary due to the time that the bituminous material is held in the silo. Record the preconditioning time when the time exceeds the one-hour specimen cool down time as required in accordance with The Kentucky Method for KYCT Index Testing. The preconditioning time may exceed an hour if the technician is unable to complete the test on the same day or within the specified times as outlined in The Kentucky Method for KYCT Index Testing. The production time and the preconditioning time shall be recorded on the AMAW.

3.2.4 File Name. As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format: “CID_Approved Mix Number_Lot Number_Sublot Number_ Date”

3.3 Hamburg Testing. Perform the rut resistance analysis (Hamburg) in accordance with AASTHO T-324, not to exceed 20,000 passes for all bituminous mixtures during the mix design phase and production. For mix design approvals, submit Hamburg results on the Department MixPack. For Class 4 mixtures, submit ingredient materials to the Division of Materials for informational verification.

3.3.1 Hamburg Testing Frequency. Perform testing and analysis per lot of material. The plant produced bituminous material sampled for the Hamburg test does not have to be obtained at the same time as the acceptance and KYCT sample. If the Hamburg test sample is not obtained at the same time as the KYCT sample, determine the Maximum Specific Gravity of the KYCT sample in accordance with AASHTO T-209 coinciding with the Hamburg specimens.

3.3.2 Record Times. Record the production time as according to section 3.2.3 in this special note. Also record the time that the specimens were fabricated and the time the Hamburg testing was started. All times shall be recorded on the AMAW.

3.3.3 File Name. Save the Excel spreadsheet with the following file name; "Hamburg_CID_Approved Mix Number_Lot Number_Sublot Number_Date" and upload the file into the AMAW.

4.0 Data

Submit the AMAW and all test data that was obtained for acceptance, gradation, KYCT, and Hamburg testing within five working days once all testing has been completed for a lot to Central Materials Lab and the District Materials Engineer. Also, any data and or comments that the asphalt contractor or district personnel deem informational during this experimental phase, shall also be submitted to the Central Materials Lab and the District Materials Engineer. Any questions or comments regarding any item in this Special Note can be directed to the Central Office, Division of Materials, Asphalt Branch.

5.0 Payment

Any additional labor and testing equipment that is required to fabricate and test the KYCT and Hamburg specimens shall be considered incidental to the asphalt surface line item. The Department will perform the testing for the KYCT and Hamburg specimens if a producer does not possess the proper equipment.

June 15th, 2022

SPECIAL NOTE FOR DOLOMITIC POLISH-RESISTANT AGGREGATE IN CLASS A 0.38-IN. AND 0.50-IN. NOMINAL ASPHALT MIXTURES

Contrary to Subsection 403.03.03, when utilizing a dolomitic polish-resistant aggregate as the coarse portion of the Class A 0.38-in. or 0.50-in.-nominal asphalt surface mixture, provide an asphalt mixture conforming to the following requirements:

- 70 percent of total combined aggregate is Class A polish-resistant aggregate.
- Any coarse aggregate utilized in the mixture shall be classified as Class A polish-resistant.
- Non-dolomitic substitutes from other Class A sources may be used as direct substitutes
- All mixes must have DFT testing/results submitted to Division of Materials with any supporting documentation prior to completion of the project.

Dynamic Friction Testing Procedure. Prepare samples for DFT analysis in accordance with PP 104. Friction testing shall be conducted by an AASHTO-accredited facility and data shall be provided in accordance with ASTM E1911 conforming to the following three-wheel polishing schedule. Variations to the testing frequency or methodology shall be coordinated with Division of Materials prior to testing.

Polishing Cycles
5,000
25,000
75,000
150,000

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 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.

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 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 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) or as directed by the Engineer. 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 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, 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

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

B. **Guardrail, 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

SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

GENERAL

Unless otherwise stated in the contract, or as directed by or with prior approval from the Engineer, construct Sidewalk Ramps and Detectable Warnings in accordance with Sections 505 and 720; Supplemental Specifications; Standard Drawings RGX-040-03, RPM-150-08, RPM-152-08, RPM-170-09, and RPM-172-07; current editions, as applicable. In lieu of the Detectable Warnings shown on Standard Drawing RGX-040-03, the Department will also allow the use of any Detectable Warnings listed as Phase XI on the Kentucky Product Evaluation List (http://www.ktc.uky.edu/kytc/kypel/allevaluations.php). For Detectable Warnings as shown on Standard Drawing RGX-040-03, saw cut existing sidewalks, curb and gutter, and pavement, if present, as shown on the detail and reconstruct sidewalk ramps with detectable warnings as directed or approved by the Engineer. For Detectable Warnings from the Kentucky Product Evaluation List, install according to the manufacturer's recommendations. Unless specified otherwise in the Contract, construct sidewalk with 4" nominal minimum required thickness; however, if the existing sidewalk thickness is found to be greater or less than the thickness specified, transition the thickness as directed by the Engineer.

Except as required by the work, do not disturb drainage pipe, catch basins, and other roadway features, appurtenances and installations. Restore any roadway features, appurtenances, and installations damaged by the work in like kind materials and design at no additional cost to the Department. Dispose of all waste off the right of way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

MEASUREMENT & PAYMENT

SIDEWALK RAMPS – The Department will measure Sidewalk Ramps in accordance with Section 505.04.01 and Standard Drawing RPM-170-09, current editions; however, contrary to Sections 505.04.05 and 505.04.06, the Department will not measure Roadway Excavation or Embankment in Place, but shall be incidental to the Sidewalk. Accept payment at the Contract unit price per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk and curb and gutter, excavation and embankment, construction of the sidewalk ramps, reconstruction of the adjacent curb and/or sidewalk as necessary to install the sidewalk ramps, and restoration of disturbed features in accordance with these notes or as directed by the Engineer.

DETECTABLE WARNINGS – The Department will measure Detectable Warnings in accordance with Section 505.04.04 and Standard Drawings RGX-040-03 and RPM-170-09, current editions. The Department will make payment according to Section 505.05.

HANDRAIL – The Department will measure and make payment for Handrail in accordance with Section 720.05 and Standard Drawing RPM-172-07, current editions.

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, Supplemental 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 shall be paid at the lump sum bid price to "Maintain and Control Traffic".

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. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Construction Phasing for the US 25/KY 418 RCUTS from US 25 MP 9.485 to KY 418 MP 1.858:

1. Phase 1: Construct the outside full depth lanes and shoulders of US 25 / KY 418 up to the final base courses.
    a. Contractor may coordinate with KYTC short term lane closures as needed for the outside lane during 9 AM and 4 PM as approved by the engineer. Contractor shall follow guidelines for drop-offs as specified in this document before opening any lane closures to traffic.
    b. Construction of Aphids Way can be completed in Phases 1 & 2. Aphids Way will be closed to traffic during construction and traffic should be diverted to Old Richmond Rd. Tie-in of Aphids Way with Old Richmond Road will be completed in Phase 2.
2. Phase 2: Construction in the median of US 25 / KY 418.
    a. Construct the median islands for the loon u-turn crossovers and left turn lanes to provide u-turn access to the side roads prior to the median closures to construct intersection left turn lanes and median islands to be completed in Phase 3. Maintain 2 lanes of traffic in each direction.
    b. Contractor may coordinate with KYTC short term lane closures as needed for the inside lanes during 9 AM and 4 PM as approved by the engineer. Contractor shall follow guidelines for drop-offs as specified in this document before opening any lane closures to traffic.
    c. Maintain 5 feet between full depth construction and the driving lane. Pavement removal areas should be performed during night and weekends during hours of reduced traffic.
    d. Construction of Aphids Way can be completed in Phases 1 & 2. Aphids Way will be closed to traffic during construction and traffic should be diverted to Old Richmond Rd. Tie-in of the new Aphids Way with the existing Old Richmond Road shall be completed as part width construction one lane at a time. A temporary signal may be utilized for this traffic control.
3. Phase 3: Construction in the median of US 25 / KY 418.
    a. Construct the median islands in the intersection to provide RCUT access to the side roads. Maintain 2 lanes of traffic in each direction. Left turns at the intersection shall be restricted and drivers may u-turn at the loons. The median closures required for this work are to be limited to 14 consecutive calendar days.
4. Phase 4: Construct final surface course for entire project as shown on the paving plans. See paving plans in the construction plan set for begin and end stationing.

The Department will allow night work on this project. Obtain the Engineer's approval of the method of lighting prior to performing night work.

Work for the RCUT and Loons at the Brenda Cowan Elementary School (Sta 65+00 to Sta 82+00) shall be constructed between June 1st and July 31st while school is NOT in session during the 2025 or 2026 "summer break". This work shall include the final surface course and pavement markings along the school entrance; however, the final surface for KY 418 may be completed outside of the selected "summer break". Since the school calendar might change, the Contractor shall coordinate these construction activities with the school.

Refer to the CAP notes for other construction requirements. Take these restrictions into account in submitting bid. The Department will not consider any claims for money or grant contract time extensions for any delays to the Contractor as a result of these restrictions.

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.

Unless otherwise approved by the Engineer, no lane closures will be allowed during the following times:

Easter Weekend	3 pm Friday, April 18, 2025 – 8 pm Sunday, April 20, 2025
Memorial Day Weekend	3 pm Friday, May 23, 2025 – 8 pm Monday, May 26, 2025
Independence Day	7 am Friday, July 4, 2025 – 8 pm Sunday, July 6, 2025
Labor Day Weekend	3 pm Friday, August 29, 2025 – 8 pm Monday, September 1, 2025
Thanksgiving Holiday	3 pm Wednesday, November 26, 2025 – 8 pm Sunday, November 30, 2025
Christmas Holiday	7 am Wednesday, December 24, 2025 – 8 pm Thursday, December 25, 2025
New Year's Day Holiday	7 am Wednesday, December 31, 2025 – 8 pm Thursday, January 1, 2026

Easter Weekend	3 pm Friday, April 3, 2026 – 8 pm Sunday, April 5, 2026
Memorial Day Weekend	3 pm Friday, May 22, 2026 – 8 pm Monday, May 25, 2026
Independence Day	7 am Saturday, July 4, 2026 – 8 pm Sunday, July 5, 2026
Labor Day Weekend	3 pm Friday, September 4, 2026 – 8 pm Monday, September 7, 2026
Thanksgiving Holiday	3 pm Wednesday, November 25, 2026 – 8 pm Sunday, November 29, 2026
Christmas Holiday	7 am Thursday, December 24, 2026 – 8 pm Friday, December 25, 2026
New Year's Day Holiday	7 am Thursday, December 31, 2026 – 8 pm Friday, January 1, 2027

Portable Changeable Message Sign quantities included could provide alternate messaging for UK home football games along with other events at the direction of the engineer. A sign should be located on I-75 Northbound one mile from the interchange and the default message would say "Road Work on KY 418, Consider Alt Route".

Do NOT erect lane closures during the following days and/or hours:

Normal Workday Rush Hours

Monday-Friday 7:00 AM – 9:00 AM, and 4:00 PM – 6:00 PM, daily

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed.

The Department will provide public notification regarding lane closures. The Contractor shall submit proposed lane closure days and times to the Engineer at least 14 calendar days in advance for approval. Liquidated Damages will be assessed for each hour or fraction of an hour that a lane closure is in place outside of an approved time period. See the Special Notes for Completion Dates & Liquidated Damages for details on the Liquidated Damages amount.

TEMPORARY SIGNAL 2 PHASE

A Temporary Signal 2 Phase has been included in the project for possible use during the construction tie-in of the proposed Aphids Way realignment with the existing Old Richmond Road. This device may be useful for other areas. The Contractor and the Engineer should work together to determine the best use of this device. Each Temporary Signal 2 Phase consists of two portable temporary signals, one placed at each end of the work zone, that work together to manage traffic through the work zone. If used, the Department will measure the Temporary Signal 2 Phase only once for payment, regardless of how many times each pair of temporary signals are set, reset, removed, and/or 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 if 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

Long term lane closures shall not be allowed; therefore, lane closures will not be measured for payment. Do not leave lane closures in place during non-working hours and prohibited periods

TEMPORARY SIGNS

Temporary signposts 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 temporary signs (temporary signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term temporary signs (temporary 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.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs approximately one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens, relocate or provide additional changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of

the actual queue. The Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign. If the damage or mechanical/electrical failure is identified during active work operations, repair or replace the Changeable Message Sign within 6 hours. If the damage or mechanical/electrical failure is identified when there are no active work operations on the project, repair or replace the Changeable Message Sign within 12 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and/or relocated during the duration of the project. The Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Arrow Panels 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 replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels 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.

THERMOPLASTIC INTERSECTION MARKINGS

Consider the locations listed on the summary and/or shown on the plan sheets as approximate only. Prior to milling and/or resurfacing, locate and document the locations of the existing markings. After final surfacing operations, replace the markings at their approximate existing locations, as shown on the plan sheets, or as directed by the Engineer. Place markings not existing prior to resurfacing as shown on the plan sheets or as directed by the Engineer.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for

the Contractor's convenience, and in no case exceeding 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. Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties, and apartments or apartment complexes of four or more units at all times. Access to fire hydrants must also be maintained at all times

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course. Install Temporary Striping according to Section 112 with the following exception:

> If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

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 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)

Messages

Basic principles that are important to providing proper messages and ensuring 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 ensure 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

Traffic Control Plan
Page 8 of 10

Standard Abbreviations

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

Word	Abbrev	Example
Access	ACCS	CRASH AHEAD/ USE ACCS RD NEXT RIGHT
Alternate	ALT	CRASH 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	CRASH ON AA HWY/ EXPECT DELAYS
Hour	HR	CRASH 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	CRASH 3 MI AHEAD/ USE ALT RTE
Minor	MNR	CRASH 3 MI MNR DELAY
Minutes	MIN	CRASH 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	CRASH 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

Traffic Control Plan
Page 9 of 10

Standard Abbreviations (cont.)

Word	Abbrev	Example
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 NOT USE THESE ABBREVIATIONS:

Abbrev	Intended Word	Word Erroneously Given
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.

Reason/Problem	Action
CRASH AHEAD	ALL TRAFFIC EXIT RT
CRASH/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

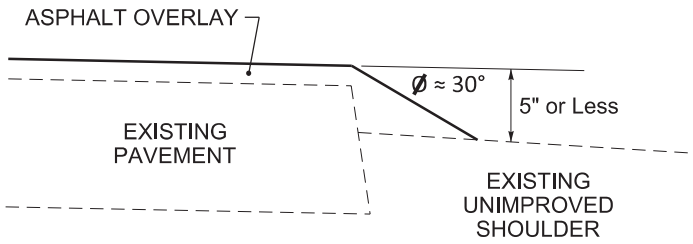
Traffic Control Plan
Page 10 of 10

Typical Messages (cont.)

Reason/Problem	Action
FOG XX MILES	PASS TO RIGHT
FREEWAY CLOSED	PREPARE TO STOP
FRESH OIL	REDUCE SPEED
HAZMAT SPILL	SLOW
ICE	SLOW DOWN
INCIDENT AHEAD	STAY IN LANE
LANES (NARROW, SHIFT, MERGE, ETC.)	STOP AHEAD
LEFT LANE CLOSED	STOP XX MILES
LEFT LANE NARROWS	TUNE RADIO 1610 AM
LEFT 2 LANES CLOSED	USE NN ROAD
LEFT SHOULDER CLOSED	USE CENTER LANE
LOOSE GRAVEL	USE DETOUR ROUTE
MEDIAN WORK XX MILES	USE LEFT TURN LANE
MOVING WORK ZONE, WORKERS IN ROADWAY	USE NEXT EXIT
NEXT EXIT CLOSED	USE RIGHT LANE
NO OVERSIZED LOADS	WATCH FOR FLAGGER
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	

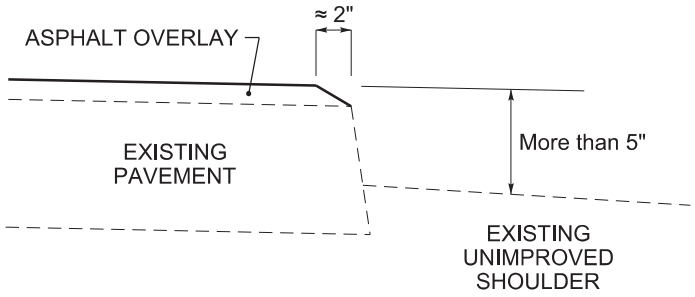
DURABLE PAVEMENT EDGE DETAIL

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



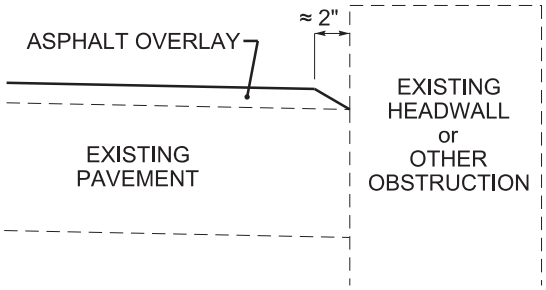
DURABLE PAVEMENT EDGE DETAIL

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



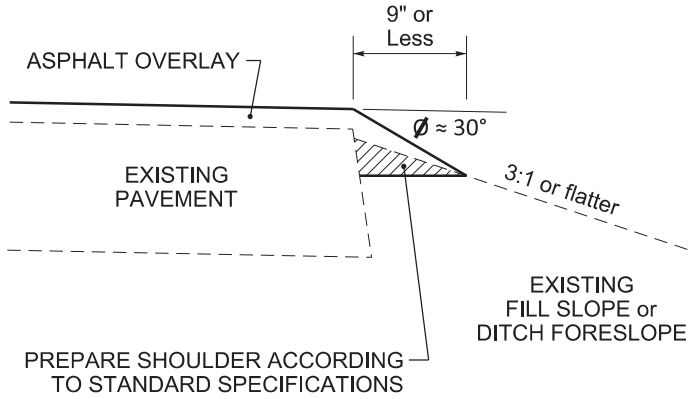
DURABLE PAVEMENT EDGE DETAIL

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



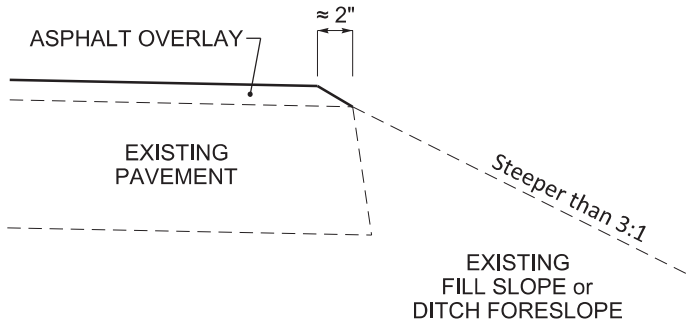
DURABLE PAVEMENT EDGE DETAIL

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



DURABLE PAVEMENT EDGE DETAIL

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



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 APROVED BY THE ENGINEER.

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS

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

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

RIGHT OF WAY CERTIFICATION

☒ Original	☐ Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	**COUNTY**	**PROJECT # (STATE)**	**PROJECT # (FEDERAL)**
7-9012.50	Fayette	12FO FD52 034 9528005R	HSIP 4181 (033)

PROJECT DESCRIPTION

Intersection and Corridor Improvements to Reduce Conflict Points and Enhance Safety along Richmond Rd and Athens Boonesboro Rd. Includes minor widening of Aphids Way.

☐ **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	11	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired			
Signed Deed	9		
Condemnation	2		
Signed ROE	2		

Notes/ Comments (Use Additional Sheet if necessary)
Rights of Entry on Parcels 36 and 37 were obtained on 9/8/2023 and 9/29/2023, respectively. Parcel 39 was a "dedication" acquisition from the Lexington-Fayette Urban County Government. The deed for Parcel 39 was signed by the mayor on 2/4/202ǫ

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Digitally signed by Cecil D. Smith
Signature		Signature	Date: 2025.03.04 09:44:42 -05'00'
Date		Date	

Right of Way Director		FHWA	
Printed Name		Printed Name	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Signature	2025.03.04 10:21:13 -05'00'	Signature	
Date		Date	

UTILITIES AND RAIL CERTIFICATION NOTE

Fayette County
0HSIP4181033
FD52 034 9528005U
Mile point: 7.805 TO 9.672
Intersection and Corridor Improvements to Reduce Conflict Points and Enhance Safety along Richmond Rd and Athens Boonesboro Rd. Includes minor widening of Aphids Way.
ITEM NUMBER: 07-9012.50

PROJECT NOTES ON UTILITIES

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

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

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

UTILITIES AND RAIL CERTIFICATION NOTE

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companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

The contractor should be aware that there is UTILITY WORK INCLUDED IN THIS ROAD CONSTRUCTION CONTRACT. The Contractor shall review the GENERAL UTILITY NOTES AND INSTRUCTIONS which may include KYTC Utility Bid Item Descriptions, utility owner supplied specifications, plans, list of utility owner preapproved subcontractors, and other instructions. Utility contractors may be added via addendum if KYTC is instructed to do so by the utility owner. Potential contractors must seek prequalification from the utility owner. Any revisions must be sent from the utility owner to KYTC a minimum of one week prior to bid opening.

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For all projects under 2000 Linear feet which require a normal excavation locate request pursuant to KRS 367.4901-4917, the awarded contractor shall field mark the proposed excavation or construction boundaries of the project (also called white lining) using the procedure set forth in KRS 367.4909(9)(k). For all projects over 2000 linear feet, which are defined as a “Large Project” in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

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

Underground gas facilities from Shoreside Dr to Jacobson Park entrance, and from Jacobson Park entrance to Hays Blvd.

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If an unknown utility is encountered, the contractor will be responsible for arranging an on - site meeting with utility representatives and the Engineer to discuss possible impacts and solutions to either avoid the utility or relocate the utility

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

None

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

Kentucky Utilities - Electric – Contractor to coordinate installation of traffic signals and roadway lighting pole bases with KU. KU is scheduled to complete relocations by May 31, 2025.

Kentucky-American Water Company – Water - KAW has existing 8” water lines in the area of Station 19+50 and Station 79+50 that may be impacted by roadway construction. Contractor is to coordinate work in those areas with KAW at contact listed below. The 30” water main impacted by roadway construction along Richmond Rd and Aphids Way will be relocated by June 1, 2025.

Windstream Holdings, LLC – Communication – Relocations to be complete by July 1, 2025

Columbia Gas of Kentucky - Natural Gas - Relocations to be completed by May 31, 2025

AT&T - KY – Communication - Relocations to be completed by July 1, 2025

Spectrum – Cable TV – Relocations to be completed by July 1, 2025

UTILITIES AND RAIL CERTIFICATION NOTE

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

Lexington Fayette Urban County Government - Sewer

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☒ **No Rail Involvement** ☐ **Rail Involved** ☐ **Rail Adjacent**

UTILITIES AND RAIL CERTIFICATION NOTE

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AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
Columbia Gas of Kentucky - Natural Gas	PO Box 14241 Lexington KY 40512	David Lemons	859-288-0249	DNLemons@nisource.com
AT&T - KY - Communication	894 E. Main St. Ext. Georgetown KY 40324	Frank Ambrose	859-753-8377	fa2207@att.com
Kentucky Utilities - Electric	820 W. Broadway Louisville KY 40202	Rodney Brock	859-367-4304	Rodney.Brock@lge-ku.com
Kentucky-American Water Company - Water	2300 Richmond Rd Lexington KY 40502	John Magner	859-382-6946	John.Magner@amwater.com
Lexington Fayette Urban County Government - Sewer	301 Lisle Industrial Avenue Lexington KY 40511	Doug Burton	859-258-3472	wdburton@lexingtonky.gov
Windstream Holdings, LLC - Communication	932 Citation Boulevard Lexington KY 40511	Deborah Saddler	859-227-9362	Deborah.A.Saddler@windstream.com
Spectrum	1575 Winchester Rd Suite 140, Lexington KY 40505	John Kelley Oram	859-519-3434	john.oram@charter.com

Form Revised 6/24/16

GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT

The contractor should be aware the following utility notes and KYTC Utility Bid Item Descriptions shall supersede, replace, and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

PROTECTION OF EXISTING UTILITIES

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

PREQUALIFIED UTILITY CONTRACTORS

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. **Utility contractors may be added via addendum if KYTC is instructed to do so by the utility owner. Potential contractors must seek prequalification from the utility owner. Any revisions must be sent from the utility owner to KYTC a minimum of one week prior to bid opening.** Those utility owners with a prequalification or preapproval requirement are as follows:

> ***Bidders and DBE subcontractors must be prequalified with the Kentucky Transportation Cabinet and possess a Certificate of Eligibility at the time of the bid opening. All other subcontractors must be prequalified when accepting subcontracts.***

The bidding contractor needs to review the above list and choose from the list of approved subcontractors at the end of these general notes as identified above before bidding. When the list of approved subcontractors is provided, only subcontractors shown on the following list(s) will be allowed to work on that utility as a part of this contract.

When the list of approved subcontractors for the utility work is not provided in these general notes, the utility work can be completed by the prime contractor. If the prime contractor chooses to subcontract the work, the subcontractor shall be prequalified with the KYTC Division of Construction Procurement in the work type of "Utilities" (I33). Those who would like to become prequalified may contact the Division of Construction Procurement at (502) 564-3500. Please Note: it could take up to 30 calendar days for prequalification to be approved. The prequalification does not have to be approved prior to the bid but must be approved before the subcontract will be approved by KYTC and the work can be performed.

CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

ENGINEER

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word "Inspector" or "Resident Project Representative" appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Inspector" or "Resident Project Representative" is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shutdowns are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns. If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so

following the rules, procedures, and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shutdowns is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be but is not limited to, a door hanger, notice by newspaper ad, telephone contact, or any combination of communication methods deemed necessary, customary, and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner's shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

CUSTOMER SERVICE AND LATERAL ABANDONMENTS

When temporary or permanent abandonment of customer water, gas, or sewer services or laterals are necessary during relocation of utilities included in the contract, the utility contractor shall perform these abandonments as part of the contract as incidental work. No separate payment will be made for service line and lateral abandonments. The contractor shall provide all labor, equipment, and materials to accomplish the temporary or permanent abandonment in accordance with the plans, specifications and/or as directed by the engineer. Abandonment may include, but is not limited to, digging down on a water or gas main at the tap to turn off the tap valve or corporation stop and/or capping or plugging the tap, digging down on a sewer tap at the main and plugging or capping the tap, digging down on a service line or lateral at a location shown on the plans or agreeable to the engineer and capping or plugging, or performing any other work necessary to abandon the service or lateral to satisfactorily accomplish the final utility relocation.

STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be "in-kind" as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

OVERFLOWS

The contractor shall be responsible for any overflows that occur during construction.

BELOW ARE NOTES FOR WHEN "INST" ITEMS ARE IN THE CONTRACT MEANING THE UTILITY COMPANY IS PROVIDING CERTAIN MATERIALS FOR UTILITY RELOCATION

MATERIAL

Contrary to Utility Bid Item Descriptions, those bid items that have the text **"INST"** at the end of the bid item will have the major components of the bid item provided by the utility owner. No direct payment will be made for the major material component(s) supplied by the utility company. All remaining materials required to construct the bid item as detailed in utility bid item descriptions, in utility specifications and utility plans that are made a part of this contract will be supplied by the contractor. The contractor's bid price should reflect the difference in cost due to the provided materials.

The following utility owners have elected to provide the following materials for work under this contract:

> ***No materials are being supplied by the utility owner(s). All materials are to be supplied by the contractor per bid item descriptions, utility specifications, and utility plans***.

SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged, or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

Standard Sanitary Sewer Bid Item Descriptions

THESE BID ITEM DESCRIPTIONS SHALL SUPERCEDE ANY BID ITEM DESCRIPTIONS CONTAINED IN UTILITY OWNER SUPPLIED SPECIFICATIONS PROVIDED ELSEWHERE IN THIS PROPOSAL.

S BYPASS PUMPING This item shall include all labor, equipment, and materials needed to complete a bypass pumping and/or hauling operation for diversion of sewage during sanitary sewer construction. Examples of such operations when bypass pumping and/or hauling may be necessary during force main tie-ins, manhole invert reconstruction, insertion of new manholes into existing mains, or other similar construction. There may be more than one bypass pumping/hauling operation on a project. This item shall be paid for each separate bypass pumping/hauling operation occurrence as called out on the plans or directed by the engineer and actually performed. There will be no separate bid items defined for length, duration, or volume of sewage pumped or hauled in each occurrence. If a bypass pumping/hauling operation is called out on the plans, but conditions are such that the bypass pumping/hauling operation is not needed or utilized, no payment will be made under this item. The contractor shall draw his own conclusions as to what labor, equipment, and materials may be needed for each bypass pumping/hauling occurrence. The contractor should be prepared to handle the maximum volume of the sewer being bypassed, even during a storm event. This item shall not be paid separately, but shall be considered incidental, when bypass pumping and/or hauling is needed during cast-in-place-pipe (CIPP) and/or point repair operations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

S CIPP LATERAL SERVICE INVESTIGATION This item shall include all equipment, materials, labor, and incidentals necessary to enter the sewer, in compliance with all safety/confided space requirements to perform the identification, assessment, and pre-measurement of all existing and abandoned laterals for the placement of Cured-In-Place-Pipe lining. This item shall be payment for all lateral service investigation for all sewer segments to be lined as a part of this contract. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be LUMP SUM (LS).

S CIPP LATERAL REINSTATEMENT This item is to pay for installing a Cured-In-Place-Pipe liner in service laterals and service/mainline connections to stabilize structural defects and construction inadequacies. This bid item shall include all labor, equipment, materials and incidentals necessary to perform the service lateral reinstatement, in accordance with the plans and specifications. Work under this item shall include bypass pumping, sewer flow control, pre-installation cleaning, sealing connections to existing sewer main, pre- and post- construction CCTV inspection, and final testing of the CIPP system. This item shall also include the "top hat" required by the specifications. All CIPP lateral reinstatements shall be paid under this item, regardless of the size or length of reinstatement. No separate bid items of varying sizes or length of CIPP lateral reinstatement will be provided in the contract. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each CIPP lateral reinstatement, complete and ready-for-use.

S CIPP LINER This item is to pay for rehabilitation of existing sanitary sewers using the Cured-In-Place-Pipe method. This bid item description applies to all CIPP sizes included in the contract. All CIPP Liner items, of all varying sizes, shall include all labor, materials, customer notification, testing, necessary permits,

ingress and egress procedures, bypass pumping, pre-construction video, sediment and root removal, dewatering, traffic control, erosion and sediment control, excavation pits, removal and replacement of manhole frames and covers as necessary to facilitate the lining work, sealing at manholes and service connections, clearing and grubbing, pipeline cleaning, re-cleaning, video inspection as many times as necessary, debris collection and disposal, root removal, pre- and post-construction video inspection, all digital inspection footage, final report preparation and approval, the cost of potable water from the Owner, required compliance tests, site restoration, site cleanup, sealing of liner at manholes, acceptance testing, and all other rehabilitation work and incidentals not included under other pay items, necessary to complete the rehabilitation per the plans and specifications. There will be no separate payment for acceptance testing of the lined pipe but shall be considered incidental to this item. Pay under this item shall be by each size bid in the contract. Pay measurement shall be from center of manhole to center of manhole. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S CIPP PROTRUDING LATERAL REMOVAL This item includes all equipment, materials, labor, and incidentals necessary to enter the sewer in compliance with all safety/confined space requirements, remove a sufficient amount of the protruding tap to insure a proper and safe Cured-In-Place-Pipe lining insertion, and perform pre-installation CCTV. This bid item shall include bypass pumping when required. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. Payment for this item shall be EACH (EA) for each protruding lateral removed.

S CONCRETE PIPE ANCHOR This item shall be constructed on the sewer pipe at the locations shown on the plans, in accordance with sanitary sewer specifications and standard drawings. Payment for concrete anchors will be made at the contract unit price each, in place, complete and ready-for-use. Each concrete anchor of sewer pipe or force main shall be paid under one bid item per contract regardless of the sizes of carrier pipe being anchored in the contract. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open-cut for the installation of force main or gravity sewer under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore, whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore, when specified, to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract, regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S ENCASEMENT CONCRETE This item includes all labor, equipment, excavation, concrete, reinforcing steel, backfill, restoration, etc. to construct the concrete encasement of the sewer or force main, as shown on the plans and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe, as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasements shall be paid under one bid item, included in the contract, regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of

pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

S ENCASEMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement, in accordance with the plans and specifications, complete and ready-for-use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately, but shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S ENCASEMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open-cut install the encasement, in accordance with the plans and specifications, complete and ready-for-use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately, but shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN This item description shall apply to all PVC, ductile iron, and polyethylene/plastic pipe bid items of every size and type, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test stations (if required by specifications), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, backfill, etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings, complete and ready-for-use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and

proposed pavement, and wherever else specified on the plans or in the specifications. This item shall also include pipe anchors on polyethylene pipe runs, as shown on the plans or required by the specifications, to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN AIR RLS/VAC VLV This item description shall apply to all force main air release/vacuum valve installations of every size, except those defined as "Special".
This item shall include the air release/vacuum valve, main to valve connecting line or piping, manhole/vault/structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill, and restoration required to install the air release/vacuum valve at the location shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready-for-use. All air release/vacuum valves on a project shall be paid under one bid item, regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release/vacuum valve would a separate bid item be established. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open-cut for the installation of sewer or force main under streets, buildings, creeks, etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore, whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore, when specified, to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract, regardless of size. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S FORCE MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the location shown on the plans. This bid item is to be used when the existing pipe material is to be reused when relocating an existing force main at point locations, such as to clear a conflict at a proposed drainage structure, pipe, or any other similar short relocation situation. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specifications as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case-by-case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation, as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically, regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Force Main Relocate shall not be paid on a linear feet

basis, but shall be paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

S FORCE MAIN TAP SLEVE/VALVE RANGE 1 OR 2 This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready-for-use, in accordance with the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Range 1 = All live tapped main sizes up to and including 8 inches
Range 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN TIE-IN This item description shall be used for all force main tie-in bid items of every size, except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, testing, and backfill required to make the force main tie-in as shown on the plans and in accordance with the specifications, complete and ready-for-use. This bid item shall include purge and sanitary disposal of any sewage from any abandoned segments of force main. Pipe for tie-ins shall be paid under separate bid items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Plugging of existing abandoned mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications for Road and Bridge Construction, using Bid code 01314, Plug Pipe.

S FORCE MAIN VALVE This item description shall apply to all force main valves of every size required in the plans and specifications, except those bid items defined as "Special". Payment under this description is to be for gate or butterfly force main valves being installed with new force main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, etc., required to install the specified valve at the location shown on the plans, in accordance with the specifications and standard drawings, complete and ready-for-use. If required on plans and/or proposed adjoining DIP is restrained, force main valves shall be restrained. Force main valve restraint shall be considered incidental to the force main valve and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S FORCE MAIN VALVE BOX ADJUST This item includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, etc., to adjust the top of the force main valve box to finished grade, complete and ready-for-use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LAMPHOLE Payment under this item is for the installation of a lamphole along or at the end of a gravity sewer pipe for inspection and cleaning of a sewer pipe. Lampholes shall include, but are not limited

to bends, tees, vertical pipe, casting, any other materials specified, excavation, backfilling, air testing, restoration, and cleanup in accordance with the plans, specifications, and standard drawings, complete and ready-for-use. Payment shall be made under this bid item regardless of lamphole size. No separate pay items will be established for size variations. All materials shall be new and unused. No additional compensation will be paid for lamphole height variations. All vertical pipe required to construct the lamphole, regardless of height, shall be considered incidental to this item. No additional payment will be made for rock excavation. Cleanouts on pipes 6 inches or less are not considered lampholes and are not to be paid under this item. Only lampholes on pipes 8 inches or larger are to be paid under this item. Cleanouts on pipes 6 inches or less are to be paid under pay item S LATERAL CLEANOUT. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL CLEANOUT This item shall be for payment for installation of a cleanout in a service lateral line. This item shall include furnishing and installation of a tee, vertical pipe of whatever length required, and threaded cap. The cleanout shall extend from the lateral to final grade elevation. The size of the cleanout shall be equivalent to the size of the lateral. The cleanout materials shall meet the same specification as those for the lateral. The cleanout shall be installed at the locations shown on the plans or as directed by the engineer. Only one pay item shall be established for cleanout installation. No separate pay items shall be established for size or height variations. Payment under this item is for cleanouts on pipe of 6 inches or less. Cleanouts on pipes of 8 inches or greater are considered lampholes and shall be paid under the S LAMPHOLE bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL LOCATE This item description is to pay for all labor, equipment, and materials needed in locating an existing sanitary sewer service lateral for tie-in of the lateral to new mainline sewers and/or for the relocation of a lateral. This bid item shall be inclusive of all methods and efforts required to locate the lateral for tie-in or relocation of the lateral. Locating methods to be included under this item shall include, but are not limited to those efforts employing the use of video cameras from within an existing sanitary sewer main or lateral, electronic locating beacons and/or tracers inserted into the sanitary sewer main or lateral, careful excavation as a separate operation from mainline sewer or lateral excavation, the use of dyes to trace the flow of a lateral, or any combination of methods required to accurately locate the lateral. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA).

S LATERAL LONG SIDE This item description shall apply to all service lateral installations of every size up to and including 6-inch internal diameter, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready-for- use. This bid item is to pay for service lateral installations where the ends of the lateral connection are on opposite sides of the public roadway. The new lateral must cross the centerline of the public roadway to qualify for payment as a long side lateral. The length of the service lateral is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service lateral across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LATERAL SHORT SIDE This item description shall apply to all service lateral installations of every size up to and including 6-inch internal diameter, except those lateral bid items defined as "Special". This item includes the specified piping material, main tap tee, bends, clean outs, labor, equipment, excavation, backfill, testing, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready- for-use. This bid item is to pay for lateral installations where both ends of the lateral connection are on the same side of the public roadway, or when an existing lateral crossing a public roadway will remain and is being extended, reconnected, or relocated, with all work on one side of the public roadway centerline as shown on the plans. The length of the service lateral is not to be specified and shall not be restricted to any minimum or maximum length. Placement of a service lateral across a private residential or commercial entrance along shall not be reason to make payment under this item Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S LINE MARKER This item is for payment for furnishing and installing a sewer utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

S MANHOLE Payment under this item is for the installation of new 4-foot interior diameter sanitary sewer manhole. Payment for manholes will be at the contract unit price, in-place, complete and ready-for-use at the locations shown on plans, in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup, in accordance with the specifications and standard drawings. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused when available and shall be considered incidental to this item. When an existing casting is unavailable or a new casting is specified on plans or elsewhere in the contract, a new casting shall be paid as a separate bid item. Anchoring of a casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. In cases where a manhole is to be located within a grade-sensitive area such as roadway pavement, sidewalks, shared-use-paths, etc., the final casting grade given on plans shall be considered approximate. Any readjustment of a manhole casting to meet field conditions shall be incidental to this item. No additional payment shall be made for casting adjustments on new manholes. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE ABANDON/REMOVE Payment under this item is for the full or partial removal, disposal, and/or filling of any sanitary sewer manhole, regardless of size or depth, that no longer serves any purpose. All manholes partially removed shall be removed to a point at least 12 inches below final grade, 12 inches below roadway subgrade, or 12 inches clear of any other underground infrastructure, whichever is lowest. If partial removal of an abandoned manhole is elected, the remaining manhole structure shall be filled with flowable fill. Flowable fill shall be considered incidental to this bid item. Plugging of pipes entering and exiting within an abandoned manhole that is left in place partially or in whole shall be considered incidental to this item. All sanitary sewer castings shall be salvaged and securely stockpiled for reuse on new sanitary sewer manholes. Salvage of manhole castings for reuse on the project shall be considered incidental to this

bid item. Any casting that is not needed for reuse, is not reusable, or is directed by the engineer not to be reused shall be disposed of by the contractor. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Plugging or safeloading of pipes required at locations outside of manholes when manholes are removed in total shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications for Road and Bridge Construction, using Bid code 01314, Plug Pipe.

S MANHOLE ADJUST TO GRADE Payment under this item is for the adjustment of sanitary sewer casting elevation on all sizes of existing sanitary manholes. This work shall be performed in accordance with the sanitary sewer specifications. Payment shall be made under this bid item regardless of the amount of adjustment necessary to a sanitary sewer manhole casting or diameter of the manhole. Work under this pay item may be as simple as placing a bed of mortar under a casting, but shall also be inclusive of installation of adjusting rings, and /or addition, removal, or replacement of barrel sections. The existing casting is to be reused unless a new casting is specified on the plans. New casting, when specified, shall be paid as a separate bid item. Anchoring of the casting shall be incidental to this item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE CASTING STANDARD Payment under this item is for the furnishing of a new, standard, traffic-bearing casting for sanitary manholes that meets the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

S MANHOLE CASTING WATERTIGHT Payment under this item is for the furnishing of a new, watertight, traffic-bearing casting for sanitary manholes that meets the requirements of the sanitary sewer specifications and standard drawings. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when installed.

S MANHOLE OVERSIZED Payment under this item is for the installation of a new manhole greater than the standard 4-foot interior diameter. Payment for oversized manholes will be made at the contract unit price in-place, complete and ready-for-use at the locations shown on plans, in accordance with specifications and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup, in accordance with the specifications and standard drawings. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused when available and shall be considered incidental to this item. When an existing casting is unavailable or a new casting is specified on plans or elsewhere in the contract, a new casting shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. In cases where a manhole is to be located within a grade-sensitive area such as roadway pavement, sidewalks, shared-use-paths, etc., the final casting grade given on plans shall be considered approximate. Any readjustment of a manhole casting to meet field conditions shall be incidental to this item. No additional payment shall be made for casting adjustments on new manholes. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE RECONSTRUCT INVERT This item is to pay for all labor, equipment, and material for

the rework of an existing manhole bench to redirect or eliminate flow, such as when the flow of a pipe or pipes are being removed or redirected. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in elimination or redirect of flow. This item shall also include providing and placement of a rubber seal or boot, as required by utility specifications, standard drawings, or plans. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. No payment shall be made under this bid when MANHOLE TAP EXISTING or MANHOLE TAP EXISTING ADD DROP are being paid at the same location, as this type of work is included in those items. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE TAP EXISTING This item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base, addition of a rubber seal as specified, and rework of the manhole bench to direct the additional pipe flow. The bid item shall be paid for each core opening added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE TAP EXISTING ADD DROP This item is to pay for all labor, equipment, and material for coring one opening in an existing manhole base and one opening in a manhole wall for cleanout, addition of rubber seals as specified, addition of a vertical drop pipe to the outside of the manhole, placement of reinforcing steel and concrete to encase vertical pipe, and rework of the manhole bench to direct the additional pipe flow. This bid item shall be paid for each drop added to a single manhole. This bid item shall also include any rework of the existing manhole bench due to the elimination of other existing pipes and flow. This work will be as specified in the plans, standard drawings, specifications, or directed by the engineer. This work may consist of, but is not limited to, removal of concrete and/or placement of concrete in the addition, elimination, or redirect of flow. The contractor shall draw his own conclusions as to the effort and scope of work needed to comply with the specifications, standard drawings, and plans. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH DROP Payment under this item is for the installation of new 4-foot interior diameter sanitary sewer manhole with drop. Payment for drop manholes will be made at the contract unit price, in-place, complete and ready-for-use at the locations shown on plans, in accordance with specifications, and standard drawings. Drop manholes shall include concrete base, barrel sections, drop materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting salvaged from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH LINING Payment under this item is for the installation of a new 4-foot interior

diameter sanitary sewer manhole with corrosion-resistant lining. Payment for manholes with lining will be made at the contract unit price, in-place, complete and ready-for-use at the locations shown on plans, in accordance with specifications, and standard drawings. Manholes shall include concrete base, barrel sections, cone section or slab top, steps, lining, excavation, backfilling, air testing, restoration, and cleanup. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). All materials, except casting, shall be new and unused. An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be paid for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S MANHOLE WITH TRAP Payment under this item is for the installation of a new manhole with trap. Payment for trap manholes will be made at the contract unit price each, in-place, complete and ready-for-use at the locations shown on plans, in accordance with specifications, and standard drawings. Trap manholes shall include concrete base, manhole structure and trap materials, cone section or slab top, steps, excavation, backfilling, air testing, restoration, and cleanup. All materials, except casting, shall be new and unused. Payment shall be made under this item regardless of whether the base is to be precast or cast-in-place (doghouse). An existing casting from an existing abandoned or removed manhole is to be reused and shall be considered incidental to this item. When a new casting is specified, or an existing casting is unavailable, it shall be paid as a separate bid item. Anchoring of casting, new or used, shall be considered incidental to this bid item. No additional compensation will be made for manhole height variations. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

S PIPE This item description shall apply to all gravity and force-main sewer pipe bid items, of every size and type of material 8 inches internal diameter and larger, except those bid items defined as "Special". This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, tap tees and couplings for joining to existing similar or dissimilar pipes), polyethylene wrap (if required by specification), labor, equipment, excavation, bedding, backfill, restoration, pressure or vacuum testing, temporary testing materials, video inspection, etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings, complete and ready-for-use. This bid item shall include material and placement of flowable fill under existing and proposed pavement, and wherever specified on the plans or in the specifications. No additional payment will be made for rock excavation. Measurement of quantities under this item shall be through fittings and encasements to a point at the outside face of manhole barrels, or to the point of main termination at dead ends or lampholes. Carrier pipe placed within an encasement shall be paid under this item and shall include casing spacers and end seals. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S PIPE POINT REPAIR This item is to be used to pay for repair of short lengths of existing sanitary sewer pipe that, through prior video inspection or other means, are known to have pre-existing failure. Pipe Point Repair may be needed in preparation for installation of cured-in-place-pipe (CIPP) lining, or other instances where failure is known and repair is prudent. The size of pipe shall not be defined in separate bid items. All diameter sizes of point repair shall be paid under this one item. The materials to be used to make the repair shall be as defined on the plans or in the specifications. This bid item shall include all excavation, pipe materials, joining materials to connect old and new pipe, bedding, and backfill to complete the repair at the locations shown on the plans or as directed by the engineer, complete and ready-for-use.

This bid item shall include bypass pumping when required. Measurement shall be from contact point to contact point of old and new pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF).

S PUMP STATION This item is for payment for installation of sanitary pump stations, including above or below ground structures for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready- for-use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) for each when complete.

S STRUCTURE ABANDON This item is to be used to pay for abandonment of larger above or below ground sewer structures such as air release/vacuum valve vaults, pump stations, tanks, etc. Payment under this item shall not be limited to size or scope; however, structures with connecting pipes of 2 inches or less shall not be paid under this item but shall be considered incidental to sewer construction (i.e., abandonment of standard air release/vacuum valves, up to and including 2 inches, would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and complete restoration. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Manhole abandonment shall not be paid under this item but shall be paid under the bid item S MANHOLE ABANDON/REMOVE.

S STRUCTURE REMOVAL This item is to be used to pay for removal of larger above or below ground sewer structures, such as air release/vacuum valve vaults, pump stations, tanks, etc. Payment under this item shall not be limited to size or scope; however, structures with connecting pipes of 2 inches or less shall not be paid under this item but shall be considered incidental to sewer construction (i.e., removal of standard air release/vacuum valves and their structures, up to and including 2 inches, would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and complete restoration. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Manhole removal shall not be paid under this item but shall be paid under the bid item S MANHOLE ABANDON/REMOVE.

Fayette County - HSIP

LEXINGTON, KENTUCKY

KY 418 at Aphids Way RCUT (MP 0.225 KY 418)

Construction Documents
Project Manual

April 2025

Item No. 7-9012.50

Table of Contents

DIVISION 03 - CONCRETE

03 09 00 CONCRETE

DIVISION 31 – EARTHWORK

31 23 33 TRENCHING, BACKFILLING, AND COMPACTING FOR UTILITIES

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 92 00 SEEDING, SODDING AND LANDSCAPING

DIVISION 33 - UTILITIES

33 05 15 PRECAST CONCRETE UTILITY STRUCTURES
33 05 23 PIPELINE UNDERCROSSINGS

DIVISION 40 - PROCESS INTERCONNECTIONS

40 05 00 PIPE AND PIPE FITTINGS: BASIC REQUIREMENTS
40 05 31 PIPE: PLASTIC
40 05 51 VALVES: BASIC REQUIREMENTS

SECTION 03 09 00
CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Cast-in-place concrete and grout.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
1. American Concrete Institute (ACI):
   a. 117, Specification for Tolerances for Concrete Construction and Materials.
   b. 211.1, Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete.
   c. 212.3R, Chemical Admixtures for Concrete.
   d. 304R, Guide for Measuring, Mixing, Transporting, and Placing Concrete.
   e. 304.2R, Placing Concrete by Pumping Methods.
   f. 305.1, Hot Weather Concreting.
   g. 306.1, Cold Weather Concreting.
   h. 318, Building Code Requirements for Structural Concrete.
   i. 347, Guide to Formwork for Concrete.
   j. CT-13, Concrete Terminology.
2. ASTM International (ASTM):
   a. A82, Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
   b. A185, Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
   c. A615, Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
   d. A1064, Standard Specification for Steel Wire and Welded Wire Replacement, Plain and Deformed, for Concrete.
   e. C31, Standard Practice for Making and Curing Concrete Test Specimens in the Field.
   f. C33, Standard Specification for Concrete Aggregates.
   g. C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
   h. C94/C94M, Standard Specification for Ready-Mixed Concrete.
   i. C138, Standard Method of Test for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete.
   j. C143, Standard Test Method for Slump of Hydraulic Cement Concrete.
   k. C150, Standard Specification for Portland Cement.
   l. C172, Standard Practice for Sampling Freshly Mixed Concrete.
   m. C173, Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
   n. C231, Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
   o. C260, Standard Specification for Air-Entraining Admixtures for Concrete.
   p. C289, Standard Test Method for Potential Alkali-Silica Reactivity of Aggregates (Chemical Method).
   q. C309, Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
   r. C494, Standard Specification for Chemical Admixtures for Concrete.
   s. C618, Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.

t. C1315, Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
u. D882, Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
v. D994, Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
w. D1056, Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber.
x. D1709, Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
y. D1751, Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
z. E96, Standard Test Methods for Water Vapor Transmission of Materials.
aa. E329, Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.

3. Corps of Engineers (COE):
   a. CRD-C621, Standard Specification for Packaged, Dry, Hydraulic-Cement Grout (Nonshrink).
4. National Ready Mixed Concrete Association (NRMCA).

B. Quality Control:
1. Concrete testing agency:
   a. Contractor to employ and pay for services of a testing laboratory to:
      1) Perform materials evaluation.
      2) Design concrete mixes.
   b. Concrete testing agency to meet requirements of ASTM E329.
2. Do not begin concrete production until proposed concrete mix design has been approved by Engineer.
   a. Approval of concrete mix design by Engineer does not relieve Contractor of his responsibility to provide concrete that meets the requirements of this Specification.
3. Adjust concrete mix designs when material characteristics, job conditions, weather, strength test results or other circumstances warrant.
   a. Do not use revised concrete mixes until submitted to and approved by Engineer.
4. Perform structural calculations as required to prove that all portions of the structure in combination with remaining forming and shoring system has sufficient strength to safely support its own weight plus the loads placed thereon.

C. Qualifications:
1. Ready mixed concrete batch plant certified by NRMCA.
2. Formwork, shoring and reshoring for slabs and beams except where cast on ground to be designed by a professional engineer currently registered in the state where the Project is located.

1.3 DEFINITIONS

A. Per ACI CT-13 except as modified herein:
1. Concrete fill: Non-structural concrete.
2. Concrete Testing Agency: Testing agency employed to perform materials evaluation, design of concrete mixes or testing of concrete placed during construction.
3. Exposed concrete: Exposed to view after construction is complete.
4. Indicated: Indicated by Contract Documents.
5. Nonexposed concrete: Not exposed to view after construction is complete.
6. Required: Required by Contract Documents.
7. Specified strength: Specified compressive strength at 28 days.
8. Submitted: Submitted to Engineer.

1.4 SUBMITTALS

A. Shop Drawings:

1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
2. Concrete mix designs proposed for use.
    a. Concrete mix design submittal to include the following information:
        1) Sieve analysis and source of fine and coarse aggregates.
        2) Test for aggregate organic impurities.
        3) Test for deleterious aggregate per ASTM C289.
        4) Proportioning of all materials.
        5) Type of cement with mill certificate for cement.
        6) Type of fly ash with certificate of conformance to specification requirements.
        7) Slump.
        8) Air content.
        9) Brand, type, ASTM designation, and quantity of each admixture proposed for use.
        10) 28-day cylinder compressive test results of trial mixes per ACI 318 and as indicated herein.
3. Product technical data including:
    a. Acknowledgement that products submitted meet requirements of standards referenced.
    b. Manufacturer's installation instructions.
    c. Manufacturers and types:
        1) Joint fillers.
        2) Curing agents.
        3) Chemical sealer.
        4) Bonding and patching mortar.
        5) Construction joint bonding adhesive.
        6) Nonshrink grout with cure/seal compound.
4. Reinforcing steel:
    a. Show grade, sizes, number, configuration, spacing, location and all fabrication and placement details.
    b. In sufficient detail to permit installation of reinforcing without having to make reference to Contract Drawings.
    c. Obtain approval of Shop Drawings by Engineer before fabrication.
    d. Mill certificates.
5. Scaled (minimum 1/8 IN per foot) drawings showing proposed locations of construction joints, control joints, expansion joints (as applicable) and joint dimensions.
6. Strength test results of in place concrete including slump, air content and concrete temperature.
7. Certifications:
    a. Certification of standard deviation value in psi for ready mix plant supplying the concrete.
    b. Certification that the material and sources submitted in the mix design will be used in the concrete for this project.
8. Test reports:
    a. Cement mill reports for all cement to be supplied.

1.5 STORAGE AND HANDLING

A. Storage of Material:
1. Cement and pozzolan:
    a. Store in moistureproof, weathertight enclosures.
    b. Do not use if caked or lumpy.
2. Aggregate:
    a. Store to prevent segregation and contamination with other sizes or foreign materials.
    b. Obtain samples for testing from aggregates at point of batching.
    c. Do not use frozen or partially frozen aggregates.
    d. Do not use bottom 6 IN of stockpiles in contact with ground.
    e. Allow sand to drain until moisture content is uniform prior to use.

3. Admixtures:
   a. Protect from contamination, evaporation, freezing, or damage.
   b. Maintain within temperature range recommended by manufacturer.
   c. Completely mix solutions and suspensions prior to use.
4. Reinforcing steel: Support and store all rebars above ground.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Portland Cement: Conform to ASTM C150 Type I or II.

B. Admixtures:
   1. Air entraining admixtures: ASTM C260.
   2. Water reducing, retarding, and accelerating admixtures:
      a. ASTM C494 Type A through E.
      b. Conform to provisions of ACI 212.3R.
      c. Do not use retarding or accelerating admixtures unless specifically approved in writing by Engineer and at no cost to Owner.
      d. Follow manufacturer's instructions.
      e. Use chloride free admixtures only.
   3. Maximum total water soluble chloride ion content contributed from all ingredients of concrete including water, aggregates, cementitious materials and admixtures by weight percent of cement:
      a. 0.10 all concrete.
   4. Do not use calcium chloride.
   5. Pozzolanic admixtures: ASTM C618.
   6. Provide admixtures of same type, manufacturer and quantity as used in establishing required concrete proportions in the mix design.

C. Water: Potable, clean, free of oils, acids and organic matter.

D. Aggregates:
   1. Normal weight concrete: ASTM C33, except as modified below.
   2. Fine aggregate:
      a. Clean natural sand.
      b. No manufactured or artificial sand.
   3. Coarse aggregate:
      a. Crushed rock, natural gravel, or other inert granular material.
      b. Maximum amount of clay or shale particles: 1 PCT.
   4. Gradation of coarse aggregate:
      a. Lean concrete and concrete topping: Size #7.
      b. All other concrete: Size #57 or #67.

E. Concrete Grout:
   1. Nonshrink, nonmetallic grout:
      a. Nonmetallic, noncorrosive, nonstaining, premixed with only water to be added.
      b. Grout to produce a positive but controlled expansion.
      c. Mass expansion not to be created by gas liberation.
      d. Minimum compressive strength of nonshrink grout at 28 days: 6500 PSI.
      e. In accordance with COE CRD-C621.
   2. Epoxy grout:
      a. 3-component epoxy resin system.
         1) Two liquid epoxy components.
         2) One inert aggregate filler component.
      b. Each component packaged separately for mixing at jobsite.

F. Reinforcing Steel:

1. Reinforcing bars: ASTM A615, Grade 60.
2. Welded wire reinforcement:
   a. ASTM A185 or ASTM A1064.
   b. Minimum yield strength: 60,000 PSI.

G. Forms:
1. Prefabricated or job built.
2. Wood forms:
   a. 5/8 or 3/4 IN 5-ply structural plywood of concrete form grade.
   b. Built-in-place or prefabricated type panel.
3. Metal forms:
   a. Metal forms may be used except for aluminum in contact with concrete.
   b. Forms to be tight to prevent leakage, free of rust and straight without dents to provide members of uniform thickness.
4. Chamfer strips: Clear white pine, surface against concrete planed.

H. Form Ties:
1. Commercially fabricated for use in form construction.
   a. Field fabricated ties are unacceptable.
2. Constructed so that ends or end fasteners can be removed without causing spalling at surfaces of the concrete.
3. 3/4 IN minimum diameter cones on both ends.
4. Embedded portion of ties to be not less than 1 IN from face of concrete after ends have been removed.
5. Cone size:
   a. 3/4 IN minimum diameter cones on both ends.
   b. Depth of cone not to exceed the concrete reinforcing cover.
6. Form release: Nonstaining and shall not prevent bonding of future finishes to concrete surface.

I. Membrane Curing Compound:
1. ASTM C309, Type II-B.
2. Resin based, dissipates upon exposure to UV light.
3. Curing compound shall not prevent bonding of any future coverings, coatings or finishes.

J. Expansion Joint Filler:
1. In contact with water or sewage:
   a. Closed cell neoprene.
   b. ASTM D1056, Class SC (oil resistant and medium swell) of 2 to 5 PSI compression deflection (Grade SCE41).
2. Exterior driveways, curbs and sidewalks:
   a. Asphalt expansion joint filler.
   b. ASTM D994.
3. Other use:
   a. Fiber expansion joint filler.
   b. ASTM D1751.

2.2 CONCRETE MIXES

A. General:
1. All concrete to be ready mixed concrete conforming to ASTM C94/C94M.
2. Provide concrete of specified quality capable of being placed without segregation and, when cured, of developing all properties required.
3. All concrete to be normal weight concrete.
4. Provide pozzolan content for all cast-in-place construction.

B. Strength:
1. Provide specified strength and type of concrete for each use in structure(s) as follows:

TYPE	WEIGHT	SPECIFIED STRENGTH*
Precast	Normal weight	4500PSI
Concrete Fill / Lean Concrete	Normal Weight	3000 PSI
All other general use concrete	Normal weight	4500PSI

* Minimum 28-day compressive strength.

C. Air Entrainment:
1. Provide air entrainment in all concrete resulting in a total air content percent by volume as follows:

MAX AGGREGATE SIZE	TOTAL AIR CONTENT PERCENT
1 IN or 3/4 IN	6 ±1-1/2
<3/4 IN	6-1/2 ±1-1/2

2. Air content to be measured in accordance with ASTM C231, ASTM C173, or ASTM C138.

D. Slump - 4 IN maximum, 1 IN minimum:
1. Measured at point of discharge of the concrete into the concrete construction member.
2. 8 IN maximum after addition of superplasticizer (if used).
3. Concrete of lower than minimum slump may be used provided it can be properly placed and consolidated.
4. Pumped concrete:
   a. Provide additional water at batch plant to allow for slump loss due to pumping.
   b. Provide only enough additional water so that slump of concrete at discharge end of pump hose does not exceed maximum slump specified above.
5. Determine slump per ASTM C143.

E. Selection of Proportions:
1. General:
   a. Proportion ingredients to:
      1) Produce proper workability, durability, strength, and other required properties.
      2) Prevent segregation and collection of excessive free water on surface.
2. Minimum cement contents and maximum water cement ratios for concrete to be as follows:

SPECIFIED STRENGTH	MINIMUM CEMENT, MAXIMUM AGGREGATE SIZE			MAXIMUM WATER CEMENT RATIO BY WEIGHT
	1/2 IN	3/4 IN	1 IN	
3000	---	517	517	0.45
4000	564	564	564	0.45
4500	611	611	--	0.42

3. Concrete mix proportioning methods for normal weight concrete:
   a. Proportion mixture to provide desired characteristics using one of methods described below:
      1) Method 1 (Trial Mix):
         a) Per ACI 318, Chapter 5, except as modified herein.
         b) Air content within range specified above.
         c) Record and report temperature of trial mixes.
         d) Proportion trial mixes per ACI 211.1.
      2) Method 2 (Field Experience):

a) Per ACI 318, Chapter 5, except as modified herein:
b) Field test records must be acceptable to Engineer to use this method.
c) Test records shall represent materials, proportions and conditions similar to those specified.

4. Required average strength to exceed the specified 28-day compressive strength by the amount determined or calculated in accordance with the requirements of Chapter 5 of ACI 318 using the standard deviation of the proposed concrete production facility.

PART 3 - EXECUTION

3.1 FORMING AND PLACING CONCRETE

A. Formwork:
1. Contractor is responsible for design and erection of formwork.
2. Construct formwork so that concrete members and structures are of correct size, shape, alignment, elevation and position.
   a. Allowable tolerances: As recommended in ACI 347.
3. Provide slabs and beams of minimum indicated depth when sloping foundation base slabs or elevated floor slabs to drains.
   a. For slabs on grade, slope top of subgrade to provide floor slabs of minimum uniform indicated depth.
   b. Do not place floor drains through beams.
4. Openings:
   a. Provide openings in formwork to accommodate work of other trades.
   b. Accurately place and securely support items built into forms.
5. Chamfer strips: Place 3/4 IN chamfer strips in forms to produce 3/4 IN wide beveled edges on permanently exposed corners of members.
6. Clean and adjust forms prior to concrete placement.
7. Tighten forms to prevent mortar leakage.
8. Coat form surfaces with form release agents prior to placing reinforcing bars in forms.

B. Reinforcement:
1. Position, support and secure reinforcement against displacement.
2. Locate and support with chairs, runners, bolsters, spacers and hangers, as required.
3. Set wire ties so ends do not touch forms and are directed into concrete, not toward exposed concrete surfaces.
4. Lap splice lengths: ACI 318 Class B top bar tension splices unless indicated otherwise on the Drawings.
5. Extend reinforcement to within 2 IN of concrete perimeter edges.
   a. If perimeter edge is earth formed, extend reinforcement to within 3 IN of the edge.
6. Minimum concrete protective covering for reinforcement: As shown on Drawings.
7. Unless otherwise indicated, provide minimum concrete cover as follows:
   a. Concrete deposited against earth: 3 IN.
   b. Formed surfaces exposed to weather or in contact with earth: 2 IN for reinforcing bars #6 or larger; 1-1/2 IN for reinforcing bars less than #6.
   c. Formed surfaces exposed to or located above any liquid: 2 IN.
8. Do not weld reinforcing bars.
9. Welded wire reinforcement:
   a. Install welded wire reinforcement in maximum practical sizes.
   b. Splice sides and ends with a splice lap length measured between outermost cross wires of each fabric sheet not less than:
      1) One spacing of cross wires plus 2 IN.
      2) 1.5 x development length.
      3) 6 IN.
   c. Development length: ACI 318 basic development length for the specified fabric yield strength.

C. Construction, Expansion, and Contraction Joints:
   1. Locate joints as indicated on Contract Drawings or as shown on approved Shop Drawings.
      a. Where construction joint spacing shown on Drawings exceeds the joint spacing indicated in Paragraph below, submit proposed construction joint location in conformance with this Specification Section.
   2. Unplanned construction joints will not be allowed.
   3. Locate wall vertical construction joints at 30 FT maximum.
   4. Locate construction joints in floor slabs and foundation base slabs so that concrete placements are approximately square and do not exceed 2500 SF.
   5. Locate construction joints in columns and walls:
      a. At the underside of beams, girders, haunches, drop panels, column capitals, and at floor panels.
      b. Haunches, drop panels, and column capitals are considered part of the supported floor or roof and shall be placed monolithically therewith.
      c. Column based need not be placed monolithically with the floor below.
   6. Install construction joints perpendicular to main reinforcement with all reinforcement continued across construction joints.
   7. At least 48 HRS shall elapse between placing of adjoining concrete construction.
   8. Thoroughly clean and remove all laitance and loose and foreign particles from construction joints.
   9. Before new concrete is placed, dampen concrete surfaces.

D. Placing Concrete:
   1. Place concrete in compliance with ACI 304R and ACI 304.2R.
   2. Place in a continuous operation within planned joints or sections.
   3. Begin placement when work of other trades affecting concrete is completed.
   4. Place concrete by methods which prevent aggregate segregation.
   5. Do not allow concrete to free fall more than 4 FT.
   6. Where free fall of concrete will exceed 4 FT, place concrete by means of tremie pipe or chute.

E. Consolidation: Consolidate all concrete using mechanical vibrators supplemented with hand rodding and tamping, so that concrete is worked around reinforcement and embedded items into all parts of forms.

F. Protection:
   1. Protect concrete from physical damage or reduced strength due to weather extremes.
   2. In cold weather comply with ACI 306.1 except as modified herein.
      a. Do not place concrete on frozen ground or in contact with forms or reinforcing bars coated with frost, ice or snow.
      b. Minimum concrete temperature at the time of mixing:

OUTDOOR TEMPERATURE AT PLACEMENT (IN SHADE)	CONCRETE TEMPERATURE AT MIXING
Below 30 DEGF	70 DEGF
Between 30-45 DEGF	60 DEGF
Above 45 DEGF	50 DEGF

      c. Do not place heated concrete that is warmer than 80 DEGF.
      d. If freezing temperatures are expected during curing, maintain the concrete temperature at or above 50 DEGF for 7 days or 70 DEGF for 3 days.
      e. Do not allow concrete to cool suddenly.
   3. In hot weather comply with ACI 305.1 except as modified herein.
      a. At air temperature of 90 DEGF and above, keep concrete as cool as possible during placement and curing.
      b. Do not allow concrete temperature to exceed 90 DEGF at placement.
      c. Prevent plastic shrinkage cracking due to rapid evaporation of moisture.

d. Do not place concrete when the actual or anticipated evaporation rate equals or exceeds 0.2 LBS/SF/HR as determined from ACI 305.1, Figure 2.1.5.

G. Curing:
1. Begin curing concrete as soon as free water has disappeared from exposed surfaces.
2. Cure concrete by use of moisture retaining cover, burlap kept continuously wet or by membrane curing compound.
3. Provide protection as required to prevent damage to concrete and to prevent moisture loss from concrete during curing period.
4. Provide curing for minimum of 7 days.
5. Form materials left in place may be considered as curing materials for surfaces in contact with the form materials except in periods of hot weather.
6. In hot weather follow curing procedures outlined in ACI 305.1.
7. In cold weather follow curing procedures outlined in ACI 306.1.
8. Curing vertical surfaces with a curing compound:
a. Cover vertical surfaces with a minimum of two coats of the curing compound.
b. Allow the preceding coat to completely dry prior to applying the next coat.
c. Apply the first coat of curing compound immediately after form removal.
d. Vertical surface at the time of receiving the first coat shall be damp with no free water on the surface.
e. A vertical surface is defined as any surface steeper than 1 vertical to 4 horizontal.

H. Form Removal:
1. Remove forms after concrete has hardened sufficiently to resist damage from removal operations or lack of support.

3.2 CONCRETE FINISHES

A. Tolerances:
1. Class A: 1/8 IN in 10 FT.
2. Class B: 1/4 IN in 10 FT.

B. Surfaces Exposed to View:
1. Provide a smooth finish for exposed concrete surfaces and surfaces that are:
a. To be covered with a coating or covering material applied directly to concrete.
b. Scheduled for grout cleaned finish.
2. Remove fins and projections, and patch voids, air pockets, and honeycomb areas with cement grout.
3. Fill tie holes with nonshrink, nonmetallic grout.

C. Surfaces Not Exposed to View:
1. Patch voids, air pockets and honeycomb areas with cement grout.
2. Fill tie holes with nonshrink, nonmetallic grout.

3.3 GROUT

A. Preparation:
1. Nonshrinking, nonmetallic grout:
a. Clean concrete surface to receive grout.
b. Saturate concrete with water for 24 HRS prior to grouting.

B. Application:
1. Nonshrinking, nonmetallic grout:
a. Mix in a mechanical mixer.
b. Use no more water than necessary to produce flowable grout.
c. Place in accordance with manufacturer's instructions.
d. Completely fill all spaces and cavities below the bottom of baseplates.
e. Provide forms where baseplates and bedplates do not confine grout.
f. Where exposed to view, finish grout edges smooth.

g. Except where a slope is indicated on Drawings, finish edges flush at the baseplate, bedplate, member, or piece of equipment.
h. Protect against rapid moisture loss by covering with wet rags or polyethylene sheets.
i. Wet cure grout for seven (7) days, minimum.

3.4 FIELD QUALITY CONTROL

A. Employ and pay for services of a concrete testing laboratory to perform testing of concrete placed during construction.

B. Concrete Quality Control During Construction:
1. Strength tests:
a. Secure concrete samples in accordance with ASTM C172.
b. Obtain each sample from a different batch of concrete on a random basis.
c. For each strength test mold and cure three cylinders from each sample in accordance with ASTM C31.
1) Record any deviations from requirements on test report.
d. Test cylinders in accordance with ASTM C39.
e. Test one (1) cylinder at seven (7) days.
f. Test two (2) cylinders at 28 days.
2. Provide strength tests as follows:
a. One strength test consisting of 6 IN DIA x 12 IN high cylinders shall be taken:
1) Not less than one (1) test each day concrete placed.
2) Not less than one (1) test for each 50 CY or fraction thereof placed in 1 day.
3) Not less than one (1) test for each type of concrete poured.
4) Not less than one (1) test for each concrete structure exceeding 2 CY in volume.
3. Determine slump of concrete sample for each strength test.
a. Additional slump tests shall be taken if consistency of concrete appears to vary.
b. Determine slump in accordance with ASTM C143.
4. Determine air content of concrete sample for each strength test in accordance with either ASTM C231, ASTM C173, or ASTM C138.
5. Determine temperature of concrete sample for each strength test.
6. Determine unit weight (LB/CF) of fresh lightweight concrete at point of discharge into construction member for each strength test.
7. Submit results of all concrete strength tests to Engineer in writing as soon as tests are completed.

C. Evaluation of Tests:
1. Strength test results:
a. Average of 28-day strength of two cylinders from each sample.
1) If one cylinder manifests evidence of improper sampling, molding, handling, curing or testing, strength of remaining cylinder will be test result.
2) If both cylinders show any of above defects, test will be discarded.

D. Acceptance of Concrete:
1. Strength level of each type of concrete shall be considered satisfactory if both of the following requirements are met:
a. Average of all sets of three consecutive strength tests equals or exceeds the required specified 28-day compressive strength.
b. No individual strength test falls below the required specified 28-day compressive strength by more than 500 PSI.
2. If tests fail to indicate satisfactory strength level, perform additional tests and/or corrective measures as directed by Engineer.
a. Perform additional tests and/or corrective measures at no additional cost to Owner.

E. Concrete tolerances per ACI 117.

END OF SECTION

SECTION 31 23 33
TRENCHING, BACKFILLING, AND COMPACTING FOR UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Excavation, trenching, backfilling and compacting for all underground utilities.

B. Related Specification Sections include but are not necessarily limited to:
   1. Section 33 05 23 - Pipeline Undercrossings.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. ASTM International (ASTM):
      a. C33, Standard Specification for Concrete Aggregates.
      b. D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 FT-lbf/ft^3 (600 kN-m/m^3)).
      c. D2321, Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
      d. D4253, Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.
      e. D4254, Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

B. Qualifications: Hire an independent soils laboratory to conduct in-place moisture-density tests for backfilling to assure that all work complies with this Specification Section.

1.3 DEFINITIONS

A. Excavation: All excavation will be defined as unclassified.

1.4 SUBMITTALS

A. Shop Drawings:
   1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
   2. Product technical data including:
      a. Acknowledgement that products submitted meet requirements of standards referenced.
      b. Manufacturer's installation instructions.
   3. Submit respective pipe or conduit manufacturer's data regarding bedding methods of installation and general recommendations.

1.5 SITE CONDITIONS

A. Avoid overloading or surcharge a sufficient distance back from edge of excavation to prevent slides or caving.
   1. Maintain and trim excavated materials in such manner to be as little inconvenience as possible to public and adjoining property owners.

B. Provide full access to public and private premises and fire hydrants, at street crossings, sidewalks and other points as designated by Owner to prevent serious interruption of travel.

C. Protect and maintain bench marks, monuments or other established points and reference points and if disturbed or destroyed, replace items to full satisfaction of Owner and controlling agency.

D. Verify location of existing underground utilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Backfill Material:
   1. As approved by Engineer.
      a. Free of rock cobbles, roots, sod or other organic matter, and frozen material.
      b. Moisture content at time of placement: 3 PCT plus/minus of optimum moisture content as specified in accordance with ASTM D698.
   2. Gravel trench backfill materials:
      a. Uniformly graded aggregate –No. 9 Aggregate.
      b. Pit Run Sand (Natural), Manufactured Sand.
      c. Flowable Fill.

B. Bedding Materials:
   1. As approved by the Engineer.
   2. Granular bedding materials:
      a. No. 9 Aggregate – Areas not subject to vehicular traffic.
      b. Dense Graded Aggregate (DGA) – Paved aeras including streets, drives, parking areas, and walks.
   3. Flowable fill:
      a. Description: Flowable fill shall be a mixture of cement, fly ash, fine sand, water, and air having a consistency which will flow under a very low head.
      b. Material characteristics:
         1) The approximate quantities of each component per cubic yard of mixed material shall be as follows:
            a) Cement (Type I or II): 50 LBS.
            b) Fly ash: 200 LBS.
            c) Fine sand: 2,700 LBS.
            d) Water: 420 LBS.
            e) Air content: 10 PCT.
         2) Actual quantities shall be adjusted to provide a yield of 1 cubic yard with the materials used.
         3) Approximate compressive strength should be 85 to 175 PSI.
         4) Fine sand shall be an evenly graded material having not less than 95 PCT passing the No. 4 sieve and not more than 5 PCT passing the No. 200 sieve.
         5) Mixing and handling of the material shall be in accordance with Specification Section 03 09 00.

PART 3 - EXECUTION

3.1 GENERAL

A. Remove and dispose of unsuitable materials as directed by Engineer to site provided by Contractor.

3.2 EXCAVATION

A. Unclassified Excavation: Remove rock excavation, clay, silt, gravel, hard pan, loose shale, and loose stone as directed by Engineer.

B. Excavation for Appurtenances:
   1. 12 IN (minimum) clear distance between outer surface and embankment.

C. Groundwater Dewatering:
   1. Where groundwater is, or is expected to be, encountered during excavation, install a dewatering system to prevent softening and disturbance of subgrade to allow subgrade stabilization, pipe, bedding and backfill material to be placed in the dry, and to maintain a stable trench wall or side slope.

2. Groundwater shall be drawn down and maintained at least 3 FT below the bottom of any trench or manhole excavation prior to excavation.
3. Review soils investigation before beginning excavation and determine where groundwater is likely to be encountered during excavation.
    a. Employ dewatering specialist for selecting and operating dewatering system.
4. Keep dewatering system in operation until dead load of pipe, structure and backfill exceeds possible buoyant uplift force on pipe or structure.
5. Dispose of groundwater to an area which will not interfere with construction operations or damage existing construction.
6. Install groundwater monitoring wells as necessary.
7. Shut off dewatering system at such a rate to prevent a quick upsurge of water that might weaken the subgrade.
8. Cost of groundwater dewatering, if any, shall be the responsibility of the contractor.

D. Trench Excavation:
1. Excavate trenches by open cut method to depth shown on Drawings and necessary to accommodate work.
    a. Support existing utility lines where proposed work crosses at a lower elevation.
        1) Stabilize excavation to prevent undermining of existing utility.
2. Open trench outside buildings, units, and structures:
    a. No more than the distance between two manholes, structures, units, or 300 LF, whichever is less.
    b. Field adjust limitations as weather conditions dictate.
3. Trenching within buildings, units, or structures:
    a. No more than 100 LF at any one time.
4. Any trench or portion of trench, which is opened and remains idle for seven (7) calendar days, or longer, as determined by the Owner, may be directed to be immediately refilled, without completion of work, at no additional cost to Owner.
    a. Said trench may not be reopened until Owner is satisfied that work associated with trench will be prosecuted with dispatch.
5. Observe following trenching criteria:
    a. Trench size:
        1) Excavate width to accommodate free working space.
        2) Maximum trench width at top of pipe or conduit may not exceed outside diameter of utility service by more than the following dimensions:

OVERALL DIAMETER OF UTILITY SERVICE	EXCESS DIMENSION
33 IN and less	18 IN
more than 33 IN	24 IN

        3) Cut trench walls vertically from bottom of trench to 1 FT above top of pipe, conduit, or utility service.
        4) Keep trenches free of surface water runoff.
            a) Include cost in Bid.
            b) No separate payment for surface water runoff pumping will be made.

E. Flowable Fill:
1. Flowable fill shall be:
    a. Discharged from a mixer by any means acceptable to the Engineer into the area to be filled.
    b. Placed in 4 FT maximum lifts to the elevations indicated.
        1) Allow 12 HR set-up time before placing next lift or as approved by the Engineer.

2) Contractor shall place flowable fill lifts in such a manner as to prevent flotation of the pipe.

2. Flowable fill shall not be placed on frozen ground.
3. Subgrade on which flowable fill is placed shall be free of disturbed or softened material and water.
4. Flowable fill batching, mixing, and placing may be started if weather conditions are favorable, and the air temperature is 34 DEGF and rising.
5. At the time of placement, flowable fill must have a temperature of at least 40 DEGF.
6. Mixing and placing shall stop when the air temperature is 38 DEGF or less and falling.
7. Each filling stage shall be as continuous an operation as is practicable.
8. Contractor shall prevent traffic contact with flowable fill for at least 24 HRS after placement or until flowable fill is hard enough to prevent rutting by construction equipment.
9. Flowable fill shall not be placed until water has been controlled or groundwater level has been lowered in conformance with the requirements of the preceding Groundwater Dewatering paragraph in PART 3 of this Specification Section.

3.3 PREPARATION OF FOUNDATION FOR PIPE LAYING

A. Over-Excavation:
1. Backfill and compact to 90 PCT of maximum dry density per ASTM D698.
2. Backfill with granular bedding material as option.

B. Rock Excavation:
1. Excavate minimum of 4 IN below bottom exterior surface of the pipe or conduit.
2. Backfill to grade with suitable earth or granular material.
3. Form bell holes in trench bottom.

C. Subgrade Stabilization:
1. Stabilize the subgrade when directed by the Owner.
2. Observe the following requirements when unstable trench bottom materials are encountered.
   a. Notify Owner when unstable materials are encountered.
      1) Define by drawing station locations and limits.
   b. Remove unstable trench bottom caused by Contractor failure to dewater, rainfall, or Contractor operations.
      1) Replace with subgrade stabilization with no additional compensation.

3.4 BACKFILLING METHODS

A. Do not backfill until tests to be performed on system show system is in full compliance with specified requirements.

B. Carefully Compacted Backfill:
1. Furnish where indicated on Drawings, specified for trench embedment conditions and for compacted backfill conditions up to 12 IN above top of pipe or conduit.
2. Comply with the following:
   a. Place backfill in lifts not exceeding 8 IN (loose thickness).
   b. Hand place, shovel slice, and pneumatically tamp all carefully compacted backfill.
   c. Observe specific manufacturer's recommendations regarding backfilling and compaction.
   d. Compact each lift to specified requirements.

C. Common Trench Backfill:
1. Perform in accordance with the following:
   a. Place backfill in lift thicknesses capable of being compacted to densities specified.
   b. Observe specific manufacturer's recommendations regarding backfilling and compaction.
   c. Avoid displacing joints and appurtenances or causing any horizontal or vertical misalignment, separation, or distortion.

D. Water flushing for consolidation is not permitted.

3.5 COMPACTION

A. General:
1. Place and assure bedding, backfill, and fill materials achieve an equal or higher degree of compaction than undisturbed materials adjacent to the work.
2. In no case shall degree of compaction below minimum compactions specified be accepted.

B. Compaction Requirements:
1. Unless noted otherwise on Drawings or more stringently by other Specification Sections, comply with following minimum trench compaction criteria.
a. Bedding material:

LOCATION	SOIL TYPE	COMPACTION DENSITY
All locations	Cohesionless soils	75 percent relative density by ASTM D4253 and ASTM D4254

b. Carefully compacted backfill:

LOCATION	SOIL TYPE	COMPACTION DENSITY
All applicable areas	Cohesive soils	95 PCT of maximum dry density by ASTM D698
	Cohesionless soils	75 percent relative density by ASTM D4253 and ASTM D4254

c. Toe drain bedding and backfill:

LOCATION	SOIL TYPE	COMPACTION DENSITY
All locations	Cohesionless soils	60 PCT relative density by ASTM D4253 and ASTM D4254

d. Common trench backfill:

LOCATION	SOIL TYPE	COMPACTION DENSITY
Under pavements, roadways, surfaces within highway right-of-ways	Cohesive soils	95 PCT of maximum dry density by ASTM D698
	Cohesionless soils	60 percent of relative density by ASTM D4253 and ASTM D4254
Under turfed, sodded, plant seeded, nontraffic areas	Cohesive soils	85 PCT of maximum dry density by ATM D698
	Cohesionless soils	40 percent of relative density by ASTM D4253 and ASTM D4254

3.6 FIELD QUALITY CONTROL

A. Testing:
1. Perform in-place moisture-density tests as directed by the Owner.
2. Perform tests through recognized testing laboratory approved by Owner.
3. Costs of tests paid by Contractor.
4. Perform additional tests as directed until compaction meets or exceeds requirements.
5. Reference to Engineer in this Specification Section will imply Geotechnical Engineer when employed by Owner and directed by Engineer to undertake necessary inspections as approvals as necessary.
6. Assure Owner has immediate access for testing of all soils related work.

7. Ensure excavations are safe for testing personnel.

END OF SECTION

SECTION 32 92 00
SEEDING, SODDING AND LANDSCAPING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Seeding, sodding and landscape planting:
      a. Soil preparation.
      b. Lawn-type seeding.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. American Nursery and Landscape Association/American National Standards Institute (ANLA/ANSI):
      a. Z60.1, American Standard for Nursery Stock.
   2. AOAC International (AOAC).
   3. ASTM International (ASTM):
      a. D2028, Standard Specification for Cutback Asphalt (Rapid-Curing Type).
      b. D5276, Standard Test Method for Drop Test of Loaded Containers by Free Fall.

1.3 SUBMITTALS

A. Shop Drawings:
   1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
   2. Product technical data including:
      a. Acknowledgement that products submitted meet requirements of standards referenced.
      b. Manufacturer's installation instructions.
      c. Signed copies of vendor's statement for seed mixture required, stating botanical and common name, place of origin, strain, percentage of purity, percentage of germination, and amount of Pure Live Seed (PLS) per bag.
      d. Source and location of sod, plants, and plant material, as per Paragraph 3.3A.
   3. Certification that each container of seed delivered will be labeled in accordance with Federal and State Seed Laws and equals or exceeds Specification requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS AND SUPPLIERS

A. Subject to compliance with the Contract Documents, the manufacturers and suppliers listed in the applicable Articles below are acceptable.

2.2 MATERIALS

A. Seed Quality:
   1. Fresh, clean, new-crop seed labeled in accordance with USDA Rules and Regulations under the Federal Seed Act in effect on date of bidding.
   2. Provide seed of species, proportions, and minimum percentages of purity, germination and maximum percentage of weed seed as specified.

B. Lawn-Type Seed Mixture:

BOTANICAL AND COMMON NAME	PERCENT BY WEIGHT (PLS)	MINIMUM PERCENT GERMINATION	MINIMUM PERCENT PURITY
Kentucky Bluegrass (Poa pratensis)	60	85	95
Fescue, Tall, KY 31 (Festura arundiancea 'KY 31 FT)	30	85	98
Ryegrass, Perennial (Lolium perenne)	10	90	95

C. Pasture Seeding:

BOTANICAL AND COMMON NAME	MINIMUM PERCENT GERMINATION	MINIMUM PERCENT PURITY	LBS PLS PER ACRE
Smooth Brome Grass (Bromus inermis 'Leyss')	80	90	14
Fescue, Tall, KY 31(Festura arundiancea 'KY 31 FT)	90	98	2.5
Switchgrass (Panicum virgatum)	90	95	3.5

D. Native Grass Seeding: Certified seed of locally adapted strains.

E. Water:
1. Water free from substances harmful to grass or sod growth.
2. Provide water from source approved prior to use.

PART 3 - EXECUTION

3.1 SOIL PREPARATION

A. General:
1. Limit preparation to areas which will be planted soon after.
2. Provide facilities to protect and safeguard all persons on or about premises.
3. Protect existing trees designated to remain.
4. Verify location and existence of all underground utilities.
   a. Take necessary precaution to protect existing utilities from damage due to construction activity.
   b. Repair all damages to utility items at sole expense.
5. Contractor to be responsible for vandalism until acceptance of work in whole or in part.

B. Preparation for Lawn-Type Seeding, Sprigging, Plugging or Sodding:
1. Loosen surface to minimum depth of 4 IN.
2. Remove stones over 1 IN in any dimension and sticks, roots, rubbish, and other extraneous matter.
3. Prior to applying fertilizer, loosen areas to be seeded with a double disc or other suitable device if the soil has become hard or compacted.
4. Correct any surface irregularities in order to prevent pocket or low areas which will allow water to stand.
5. Distribute fertilizer uniformly over areas to be seeded:
   a. For lawn-type seeding: 30 LBS per 1000 SQFT.
   b. For pasture seeding: 200 LBS per acre.
6. Incorporate fertilizer into soil to a depth of at least 2 IN by disking, harrowing, or other approved methods.
7. Remove stones or other substances from surface which will interfere with turf development or subsequent mowing operations.

8. Grade lawn areas to a smooth, even surface with a loose, uniformly fine texture.
    a. Roll and rake, remove ridges and fill depressions, as required to meet finish grades.
    b. Limit fine grading to areas which can be planted soon after preparation.
9. Restore lawn areas to specified condition if eroded or otherwise disturbed after fine grading and before planting.

3.2 INSTALLATION

A. Lawn-Type and Pasture Seeding:
1. Do not use seed which is wet, moldy, or otherwise damaged.
2. Perform seeding work from April 20 to May 15 for spring planting, and August 1 to September 15 for fall planting, unless otherwise approved by Engineer.
3. Employ satisfactory methods of sowing using mechanical power-driven drills or seeders, or mechanical hand seeders, or other approved equipment.
4. Distribute seed evenly over entire area at rate of application not less than 4 LBS (PLS) of seed per 1000 SQFT, 50 PCT sown in one direction, remainder at right angles to first sowing.
5. Stop work when work extends beyond most favorable planting season for species designated, or when satisfactory results cannot be obtained because of drought, high winds excessive moisture, or other factors.
    a. Resume work only when favorable conditions develop.
6. Lightly rake seed into soil followed by light rolling or cultipacking.
7. Immediately protect seeded areas against erosion by mulching.
    a. Spread mulch in continuous blanket using 1-1/2 tons per acre to a depth of 4 or 5 straws.
8. Protect seeded slopes against erosion with erosion netting or other methods approved by Engineer.
    a. Protect seeded areas against traffic or other use by erecting barricades and placing warning signs.
9. Immediately following spreading mulch, anchor mulch using an approved method.

3.3 MAINTENANCE AND REPLACEMENT

A. General:
1. Begin maintenance of planted areas immediately after each portion is planted and continue until final acceptance or for a specific time period as stated below, whichever is the longer.
2. Provide and maintain temporary piping, hoses, and watering equipment as required to convey water from water sources and to keep planted areas uniformly moist as required for proper growth.
3. Protection of new materials:
    a. Provide barricades, coverings or other types of protection necessary to prevent damage to existing improvements indicated to remain.
    b. Repair and pay for all damaged items.
4. Replace unacceptable materials with materials and methods identical to the original specifications unless otherwise approved by the Engineer.

B. Seeded or Sodded Lawns:
1. Maintain seeded lawns: 90 days, minimum, after installation and review of entire project area to be planted.
2. Maintenance period begins at completion of planting or installation of entire area to be seeded or sodded.
3. Engineer will review seeded or sodded lawn area after installation for initial acceptance.
4. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations such as rolling, regrading, and replanting as required to establish a smooth, uniform lawn, free of weeds and eroded or bare areas.
5. Lay out temporary lawn watering system and arrange watering schedule to avoid walking over muddy and newly seeded areas.

   a. Use equipment and water to prevent puddling and water erosion and displacement of seed or mulch.
6. Remulch with new mulch in areas where mulch has been disturbed by wind or maintenance operations sufficiently to nullify its purpose.
   a. Anchor as required to prevent displacement.
7. Unacceptable plantings are those areas that do not meet the quality of the specified material, produce the specified results, or were not installed to the specified methods.
8. Replant bare areas using same materials specified.
9. Engineer will review final acceptability of installed areas at end of maintenance period.
10. Maintain repaired areas until remainder of maintenance period or approved by Engineer, whichever is the longer period.

END OF SECTION

SECTION 33 05 15
PRECAST CONCRETE UTILITY STRUCTURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Precast concrete utility structures and appurtenant items.
      a. Air release valve vaults.
   2. Design and fabrication of precast concrete utility structures.

B. Related Specification Sections include but are not necessarily limited to:
   1. Section 03 09 00 - Concrete.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. ASTM International (ASTM):
      a. C857, Standard Practice for Minimum Design Loading for Underground Precast Concrete Utility Structures.
      b. C858, Standard Specification for Underground Precast Concrete Utility Structures.
      c. C890, Standard Practice for Minimum Structural Design Loading for Monolithic or Sectional Precast Concrete Water and Wastewater Structures.
      d. C990, Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.
      e. D1227, Standard Specification for Emulsified Asphalt Used as a Protective Coating for Roofing.

1.3 SUBMITTALS

A. Shop Drawings:
   1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
   2. Product technical data including:
      a. Acknowledgement that products submitted meet requirements of standards referenced.
      b. Manufacturer's installation instructions.
   3. Concrete mix design(s):
      a. Include submittal information defined in Specification Section 03 09 00.
      b. Certification in accordance with ASTM C858, Section 12.
   4. Fabrication and/or layout drawings:
      a. Include detailed diagrams of utility structures showing typical components and dimensions, reinforcement, and other details.
      b. Itemize, on separate schedule, elevations or sectional breakdown of each utility structure with all components and refer to drawing identification number or notation.
      c. Indicate required penetration details for all piping entering each structure.

1.4 SITE CONDITIONS

A. Design groundwater elevation for precast structure design shall be the 100-year flood elevation shown on the Contract Documents.
   1. If the 100-year flood elevation is not shown on the Contract Documents, the design groundwater elevation shall be equal to the ground surface elevation at the structure.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
   1. Concrete Valve Vault
      a. Valve vaults shall conform, in shape, size, dimensions, materials, and other respects, to the details indicated on the drawings.
      b. Oldcastle Infrastructure
      c. Or approved equivalent.
   2. Manhole rings, covers and frames:
      a. Manhole rings, covers and frames shall conform, in shape, size, dimensions, materials, and other respects, to the details indicated on the drawings.
      b. Neenah Foundry.
      c. Deeter Foundry.
      d. J.R. Hoe.
   3. Manhole steps:
      a. M. A. Industries.
      b. Neenah Foundry.
      c. Deeter Foundry.
   4. Black mastic joint compound:
      a. Kalktite 340.
      b. Tufflex.
      c. Plastico.
   5. Premolded joint sealant:
      a. NPC Bidco, Inc., C-56.
      b. Ram-Nek, Henry Co.
      c. EZ-Stik, Press-Seal Gasket Corp.
      d. CS-102, Conseal.
   6. Elastomeric joint seals:
      a. Kent Seal.
   7. Emulsified fibrated asphalt compound:
      a. Sonneborn Hydrocide 700B Semi-Mastic.

2.2 PRECAST UTILITY STRUCTURE COMPONENTS

A. Provide utility structures with interior dimensions as shown on the Drawings.

B. Provide the following components for each utility structure:
   1. Precast base section with integral or cast in place base slab.
   2. Precast wall section(s).
   3. Precast flat top.
      a. Where reinforcement is shown for top slab, furnish slab with reinforcing as designed, but not less than reinforcing shown on Drawings.

C. Provide openings and appurtenances as shown on Drawings.
   1. Manhole frames and covers:
      a. Cast frames into top slab.

D. Concrete:
   1. Conform to requirements of Specification Section 03 09 00.
   2. Conform to requirements of ASTM C858, where stricter than Specification Section 03 09 00.fc
      a. Minimum 28-day compressive strength 4500 PSI.
      b. All portions of precast utility structure are considered to be exposed to freeze-thaw cycles.

E. Joints:
1. Joints of precast riser and top sections:
a. Preformed flexible joint sealants: ASTM C990.
2. Pipe and conduit entry for utility structures.

F. Coatings:
1. Vertical wall surfaces:
a. Emulsified fibrated asphalt compound meeting ASTM D1227 Type I for all vertical wall exterior surfaces.

2.3 DESIGN

A. General Design Requirements:
1. Design precast units and appurtenances in accordance with ASTM C858.
a. Notify Engineer and furnish cast-in-place structures if sizes of precast utility structures shown on Drawings can not be designed or fabricated.

B. Design loads:
1. Design precast units for all loads and load cases described in ASTM C857, with the following values and selections:
a. Minimum uniform live load for exposed roof slabs shall be 150 psf.
b. Wheel loads shall be considered.
1) Use wheel load designation A-16 (HS20-44) as shown in ASTM C857, Table 1.
2) Wheel loads and uniform live load do not act concurrently.
c. Unit weight of soil W shall be taken as no less than 100 LB/CU FT.
d. Minimum lateral soil pressure coefficient (K_0): 0.50.

C. Specific Design Requirements:
1. Out-of-plane shear:
a. Out-of-plane shear shall be shown in the calculations.
b. Wall thickness shall be determined based on meeting design requirements for out-of-plane shear resulting from soil and groundwater loads.
c. Wall sections shall be designed as one-way spans between corners for calculation of out-of-plane shear. Transfer of shear or bending load shall not be considered to be transferred across joints between precast units or between walls and slabs, unless unit as integrally cast together.
d. Use of shear steel reinforcement to increase out-of-plane shear capacity shall be prohibited.
2. Design precast units taking into account reduced cross section at openings and penetrations.
3. Structure shall be checked for buoyancy.
a. The minimum factor of safety for uplift with the design groundwater elevation shall be 1.25, unless a larger factor of safety is required by the local governing body or Building Code.
b. The minimum factor of safety for uplift at the fully submerged condition shall be no less than 1.0
c. If the buoyant weight of soil above base slab extensions beyond the external dimensions of the structure is used to resist uplift, the volume of soil considered to resist uplift shall be limited to soil within the vertical projection of the edge of the base slab extensions.

PART 3 - EXECUTION

3.1 PRECAST UTILITY STRUCTURE CONSTRUCTION

A. Build each structure to dimensions shown on plans and at such elevation that pipe sections built into wall of structure will be true line of pipe extensions.

B. For all horizontal mating surfaces between precast concrete units, apply premolded flexible joint sealant to clean mating surfaces in accordance with sealant manufacturer's written instructions. Apply sufficient pressure to each concrete unit to seat unit in sealant.

C. Seal all pipe penetrations in manhole.
   1. Where post-installed seals are permitted, form pipe openings smooth and well-shaped.
   2. After installation, seal exterior of penetration with non-shrink grout.
   3. After grout cures, wire brush smooth and apply two coats emulsified fibrated asphalt compound to minimum wet thickness of 1/8 IN to ensure complete seal.

D. Set top slab level to elevation shown on Drawings.

3.2 FIELD QUALITY CONTROL

A. Any proposed repairs of precast components or structures shall be submitted to Engineer for approval.

B. No leakage that includes visible flow through joints between precast concrete sections or through pipe penetrations shall be permitted.

C. Damp spots on interior wall surfaces shall be considered leakage and shall not be permitted.
   1. Damp spots shall be defined as spots where moisture from a source outside the structure can be picked up on a dry hand.
   2. Locate the source of water movement through the wall and permanently seal.

END OF SECTION

SECTION 33 05 23
PIPELINE UNDERCROSSINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Construction of pipe undercrossings.
2. Requirements for work on and affecting the railroad right-of-way (if applicable).

1.2 SUBMITTALS

A. Shop Drawings:
1. Product technical data including:
a. Acknowledgement that products submitted meet requirements of standards referenced.
b. Manufacturer's installation instructions.
c. Compliance with submittal requirements of railroad having jurisdiction over undercrossing.
d. Track Monitoring Plan, as applicable (See Subpart 3.3)
e. Ground Monitoring and Contingency Plans, as applicable (see Subpart 3.3)
f. Shoring Plans and Calculations (See Subpart 3.11)

1.3 QUALITY ASSURANCE

A. Referenced Standards:

1. Norfolk Southern Railroad (NS) Specifications for Pipeline Occupancy of Norfolk Southern Corporation Property, NSCE-8.

2. ASTM International (ASTM), A139 Standard Specification for Electric-Fusion (ARC) welded steel pipe.

3. AREMA, American Railway Engineering and Maintenance – Right-of-Way Association, publications and recommended practices.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Casing Pipe:
1. Structural grade steel: New Grade B Steel Pipe, meeting the ASTM A139 standard, minimum yield strength of 35,000 PSI or greater as required by the permits.
2. Wall thickness: Minimum 0.375 IN or greater as required by the permits. For railroad crossing, minimum wall thickness of 0.532 IN.
3. Diameter: Minimum of 4 IN larger than outside diameter of carrier pipe's jointing system.
4. Joints between sections of pipe shall be fully welded around the complete circumference of the pipe.

B. Casing Spacers:

1. Polyethylene, Raci Spacers or equivalent.

2. Seal both ends of casing pipe to outside of carrier pipe to prevent entrance of foreign material but allow leakage to pass in the event of a carrier break.

C. End Seals:

1. Link-Seal or equivalent.

D. Marker Posts or Signs:

1. All crossings shall be prominently marked at right-of-way lines (or both sides of crossing) by durable, weatherproof marker posts or signs located over the centerline of the pipe. Signs shall show the following:
    a. Name and address of applicant
    b. Contents of pipe
    c. Pressure in pipe
    d. Emergency telephone number

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

A. Casing pipe shall be so constructed as to prevent leakage of any substance from the casing throughout its length. For railroad crossings, casing shall be installed so as to prevent the formation of a waterway under the railroad, and with an even bearing throughout its length, and shall slope to one end.

B. The inside diameter of the casing pipe shall be such as to allow the carrier pipe to be removed subsequently without disturbing the casing or the roadbed. For steel pipe casings, the inside diameter of the casing pipe shall be at least 4 inches greater than the largest outside diameter of the carrier pipe joints or couplings.

C. A maximum vertical deflection of the casing pipe of 3 percent of its diameter, plus ½ inch clearance shall be provided so that no loads from the roadbed, track, traffic or casing pipe itself are transmitted to the carrier pipe. When insulators are used on the carrier pipe, the inside diameter of the flexible casing pipe shall be at least 4 ½ inches greater than the outside of the carrier pipe.

3.2 INSTALLATION

A. General:
    1. Install undercrossing to meet requirements of authority or agency having jurisdiction over undercrossing.
    2. Observe work requirements stipulated in any permit condition.
    3. Consult Contract Drawings for limitation of construction right-of-way.

B. If installation of crossing is by jacking or dry boring, the following will be required unless more rigid requirements are specified by the authority or agency having jurisdiction over the crossing:
    1. Pressure grout all voids outside of casing, including abandoned or misaligned holes.
    2. Undercrossing casing:
        a. Full lengths.
        b. Weld pressure tight.
    3. After casing is installed, use casing spacers with each length of carrier pipe to prevent displacement and pull pipe into place. Refer to drawings for maximum spacing.
        a. Pipe must be straight and centered in casing when in place.
    4. Coordinate connections to system with authority or agency having jurisdiction over the crossing.

3.3 TRACK AND GROUND MONITORING – RAILROAD CROSSINGS (IF APPLICABLE)

A. General track and ground monitoring requirements:

1. General requirements:
    a. Temporary lighting may be required by the railroad to identify tripping hazards to train crewmen and other railroad personnel.
    b. Any excavation, holes or trenches on the railroad property shall be covered, guarded and/or protected. Handrails, fence, or other barrier methods must meet OSHA and FRA

requirements.

2. Track and ground monitoring are required as follows:
   a. For crossings up to 25 feet below base of rail for 36-inch encasement pipe.
   b. For shoring within theoretical embankment line (Zone 1) of any track.
   c. Additional monitoring may be required by the railroad on a case by case basis.
3. Monitoring schedule
   a. Monitoring shall commence once any construction activity is begun within Zone 1. Refer to railroad requirements.
   b. Monitoring shall continue through completion of installation and may be required after completion for a period of time determined by NS or its representative.

B. Track Monitoring

1. Track Deflection Limits
2. Targets
   a. Track monitoring shall not require track access other than to place the track monitoring targets.
   b. Monitoring targets should be placed such that monitoring is possible when a train is present. However, monitoring during the passing of a train is not required as the train will temporarily deflect the track.
   c. Adhesive backed reflective targets may be attached to the side of the rail temporarily. Targets should be removed once monitoring phase is complete.
3. Monitoring Plan
4. If the top of rail does deflect more than values listed below, all operations shall stop until the matter is resolved.
   a. Track monitoring values for Class 3 through Class 4:
      1. Threshold value = 1/8 inch permanent vertical or horizontal deflection
      2. Installation Shutdown value = ¼ inch permanent vertical or horizontal deflection
   b. Track monitoring values for Class 1 through Class 2:
      1. Threshold value = ¼ inch permanent vertical or horizontal deflection
      2. Installation Shutdown value = ½ inch permanent vertical or horizontal deflection
   c. Provide established contingency plan, per railroad requirements, in the event of ground loss and/or the rail deviates ¼ inch vertical or horizontal
   d. Establish a benchmark in the vicinity of the construction. Establish locations for shooting elevations on the top of rail at each area of construction.
      1. Example locations for shooting rail elevation would be at:
         * At the centerline of an under track crossing.
         * At both outside edges of the crossing i.e. for a wide excavation.
         * At multiple locations from the crossing/excavation edge but not less than 10, 20, 30, 40 and 50 feet from the crossing.
   e. Monitoring shall be continuous and recorded in a field logbook dedicated for this purpose. Copies of these field log entries can be made available to all concerned parties upon request at any time during construction.

C. Ground Monitoring

1. Provide means for monitoring ground settlement. Submit monitoring plan for railroad review.
2. Ground monitoring points should be in alignment above the proposed construction activities.

D. Contingency Plans

1. The Contractor shall supply Contingency Plan(s), which anticipate reaching the Threshold and Installation Shutdown values, for all construction activities which may result in horizontal and/or vertical track deflection.
   a. Track monitoring values for Class 3 through Class 4:
      1. Threshold value = 1/8 inch permanent vertical or horizontal deflection
      2. Installation Shutdown value = ¼ inch permanent vertical or horizontal deflection
   b. Track monitoring values for Class 1 through Class 2:

1. Threshold value = ¼ inch permanent vertical or horizontal deflection
2. Installation Shutdown value = ½ inch permanent vertical or horizontal deflection

2. The Contingency Plans shall provide means and methods, with options if necessary.
3. The Contractor should anticipate the need to implement each Contingency Plan with required materials, equipment and personnel.
   a. Once the Threshold value is met, the contractor shall determine the appropriate Contingency Plan(s) and immediately discuss this plan with, and receive approval confirmation from, the railroad.
   b. Once the Installation Shutdown value is exceeded all project work shall stop and the chosen Contingency Plan shall commence.
      1. The railroad may choose to allow and/or require the immediate implementation of specific approved Contingency Plans, submitted by the contractor, once the Installation Shutdown value is exceeded.

3.4 BORE AND JACK INSTALLATION (STEEL PIPE) – RAILROAD CROSSING (IF APPLICABLE)

A. This method consists of pushing the pipe into the earth with a boring auger rotating within the pipe to remove the spoil.

B. The boring operation shall be progressed on a 24-hour basis without stoppage in Zone 1, 2, and 3 as indicated in Norfolk Southern (NS) Plate VIII (except for adding lengths of pipe) until the leading edge of the pipe has reached the receiving pit.

C. The front of the pipe shall be provided with mechanical arrangements or devices that will positively prevent the auger from leading the pipe so that no unsupported excavation is ahead of the pipe.

D. The auger and cutting head arrangement shall be removable from within the pipe in the event an obstruction is encountered. If the obstruction cannot be removed without excavation in advance of the pipe, the pipe shall be abandoned in place and immediately filled with grout. A new installation procedure and revised plans must be approved by NS before work can resume.

E. The over-cut by the cutting head shall not exceed the outside diameter of the pipe by more than ½ inch. If voids should develop or if the bored hole diameter is greater than the outside diameter of the pipe (plus coating) by more than approximately 1 inch, grouting or other methods approved by NS, shall be employed to fill such voids.

F. The face of the cutting head shall be arranged to provide a reasonable obstruction to the free flow of soft or poor material.

G. Plans and description of the arrangement to be used shall be submitted to NS for approval and no work shall proceed until such approval is obtained.

H. Any method that employs simultaneous boring and jacking for pipes over 8 inches in diameter that does not have the above approved arrangement **will not be permitted.**

3.5 GROUTING – RAILROAD CROSSING (IF APPLICABLE)

A. For jacked and tunneled installations, a uniform mixture of 1:6 (cement: sand) cement grout shall be placed under pressure through the grout holes to fill any voids which exist between the pipe or liner plate and the undisturbed earth.

B. Grouting shall start at the lowest hole in each grout panel and proceed upwards simultaneously on both side of the pipe.

C. A threaded plug shall be installed in each grout hole as the grouting is completed at that hole.

3.6 SOIL STABILIZATION – RAILROAD CROSSING (IF APPLICABLE)

A. Pressure grouting of the soils or freezing of the soils before jacking, boring, or tunneling may be required at the direction of the railroad to stabilize the soils, control water, prevent loss of material and prevent settlement or displacement of embankment. Grout shall be cement, chemical or other special injection material selected to accomplish the necessary stabilization.

B. The materials to be used and the method of injection shall be prepared by a Registered Professional Soils Engineer or by an experienced and qualified company specializing in this work and submitted for approval to the railroad before the start of work. Proof of experience and competency shall accompany the submission.

3.7 DEWATERING – RAILROAD CROSSING (IF APPLICABLE)

A. When water is known or expected to be encountered, pumps of sufficient capacity to handle the flow shall be maintained at the site, provided the contractor has received approval from the railroad to operate them. Pumps in operation shall be constantly attended on a 24-hour basis until, in the sole judgement of the railroad, the operation can be safely halted. When dewatering, close observation shall be maintained to detect any settlement or displacement of railroad embankment, tracks, and facilities.

3.8 SAFETY REQUIREMENTS – RAILROAD CROSSING (IF APPLICABLE)

A. All operations shall be conducted so as not to interfere with, interrupt, or endanger the operation of trains nor damage, destroy, or endanger the integrity of railroad facilities. All work on or near the railroad property shall be conducted in accordance with the railroad safety rules and regulations. The contractor shall secure and comply with the railroad safety rules and shall give written acknowledgement to the railroad that they have been received, read, and understood by the contractor and its employees. Operations will be subject to the railroad monitoring at any and all times.

B. All cranes, lifts, or other equipment that will be operated in the vicinity of the railroad's electrification and power transmission facilities shall be electrically grounded as directed by the railroad.

C. At all times when the work is being progressed, a field supervisor for the work with no less than twelve (12) months experience in the operation of the equipment being used shall be present. If boring equipment or similar machines are being use, the machine operator also shall have no less than twelve (12) months experience in the operation of the equipment being used.

D. Whenever equipment or personnel are working closer than 15 feet from the centerline of an adjacent track, that track shall be considered as being obstructed. Insofar as possible, all operations shall be conducted no less than this distance. Operations closer than 15 feet from the centerline of a track shall be conducted only with the permission of, and as directed by, a duly qualified railroad employee or an authorized railroad representative present at the site of the work.

E. Construction near switching areas may require lighting.

F. Crossing of tracks at grade by equipment and personnel is prohibited except by prior arrangement with and as directed by the railroad.

3.9 BLASTING

A. Blasting will not be permitted.

3.10 PROTECTION OF DRAINAGE FACILITIES – RAILROAD CROSSING (IF APPLICABLE)

A. If, in the course of construction, it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches or other drainage facilities shall be installed to maintain adequate drainage, as approved by the railroad. Upon completion of the work, the temporary facilities shall be removed, and the permanent facilities restored.

B. Soil erosion methods shall be used to protect railroad ditches and other drainage facilities during construction on and adjacent to the railroad right-of-way.

3.11 SUPPORT OF EXCAVATION ADJACENT TO TRACK – RAILROAD CROSSING (IF APPLICABLE)

A. Launching and Receiving Pits

1. The face of all pits shall be located a minimum of 25 feet from centerline of adjacent track, **measured at right angles to track** unless otherwise approved by the railroad.
2. The railroad Typical Drawing No. 4 – Shoring Requirements shall govern the limits and type of required excavation support.
3. All plans and calculations for shoring shall be prepared, signed and sealed by a Registered Professional Engineer licensed in the state of the project. The Engineer will be responsible for the accuracy for all controlling dimensions as well as the selection of soil design values which will accurately reflect the actual field conditions.
4. The plans shall contain details of the shoring system showing sizes of all structural members, details of connection, and embedment depth. The plans shall include a plan view showing all the proposed excavations and distances from centerline of track to face of excavation. Plans shall show a section normal to the track showing the shoring location relative to the centerline of track and showing the height of sheeting and track elevation in relation to the bottom of excavation. The plans must be complete and accurately describe the nature of the work.
5. Shoring in Zone 1 or 2, AREMA recommended practice is to be used for design. No increase in temporary stresses is permitted. Refer to AREMA Load Section.
6. Design shall include 2 feet of spoils adjacent to the shoring and the first 1 foot below the dredge line is to be neglected for passive resistance.
7. Shoring location in Zone 2 as shown on the railroad Typical Drawing No. 4 – Shoring Requirements shall be designed using interlocking sheeting. Soldier piles and lagging will be considered only when its use is specifically approved by the railroad. Consideration for the use of soldier piles and lagging will only be made if the required penetration of steel sheet piling cannot be obtained and when dry, stable material will be encountered.
8. All excavations with the limits shown on railroad Typical Drawing No. 4 – Shoring Requirements shall be designed for railroad live load surcharge. All shoring designed for railroad live load surcharge shall be based on Cooper's E-80 live load. AREMA Chapter 8, Part 20, Section 3, Paragraph 2(b), refers to the Boussinesq equation as a method to determine lateral pressure values for railroad surcharge loading. The railroad Typical Drawing No. 5 - Shoring Design Guide – Lateral Pressures from Train Loads indicates the lateral pressures associated with various depths of excavation and distances from centerline of track as determined by the Boussinesq equation.
9. Calculations for the proposed shoring shall include deflection calculations. The maximum deflection for excavations within 18'-0" of the centerline of the nearest tack shall be 3/8". For all other cases, the max deflections shall not exceed ½".
10. Railings shall be constructed around all excavations on railroad property. Walkways with railings shall be constructed over open excavations adjacent to the tracks located within the normal walkway. Refer to AREAMA Section 15 for walkway and railing design criteria. Railings shall not be closer than 10'-0" horizontally from centerline of track. Railing shall be indicated on plans submitted for railroad acceptance.
11. Railroad approval is required prior to beginning any excavation.

END OF SECTION

SECTION 40 05 00
PIPE AND PIPE FITTINGS: BASIC REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Utility piping systems.

B. Related Specification Sections include but are not necessarily limited to:
   1. Division 00 - Procurement and Contracting Requirements.
   2. Division 01 - General Requirements.
   3. Section 31 23 33 - Trenching, Backfilling, and Compacting for Utilities.
   4. Section 40 05 51 - Valves: Basic Requirements.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. ASTM International (ASTM):
   2. American Water Works Association (AWWA):
   3. American Water Works Association/American National Standards Institute (AWWA/ANSI):
   4. International Plumbing Code (IPC).
   5. Underwriters Laboratories, Inc. (UL).

1.3 SYSTEM DESCRIPTION

A. Piping Systems Organization and Definition:
   1. Piping services are grouped into designated systems according to the chemical and physical properties of the fluid conveyed, system pressure, piping size and system materials of construction.
   2. See PIPING SPECIFICATION SCHEDULES in PART 3.

1.4 SUBMITTALS

A. Shop Drawings:
   1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
   2. Product technical data including:
      a. Acknowledgement that products submitted meet requirements of standards referenced.
      b. Copies of manufacturer's written directions regarding material handling, delivery, storage and installation.
      c. Separate schedule sheet for each piping system scheduled in this Specification Section showing compliance of all system components.
         1) Attach technical product data on gaskets, pipe, fittings, and other components.

B. Informational Submittals:
   1. Test reports:
      a. Copies of pressure test results on all piping systems.
      b. Reports defining results of dielectric testing and corrective action taken.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Protect pipe coating during handling using methods recommended by manufacturer.
   1. Use of bare cables, chains, hooks, metal bars or narrow skids in contact with coated pipe is not permitted.

B. Prevent damage to pipe during transit.
   1. Repair abrasions, scars, and blemishes.

2. If repair of satisfactory quality cannot be achieved, replace damaged material immediately.

PART 2 - PRODUCTS

2.1 PIPING SPECIFICATION SCHEDULES

A. Piping system materials, fittings and appurtenances are subject to requirements of specific piping specification schedules located at the end of PART 3 of this Specification Section.

2.2 COMPONENTS AND ACCESSORIES

A. Reducers:
   1. Furnish appropriate size reducers and reducing fittings to mate pipe to equipment connections.
   2. Connection size requirements may change from those shown on Drawings depending on equipment furnished.

B. Protective Coating and Lining:
   1. Include pipe, fittings, and appurtenances where coatings, linings, coating, tests and other items are specified.
   2. “DIMJ” fittings to be provided with “Protecto 401” coating.
   3. Field coating pipe in accordance with Specification Section 09 96 00.

C. Underground Warning Tape:
   1. Materials: Polyethylene
   2. Size: 6 IN wide (minimum)
   3. Thickness: 3.5 MILS
   4. Fabrication: Preprinted and permanently imbedded legend, message continuously printed , tensile strength 1750 PSI

D. Valves:
   1. See schematics and details for definition of manual valves used in each system under 4 IN in size.
      a. See Specification Section 40 05 51 schedule for valve types 4 IN and above and for automatic valves used in each system.
   2. See Specification Section 40 05 51.

PART 3 - EXECUTION

3.1 EXTERIOR BURIED PIPING INSTALLATION

A. Enter and exit through structure walls, floors, and ceilings by using penetrations and seals specified and as shown on Drawings.

B. When entering or leaving structures with buried mechanical joint piping, install joint within 2 FT of point where pipe enters or leaves structure.
   1. Install second joint not more than 6 FT nor less than 4 FT from first joint.

C. Install expansion devices as necessary to allow expansion and contraction movement.

D. Laying Pipe In Trench:
   1. Excavate and backfill trench in accordance with Specification Section 31 23 33.
   2. Clean each pipe length thoroughly and inspect for compliance to specifications.
   3. Grade trench bottom and excavate for pipe bell and lay pipe on trench bottom.
   4. Install gasket or joint material according to manufacturer's directions after joints have been thoroughly cleaned and examined.
   5. Except for first two (2) joints, before making final connections of joints, install two (2) full sections of pipe with earth tamped along-side of pipe or final with bedding material placed.
   6. Lay pipe in only suitable weather with good trench conditions.
      a. Never lay pipe in water except where approved by Engineer.

7. Seal open end of line with watertight plug if pipe laying stopped.
8. Remove water in trench before removal of plug.

E. Lining Up Push-On Joint Piping:
1. Lay piping on route lines shown on Drawings.
2. Deflect from straight alignments or grades by vertical or horizontal curves or offsets.
3. Observe maximum deflection values stated in manufacturer's written literature.
4. Provide special bends when specified or where required alignment exceeds allowable deflections stipulated.
5. Install shorter lengths of pipe in such length and number that angular deflection of any joint, as represented by specified maximum deflection, is not exceeded.

F. Anchorage and Blocking:
1. Provide reaction blocking, anchors, joint harnesses, or other acceptable means for preventing movement of piping caused by forces in or on buried piping tees, wye branches, plugs, or bends.
2. Place concrete blocking so that it extends from fitting into solid undisturbed earth wall.
a. Concrete blocks shall not cover pipe joints.
3. Provide bearing area of concrete in accordance with drawing detail.

G. Underground Warning Tape
1. The tape shall be the last equipment installed in the trench so as to be first out.
2. The tape shall be buried 4 to 6 inches below top of grade.
3. After trench backfilling, the tape shall be placed in the backfill and allowed to settle into place with the backfill.
4. The tape may be plowed in after final settlement, installed with a tool during the trench backfilling process, unrolled before final restoration or installed in any other way acceptable to the Owner or Engineer.

3.2 CONNECTIONS WITH EXISTING PIPING

A. Where connection between new work and existing work is made, use suitable and proper fittings to suit conditions encountered.

B. Perform connections with existing piping at time and under conditions which will least interfere with service to customers affected by such operation.

C. Undertake connections in fashion which will disturb system as little as possible.

D. Provide suitable equipment and facilities to dewater, drain, and dispose of liquid removed without damage to adjacent property.

E. Where connections to existing systems necessitate employment of past installation methods not currently part of trade practice, utilize necessary special piping components.

F. Where connection involves potable water systems, provide disinfection methods as prescribed in this Specification Section.

G. Once tie-in to each existing system is initiated, continue work continuously until tie-in is made and tested.

3.3 FIELD QUALITY CONTROL

A. Pipe Testing - General:
1. Test piping systems as follows:
a. Test exposed, non-insulated piping systems upon completion of system.
b. Test exposed, insulated piping systems upon completion of system but prior to application of insulation.
c. Test concealed interior piping systems prior to concealment and, if system is insulated, prior to application of insulation.
d. Test buried piping after backfilling has been complete.

2. Utilize pressures, media and pressure test durations as specified in the PIPING SPECIFICATION SCHEDULES.
3. Isolate equipment which may be damaged by the specified pressure test conditions.
4. Perform pressure test using calibrated pressure gages and calibrated volumetric measuring equipment to determine leakage rates.
   a. Select each gage so that the specified test pressure falls within the upper half of the gage's range.
   b. Notify the Engineer 24 HRS prior to each test.
5. Completely assemble and test new piping systems prior to connection to existing pipe systems.
6. Acknowledge satisfactory performance of tests and inspections in writing to Engineer prior to final acceptance.
7. Bear the cost of all testing and inspecting, locating and remedying of leaks and any necessary retesting and re-examination.

B. Pressure Testing:
1. Testing medium: Unless otherwise specified in the PIPING SPECIFICATION SCHEDULES, utilize the following test media.
   a. Liquid systems:

PIPE LINE SIZE (DIA)	GRAVITY OR PUMPED	SPECIFIED TEST PRESSURE	TESTING MEDIUM
All sizes	Pumped	250 PSIG or less	Water

2. Before the hydrostatic test is begun, the Contractor shall: backfill all pipe; provide all temporary and permanent thrust anchor blocking; and install taps for releasing air at all points of highest elevation where no fire hydrant or flushing connection has been installed. All valves within the test area shall be fully open including valves on fire hydrant supply pipes.
3. It shall be the Contractor's responsibility to locate and repair any and all leaks that may develop.
4. The water main (ductile iron and PVC) and appurtances shall be discharged of hyperchlorinated water, flushed and filled with potable water prior to performing the pressure and leakage test.
5. Water piping shall be pressure tested to 250 percent of the normal system operating pressure or to 100 percent if the rated pressure of the pipe, whichever is less. At no time shall the test pressure exceed 100 percent of the pipe’s rated working pressure. A pipe shall be accepted if the test pressure dies nit fall more than 5 psi during the minimum 2-hour test period. The pipe shall be tested for allowable leakage according to AWWA C-600 or C-605, as applicable, concurrently with the pressure test.
6. In conjunction with the hydrostatic test, a leakage test shall be conducted at the same pressure and for the same period of time.
7. The Contractor may furnish a test pump if approved by the Inspector or Engineer. The test pump must be equipped with a quick-connect coupling to allow the connection of the Company Inspector’s pressure gauge.
8. All piping shall be tested for leakage at a pressure no less than that specified for the pressure test. The leakage shall be defined as the quantity of water that must be supplied to the tested section to maintain pressure within 5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water. The leakage shall be less than an allowable amount determined by the following equation.

$$L = \frac{SD\,(P)^{1/2}}{133{,}200}$$

Where: L = allowable leakage (gallons/hour)
S = length of pipe tested (feet)

D = nominal diameter of pipe (inches)
P = test pressure (psig)

9. All pipe, fittings, and other materials found to be defective under test shall be removed and replaced. These tests shall be repeated until satisfactory to the Engineer and Inspector. All visible leaks shall be repaired regardless of the amount of leakage.
10. The required testing apparatus, consisting of a gasoline motor driven pump, valves, pressure gauge, meter, test pump hose, and connections, shall be picked up and returned to the Company yard, the day the test is to be run.
11. The Contractor shall be responsible for all phases of testing the water main.

C. Dielectric Testing Methods and Criteria:
1. Provide electrical check between metallic non-ferrous pipe or appurtenances and ferrous elements of construction to assure discontinuity has been maintained.
2. Wherever electrical contact is demonstrated by such test, locate the point or points of continuity and correct the condition.

3.4 CLEANING, DISINFECTION AND PURGING

A. Cleaning:
1. Clean interior of piping systems thoroughly before installing.
2. Maintain pipe in clean condition during installation.
3. Before jointing piping, thoroughly clean and wipe joint contact surfaces and then properly dress and make joint.
4. Immideatly prior to pressure testing, clean and remove grease, metal cutting, dirt, or other foreign materials which may have entered the system.
5. At completion of work and prior to Final Acceptance, thoroughly clean work installed under these Specifications.
   a. Clean equipment, fixtures, pipe, valves, and fittings of grease, metal cuttings, and sludge which may have accumulated by operation of system, from testing, or from other causes.
   b. Repair any stoppage or discoloration or other damage to parts of building, its finish, or furnishings, due to failure to properly clean piping system, without cost to Owner.
6. Clean chlorine piping in accordance with CI Pamphlet 6.

B. Disinfection of Potable Water Systems:
1. After favorable performance of pressure test and prior to Final Acceptance, thoroughly flush entire potable water piping system including supply, source and any appurtenant devices and perform disinfection as prescribed.
2. Perform work, including preventative measures during construction, in full compliance with AWWA C651.
3. Perform disinfection using sodium hypochlorite complying with AWWA B300.
4. Flush each segment of system to provide flushing velocity of not less than 2.5 FT per second.
5. Drain flushing water to sanitary sewer.
   a. Do not drain flushing water to receiving stream.
6. Use continuous feed method of application.
   a. Tag system during disinfection procedure to prevent use.
7. After required contact period, flush system to remove traces of heavily chlorinated water.
8. After final flushing and before placing water in service, obtain an independent laboratory approved by the Owner to collect samples and test for bacteriological quality.
   a. Repeat entire disinfection procedures until satisfactory results are obtained.
9. Secure and deliver to Owner, satisfactory bacteriological reports on samples taken from system.
   a. Ensure sampling and testing procedures are in full compliance to AWWA C651, local water purveyor and applicable requirements of State of Kentucky.

3.5 LOCATION OF BURIED OBSTACLES

A. Furnish exact location and description of buried utilities encountered and thrust block placement.

B. Reference items to definitive reference point locations such as found property corners, entrances to buildings, existing structure lines, fire hydrants and related fixed structures.

C. Include such information as location, elevation, coverage, supports and additional pertinent information.

D. Incorporate information on "As-Recorded" Drawings.

3.6 PIPING SYSTEM SCHEDULES

A. SPECIFICATION SCHEDULE -
1. General:
   a. Piping symbol and service:
      1) FM – Sanitary Force Main
   b. Test requirements:
      1) Test medium: Water.
      2) Pressure: 125 PSIG.
      3) Duration: 6 HRS.
   c. Gaskets and O-rings:
      1) O-rings: Neoprene or rubber.
      2) Gasket: ASTM F477
2. System components:
   a. Pipe size to 3 IN through 12 IN:
      1) Buried service:
         a) Materials: Polyvinyl Chloride (PVC), C900 (DR 21).
         b) Reference: AWWA/ANSI C900.
         c) Pipe Compound: ASTM D1784 Cells Class 12454.
         d) Integral Bell Joint: ASTM D3139.
         e) Linning: None
         f) Coating: None
         g) Fittings:
         h) Joints: Push-on with mechanical joints at fittings and valves.

END OF SECTION

SECTION 40 05 31
PIPE: PLASTIC

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Plastic pipe.

B. Related Specification Sections include but are not necessarily limited to:
   1. Division 00 - Procurement and Contracting Requirements.
   2. Division 01 - General Requirements.
   3. Section 40 05 00 - Pipe and Pipe Fittings: Basic Requirements.

1.2 QUALITY ASSURANCE

A. See Specification Section 40 05 00.

B. Referenced Standards:
   1. ASTM International (ASTM):
      a. PVC (polyvinyl chloride) materials:
         1) D1784, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.
         2) D3034, Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
         3) D3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
         4) D3212, Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
         5) F593, Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
      b. Installation:
         1) D2321, Standard Practice for Underground Installation of Thermosplastic Pipe for Sewers and Other Gravity-Flow Applications.
   2. NSF International (NSF).

1.3 SUBMITTALS

A. See Specification Section 40 05 00.

PART 2 - PRODUCTS

2.1 PRESSURE PIPING (UNDERGROUND)

A. Materials: Furnish materials in full compliance with following requirements:
   1. 4-12 IN: AWWA C900 PVC with Pressure Class of 235 PSI (DR18)
   2. Joints for PVC pipe shall be the elastomeric-gasket type with a pressure rating not less than pipe pressure rating meeting performance requirements of ASTM D3139.

PART 3 - EXECUTION

3.1 IDENTIFICATION

A. Identify each length of pipe clearly at intervals of 5 FT or less.
   1. Include manufacturer's name and trademark.

2. Nominal size of pipe, appurtenant information regarding polymer cell classification and critical identifications regarding performance specifications and NSF approvals when applicable.

3.2 PRESSURE PIPING (UNDERGROUND)

A. Installation:
   1. Field threading of PVC pipe will not be permitted.
   2. Perform installation procedures, handling, thrust blocking, connections, and other appurtenant operations in full compliance to the manufacturer's printed recommendations and in conformance to plan details.

END OF SECTION

SECTION 40 05 51
VALVES: BASIC REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Valving and valving appurtenances.
   2. Sewage Combination Air Valve

B. Related Sections include but are not necessarily limited to:
   1. Section 40 05 00 - Pipe and Pipe Fittings: Basic Requirements.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. American Society of Mechanical Engineers (ASME):
      1. B1.20.1, Pipe Threads, General Purpose.
      2. B16.1, Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
      3. B16.18, Cast Copper Alloy Solder Joint Pressure Fittings.
   2. ASTM International (ASTM):
      1. A126, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
      2. D256, Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
      3. D638, Standard Test Method for Tensile Properties of Plastics.
      4. D648, Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.
      5. D695, Standard Test Method for Compressive Properties of Rigid Plastics.
      6. D2240, Standard Test Method for Rubber Property-Durometer Hardness.
   3. American Water Works Association (AWWA):
      1. C207, Standard for Steel Pipe Flanges for Waterworks Service - Sizes 4 IN through 144 IN.
      2. C500, Standard for Metal-Seated Gate Valves for Water Supply Service.
      3. C504, Standard for Rubber-Seated Butterfly Valves.
      4. C507, Standard for Ball Valves, 6 IN through 48 IN (150 MM through 1200 MM).
      5. C509, Standard for Resilient-Seated Gate Valves for Water Supply Service.
      6. C550, Standard for Protective Coatings for Valves and Hydrants.
      7. C606, Standard for Grooved and Shouldered Joints.
   4. American Water Works Association/American National Standards Institute (AWWA/ANSI):
      1. C111/A21.11, Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
   5. National Electrical Manufacturers Association (NEMA):
      1. 250, Enclosures for Electrical Equipment (1000 Volts Maximum).
      2. MG 1, Motors and Generators.
   6. National Fire Protection Association (NFPA):
      1. 70, National Electrical Code (NEC).

1.3 SUBMITTALS

A. Shop Drawings:
   1. Product technical data including:
      1. Acknowledgement that products submitted meet requirements of standards referenced.
      2. Manufacturer's installation instructions.
      3. Valve pressure and temperature rating.

4. Valve material of construction.
5. Special linings.
6. Valve dimensions and weight.
7. Valve flow coefficient.

2. Test reports.

B. Closeout Contract Information:
1. Operation and Maintenance Data:

PART 2 - PRODUCTS

2.1 COMBINATION AIR VALVE

A. ARI USA or quivalent.

2.2 FABRICATION

A. End Connections:
1. Provide the type of end connections for valves as required in the Piping Schedules presented in Section 40 05 00 or as shown on the Drawings.
2. Comply with the following standards:
1. Threaded: ASME B1.20.1.
2. Flanged: ASME B16.1, Class 125 unless otherwise noted or AWWA C207.
3. Bell and spigot or mechanical (gland) type: AWWA/ANSI C111/A21.11.
4. Soldered: ASME B16.18.
5. Grooved: Rigid joints per Table 5 of AWWA C606.

B. Nuts, Bolts, and Washers:
1. Wetted or internal to be bronze or stainless steel.
1. Exposed to be zinc or cadmium plated.

C. On Insulated Piping: Provide valves with extended stems to permit proper insulation application without interference from handle.

D. Epoxy Interior Coating: Provide epoxy interior coating for all ferrous surfaces in accordance with AWWA C550.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Painting Requirements: All fire hydrants shall be fully coated, inside and out, with fusion bonded epoxy coating in accordance with AWWA C550 Standard and color shall be selected by the Owner.

C. Setting Buried Valves:
1. Locate valves installed in pipe trenches where buried pipe indicated on Drawings.
2. Set valves and valve boxes plumb.
3. Place valve boxes directly over valves with top of box being brought to surface of finished grade.
4. Install in closed position.
5. Place valve on firm footing in trench to prevent settling and excessive strain on connection to pipe.
6. After installation, backfill up to top of box for a minimum distance of 4 FT on each side of box.

D. Support exposed valves and piping adjacent to valves independently to eliminate pipe loads being transferred to valve and valve loads being transferred to the piping.

E. For grooved coupling valves, install rigid type couplings.

END OF SECTION

Kentucky Transportation Cabinet

Highway District 7 (1)

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 US 25 / KY 418 in Fayette County (1)

Project: CID 07 – 9012.50

Revised 3/4/2016

KYTC BMP Plan for Project CID **07 – 9012.50**

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 7 (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): US 25 / KY 418 (1)
6. Latitude/Longitude (project mid-point): 37° 58’ 58”, -84° 25’ 28” (1)
7. County (project mid-point): Fayette (1)
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project CID **07 – 9012.50**

A. Site description:

1. Nature of Construction Activity (from letting project description): From Eagle Creek Drive to approximately 0.12 miles south of the school entrance, constructing RCUTs through the corridor. (1)

2. Order of major soil disturbing activities: (2) and (3)

3. Projected volume of material to be moved: 55,367 CY (Cut) & 7,024 CY (Fill);

4. Estimate of total project area (acres): 92.2 Acres (1)

5. Estimate of area to be disturbed (acres): 54.1 Acres (1)

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: Lexington Reservoir No. 4 and UT of East Hickman Creek (1)

10. TMDLs and Pollutants of Concern in Receiving Waters: (1) *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)

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. <u>All DDA’s will have adequate BMP’s in place before being disturbed.</u>

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.
  - 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
- 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: (1) *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:**

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.

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 contract with a hazardous substance.
- 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 cleanup 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. (1) *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. (1) *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:

- 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 form cleaning concrete trucks and equipment.

- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- 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

KYTC BMP Plan for Project CID **07 – 9012.50**

_____ 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.

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.)

KYTC BMP Plan for Project CID **07 – 9012.50**

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

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 gathered and evaluated 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, 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. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engineer signature

Signed _____title_____, _____
Typed or printed name[2] signature

(3) Signed _____title_____, _____
Typed or printed name[1] signature

1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

KYTC BMP Plan for Project CID **07 – 9012.50**

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor

Name:
Address:
Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed _____title_____, _____
Typed or printed name[1] signature

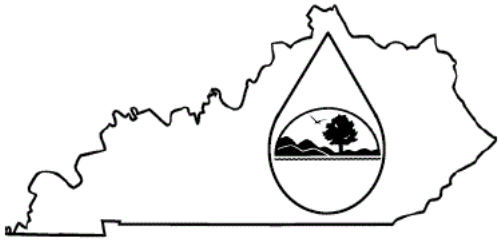
1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

Item No.: 7-9012.50
Fayette County
Highway Safety Improvement Project along US 25 (MP 7.805 – 9.672) and KY 418 (MP 0.00-2.489)

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: 491562

eForm Transaction ID: 5adf97ac-029c-4c53-ac82-51fda768df04



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/KYR10%20Instructions.pdf)

Click here to obtain information and a copy of the KPDES General Permit. (https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYR10PermitPage.pdf)

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

Reason for Submittal:(*)

Agency Interest ID:
Agency Interest ID

Permit Number:(✓)
KPDES Permit Number

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.

COVERAGE:
Applicants shall complete and submit the eNOI-SWCA a minimum of seven (7) days before the proposed date for commencement of construction activities. Applicants shall receive written notification from the Division of Water before being authorized to discharge under the terms of the KYR10 General Permit.

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:(✓)
Company Name

First Name:(✓)
First Name

M.I.:
MI

Last Name:(✓)
Last Name

Mailing Address:(*)
Mailing Address

City:(*)
City

State:(*)

Zip:(*)
Zip

eMail Address:(*)
eMail Address

Business Phone:(*)
___-___-____

Alternate Phone:
___-___-____

Additional Facility Operator information(Co-Permittee) required ?(*)

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)
Project Name

Status of Owner/Operator(*)

SIC Code(*)

Company Name:(✓)
Company Name

First Name:(✓)
First Name

M.I.:
MI

Last Name:(✓)
Last Name

Site Physical Address:(*)
Site Physical Address

City:(*)
City

State:(*)

Zip:(*)
Zip

County:(*)

Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal)
Latitude

Longitude(decimal degrees)(*)
Longitude

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)

Describe the project.

Was the pre-development land used for agriculture ?(*)

Will there be demolition of any structure built or renovated before January 1, 1980 ? (*)

Select the type of construction site (check all that apply)(*)

- [ ] Single-Family Residential
- [ ] Multi-Family Residential
- [ ] Commercial
- [ ] Industrial
- [ ] Institutional
- [ ] Highway or Road
- [ ] Utility
- [ ] Other

a. For single projects provide the following information

Total Number of Acres in Project:(✓)

Project Acres

Total Number of Acres Disturbed:(✓)

Disturbed Acres

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:(✓)

lot(s)

Number of lots in development:(✓)

lot(s)

Total acreage of lots intended to be developed:(✓)

Project Acres

Number of acres intended to be disturbed at any one time:(✓)

Disturbed Acres

Anticipated Start Date:(✓)

Anticipated Completion Date:(✓)

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

	Company Name	
+		

SECTION IV -- INFORMATION IS ALWAYS REQUIRED FOR ONSITE POINT OF DISCHARGE AND RECEIVING WATER

Discharge Point(s):(*)

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	
+					

This grid can be edited either directly on this page or by editing the information in an excel sheet.
If you would like to edit this information in an excel sheet, first use the right button (export) to download the sheet.
After adding your data, save the sheet, and use the left button (import) to import the same file to this grid.

SECTION V -- Section V MUST BE COMPLETED IF WITHIN A MS4 AREA

Name of MS4:

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

Will the project require construction activities in a water body or the riparian zone?: (*)	
If Yes, describe scope of activity: (✓)	Describe the scope of activity
Is a Clean Water Act 404 permit required?:(*)	
Is a Clean Water Act 401 Water Quality Certification required?:(*)	

SECTION VII -- NOI PREPARER INFORMATION

First Name:(*)	M.I.:	Last Name:(*)	Company Name:(*)
First Name	MI	Last Name	Company Name

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
Mailing Address	City		Zip

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
eMail Address	___-___-____	___-___-____

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.

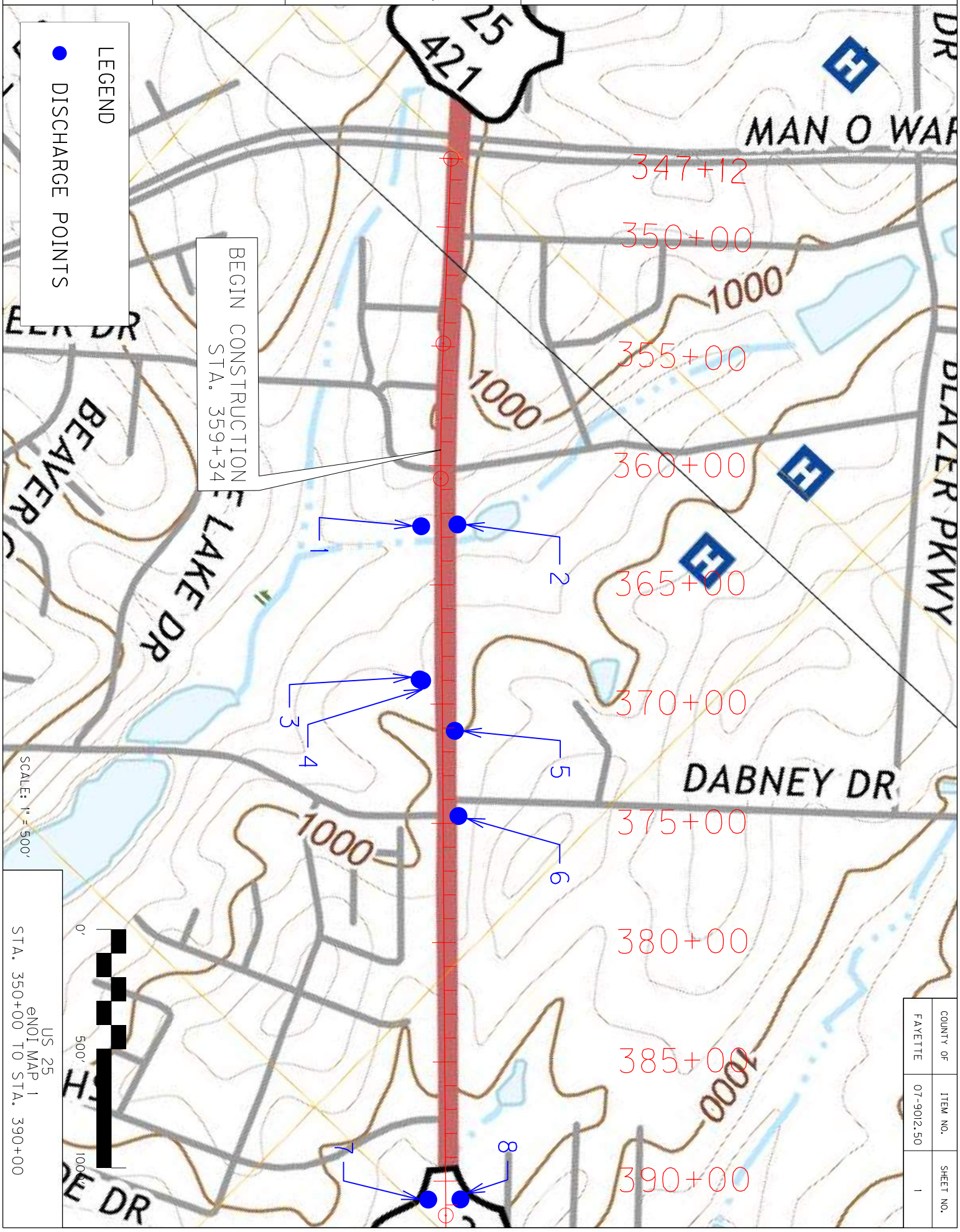
Signature:(*)		Title:(*)
Signature		Title

First Name:(*)	M.I.:	Last Name:(*)
First Name	MI	Last Name

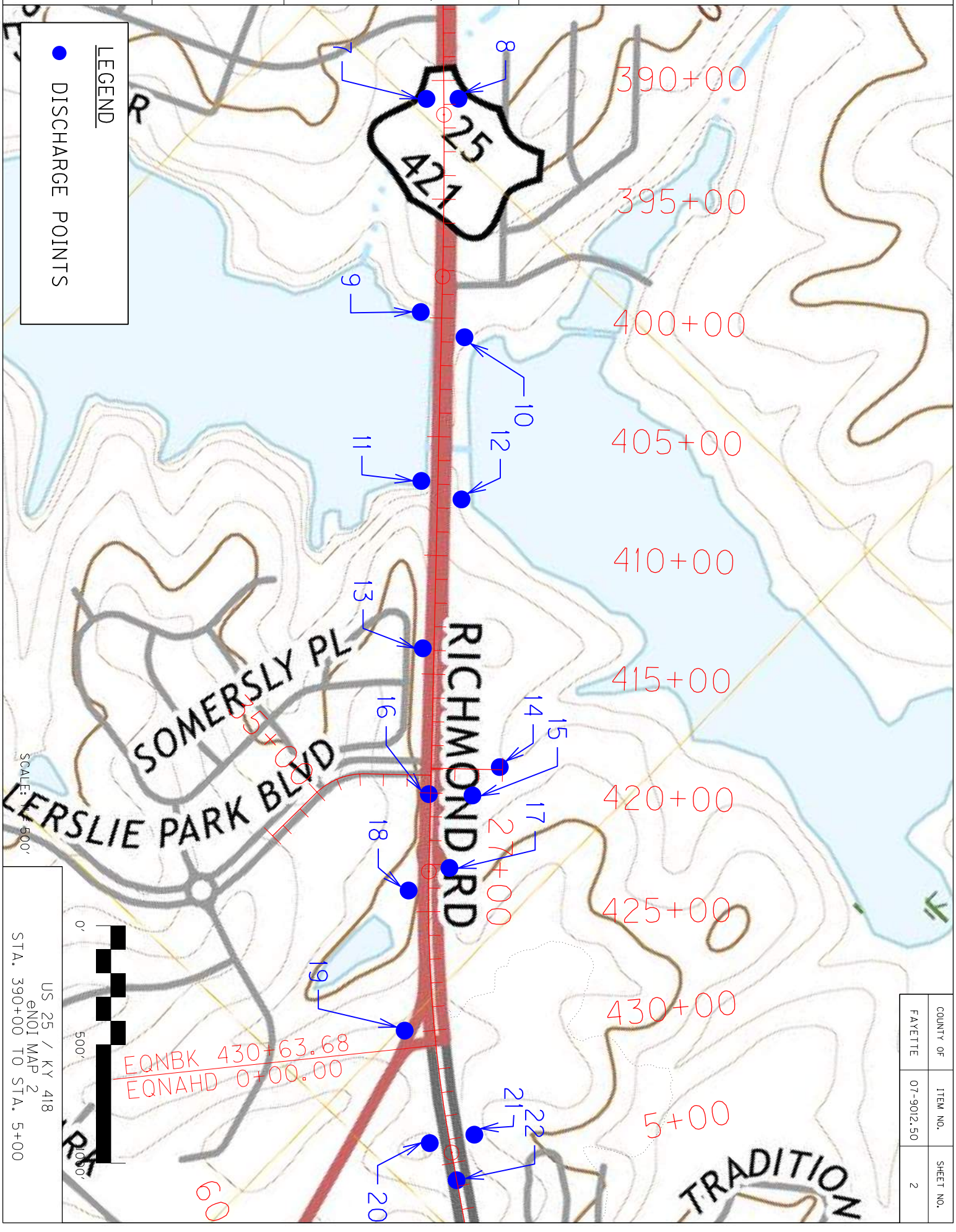
eMail Address:(*)	Business Phone:(*)	Alternate Phone:	Signature Date:(*)
eMail Address	___-___-____	___-___-____	Date

Click to Save Values for Future Retrieval | Click to Submit to EEC

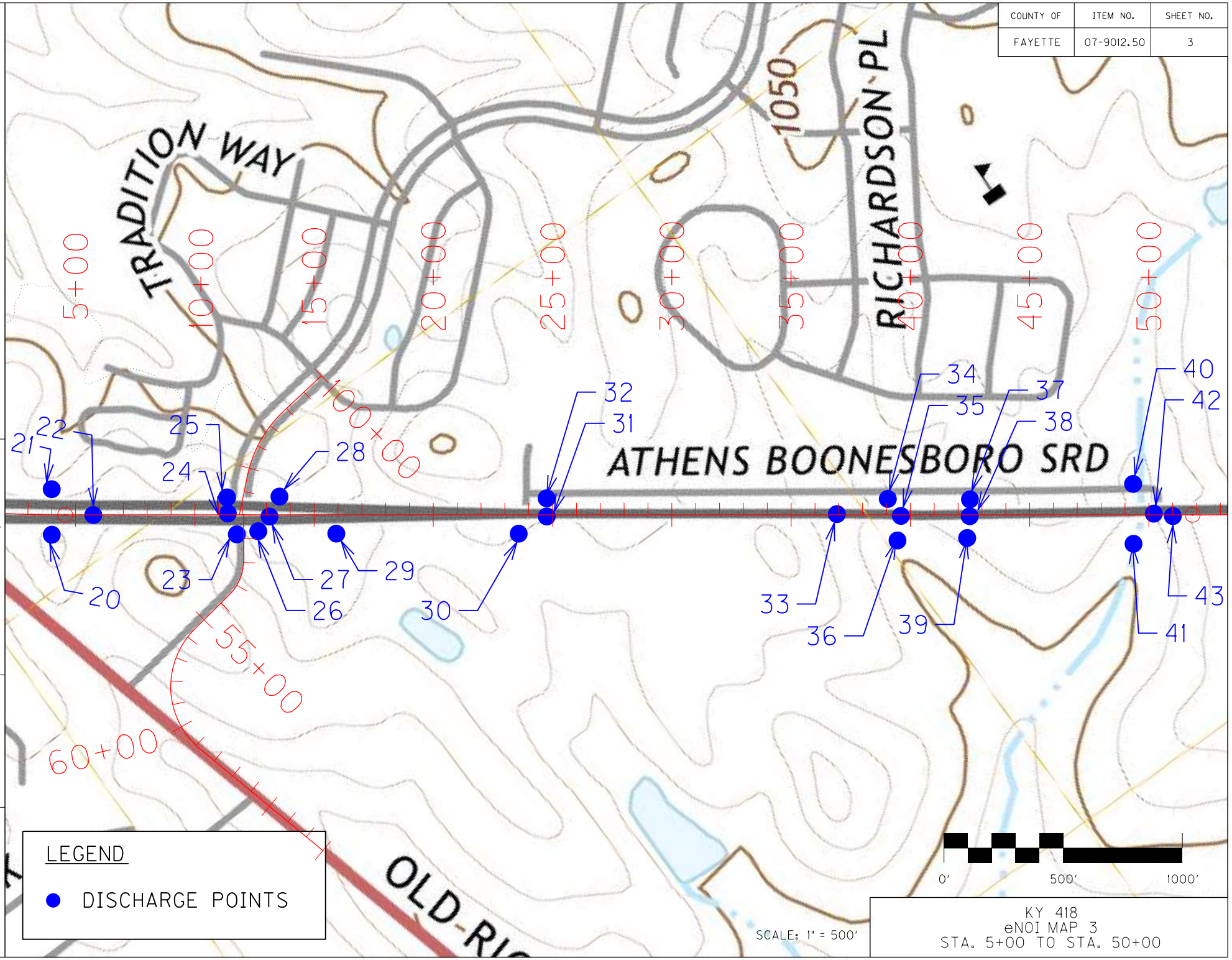
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MicroStation v8.11.9.919 | E-SHEET NAME: | USER: ACAUDILL | DATE PLOTTED: December 17, 2024 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\ENOI_SHEET2.DGN



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	3

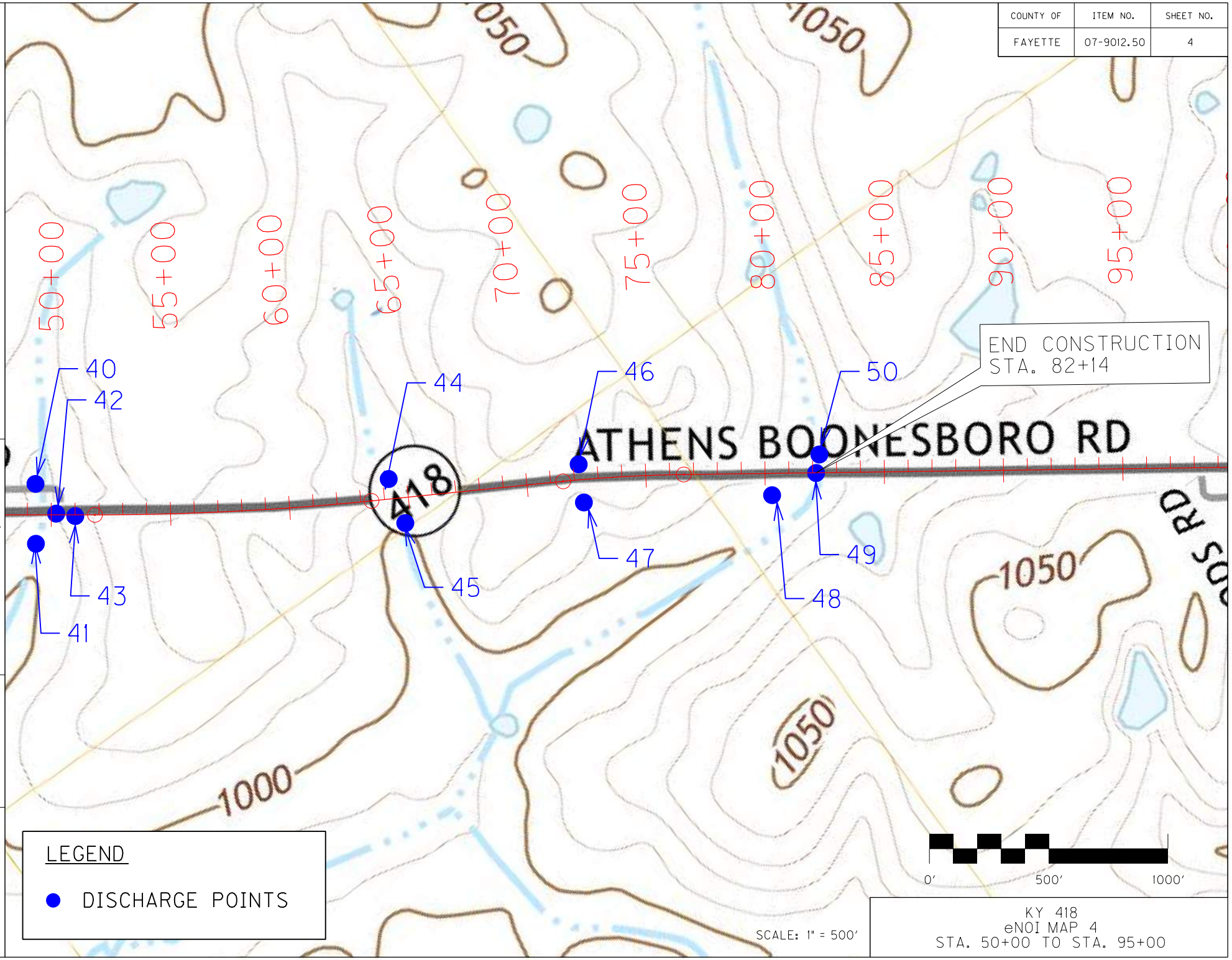


KY 418
eNOI MAP 3
STA. 5+00 TO STA. 50+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\ENOI_SHEET3.DGN
USER: ACAUDILL
DATE PLOTTED: December 17, 2024
E-SHEET NAME:
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	4



KY 418
eNOI MAP 4
STA. 50+00 TO STA. 95+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\ENOI_SHEET4.DGN
USER: ACAUDILL
DATE PLOTTED: December 17, 2024
E-SHEET NAME:
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Communicating All Promises (CAP)

Item No. 7-9012.50 **County: Fayette** **Route: US 25/KY 418**

CAP #	Promise made to:	Location of Promise:	CAP Description:
CAP # 1	Anderson Acquisitions, LLC	Parcel 37	KYTC will construct 3 entrances as shown on the Project Plan Sheets. These are located at KY 418 Sta. 7+04, Aphids Way Sta. 51+76, and Sta. 55+41. These entrances shall extend to and terminate at the Property Owner's right-of-way boundary with the remaining property of the owner.
CAP # 2	Anderson Acquisitions, LLC	Parcel 37	The Property Owner grants KYTC, its employees, and the Contractor constructing the project, temporary access to the remaining property for the sole and exclusive purpose of constructing the entrances detailed in CAP # 1. The Property Owner understands its remaining property may be materially impacted by the construction of the entrances. The Property Owner hereby releases and forever discharges KYTC, its employees, and the Contractor constructing the project from any and all claims, demands, and/or causes of action which may arise as a result of the construction of the entrances. This release in no way discharges KYTC, its employees, and the Contractor constructing the Project from any wrongdoing that is unrelated to the construction of the entrances.
CAP # 3	Anderson Acquisitions, LLC	Parcel 37	The Contractor, upon being awarded the Project by KYTC, shall email Mr. Jon Strom at jstrom@andersoncommunities.com and provide the name of the Contractor as well as the name and telephone number for the best contact for the Contractor on the Project. And at least fourteen (14) calendar days before starting work on the entrances detailed in CAP # 1, the Contractor shall email Mr. Jon Strom at jstrom@andersoncommunities.com providing the expected start date.
CAP # 4	The Traditions at Parks Edge Townhome Assoc., Inc	Parcel 38	The property owner was compensated for 50 LF of 4 board plank fence.
CAP # 5	Ivel White et al	Parcel 68	KYTC and LFUCG approve 2 access breaks on Richmond Rd as were submitted. The first business access point is a right-in, right-out only to be located 500 feet southeast of the intersection of Yorkshire Boulevard and Richmond Rd. The second business access point is to be a left-in, right-in, right-out and to be located off the north side of the proposed constructed loon and being 620 feet from the first entrance. These 2 access points/entrances are to be constructed in the future by the developer and not constructed with this project.
CAP # 6	DF Lexington Properties II, LLC	Parcel 69	The sign and curbing within the temporary easement will not be disturbed. Furthermore, anything disturbed in the temporary easement will be restored by the contractor to as good as, if not better, than when the project began.

Communicating All Promises
Page 2 of 2

CAP #	Promise made to:	Location of Promise:	CAP Description:
CAP # 7	Brenda Cowan Elementary School	Parcel 16	A Consent & Release was obtained to resurface a portion of the entrance to the Brenda Cowan Elementary School. The asphalt resurfacing will extend along the school entrance from Athens-Boonesboro Road to a point approximately 180 feet from the back of radius of the entrance. Following the resurfacing, new pavement markings will be placed, and new signing will be installed adjacent to and just west of the entrance behind the existing curb line. Except for the new signing, all other work will occur between the existing curb lines. All work will occur when school is not in session. The exact timing of the work will depend on several factors, but all work will either occur during the school's 2025 "summer break" or the school's 2026 "summer break". Additionally, while the work is taking place, reasonable access along the entrance will be maintained and appropriate temporary traffic control devices (e.g. temporary road work signing, cones, flaggers, etc.) will be in place to direct motorists entering and leaving the school property.

M E M O R A N D U M **R-000-2021**

TO: Nathan Ridgway, PE
Highway Safety Improvement Program

FROM: Michael Carpenter, PE
Division Director of Structural Design

BY: Christian Wallover, PG
Geotechnical Branch

DATE: April 21, 2021

SUBJECT: Fayette County
Aphids Way
Item No. 7-9012.50
Geotechnical Investigation for HSIP Project

The Highway Safety Improvement Program requested the Geotechnical Branch perform a subsurface investigation for a project proposed on Aphids Way in Fayette County. The purpose of the investigation was to determine depths to bedrock for a cut slope planned between stations 51+00 and 58+00. The Geotechnical Branch completed the subsurface investigation, consisting of five rod soundings along the right-of-way fence on the north side of Aphids Way, on March 24, 2021.

The project is located within the Coletown Quadrangle, south of Jacobson Park between US 25 and KY 418. Geologic mapping indicates bedrock beneath Aphids Way is a part of the Lexington Limestone Formation. The Lexington Limestone consists of limestone with lesser amounts of shale intermixed. The Kentucky Geological Survey identifies the limestone within this formation as having an intense karst potential resulting in features such as fluctuating rocklines, sinkholes, solutioned cavities, and conduits. The geological quadrangle identifies multiple mapped sinkholes in the vicinity of the project.

Five soundings were driven into the ground with an eight foot long rod, 50 feet apart horizontally, paralleling Aphids Way. Due to the height of the cut slope and to reduce disturbance, rod soundings were elected instead of the use of a drill rig. Eight foot rods were adequate to exceed the depth of the proposed ditch through the cut limits. All five rod soundings, listed on the attached cut stability section, were easily driven the full eight feet with no refusal. Results from the investigation indicate bedrock will not be encountered during the construction of the cut slope. Due to the karst potential however, the rockline will vary on the project and there is the possibility a pentacle of bedrock will need to be excavated during the construction of the slope.

2:1 slopes or flatter are recommended for all cut sections on this project. Stability analyses were deemed not necessary due to slope configuration. All excavated material should be classified as common.

GEOTECHNICAL SYMBOLS

AASHTO Classification of Soils and Soil-Aggregate Mixtures

General Classification	Granular Materials (35% or less passing 0.075 mm)							Silt-Clay Materials (More than 35% passing 0.075 mm)			
Group Classification	A-1		A-3	A-2				A-4	A-5	A-6	A-7
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5 A-7-6
Sieve Analysis, Percent Passing											
2.00 mm (No. 10)	50 max	---	---	---	---	---	---	---	---	---	---
0,425 mm (No, 40)	30 max	50 max	51 min	---	---	---	---	---	---	---	---
0,075 mm (No, 200)	15 max	25 max	10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min
Characteristics of Fraction Passing 0.425 mm (No. 40)											
Liquid Limit	---		---	40 max	41 min	40 max	41 min	40 max	41 min	40 max	41 min
Plasticity Index	6 max		N.P.	10 max	10 max	11 min	11 min	10 max	10 max	11 min	11 min

AI	Activity Index
LI	Liquidity Index
S+C	Silt + Clay (% finer than No.200 Sieve)
○	Rockline Soundings
◒	Disturbed Sample Boring
◎	Undisturbed Sample Boring
⦿	Undisturbed Sample Boring & Rock Core
●	Rock Core
⌖	Slope Inclinometer Installation typical applications: ⌖ ◒ ◎ ⦿ ●
OW	Observation Well
➡	Approximate Footing Elevation
▼ (Date)	Water Elevation

VS (psf)	Field Vane Shear Strength
■	Thin-walled Tube Sample
<	Standard Penetration Test Sample
N	Penetration Resistance
Qu (psf)	Unconfined Compressive Strength
UU (psf)	Unconsolidated Undrained Triaxial Strength
w%	Moisture Content
KY RQD	Rock Quality Designation (Kentucky Method)
STD RQD	Rock Quality Designation (Standard Method)
SDI(JS)	Slake Durability Index (Jar Slake Test)
REC	Core Recovery
φ	Angle of Internal Friction (Total Stress)
$\bar{\varphi}$	Angle of Internal Friction (Effective Stress)
c (psf)	Cohesion (Total Stress)
$\bar{c}$ (psf)	Cohesion (Effective Stress)
γ (pcf)	Total Unit Weight
RDZ	Rock Disintegration Zone
OB	Overburden Bench
IB	Intermediate Bench
R	Refusal
NR	Refusal Not Encountered

Unified Soil Classifications

MAJOR DIVISIONS		SYMBOL	NAME
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel-sand mixtures, little or no fines.
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GM	Silty gravels,gravel-sand-silt mixtures.
		GC	Clayey gravels,gravel-sand-clay mixtures.
	SAND AND SANDY SOILS	SW	Well graded sands or gravelly sands, little or no fines.
		SP	Poorly graded sands or gravelly sands, little or no fines.
		SM	Silty sands,sand-silt mixtures.
		SC	Clayey sands,sand-clay mixtures.
FINE GRAINED SOILS	SILTS AND CLAYS LL IS LESS THAN 50	ML	Inorganic silts and very fine sands,rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		CL	Inorganic clays of low to medium plasticity, gravelly clays,sandy clays silty clays, lean clays.
		ML-CL	Silty clay-silty clay with sand and or gravel, sandy silty clay, sandy silty clay with gravel, gravelly silty clay, gravelly silty clay with sand
	SILTS AND CLAYS LL IS GREATER THAN 50	MH	Inorganic silts,micaceous or diatomaceous fine sandy or silty soils,elastic silts.
		CH	Inorganic clays of high plasticity,fat clays.

Unified Soil Classifications - Continued

MAJOR DIVISIONS		SYMBOL	NAME
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GP-GC	Poorly graded gravel with clay (or silty clay), poorly graded gravel with clay and sand (or silty clay & sand)
		GP-GM	Poorly graded gravel with silt, poorly graded gravel with silt and sand
		GW-GC	Well graded gravel with clay (or silty clay), well graded gravel with clay and sand (or silty clay and sand)
		GW-GM	Well graded gravel with silt, well graded gravel with silt and sand
		GC-GM	Silty clayey gravel, silty clayey gravel with sand
	SAND AND SANDY SOILS	SW-SC	Well graded sand with clay (or silty clay), well graded sand with clay and gravel (or silty clay & gravel)
		SP-SC	Poorly graded sand with clay (or silty clay), poorly graded sand with clay and gravel (or silty clay and gravel)
		SP-SM	Poorly graded sand with silt, poorly graded sand with silt and gravel
		SC-SM	Silty clayey sand, silty clayey sand with gravel
		SW-SM	Well graded sand with silt, well graded sand with silt and gravel
UNCLASSIFIED MATERIAL		OH	Organic (High Plasticity)
		OL	Organic (Low Plasticity)

LIMESTONE	TALUS, MINE WASTE, FILL MATERIAL, BOULDERS, & ETC.
SANDSTONE	COAL
DURABLE SHALE (SDI ≥95)	DOLOMITE
NONDURABLE SHALE (SDI <95)	LIMESTONE (ARGILLACEOUS)
GRANULAR EMBANKMENT	SLOPE PROTECTION
STRUCTURE GRANULAR BACKFILL	

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

REVISION	DATE

PREPARED BY
Division of Structural Design
Geotechnical Branch

DATE:	CHECKED BY
DESIGNED BY:	
DETAILED BY:	

GEOTECHNICAL SYMBOL SHEET

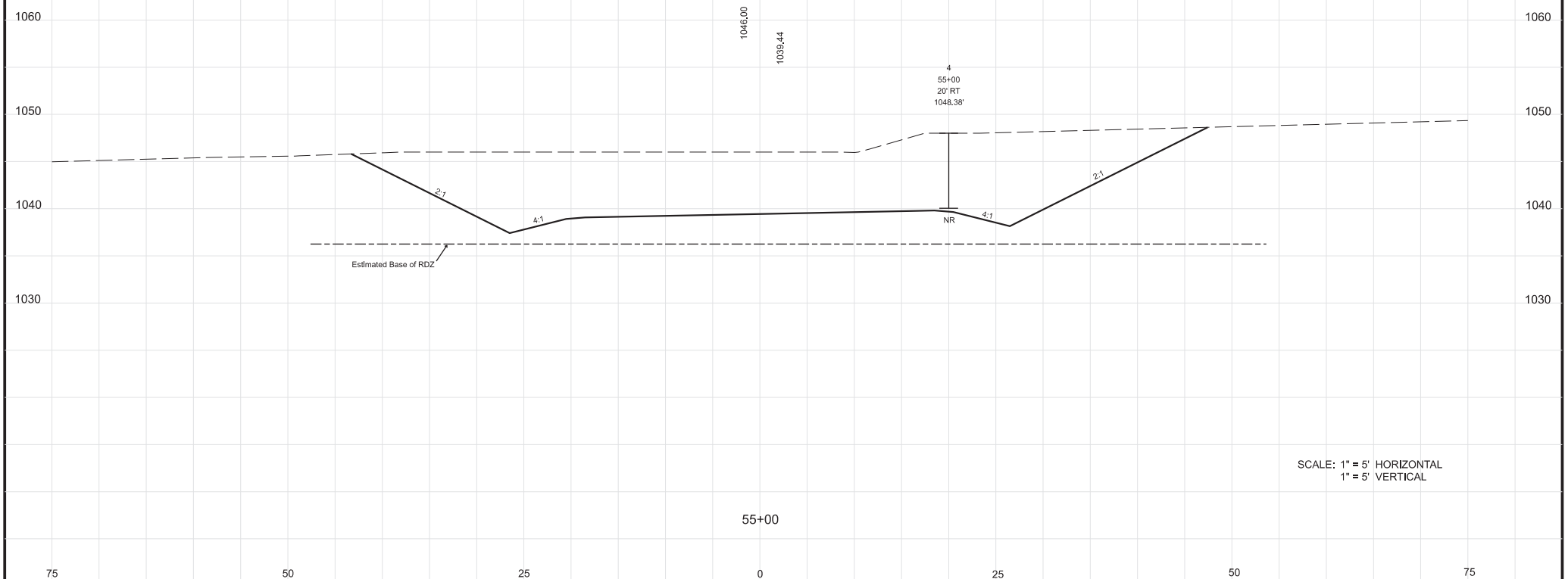
ROUTE	ITEM NO.	COUNTY OF
APHIDS WAY	7-9012.50	FAYETTE
	SHEET NO.	DRAWING NUMBER

R-007-2025

Additional Rockline Soundings

Hole No.	Station	Offset	Depth to Refusal
1	51+50	35' Rt	8' NR
2	52+00	35' Rt	8' NR
3	54+50	20' Rt.	8' NR
5	55+50	20' Rt	8' NR

CUT LIMITS FROM STA. 51+00 TO STA. 58+00
HOLE 4, STA. 55+00, 20' RT
ELEVATION: 1046.0 - 1040.0 OVERBURDEN



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

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	REVISION	DATE	PREPARED BY Division of Structural Design Geotechnical Branch	DATE: DESIGNED BY: DETAILED BY:	CHECKED BY	STA. 55+00 CUT STABILITY SECTION	ROUTE APHIDS WAY	ITEM NO. 7-9012.50 SHEET NO.	COUNTY OF FAYETTE DRAWING NUMBER

MATERIAL SUMMARY

CONTRACT ID: 254301 **034GR25T010-HSIP, SLX, & FD05** **0703400252501**

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) CONSTRUCTION OF RCUT INTERSECTIONS ALONG THE CORRIDOR FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD ASPHALT SURFACE WITH GRADE & DRAIN, A DISTANCE OF 1.87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0280	00003	CRUSHED STONE BASE	30,594.00	TON
0285	00100	ASPHALT SEAL AGGREGATE	52.00	TON
0290	00103	ASPHALT SEAL COAT	7.00	TON
0295	00190	LEVELING & WEDGING PG64-22	111.00	TON
0300	00212	CL2 ASPH BASE 1.00D PG64-22	2,203.00	TON
0305	00217	CL4 ASPH BASE 1.00D PG64-22	18,273.00	TON
0310	00219	CL4 ASPH BASE 1.00D PG76-22	7,113.00	TON
0315	02084	JPC PAVEMENT-8 IN	524.00	SQYD
0320	02676	MOBILIZATION FOR MILL & TEXT - (CID 254301)	1.00	LS
0325	02677	ASPHALT PAVE MILLING & TEXTURING	11,900.00	TON
0330	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	112.50	TON
0335	01811	STANDARD CURB AND GUTTER MOD	1,614.00	LF
0340	01812	REMOVE CURB AND GUTTER	470.00	LF
0345	01891	ISLAND HEADER CURB TYPE 2	1,201.00	LF
0350	01917	STANDARD BARRIER MEDIAN TYPE 2	1,538.00	SQYD
0355	01921	STANDARD BARRIER MEDIAN TYPE 4	640.00	SQYD
0360	02091	REMOVE PAVEMENT	9,646.00	SQYD
0365	02159	TEMP DITCH	9,550.00	LF
0370	02160	CLEAN TEMP DITCH	4,772.00	LF
0375	02200	ROADWAY EXCAVATION	55,367.00	CUYD
0380	02203	STRUCTURE EXCAV-UNCLASSIFIED	125.70	CUYD
0385	02223	GRANULAR EMBANKMENT	63.30	CUYD
0390	02242	WATER	1,808.00	MGAL
0395	02429	RIGHT-OF-WAY MONUMENT TYPE 1	27.00	EACH
0400	02432	WITNESS POST	27.00	EACH
0405	02483	CHANNEL LINING CLASS II	1,264.00	TON
0410	02545	CLEARING AND GRUBBING - (APPROX. 92.2 ACRES)	1.00	LS
0415	02555	CONCRETE-CLASS B	64.00	CUYD
0420	02562	TEMPORARY SIGNS	550.00	SQFT
0425	02603	FABRIC-GEOTEXTILE CLASS 2	218.00	SQYD
0430	02650	MAINTAIN & CONTROL TRAFFIC - (FAYETTE US 25/KY 418 HSIP)	1.00	LS
0435	02671	PORTABLE CHANGEABLE MESSAGE SIGN	7.00	EACH
0440	02697	EDGELINE RUMBLE STRIPS	51,092.00	LF
0445	02701	TEMP SILT FENCE	9,550.00	LF
0450	02704	SILT TRAP TYPE B	50.00	EACH
0455	02705	SILT TRAP TYPE C	50.00	EACH
0460	02707	CLEAN SILT TRAP TYPE B	50.00	EACH
0465	02708	CLEAN SILT TRAP TYPE C	50.00	EACH
0470	02726	STAKING - (FAYETTE US 25/KY 418 HSIP)	1.00	LS
0475	02775	ARROW PANEL	6.00	EACH
0480	03225	TUBULAR MARKERS - (PEXCO CITY POST EMBEDDED ANCHOR CUP)	42.00	EACH
0485	04933	TEMP SIGNAL 2 PHASE	1.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0490	05950	EROSION CONTROL BLANKET	9,846.00	SQYD
0495	05952	TEMP MULCH	148,627.00	SQYD
0500	05953	TEMP SEEDING AND PROTECTION	111,470.00	SQYD
0505	05963	INITIAL FERTILIZER	12.40	TON
0510	05964	MAINTENANCE FERTILIZER	7.50	TON
0515	05985	SEEDING AND PROTECTION	222,940.00	SQYD
0520	05989	SPECIAL SEEDING CROWN VETCH	10,484.00	SQYD
0525	05990	SODDING	2,256.00	SQYD
0530	05992	AGRICULTURAL LIMESTONE	148.00	TON
0535	06511	PAVE STRIPING-TEMP PAINT-6 IN	162,005.00	LF
0540	06515	PAVE STRIPING-PERM PAINT-6 IN	381.00	LF
0545	06542	PAVE STRIPING-THERMO-6 IN W	65,475.00	LF
0550	06543	PAVE STRIPING-THERMO-6 IN Y	38,460.00	LF
0555	06546	PAVE STRIPING-THERMO-12 IN W	4,068.00	LF
0560	06568	PAVE MARKING-THERMO STOP BAR-24IN	1,063.00	LF
0565	06569	PAVE MARKING-THERMO CROSS-HATCH	3,285.00	SQFT
0570	06574	PAVE MARKING-THERMO CURV ARROW	170.00	EACH
0575	06575	PAVE MARKING-THERMO COMB ARROW	6.00	EACH
0580	06576	PAVE MARKING-THERMO ONLY	29.00	EACH
0585	06598	PAVEMENT MARKING REMOVAL	31.00	SQFT
0590	06610	INLAID PAVEMENT MARKER-MW	765.00	EACH
0595	06611	INLAID PAVEMENT MARKER-MY	102.00	EACH
0600	06612	INLAID PAVEMENT MARKER-BY	33.00	EACH
0605	06613	INLAID PAVEMENT MARKER-B W/R	338.00	EACH
0610	10020NS	FUEL ADJUSTMENT	90,145.00	DOLL
0615	10030NS	ASPHALT ADJUSTMENT	174,087.00	DOLL
0620	20206EC	PAVE MARK HANDICAP SYMBOL	1.00	EACH
0625	20411ED	LAW ENFORCEMENT OFFICER	34.00	HOUR
0630	20430ED	SAW CUT	37,177.00	LF
0635	21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW	4,208.00	SQFT
0640	22000ED	WOOD PLANK FENCE	1,006.00	LF
0645	23010EN	PAVE MARK TEMP PAINT STOP BAR-24 IN	400.00	LF
0650	23274EN11F	TURF REINFORCEMENT MAT 1	3,902.00	SQYD
0655	24261EC	ISLAND CURB AND GUTTER(MODIFIED)	42.00	LF
0660	24679ED	PAVE MARK THERMO CHEVRON	837.00	SQFT
0665	24768EC	LANE SEPARATOR CURB	167.00	LF
0670	24889EC	PAVE MARKING-THERMO U-TURN	54.00	EACH
0675	26228EC	ELECTRONIC DELIVERY MGMT SYSTEM - (FAYETTE US 25/KY 418 HSIP)	1.00	LS
0680	00440	ENTRANCE PIPE-15 IN	196.00	LF
0685	00461	CULVERT PIPE-15 IN	54.00	LF
0690	00462	CULVERT PIPE-18 IN	95.00	LF
0695	00464	CULVERT PIPE-24 IN	8.00	LF
0700	00468	CULVERT PIPE-36 IN	8.00	LF
0705	00469	CULVERT PIPE-42 IN	38.00	LF
0710	00521	STORM SEWER PIPE-15 IN	2,405.00	LF
0715	00522	STORM SEWER PIPE-18 IN	226.00	LF
0720	00526	STORM SEWER PIPE-30 IN	8.00	LF
0725	01202	PIPE CULVERT HEADWALL-15 IN	1.00	EACH
0730	01214	PIPE CULVERT HEADWALL-42 IN	2.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0735	01310	REMOVE PIPE	117.00	LF
0740	01432	SLOPED BOX OUTLET TYPE 1-15 IN	4.00	EACH
0745	01433	SLOPED BOX OUTLET TYPE 1-18 IN	1.00	EACH
0750	01440	SLOPED BOX INLET-OUTLET TYPE 1	2.00	EACH
0755	01450	S & F BOX INLET-OUTLET-18 IN	1.00	EACH
0760	01456	CURB BOX INLET TYPE A	3.00	EACH
0765	01505	DROP BOX INLET TYPE 5B	5.00	EACH
0770	01511	DROP BOX INLET TYPE 5D	3.00	EACH
0775	01517	DROP BOX INLET TYPE 5F	3.00	EACH
0780	01559	DROP BOX INLET TYPE 13G	5.00	EACH
0785	01756	MANHOLE TYPE A	1.00	EACH
0790	01767	MANHOLE TYPE C	2.00	EACH
0795	23952EC	DRAINAGE JUNCTION BOX TY B	4.00	EACH
0800	24575ES610	HEADWALL - (DBL PIPE CULVERT HEADWALL 36" MOD)	1.00	EACH
0805	24814EC	PIPELINE INSPECTION	2,648.00	LF
0810	26131ED	SLOPED AND MITERED HEADWALL-18 IN	3.00	EACH
0815	15021	S ENCASEMENT STEEL OPEN CUT RANGE 2	200.00	LF
0820	15026	S FORCE MAIN AIR RLS/VAC VLV 02 IN	1.00	EACH
0825	15062	S FORCE MAIN PVC 10 INCH	500.00	LF
0830	15076	S FORCE MAIN TIE-IN 10 INCH	2.00	EACH
0835	15122	S STRUCTURE REMOVAL	1.00	EACH
0840	06406	SBM ALUM SHEET SIGNS .080 IN	2,307.00	SQFT
0845	06407	SBM ALUM SHEET SIGNS .125 IN	1,236.00	SQFT
0850	06410	STEEL POST TYPE 1	3,992.00	LF
0855	06490	CLASS A CONCRETE FOR SIGNS	9.50	CUYD
0860	21596ND	GMSS TYPE D	38.00	EACH
0865	21596ND	GMSS TYPE D - (SURFACE MOUNT)	19.00	EACH
0870	24631EC	BARCODE SIGN INVENTORY	514.00	EACH
0875	04740	POLE BASE	34.00	EACH
0880	04820	TRENCHING AND BACKFILLING	8,482.00	LF
0885	04821	OPEN CUT ROADWAY	842.00	LF
0890	04940	REMOVE LIGHTING - (FAYETTE US 25/KY 418 HSIP)	1.00	LS
0895	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	10.00	EACH
0900	21543EN	BORE AND JACK CONDUIT	842.00	LF
0905	24900EC	PVC CONDUIT-1 1/4 IN-SCHEDULE 80	6,920.00	LF
0910	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	2,404.00	LF
0915	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	22.00	EACH
0920	02351	GUARDRAIL-STEEL W BEAM-S FACE	2,037.50	LF
0925	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0930	02367	GUARDRAIL END TREATMENT TYPE 1	1.00	EACH
0935	02369	GUARDRAIL END TREATMENT TYPE 2A	3.00	EACH
0940	02381	REMOVE GUARDRAIL	2,794.00	LF
0945	02391	GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH
0950	02568	MOBILIZATION	1.00	LS
0955	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 254301 **034GR25T010-HSIP, SLX, & FD05** **0703400252502**

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) CONSTRUCTION OF A SHARED USE PATH AND OTHER VULNERABLE ROAD USER (VRU) IMPROVEMENTS FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD ASPHALT SURFACE WITH GRADE & DRAIN, A DISTANCE OF

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0200	00003	CRUSHED STONE BASE	1,629.00	TON
0205	00212	CL2 ASPH BASE 1.00D PG64-22	1,114.00	TON
0210	00307	CL2 ASPH SURF 0.38B PG64-22	494.00	TON
0215	02677	ASPHALT PAVE MILLING & TEXTURING	39.00	TON
0220	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	3.10	TON
0225	02611	HANDRAIL-TYPE A-1	235.00	LF
0230	02720	SIDEWALK-4 IN CONCRETE	505.00	SQYD
0235	02721	REMOVE CONCRETE SIDEWALK	109.00	SQYD
0240	02726	STAKING - (HSIP-VRU SHARED USE PATH)	1.00	LS
0245	06566	PAVE MARKING-THERMO X-WALK-12 IN	4,754.00	LF
0250	20782NS714	PAVE MARKING THERMO-BIKE	2.00	EACH
0255	23158ES505	DETECTABLE WARNINGS	312.00	SQFT
0260	24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	2.00	EACH
0265	26192EC	PAVE MARKING-THERMO SHARED LANE MARKING	4.00	EACH
0270	26228EC	ELECTRONIC DELIVERY MGMT SYSTEM - (HSIP-VRU SHARED USE PATH)	1.00	LS
0275	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 254301 **034GR25T010-HSIP, SLX, & FD05** **0703400252503**

RICHMOND ROAD & ATHENS-BOONESBORO ROAD (US 25 & KY 418) CONSTRUCTION OF TRAFFIC SIGNALS ALONG THE CORRIDOR FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO ASHLEY WOODS ROAD TRAFFIC SIGNAL SYSTEMS, A DISTANCE OF 1.87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02650	MAINTAIN & CONTROL TRAFFIC - (FAYETTE US 25/KY 418 SLX TRAFFIC SIGNALS)	1.00	LS
0010	02726	STAKING - (FAYETTE US 25/KY 418 SLX TRAFFIC SIGNALS)	1.00	LS
0015	04740	POLE BASE	15.00	EACH
0020	04780	FUSED CONNECTOR KIT	123.00	EACH
0025	04795	CONDUIT-2 IN	200.00	LF
0030	04820	TRENCHING AND BACKFILLING	12,842.00	LF
0035	04821	OPEN CUT ROADWAY	3,396.00	LF
0040	04835	WIRE-NO. 4	800.00	LF
0045	04841	CABLE-NO. 14/2C	4,317.00	LF
0050	04845	CABLE-NO. 14/7C	14,045.00	LF
0055	04881	MAST ARM POLE	14.00	EACH
0060	04884	ANCHOR	10.00	EACH
0065	04886	MESSENGER-15400 LB	600.00	LF
0070	04927	COORDINATING UNIT	2.00	EACH
0075	04932	INSTALL STEEL STRAIN POLE	4.00	EACH
0080	04933	TEMP SIGNAL 2 PHASE	5.00	EACH
0085	04934	TEMP SIGNAL MULTI PHASE	3.00	EACH
0090	04953	TEMP RELOCATION OF SIGNAL HEAD	126.00	EACH
0095	06472	INSTALL SPAN MOUNTED SIGN	1.00	EACH
0100	20093NS835	INSTALL PEDESTRIAN HEAD-LED	32.00	EACH
0105	20188NS835	INSTALL LED SIGNAL-3 SECTION	53.00	EACH
0110	20266ES835	INSTALL LED SIGNAL- 4 SECTION	34.00	EACH
0115	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	17.00	EACH
0120	20392NS835	ELECTRICAL JUNCTION BOX TYPE C	39.00	EACH
0125	20457NS835	INSTALL PED DETECTOR-AUDIBLE	28.00	EACH
0130	21077ED	FIBER OPTIC CABLE	10,107.00	LF
0135	21543EN	BORE AND JACK CONDUIT	7,277.00	LF
0140	22403NN	WEB CAMERA ASSEMBLY	4.00	EACH
0145	22939ND	INSTALL LUMINAIRE POLE	16.00	EACH
0150	23157EN	TRAFFIC SIGNAL POLE BASE	63.00	CUYD
0155	23222EC	INSTALL SIGNAL PEDESTAL	12.00	EACH
0160	24121EC	HDPE CONDUIT-2 IN-SCHEDULE 80	18,880.00	LF
0165	24908EC	INSTALL SIGNAL CONTROLLER-TY ATC	12.00	EACH
0170	24923EC	CABINET FIBER TERMINATION PANEL	12.00	EACH
0175	24955ED	REMOVE SIGNAL EQUIPMENT	4.00	EACH
0180	26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	26.00	EACH
0185	26120EC	INSTALL RADAR ADVANCE DETECTOR TYPE B	13.00	EACH
0190	26169EC	INSTALL MAST ARM DAMPENER	19.00	EACH
0195	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 254301 **034GR25T010-HSIP, SLX, & FD05** **MP03400252501**

RICHMOND ROAD (US 25) FROM EAGLE CREEK DRIVE EXTENDING SOUTH TO OLD RICHMOND ROAD ASPHALT RESURFACING, A DISTANCE OF 1.34 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1000	00307	CL2 ASPH SURF 0.38B PG64-22	366.00	TON
1005	00342	CL4 ASPH SURF 0.38A PG76-22	5,754.00	TON
1010	02650	MAINTAIN & CONTROL TRAFFIC - (FAYETTE US 25 FD05)	1.00	LS
1015	02726	STAKING - (FAYETTE US 25 FD05)	1.00	LS
1020	20411ED	LAW ENFORCEMENT OFFICER	34.00	HOUR
1025	26228EC	ELECTRONIC DELIVERY MGMT SYSTEM - (FAYETTE US 25 FD05)	1.00	LS
1030	02568	MOBILIZATION	1.00	LS
1035	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 254301 **034GR25T010-HSIP, SLX, & FD05** **MP03404182501**

ATHENS BOONESBORO ROAD (KY 418) FROM OLD RICHMOND ROAD EXTENDING SOUTH TO THE PAVEMENT JOINT NEAR ASHLEY WOODS ROAD ASPHALT RESURFACING, A DISTANCE OF 1.87 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0960	00307	CL2 ASPH SURF 0.38B PG64-22	469.00	TON
0965	00342	CL4 ASPH SURF 0.38A PG76-22	8,515.00	TON
0970	02650	MAINTAIN & CONTROL TRAFFIC - (FAYETTE KY 418 FD05)	1.00	LS
0975	02726	STAKING - (FAYETTE KY 418 FD05)	1.00	LS
0980	20411ED	LAW ENFORCEMENT OFFICER	34.00	HOUR
0985	26228EC	ELECTRONIC DELIVERY MGMT SYSTEM - (FAYETTE KY 418 FD05)	1.00	LS
0990	02568	MOBILIZATION	1.00	LS
0995	02569	DEMOBILIZATION	1.00	LS

Highway Safety Improvement Program

Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

General Summary

Item No.	Description	Unit	Quantity
PAVEMENT			
3	CRUSHED STONE BASE	TON	32,223
100	ASPHALT SEAL AGGREGATE	TON	52
103	ASPHALT SEAL COAT	TON	7
190	LEVELING & WEDGING PG64-22	TON	111
212	CL2 ASPH BASE 1.00D PG64-22	TON	3,317
217	CL4 ASPH BASE 1.00D PG64-23	TON	18,273
219	CL4 ASPH BASE 1.00D PG76-22	TON	7,113
307	CL2 ASPH SURF 0.38B PG64-22	TON	1,329
342	CL4 ASPH SURF 0.38A PG76-22	TON	14,269
2084	JPC PAVEMENT-8 IN	SY	524
2676	MOBILIZATION FOR MILL & TEXT	LS	1
2677	ASPHALT PAVE MILLING & TEXTURING	TON	11,939
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	115.6
EARTHWORK			
2200	ROADWAY EXCAVATION	CY	55,367
ROADWAY			
1811	STANDARD CURB AND GUTTER MOD	LF	1,614
1812	REMOVE CURB AND GUTTER	LF	470
1891	ISLAND HEADER CURB TY 2	LF	1,201
1917	STANDARD BARRIER MEDIAN TYPE 2	SQYD	1,538
1921	STANDARD BARRIER MEDIAN TYPE 4	SQYD	640
2091	REMOVE PAVEMENT	SQYD	9,646
2159	TEMP DITCH	LF	9,550
2160	CLEAN TEMP DITCH	LF	4,772
2203	STRUCTURE EXCAV-UNCLASSIFIED	CUYD	125.7
2223	GRANULAR EMBANKMENT	CUYD	63.3
2242	WATER	MGAL	1,808
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	27
2432	WITNESS POST	EACH	27
2483	CHANNEL LINING CLASS II	TON	1,264
2555	CONCRETE-CLASS B	CUYD	64
2603	FABRIC GEOTEXTILE CLASS 2	SQYD	218
2611	HANDRAIL TYPE A-1	LF	235
2697	EDGELINE RUMBLE STRIPS	LF	51,092
2701	TEMP SILT FENCE	LF	9,550
2704	SILT TRAP TYPE B	EACH	50
2705	SILT TRAP TYPE C	EACH	50
2707	CLEAN SILT TRAP TYPE B	EACH	50
2708	CLEAN SILT TRAP TYPE C	EACH	50
2720	SIDEWALK-4 IN CONCRETE	SQYD	505
2721	REMOVE CONCRETE SIDEWALK	SQYD	109

Highway Safety Improvement Program

Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

General Summary

Item No.	Description	Unit	Quantity
ROADWAY (cont.)			
3225	TUBULAR MARKERS (PEXCO CITY POST EMBEDDED ANCHOR CUP)	EACH	42
5950	EROSION CONTROL BLANKET	SQYD	9,846
5952	TEMP MULCH	SQYD	148,627
5953	TEMP SEEDING AND PROTECTION	SQYD	111,470
5963	INITIAL FERTILIZER	TON	12.4
5964	MAINTENANCE FERTILIZER	TON	7.5
5985	SEEDING AND PROTECTION	SQYD	222,940
5989	SPECIAL SEEDING CROWN VETCH	SQYD	10,484
5990	SODDING	SQYD	2,256
5992	AGRICULTURAL LIMESTONE	TON	148
20430ED	SAW CUT	LF	37,177
22000ED	WOOD PLANK FENCE	LF	1,006
23158ES505	DETECTABLE WARNINGS	SQFT	312
23274EN11F	TURF REINFORCEMENT MAT 1	SQYD	3,902
24261EC	ISLAND CURB AND GUTTER(MODIFIED)	LF	42
24768EC	LANE SEPARATOR CURB	LF	167
STRIPING			
6511	PAVE STRIPING-TEMP PAINT-6 IN	LF	162,005
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	381
6542	PAVE STRIPING-THERMO-6 IN W	LF	65,475
6543	PAVE STRIPING-THERMO-6 IN Y	LF	38,460
6546	PAVE STRIPING- THERMO-12 IN W	LF	4,068
6566	PAVE MARKING-THERMO X-WALK-12 IN	LF	4,754
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	1,063
6569	PAVE MARKING-THERMO CROSS-HATCH	SF	3,285
6574	PAVE MARKING-THERMO CURV ARROW	EA	170
6575	PAVE MARKING-THERMO COMB ARROW [2]	EA	6
6576	PAVE MARKING-THERMO ONLY	EA	29
6598	PAVEMENT MARKING REMOVAL	SQFT	31
6610	INLAID PAVEMENT MARKER-MW	EA	765
6611	INLAID PAVEMENT MARKER-MY	EA	102
6612	INLAID PAVEMENT MARKER-BY	EA	33
6613	INLAID PAVEMENT MARKER-B W/R	EA	338
20206EC	PAVE MARK HANDICAP SYMBOL	EA	1
20782NS714	PAVE MARKING THERMO-BIKE	EA	2
21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW	SF	4,208
23010EN	PAVE MARK TEMP PAINT STOP BAR-24 IN	LF	400
24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	EA	2
24679ED	PAVE MARK THERMO CHEVRON	SF	837
24889EC	PAVE MARKING-THERMO U-TURN	EA	54
26192EC	PAVE MARKING-THERMO SHARED LANE MARKING	EA	4

Highway Safety Improvement Program

Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

General Summary

Item No.	Description	Unit	Quantity
DRAINAGE			
440	ENTRANCE PIPE-15 IN	LF	196
461	CULVERT PIPE-15 IN	LF	54
462	CULVERT PIPE-18 IN	LF	95
464	CULVERT PIPE-24 IN	LF	8
468	CULVERT PIPE-36 IN	LF	8
469	CULVERT PIPE-42 IN	LF	38
521	STORM SEWER PIPE-15 IN	LF	2,405
522	STORM SEWER PIPE-18 IN	LF	226
526	STORM SEWER PIPE-30 IN	LF	8
1202	PIPE CULVERT HEADWALL-15 IN	EACH	1
1214	PIPE CULVERT HEADWALL-42 IN	EACH	2
1310	REMOVE PIPE	LF	117
1432	SLOPED BOX OUTLET TYPE 1-15 IN	EACH	4
1433	SLOPED BOX OUTLET TYPE 1-18 IN	EACH	1
1440	SLOPED BOX INLET/OUTLET	EACH	2
1450	S & F BOX INLET-OUTLET-18 IN	EACH	1
1456	CURB BOX INLET TY A	EACH	3
1505	DROP BOX INLET TYPE 5B	EACH	5
1511	DROP BOX INLET TYPE 5D	EACH	3
1517	DROP BOX INLET TYPE 5F	EACH	3
1559	DROP BOX INLET TYPE 13G	EACH	5
1756	MANHOLE TYPE A	EACH	1
1767	MANHOLE TYPE C	EACH	2
23952EC	DRAINAGE JUNCTION BOX TY B	EACH	4
24575ES610	DBL PIPE CULVERT HEADWALL 36" MOD	EACH	1
24814EC	PIPELINE INSPECTION	LF	2,648
26131ED	SLOPED AND MITERED HEADWALL 18"	EACH	3
SANITARY SEWER			
15021	S ENCASEMENT STEEL OPEN CUT RANGE 2	LF	200
15026	S FORCE MAIN AIR RLS/VAC VLV 02 IN	EACH	1
15062	S FORCE MAIN PVC 10 INCH	LF	500
15076	S FORCE MAIN TIE-IN 10 INCH	EACH	2
15122	S STRUCTURE REMOVAL	EACH	1
SIGNING			
6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	2,307
6407	SBM ALUM SHEET SIGNS .125 IN	SQFT	1,236
6410	STEEL POST TYPE 1	LF	3,992
6490	CLASS A CONCRETE FOR SIGNS	CUYD	9.5
21596ND	GMSS TYPE D	EACH	38
21596ND	GMSS TYPE D (SURFACE MOUNT)	EACH	19
24631EC	BARCODE SIGN INVENTORY	EACH	514

Highway Safety Improvement Program

Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

General Summary

Item No.	Description	Unit	Quantity
SIGNALS			
4740	POLE BASE	EACH	15
4780	FUSED CONNECTOR KIT	EACH	123
4795	CONDUIT 2 INCH	LIN FT	200
4820	TRENCHING AND BACKFILLING	LIN FT	12,842
4821	OPEN CUT ROADWAY [3]	LIN FT	3,396
4835	WIRE-NO. 4	LIN FT	800
4841	CABLE-NO. 14/2C	LIN FT	4,317
4845	CABLE-NO. 14/7C	LIN FT	14,045
4881	MAST ARM POLE	EACH	14
4884	ANCHOR	EACH	10
4886	MESSENGER-15400 LB	LIN FT	600
4927	COORDINATING UNIT	EACH	2
4932	INSTALL STEEL STRAIN POLE	EACH	4
4933	TEMP SIGNAL 2 PHASE	EACH	5
4934	TEMP SIGNAL MULTI PHASE	EACH	3
4953	TEMPORARY RELOCATION OF SIGNAL HEAD	EACH	126
6472	INSTALL SPAN MOUNTED SIGN	EACH	1
20093NS835	INSTALL PEDESTRIAN HEAD LED	EACH	32
20188NS835	INSTALL SIGNAL-3 SECTION LED	EACH	53
20266ES835	INSTALL SIGNAL-4 SECTION LED	EACH	34
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	EACH	17
20392NS835	ELECTRICAL JUNCTION BOX TYPE C	EACH	39
20457NS835	INSTALL PED DETECTOR AUDIBLE	EACH	28
21077ED	FIBER OPTIC CABLE	LIN FT	10,107
21543EN	BORE AND JACK CONDUIT [3]	LIN FT	7,277
22403NN	WEB CAMERA ASSEMBLY	EACH	4
22939ND	INSTALL LUMINAIRE POLE	EACH	16
23157EN	TRAFFIC SIGNAL POLE BASE	CU YD	63
23222EC	INSTALL SIGNAL PEDESTAL	EACH	12
24121EC	HDPE CONDUIT - 2 INCH - SCHEDULE 80	LIN FT	18,880
24908EC	INSTALL SIGNAL CONTROLLER-TY ATC	EACH	12
24923EC	CABINET FIBER TERMINATION PANEL	EACH	12
24955ED	REMOVE SIGNAL EQUIPMENT	EACH	4
26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	EACH	26
26120EC	INSTALL RADAR ADVANCE DETECTOR TYPE B	EACH	13
26169EC	INSTALL MAST ARM DAMPENER	EACH	19
LIGHTING			
4740	POLE BASE	EACH	34
4820	TRENCHING AND BACKFILLING	LIN FT	8,482
4821	OPEN CUT ROADWAY	LIN FT	842
4940	REMOVE LIGHTING	LP SUM	1

Highway Safety Improvement Program

Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

General Summary

Item No.	Description	Unit	Quantity
LIGHTING (cont.)			
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	EACH	10
21543EN	BORE AND JACK CONDUIT	LIN FT	842
24900EC	PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80	LIN FT	6,920
24901EC	PVC CONDUIT - 2 INCH - SCHEDULE 80	LIN FT	2,404
GUARDRAIL			
1982	DELINEATOR FOR GUARDRAIL M/W	EACH	22
2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	2,037.5
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	1
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	1
2369	GUARDRAIL END TREATMENT TYPE 2A	EACH	3
2381	REMOVE GUARDRAIL	LF	2,794
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	1
OTHER			
2545	CLEARING AND GRUBBING [1, 4]	LS	1
2562	TEMPORARY SIGNS	SQFT	550
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	7
2726	STAKING	LS	1
2775	ARROW PANEL	EACH	6
4933	TEMP SIGNAL 2 PHASE	EACH	1
10020NS	FUEL ADJUSTMENT	DOLL	90,145
10030NS	ASPHALT ADJUSTMENT	DOLL	174,087
20411ED	LAW ENFORCEMENT OFFICER	HOUR	100
2568	MOBILIZATION	LS	1
2569	DEMOBILIZATION	LS	1

Notes:

1 The entire Project includes approximately 92.2 Acres for Clearing and Grubbing, of which approximately 2.2 Acres has Tree Removal or Trimming.

2 Refer to the striping plans for the various types of combination arrows.

3 Bore and Jack is the preferred option. If that option can not be utilized, the Contractor shall obtain approval from the Engineer to perform the open cut option. The Contractor will only be paid for the option that is actually performed.

4 Removal of the existing cistern near Aphids Sta. 57+25 is incidental to Clearing & Grubbing.

Highway Safety Improvement Program
Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

Paving Areas

Item No.	Item	Unit	US 25 / KY 418	Jacobson Drive	Ellerslie Park Blvd.	Hays Blvd. & Aphids Way	Shared Use Path [2]	Entrances	PROJECT TOTALS
Asphalt Surface[1]									
00307	1.25" CL2 ASPH SURF 0.38B PG64-22	SQ YD					7175	953	**8128**
00307	1.50" CL2 ASPH SURF 0.38B PG64-22	SQ YD		1487	1276	5661			**8424**
00342	1.50" CL4 ASPH SURF 0.38A PG76-22	SQ YD	172942						**172942**
Asphalt Base									
00212	2.00" CL2 ASPH BASE 1.00D PG64-22	SQ YD						964	**964**
00212	3.00" CL2 ASPH BASE 1.00D PG64-22	SQ YD		1098	195	4166	6748		**12207**
00212	4.00" CL2 ASPH BASE 1.00D PG64-22	SQ YD		1106	155	4152			**5413**
00219	3.00" CL4 ASPH BASE 1.00D PG76-22	SQ YD	43109						**43109**
00217	4.00" CL4 ASPH BASE 1.00D PG64-22	SQ YD	83057						**83057**
00003	9.00" CRUSHED STONE BASE	SQ YD	45374						**45374**
00003	8.00" CRUSHED STONE BASE	SQ YD		1274	277				**1551**
00003	6.00" CRUSHED STONE BASE	SQ YD				4517		707	**5224**
00003	4.00" CRUSHED STONE BASE	SQ YD					7079	275	**7354**
00190	LEVELING & WEDGING PG64-22 [7]	SQ YD		297	548				**845**
02677	1.50" ASPHALT PAVE MILLING & TEXTURING	SQ YD	134126	400	1121	1596	565		**137808**
02677	3.00" ASPHALT PAVE MILLING & TEXTURING [3]	SQ YD	3367	5	40	72			**3484**
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	SQ YD	256366	2584	1471	5899	7175	953	**274448**
02084	JPC PAVEMENT-8 IN	SQ YD				524			**524**

Paving Quantities

Item No.	Item	Unit	US 25 / KY 418	Jacobson Drive	Ellerslie Park Blvd.	Hays Blvd. & Aphids Way	Shared Use Path [2]	Entrances	PROJECT TOTALS
Asphalt Surface[1]									
00307	CL2 ASPH SURF 0.38B PG64-22	TON		148	151	469	494	67	**1329**
00342	CL4 ASPH SURF 0.38A PG76-22	TON	14269						**14269**
Asphalt Base									
00212	CL2 ASPH BASE 1.00D PG64-22	TON		426	68	1602	1114	107	**3317**
00219	CL4 ASPH BASE 1.00D PG76-22	TON	7113						**7113**
00217	CL4 ASPH BASE 1.00D PG64-22	TON	18273						**18273**
00003	CRUSHED STONE BASE [4]	TON	28249	587	128	1559	1629	71	**32223**
00100	ASPHALT SEAL AGGREGATE [5]	TON	52						**52**
00103	ASPHALT SEAL COAT [6]	TON	7						**7**
00190	LEVELING & WEDGING PG64-22 [7]	TON		50	61				**111**
02677	ASPHALT PAVE MILLING & TEXTURING	TON	11622	34	100	144	39		**11939**
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	107.7	1.1	0.7	2.5	3.1	0.5	**115.6**
02084	JPC PAVEMENT-8 IN	SY				524			**524**

Notes:

1 FD05 Funding will pay for all asphalt surfacing for the entire project.
US 25 FD05 Surface Area = 69,737 SY & Quantity = 5,754 TONS
KY 418 FD05 Surface Area = 103,205 SY & Quantity = 8,515 TONS
Hays Blvd FD05 Surface Area = 1,734 SY & Quantity = 144 TONS
Aphids Way FD05 Surface Area = 3,927 SY & Quantity = 325 TONS

2 Includes Milling and Overlay of the park's parking lot

3 This is for milling the top base layer for Longitudinal Edge Key

4 Includes Full Depth CSB Wedge for Shoulders on US 25/KY 418

5 Estimated at 20 LBS per SQYD (2 applications)

6 Estimated at 2.4 LBS per SQYD (2 applications)

7 An amount of Leveling & Wedging has been provided to assist in grading the pavement to drain as needed and as directed by the engineer.

Highway Safety Improvement Program
7-9012.50
Fayette
US 25 & KY 418

Pipe Culvert Summary

	ENTRANCE PIPE 15 IN	CULVERT PIPE 15 IN	CULVERT PIPE 18 IN	CULVERT PIPE 24 IN	CULVERT PIPE 36 IN	CULVERT PIPE 42 IN	STORM SEWER PIPE 15 IN	STORM SEWER PIPE 18 IN	STORM SEWER PIPE 30 IN	REMOVE PIPE	SLOPED BOX OUTLET TY. 1 - 15 IN	SLOPED BOX OUTLET TY. 1 - 18 IN	SLOPED BOX INLET/ OUTLET TY. 1	S&F BOX INLET/ OUTLET - 18 IN	CURB BOX INLET TY. A	DROP BOX INLET TY. 5B	DROP BOX INLET TY. 5D	DROP BOX INLET TY. 5F	DROP BOX INLET TY. 13G	MANHOLE TY. A	MANHOLE TY. C	JUNCTION BOX TY. B-2	PIPE CULVERT HEADWALL 15"	PIPE CULVERT HEADWALL 42"	DBL. PIPE CULVERT HEADWALL 36" MOD	SLOPED & MITERED HEADWALL 18"
Item No.	**440**	**461**	**462**	**464**	**468**	**469**	**521**	**522**	**526**	**1310**	**1432**	**1433**	**1440**	**1450**	**1456**	**1505**	**1511**	**1517**	**1559**	**1756**	**1767**	**23952EC**	**1202**	**1214**	**24575ES610**	**26131ED**
Unit	**LF**	**LF**	**LF**	**LF**	**LF**	**LF**	**LF**	**LF**	**LF**	**LF**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**	**EACH**
KY 418																										
365+00							148				2				1											
LT. 376+29	36																									
419+99							52			13								1				1	1			
423+32							27										1									
423+65						8	172			12											1					
425+40																		1								
2+47							150									1										
5+75							109	11		4																1
6+85																		1								
9+25							218												2							
10+50								85					1													
11+35.50																						1				
11+38							9												2			1				
12+51							43			59									1			1				
12+78							32										1									
13+15								8		8										1						
15+49							122		8	12											1					
16+74							333										1									
20+10																1										
42+48.67							273																			
45+23																1										
65+43							178																			
67+23							309									1										
70+35																1										
79+84							230						1													
SHARED USE PATH																										
114+33						30																		2		
JACOBSON PARK ENTRANCE																										
27+31				8	8																					
RT. 27+59.5		54									2														1	
ELLERSLIE PARK BLVD.																										
30+86.11								122				1			2											
APHIDS WAY																										
50+82.15			95							9				1												2
RT. 51+76	69																									
LT. 52+29	40																									
RT. 59+25	51																									
TOTAL PROJECT	**196**	**54**	**95**	**8**	**8**	**38**	**2405**	**226**	**8**	**117**	**4**	**1**	**2**	**1**	**3**	**5**	**3**	**3**	**5**	**1**	**2**	**4**	**1**	**2**	**1**	**3**

Highway Safety Improvement Program
Item No: 7-9012.50
County: Fayette
Route: US 25 & KY 418

Striping Summary

Item No.	Item	Unit	Quantity
6511	PAVE STRIPING-TEMP PAINT-6 IN	LF	162,005
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	381
6542	PAVE STRIPING-THERMO-6 IN W	LF	65,475
6543	PAVE STRIPING-THERMO-6 IN Y	LF	38,460
6546	PAVE STRIPING- THERMO-12 IN W	LF	4,068
6566	PAVE MARKING-THERMO X-WALK-12 IN	LF	4,754
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	1,063
6569	PAVE MARKING-THERMO CROSS-HATCH	SF	3,285
6574	PAVE MARKING-THERMO CURV ARROW	EA	170
6575	PAVE MARKING-THERMO COMB ARROW[1]	EA	6
6576	PAVE MARKING-THERMO ONLY	EA	29
6598	PAVEMENT MARKING REMOVAL	SQFT	31
23010EN	PAVE MARK TEMP PAINT STOP BAR-24 IN	LF	400
24889EC	PAVE MARKING-THERMO U-TURN	EA	54
21417ES717	PAVE MARK THERMO CONE CAP-SOLID YELLOW	SF	4,208
24679ED	PAVE MARK THERMO CHEVRON	SF	837
20782NS714	PAVE MARKING THERMO-BIKE	EA	2
24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	EA	2
26192EC	PAVE MARKING-THERMO SHARED LANE MARKING	EA	4
20206EC	PAVE MARK HANDICAP SYMBOL	EA	1
6610	INLAID PAVEMENT MARKER-MW	EA	765
6611	INLAID PAVEMENT MARKER-MY	EA	102
6612	INLAID PAVEMENT MARKER-BY	EA	33
6613	INLAID PAVEMENT MARKER-B W/R	EA	338

Notes:

1. This bid item is used for combination arrows as shown on the plans.

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
										Text/ Symbol Color	Background Color	Sheeting Type								
S-1	US 25	362+41	RT	6.864	EB	R2-1	Speed Limit XX	55 MPH	36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor		2	10	20	1
	US 25	362+41	RT	6.864	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00							1
S-2	US 25	364+41	MID	6.902	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount		2	11	22	1
	US 25	364+41	MID	6.902	EB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-3	US 25	364+41	RT	6.902	EB	R4-4	Begin Right Turn Lane,Yield to Bikes		36 x 30	Black	White	xi	7.50		Soil Stablizer w/ Anchor		2	11	21	1
	US 25	364+41	RT	6.902	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-4	US 25	364+75	RT	6.908	SB	R6-1L	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-5	US 25	366+18	RT	6.935	EB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	14	14	1
	US 25	366+18	RT	6.935	EB	R10-31P	At Signal	(DOUBLE STANDARD SIZE)	48 x 18	Black	White	XI		6.00						1
S-6	US 25	368+76	MID	6.984	NB	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Type D Surface Mount		1	9	9	1
S-7	US 25	369+05	RT	6.990	NB	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Soil Stablizer w/ Anchor		1	12	12	1
	US 25	369+05	RT	6.990	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00							1
S-8	US 25	370+18	RT	7.011	EB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	14	14	1
	US 25	370+18	RT	7.011	EB	R10-31P	At Signal	(DOUBLE STANDARD SIZE)	48 x 18	Black	White	XI		6.00						1
S-9	US 25	372+18	RT	7.049	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-10	US 25	374+18	MID	7.087	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount		2	11	22	1
S-11	US 25	374+09	RT	7.085	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-12L	Squires RD	374+99, OFF. 265	RT	7.102	NB	M4-5	To		24 x 12	Black	White	XI	2.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M3-1	North		24 x 12	Black	White	XI	2.00							1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M1-4	US Route Sign (1 or 2 digit)	25	24 x 24	Black	White	XI	4.00							1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M1-4A	US Route Sign (3 digit)	421	30 x 24	Black	White	XI	5.00							1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M5-4	Left Lane		24 x 18	Black	White	XI	3.00							1
S-12R	Squires RD	374+99, OFF. 265	RT	7.102	NB	M3-3	South		24 x 12	Black	White	XI	2.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M1-4	US Route Sign (1 or 2 digit)	25	24 x 24	Black	White	XI	4.00							1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M1-4A	US Route Sign (3 digit)	421	30 x 24	Black	White	XI	5.00							1
	Squires RD	374+99, OFF. 265	RT	7.102	NB	M5-6	Right Lane		24 x 18	Black	White	XI	3.00							1
S-13	Squires RD	37499, OFF. 163	RT	7.102	NB	R3-8	Advance Lane Control	CUSTOM	36 x 30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-14	US 25	374+80	MID	7.098	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	13	13	1
	US 25	374+80	MID	7.098	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	US 25	374+80	MID	7.098	WB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-15	US 25	375+48	MID	7.111	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	13	13	1
	US 25	375+48	MID	7.111	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-16	US 25	379+83	RT	7.194	EB	M3-1	North		36 x 18	Black	White	XI	4.50		Type D Anchor	Yes	1	10	10	1
	US 25	379+83	RT	7.194	EB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1
	US 25	379+83	RT	7.194	EB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	US 25	379+83	RT	7.194	EB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38							1
S-17	US 25	385+00	RT	7.292	EB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Surface Mount	Yes	1	17	17	1
	US 25	385+00	RT	7.292	EB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	US 25	385+00	RT	7.292	EB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
										Text/ Symbol Color	Background Color	Sheeting Type								
	US 25	385+00	RT	7.292	EB	M3-1	North		36 x 18	Black	White	XI	4.50							1
S-18	US 25	385+16	RT	7.295	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-19	US 25	385+17	MID	7.295	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	385+17	MID	7.295	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-20	US 25	385+76	MID	7.306	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	11	11	1
	US 25	385+76	MID	7.306	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-21	US 25	386+97	MID	7.329	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	US 25	386+97	MID	7.329	EB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-22	US 25	386+97	RT	7.329	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-23	US 25	387+79	RT	7.345	NB	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Soil Stablizer w/ Anchor		1	9	9	1
	US 25	387+79	RT	7.345	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00							1
S-24	US 25	387+29	MID	7.335	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	15	15	1
	US 25	387+29	MID	7.335	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	US 25	387+29	MID	7.335	WB	R3-4d	TRUCKS No U Turn		36 x 54	Red & Black	White	XI		13.50						1
S-25	US 25	388+10	MID	7.350	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	388+10	MID	7.350	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-26	US 25	394+02	RT	7.463	SB		TOURIST SIGN	REUSE EXISTING SIGN SHEET							Type D Anchor	Yes	2	8	16	
S-27	US 25	398+23	RT	7.542	EB	R3-4d	TRUCKS No U Turn		36 x 54	Black	White	XI		13.50	Soil Stablizer w/ Anchor	Yes	1	15	15	1
S-28	US 25 (PATH)	398+13	RT	7.540	WB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor	Yes	1	6	6	1
S-29	US 25	398+91	RT	7.555	NB	R6-1R	One Way		36 x 12	Black	White	XI	3.00		Soil Stablizer w/ Anchor	Yes	1	12	12	1
	US 25	398+91	RT	7.555	SB	R6-1L	One Way		36 x 12	Black	White	XI	3.00							1
	US 25	398+91	RT	7.555	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00							1
	US 25	398+91	RT	7.555	NB	W4-4P	Cross Traffic Does Not Stop		24 x 12	Black	Yellow	XI	2.00							1
S-30	US 25	399+10	MID	7.559	EB	R4-7	Keep Right		36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-31	US 25	406+73	MID	7.703	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-32	US 25	406+74	RT	7.703	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-33	US 25	408+73	MID	7.741	EB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	US 25	408+73	MID	7.741	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-34	US 25	408+73	RT	7.741	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-35	US 25	409+15	RT	7.749	SB	R6-1L	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-36	US 25	410+53	RT	7.775	EB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor		1	12	12	1
S-37	US 25	414+53	RT	7.851	EB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor		1	12	12	1
S-38	US 25	416+53	RT	7.889	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-39	US 25	418+51	MID	7.926	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		1	13	13	1
	US 25	418+51	MID	7.926	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-40	US 25	418+53	RT	7.927	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-41L	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M4-5	To		24 x 12	Black	White	XI	2.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M3-1	North		24 x 12	Black	White	XI	2.00							1
	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M1-4	US Route Sign (1 or 2 digit)	25	24 x 24	Black	White	XI	4.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M1-4A	US Route Sign (3 digit)	421	30	x	24	Black	White	XI	5.00							1
	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M5-4	Left Lane		24	x	18	Black	White	XI	3.00							1
S-41R	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M3-3	South		24	x	12	Black	White	XI	2.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	ELLERSIE PARK BLVD	3282	RT	0.622	NB	M1-4	US Route Sign (1 or 2 digit)	25	24	x	24	Black	White	XI	4.00							1
	ELLERSIE PARK BLVD	3282	RT	0.622	NB	M1-4A	US Route Sign (3 digit)	421	30	x	24	Black	White	XI	5.00							1
	ELLERSLIE PARK BLVD	32+82	LT	0.622	NB	M5-6	Right Lane		24	x	18	Black	White	XI	3.00							1
S-42	ELLERSLIE PARK BLVD	31+80	RT	0.602	NB	R3-8	Advance Lane Control	CUSTOM FOR 2 RIGHT TURNS	36	x	30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-43	US 25	419+60	MID	7.947	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	419+60	MID	7.947	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-44	US 25	419+12	MID	7.938	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Type D Surface Mount	Yes	1	13	13	1
	US 25	419+12	MID	7.938	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
	US 25	419+12	MID	7.938	NB	R3-4	No U-Turn		36	x	36	Red & Black	White	XI	9.00							1
S-45	US 25	419+95	MID	7.954	EB	M6-2L	Upward Left Diagonal Arrow		30	x	21	Black	White	XI	4.38		Soil Stablizer w/ Anchor	Yes	1	17	17	1
	US 25	419+95	MID	7.954	EB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	US 25	419+95	MID	7.954	EB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	US 25	419+95	MID	7.954	EB	M3-1	North		36	x	18	Black	White	XI	4.50							1
S-46	US 25	424+33	MID	8.037	EB	M3-1	North		30	x	21	Black	White	XI	4.38		Soil Stablizer w/ Anchor	Yes	1	18	18	1
	US 25	424+33	MID	8.037	EB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	US 25	424+33	MID	8.037	EB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	US 25	424+33	MID	8.037	EB	CUSTOM	#N/A	CUSTOM U-TURN	30	X	21	Black	White	XI	4.38							1
S-47	US 25	424+77	MID	8.045	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	424+77	MID	8.045	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-48	US 25	425+30	MID	8.055	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	425+30	MID	8.055	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-49	US 25	430+37	MID	8.151	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-50	KY 418	0+28	RT	0.005	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25	Soil Stablizer w/ Anchor	Yes	2	13	26	1
	KY 418	0+28	RT	0.005	EB	M2-1	Junction		30	x	21	Black	White	XI	4.38							1
	KY 418	0+28	RT	0.005	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-51	KY 418	0+28	MID	0.005	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-52	KY 418	2+27	MID	0.043	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	2+27	MID	0.043	EB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00							1
S-53	KY 418	2+27	RT	0.043	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Type D Anchor	Yes	2	11	22	1
	KY 418	2+27	RT	0.043	EB		TOURIST SIGN	REUSE EXISTING SIGN SHEET														
S-54	KY 418	2+83	RT	0.054	SB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-55	KY 418	3+59	RT	0.068	EB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-56L	KY 418	5+58	RT	0.106	EB	M6-3	Straight Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	5+58	RT	0.106	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	5+58	RT	0.106	EB	M3-2	East		36	x	18	Black	White	XI	4.50							1
S-56R	KY 418	5+58	RT	0.106	EB	M5-1R	Advance Right Turn Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	KY 418	5+58	RT	0.106	EB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	5+58	RT	0.106	EB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	5+58	RT	0.106	EB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-57	KY 418	6+86	RT	0.130	NB	R5-1	Do Not Enter		30	x	30	White	Red	XI	6.25		Soil Stablizer w/ Anchor		1	11	11	1
S-58	KY 418	7+21	RT	0.137	NB	R5-1	Do Not Enter		30	x	30	White	Red	XI	6.25		Soil Stablizer w/ Anchor		1	11	11	1
S-59	KY 418	7+57	RT	0.143	EB	M6-3	Straight Arrow		30	x	21	White	Blue	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	7+57	RT	0.143	EB	M1-1	Interstate Route Sign (2-digit)	75	36	x	36	White	Blue & Red	XI	9.00							1
	KY 418	7+57	RT	0.143	EB	M4-5	To		36	x	18	White	Blue	XI	4.50							1
S-60	KY 418	9+57	RT	0.181	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		1	10	10	1
	KY 418	9+57	RT	0.181	EB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00						1
S-61L	KY 418	11+58	RT	0.219	EB	M6-3	Straight Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	11+58	RT	0.219	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	11+58	RT	0.219	EB	M3-2	East		36	x	18	Black	White	XI	4.50							1
	KY 418	11+58	RT	0.219	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-61R	KY 418	11+58	RT	0.219	EB	M6-1R	Right Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	11+58	RT	0.219	EB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	11+58	RT	0.219	EB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	11+58	RT	0.219	EB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-62	APHIDS WAY	51+51	RT	0.976	EB	R5-1	Do Not Enter		30	x	30	White	Red	XI	6.25		Soil Stablizer w/ Anchor		1	11	11	1
S-63	APHIDS WAY	52+06	RT	0.986	EB	R5-1	Do Not Enter		30	x	30	White	Red	XI	6.25		Soil Stablizer w/ Anchor		1	11	11	1
S-64	APHIDS WAY	52+02	RT	0.985	SB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25	Soil Stablizer w/ Anchor		1	16	16	1
	APHIDS WAY	52+02	RT	0.985	SB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	APHIDS WAY	52+02	RT	0.985	SB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-65	APHIDS WAY	65+66	RT	1.244	SB	R2-1	Speed Limit XX	55	24	x	30	Black	White	XI	5.00		Soil Stablizer w/ Anchor		1	11	11	1
S-66	APHIDS WAY	59+72	RT	1.131	SB	W16-8P	Advance Street Name (1-line)	Delong Rd	30	x	15	Black	Yellow	XI	3.13		Soil Stablizer w/ Anchor		1	12	12	1
	APHIDS WAY	59+72	RT	1.131	SB	W2-4	T Intersection		30	x	30	Black	Yellow	XI	6.25							1
	APHIDS WAY	59+72	LT	1.131	NB	W1-8R	Right Chevron		18	x	24	Black	FL Yellow	XI	3.00							1
S-67	APHIDS WAY	58+98	LT	1.117	NB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25	Soil Stablizer w/ Anchor		1	11	11	1
	APHIDS WAY	58+98	LT	1.117	NB	M2-1	Junction		30	x	21	Black	White	XI	4.38							1
S-68	APHIDS WAY	56+77	LT	1.075	NB	W3-3	Signal Ahead		30	x	30	Red, Green & Black	Yellow	XI	6.25		Soil Stablizer w/ Anchor		1	11	11	1
S-69L	APHIDS WAY	54+64	LT	1.035	NB	M5-4	Left Lane		36	x	24	Black	White	XI	6.00		Type D Anchor	Yes	1	18	18	1
	APHIDS WAY	54+64	LT	1.035	NB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	APHIDS WAY	54+64	LT	1.035	NB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	APHIDS WAY	54+64	LT	1.035	NB	M3-1	North		36	x	18	Black	White	XI	4.50							1
S-69R	APHIDS WAY	5464	LT	1.035	NB	M5-6	Right Lane		36	x	24	Black	White	XI	6.00		Type D Anchor	Yes	1	15	15	1
	APHIDS WAY	54+64	LT	1.035	NB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	APHIDS WAY	54+64	LT	1.035	NB	M3-2	East		36	x	18	Black	White	XI	4.50							1
S-70	APHIDS WAY	52+57	LT	0.996	NB	R3-8	Advance Lane Control	CUSTOM FOR 2 RIGHT TURNS	36	x	30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-71L	APHIDS WAY	51+25	LT	0.971	NB	M6-1R	Right Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	19	19	1

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										Text/ Symbol Color	Background Color	Sheeting Type								
	APHIDS WAY	51+25	LT	0.971	NB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	APHIDS WAY	51+25	LT	0.971	NB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1
	APHIDS WAY	51+25	LT	0.971	NB	M3-1	North		36 x 18	Black	White	XI	4.50							1
S-71R	APHIDS WAY	5125	LT	0.971	NB	M6-1R	Right Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	15	15	1
	APHIDS WAY	51+25	LT	0.971	NB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	APHIDS WAY	51+25	LT	0.971	NB	M3-2	East		36 x 18	Black	White	XI	4.50							1
S-72	KY 418	12+05	MID	0.228	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	13	13	1
	KY 418	12+05	MID	0.228	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	KY 418	12+05	MID	0.228	WB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-73	KY 418	12+46	MID	0.236	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	10	10	1
	KY 418	12+46	MID	0.236	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-74	KY 418	13+26	MID	0.251	EB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	10	10	1
	KY 418	13+26	MID	0.251	EB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25				11		1
	KY 418	13+26	MID	0.251	EB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00					11		1
	KY 418	13+26	MID	0.251	EB	M3-1	North		36 x 18	Black	White	XI	4.50					10		1
S-75	KY 418	19+25	MID	0.365	EB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	19+25	MID	0.365	EB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	KY 418	19+25	MID	0.365	EB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1
	KY 418	19+25	MID	0.365	EB	M3-1	North		36 x 18	Black	White	XI	4.50							1
S-76	KY 418	19+47	MID	0.369	SB	R6-2R	One Way		36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	1	15	15	1
	KY 418	19+47	MID	0.369	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-77	KY 418	20+06	MID	0.380	SB	R6-2R	One Way		36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	1	15	15	1
	KY 418	20+06	MID	0.380	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-78	KY 418	21+49	RT	0.407	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25	Soil Stablizer w/ Anchor	Yes	2	13	25	1
	KY 418	21+49	RT	0.407	EB	M3-2	East		36 x 18	Black	White	XI	4.50							1
	KY 418	21+49	RT	0.407	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00							1
S-79	KY 418	21+49	MID	0.407	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-80	KY 418	23+49	MID	0.445	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-81	KY 418	23+49	RT	0.445	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-82	KY 418	24+15	RT	0.457	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		1	12	12	1
	KY 418	24+15	RT	0.457	NB	R6-1R	One Way		36 x 12	Black	White	XI	3.00							1
S-83	KY 418	24+56	RT	0.465	EB	R2-1	Speed Limit XX	55	36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-84	KY 418	23+93	MID	0.453	NB	R6-2R	One Way		36 x 48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	2	12	24	1
S-85	KY 418	34+83	MID	0.660	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-86	KY 418	34+83	RT	0.660	WB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-87	KY 418	36+83	MID	0.698	EB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	36+83	MID	0.698	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-88	KY 418	36+83	RT	0.698	WB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-89	KY 418	37+58	RT	0.712	NB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		1	12	12	1

Highway Safety Improvement Program								Item No.: 7-9012.50				County: Fayette				Route: KY 418					
												SHEETING									
Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
	KY 418	37+58	RT	0.712	NB	R6-1R	One Way		36	x	12	Black	White	XI	3.00							1
S-90	KY 418	42+34	MID	0.802	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-91	KY 418	42+34	RT	0.802	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-92	KY 418	44+34	MID	0.840	EB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	44+34	MID	0.840	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-93	KY 418	44+34	RT	0.840	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-94	KY 418	44+87	RT	0.850	SB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-95	KY 418	46+48	MID	0.880	EB	M6-2L	Upward Left Diagonal Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	46+48	MID	0.880	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	46+48	MID	0.880	EB	M3-4	West		36	x	18	Black	White	XI	4.50							1
S-96	KY 418	50+12	MID	0.949	EB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	50+12	MID	0.949	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	50+12	MID	0.949	EB	M3-4	West		36	x	18	Black	White	XI	4.50							1
S-97	KY 418	50+27	MID	0.952	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	50+27	MID	0.952	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00						1
S-98	KY 418	50+78	MID	0.962	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		1	10	10	1
S-99	KY 418	50+88	MID	0.964	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	50+88	MID	0.964	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00						1
S-100	KY 418	60+15	MID	1.139	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-101	KY 418	60+15	RT	1.139	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-102	KY 418	62+15	MID	1.177	EB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	62+15	MID	1.177	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-103	KY 418	62+15	RT	1.177	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-104	KY 418	64+36	MID	1.219	EB	S4-3P	School		36	x	12	Black	FL Yellow-Green	XI	3.00		Soil Stablizer w/ Anchor	Yes	2	13	26	1
	KY 418	64+36	MID	1.219	EB	S1-1	School Area Sign		48	x	48	Black	FL Yellow-Green	XI		16.00						1
	KY 418	64+36	MID	1.219	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-105	KY 418	64+36	RT	1.219	EB	S4-3P	School		36	x	12	Black	FL Yellow-Green	XI	3.00		Soil Stablizer w/ Anchor	Yes	2	13	26	1
	KY 418	64+36	RT	1.219	EB	S1-1	School Area Sign		48	x	48	Black	FL Yellow-Green	XI		16.00						1
	KY 418	64+36	RT	1.219	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-106	KY 418	66+36	MID	1.257	EB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	66+36	MID	1.257	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-107	KY 418	66+36	RT	1.257	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-108	KY 418	66+77	RT	1.265	SB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-109	KY 418	66+49	MID	1.259	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	66+49	MID	1.259	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-110	KY 418	67+03	MID	1.270	NB	R6-1R	One Way		48	x	18	Black	White	XI			Soil Stablizer w/ Anchor	Yes	1	13		1
	KY 418	67+03	MID	1.270	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-111	KY 418	72+22	RT	1.368	WB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-112	KY 418	74+24	RT	1.406	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
										Text/ Symbol Color	Background Color	Sheeting Type								
S-113	KY 418	74+49	MID	1.411	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	15	15	1
	KY 418	74+49	MID	1.411	NB	R6-2R	One Way		36 x 48	Black	White	XI		12.00						1
	KY 418	74+49	MID	1.411	WB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-114	KY 418	75+24	MID	1.425	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	11	11	1
	KY 418	75+24	MID	1.425	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-115	KY 418	75+69	MID	1.434	EB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	75+69	MID	1.434	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	75+69	MID	1.434	EB	M3-4	West		36 x 18	Black	White	XI	4.50							1
S-116	KY 418	79+91	MID	1.513	EB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	79+91	MID	1.513	EB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	79+91	MID	1.513	EB	M3-4	West		36 x 18	Black	White	XI	4.50							1
S-117	KY 418	80+11	MID	1.517	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	80+11	MID	1.517	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-118	KY 418	80+66	MID	1.528	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	80+66	MID	1.528	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-119	KY 418	82+93	MID	1.571	WB	S4-3P	School		36 x 12	Black	FL Yellow-Green	XI	3.00		Soil Stablizer w/ Anchor	Yes	2	13	26	1
	KY 418	82+93	MID	1.571	WB	S1-1	School Area Sign		48 x 48	Black	FL Yellow-Green	XI		16.00						1
	KY 418	82+93	MID	1.571	EB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00							1
S-120	KY 418	82+93	LT	1.571	WB	S4-3P	School		36 x 12	Black	FL Yellow-Green	XI	3.00		Soil Stablizer w/ Anchor	Yes	2	13	26	1
	KY 418	82+93	LT	1.571	WB	S1-1	School Area Sign		48 x 48	Black	FL Yellow-Green	XI		16.00						1
	KY 418	82+93	LT	1.571	EB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00							1
S-121	KY 418	80+92	MID	1.533	WB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	80+92	MID	1.533	EB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-122	KY 418	80+92	LT	1.533	EB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-123	KY 418	80+18	LT	1.519	NB	R6-1L	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-124	KY 418	79+02	LT	1.497	WB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-125	KY 418	77+02	LT	1.459	EB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-126	KY 418	75+03	LT	1.421	WB	R3-7R	Right Lane Must Turn Right		48 x 48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	2	11	22	1
	KY 418	75+03	LT	1.421	EB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-127	KY 418	74+67	MID	1.414	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	13	13	1
	KY 418	74+67	MID	1.414	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	KY 418	74+67	MID	1.414	EB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-128L	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M5-4	Left Lane		24 x 18	Black	White	XI	3.00		Soil Stablizer w/ Anchor	Yes	1	14	14	1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M1-5A	State Route Sign (3 or 4 digit)	418	30 x 24	Black	White	XI	5.00							1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M3-2	East		24 x 12	Black	White	XI	2.00							1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M4-5	To		24 x 12	Black	White	XI	2.00							1
S-128R	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M5-6	Right Lane		24 x 18	Black	White	XI	3.00		Soil Stablizer w/ Anchor	Yes	1	14	14	1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M1-5A	State Route Sign (3 or 4 digit)	418	30 x 24	Black	White	XI	5.00							1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	M3-4	West		24 x 12	Black	White	XI	2.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
										Text/ Symbol Color	Background Color	Sheeting Type								
S-129	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	R3-8	Advance Lane Control	CUSTOM FOR 2 RIGHT TURNS	36 x 30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-130	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		1	12	12	1
	SCHOOL ENTRANCE	74+21, OFF. 272'	LT	1.405	SB	R6-1R	One Way		36 x 12	Black	White	XI	3.00							1
S-131	KY 418	73+77	MID	1.397	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	13	13	1
	KY 418	73+77	MID	1.397	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-132	KY 418	70+29	MID	1.331	WB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	70+29	MID	1.331	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	70+29	MID	1.331	WB	M3-2	East		36 x 18	Black	White	XI	4.50							1
S-133	KY 418	67+19	MID	1.273	WB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	67+19	MID	1.273	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	67+19	MID	1.273	WB	M3-2	East		36 x 18	Black	White	XI	4.50							1
S-134	KY 418	62+96	MID	1.192	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	62+96	MID	1.192	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-135	KY 418	62+52	MID	1.184	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		1	10	10	1
S-136	KY 418	62+35	MID	1.181	WB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	62+35	MID	1.181	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	KY 418	62+35	MID	1.181	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-137	KY 418	53+01	MID	1.004	EB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-138	KY 418	53+01	LT	1.004	EB	R5-1A	Wrong Way		36 x 24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-139	KY 418	51+01	MID	0.966	WB	R3-18	No Left/U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	51+01	MID	0.966	EB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-140	KY 418	51+01	LT	0.966	EB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-141	KY 418	50+31	LT	0.953	SB	R1-1	Stop		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	13	25	1
	KY 418	50+31	LT	0.953	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	KY 418	50+31	LT	0.953	NB	R6-1L	One Way		48 x 18	Black	White	XI		6.00						1
S-142	KY 418	49+74	MID	0.942	WB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	49+74	MID	0.942	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	49+74	MID	0.942	WB	M3-2	East		36 x 18	Black	White	XI	4.50							1
S-143	KY 418	45+26	MID	0.857	WB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	45+26	MID	0.857	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45 x 36	Black	White	XI		11.25						1
	KY 418	45+26	MID	0.857	WB	M3-2	East		36 x 18	Black	White	XI	4.50							1
S-144	KY 418	45+06	MID	0.853	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	45+06	MID	0.853	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-145	KY 418	44+55	MID	0.844	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	44+55	MID	0.844	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-146	KY 418	37+70	MID	0.714	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	37+70	MID	0.714	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-147	KY 418	37+04	MID	0.702	WB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	37+04	MID	0.702	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	KY 418	37+04	MID	0.702	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-148	KY 418	26+39	MID	0.500	WB	W3-3	Signal Ahead		48	x	48	Red, Green & Black	Yellow	XI		16.00	Soil Stablizer w/ Anchor		2	14	28	1
	KY 418	26+39	MID	0.500	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-149	KY 418	26+39	LT	0.500	WB	W3-3	Signal Ahead		48	x	48	Red, Green & Black	Yellow	XI		16.00	Soil Stablizer w/ Anchor		2	14	28	1
	KY 418	26+39	LT	0.500	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-150	KY 418	24+39	MID	0.462	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-151	KY 418	24+39	LT	0.462	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-152	KY 418	23+76	LT	0.450	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	2	10	19	1
S-153	KY 418	23+65	LT	0.448	SB	R6-1R	One Way		36	x	12	Black	White	XI	3.00		Soil Stablizer w/ Anchor		1	12	12	1
	KY 418	23+65	LT	0.448	SB	R1-1	Stop		36	x	36	White	Red	XI	9.00							1
S-154	KY 418	22+40	LT	0.424	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25	Soil Stablizer w/ Anchor	Yes	2	16	32	1
	KY 418	22+40	LT	0.424	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	22+40	LT	0.424	WB	M2-1	Junction		30	x	21	Black	White	XI	4.38							1
	KY 418	22+40	LT	0.424	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-155	KY 418	22+40	MID	0.424	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-156	KY 418	20+41	MID	0.387	WB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	KY 418	20+41	MID	0.387	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-157	KY 418	20+39	LT	0.386	EB		TOURIST SIGN	REUSE EXISTING SIGN SHEET									Type D Anchor	Yes	2	8	16	
	KY 418	20+39	LT	0.386	WB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-158	KY 418	19+87	LT	0.376	NB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-159	KY 418	19+04	LT	0.361	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-160R	KY 418	17+05	LT	0.323	WB	M6-3	Straight Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	17+05	LT	0.323	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	17+05	LT	0.323	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	17+05	LT	0.323	WB	M3-1	North		36	x	18	Black	White	XI	4.50							1
S-160L	KY 418	17+05	LT	0.323	WB	M5-1L	Advance Left Turn Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	1705	LT	0.323	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	1705	LT	0.323	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	17+05	LT	0.323	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-161	KY 418	15+05	LT	0.285	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor		2	12	24	1
	KY 418	15+05	LT	0.285	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-162R	KY 418	13+05	LT	0.247	WB	M6-3	Straight Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	2	17	35	1
	KY 418	13+05	LT	0.247	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	13+05	LT	0.247	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	13+05	LT	0.247	WB	M3-1	North		36	x	18	Black	White	XI	4.50							1
S-162L	KY 418	13+05	LT	0.247	WB	M6-1L	Left Arrow		30	x	21	Black	White	XI	4.38							1
	KY 418	13+05	LT	0.247	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	13+05	LT	0.247	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	13+05	LT	0.247	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	KY 418	13+05	LT	0.247	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-163L	HAYS BLVD	102+41	RT	1.940	SB	M4-5	To		24	x	12	Black	White	XI	2.00		Type D Anchor	Yes	1	18	18	1
	HAYS BLVD	102+41	RT	1.940	SB	M3-3	South		24	x	12	Black	White	XI	2.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M1-4	US Route Sign (1 or 2 digit)	25	24	x	24	Black	White	XI	4.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M1-4A	US Route Sign (3 digit)	421	30	x	24	Black	White	XI	5.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M3-2	East		24	x	12	Black	White	XI	2.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M1-5A	State Route Sign (3 or 4 digit)	418	30	x	24	Black	White	XI	5.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M5-4	Left Lane		24	x	18	Black	White	XI	3.00							1
S-163R	HAYS BLVD	102+41	RT	1.940	SB	M3-1	North		24	x	12	Black	White	XI	2.00		Type D Anchor	Yes	1	14	14	1
	HAYS BLVD	102+41	RT	1.940	SB	M1-4	US Route Sign (1 or 2 digit)	25	24	x	24	Black	White	XI	4.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M1-4A	US Route Sign (3 digit)	418	30	x	24	Black	White	XI	5.00							1
	HAYS BLVD	102+41	RT	1.940	SB	M5-6	Right Lane		24	x	18	Black	White	XI	3.00							1
S-164	HAYS BLVD	104+28	LT	1.975	SB	R3-8	Advance Lane Control	CUSTOM FOR 2 RIGHT TURNS	36	x	30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-165	HAYS BLVD	105+97	MID	2.007	NB	R4-7	Keep Right		24	x	30	Black	White	XI	5.00		Soil Stablizer w/ Anchor		1	11	11	1
S-166	KY 418	12+25	MID	0.232	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	12+25	MID	0.232	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00						1
	KY 418	12+25	MID	0.232	EB	R3-4	No U-Turn		36	x	36	Red & Black	White	XI	9.00							1
S-167	KY 418 (PATH)	11+18	LT	0.212	WB	R5-3	No Motor Vehicles		24	x	24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
	KY 418 (PATH)	11+18	LT	0.212	EB	R9-5	Bikes Use Ped Signal		12	X	18	Black	White	XI	1.50		Soil Stablizer w/ Anchor		1	6	6	1
S-168	KY 418	11+43	MID	0.216	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	11	11	1
	KY 418	11+43	MID	0.216	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00						1
S-169	KY 418	10+00	LT	0.189	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25	Soil Stablizer w/ Anchor	Yes	1	16	16	1
	KY 418	10+00	LT	0.189	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	10+00	LT	0.189	WB	M3-1	North		36	x	18	Black	White	XI	4.50							1
S-170	KY 418	8+49	LT	0.161	WB	R2-1	Speed Limit XX	55	36	x	48	Black	White	XI		12.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-171R	KY 418	6+72	RT	0.127	WB	M6-2L	Upward Left Diagonal Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	15	15	1
	KY 418	6+72	RT	0.127	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	6+72	RT	0.127	WB	M3-2	East		36	x	18	Black	White	XI	4.50							1
S-171L	KY 418	672	RT	0.127	WB	M6-2L	Upward Left Diagonal Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	KY 418	6+72	RT	0.127	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	6+72	RT	0.127	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	6+72	RT	0.127	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-172	KY 418	5+16	RT	0.098	WB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	White	Blue	XI	4.38		Type D Anchor	Yes	1	14	14	1
	KY 418	5+16	RT	0.098	WB	M1-1	Interstate Route Sign (2-digit)	75	36	x	36	White	Blue & Red	XI	9.00							1
	KY 418	5+16	RT	0.098	WB	M4-5	To		36	x	18	White	Blue	XI	4.50							1
S-173R	KY 418	3+29	RT	0.062	WB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	15	15	1
	KY 418	3+29	RT	0.062	WB	M1-5A	State Route Sign (3 or 4 digit)	418	45	x	36	Black	White	XI		11.25						1
	KY 418	3+29	RT	0.062	WB	M3-2	East		36	x	18	Black	White	XI	4.50							1
S-173L	KY 418	3+29	RT	0.062	WB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	KY 418	3+29	RT	0.062	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	KY 418	3+29	RT	0.062	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	KY 418	3+29	RT	0.062	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-174	KY 418	3+12	MID	0.059	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	3+12	MID	0.059	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-175	KY 418	2+79	LT	0.053	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-176	KY 418	2+53	MID	0.048	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	KY 418	2+53	MID	0.048	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-177	KY 418	0+77	MID	0.015	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-178	KY 418	0+77	LT	0.015	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-179	KY 418 (PATH)	0+45	LT	0.009	WB	R1-2	Yield		18	x	18	White	Red	XI	1.13		Soil Stablizer w/ Anchor		1	6	6	1
S-180	KY 418	0+33	LT	0.006	NB	W11-15	Bicycle / Pedestrian		30	x	30	Black	Yellow Green	XI	6.25		Soil Stablizer w/ Anchor		1	12	12	1
	KY 418	0+33	LT	0.006	NB	W16-7PL	Downward Diagonal Arrow (Left)		21	x	15	Black	Yellow Green	XI	2.19							1
S-181	US 25 (PATH)	430+21	LT	8.148	EB	R1-2	Yield		18	x	18	White	Red	XI	1.13		Soil Stablizer w/ Anchor		1	6	6	1
S-182	US 25	430+12	LT	8.146	SB	R1-1	Stop		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		1	12	12	1
	US 25	430+12	LT	8.146	SB	R6-1R	One Way		36	x	12	Black	White	XI	3.00							1
S-183	US 25	427+51	MID	8.097	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-184	US 25	427+51	LT	8.097	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-185	US 25	425+50	MID	8.059	WB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	US 25	425+50	MID	8.059	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-186	US 25	425+47	LT	8.058	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-187	US 25	424+77	LT	8.045	NB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-188	US 25	423+69	LT	8.024	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-189	US 25	421+68	LT	7.986	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-190	US 25	419+69	LT	7.949	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor		2	12	24	1
	US 25	419+69	LT	7.949	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-191	US 25 (PATH)	419+76	LT	7.950	WB	R9-5	Bikes Use Ped Signal		12	X	18	Black	White	XI	1.50		Soil Stablizer w/ Anchor		1	6	6	1
S-192	US 25	418+95	LT	7.935	NB	R4-7	Keep Right		24	x	30	Black	White	XI	5.00		Soil Stablizer w/ Anchor		1	11	11	1
S-193	US 25	419+05	MID	7.937	SB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Type D Surface Mount	Yes	1	11	11	1
	US 25	419+05	MID	7.937	SB	R6-2R	One Way		36	x	48	Black	White	XI		12.00						1
	US 25	419+05	MID	7.937	EB	R3-4	No U-Turn		36	x	36	Red & Black	White	XI	9.00							1
S-194	US 25 (PATH)	418+29	LT	7.922	EB	R9-5	Bikes Use Ped Signal		12	X	18	Black	White	XI	1.50		Soil Stablizer w/ Anchor		1	10	10	1
S-195	IN PARKING LOT		LT	0.000	SB	R7-8P	Handicap Assesible	No Arrows	12	X	18	Blue & Green	White	XI	1.50		Soil Stablizer w/ Anchor		1	10	10	1
S-196	US 25	413+97	LT	7.840	WB	M6-2L	Upward Left Diagonal Arrow		30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	US 25	413+97	LT	7.840	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	US 25	413+97	LT	7.840	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	US 25	413+97	LT	7.840	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-197	US 25	411+97	MID	7.802	WB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	White	Blue	XI	4.38		Type D Anchor	Yes	1	14	14	1
	US 25	411+97	MID	7.802	WB	M1-1	Interstate Route Sign (2-digit)	75	36	x	36	White	Blue & Red	XI	9.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
	US 25	411+97	MID	7.802	WB	M4-5	To		36	x	18	White	Blue	XI	4.50							1
S-198	US 25	409+97	MID	7.765	WB	CUSTOM	#N/A	CUSTOM U-TURN	30	x	21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	US 25	409+97	MID	7.765	WB	M1-4A	US Route Sign (3 digit)	421	45	x	36	Black	White	XI		11.25						1
	US 25	409+97	MID	7.765	WB	M1-4	US Route Sign (1 or 2 digit)	25	36	x	36	Black	White	XI	9.00							1
	US 25	409+97	MID	7.765	WB	M3-3	South		36	x	18	Black	White	XI	4.50							1
S-199	US 25	409+75	MID	7.760	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Type D Surface Mount	Yes	1	13	13	1
	US 25	409+75	MID	7.760	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-200	US 25	408+95	MID	7.745	NB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	408+95	MID	7.745	NB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-201	US 25	403+00	MID	7.633	WB		TOURIST SIGN	REUSE EXISTING SIGN SHEET									Type D Anchor	Yes	2	8	16	
S-202	US 25	399+24	MID	7.561	WB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	11	11	1
S-203	US 25 (PATH)	399+07	LT	7.558	WB	R1-2	Yield		18	x	18	White	Red	XI	1.13		Soil Stablizer w/ Anchor		1	6	6	1
S-204	US 25	398+33	LT	7.544	SB	W4-4P	Cross Traffic Does Not Stop		24	x	12	Black	Yellow	XI	2.00		Soil Stablizer w/ Anchor		1	13	13	1
	US 25	398+33	LT	7.544	SB	R1-1	Stop		36	x	36	White	Red	XI	9.00							1
	US 25	398+33	LT	7.544	SB	R6-1R	One Way		36	x	12	Black	White	XI	3.00							2
	US 25	398+33	LT	7.544	NB	R6-1L	One Way		36	x	12	Black	White	XI	3.00							3
S-205	US 25	398+13	LT	7.540	EB	R1-2	Yield		18	x	18	White	Red	XI	1.13		Soil Stablizer w/ Anchor		1	6	6	1
S-206	US 25	388+08	LT	7.350	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00		Soil Stablizer w/ Anchor		2	10	20	1
S-207	US 25	386+08	MID	7.312	WB	R3-18	No Left/U-Turn		36	x	36	Red & Black	White	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
	US 25	386+08	MID	7.312	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
S-208	US 25	386+07	LT	7.312	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Soil Stablizer w/ Anchor		2	11	22	1
S-209	US 25	385+40	LT	7.299	NB	R6-1L	One Way		48	x	18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		2	10	19	1
S-210	US 25	384+65	LT	7.285	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-211	US 25	380+65	LT	7.209	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor	Yes	1	12	12	1
S-212	US 25	376+66	LT	7.134	WB	R3-7R	Right Lane Must Turn Right		48	x	48	Black	White	XI		16.00	Soil Stablizer w/ Anchor		2	12	24	1
	US 25	376+66	LT	7.134	EB	R5-1A	Wrong Way		36	x	24	White	Red	XI	6.00							1
S-213	US 25	376+28	MID	7.127	SB	R6-1R	One Way		48	x	18	Black	White	XI		6.00	Type D Surface Mount		1	10	10	1
S-214	US 25	374+65	MID	7.096	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00		Type D Surface Mount		2	11	22	1
S-215	US 25	374+65	LT	7.096	WB	R9-5	Bikes Use Ped Signal		12	x	18	Black	White	XI	0.00	0.00	Type D Surface Mount		2	12	24	1
	US 25	374+65	LT	7.096	EB	R5-1	Do Not Enter		36	x	36	White	Red	XI	9.00							1
	US 25	374+65	LT	7.096	EB	R3-7bP	EXCEPT BICYCLES		24	X	12	Black	White	XI	2.00							1
S-216L	US 25	373+89, OFF. 290'	LT	7.081	SB	M5-4	Left Lane		24	x	18	Black	White	XI	3.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M1-4A	US Route Sign (3 digit)	421	30	x	24	Black	White	XI	5.00							1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M1-4	US Route Sign (1 or 2 digit)	25	24	x	24	Black	White	XI	4.00							1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M3-3	South		24	x	12	Black	White	XI	2.00							1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M4-5	To		24	x	12	Black	White	XI	2.00							1
S-216R	US 25	373+89, OFF. 290'	LT	7.081	SB	M5-6	Right Lane		24	x	18	Black	White	XI	3.00		Soil Stablizer w/ Anchor	Yes	1	16	16	1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M1-4A	US Route Sign (3 digit)	421	30	x	24	Black	White	XI	5.00							1
	US 25	373+89, OFF. 290'	LT	7.081	SB	M1-4	US Route Sign (1 or 2 digit)	25	24	x	24	Black	White	XI	4.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
										Text/ Symbol Color	Background Color	Sheeting Type								
	US 25	373+89, OFF. 290'	LT	7.081	SB	M3-1	North		24 x 12	Black	White	XI	2.00							1
S-217	US 25	373+87	LT	7.081	SB	R3-8	Advance Lane Control	CUSTOM FOR 2 RIGHT TURNS	36 x 30	Black	White	XI	7.50		Soil Stablizer w/ Anchor		1	11	11	1
S-218	US 25	374+00	MID	7.083	SB	R5-1	Do Not Enter		30 x 30	White	Red	XI	6.25		Soil Stablizer w/ Anchor	Yes	1	12	12	1
	US 25	374+00	MID	7.083	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
	US 25	374+00	MID	7.083	EB	R3-4	No U-Turn		36 x 36	Red & Black	White	XI	9.00							1
S-219	US 25	373+38	MID	7.072	SB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00		Soil Stablizer w/ Anchor	Yes	1	13	13	1
	US 25	373+38	MID	7.072	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00						1
S-220	US 25	370+46	LT	7.016	WB	M6-2L	Upward Left Diagonal Arrow		30 x 21	Black	White	XI	4.38		Type D Anchor	Yes	1	17	17	1
	US 25	370+46	LT	7.016	WB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	US 25	370+46	LT	7.016	WB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1
	US 25	370+46	LT	7.016	WB	M3-3	South		36 x 18	Black	White	XI	4.50							1
S-221	US 25	365+32	LT	6.919	WB	CUSTOM	#N/A	CUSTOM U-TURN	30 x 21	Black	White	XI	4.38		Type D Surface Mount	Yes	1	17	17	1
	US 25	365+32	LT	6.919	WB	M1-4A	US Route Sign (3 digit)	421	45 x 36	Black	White	XI		11.25						1
	US 25	365+32	LT	6.919	WB	M1-4	US Route Sign (1 or 2 digit)	25	36 x 36	Black	White	XI	9.00							1
	US 25	365+32	LT	6.919	WB	M3-3	South		36 x 18	Black	White	XI	4.50							1
S-222	US 25	364+75	MID	6.908	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Type D Surface Mount	Yes	1	13	13	1
	US 25	364+75	MID	6.908	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-223	US 25	364+60	LT	6.905	WB	R4-4	Begin Right Turn Lane,Yield to Bikes		36 x 30	Black	White	xi	7.50		Soil Stablizer w/ Anchor	Yes	1	11	11	1
S-224	US 25	364+54	MID	6.904	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Type D Surface Mount	Yes	1	13	13	1
	US 25	364+54	MID	6.904	NB	R5-1	Do Not Enter		36 x 36	White	Red	XI	9.00							1
S-225	US 25 (PATH)	375+15	LT	7.105	WB	W3-3	Signal Ahead		18 x 18	Red, Green & Black	Yellow	XI	2.25		Soil Stablizer w/ Anchor		1	6	6	1
S-226	US 25 (PATH)	399+07	LT	7.558	EB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
S-227	US 25 (PATH)	417+79	LT	7.913	EB	W3-3	Signal Ahead		18 x 18	Red, Green & Black	Yellow	XI	2.25		Soil Stablizer w/ Anchor		1	6	6	1
S-228	US 25 (PATH)	418+45	LT	7.925	WB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
S-229	US 25 (PATH)	419+76	LT	7.950	EB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
S-230	US 25 (PATH)	420+25	LT	7.959	WB	W3-3	Signal Ahead		18 x 18	Red, Green & Black	Yellow	XI	2.25		Soil Stablizer w/ Anchor		1	6	6	1
S-231	US 25 (PATH)	430+21	LT	8.148	WB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
S-232	KY 418 (PATH)	0+45	LT	0.009	EB	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Soil Stablizer w/ Anchor		1	6	6	1
S-233	KY 418 (PATH)	10+68	LT	0.202	EB	W3-3	Signal Ahead		18 x 18	Red, Green & Black	Yellow	XI	2.25		Soil Stablizer w/ Anchor		1	6	6	1
S-235	HAYS BLVD	106+20	LT	2.011	SB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		1	8	8	1
S-236	APHIDS WAY	50+75	LT	0.961	NB	R6-1R	One Way		48 x 18	Black	White	XI		6.00	Soil Stablizer w/ Anchor		1	8	8	1
S-237	APHIDS WAY	54+01	RT	1.023	SB	W1-2L	Left Curve		30 x 30	Black	FL Yellow	XI	6.25		Soil Stablizer w/ Anchor		1	13	13	1
	APHIDS WAY	54+01	RT	1.023	SB	W13-1P	XX MPH (Advisory Speed)	35	18 x 18	Black	FL Yellow	XI	2.25							1
S-238	APHIDS WAY	56+18	RT	1.064	SB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Soil Stablizer w/ Anchor		1	10	10	1
	APHIDS WAY	56+18	RT	1.064	NB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00							1
S-239	APHIDS WAY	57+36	RT	1.086	SB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Soil Stablizer w/ Anchor		1	10	10	1
	APHIDS WAY	57+36	RT	1.086	NB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00							1
S-240	APHIDS WAY	58+54	RT	1.109	SB	W1-8L	Left Chevron		18 x 24	Black	FL Yellow	XI	3.00		Soil Stablizer w/ Anchor		1	10	10	1
	APHIDS WAY	58+54	RT	1.109	NB	W1-8R	Right Chevron		18 x 24	Black	FL Yellow	XI	3.00							1

Highway Safety Improvement Program | **Item No.: 7-9012.50** | **County: Fayette** | **Route: KY 418**

Sign ID	Road Name	Approx. Station	Side of Road	Approx. Mile Point	Facing Traffic Traveling	MUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)			SHEETING			SBM Alum Sheet Signs 0.080 IN (SQ FT)	SBM Alum Sheet Signs 0.125 IN (SQ FT)	Installation Type	Bracing Req'd	# of Sign Posts	Estimated Length of 2" Post (ft)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
												Text/ Symbol Color	Background Color	Sheeting Type								
S-241	APHIDS WAY	60+90	RT	1.153	SB	W1-8L	Left Chevron		18	x	24	Black	FL Yellow	XI	3.00		Soil Stablizer w/ Anchor		1	10	10	1
	APHIDS WAY	60+90	RT	1.153	NB	W1-8R	Right Chevron		18	x	24	Black	FL Yellow	XI	3.00							1
S-242	APHIDS WAY	63+66	RT	1.206	SB	M4-14	Begin		24	x	12	Black	White	XI	2.00		Soil Stablizer w/ Anchor		1	10	10	1
	APHIDS WAY	63+66	RT	1.206	SB	M10-3	Kentucky Scenic Byway	Contact KYTC CO Traffic for Design	24	x	24	Green, Brown, Blue, & Black	White	XI	4.00							1
S-243	APHIDS WAY	63+66	LT	1.206	NB	W1-2R	Right Curve		30	x	30	Black	FL Yellow	XI	6.25		Soil Stabilizer w/ Anchor		1	13	13	1
	APHIDS WAY	63+66	LT	1.206	NB	W13-1P	XX MPH (Advisory Speed)	35	18	x	18	Black	FL Yellow	XI	2.25							1
S-244	COYS LANE	398+33	LT	7.544	NB	CUSTOM	AFTER STOP RIGHT TURN MUST YIELD TO U TURN	AFTER STOP RIGHT TURN MUST YIELD TO U TURN	30	x	36	Black	White	XI	7.50		Soil Stabilizer w/ Anchor		1	11	11	1
S-245	SHORESIDE DR	387+79	RT	7.345	NB	W13-1P	AFTER STOP RIGHT TURN MUST YIELD TO U TURN	AFTER STOP RIGHT TURN MUST YIELD TO U TURN	30	x	36	Black	White	XI	7.50		Soil Stabilizer w/ Anchor		1	11	11	1

Summary of Items

SBM Alum Sheet Signs 0.080 INCH	2307	SQ FT
SBM Alum Sheet Signs 0.125 INCH	1263	SQ FT
Barcode Sign Inventory	514	EACH

Summary of Items

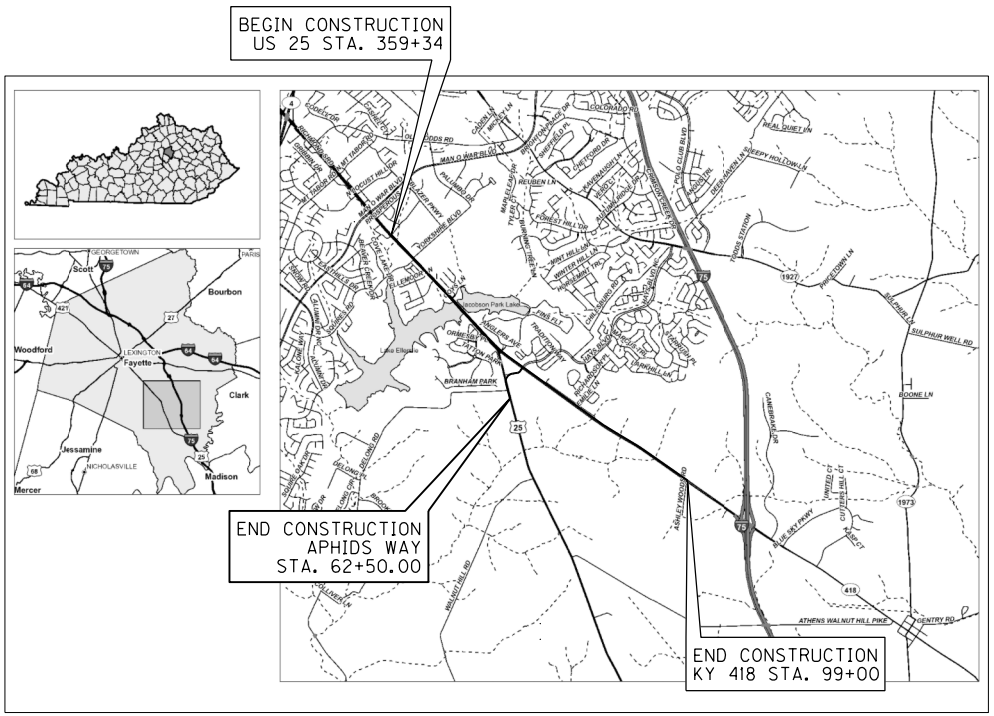
Steel Post - Type 1	3992	LF
GMSS Type D	38	EACH
GMSS Type D (Surface Mount)	19	EACH
Class A Concrete for Signs	9.5	CU YD

Contract ID: 254301 Page 200 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R1

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

FAYETTE
ITEM NO. 07-9012.50
KY 418 R-CUT



LAYOUT MAP

DESIGN CRITERIA

CLASS OF HIGHWAY _____
TYPE OF TERRAIN FLAT
DESIGN SPEED _____
ADT PRESENT ( ) _____

GEOGRAPHIC COORDINATES

LATITUDE ____ DEGREES ____ MINUTES ____ SECONDS NORTH
LONGITUDE ____ DEGREES ____ MINUTES ____ SECONDS WEST

BEFORE YOU DIG

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

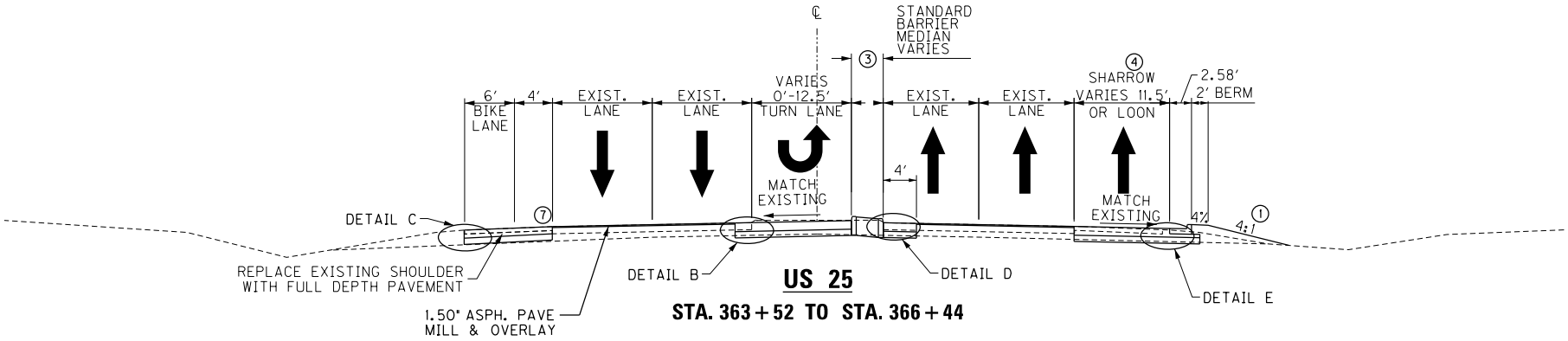
LAYOUT SHEET

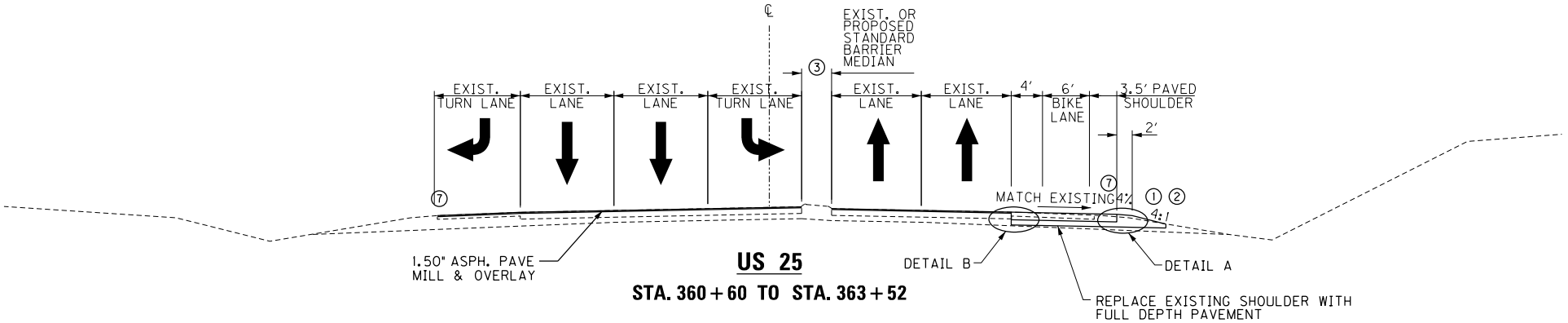
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\R00100LS.DGN

Contract ID: 254301 Page 201 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2

TYPICAL SECTION
US 25





GENERAL NOTES

① SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.

② ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.

③ SEE PLANS FOR LAYOUT OF STANDARD BARRIER MEDIAN.

④ SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.

⑤ SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)

⑥ ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

⑦ CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

US 25
TYPICAL SECTIONS

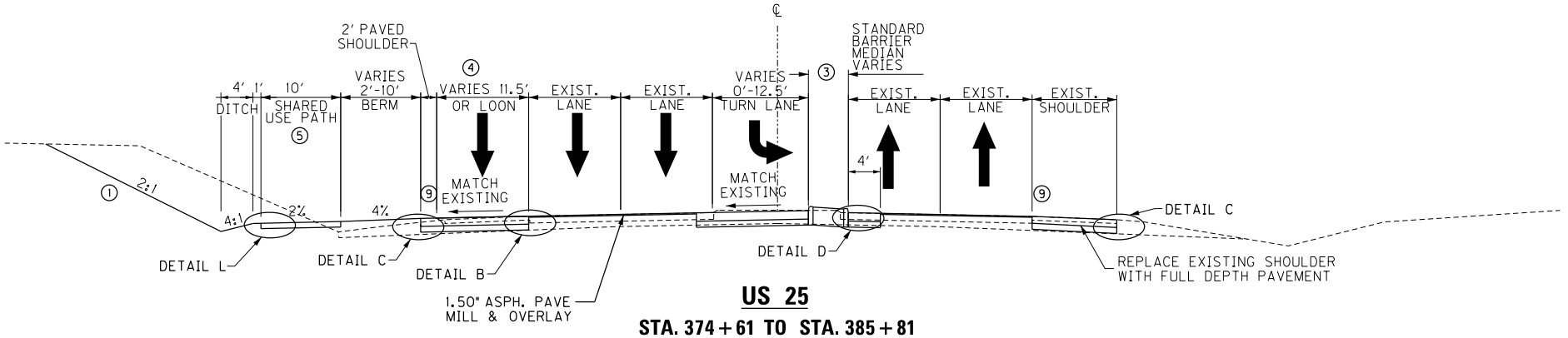
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

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USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 202 of 605

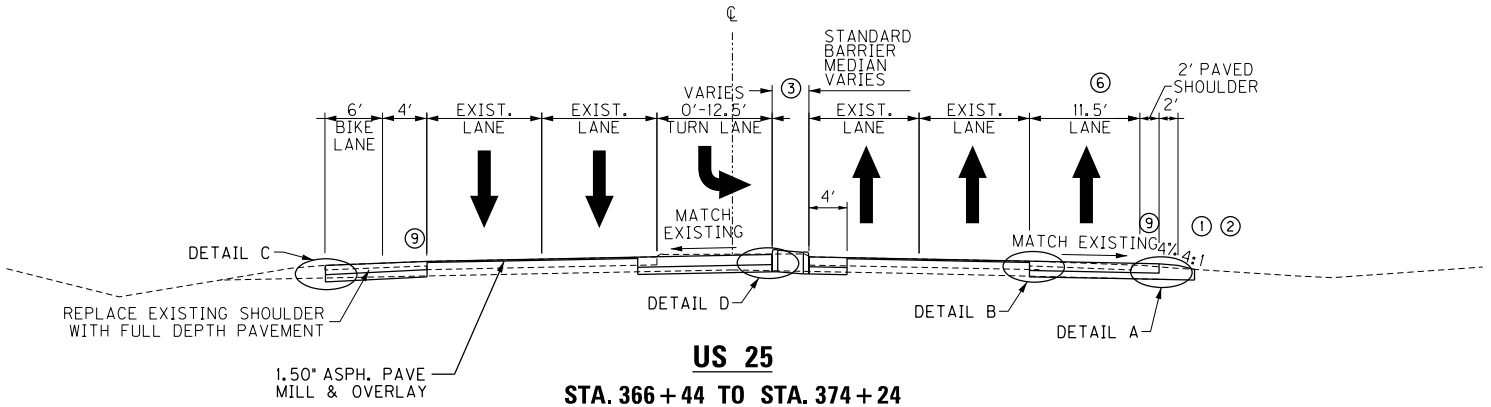
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2A

TYPICAL SECTION
US 25



US 25

STA. 374+61 TO STA. 385+81



US 25

STA. 366+44 TO STA. 374+24

GENERAL NOTES

① SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.

② ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.

③ SEE PLANS FOR LAYOUT OF STANDARD BARRIER MEDIAN AND TURN LANES.

④ SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.

⑤ SEE PLANS FOR LAYOUT OF THE PATH AROUND THE LOON.

⑥ SEE PLANS FOR LAYOUT OF THE EXIST. SHOULDER REPLACEMENT AND DRIVEWAY ENTRANCE.

⑦ SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)

⑧ ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

⑨ CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

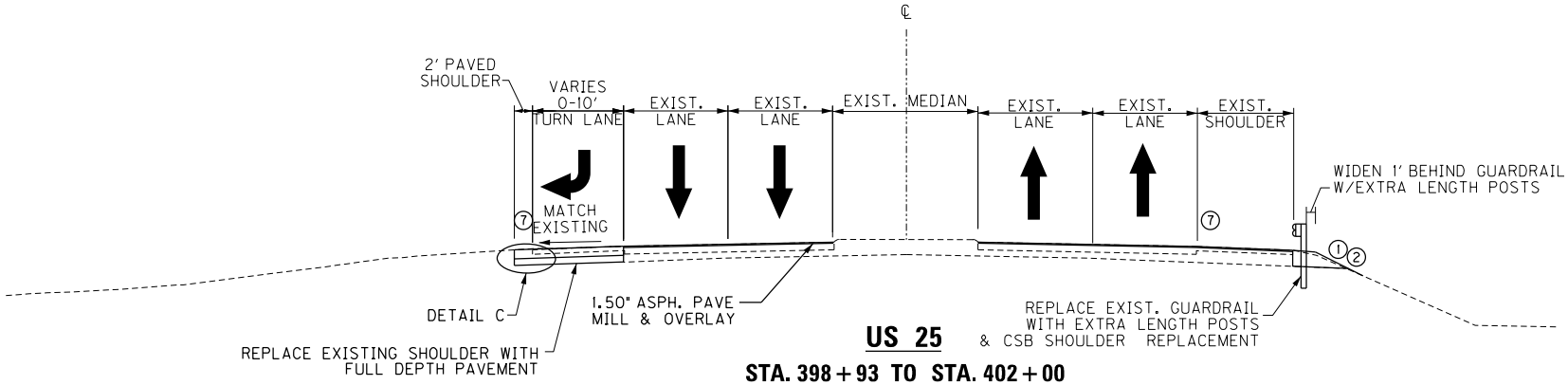
US 25
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
MicroStation v8.11.9.919

Contract ID: 254301
Page 203 of 605

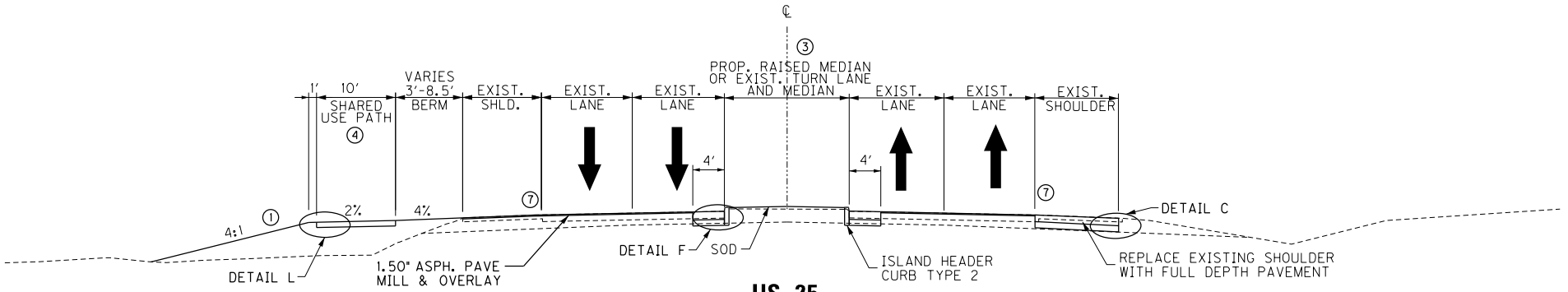
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2B

TYPICAL SECTION
US 25



US 25

STA. 398+93 TO STA. 402+00



US 25

STA. 385+81 TO STA. 398+37

GENERAL NOTES

① SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.

② ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.

③ SEE PLANS FOR LAYOUT OF ISLAND HEADER CURB STA. 385+55 TO STA. 387+54. REMAINING AREA IS EXISTING TURN LANE AND MEDIAN

④ SEE PLANS FOR LAYOUT OF THE PATH AROUND THE LOON.

⑤ SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)

⑥ ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

⑦ CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

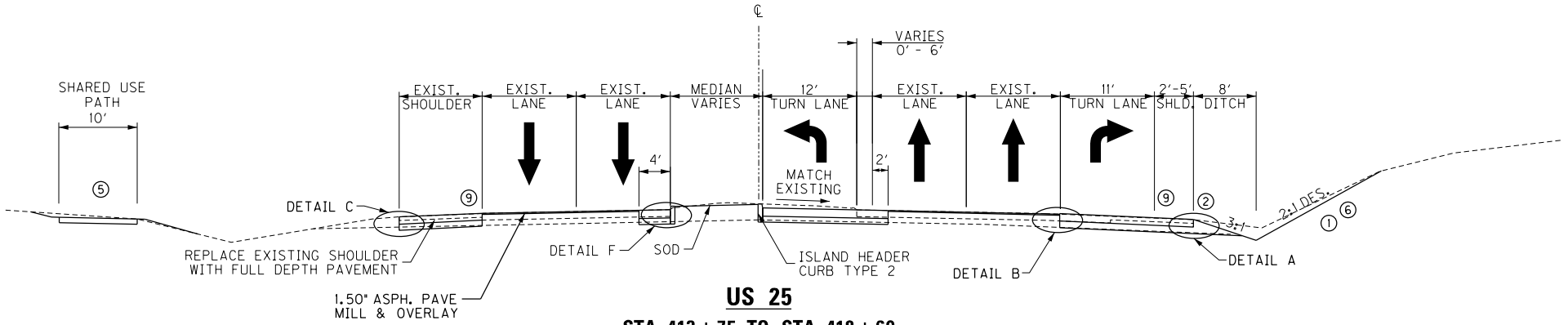
US 25
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
MicroStation v8.11.9.919

Contract ID: 254301 Page 204 of 605

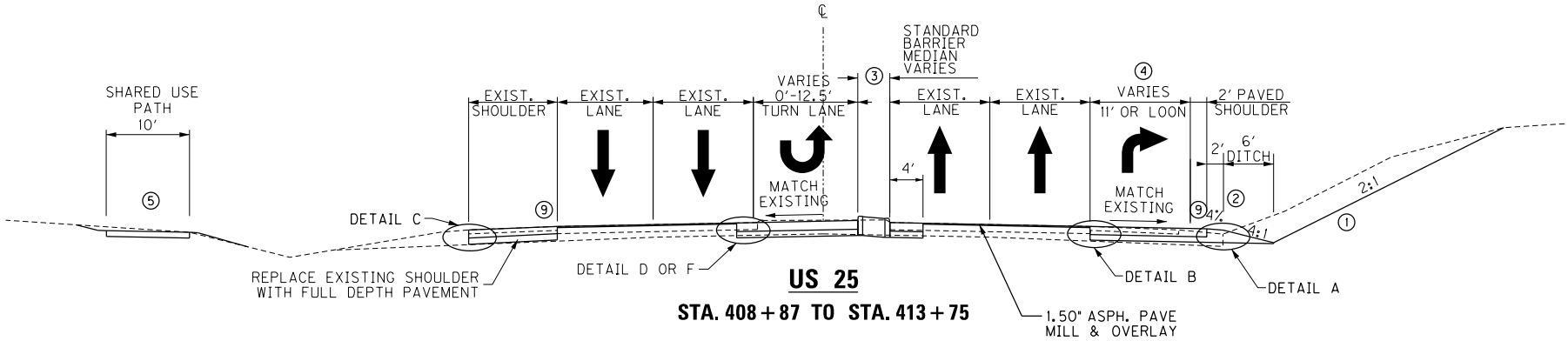
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2C

TYPICAL SECTION
US 25



US 25

STA. 413+75 TO STA. 418+60



US 25

STA. 408+87 TO STA. 413+75

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
3. SEE PLANS FOR LAYOUT OF STANDARD BARRIER MEDIAN.
4. SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.
5. SEE SHARED USE PATH TYPICAL FOR DESIGN OF PATH. SEE PLANS AND CROSS SECTIONS FOR LAYOUT
6. CHANNEL LINE BACK SLOPE WHEN STEEPER THAN 2:1. SEE SLOPE PROTECTION DETAIL.
7. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
8. ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.
9. CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

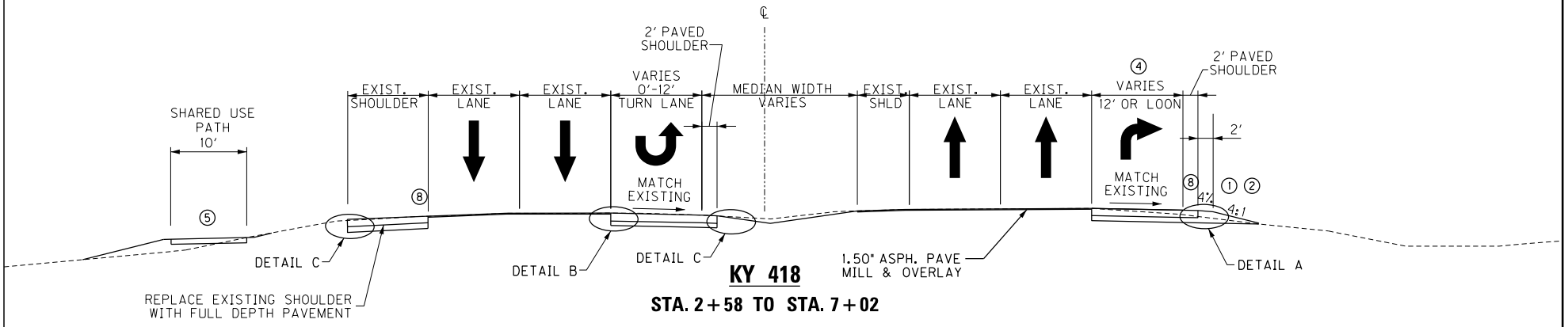
US 25
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 205 of 605

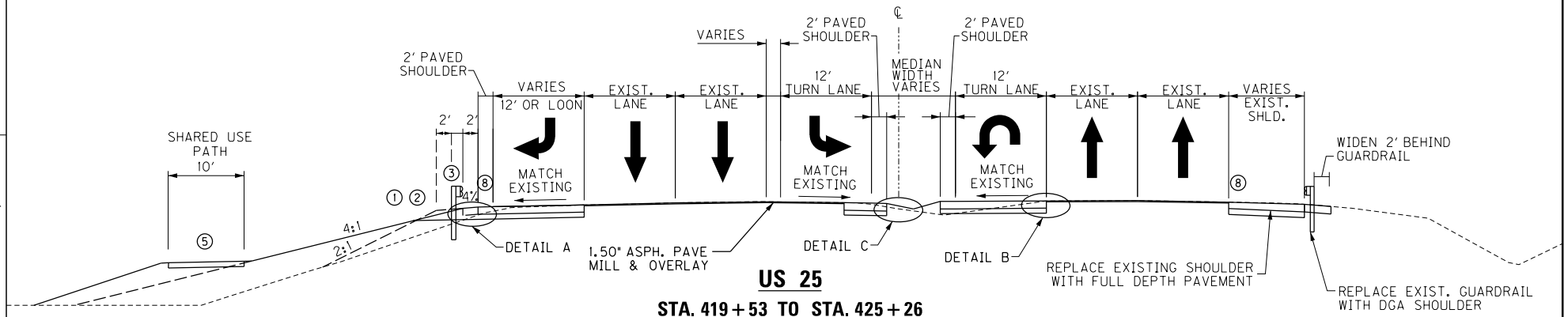
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2D

TYPICAL SECTION
US 25 / KY 418



KY 418

STA. 2+58 TO STA. 7+02



US 25

STA. 419+53 TO STA. 425+26

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
3. SHOULDERS SHALL BE WIDENED 3.5' WHERE GUARDRAIL IS TO BE INSTALLED AND PAVED SHOULDER SHALL BE WIDENED 2' TO FACE OF GUARDRAIL.
4. SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.
5. SEE SHARED USE PATH TYPICAL FOR DESIGN OF PATH. SEE PLANS AND CROSS SECTIONS FOR LAYOUT
6. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
7. ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.
8. CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

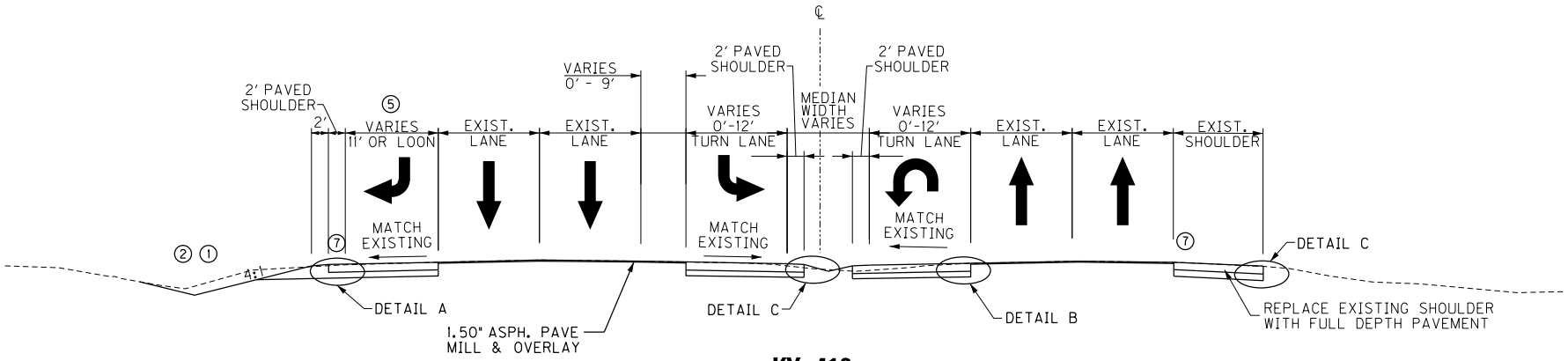
US 25 / KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301 Page 206 of 605

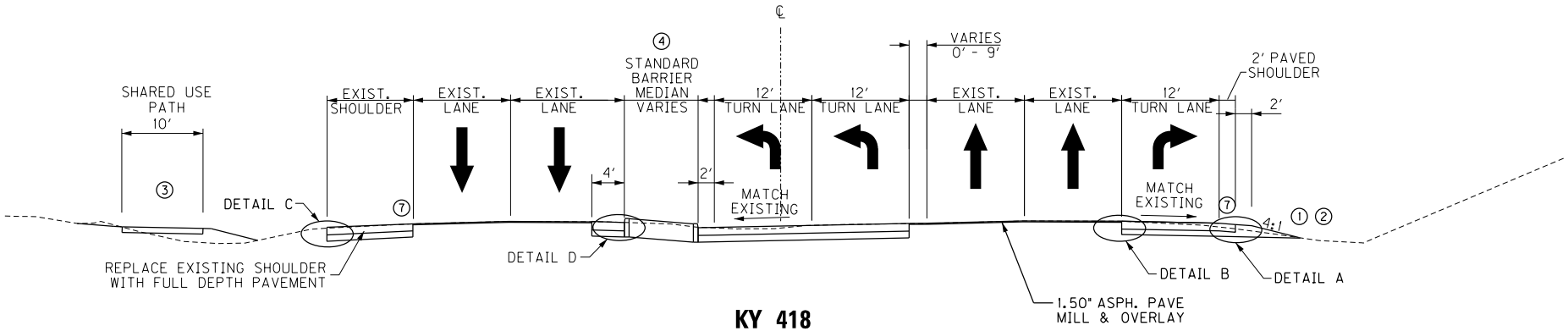
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2E

TYPICAL SECTION
KY 418



KY 418

STA. 12+39 TO STA. 20+02



KY 418

STA. 7+02 TO STA. 11+52

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
3. SEE SHARED USE PATH TYPICAL FOR DESIGN OF PATH. SEE PLANS AND CROSS SECTIONS FOR LAYOUT
4. SEE PLANS FOR LAYOUT OF STANDARD BARRIER MEDIAN.
5. SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.
6. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
7. CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE
8. ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

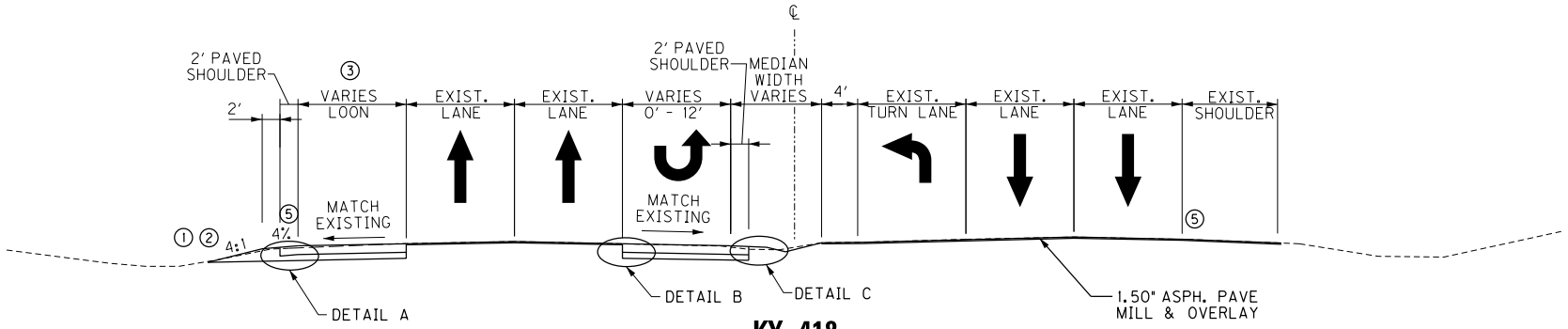
KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 207 of 605

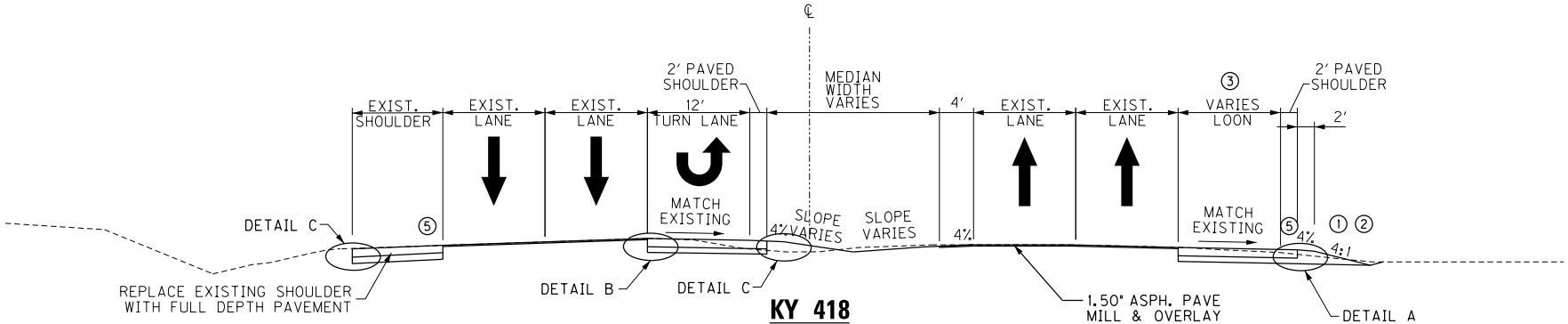
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2F

TYPICAL SECTION
KY 418



KY 418

STA. 46+26 TO STA. 50+77



KY 418

STA. 44+60 TO STA. 46+26
STA. 66+53 TO STA. 70+77

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
3. SEE PLANS FOR DIMENSIONS AT EACH LOON LOCATION.
4. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
5. CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE
6. ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

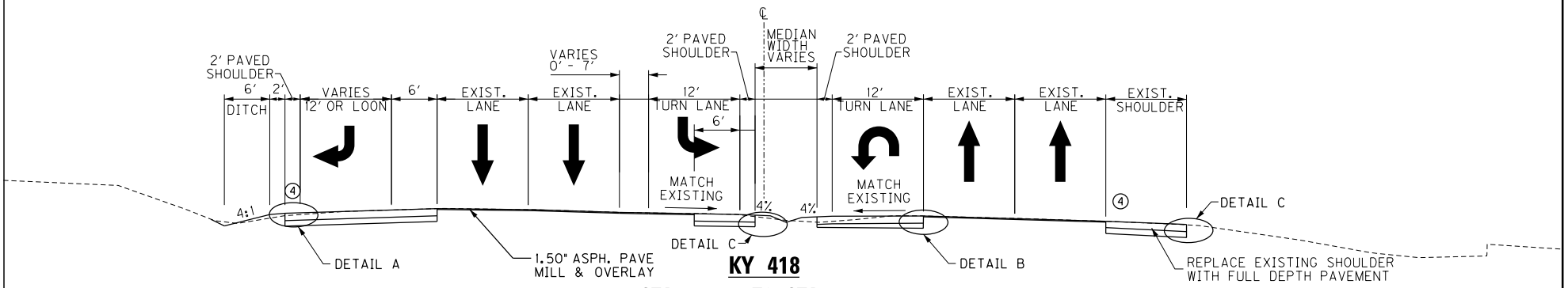
KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
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USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 208 of 605

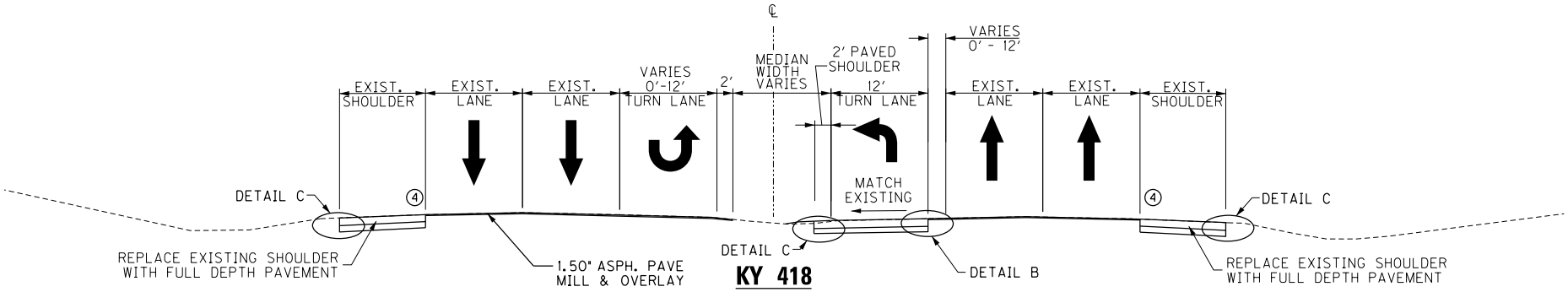
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2G

TYPICAL SECTION
KY 418



KY 418

STA. 74+99 TO STA. 82+32



KY 418

STA. 69+94 TO STA. 73+88

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.
3. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
4. CONSTRUCT EDGELINE RUMBLE STRIPS ON FINAL SURFACE
5. ALL ASPH. SURF. SHALL BE PAID BY FD05 FUNDS. SEE PAVING PLANS FOR LIMITS OF WORK.

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

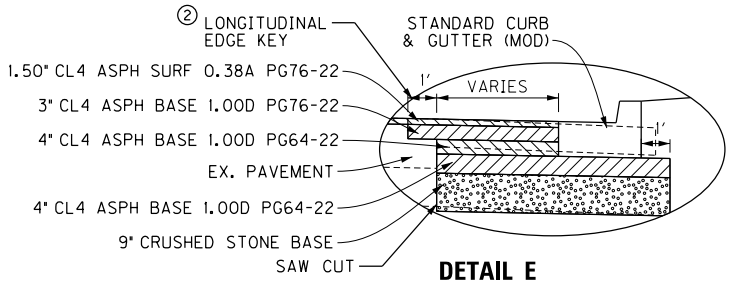
KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN

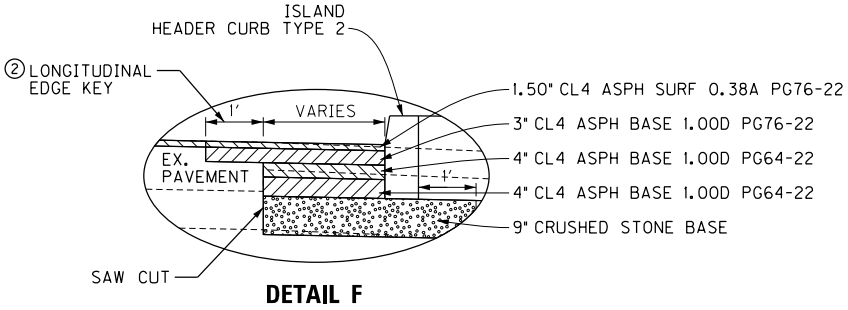
Contract ID: 254301
Page 209 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2H

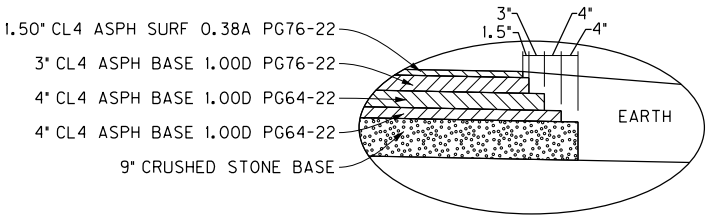
TYPICAL SECTION
US 25 / KY 418



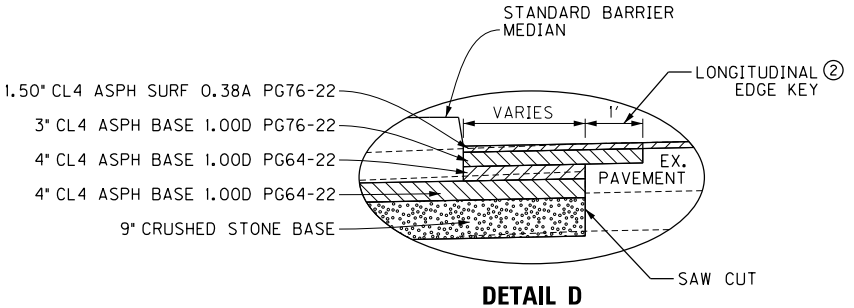
DETAIL E



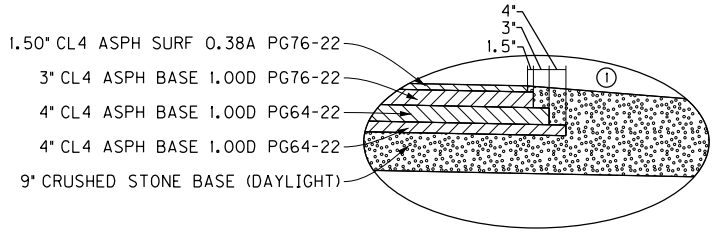
DETAIL F



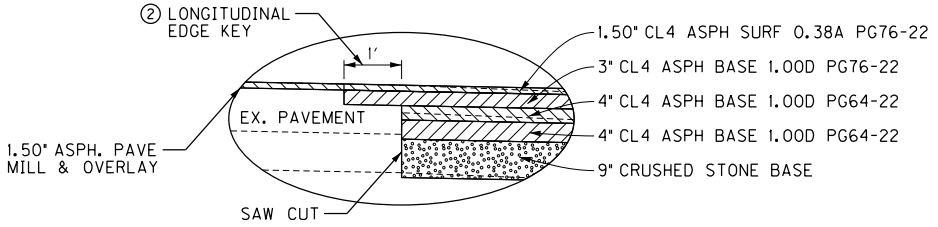
DETAIL C



DETAIL D



DETAIL A



DETAIL B

GENERAL NOTES

① ASPHALT SEAL REQUIRED FROM EDGE OF PAVED SHOULDER TO A POINT 2 FEET DOWN THE DITCH OR FILL SLOPE.

② LONGITUDINAL EDGE KEY TO BE USED WHERE FULL DEPTH IS ADJACENT TO OVERLAY AND SHALL BE PAID BY TONS OF ASPHALT PAVE MILL & TEXT

WIDENING & FULL DEPTH SHOULDERS

1.50" CL4 ASPH SURF 0.38A PG76-22
3" CL4 ASPH BASE 1.00D PG76-22
4" CL4 ASPH BASE 1.00D PG64-22
4" CL4 ASPH BASE 1.00D PG64-22
9" CRUSHED STONE BASE

ASPHALT SEAL (2 COATS)

ASPHALT SEAL COAT 2.40 LBS/SQYD
ASPHALT SEAL AGGREGATE 20 LBS/SQYD

SCALE: 1" = N/A

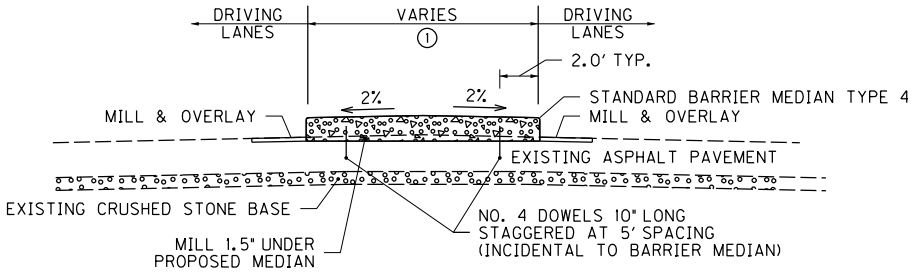
US 25 / KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

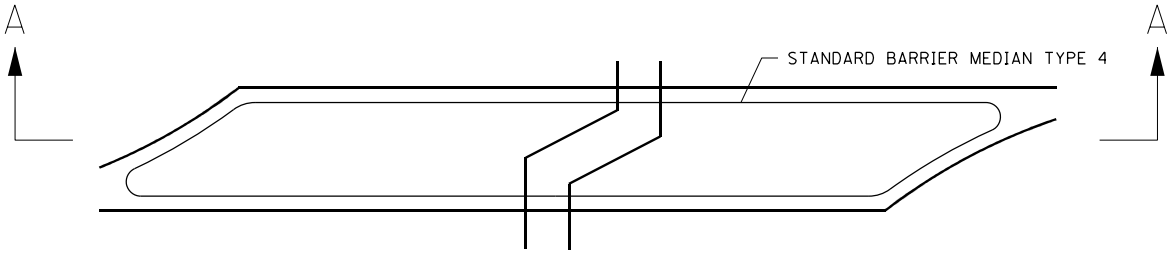
Contract ID: 254301 Page 210 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2I

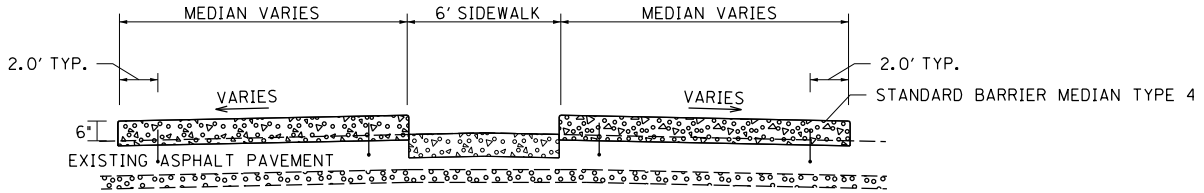
TYPICAL SECTION
US 25 / KY 418



STANDARD BARRIER MEDIAN TYPE 4 INTERSECTION DETAIL



STANDARD BARRIER MEDIAN – PLAN VIEW



SECTION A–A

GENERAL NOTES

① SEE PLANS FOR MEDIAN LOCATIONS AND WIDTH.

SCALE: 1" = N/A

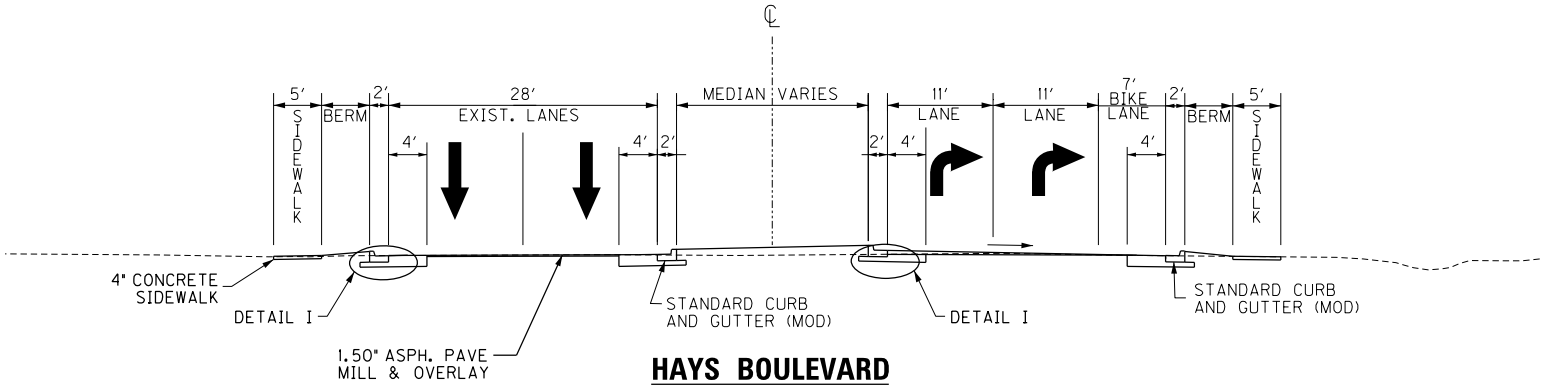
US 25 / KY 418
TYPICAL SECTIONS

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

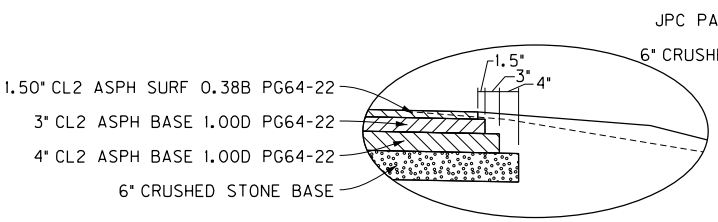
Contract ID: 254301
Page 211 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2J

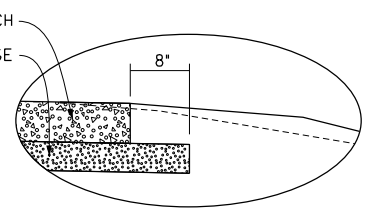
TYPICAL SECTION
HAYS BOULEVARD / APHIDS WAY



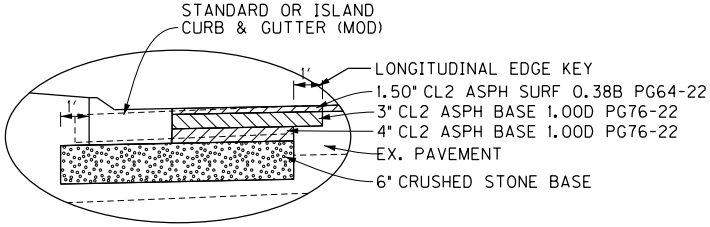
HAYS BOULEVARD



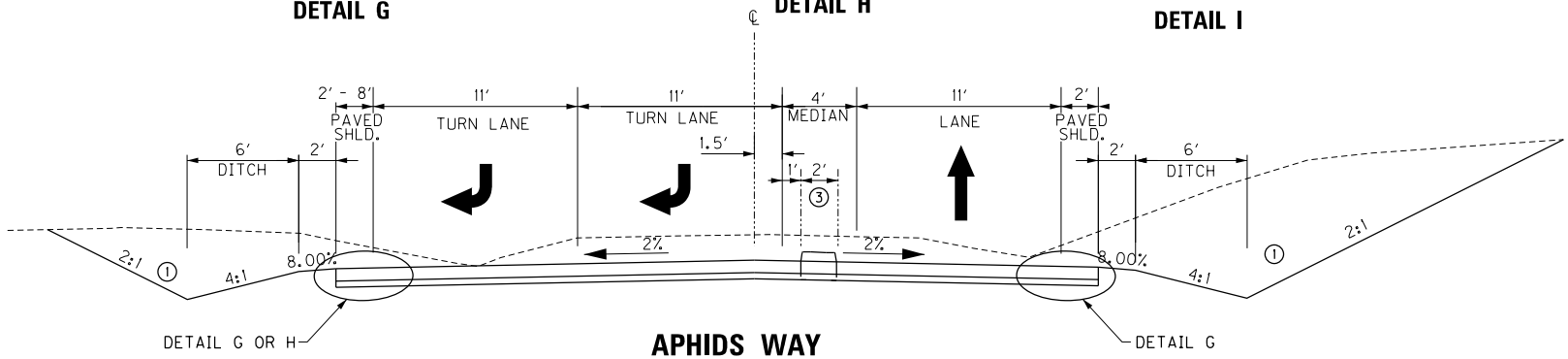
DETAIL G



DETAIL H



DETAIL I



APHIDS WAY

STA. 50+43 TO STA. 52+40

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
3. SEE PLANS SHEETS FOR FURTHER DETAILS ON STANDARD BARRIER MEDIAN LOCATION.

APHIDS WAY – ASPHALT & HAYS BOULEVARD

1.50" CL2 ASPH SURF 0.38B PG64-22
3" CL2 ASPH SURF 1.00D PG64-22
4" CL2 ASPH SURF 1.00D PG64-22
6" CRUSHED STONE BASE

APHIDS WAY – CONCRETE

8" PCC
6" CRUSHED STONE BASE

SCALE: 1" = N/A

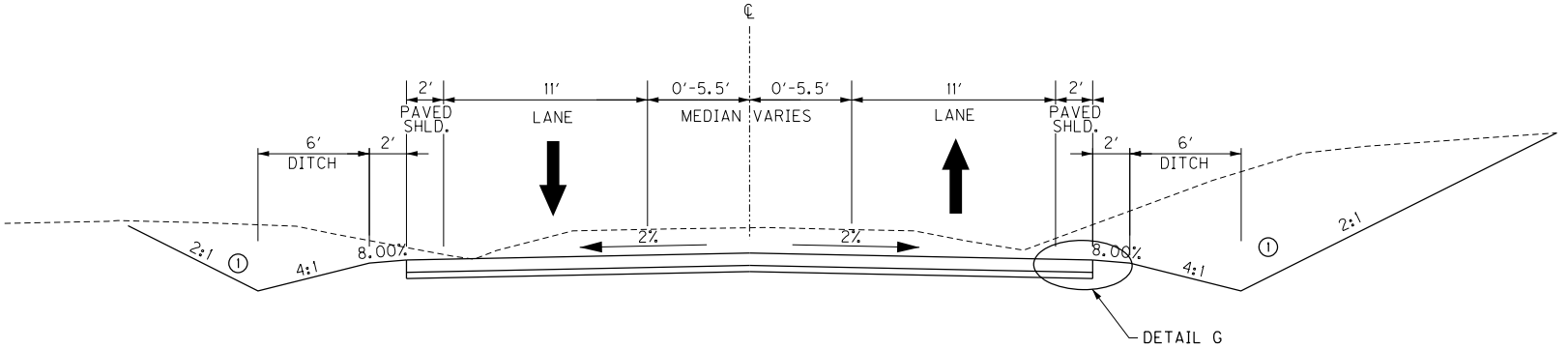
APHIDS WAY
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D6410941\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301 Page 212 of 605

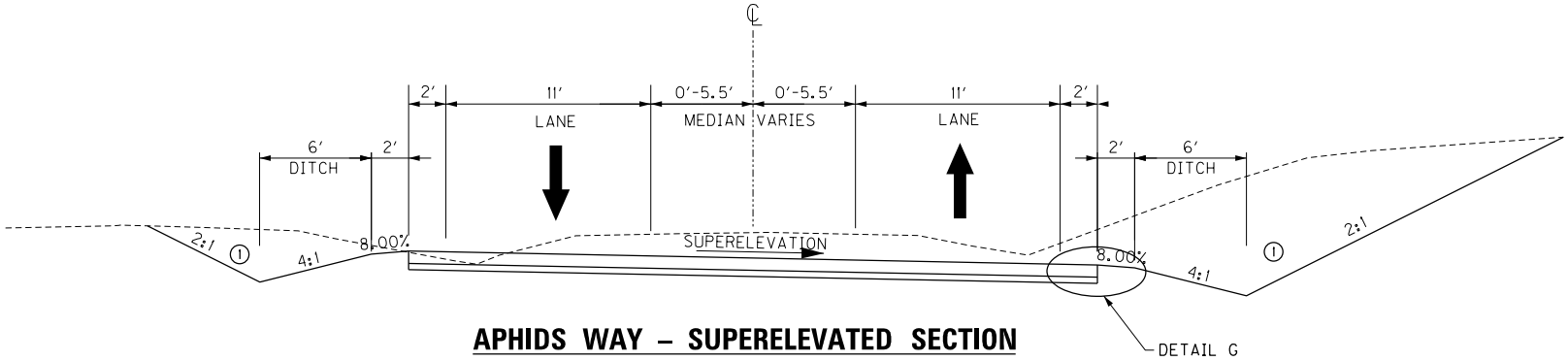
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2K

TYPICAL SECTION
APHIDS WAY



APHIDS WAY – NORMAL SECTION

STA. 52+40 TO STA. 62+50



APHIDS WAY – SUPERELEVATED SECTION

STA. 52+40 TO STA. 62+50

GENERAL NOTES

① SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.

② SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)

APHIDS WAY – ASPHALT

1.50" CL2 ASPH SURF 0.38B PG64-22
3" CL2 ASPH SURF 1.00D PG64-22
4" CL2 ASPH SURF 1.00D PG64-22
6" CRUSHED STONE BASE

SCALE: 1" = N/A

APHIDS WAY
TYPICAL SECTIONS

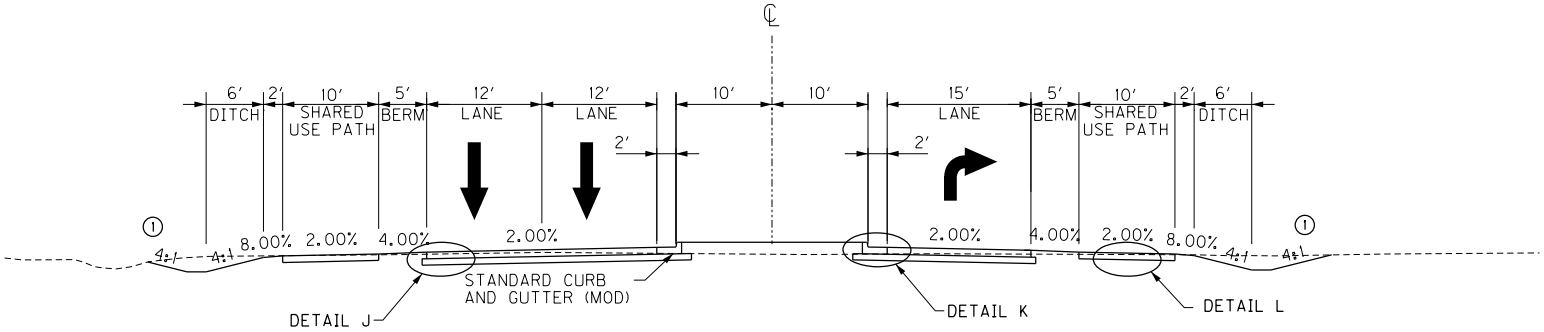
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

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USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

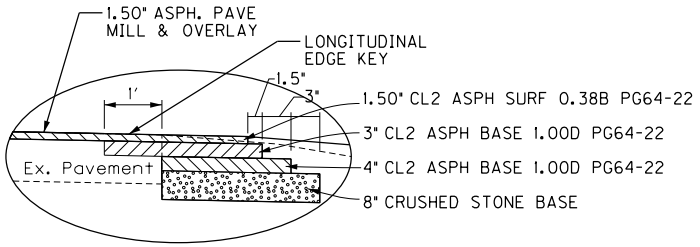
Contract ID: 254301
Page 213 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2L

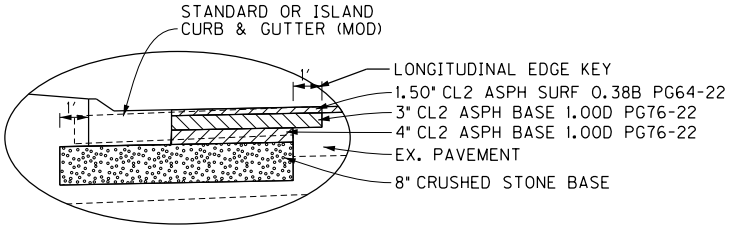
TYPICAL SECTION
APPROACH ROADS



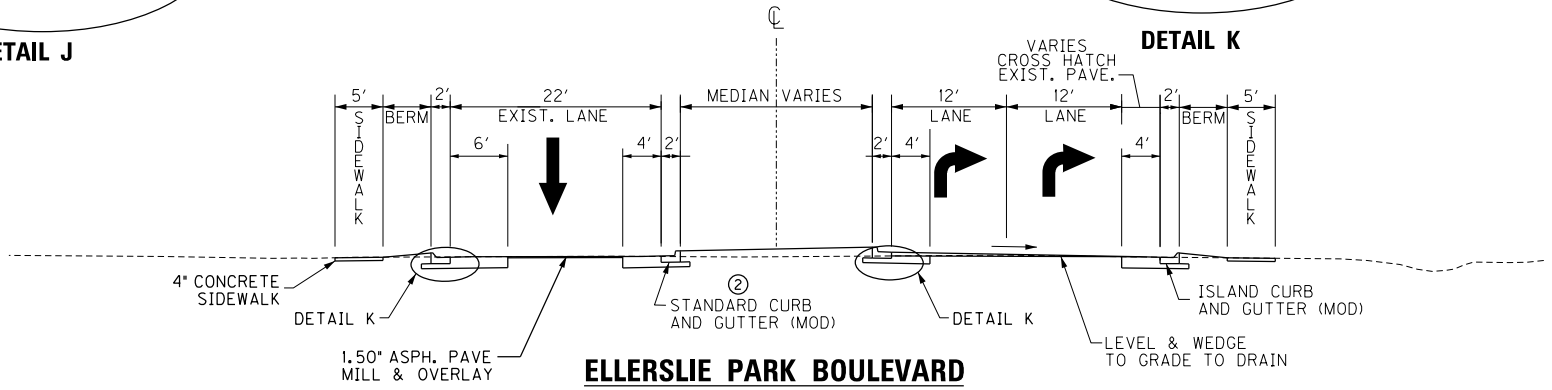
JACOBSON PARK ENTRANCE



DETAIL J



DETAIL K



ELLERSLIE PARK BOULEVARD

GENERAL NOTES

① SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.

② ON ELLERSLIE PARK BLVD., MATCH THE STANDARD CURB AND GUTTER WIDTH TO THE EXISTING GUTTER WIDTH IN THE FIELD.

③ SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)

JACOBSON PARK ENTRANCE & ELLERSLIE PARK BOULEVARD

1.50" CL2 ASPH SURF 0.38B PG64-22
3" CL2 ASPH SURF 1.00D PG64-22
4" CL2 ASPH SURF 1.00D PG64-22
8" CRUSHED STONE BASE

SCALE: 1" = N/A

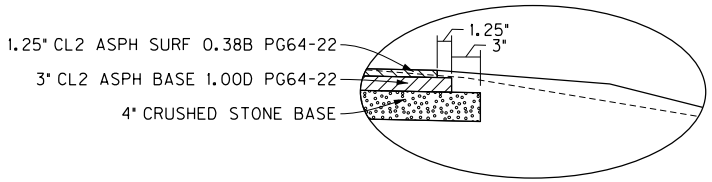
APPROACH ROADS
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

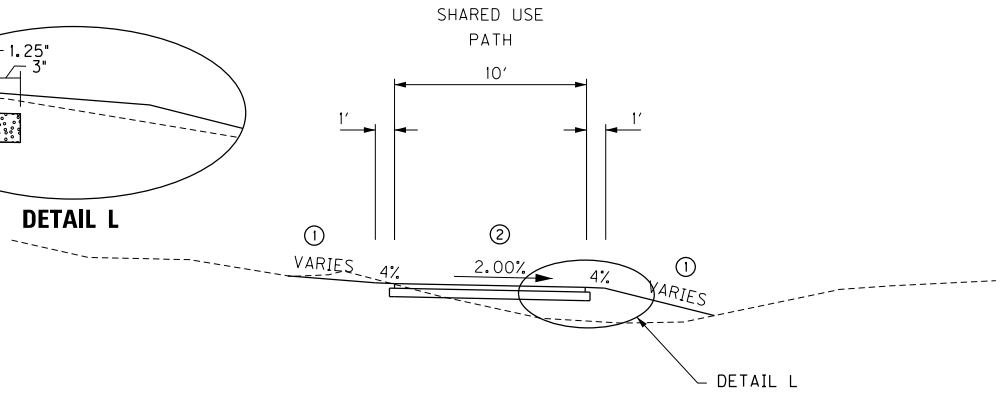
Contract ID: 254301
Page 214 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R2M

TYPICAL SECTION
SHARED USE PATH

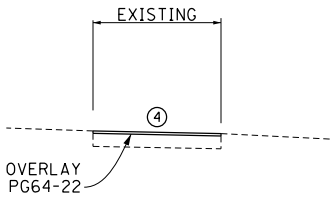


DETAIL L

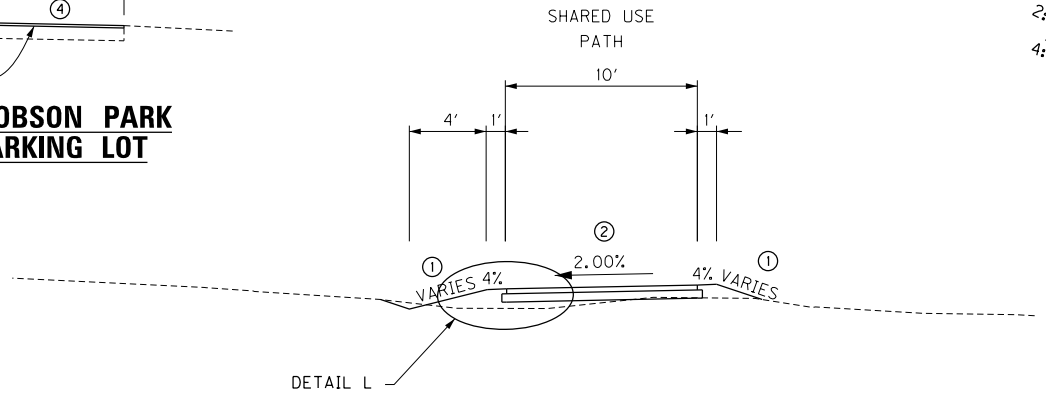


SHARED USE PATH

LT. KY 418 STA. 407+70 TO STA. 418+60
LT. US 25 STA. 7+25 TO STA. 11+45

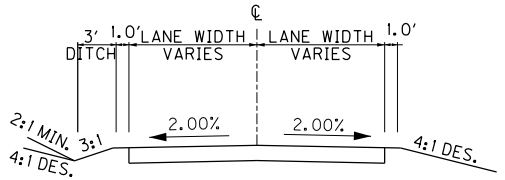


JACOBSON PARK PARKING LOT



SHARED USE PATH

LT. KY 418 STA. 419+40 TO STA. 430+33
LT. US 25 STA. 0+29 TO STA. 7+25



ENTRANCE

RESIDENTAL ENTRANCE
1.25" CL2 ASPH. SURF. 0.38B PG64-22
2" CL2 ASPH. BASE 1.00D PG64-22
4" CSB

COMMERCIAL ENTRANCE
1.25" CL2 ASPH. SURF. 0.38B PG64-22
2" CL2 ASPH. BASE 1.00D PG64-22
6" CSB

GENERAL NOTES

1. SEE CROSS SECTIONS FOR THE LIMITS OUTSIDE OF THE SHOULDER.
2. SEE PLANS AND CROSS SECTIONS FOR LAYOUT AND LOCATION TO ROADWAY.
3. SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AT EACH LOCATION WITH STATION LIMITS. (FULL DEPTH, OVERLAY, ETC.)
4. PARKING LOT AT JACOBSON PARK SHALL BE MILL & OVERLAID USING THE SAME SURFACE AS THE SHARED USE PATH. SEE PLANS FOR LOCATION.

SHARED USE PATH

1.25" CL2 ASPH SURF 0.38B PG64-22
3" CL2 ASPH BASE 1.00D PG64-22
4" CRUSHED STONE BASE

SCALE: 1" = N/A

SHARED USE PATH
TYPICAL SECTIONS

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 TYPICAL SECTIONS.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PLAN_01.DGN

SEE PAVING PLANS FOR FURTHER DETAILS ON PAVEMENT DEPTHS AND LOCATIONS (FULL DEPTH, OVERLAY, ETC.), AS WELL AS FOR SAW CUT NOTES.

PC 354+87.86

355+00

EXIST. R/W

PI 357+71.17

BEGIN CONSTRUCTION STA. 359+34

US 25

18" CMP

EXIST. R/W

SOUTH EAGLE CREEK DRIVE

NORTH EAGLE CREEK DRIVE

360+00

EXIST. R/W

PT 360+54.37

EXIST. R/W & C/A

INV. 982.72

℄ US 25

8'X8' RCBC

INV. 970.36

INV. 967.

MATCHLINE STA. 363+00

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 359+34 TO STA. 363+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R3

Contract ID: 254301
Page 216 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R4

DITCH CONSTRUCTION RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
364+00 - 364+42	SPL. "V" DT.	ECB	1'	39 S.Y.
366+08 - 366+23	SPL. "V" DT.	ECB	1'	14 S.Y.

365+00

370+00

MATCHLINE STA. 363+00

MATCHLINE STA. 372+00

STA. 363+63 TO STA. 364+80 CONST.
123 S.Y. OF STANDARD BARRIER MEDIAN TY 2

STA. 365+13 TO STA. 372+00 CONST.
306 S.Y. OF STANDARD BARRIER MEDIAN TY 2

EXIST. R/W & C/A

℄ US 25

US 25

30" CONCRETE

12" RCP

18" PIPE

+98.49 -8.50'

+79.36 7.25'

+14.77 6.00'

+62.58 3.94'

+62.58 8.00'

+60.14 6.00'

+62.58 7.89'

+52.28 45.05'

+98.49 36.50'

SPL. "V" DT.

PROP. R/W & C/A

TEMP. ESMT.

+21.71 77.37'

+44.21 45.00'

+85.99 45.00'

+85.99 93.00'

+29.55 74.55

+20.66 83.32

+23.77 94.94

+44.21 293.00

+56.97 49.70

+71.85 49.79

+93.62 69.03

+69.17 75.94

+32.22 80.09

+93.81 90.04'

+95.68 4.00'

+95.68 -8.00'

+95.68 8.00'

+95.68 4.00'

+36.34 45.00'

+73.31 45.00'

+36.34 95.00'

+10.71 79.42'

20' BL ESMT.

25' GAS & UTIL. ESMT.

20' BL, TELE. & UTIL. ESMT.

20' UTIL. ESMT.

EXIST. R/W

DO NOT DISTURB LIGHT POLE

DO NOT DISTURB SIGN, CURB OR PARKING LOT PAVEMENT

P 69

DF LEXINGTON PROPERTIES II LLC

RT. STA. 364+52 TO STA. 366+44 CONST.
218 LF STANDARD CURB AND GUTTER (MOD)

RT. STA. 367+86 TO STA. 368+24 CONST.
82 LF STANDARD CURB AND GUTTER (MOD)

RT. STA. 368+94 TO STA. 369+36 CONST.
74 LF STANDARD CURB AND GUTTER (MOD)

RT. STA. 368+69 REMOVE 2 BOLLARDS
(WORK INCIDENTAL TO CLEARING AND GRUBBING)

RT. STA. 368+55 TO STA. 368+73 CONST.
44 S.Y. OF STANDARD BARRIER MEDIAN TY 4

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 363+00 TO STA. 372+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_02.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 217 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R5

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
374+75 - 376+11	SPL. "V" DT.	ECB	1'	97 S.Y.
376+46 - 381+00	SPL. "V" DT.	ECB	1'	321 S.Y.

LT. STA. 374+60 TO STA. 376+24
CONST. 148 S.Y. OF SHARED USE PATH

LT. STA. 376+35 TO STA. 381+00
CONST. 517 S.Y. OF SHARED USE PATH

LT. STA. 374+30 TO STA. 374+60
CONST. 38 S.Y. OF SIDEWALK W/RAMP
TYPE 1 W/ 24 S.F. OF DETECTABLE
WARNINGS

LT. STA. 376+29
CONST. RES. ENTRANCE
W/36 L.F. OF 15" ENT. PIPE
1.25" ASPH. SURF. - 199 SY
2" ASPH. BASE - 203 SY
4" CSB - 209 SY

P
68

MARY LENA STROHMEIER
BEVERLY COX,CO-TRUSTEES
OF THE IVEL W.WHITE IRREVOCABLE
FAMILY GIFTING GSTT TRUST

375+00

380+00

MATCHLINE STA. 372+00

MATCHLINE STA. 381+00

EXIST. R/W

YORKSHIRE BLVD

DO NOT
DISTURB
HEADWALL

TEMP.ESMT.

+75.54
-93.00

+58.84
-101.00

+07.16
-64.00

+58.84
-55.00

+77.30
-55.00

O.E.
1002.70

I.E.
1002.88

EXIST. R/W & C/A

EXIST. R/W&M & C/A

18" RCP

INV.
999.12

SPL. "V" DT.

30" CONCRETE

12" D.I. PIPE

R 54'

R 46'

US 25

℄ US 25

+32.82
4.00

+32.82
8.00

+07.16
-10.00

+32.82
8.00

+32.82
4.00

8" DI

GALVANIZED

R 33'

R 41'

+22.34
75.39'

+35.03
72.50'

EXIST. R/W & C/A

DO NOT
DISTURB

SQUIRES ROAD

ONLY

SANMH

SAN

STA. 372+81 TO STA. 375+00 MEDIAN
CONST. 8 EACH TUBULAR
MARKERS (PEXCO CITY POST
EMBEDDED ANCHOR CUP)
SEE ISLAND DETAIL SHEET

STA. 372+00 TO STA. 373+46
CONST. 65 S.Y. OF
STANDARD BARRIER MEDIAN TY 2

STA. 373+80 TO STA. 375+00
CONST. 158 S.Y. OF
STANDARD BARRIER MEDIAN TY 4

STA. 375+44 TO STA. 381+00
CONST. 247 S.Y. OF
STANDARD BARRIER MEDIAN TY 2

RT. STA. 372+55 TO STA. 374+44 CONST. 116 S.Y. OF SIDEWALK
W/RAMP TYPE 1 & RAMP TYPE 4 W/ 32 S.F. OF DETECTABLE WARNINGS

RT. STA. 375+00 CONST. 16 S.Y. OF SIDEWALK
W/RAMP TYPE 4 W/ 12 S.F. OF DETECTABLE WARNINGS

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 372+00 TO STA. 381+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

USER: ACAUDILL
DATE PLOTTED: March 17, 2025

FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_03.DGN

MicroStation v8.11.9.919

Contract ID: 254301
Page 218 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R6

LT. STA. 381+00 TO STA. 390+00
CONST. 1012 S.Y. OF SHARED USE PATH

STA. 381+00 TO STA. 385+20
CONST. 187 S.Y. OF
STANDARD BARRIER MEDIAN TY 2

STA. 385+54 TO STA. 387+54
CONST. 410 LF OF ISLAND HEADER
CURB TYPE 2 W/ 287 S.Y. OF SODDING

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
381+00 - 387+00	SPL. "V" DT.	ECB	1'	424 S.Y.

LT. STA. 389+90 TO STA. 390+00
CONST. A GRAVITY RETAINING WALL
CASE IV, WITH 4 C.Y. OF CONCRETE CLASS B,
6.8 C.Y. STRUCTURE EXCAVATION,
3.5 C.Y. GRANULAR EMBANKMENT, AND
11 S.Y. OF GEOTEXTILE FABRIC CLASS 2
WITH 10 L.F. OF HANDRAIL TYPE A-1

STA. 387+55 TO STA. 387+90
CONST. 36 LF OF LANE SEPARATOR
CURB (PEXCO FG 300)

STA. 386+80 TO STA. 387+53
REMOVE 72 S.Y. PAVEMENT

P 68

MARY LENA STROHMEIER
BEVERLY COX,CO-TRUSTEES
OF THE IVEL W.WHITE IRREVOCABLE
FAMILY GIFTING GSTT TRUST

385+00

390+00

MATCHLINE STA. 381+00

MATCHLINE STA. 390+00

+89.10
-293.00

R 250'

+72.88
-115.00

+11.84
75.20'

TEMP.ESMT.

PROP.R/W & C/A

+89.10
-43.00

R 50'

+70.29
-110.00

R 50'

EXIST. R/W & C/A

SPL. "V" DT.

+33.93
36.00'

R 62'

R 45'

+80.72
-31.50

+73.78
-2.59

R 45'

R 5'

℄ US 25

US 25

4'

+52.96
6.59'

+95.48
-54.50

+95.48
-149.50

R 95'

36" RCP

30" CONCRETE

SAN

SANMH

+18.05
6.00'

+55.63
6.82

+33.32
2.82'

R 1'

R 5'

R 45'

R 105'

+71.46
36.50

+34.52
45.19

SHORESIDE DRIVE

EXIST. R/W

EXIST. R/W

EXIST. R/W & C/A

SAN

SANMH

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 381+00 TO STA. 390+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_04.DGN

Contract ID: 254301
Page 219 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R7

LT. STA. 390+00 TO STA. 398+22
CONST. 915 S.Y. OF SHARED USE PATH

LT. STA. 390+00 TO STA. 391+25
CONST. A GRAVITY RETAINING WALL
CASE IV, WITH 42 C.Y. OF CONCRETE CLASS B,
85.2 C.Y. STRUCTURE EXCAVATION,
43.5 C.Y. GRANULAR EMBANKMENT, AND
131 S.Y. OF GEOTEXTILE FABRIC CLASS 2
WITH 125 L.F. OF HANDRAIL TYPE A-1

LT. STA. 398+22 TO STA. 398+37
CONST. 13 S.Y. OF SIDEWALK W/
RAMP TYPE 1 W/16 S.F. OF
DETECTABLE WARNINGS

390+00

395+00

MATCHLINE STA. 390+00

MATCHLINE STA. 399+00

+44.71
-149.50

R 95'

DO NOT DISTURB
EXIST. HEADWALL.

+44.72
-54.50

18" RCP

INV.
981.61

EXIST. R/W & C/A

30" CONCRETE

30" D.I.

PI 394+84.69

LAKESIDE GOLF COURSE
SIGN BETWEEN TWO
STONE COLUMNS

COYS LANE

T/R-977.83
INV. 961.13

T/R-975.59
INV. 971.60

15" RCP

+36.84
-60.00

℄ US 25

US 25

48" RCP

R 105'

+05.54
45.00

INV.
978.41

EXIST. R/W & C/A

PC 391+43.86

PT 398+25.47

RT. STA. 398+88 TO STA. 399+00
REMOVE 18 LF EXISTING GUARDRAIL

RT. STA. 398+89 TO STA. 399+00
CONST. 15.5 LF STEEL "W" BEAM
GUARDRAIL SINGLE FACE WITH
1-GUARDRAIL TERMINAL SECTION NO. 1

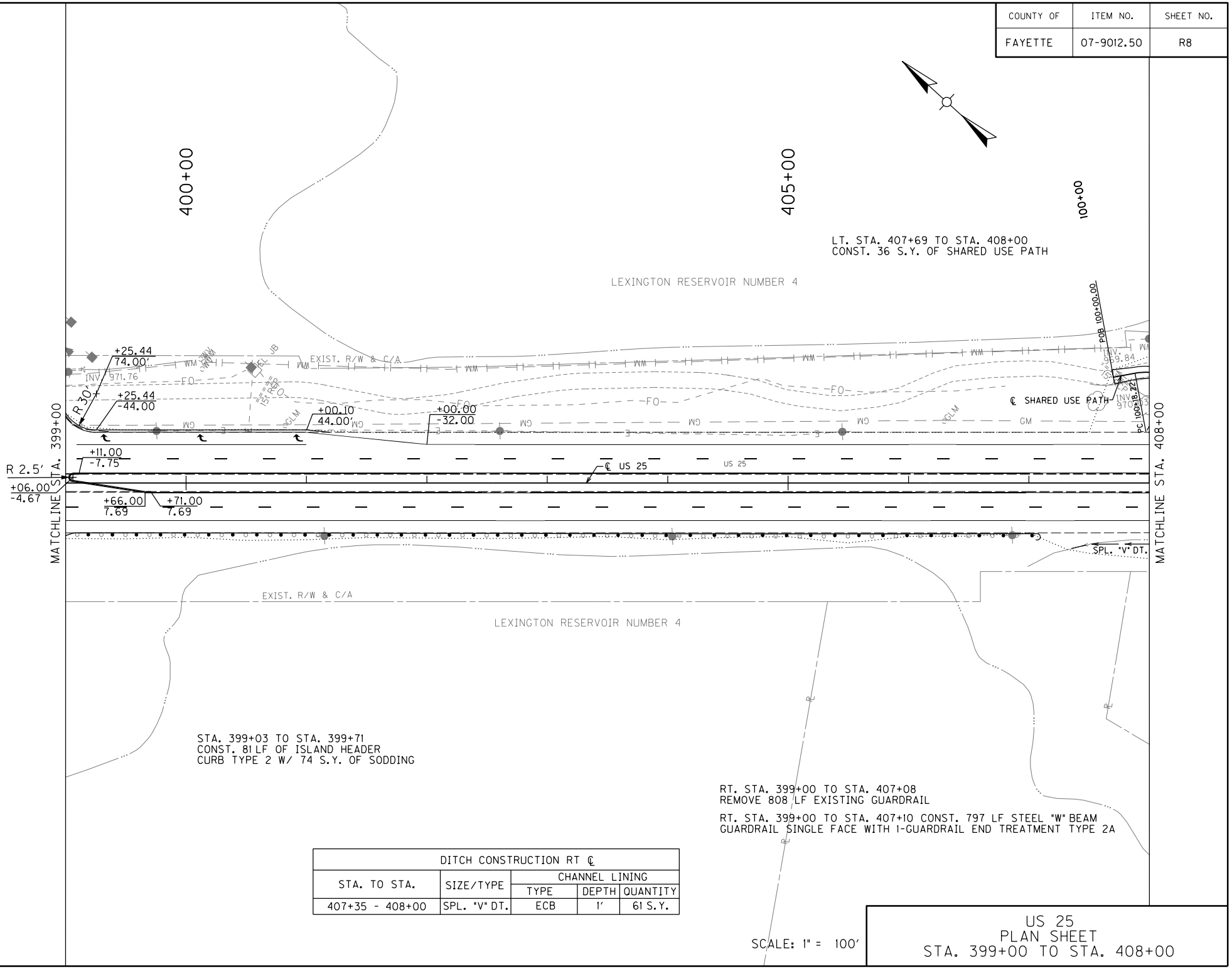
SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 390+00 TO STA. 399+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_05.DGN

Contract ID: 254301
Page 220 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R8



DITCH CONSTRUCTION RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
407+35 - 408+00	SPL. "V" DT.	ECB	1'	61 S.Y.

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 399+00 TO STA. 408+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_06.DGN

Contract ID: 254301
Page 221 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R9

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
408+50 - 409+50	2' F.B.	TRM 1	-	123 S.Y.
416+50 - 417+00	SPL. "V" DT.	ECB	1'	36 S.Y.

LT. STA. 408+00 TO STA. 417+00
CONST. 1039 S.Y. OF SHARED USE PATH

LT. STA. 408+32 TO STA. 415+53
CONST. 773 L.F. OF WOOD PLANK FENCE
(TO MATCH EXIST.)

LT. STA. 415+84 TO STA. 417+00
CONST. 88 L.F. OF WOOD PLANK FENCE
(TO MATCH EXIST.)

STA. 409+70 TO STA. 413+75
CONST. 248 S.Y. OF
STANDARD BARRIER MEDIAN TY 2

LT. STA. 413+74 TO STA. 414+50 CONST.
77 LF ISLAND HEADER CURB TYPE 2
W/81 S.Y. OF SODDING

STA. 413+75 TO STA. 417+00 CONST.
326 L.F. ISLAND HEADER CURB TYPE 2

STA. 414+17 TO STA. 414+50
REMOVE 28 S.Y. OF PAVEMENT

LT. STA. 415+99 TO STA. 417+00
REMOVE 48 S.Y. CONC. SIDEWALK

STA. 413+74 TO STA. 417+00
CONST. 428 S.Y. OF SODDING

410+00

415+00

105+00

MATCHLINE STA. 408+00

MATCHLINE STA. 417+00

℄ SHARED USE PATH

℄ US 25

EXIST. R/W & C/A

EXIST. R/W

30" CONCRETE

2' F.B.

SPL. "V" DT.

50:1 TAPER

DISTURB LIMITS

PROP. R/W & C/A

TRAV

DELONG ESTATES
DEVELOPMENT, LLC

P
46

RT. STA. 408+90 TO LT. STA. 409+09
CONST. 48 LF ISLAND HEADER CURB TYPE 2

RT. STA. 413+95 TO STA. 417+00
CONST. 458 TONS OF CLASS II CHANNEL
LINING ON BACKSLOPE OF DITCH

DITCH CONSTRUCTION RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
408+00 - 413+50	SPL. "V" DT.	ECB	1'	389 S.Y.
413+95 - 417+00	SPL. "V" DT.	ECB	1'	183 S.Y.

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 408+00 TO STA. 417+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_07.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 222 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R10

LT. STA. 27+45 TO STA. 29+18 JACOBSON PARK ENTRANCE CONST. 189 S.Y. OF SHARED USE PATH

RT. STA. 27+79 TO STA. 29+25 JACOBSON PARK ENTRANCE CONST. 157 S.Y. OF SHARED USE PATH

STA. 27+87 TO STA. 29+22 JACOBSON PARK ENTRANCE CONST. 305 L.F. STANDARD CURB AND GUTTER (MOD) AND CONST. 280 S.Y. OF SODDING

TEMP. ESMT.

STA. 29+32 TO LT. STA. 29+47 JACOBSON PARK ENTRANCE CONST. 86 L.F. STANDARD CURB AND GUTTER (MOD) AND CONST. 43 S.Y. OF SODDING

POB 27+00.00

+19
60

+50
116

110+00

+10.25
67.00'

+76.46
76.00'

+96.56
0.00'

STA. 418+95.68 KY 418 =
STA. 30+00.00 JACOBSON PARK ENTRANCE

EXIST. R/W

+00.11
87.00

DISTURB LIMITS

2' F.B. SPL. DT.

PI 111+06.42

S47° 44'21.85"W

℄ JACOBSON PARK ENTRANCE

PI 111+94.30

+97.35
86.00'

2' F.B. SPL. DT.

PC 113+09.10

PI 113+64.33

PI 114+18.81

0.L.
984.56

2' F.B. SPL. DT.

PT 115+17.09

I.E.
984.85

PC 114+11.00

INV.
986.50

PC 423+30.60

+47.92
82.92

PT 117+59.86

PI 117+65.19

PT 117+70.33

+25.74
42.59

+32.68
56.12

+72.00
34.46

+23.99
19.06

+84.66
4.77

+00.47
5.86

+61.39
21.46

+83.67
-15.47

+81.99
54.66

+90.00
-15.58

50:1 TAPER

SPL. "V" DT.

30+00

ATHENS SUGARSBORG RD.

℄ US 25

US 25

+71.03
6.32

+61.39
3.54

+89.66
16.58

+71.15
44.94

+70.87
-52.05

DISTURB LIMITS

RT. STA. 421+10 TO STA. 426+00 REMOVE 490 LF EXISTING GUARDRAIL

DELONG ESTATES DEVELOPMENT, LLC

PERM. ESMT.

+54.19
91.93

+26.80
102.32

+01.86
-49.04

60' LANDSCAPE & WALL ESMT.

℄ ELLERSLIE PARK BLVD.

S47° 44'21.85"W

20' B.L.

P 43

+00.00
37.81

RT. STA. 419+12 TO STA. 419+52 CONST. 25 S.Y. OF SIDEWALK W/ RAMP TYPE 1'S W/25 S.F. OF DETECTABLE WARNINGS

STA. 417+00 TO STA. 417+90 MEDIAN CONST. 237 LF ISLAND HEADER CURB TYPE 2

STA. 417+00 TO STA. 418+60 MEDIAN CONST. 235 S.Y. OF SODDING

RT. STA. 417+00 TO STA. 418+46 CONST. 145 TONS OF CLASS II CHANNEL LINING ON BACKSLOPE OF DITCH

STA. 418+55 TO STA. 419+62 CONST. 167 S.Y. OF STANDARD BARRIER MEDIAN TY 4

RT. STA. 30+71 TO STA. 31+00 ELLERSLIE PARK BLVD. CONST. 20 L.F. OF ISLAND CURB AND GUTTER (MOD)

STA. 30+52 TO STA. 30+62 MEDIAN ELLERSLIE PARK BLVD. REMOVE 40 S.Y. OF PAVEMENT

STA. 30+72 TO STA. 30+85 MEDIAN ELLERSLIE PARK BLVD. REMOVE 58 S.Y. OF PAVEMENT

LT. STA. 419+53 TO STA. 426+00 REMOVE 647 LF EXISTING GUARDRAIL

LT. STA. 417+00 TO STA. 418+63 CONST. 163 S.Y. OF SHARED USE PATH

LT. STA. 419+39 TO STA. 426+00 CONST. 730 S.Y. OF SHARED USE PATH

RT. STA. 27+27 TO STA. 27+39 JACOBSON PARK ENTRANCE CONST. 14 S.Y. OF SHARED USE PATH

27+00 (P 39) STA. 418+57 TO STA. 419+57 MEDIAN CONST. 10 EACH TUBULAR MARKERS (PEXCO CITY POST EMBEDDED ANCHOR CUP) SEE ISLAND DETAIL SHEET

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

STA. 419+25.68 KY 418 = STA. 30+00.00 ELLERSLIE PARK BLVD.

115+00

LT. STA. 418+77 TO STA. 419+08 CONST. 20 S.Y. OF SIDEWALK W/ RAMP TYPE 1'S W/25 S.F. OF DETECTABLE WARNINGS

LT. STA. 418+62 CONST. 16 S.Y. OF SIDEWALK W/RAMP TYPE 1 W/10 S.F. OF DETECTABLE WARNINGS

LT. STA. 419+46 CONST. 25 S.Y. OF SIDEWALK W/RAMP TYPE 4 W/20 S.F. OF DETECTABLE WARNINGS

LT. STA. 417+40 TO STA. 418+26 REMOVE 328 S.Y. OF PAVEMENT

LT. STA. 417+00 TO STA. 418+01 REMOVE 61 S.Y. CONC. SIDEWALK

LT. STA. 422+72 TO STA. 426+00 CONST. 343 LF STEEL "W" BEAM GUARDRAIL SINGLE FACE WITH 1-GUARDRAIL END TREATMENT TYPE 2A

+31.83
304.12

LT. STA. 417+00 TO STA. 418+45 CONST. 145 L.F. OF WOODEN PLANK FENCE (TO MATCH EXIST.)

425+00

EXIST. R/W

DISTURB LIMITS

℄ SHARED USE PATH

R 248'

R 22'

R 52'

R 60'

MATCHLINE STA. 417+00

MATCHLINE STA. 426+00

SPL. "V" DT.

15" SAN

EXIST. R/W & C/A

PERM. ESMT.

+84.19
91.93

+00.00
37.81

RT. STA. 421+10 TO STA. 426+00 CONST. 440 LF STEEL "W" BEAM GUARDRAIL SINGLE FACE W/ 1-GUARDRAIL END TREATMENT TYPE 1

LT. STA. 30+71 TO STA. 31+02 ELLERSLIE PARK BLVD. CONST. 22 L.F. OF ISLAND CURB AND GUTTER (MOD)

STA. 30+85 TO STA. 31+47 ELLERSLIE PARK BLVD. REMOVE 108 L.F. OF CURB AND GUTTER IN MEDIAN

P.C. 32+76.97

STA. 30+52 TO STA. 30+62 MEDIAN ELLERSLIE PARK BLVD. CONST. 94 L.F. OF STANDARD CURB AND GUTTER (MOD) AND CONST. 40 S.Y. OF SODDING

LT. STA. 30+66 TO STA. 31+25 ELLERSLIE BLVD. CONST. 33 S.Y. OF SIDEWALK W/RAMP TYPE 1 W/11 S.F. OF DETECTABLE WARNINGS AND CONST. 39 S.Y. OF SODDING

RT. STA. 30+58 TO STA. 31+65 ELLERSLIE BLVD. CONST. 72 S.Y. OF SIDEWALK W/RAMP TYPE 4 W/ 26 S.F. OF DETECTABLE WARNINGS AND CONST. 65 S.Y. OF SODDING

STA. 30+72 TO STA. 31+47 ELLERSLIE PARK BLVD. CONST. 157 L.F. OF STANDARD CURB AND GUTTER (MOD) AND CONST. 192 S.Y. OF SODDING

(P 42)

COMMONWEALTH DESIGNS, INC.

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
417+00 - 418+50	SPL. "V" DT.	ECB	1'	106 S.Y.
420+02	5' F.B. OUT.	CLASS II	1'	8 TON
420+80-421+58	2' F.B.	CLASS II	1'	46 TON
421+70	11' F.B. OUT.	CLASS II	1'	8 TON
421+73-426+00 L.SUP	2' F.B.	ECB	1'	487 S.Y.
421+91	6' F.B. IN.	CLASS II	1'	15 TON
422+10 - 423+00	2' F.B.	CLASS II	1'	53 TON
27+62 - 29+10 PARK	2' F.B.	CLASS II	1'	110 TON

DITCH CONSTRUCTION MEDIAN & RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
419+68 - 419+99 MED	SPL. "V" DT.	ECB	1'	59 S.Y.
420+09 - 423+12 MED	SPL. "V" DT.	ECB	1'	311 S.Y.
423+38 - 424+60 MED	SPL. "V" DT.	ECB	1'	139 S.Y.
425+46 - 426+00 MED	SPL. "V" DT.	ECB	1'	62 S.Y.
417+00 - 418+46 RT	SPL. "V" DT.	ECB	1'	81 S.Y.
27+14 PARK RT	2' F.B. OUT.	CLASS II	1'	22 TON
27+81-29+12 PARK RT	2' F.B.	CLASS II	1'	96 TON

US 25
PLAN SHEET
STA. 417+00 TO STA. 426+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_08.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 223 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R11

LT. STA. 426+00 TO STA. 429+10
REMOVE 310 LF EXISTING GUARDRAIL

LT. STA. 426+00 TO STA. 429+10 CONST.
257 LF STEEL "W" BEAM GUARDRAIL SINGLE
FACE W/ 1-GUARDRAIL END TREATMENT TYPE 4A

STA. 427+67 TO STA. 2+88
REMOVE 838 OF S.Y. PAVEMENT

LT. STA. 426+00 TO STA. 430+26
CONST. 469 S.Y. OF SHARED USE PATH

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
426+00-430+00 L.SUP	2' F.B.	ECB	1'	370 S.Y.
429+50 - 430+00	SPL. "V" DT.	ECB	1'	36 S.Y.

94' LT. STA. 430+56 TO STA. 0+07
CONST. 22 L.F. ISLAND HEADER CURB TYPE 2

LT. STA. 0+30 TO STA. 5+00
CONST. 513 S.Y. OF SHARED USE PATH

LT. STA. 3+50 TO STA. 4+50
CONST. A GRAVITY RETAINING WALL
CASE III, WITH 18 C.Y. OF CONCRETE CLASS B,
33.7 C.Y. STRUCTURE EXCAVATION,
16.3 C.Y. GRANULAR EMBANKMENT, AND
76 S.Y. OF GEOTEXTILE FABRIC CLASS 2
WITH 100 L.F. OF HANDRAIL TYPE A-1

LT. STA. 430+26 TO STA. 430+35
CONST. 8 S.Y. OF SIDEWALK W/
RAMP TYPE 1 W/16 S.F. OF
DETECTABLE WARNINGS

LT. STA. 0+26 TO STA. 0+40
CONST. 12 S.Y. OF SIDEWALK W/
RAMP TYPE 1 W/16 S.F. OF
DETECTABLE WARNINGS

DO NOT DISTURB EXIST.
HEADWALL. PLACE RETAINING
WALL BEHIND HEADWALL AND
ON TOP OF EXIST. STRUCTURE

RT. STA. 426+00 TO STA. 0+21
REMOVE 521 LF EXISTING GUARDRAIL

RT. STA. 426+00 TO STA. 427+85
CONST. 185 LF STEEL "W" BEAM
GUARDRAIL SINGLE FACE W/
1-GUARDRAIL END TREATMENT TYPE 2A

RT. STA. 428+05 KY 418 ALONG
OLD RICHMOND RD. TOWARD APHIDS WAY
(SEE SHEET 19) REMOVE 3393 S.Y.
OF PAVEMENT AND GRADE TO DRAIN

DITCH CONSTRUCTION MEDIAN & RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
426+00 - 1+62 MED	SPL. "V" DT.	ECB	1'	983 S.Y.
1+95 - 2+41 MED	SPL. "V" DT.	ECB	1'	92 S.Y.
3+43 - 5+00 MED	SPL. "V" DT.	ECB	1'	351 S.Y.
2+62 - 3+79 RT	SPL. "V" DT.	ECB	1'	91 S.Y.

CAUTION WATER LINE

SCALE: 1" = 100'

US 25 / KY 418
PLAN SHEET
STA. 426+00 TO STA. 5+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_09.DGN

Contract ID: 254301
Page 224 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R12

DITCH CONSTRUCTION MEDIAN & LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
5+00 - 5+69 MED	SPL. "V" DT.	ECB	1'	109 S.Y.
5+81 - 6+79 MED	SPL. "V" DT.	ECB	1'	145 S.Y.
12+84 - 14+00 MED	SPL. "V" DT.	ECB	1'	119 S.Y.
5+57 - 5+72 LT	SPL. "V" DT.	ECB	1'	11 S.Y.
5+75	6' F.B. OUT	CLASS II	1'	2 TON
5+77 - 7+00 LT	SPL. "V" DT.	ECB	1'	74 S.Y.
7+50 - 10+44 LT	SPL. "V" DT.	ECB	1'	238 S.Y.

RT. STA. 105+65 TO STA. 106+32 HAYS BLVD.
CONST. 48 S.Y. OF SIDEWALK W/RAMP TYPE 1
W/ 12 S.F. OF DETECTABLE WARNINGS

LT. STA. 105+60 TO STA. 106+07 HAYS BLVD.
CONST. 40 S.Y. OF SIDEWALK W/ RAMP TYPE 3
W/25 S.F. OF DETECTABLE WARNINGS

RT. STA. 102+41 TO STA. 106+17 HAYS BLVD.
REMOVE 433 S.Y. OF PAVEMENT AND
REMOVE 362 L.F. OF CURB AND GUTTER

RT. STA. 102+41 TO STA. 106+17 HAYS BLVD.
CONST. 477 L.F. OF STANDARD CURB AND GUTTER (MOD)
AND CONST. 492 S.Y. OF SOD

RT. STA. 105+66 TO STA. 106+32 HAYS BLVD.
CONST. 66 L.F. OF STANDARD CURB AND GUTTER (MOD)

LT. STA. 105+60 TO STA. 106+07 HAYS BLVD.
CONST. 55 L.F. OF STANDARD CURB AND GUTTER (MOD)

LT. STA. 5+00 TO STA. 11+47
CONST. 708 S.Y. OF SHARED USE PATH

STA. 7+03 TO STA. 11+52 CONST.
330 S.Y. OF STANDARD BARRIER MEDIAN TY 2

STA. 11+07 TO STA. 12+68 MEDIAN
CONST. 12 EACH TUBULAR
MARKERS (PEXCO CITY POST
EMBEDDED ANCHOR CUP)
SEE ISLAND DETAIL SHEET

P 38

THE TRADITION AT PARKS
EDGE TOWNHOME ASSOCIATION, INC.

STA. 11+86.38 KY 418 =
STA. 107+00.00 HAYS BLVD.

STA. 11+06 TO STA. 12+69
CONST. 128 S.Y. OF
STANDARD BARRIER MEDIAN TY 4

STA. 12+03.96 KY 418 =
STA. 50+00.00 APHIDS WAY

RT. STA. 7+04
CONST. COMM. ENTRANCE
1.25' ASPH. SURF. - 292 SY
2" ASPH. BASE - 295 SY
6" CSB - 300 SY

P 37

ANDERSON ACQUISITIONS LLC

P 36

GREEN PROPERTY
HOLDINGS, LLC

DITCH CONSTRUCTION RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
5+25 - 6+89	SPL. "V" DT.	ECB	1'	199 S.Y.
7+20 - 9+50	SPL. "V" DT.	ECB	1'	308 S.Y.

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SEE CAP NOTES FOR DESCRIPTION OF LIMITS OUTSIDE OF RIGHT-OF-WAY ON P37

SCALE: 1" = 100'

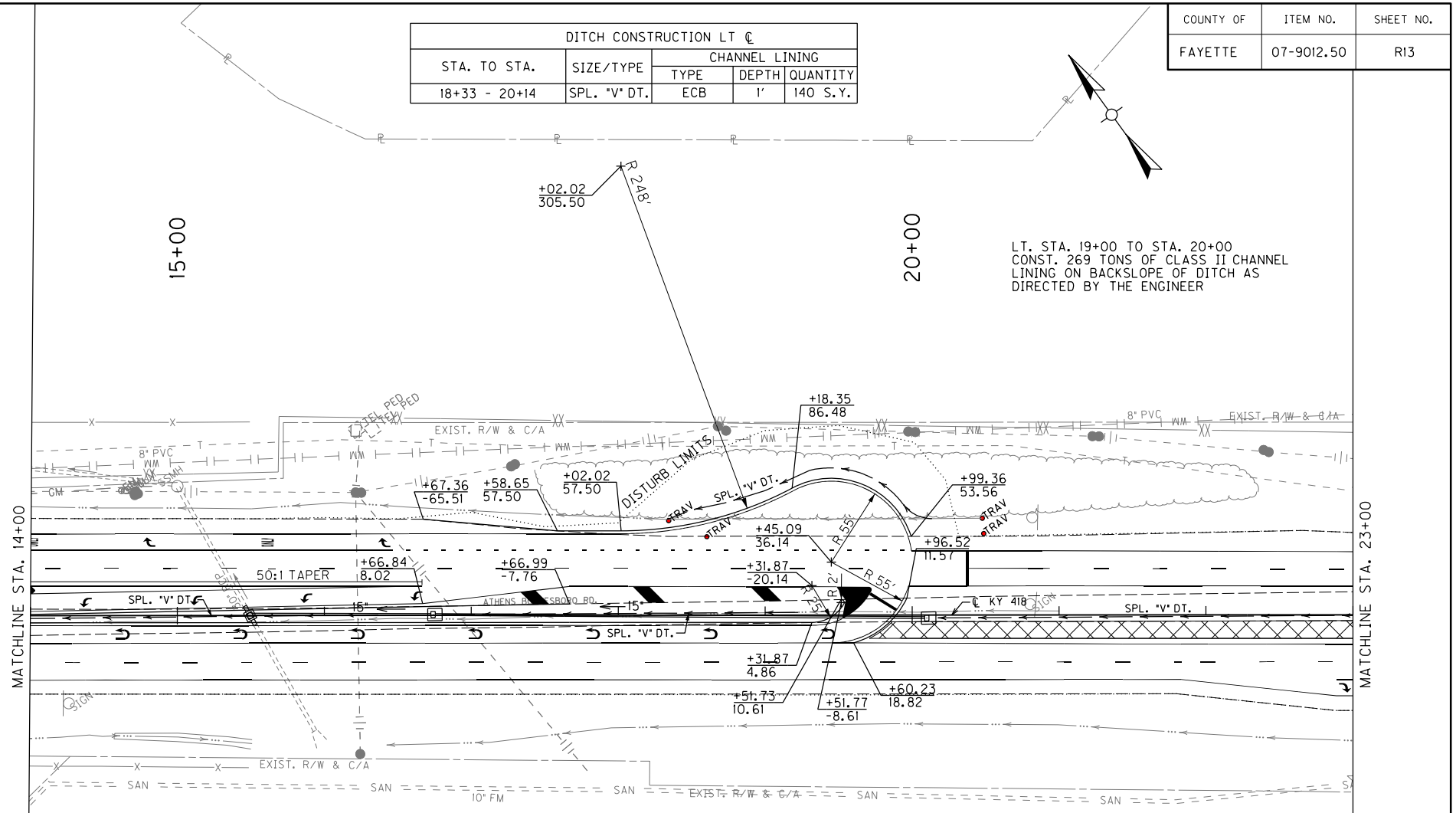
KY 418
PLAN SHEET
STA. 5+00 TO STA. 14+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_10.DGN

Contract ID: 254301
Page 225 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R13

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
18+33 - 20+14	SPL. "V" DT.	ECB	1'	140 S.Y.



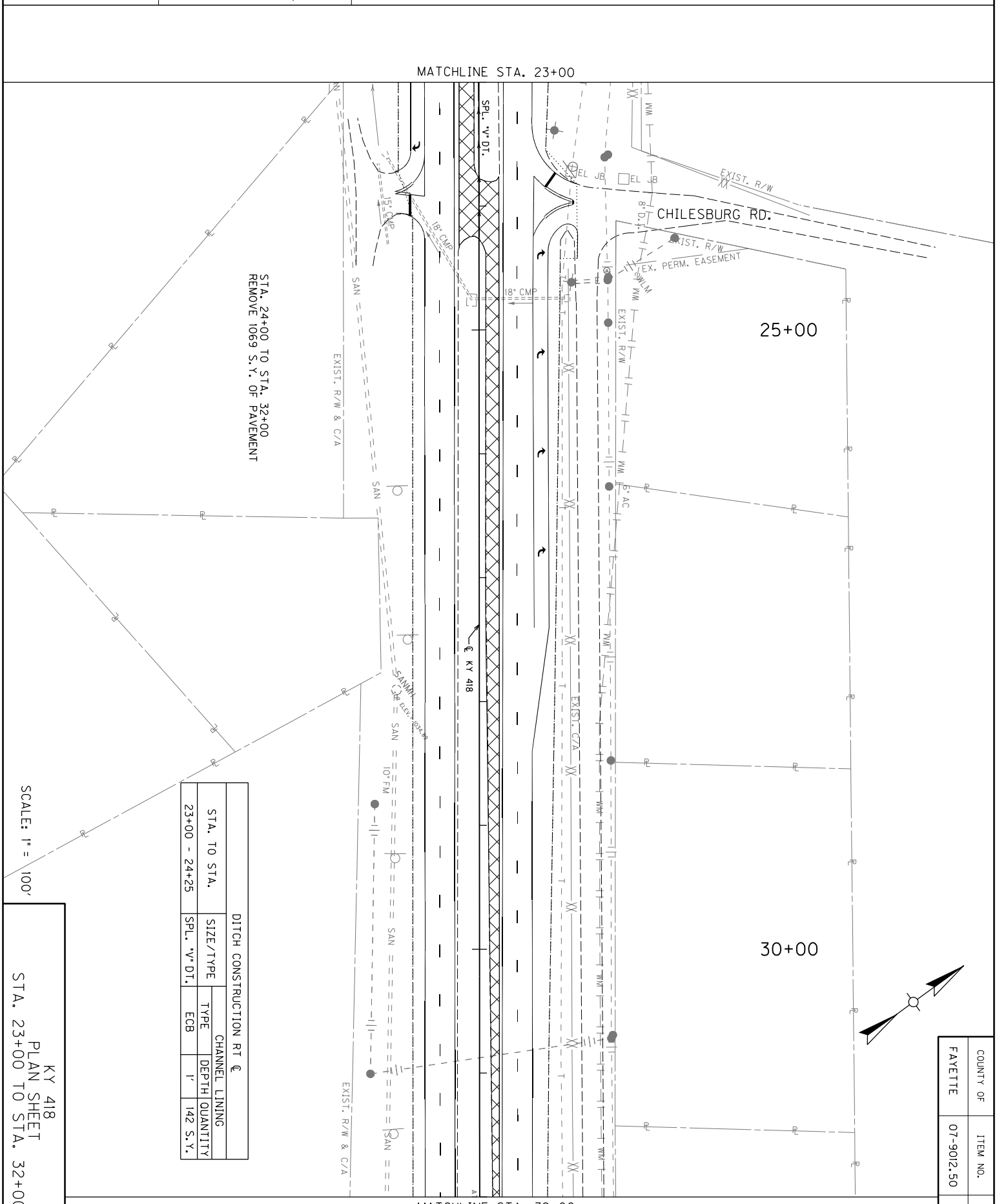
DITCH CONSTRUCTION MEDIAN ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
14+00 - 16+70	SPL. "V" DT.	ECB	1'	307 S.Y.
16+80 - 19+23	SPL. "V" DT.	ECB	1'	329 S.Y.
20+16 - 23+00	SPL. "V" DT.	ECB	1'	384 S.Y.

SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 14+00 TO STA. 23+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN.11.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PLAN_12.DGN



SCALE: 1" = 100'

DITCH CONSTRUCTION RT ℄

STA. TO STA.	SIZE/TYPE	CHANNEL LINING	
		TYPE	DEPTH	QUANTITY
23+00 - 24+25	SPL. "V" DT.	ECB	1'	142 S.Y.

KY 418
PLAN SHEET
STA. 23+00 TO STA. 32+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R14

Contract ID: 254301
Page 227 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R15

STA. 32+00 TO STA. 34+90
REMOVE 92 S.Y. OF PAVEMENT

STA. 36+86 TO STA. 37+39
REMOVE 69 S.Y. OF PAVEMENT

STA. 37+16 TO STA. 37+59
CONST. 60 LF OF LANE SEPARATOR
CURB (PEXCO FG 300)

35+00

40+00

MATCHLINE STA. 32+00

MATCHLINE STA. 41+00

EXIST. R/W

EXIST. C/A

36" RCP

36" RCP

24" RCP

±85.52
14.49

+38.60
14.44

℄ KY 418

HENS BOONESBORO RD.

+59.26
27.78

+98.98
17.43

+13.44
17.32

18" CMP

18" CMP

15" RCP

SAN

EXIST. R/W & C/A

10" FM

CWM

EXIST. R/W & C/A

SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 32+00 TO STA. 41+00

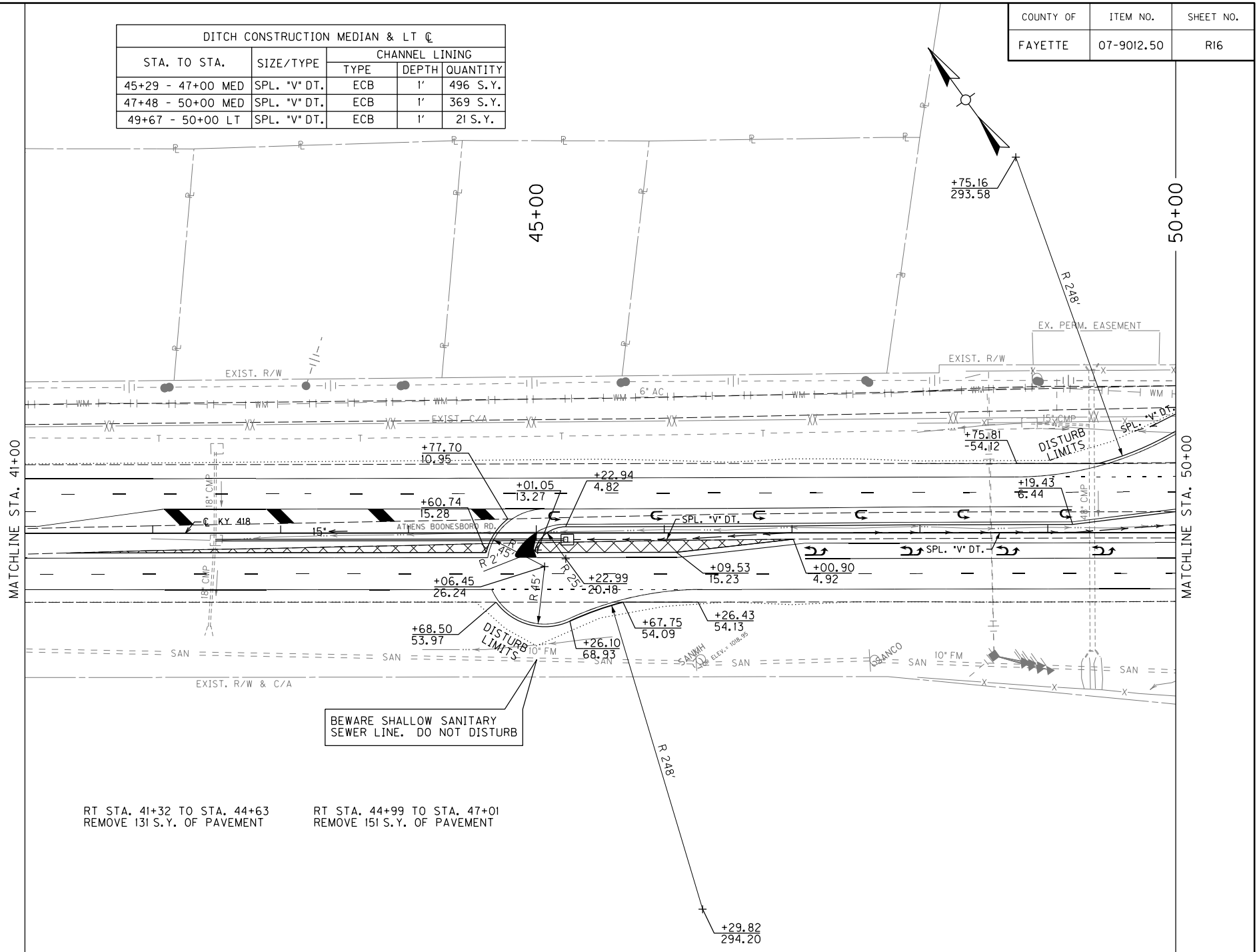
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USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 228 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R16

DITCH CONSTRUCTION MEDIAN & LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
45+29 - 47+00 MED	SPL. "V" DT.	ECB	1'	496 S.Y.
47+48 - 50+00 MED	SPL. "V" DT.	ECB	1'	369 S.Y.
49+67 - 50+00 LT	SPL. "V" DT.	ECB	1'	21 S.Y.



RT STA. 41+32 TO STA. 44+63
REMOVE 131 S.Y. OF PAVEMENT

RT STA. 44+99 TO STA. 47+01
REMOVE 151 S.Y. OF PAVEMENT

SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 41+00 TO STA. 50+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_14.DGN

Contract ID: 254301
Page 229 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R17

DITCH CONSTRUCTION MEDIAN ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
50+00 - 50+15	SPL. "V" DT.	ECB	1'	26 S.Y.

STA. 50+52 TO STA. 59+00
REMOVE 919 S.Y. OF PAVEMENT

STA. 50+25 TO STA. 50+77
CONST. 71 LF OF LANE SEPARATOR
CURB (PEXCO FG 300)

50+00

55+00

MATCHLINE STA. 50+00

MATCHLINE STA. 59+00

PC 51+83.24

PI 57+64.33

DISTURB LIMITS

EXIST. R/W & C/A

6" DI

WM

SAN

10" FM

SANMH

℄ KY 418

SPL. "V" DT.

MP

POST

+00.40
-16.35

+43.96
83.13

+26.28
32.11

+77.94
16.39

+00.00
15.46

+55.06
15.15

+51.84
15.46

STA. 52+55 TO STA. 59+00
REMOVE 521 S.Y. OF PAVEMENT

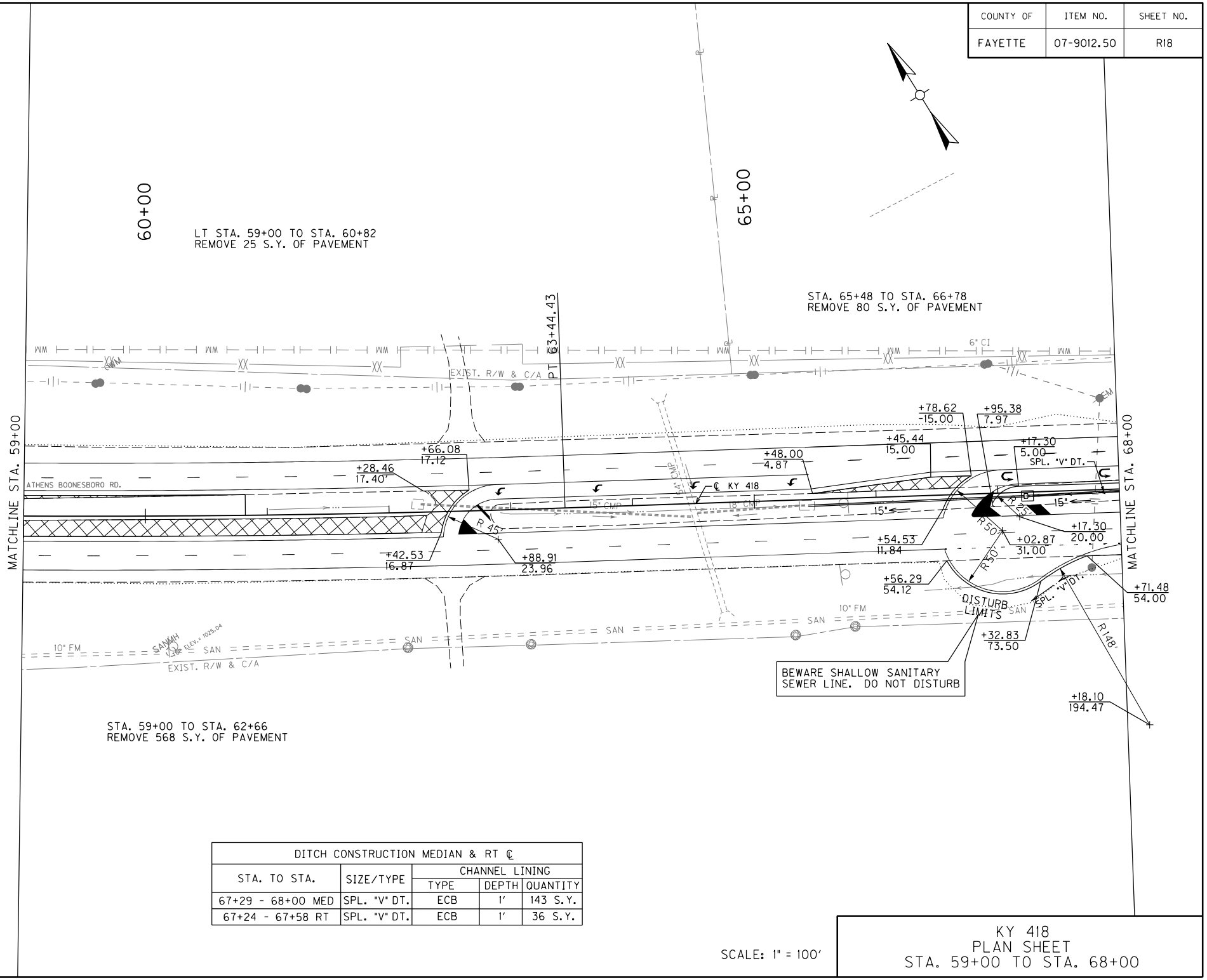
SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 50+00 TO STA. 59+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_15.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301 Page 230 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R18



DITCH CONSTRUCTION MEDIAN & RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
67+29 - 68+00 MED	SPL. "V" DT.	ECB	1'	143 S.Y.
67+24 - 67+58 RT	SPL. "V" DT.	ECB	1'	36 S.Y.

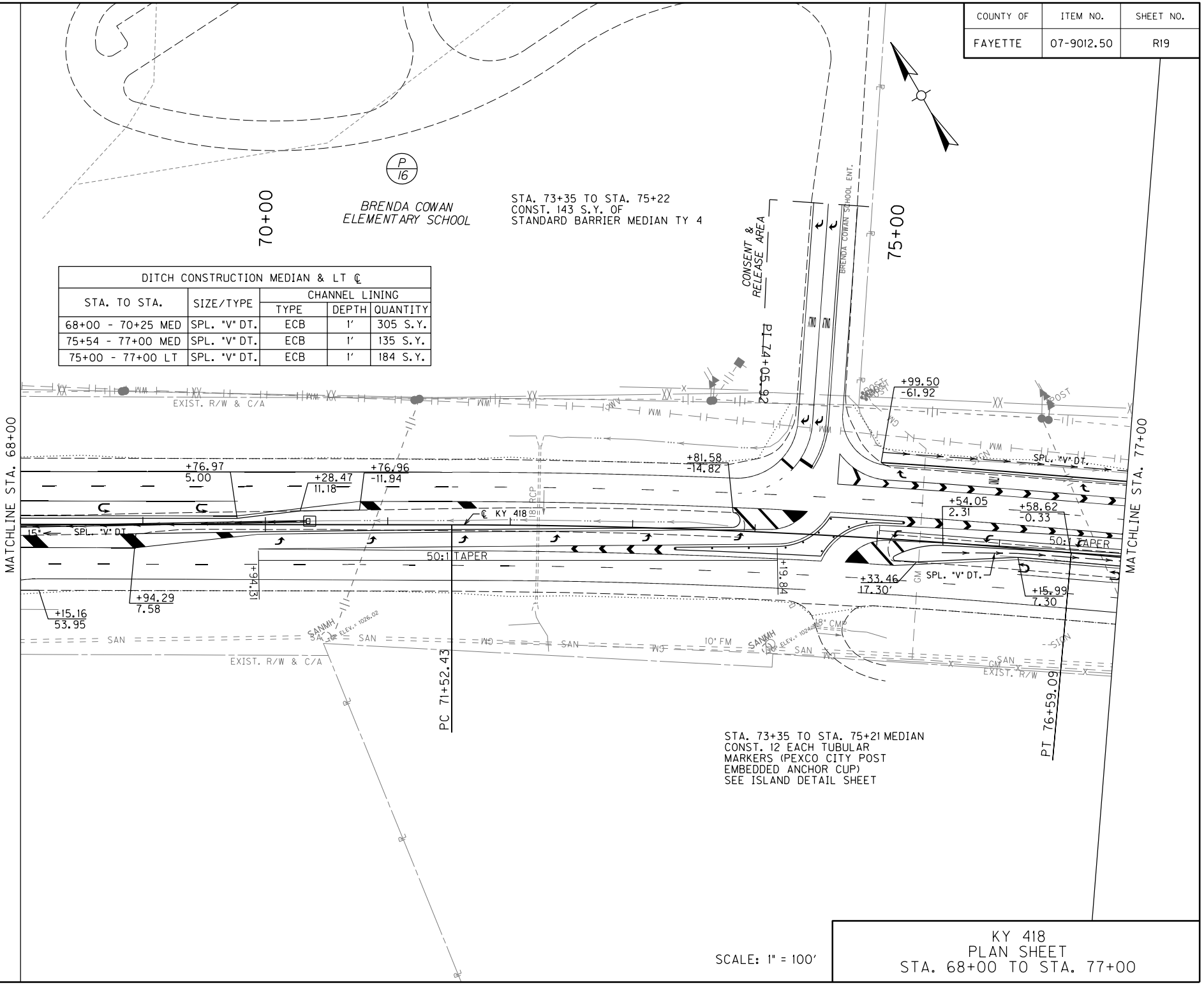
SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 59+00 TO STA. 68+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_16.DGN

Contract ID: 254301
Page 231 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R19



DITCH CONSTRUCTION MEDIAN & LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
68+00 - 70+25 MED	SPL. "V" DT.	ECB	1'	305 S.Y.
75+54 - 77+00 MED	SPL. "V" DT.	ECB	1'	135 S.Y.
75+00 - 77+00 LT	SPL. "V" DT.	ECB	1'	184 S.Y.

SCALE: 1" = 100'

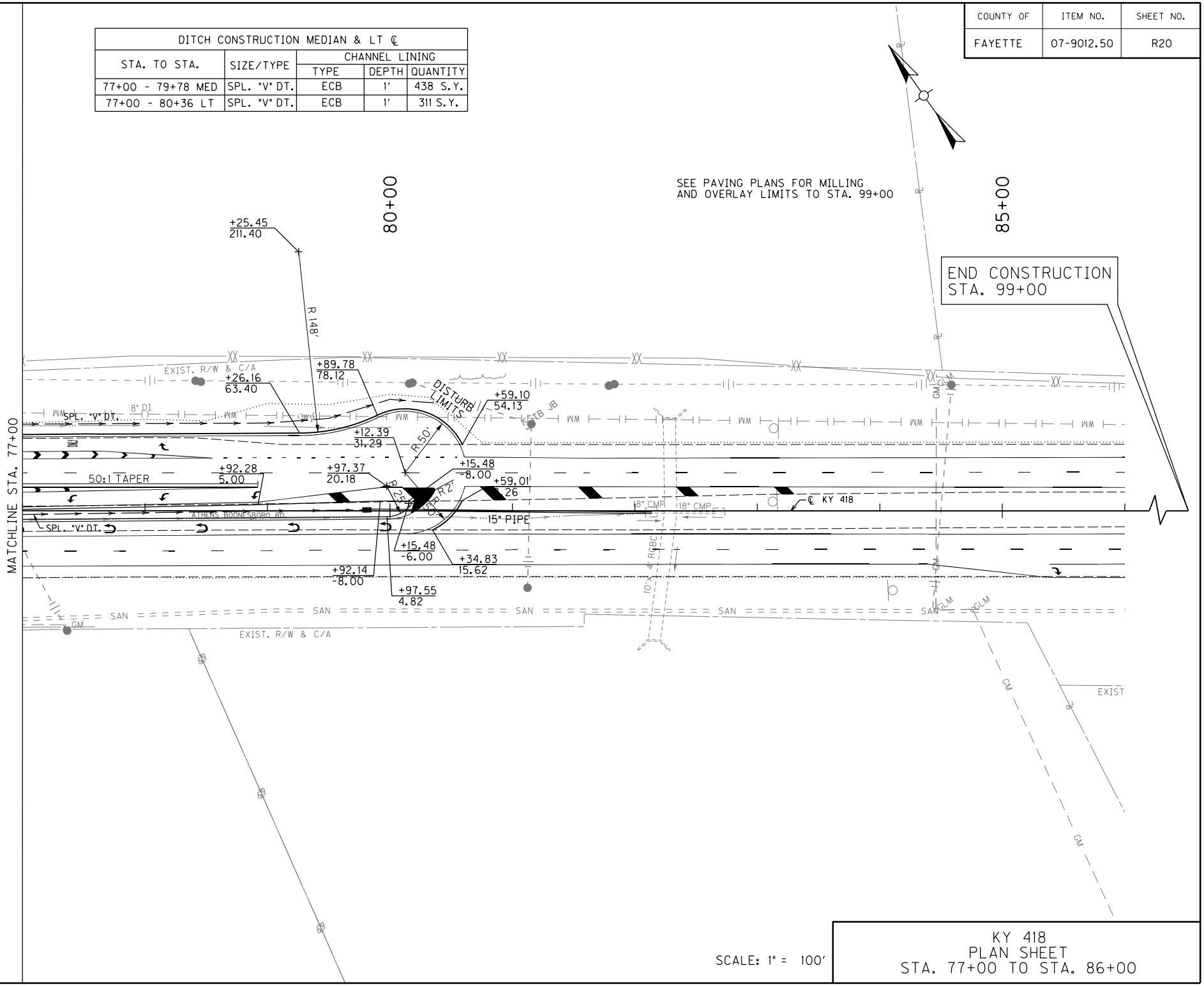
KY 418
PLAN SHEET
STA. 68+00 TO STA. 77+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN17.DGN

Contract ID: 254301
Page 232 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R20

DITCH CONSTRUCTION MEDIAN & LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
77+00 - 79+78 MED	SPL. "V" DT.	ECB	1'	438 S.Y.
77+00 - 80+36 LT	SPL. "V" DT.	ECB	1'	311 S.Y.



SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 77+00 TO STA. 86+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_18.DGN

Contract ID: 254301
Page 233 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R21

MATCHLINE OLD RICHMOND RD.

DO NOT DISTURB WATER LINE WITH PAVEMENT REMOVAL

SEE SHEET 9 FOR REMOVAL QUANTITY

LT. STA. 50+58 APHIDS WAY CONST.
7 S.Y. OF SIDEWALK W/ RAMP TYPE 3
W/ 12 S.F. OF DETECTABLE WARNINGS

RT. STA. 50+64 APHIDS WAY CONST.
16 S.Y. OF SIDEWALK W/ RAMP TYPE 3
W/ 30 S.F. OF DETECTABLE WARNINGS

PI STA 52+77.69
D= 45°24'43.59"
C= 28°38'52.40"
T=83.69
L=158.52
R=200.00
E=16.80

PI STA 59+30.46
D= 95°55'08.29"
C= 16°51'06.12"
T=377.07
L=569.19
R=340.00
E=167.72

END CONSTRUCTION STA. 62+50.00

P 36
GREEN PROPERTY HOLDINGS,LLC

DITCH CONSTRUCTION LT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
50+83 OUTLET	6' F.B.	CLASS II	1'	9 TON
50+90 - 52+11	SPL. "V" DT.	TRM 1	-	143 S.Y.
52+45 - 55+50	SPL. "V" DT.	TRM 1	-	646 S.Y.
55+50 - 62+50	SPL. "V" DT.	TRM 1	-	1783 S.Y.

PT 61+22.58

60+00

55+00

LT. STA. 52+29
CONST. RES. ENTRANCE
W/40 L.F. OF 15" ENT. PIPE
1.25" ASPH, SURF. - 63 SY
2" ASPH. BASE - 64 SY
4" CSB - 66 SY

RT. STA. 59+27
CONST. COMM. ENTRANCE
W/51 L.F. OF 15" ENT. PIPE
1.25" ASPH, SURF. - 123 SY
2" ASPH. BASE - 124 SY
6" CSB - 126 SY

RT. STA. 59+17 TO STA. 60+25
REMOVE 203 S.Y. OF PAVEMENT
ALONG OLD RICHMOND RD. AND
GRADE TO DRAIN

PI 52+77.69

PC 55+53.39

APPROX. COMMERCIAL DEVELOPMENT LINE

STA. 50+00.00 APHIDS WAY =
STA. 12+03.96 KY 418

STA. 50+99 TO STA. 51+41
CONST. 32 S.Y. OF STANDARD
BARRIER MEDIAN TY. 2

FUTURE CONSTRUCTION BY OTHERS

PROP.R/W

TEMP.ESMT.

DISTURB LIMITS

SPL. "V" DT.

℄ APHIDS WAY

35:1 TAPER

50' TAPER

35:1 SHLD. TAPER

I.E. 1024.50

O.E. 1023.56

I.E. 1018.12

O.E. 1017.43

I.E. 1022.71

I.E. 1022.96

+94.15

+40 3.50

+00 3.50

+50

PT 53+52.52

PC 51+94.00

P 37
ANDERSON ACQUISITIONS LLC

RT. STA. 55+41
CONST. COMM. ENTRANCE
1.25" ASPH, SURF. - 138 SY
2" ASPH. BASE - 139 SY
6" CSB - 140 SY

RT. STA. 56+71 TO STA. 57+69
REMOVE 211 S.Y. OF PAVEMENT
ALONG APHIDS WAY AND GRADE
TO DRAIN

SEE PLAN SHEET 12

RT. STA. 51+76
CONST. COMM. ENTRANCE
W/69 L.F. OF 15" ENT. PIPE
1.25" ASPH, SURF. - 138 SY
2" ASPH. BASE - 139 SY
6" CSB - 141 SY

DITCH CONSTRUCTION RT ℄				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
50+83 INLET	6' F.B.	CLASS II	1'	11 TON
50+85 - 51+00	2' F.B.	CLASS II	1'	12 TON
51+00 - 51+27	SPL. "V" DT.	TRM 1	-	48 S.Y.
51+96 - 55+10	SPL. "V" DT.	TRM 1	-	805 S.Y.
55+64 - 58+20	SPL. "V" DT.	TRM 1	-	354 S.Y.
58+97 - 59+06	SPL. "V" DT.	ECB	1'	41 S.Y.
59+45 - 60+50	SPL. "V" DT.	ECB	1'	104 S.Y.

SEE CAP NOTES FOR DESCRIPTION OF LIMITS OUTSIDE OF RIGHT-OF-WAY ON P37

SEE RIGHT-OF-WAY PLANS FOR CALLOUTS

SCALE: 1" = 100'

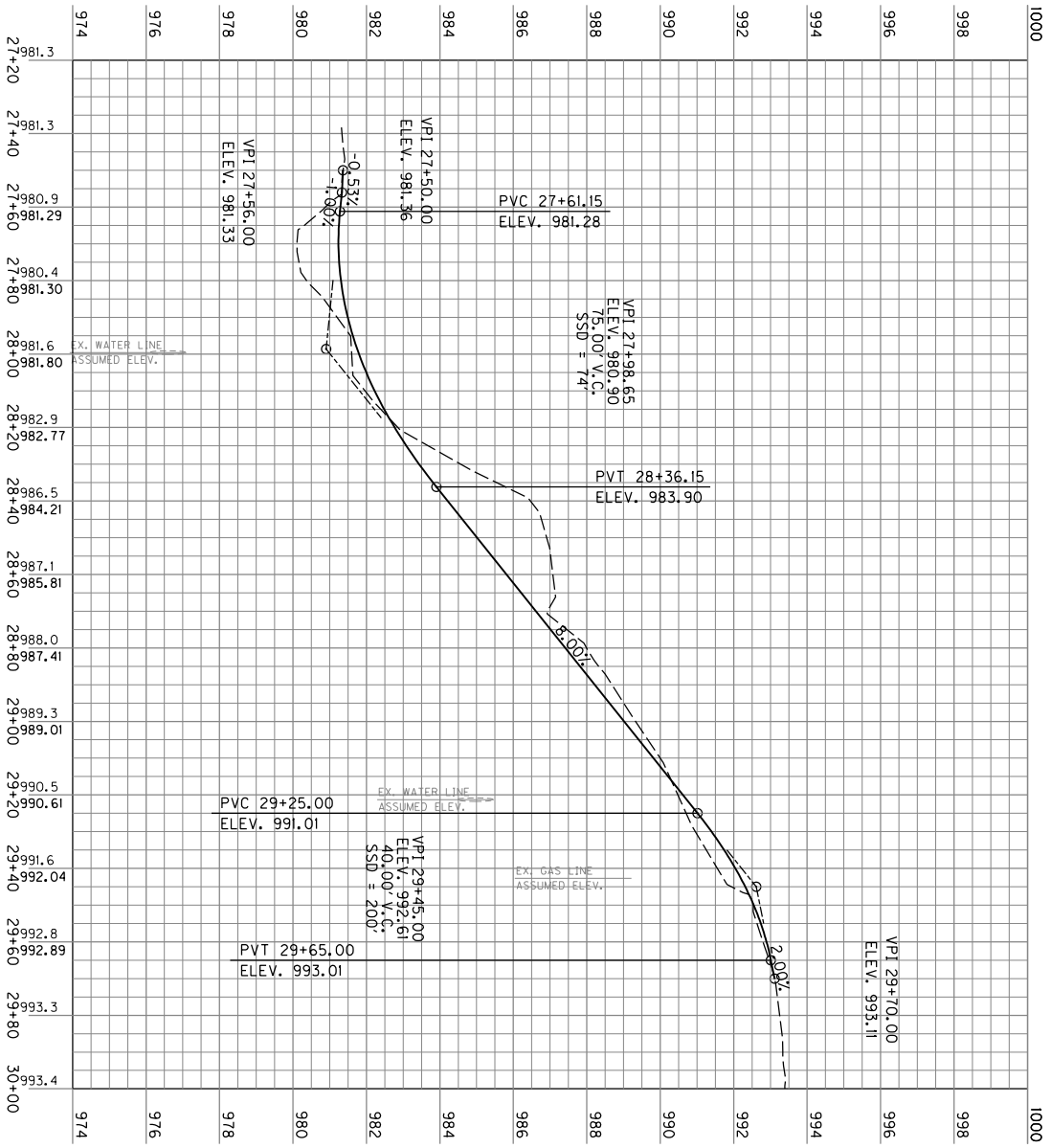
PI 59+30.46

MATCHLINE OLD RICHMOND RD.

APHIDS WAY PLAN SHEET STA. 51+00 TO STA. 62+50

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PLAN_19.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\NEW PARK ENTRANCE(ELLERSLIE)PROFILE.DGN



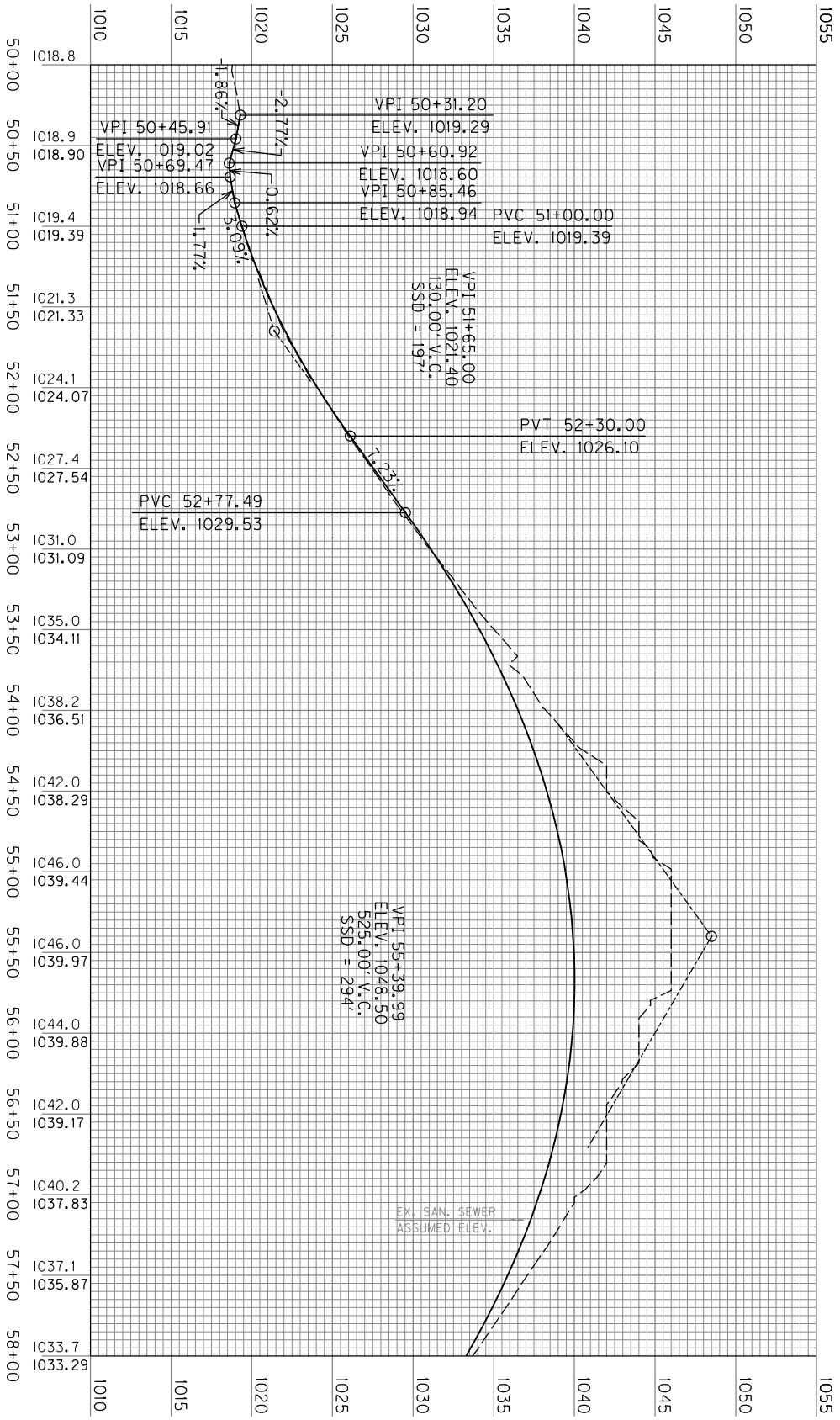
NOTE: BEWARE OVERHEAD UTILITY LINES.

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

JACOBSON PARK ENTRANCE
PROFILE SHEET
STA. 27+20 TO STA. 30+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R22

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\APHIDS PROFILE.DGN

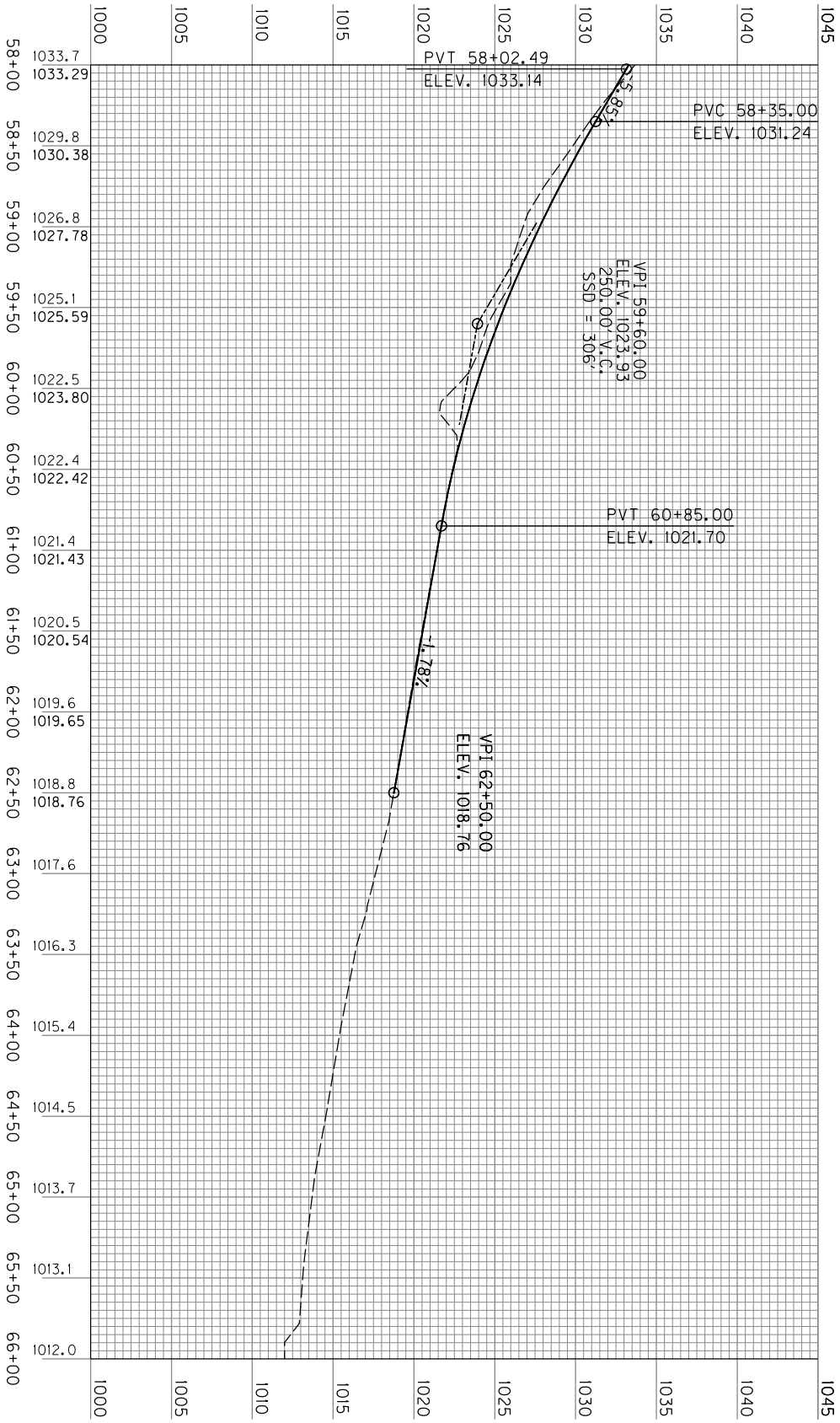


SCALE: 1" = 100 HORIZONTAL
1" = 10 VERTICAL

APHIDS WAY
PROFILE SHEET
STA. 50+00 TO STA. 58+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R23

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\APHIDS PROFILE.DGN

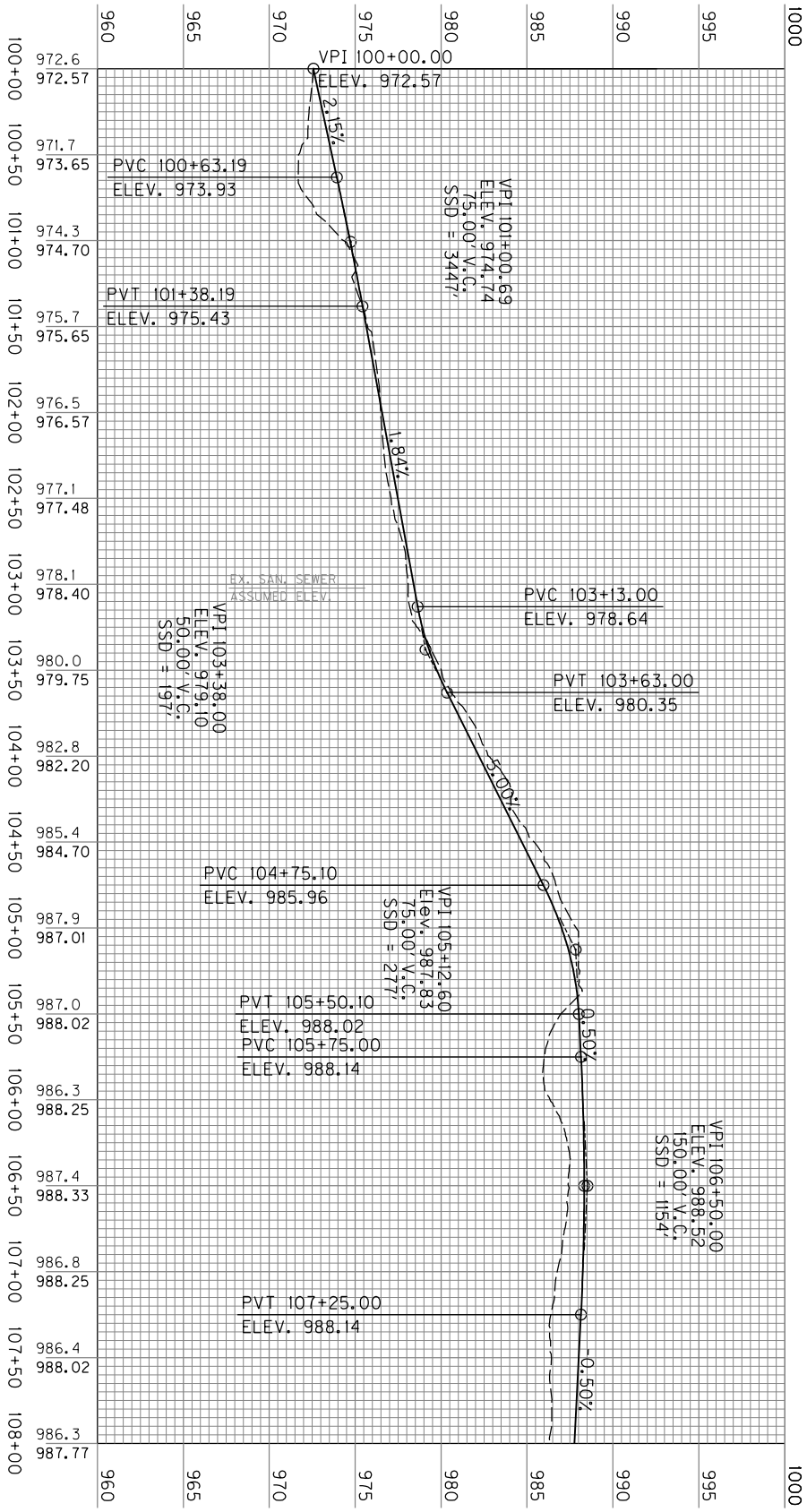


SCALE: 1" = 100 HORIZONTAL
1" = 10 VERTICAL

APHIDS WAY
PROFILE SHEET
STA. 58+00 TO STA. 66+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R24

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\SUP PROFILE.DGN

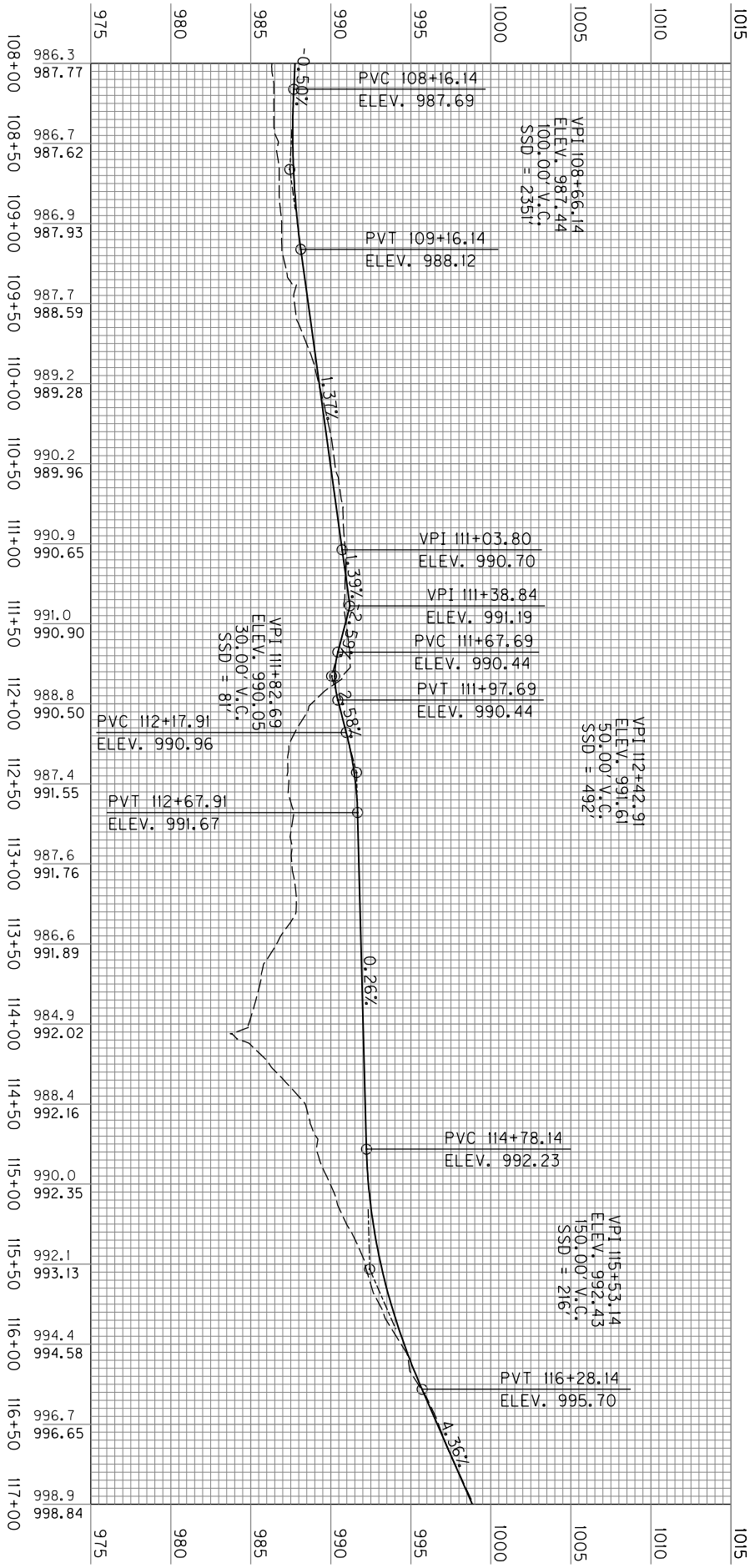


SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

SHARED USE PATH
PROFILE SHEET
STA. 100+00 TO STA. 108+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R25

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\SUP PROFILE.DGN

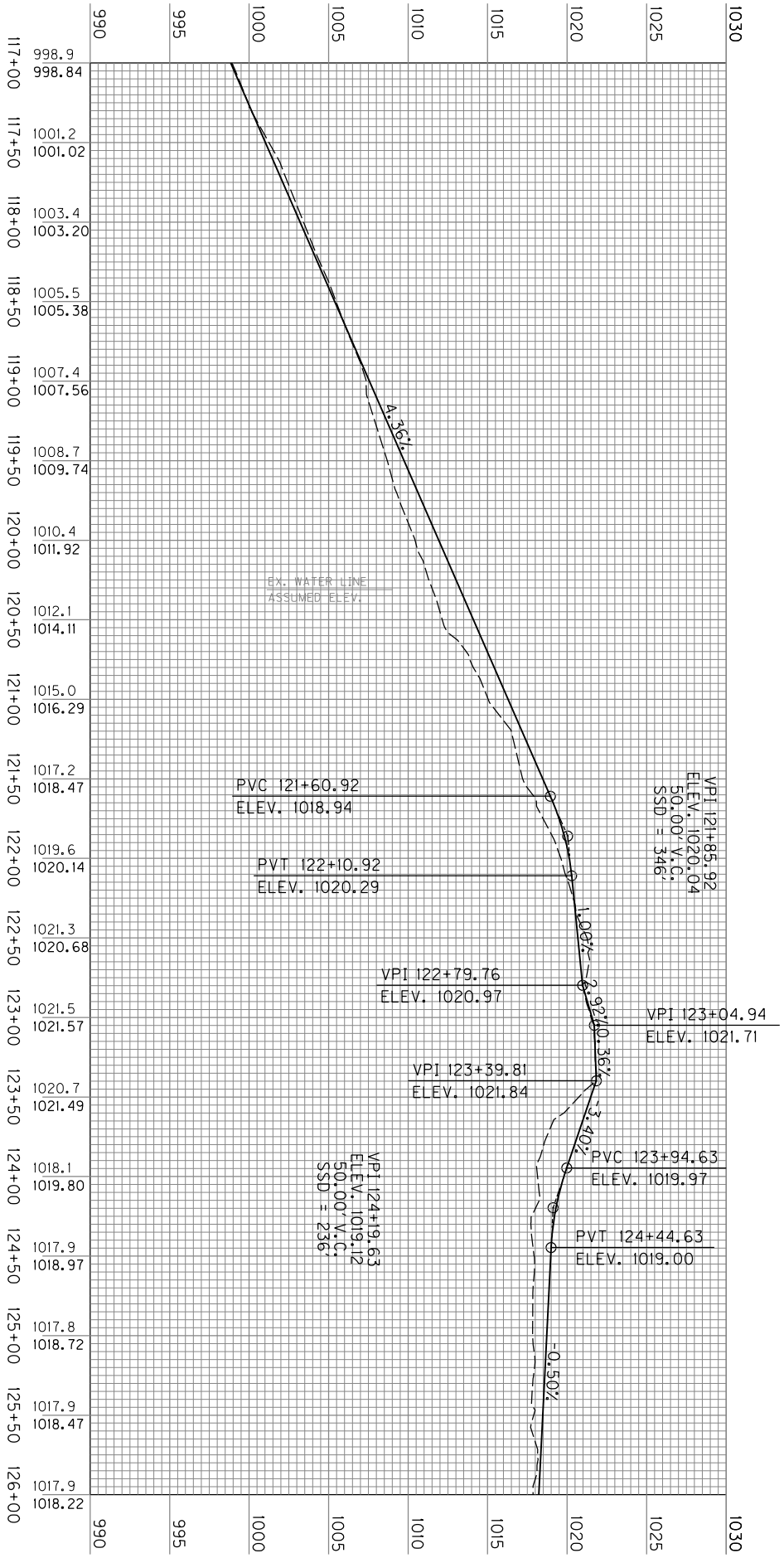


SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

SHARED USE PATH
PROFILE SHEET
STA. 108+00 TO STA. 117+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R26

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SUP PROFILE.DGN

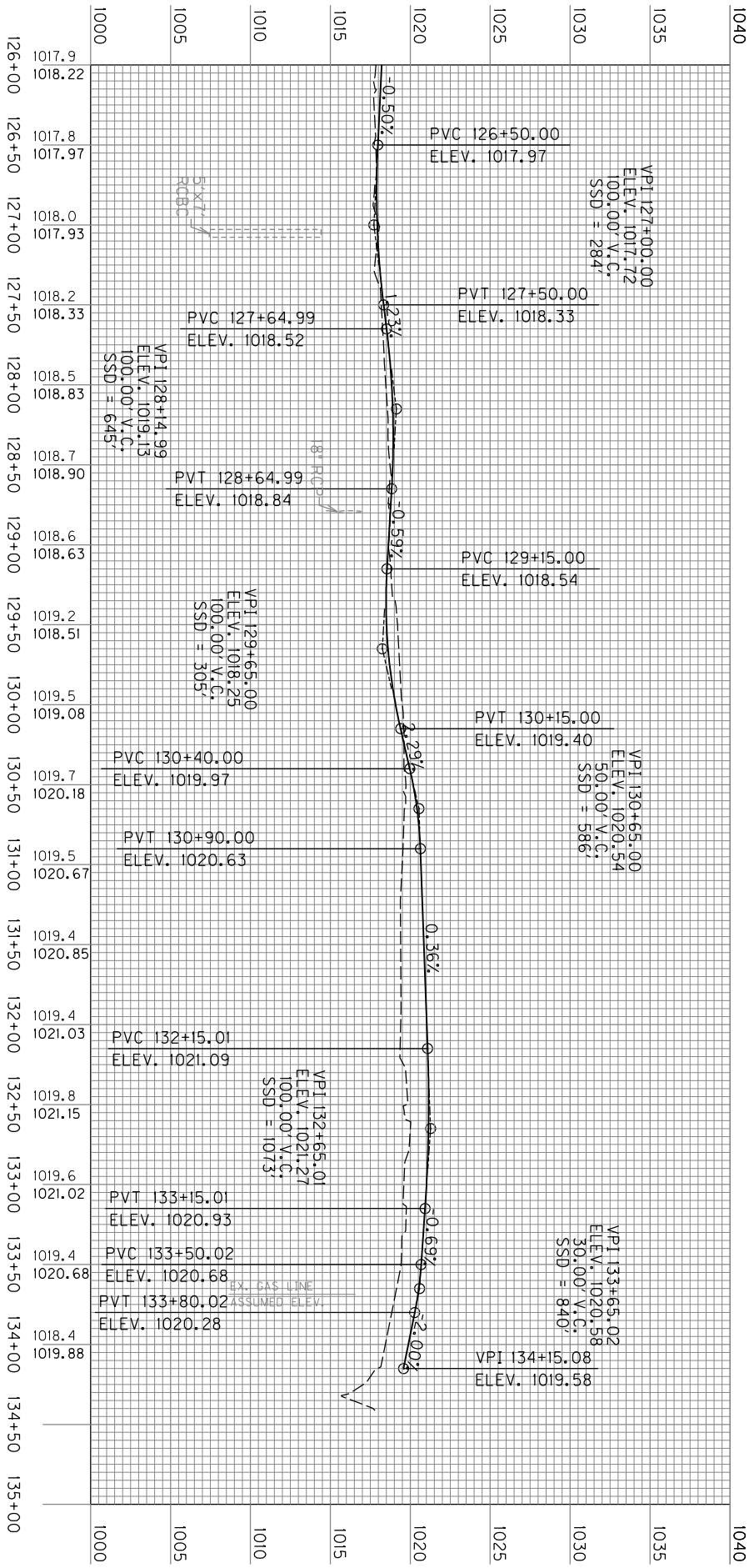


SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

SHARED USE PATH
PROFILE SHEET
STA. 117+00 TO STA. 126+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R27

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SUP PROFILE.DGN

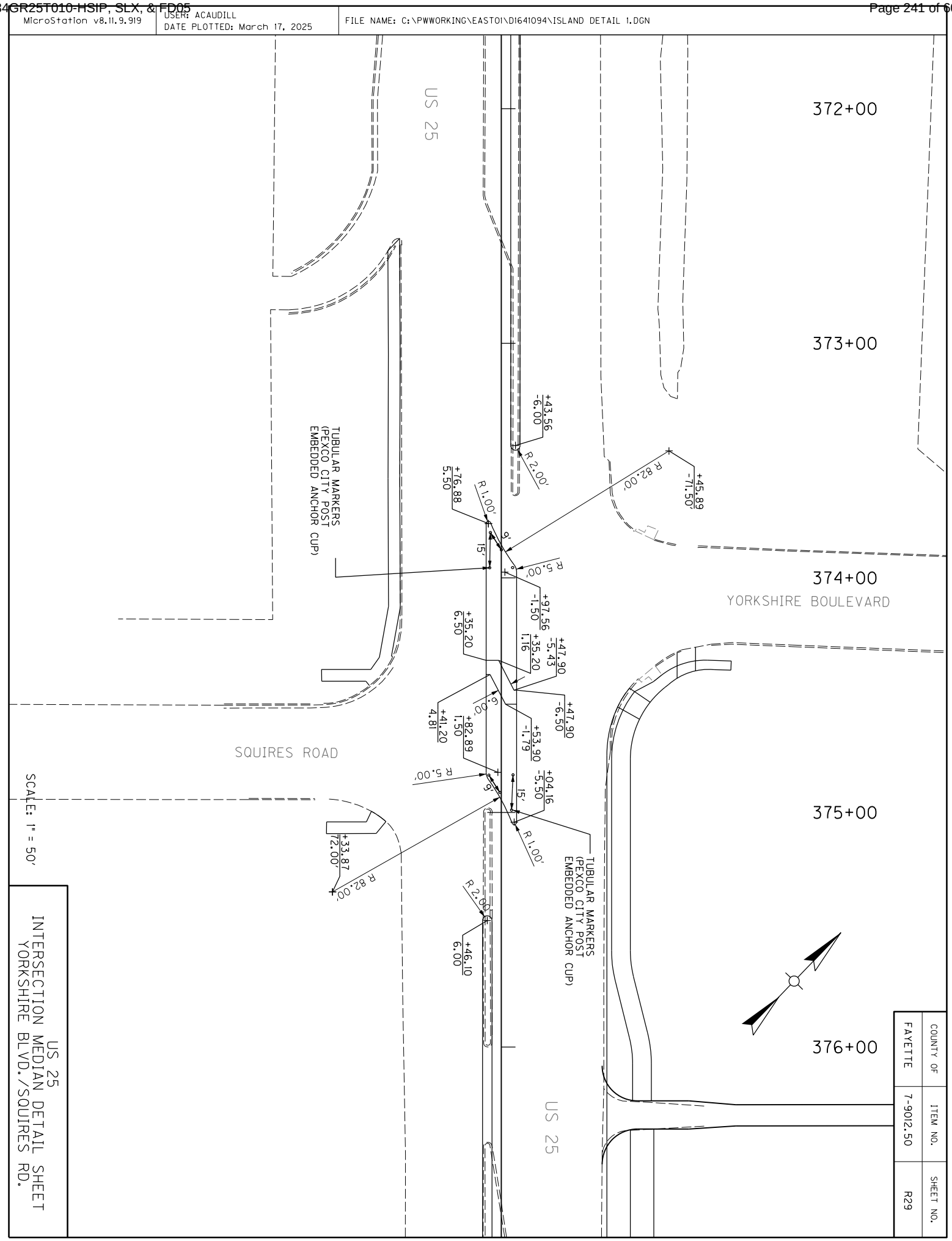


SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

SHARED USE PATH
PROFILE SHEET
STA. 126+00 TO STA. 135+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R28

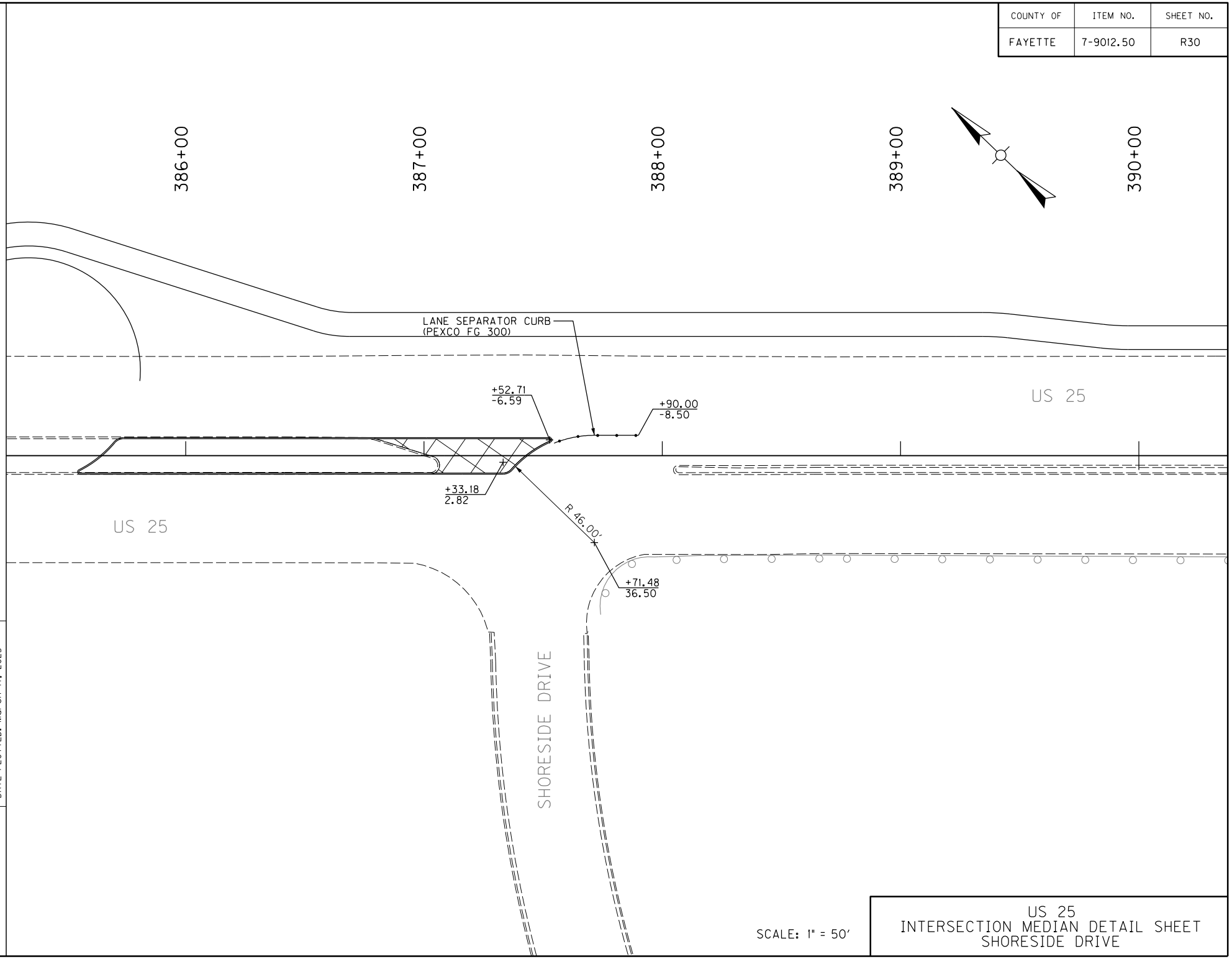
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\ISLAND DETAIL 1.DGN



US 25
INTERSECTION MEDIAN DETAIL SHEET
YORKSHIRE BLVD./SQUIRES RD.

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-902.50	R29

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R30



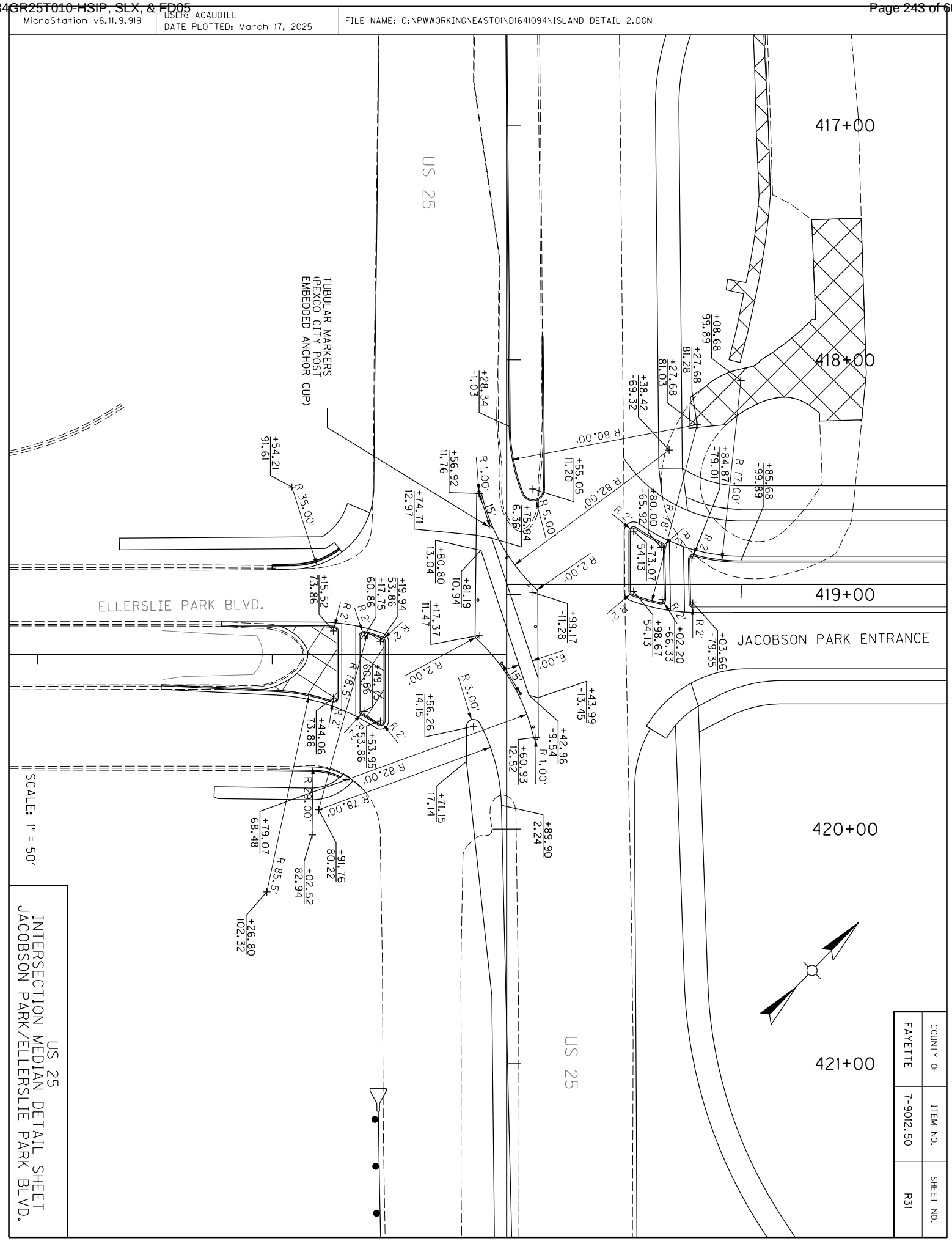
SCALE: 1" = 50'

US 25
INTERSECTION MEDIAN DETAIL SHEET
SHORESIDE DRIVE

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\ISLAND DETAIL 1.2.DGN

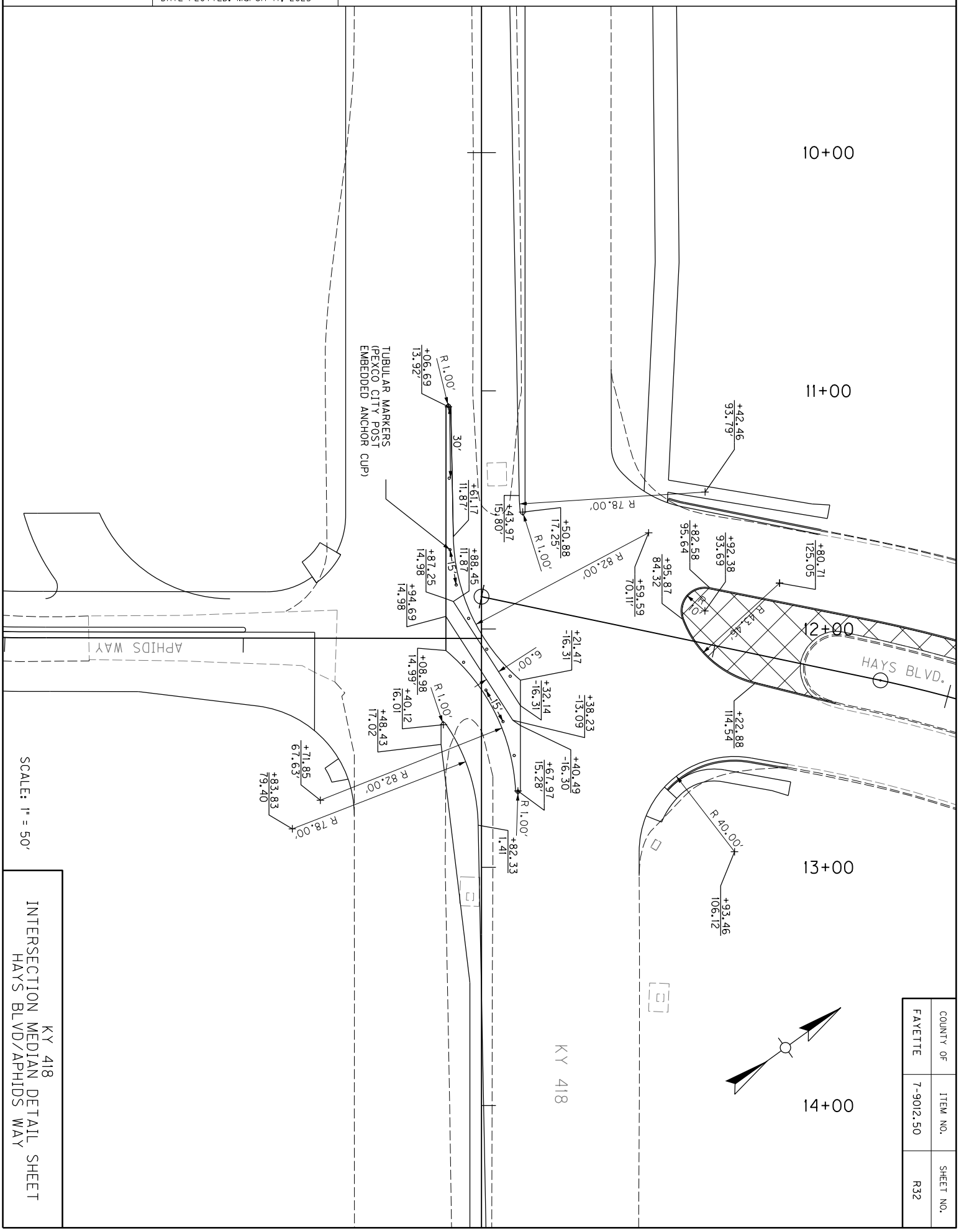
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\ISLAND DETAIL 2.DGN



US 25 INTERSECTION MEDIAN DETAIL SHEET
JACOBSON PARK/ELLERSLIE PARK BLVD.

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-902.50	R31

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\ISLAND DETAIL 3.DGN



KY 418
INTERSECTION MEDIAN DETAIL SHEET
HAYS BLVD/APHIDS WAY

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R32

Contract ID: 254301
Page 245 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R33

35+00 36+00 37+00 38+00 39+00 40+00

ATHENS BOONESBORO SERVICE RD

LANE SEPARATOR CURB
(PEXCO FG 300)

+59.29
-17.22

KY 418

R 45.00'

+15.57
16.99

+59.26
27.78

KY 418

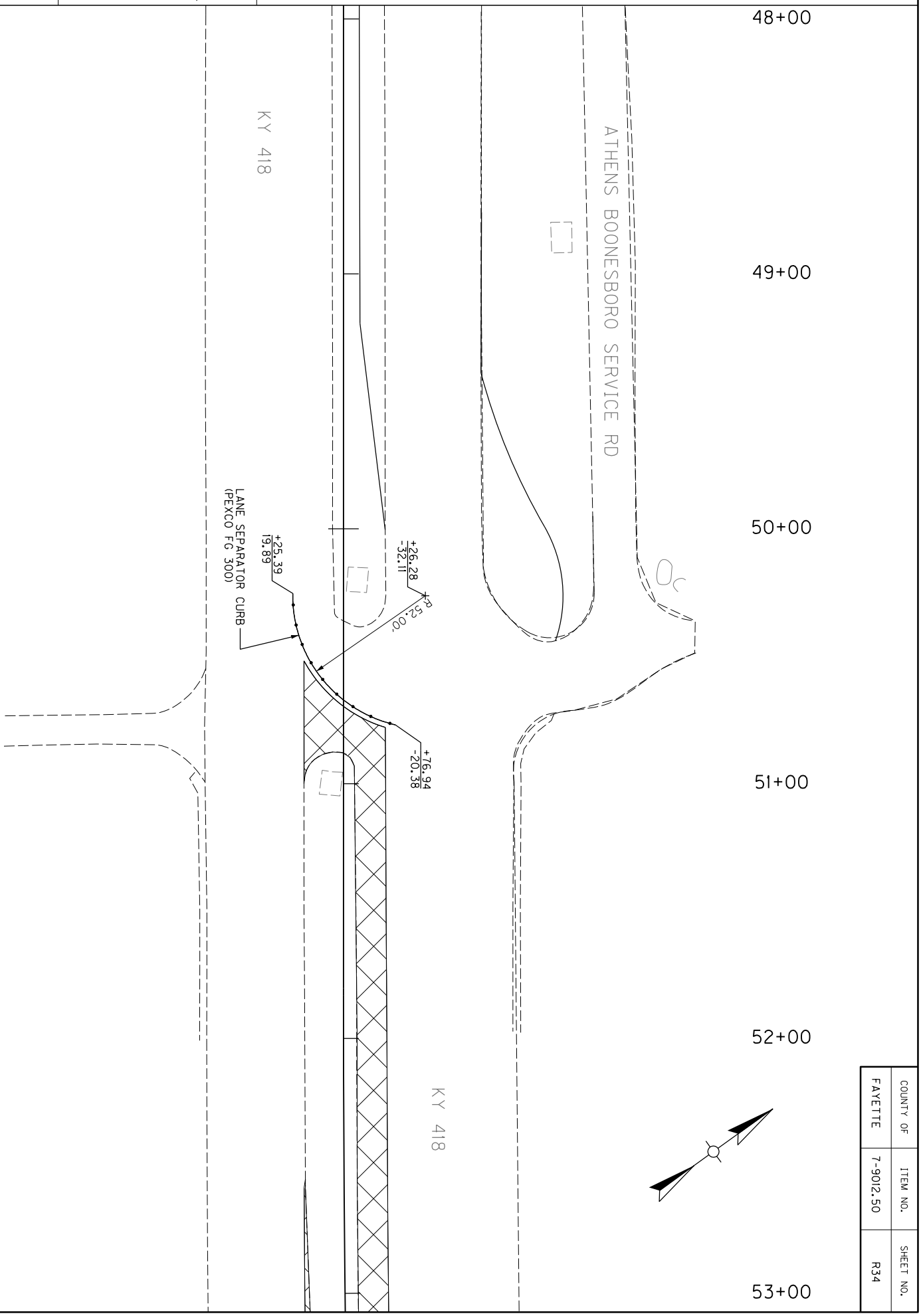
SCALE: 1" = 50'

KY 418
INTERSECTION MEDIAN DETAIL SHEET
STA. 37+25

FILE NAME: C:\PWWORKING\EASTON\D1641094\ISLAND DETAIL 3.2.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\ISLAND DETAIL 3.3.DGN

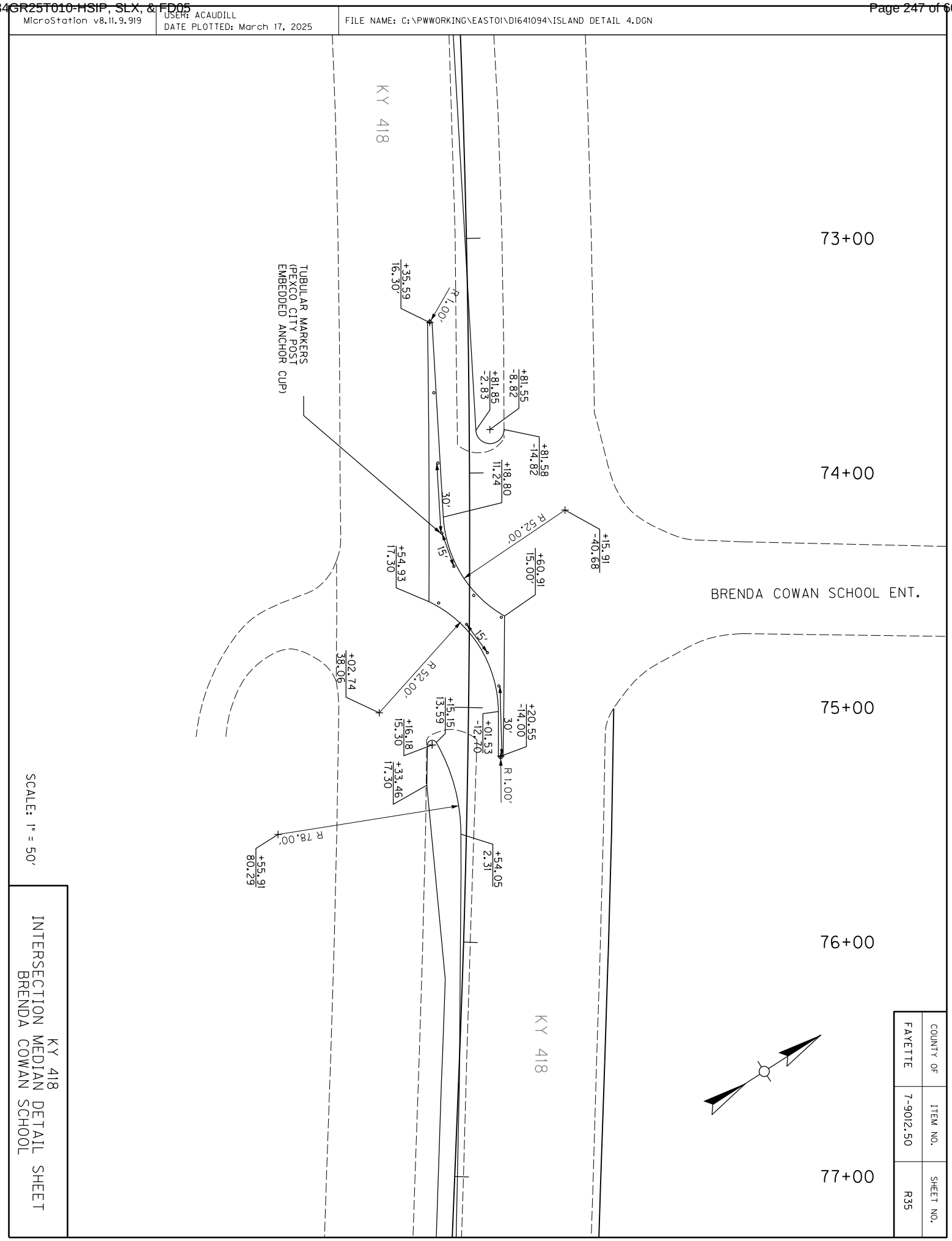


SCALE: 1" = 50'

KY 418
INTERSECTION MEDIAN DETAIL SHEET
ATHENS SERVICE ROAD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R34

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\ISLAND DETAIL 4.DGN



SCALE: 1" = 50'

KY 418
INTERSECTION MEDIAN DETAIL SHEET
BRENDA COWAN SCHOOL

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R35

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R36

GEOMETRIC COORDINATE POINTS US 25 /KY 418

POINT	NAME	NORTH (Y)	EAST (X)
POB	347+12.11	3890639.9589	5297056.0114
PC	354+87.86	3890055.6659	5297566.2991
PI	357+71.17	3889842.2778	5297752.6600
PT	360+54.37	3889638.3598	5297949.3383
PC	391+43.86	3887414.6410	5300094.1088
PI	394+84.69	3887169.3217	5300330.7186
PT	398+25.47	3886917.0749	5300559.9287
PC	423+30.50	3885063.1228	5302244.5661
PI	429+27.36	3884621.3855	5302645.9612
EQNBK	430+63.68	3884553.4798	5302770.9593
EQNAHD	0+00.00	3884553.4798	5302770.9593
PT	4+56.26	3884271.8566	5303129.7786
PC	51+83.24	3881503.7041	5306961.4515
PI	57+64.33	3881163.4140	5307432.4805
PT	63+44.43	3880872.5148	5307935.5145
PC	71+52.43	3880468.0203	5308634.9818
PI	74+05.92	3880341.1203	5308854.4220
PT	76+59.09	3880195.3383	5309061.7989
POE	136+67.61	3876739.8517	5313977.2772

GEOMETRIC COORDINATE POINTS JACOBSON PARK ENTRANCE

POINT	NAME	NORTH (Y)	EAST (X)
POB	27+00.00	3885586.6776	5302174.1798
POE	30+00.00	3885384.9264	5301952.1516

GEOMETRIC COORDINATE POINTS ELLERSLIE PARK BLVD.

POINT	NAME	NORTH (Y)	EAST (X)
POB	30+00.00	3885362.7250	5301972.3282
PC	32+76.97	3885176.4634	5301767.3465
PI	33+99.96	3885093.7528	5301676.3230
PT	35+09.61	3884970.8228	5301672.5118
POE	37+62.13	3884718.4218	5301664.6867

FAYETTE COUNTY
034-GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\COORDINATE CONTROL TABLE.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

US 25 / KY 418
COORDINATE CONTROL SHEET

Contract ID: 254301 Page 249 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R37

GEOMETRIC COORDINATE POINTS HAYS BLVD.

POINT	NAME	NORTH (Y)	EAST (X)
POB	100+00.00	3884115.8994	5304342.2145
PC	102+18.17	3884087.8965	5304125.8536
PI	103+78.56	3884067.3089	5303966.7863
PT	105+28.96	3883959.3800	5303848.1372
POE	107+00.00	3883844.2901	5303721.6157

GEOMETRIC COORDINATE POINTS APHIDS WAY

POINT	NAME	NORTH (Y)	EAST (X)
POB	50+00.00	3883834.0005	5303735.8585
PC	51+94.00	3883676.9173	5303622.0092
PI	52+77.69	3883609.1563	5303572.8981
PT	53+52.52	3883596.5636	5303490.1643
PC	55+53.39	3883566.3386	5303291.5865
PI	59+30.46	3883509.5990	5302918.8081
PT	61+22.58	3883144.6592	5303013.6868
POE	67+90.47	3882498.2531	5303181.7423

COORDINATE CONTROL POINTS

POINT	DESCRIPTION	State Plane Coordinates			STATION and OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)	
M-1	RW MONUMENT	3888929.260	5298528.696	994.77	STA. 369+67, 75.3' RT
M-2	RW MONUMENT	3886014.960	5301279.392	991.22	STA. 409+77, 74.2' RT
M-3	RW MONUMENT	3885384.594	5302196.741	983.61	STA. 420+60.4, 180.8' LT
M-4	RW MONUMENT	3884724.012	5302689.907	1016.45	STA. 428+89.1, 74.7' LT

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.

BEFORE YOU DIG

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

US 25 / KY 418
COORDINATE CONTROL SHEET

FAYETTE COUNTY
034-GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\COORDINATE CONTROL TABLE.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	R38

GEOMETRIC COORDINATE POINTS
SHARED USE PATH

POINT	NAME	NORTH (Y)	EAST (X)
POB	100+00.00	3886276.9218	5301260.2632
PC	100+18.22	3886265.8857	5301274.7556
PI	100+35.44	3886255.4537	5301288.4547
PT	100+51.38	3886238.7987	5301292.8257
PC	100+61.04	3886229.4580	5301295.2770
PI	100+98.42	3886193.3043	5301304.7651
PT	101+34.30	3886165.8301	5301330.1085
PC	102+04.00	3886114.6011	5301377.3643
PI	102+23.42	3886100.3262	5301390.5321
PT	102+42.63	3886089.8755	5301406.9011
PC	103+04.28	3886056.6977	5301458.8677
PI	103+21.68	3886047.3334	5301473.5350
PT	103+38.93	3886034.8598	5301485.6690
PC	106+21.62	3885832.2283	5301682.7826
PI	106+47.74	3885813.5017	5301700.9992
PT	106+73.35	3885789.7192	5301711.8120
PC	107+08.24	3885757.9537	5301726.2544
PI	107+35.82	3885732.8496	5301737.6681
PT	107+62.79	3885713.4465	5301757.2643
PC	108+55.92	3885647.9173	5301823.4459
PI	108+75.39	3885634.2177	5301837.2820
PT	108+94.38	3885616.3276	5301844.9672
PC	109+01.76	3885609.5473	5301847.8799
PI	109+19.01	3885593.7015	5301854.6870
PT	109+35.92	3885581.0511	5301866.4086
PI	111+06.42	3885455.9820	5301982.2949
PI	111+94.30	3885395.6843	5302046.2152
PC	113+09.10	3885313.4240	5302126.2988
PI	113+64.33	3885273.8517	5302164.8241
PT	114+16.87	3885259.6562	5302218.1970
PC	114+31.10	3885255.9986	5302231.9490
PI	114+75.32	3885244.6348	5302274.6755
PT	115+17.09	3885211.9138	5302304.4083
PC	117+59.86	3885032.2457	5302467.6679
PI	117+65.10	3885028.3676	5302471.1918
PT	117+70.33	3885024.2531	5302474.4365
PC	121+79.41	3884703.0360	5302727.7468
PI	121+93.82	3884691.7253	5302736.6663
PT	122+08.13	3884682.3188	5302747.5753
PI	122+79.67	3884635.6037	5302801.7520
PI	123+39.66	3884588.7775	5302839.2469
PI	128+21.85	3884295.0337	5303221.6351
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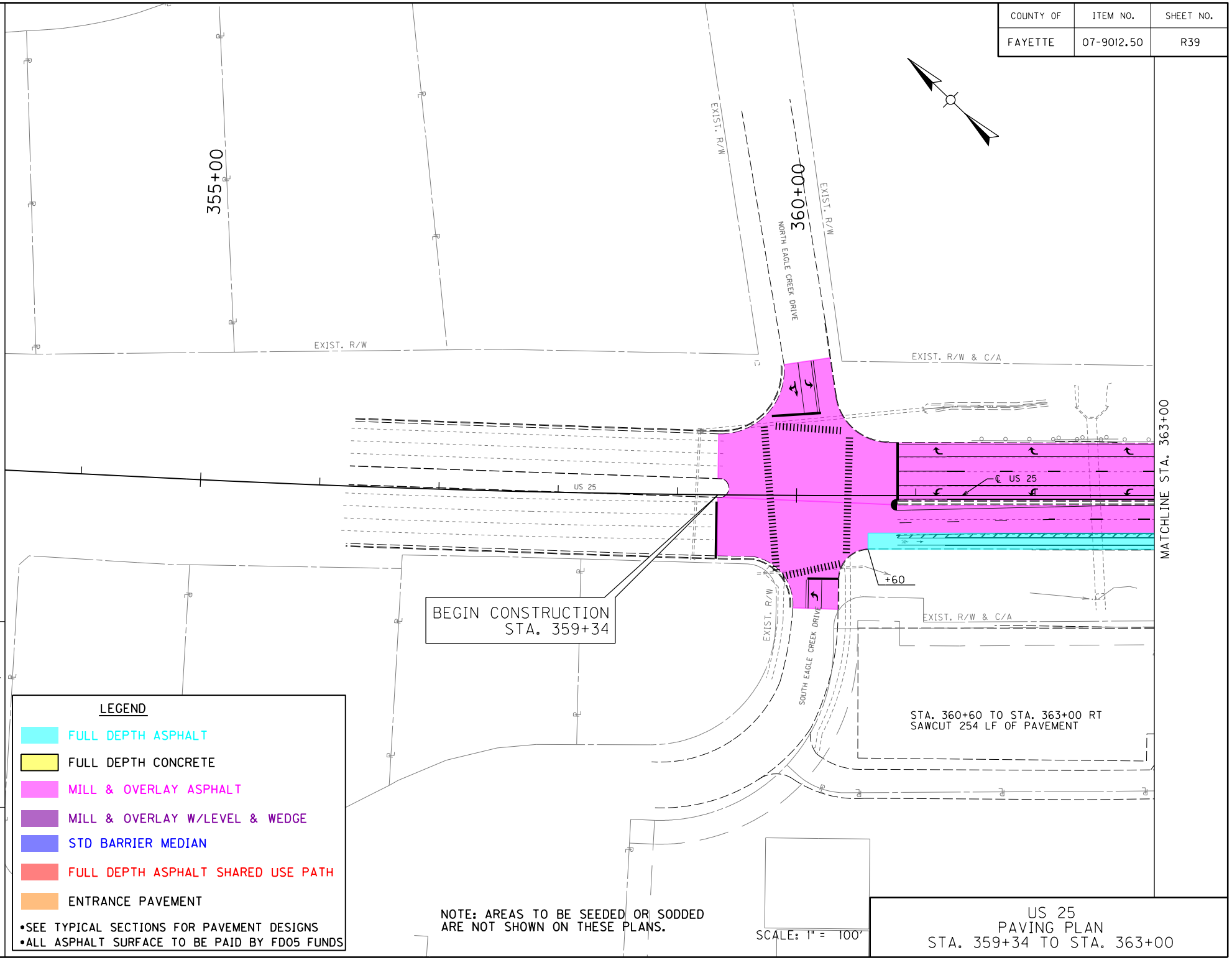
FAYETTE COUNTY
034-CR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\COORDINATE CONTROL TABLE.DGN

US 25 / KY 418
COORDINATE CONTROL SHEET

Contract ID: 254301 Page 251 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R39

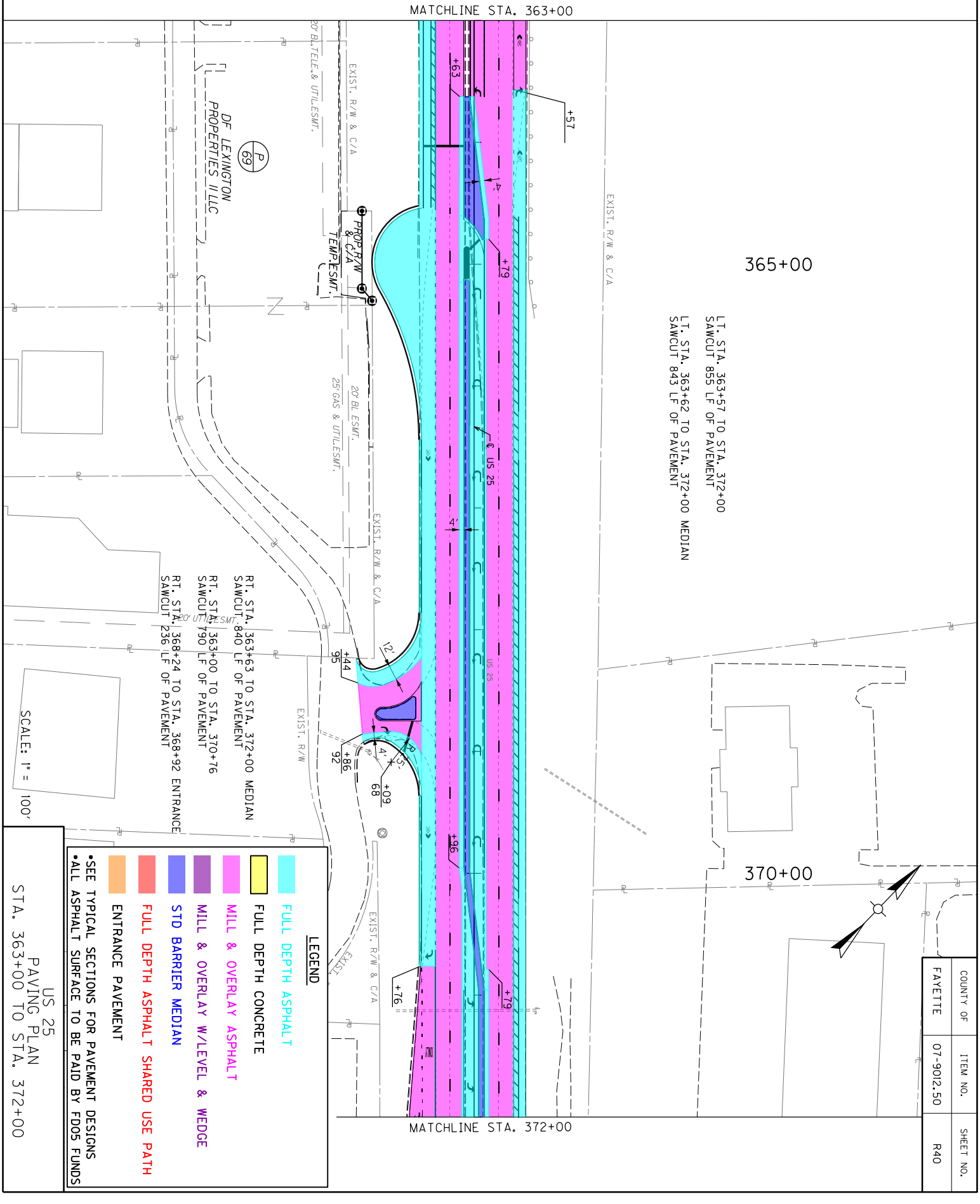


US 25
PAVING PLAN
STA. 359+34 TO STA. 363+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_01.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\PAVING PLAN_02.DGN



Contract ID: 254301
Page 253 of 605

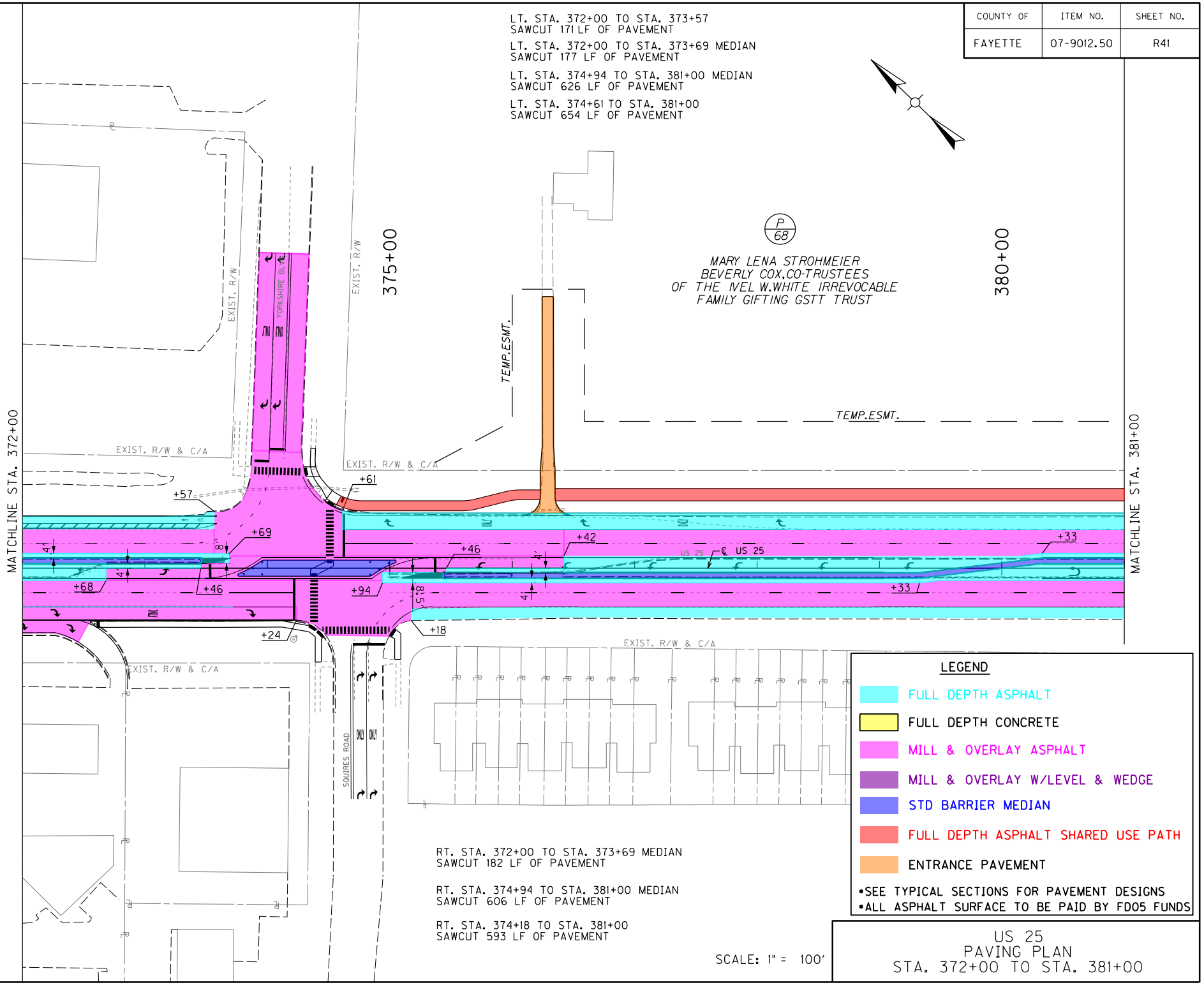
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R41

LT. STA. 372+00 TO STA. 373+57
SAWCUT 171 LF OF PAVEMENT

LT. STA. 372+00 TO STA. 373+69 MEDIAN
SAWCUT 177 LF OF PAVEMENT

LT. STA. 374+94 TO STA. 381+00 MEDIAN
SAWCUT 626 LF OF PAVEMENT

LT. STA. 374+61 TO STA. 381+00
SAWCUT 654 LF OF PAVEMENT



RT. STA. 372+00 TO STA. 373+69 MEDIAN
SAWCUT 182 LF OF PAVEMENT

RT. STA. 374+94 TO STA. 381+00 MEDIAN
SAWCUT 606 LF OF PAVEMENT

RT. STA. 374+18 TO STA. 381+00
SAWCUT 593 LF OF PAVEMENT

SCALE: 1" = 100'

LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

US 25
PAVING PLAN
STA. 372+00 TO STA. 381+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_03.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

Contract ID: 254301 Page 254 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R42

LT. STA. 381+00 TO STA. 390+00
SAWCUT 900 LF OF PAVEMENT

LT. STA. 381+00 TO STA. 387+56 MEDIAN
SAWCUT 662 LF OF PAVEMENT

P 68

MARY LENA STROHMEIER
BEVERLY COX,CO-TRUSTEES
OF THE IVEL W.WHITE IRREVOCABLE
FAMILY GIFTING GSTT TRUST

385+00

390+00

TEMP.ESMT.

PROP.R/W & C/A

EXIST. R/W & C/A

MATCHLINE STA. 381+00

MATCHLINE STA. 390+00

+81

+18

+74

+56

+56

4"

4"

4"

℄ US 25

US 25

EXIST. R/W & C/A

SHORESIDE DRIVE

EXIST. R/W

EXIST. R/W

RT. STA. 381+00 TO STA. 387+54 MEDIAN
SAWCUT 659 LF OF PAVEMENT

RT. STA. 381+00 TO STA. 390+00
SAWCUT 900 LF OF PAVEMENT

LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

SCALE: 1" = 100'

US 25
PAVING PLAN
STA. 381+00 TO STA. 390+00

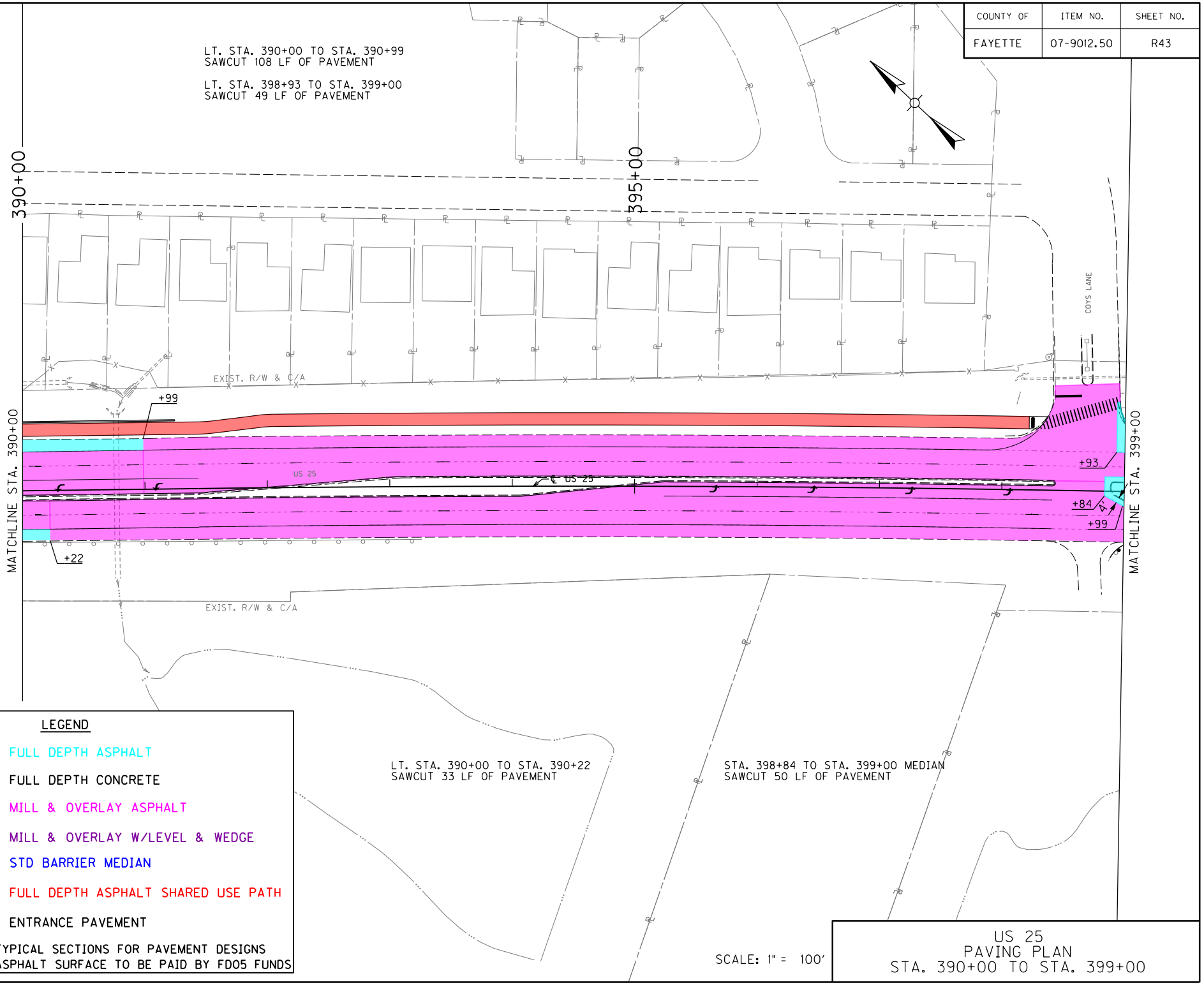
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USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R43

LT. STA. 390+00 TO STA. 390+99
SAWCUT 108 LF OF PAVEMENT

LT. STA. 398+93 TO STA. 399+00
SAWCUT 49 LF OF PAVEMENT



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

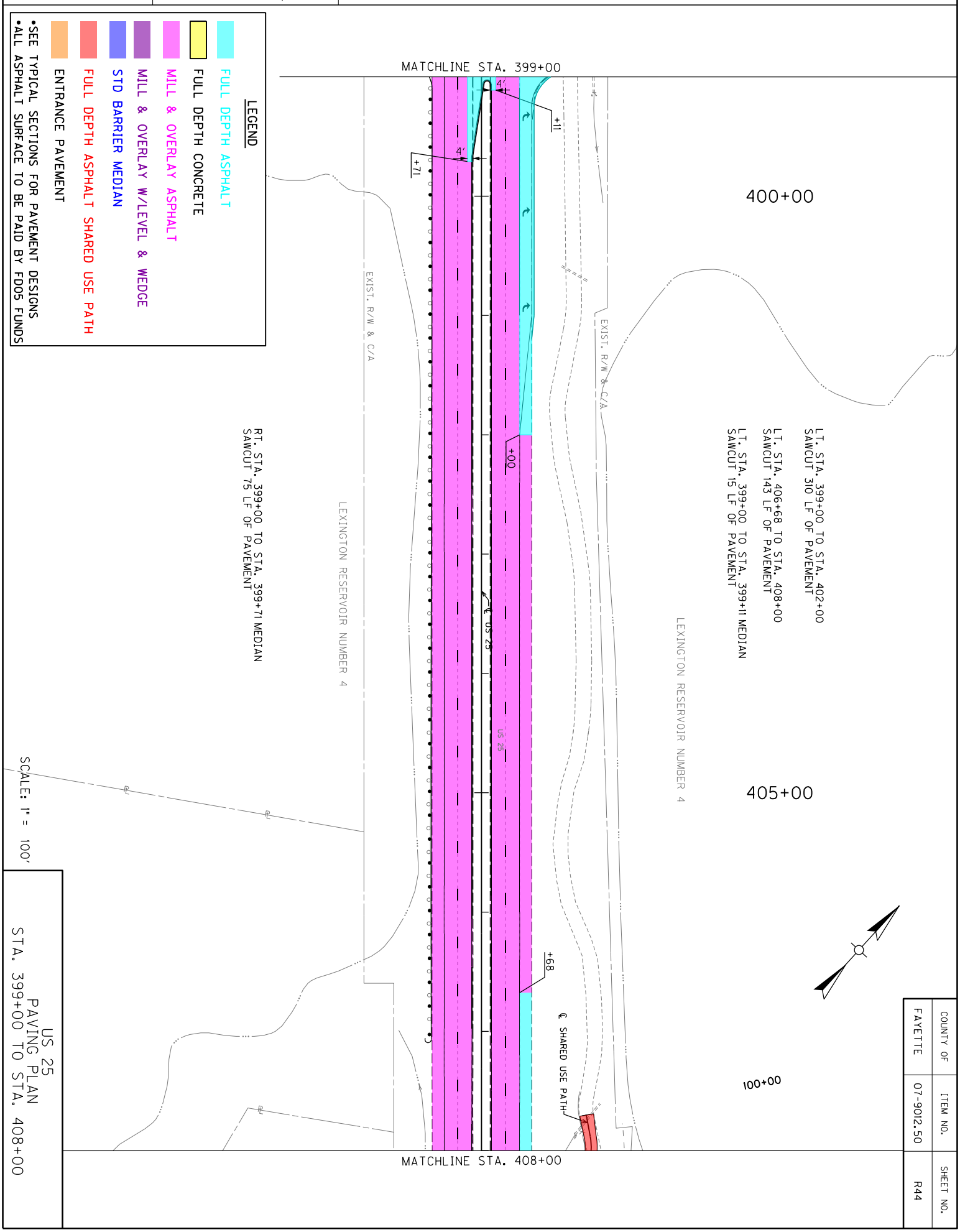
SCALE: 1" = 100'

US 25
PAVING PLAN
STA. 390+00 TO STA. 399+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_05.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

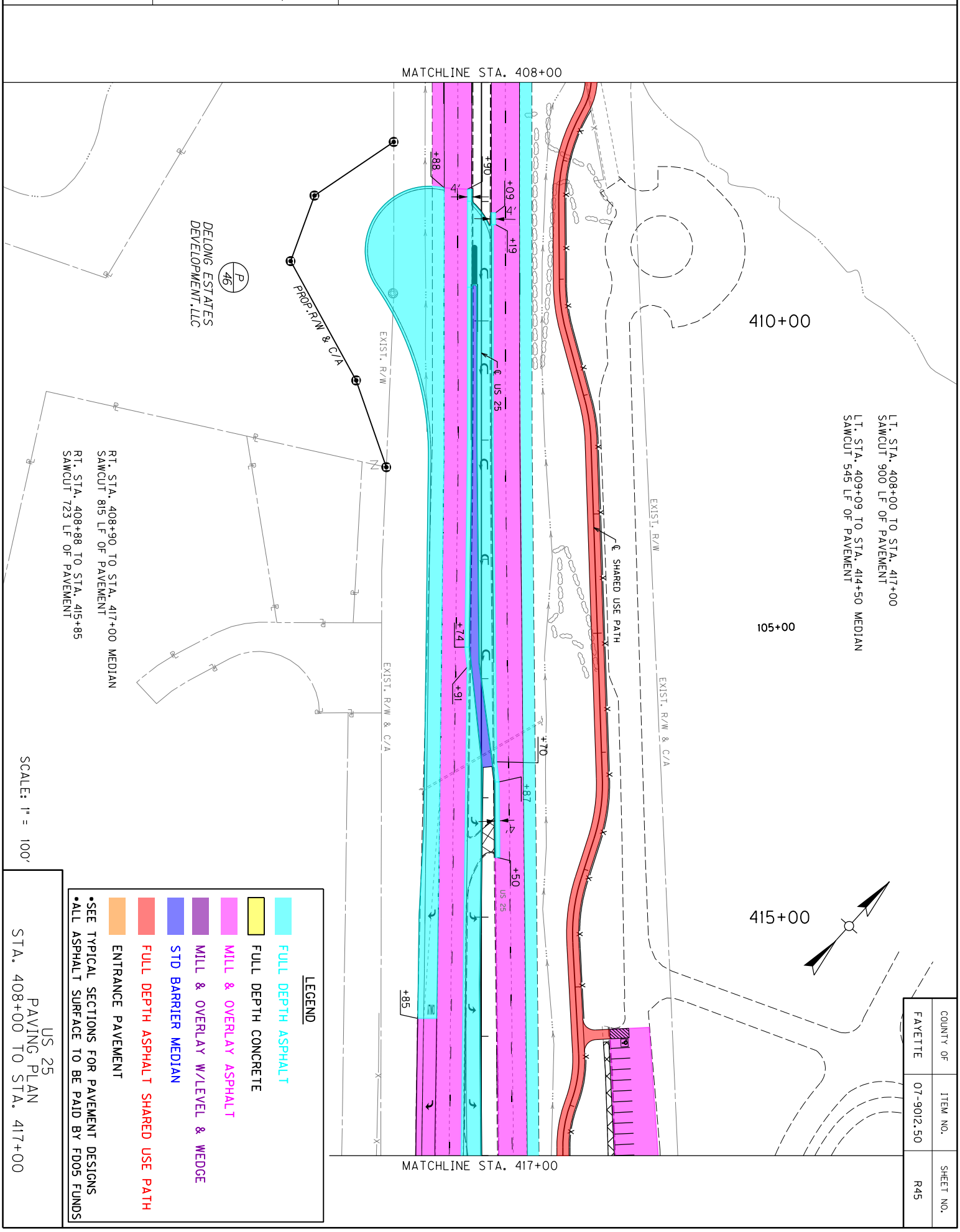
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PAVING PLAN_06.DGN



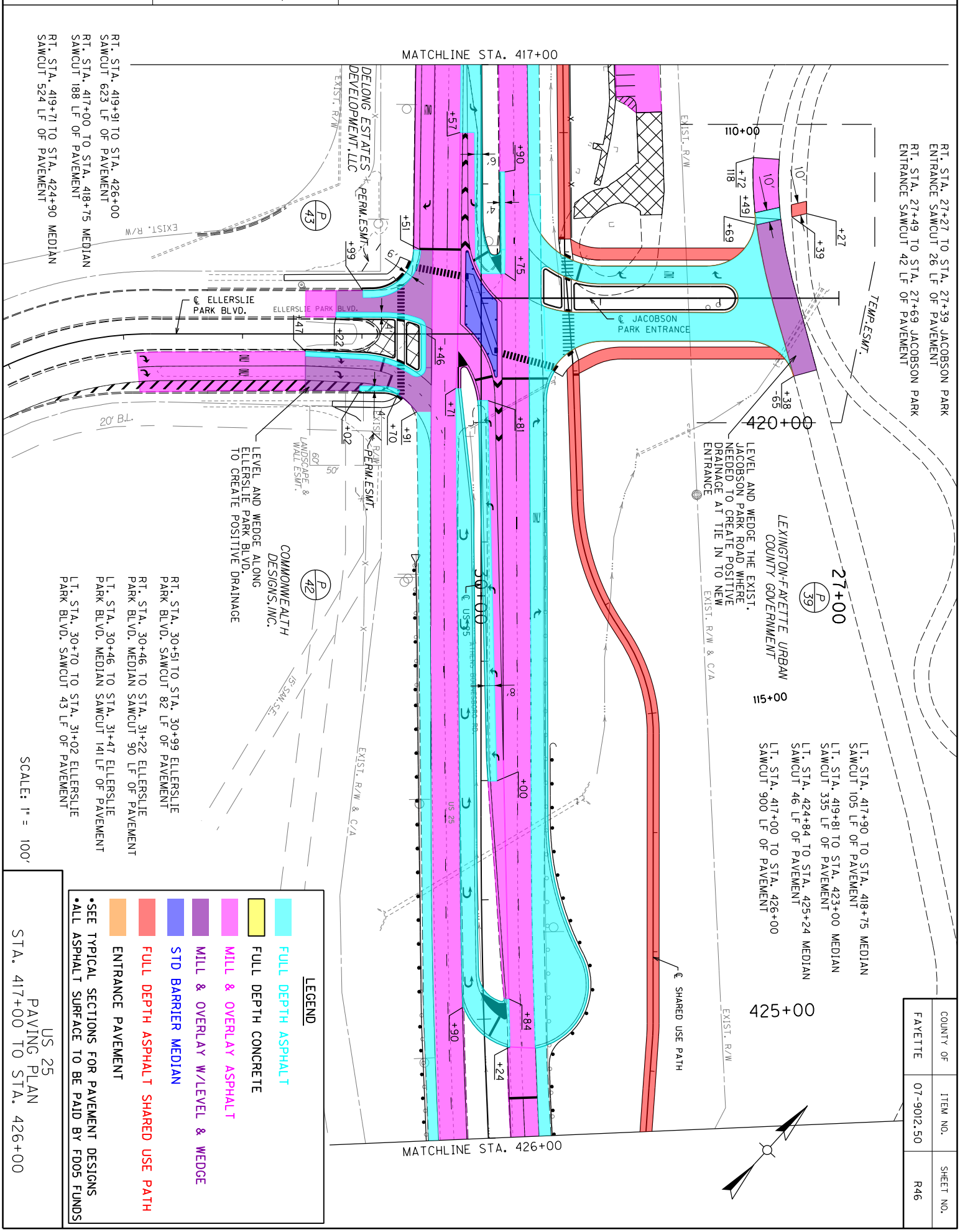
US 25
PAVING PLAN
STA. 399+00 TO STA. 408+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R44

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PAVING PLAN_07.DGN



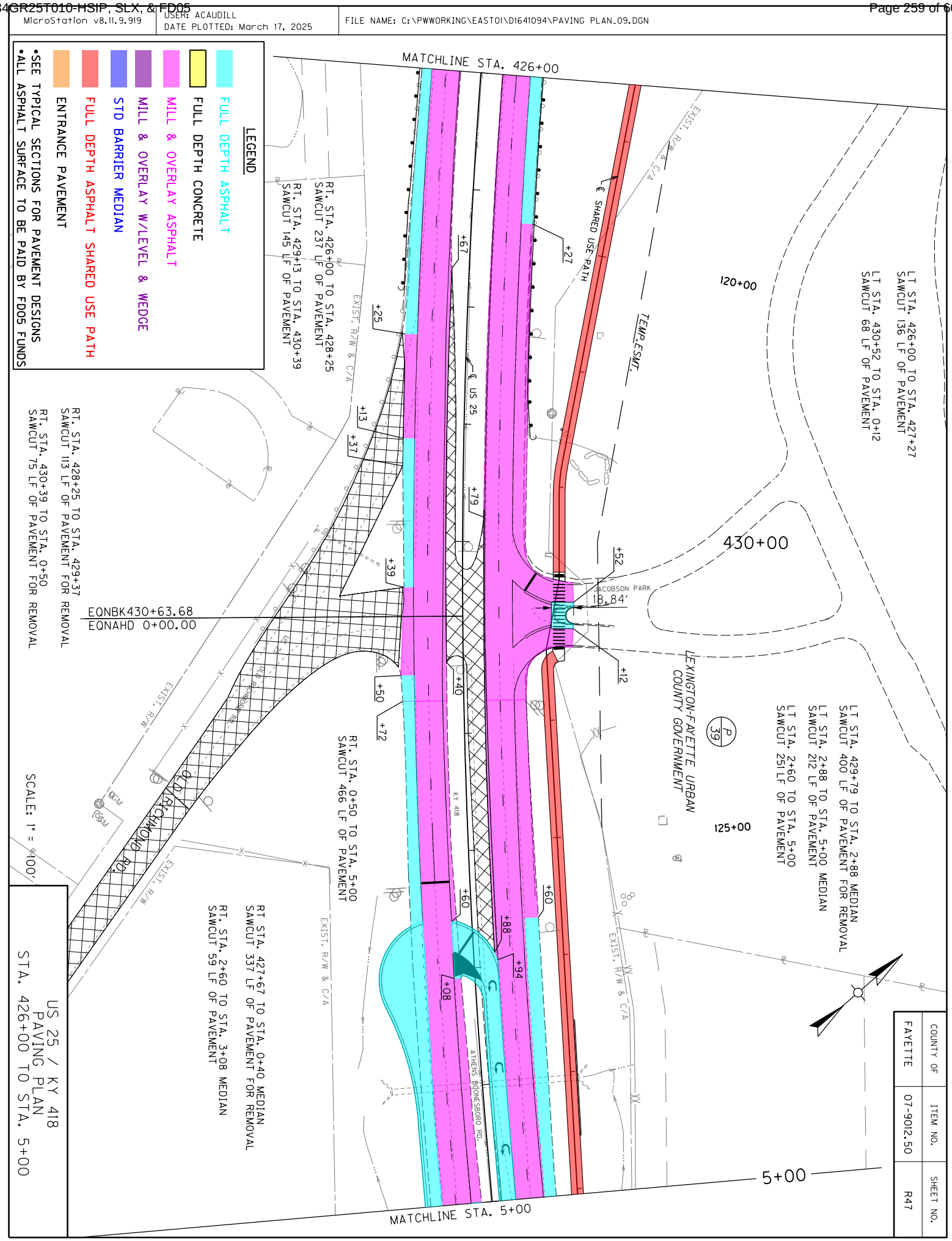
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US 25
PAVING PLAN
STA. 417+00 TO STA. 426+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R46

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\PAVING PLAN_09.DGN



US 25 / KY 418
PAVING PLAN
STA. 426+00 TO STA. 5+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R47

Contract ID: 254301 Page 260 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R48

LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

LT. STA. 5+00 TO STA. 11+56 MEDIAN
SAWCUT 656 LF OF PAVEMENT

LT. STA. 5+00 TO STA. 11+24
SAWCUT 634 LF OF PAVEMENT

LT. STA. 12+31 TO STA. 14+00 MEDIAN
SAWCUT 194 LF OF PAVEMENT

RT. STA. 105+66 TO STA. 106+32 HAYS BLVD.
SAWCUT 76 LF OF PAVEMENT

RT. STA. 102+41 TO STA. 106+17 HAYS BLVD.
MEDIAN SAWCUT 426 LF OF PAVEMENT

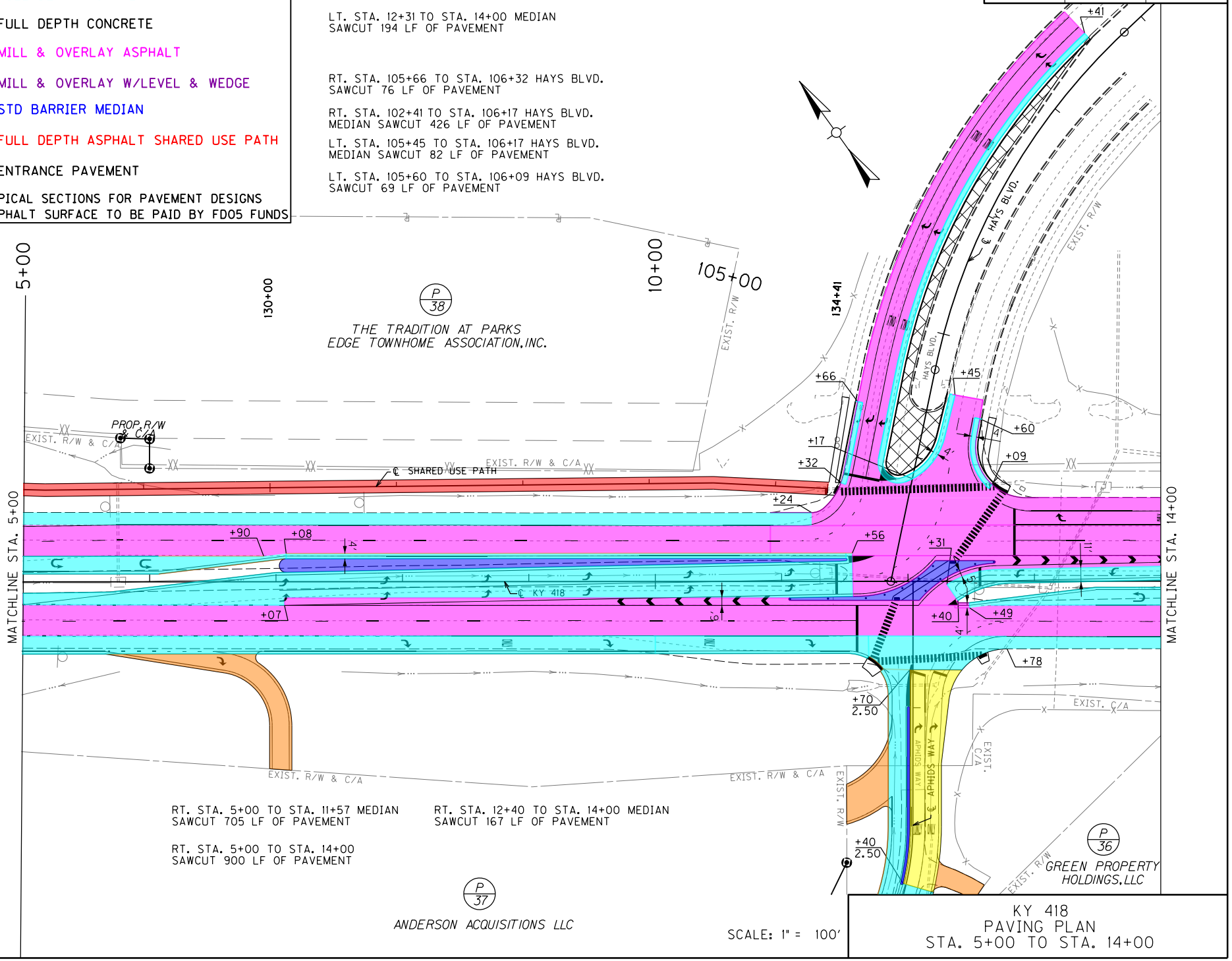
LT. STA. 105+45 TO STA. 106+17 HAYS BLVD.
MEDIAN SAWCUT 82 LF OF PAVEMENT

LT. STA. 105+60 TO STA. 106+09 HAYS BLVD.
SAWCUT 69 LF OF PAVEMENT

RT. STA. 5+00 TO STA. 11+57 MEDIAN
SAWCUT 705 LF OF PAVEMENT

RT. STA. 12+40 TO STA. 14+00 MEDIAN
SAWCUT 167 LF OF PAVEMENT

RT. STA. 5+00 TO STA. 14+00
SAWCUT 900 LF OF PAVEMENT

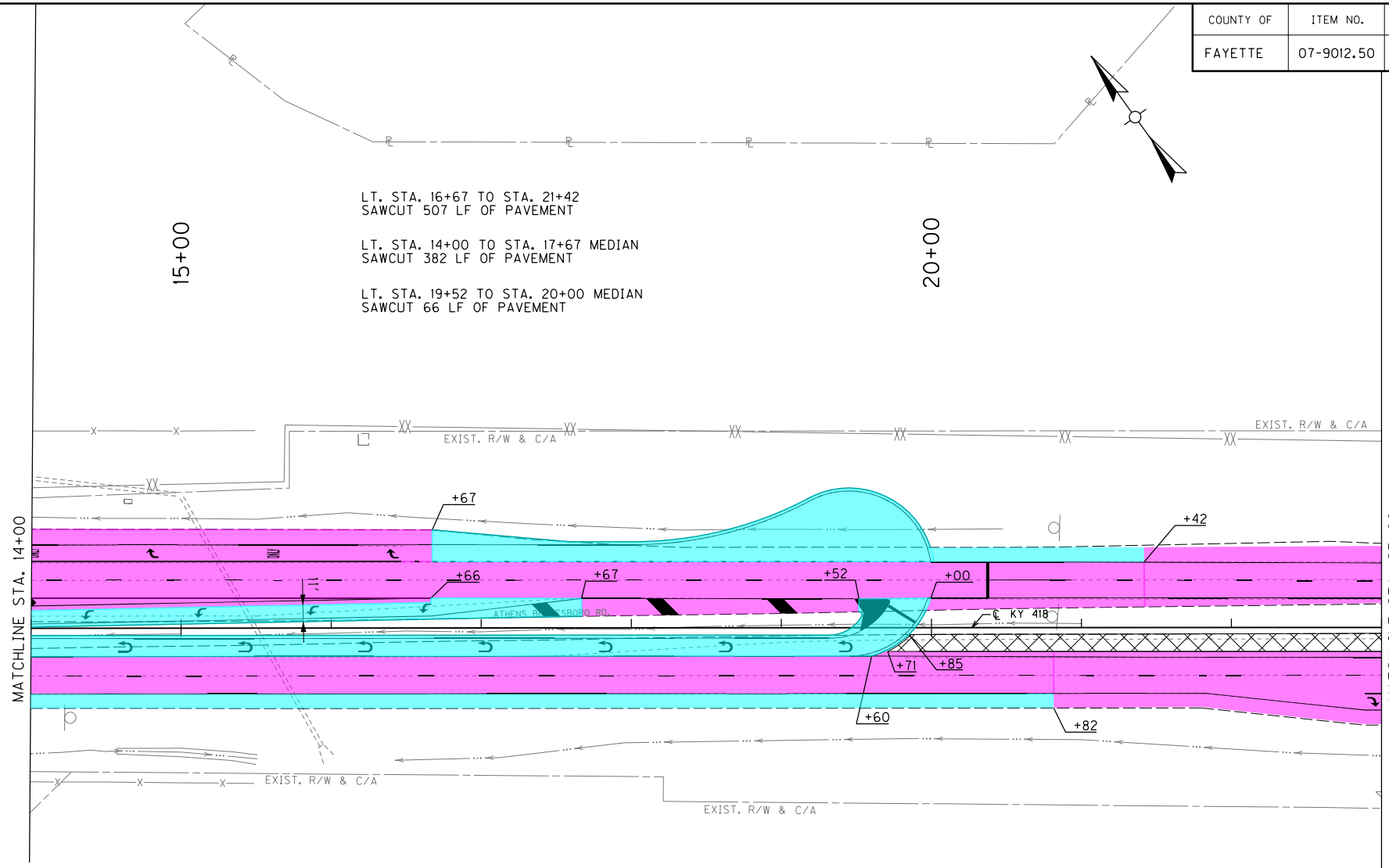


SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 5+00 TO STA. 14+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_10.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R49



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

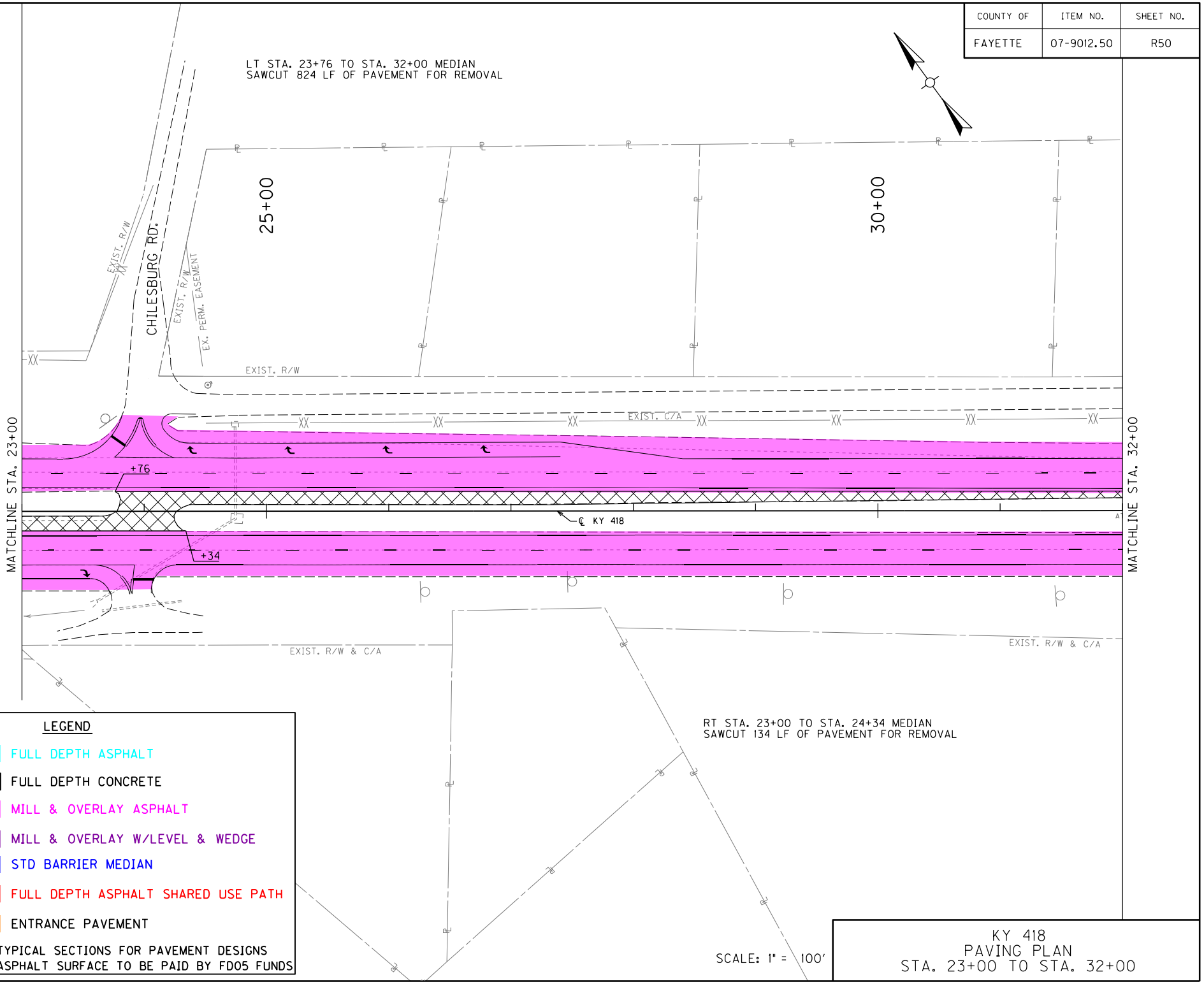
SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 14+00 TO STA. 23+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_11.DGN

Contract ID: 254301
Page 262 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R50



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

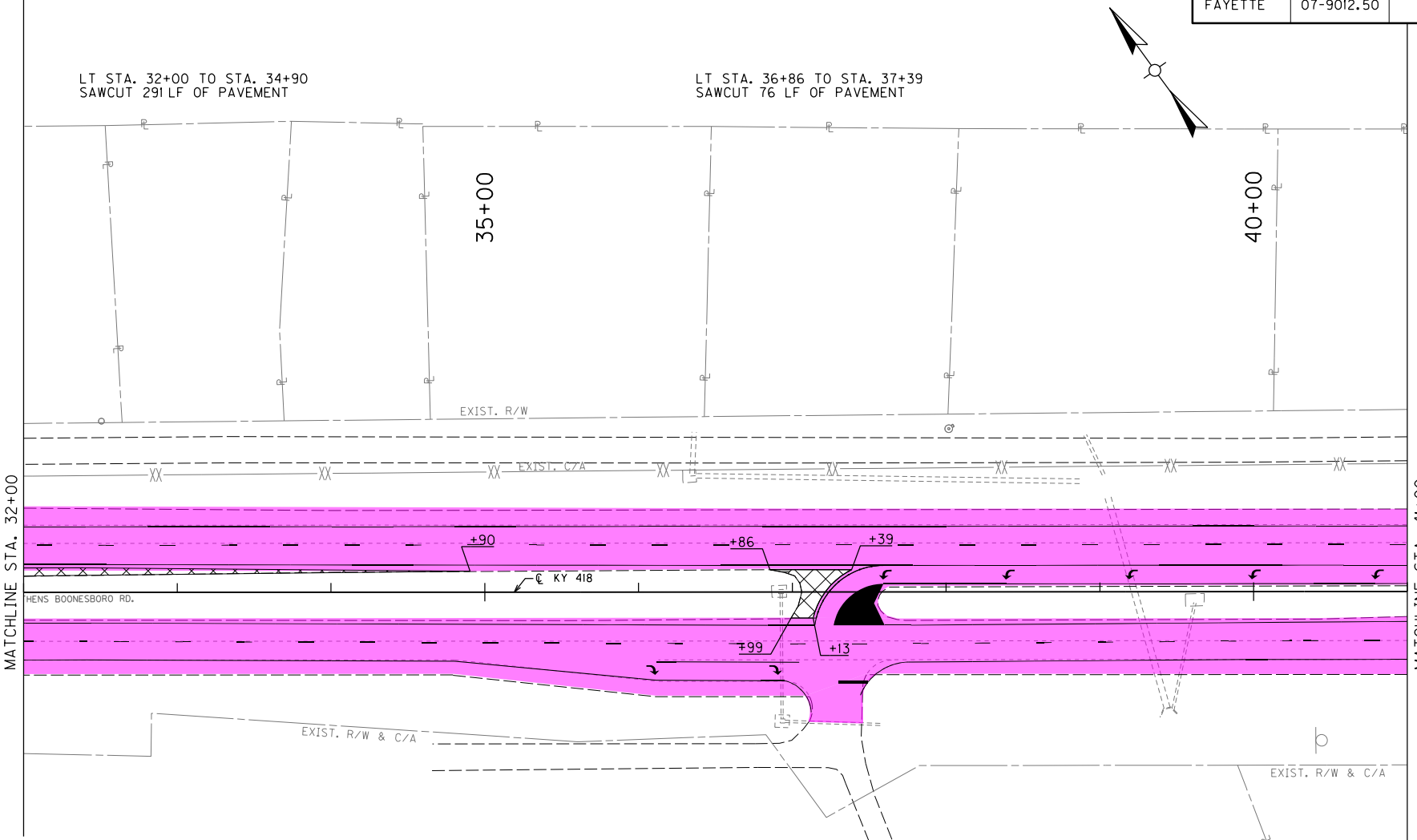
SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 23+00 TO STA. 32+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_12.DGN

Contract ID: 254301
Page 263 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R51



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

SCALE: 1" = 100'

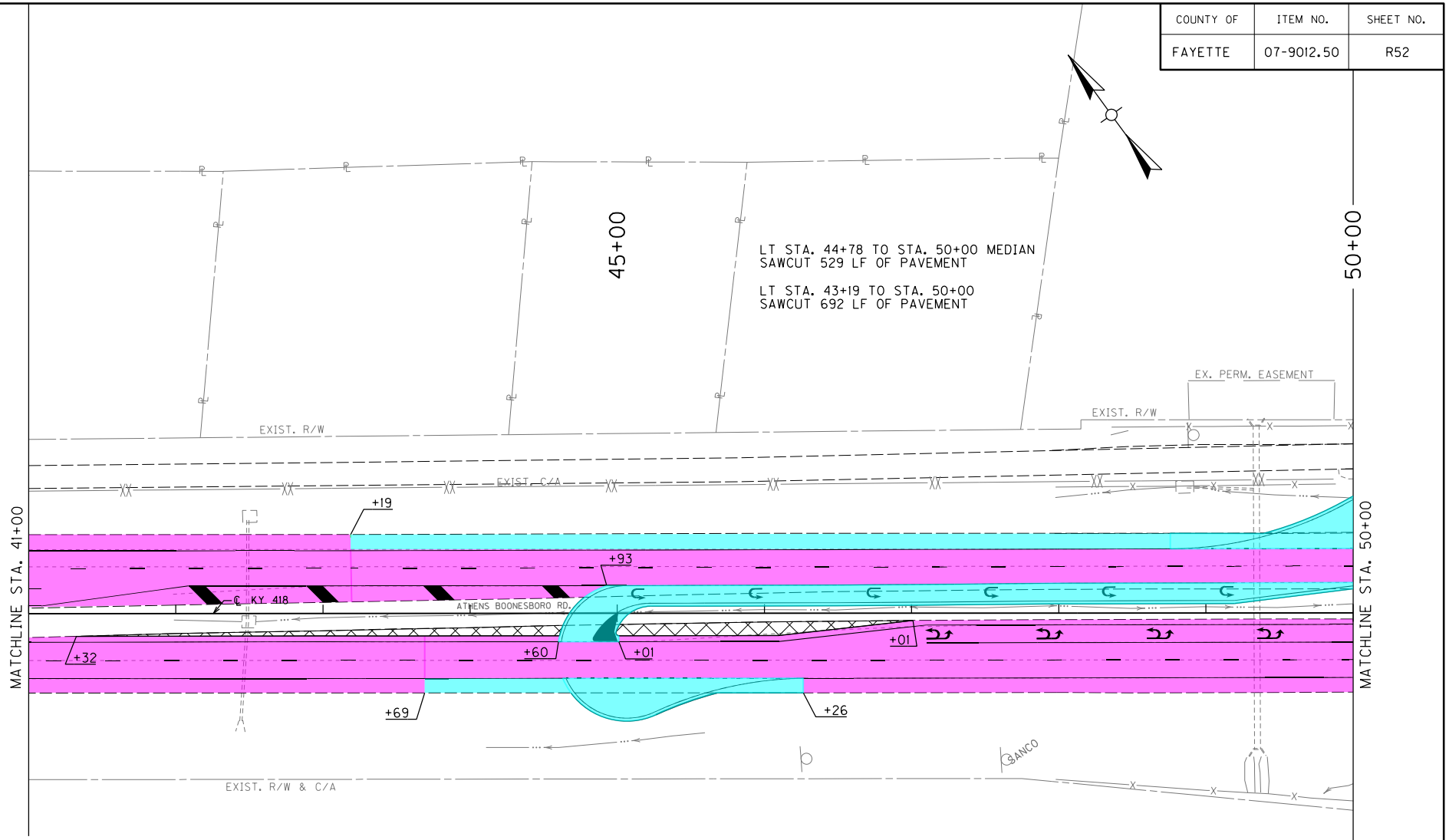
KY 418
PAVING PLAN
STA. 32+00 TO STA. 41+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EAST01\D1641094\PAVING PLAN_13.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 264 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R52



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

RT STA. 41+32 TO STA. 44+60 MEDIAN
SAWCUT 329 LF OF PAVEMENT FOR REMOVAL

RT STA. 44+60 TO STA. 45+01 MEDIAN
SAWCUT 66 LF OF PAVEMENT

RT STA. 45+01 TO STA. 47+01 MEDIAN
SAWCUT 201 LF OF PAVEMENT FOR REMOVAL

RT STA. 44+69 TO STA. 46+26
SAWCUT 277 LF OF PAVEMENT

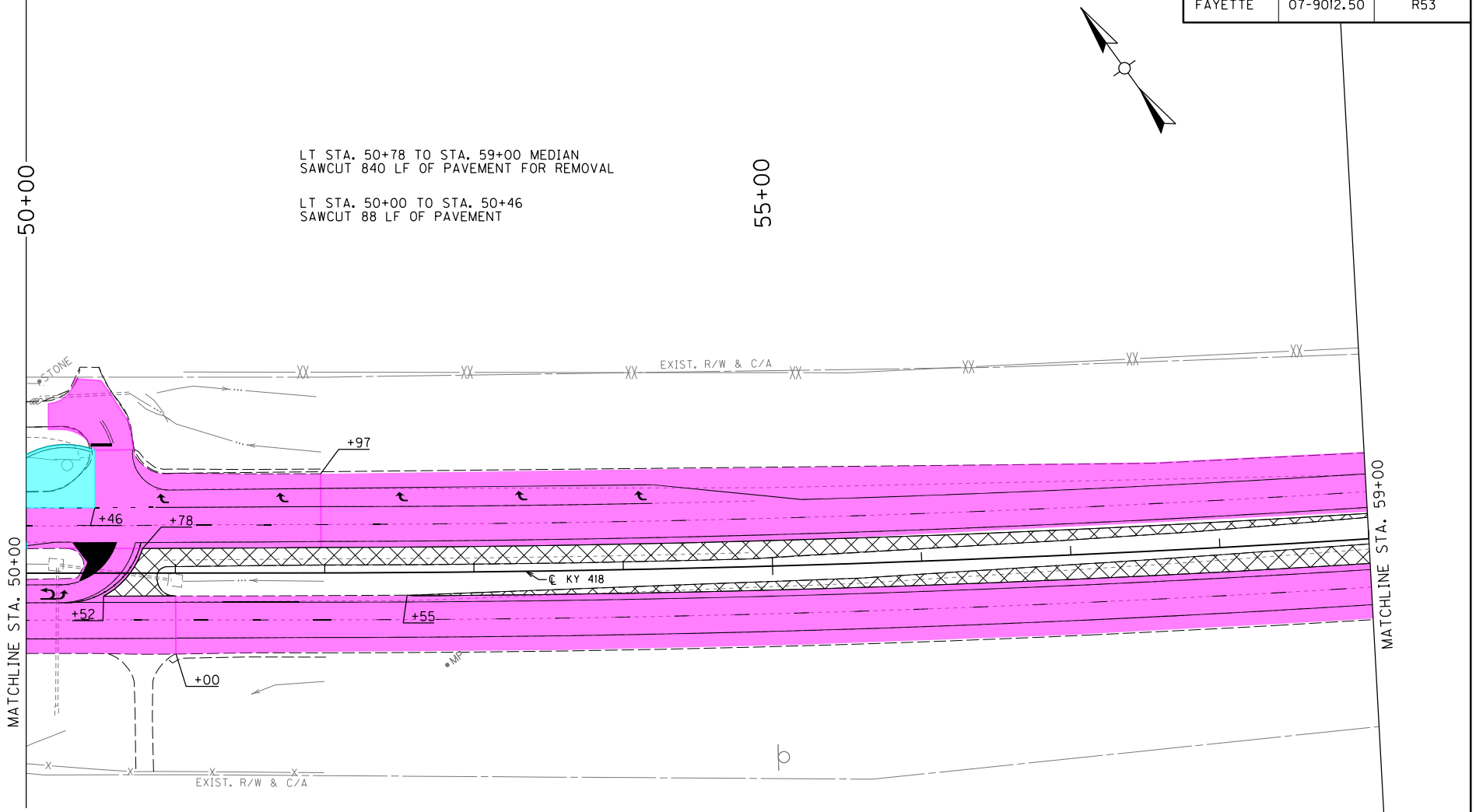
SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 41+00 TO STA. 50+00

FAYETTE COUNTY
0340R25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_14.DGN

Contract ID: 254301
Page 265 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R53



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

RT STA. 50+52 TO STA. 51+00 MEDIAN
SAWCUT 71 LF OF PAVEMENT FOR REMOVAL

RT STA. 52+55 TO STA. 59+00 MEDIAN
SAWCUT 643 LF OF PAVEMENT FOR REMOVAL

SCALE: 1" = 100'

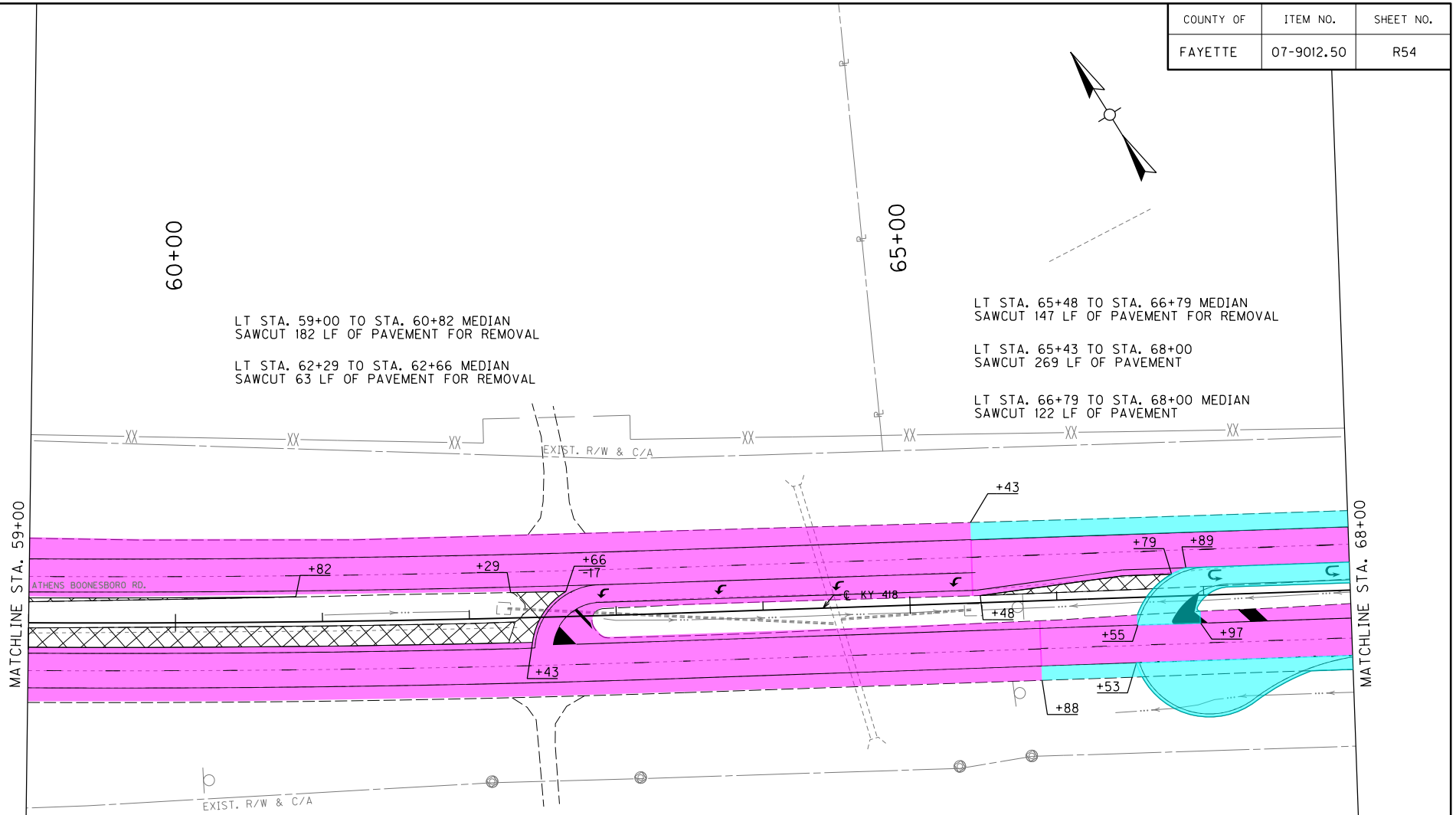
KY 418
PAVING PLAN
STA. 50+00 TO STA. 59+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_15.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301 Page 266 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R54



RT STA. 59+00 TO LT STA. 62+49 MEDIAN
SAWCUT 362 LF OF PAVEMENT FOR REMOVAL

RT STA. 65+88 TO STA. 68+00
SAWCUT 222 LF OF PAVEMENT

RT STA. 66+55 TO STA. 66+97 MEDIAN
SAWCUT 58 LF OF PAVEMENT

LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

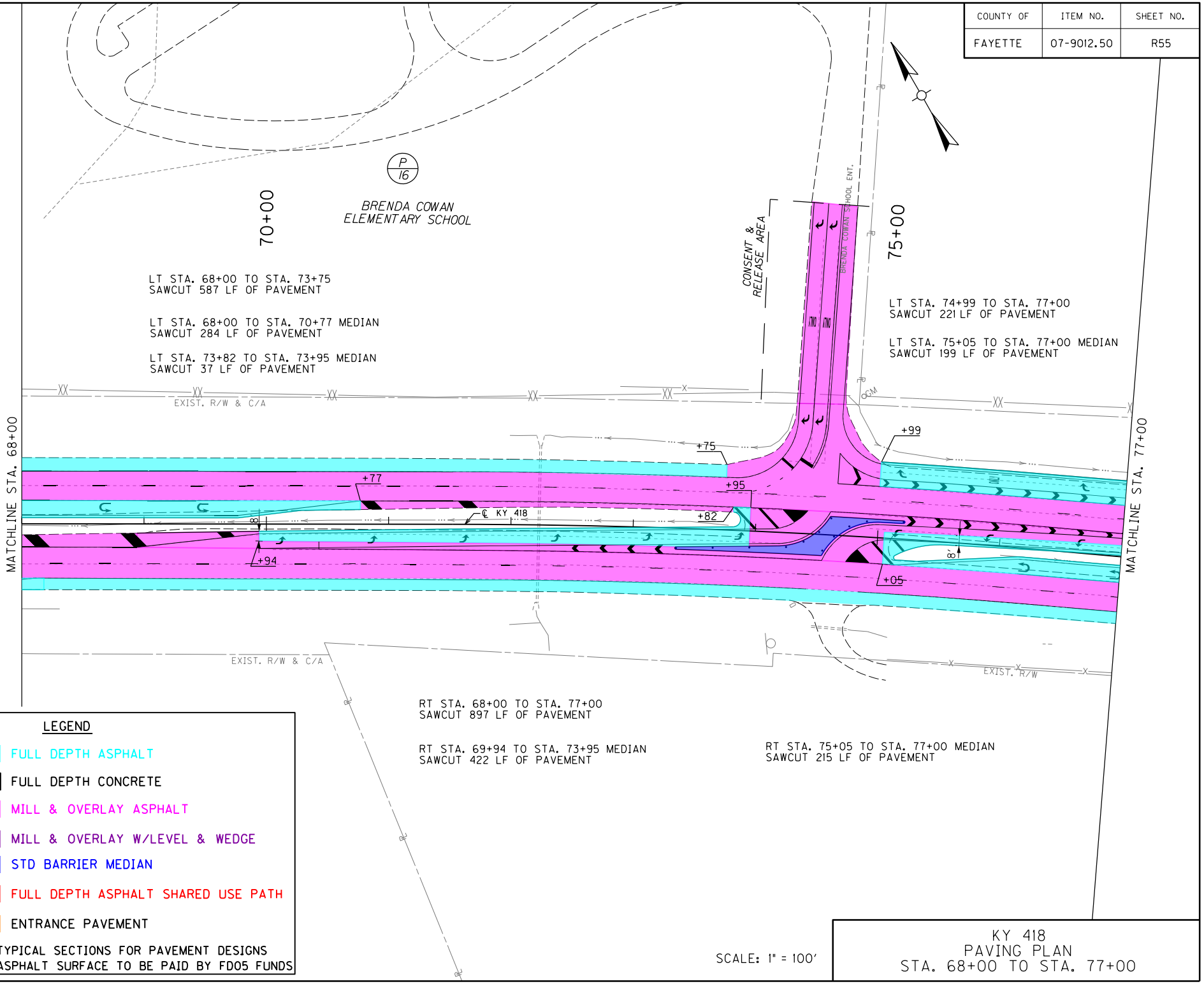
SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 59+00 TO STA. 68+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_I6.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R55



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

SCALE: 1" = 100'

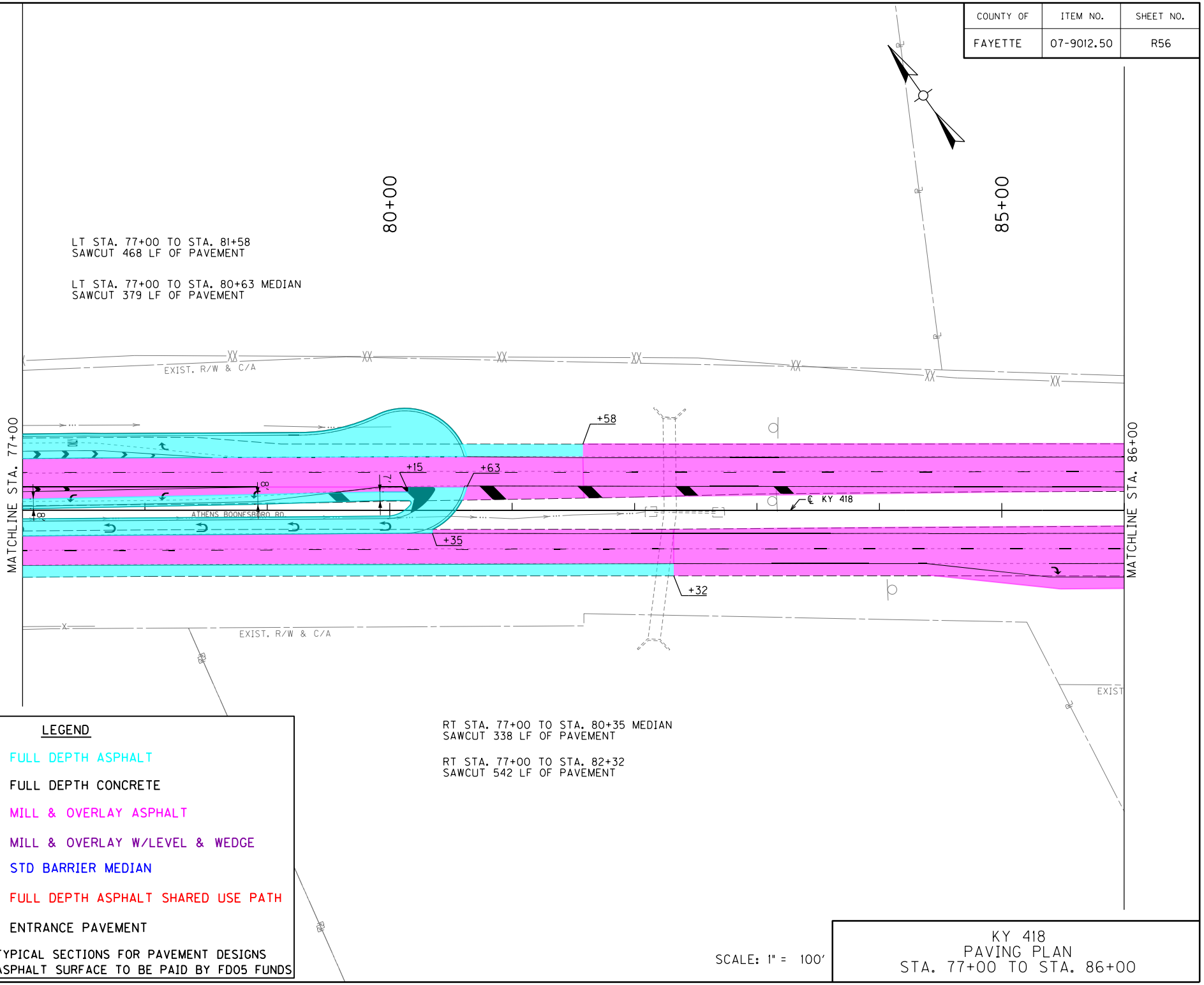
KY 418
PAVING PLAN
STA. 68+00 TO STA. 77+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_I7.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 268 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R56



LEGEND

- FULL DEPTH ASPHALT
- FULL DEPTH CONCRETE
- MILL & OVERLAY ASPHALT
- MILL & OVERLAY W/LEVEL & WEDGE
- STD BARRIER MEDIAN
- FULL DEPTH ASPHALT SHARED USE PATH
- ENTRANCE PAVEMENT

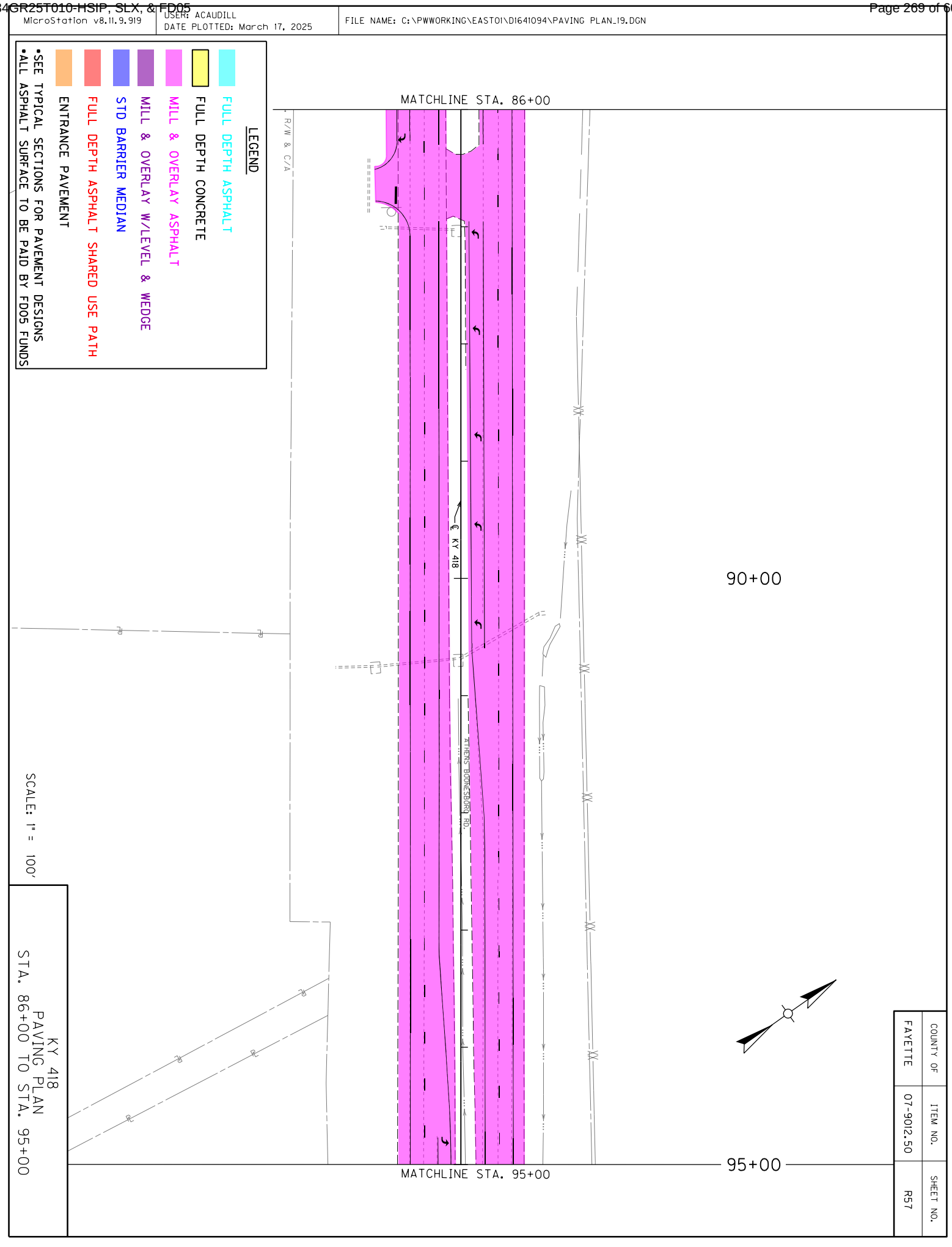
•SEE TYPICAL SECTIONS FOR PAVEMENT DESIGNS
•ALL ASPHALT SURFACE TO BE PAID BY FD05 FUNDS

SCALE: 1" = 100'

KY 418
PAVING PLAN
STA. 77+00 TO STA. 86+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTOV\D1641094\PAVING PLAN_18.DGN

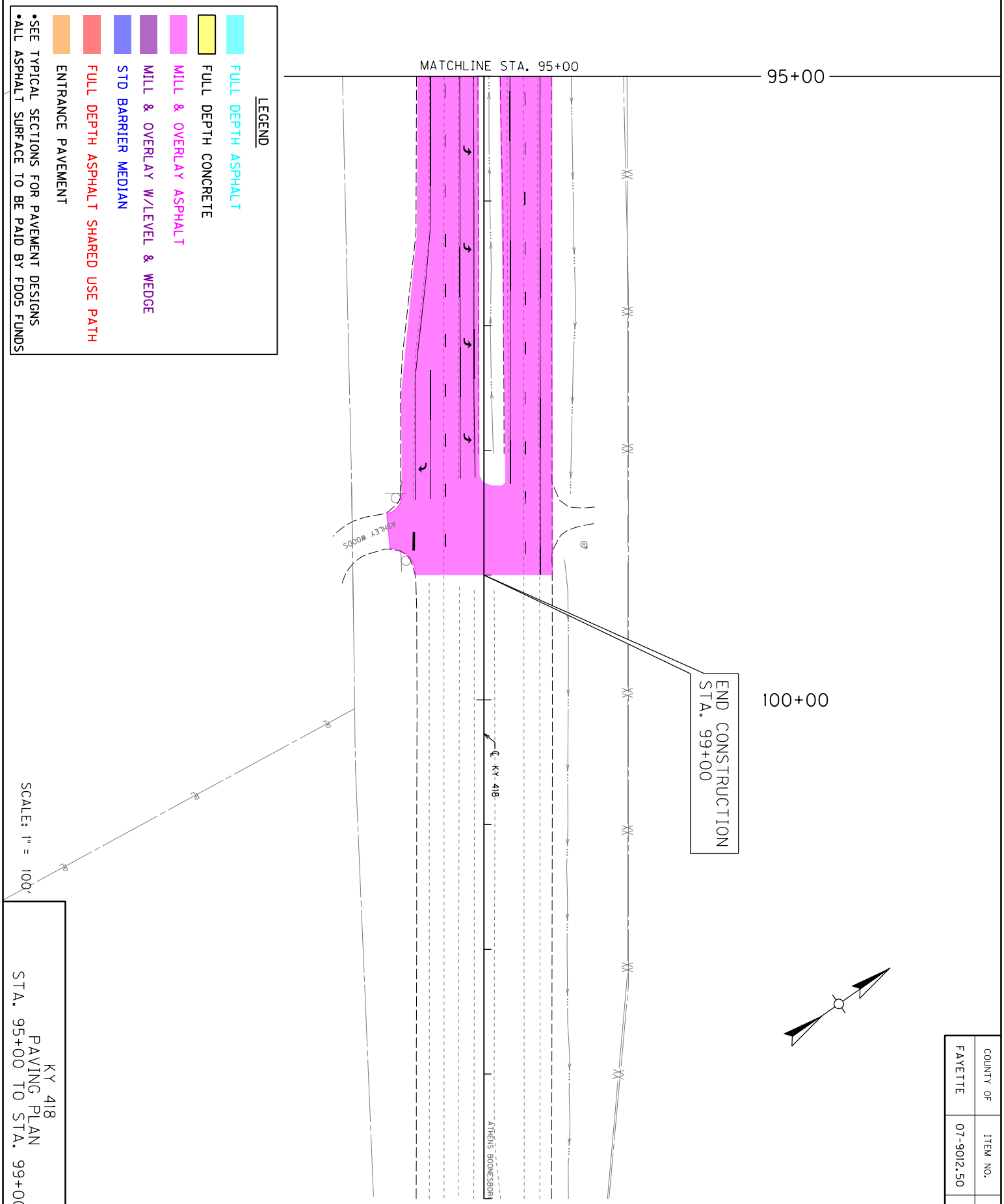
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PAVING PLAN_19.DGN



KY 418
PAVING PLAN
STA. 86+00 TO STA. 95+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R57

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\PAVING PLAN_20.DGN

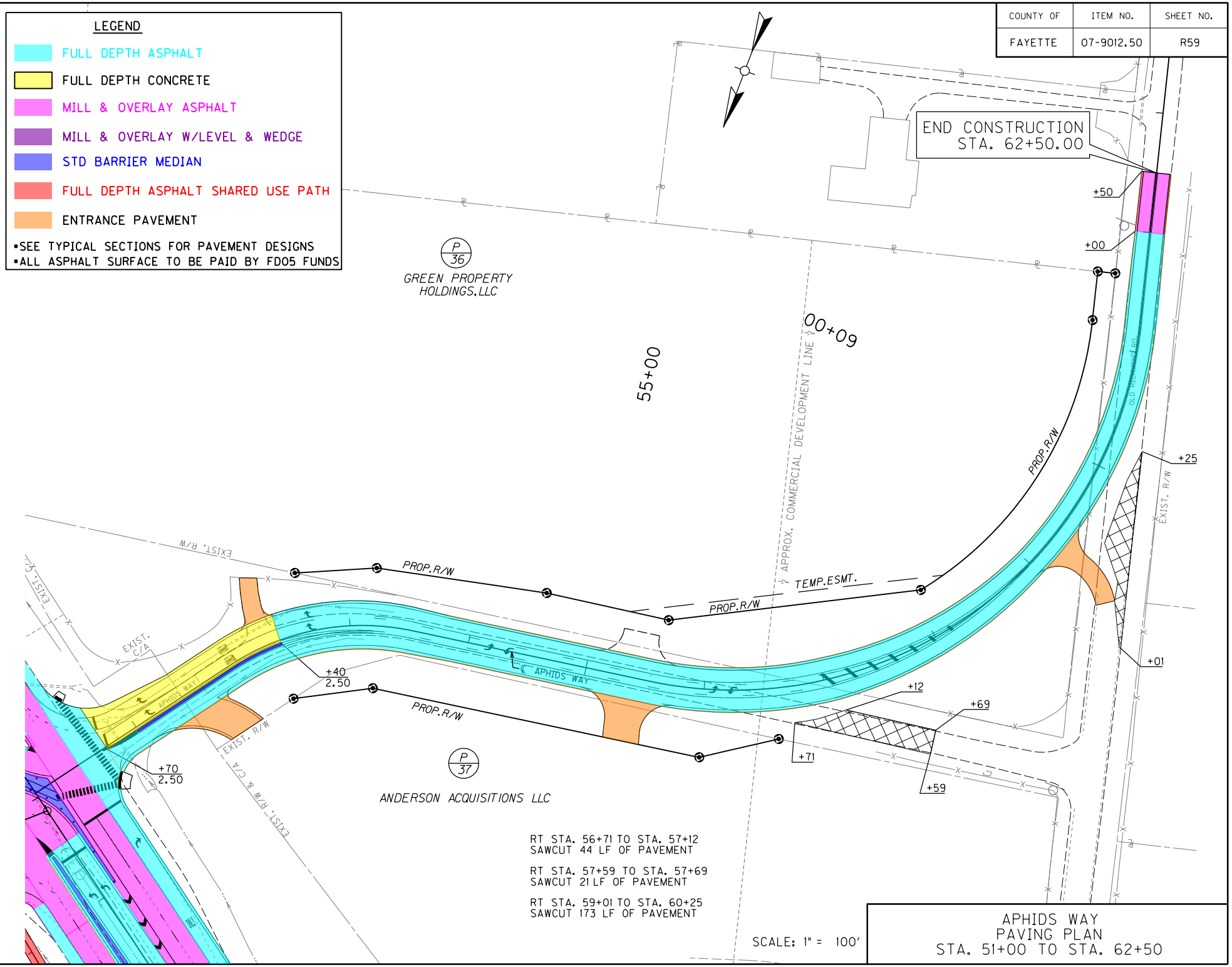


KY 418
PAVING PLAN
STA. 95+00 TO STA. 99+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R58

Contract ID: 254301
Page 271 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R59



FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PAVING PLAN_2I.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 272 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R60

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

TYPICAL PHASE CONSTRUCTION

TRAFFIC CONTROL DEVICE

CONST.

PHASE 1 CONSTRUCTION:

CONSTRUCTION OF THE OUTSIDE FULL DEPTH LANES AND SHOULDERS OF US 25 / KY 418 UP TO THE FINAL BASE COURSE.

CONTRACTOR MAY COORDINATE WITH KYTC SHORT TERM LANE CLOSURES AS NEEDED FOR THE OUTSIDE LANE DURING 9AM AND 4PM AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL FOLLOW GUIDELINES FOR DROPOFFS AS SPECIFIED IN THE TRAFFIC CONTROL NOTE BEFORE OPENING ANY LANE CLOSURES.

350+00

355+00

360+00

365+00

370+00

NORTH EAGLE CREEK DRIVE

EXIST. R/W

EXIST. R/W & C/A

℄ US 25

12′

11′

45:1 TAPER

PAVEMENT MARKING REMOVAL WILL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC BID ITEM.

FOR MAINTENANCE OF TRAFFIC ONLY

0′ 100′ 200′ 400′

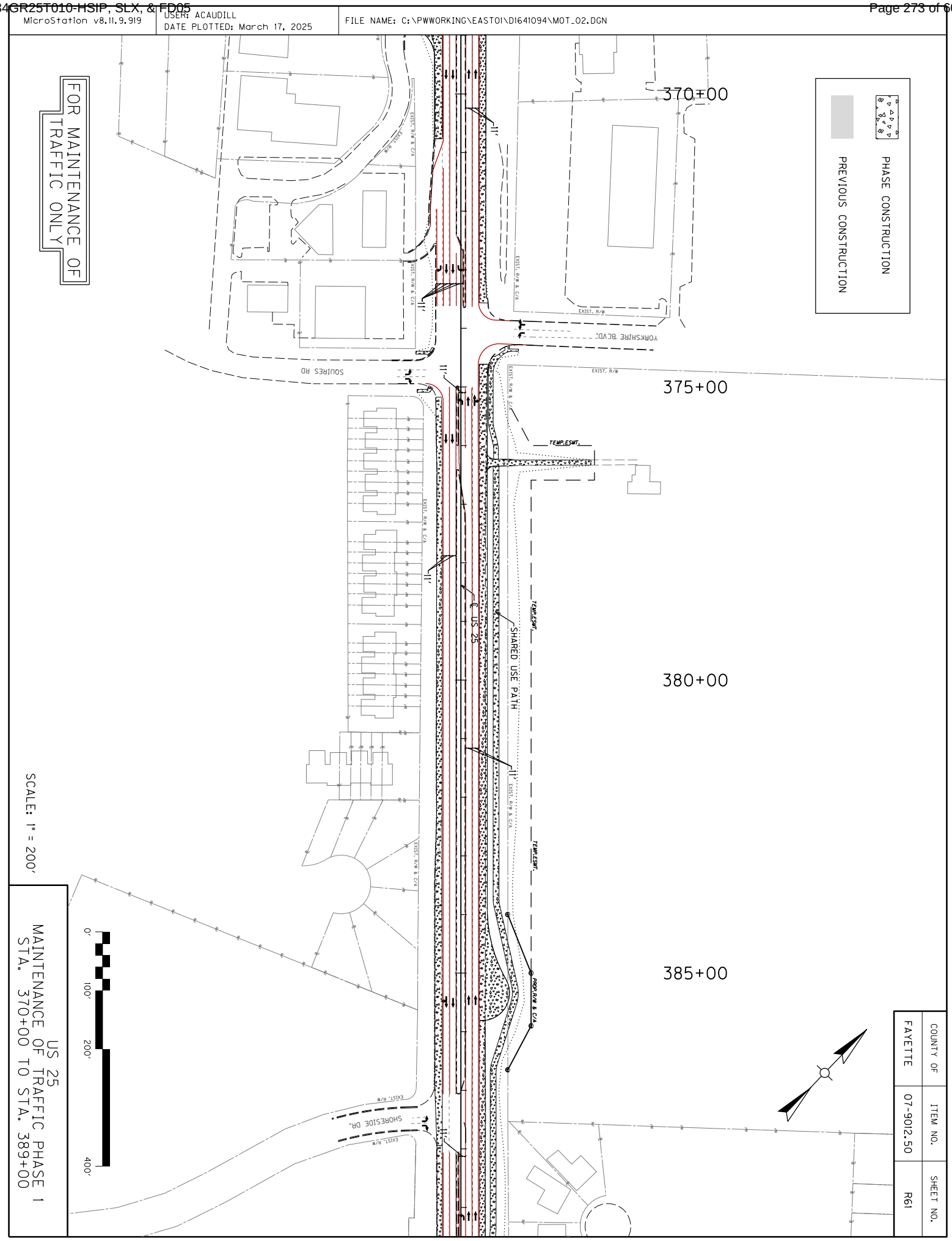
SCALE: 1" = 200′

US 25
MAINTENANCE OF TRAFFIC PHASE 1
STA. 360+00 TO STA. 370+00

FILE NAME: C:\PWWORKING\EASTOI\D1641094\MOT_01.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_02.DGN



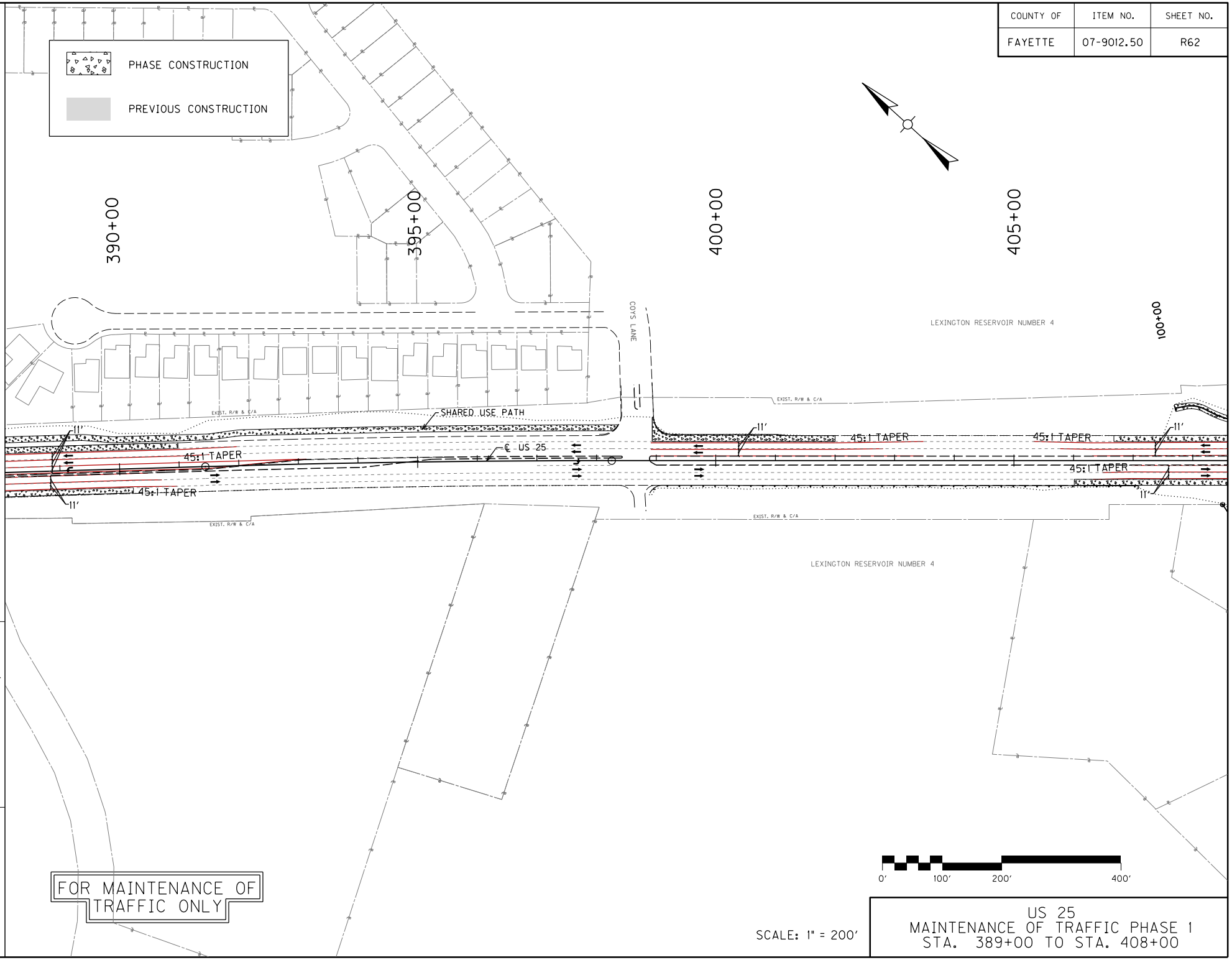
SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 1
STA. 370+00 TO STA. 389+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R61

Contract ID: 254301
Page 274 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R62



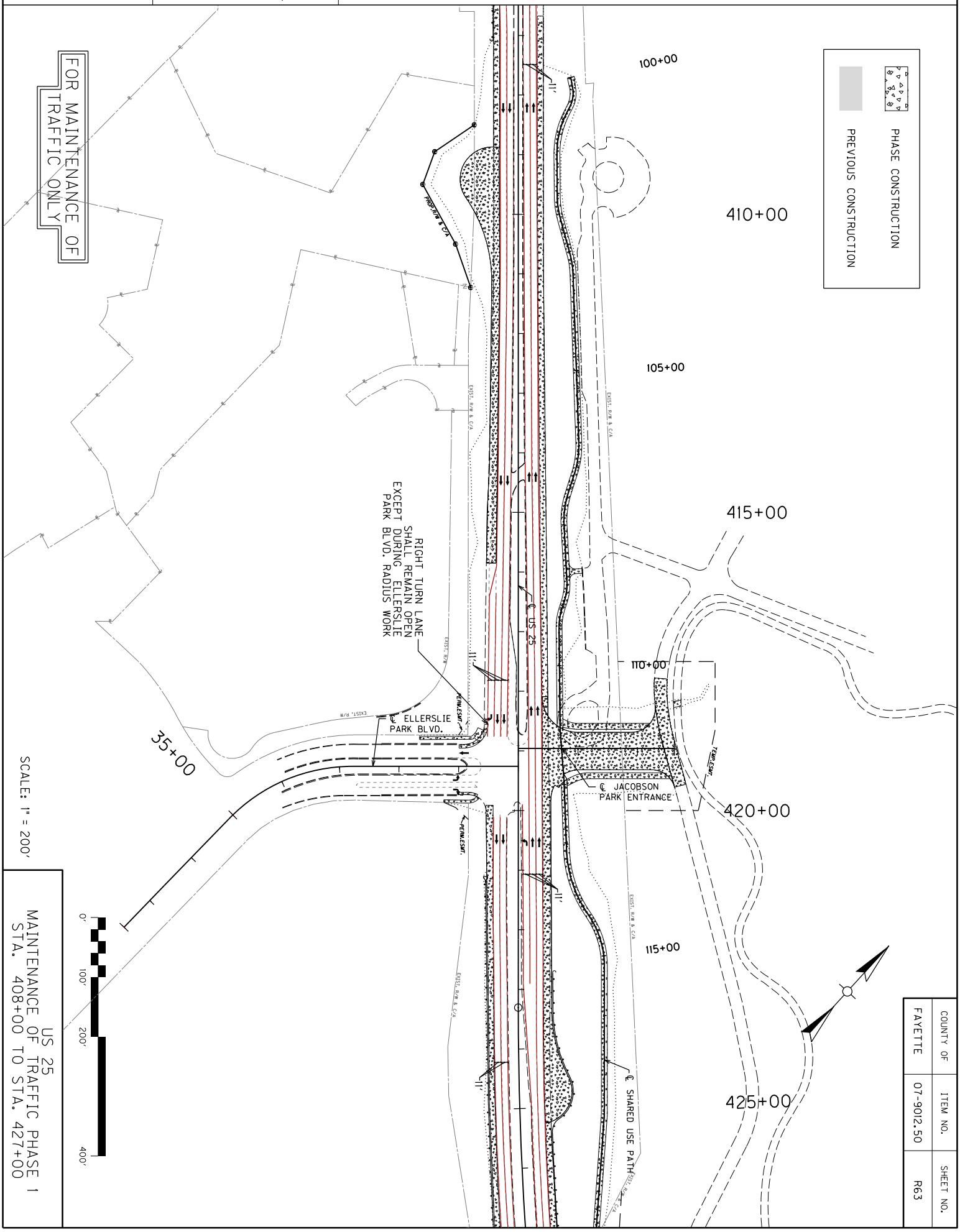
FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 1
STA. 389+00 TO STA. 408+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_03.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

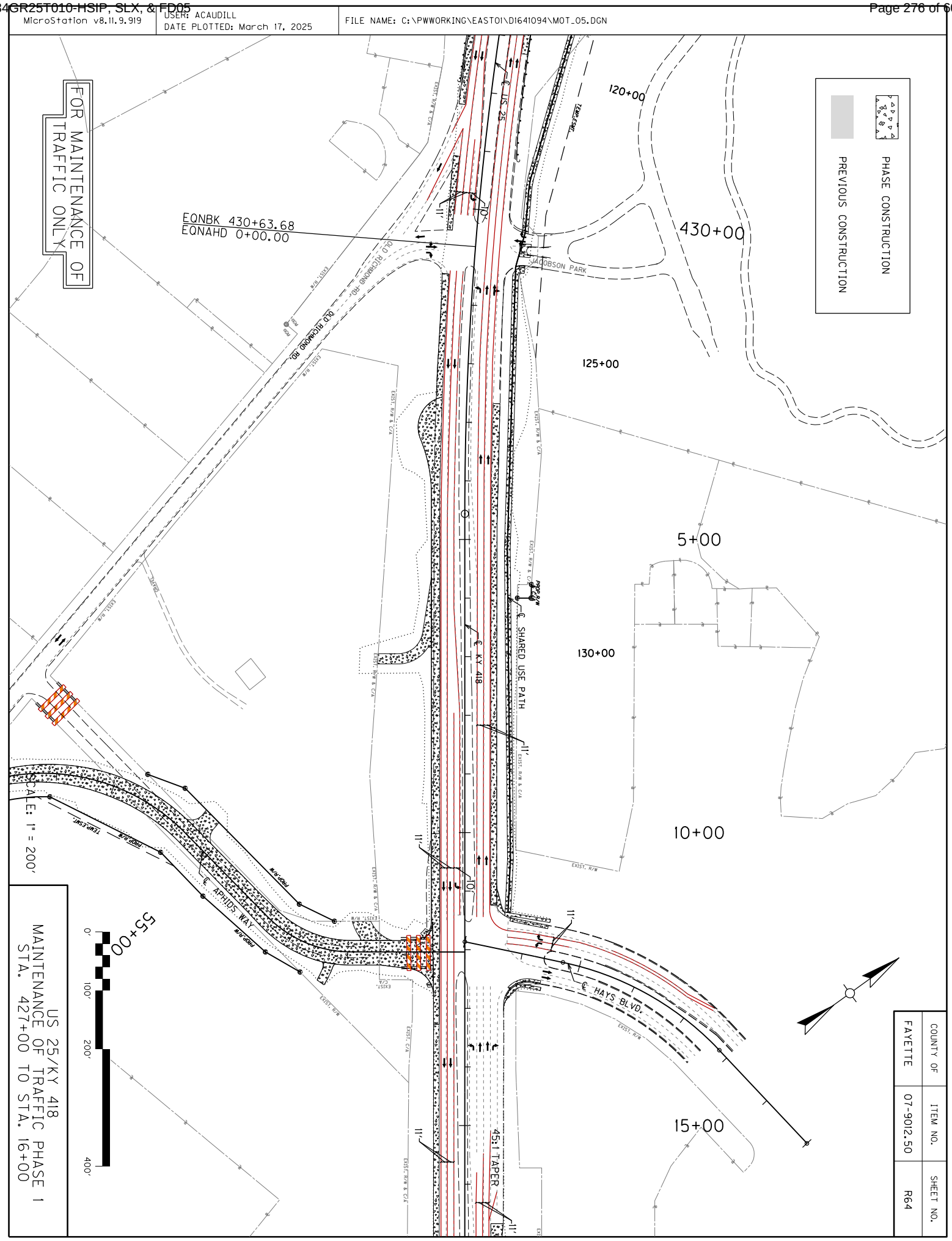
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_04.DGN



US 25
MAINTENANCE OF TRAFFIC PHASE 1
STA. 408+00 TO STA. 427+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R63

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_05.DGN



Contract ID: 254301 Page 277 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R65

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

20+00

25+00

30+00

35+00

EXIST. R/W & C/A

EXIST. R/W

EX. PERM. EASEMENT

ATHENS BOONESBORO SERVICE RD.

11'

45:1 TAPER

℄ KY 418

FOR MAINTENANCE OF TRAFFIC ONLY

0' 100' 200' 400'

SCALE: 1" = 200'

KY 418
MAINTENANCE OF TRAFFIC PHASE 1
STA. 16+00 TO STA. 36+00

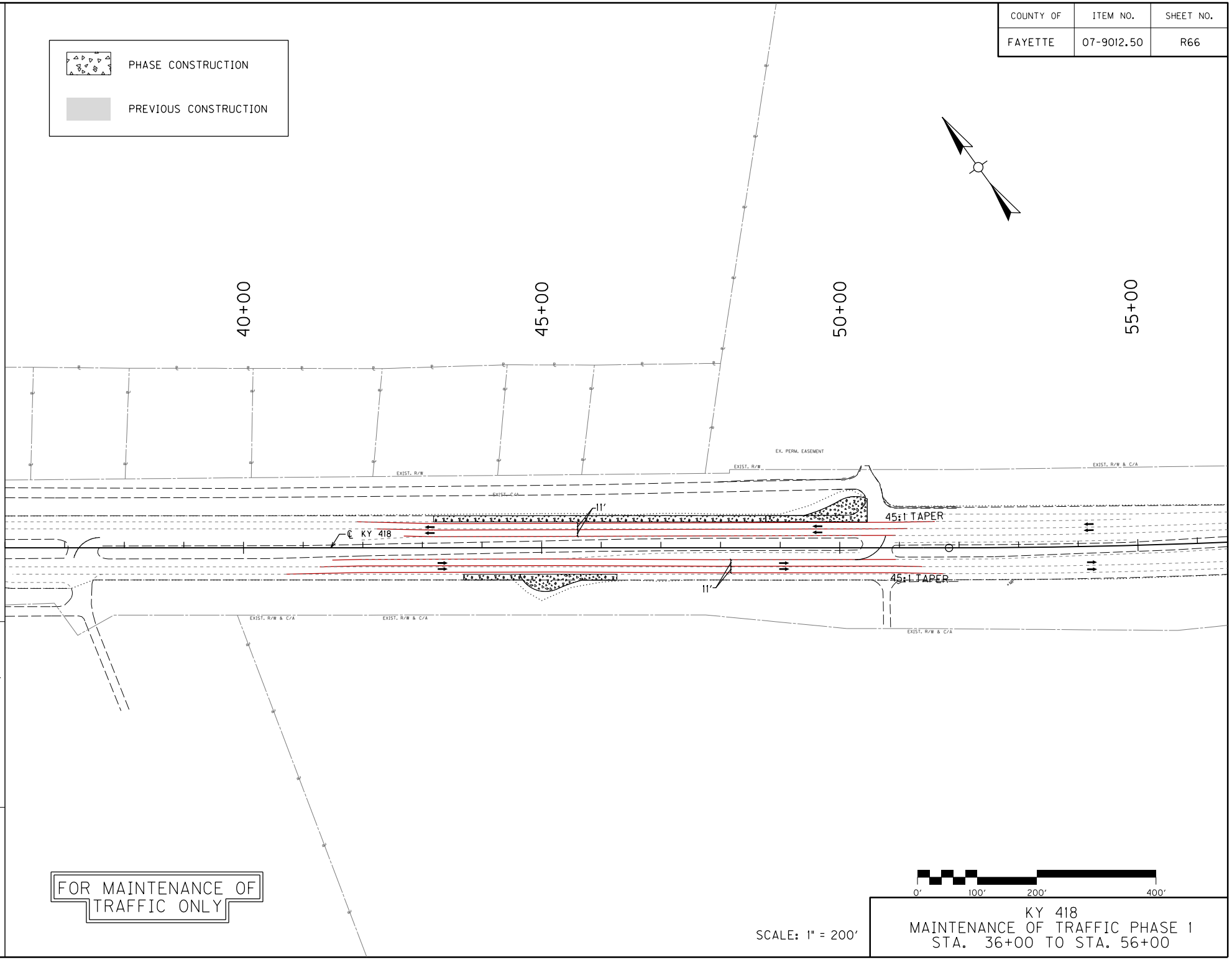
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_06.DGN

Contract ID: 254301
Page 278 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R66

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION



FOR MAINTENANCE OF TRAFFIC ONLY

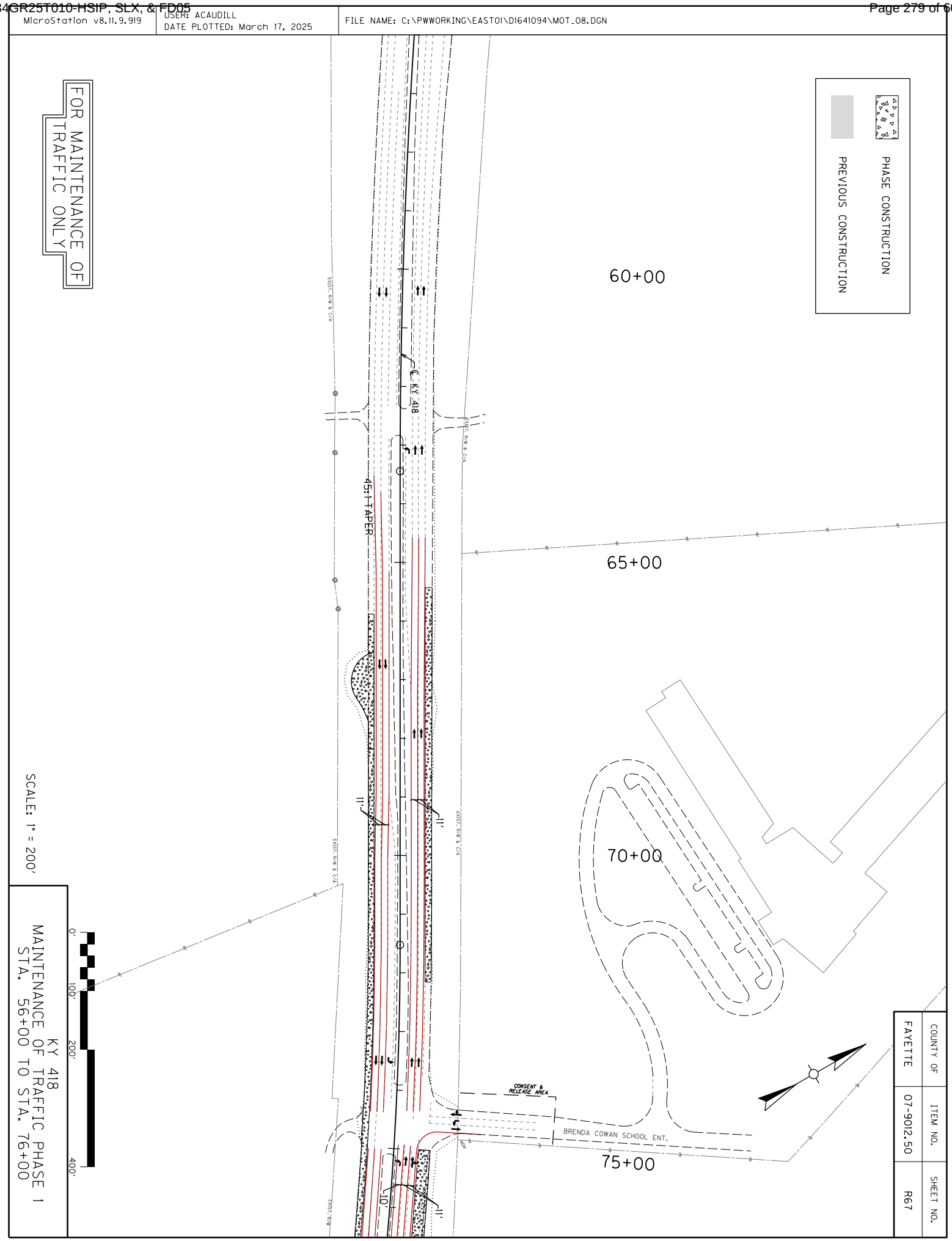
SCALE: 1" = 200'

0' 100' 200' 400'

KY 418
MAINTENANCE OF TRAFFIC PHASE 1
STA. 36+00 TO STA. 56+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\MOT_07.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_08.DGN



KY 418
MAINTENANCE OF TRAFFIC PHASE 1
STA. 56+00 TO STA. 76+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R67

Contract ID: 254301 Page 280 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R68

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

80+00

85+00

90+00

95+00

EXIST. R/W & C/A

11'

45:1 TAPER

℄ KY 418

10'

11'

45:1 TAPER

EXIST. R/W

EXIST. R/W & C/A

EXIST. R/W & C/A

SEE TRAFFIC CONTROL PLAN FOR NOTES ON THE PORTABLE CHANGEABLE MESSAGE SIGN TO BE USED ON THE INTERSTATE.

FOR MAINTENANCE OF TRAFFIC ONLY

0' 100' 200' 400'

SCALE: 1" = 200'

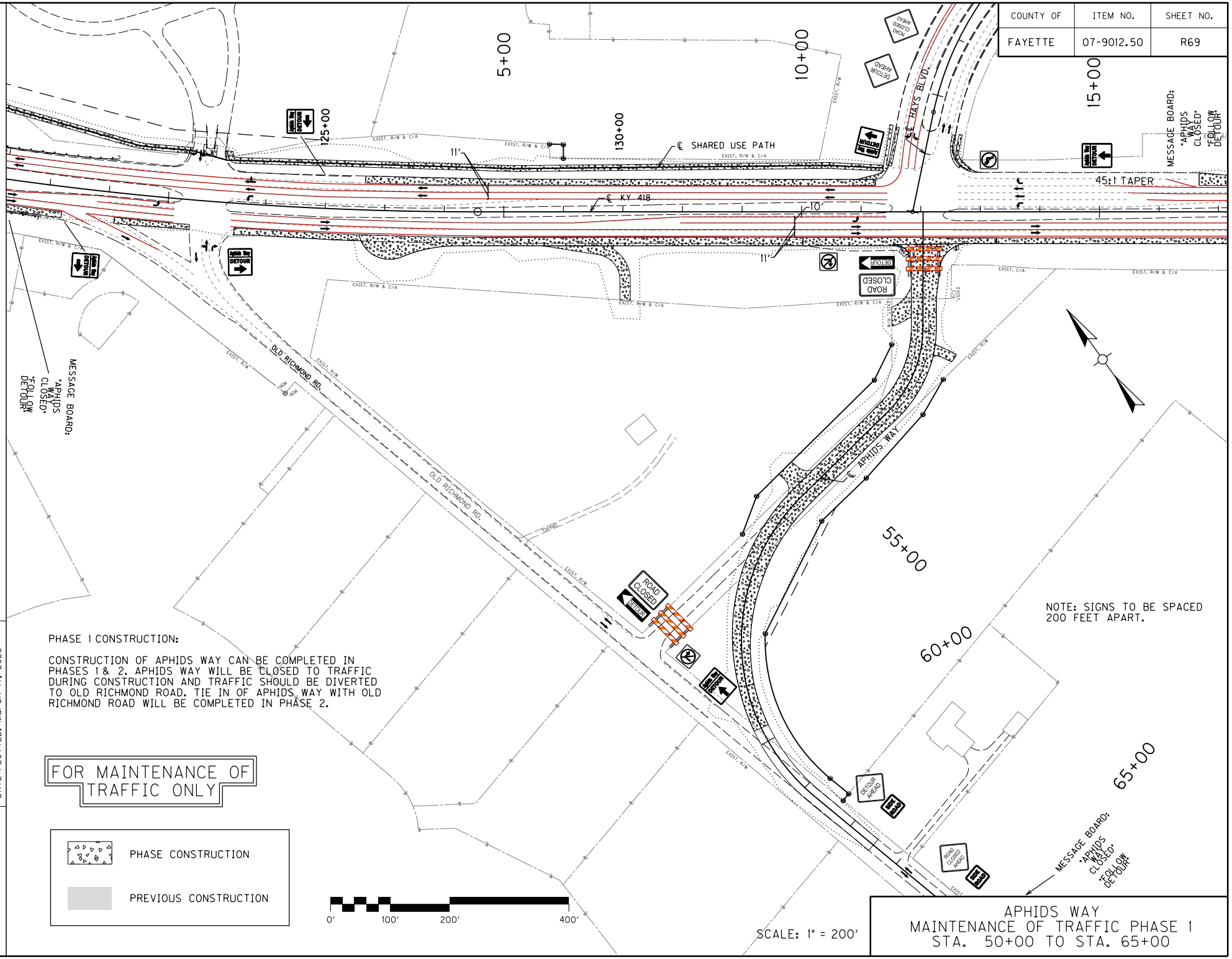
KY 418
MAINTENANCE OF TRAFFIC PHASE 1
STA. 76+00 TO STA. 85+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_09.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 281 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R69



APHIDS WAY
MAINTENANCE OF TRAFFIC PHASE 1
STA. 50+00 TO STA. 65+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_10.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R70

PHASE 2 CONSTRUCTION:

CONSTRUCTION IN THE MEDIAN OF US 25 / KY 418 - CONSTRUCT THE MEDIAN ISLANDS FOR THE U-TURN CROSSOVERS AND LEFT TURN LANES. THIS WILL PROVIDE U-TURN ACCESS TO THE SIDE ROADS PRIOR TO THE MEDIAN CLOSURES WHICH WILL CONSTRUCT THE INTERSECTION LEFT TURN LANES AND MEDIAN ISLANDS TO BE COMPLETED IN PHASE 3. MAINTAIN 2 LANES OF TRAFFIC IN EACH DIRECTION.

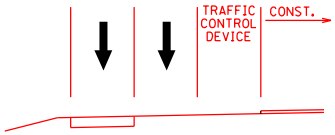
CONTRACTOR MAY COORDINATE WITH KYTC SHORT TERM LANE CLOSURES AS NEEDED DURING 9AM AND 4PM AS APPROVED BY THE ENGINEER. CONTRACTOR SHALL FOLLOW GUIDELINES FOR DROPOFFS AS SPECIFIED IN THE TRAFFIC CONTROL NOTE BEFORE OPENING ANY LANE CLOSURES.

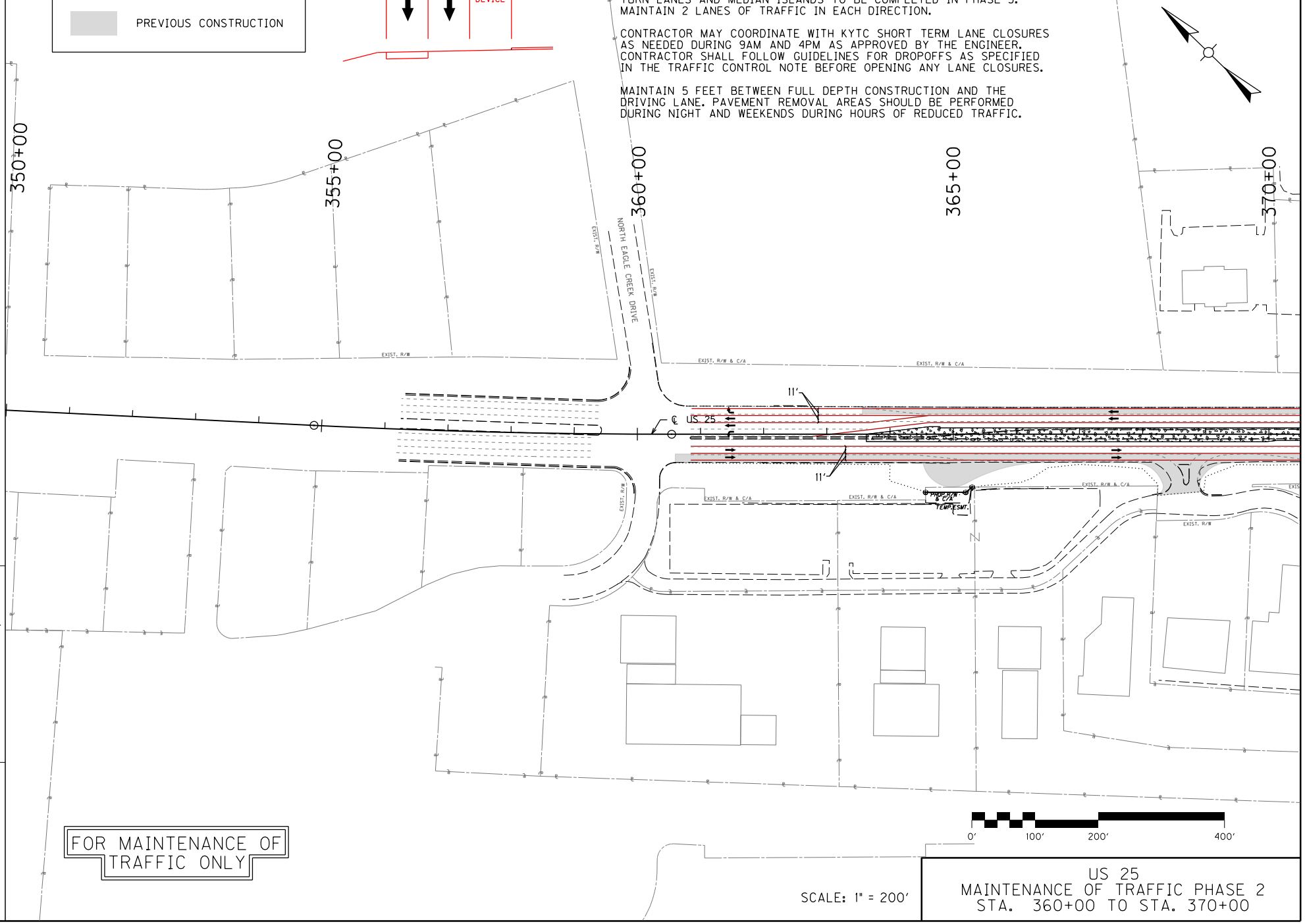
MAINTAIN 5 FEET BETWEEN FULL DEPTH CONSTRUCTION AND THE DRIVING LANE. PAVEMENT REMOVAL AREAS SHOULD BE PERFORMED DURING NIGHT AND WEEKENDS DURING HOURS OF REDUCED TRAFFIC.

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

TYPICAL PHASE CONSTRUCTION





FOR MAINTENANCE OF TRAFFIC ONLY

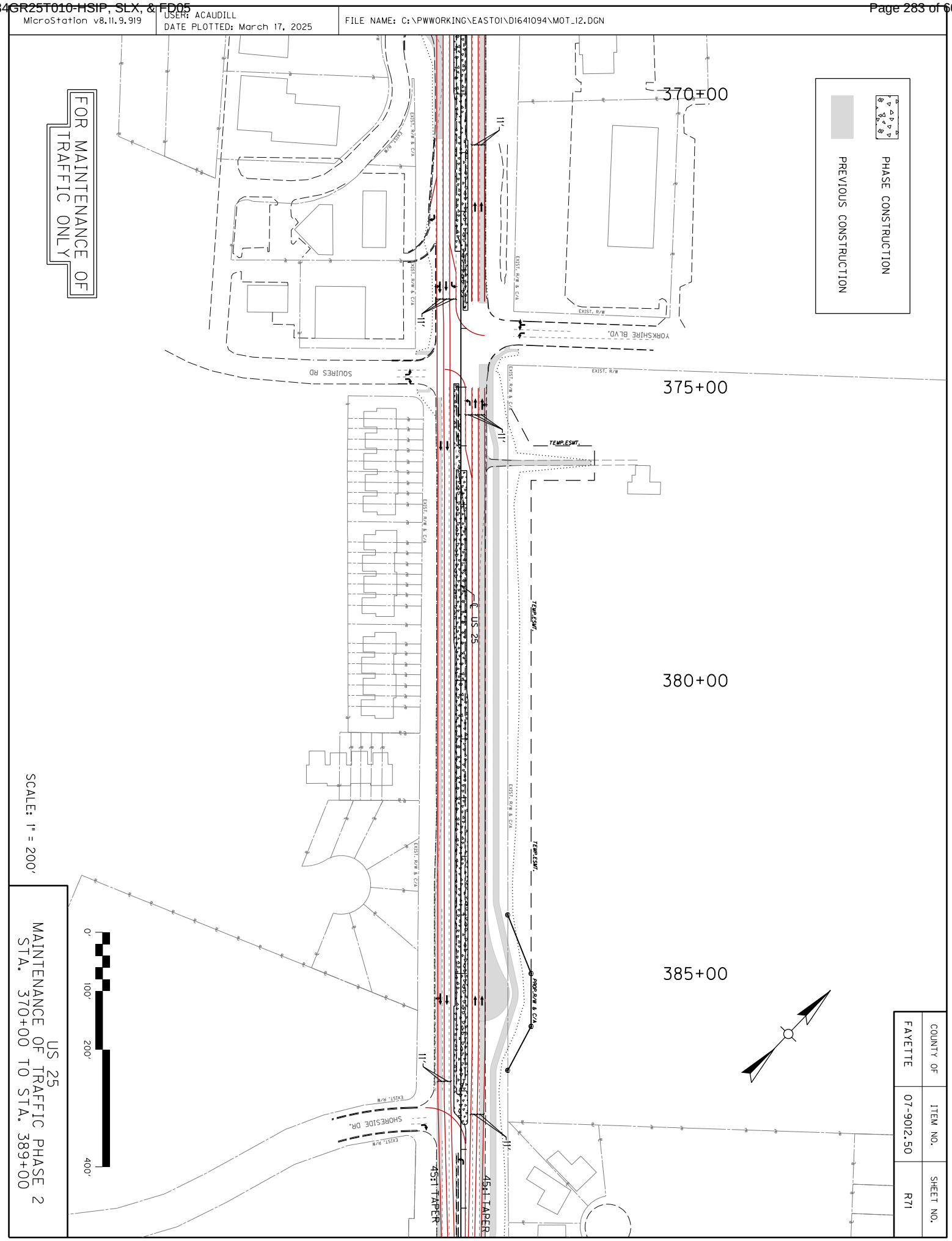
SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 2
STA. 360+00 TO STA. 370+00

FILE NAME: C:\PWWORKING\EASTO\D1641094\MOT_I1.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_12.DGN

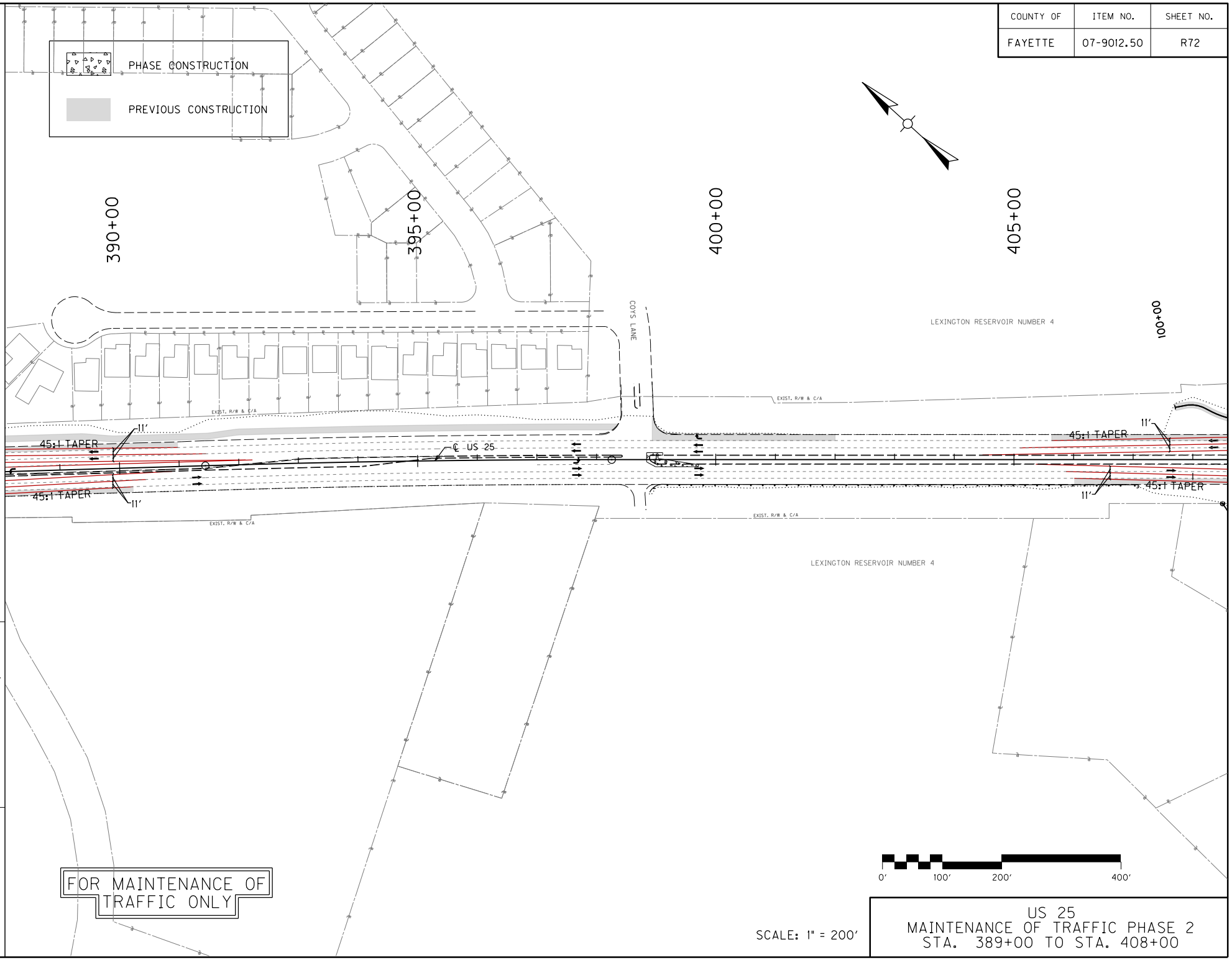


US 25
MAINTENANCE OF TRAFFIC PHASE 2
STA. 370+00 TO STA. 389+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R71

Contract ID: 254301
Page 284 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R72

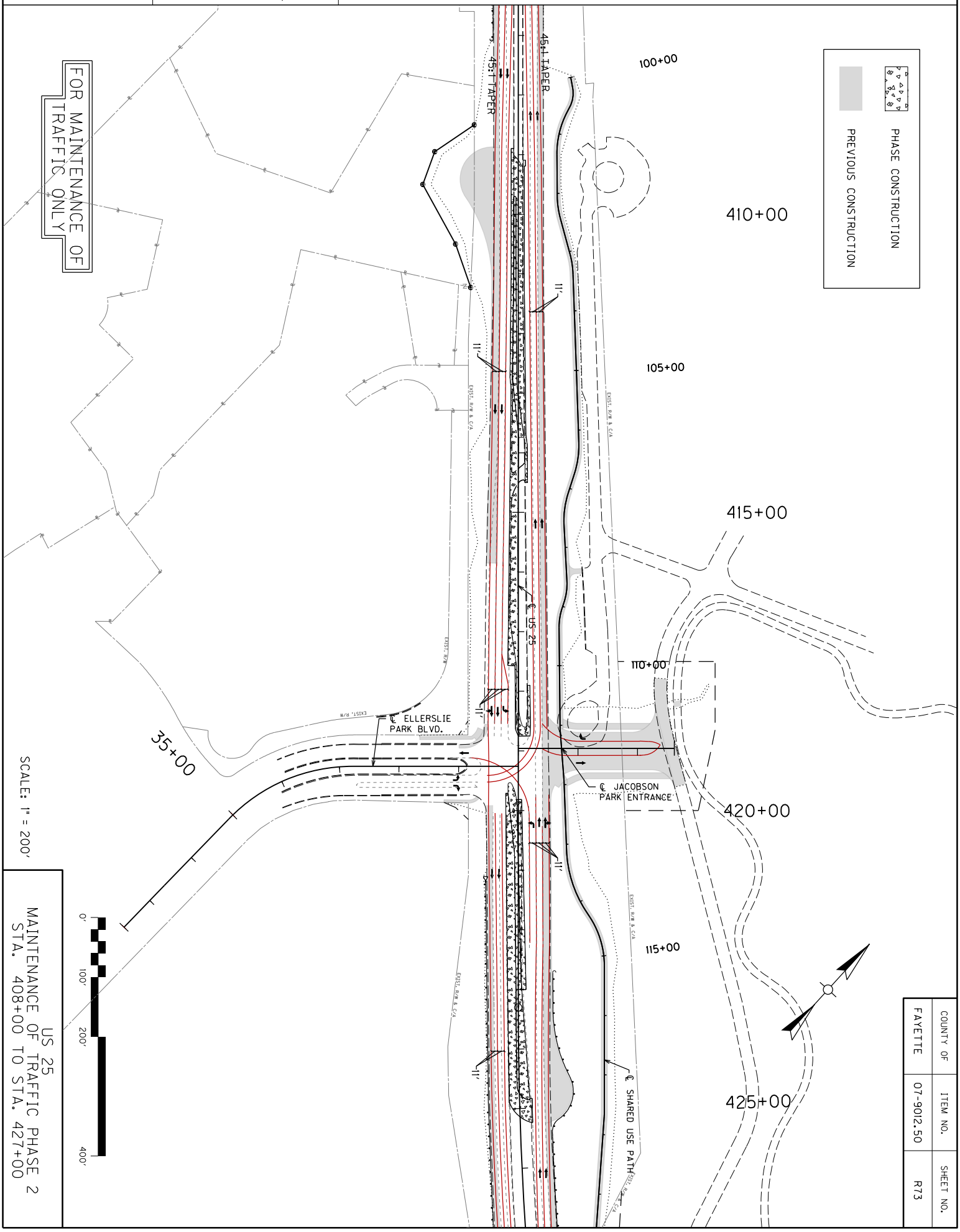


SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 2
STA. 389+00 TO STA. 408+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_J3.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

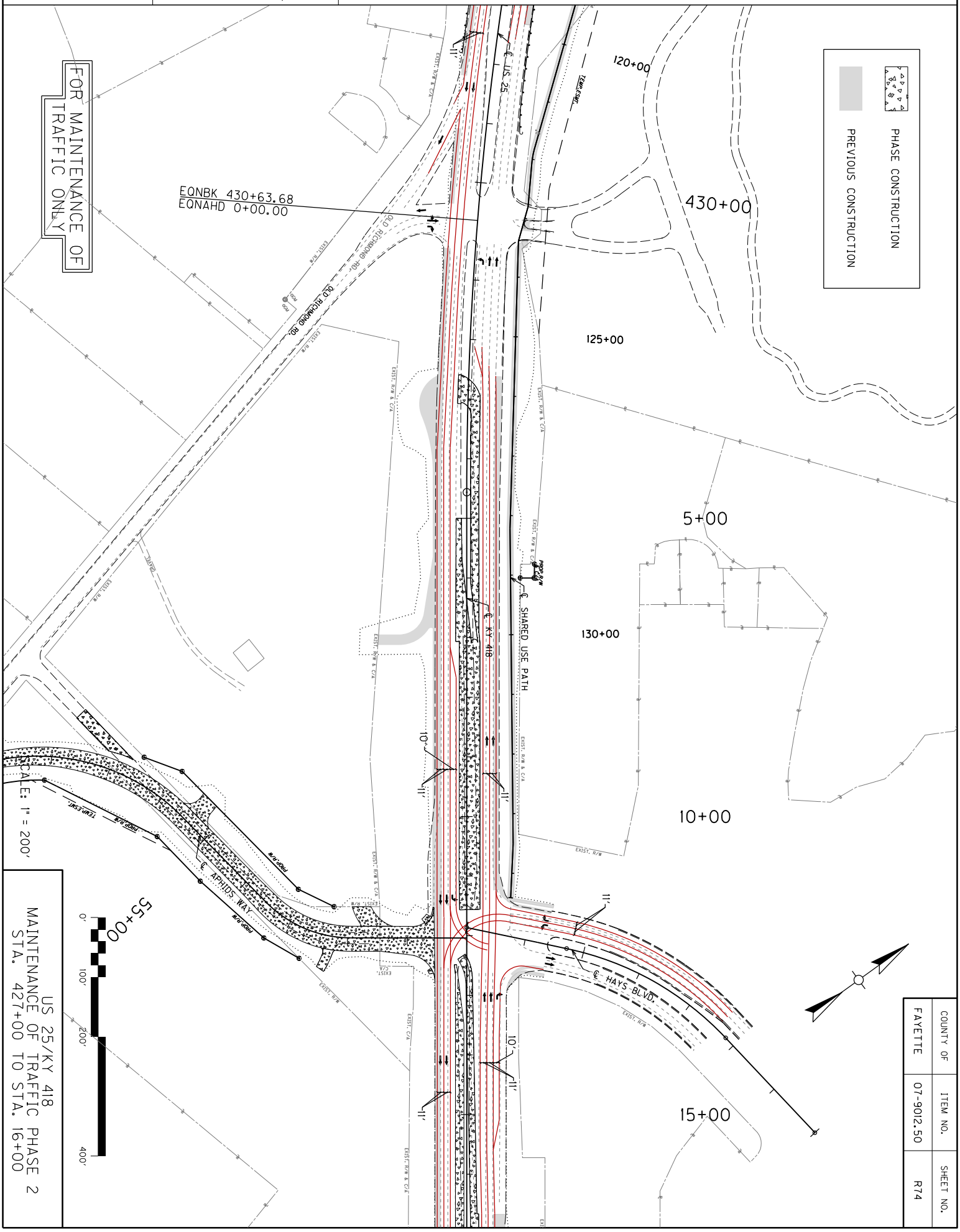
MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_14.DGN



US 25
MAINTENANCE OF TRAFFIC PHASE 2
STA. 408+00 TO STA. 427+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R73

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_15.DGN

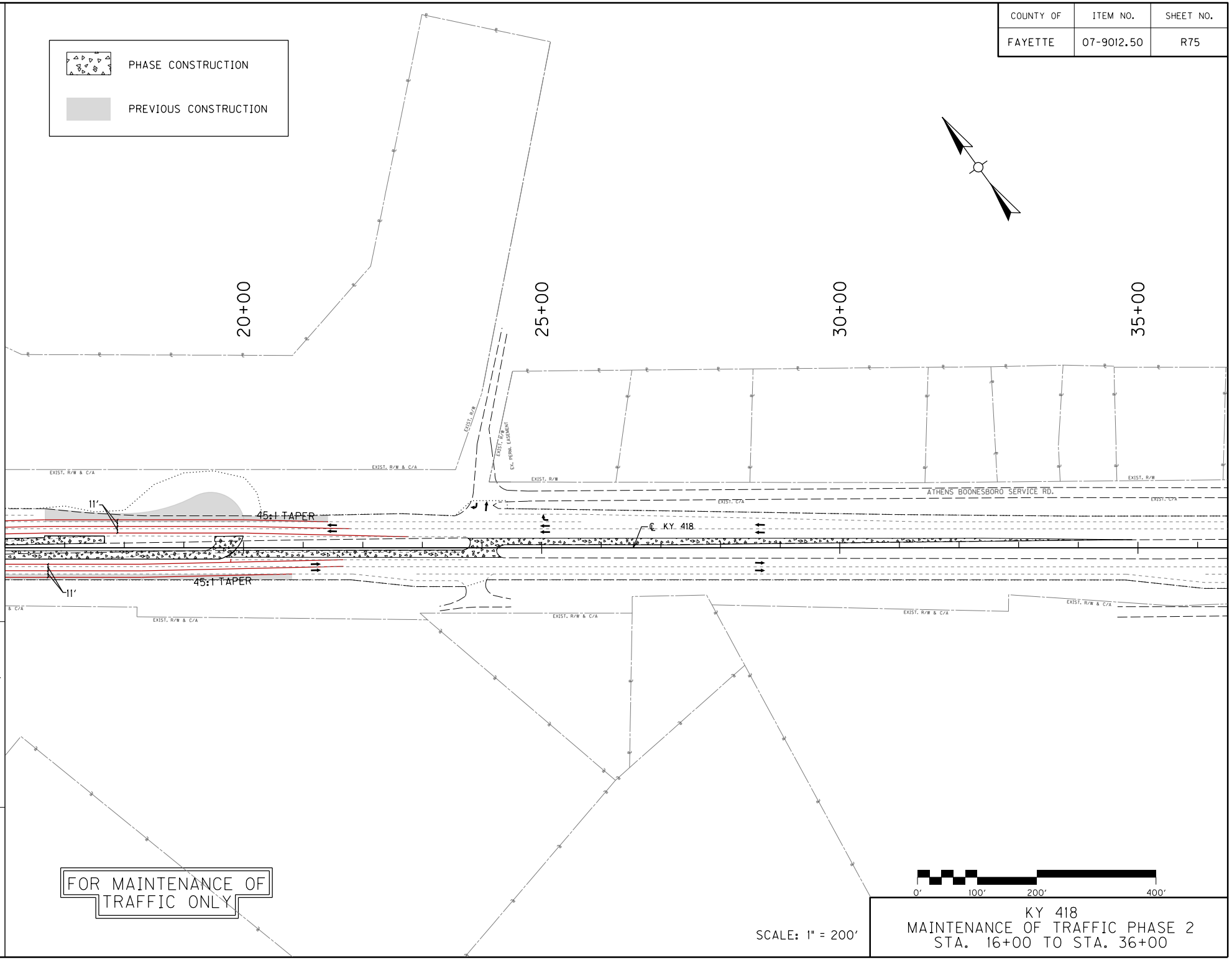


US 25/KY 418
MAINTENANCE OF TRAFFIC PHASE 2
STA. 427+00 TO STA. 16+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R74

Contract ID: 254301 Page 287 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R75



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

KY 418
MAINTENANCE OF TRAFFIC PHASE 2
STA. 16+00 TO STA. 36+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_I6.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

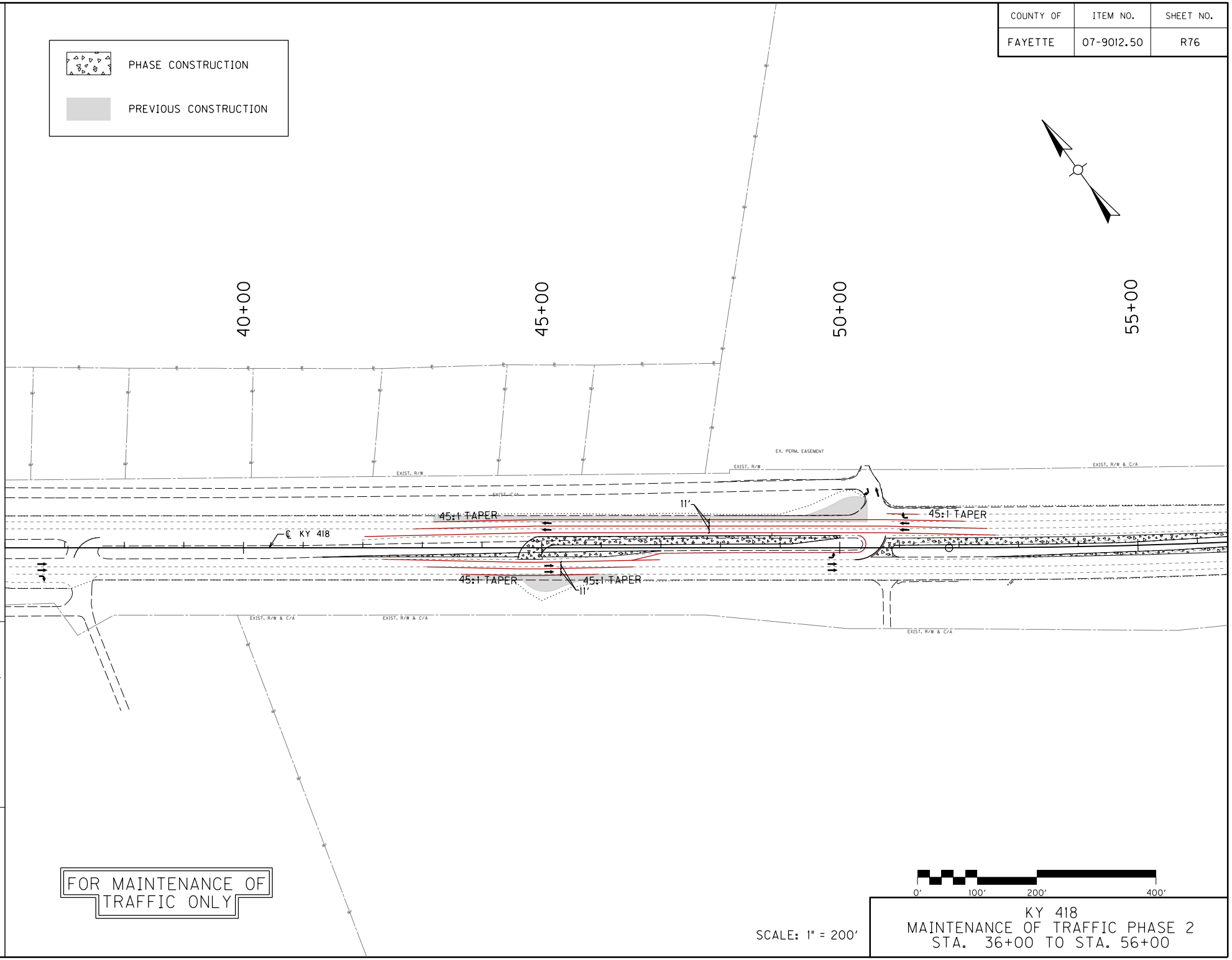
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 288 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R76

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION



FOR MAINTENANCE OF TRAFFIC ONLY

0' 100' 200' 400'

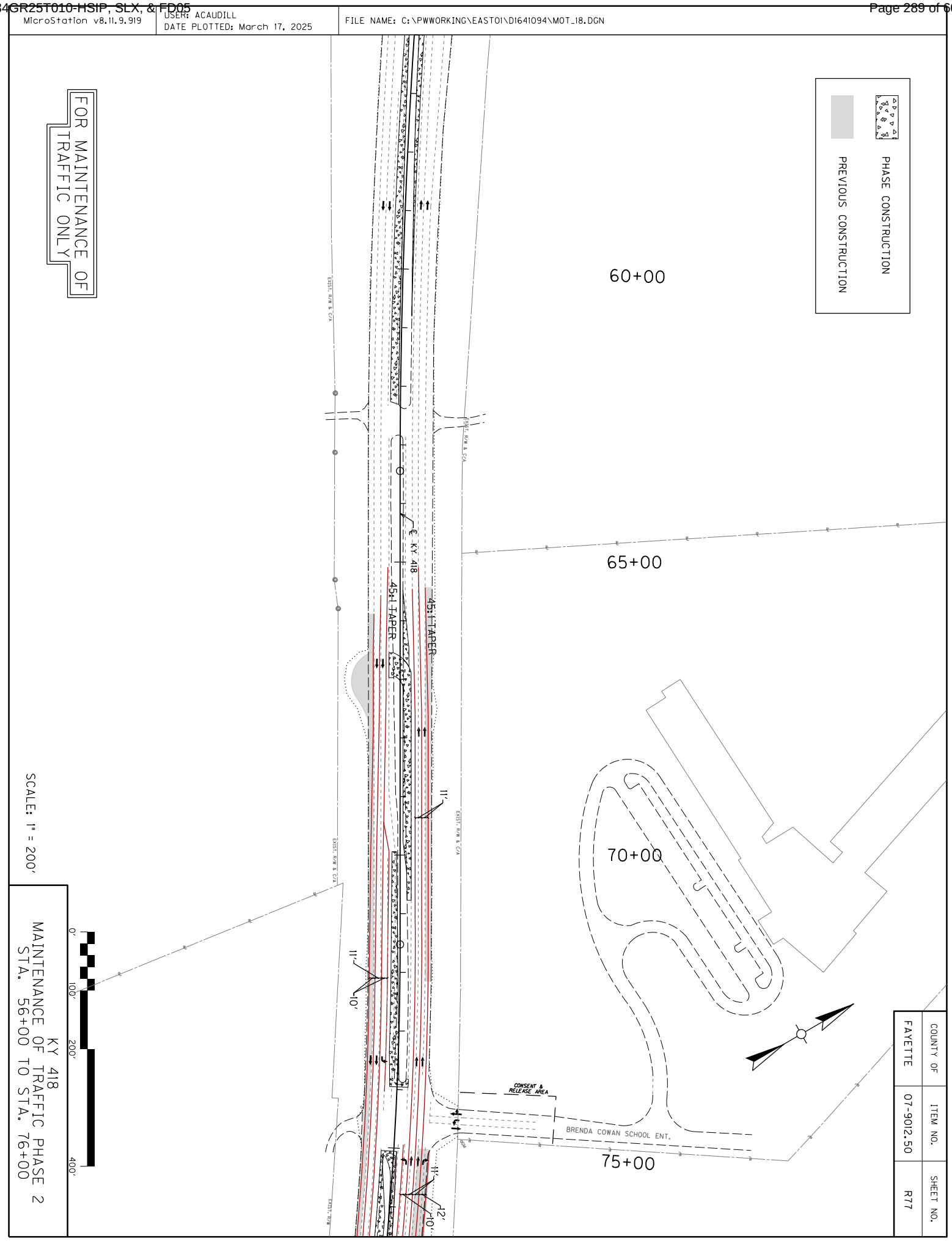
SCALE: 1" = 200'

KY 418
MAINTENANCE OF TRAFFIC PHASE 2
STA. 36+00 TO STA. 56+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_I7.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_18.DGN



KY 418
MAINTENANCE OF TRAFFIC PHASE 2
STA. 56+00 TO STA. 76+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R77

Contract ID: 254301
Page 290 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R78

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

80+00

85+00

90+00

95+00

EXIST. R/W & C/A

11′ 12′ 10′

45:1 TAPER

℄ KY 418

45:1 TAPER

11′ 10′

EXIST. R/W

EXIST. R/W & C/A

EXIST. R/W & C/A

FOR MAINTENANCE OF TRAFFIC ONLY

0′ 100′ 200′ 400′

SCALE: 1" = 200′

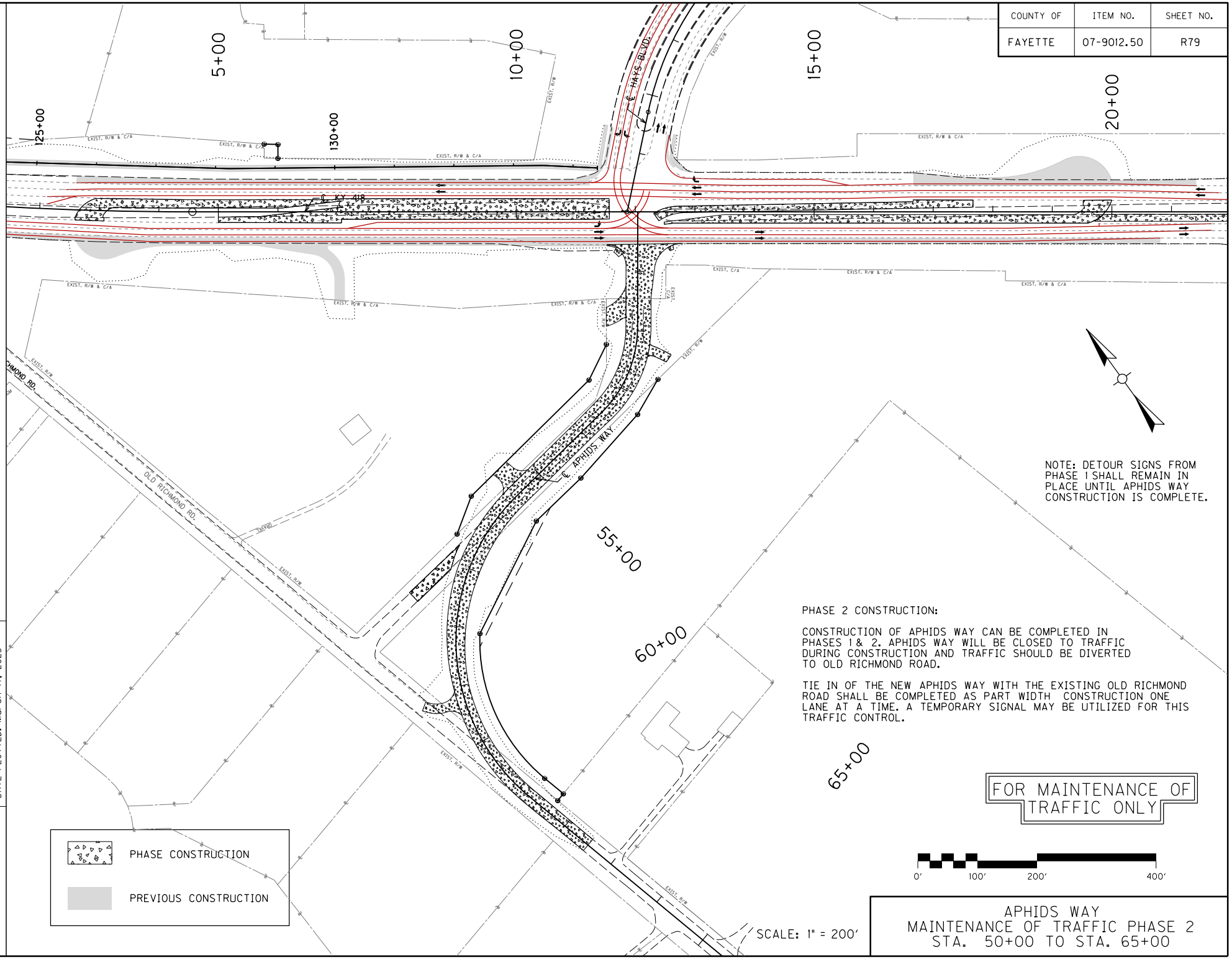
KY 418
MAINTENANCE OF TRAFFIC PHASE 2
STA. 76+00 TO STA. 85+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_19.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 291 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R79



NOTE: DETOUR SIGNS FROM PHASE 1 SHALL REMAIN IN PLACE UNTIL APHIDS WAY CONSTRUCTION IS COMPLETE.

PHASE 2 CONSTRUCTION:

CONSTRUCTION OF APHIDS WAY CAN BE COMPLETED IN PHASES 1 & 2. APHIDS WAY WILL BE CLOSED TO TRAFFIC DURING CONSTRUCTION AND TRAFFIC SHOULD BE DIVERTED TO OLD RICHMOND ROAD.

TIE IN OF THE NEW APHIDS WAY WITH THE EXISTING OLD RICHMOND ROAD SHALL BE COMPLETED AS PART WIDTH CONSTRUCTION ONE LANE AT A TIME. A TEMPORARY SIGNAL MAY BE UTILIZED FOR THIS TRAFFIC CONTROL.

FOR MAINTENANCE OF TRAFFIC ONLY

0′ 100′ 200′ 400′

SCALE: 1" = 200′

APHIDS WAY
MAINTENANCE OF TRAFFIC PHASE 2
STA. 50+00 TO STA. 65+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_20.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R80

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

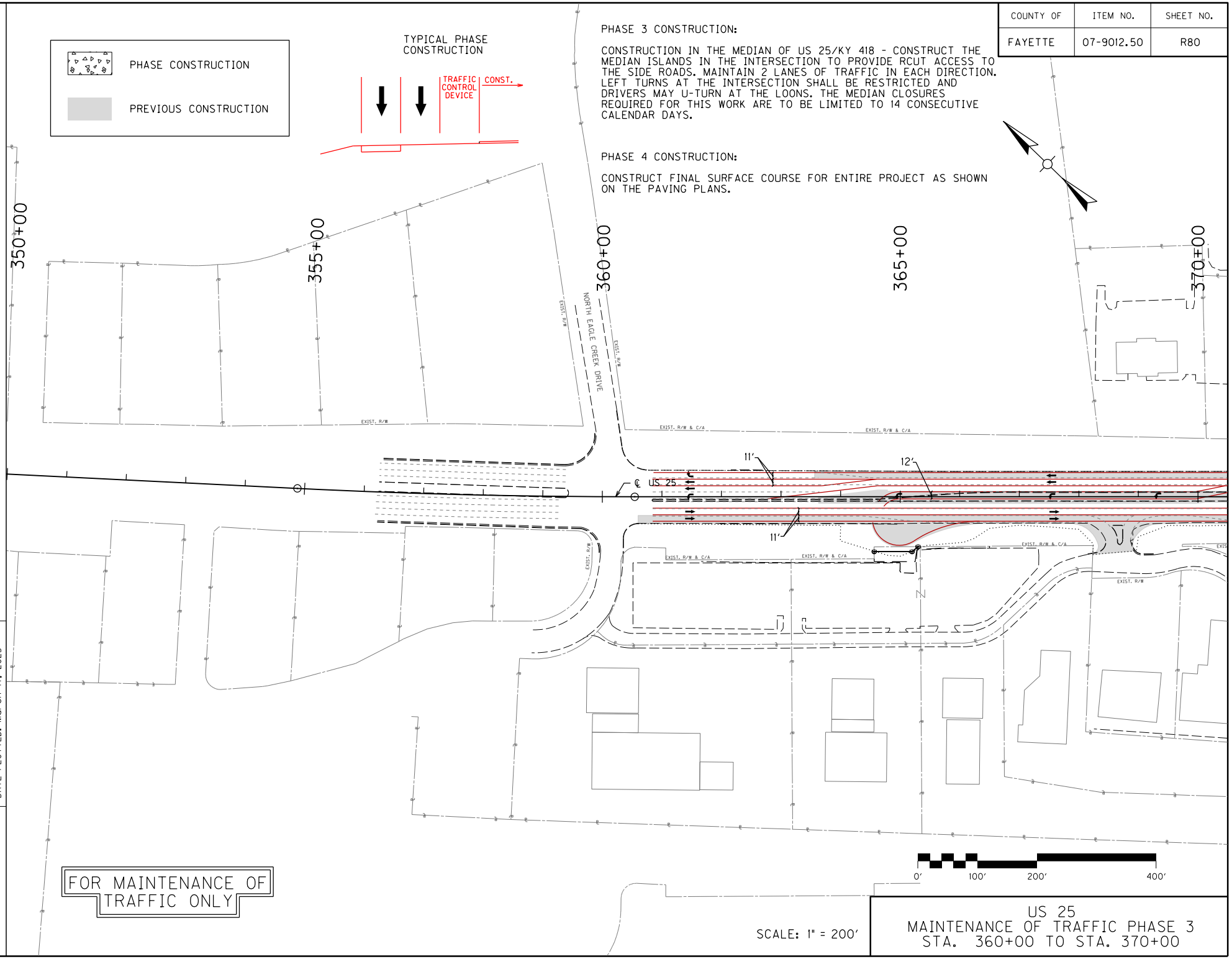
TYPICAL PHASE CONSTRUCTION

PHASE 3 CONSTRUCTION:

CONSTRUCTION IN THE MEDIAN OF US 25/KY 418 - CONSTRUCT THE MEDIAN ISLANDS IN THE INTERSECTION TO PROVIDE RCUT ACCESS TO THE SIDE ROADS. MAINTAIN 2 LANES OF TRAFFIC IN EACH DIRECTION. LEFT TURNS AT THE INTERSECTION SHALL BE RESTRICTED AND DRIVERS MAY U-TURN AT THE LOONS. THE MEDIAN CLOSURES REQUIRED FOR THIS WORK ARE TO BE LIMITED TO 14 CONSECUTIVE CALENDAR DAYS.

PHASE 4 CONSTRUCTION:

CONSTRUCT FINAL SURFACE COURSE FOR ENTIRE PROJECT AS SHOWN ON THE PAVING PLANS.



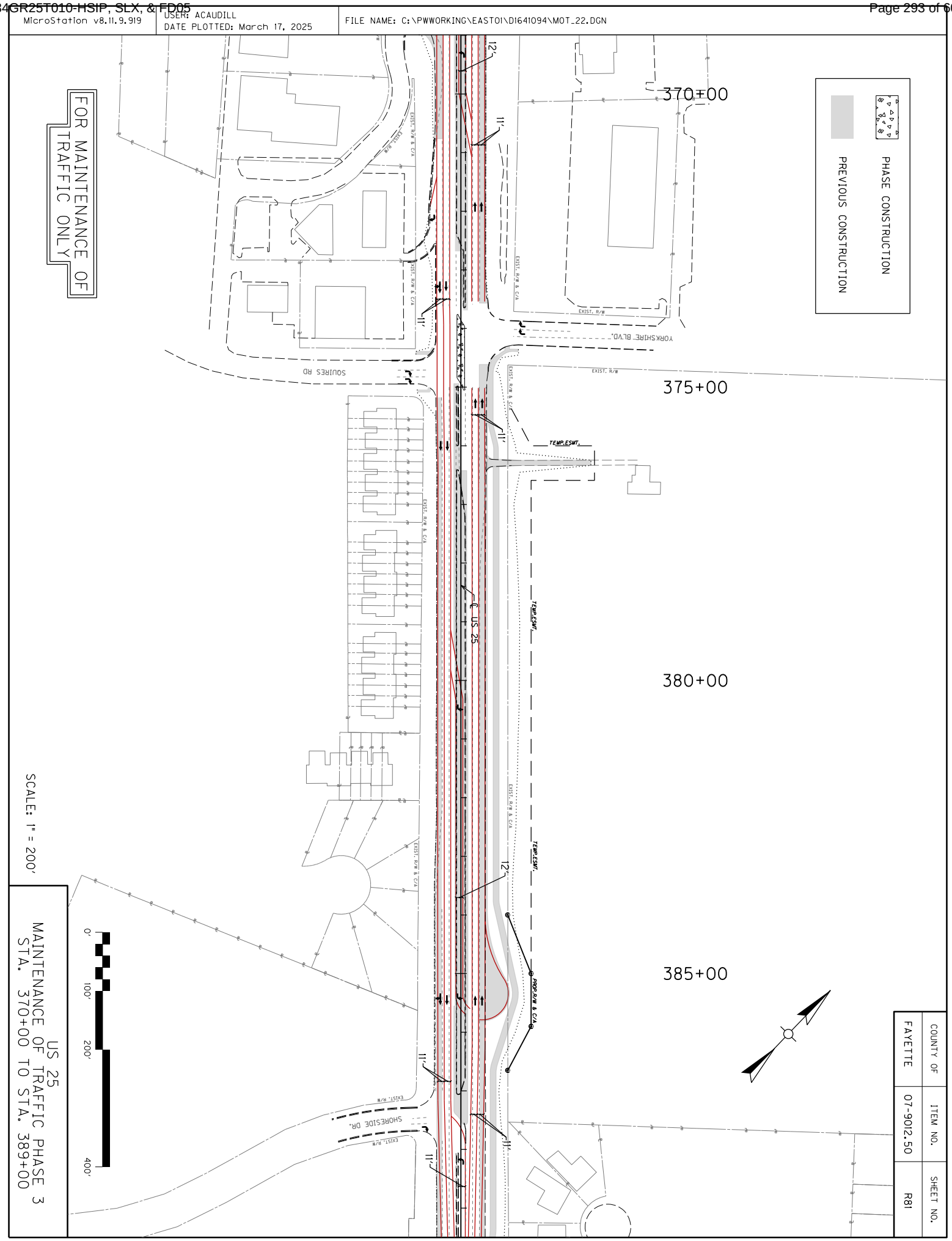
FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 3
STA. 360+00 TO STA. 370+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_2L.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_22.DGN

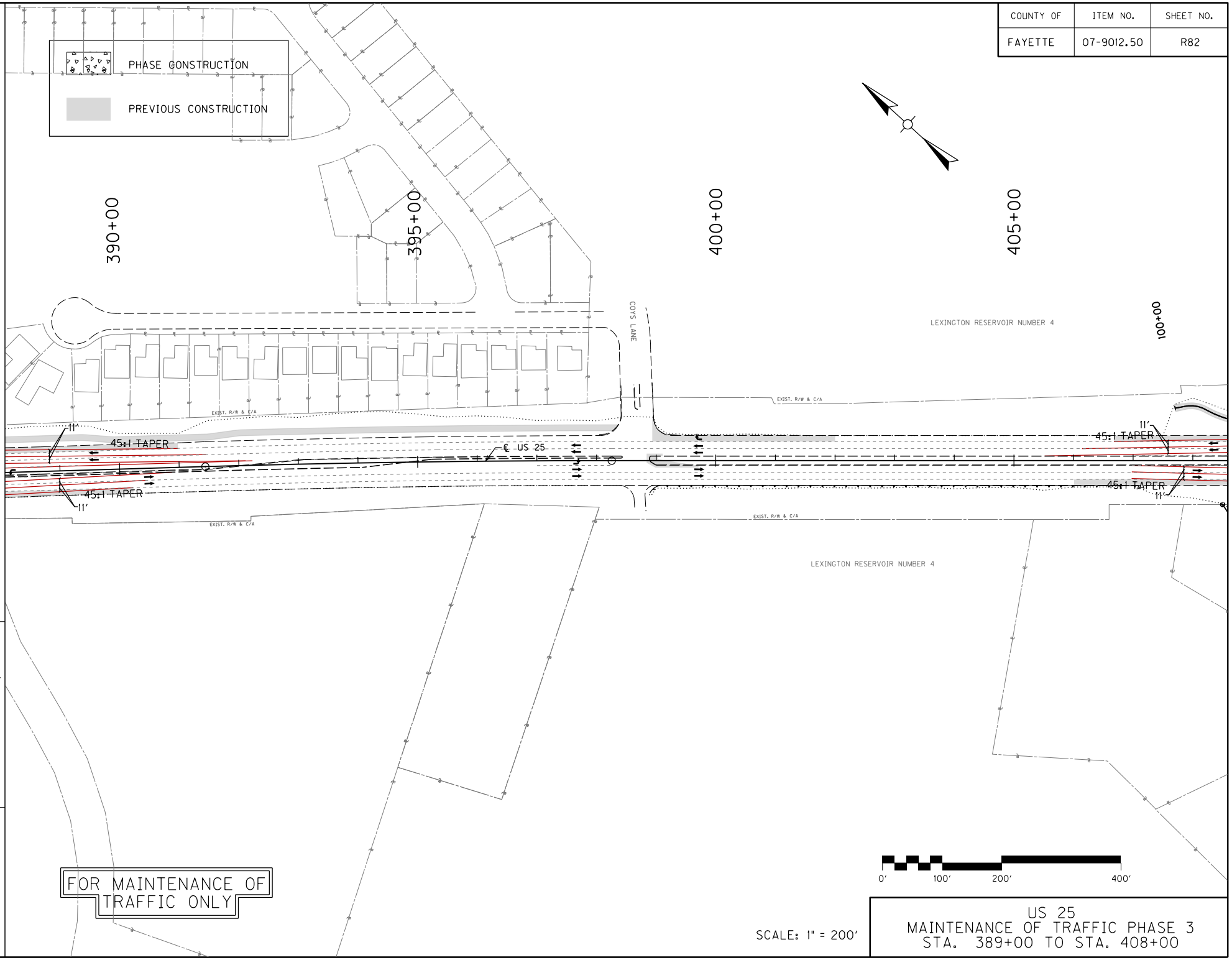


US 25
MAINTENANCE OF TRAFFIC PHASE 3
STA. 370+00 TO STA. 389+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R81

Contract ID: 254301
Page 294 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R82



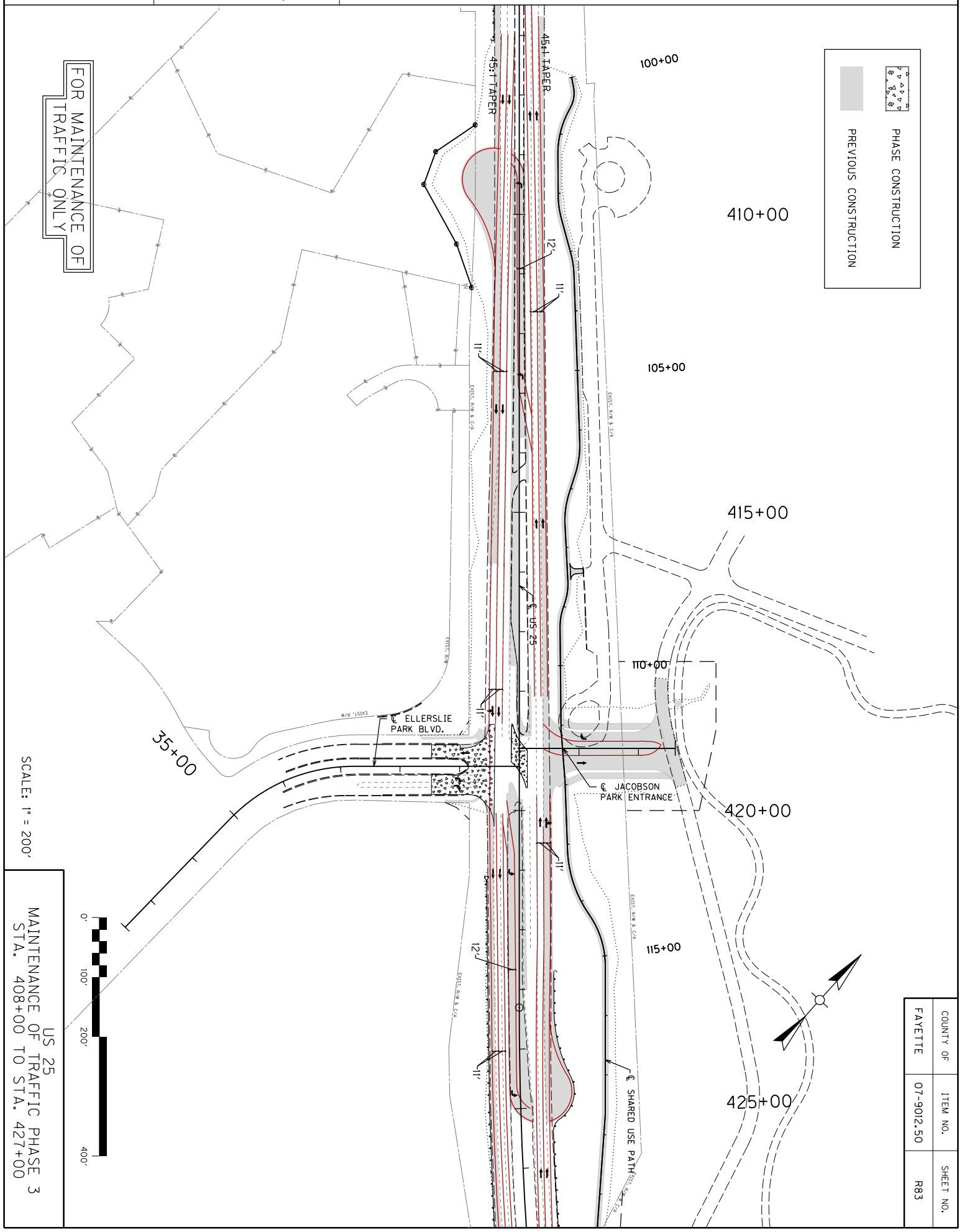
FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

US 25
MAINTENANCE OF TRAFFIC PHASE 3
STA. 389+00 TO STA. 408+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_23.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

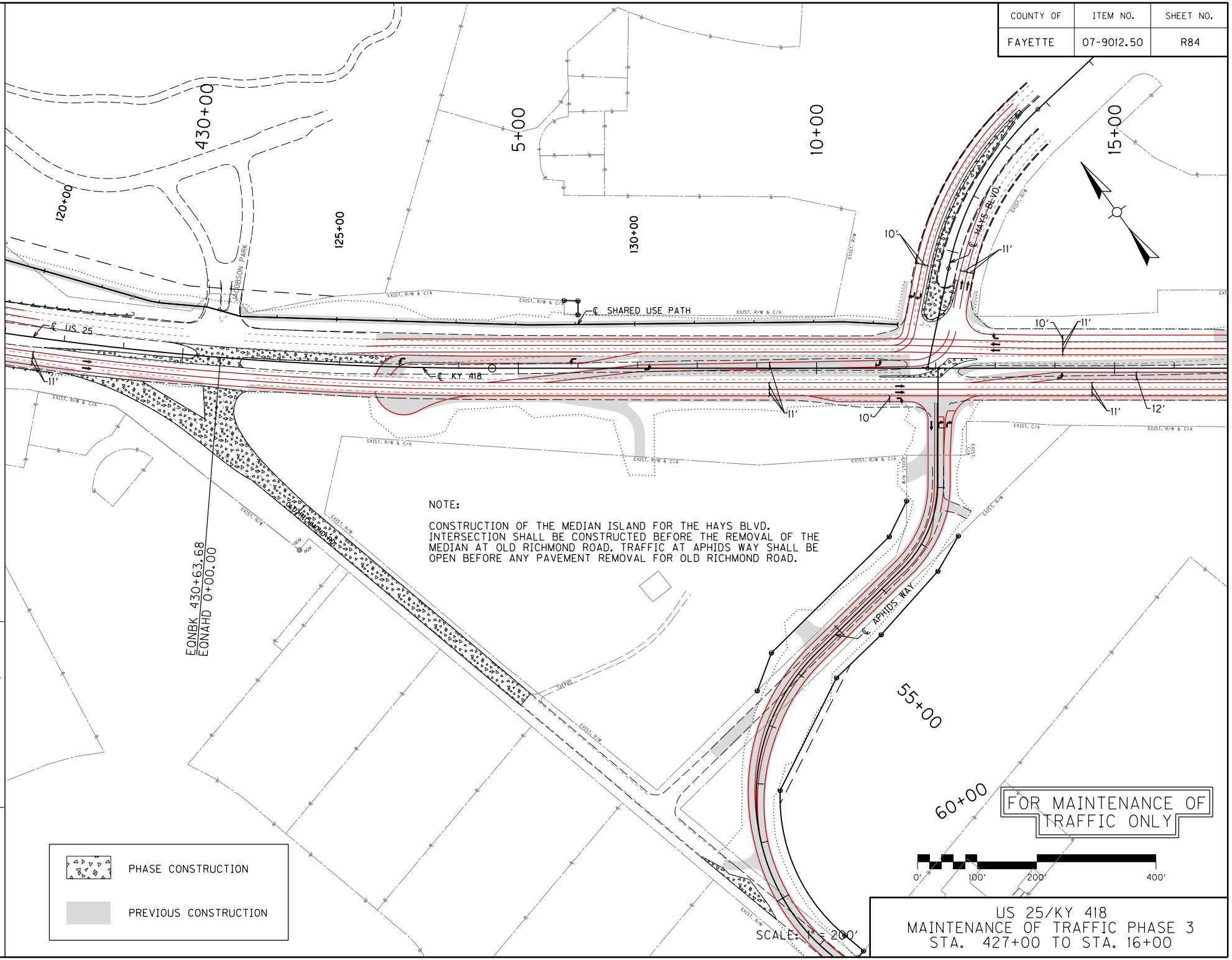
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US 25
MAINTENANCE OF TRAFFIC PHASE 3
STA. 408+00 TO STA. 427+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R83

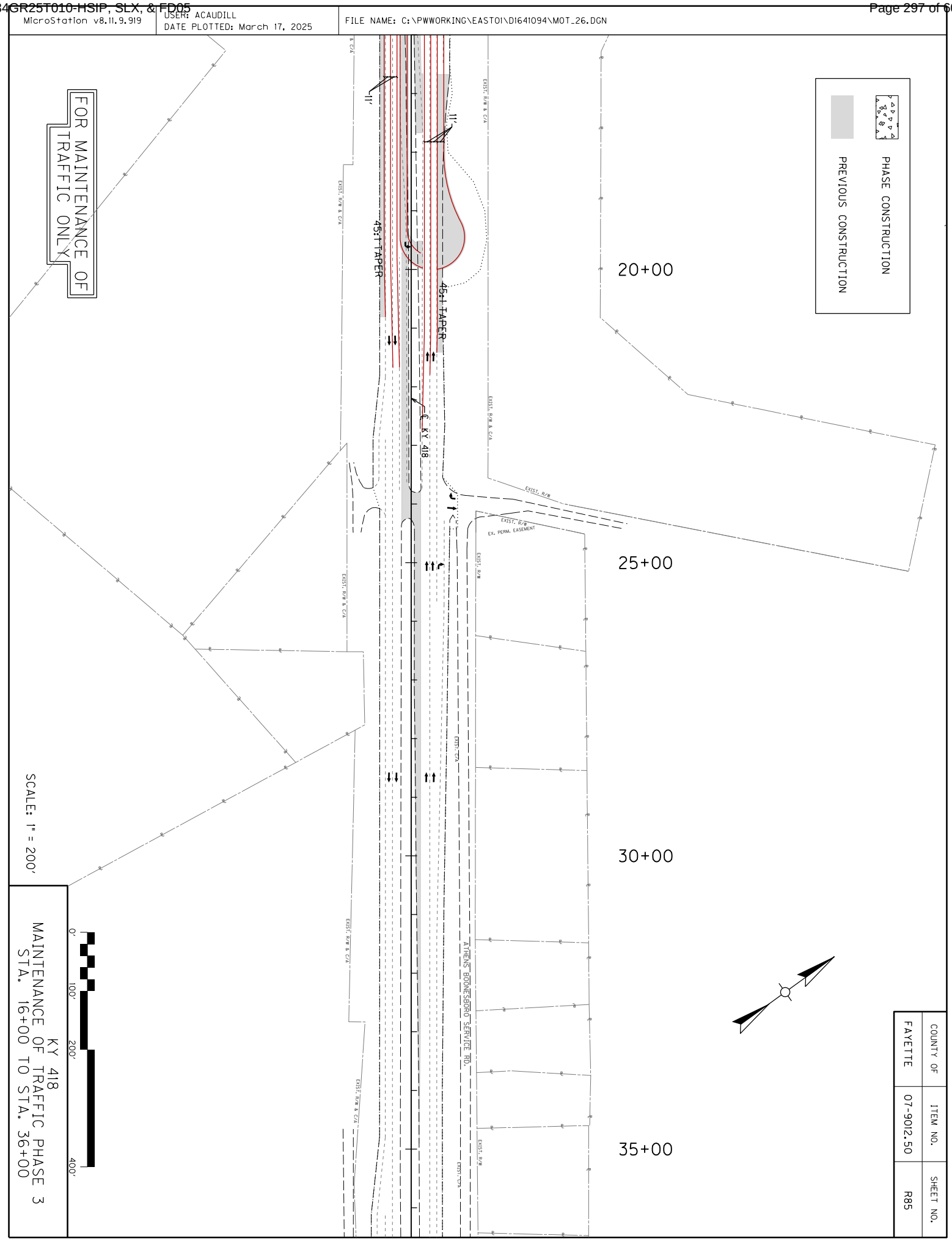
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R84



US 25/KY 418
MAINTENANCE OF TRAFFIC PHASE 3
STA. 427+00 TO STA. 16+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_25.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\MOT_26.DGN



KY 418
MAINTENANCE OF TRAFFIC PHASE 3
STA. 16+00 TO STA. 36+00

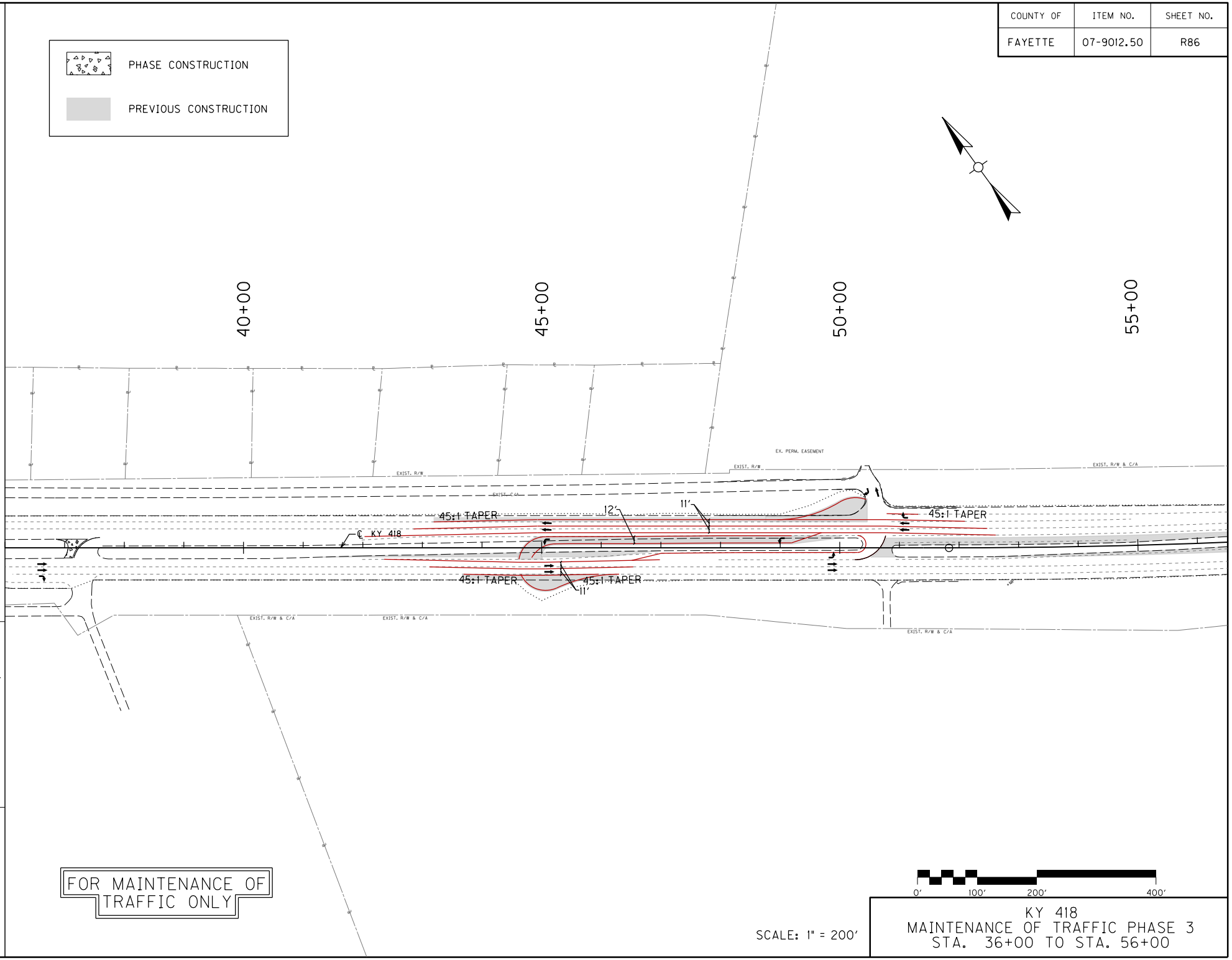
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R85

Contract ID: 254301
Page 298 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R86

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

0' 100' 200' 400'

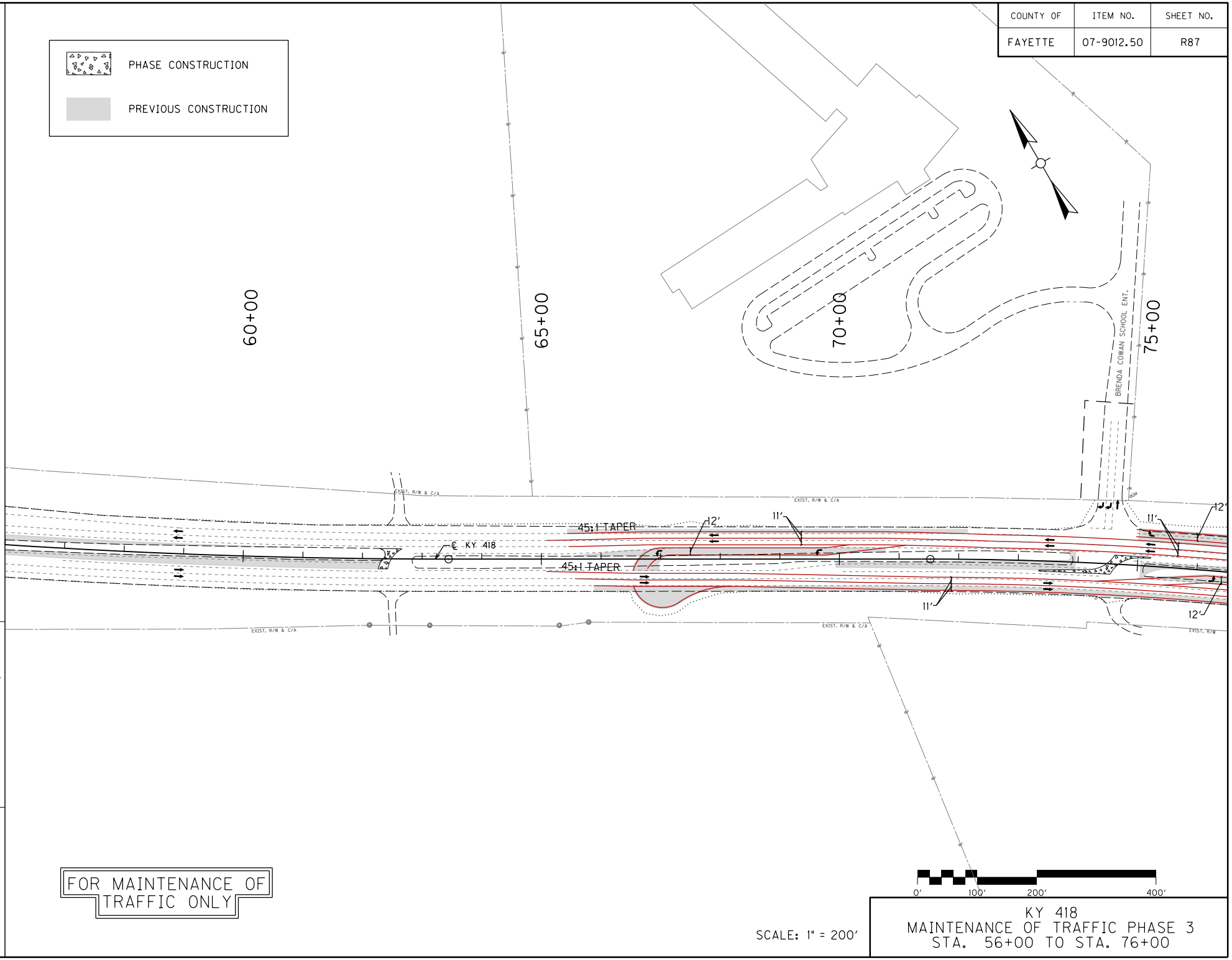
KY 418
MAINTENANCE OF TRAFFIC PHASE 3
STA. 36+00 TO STA. 56+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_27.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301 Page 299 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R87



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1" = 200'

KY 418
MAINTENANCE OF TRAFFIC PHASE 3
STA. 56+00 TO STA. 76+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_28.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

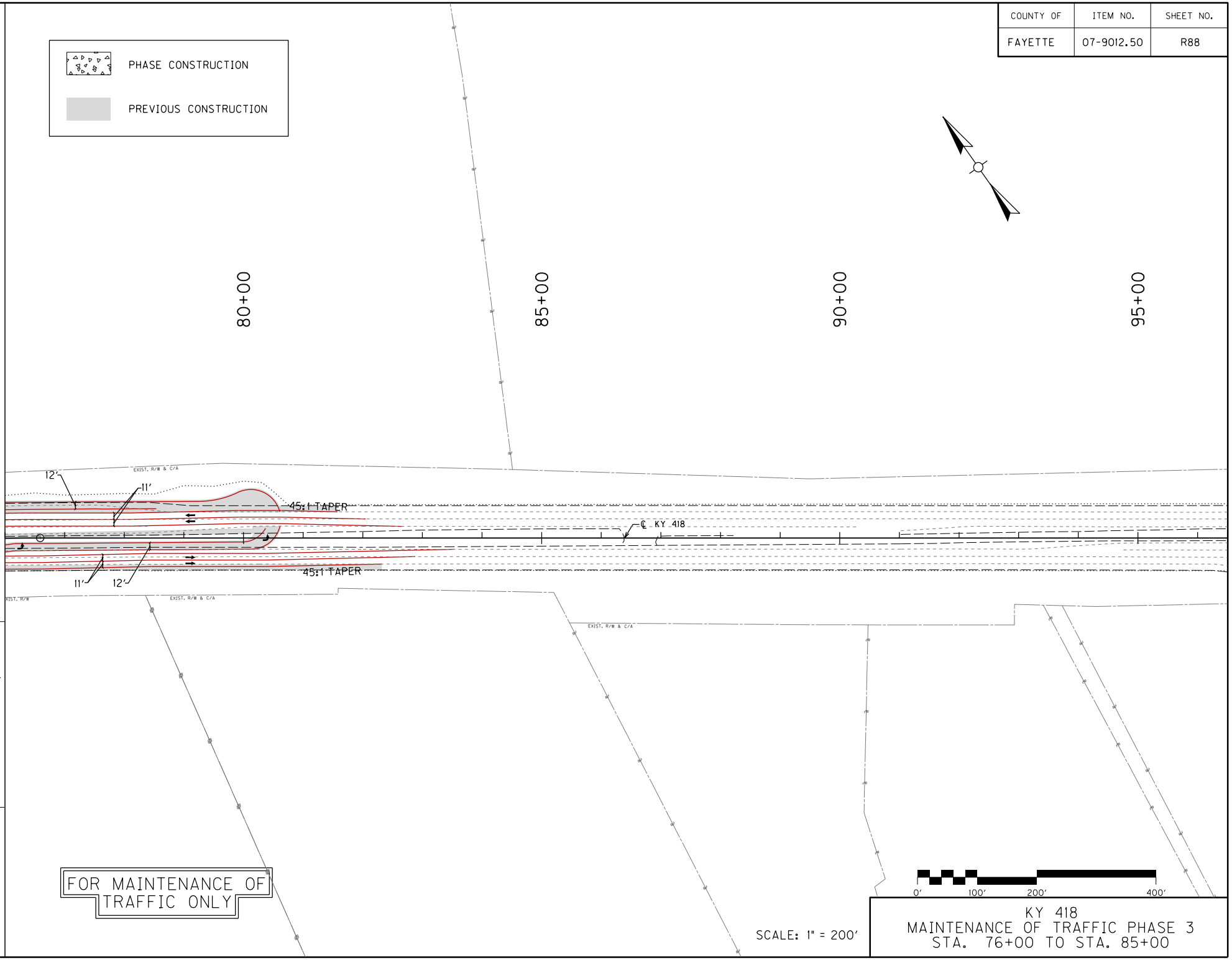
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 300 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R88

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION



FOR MAINTENANCE OF TRAFFIC ONLY

0' 100' 200' 400'

SCALE: 1" = 200'

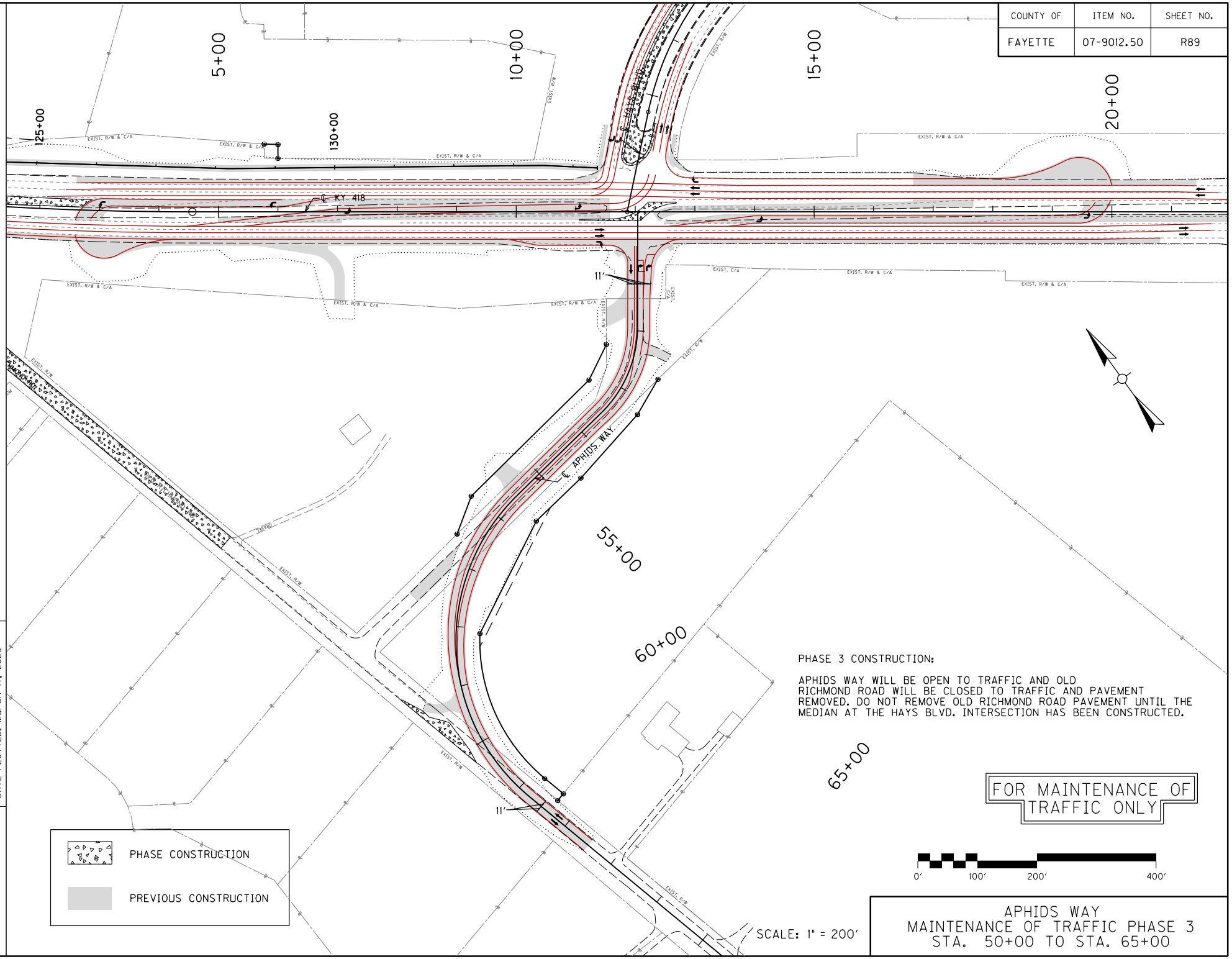
KY 418
MAINTENANCE OF TRAFFIC PHASE 3
STA. 76+00 TO STA. 85+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_29.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 301 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R89



PHASE 3 CONSTRUCTION:

APHIDS WAY WILL BE OPEN TO TRAFFIC AND OLD RICHMOND ROAD WILL BE CLOSED TO TRAFFIC AND PAVEMENT REMOVED. DO NOT REMOVE OLD RICHMOND ROAD PAVEMENT UNTIL THE MEDIAN AT THE HAYS BLVD. INTERSECTION HAS BEEN CONSTRUCTED.

FOR MAINTENANCE OF TRAFFIC ONLY

PHASE CONSTRUCTION

PREVIOUS CONSTRUCTION

0' 100' 200' 400'

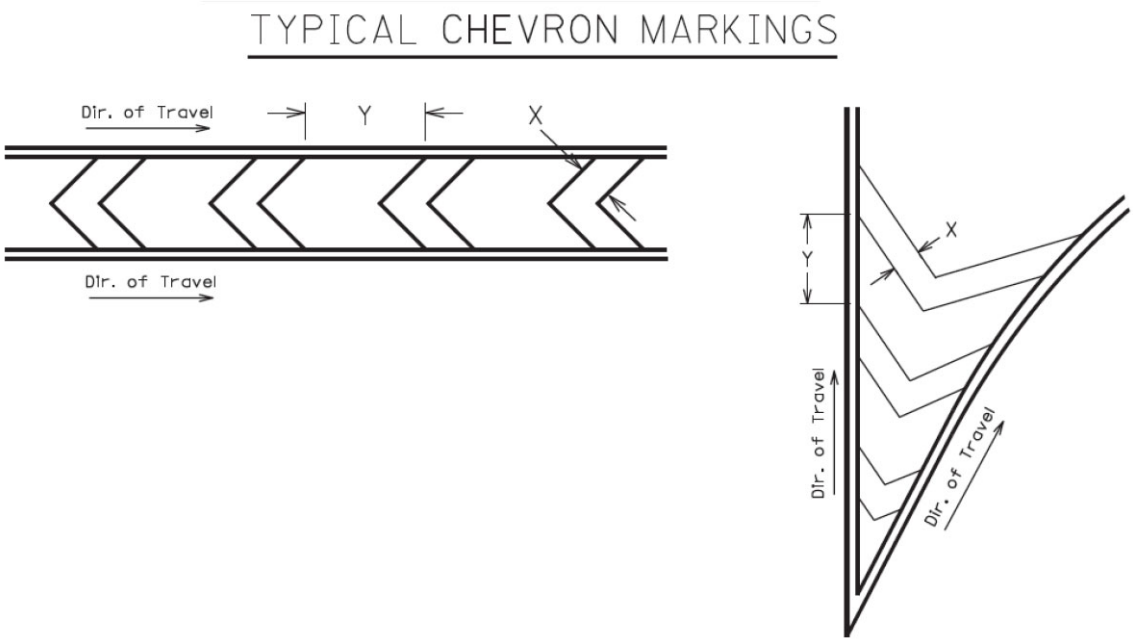
SCALE: 1" = 200'

APHIDS WAY
MAINTENANCE OF TRAFFIC PHASE 3
STA. 50+00 TO STA. 65+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\MOT_30.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

CHEVRON PAVEMENT MARKINGS DETAIL



The chevron pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each chevron installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the chevron pavement markings as necessary so that a minimum of three (3) chevron markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

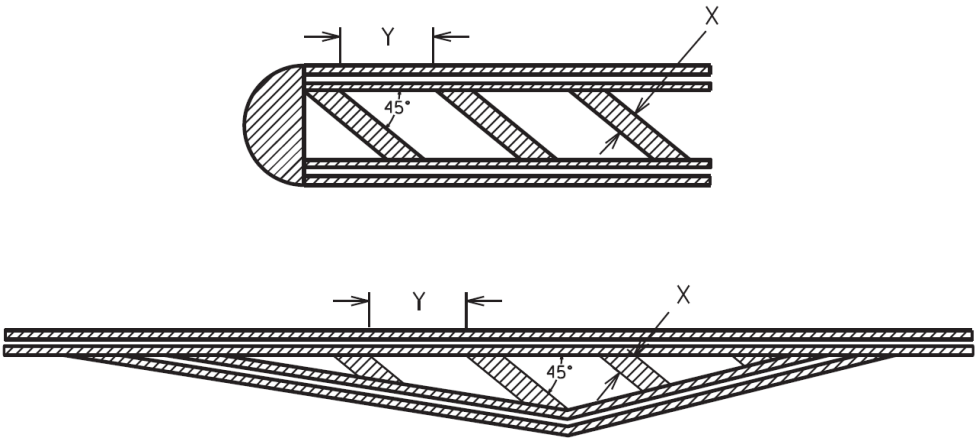
The Department will measure the finished in-place area of Chevron Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between the chevrons. See Section 717.04 for additional measurement information.

When listed as a bid item, the Department will make payment for the completed and accepted quantities of Chevron Pavement Markings under the following:

Code	Pay Item	Pay Unit
24679ED	Pave Mark Thermo Chevron	Square Foot
26166ES717	Pave Mark TY 1 Tape Chevron	Square Foot

CROSS-HATCH PAVEMENT MARKINGS DETAIL

TYPICAL CROSS-HATCH MARKINGS



The cross-hatch pavement marking width (X) and spacing (Y) will usually be specified in the plans. The width to spacing values usually have a ratio of 1:10. If the plans do not specify the width (X) and spacing (Y) the Engineer will provide the contractor with the X and Y values for each cross-hatch installation. If necessary, the Engineer may obtain guidance from the District Traffic Engineer and/or the Division of Traffic Operations.

NOTE: Adjust the width and spacing of the cross-hatch pavement markings as necessary so that a minimum of three (3) cross-hatch markings are placed within the area being marked. The 1:10 ratio between width and spacing values should be maintained as much as possible.

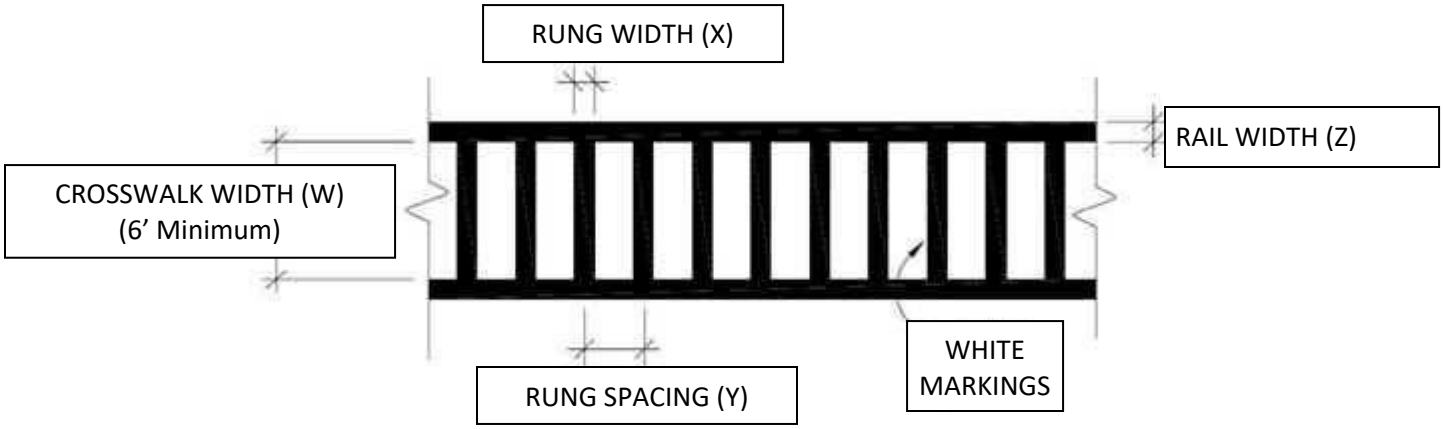
Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

The Department will measure the finished in-place area of Cross-Hatch Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between cross-hatching. See Section 717.04 for additional measurement information.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Cross-Hatch Pavement Markings under the following:

Code	Pay Item	Pay Unit
06569	Pave Marking-Thermo Cross-Hatch	Square Foot
23253ES717	Pave Mark TY 1 Tape Cross Hatch	Square Foot

LADDER STYLE CROSSWALK DETAIL



Ladder Style Crosswalks consist of white markings that produce rails and rungs. The overall crosswalk width (W), rung width (X), rung spacing (Y), and rail width (Z) are to be installed as specified above or as specified on the plans and/or summary sheets (the latter case is typically because there are multiple crosswalks with different dimensions). If this detail, the plans, and/or summary sheets do not specify the dimensions, then construct the Ladder Style Crosswalks as directed by the District Traffic Engineer and/or the Engineer.

Refer to Section 717 of the Standard Specifications for Road and Bridge Construction, current edition, for more information concerning Material and Construction specifications.

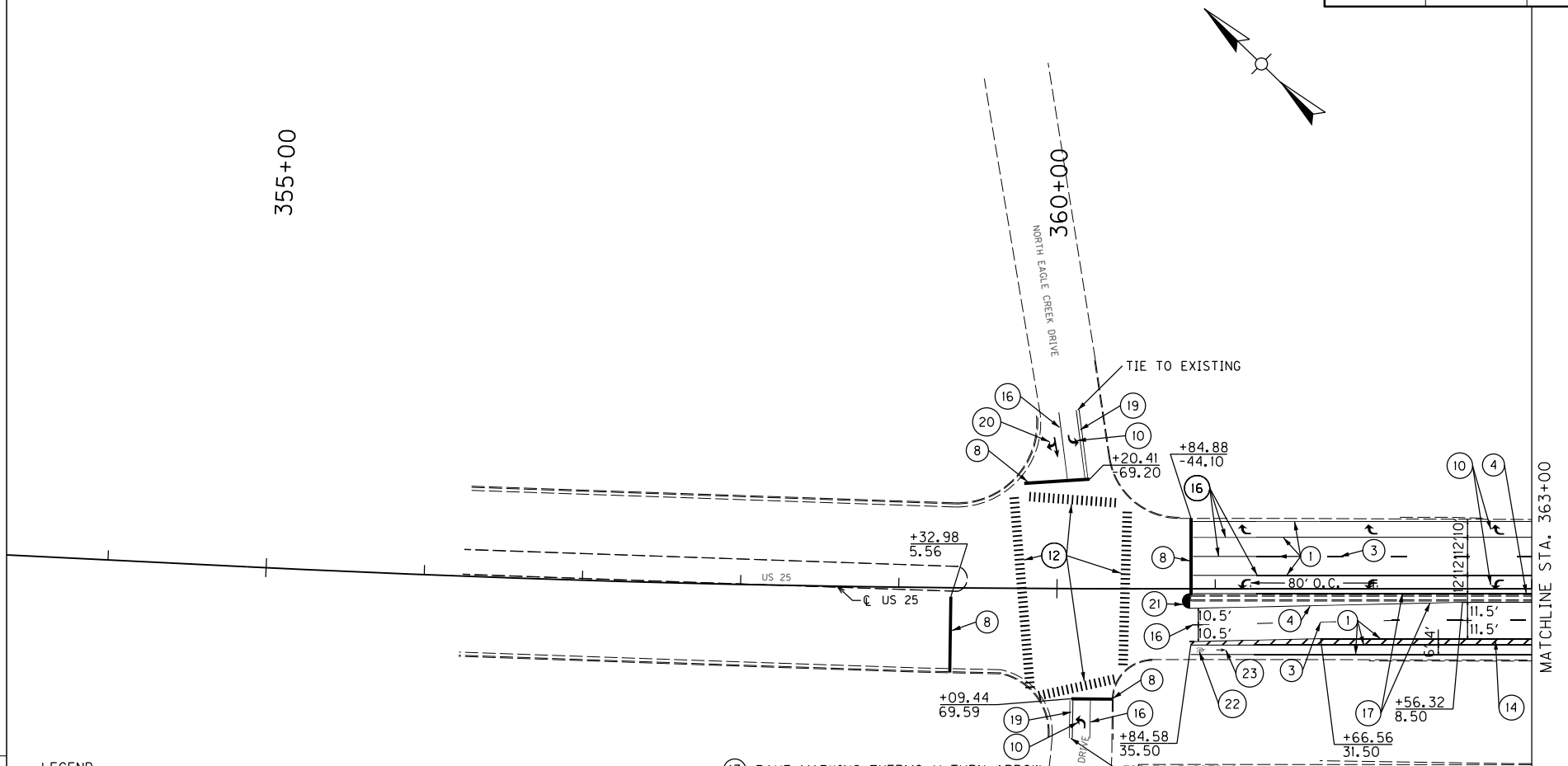
The Department will measure the sum of the lengths of the rails in linear feet and make payment under the X-Walk bid item with a description containing the applicable rail width and material type.

The Department will measure the sum of the lengths of the rungs in linear feet and make payment under the X-Walk bid item with a description containing the applicable rung width and material type.

When listed in the bid items, the Department will make payment for the completed and accepted quantities of Ladder Style Crosswalks under the following:

Code	Pay Item	Pay Unit
06565	Pave Marking-Thermo X-Walk-6 Inch	Linear Foot
06566	Pave Marking-Thermo X-Walk-12 Inch	Linear Foot
23261EC	Pave Mark-Thermo-X-Walk-24 Inch	Linear Foot
23251ES717	Pave Mark TY 1 Tape X-Walk-6 Inch	Linear Foot
23264ES717	Pave Mark TY 1 Tape X-Walk-12 Inch	Linear Foot
26164ES717	Pave Mark TY 1 Tape X-Walk-24 Inch	Linear Foot

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R90



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

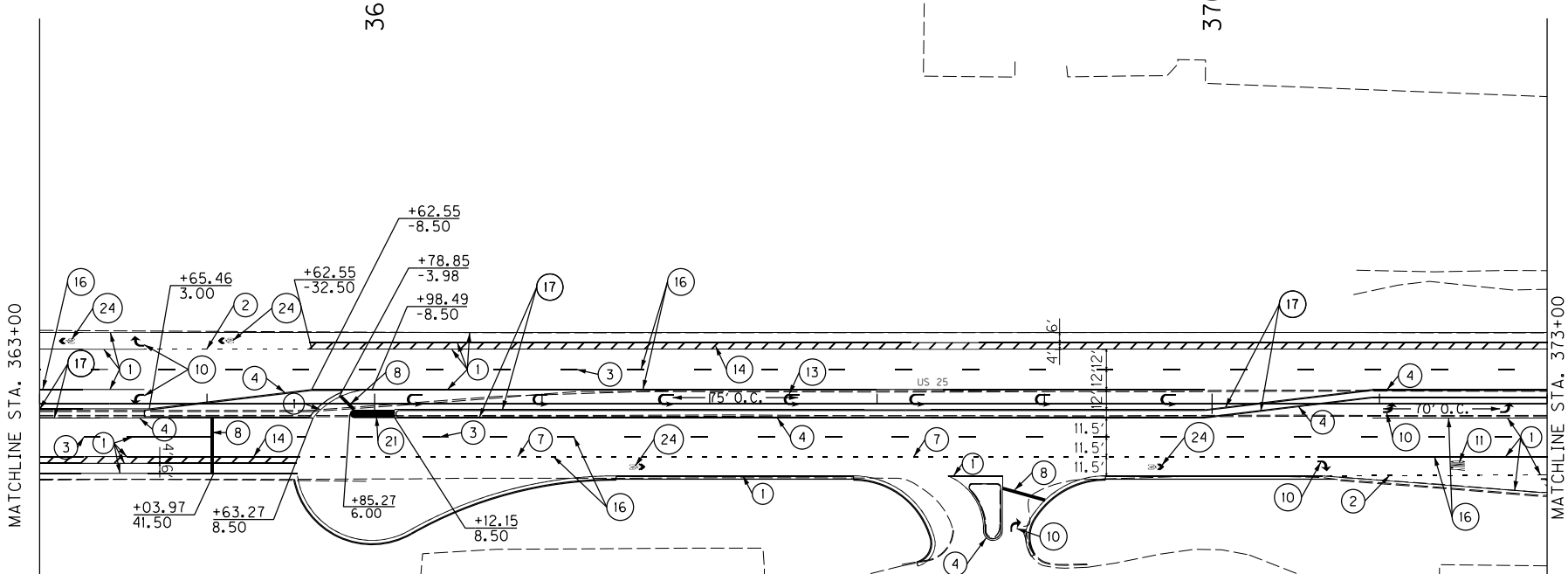
US 25
PAVEMENT MARKINGS SHEET
STA. 354+00 TO STA. 363+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_01.DGN
USER: BSAYLOR
DATE PLOTTED: January 31, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 306 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R91



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 363+00 TO STA. 372+00

FAYETTE COUNTY
034-SR25T010-HSIP, SLX, & FD05

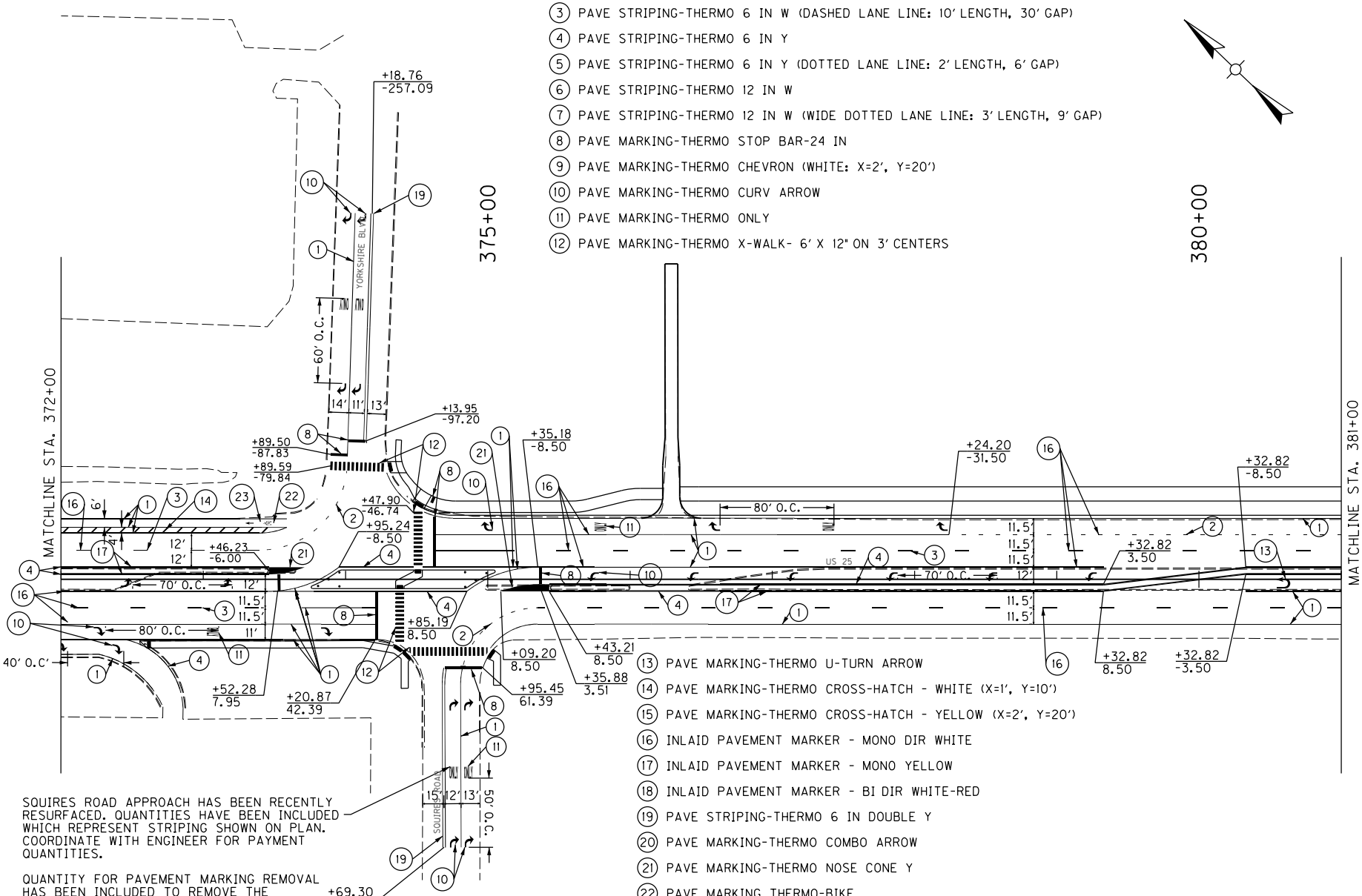
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DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_02.DGN
MicroStation v8.11.9.919

Contract ID: 254301
Page 307 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R92

LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS



SQUIRES ROAD APPROACH HAS BEEN RECENTLY RESURFACED. QUANTITIES HAVE BEEN INCLUDED WHICH REPRESENT STRIPING SHOWN ON PLAN. COORDINATE WITH ENGINEER FOR PAYMENT QUANTITIES.

QUANTITY FOR PAVEMENT MARKING REMOVAL HAS BEEN INCLUDED TO REMOVE THE EXIST. ARROWS AND REPLACE AS SHOWN.

13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 372+00 TO STA. 381+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

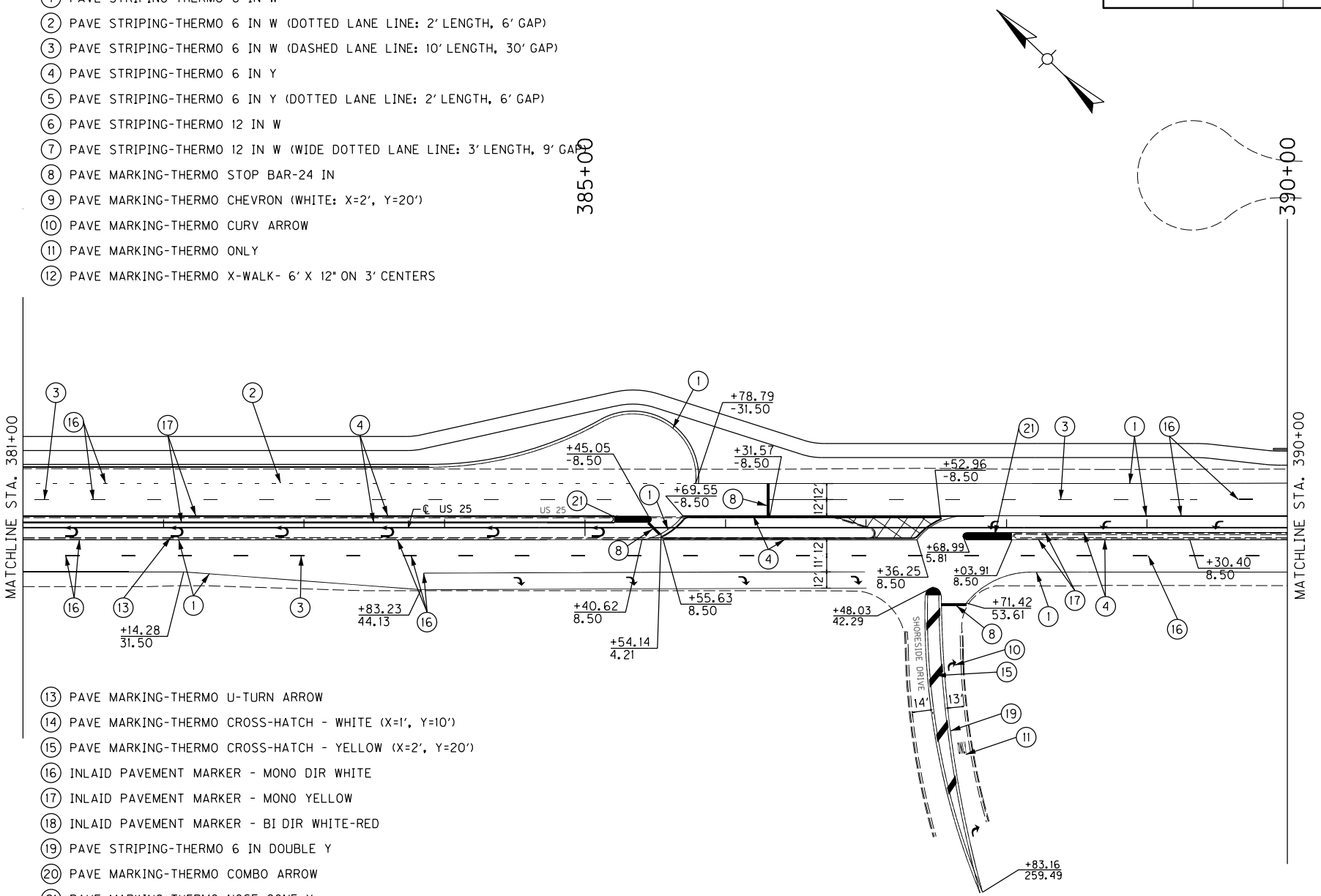
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USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 308 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R93

LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS



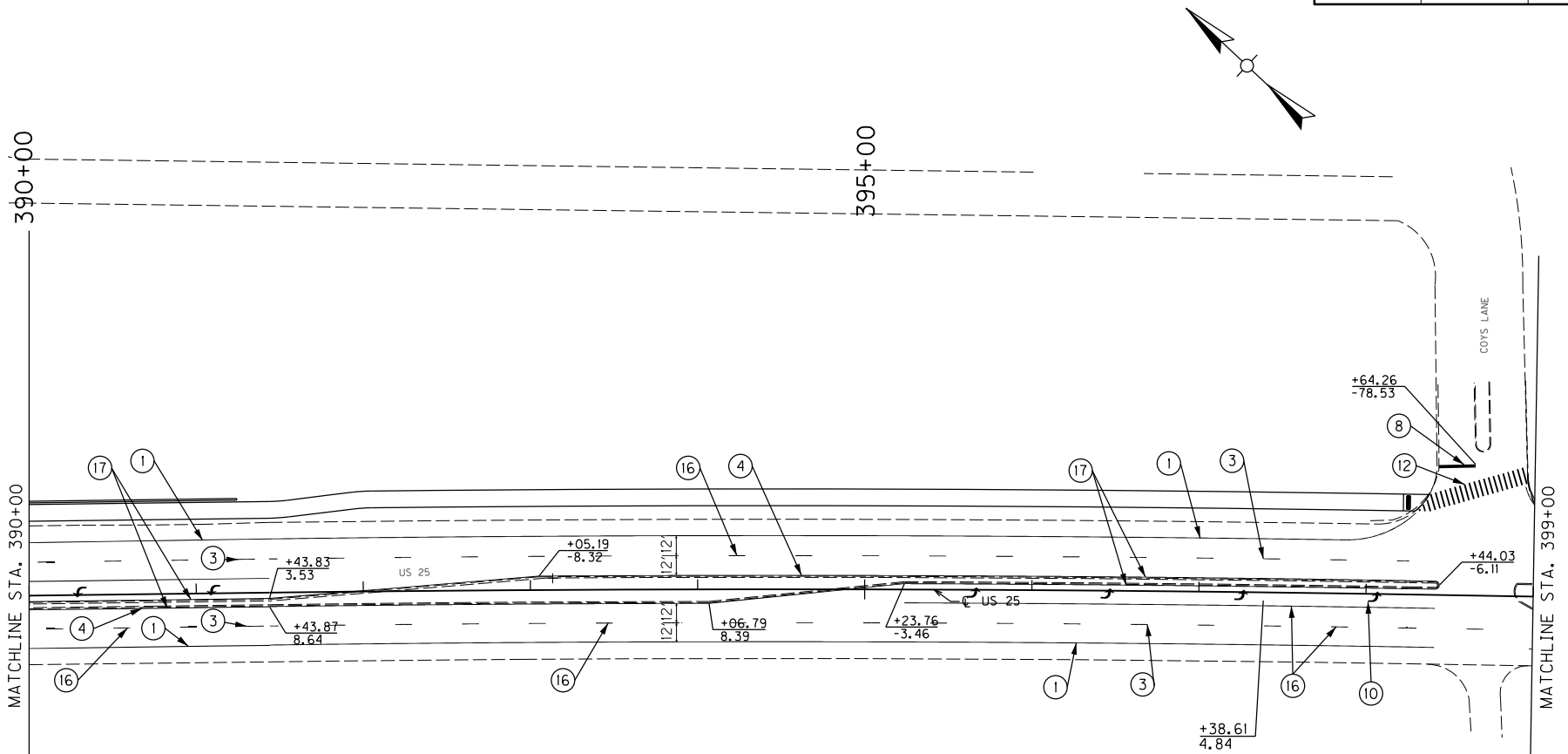
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 381+00 TO STA. 390+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_04.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R94



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 390+00 TO STA. 399+00

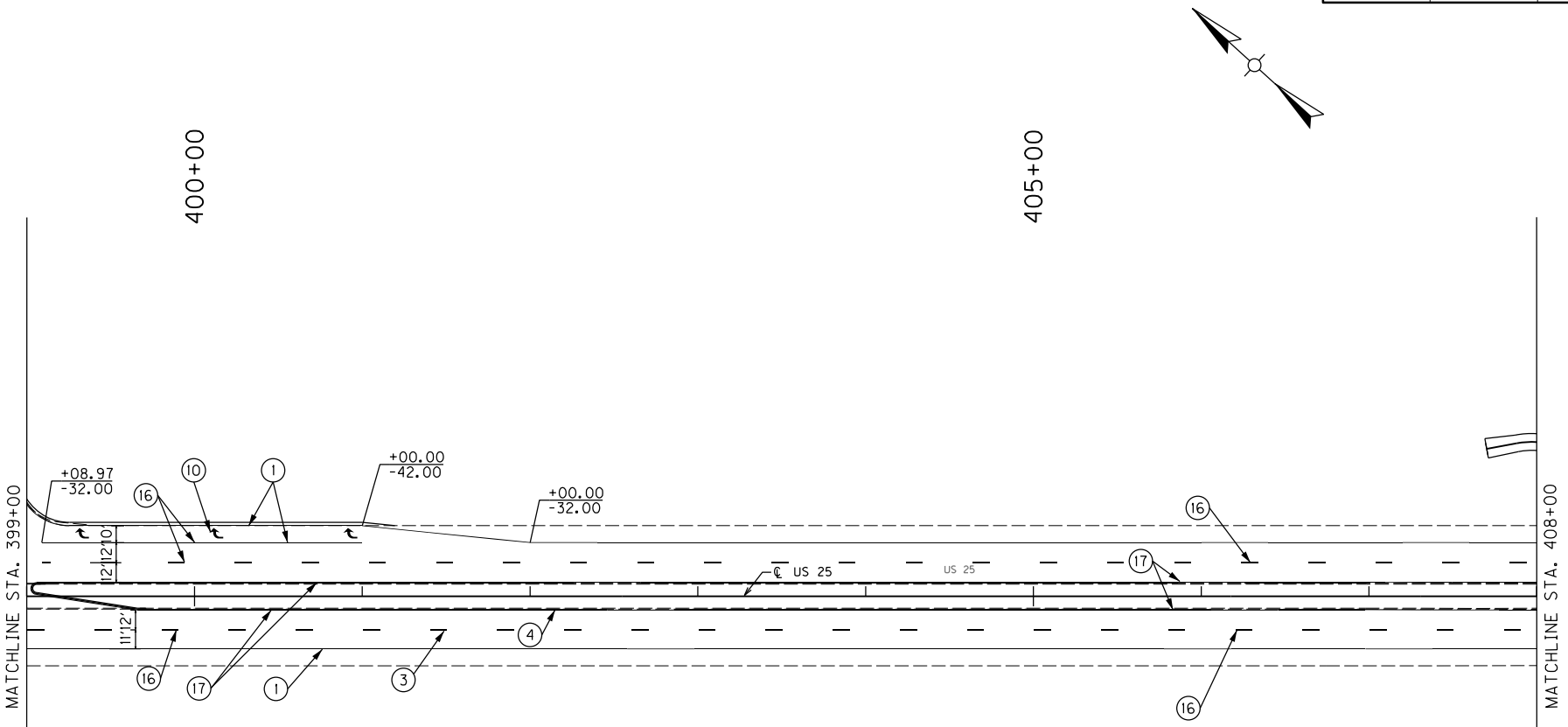
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_05.DGN

Contract ID: 254301
Page 310 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R95



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

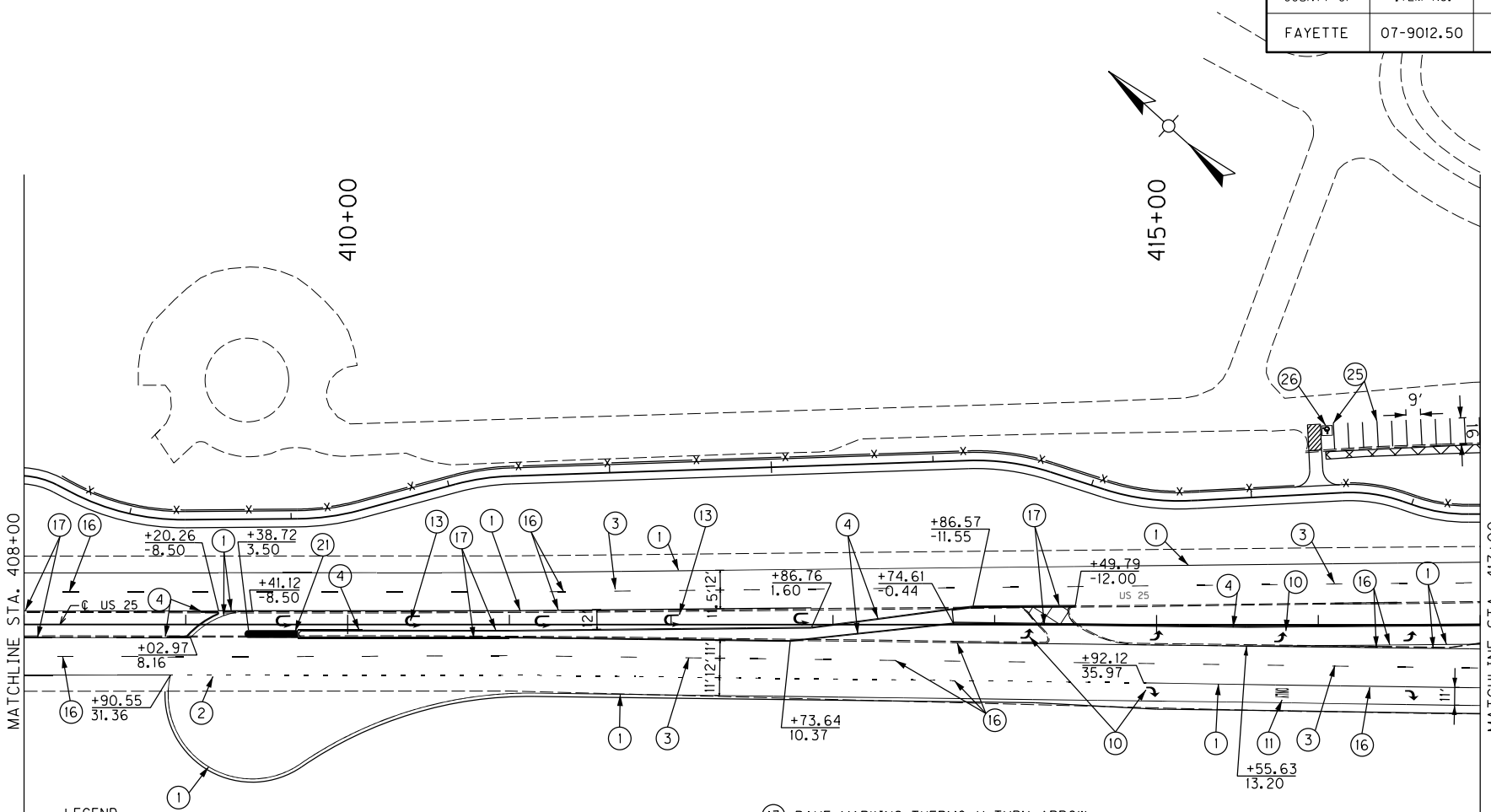
SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 399+00 TO STA. 408+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_06.DGN

Contract ID: 254301
Page 311 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R96



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

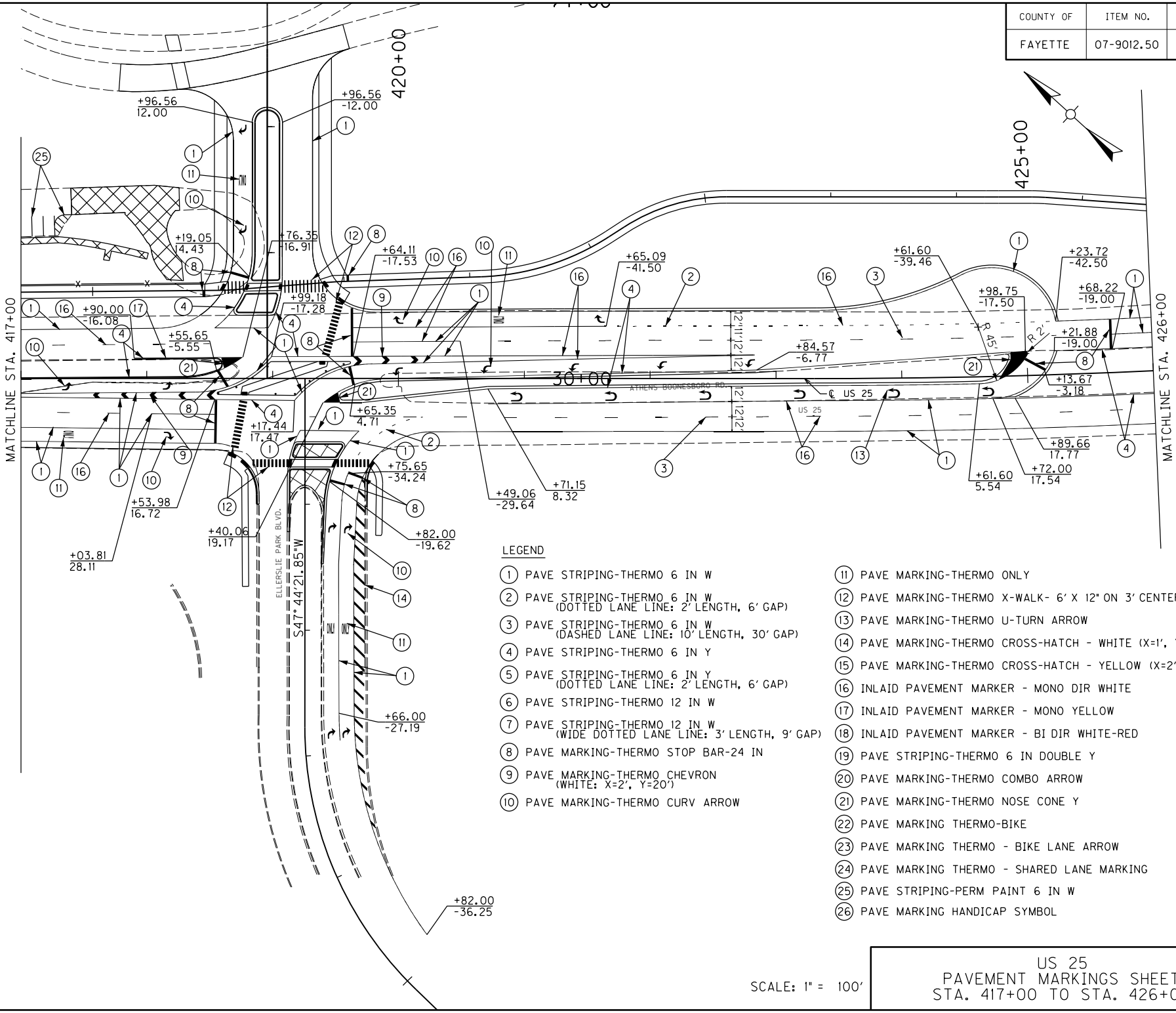
SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 408+00 TO STA. 417+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_07.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 312 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R97



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

US 25
PAVEMENT MARKINGS SHEET
STA. 417+00 TO STA. 426+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

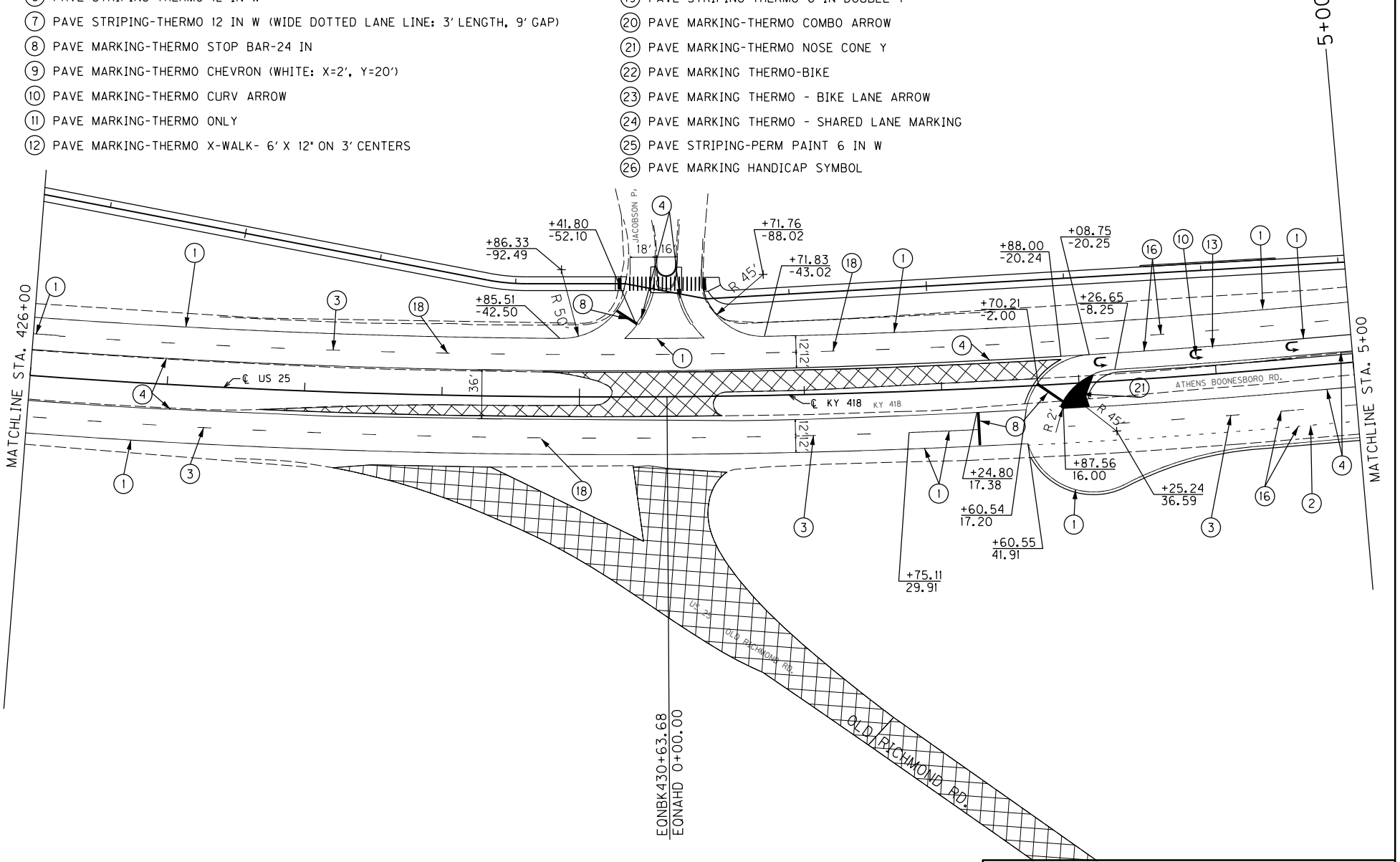
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DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 313 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R98

LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL



SCALE: 1" = 100'

US 25 / KY 418
PAVEMENT MARKINGS SHEET
STA. 426+00 TO STA. 5+00

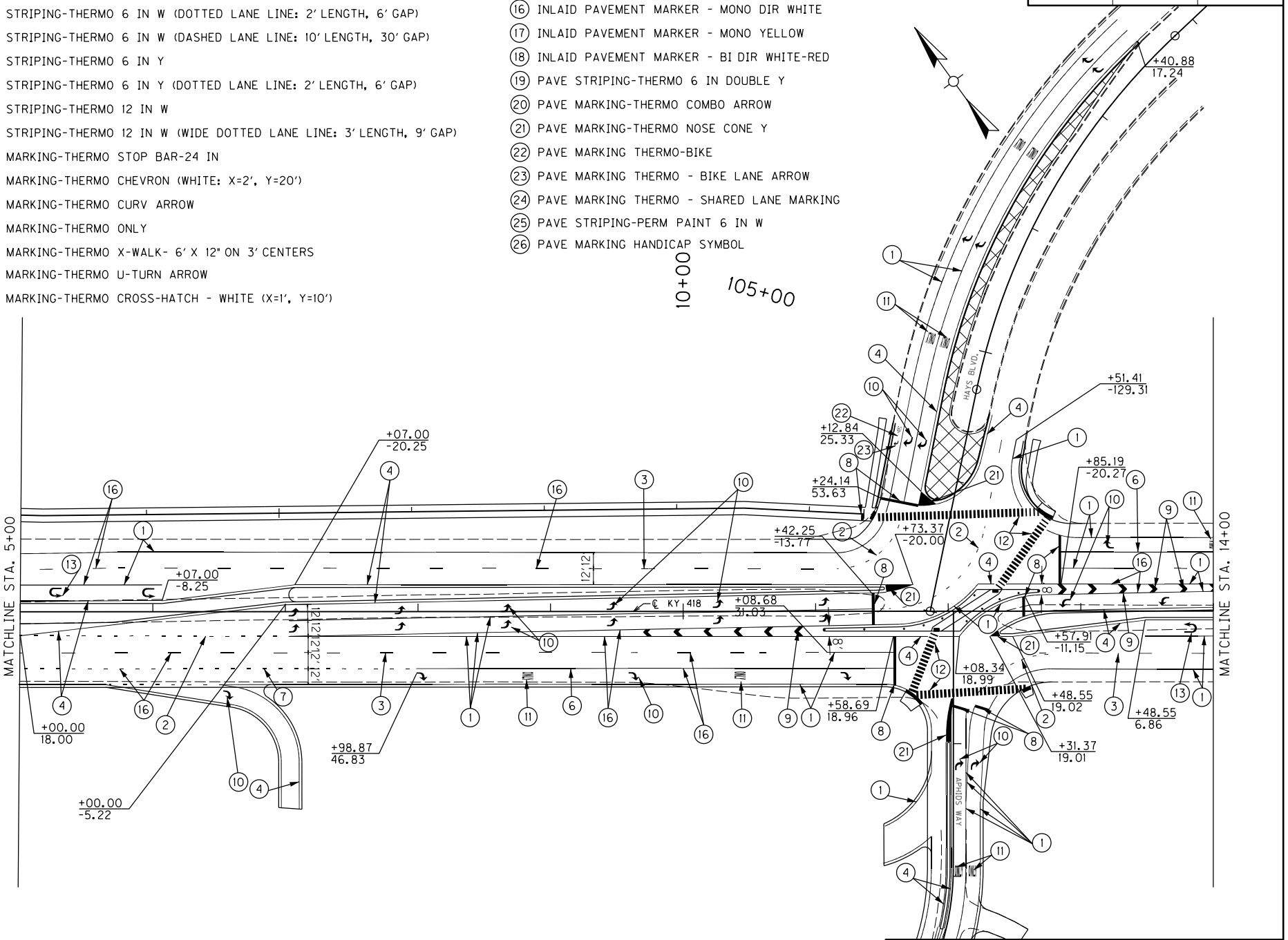
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
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Contract ID: 254301
Page 314 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R99

LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL



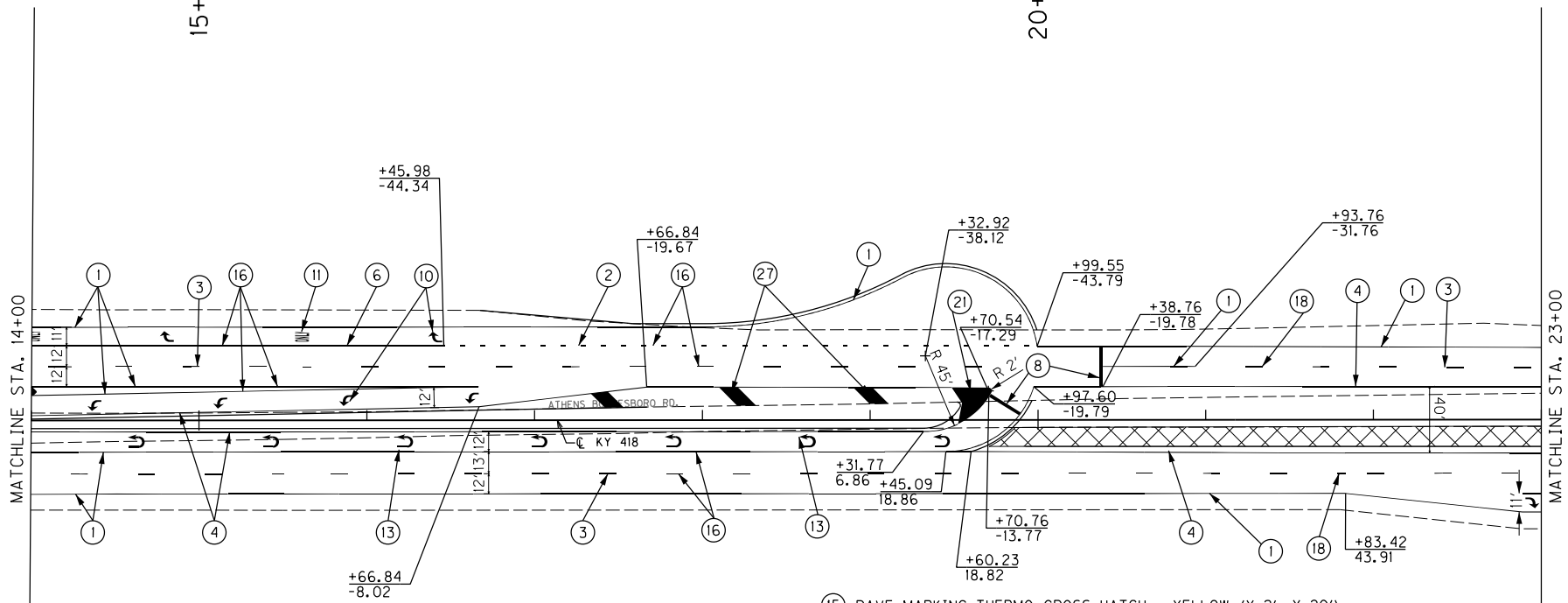
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 5+00 TO STA. 14+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_10.DGN

Contract ID: 254301
Page 315 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R100



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')

SCALE: 1" = 100'

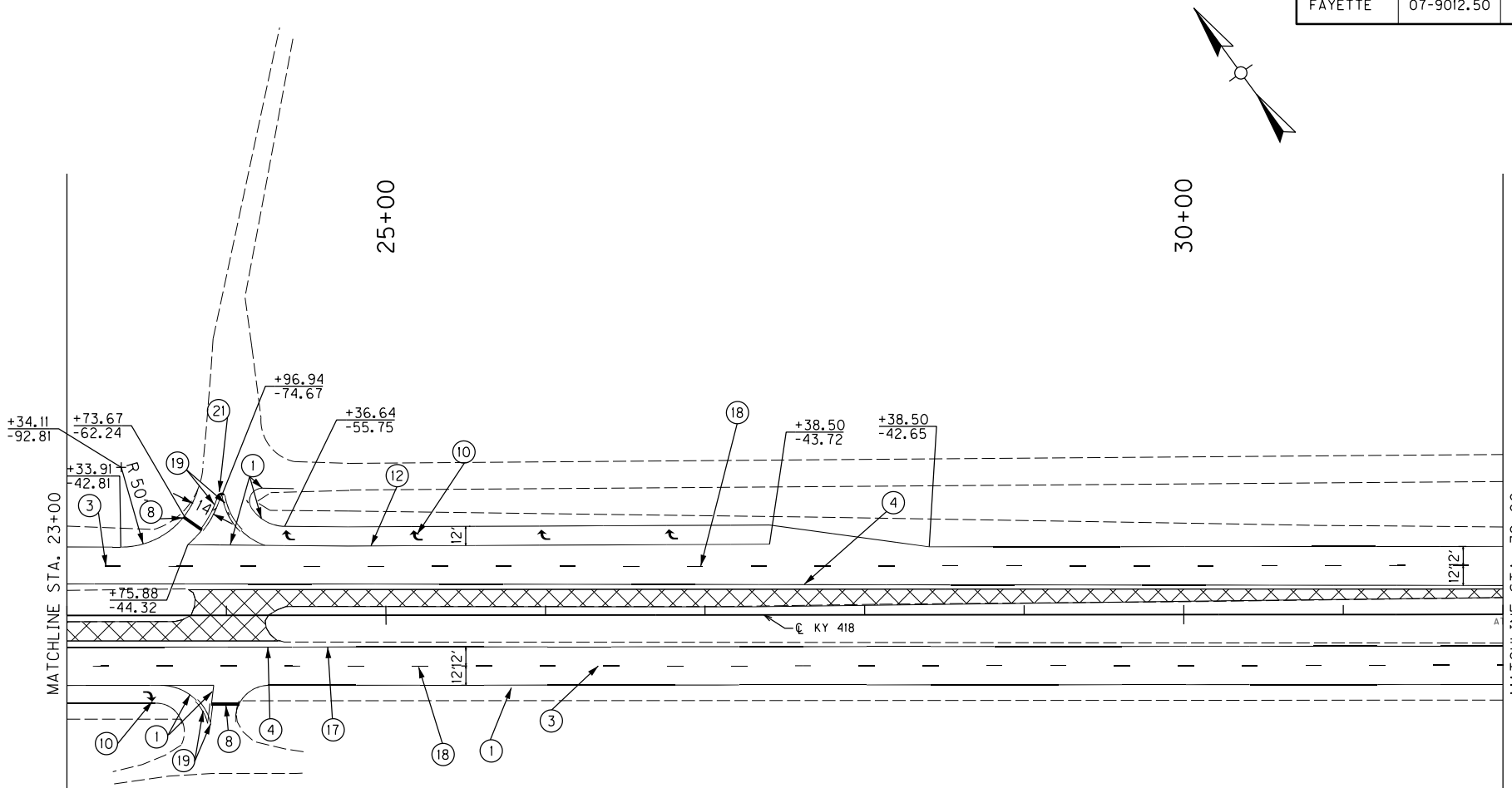
KY 418
PAVEMENT MARKINGS SHEET
STA. 14+00 TO STA. 23+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

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USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 316 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R101



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

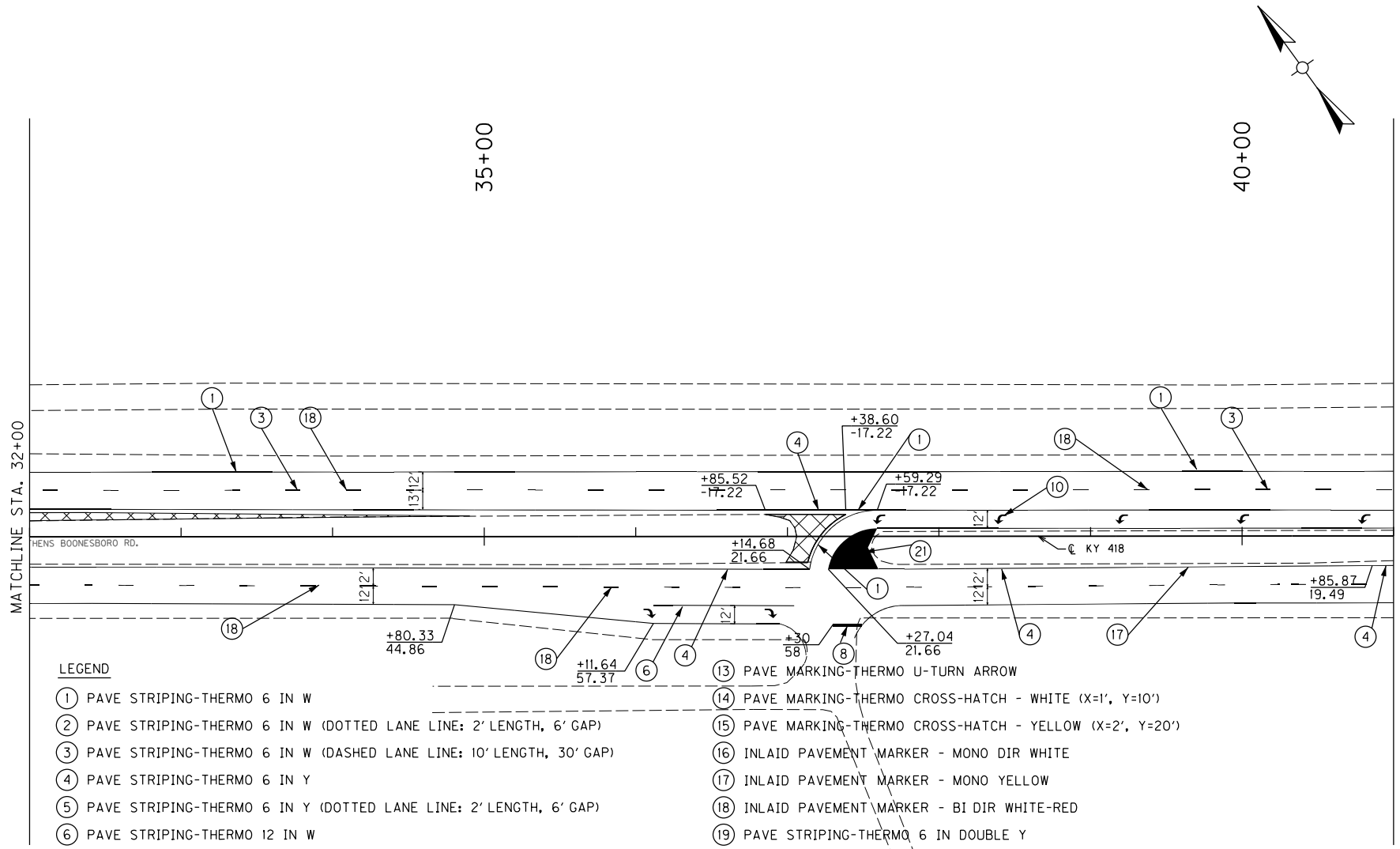
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 23+00 TO STA. 32+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_12.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034-25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R102



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

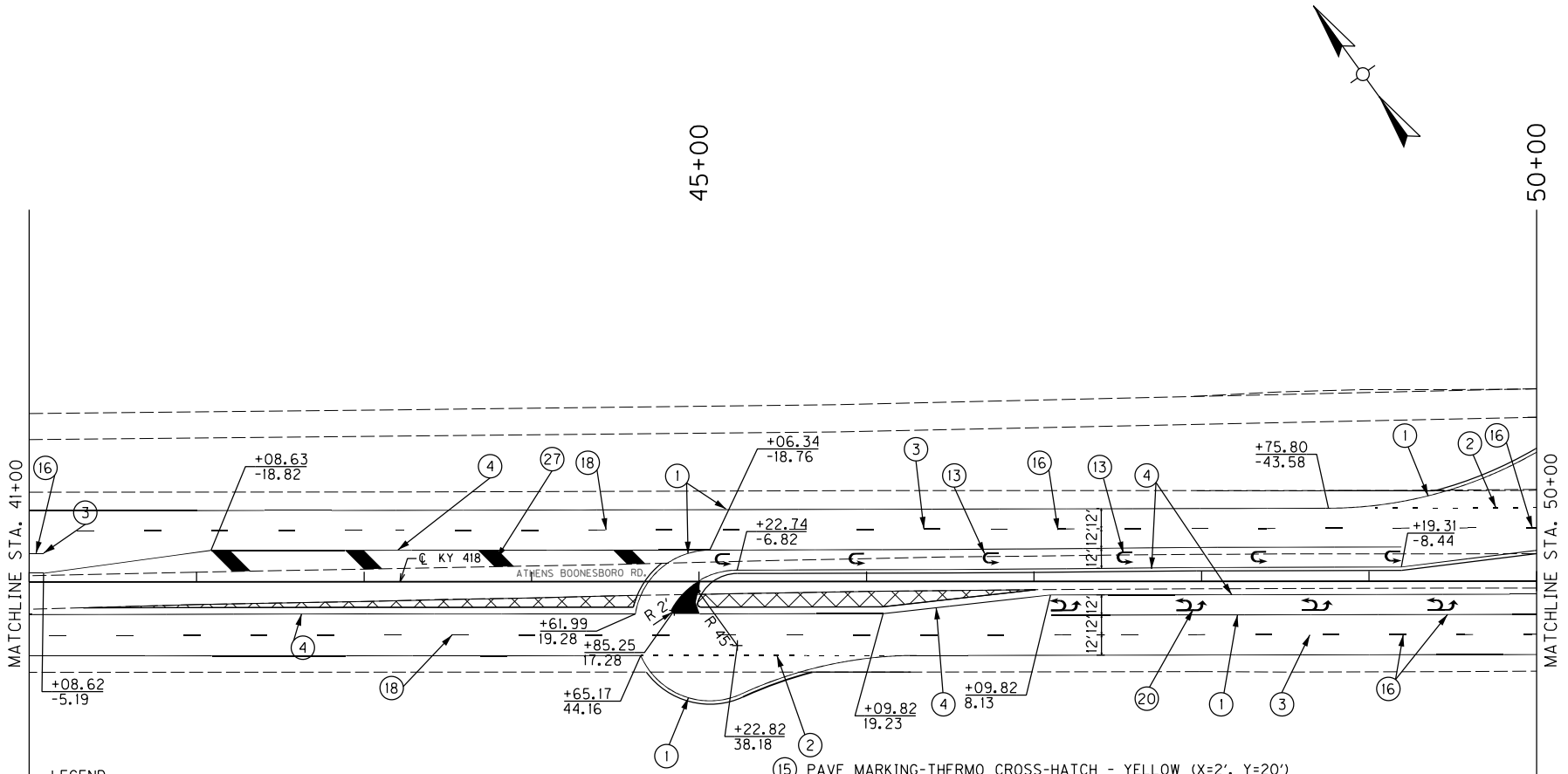
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 32+00 TO STA. 41+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_13.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R103



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')

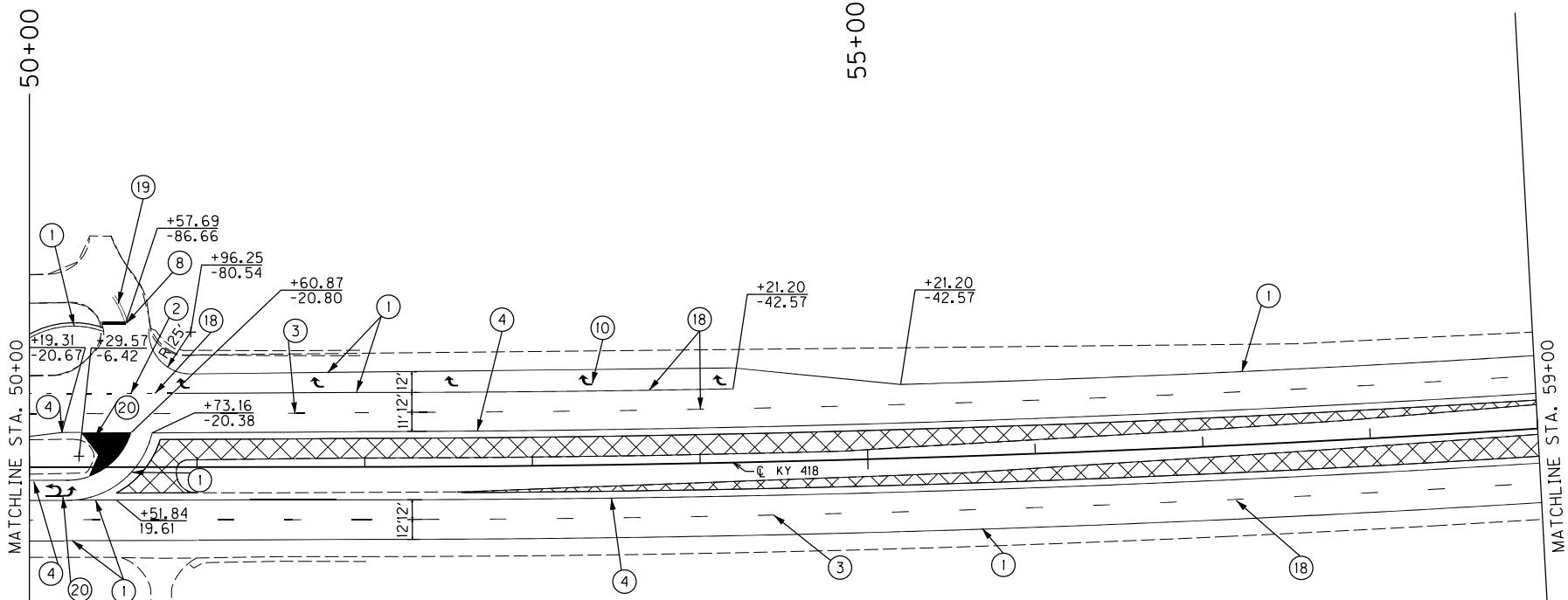
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 41+00 TO STA. 50+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_14.DGN

Contract ID: 254301
Page 319 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R104



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

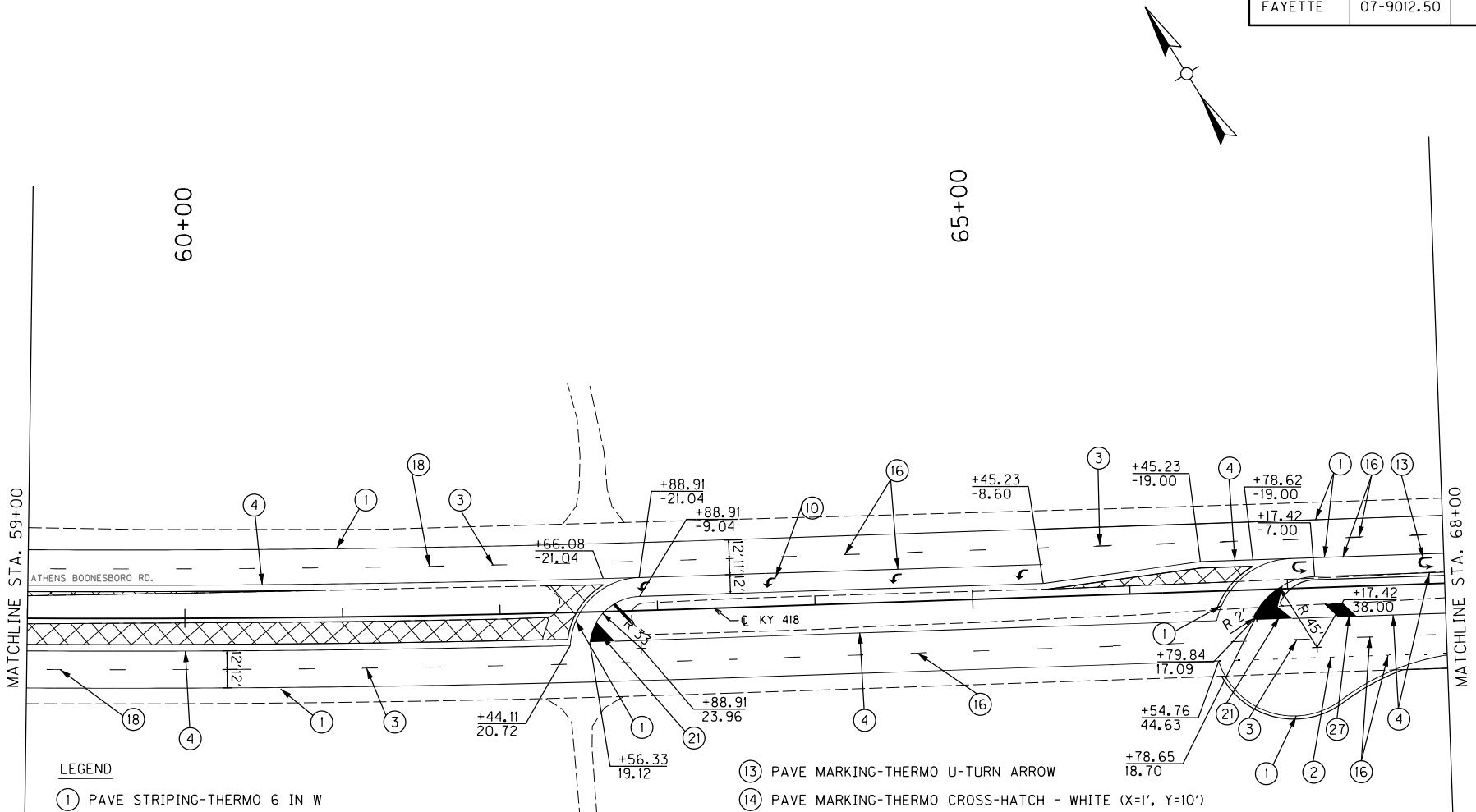
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 50+00 TO STA. 59+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_15.DGN

Contract ID: 254301
Page 320 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R105



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')

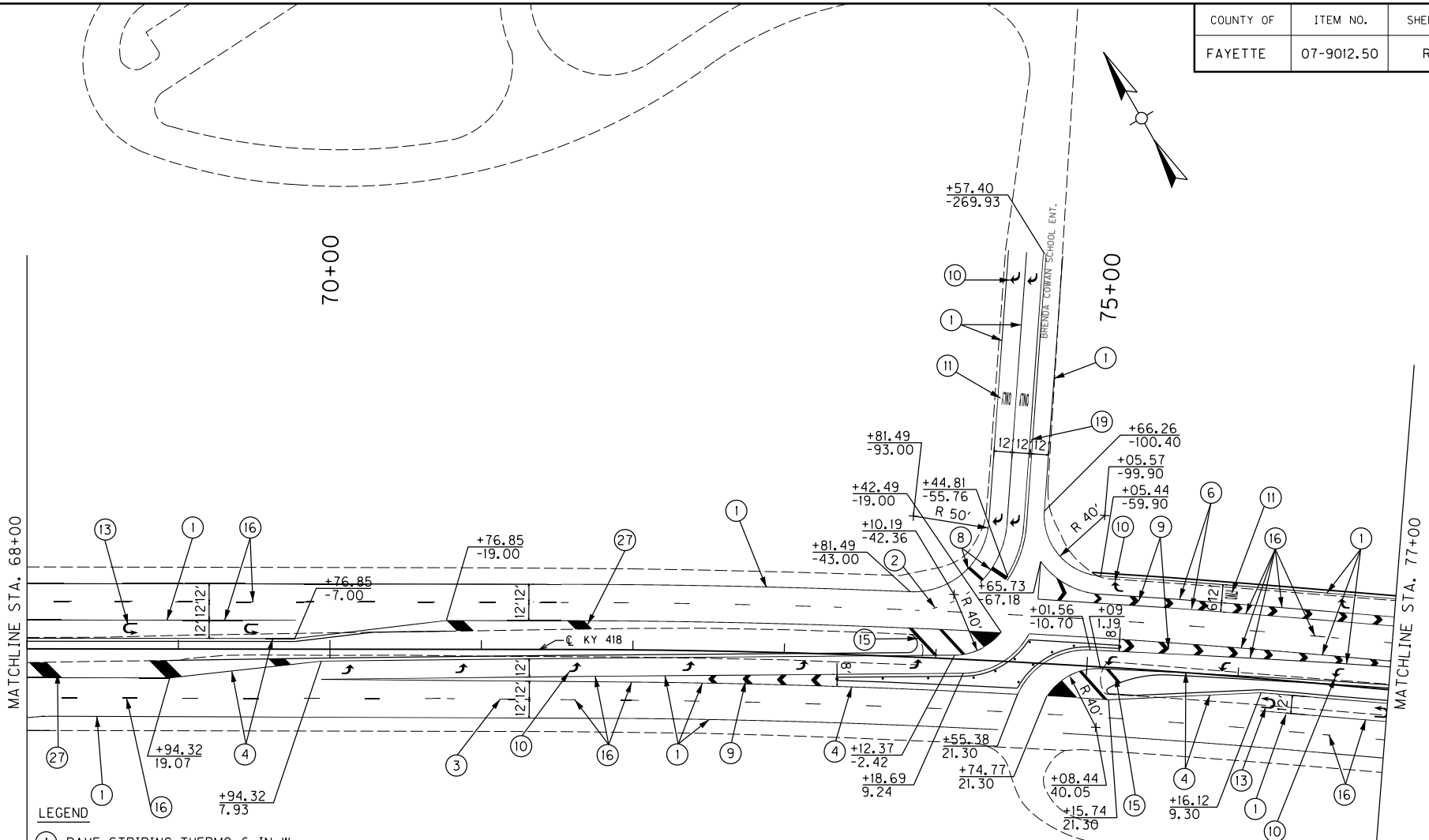
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 59+00 TO STA. 68+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_16.DGN

Contract ID: 254301
Page 321 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R106



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')

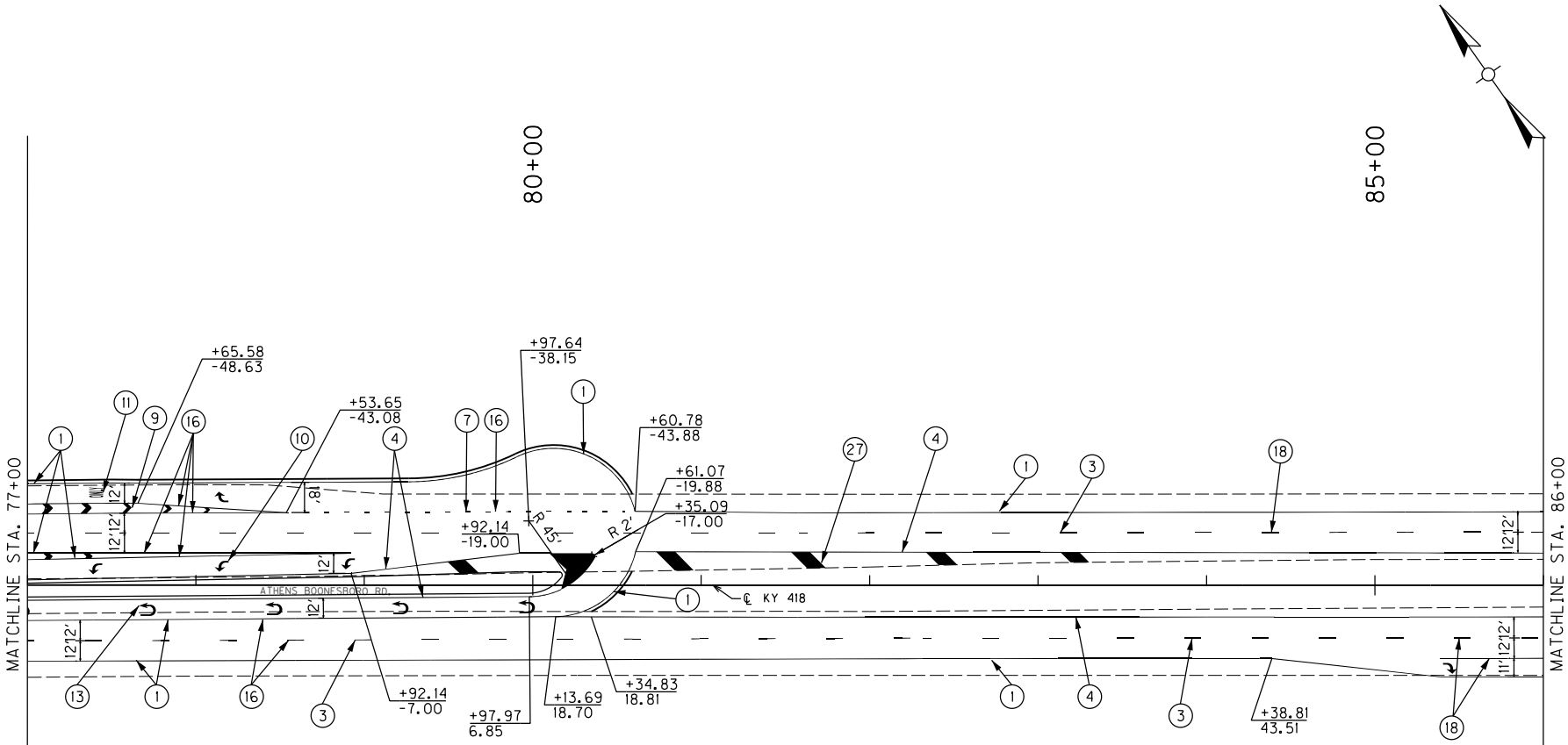
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 68+00 TO STA. 77+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_017.DGN

Contract ID: 254301
Page 322 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R107



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')

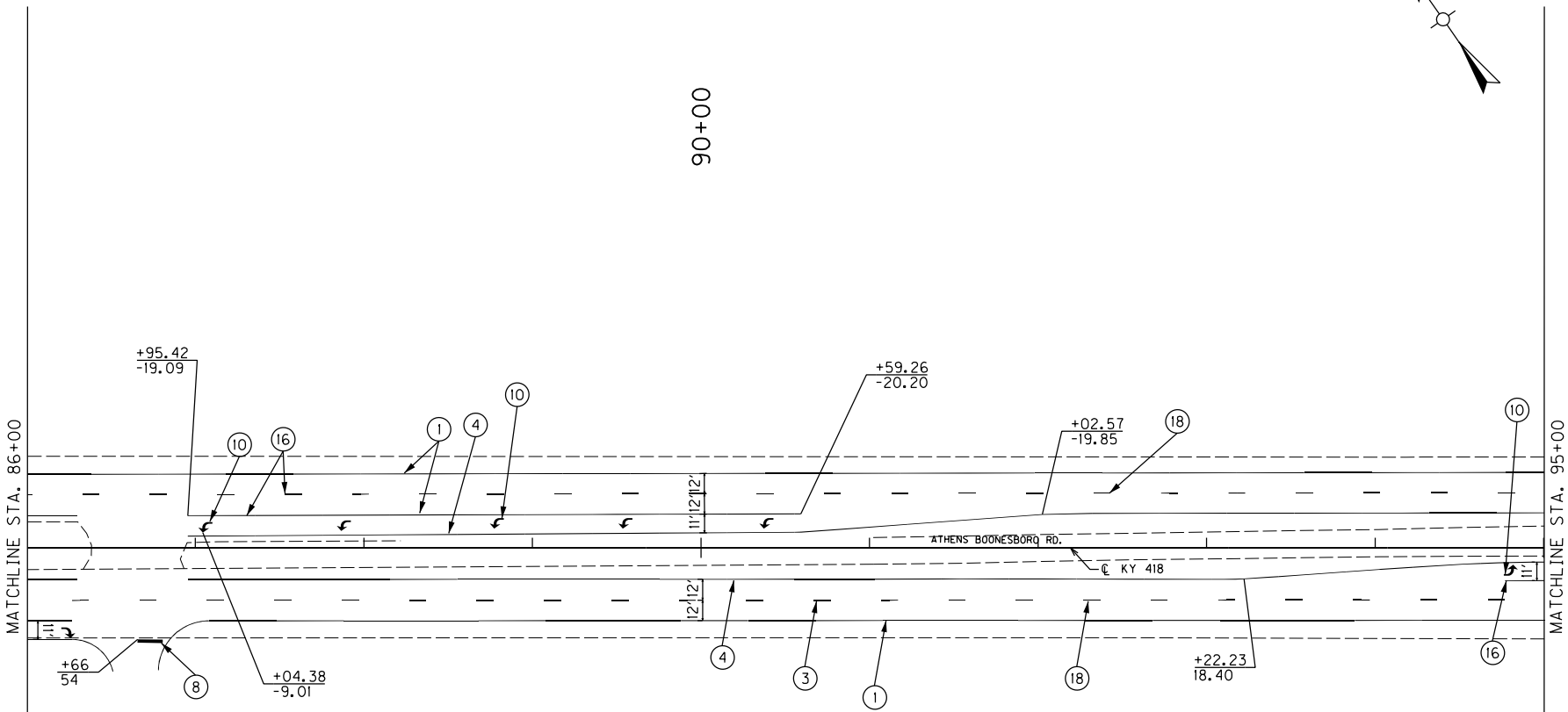
SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 77+00 TO STA. 86+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_018.DGN

Contract ID: 254301
Page 323 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R108



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

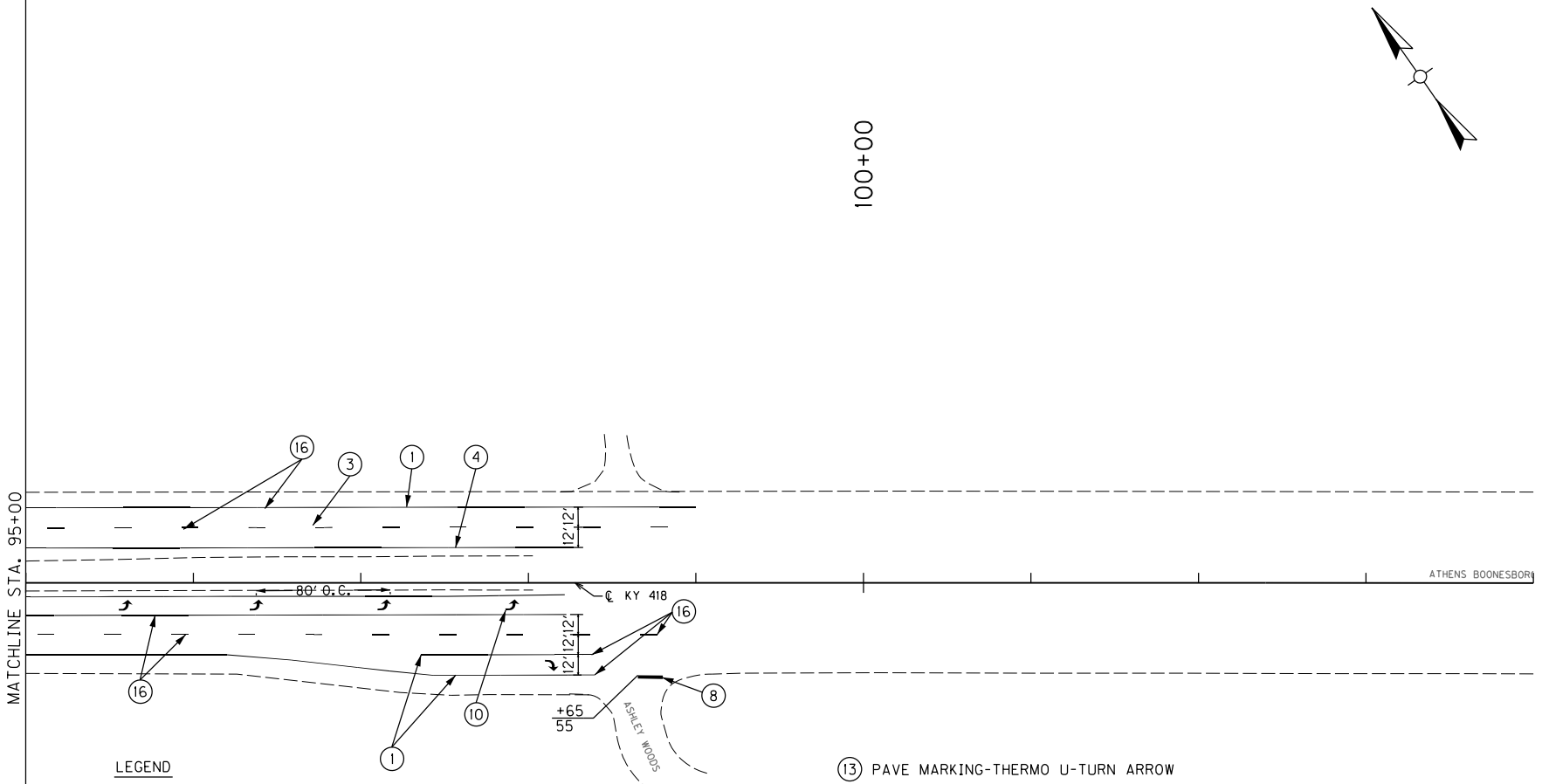
KY 418
PAVEMENT MARKINGS SHEET
STA. 86+00 TO STA. 95+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_19.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301
Page 324 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R109



LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL

SCALE: 1" = 100'

KY 418
PAVEMENT MARKINGS SHEET
STA. 95+00 TO STA. 99+00

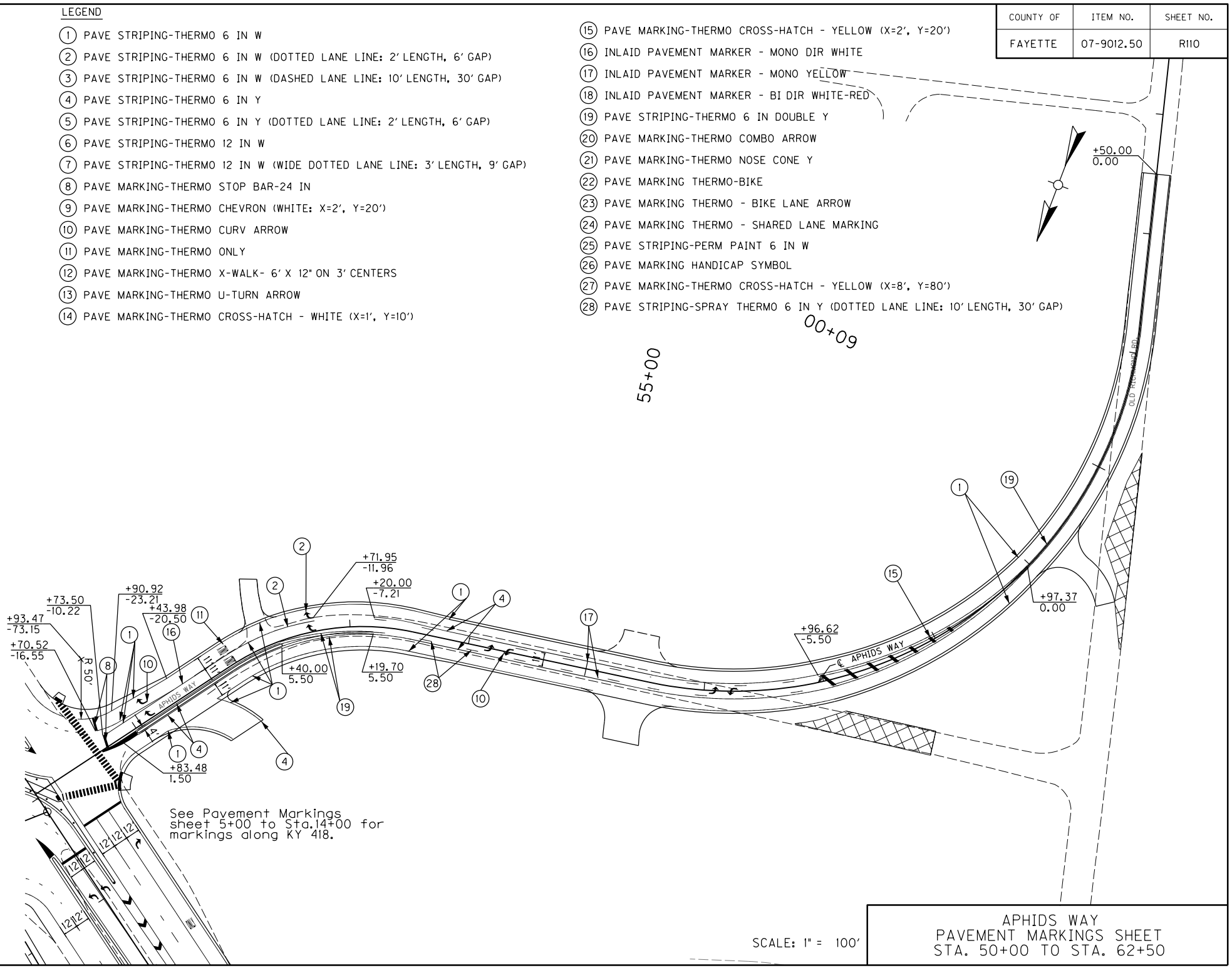
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_20.DGN

Contract ID: 254301
Page 325 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R110

LEGEND

1. PAVE STRIPING-THERMO 6 IN W
2. PAVE STRIPING-THERMO 6 IN W (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
3. PAVE STRIPING-THERMO 6 IN W (DASHED LANE LINE: 10' LENGTH, 30' GAP)
4. PAVE STRIPING-THERMO 6 IN Y
5. PAVE STRIPING-THERMO 6 IN Y (DOTTED LANE LINE: 2' LENGTH, 6' GAP)
6. PAVE STRIPING-THERMO 12 IN W
7. PAVE STRIPING-THERMO 12 IN W (WIDE DOTTED LANE LINE: 3' LENGTH, 9' GAP)
8. PAVE MARKING-THERMO STOP BAR-24 IN
9. PAVE MARKING-THERMO CHEVRON (WHITE: X=2', Y=20')
10. PAVE MARKING-THERMO CURV ARROW
11. PAVE MARKING-THERMO ONLY
12. PAVE MARKING-THERMO X-WALK- 6' X 12" ON 3' CENTERS
13. PAVE MARKING-THERMO U-TURN ARROW
14. PAVE MARKING-THERMO CROSS-HATCH - WHITE (X=1', Y=10')
15. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=2', Y=20')
16. INLAID PAVEMENT MARKER - MONO DIR WHITE
17. INLAID PAVEMENT MARKER - MONO YELLOW
18. INLAID PAVEMENT MARKER - BI DIR WHITE-RED
19. PAVE STRIPING-THERMO 6 IN DOUBLE Y
20. PAVE MARKING-THERMO COMBO ARROW
21. PAVE MARKING-THERMO NOSE CONE Y
22. PAVE MARKING THERMO-BIKE
23. PAVE MARKING THERMO - BIKE LANE ARROW
24. PAVE MARKING THERMO - SHARED LANE MARKING
25. PAVE STRIPING-PERM PAINT 6 IN W
26. PAVE MARKING HANDICAP SYMBOL
27. PAVE MARKING-THERMO CROSS-HATCH - YELLOW (X=8', Y=80')
28. PAVE STRIPING-SPRAY THERMO 6 IN Y (DOTTED LANE LINE: 10' LENGTH, 30' GAP)



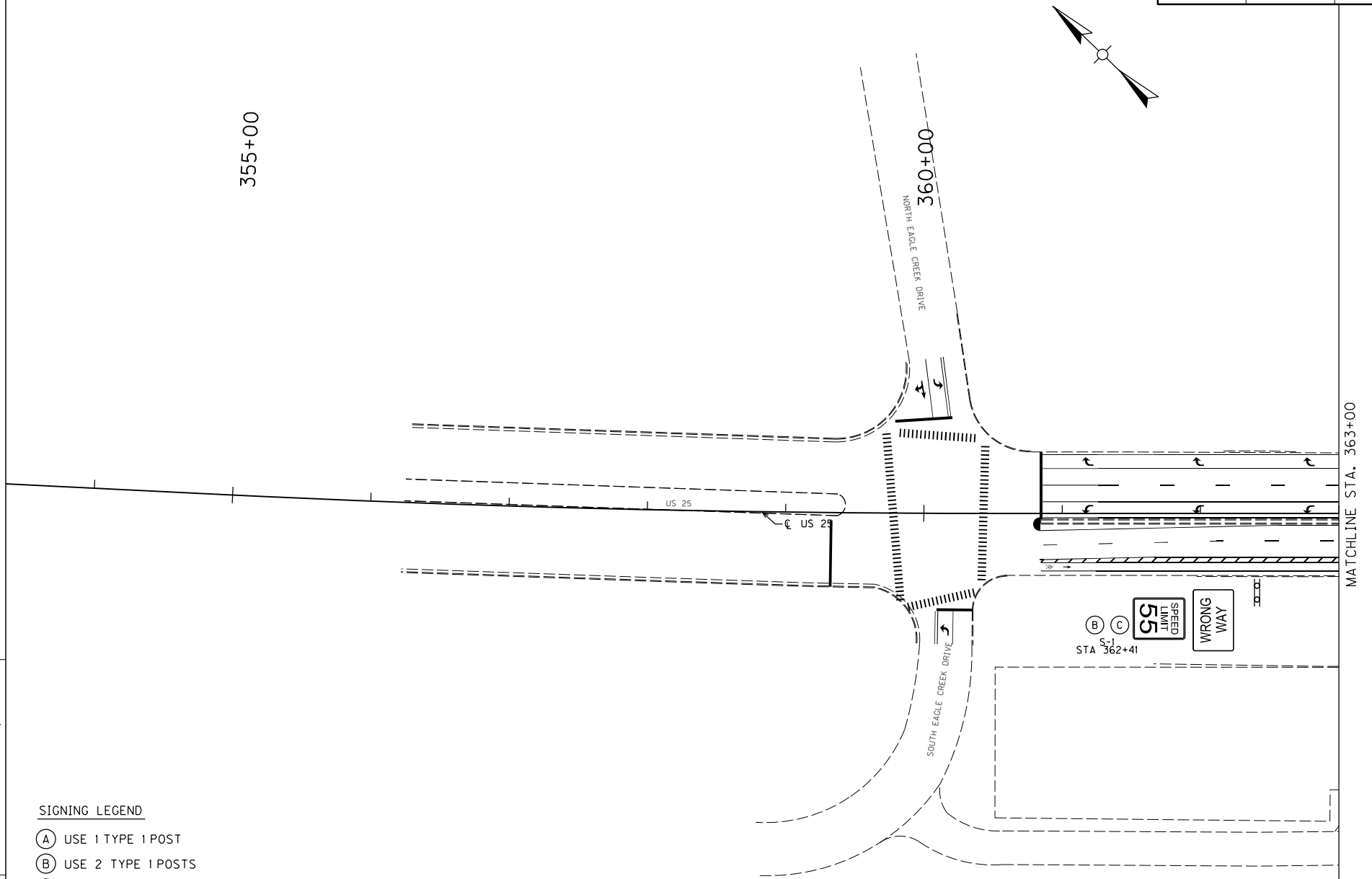
SCALE: 1" = 100'

APHIDS WAY
PAVEMENT MARKINGS SHEET
STA. 50+00 TO STA. 62+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\STRIPING_21.DGN
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034C25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R111



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL ROADWAY SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT
ALL PATHWAY SIGNS SHALL BE MOUNTED AT 4 FT HEIGHT

ALL SIGNS WITHIN PROJECT LIMITS ARE TO BE REMOVED WHEN NEW SIGNS ARE ERECTED. REMOVAL IS INCIDENTAL TO PROJECT.

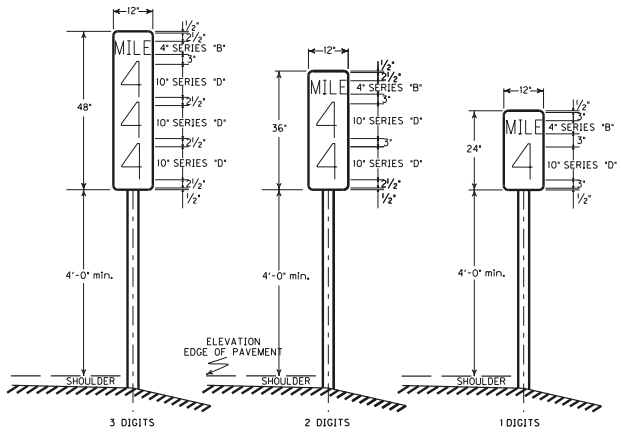
SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 354+00 TO STA. 363+00

FAYETTE COUNTY
034-25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_01.DGN

COUNTY OF	ITEM NO.	SHEET NO.

MILEPOST MARKERS



TYPICAL SIGN PANEL DIMENSIONS AND MILEPOST LOCATIONS

MILE POST NUMBER	STATION NUMBER ✳ ——— BOUND LANE (S)

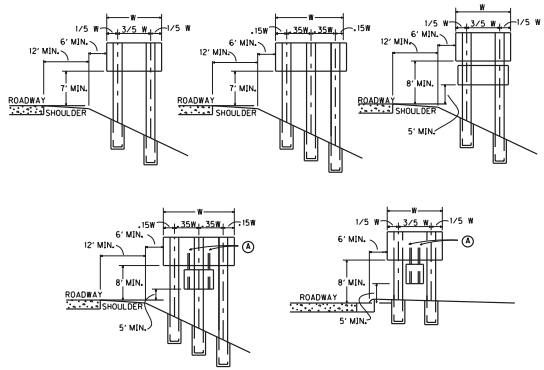
MILE POST NUMBER	STATION NUMBER ✳ ——— BOUND LANE (S)

NOTE: STATION NUMBERS ARE GIVEN FOR NOTED DIRECTION OF TRAVEL ONLY. CORRESPONDING MILEPOST MARKERS FOR OTHER DIRECTION SHOULD BE PLACED DIRECTLY OPPOSITE THOSE FOR WHICH STATION NUMBERS ARE GIVEN.

IN JEFFERSON COUNTY, FINAL LOCATION OF MILEPOST MARKERS SHALL BE VERIFIED BY TRIMARC. NOTIFY TRIMARC AT LEAST TWO WEEKS PRIOR TO BEGINNING WORK ON THIS ITEM:

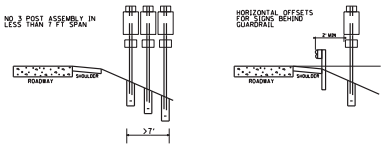
901 WEST MAIN STREET
LOUISVILLE, KY 40202
502-587-6624
270-307-7456

PANEL SIGNS

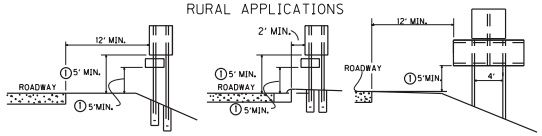


Ⓐ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" X 3" X ¾" ANGLES OF SUFFICIENT LENGTH TO EXTEND FROM THE LOWER EDGE OF THE SECONDARY SIGN TO AT LEAST THREE FEET UP THE BACK OF THE MAJOR SIGN. A MINIMUM OF ONE POST CLIP PER FOOT SHALL BE USED IN ATTACHING EXTRUSIONS TO EACH ANGLE.

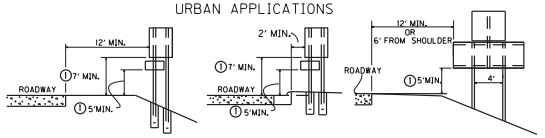
SHEETING SIGNS



RURAL APPLICATIONS



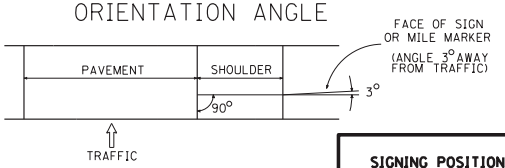
URBAN APPLICATIONS



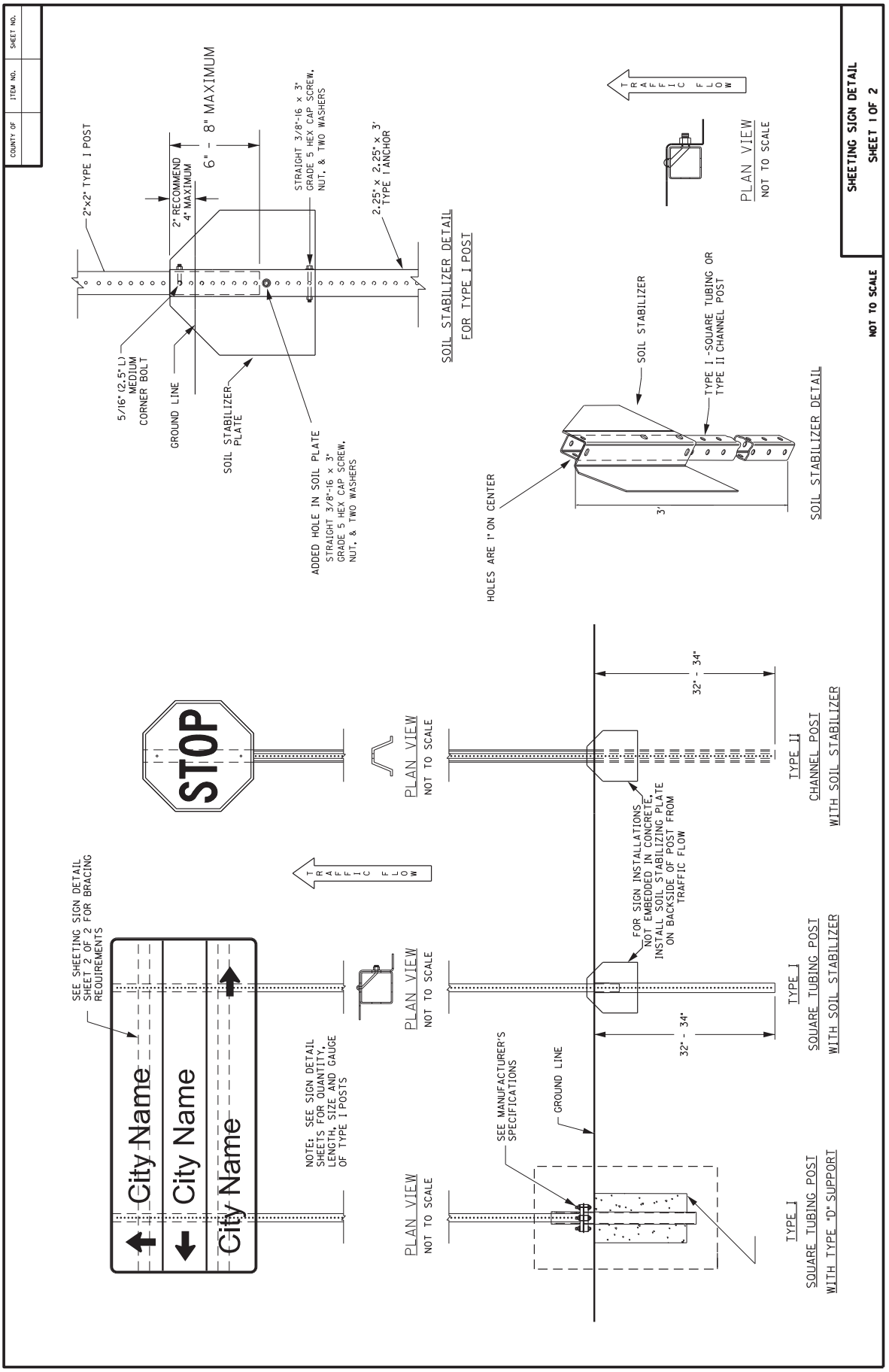
NOTE: SHOULD A SIGN BE LOCATED AT A POINT WHERE GUARDRAIL IS CALLED FOR OR EXISTING, ALL SIGN SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL AND LATERAL OFFSET SHALL BE MEASURED FROM THE GUARDRAIL.

① NOT TO EXCEED 8' IN URBAN AREAS AND 6' IN RURAL AREAS UNLESS SPECIFIED BY THE ENGINEER

ORIENTATION ANGLE

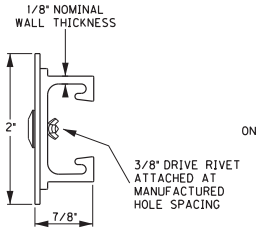


SIGNING POSITIONING DETAIL SHEET

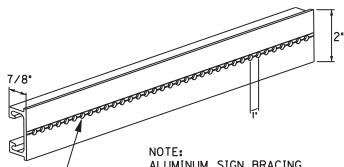

COUNTY OF
ITEM NO.
SHEET NO.
SHEETING SIGN DETAIL
SHEET 1 OF 2
NOT TO SCALE
2"x2" TYPE I POST
2" RECOMMEND 4" MAXIMUM
6" - 8" MAXIMUM
STRAIGHT 3/8"-16 x 3" GRADE 5 HEX CAP SCREW, NUT, & TWO WASHERS
2.25" x 2.25" x 3' TYPE I ANCHOR
5/16" (2.5" L) MEDIUM CORNER BOLT
GROUND LINE
SOIL STABILIZER PLATE
ADDED HOLE IN SOIL PLATE STRAIGHT 3/8"-16 x 3" GRADE 5 HEX CAP SCREW, NUT, & TWO WASHERS
SOIL STABILIZER DETAIL
FOR TYPE I POST
TRAFFIC FLOW
PLAN VIEW
NOT TO SCALE
SOIL STABILIZER
TYPE I -SQUARE TUBING OR TYPE II CHANNEL POST
HOLES ARE 1" ON CENTER
3'
SOIL STABILIZER DETAIL
SEE SHEETING SIGN DETAIL SHEET 2 OF 2 FOR BRACING REQUIREMENTS
City Name
City Name
City Name
NOTE: SEE SIGN DETAIL SHEETS FOR QUANTITY, LENGTH, SIZE AND GAUGE OF TYPE I POSTS
STOP
32" - 34"
FOR SIGN INSTALLATIONS NOT EMBEDDED IN CONCRETE, INSTALL SOIL STABILIZING PLATE ON BACKSIDE OF POST FROM TRAFFIC FLOW
TYPE II
CHANNEL POST
WITH SOIL STABILIZER
TYPE I
SQUARE TUBING POST
WITH SOIL STABILIZER
SEE MANUFACTURER'S SPECIFICATIONS
GROUND LINE
TYPE I
SQUARE TUBING POST
WITH TYPE "D" SUPPORT

COUNTY OF	ITEM NO.	SHEET NO.

FOR ATTACHMENT OF SIGNS LESS THAN 72" IN WIDTH USING MANUFACTURED 3/8" HOLES ACCORDING TO 2004 STANDARD HIGHWAY SIGNS BLANK STANDARDS PGS 7-1 THRU 7-6

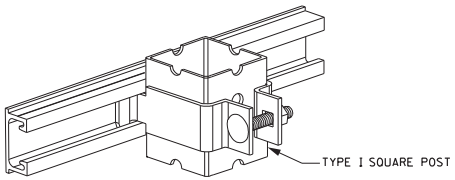


SIGN BRACE



NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS

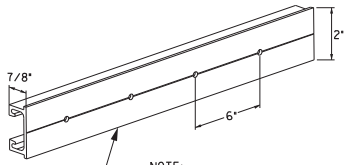
6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/8" DIAMETER HOLES ON 1" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING 3/8" DRIVE RIVETS



SQUARE POST CLAMP & BRACE

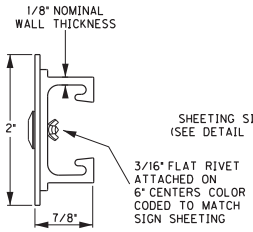
FOR ATTACHMENT OF SIGNS GREATER THAN, OR EQUAL TO, 72" IN WIDTH.

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

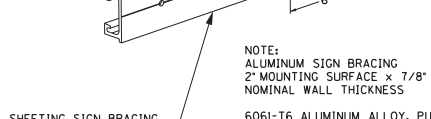


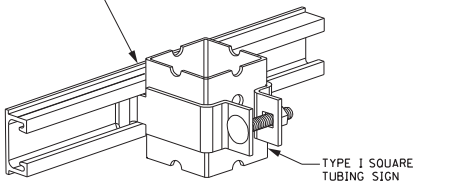
NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS

6061-T6 ALUMINUM ALLOY, PUNCHED WITH 3/16" DIAMETER HOLES ON 6" CENTERS FOR ATTACHMENT OF SIGN SUBSTRATE USING RIVETS

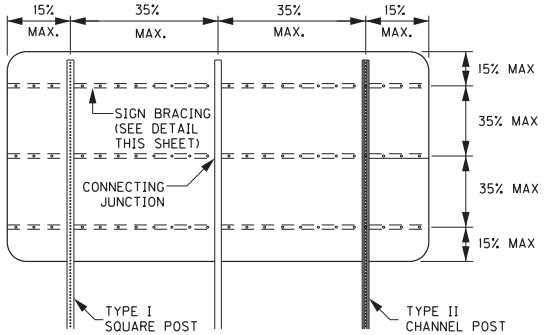


SIGN BRACE





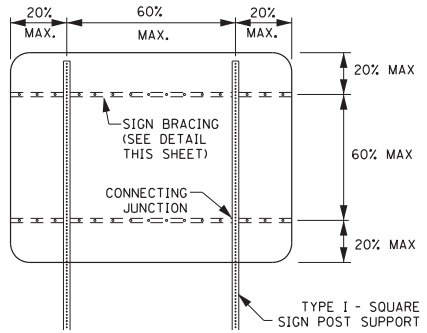
SQUARE POST CLAMP & BRACE



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.

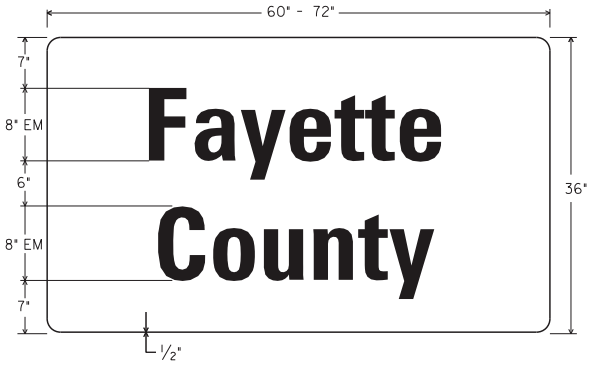
NOT TO SCALE

SHEETING SIGN DETAIL

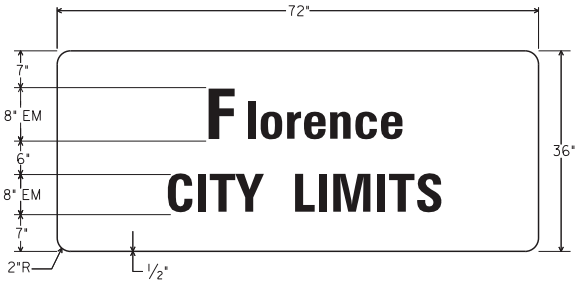
SHEET 2 OF 2

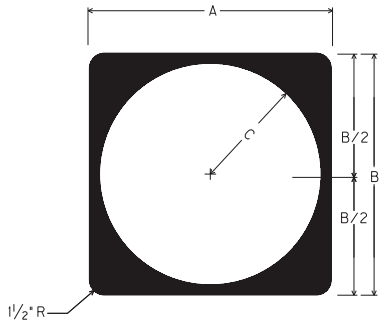
COUNTY OF	ITEM NO.	SHEET NO.

T-1



T-2

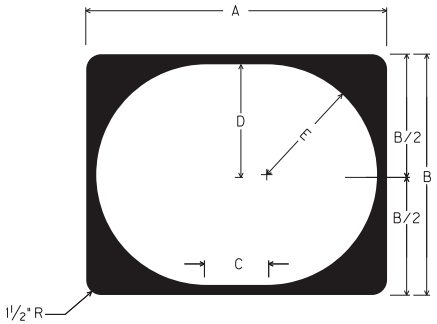




M1-5 (1 OR 2 DIGIT)

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

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



M1-5 (3 OR 4 DIGIT)

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

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

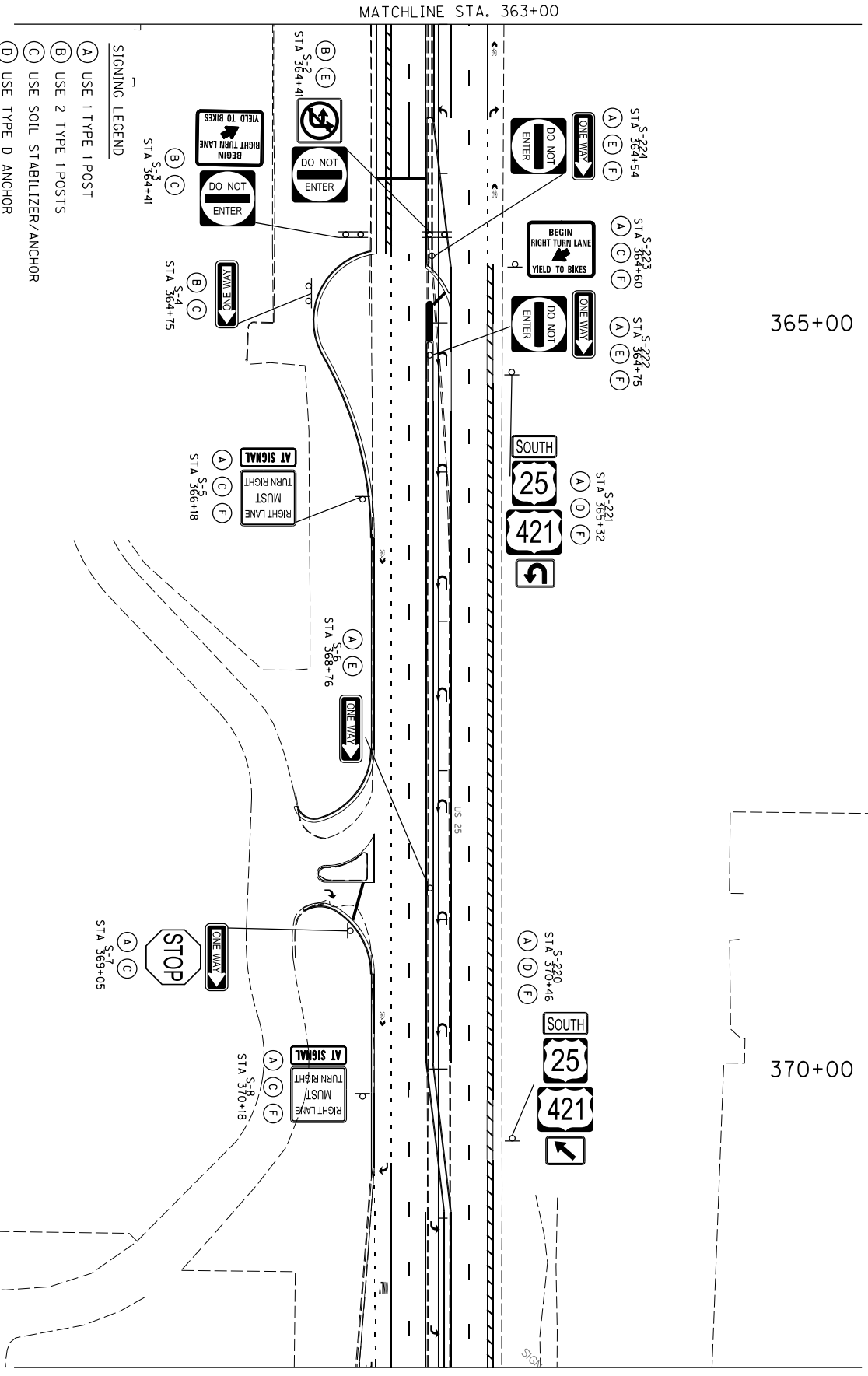
S-1



NOT TO SCALE

TYPICAL SIGNS

MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SIGNING_02.DGN



SIGNING LEGEND

(A) USE 1 TYPE I POST
(B) USE 2 TYPE I POSTS
(C) USE SOIL STABILIZER/ANCHOR
(D) USE TYPE D ANCHOR
(E) USE TYPE D SURFACE MOUNT
(F) USE BRACING ON SIGN(S)
(G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
(H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

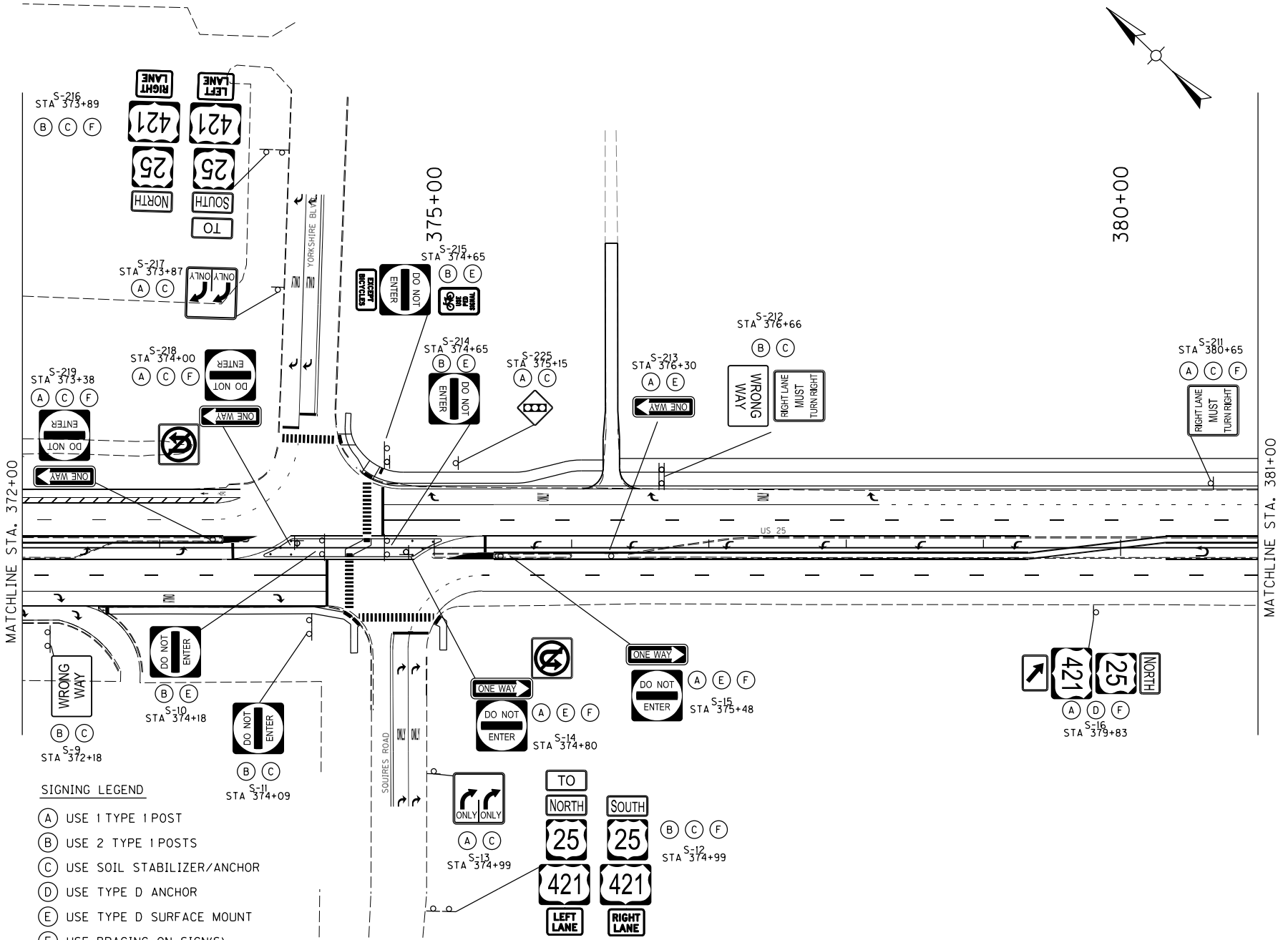
SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 363+00 TO STA. 372+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R112

Contract ID: 254301
Page 332 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R113



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

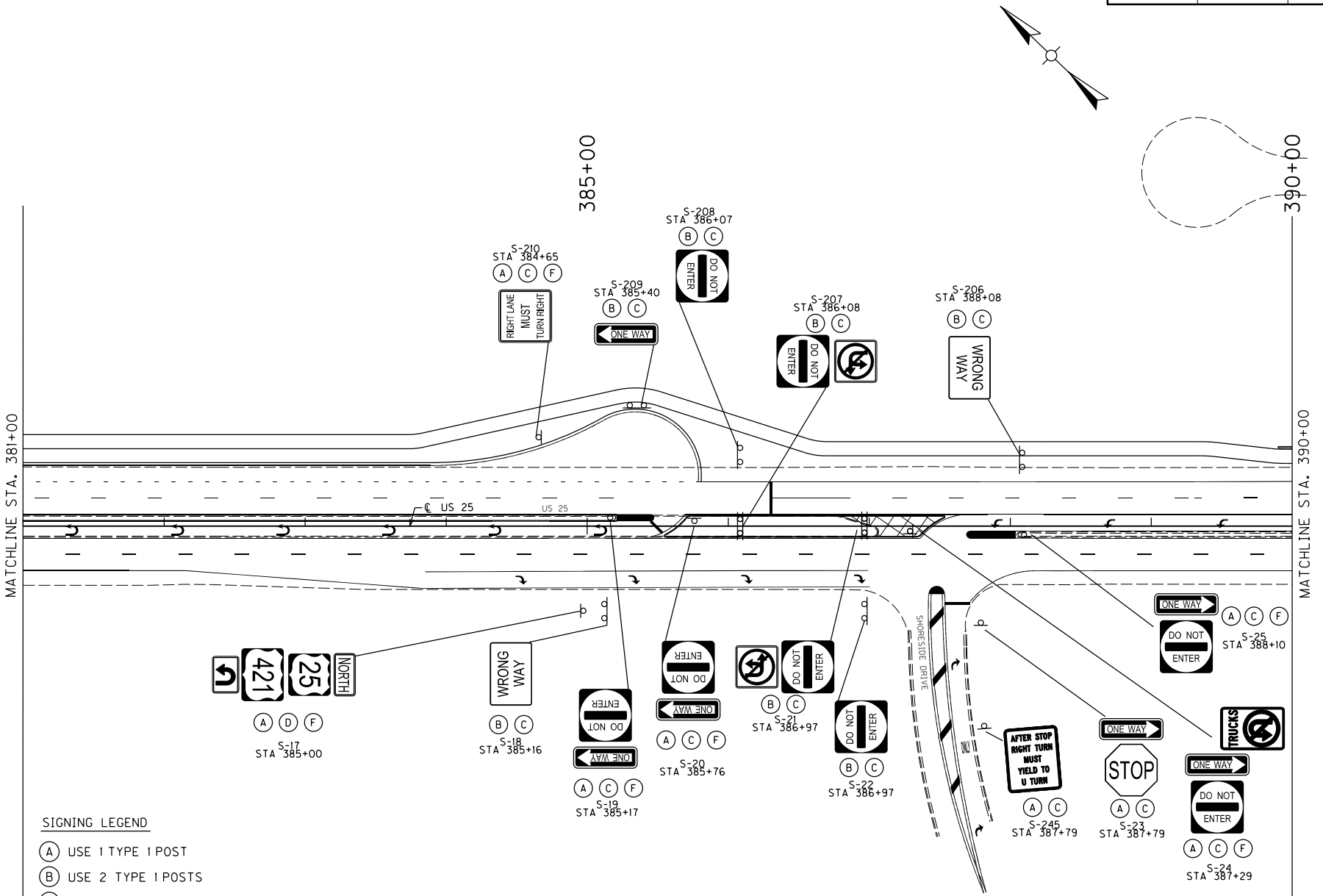
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 372+00 TO STA. 381+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_03.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R114



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

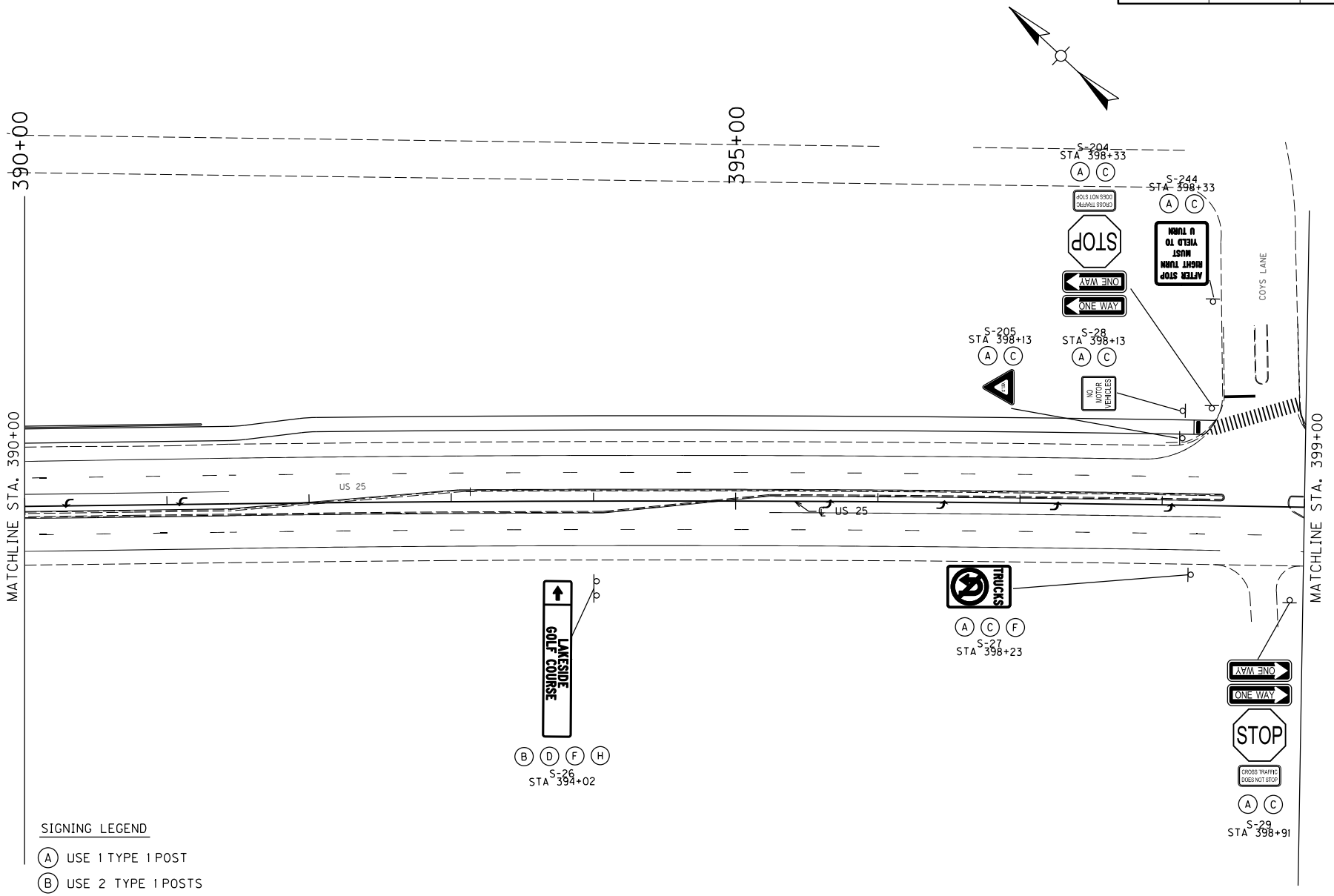
US 25
SIGNING SHEET
STA. 381+00 TO STA. 390+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_04.DGN
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
MicroStation v8.11.9.919

Contract ID: 254301 Page 334 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R115



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

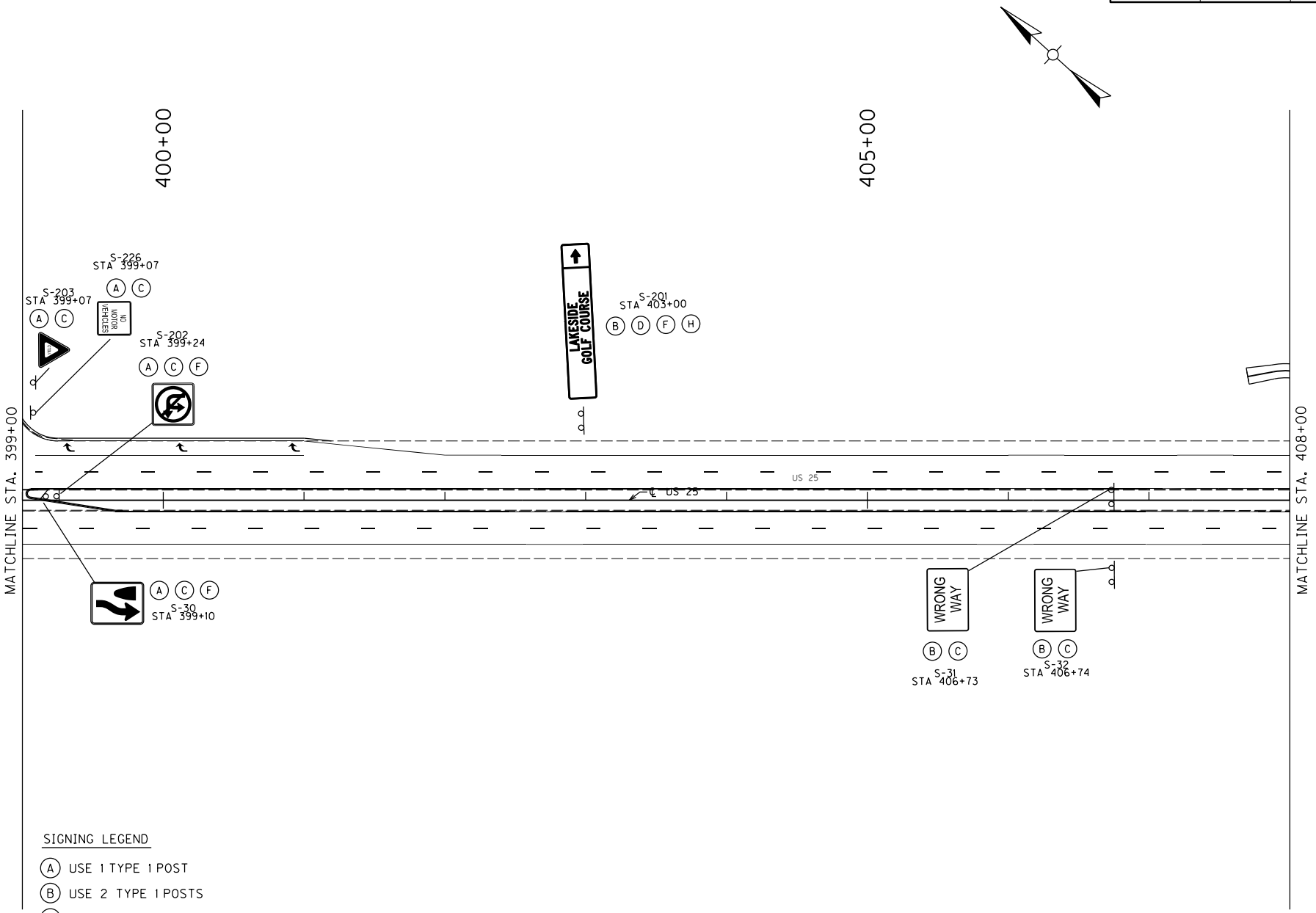
SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 390+00 TO STA. 399+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_05.DGN

Contract ID: 254301
Page 335 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R116



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

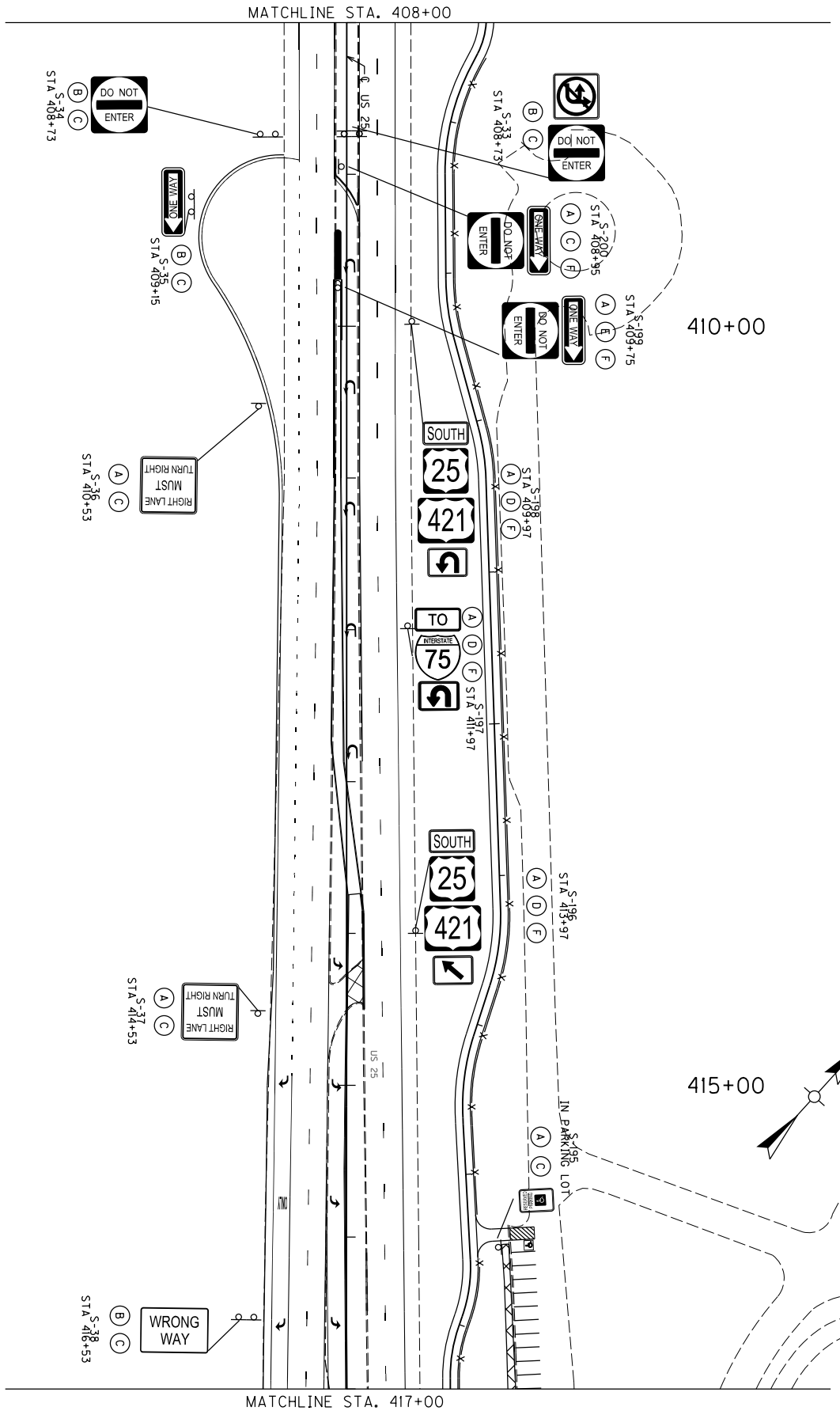
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 399+00 TO STA. 408+00

FAYETTE COUNTY
0340R25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_06.DGN

MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SIGNING_07.DGN



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

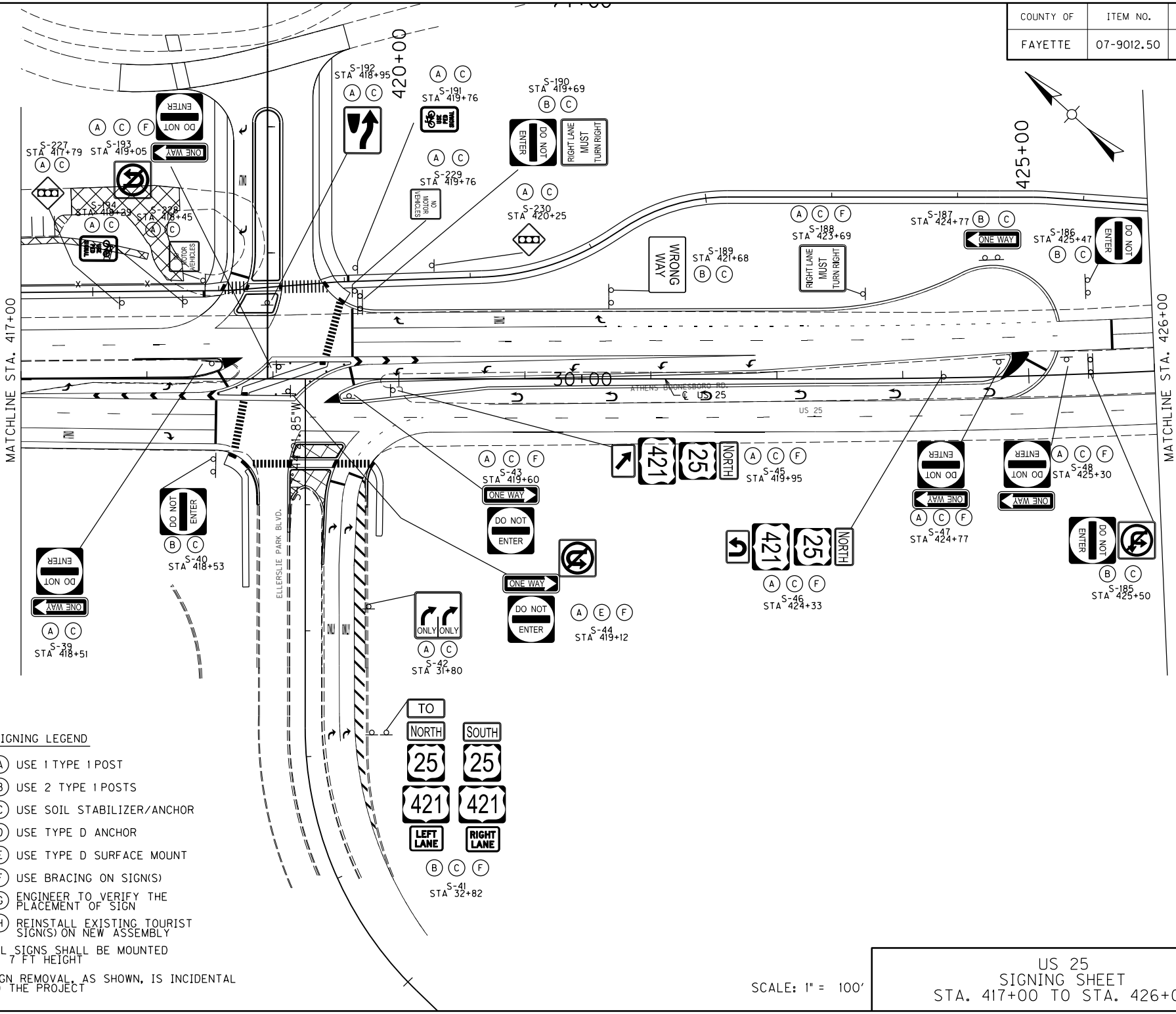
SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 408+00 TO STA. 417+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R117

Contract ID: 254301
Page 337 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R118



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

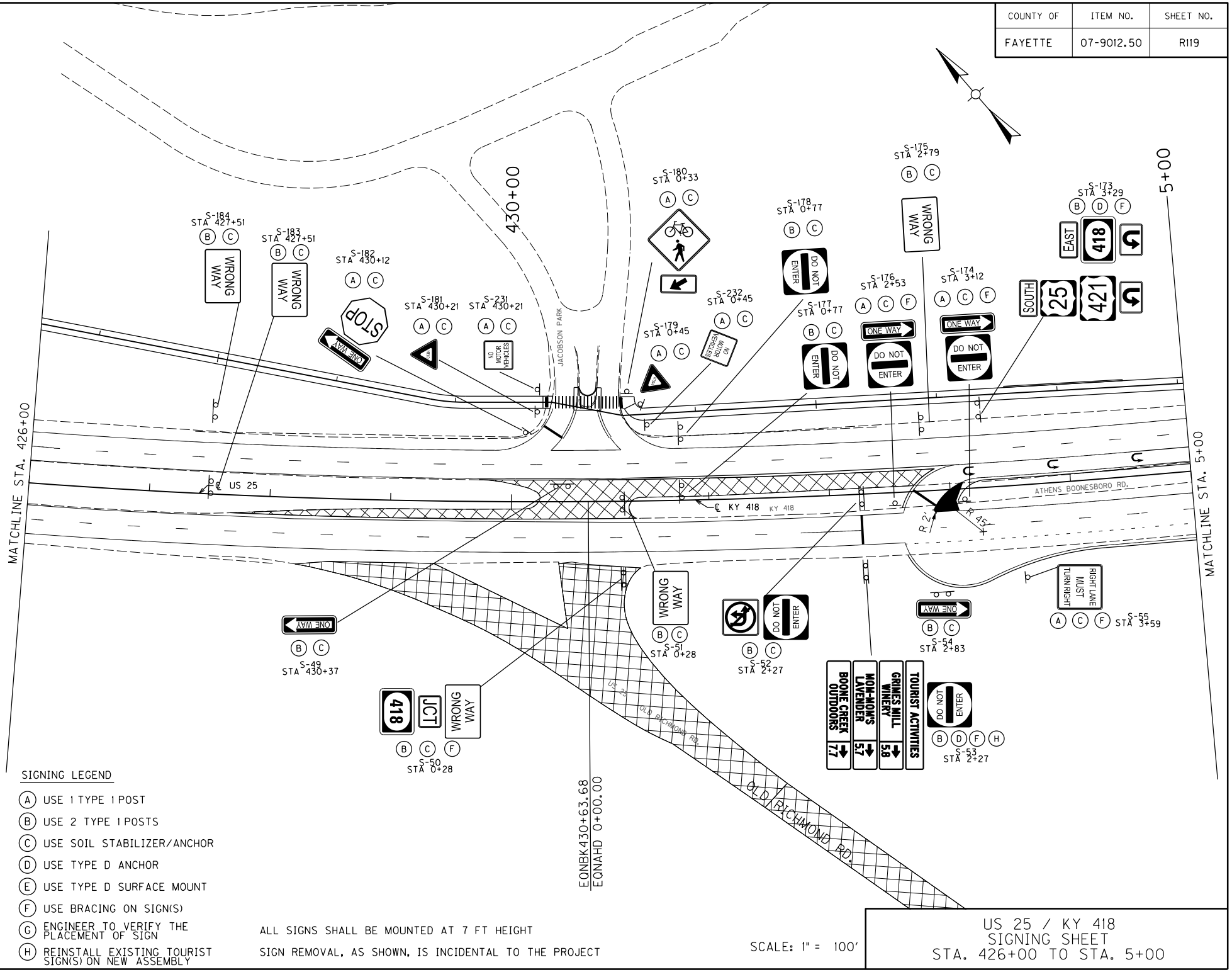
SCALE: 1" = 100'

US 25
SIGNING SHEET
STA. 417+00 TO STA. 426+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_08.DGN

Contract ID: 254301
Page 338 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R119



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

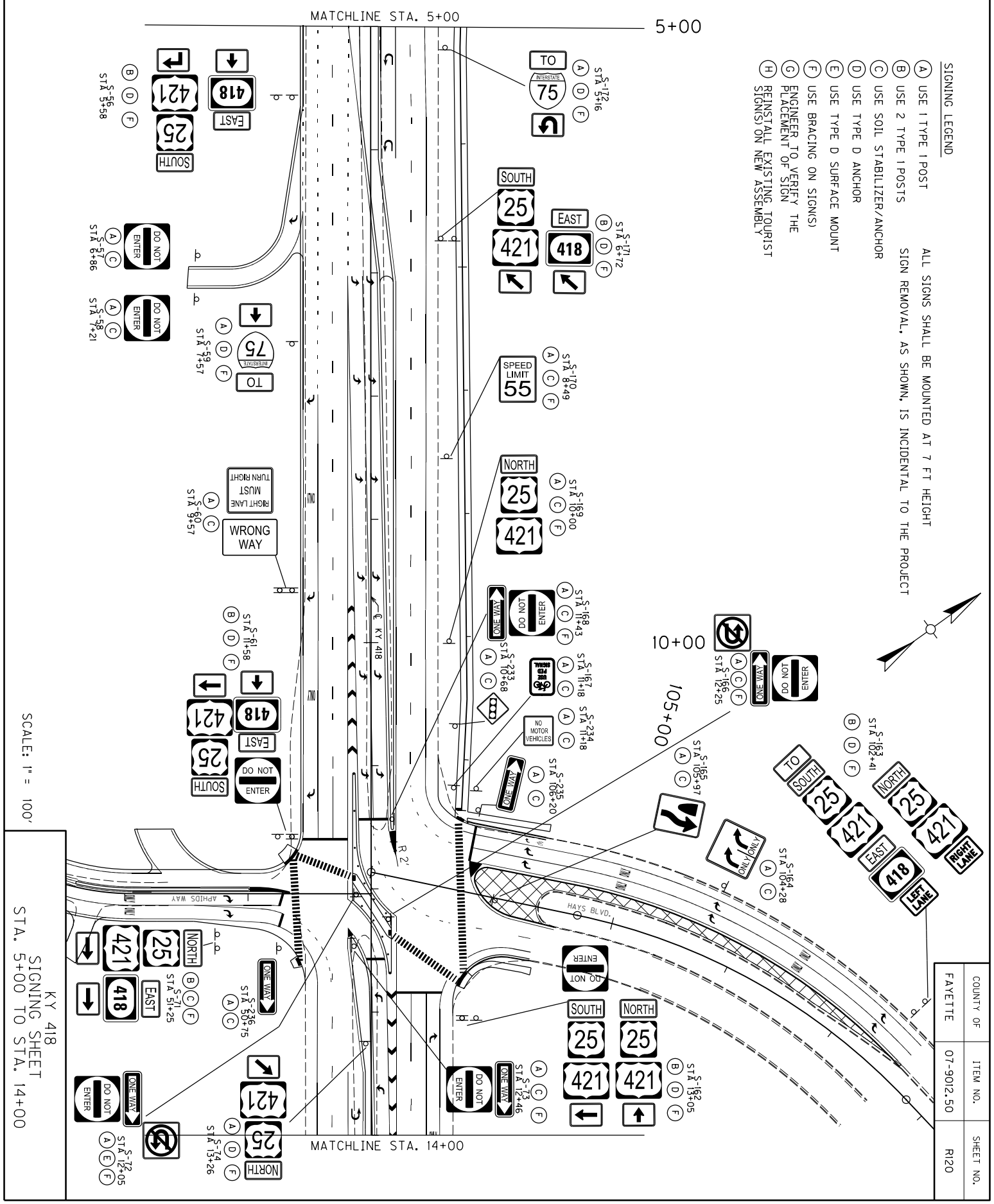
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

US 25 / KY 418
SIGNING SHEET
STA. 426+00 TO STA. 5+00

FAYETTE COUNTY
0340R25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_09.DGN

MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SIGNING_10.DGN

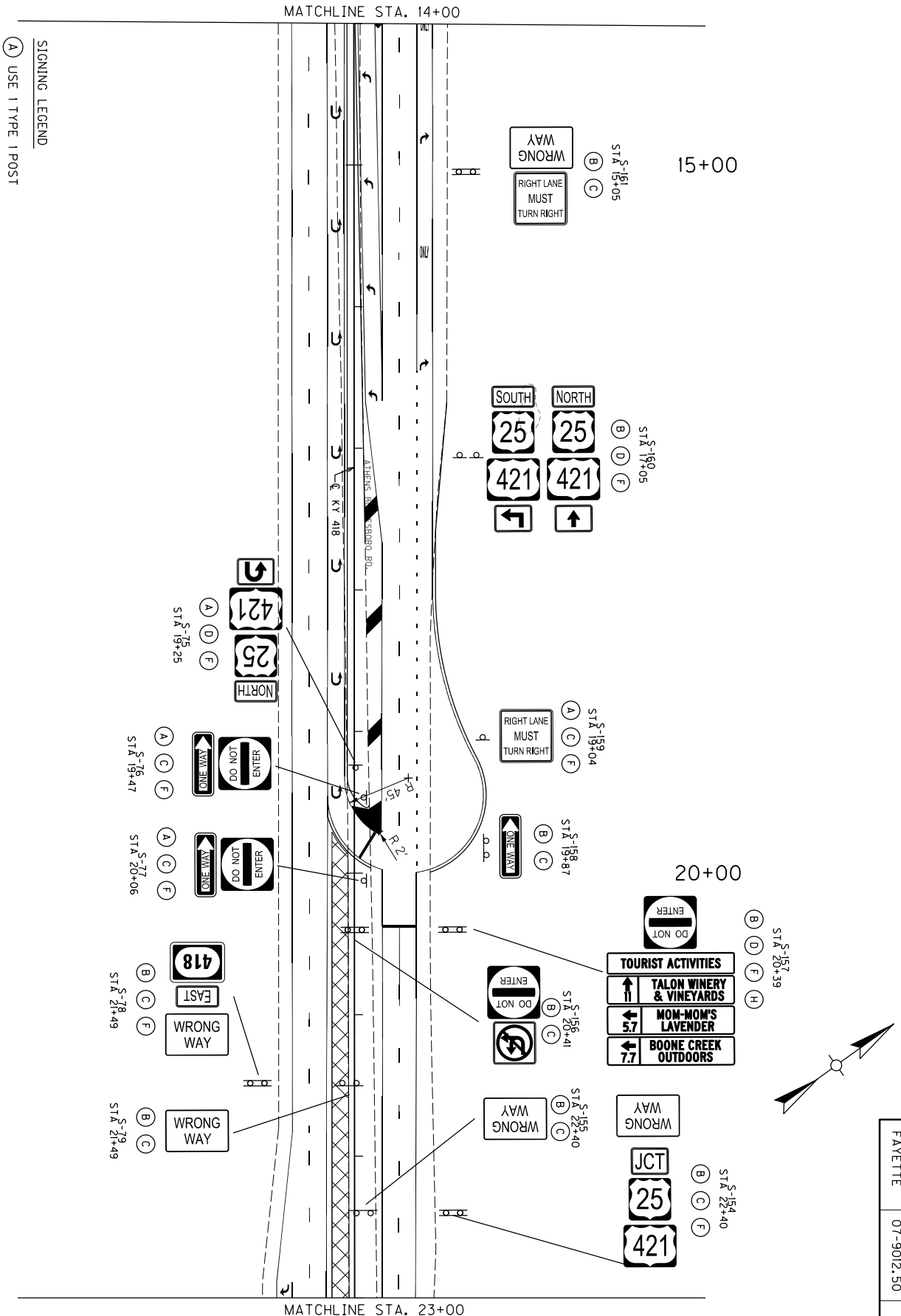


KY 418
SIGNING SHEET
STA. 5+00 TO STA. 14+00

SCALE: 1" = 100'

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R120

MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SIGNING_11.DGN



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

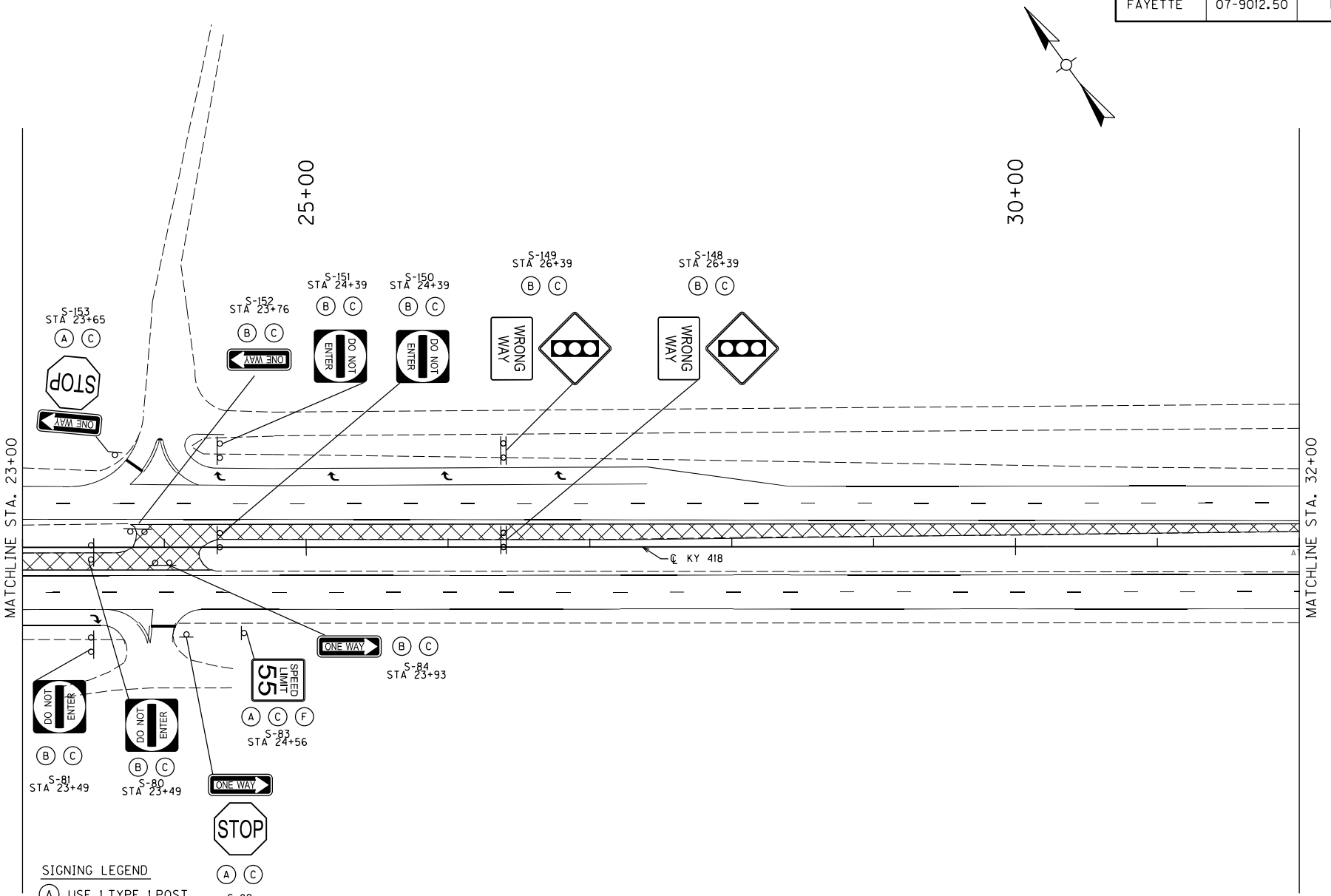
SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 14+00 TO STA. 23+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R121

Contract ID: 254301
Page 341 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R122



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

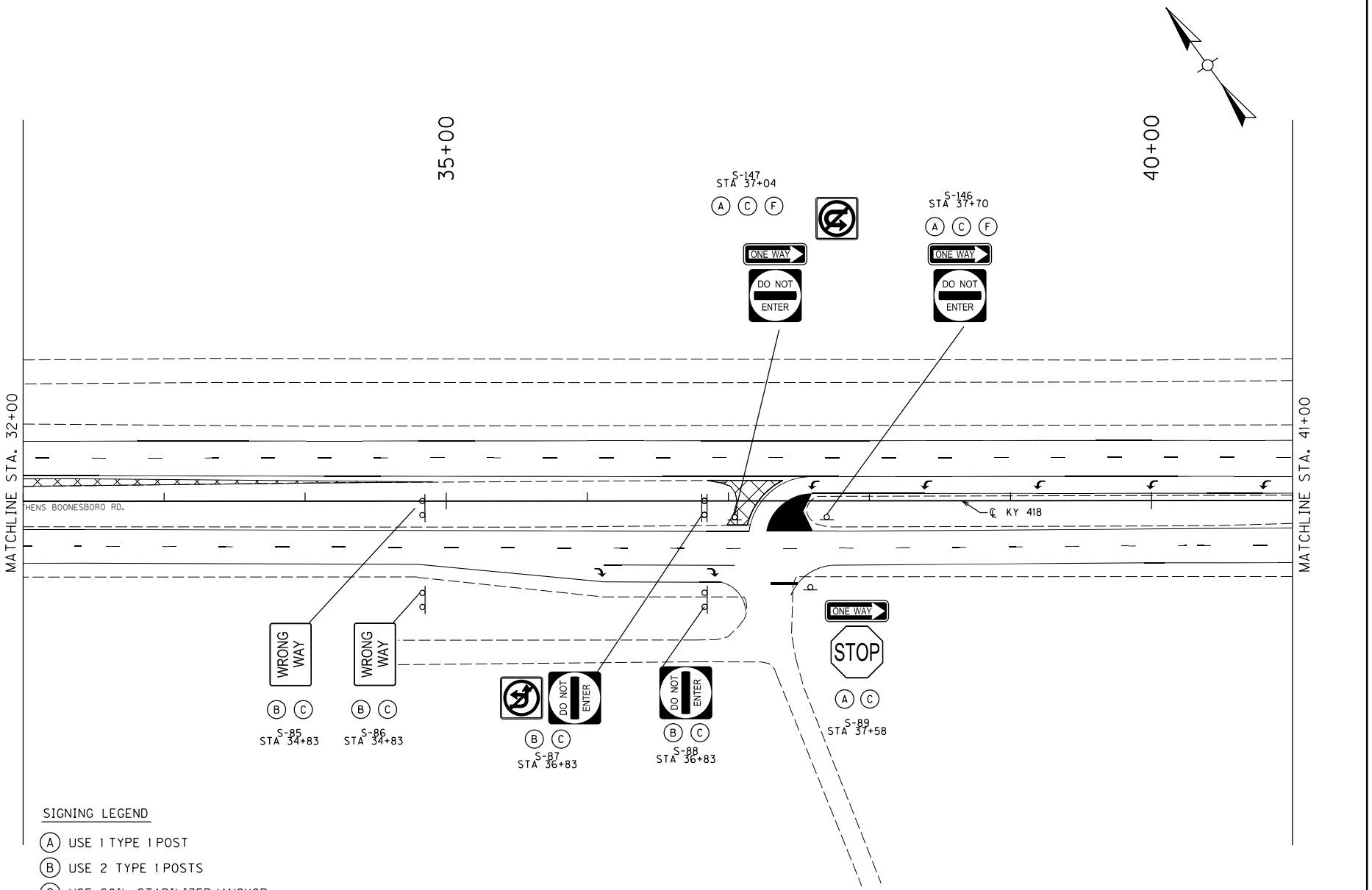
SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 23+00 TO STA. 32+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_12.DGN

Contract ID: 254301
Page 342 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R123



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

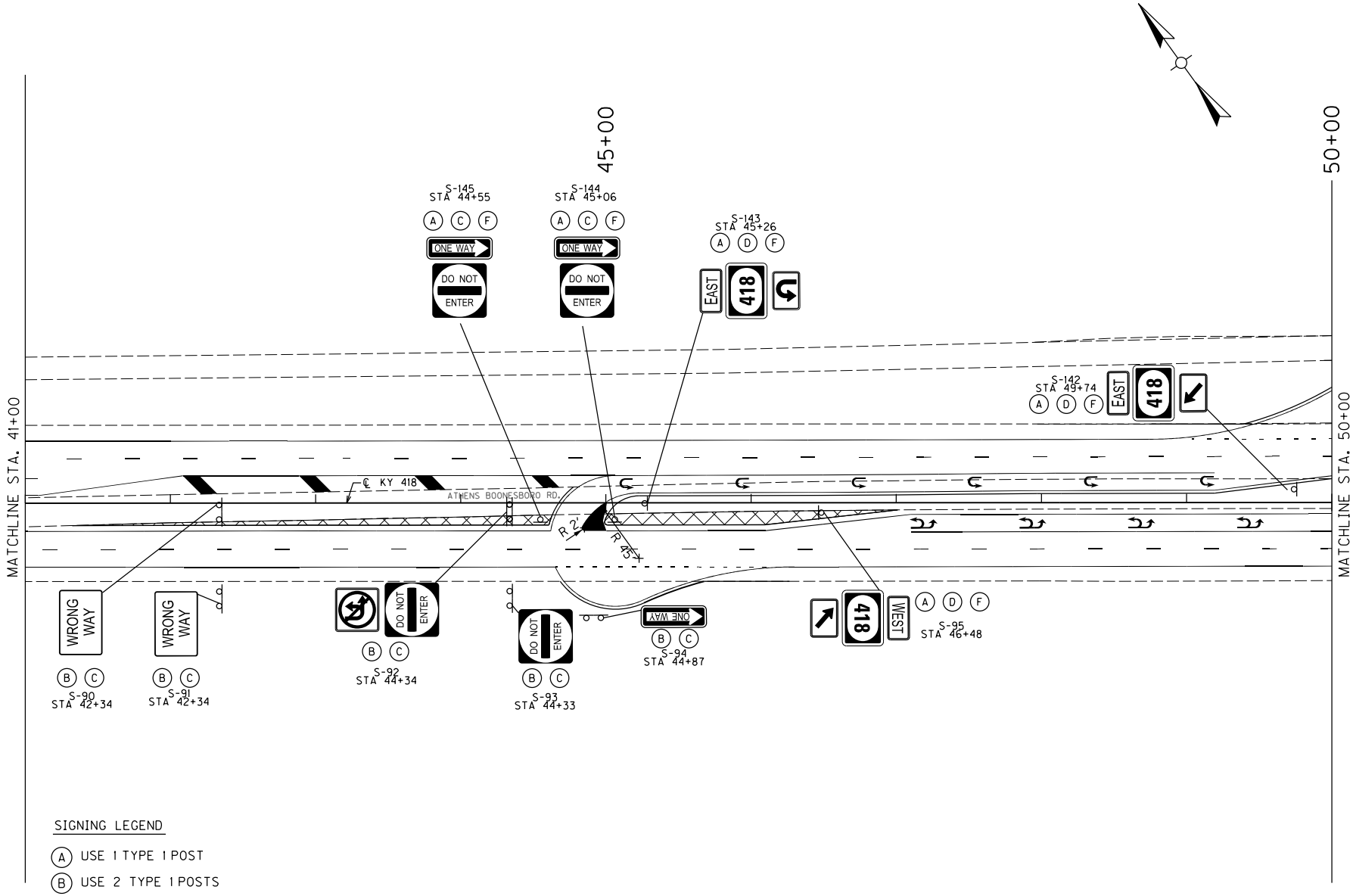
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 32+00 TO STA. 41+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_13.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R124



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

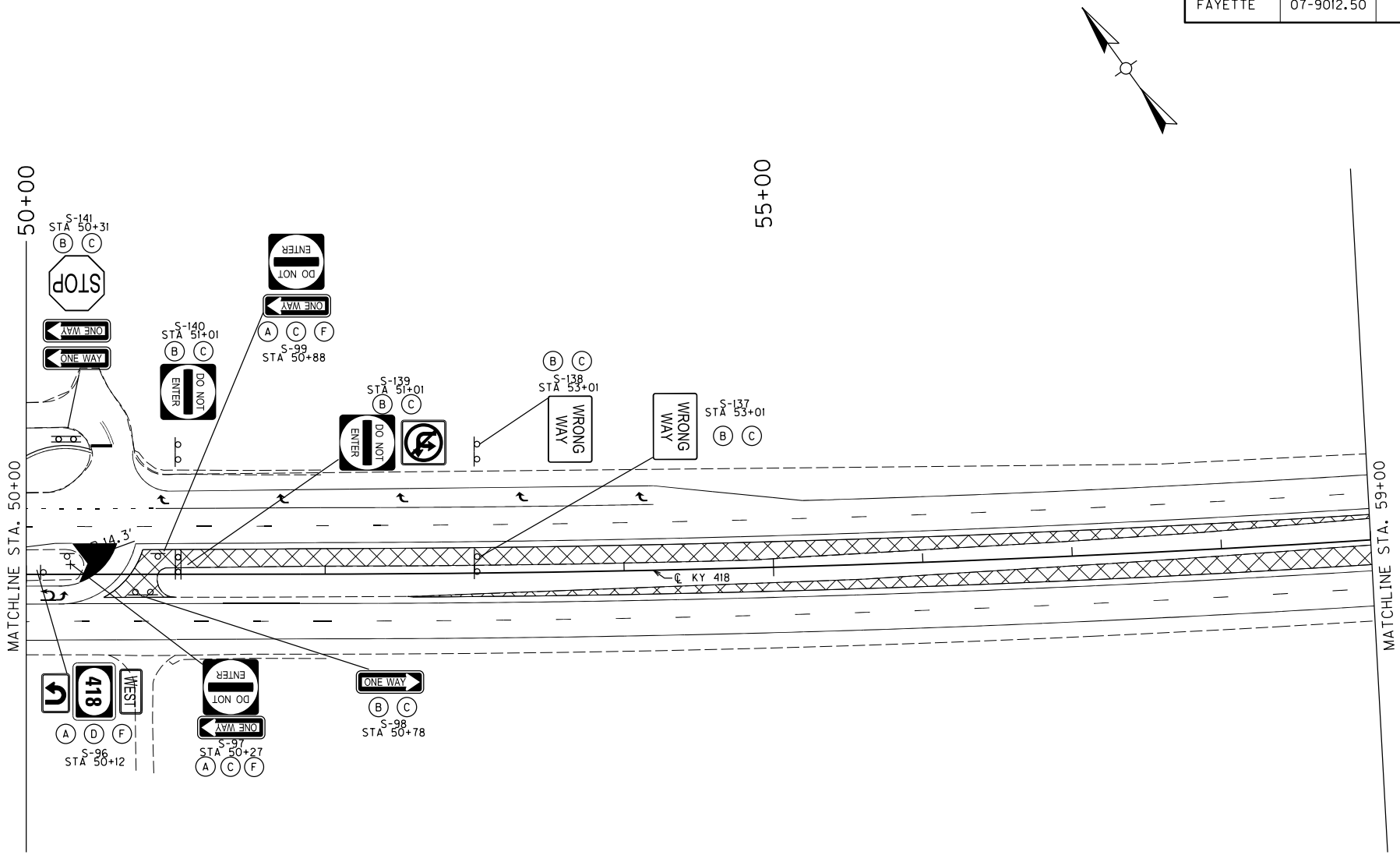
SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 41+00 TO STA. 50+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_14.DGN

Contract ID: 254301
Page 344 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R125



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

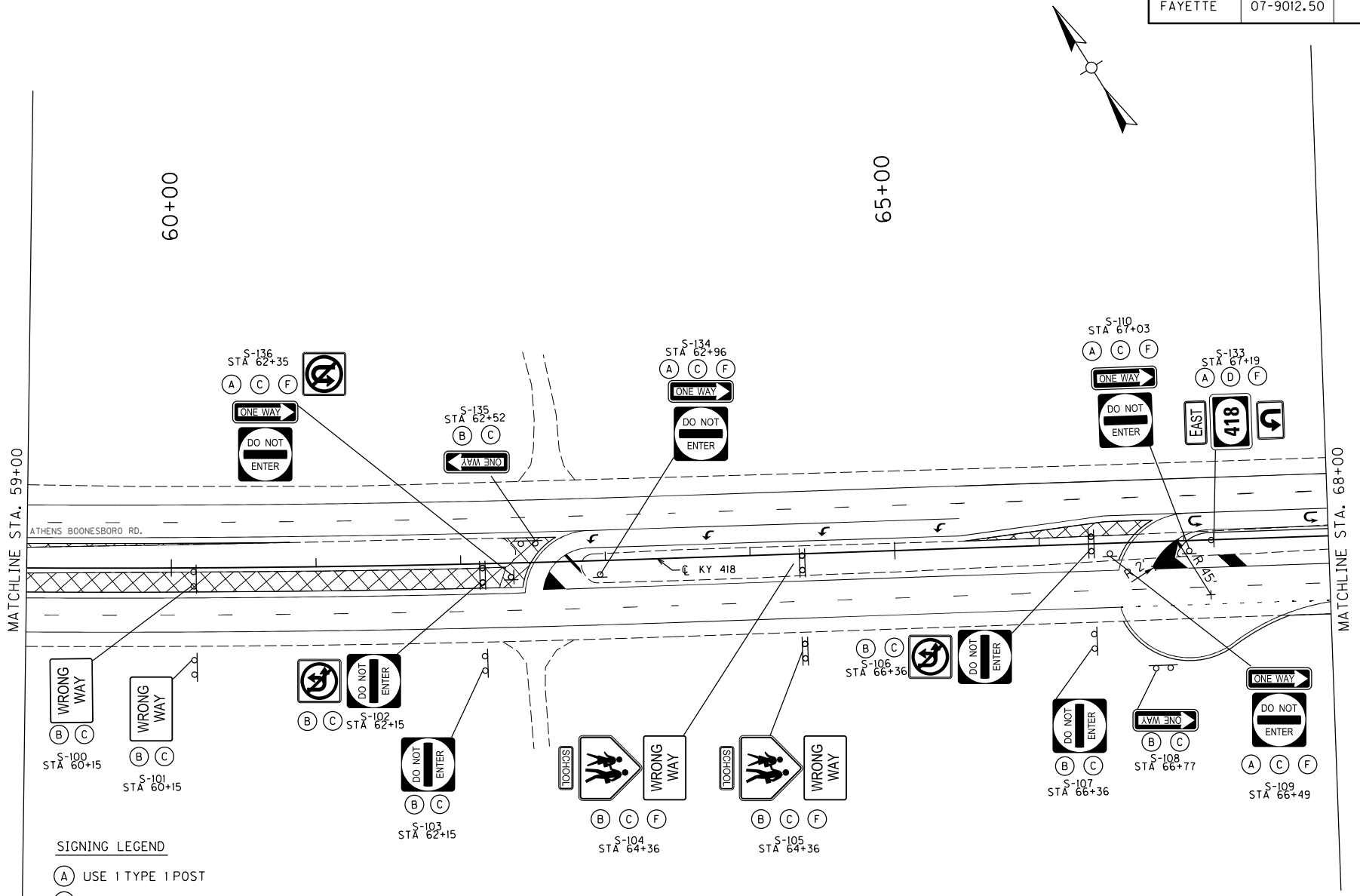
SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 50+00 TO STA. 59+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_15.DGN

Contract ID: 254301
Page 345 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R126



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

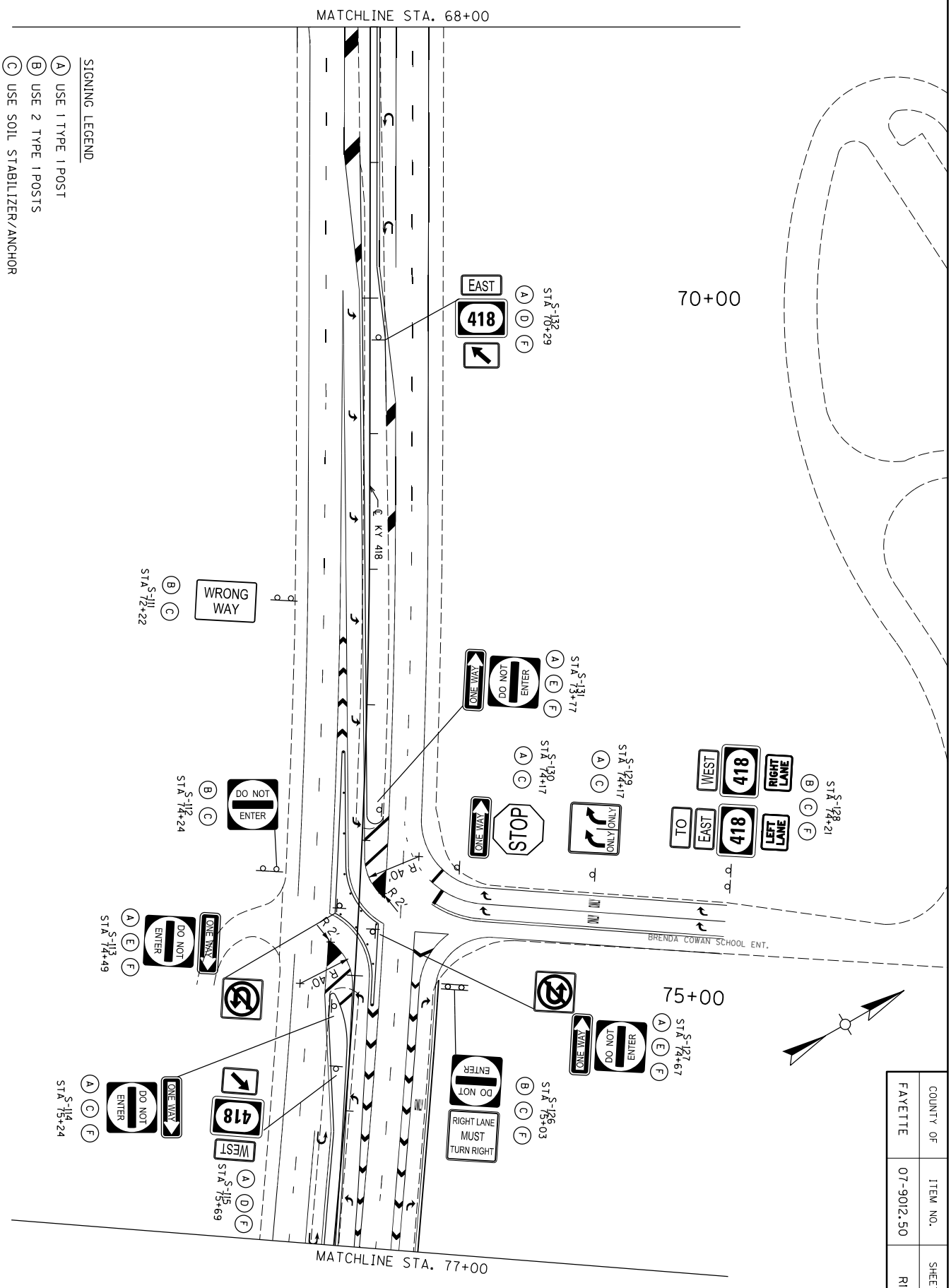
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 59+00 TO STA. 68+00

FAYETTE COUNTY
0340R25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_16.DGN

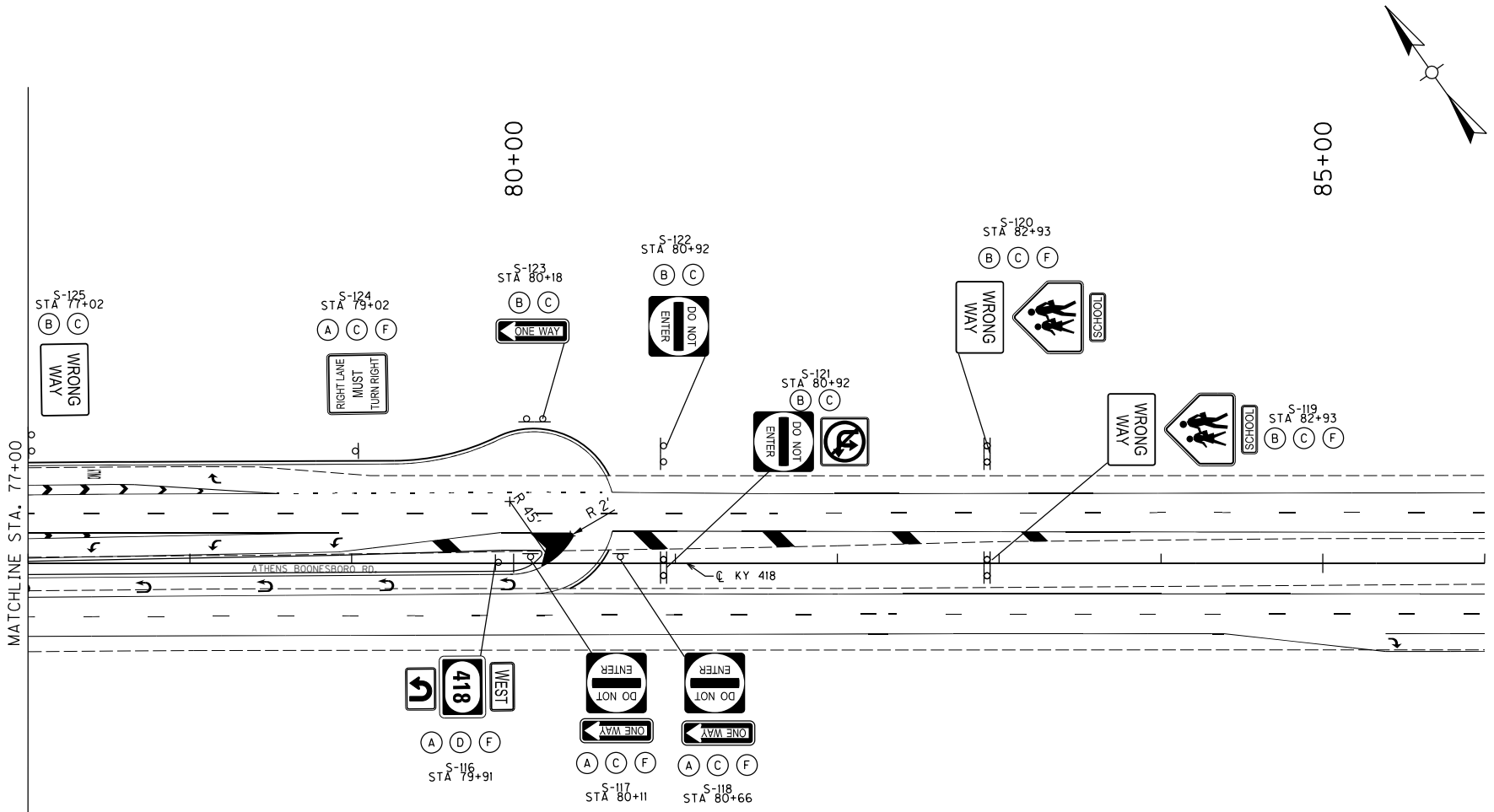
MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D1641094\SIGNING_17.DGN



KY 418
SIGNING SHEET
STA. 68+00 TO STA. 77+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R127

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R128



SIGNING LEGEND

- (A) USE 1 TYPE 1 POST
- (B) USE 2 TYPE 1 POSTS
- (C) USE SOIL STABILIZER/ANCHOR
- (D) USE TYPE D ANCHOR
- (E) USE TYPE D SURFACE MOUNT
- (F) USE BRACING ON SIGN(S)
- (G) ENGINEER TO VERIFY THE PLACEMENT OF SIGN
- (H) REINSTALL EXISTING TOURIST SIGN(S) ON NEW ASSEMBLY

ALL SIGNS SHALL BE MOUNTED AT 7 FT HEIGHT

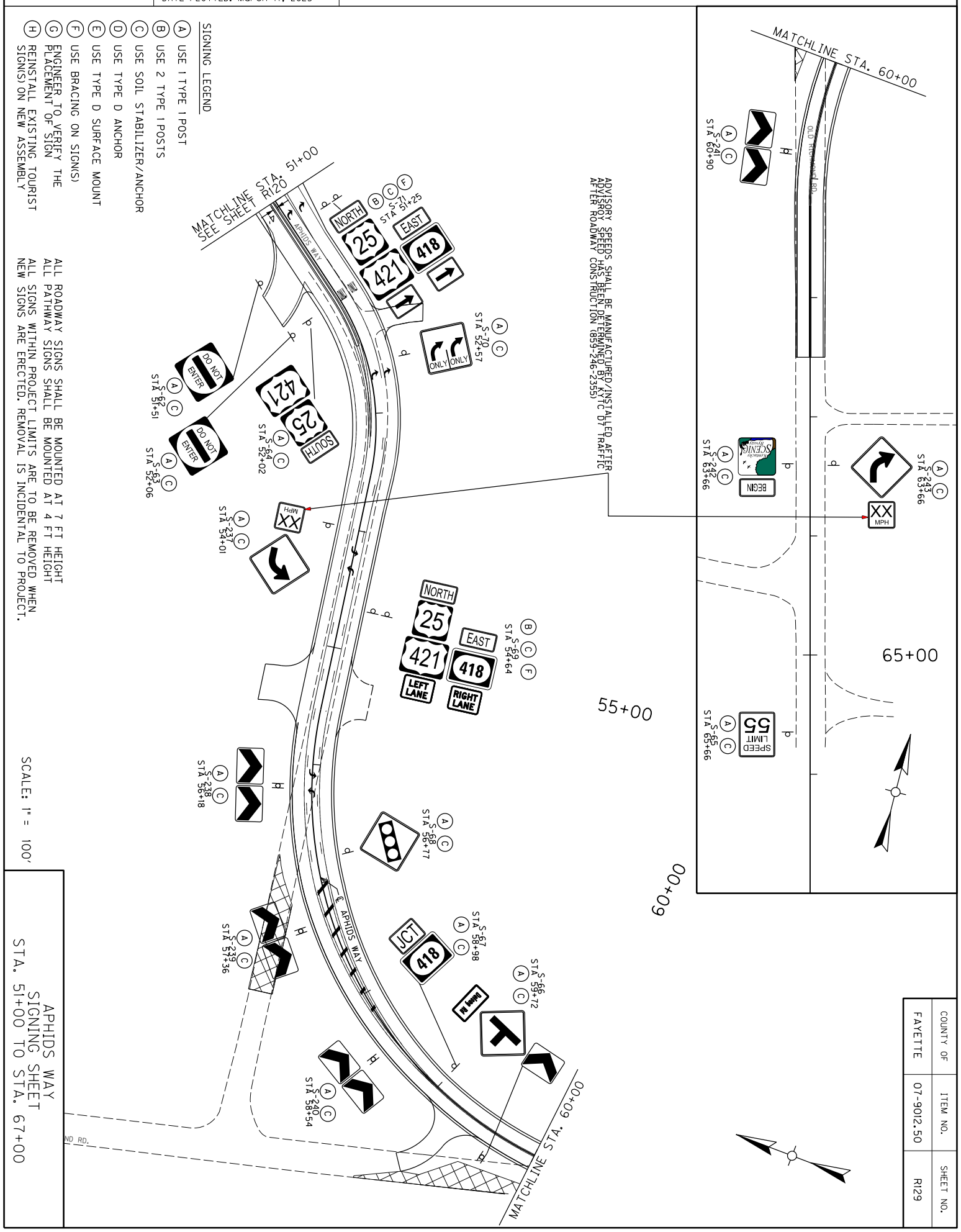
SIGN REMOVAL, AS SHOWN, IS INCIDENTAL TO THE PROJECT

SCALE: 1" = 100'

KY 418
SIGNING SHEET
STA. 77+00 TO STA. 86+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: BSAYLOR
DATE PLOTTED: March 17, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\SIGNING_18.DGN

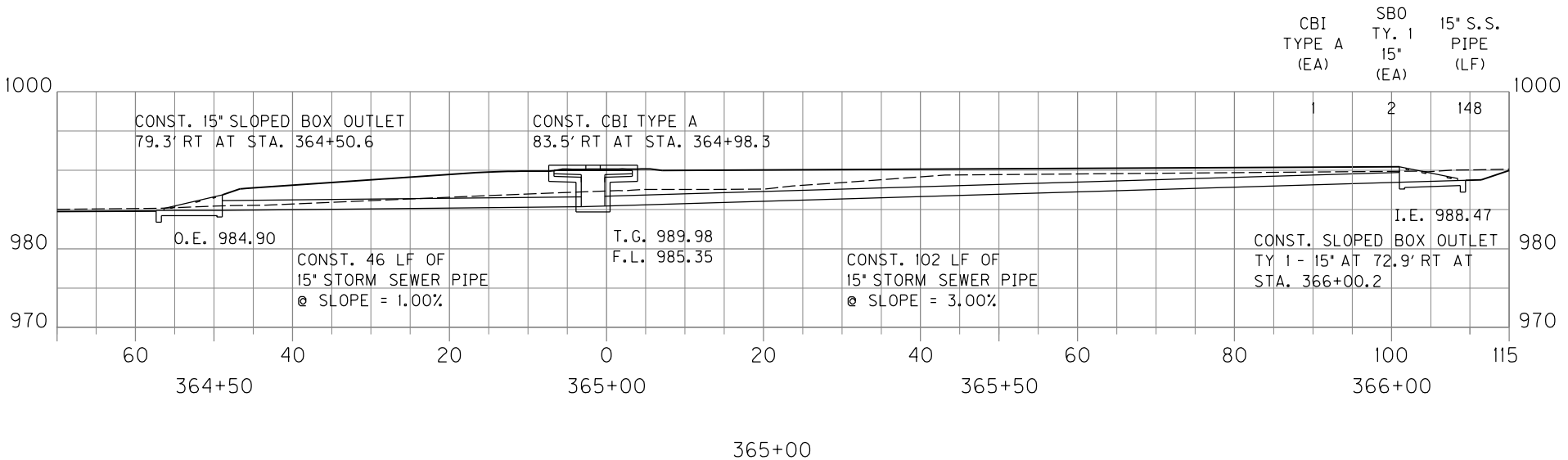
MicroStation v8.11.9.919 | USER: BSAYLOR | DATE PLOTTED: March 17, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\SIGNING_19.DGN



Contract ID: 254301 Page 349 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R130

NOTE: ELEVATIONS BASED OFF OF LIDAR AND SOME SURVEY INFORMATION. CONFIRM PROPOSED ELEVATIONS IN THE FIELD AND GRADE TO DRAIN.



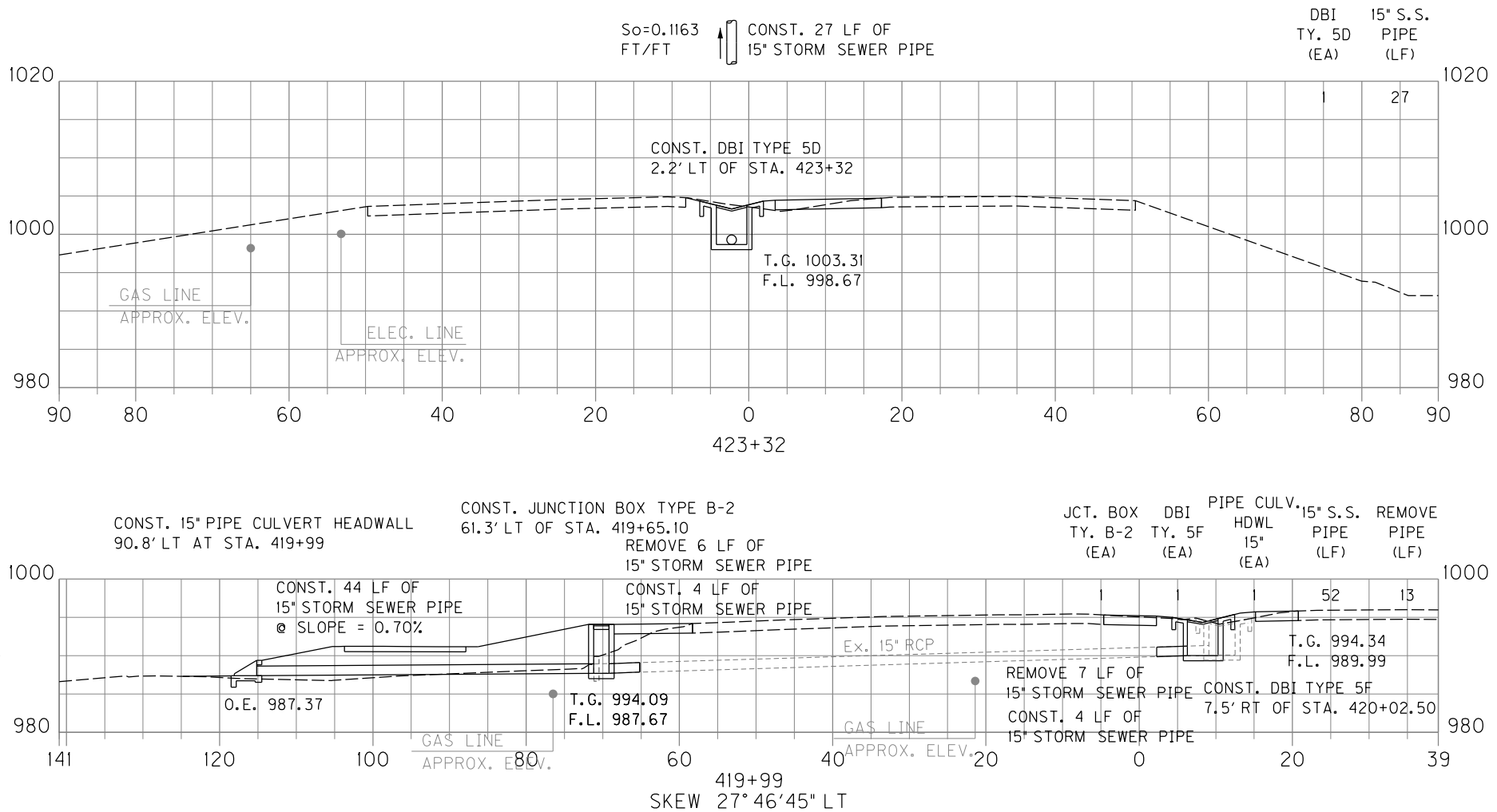
NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

KY 418
PIPE SECTION SHEET
STA. 364+50 - STA. 366+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	RI31



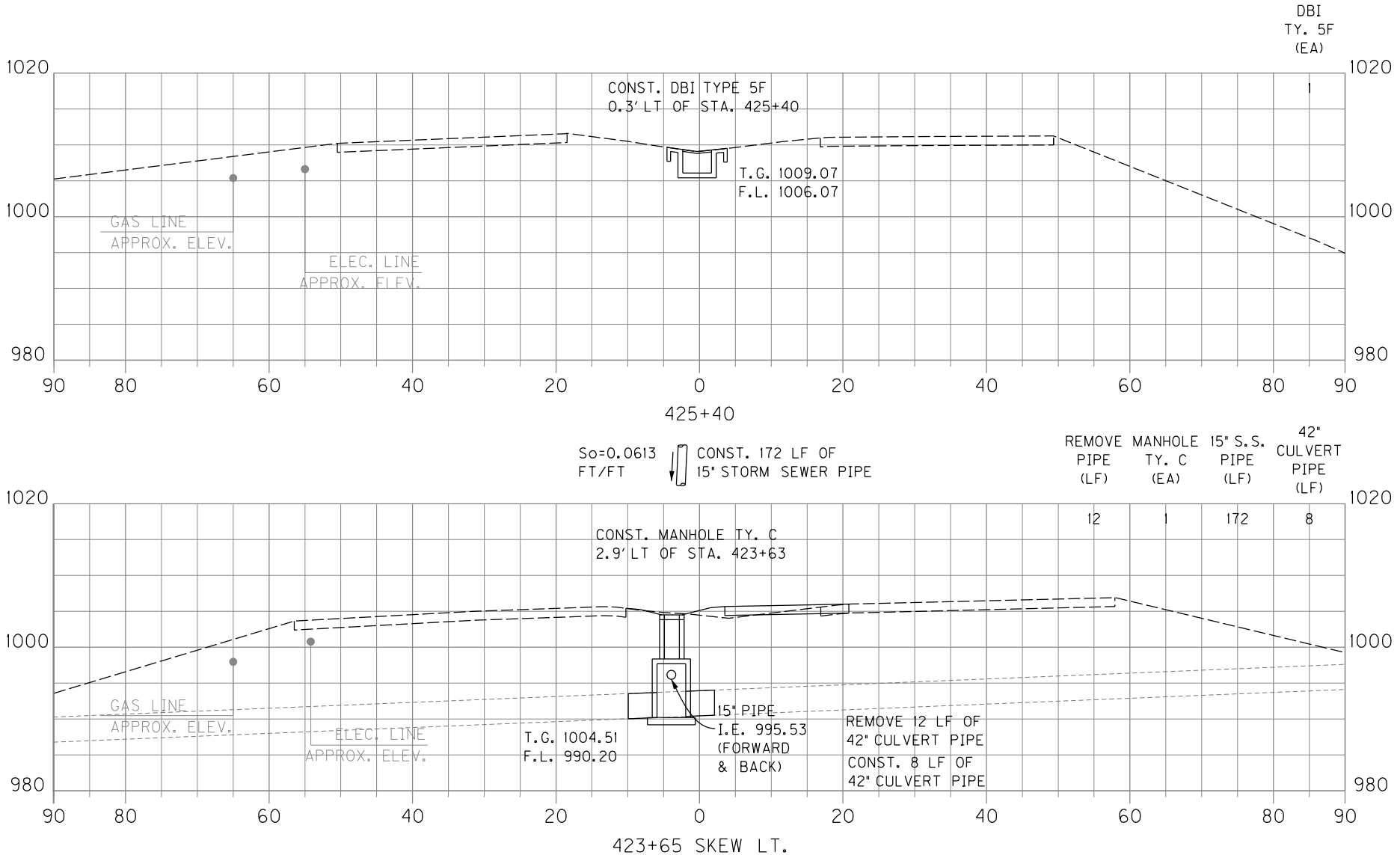
NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

KY 418
PIPE SECTION SHEET
STA. 419+99, STA. 423+32

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R132



NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

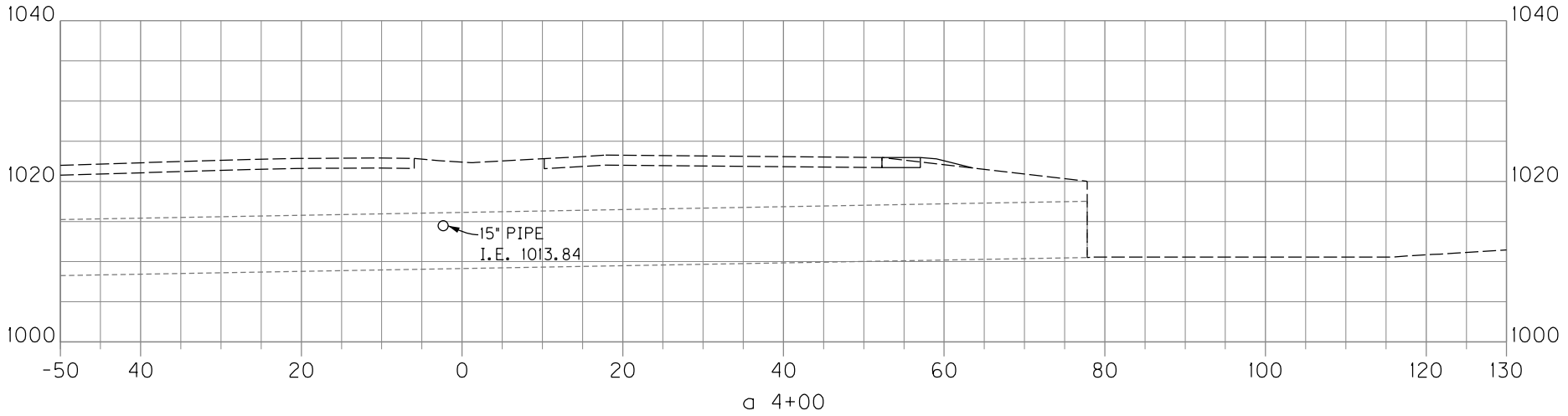
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 418
PIPE SECTION SHEET
STA. 423+65, STA. 425+40

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

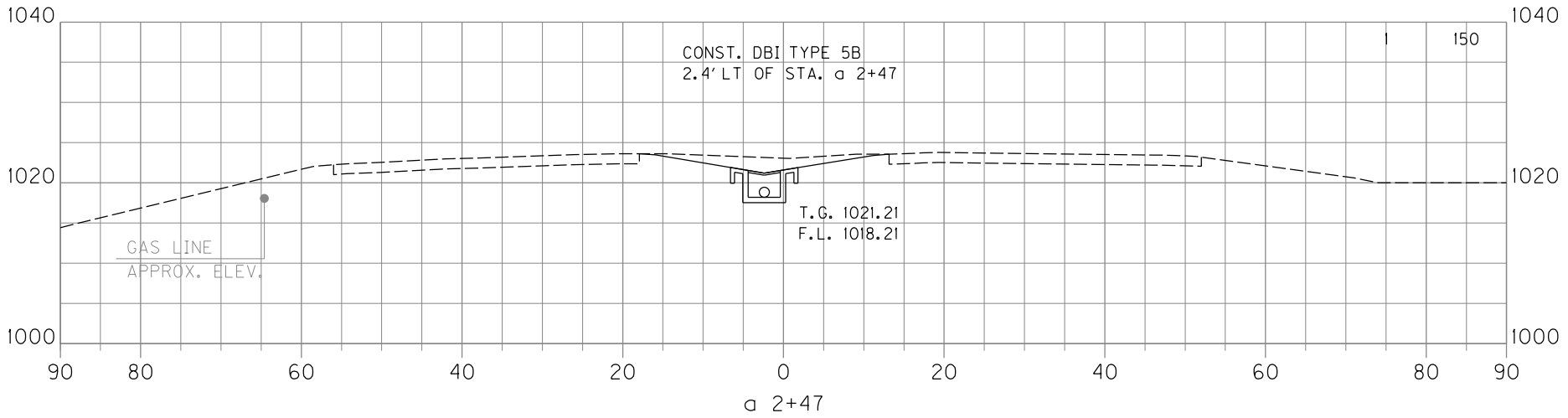
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R133



So=0.0291 FT/FT — CONST. 150 LF OF 15" STORM SEWER PIPE

DBI TY. 5B (EA)	15" S.S. PIPE (LF)
1	150



NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

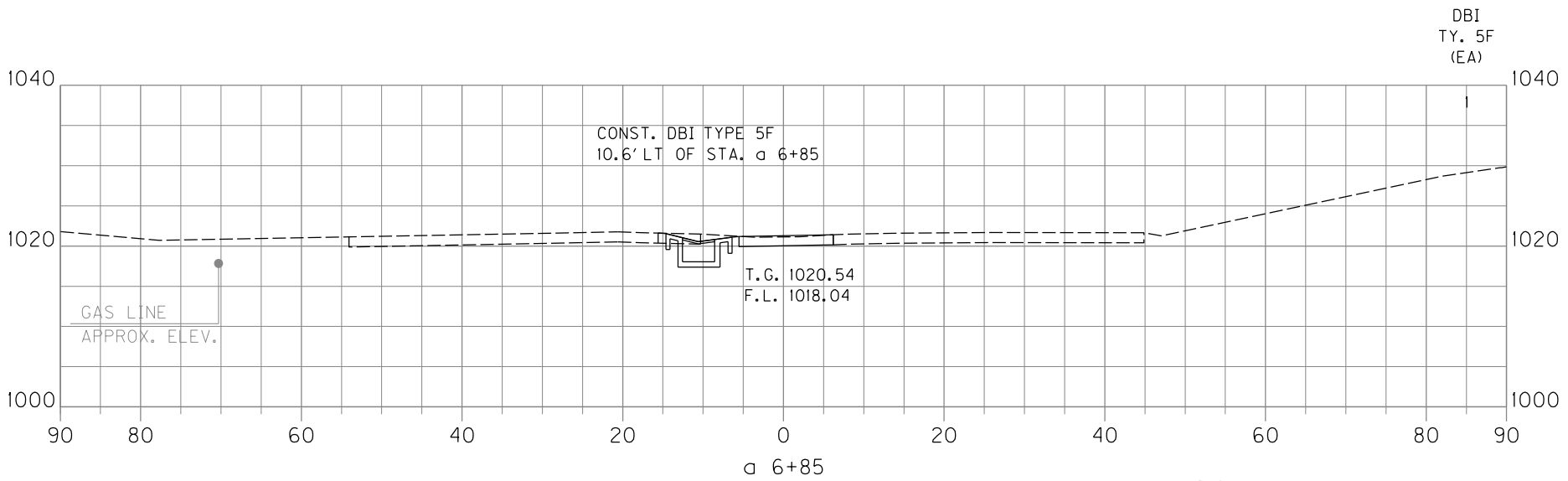
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

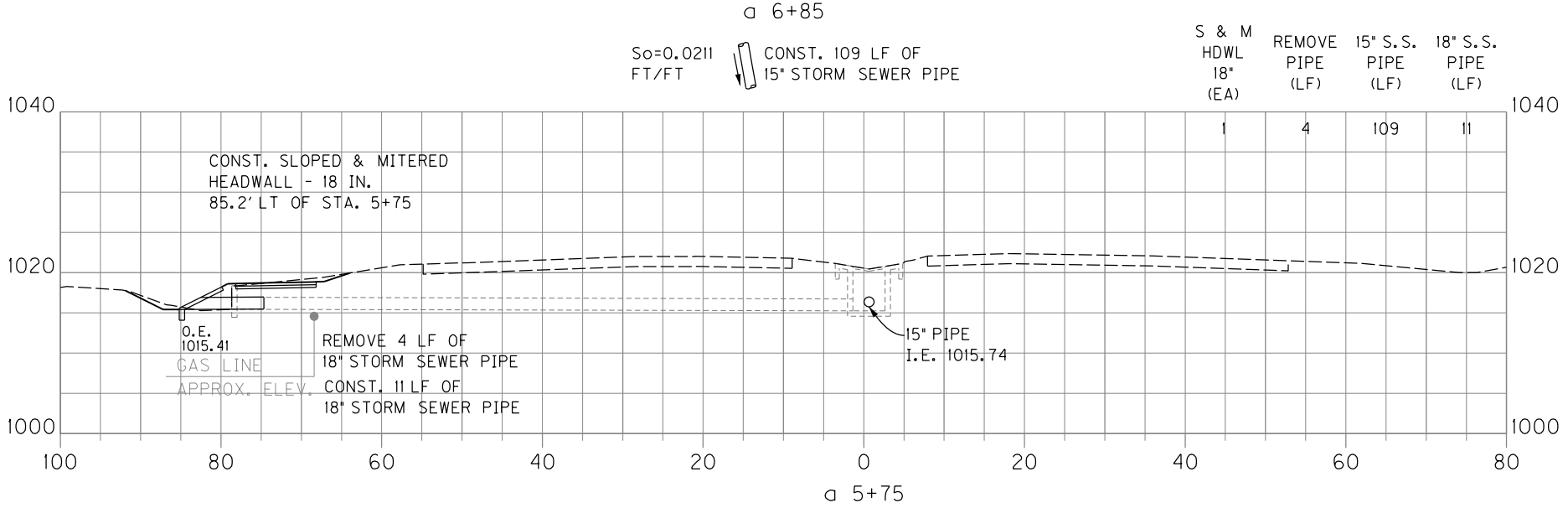
US 25
PIPE SECTION SHEET
STA. 2+47, STA. 4+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

Contract ID: 254301
Page 353 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R134





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY. CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

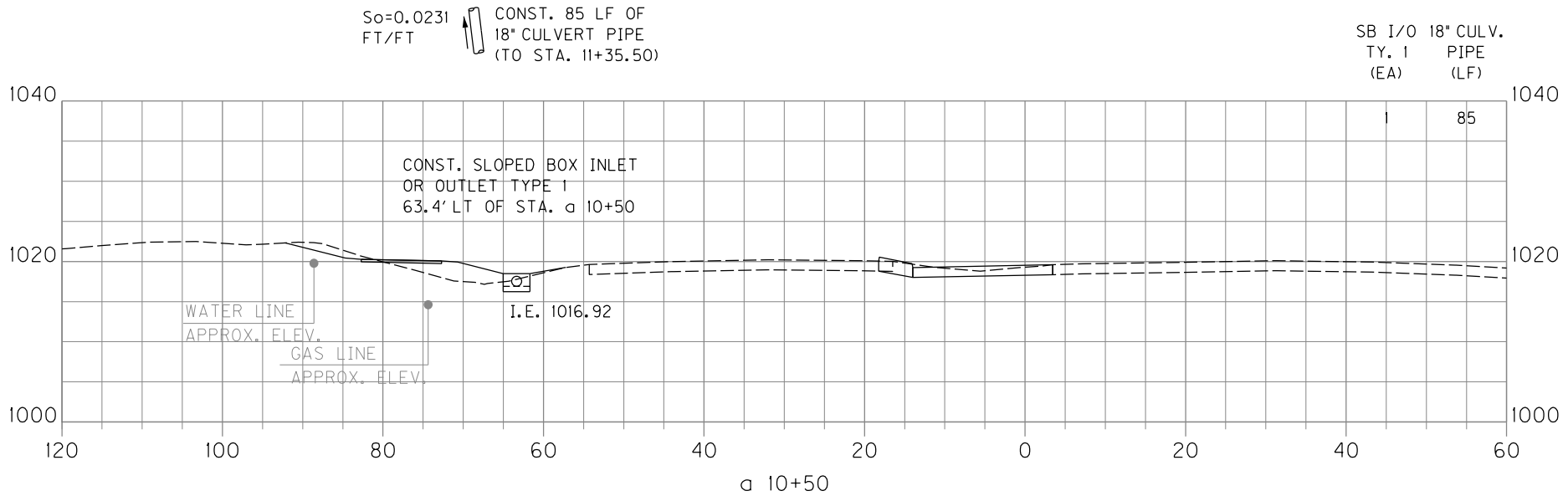
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

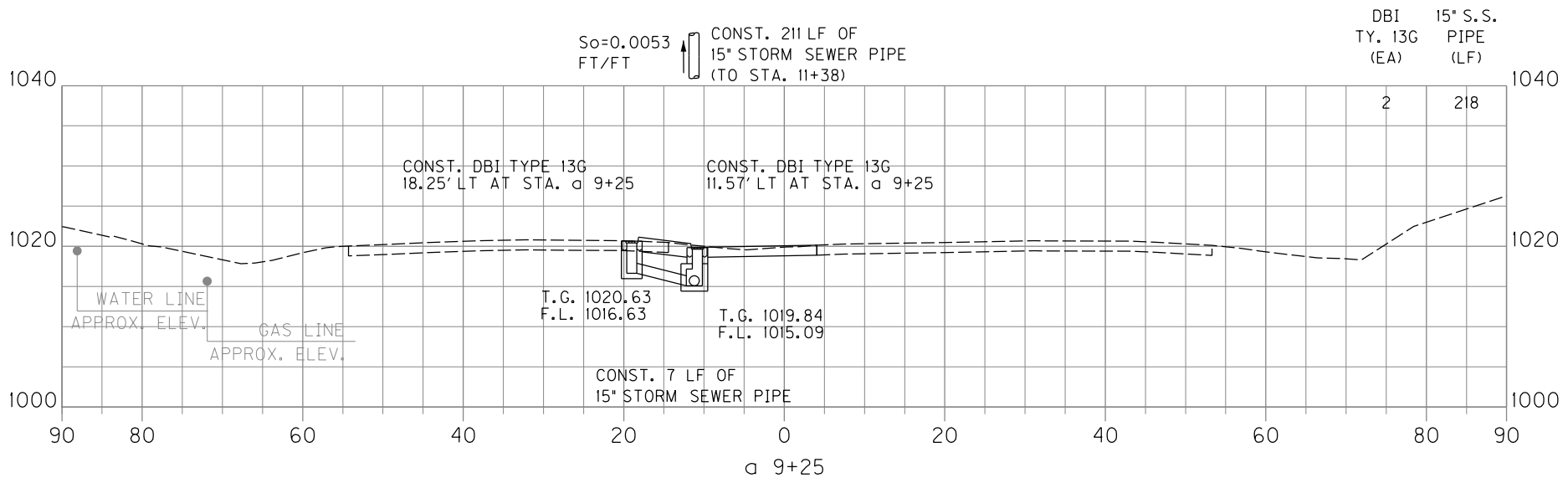
US 25
PIPE SECTION SHEET
STA. 5+75, STA. 6+85

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

Contract ID: 254301
Page 354 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R135





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

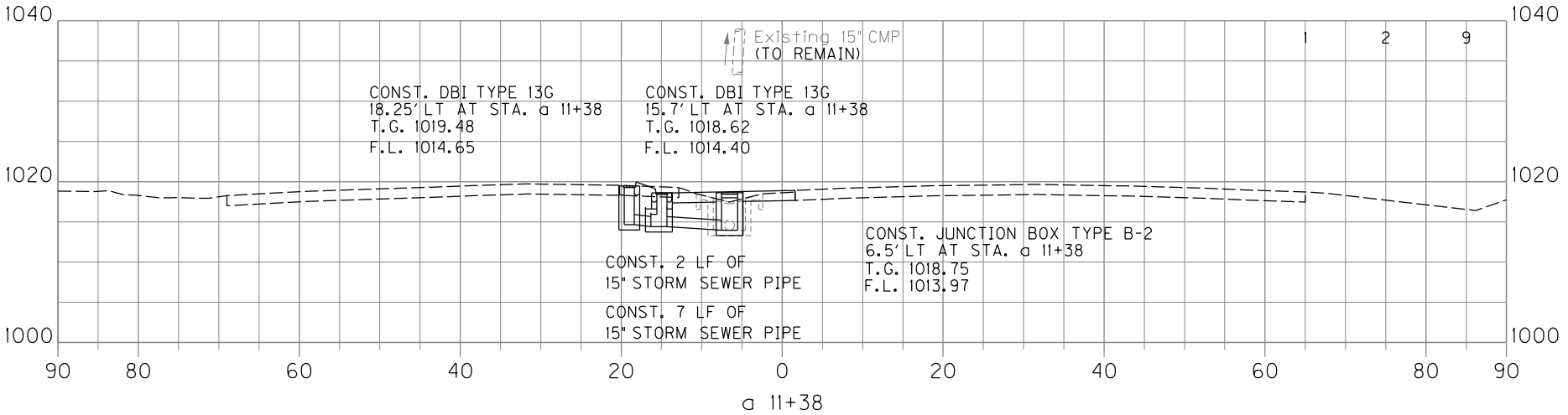
US 25
PIPE SECTION SHEET
STA. 9+25, STA. 10+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

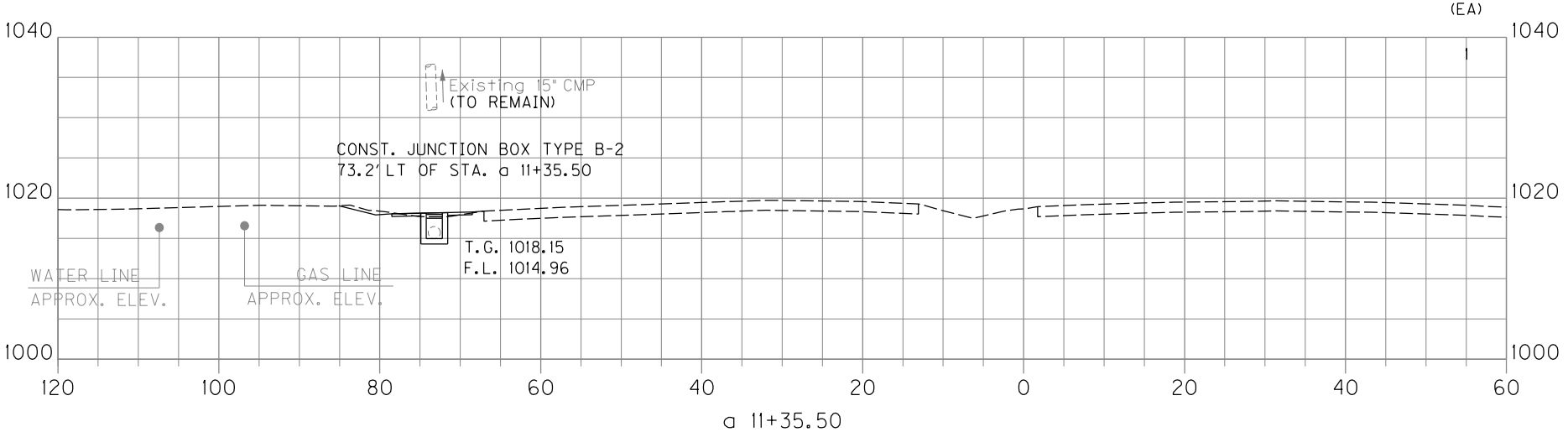
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R136

JCT. BOX TY. B-2 (EA)	DBI TY. 13G (EA)	15" S.S. PIPE (LF)
1	2	9



JCT. BOX TY. B-2 (EA)
1



NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

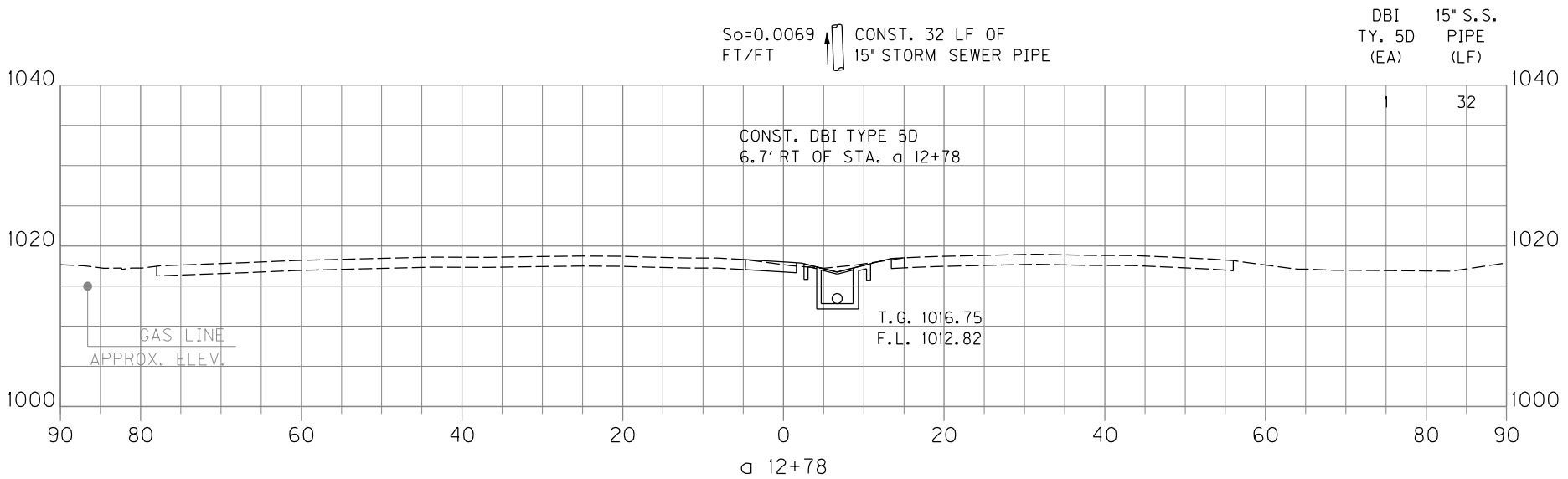
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

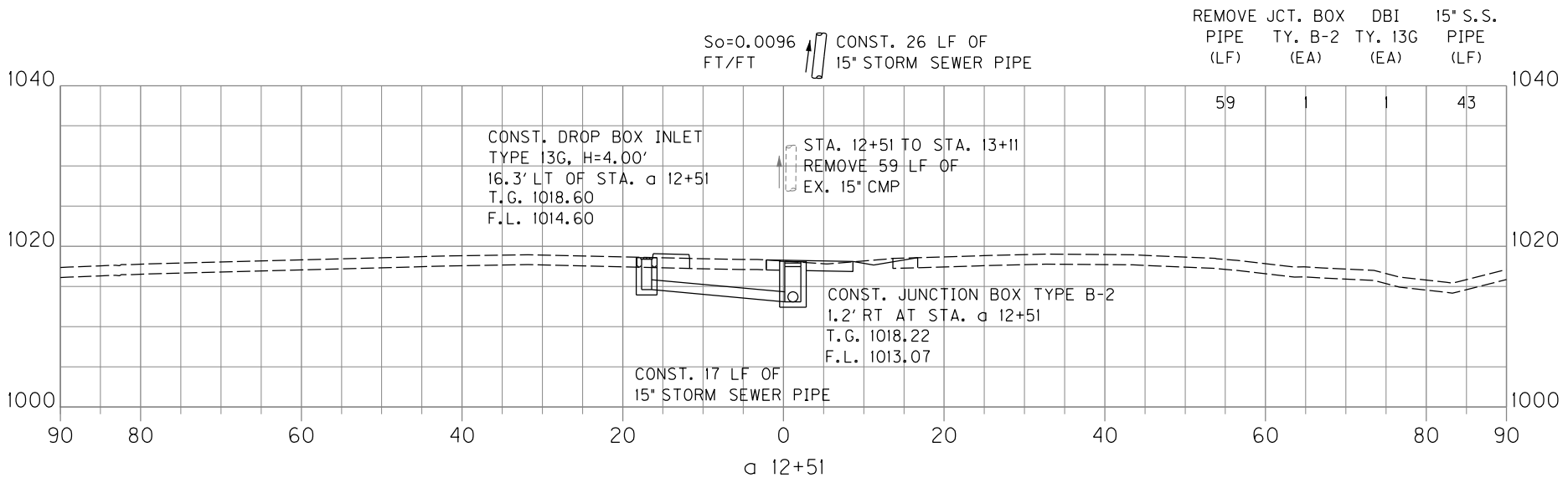
US 25
PIPE SECTION SHEET
STA. 11+35.50, STA. 11+38

FILE NAME: C:\PWWORKING\EASTOI\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R137





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY. CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

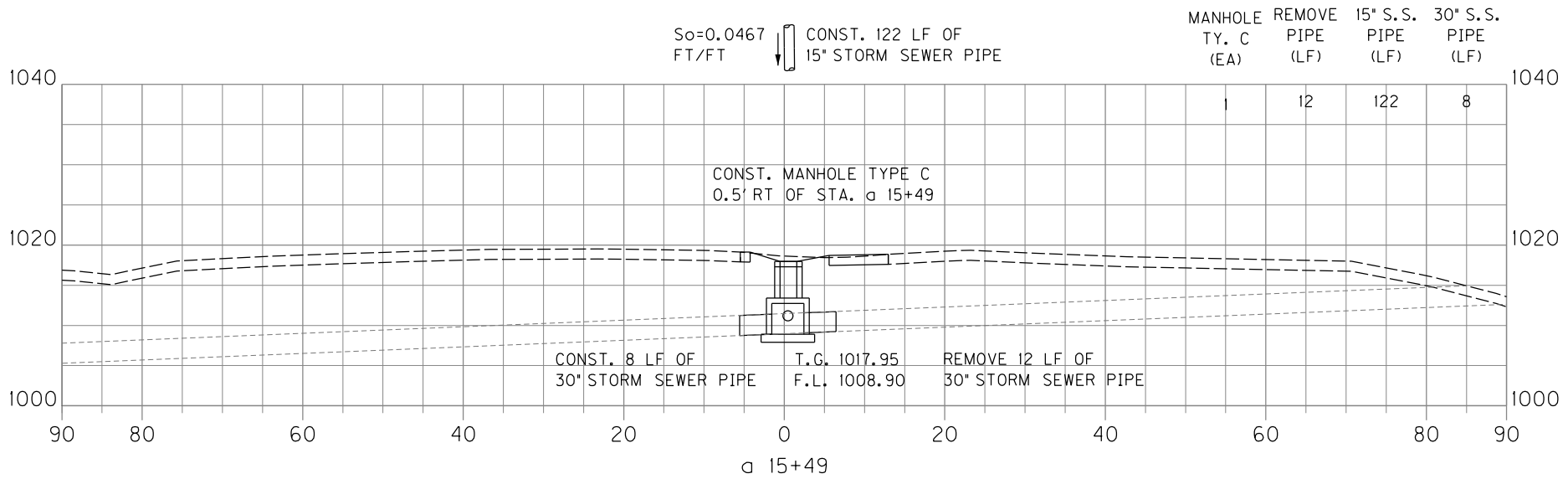
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

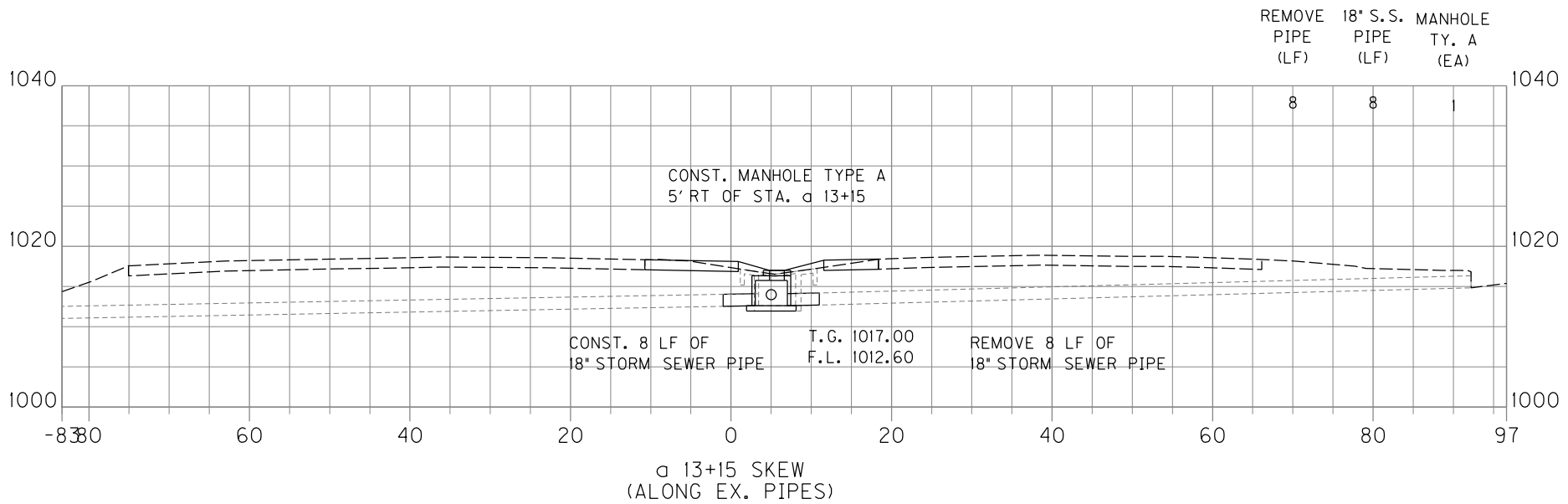
US 25
PIPE SECTION SHEET
STA. 12+51, STA. 12+75

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R138





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

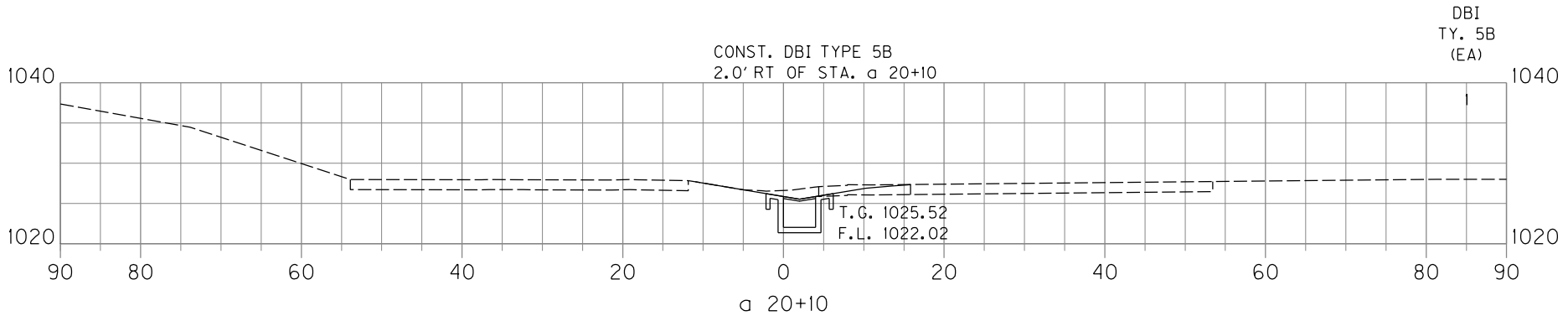
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

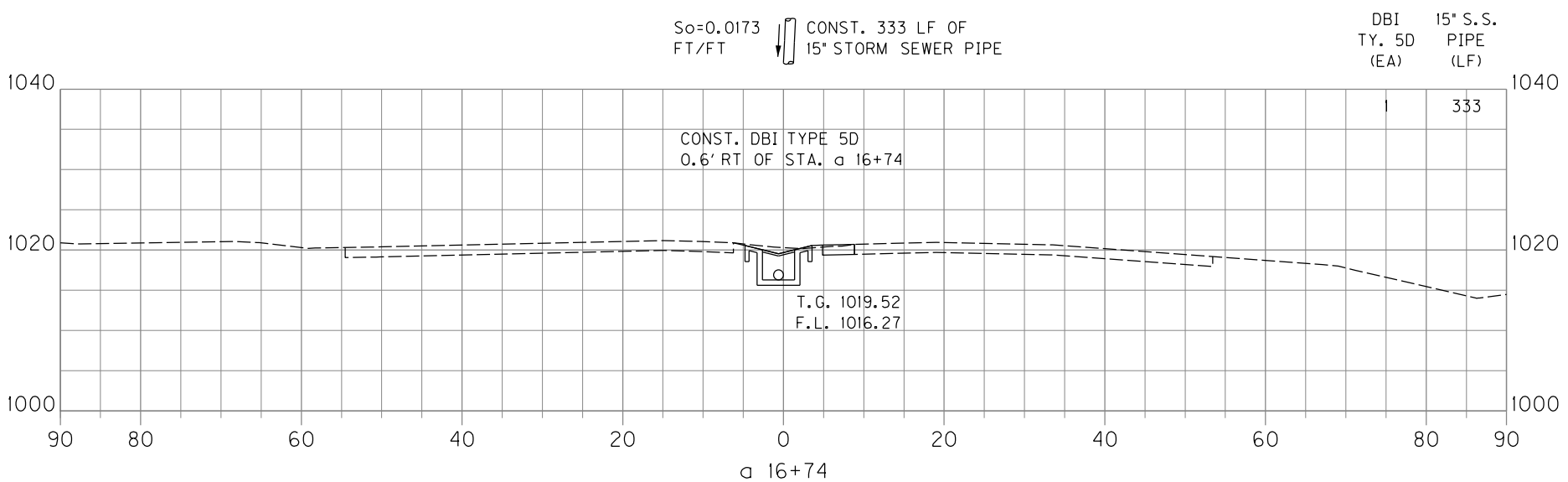
US 25
PIPE SECTION SHEET
STA. 13+15, STA. 15+49

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R139





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

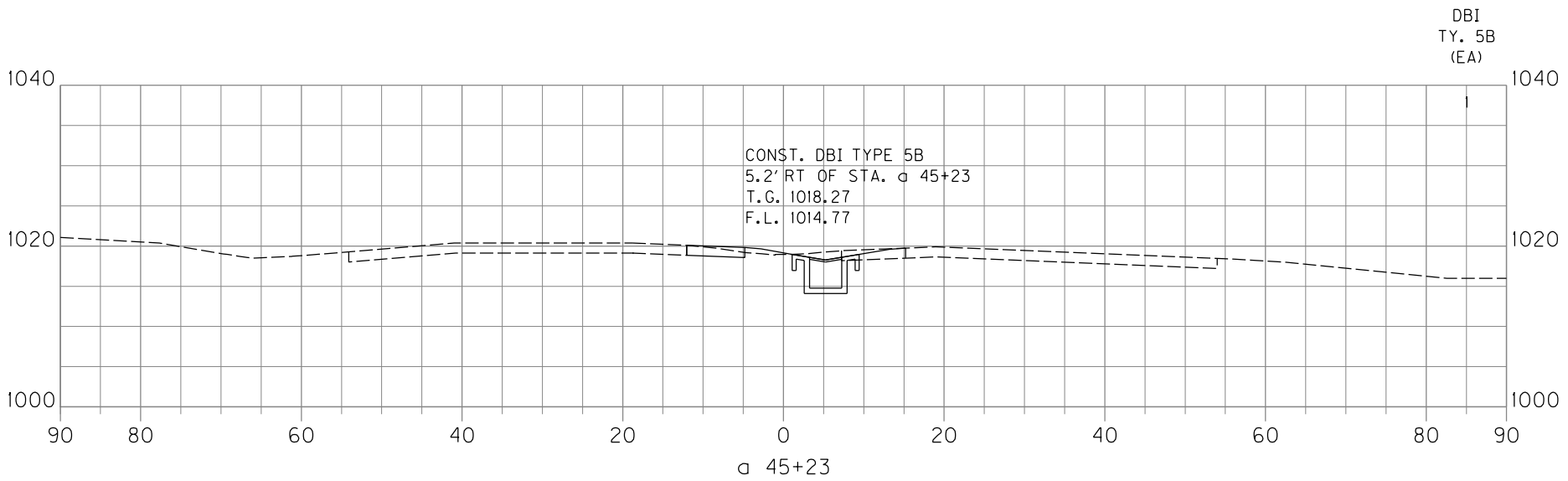
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

US 25
PIPE SECTION SHEET
STA. 16+74, STA. 20+10

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTO\D1641094\PIPE CROSS SECTIONS.DGN

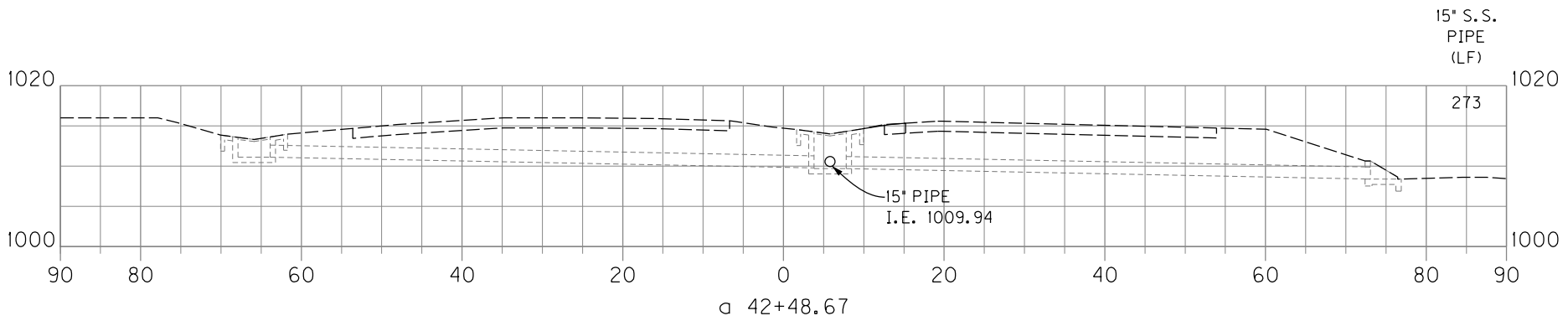
Contract ID: 254301 Page 359 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R140



So=0.0177 FT/FT

CONST. 273 LF OF 15" STORM SEWER PIPE



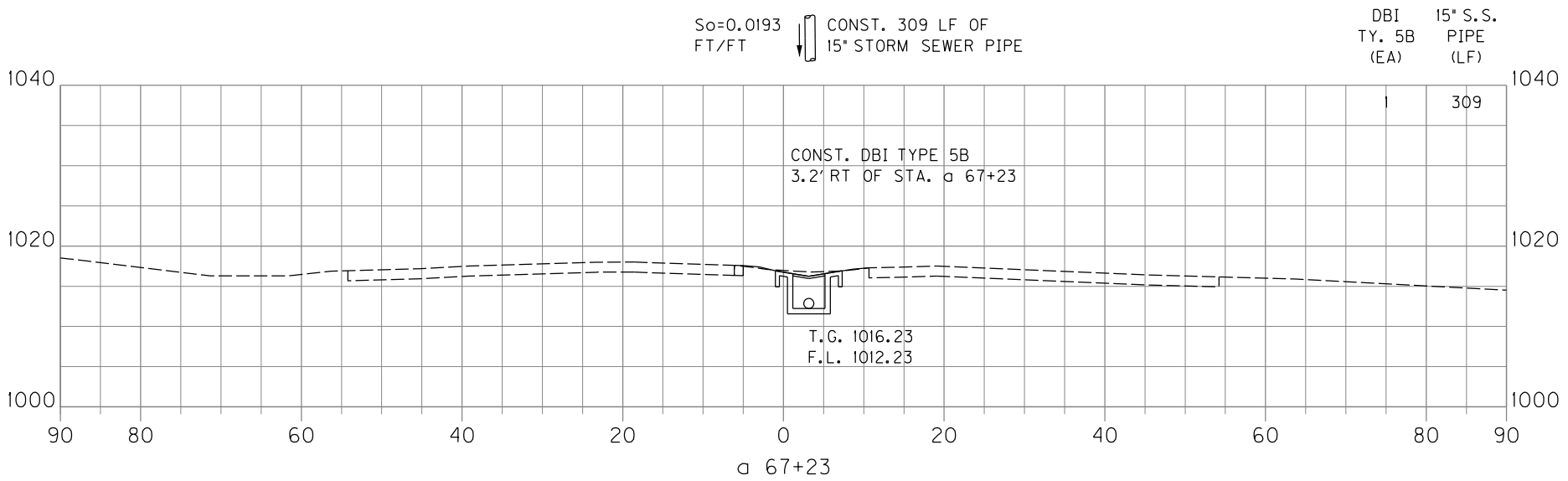
NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY. CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

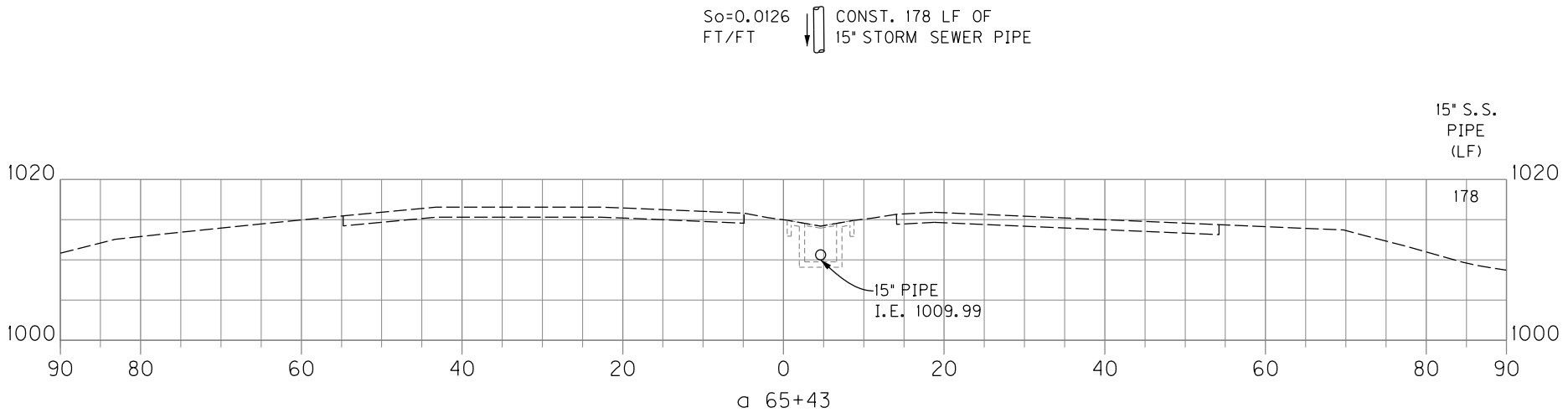
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

US 25
PIPE SECTION SHEET
STA. 42+48.67, STA. 45+23

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\PIPE CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	RI41





NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY. CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

US 25
PIPE SECTION SHEET
STA. 65+43, STA. 67+23

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

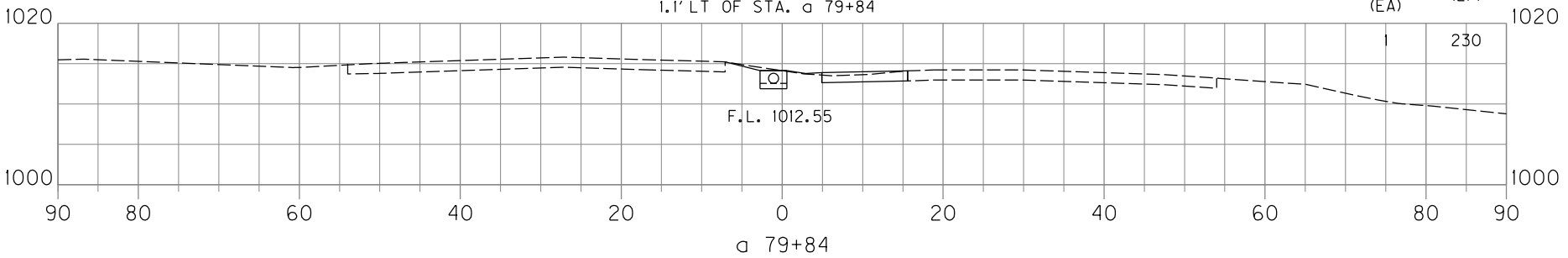
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R142

So=0.0324 FT/FT

CONST. 230 LF OF 15" STORM SEWER PIPE

CONST. SLOPED BOX INLET
OR OUTLET TYPE 1
1.1' LT OF STA. a 79+84

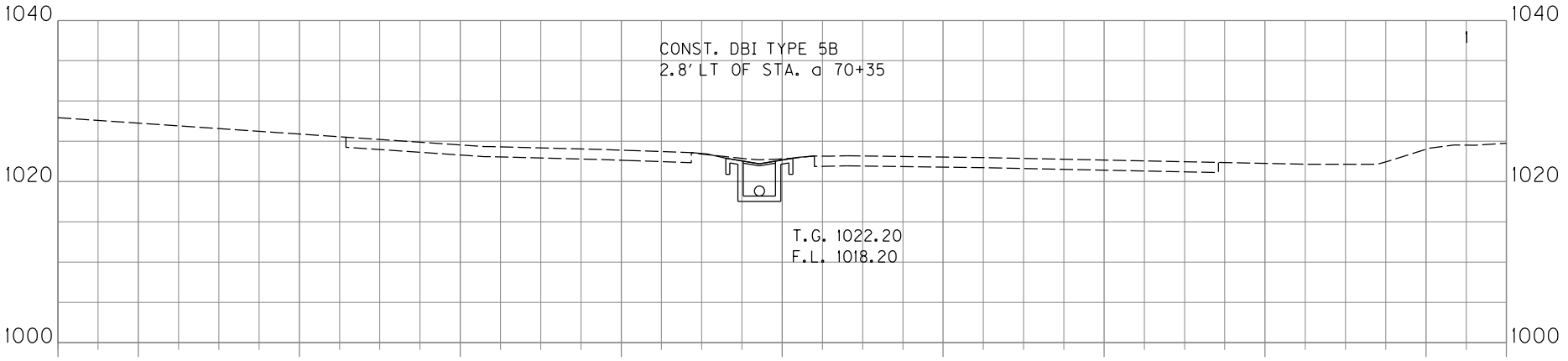
SB I/O TY. 1 15" (EA)	15" S.S. PIPE (LF)
1	230



a 79+84

DBI TY. 5B (EA): 1

CONST. DBI TYPE 5B
2.8' LT OF STA. a 70+35



a 70+35

NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

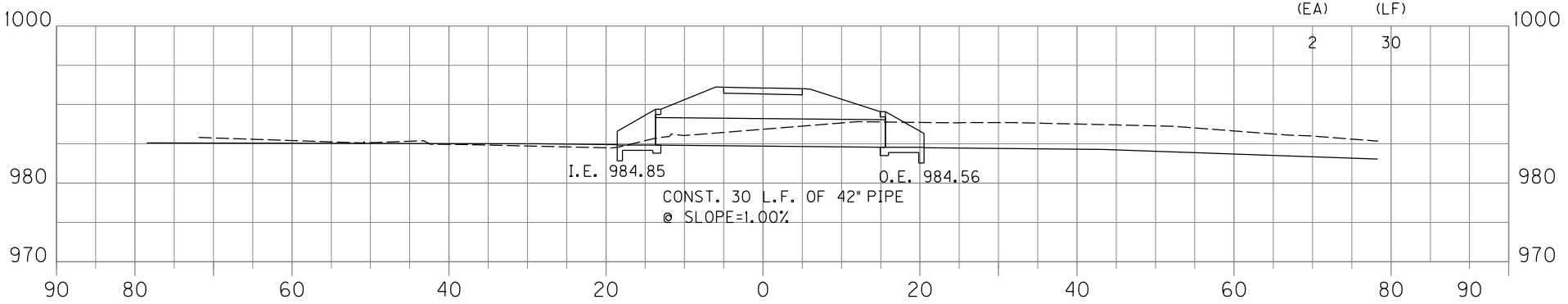
US 25
PIPE SECTION SHEET
STA. 70+35, STA. 79+84

FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

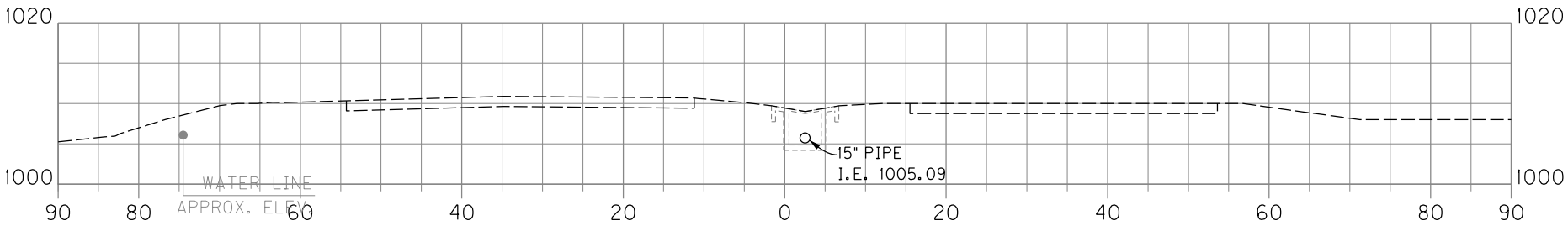
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R143

42" CULVERT HEADWALL (EA)	42" CULVERT PIPE (LF)
2	30



114+33
SHARED USE PATH



℄ 82+14.38

NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

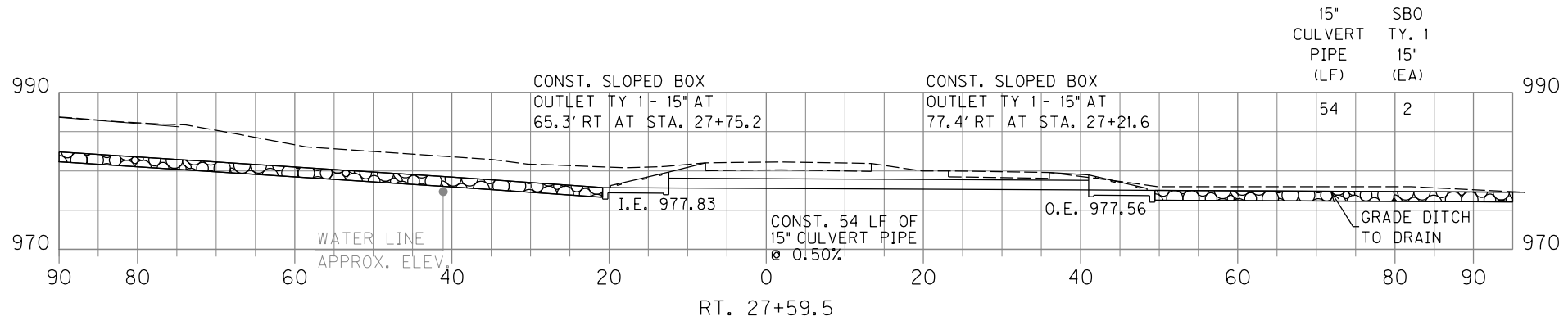
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

PIPE SECTION SHEET
US 25 STA. 82+14.38
SHARED USE PATH STA. 114+33

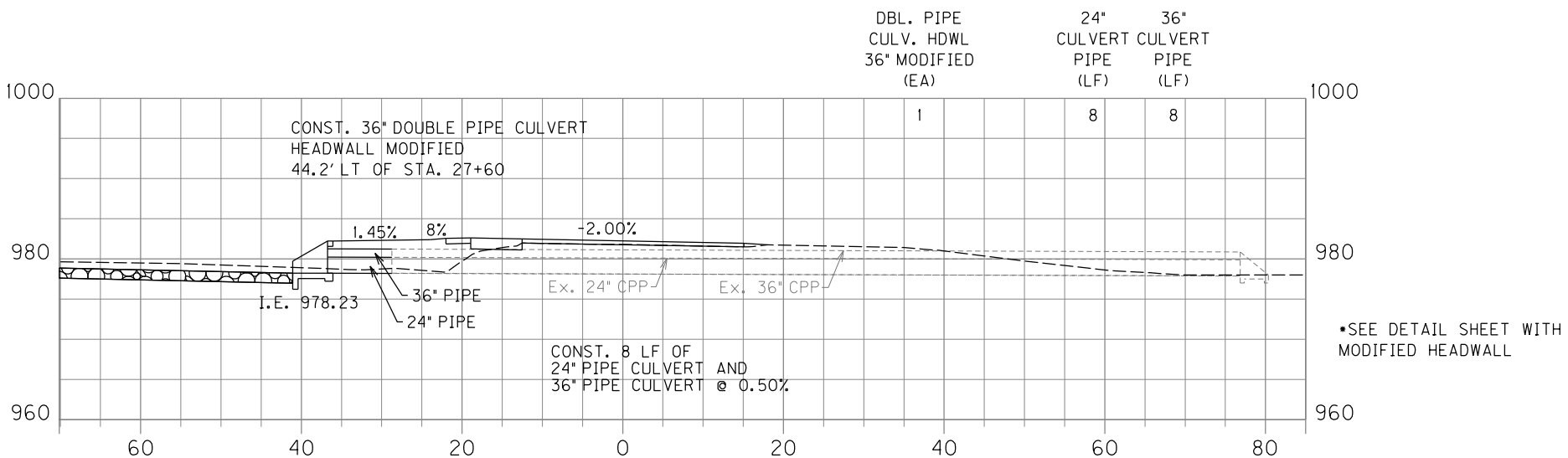
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R144



RT. 27+59.5



27+31, 32°54'26" RT SKEW

NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

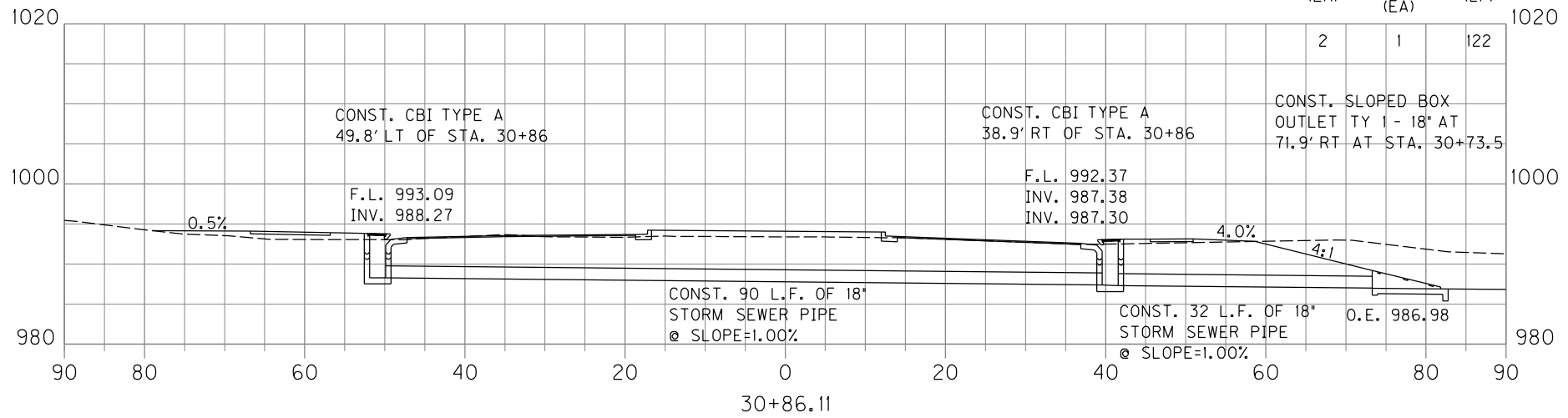
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

JACOBSON PARK ENTRANCE
PIPE SECTION SHEET
STA. 27+31, RT. STA. 27+59

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R145

	CBI TYPE A (EA)	SBO TY. 1 18" (EA)	18" S.S. PIPE (LF)
	2	1	122



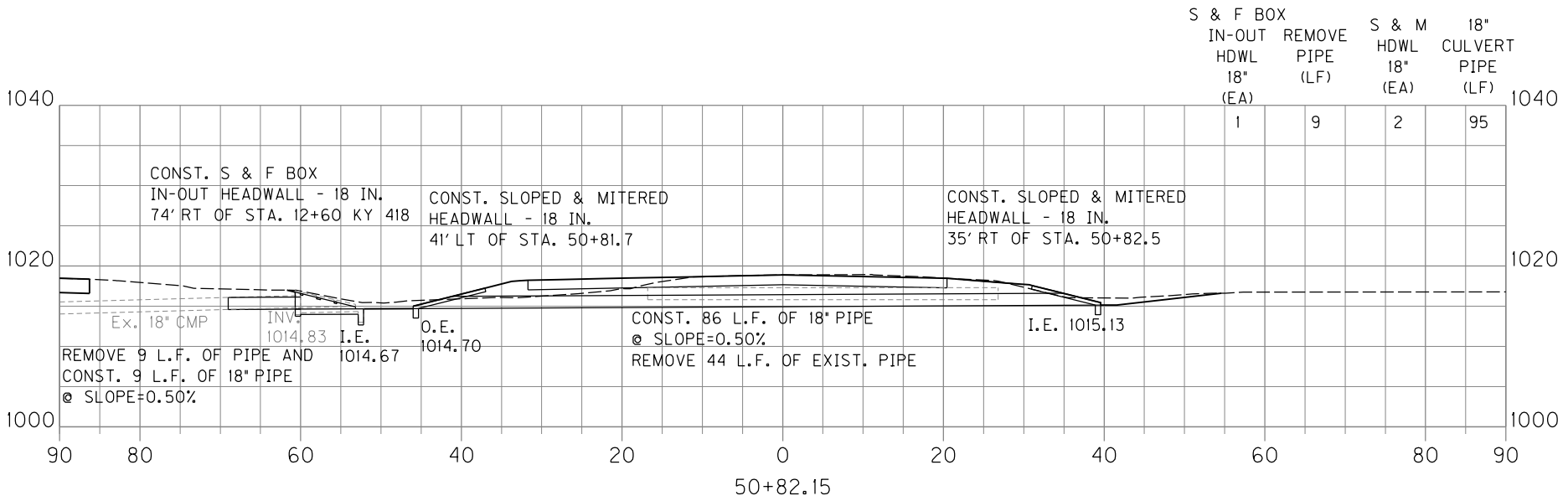
NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

ELLERSLIE PARK BOULEVARD
PIPE SECTION SHEET
STA. 30+86.11

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R146



NOTE: UTILITIES ARE SHOWN FOR REFERENCE ONLY, CONTACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION.

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

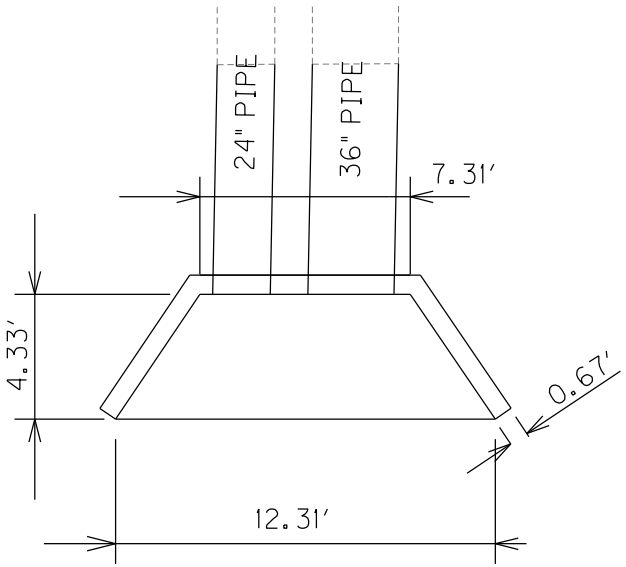
APHIDS WAY
PIPE SECTION SHEET
STA. 50+82.15

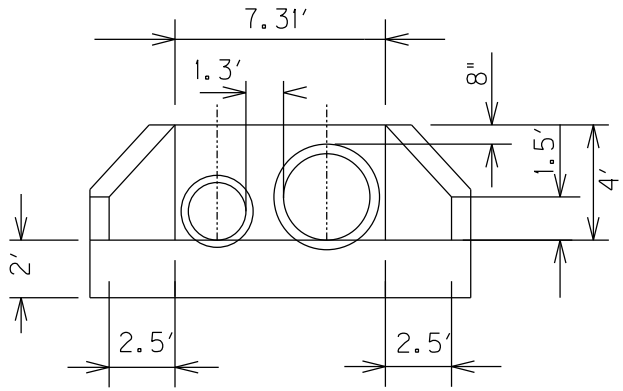
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

Contract ID: 254301
Page 366 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R147

36" DOUBLE PIPE CULVERT
HEADWALL MODIFIED





FOR ESTIMATING PURPOSES, ASSUME A QUANTITY OF 2.9 CY OF CLASS A CONCRETE, AND 227 LBS OF STEEL REINFORCEMENT.

FOLLOW STANDARD DRAWING NO. RDH-110-02 FOR PLACEMENT OF REINFORCEMENT THAT SATISFIES THE DIMENSIONS SHOWN ABOVE.

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

JACOBSON PARK ENTRANCE
MODIFIED PIPE CULVERT HEADWALL
STA. 27+60

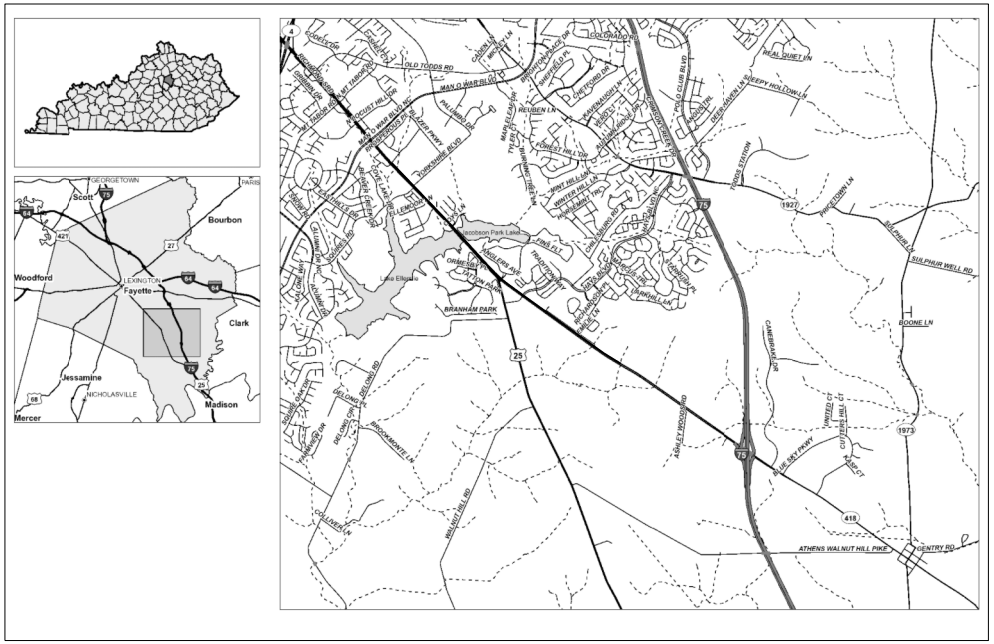
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\PIPE CROSS SECTIONS.DGN

Contract ID: 254301 Page 367 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	R1

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

FAYETTE
ITEM NO. 07-9012.50
KY 418 R-CUT
RIGHT OF WAY PLANS



LAYOUT MAP

RIGHT OF WAY PLANS

DESIGN CRITERIA

CLASS OF HIGHWAY _____
TYPE OF TERRAIN **FLAT**
DESIGN SPEED _____
ADT PRESENT ( ) _____

GEOGRAPHIC COORDINATES

LATITUDE ___ DEGREES ___ MINUTES ___ SECONDS NORTH
LONGITUDE ___ DEGREES ___ MINUTES ___ SECONDS WEST

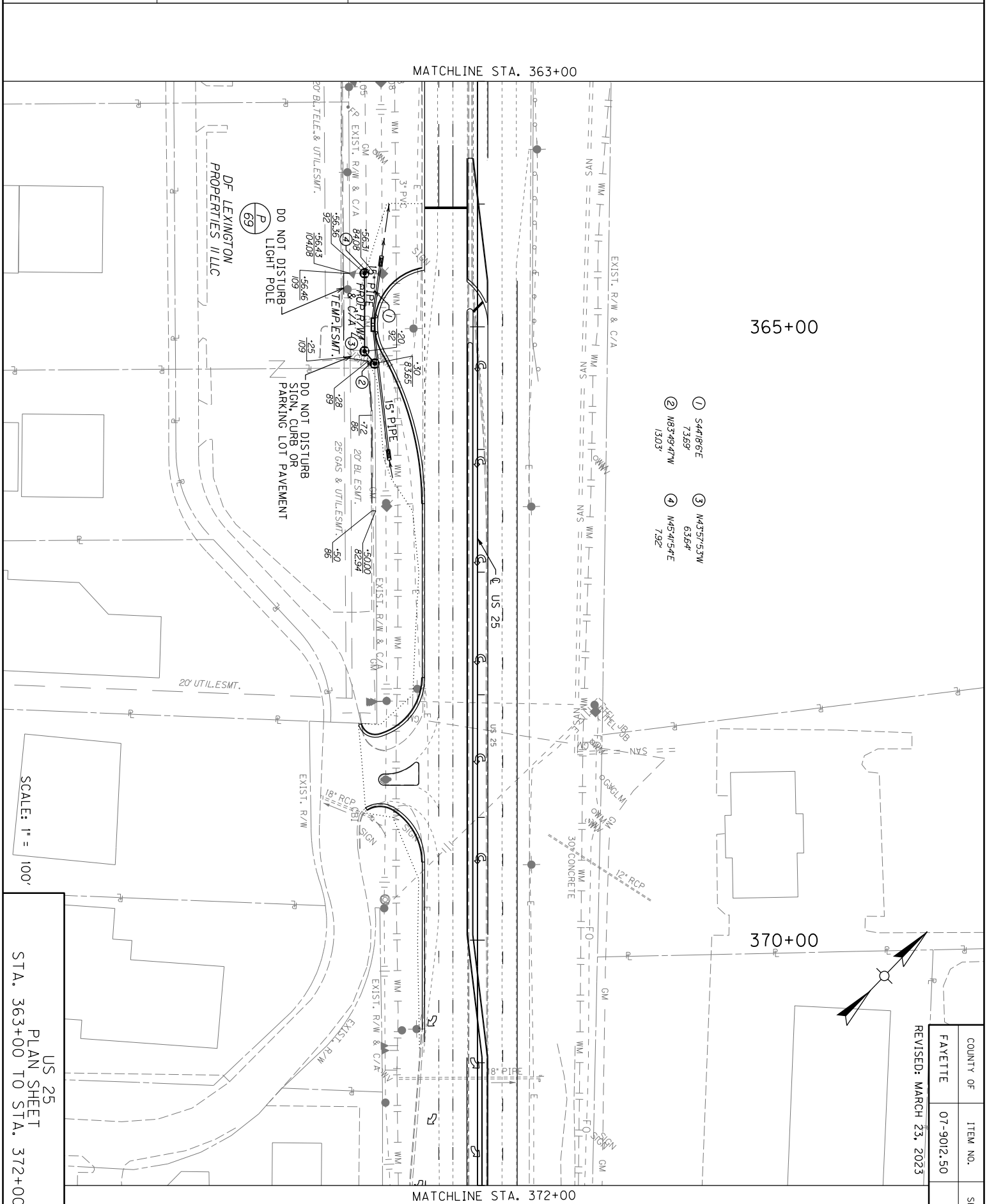
BEFORE YOU DIG

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

LAYOUT SHEET

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: AWESTCOT
DATE PLOTTED: October 1, 2024
FILE NAME: C:\PWWORKING\EASTON\D2858875\ROW LAYOUT SHEET_01.DGN

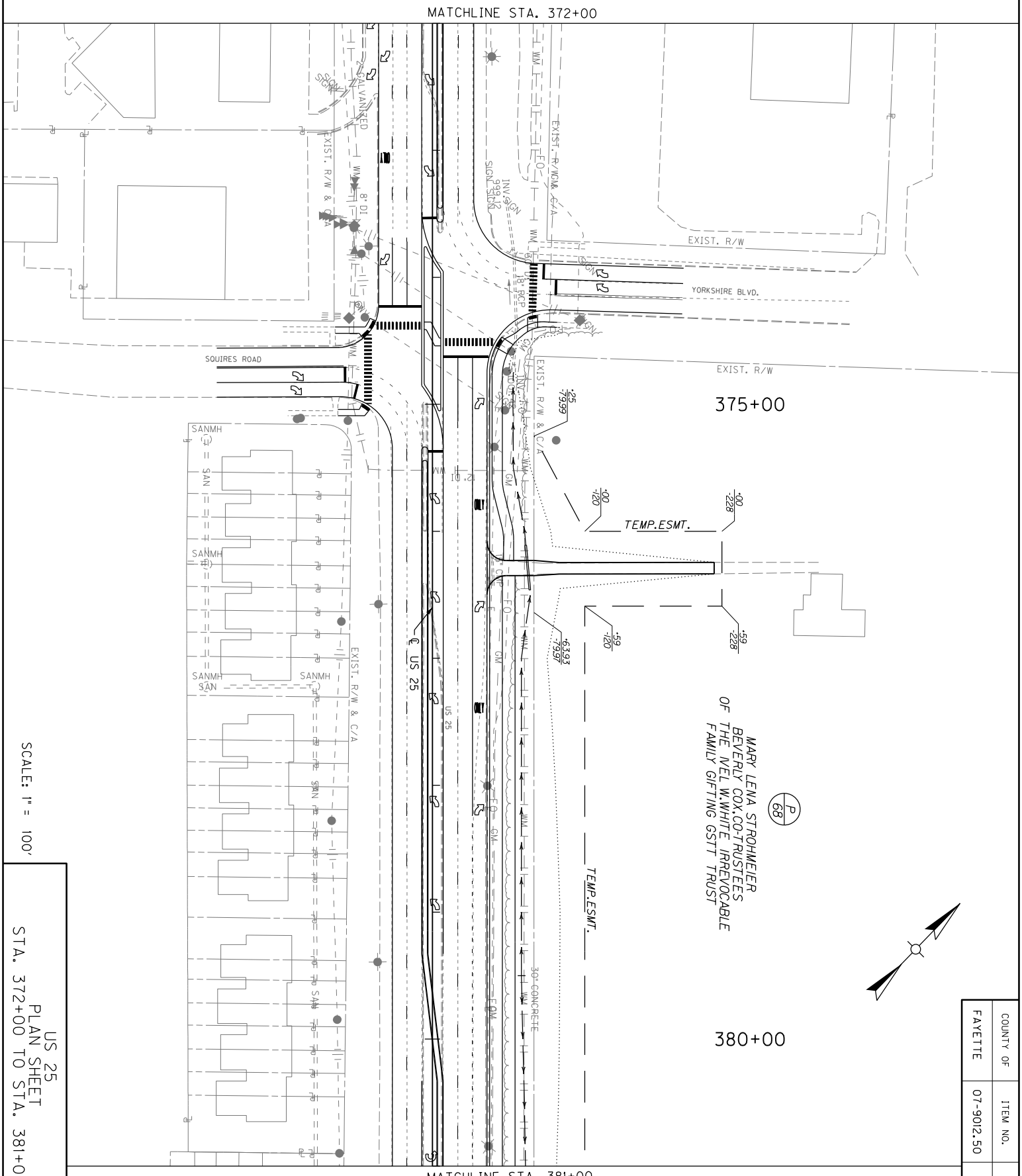
MicroStation v8.11.9.919 | USER: AWESTCOT | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_02.DGN



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	2

REVISED: MARCH 23, 2023

MicroStation v8.11.9.919 | USER: AWESTCOT | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_03.DGN

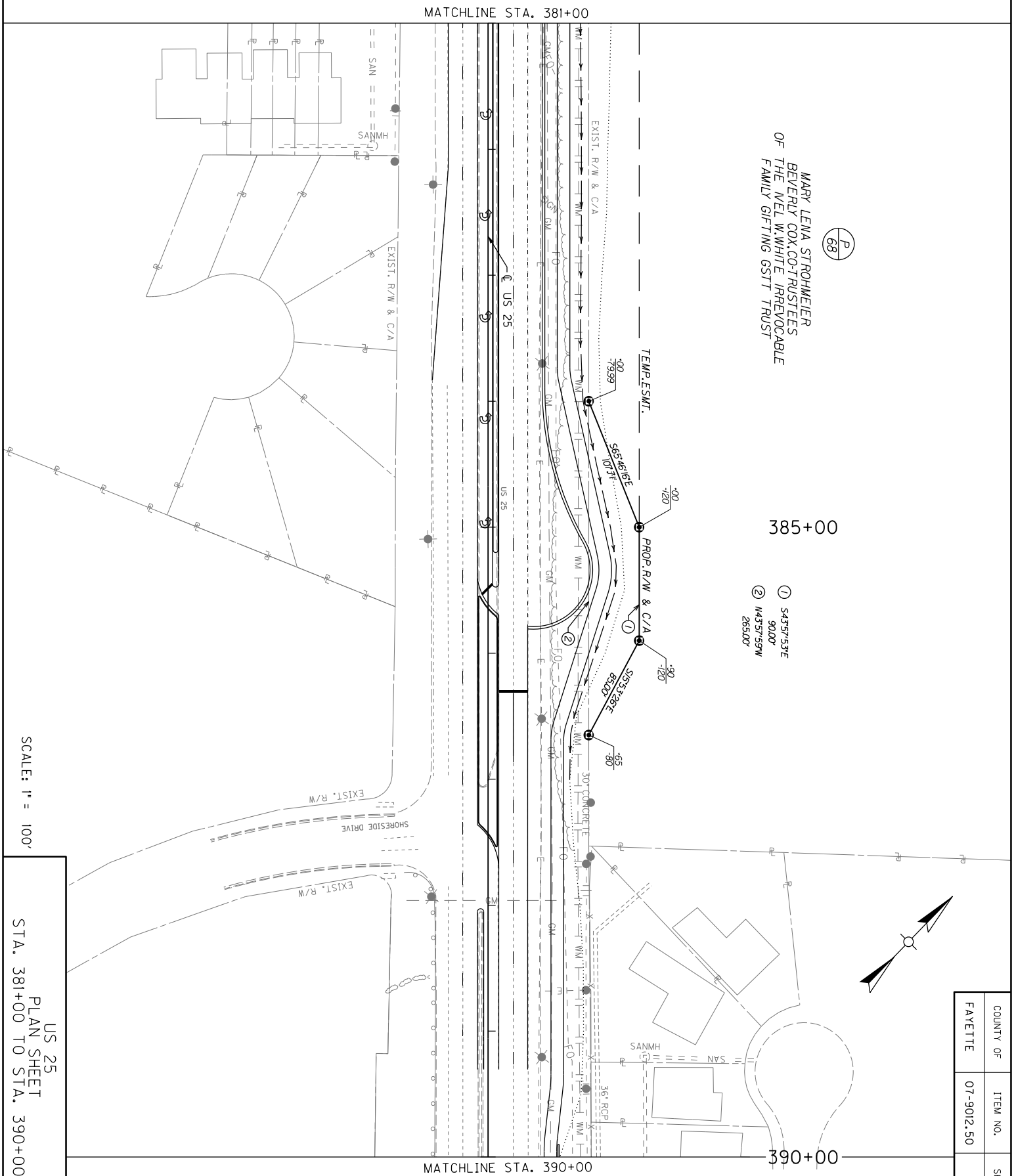


SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 372+00 TO STA. 381+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	3

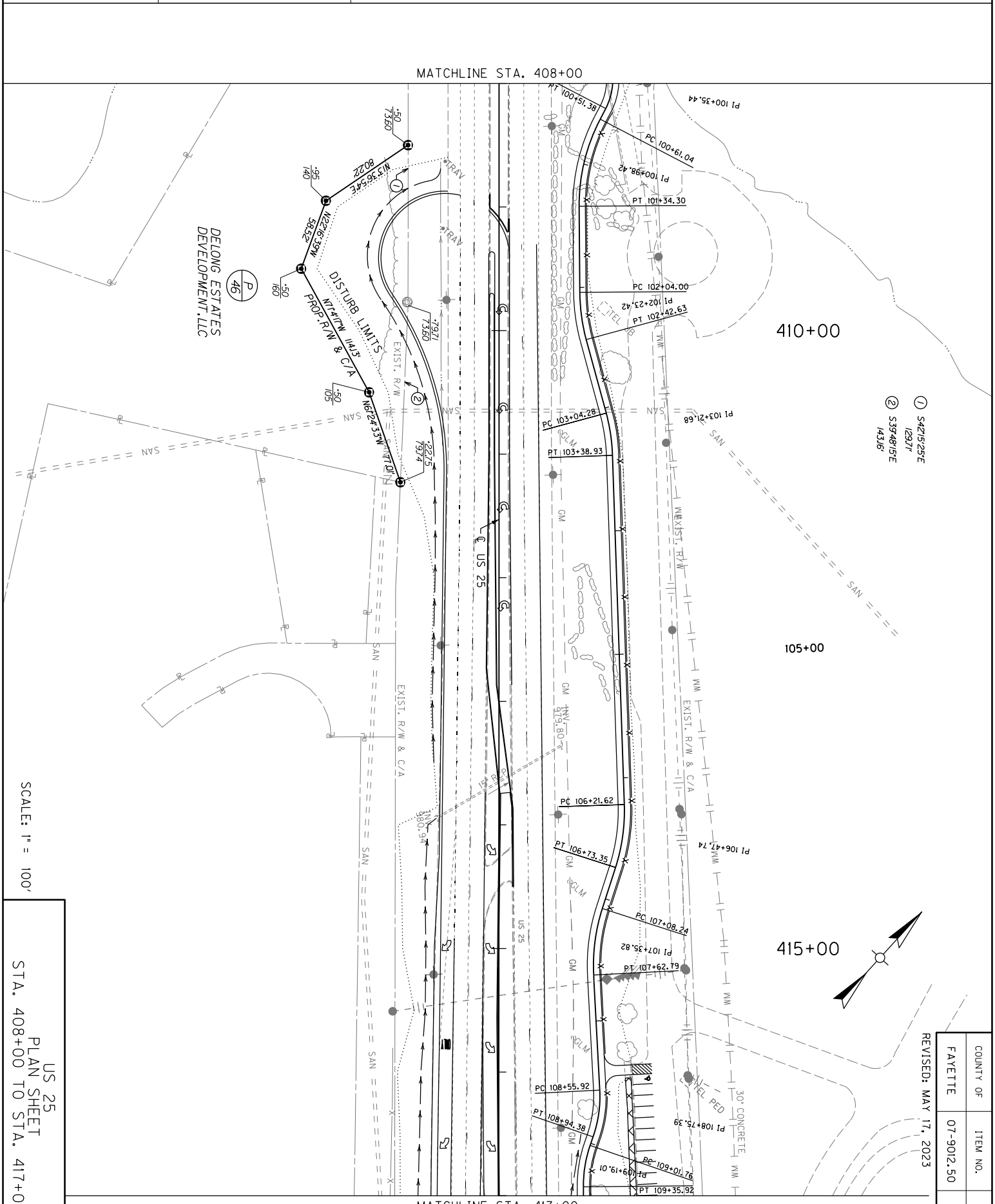
MicroStation v8.11.9.919 | USER: AWESTCOT | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_04.DGN



US 25
PLAN SHEET
STA. 381+00 TO STA. 390+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	4

MicroStation v8.11.9.919 | USER: AWESTCOT | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_05.DGN



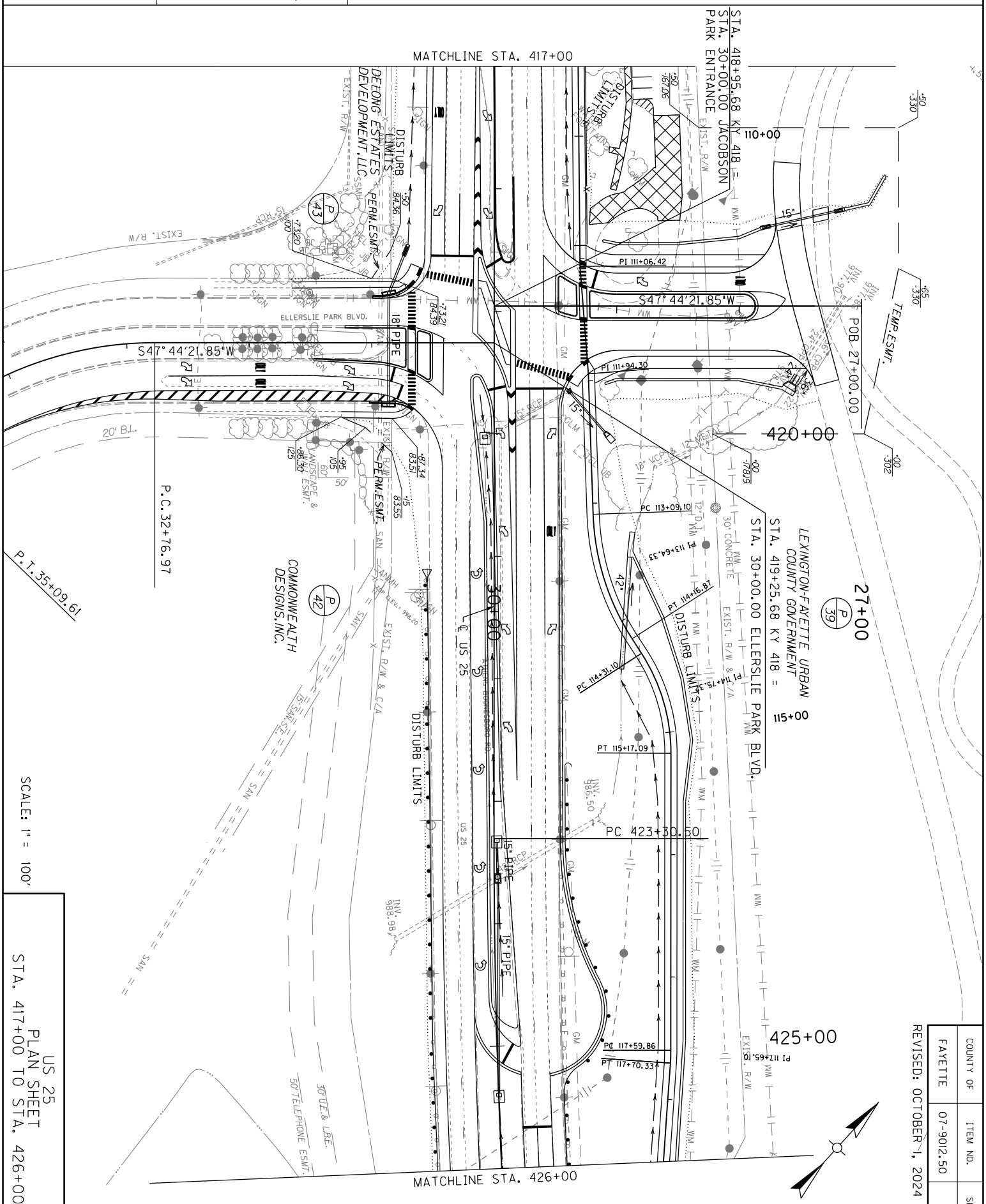
SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 408+00 TO STA. 417+00

REVISED: MAY 17, 2023

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	5

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_06.DGN



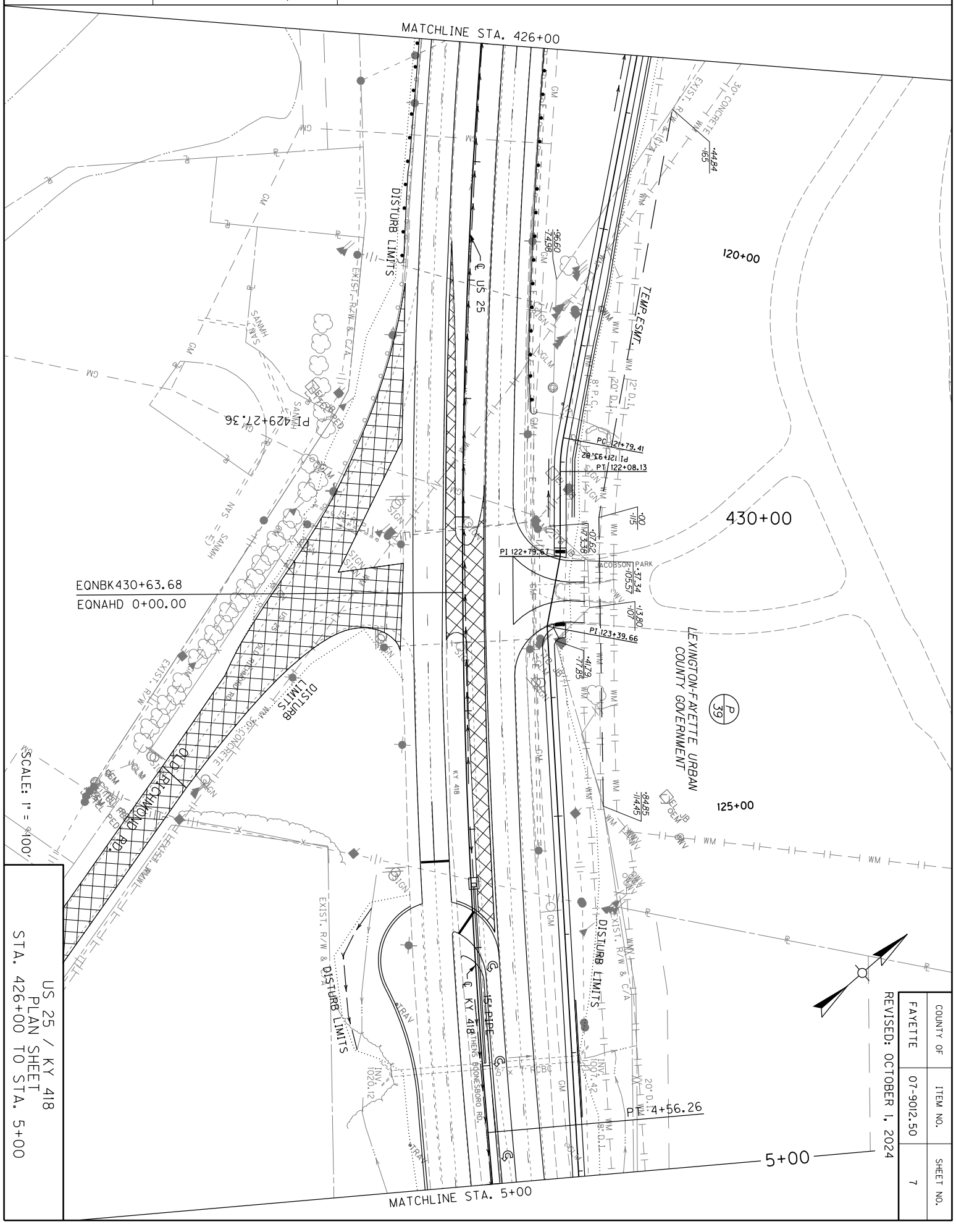
SCALE: 1" = 100'

US 25
PLAN SHEET
STA. 417+00 TO STA. 426+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	6

REVISED: OCTOBER 1, 2024

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_07.DGN



US 25 / KY 418
PLAN SHEET
STA. 426+00 TO STA. 5+00

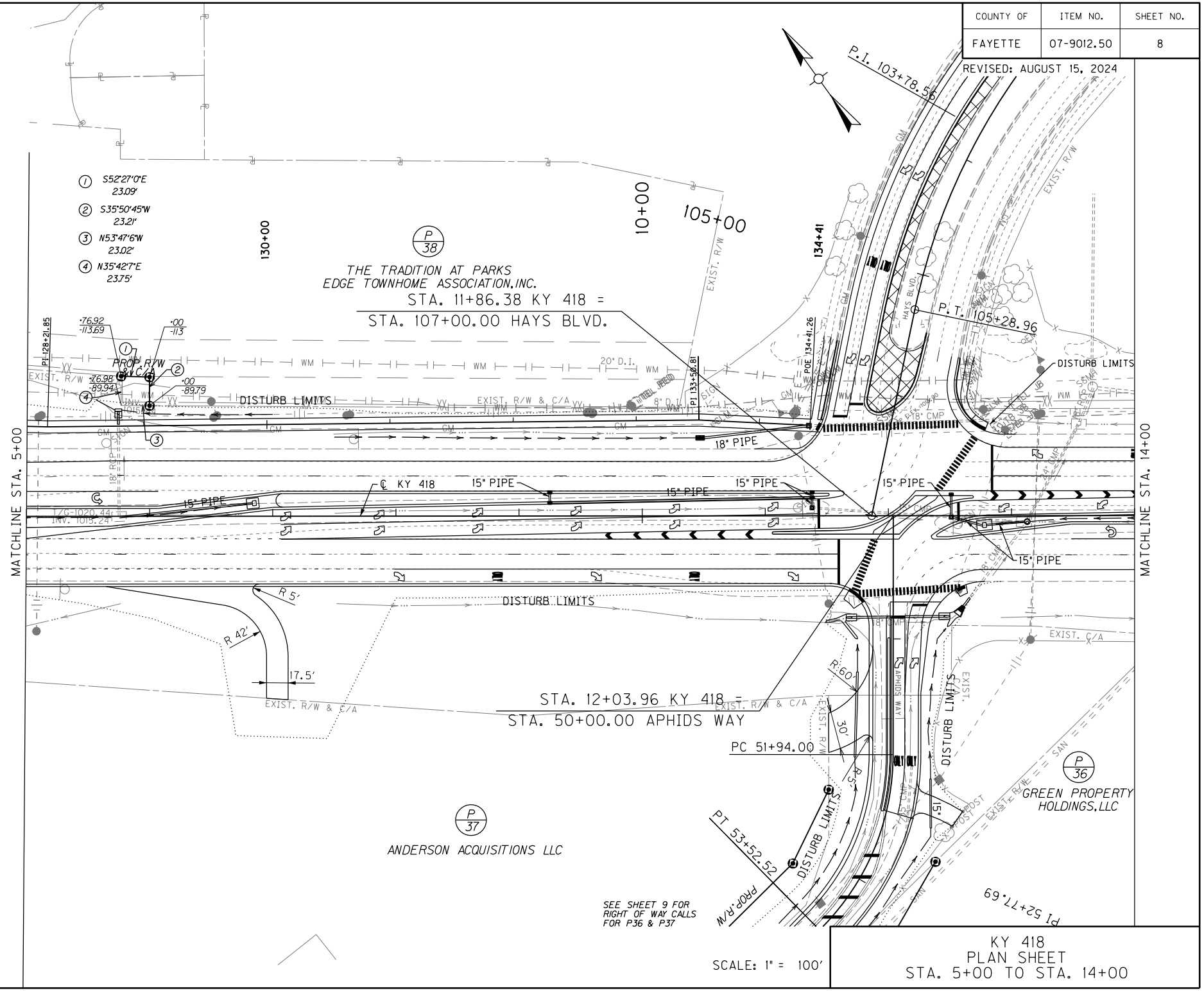
REVISED: OCTOBER 1, 2024

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	7

Contract ID: 254301
Page 374 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	8

REVISED: AUGUST 15, 2024

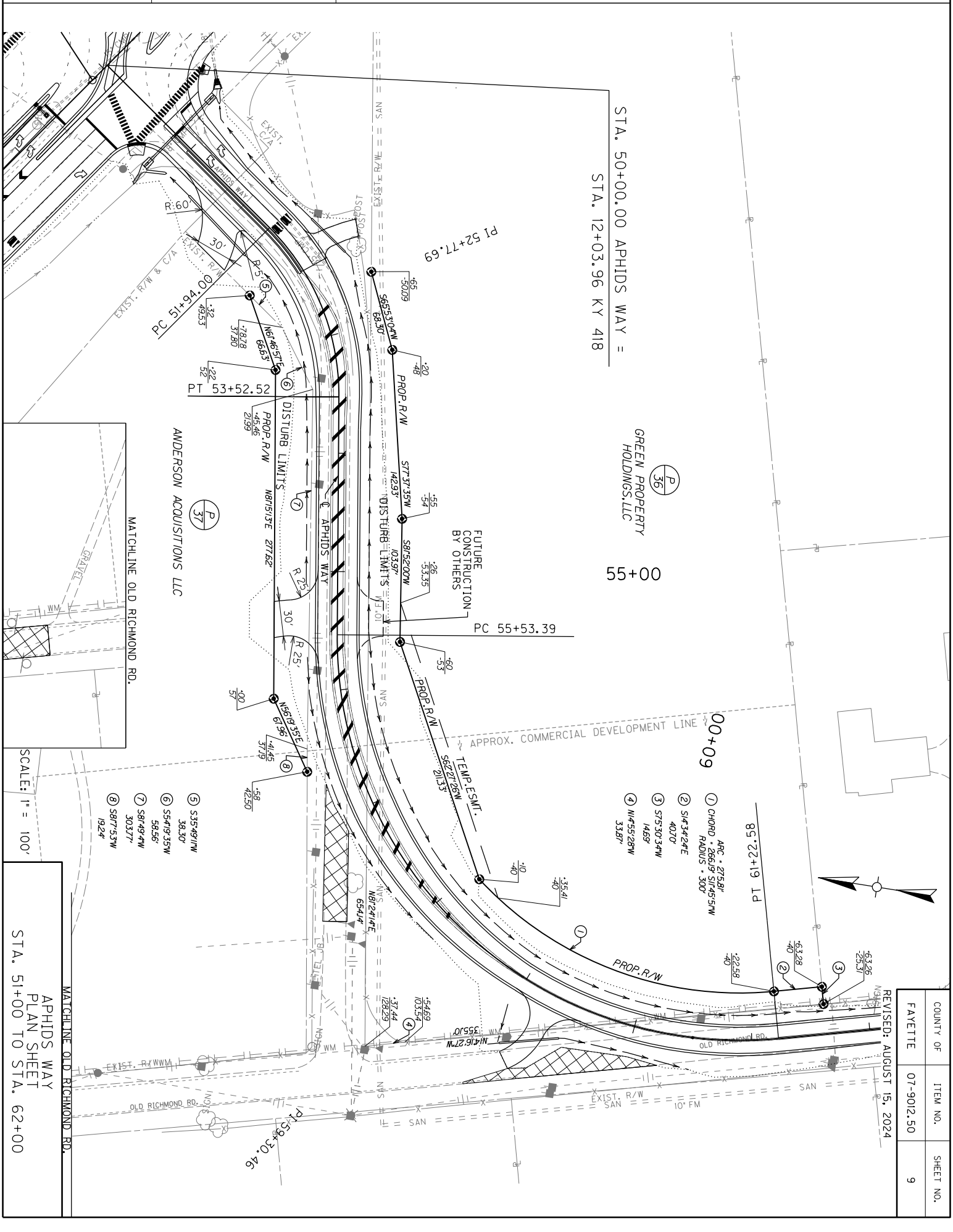


KY 418
PLAN SHEET
STA. 5+00 TO STA. 14+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D2858875\ROW PLAN_08.DGN
USER: ACAUDILL
DATE PLOTTED: October 1, 2024
MicroStation v8.11.9.919

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PLAN_09.DGN



APHIDS WAY
PLAN SHEET
STA. 51+00 TO STA. 62+00

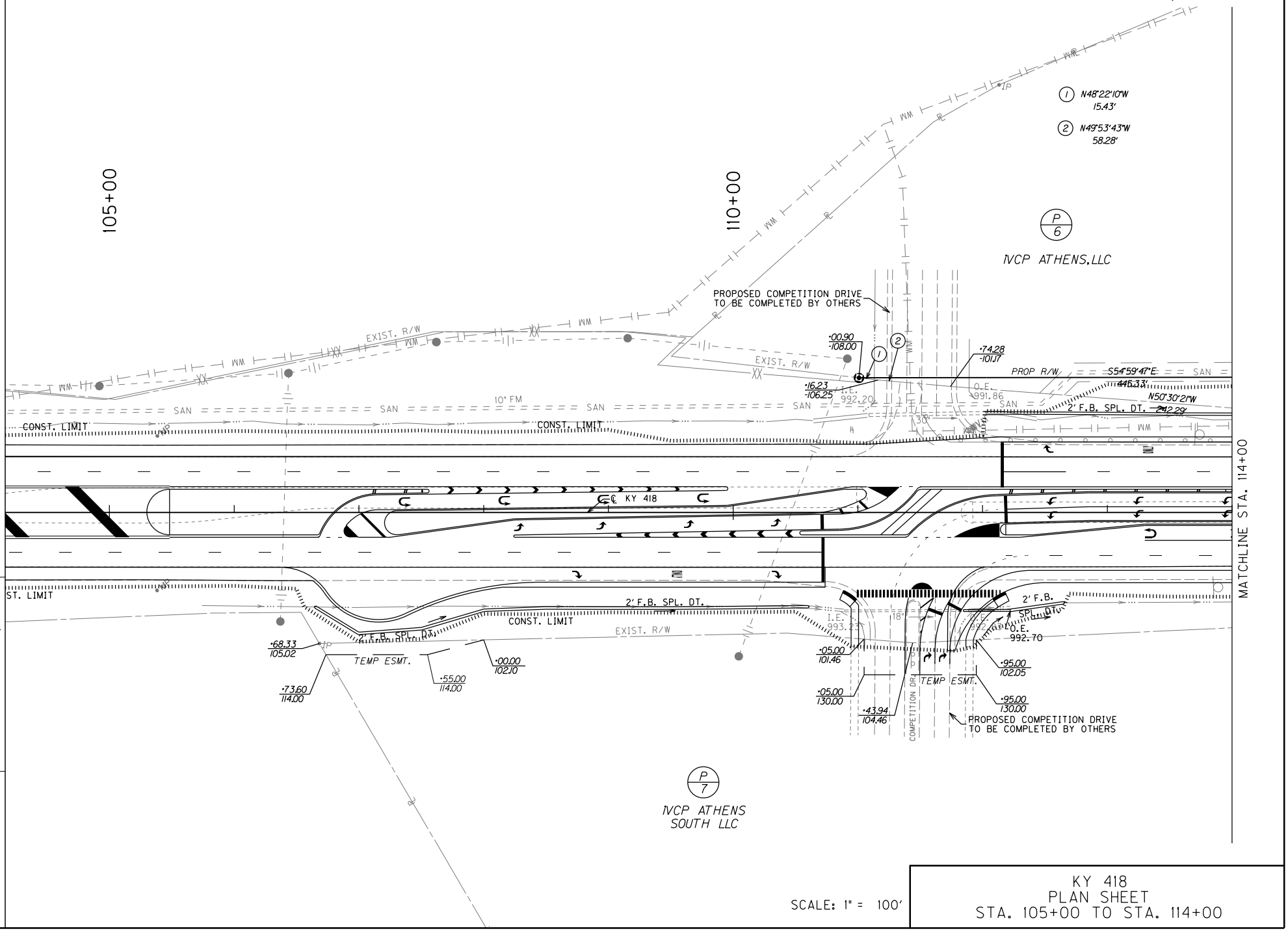
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	9

REVISED: AUGUST 15, 2024

Contract ID: 254301 Page 376 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	10

REVISED: JANUARY 31, 2024



SCALE: 1" = 100'

KY 418
PLAN SHEET
STA. 105+00 TO STA. 114+00

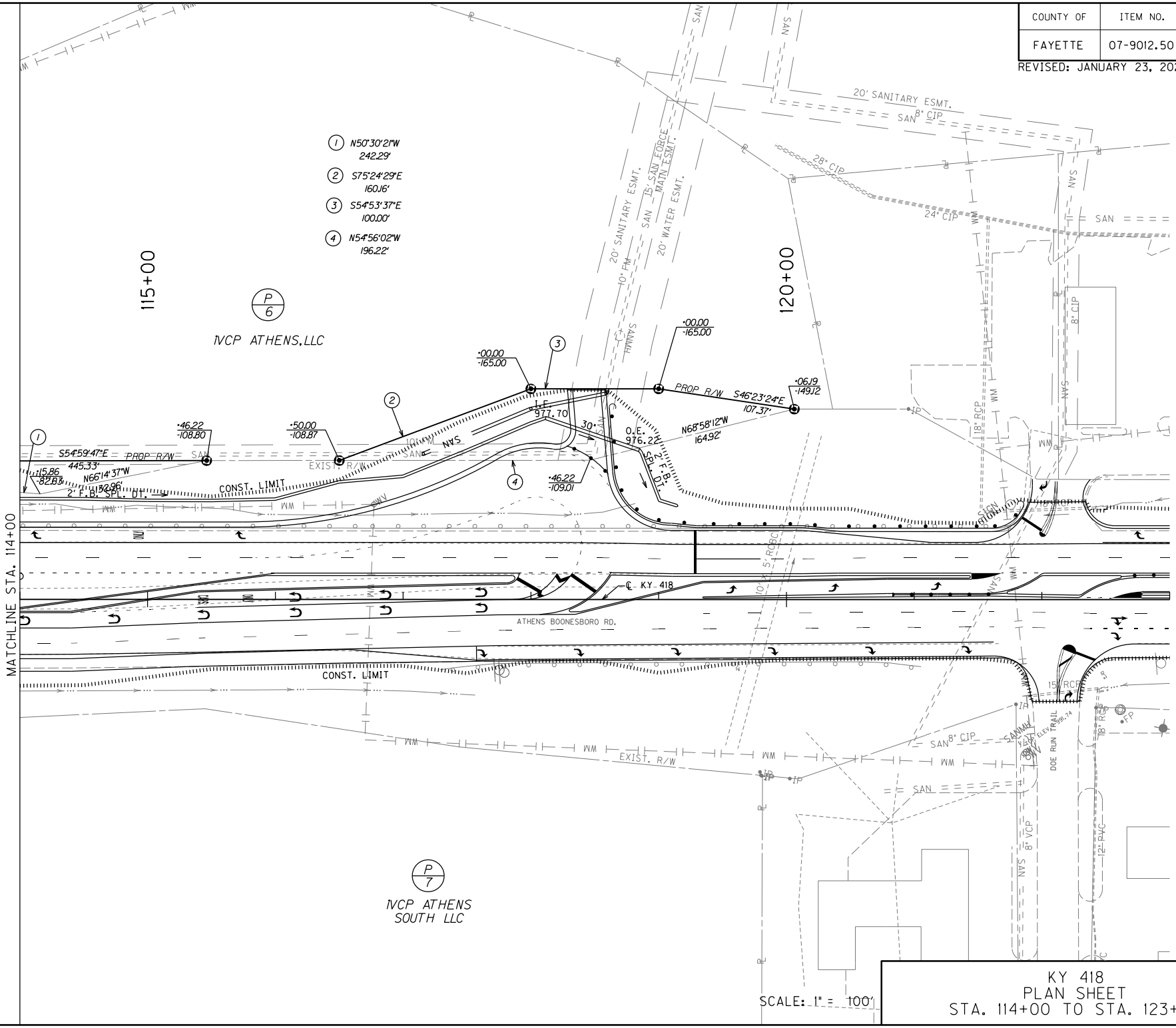
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D2858875\ROW PLAN_10_SOCCER.DGN
USER: ACAUDILL
DATE PLOTTED: October 1, 2024
MicroStation v8.11.9.919

Contract ID: 254301
Page 377 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	11

REVISED: JANUARY 23, 2024

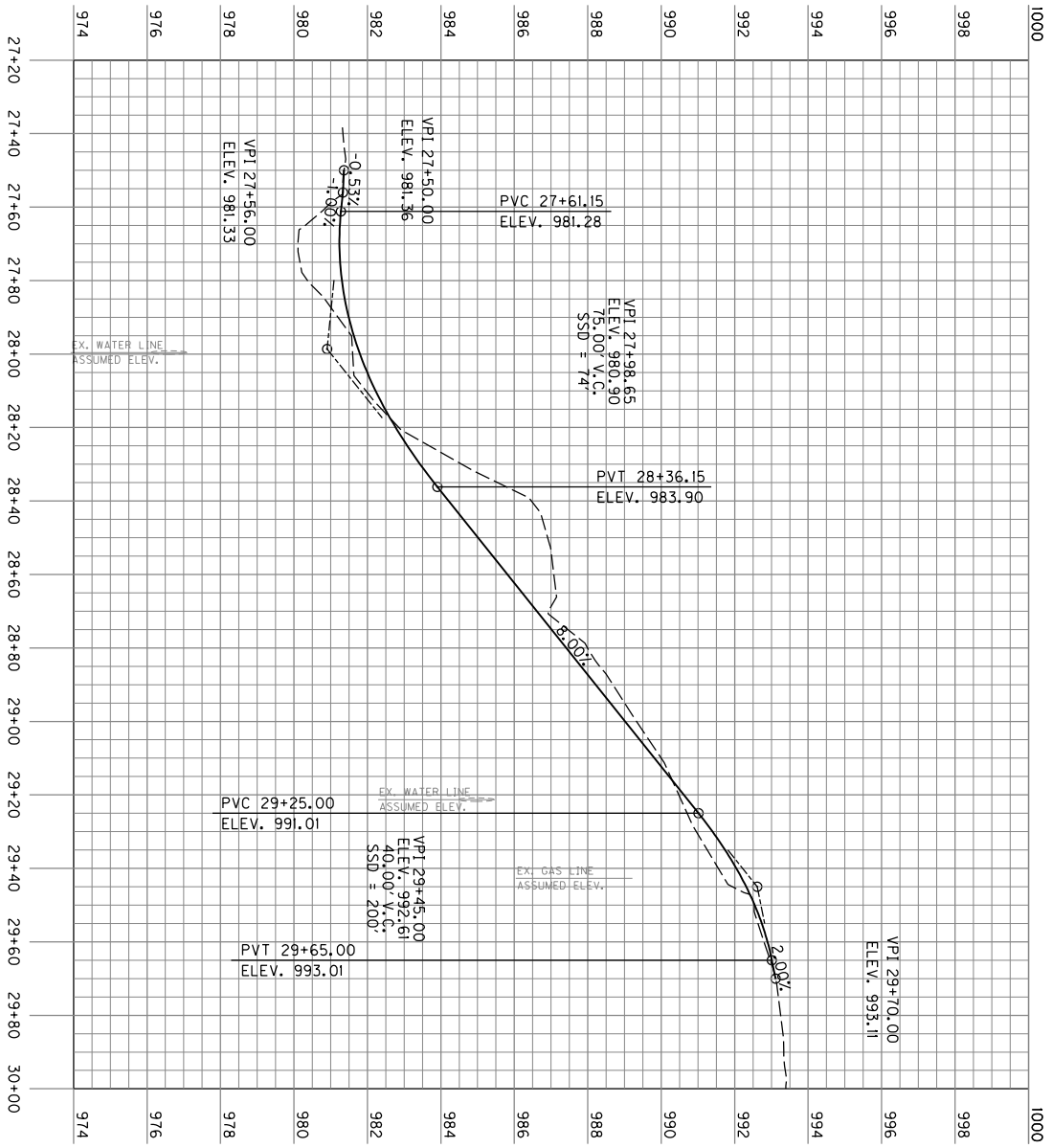


KY 418
PLAN SHEET
STA. 114+00 TO STA. 123+00

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: October 1, 2024
FILE NAME: C:\PWWORKING\EASTON\D2858875\ROW PLAN_11-SOCCER.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: October 1, 2024 | FILE NAME: C:\PWWORKING\EASTOI\D2858875\ROW PROFILE 12_NEW PARK ENTRANCE.DGN

DATUM



SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

REVISED: OCTOBER 1, 2024

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	12

DATUM

JACOBSON PARK ENTRANCE
PROFILE SHEET
STA. 27+20 TO STA. 30+00

Contract ID: 254301 Page 379 of 605

FILE NAME: C:\PWWORKING\EASTO\D2858875\ROW SHEET 13-RW SUMMARY.DGN
USER: ACAUDILL
DATE PLOTTED: October 1, 2024
E-SHEET NAME:
MicroStation v8.11.9.919

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 TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				SOURCE OF TITLE	REMARKS*
						PERMANENT	TEMPORARY	LEFT		RIGHT							YES	NO	C	R	F	S		
		ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.									
1-5	NOT USED																							
6	IVCP ATHENS, LLC	6.70	291,695	0.404	17,626			6.296	274,069					6.296	274,069								D.B. 3611, P. 252 P.C. R, SL. 522	
7	IVCP ATHENS SOUTH LLC	51.60	2,247,708				3,501							51.60	2,247,708								D.B. 3935, P. 337	
8-35	NOT USED																							
36	GREEN PROPERTY HOLDINGS, LLC	17.29	753,262	1.04	45,301		2,483			16.25	707,961			16.25	707,961								D.B. 3825, P. 239	
37	ANDERSON ACQUISITIONS LLC	8.623	375,618	0.23	10,235					8.393	365,383			8.393	365,383								D.B. 3963, P. 133	
38	THE TRADITION AT PARKS EDGE TOWNHOME ASSOCIATION, INC.	3.80	165,405	0.01	541			3.79	164,864					3.79	164,864								D.B. 3599, P. 32 P.C. L, SL. 855	
39	LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT	386.158	16,821,042				58,751							386.158	16,821,042								D.B. 3030, P. 586	
40-41	NOT USED																							
42	COMMONWEALTH DESIGNS, INC.	11.87	517,062.59			467								11.87	517,062.59								D.B. 3817, P. 128 P.C. R, SL. 526	
43	DELONG ESTATES DEVELOPMENT LLC	0.76	33,032			181								0.76	33,032								D.B. 2628, P. 290 P.C. N, SL. 480	
44-45	NOT USED																							
46	DELONG ESTATES DEVELOPMENT LLC	5.35	232,902	0.29	12,512					5.06	220,390			5.06	220,390								D.B. 2628, P. 290 P.C. M, SL. 456	
47-67	NOT USED																							
68	MARY LENA STROMEIER AND BEVERLY COX, CO-TRUSTEES OF THE IVEL W. WHITE IRREVOCABLE FAMILY GIFTING GSTT TRUST	138	6,011,280	0.16	7,101		41,890	137.84	6,004,179					137.84	6,004,179								D.B. 2911, P. 398	
69	DF LEXINGTON PROPERTIES II LLC	0.75	32,670	0.01	557		1,607							0.74	32,113								D.B. 3793, P. 98 P.C. H, SL. 618	

NOTE: PERMANENT R/W 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 - COMMERICAL
R - RESIDENTIAL
F - FARM
S - STORAGE

*INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)

RIGHT OF WAY SUMMARY SHEET

Contract ID: 254301 Page 380 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	14

REVISED: OCTOBER 1, 2024

GEOMETRIC COORDINATE POINTS US 25 /KY 418

POINT	NAME	NORTH (Y)	EAST (X)
POB	347+12.11	3890639.9589	5297056.0114
PC	354+87.86	3890055.6659	5297566.2991
PI	357+71.17	3889842.2778	5297752.6600
PT	360+54.37	3889638.3598	5297949.3383
PC	391+43.86	3887414.6410	5300094.1088
PI	394+84.69	3887169.3217	5300330.7186
PT	398+25.47	3886917.0749	5300559.9287
PC	423+30.50	3885063.1228	5302244.5661
PI	429+27.36	3884621.3855	5302645.9612
EQNBK	430+63.68	3884553.4798	5302770.9593
EQNAHD	0+00.00	3884553.4798	5302770.9593
PT	4+56.26	3884271.8566	5303129.7786
PC	51+83.24	3881503.7041	5306961.4515
PI	57+64.33	3881163.4140	5307432.4805
PT	63+44.43	3880872.5148	5307935.5145
PC	71+52.43	3880468.0203	5308634.9818
PI	74+05.92	3880341.1203	5308854.4220
PT	76+59.09	3880195.3383	5309061.7989
POE	132+75.00	3876965.6381	5313656.0928

GEOMETRIC COORDINATE POINTS APHIDS WAY

POINT	NAME	NORTH (Y)	EAST (X)
POB	50+00.00	3883834.0005	5303735.8585
PC	51+94.00	3883676.9173	5303622.0092
PI	52+77.69	3883609.1563	5303572.8981
PT	53+52.52	3883596.5636	5303490.1643
PC	55+53.39	3883566.3386	5303291.5865
PI	59+30.46	3883509.5990	5302918.8081
PT	61+22.58	3883144.6592	5303013.6868
POE	67+90.47	3882498.2531	5303181.7423

GEOMETRIC COORDINATE POINTS JACOBSON PARK ENTRANCE

POINT	NAME	NORTH (Y)	EAST (X)
POB	27+38.31	3885560.9153	5302145.8282
POE	30+00.00	3885384.9264	5301952.1516

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.

BEFORE YOU DIG

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

RIGHT OF WAY POINTS

ROADWAY STATION	OFFSET	NORTH (Y)	EAST (X)
US 25 STA.364+56.36	92.00' RT	3889285.1509	5298162.1884
US 25 STA.364+56.43	104.08' RT	3889276.7121	5298153.5413
US 25 STA.364+56.46	109.00' RT	3889273.2773	5298150.0218
US 25 STA.365+20.00	92.00' RT	3889239.3451	5298206.3679
US 25 STA.365+25.00	109.00' RT	3889223.9446	5298197.6030
US 25 STA.365+28.00	89.00' RT	3889235.6696	5298214.0810
US 25 STA.365+30.00	83.65' RT	3889237.9448	5298219.3208
US 25 STA.365+72.00	86.00' RT	3889206.0825	5298246.7857
US 25 STA.366+50.00	82.94' RT	3889152.0626	5298303.1347
US 25 STA.366+50.00	86.00' RT	3889149.9405	5298300.9344
US 25 STA.375+25.00	79.99' LT	3888635.3762	5299027.8466
US 25 STA.376+00.00	120.00' LT	3888609.1689	5299108.7104
US 25 STA.376+00.00	228.00' LT	3888684.1440	5299186.4454
US 25 STA.376+59.00	228.00' LT	3888641.6777	5299227.4040
US 25 STA.376+59.00	120.00' LT	3888566.7026	5299149.6691
US 25 STA.384+00.00	79.99' LT	3888005.5787	5299635.2839
US 25 STA.385+00.00	120.00' LT	3887961.3775	5299733.5034
US 25 STA.385+90.00	120.00' LT	3887896.5983	5299795.9827
US 25 STA.386+65.00	80.00' LT	3887814.8453	5299819.2561
US 25 STA.408+50.00	73.60' RT	3886109.3348	5301194.4589
US 25 STA.408+95.00	140.00' RT	3886031.3739	5301175.5766
US 25 STA.409+50.00	160.00' RT	3885977.2186	5301197.7625
US 25 STA.410+50.00	105.00' RT	3885940.1970	5301305.7180
US 25 STA.411+22.75	79.74' RT	3885903.3456	5301373.3340
US 25 STA.417+50.00	167.06' LT	3885605.0905	5301977.8180
US 25 STA.417+50.00	330.00' LT	3885714.6705	5302098.4114
US 25 STA.418+50.00	84.36' RT	3885361.9998	5301858.9936
US 25 STA.418+65.00	330.00' LT	3885629.5597	5302175.7493
US 25 STA.418+73.20	100.00' RT	3885334.3188	5301863.0221
US 25 STA.419+86.30	125.00' RT	3885233.8011	5301920.5804
US 25 STA.419+95.00	105.00' RT	3885240.8084	5301941.2340
US 25 STA.420+00.00	178.19' LT	3885427.5521	5302154.1814
US 25 STA.420+00.00	302.00' LT	3885510.8169	5302245.8147
US 25 STA.420+15.00	83.55' RT	3885240.4320	5301970.5594
US 25 STA.426+44.84	165.00' LT	3884953.8854	5302578.0839
US 25 STA.430+00.00	115.00' LT	3884681.7600	5302798.2155
KY 418 STA. 1+84.85	114.45' LT	3884525.4405	5302984.9574
KY 418 STA. 5+76.92	113.69' LT	3884293.3485	5303294.1644
KY 418 STA. 6+00.00	113.00' LT	3884279.2786	5303312.4674
KY 418 STA. 6+00.00	89.79' LT	3884260.4634	5303298.8746
APHIDS WAY STA.52+32.00	49.53' RT	3883684.5632	5303563.0375
APHIDS WAY STA.52+65.00	50.09' LT	3883586.2922	5303598.9265
APHIDS WAY STA.53+20.00	48.00' LT	3883558.3853	5303536.5853
APHIDS WAY STA.53+22.00	52.00' RT	3883653.0571	5303504.3221
APHIDS WAY STA.54+55.00	54.00' LT	3883527.7579	5303396.9770
APHIDS WAY STA.55+26.00	53.35' LT	3883517.7127	5303326.6882
APHIDS WAY STA.55+60.00	53.00' LT	3883513.0482	5303294.0499
APHIDS WAY STA.56+00.00	57.00' RT	3883610.8420	5303229.9284
APHIDS WAY STA.56+58.00	42.50' RT	3883573.1609	5303173.3714
APHIDS WAY STA.58+10.00	40.00' LT	3883415.3273	5303106.6724
APHIDS WAY STA.58+35.41	40.00' LT	3883397.1846	5303093.5100
APHIDS WAY STA.61+22.58	40.00' LT	3883154.7240	5303052.3999
APHIDS WAY STA.61+63.26	25.31' LT	3883111.6595	5303048.4152
APHIDS WAY STA.61+63.28	40.00' LT	3883115.3358	5303062.6402
KY 418 STA. 106+73.60	114.00' RT	3878368.4384	5311462.3626
KY 418 STA. 107+55.00	114.00' RT	3878321.6229	5311528.9582
KY 418 STA. 108+00.00	102.10' RT	3878305.4792	5311572.6161
KY 418 STA. 111+00.90	108.00' LT	3878304.3129	5311939.6033
KY 418 STA. 111+05.00	101.46' RT	3878130.5982	5311822.5001
KY 418 STA. 111+05.00	130.00' RT	3878107.2493	5311806.0863
KY 418 STA. 111+95.00	102.05' RT	3878078.3563	5311895.7882
KY 418 STA. 111+95.00	130.00' RT	3878055.4905	5311879.7139
KY 418 STA. 115+46.22	108.80' LT	3878048.8623	5312304.3772
KY 418 STA. 116+50.00	108.87' LT	3877989.2399	5312389.3181
KY 418 STA. 118+00.00	165.00' LT	3877948.8913	5312544.3090
KY 418 STA. 119+00.00	165.00' LT	3877891.3816	5312626.1175
KY 418 STA. 120+06.19	149.12' LT	3877817.3240	5312703.8585

COORDINATE CONTROL SHEET

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919 E-SHEET NAME:
USER: ACAUDILL
DATE PLOTTED: October 1, 2024
FILE NAME: C:\PWWORKING\EASTON\D2858875\ROW SHEET 14-CC.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	L01

ROADWAY LIGHTING ESTIMATE OF QUANTITIES

TOTAL	UNITS	CODE	ITEM DESCRIPTION
34	EACH	4740	POLE BASE
8482	LIN FT	4820	TRENCHING AND BACKFILLING
842	LIN FT	4821	OPEN CUT ROADWAY
1	LP SUM	4940	REMOVE LIGHTING
10	EACH	2039INS835	ELECTRICAL JUNCTION BOX TYPE A
842	LIN FT	21543EN	BORE AND JACK CONDUIT
6920	LIN FT	24900EC	PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80
2404	LIN FT	24901EC	PVC CONDUIT - 2 INCH - SCHEDULE 80

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

CONTRACTOR SHALL MEET WITH LFUCG AND KENTUCKY UTILITIES REPRESENTATIVES PRIOR TO ANY CONDUIT/POLE BASE INSTALLATION TO FINALIZE CONDUIT RUNS AND BASE LOCATIONS.

WHEN LIGHTING CONDUIT AND FIBER/SIGNAL CONDUIT CROSS EACH OTHER, THE LIGHTING CONDUIT SHALL BE INSTALLED AT A DEPTH OF 42" SO AS TO GO UNDERNEATH THE FIBER/SIGNAL CONDUIT.

ALL POLE BASES THAT CONFLICT WITH UNDER GROUND DRAINAGE/UTILITIES/ETC. SHALL BE INSTALLED ON THE BACKSIDE OF THE UNDER GROUND FEATURE AT THE SAME STATION AS CALLED FOR BUT AS CLOSE TO THE ROAD AS POSSIBLE.

ALL POLE BASES LOCATED BEHIND SIDEWALK SHALL BE FORMED AGAINST THE BACKSIDE OF THE SIDEWALK AND THE TOP OF THE CONCRETE SHALL BE FLUSH WITH THE SIDEWALK.

ALL JUNCTION BOXES SHALL HAVE A PENTA HEAD AUGER BOLTS AND THE LABEL SHALL BE "ELECTRIC".

BEFORE YOU DIG

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CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 716 & 834

SUBSECTION: 716.03.03 TRENCHING.

REMOVE: REMOVE SENTENCE UNDER B): NO PAYMENT FOR ADDITIONAL JUNCTION BOXES FOR GREATER DEPTHS WILL BE ALLOWED.

SUBSECTION: 716.03.04 CONDUIT INSTALLATION

REVISION: ADD TO SECOND SENTENCE WITH THE FOLLOWING: BASES WITH BREAKWAY DEVICES INSTALLED.

SUBSECTION: 716.03.04 (K) BORE AND JACK.

REVISION: REPLACE TITLE WITH THE FOLLOWING: BORE AND JACK/OPEN CUT ROADWAY
ADD SENTENCES AFTER LAST SENTENCE: WITH PERMISSION OF THE ENGINEER, ROADWAY MAY BE OPEN CUT IF CONDUIT IS UNDER PAVEMENT. THE CONDUIT IN OPEN CUT CAN BE EITHER 2" RIDID STEEL OR SCHEDULE 80 PVC UNDER ALL PAVEMENTS AREAS. IF IT IS THE LOOP TRANSITION FROM THE SAW SLOT, IT SHALL BE RIGID STEEL.

SECTION: 834.33 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL)THICK.

DESIGNED BY: TAS/CX
DATE SUBMITTED:

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF
FAYETTE

PROJECT NUMBERS: 07-9012.50

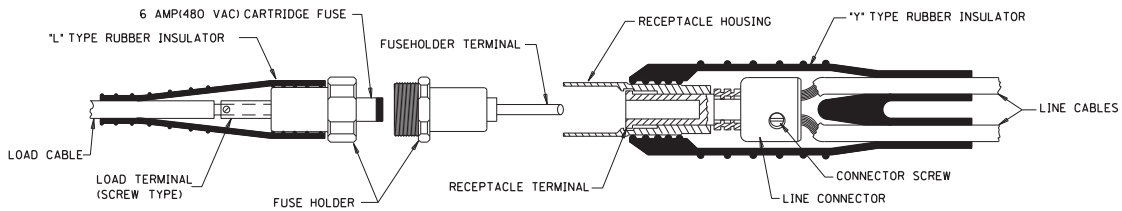
ROADWAY LIGHTING ESTIMATES OF QUANTITIES

11-18-2024

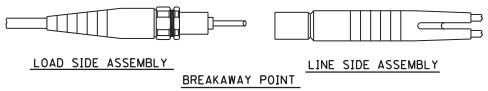
POWER INROADS V8.11.9.912 | USER: SWANSEGART | DATE PLOTTED: MARCH 21, 2025 | FILE NAME: C:\PWWORKING\EAST01\D2224187\T00100LT QUANTITY SHEET.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L02

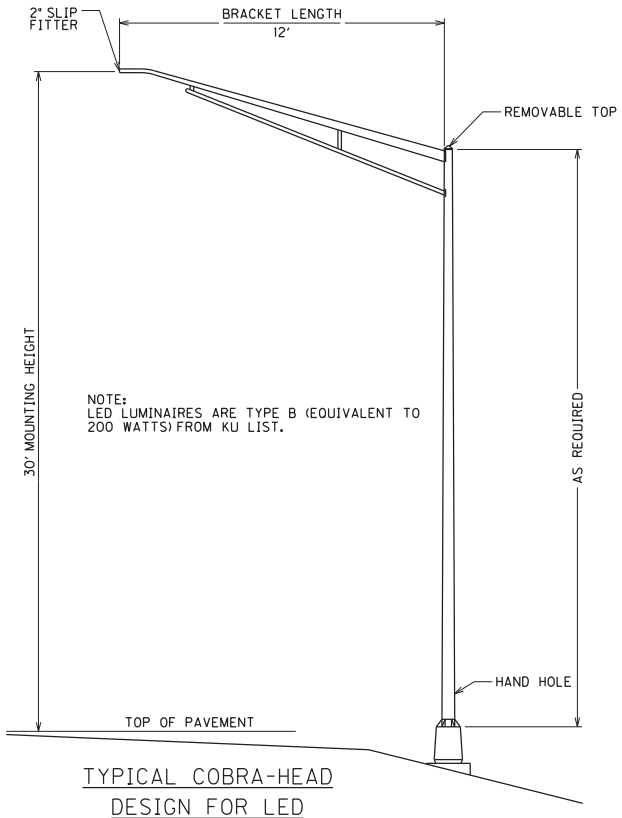
BREAKAWAY FUSE CONNECTOR KIT



DETAILS OF TYPE HEB-JW-RYC CONNECTOR



TYPE HEB-JW-RYC CONNECTOR SHOWN



NOTE:
LED LUMINAIRES ARE TYPE B (EQUIVALENT TO 200 WATTS) FROM KU LIST.

TYPICAL COBRA-HEAD DESIGN FOR LED LUMINAIRES

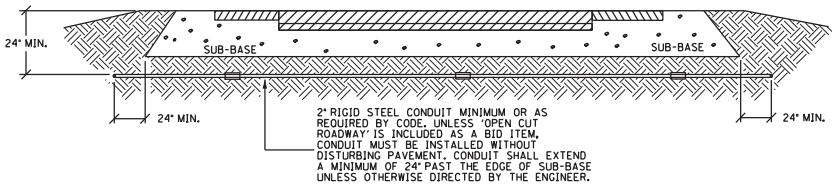
SPECIAL NOTE:
ALL LUMINAIRES SHALL HAVE THE NEMA LABEL INSTALL ON THE BOTTOM OF THE FIXTURE TO VERIFY THE WATTAGE.

POWER INROADS V8.11.9.912
USER: SWANSEGART
DATE PLOTTED: AUGUST 28, 2023
FILE NAME: C:\PWWORKING\EAST01\D2224187\T00200LT COBRAFUSE (CL).DGN

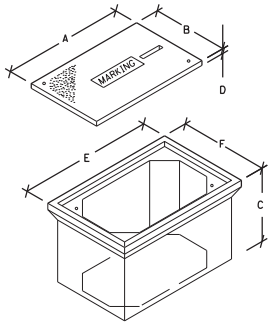
4-24-2017

COBRA-HEAD LUMINAIRE/FUSE CONNECTOR DETAILS

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L03

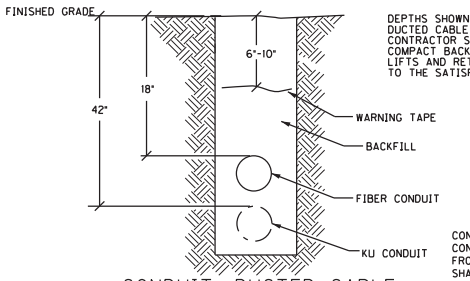


CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL



JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1¾" *	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

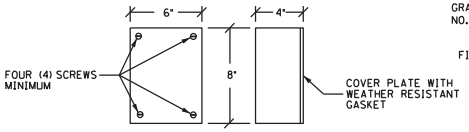
* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED



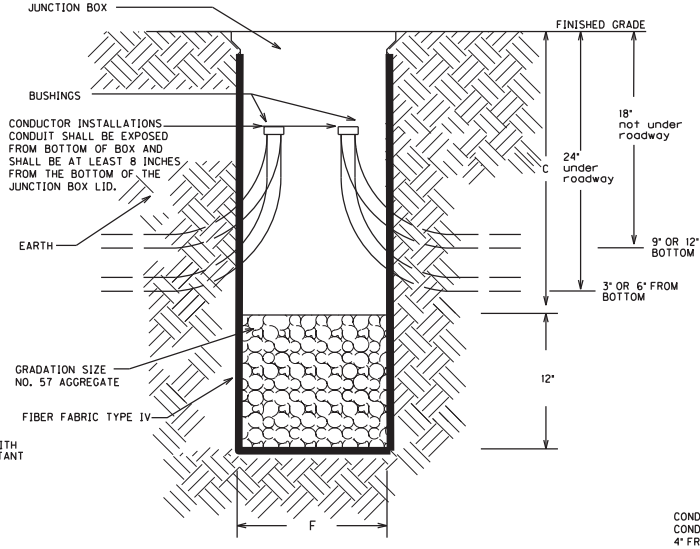
DEPTHS SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN 9" MAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

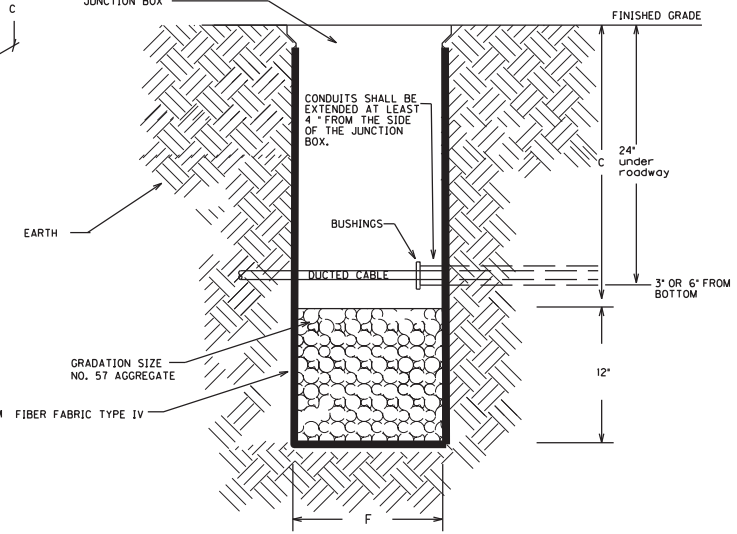
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



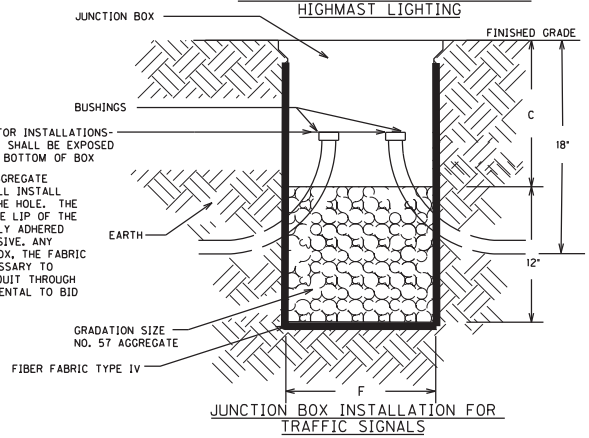
ABOVE GROUND BOX



JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING

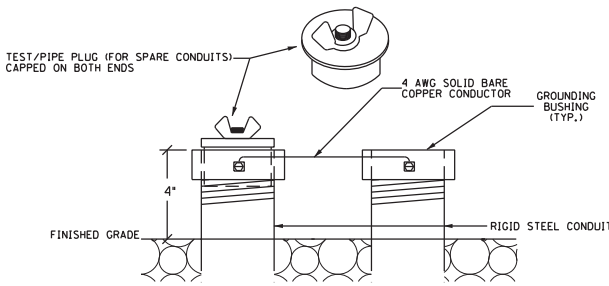


JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING

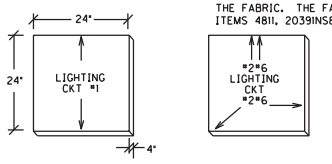


JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS

BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT" ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 20391NS835, OR 20392NS835.



TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL

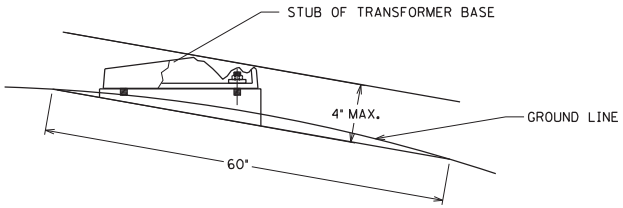


CONCRETE CABLE MARKERS

6/1/2023 MODIFY FOR KU/LEXINGTON FAYETTE

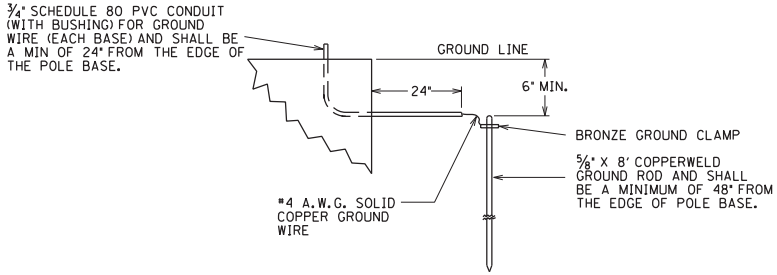
TRAFFIC SIGNAL AND ROADWAY LIGHTING
JUNCTION BOX AND CONDUIT DETAILS

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L04



THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE.

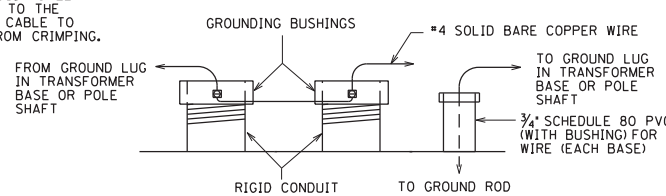
BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT



GROUNDING DETAIL

IF DUCTED CABLE INSTALLED BETWEEN POLE BASES:
INSTALL RIGID STEEL/DUCTED CABLE COUPLING. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO DUCTED CABLE. RACEWAYS SHALL BE THE SAME SIZE AS THE DUCTED CABLE WHICH ATTACHS TO THE RIGID STEEL CONDUIT. ALTERNATELY IF DUCTED CABLE IS USED, THE CONTRACTOR CAN INSTALL RIGID STEEL CONDUIT TWO TIMES THE SIZE OF THE DUCT AND RUN THE DUCT INSIDE THIS CONDUIT. THE SWEEP FOR THE CONDUIT SHALL BE INCREASED TO ADHERE TO THE BENDING RADIUS RECOMMENDED BY THE MANUFACTURER OF THE DUCT.

DUCTED CABLE INSTALLED THROUGH 3" CONDUIT CROSSINGS TO LUMINAIRE POLE BASE: INSTALL DUCTED CABLE INTO THE POLE BASE. THE DUCT SHOULD BE EXTENDED 1" ABOVE THE CONDUIT. THE CONDUIT SWEEP SHOULD BE INSTALL ACCORDING TO THE MANUFACTURER OF THE DUCTED CABLE TO PREVENT THE DUCTED CABLE FROM CRIMPING.



TYPICAL GROUNDING DETAIL

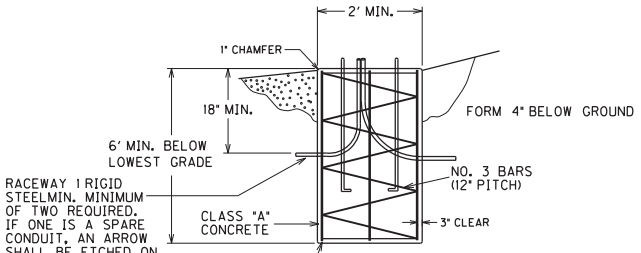
GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO TRANSFORMER BASE.

POLE/TRANSFORMER BASE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE TRANSFORMER BASE/POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

NOTES:

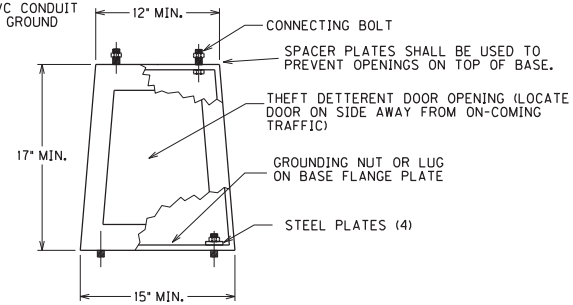
ALL CONDUITS USED FOR THE GROUNDING, SPARES AND CONDUCTORS THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "4740". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE POLE BASE.



ALL POLE BASES SHALL HAVE A MINIMUM OF TWO CONDUITS (NOT INCLUDING GROUND CONDUIT). THE SPARE CONDUIT SHALL BE 180 DEGREE FROM THE CONDUIT FOR THE CONDUCTORS.

NOTE: PRECAST CONCRETE BASES ARE NOT ACCEPTABLE

FOUNDATION DETAIL



CONCRETE BASES SHALL BE POURED LEVEL. NO MORE THAN A ⅜" GAP SHALL EXIST BETWEEN CONCRETE BASE AND TRANSFORMER BASE WHEN THE POLE IS PLUMBED.

TYPICAL CAST ALUMINUM TRANSFORMER BASE

NOTE:
THE TRANSFORMER BASE DOOR SHALL HAVE A 4" BY 6" ARC FLASH WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBINATE MATERIAL, AND WITH MC53FL PRESSURE SENSTIVE ADHESIVE OR APPROVAL EQUAL. THIS SHALL BE INCIDENTAL TO PROJECT.

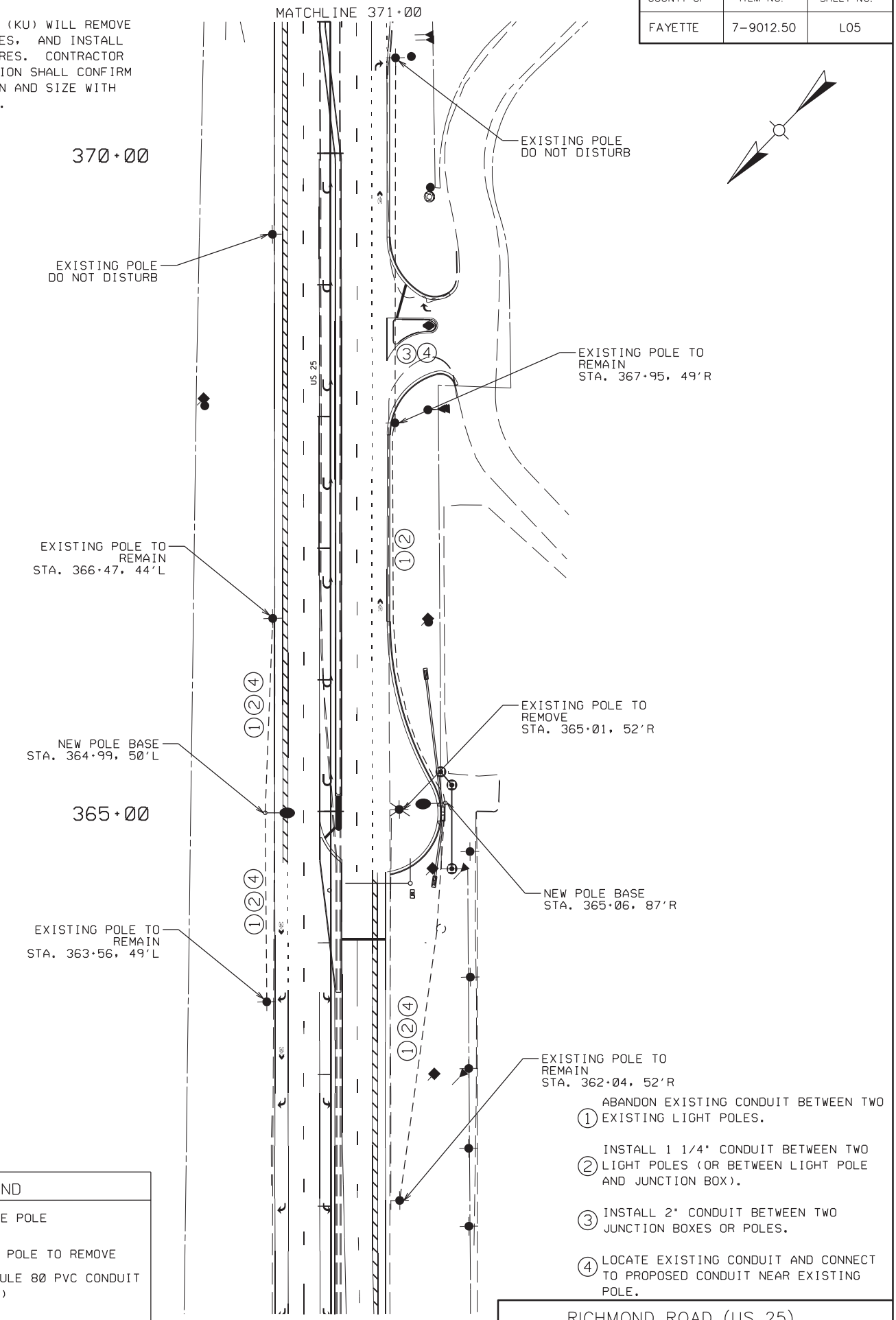
SPECIAL NOTE FOR TRANSFORMER BASES:
FURNISH AN ARC FLASH AND SHOCK HAZARD WARNING STICKER ON TRANSFORMER BASE WITH THE FOLLOWING INFORMATION:
VOLTAGE (480 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (12 IN)
MINIMUM CLOTHING ARC RATING (CAT 2)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

6/1/2023 MODIFY FOR KU

TRANSFORMER BASE DETAIL

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L05

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- [A1] JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

SCALE: 1"=100'

RICHMOND ROAD (US 25)
LIGHTING PLAN 1

FILE NAME: C:\PW\WORKING\EAST\011D2224187\T00500LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L06

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.

MATCHLINE 380+50

380+00

CONDUIT GOES TO POLE ON SHEET L07

JB A3

CONDUIT SHALL BE 36" BELOW GRADE FOR FUTURE ENTRANCE

JB A2

EXISTING POLE DO NOT DISTURB

EXISTING POLE TO REMOVE STA. 378+01, 43'L

NEW POLE BASE STA. 377+93, 53.5'L

US 25

EXISTING POLE DO NOT DISTURB

EXISTING POLE TO REMOVE STA. 375+33, 49'L

NEW POLE BASE STA. 375+33, 56'L

375+00

EXISTING POWER POLE TO REMOVE STA. 374+74, 59'L

JB A1 *

SQUIRES ROAD

YORKSHIRE BLVD

* THERE SHALL BE A 2" SCHEDULE 80 PVC CONDUIT INSTALL FROM THE JBA1 TO THE UTILITY POLE. THIS CONDUIT SHALL BE PLACE ON 6" STAND-OFF FROM UTILITY POLE. ALL ITEMS FOR THE UTITILY SERVICE SHALL BE INCIDETAL TO CONDUIT ITEM 24901EC PVC CONDUIT-2 INCH-SCHEDUE 80

EXISTING POLE DO NOT DISTURB

EXISTING POLE DO NOT DISTURB

MATCHLINE 371+00

LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

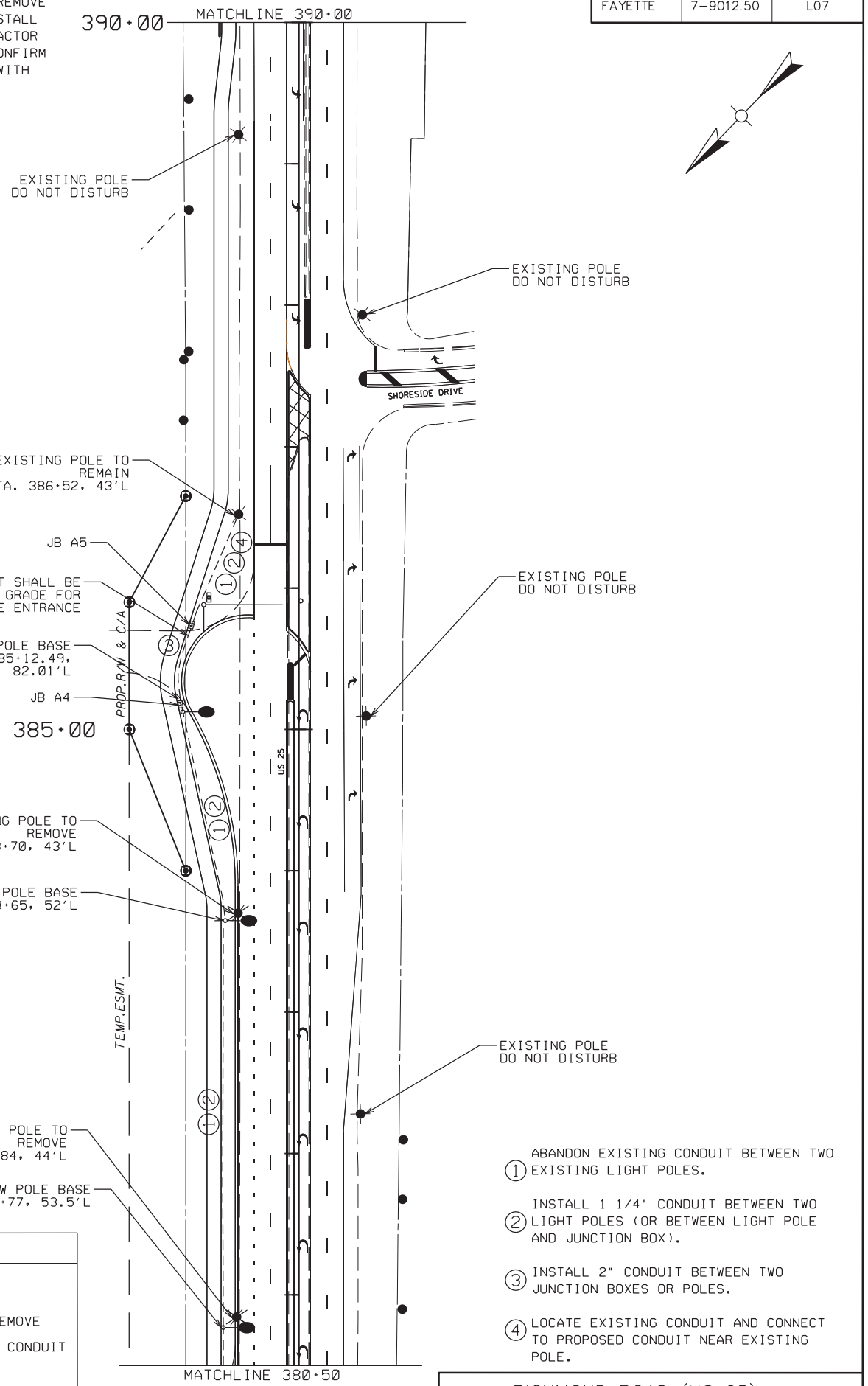
SCALE: 1"=100'

RICHMOND ROAD (US 25)
LIGHTING PLAN 2

FILE NAME: C:\PWWORKING\EAST01\D2224187\T00600LT.DGN
USER: Swansegarf
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L07

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- AI JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

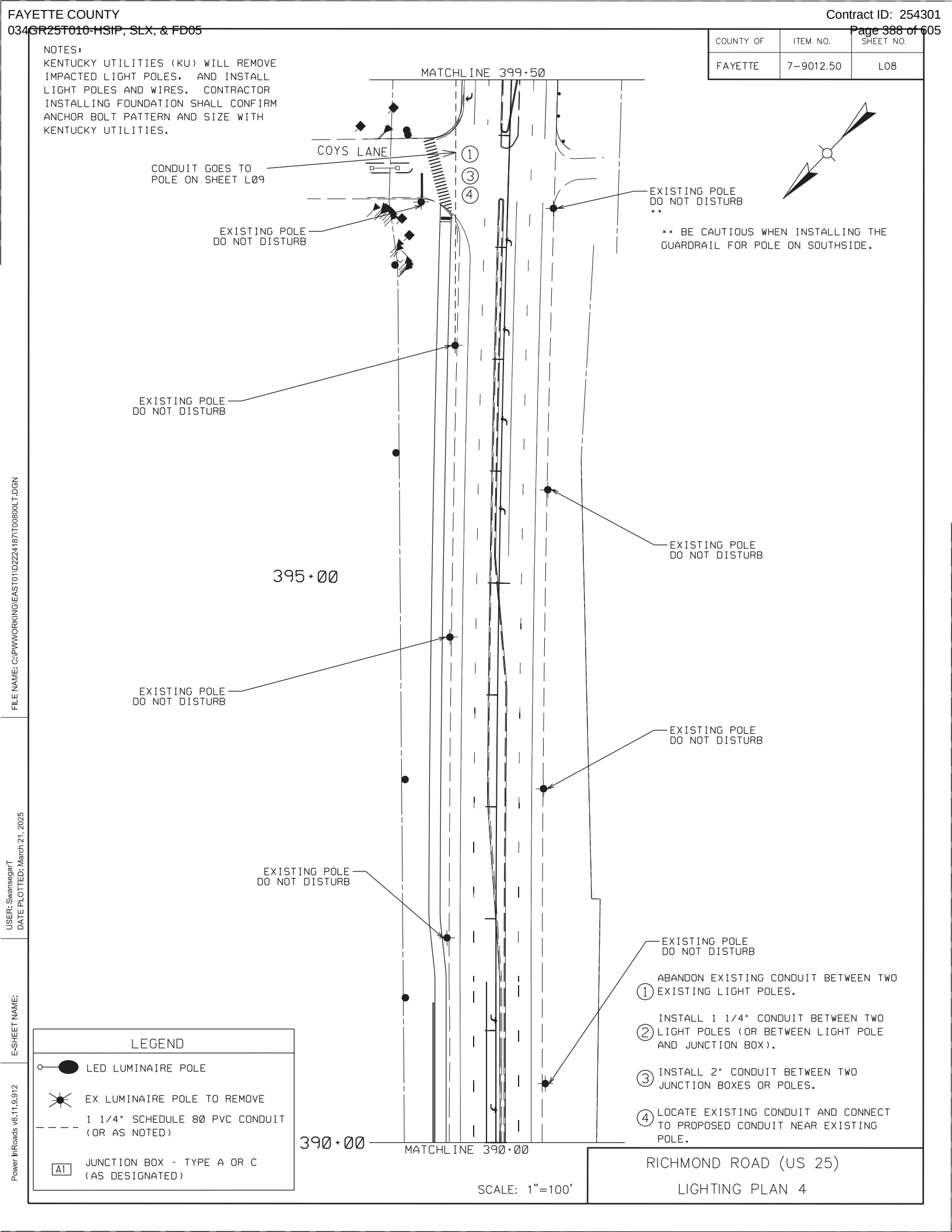
SCALE: 1"=100'

RICHMOND ROAD (US 25)
LIGHTING PLAN 3

FILE NAME: C:\PWWORKING\EAST01\D2224187\T00700LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L08

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES. AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

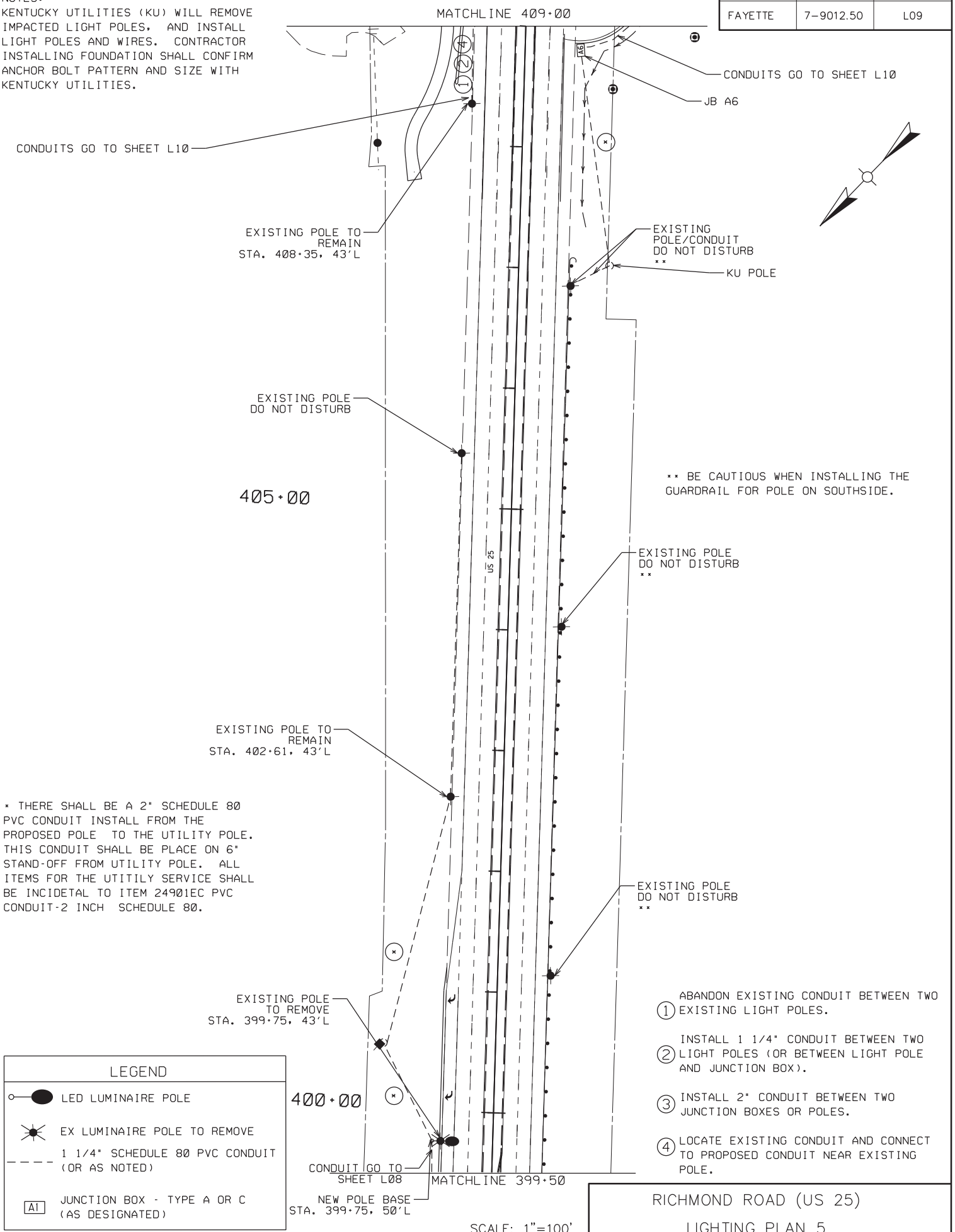
SCALE: 1"=100'

RICHMOND ROAD (US 25)
LIGHTING PLAN 4

FILE NAME: C:\PW\WORKING\EAST\D1D222418\T00800LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L09

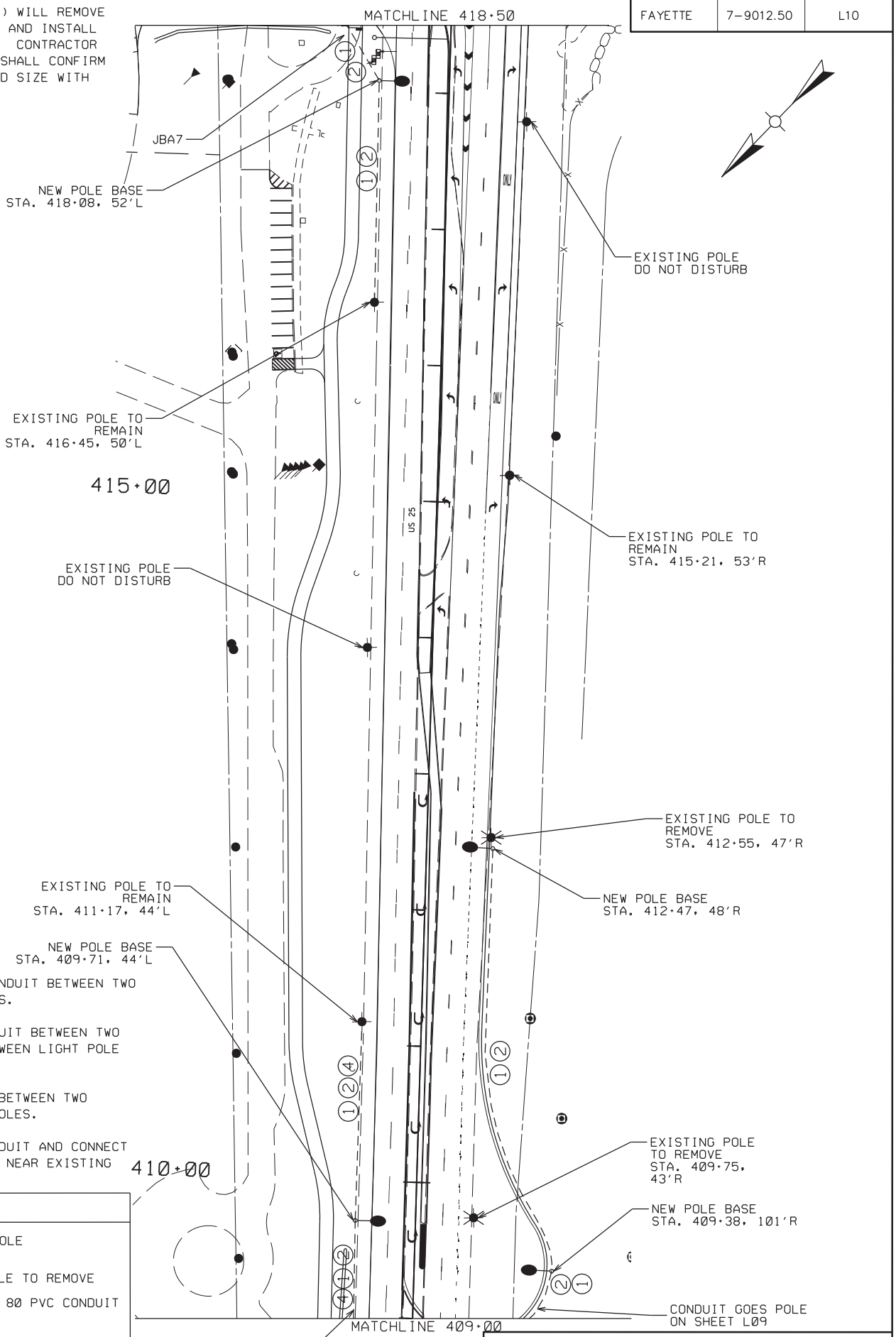
NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



FILE NAME: C:\PWWORKING\EAST01\D2224187\T00900LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L10

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

SCALE: 1"=100'

RICHMOND ROAD (US 25)
LIGHTING PLAN 6

FILE NAME: C:\PW\WORKING\EAST01\D2224187\T01000LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L11

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.

* THERE SHALL BE A 2" SCHEDULE 80 PVC CONDUIT INSTALL FROM THE NEW POLE BASE TO THE UTILITY POLE. THIS CONDUIT SHALL BE PLACE ON 6" STAND-OFF FROM UTILITY POLE. ALL ITEMS FOR THE UTITILY SERVICE SHALL BE INCIDETAL TO ITEM 24901EC PVC CONDUIT2 - INCH SCHEDULE 80.

CONDUIT GOES TO POLE ON SHEET L12

MATCHLINE 428+00

EXISTING POLE TO REMOVE STA. 427+65, 53'L

NEW POLE BASE STA. 427+08, 58.5'L

CONDUIT GOES TO POLE ON SHEET L12

EXISTING POLE TO REMOVE STA. 426+54, 52'R

NEW POLE BASE STA. 426+47, 58'R

EXISTING POLE TO REMOVE STA. 425+44, 53'L

425+00

NEW POLE BASE STA. 425+11, 82'L *

EXISTING POLE TO REMOVE STA. 424+40, 53'R

NEW POLE BASE STA. 424+33, 57'R

EXISTING POLE TO REMOVE STA. 423+31, 54'L

NEW POLE BASE STA. 423+19, 63'L

EXISTING POLE TO REMOVE STA. 422+27, 55'R

NEW POLE BASE STA. 422+21, 59'R

EXISTING POLE TO REMOVE STA. 521+20, 53'L

NEW POLE BASE STA. 421+16, 59'L

NEW POLE BASE STA. 419+72, 60'L

EXISTING POLE TO REMOVE STA. 418+08, 52'L

EXISTING POLE TO REMAIN STA. 419+96, 61'R

RICHMOND RD

ABANDON EXISTING CONDUIT BETWEEN TWO (1) EXISTING LIGHT POLES.

(2) INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).

(3) INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.

420+00

(4) LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

JBA8

JACOBSON PARK ENTRANCE

KY-418 (ATHENS BOONESBORO RD)

ELLERSLIE PARK BLVD.

MATCHLINE 418+50

LEGEND

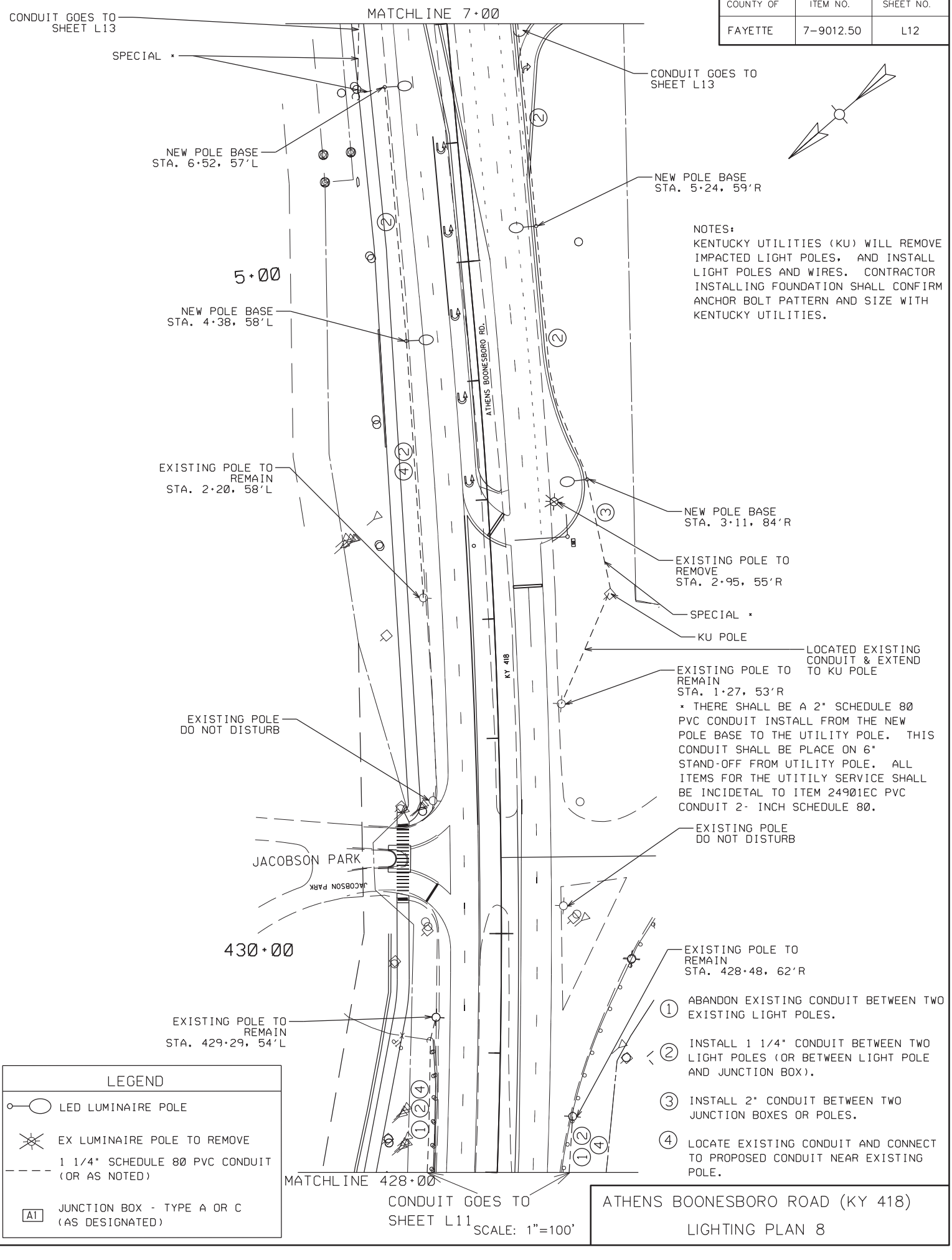
- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

SCALE: 1"=100'

RICHMOND RD (US 25)
LIGHTING PLAN 7

FILE NAME: C:\PW\WORKING\EAST\01\D2224187\T01100LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L12



NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.

* THERE SHALL BE A 2" SCHEDULE 80 PVC CONDUIT INSTALL FROM THE NEW POLE BASE TO THE UTILITY POLE. THIS CONDUIT SHALL BE PLACE ON 6" STAND-OFF FROM UTILITY POLE. ALL ITEMS FOR THE UTITILY SERVICE SHALL BE INCIDETAL TO ITEM 24901EC PVC CONDUIT 2- INCH SCHEDULE 80.

① ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.

② INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).

③ INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.

④ LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

LEGEND

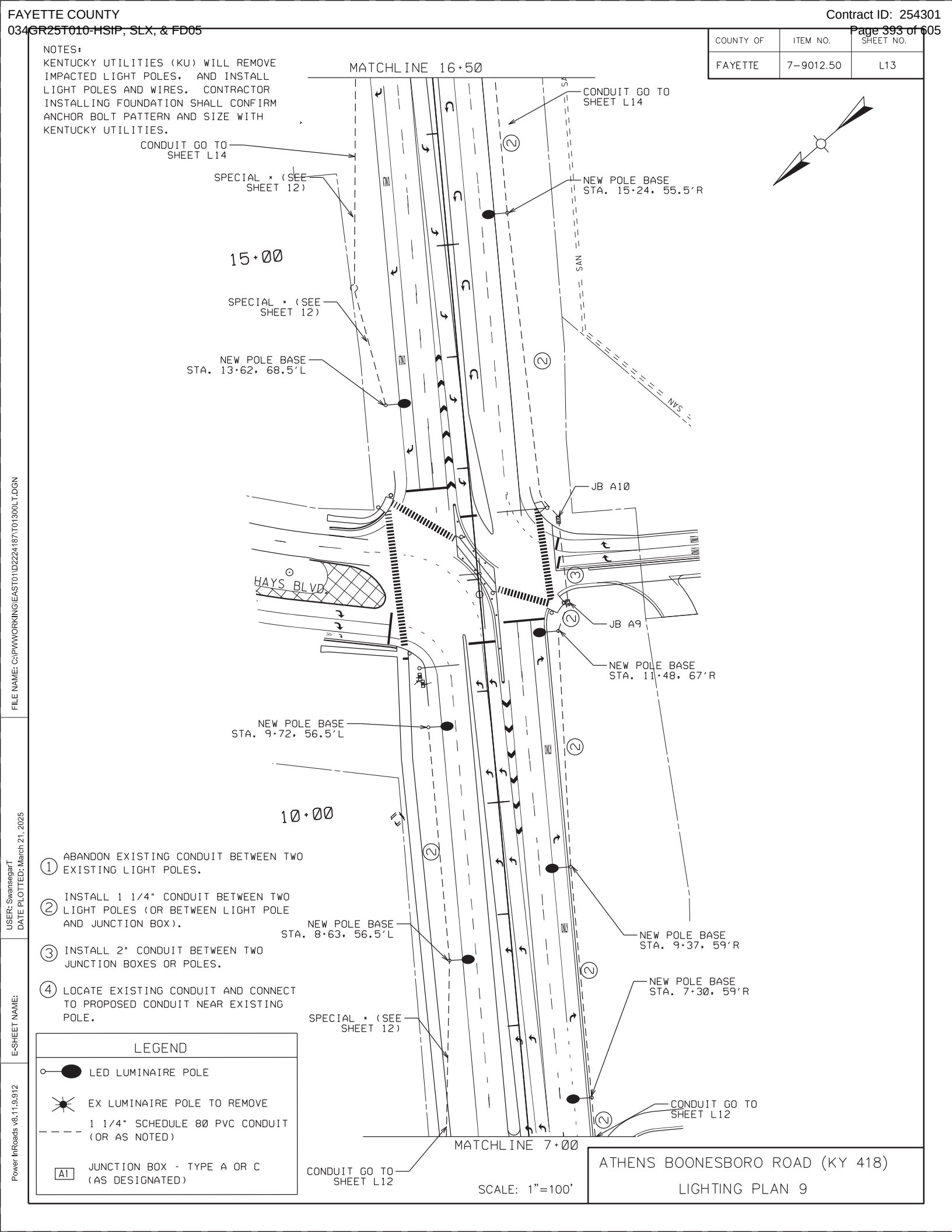
- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

ATHENS BOONESBORO ROAD (KY 418)
LIGHTING PLAN 8

FILE NAME: C:\PWWORKING\EAST\D1D222418\T01200LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L13

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES. AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

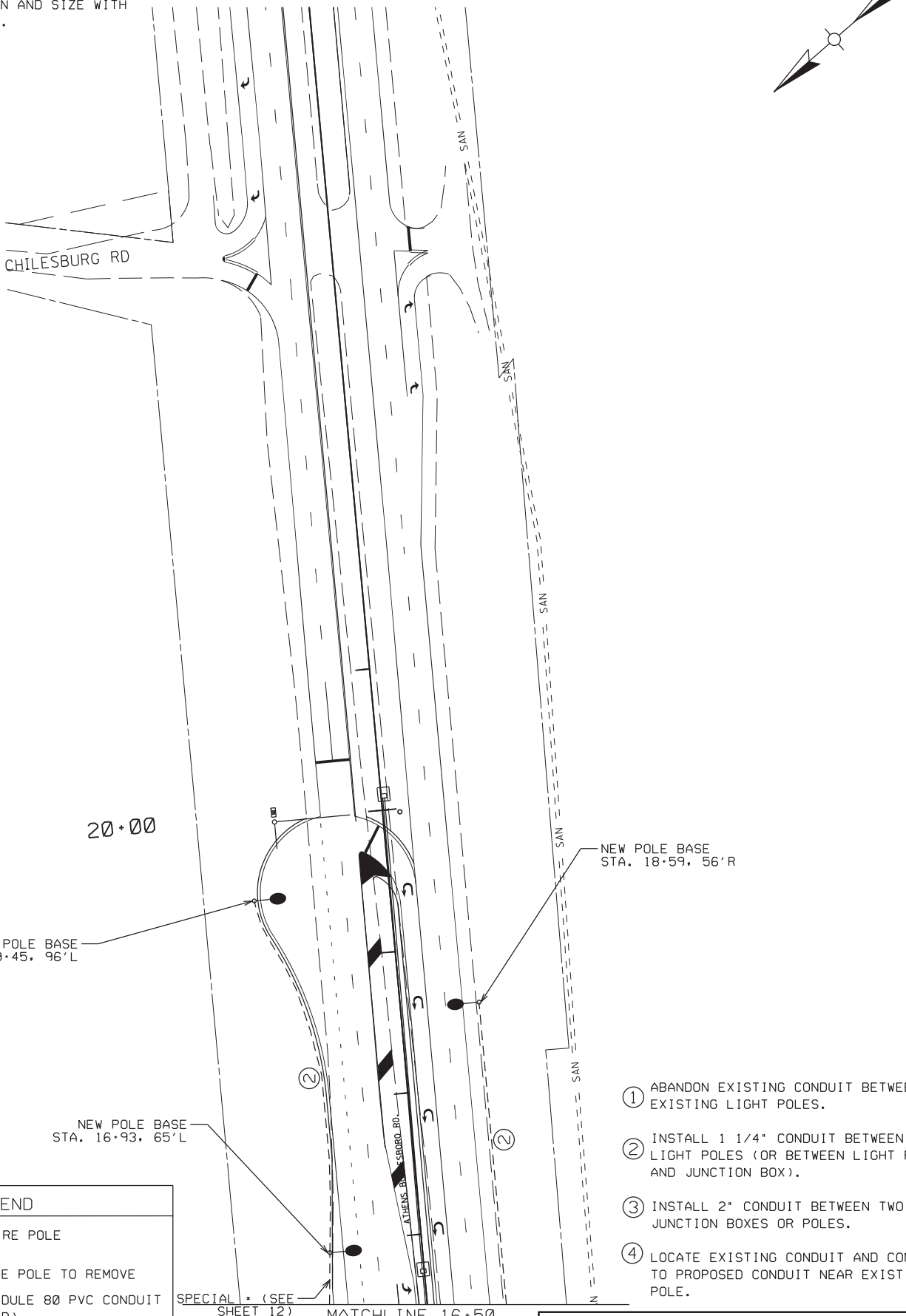
SCALE: 1"=100'

ATHENS BOONESBORO ROAD (KY 418)
LIGHTING PLAN 9

FILE NAME: C:\PW\WORKING\EAST\D1\D2224187\T01300LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	L14

NOTES:
KENTUCKY UTILITIES (KU) WILL REMOVE IMPACTED LIGHT POLES, AND INSTALL LIGHT POLES AND WIRES. CONTRACTOR INSTALLING FOUNDATION SHALL CONFIRM ANCHOR BOLT PATTERN AND SIZE WITH KENTUCKY UTILITIES.



LEGEND

- LED LUMINAIRE POLE
- EX LUMINAIRE POLE TO REMOVE
- 1 1/4" SCHEDULE 80 PVC CONDUIT (OR AS NOTED)
- A1 JUNCTION BOX - TYPE A OR C (AS DESIGNATED)

1. ABANDON EXISTING CONDUIT BETWEEN TWO EXISTING LIGHT POLES.
2. INSTALL 1 1/4" CONDUIT BETWEEN TWO LIGHT POLES (OR BETWEEN LIGHT POLE AND JUNCTION BOX).
3. INSTALL 2" CONDUIT BETWEEN TWO JUNCTION BOXES OR POLES.
4. LOCATE EXISTING CONDUIT AND CONNECT TO PROPOSED CONDUIT NEAR EXISTING POLE.

SCALE: 1"=100'

ATHENS BOONESBORO ROAD (KY 418)
LIGHTING PLAN 10

FILE NAME: C:\PW\WORKING\EAST01\D2224187\T01400LT.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME:
Power InRoads v8.11.9.912

Tim Tharpe - Director
Phone (502) 564-3020
FAX (502) 564-7759

DIVISION OF TRAFFIC OPERATIONS

PROJECT MATERIALS RELEASE FORM FOR SIGNAL AND LIGHTING

Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.

Item Number: **7-9012.50**

County: **Fayette**

Description: **RCUT Intersections along Richmond Rd (US 25) and Athens-Boonesboror Rd (KY 418)**

Cabinets	Master code	
7	T-01-0010	Pole Mounted 336 Cabinet
12	T-01-0020	Base Mounted 332 Cabinet
19	T-01-0105	ATC Controller
19	T-01-0106	1C w/Maxtime (this should go with item ATC controller)
19	T-01-0501	Conflict Monitor, Model 2018
10	T-01-0510	Isolator, Model 242 (1 for 2070, plus for ped detector and railroad)
83	T-01-0700	Load Switches

Signals		
74	T-02-0009	Siemens 3 Section Signal
74	T-02-0032	Siemen 3 section backplate
30	T-02-0033	Siemen 4 secton 12" signal (poly)
27	T-02-0043	Siemen 4-sec. straight signal backplate
32	T-02-0090	Pedestrian signal housing
28	T-02-0099	Audible pedestrian detector
25	T-02-0300	LED Module 12" red arrow
84	T-02-0310	LED Module 12" yellow arrow
59	T-02-0320	LED Module 12" green arrow
70	T-02-0330	LED Module 12" red ball
36	T-02-0340	LED Module 12" yellow ball
36	T-02-0350	LED Module 12" green ball
5	T-02-0391	LED Module 12" Red U-Turn
10	T-02-0392	LED Module 12" Yellow U-Turn
5	T-02-0393	LED Module 12" Green U-Turn
32	T-02-0365	LED Countdown Pedestrian Module

Special items		
1	T-09-0415	30 X 36 through 36 X 36 sign hanger (New)
11	T-02-0650	Pedstl.top mntg.bkt One-way
3	T-02-0660	Pedstl.top mntg.bkt Two-way
14	T-02-0670	Pedestal
45	T-02-0640	Mast arm mount signal bracket (3 section)
28	T-02-0641	Mast arm mount signal bracket (4 section)
21	T-02-0646	Mast Arm Dampers
15	T-04-0150	Lighting Pole 30' w/no arm mongoose luminaire
15	T-06-0600	Transformer Base for Luminaire Poles w/o anchor bolts (See T-06-0601 for anchor bolts)
15	T-06-0601	Anchor Bolts for Luminaire Poles
1		Radar **Special Order - Pickup Radar Equip. from District Traffic Engineer**

Poles		
3	T-04-0030	Steel Strain Pole 32 foot
1	T-04-0051	Steel Strain Pole 36 foot

REQUIRED

Electrical Contractor Name _____

Electrical Contractor Supervisor _____ Contact number for Supervisor _____

Project Engineer _____ Contact number for Project Engineer _____

Project Engineer attests that the mentioned contractor is the actual electrical contractor on this project

Signature of Project Engineer or Designee _____

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	TI

TRAFFIC SIGNAL ESTIMATE OF QUANTITIES

US25 @ EAGLE CREEK	US 25 @ YORKSHIRE NB LOON	US 25 @ YORKSHIRE	US 25 @ SQUIRES SB LOON	KY 418 @ ELLERSLIE NEW JACOBSON	KY 418 @ ELLERSILE EAST LOON	KY 418 @ HAYS NB LOON	KY 418 @ HAYS APHIDS	KY 418 @ APHIDS SB LOON	FIBER	TOTAL	UNITS	CODE	ITEM DESCRIPTION
0	0	0	0	0	0	0	200	0	0	200	LIN FT	4795	CONDUIT 2 INCH
140	100	492	108	2070	140	130	338	125	9199	12,842	LIN FT	4820	TRENCHING AND BACKFILLING
	55	285	45	400	50	71	625	50	1815	3,396	LIN FT	4821	OPEN CUT ROADWAY •
683	0	942	0	1233	0	0	1459	0	0	4,317	LIN FT	4841	CABLE-NO. 14/2C
2976	175	3126	290	3354	265	280	3313	266	0	14,045	LIN FT	4845	CABLE-NO. 14/7C
0	1	4	1	2	1	1	3	1	0	14	EACH	4881	MAST ARM POLE
6	0	0	0	0	0	0	4	0	0	10	EACH	4884	ANCHOR
600	0	0	0	0	0	0	0	0	0	600	LIN FT	4886	MESSENGER-15400 LB
4	0	0	0	0	0	0	0	0	0	4	EACH	4932	INSTALL STEEL STRAIN POLE
1	0	1	0	1	0	0	1	0	0	4	EACH	24955ed	REMOVE SIGNAL EQUIPMENT
1	0	0	0	0	0	0	0	0	0	1	EACH	6472	INSTALL SPAN MOUNTED SIGN
8	0	8	0	8	0	0	8	0	0	32	EACH	20093NS835	INSTALL PEDESTRIAN HEAD LED
20	8	20	8	20	10	10	20	10	0	126	EACH	4953	TEMPORARY RELOCATION OF SIGNAL HEAD
9	2	12	2	12	2	2	10	2	0	53	EACH	20188NS835	INSTALL SIGNAL-3 SECTION LED
4	3	6	3	4	3	3	5	3	0	34	EACH	20266ES835	INSTALL SIGNAL-4 SECTION LED
1	0	0	0	0	0	0	0	1	0	2	EACH	4927	COORDINATING UNIT
0	2	1	2	2	2	2	4	2	0	17	EACH	20391NS835	ELECTRICAL JUNCTION BOX TYPE A
0	0	5	0	5	0	0	4	0	25	39	EACH	20392NS835	ELECTRICAL JUNCTION BOX TYPE C
0	110	670	110	1210	100	142	1205	100	3630	7,277	LIN FT	21543EN	BORE AND JACK CONDUIT •
4	0	8	0	8	0	0	8	0	0	28	EACH	20457NS835	INSTALL PED DETECTOR AUDIBLE
	1	4	0	4	1	1	4	1	0	16	EACH	22939ND	INSTALL LUMINAIRE POLE
17.6	3.3	12	3.8	7.6	3.3	2.9	8.8	3.3	0	63	CU YD	23157EN	TRAFFIC SIGNAL POLE BASE
3	0	2	0	4	0	0	3	0	0	12	EACH	23222EC	INSTALL SIGNAL PEDESTAL
140	166	1278	188	2070	240	201	1543	225	12829	18,880	LIN FT	24121EC	HDPE CONDUIT - 2 INCH - SCHEDULE 80
1	1	2	1	2	1	1	2	1	0	12	EACH	24908EC	INSTALL SIGNAL CONTROLLER-TY ATC
4	2	4	2	4	2	2	4	2	0	26	EACH	26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A
2	1	2	1	2	1	1	2	1	0	13	EACH	26120EC	INSTALL RADAR ADVANCE DETECTOR TYPE B
0	1	4	1	2	2	2	5	2	0	19	EACH	26169EC	INSTALL MAST ARM DAMPENER
0	0	0	0	0	0	0	800	0	0	800	LIN FT	4835	WIRE-NO. 4
0	1	4	1	4	1	1	2	1	0	15	EACH	4740	POLE BASE
15	5	32	5	30	5	5	21	5	0	123	EACH	4780	FUSED CONNECTOR KIT
0	0	0	0	0	0	0	0	0	10107	10,107	LIN FT	21077ED	FIBER OPTIC
1	1	2	1	2	1	1	2	1	0	12	EACH	24923EC	CABINET FIBER TERMINATION PANEL
1	0	1	0	1	0	0	1	0	0	4	EACH	22403NN	WEB CAMERA ASSEMBLY
0	0	1	0	1	0	0	1	0	0	3	EACH	4934	TEMP SIGNAL MULTI PHASE
0	1	0	1	0	1	1	0	1	0	5	EACH	4933	TEMP SIGNAL 2 PHASE

SPECIAL NOTE:
• BORE AND JACK IS THE PREFER OPTION, IF THAT OPTION CAN NOT BE DONE, THE CONTRACTOR SHALL GET APPROVAL FROM THE RESIDENT ENGINEER TO DO THE OPEN CUT OPTION. THE CONTRACTOR WILL ONLY BE PAID FOR THE OPTION THAT THEY DO.

NOTE FOR FIBER: ALL CONDUIT SHALL BE INSTALLED AND SHALL INCLUDE 1/2" PULL ROPE WITH DETECTABLE TRACER WIRE. THIS SHALL BE INCIDENTAL TO CONDUIT BID ITEM AND NO PAYMENT SHALL BE MADE FOR CONDUIT INSTALLED WITHOUT REQUIRED PULL ROPE. JUNCTION BOX LIDS SHALL BE MARKED WITH "LFUCG FIBER". ALL FIBER-OPTIC CABLE SHALL 72-STRAND SINGLE MODE FIBER. FIBER OPTIC SHALL BE CORNING MFR PART # 072ZU4-T4F2B20. THIS PRODUCT MATCHES THE EXISTING FIBER-OPTIC NETWORK AND NO EXCEPTIONS WILL BE MADE.
ALL 12-STRAND FIBER-OPTIC CABLE SHALL BE ARMORED AND CORNING FREEDM. ARMORED CABLING SHALL BE USED FROM SPLICE POINT TO TERMINATION INSIDE CABINET ENCLOSURE. CONTRACTOR SHALL DOCUMENT FIBER-OPTIC CABLE FOOTAGE LOCATED ON THE JACKET OF THE CABLE AFTER INSTALLATION INSIDE JUNCTION BOXES TO VERIFY SLACK FOOTAGES ARE CORRECT. CONTRACTOR SHALL HAVE SLACK LOOPS INSIDE JUNCTION BOXES AND CABINETS.
SPLICES SHALL CONFORM TO EXISTING LFUCG TRAFFIC ENGINEERING STANDARDS. MASTER SPLICES SHALL CONSIST OF SPLICING EXISTING SEVENTY-TWO (72) STRAND FIBER OPTIC CABLE WITH PROPOSED SEVENTY-TWO (72) STRAND FIBER-OPTIC CABLE.
IT IS ANTICIPATED THAT MASTER SPLICES WILL BE COMPLETED AT TWO (2) LOCATIONS:
- EXISTING TERMINATION POINT LOCATED NEAR EAGLE CREEKDRIVE (BEGINNING OF PROJECT)
- AT MID-POINT OF FIBER-OPTIC CABLING RUN ALONG RICHMOND ROAD. ACTUAL LOCATION TO BE DETERMINED DURING CONSTRUCTION PROCESS.

CONTRACTOR SHALL CONDUCT AN OPTICAL TEST ON PROPOSED FIBER-OPTIC CABLE PRIOR TO COMPLETING SPLICE. A POST SPLICE TEST SHALL ALSO BE COMPLETED BY THE CONTRACTOR WITH A MAXIMUM OF .10 DB LOSS ALLOWED. SHOULD THIS LIMIT BE EXCEEDED, A NEW SPLICE SHALL BE COMPLETED UNTIL THE .10DB OR BETTER CAN BE ACHIEVED. AN ADDITIONAL TEST WILL BE COMPLETED BY LFUCG PERSONNEL PRIOR TO FINAL PROJECT ACCEPTANCE.
FIBER CABLE INSTALLATION AND SPLICES SHALL ONLY BE COMPLETED BY PERSONS WITH THE APPROPRIATE CERTIFICATIONS. THESE CERTIFICATION MUST INCLUDE, BUT ARE NOT LIMITED TO:
-THE FIBER OPTIC ASSOCIATION (FOA)
-CORNING
-BICSI FIBER OPTICS

NOTE FOR COORDINATING UNIT: THE UNIT SHALL BE A CRADLEPOINT R1900 AND OUTDOOR ANTENNA WITH 3-YR NETCLOUD MOBILE PERFORMANE ESSENTIALS PLAN. WHEN EQUIPMENT IS AVAILABLE, THE CONTRACTOR WILL CONTACT THE LFUCG COORDINATOR TO GET IT CONFIGURE (LFUCG WILL PROVIDE THE SIM CARD). CONTACT THE COORDINATOR 2 WEEKS BEFORE THE INSTALLATION.

NOTE FOR WEB CAMERA: THE WEB CAMERA SHALL BE AXIS Q6075-E WITH AXIX Q6100-E MK DOME. THIS SHALL INCLUDE ASTR-BRAC, 120 IN , SS-HDWE AND T94A01D PENDENT KIT FOR MOUNTING. ALL THE COMPONENTS/WIRING FOR THE WEB CAMERA SHALL BE INCIDENTAL TO WEB CAMERA BID ITEM. LFUCG WILL PROVIDE A CAMERA MOUNTING POLE PRE BENT FOR THE INSTALLATION.

THE CONTRACTOR IS REQUIRED TO DO ALL FIELD TERMINATIONS IN CABINETS OR ANY OTHER LOCATIONS REQUIRED TO COMPLETE FIBER ROUTE.

NOTE FOR CABINET FIBER TERMINATON PANEL: CONTRACTOR SHALL PROVIDE AND INSTALL ISW 16803 COMPLIANT NETWORK SWITCHES, WITH 16807 POWER SUPPLY, AND DIN RAIL. THE NETWORK SWITCH SHALL BE EXTREME NETWORK BRANDED. CORNING CONNECTOR HOUSING-SPH-01P, CORNING SM LC PANEL-CCH-CP06-A9 AND DIN RAIL. ALL TERMINATIONS SHALL BE FACTORY POLISHED UP LC PIGTAILS FUSION SPLICED TO ARMORED FIBER IN THE CONNECTOR HOUSINGS. CONTRACTOR SHALL PROVIDE WRITTEN REQUEST TO PROJECT ENGINEER PRIOR TO PURCHASING ANY EQUIPMENT. SWITCHES SHALL BE INSTALLED IN ALL TRAFFIC SIGNAL CABINETS WITHIN THE PROJECT AREA. LOCATION OF SWITCH INSIDE THE CABINET SHALL BE COORDINATED WITH PROJECT ENGINEER PRIOR TO INSTALLATION.

MOT TEMP SIGNAL REQUIREMENTS:

WE PROPOSED 3 STAGES OF MOT WHICH INCLUDE THE FOLLOWING:
1. CLOSE OUTSIDE SHOULDER/LANES TO BUILD THE LOONS
2. PARTIALLY CLOSE THE INSIDE MEDIAN/LANES BETWEEN LOONS AND MAIN INTERSECTION. SWITCH LANE LOCATIONS
3. FULLY CLOSED CENTER OF MAIN INTERSECTION TO BUILD THE LEFT TURNS FOR THE RCUT. (NO THROUGH/LEFT TURN ACCESS FOR SIDE STREETS AND USE LOONS TO MAKE THE U TURN FOR THE SIDE STREETS)
4. OPEN R CUT WITH TEMP SIGNAL OR THE NEW MAST ARM POLES.

US 25 @ EAGLE CREEK-
USED EXISTING SIGNAL. THIS SIGNAL WILL NOT REQUIRE ANY MOT CHANGES.

ALL LOONS-
BUILD TWO PHASE SIGNAL (AT LEAST THREE WOOD POLES WITH ANCHORS) WITH SAME PHASES AS THE PROPOSED SIGNAL. THE TURN ON OF THIS SIGNAL SHOULD CORRESPOND TO THE CLOSING OF THE MEDIAN AT THE MAIN INTERSECTION. THE CABINET WILL SUPPLY THE TYPE ATC CONTROLLER/ 336 CABINET/RADARS/HEADS /LED MODULES. ONLY THE RADARS AND SIGNAL HEADS WILL BE TRANSFERRED TO THE PROPOSED SIGNAL WHEN THE TEMP SIGNAL IS REMOVED.

EXISTING MAIN INTERSECTION (YORKSHORE/SQUIRES & HAYS/APHIDS)-
BUILD MULTI PHASE SIGNAL (USE THE EXISTING POLES WITH ANCHORS (PROPOSED)/CABINET/SIGNAL HEADS/WIRING) WITH SAME PHASES AS THE EXISTING SIGNAL. All PED PHASES WIL BE MAINTAINED UNTIL THE FINAL MOT STAGE AND THEN THEY WILL BE DISCCONNECTED UNTIL THE MASTARMS ARE INSTALLED. THE CONTRACTOR WILL INSTALL THE PROPOSED RADAR DETECTION TO REPLACE THE EXISTING DETECTION AT THE BEGINNING OF THE PROJECT AND BE USED DURING MOT STAGES TO KEEP DETECTON RUNNING ON ALL PHASES. IF THE MAST ARM POLES ARE NOT INSTALLED AND READY FOR THE TURN ON, THE EXISTING SIGNAL MAY HAVE TO BE REWIRE SO THAT IT WILL FUNCTION AS SHOWN IN THE PROPOSED SIGNAL. THIS WILL REQUIRE INSTALLATION OF EXTRA CABINET/SIGNAL HEADS/WIRING. KYTC WILL SUPPLY THE TYPE ATC CONTROLLER/ 336 CABINET/RADARS/HEADS/LED MODULES FOR THE INITIAL/FINAL STAGE OF THE MOT (IF NEEDED). ONLY THE RADARS WILL BE TRANSFERRED TO THE PROPOSED SIGNAL WHEN THE TEMP SIGNAL IS REMOVED.

PROPOSED NEW INTERSECTION (ELLERSILE/JACOBSON PARK)-
BUILD MULTI PHASE SIGNAL (AT LEAST FOUR WOOD POLES WITH ANCHORS/CABINET/ SIGNAL HEADS/WIRING) WITH PHASES 1, 2, 4, 5, 6, & 8. PHASE 1 & 5 SHALL BE FOUR SECTION FLASHING YELLOW ARROWS. PHASES 2, 4, 6 & 8 SHALL BE 3 SECTION R/Y/G BALLS (SHALL HAVE 2 HEADS PER PHASE). All PED PHASES WILL BE MAINTAINED UNTIL THE FINAL MOT STAGE AND THEN THEY WILL BE DISCCONNECTED UNTIL THE MASTARMS ARE INSTALLED. THE CONTRACTOR WILL INSTALL THE PROPOSED RADAR DETECTION AT THE BEGINNING OF THE PROJECT AND BE USED DURING MOT STAGES TO KEEP DETECTON RUNNING ON ALL PHASES. IF THE MAST ARM POLES ARE NOT INSTALLED AND READY FOR THE TURN ON, THE TEMP SIGNAL MAY HAVE TO BE REWIRE SO THAT IT WILL FUNCTION AS SHOWN IN THE PROPOSED SIGNAL. THIS WILL REQUIRE INSTALLATION OF EXTRA CABINET/SIGNAL HEADS/WIRING. KYTC WILL SUPPLY THE TYPE ATC CONTROLLER/ 336 CABINET/RADARS/HEADS/LED MODULES FOR THE INITIAL/FINAL STAGE OF THE MOT (IF NEEDED). ONLY THE RADARS WILL BE TRANSFERRED TO THE PROPOSED SIGNAL WHEN THE TEMP SIGNAL IS REMOVED.

SIGNAL TIMING COORDINATION:
THE SIGNAL TIMING WILL BE PROVIDED BY CONSULTANT AND THE CONTRACTOR SHALL CONTACT THE CONSULTANT TWO WEEKS BEFORE THE TURN ON OF THE SIGNAL OR ANY MOT CHANGES THAT WILL CHANGE HOW THE SIGNAL FUNCTIONS. CONTACT VANESSA NGHIEM AT VANESSA.NGHIEM@AECOM.COM.

USE TEMPORARY RELOCATION OF SIGNAL HEADS TO MOVE AROUND PROPOSED TEMPORARY SIGNALS HEADS. IF THE SIGNALS HEADS/RECONFIGURE LED MODULES ARE NEW INSTALLATION TO THE MOT STAGE, THE INSTALLATION WILL BE COVER BY ITEMS 4934 OR 4933.

DESIGNED BY: TAS
DATE SUBMITTED:

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF
FAYETTE

PROJECT NUMBERS:

TRAFFIC SIGNALS/FIBER
ESTIMATE OF QUANTITIES
MEASUREMENT, CONST, AND MISC NOTES.

6-11-2024

FILE NAME: G:\PW\WORKING\EASTON\D223246\ALL SIGNAL STANDARDS.DGN
USER: Swansegort
DATE PLOTTED: March 21, 2025
E-SHEET NAME: T0010DSU
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET #
FAYETTE	7-9012.50	TIA

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622). THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTOR'S FOREMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-8994/502-782-5536) OR EMAIL (KIM.STAMPER@KY.GOV/KERRY.DECKER@KY.GOV).
2. CONTRACTOR SHALL CONTACT THE WAREHOUSE TO PREARRANGE PICK UP OF MATERIALS. CONTRACTOR SHALL EMAIL THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED SIGNATURES TO THE WAREHOUSE AT KIM.STAMPER@KY.GOV AND SHALL NOTIFY THE WAREHOUSE BY PHONE (502-782-8994/502-330-8153) OR EMAIL KIM.STAMPER@KY.GOV AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL.
3. CONTRACTOR SHALL ALSO CONTACT THE SYSTEM OPERATIONS BRANCH OF THE DIVISION OF TRAFFIC OPERATIONS BY PHONE (502-782-5543/502-782-5547) OR EMAIL (JOE.THOMPSON@KY.GOV/LARRY.IRISH@KY.GOV) AT LEAST TWO (2) WORKING DAYS PRIOR TO ARRIVAL TO FACILITATE PROGRAMMING OF ROUTERS.
4. CONTRACTOR SHALL ARRIVE AT THE KYTC'S DIVISION OF EQUIPMENT WAREHOUSE (1239 WILKINSON BOULEVARD, FRANKFORT, KY 40622) AT THE PREARRANGED DATE/TIME FOR MATERIAL PICK UP. TO FACILITATE THIS PROCESS, ENSURE CONTRACTOR'S DELIVERY DRIVER HAS A COPY OF THE PROJECT MATERIALS RELEASE FORM WITH THE REQUIRED SIGNATURES.

ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

MATERIAL NOTES THAT ARE CONTRARY TO SECTION 835

SUBSECTION: 07.02 MAST ARM POLES
REVISION: REPLACE ENTIRE 9) NOTE FOR "THE DETAIL ANALYSIS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING CALCULATIONS:" WITH THE FOLLOWING:
LIMIT VERTICAL DEFLECTION TO 8 INCHES FOR GALLOPING FOR ALL ARMS.

SUBSECTION: .21 WARNING TAPE.
REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33:
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL)THICK.

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION: 03.02 POLES AND BASES INSTALLATION. B)
REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING:

MAXIMUM SERVICE FORCES		DRILLED SHAFT DATA							
MAX SERVICE MOMENT (FT-KIPS)	DIAMETER (IN.)	DEPTH (FEET) < 2:1 GROUND SLOPE SOIL	DEPTH (FEET) < 2:1 GROUND SLOPE ROCK	DEPTH (FEET) 2:1 GROUND SLOPE* SOIL	DEPTH (FEET) 2:1 GROUND SLOPE* ROCK	VERTICAL BARS SIZE	VERTICAL BARS TOTAL	TIES OR SPIRAL BAR SIZE	TIES OR SPIRAL SPACING OR PITCH (IN.)
0-9.9	36	6	6	6.5	6	13	#8	#4	12
10-19.9	36	7	6	8	6	13	#8	#4	12
20-29.9	36	8	6	9	6	13	#8	#4	12
30-39.9	36	9	6	10	6	13	#8	#4	12
40-49.9	36	9.5	6	10.5	6	13	#8	#4	12
50-59.9	36	10	6	11	6	13	#8	#4	12
60-69.9	36	11	6	12	6	13	#8	#4	12
70-99.9	36	12.5	6	13.5	6	13	#8	#4	12
100-149.9	36	14.5	6	16	6	13	#8	#4	12
150-199.9	36	15.5	6	17.5	6	13	#8	#4	12
200-249.9	36	17	6	19.5	6	13	#8	#4	12
250-299.9	36	18.5	6.5	21	6.5	13	#8	#4	12
300-399.9	36	21	7	25	7	18	#8	#4	6
400-499.9	42	21.5	7.5	25	7.5	18	#8	#4	12
500-600	48	22.5	7.5	25.5	7.5	19	#9	#4	12

SUBSECTION: 03.12 WIRING INSTALLATION.
REVISION: SEE TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE ALL CHARTS FOR WIRING TO SHOW CHANGES FOR EQUIPMENT GROUNDING.

SUBSECTION: 04.22 REMOVE SIGNAL EQUIPMENT. (CONSTRUCTION ONLY)
REVISION: REPLACE THE PARAGRAPH WITH THE FOLLOWING:
THE DEPARTMENT WILL MEASURE THE QUANTITY BY EACH. THE DEPARTMENT WILL NOT MEASURE BACKFILLING AND THE DISPOSAL OR TRANSPORTATION OF EQUIPMENT AND MATERIALS ASSOCIATED WITH ANY STRUCTURAL OR ELECTRICAL COMPONENT OF THE SIGNAL SYSTEM INCLUDING, BUT NOT LIMITED TO POLE BASES, POLES, JUNCTION BOXES, CABINETS, AND WOOD POLES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

MEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723

INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT INSTALLED. THE DEPARTMENT WILL NOT MEASURE THE CONCRETE BASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL AND DETECTORS, EXCAVATION, BACKFILLING, RESTORATION, ANY NECESSARY POLE MOUNTING HARDWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES INVOLVING UTILITY SECONDARY/PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE CONNECTING THE INDUCTION LOOP AMPLIFIERS, PEDESTRIAN ISOLATORS, LOAD SWITCHES, MODEL 400 MODEM CARD FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK. THE DEPARTMENT WILL ALSO NOT MEASURE FURNISHING AND INSTALLING ELECTRICAL SERVICE CONDUCTORS, CONDUITS, ANCHORS, METER BASE, FUSED CUTOUT, FUSES, GROUND RODS, GROUND LUGS, AND GROUND WIRES FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK.

INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR PRESENCE DETECTOR TYPE A SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE WILL ASSIST WITH SETUP AND CALIBRATION. THE CONTRACTOR SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FINAL AIMING OF THE SENSORS. THE CONTRACTOR SHALL PROVIDE INDIVIDUALS CAPABLE OF OPERATING THE SETUP SOFTWARE AND LEARNING THE SETUP PROCESS SO THAT FUTURE INSTALLATIONS MAY BE COMPLETED WITHOUT ASSISTANCE FROM OTHERS.

INSTALL RADAR ADVANCE DETECTOR TYPE B SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, SENSOR MOUNTING BRACKET, SENSOR CABLES, INTERFACE BOXES, LEAD-IN CABLE, CONNECTORS (FURNISHED BY CONTRACTOR), AND CONTROLLER INTERFACE ASSEMBLY. RADAR ADVANCE DETECTOR TYPE B BID ITEM SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM. RADAR ADVANCE DETECTOR TYPE B SHALL BE INSTALLED AND WIRED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR IS POWERED ON, THE CONTRACTOR SHALL COORDINATE WITH DISTRICT TRAFFIC DIVISION'S REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR SETUP. THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTED BEFORE SCHEDULING THE SETUP WORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE.

6-11-2024

Power InRoads v8.11.9.912 | E-SHEET NAME: TOOLADOS | USER: Swonsegort DATE PLOTTED: January 23, 2025 | FILE NAME: C:\PWWORKING\EASTON\D2232465\ALL SIGNAL STANDARDS.DGN

COUNTY OF	ITEM NO.	SHEET
FAYETTE	7-9012.50	T2

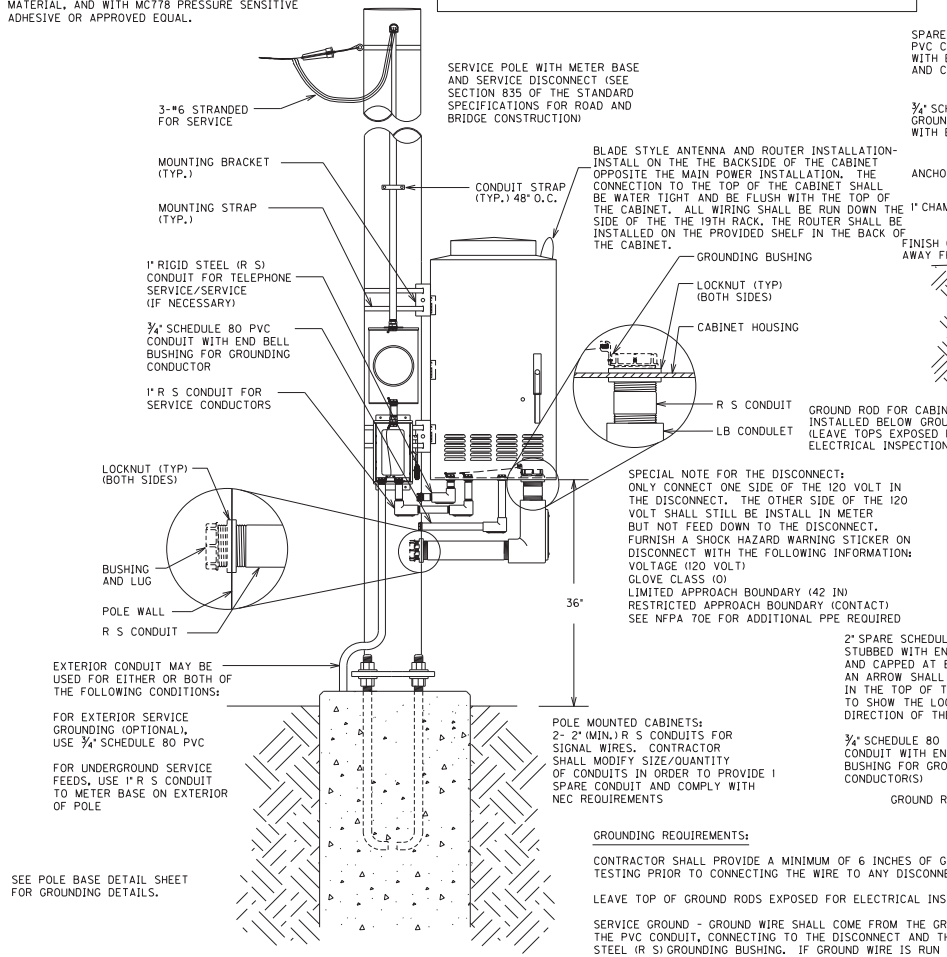
SPECIAL NOTE:
DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE UL RATED FOR COMMERCIAL USE. DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE ALUMINUM ENCLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATED THE MAXIMUM AVAILABLE FAULT CURRENT FOR THE SERVICE EQUIPMENT THAT IS INSTALLED. THE CONTRACTOR SHALL SUPPLY A STICKER THAT WILL BE INSTALLED IN THE DISCONNECT WITH THE SYMMETRICAL RMS AMPERES AND THE DATE THAT THIS FAULT CURRENT IS CALCULATED. THE STICKER SHALL BE 4" LONG AND 4" WIDE AND BE METALCRAFT PLY425 PREM STYLEMARK LABEL (OR APPROVED EQUAL) WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC778 PRESSURE SENSITIVE ADHESIVE OR APPROVED EQUAL.

NOTES:

ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARES, AND SERVICE (INCLUDING FLEX CONDUIT IF IT IS RUN INSIDE THE POLE) THAT ARE INSTALLED ON THE POLE AND/OR IN THE CABINET BASE ARE INCIDENTAL TO BID ITEM "493I". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE PAD.

ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT.

SERVICE WIRES FOR BASE MOUNTED CABINETS MAY BE INSTALLED IN FLEXIBLE CONDUIT FROM THE DISCONNECT TO THE 1" RIGID STEEL CONDUIT INSIDE THE POLE BASE. USE THE PROPER CONNECTIONS FOR TRANSITION FROM FLEXIBLE CONDUIT TO R S CONDUIT. FLEXIBLE CONDUIT SHALL NOT BLOCK THE HAND HOLE OR THE ABILITY TO ACCESS THE GROUNDING SYSTEM.



SEE POLE BASE DETAIL SHEET FOR GROUNDING DETAILS.

GROUNDING REQUIREMENTS:

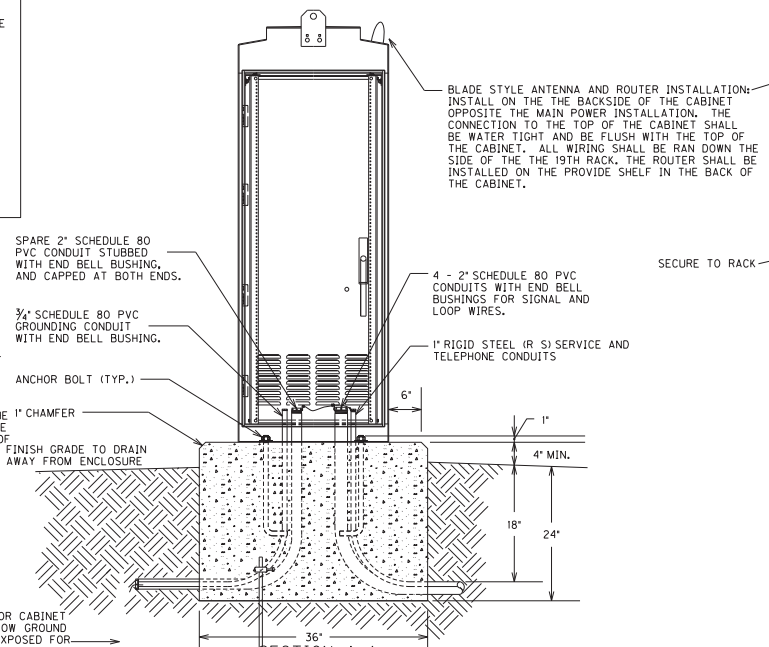
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.

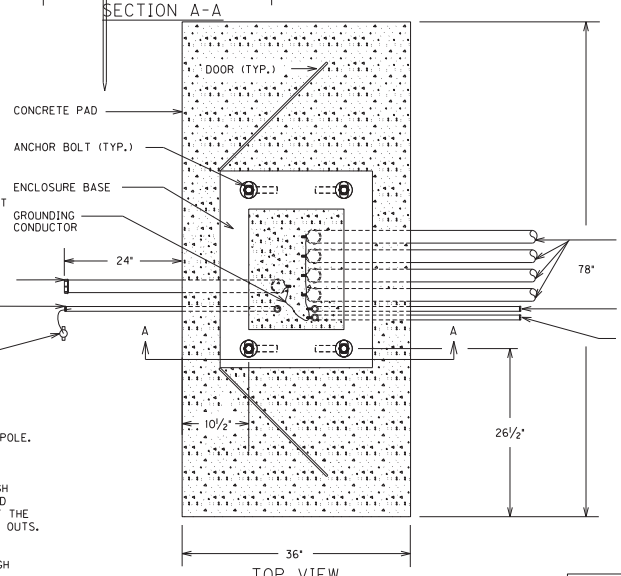
SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING. IF GROUND WIRE IS RUN ON THE INSIDE OF THE POLE, RUBBER GROMMETS SHALL BE PROVIDED AT DISCONNECT AND POLE CUT OUTS. THEY SHALL BE INCIDENTAL TO BID ITEM "493I".

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS.

STEEL POLE MOUNT ENCLOSURE

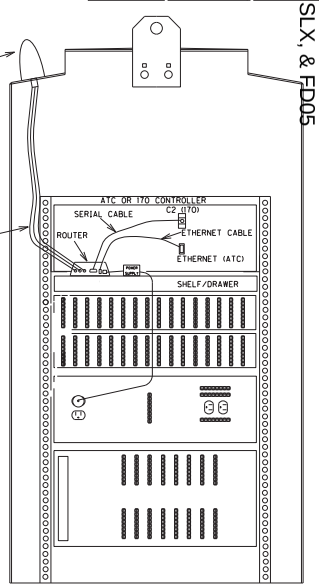


SECTION A-A



TOP VIEW

PAD MOUNT ENCLOSURE

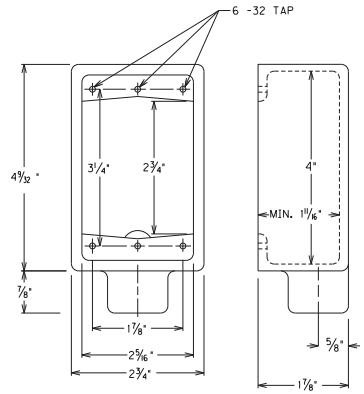


ROUTER INSTALLATION
(REAR OF CABINET)

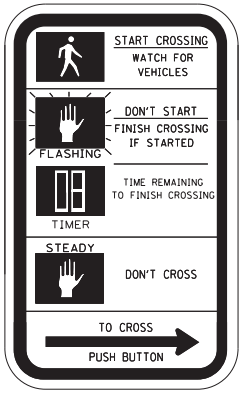
CONTROLLER CABINET
AND ANTENNA/ROUTER DETAIL

11/27/2024

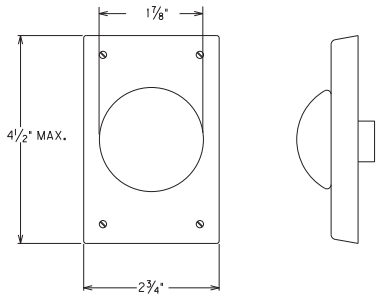
COUNTY OF	ITEM NO.	SHEET #
FAYETTE	7-9012.50	T3



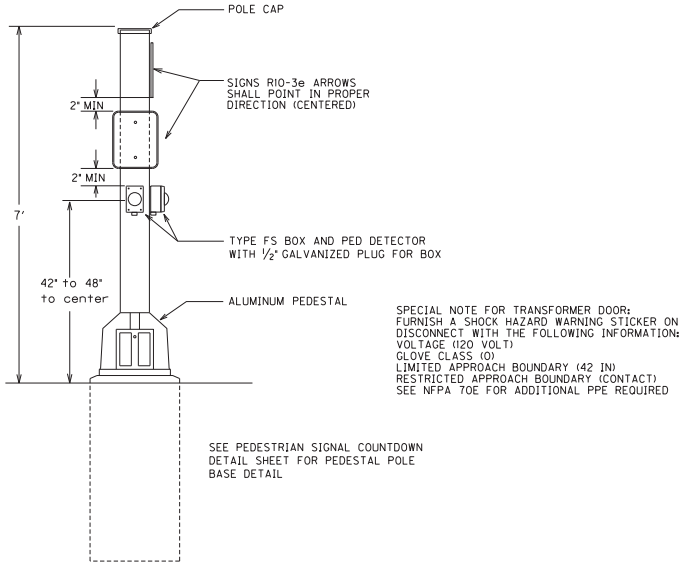
TYPE FS BOX FOR PED DETECTOR FOR USE WITH STEEL STRAIN POLE, WOOD POST, PEDESTAL, AND WOOD POLE



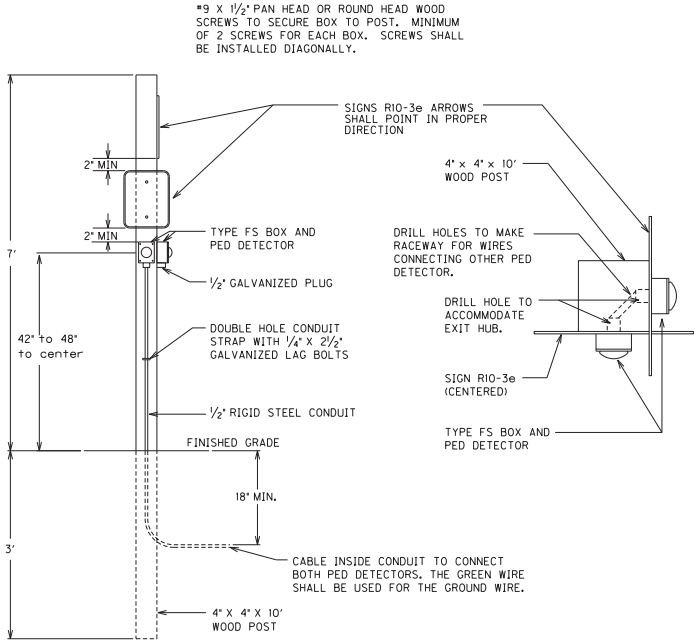
R10-3e SIGN (9" X 15") FOR COUNTDOWN ONLY



PED DETECTOR



PEDESTAL POST DETAIL FOR PED DETECTORS & SIGNS



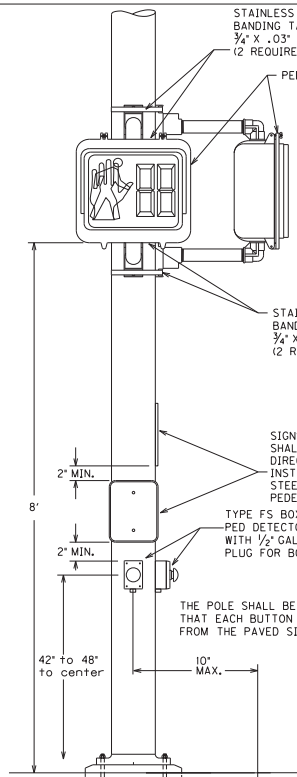
PED DETECTOR ON WOOD POST DETAIL

FILE NAME: G:\PWWORK\NC\EASTON\D2232416\ALL SIGNAL STANDARDS.DGN
USER: Swansegort
DATE PLOTTED: December 20, 2024
E-SHEET NAME: T03OOP0
Power inRoads v8.11.9.912

10/18/2022

PEDESTRIAN DETECTOR DETAIL

COUNTY OF	ITEM NO.	SHEET #
FAYETTE	7-9012.50	T4



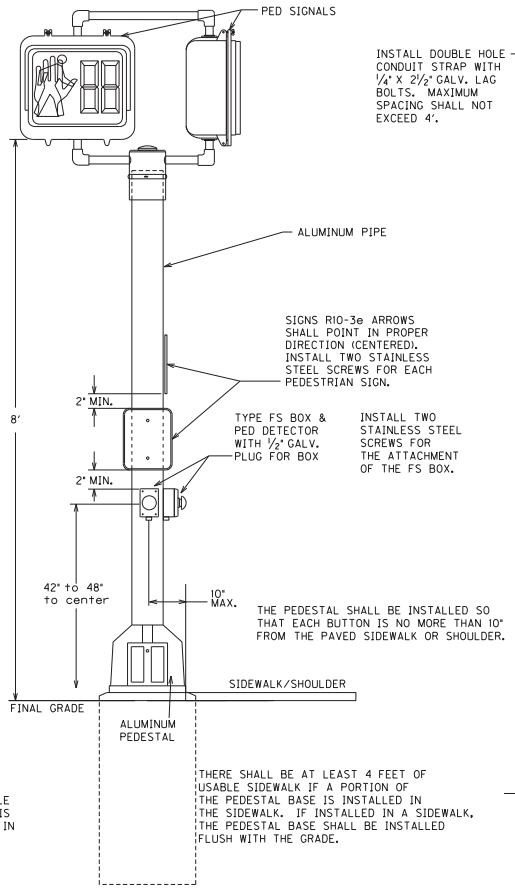
CONTRACTOR SHALL DRILL HOLES IN THE STEEL STRAIN POLE AND THE TYPE FS BOX NOT EXCEEDING ½" IN DIAMETER. CONTRACTOR SHALL USE A ROUND FILE TO REMOVE ALL BURRS AND SHARP EDGES FORM THE HOLES. WIRES SHALL BE PROTECTED WITH HEAT SHRINK TUBING OR VINYL TAPE WHERE THEY PASS THROUGH THE HOLES.

STEEL STRAIN POLE DETAIL FOR PED DETECTORS AND PED SIGNALS

NOTE:

ALL GROUNDING AND SPARE CONDUITS THAT ARE INSTALLED IN THE CONCRETE PEDESTAL POLE BASE ARE INCIDENTAL TO BID ITEM '23222EC'. THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE BASE. AN ARROW SHALL BE ETCHED INTO THE TOP OF THE PEDESTAL BASE TO SHOW LOCATION AND DIRECTION OF THE SPARE CONDUIT.

THERE SHALL BE A 2.5' (MIN.) X 4' (MIN.) CLEAR SPACE AT ALL PEDESTRIAN BUTTONS PER SECTION 404 OF PROWAG REQUIREMENTS.



CONTRACTOR SHALL DRILL HOLES IN THE PIPE AND THE TYPE FS BOX NOT EXCEEDING ½" IN DIAMETER. CONTRACTOR SHALL USE A ROUND FILE TO REMOVE ALL BURRS AND SHARP EDGES FROM THE HOLES. WIRES SHALL BE PROTECTED WITH HEAT SHRINK TUBING OR VINYL TAPE WHERE THEY PASS THROUGH THE HOLES.

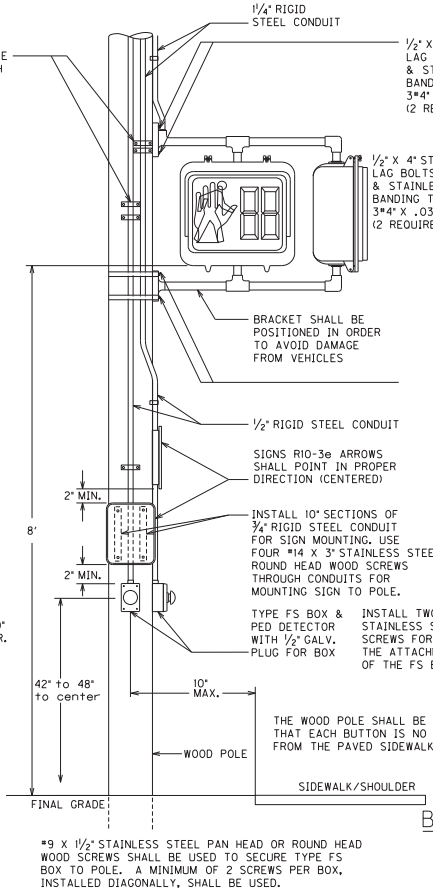
PEDESTAL POLE DETAIL FOR PED DETECTORS AND PED SIGNALS

GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO THE TRANSFORMER BASE.

LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.

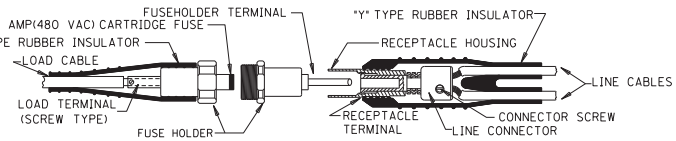
PEDESTAL POLE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO A GROUND LUG ON THE TRANSFORMER BASE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.
ALL GROUND RODS SHALL BE 24" FROM THE CONCRETE POLE BASE.



#9 X 1½" STAINLESS STEEL PAN HEAD OR ROUND HEAD WOOD SCREWS SHALL BE USED TO SECURE TYPE FS BOX TO POLE. A MINIMUM OF 2 SCREWS PER BOX, INSTALLED DIAGONALLY, SHALL BE USED.

WOOD POLE DETAIL FOR PED DETECTORS AND PED SIGNALS

BREAKAWAY FUSE CONNECTOR KIT

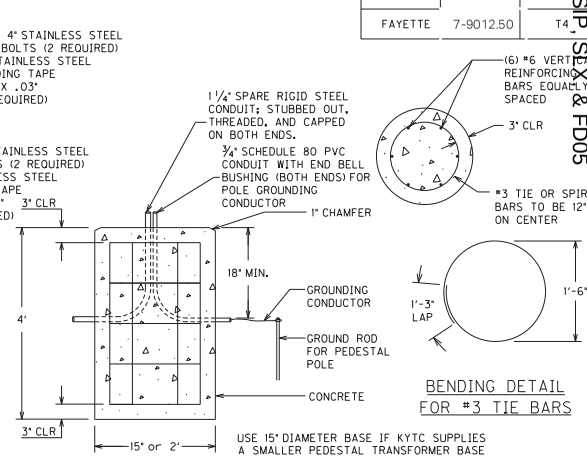


DETAILS OF TYPE HEB-JW-RYC CONNECTOR



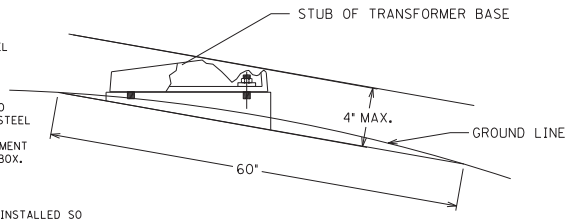
TYPE HEB-JW-RYC CONNECTOR SHOWN

SPECIAL NOTE FOR THE TRANSFORMER BASE: FUSED CONNECTOR KITS SHALL BE INSTALLED FOR ALL 120 VOLT WIRING IN TRANSFORMER BASES. THIS WILL ONLY BE NEEDED FOR PEDESTRAIN HEADS AND SIGNALS HEADS. PEDESTRAIN DETECTORS DO NOT REQUIRE FUSED CONNECTOR KITS. CONTRACTOR CAN USE ONE KIT FOR A COMMON NEUTRAL FOR ALL DEVICESIN THE TRANSFORMER BASE. THERE SHALL BEA METAL LUG INSTALLED IN THE NEUTRAL WIRE KIT INSTEAD OF A FUSE.



BENDING DETAIL FOR #3 TIE BARS

PEDESTAL POLE BASE DETAIL



THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE.

BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT

NOTE:
THE PEDESTAL BASE DOOR SHALL HAVE A 4" BY 6" SHOCK HAZARD WARNING STICKER (IF SMALLER TRANSFORMER BASE IS INSTALLED USE A 2" BY 3" INSTEAD). INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE OR APPROVAL EQUAL. THIS SHALL BE INCIDENTAL TO THE PROJECT.

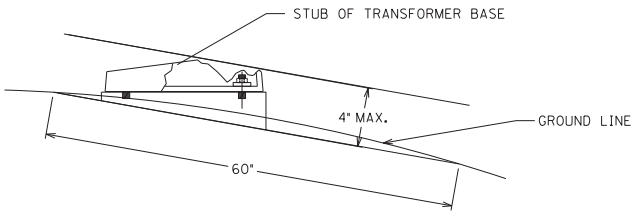
SPECIAL NOTE FOR THE TRANSFORMER BASE:
FURNISH A SHOCK HAZARD WARNING STICKER ON DISCONNECT WITH THE FOLLOWING INFORMATION:
VOLTAGE (120 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

PEDESTRIAN SIGNAL COUNTDOWN DETAIL

10/18/2022

FILE NAME: G:\PWWORK\NC\EASTON\D2232416\ALL SIGNAL STANDARDS.DGN
USER: Swansegar1
DATE PLOTTED: December 20, 2024
E-SHEET NAME: TOD400P0
Power inRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T5



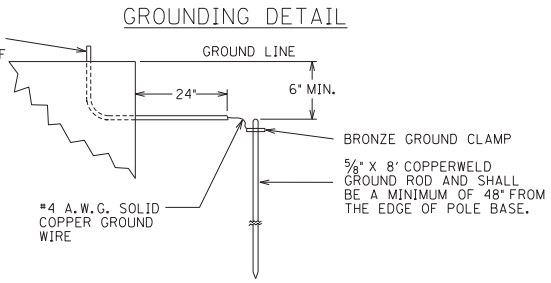
THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE.

BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT

DUCTED CABLE INSTALLED THROUGH 3" CONDUIT CROSSINGS TO LUMINAIRE POLE BASE: INSTALL DUCTED CABLE INTO THE POLE BASE. THE DUCT SHOULD BE EXTENDED 1" ABOVE THE CONDUIT. THE CONDUIT SWEEP SHOULD BE INSTALL ACCORDING TO THE MANUFACTURER OF THE DUCTED CABLE TO PREVENT THE DUCTED CABLE FROM CRIMPING.

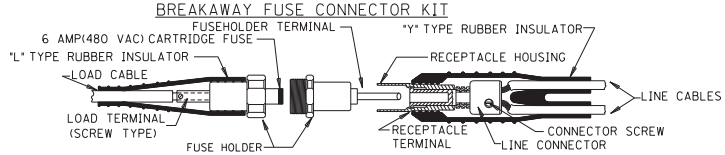
IF DUCTED CABLE INSTALLED BETWEEN POLE BASES: INSTALL RIGID STEEL/DUCTED CABLE COUPLING. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO DUCTED CABLE. RACEWAYS SHALL BE THE SAME SIZE AS THE DUCTED CABLE WHICH ATTACHS TO THE RIGID STEEL CONDUIT. ALTERNATELY IF DUCTED CABLE IS USED, THE CONTRACTOR CAN INSTALL RIGID STEEL CONDUIT TWO TIMES THE SIZE OF THE DUCT AND RUN THE DUCT INSIDE THIS CONDUIT. THE SWEEP FOR THE CONDUIT SHALL BE INCREASED TO ADHERE TO THE BENDING RADIUS RECOMMENDED BY THE MANUFACTURER OF THE DUCT.

GROUNDING DETAIL

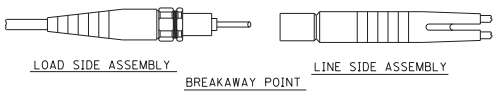


SPECIAL NOTE FOR THE TRANSFORMER BASE: FUSED CONNECTOR KITS SHALL BE INSTALLED FOR ALL 120 VOLT WIRING IN TRANSFORMER BASES. THIS WILL ONLY BE NEEDED FOR PEDESTRAIN HEADS AND SIGNALS HEADS. PEDESTRAIN DETECTORS DO NOT REQUIRE FUSED CONNECTOR KITS. CONTRACTOR CAN USE ONE KIT FOR A COMMON NEUTRAL FOR ALL DEVICES IN THE TRANSFORMER BASE. THERE SHALL BEA METAL LUG INSTALLED IN THE NEUTRAL WIRE KIT INSTEAD OF A FUSE.

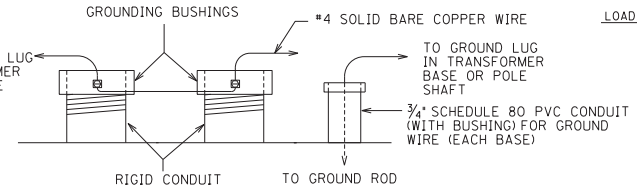
BREAKAWAY FUSE CONNECTOR KIT



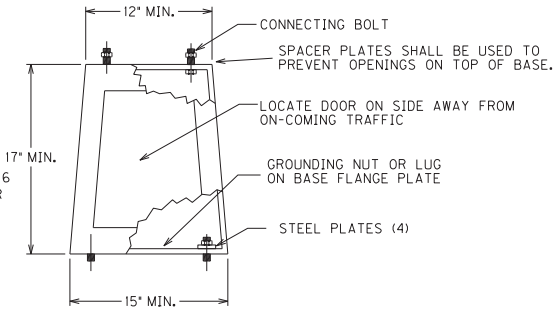
DETAILS OF TYPE HEB-JW-RYC CONNECTOR



TYPE HEB-JW-RYC CONNECTOR SHOWN

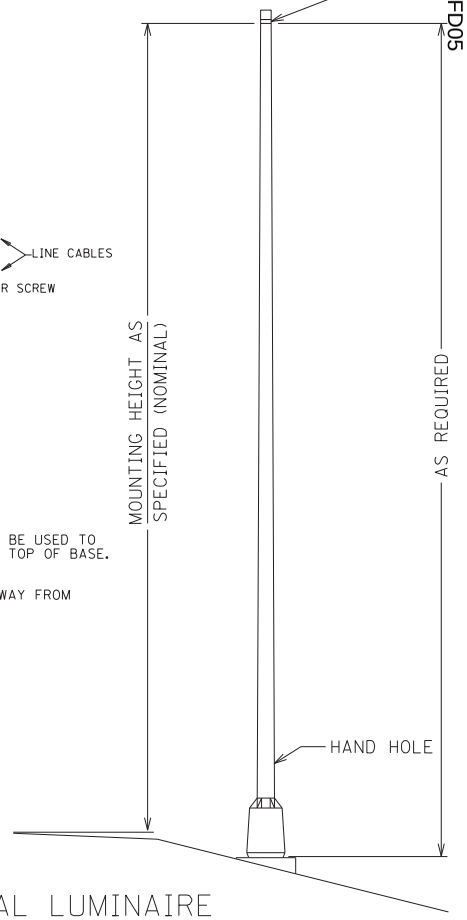


TYPICAL GROUNDING DETAIL

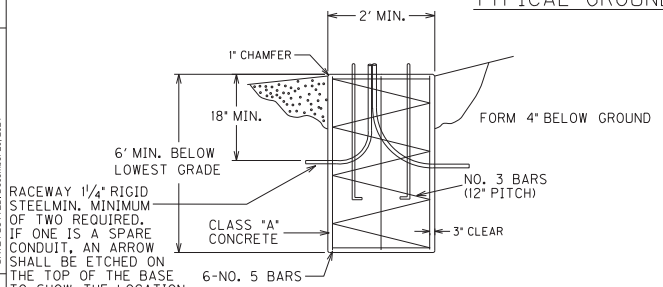


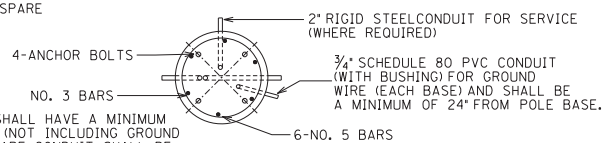
CONCRETE BASES SHALL BE POURED LEVEL. NO MORE THAN A ⅜" GAP SHALL EXIST BETWEEN CONCRETE BASE AND TRANSFORMER BASE WHEN THE POLE IS PLUMBED.

ALUMINUM POLE CAP WITH STAINLESS STEEL SET SCREWS



SIGNAL LUMINAIRE





ALL POLE BASES SHALL HAVE A MINIMUM OF TWO CONDUITS (NOT INCLUDING GROUND CONDUIT). THE SPARE CONDUIT SHALL BE 180 DEGREE FROM THE CONDUIT FOR THE CONDUCTORS.

NOTE: PRECAST CONCRETE BASES ARE NOT ACCEPTABLE

FOUNDATION DETAIL

GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO TRANSFORMER BASE.

POLE/TRANSFORMER BASE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE TRANSFORMER BASE/POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

NOTES:

ALL CONDUITS USED FOR THE GROUNDING, SPARES AND CONDUCTORS THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "4740". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE POLE BASE.

TYPICAL

CAST ALUMINUM TRANSFORMER BASE

NOTE:
THE TRANSFORMER BASE DOOR SHALL HAVE A 4" BY 6" SHOCK HAZARD WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBINATE MATERIAL, AND WITH MC53FL PRESSURE SENSTIVE ADHESIVE OR APPROVAL EQUAL. THIS SHALL BE INCIDENTAL TO PROJECT.

SPECIAL NOTE FOR THE TRANSFORMER BASE: FURNISH A SHOCK HAZARD WARNING STICKER ON DISCONNECT WITH THE FOLLOWING INFORMATION:
VOLTAGE (120 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

SIGNAL TRANSFORMER BASE DETAIL

4/28/2020

FILE NAME: C:\PWWORKING\EAST\D1D2232416\ALL SIGNAL STANDARDS.DGN
USER: Swansegart
DATE PLOTTED: December 20, 2024
E-SHEET NAME: T005001
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T6

NOTES:

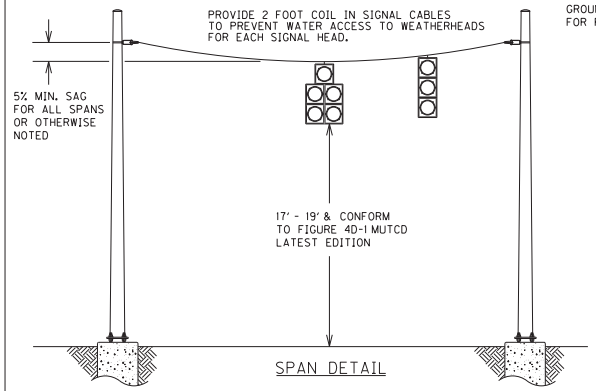
ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "23157EN". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE BASE.

ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT.

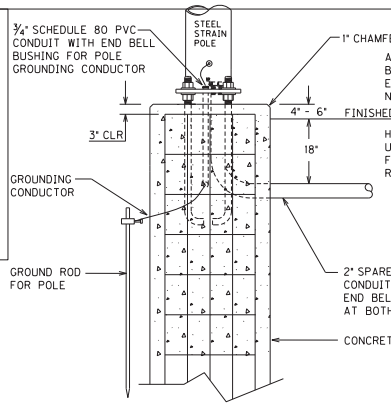
FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A 1" RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE CONDUIT.

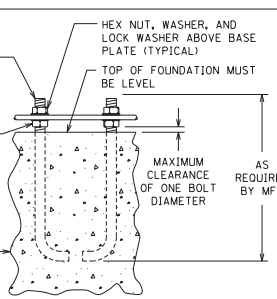
UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN 1" RIGID STEEL CONDUIT AS SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.



SPAN DETAIL



STEEL STRAIN POLE BASE WITH POLE GROUND DETAIL



NOTE:
THE STEEL STRAIN DOOR SHALL HAVE A 4" BY 6" SHOCK HAZARD WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC53FL PRESSURE SENSTIVE ADHESIVE OR APPROVED EQUAL. THIS SHALL BE INCIDENTAL TO THE PROJECT.

GROUNDING REQUIREMENTS:

CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION.

POLE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

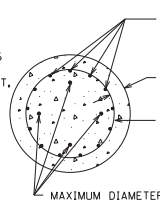
ALL GROUND RODS SHALL BE 24" FROM THE CONCRETE POLE BASE.

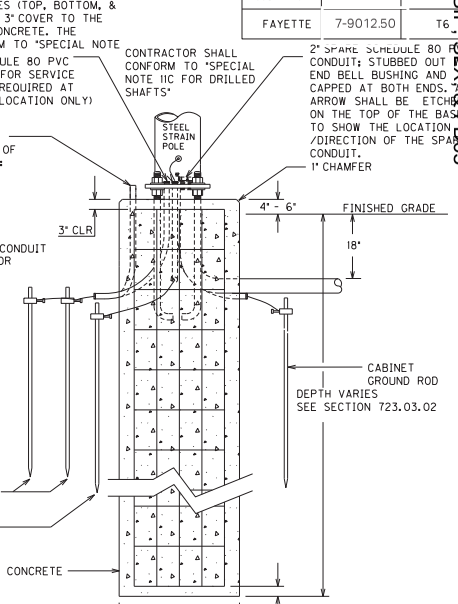
THE CONTRACTOR SHALL INSTALL SPACERS ON THE POLE BASE CAGES (TOP, BOTTOM, & SIDES) TO GUARANTEE A 3" COVER TO THE EDGE OF THE POURED CONCRETE. THE SPACERS SHALL CONFORM TO "SPECIAL NOTE 11C".

EXTERIOR CONDUIT MAY BE USED FOR EITHER OR BOTH OF THE FOLLOWING CONDITIONS:

FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE ¾" SCHEDULE 80 PVC

FOR UNDERGROUND SERVICE FEEDS, USE 1" RIGID STEEL CONDUIT TO METER BASE ON EXTERIOR OF POLE





STEEL STRAIN POLE BASE WITH SERVICE, POLE, AND POLE MOUNTED CABINET GROUNDING DETAILS

CLAMP ASSEMBLY SPECIFCATIONS

CLAMP ASSEMBLIES MUST BE DESIGNED IN ACCORDANCE TO THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, SIXTH EDITION 2013. ADDITIONAL DESIGN PROVISIONS NOT ADDRESSED IN THE AFOREMENTIONED CODE SHALL BE OBTAINED FROM THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (2002). CLAMP ASSEMBLIES SHALL CONFORM TO SECTION 835.07.01 AND THE DRAWINGS SHOWN ON THIS STANDARD.

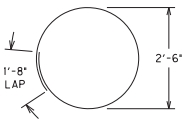
MATERIALS:

CLAMP/CLEVIS- ASTM A36 (GRADE 36)/ASTM A572 (GRADE 50)

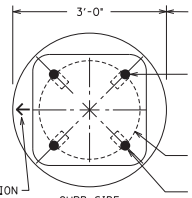
BOLTS (EXCEPT U- BOLTS)- HIGH STRENGTH ASTM A325, ASTM A449, OR ASTM A490

U- BOLTS- MINIMUM ASTM A36

GALVANIZING- ASTM A153

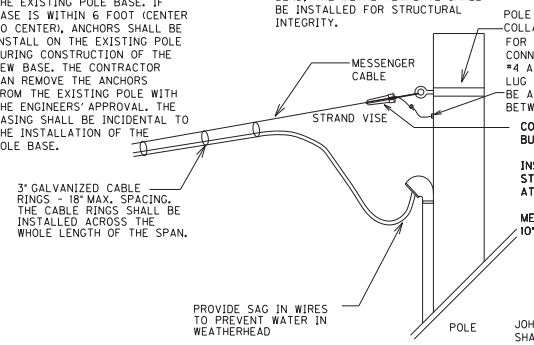


BENDING DETAIL FOR TIE BARS



IF ANCHOR BOLTS ARE STRAIGHT NOT BEND, THE METAL TEMPLATE SHALL BE INSTALLED FOR STRUCTURAL INTEGRITY.

THE CONTRACTOR SHALL ADD A 16-GAUGE CORRUGATED STEEL CASING TO THE INSTALLATION OF THE NEW POLE BASE IF BASE IS 9 FEET (CENTER TO CENTER) FROM THE EXISTING POLE BASE. IF BASE IS WITHIN 6 FOOT (CENTER TO CENTER), ANCHORS SHALL BE INSTALL ON THE EXISTING POLE DURING CONSTRUCTION OF THE NEW BASE. THE CONTRACTOR CAN REMOVE THE ANCHORS FROM THE EXISTING POLE WITH THE ENGINEERS' APPROVAL. THE CASING SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE BASE.



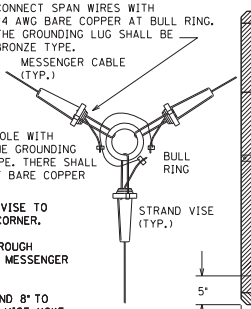
SPAN WIRE DETAIL

FOR EQUIPMENT GROUND:
CONNECT SPAN WIRE TO POLE WITH #4 AWG BARE COPPER. THE GROUNDING LUG SHALL BE BRONZE TYPE. THERE SHALL BE AT LEAST 1.5 FOOT OF BARE COPPER BETWEEN EACH LUG.

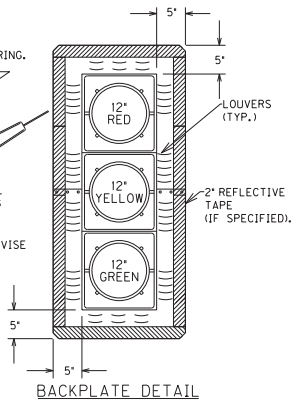
CONNECT EACH STRAND VISE TO BULL RING AT AERIAL CORNER.

INSTALL MESSENGER THROUGH STRAND VISE AND BEND MESSENGER AT EXIT POINT.

MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE.



DROP BOX AERIAL CORNER DETAIL



BACKPLATE DETAIL

JOHNNYBALLS OR STRAIN ISOLATORS SHALL NOT BE USED ON THE ATTACHMENT OF THE SPAN WIRE TO THE POLE.

INSTALL MESSENGER THROUGH STRAND VISE AND BEND MESSENGER AT EXIT POINT.

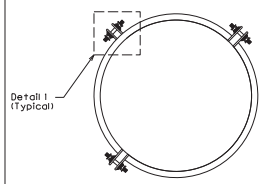
MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE.

THERE SHALL BE A SEPARATE COLLAR USED FOR EACH SPAN.

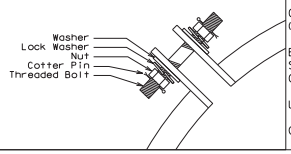
FOR EQUIPMENT GROUND SIGNAL/PED HEADS: CONNECT GREEN WIRE FROM 5C/7C IMSA CABLE TO CONNECTOR THAT WILL BE INSTALLED UNDER ONE OF THE BOLTS FOR THE TRI STUD ASSEMBLY THAT CONNECTS THE HEADS. WE RECOMMEND BUTTED SEAM CLOSED BARREL FOR THIS CONNECTION.

SPECIAL NOTE FOR POLE DOOR:
FURNISH A SHOCK HAZARD WARNING STICKER ON DISCONNECT WITH THE FOLLOWING INFORMATION:
VOLTAGE (120 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

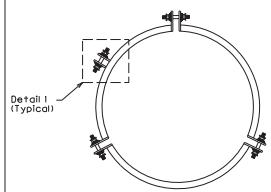
Clamp Assembly Alt. 1



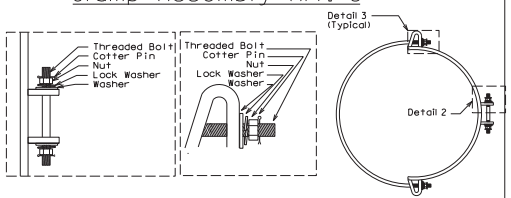
Detail 1



Clamp Assembly Alt. 2



Clamp Assembly Alt. 3

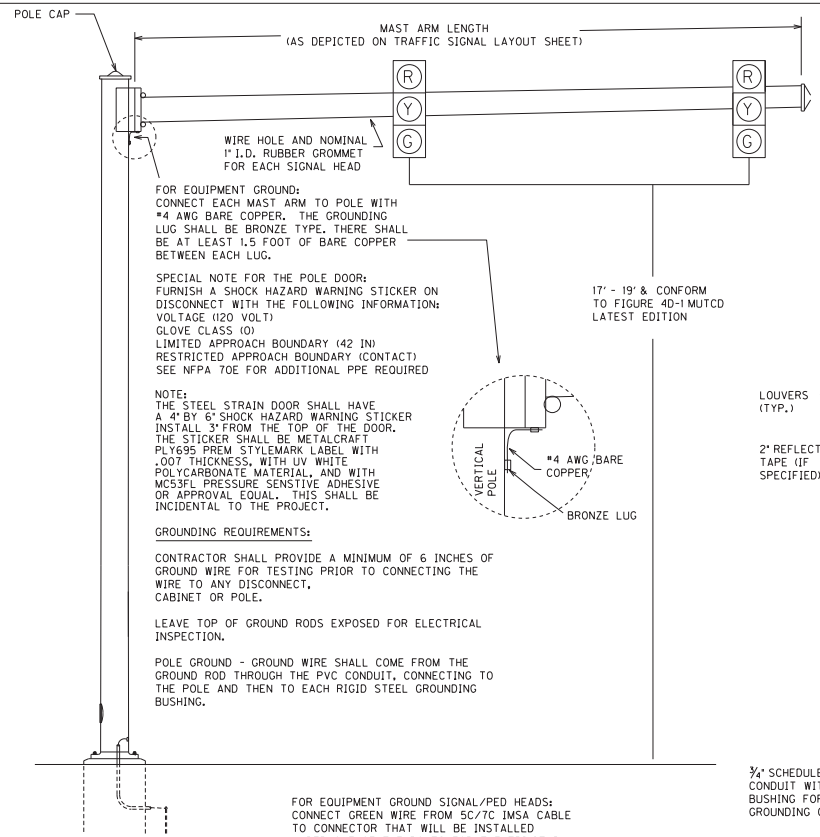


POLE BASE/SIGNAL HEAD DETAILS

11/27/2024

Power inRoads v8.11.9.912
E-SHEET NAME: T0060OPO
USER: Swansegart
DATE PLOTTED: December 20, 2024
FILE NAME: G:\PWWORK\NC\EASTON\D2232416\ALL SIGNAL STANDARDS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T7



MONOTUBE MAST ARM POLE DETAIL

NOTES:

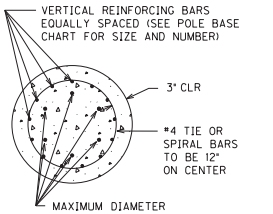
ALL CONDUITS USED FOR THE TELEPHONE, GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "23157EN". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE POLE BASE.

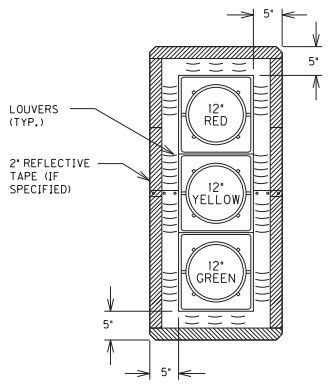
ALL CONDUITS SHALL BE INSTALLED 6 INCHES ABOVE THE CONCRETE POLE BASE.

FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

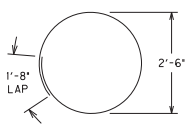
OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A ¾" RIGID STEEL CONDUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE CONDUIT.

UNDERGROUND SERVICE WIRES SHALL BE INSTALLED IN ¾" RIGID STEEL CONDUIT AS SHOWN ON THE CONTROLLER CABINET DETAIL SHEET.

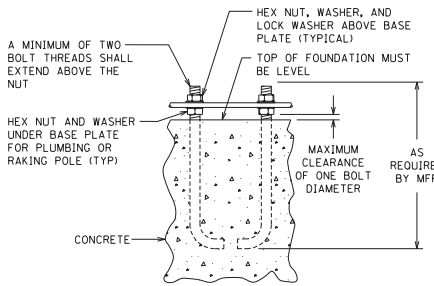


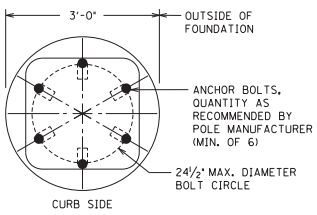


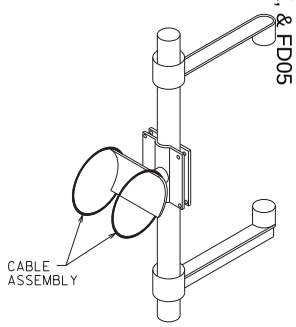
BACKPLATE DETAIL



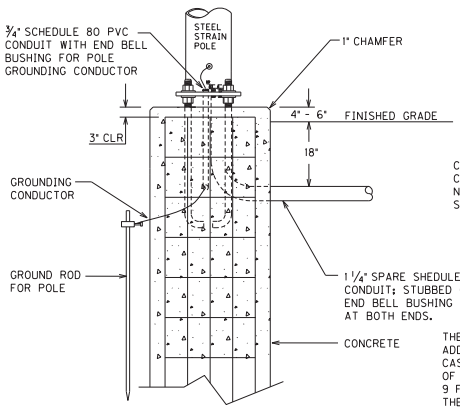
BENDING DETAIL
FOR TIE BARS







BRACKET ASSEMBLY FOR MOUNTING
SIGNAL HEADS ON MAST ARMS

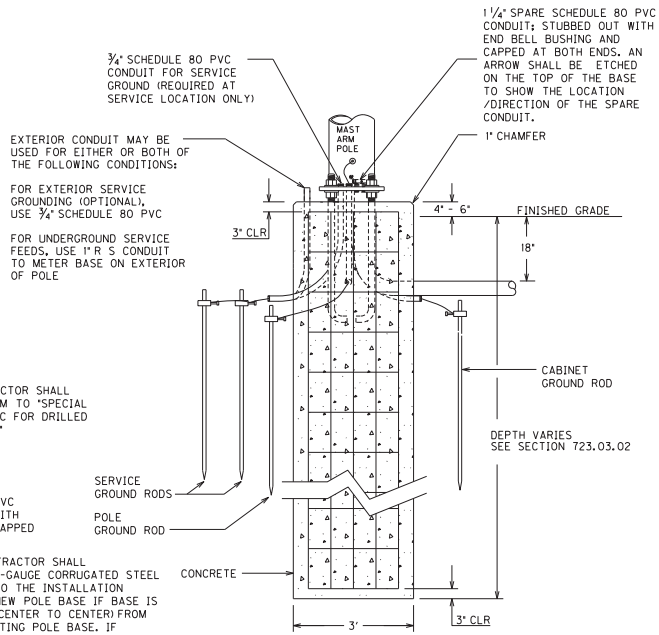


MAST ARM POLE BASE
WITH POLE GROUND DETAIL

THE CONTRACTOR SHALL INSTALL SPACERS ON THE POLE BASE CAGES (TOP, BOTTOM, & SIDES) TO GUARANTEE A 3" COVER TO THE EDGE OF THE POURED CONCRETE. THE SPACERS SHALL CONFORM TO "SPECIAL NOTE IIC".

CONTRACTOR SHALL
CONFORM TO "SPECIAL
NOTE IIC FOR DRILLED
SHAFTS"

THE CONTRACTOR SHALL ADD A 16-GAUGE CORRUGATED STEEL CASING TO THE INSTALLATION OF THE NEW POLE BASE IF BASE IS 9 FEET (CENTER TO CENTER) FROM THE EXISTING POLE BASE. IF BASE IS WITHIN 6 FOOT (CENTER TO CENTER), ANCHORS SHALL BE INSTALL ON THE EXISTING POLE DURING CONSTRUCTION OF THE NEW BASE. THE CONTRACTOR CAN REMOVE THE ANCHORS FROM THE EXISTING POLE WITH THE ENGINEERS' APPROVAL. THE CASING SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE BASE.

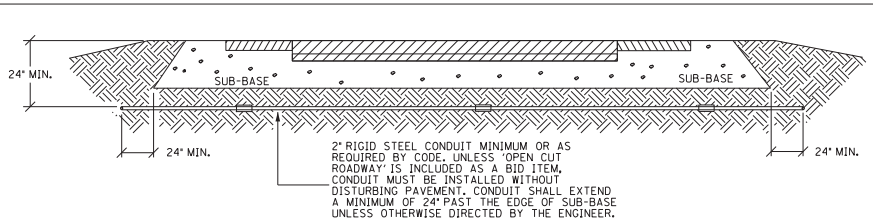


MAST ARM POLE BASE WITH SERVICE, POLE,
AND POLE MOUNTED CABINET GROUNDING DETAILS

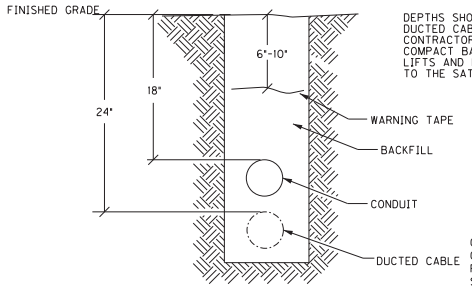
7/9/2024

MAST ARM DETAILS

Power InRoads v8.11.9.912 | E-SHEET NAME: TOOTOOMA | USER: Swonsegort | DATE PLOTTED: December 20, 2024 | FILE NAME: C:\PWWORKING\EASTON\D2232465\ALL SIGNAL STANDARDS.DGN



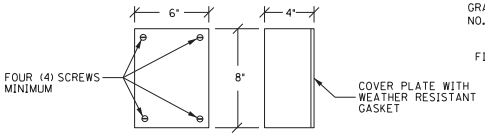
CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL



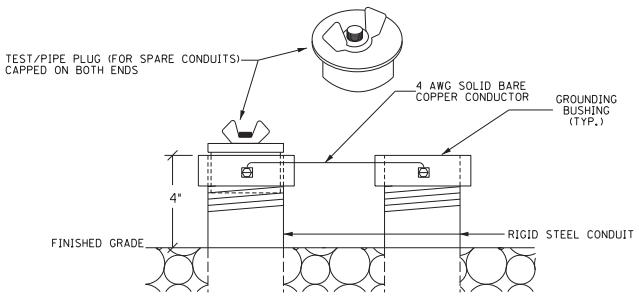
DEPTHS SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN 9" MAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

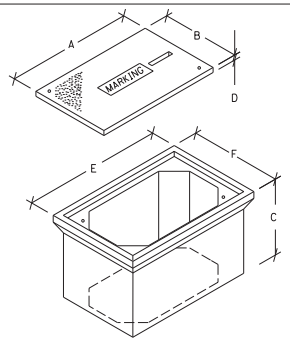
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



ABOVE GROUND BOX

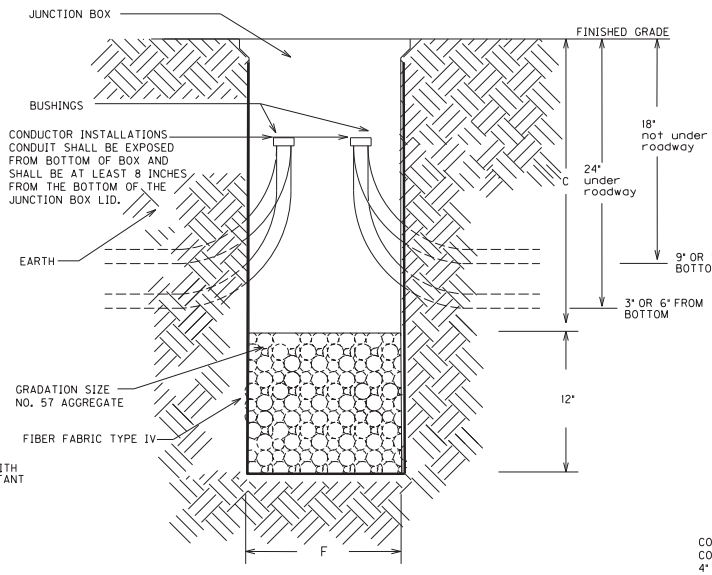


TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL



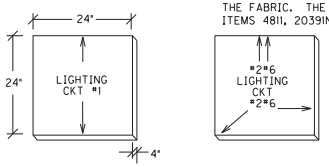
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1¾" •	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

• MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED

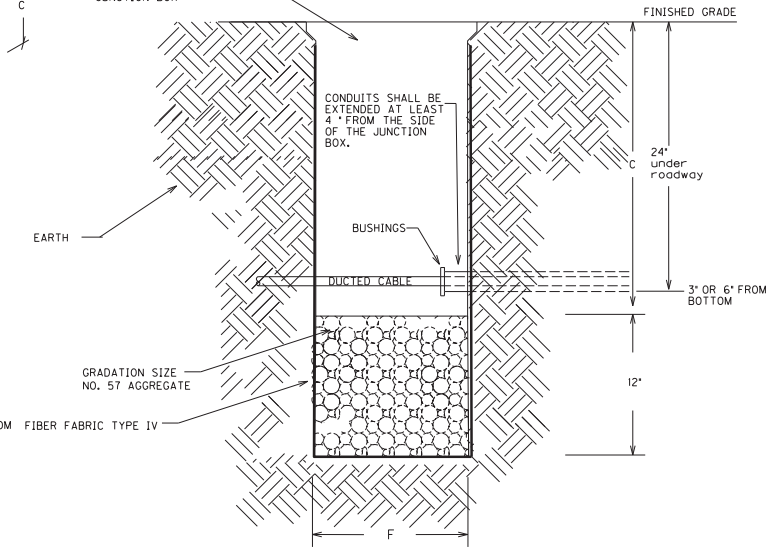


JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING

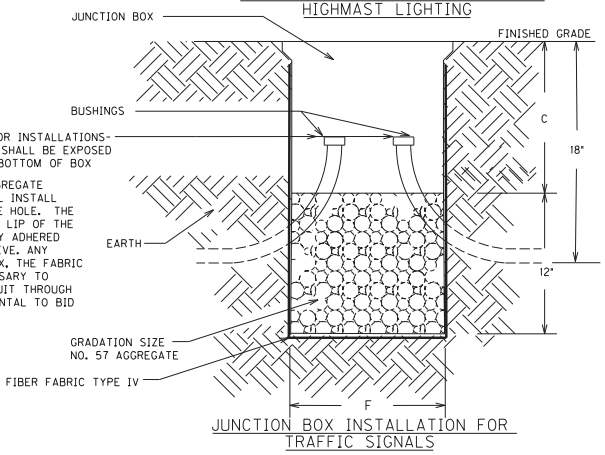
BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE 'X CUT' ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 481I, 2039INS835, OR 2039ZNS835.



CONCRETE CABLE MARKERS



JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING



JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS

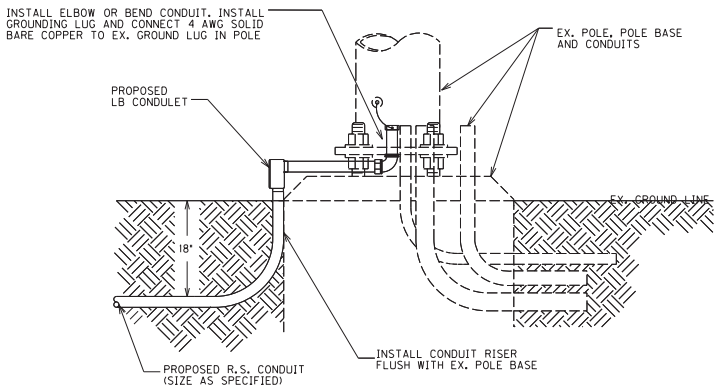
COUNTY OF	ITEM NO.	SHEET #
FAYETTE	7-9012.50	T8

TRAFFIC SIGNAL AND ROADWAY LIGHTING
JUNCTION BOX AND CONDUIT DETAILS

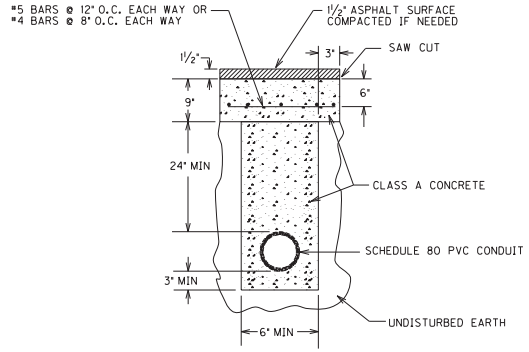
3/13/2017

FILE NAME: G:\PWWORK\NG\EASTON\D2232416\ALL SIGNAL STANDARDS.DGN
USER: Swansegort
DATE PLOTTED: December 20, 2024
E-SHEET NAME: T08001.dB
Power inRoads v8.11.9.912

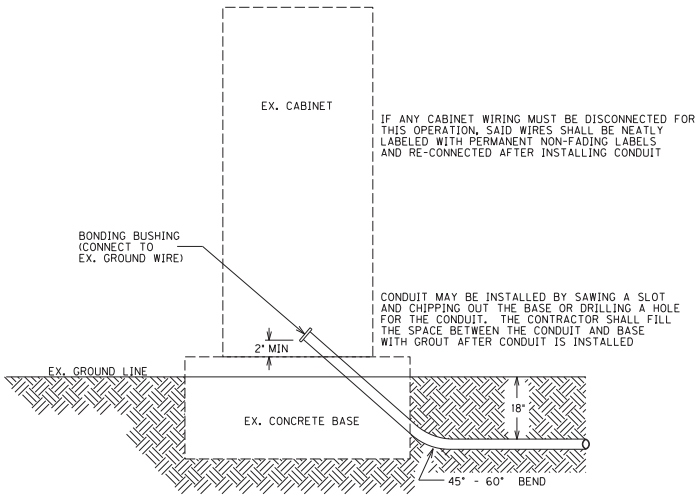
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T9



CONDUIT INSTALLATION IN EX. POLE BASE



OPEN CUT PAVEMENT DETAIL



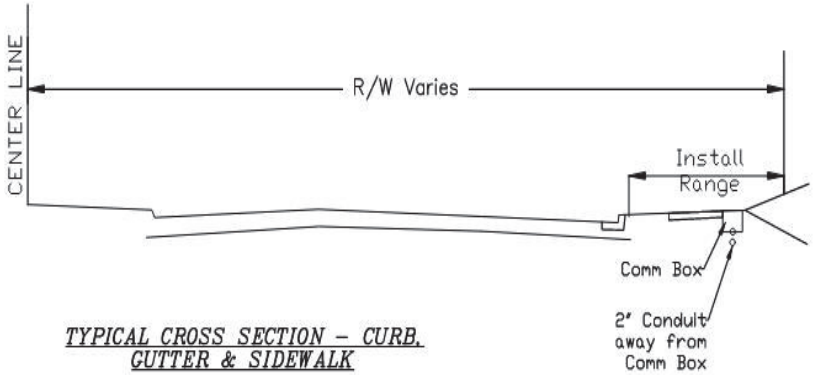
CONDUIT INSTALLATION IN EX. CABINET BASE

3/10/2017

CONDUIT/FIBER INSTALLATIONS IN NEW/EXISTING LOCATIONS

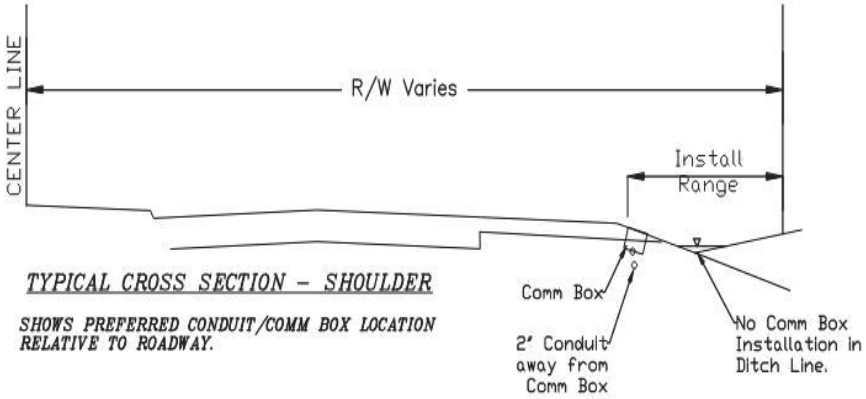
POWER INROADS V8.11.9.912 | E-SHEET NAME: TO090DSP | USER: SWANSEGART | DATE PLOTTED: DECEMBER 20, 2024 | FILE NAME: C:\PWWORKING\EAST01\D2232416\ALL SIGNAL STANDARDS.DGN

COUNTY OF	ITEM NO.	SHEET
FAYETTE	7-9012.50	T10



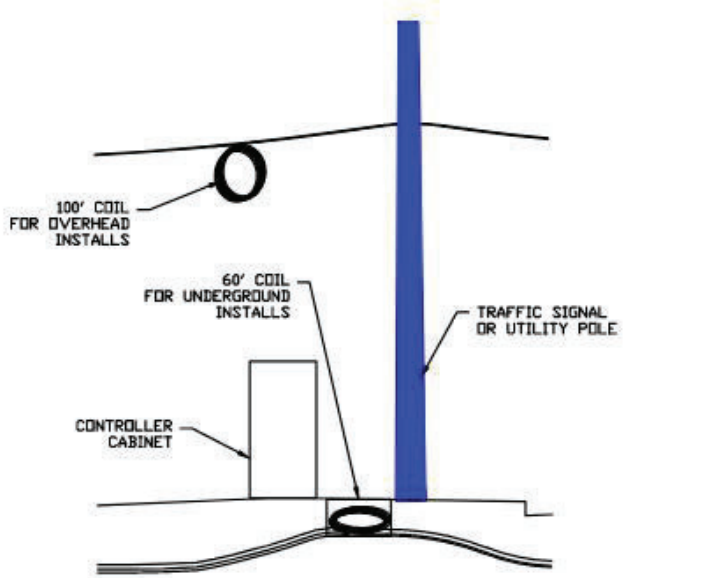
TYPICAL CROSS SECTION – CURB, GUTTER & SIDEWALK

SHOWS PREFERRED CONDUIT/COMM BOX LOCATION RELATIVE TO ROADWAY.

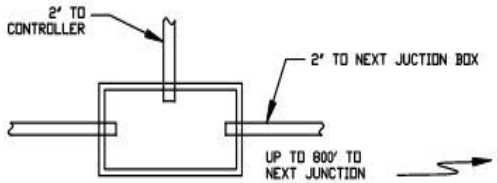


TYPICAL CROSS SECTION – SHOULDER

SHOWS PREFERRED CONDUIT/COMM BOX LOCATION RELATIVE TO ROADWAY.



TYPICAL SLACK LOOP ARRANGMENT AT EACH TRAFFIC SIGNAL

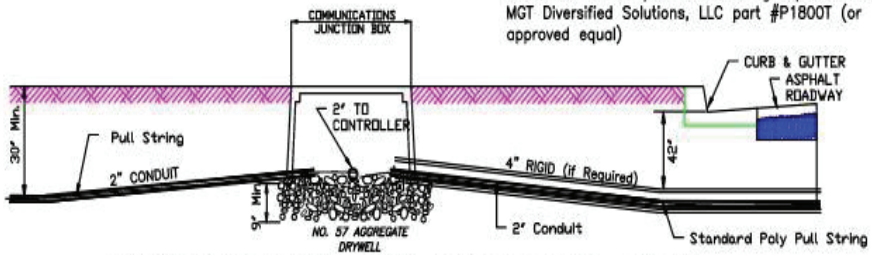


STANDARD INSTALLATION - PLAN VIEW

CONDUIT SPECIFICATIONS
CONDUIT SHALL BE SMOOTHWALL or RIBBED, HIGH DENSITY POLYETHYLENE (HDPE), SCHEDULE 80, ORANGE.

DETECTABLE FIBER-OPTIC CABLE PULLING TAPE SHALL BE PLACED INSIDE CONDUIT AS PART OF THE CONDUIT INSTALLATION UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

Detectable Fiber-Optic Cable Pulling Tape shall be installed along with fiber optic cable when it is pulled. Pulling tape shall be Tensile Strength of 1,800-pounds, Width of 5/8-inch, Woven Construction, Pre-Lubricated, with Foot-Markings. Detectable Fiber-Optic Cable Pulling Tape shall be MGT Diversified Solutions, LLC part #P1800T (or approved equal)



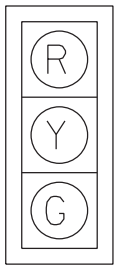
COMMUNICATIONS CONDUIT - STANDARD INSTALLATION - PROFILE

FIBER DETAILS

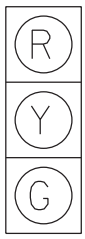
POWER INROADS V8.11.9.912 | E-SHEET NAME: T010005P | USER: SWANSEGART | DATE PLOTTED: JUNE 20, 2023 | FILE NAME: C:\PWORKING\EAST01\D2232416\ALL SIGNAL STANDARDS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T11

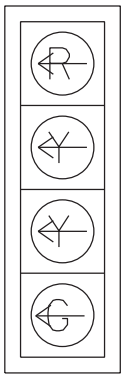
SIGNAL HEADS



HEADS # 2A, 2B, 2C, 6A, 6B



HEADS # 4A, 4B, 8A, 8B



HEADS # 1A, 3A, 5A, 7A



ALL COUNTDOWN PEDESTRIAN SIGNALS

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

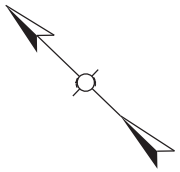
NOTES:

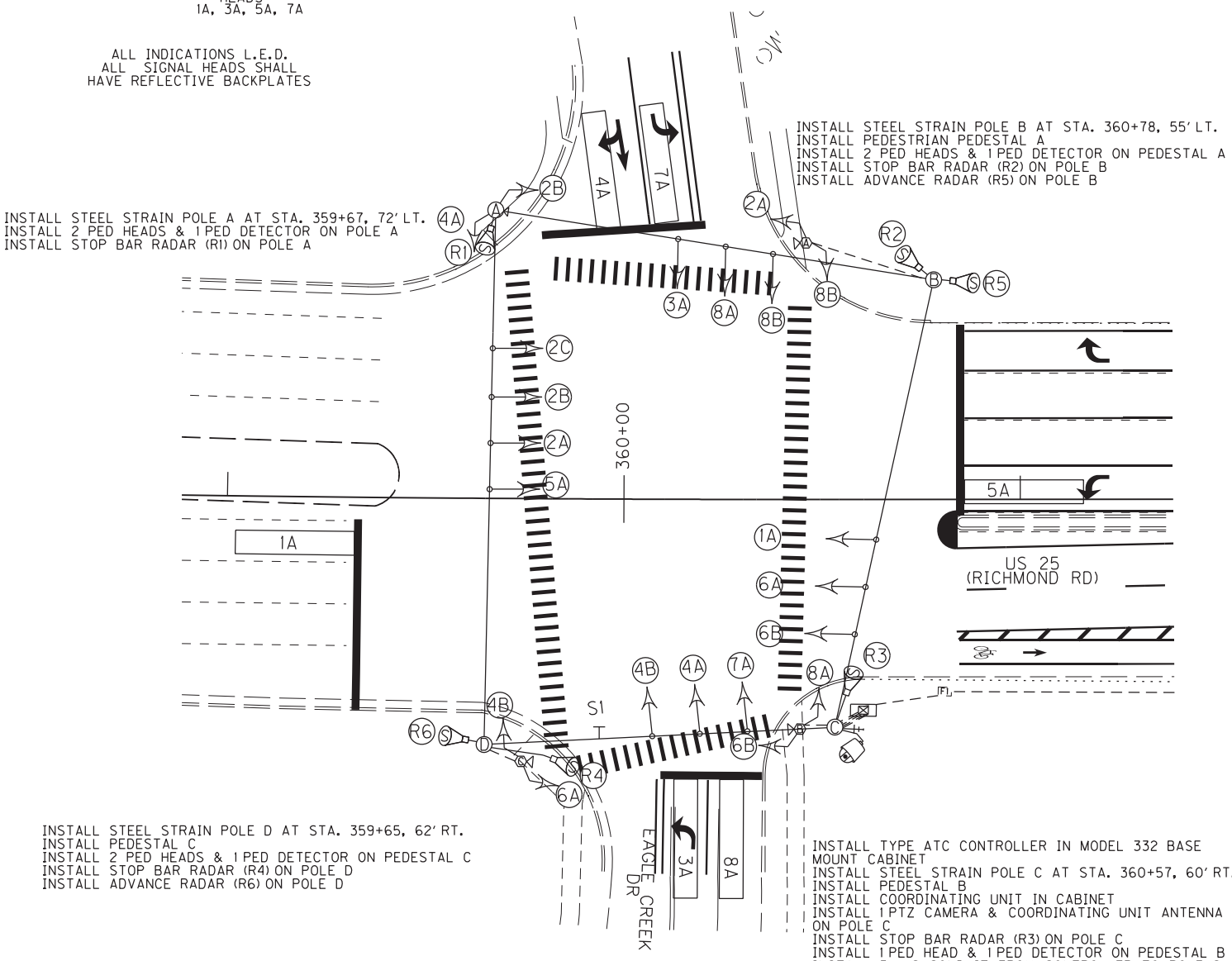
THE CABINET SHALL SUPPLY CLAMP ASSEMBLIES FOR MESSENGER CABLE ATTACHMENTS BASED ON THE PRELIMINARY DESIGN OF THE POLES. IF THE ATTACHMENT LOCATIONS FOR CLAMP ASSEMBLIES ARE MORE THAN 2 FEET FROM THE TOP OF THE POLE, THE CONTRACTOR SHALL PROVIDE REPLACEMENT CLAMP ASSEMBLIES THAT WILL FACILITATE THE INSTALLATION. CONTRACTOR SUPPLIED CLAMP ASSEMBLIES SHALL BE INCIDENTAL TO THE INSTALLATION OF THE STEEL STRAIN POLE. CONTRACTOR SUPPLIED CLAMP ASSEMBLIES SHALL CONFORM TO THE SPECIFICATIONS STATED ON THE POLE BASE/SIGNAL HEAD DETAILS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE REPLACEMENT ASSEMBLIES TO THE DIVISION OF TRAFFIC OPERATIONS FOR APPROVAL.

ALL MESSENGER IS 15,400 LBS.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS.

REMOVE AND REINSTALL SIGN S1 (RIGHT TURN ON RED MUST YIELD TO U TURN), BUT USE NEW SUPPLIED HANGER.
REMOVE AND REINSTALL STREET SIGNS (ARMS/BANDS). IF THE BANDS/ARMS ARE NOT REUSABLE, THE CONTRACTOR SHALL SUPPLY MATERIALS. CONNECT A 1-7C TO EACH ILLUMINATED SIGN AND RUN TO THE NEW TRAFFIC CABINET. THE REMOVAL/REINSTALLING OF STREET SIGNS SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.





LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

SCALE: 1"=40'

SIGNAL PLAN
US 25 (RICHMOND RD) @ EAGLE CREEK DR

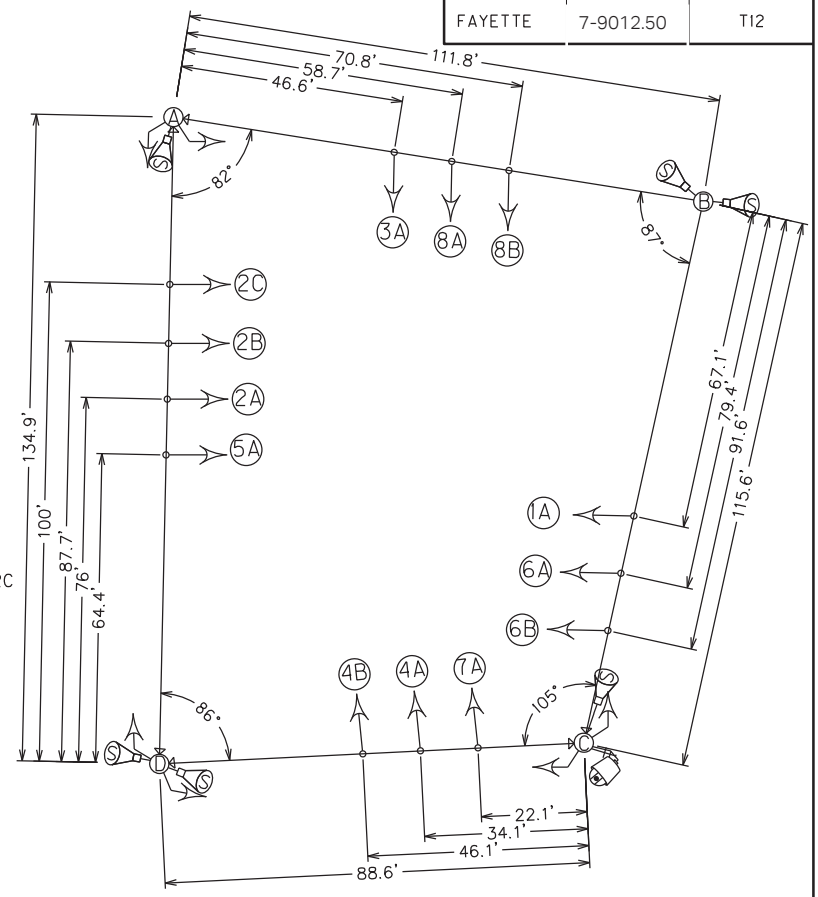
FILE NAME: C:\PWWORKING\EAST01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: March 17, 2025
E-SHEET NAME: T00200SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T12

STEEL STRAIN POLES

POLE	HEIGHT	SPAN	ATT. HT.	CALC. SERV. MOMENT	SAG
A	32.0'	A-B	27.0'	232.24 K-FT	3%
		A-D	30.0'		
B	32.0'	B-A	29.0'	213.33 K-FT	3%
		B-C	30.0'		
C	36.0'*	C-B	30.0'	185.13 K-FT	3%
		C-D	29.0'		
D	32.0'	D-A	31.0'	232.56 K-FT	3%
		D-C	28.0'		

* EXTENDED HEIGHT FOR MOUNTING PTZ CAMERA.



WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 1A	SH 1A
1 - #14/7C	CONTROLLER	SH 2C	SH 2A & 2B & 2C
1 - #14/7C	CONTROLLER	SH 3A	SH 3A
1 - #14/7C	CONTROLLER	SH 4B	SH 4B & 4A
1 - #14/7C	CONTROLLER	SH 5A	SH 5A
1 - #14/7C	CONTROLLER	SH 6A	SH 6A & 6B
1 - #14/7C	CONTROLLER	SH 7A	SH 7A
1 - #14/7C	CONTROLLER	SH 8A	SH 8B & 8A
1 - #14/7C	CONTROLLER	PEDESTAL C	PH 6A
1 - #14/7C	CONTROLLER	PEDESTAL B	PH 6B
1 - #14/7C	CONTROLLER	POLE A	PH 4A
1 - #14/7C	CONTROLLER	PEDESTAL C	PH 4B
1 - #14/7C	CONTROLLER	PEDESTAL A	PH 2A
1 - #14/7C	CONTROLLER	POLE A	PH 2B
1 - #14/7C	CONTROLLER	PEDESTAL B	PH 8A
1 - #14/7C	CONTROLLER	PEDESTAL A	PH 8B
1 - RADAR CABLE	CONTROLLER	POLE A	R1
1 - RADAR CABLE	CONTROLLER	POLE B	R2
1 - RADAR CABLE	CONTROLLER	POLE C	R3
1 - RADAR CABLE	CONTROLLER	POLE D	R4
1 - RADAR CABLE	CONTROLLER	POLE B	R5
1 - RADAR CABLE	CONTROLLER	POLE D	R6
1 - PTZ CABLE	CONTROLLER	POLE C	PTZ CAMERA
1 - ANTENNA CABLE	CONTROLLER	POLE C	ANTENNA
1 - #14/2C	CONTROLLER	PEDESTAL C	PB 4B
1 - #14/2C	CONTROLLER	PEDESTAL B	PB 6B
1 - #14/2C	CONTROLLER	POLE A	PB 4A
1 - #14/2C	CONTROLLER	PEDESTAL C	PB 6A
1 - #14/2C	CONTROLLER	PEDESTAL A	PB 2A
1 - #14/2C	CONTROLLER	POLE A	PB 2B
1 - #14/2C	CONTROLLER	PEDESTAL B	PB 8A
1 - #14/2C	CONTROLLER	PEDESTAL A	PB 8B

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
3A	3	6' X 30'	0'
4A	4	6' X 30'	0'
5A	5	6' X 30'	0'
7A	7	6' X 30'	0'
8A	8	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 3 RED	PHASE 7 RED
STEADY YELLOW ARROW	ORANGE	PHASE 3 YELLOW	PHASE 7 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 3 GREEN	PHASE 7 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 4	PED YELLOW PHASE 8
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE (A)
- PEDESTAL POLE (D)
- JUNCTION BOXES TYPE A, B & C (B9)
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR (S)
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

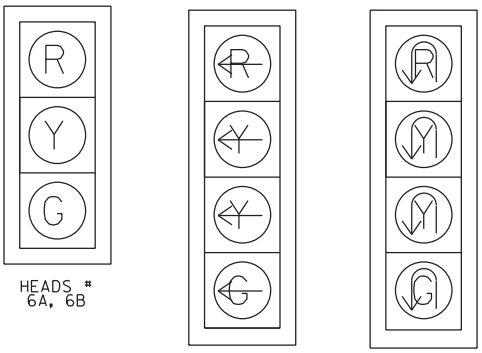
SCALE: 1"=40'

SIGNAL PLAN
US 25 (RICHMOND RD) @ EAGLE CREEK DR

FILE NAME: C:\PW\WORKING\EAST01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: December 24, 2024
E-SHEET NAME: T00200SG
Power InRoads v8i 11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T13

SIGNAL HEADS



HEADS # 6A, 6B

HEADS # 5A, 5B

HEAD # 5C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

NOTES:

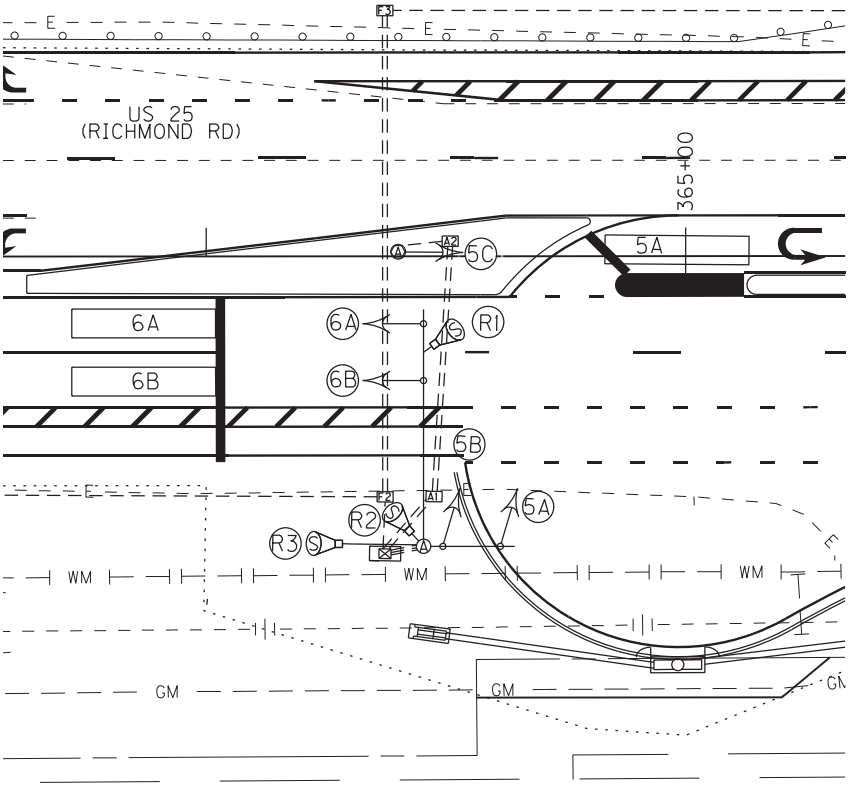
EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

SH 6A & 6B SHALL HAVE THE MAXIMUM BOTTOM HEIGHT OF 18.4'



INSTALL TYPE ATC CONTROLLER IN MODEL 332 BASE MOUNT
INSTALL ELECTRICAL SERVICE AND METER ON POLE A
INSTALL PEDESTAL A AT STA. 364+61, 3' LT.

INSTALL MAST ARM POLE A AT STA. 364+45, 60' RT.
INSTALL STOP BAR RADAR (R2) & ADVANCE RADAR (R3) ON POLE A
INSTALL STOP BAR RADAR (R1) ON ARM 1 ATTACHED TO POLE A

INSTALL JUNCTION BOX JB A2
INSTALL JUNCTION BOX JB A1

INSTALL 1 - 2" CONDUIT FROM CONTROLLER TO JB F2
INSTALL 2 - 2" CONDUIT FROM CONTROLLER TO JB A1
INSTALL 3 - 2" CONDUIT FROM CONTROLLER TO POLE A
INSTALL 2 - 2" CONDUIT FROM JB A1 TO JB A2
INSTALL 1 - 2" CONDUIT FROM JB A2 TO PEDESTAL A

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 5A	SH 5A & 5B
1 - #14/7C	CONTROLLER	SH 6A	SH 6B & 6A
1 - #14/7C	CONTROLLER	SH 5C	SH 5C
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R1
1 - RADAR CABLE	CONTROLLER	POLE A	RADAR - R2
1 - RADAR CABLE	CONTROLLER	POLE A	RADAR - R3

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	22.0'	1	20.0'	83.84 K-FT
		2	20.0'	

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
5A	5	6' X 30'	0'
6A	6	6' X 30'	0'
6B	6	6' X 30'	0'
6C	6	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

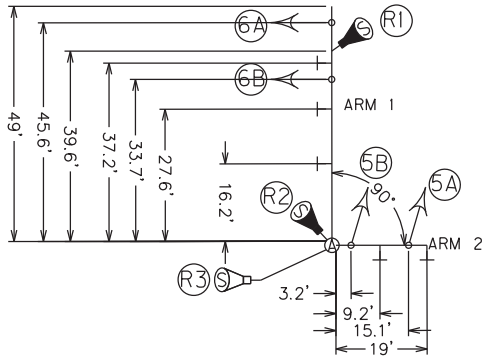
SCALE: 1"=40'

SIGNAL PLAN
US 25 AT NB LOON FOR YORKSHIRE BLVD

FILE NAME: C:\PW\WORKING\EAST\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: December 22, 2024
E-SHEET NAME: T00300SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T14

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRAIN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	6B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	R1	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	6A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	2	5B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	5A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

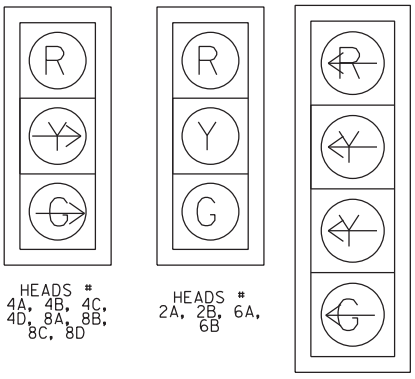
SIGNAL PLAN

US 25 AT NB LOON FOR YORKSHIRE BLVD

FILE NAME: C:\PW\WORKING\EAST\01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T00300SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T15

SIGNAL HEADS



HEADS # 4A, 4B, 4C, 4D, 8A, 8B, 8C, 8D

HEADS # 2A, 2B, 6A, 6B

HEADS # 1A, 1B, 5A, 5B, 5C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES



ALL COUNTDOWN PEDESTRIAN SIGNALS

NOTES:

EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

C1 AND C2 CONTROL NB AND SB TRAFFIC RESPECTIVELY.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

REMOVE AND REINSTALL STREET SIGNS (ARMS/BANDS). IF THE BANS/ARMS ARE NOT REUSABLE, THE CONTRACTOR SHALL SUPPLY MATERIALS. CONNECT A 1-7C TO EACH ILLUMINATED SIGN AND RUN TO THE NEW TRAFFIC CABINET. THE REMOVAL/REINSTALLING OF STREET SIGNS SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

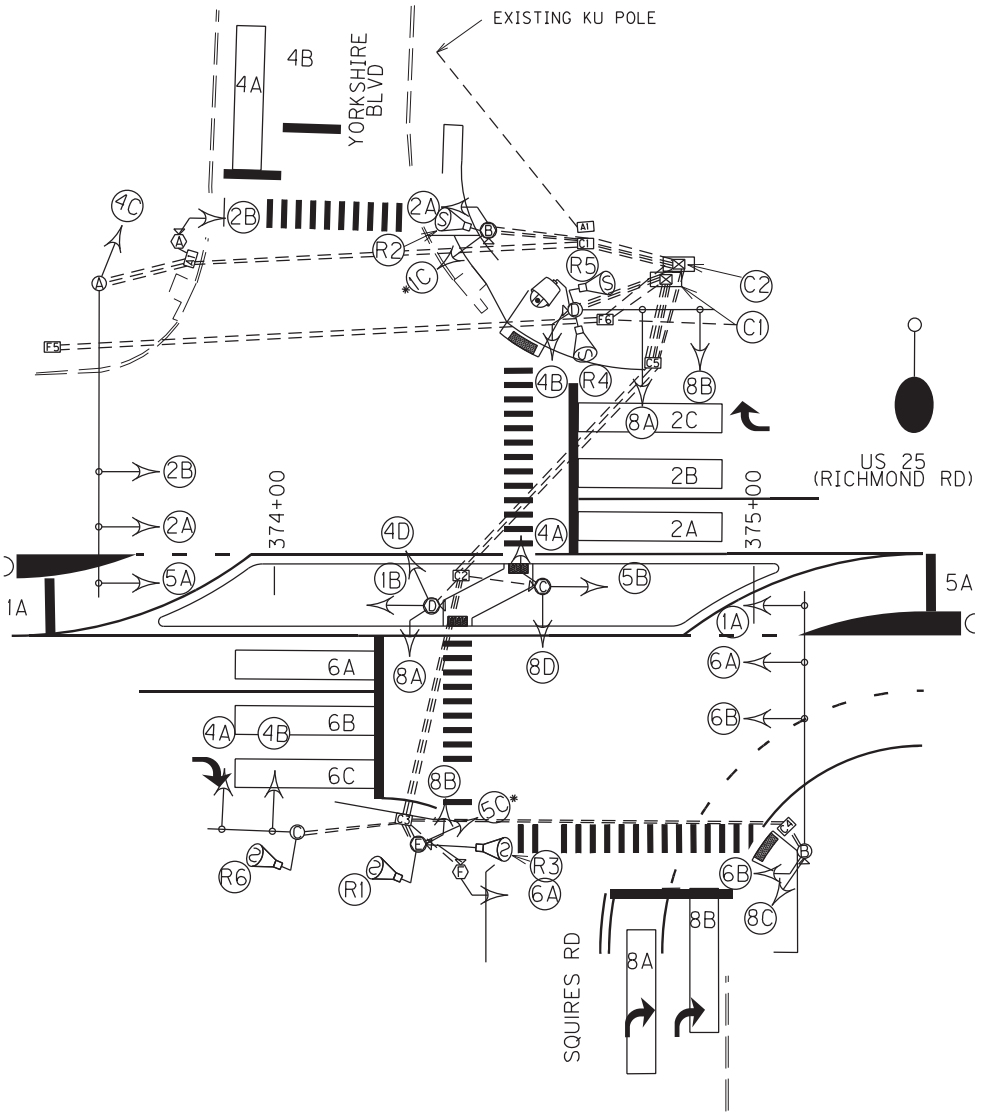
NORTHEAST CORNER:
INSTALL C1 TYPE ATC CONTROLLER IN MODEL 332
INSTALL C2 TYPE ATC CONTROLLER IN MODEL 332
INSTALL METER AND 2 DISCONNECTS ON POLE D (ONE FOR EACH CABINET)
INSTALL 1-1" RIGID STEEL SERVICE CONDUIT FROM POLE D DISCONNECTS TO EACH CONTROLLER CABINET (DO NOT RUN THROUGH ANY JB).
INSTALL MAST ARM POLE D AT 374+63, 59' LT.
INSTALL 2 RADAR (STOP BAR-R4, ADVANCE-R5), 1 PTZ CAMERA, ETHERNET RADIO & 1 SIGNAL HEAD ON POLE D
INSTALL 1 PED HEAD & 1 PED DETECTOR ON POLE D
INSTALL LUMINAIRE POLE B
INSTALL 1 STOP BAR RADAR, 1 PED HEAD, 1 PED DETECTOR & 1 SIGNAL HEAD (BOTTOM AT 17') ON LUMINAIRE POLE B
INSTALL JUNCTION BOX C1 & C5
INSTALL 1-2" CONDUIT FROM CAB C1 TO JB F6
INSTALL 4-2" CONDUIT FROM CAB C1 TO JB C1
INSTALL 2-2" CONDUIT FROM CAB C1 TO JB C5
INSTALL 1-2" CONDUIT FROM CAB C2 TO JB F6
INSTALL 4-2" CONDUIT FROM CAB C2 TO JB C5
INSTALL 3-2" CONDUIT FROM CAB C2 TO POLE D
INSTALL 2-2" CONDUIT FROM JB C1 TO JB A1
INSTALL 3-2" CONDUIT FROM JB C1 TO LUMINAIRE POLE B
INSTALL 3 - 3" CONDUIT FROM JB C5 TO JB C2

NORTHWEST CORNER:
INSTALL MAST ARM POLE A AT STA. 373+63, 65' LT.
INSTALL PEDESTAL A
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL A
INSTALL JUNCTION BOX A1
INSTALL 3 2" CONDUIT FROM JB A1 TO POLE A

MEDIAN:
INSTALL 2 - 3" CONDUIT FROM JB C2 TO JB C3
INSTALL LUMINAIRE POLE C & D
INSTALL 1 PED HEAD, 1 PED DETECTOR, SH 5B (BOTTOM AT 12'), & SH 8D (BOTTOM AT 17') ON LUMINAIRE POLE C
INSTALL 1 PED HEAD, 1 PED DETECTOR, SH 1B (BOTTOM AT 12'), & SH 4D (BOTTOM AT 17') ON LUMINAIRE POLE D

SOUTHWEST CORNER:
INSTALL MAST ARM POLE C AT STA. 374+4.778, 49.5' RT.
INSTALL LUMINAIRE POLE E
INSTALL 2 RADARS (STOP BAR-R1/R3), 1 PED HEAD & 1 PED DETECTOR & SH 5C (BOTTOM AT 17') ON LUMINAIRE POLE E
INSTALL PEDESTAL F
INSTALL 1 PED HEAD, 1 PED DETECTOR ON PEDESTAL F
INSTALL JUNCTION BOX C3
INSTALL ADVANCE RADAR (R6) ON POLE C
INSTALL 2 - 2" CONDUIT FROM JB C3 TO JB C4

SOUTHEAST CORNER:
INSTALL MAST ARM POLE B AT STA. 375+11, 54' RT.
INSTALL 1 PED HEAD, 1 PED DETECTOR & 1 SIGNAL HEAD ON POLE B
INSTALL JUNCTION BOX JB C4
INSTALL 2 - 2" CONDUIT FROM JB C4 TO POLE B



MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	22.0'	1	18.0'	139.83 K-FT
B	22.0'	1	20.0'	89.34 K-FT
C	24.0'	1	22.0'**	37.13 K-FT
D	36.0'*	1	22.0'**	52.30 K-FT

* EXTENDED HEIGHT FOR MOUNTING PTZ CAMERA.
** MOUNT ALL SIGNAL HEADS AND SIGNS AT 20 FEET ABOVE GRADE OF THE ROADWAY

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'
2C	2	6' X 30'	0'
4A	4	6' X 30'	0'
4B	4	6' X 30'	0'
5A	5	6' X 30'	0'
6A	6	6' X 30'	0'
6B	6	6' X 30'	0'
6C	6	6' X 30'	0'
8A	8	6' X 30'	0'
8B	8	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

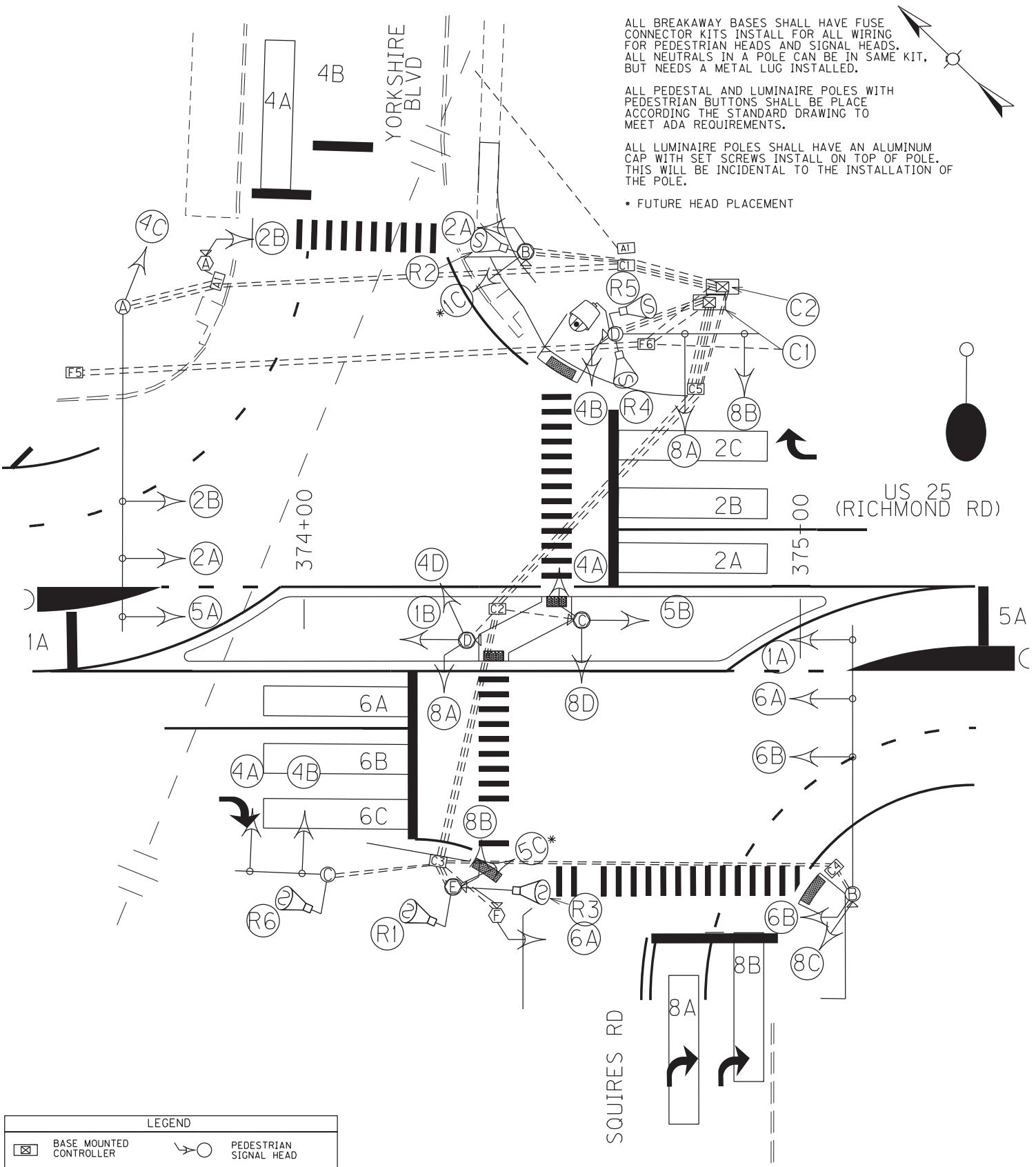
SCALE: 1"=40'

SIGNAL PLAN

US 25 AT YORKSHIRE BLVD/SQUIRES RD

FILE NAME: C:\PW\WORKING\EAST\D1D2232416\KYTC_2D.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME: T00400SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	TI6



LEGEND

⊠	BASE MOUNTED CONTROLLER	○	PEDESTRIAN SIGNAL HEAD
Ⓐ	STEEL STRAIN POLE	○	SIGNAL HEAD
Ⓟ	PEDESTAL POLE		STOP BAR/ADVANCE DETECTOR
B9	JUNCTION BOXES TYPE A, B & C	◁	ACCESSIBLE PED DETECTOR
1A	DETECTION ZONE		ANTENNA
— — —	2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)		PTZ CAMERA

THE CONTRACTOR SHALL ADD A STEEL CASING TO THE INSTALLATION OF THE NEW POLE BASE PER NOTES ON POLE DETAILS SHEET. EACH EXISTING POLE SHALL BE ANCHORED WITH TWO ANCHORS. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF BID ITEM 23157EN

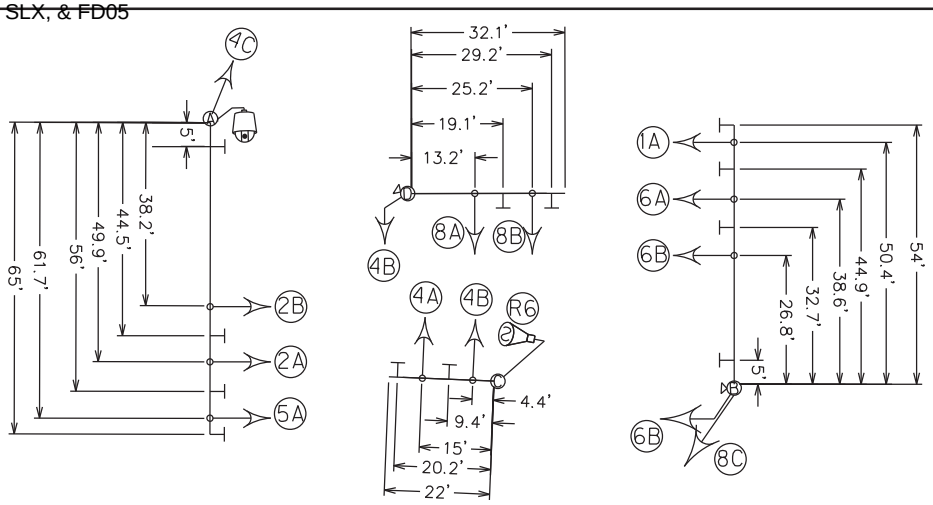
SCALE: 3"=80'

SIGNAL PLAN

US 25 AT YORKSHIRE BLVD/SQUIRES RD

FILE NAME: C:\PW\WORKING\EAST\D1\D2232416\KYTC_2D.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME: T00500SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T17



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	5A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	6B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	6A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	1A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
C	1	4B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
C	1	(FUTURE)	SIGN	30"x42"	16 LBS
C	1	4A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
C	1	(FUTURE)	SIGN	36"x48"	20 LBS
D	1	(FUTURE)	SIGN	33"x42"	16 LBS
D	1	8A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
D	1	8B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
D	1	(FUTURE)	SIGN	36"x48"	20 LBS

LEGEND

BASE MOUNTED CONTROLLER		PEDESTRIAN SIGNAL HEAD	
STEEL STRAIN POLE	A	SIGNAL HEAD	
PEDESTAL POLE	D	STOP BAR/ADVANCE DETECTOR	
JUNCTION BOXES TYPE A, B & C	B9	ACCESSIBLE PED DETECTOR	
DETECTION ZONE	1A	ANTENNA	
2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)		PTZ CAMERA	

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER C1	SH 1A	SH 1A
1 - #14/7C	CONTROLLER C1	SH 1B	SH 1B
1 - #14/7C	CONTROLLER C1	SH 2A	SH 2A & 2B
1 - #14/7C	CONTROLLER C1	SH 4A	SH 4A & 4B
1 - #14/7C	CONTROLLER C1	SH 4C	SH 4C
1 - #14/7C	CONTROLLER C2	SH 5A	SH 5A
1 - #14/7C	CONTROLLER C2	SH 5B	SH 5B
1 - #14/7C	CONTROLLER C2	SH 6A	SH 6A & 6B
1 - #14/7C	CONTROLLER C2	SH 8A	SH 8B & 8A
1 - #14/7C	CONTROLLER C1	SH 8C	SH 8C
1 - #14/7C	CONTROLLER C2	SH 8D	SH 8D
1 - #14/7C	CONTROLLER C1	SH 4D	SH 4D
1 - #14/7C	CONTROLLER C1	PEDESTAL A	PH 2B
1 - #14/7C	CONTROLLER C1	LUMINAIRE POLE B	PH 2A
1 - #14/7C	CONTROLLER C1	LUMINAIRE POLE C	PH 4A
1 - #14/7C	CONTROLLER C2	LUMINAIRE POLE D	PH 8A
1 - #14/7C	CONTROLLER C2	LUMINIARE POLE E	PH 8B
1 - #14/7C	CONTROLLER C2	PEDESTAL F	PH 6A
1 - #14/7C	CONTROLLER C2	POLE B	PH 6B
1 - #14/7C	CONTROLLER C1	POLE D	PH 4B
1 - RADAR CABLE	CONTROLLER C2	LUMINAIRE POLE E	RADAR - R1
1 - RADAR CABLE	CONTROLLER C1	LUMINAIRE POLE B	RADAR - R2
1 - RADAR CABLE	CONTROLLER C2	LUMINAIRE POLE E	RADAR - R3
1 - RADAR CABLE	CONTROLLER C1	POLE D	RADAR - R4
1 - RADAR CABLE	CONTROLLER C1	LUMINAIRE POLE D	RADAR - R5
1 - RADAR CABLE	CONTROLLER C2	POLE C	RADAR - R6
1 - PTZ CABLE	CONTROLLER C1	POLE D	PTZ
1 - ETHERNET CABLE	CONTROLLER C1	POLE D	ETHERNET
1 - #14/2C	CONTROLLER C1	PEDESTAL A	PB 2B
1 - #14/2C	CONTROLLER C1	LUMINAIRE POLE B	PB 2A
1 - #14/2C	CONTROLLER C1	LUMINAIRE POLE C	PB 4A
1 - #14/2C	CONTROLLER C2	LUMINAIRE POLE D	PB 8A
1 - #14/2C	CONTROLLER C2	LUMINIARE POLE E	PB 8B
1 - #14/2C	CONTROLLER C2	PEDESTAL F	PB 6A
1 - #14/2C	CONTROLLER C2	POLE B	PB 6B
1 - #14/2C	CONTROLLER C1	POLE D	PB 4B

SCALE: 1"=40'

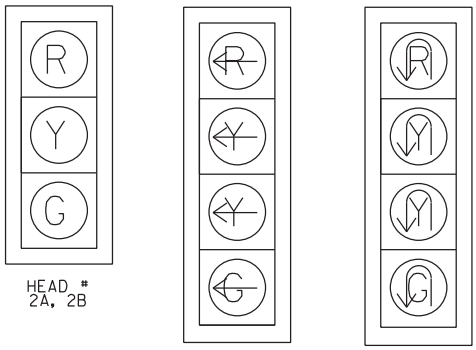
SIGNAL PLAN

US 25 AT YORKSHIRE BLVD/SQUIRES RD

FILE NAME: C:\PWWORKING\EAST011D2232416\KYTC_2D.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T00600SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T18

SIGNAL HEADS



HEAD # 2A, 2B

HEADS # 1A, 1B

HEAD # 1C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

NOTES:

EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

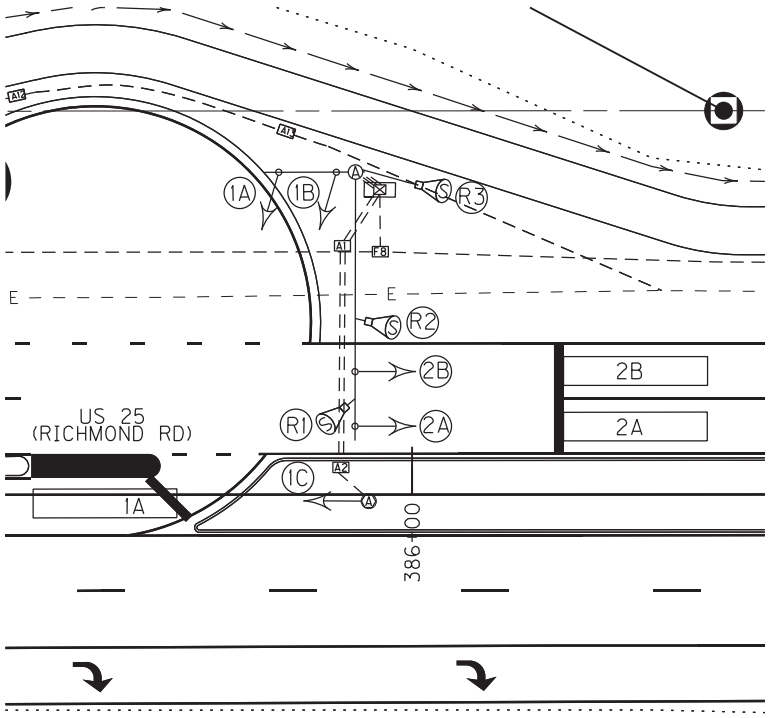
SH 2A & 2B SHALL HAVE THE MAXIMUM BOTTOM HEIGHT OF 17.6'

INSTALL TYPE ATC CONTROLLER IN MODEL 332 BASE MOUNT

INSTALL LUMINAIRE POLE A AT STA. 384 + 90.955 1.3752 RT
INSTALL SH 1C (BOTTOM AT 15.5') ON LUMINAIRE POLE A
INSTALL MAST ARM POLE A AT STA. 385+88, 67' LT.
INSTALL STOP BAR RADAR (R1/R2) ON MAST ARM & ADVANCE RADAR (R3) ON POLE A

INSTALL JUNCTION BOX JB A1
INSTALL JUNCTION BOX JB A2

INSTALL 1 - 2" CONDUIT FROM CONTROLLER TO JB F8
INSTALL 2 - 2" CONDUIT FROM CONTROLLER TO JB A1
INSTALL 4 - 2" CONDUIT FROM CONTROLLER TO POLE A
INSTALL 2 - 2" HDPE FROM JB A1 TO JB A2



WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 2A	SH 2A & 2B
1 - #14/7C	CONTROLLER	SH 1A	SH 1A & 1B
1 - #14/7C	CONTROLLER	SH 1C	SH 1C
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R1
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R2
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R3

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	22.0'	1	17'	149.90 K-FT
		2	19'	

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

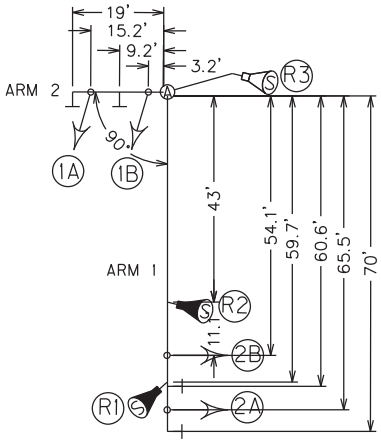
SCALE: 1"=40'

SIGNAL PLAN

US 25 AT SB LOON FOR SQUIRES RD

FILE NAME: C:\PW\WORKING\EAST\D1\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: January 16, 2025
E-SHEET NAME: T00700SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T19



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	R2	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	R1	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	1B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	1A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR
FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

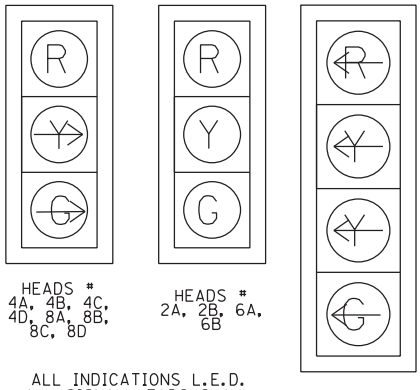
SIGNAL PLAN

US 25 AT SB LOON FOR SQUIRES RD

FILE NAME: C:\PW\WORKING\EAST\01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T00300SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T20

SIGNAL HEADS



HEADS # 4A, 4B, 4C, 4D, 8A, 8B, 8C, 8D

HEADS # 2A, 2B, 6A, 6B

HEADS # 1A, 5A

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES



ALL COUNTDOWN PEDESTRIAN SIGNALS

NOTES:

EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

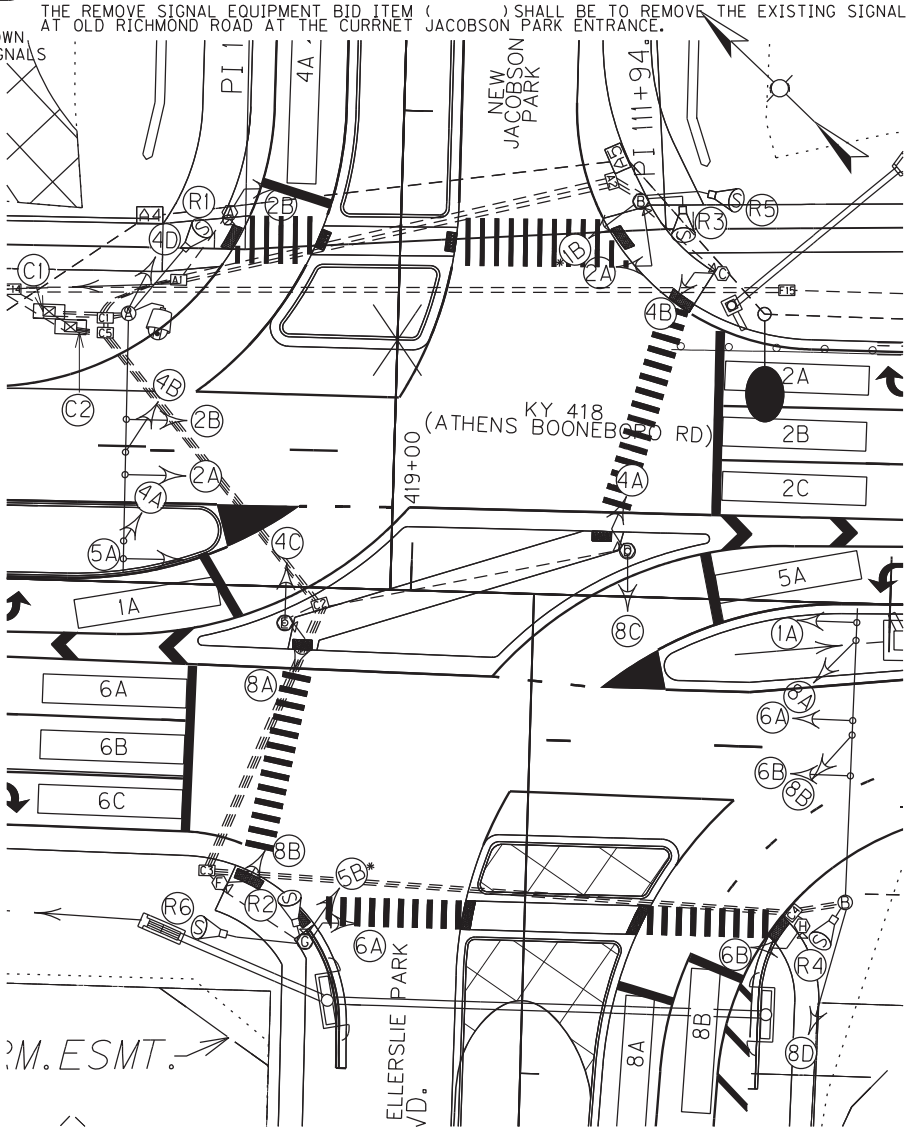
INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

C1 AND C2 CONTROL NB AND SB TRAFFIC RESPECTIVELY.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABIENTS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

THE REMOVE SIGNAL EQUIPMENT BID ITEM ( ) SHALL BE TO REMOVE THE EXISTING SIGNAL AT OLD RICHMOND ROAD AT THE CURRNET JACOBSON PARK ENTRANCE.



NORTHWEST CORNER:
INSTALL C1 TYPE ATC CONTROLLER IN MODEL 332
INSTALL C2 TYPE ATC CONTROLLER IN MODEL 332
INSTALL METER AND 2 DISDONNECTS ON POLE A (ONE FOR EACH CABINET)
INSTALL 1-1" RIGID STEEL SERVICE CONDUIT FROM POLE A DISCONNECTS TO EACH CONTROLLER CABINET (DO NOT RUN THROUGH JBC1).
INSTALL MAST ARM POLE A AT STA. 418+39, 56' LT.
INSTALL STOP BAR RADAR (R1), PTZ CAMERA, SH 4D (BOTTOM AT 17') & ETHERNET ON POLE A
INSTALL PEDESTAL A
INSTALL 1 PED HEADS & 1 PED DETECTOR ON PEDESTAL A
INSTALL JUNCTION BOX JB C1 & A1

INSTALL 1 - 2" CONDUIT FROM CONTROLLER C1 TO JB F14
INSTALL 1 - 2" CONDUIT FROM CONTROLLER C2 TO JB F14
INSTALL 4 - 2" CONDUIT FROM CONTROLLER C1 TO JB C1
INSTALL 4 - 2" CONDUIT FROM CONTROLLER C2 TO JB C5
INSTALL 3- 2" CONDUIT FROM JB C1 TO POLE A
INSTALL 2- 2" CONDUIT FROM JBC1 TO JBC5
INSTALL 3 - 2" CONDUIT FROM JB C1 TO JB A1
INSTALL 1 - 2" CONDUIT FROM JB A1 TO PEDESTAL A
INSTALL 4 - 2" HDPE FROM JB C5 TO JB C2
INSTALL 3 - 2" HDPE FROM JB A1 TO JB A2

NORTHEAST CORNER:
INSTALL LUMINAIRE POLE B
INSTALL 1 PED HEAD, 1 PED DETECTOR, SH 1B* (BOTTOM AT 17'), & 2 RADARS (STOP BAR-R3 & ADVANCE -R5) ON LUMINAIRE POLE B
INSTALL PEDESTAL C
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL C
INSTALL JUNCTION BOX JB A2
INSTALL 3-2" CONDUIT FROM JBA2 TO LUMINAIRE POLE B

MIDDLE OF MEDIAN:
INSTALL LUMINAIRE POLE D
INSTALL 1 PED HEAD, 1 PED DETECTOR, & SH4C(BOTTOM AT 17') ON LUMINAIRE POLE E
INSTALL LUMINAIRE POLE E
INSTALL 1 PED HEAD, 1 PED DETECTOR, & SH8C(BOTTOM AT 17') ON LUMINAIRE POLE D
INSTALL JUNCTION BOX JB C2
INSTALL 4 -2" HDPE FROM JB C2 TO JB C3

SOUTHWEST CORNER:
INSTALL PEDESTAL F
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL F
INSTALL LUMINAIRE POLE G
INSTALL 1 PED HEAD, 1 PED DETECTOR, 2 RADAR (STOP BAR-R2 & ADVANCE-R6) & SH 5B * (BOTTOM AT 17') ON LUMINAIRE POLE G
INSTALL JUNCTION BOX JB C3
INSTALL 3 -2" HDPE FROM JB C3 TO JB C4

SOUTHEAST CORNER:
INSTALL MAST ARM POLE B AT STA. 419+92, 62' RT.
INSTALL RADAR (STOP BAR) & SH 8D (BOTTOM AT 17') ON POLE B
INSTALL PEDESTAL H
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL H
INSTALL JUNCTION BOX JB C4
INSTALL 3 - 2" CONDUIT FROM JB C4 TO POLE B

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	36.0'*	1	19'	106.80 K-FT
B	23.0'	1	19'	133.12 K-FT

* EXTENDED HEIGHT FOR MOUNTING PTZ CAMERA.

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'
2C	2	6' X 30'	0'
4A	4	6' X 30'	0'
5A	5	6' X 30'	0'
6A	6	6' X 30'	0'
6B	6	6' X 30'	0'
6C	6	6' X 30'	0'
8B	8	6' X 30'	0'
8B	8	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

* FUTURE HEAD PLACEMENT (1B & 5B)

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

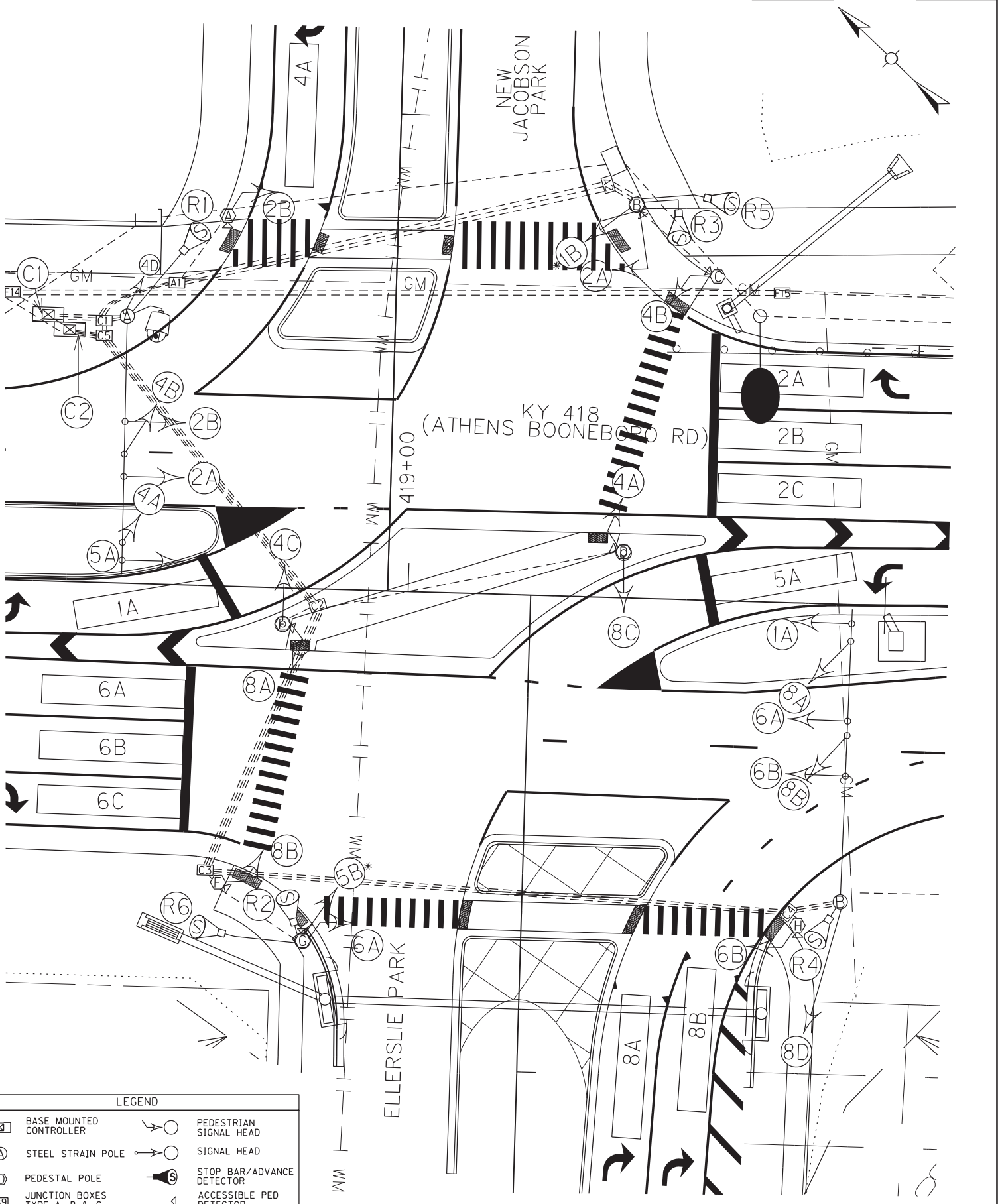
SCALE: 1"=40'

SIGNAL PLAN

KY 418 AT ELLERSLIE/NEW JACOBSON

FILE NAME: C:\PW\WORKING\EAST\D1D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME:T00800SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T21



LEGEND

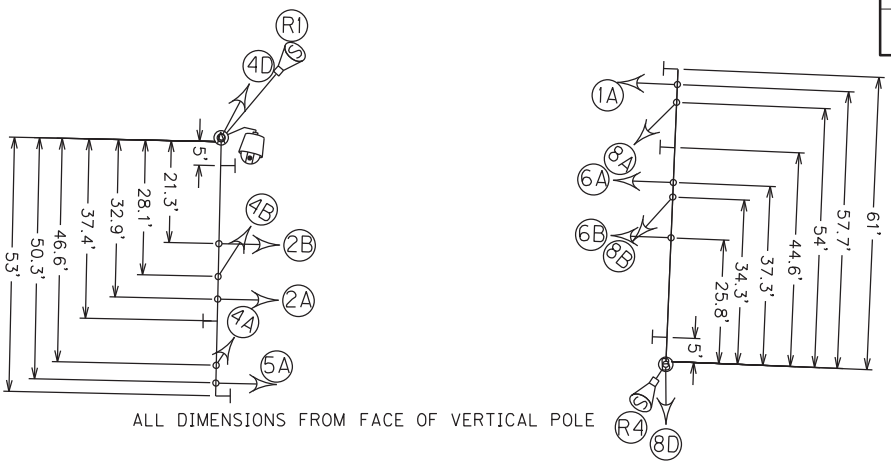
- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

SCALE: 3"=80'

SIGNAL PLAN
KY 418 AT ELLERSLIE/NEW JACOBSON

FILE NAME: C:\PW\WORKING\EAST\01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME: T00900SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T22



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER C1	SH 1A	SH 1A
1 - #14/7C	CONTROLLER C1	SH 2A	SH 2A & 2B
1 - #14/7C	CONTROLLER C1	SH 4A	SH 4A & 4B
1 - #14/7C	CONTROLLER C2	SH 5A	SH 5A
1 - #14/7C	CONTROLLER C2	SH 6A	SH 6A & 6B
1 - #14/7C	CONTROLLER C2	SH 8A	SH 8A & 8B
1 - #14/7C	CONTROLLER C1	SH 4C	SH 4C
1 - #14/7C	CONTROLLER C1	SH 4D	SH 4D
1 - #14/7C	CONTROLLER C2	SH 8C	SH 8C
1 - #14/7C	CONTROLLER C2	SH 8D	SH 8D
1 - #14/7C	CONTROLLER C1	PEDESTAL A	PH 2B
1 - #14/7C	CONTROLLER C1	LUMINAIRE POLE B	PH 2A
1 - #14/7C	CONTROLLER C1	PEDESTAL C	PH 4B
1 - #14/7C	CONTROLLER C1	LUMINAIRE POLE D	PH 4A
1 - #14/7C	CONTROLLER C2	LUMINAIRE POLE E	PH 8A
1 - #14/7C	CONTROLLER C2	PEDESTAL F	PH 8B
1 - #14/7C	CONTROLLER C2	LUMINAIRE POLE G	PB 6A
1 - #14/7C	CONTROLLER C2	PEDESTAL H	PH 6B
1 - #14/2C	CONTROLLER C1	PEDESTAL A	PB 2B
1 - #14/2C	CONTROLLER C1	LUMINAIRE POLE B	PB 2A
1 - #14/2C	CONTROLLER C1	PEDESTAL C	PB 4B
1 - #14/2C	CONTROLLER C1	LUMINAIRE POLE D	PB 4A
1 - #14/2C	CONTROLLER C2	LUMINAIRE POLE E	PB 8A
1 - #14/2C	CONTROLLER C2	PEDESTAL F	PB 8B
1 - #14/2C	CONTROLLER C2	LUMINAIRE POLE G	PB 6A
1 - #14/2C	CONTROLLER C2	PEDESTAL H	PB 6B
1 - RADAR CABLE	CONTROLLER C1	POLE A	RADAR - R1
1 - RADAR CABLE	CONTROLLER C2	LUMINAIRE POLE G	RADAR - R2
1 - RADAR CABLE	CONTROLLER C1	LUMINAIRE POLE B	RADAR - R3
1 - RADAR CABLE	CONTROLLER C2	POLE B	RADAR - R4
1 - RADAR CABLE	CONTROLLER C1	LUMINAIRE POLE B	RADAR - R5
1 - RADAR CABLE	CONTROLLER C2	LUMINAIRE POLE G	RADAR - R6
1 - PTZ CABLE	CONTROLLER C1	POLE A	PTZ
1 - ETHERNET CABLE	CONTROLLER C1	POLE A	ETHERNET

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	(FUTURE)	STREET SIGN	72""x24"x18"	100 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	4B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	4A	3-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	1	5A	4-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	(FUTURE)	STREET SIGN	72"x24"X18"	100 LBS
B	1	6B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	8B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	6A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	8B	3-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
B	1	1A	4-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

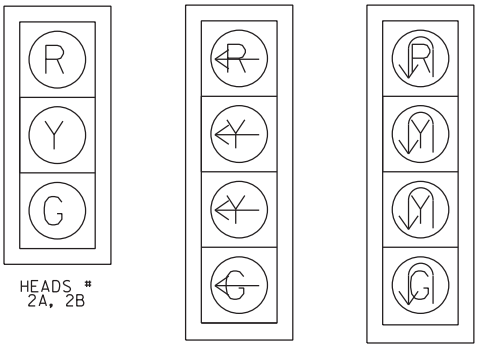
SCALE: 1"=40'

SIGNAL PLAN
KY 418 AT ELLERSLIE/NEW JACOBSON

FILE NAME: C:\PWWORKING\EAST\D1D2232416\KYTC_2D.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME:T01000SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T23

SIGNAL HEADS



HEADS # 2A, 2B

HEADS # 1A, 1B

HEAD # 1C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

NOTES:

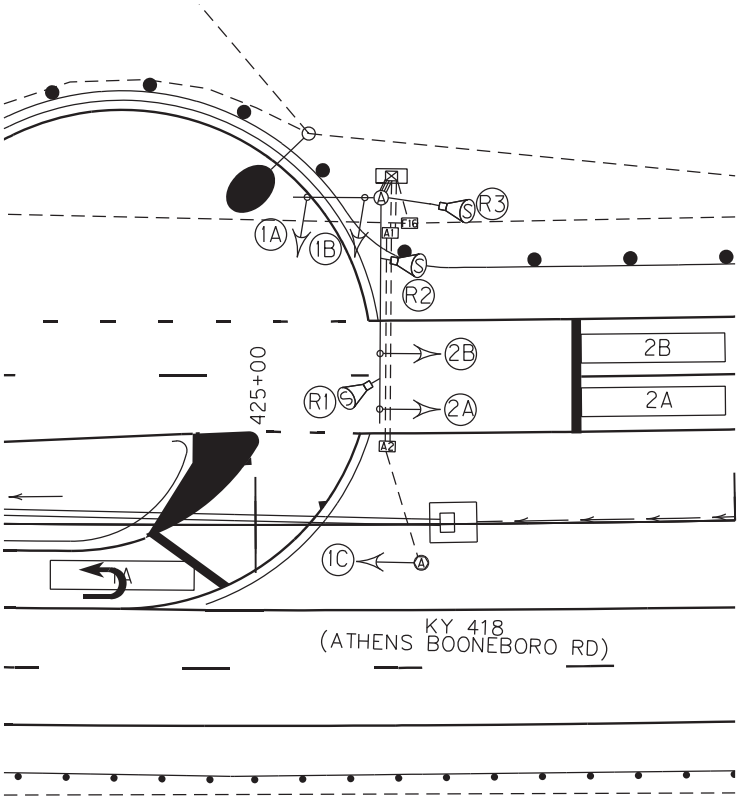
EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

SH 2A & 2B HALL HAVE THE MAXIMUM BOTTOM HEIGHT OF 17.1'



INSTALL TYPE ATC CONTROLLER IN MODEL 332 BASE MOUNT
INSTALL MAST ARM POLE A AT STA. 425+27, 68' LT.
INSTALL LUMINAIRE POLE A AT STA. 425 + 34.58 8.03 RT
INSTALL SH 1C (BOTTOM AT 17.5') ON LUMINAIRE POLE A
INSTALL 2 STOP BAR RADARS (R1/R2) ON MAST ARM & ADVANCE RADAR (R3) ON POLE A

INSTALL JUNCTION BOX JB A1
INSTALL JUNCTION BOX JB A2

INSTALL 1 - 2" CONDUIT FROM CONTROLLER TO JB F16
INSTALL 2 - 2" CONDUIT FROM CONTROLLER TO JB A1
INSTALL 4 - 2" CONDUIT FROM CONTROLLER TO POLE A
INSTALL 2 - 2" HDPE FROM JB A1 TO JB A2

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 2A	SH 2A & 2B
1 - #14/7C	CONTROLLER	SH 1A	SH 1A & 1B
1 - #14/7C	CONTROLLER	SH 1C	SH 1C
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R1
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R2
1 - RADAR CABLE	CONTROLLER	POLE A	RADAR - R3

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	24.0'	1	19'	80.11 K-FT
		2	17'	

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

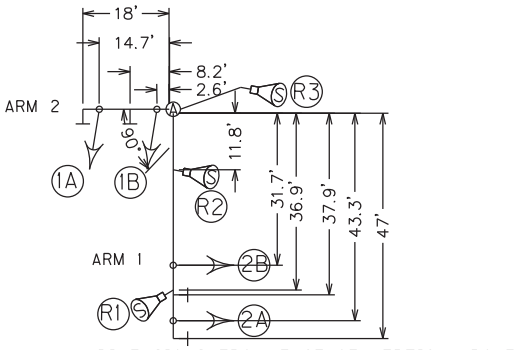
SCALE: 1"=40'

SIGNAL PLAN

KY 418 AT SB LOON FOR ELLERSLIE BLVD

FILE NAME: C:\PW\WORKING\EAST\D11D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: December 24, 2024
E-SHEET NAME: T01100SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T24



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	R2	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	R1	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	1B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	1A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

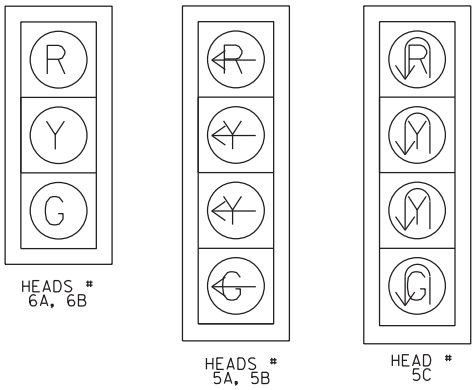
SIGNAL PLAN

KY 418 AT SB LOON FOR ELLERSLIE BLVD

FILE NAME: C:\PW\WORKING\EAST01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T01100SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T25

SIGNAL HEADS



HEADS # 6A, 6B

HEADS # 5A, 5B

HEAD # 5C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

NOTES:

EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

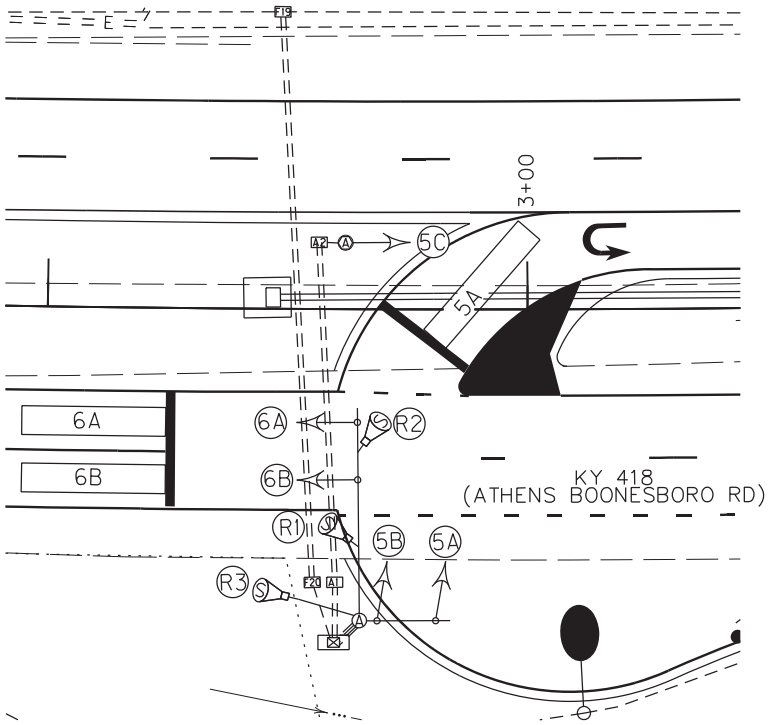
ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

SH 6A & 6B SHALL HAVE THE MAXIMUM BOTTOM HEIGHT OF 15.7'

INSTALL TYPE ATC CONTROLLER IN MODEL 332 BASE MOUNT
INSTALL MAST ARM POLE A AT STA. 2+65, 65' RT.
INSTALL LUMINAIRE POLE A
INSTALL SH 5C (BOTTOM AT 17') ON LUMINAIRE POLE A
INSTALL 2 STOP BAR RADARS (R1/R2) ON MAST ARM & ADVANCE RADAR (R3) ON POLE A

INSTALL JUNCTION BOX JB A1
INSTALL JUNCTION BOX JB A2

INSTALL 1 - 2" CONDUIT FROM CONTROLLER TO JB F20
INSTALL 2 - 2" CONDUIT FROM CONTROLLER TO JB A1
INSTALL 4 - 2" CONDUIT FROM CONTROLLER TO POLE A
INSTALL 2 - 2" HDPE FROM JB A1 TO JB A2



WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 5A	SH 5A & 5B
1 - #14/7C	CONTROLLER	SH 5C	SH 5C
1 - #14/7C	CONTROLLER	SH 6A	SH 6A & SH 6B
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R1
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R2
1 - RADAR CABLE	CONTROLLER	POLE A	RADAR - R3

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	22.0'	1	17.0'	68.78 K-FT
		2	19.0'	

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
5A	5	6' X 30'	0'
6A	6	6' X 30'	0'
6B	6	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

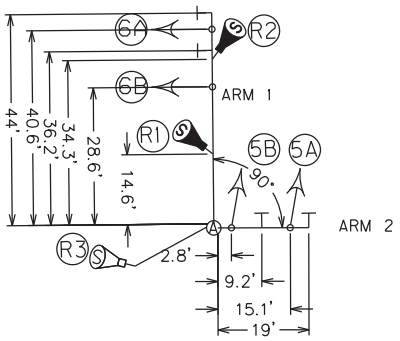
SCALE: 1"=40'

SIGNAL PLAN

KY 418 AT NB LOON FOR HAYS BLVD

FILE NAME: C:\PW\WORKING\EAST\D11D2232416\T01100SGEX.DGN
USER: SwansegarT
DATE PLOTTED: December 22, 2024
E-SHEET NAME: T01200SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T26



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	R2	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	6B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	R1	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	6A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	5B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	5A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

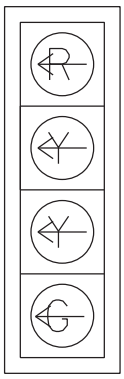
SIGNAL PLAN

KY 418 AT NB LOON FOR HAYS BLVD

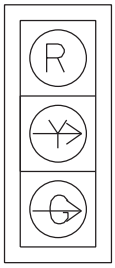
FILE NAME: C:\PWWORKING\EAST\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T01200SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T27

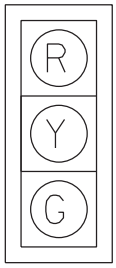
SIGNAL HEADS



HEADS # 1A, 1B, 5A



HEADS # 4A, 4B, 4C, 8A, 8B, 8C



HEADS # 2A, 2B, 6A, 6B

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES
* FUTURE HEAD PLACEMENT



ALL COUNTDOWN PEDESTRIAN SIGNALS

NOTES:

EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

C1 AND C2 CONTROL NB AND SB TRAFFIC RESPECTIVELY.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL BE WITHIN 3 TO 6 FOOT OF MAIN POLE

NORTHWEST CORNER:
INSTALL C1 TYPE ATC CONTROLLER IN MODEL 332
INSTALL C2 TYPE ATC CONTROLLER IN MODEL 332
INSTALL METER AND 2 DISCONNECTS ON POLE A (ONE FOR EACH CABINET)
INSTALL 1-1" RIGID STEEL SERVICE CONDUIT FROM POLE A DISCONNECTS TO EACH CONTROLLER CABINET (DO NOT RUN THROUGH ANY JB).
INSTALL MAST ARM POLE A AT STA. 11+26, 59' LT.
INSTALL 2 STOP BAR RADARS (R1/R2), 1 PTZ CAMERA, ETHERNET RADIO & SH 4C (BOTTOM AT 17') ON POLE A
INSTALL PEDESTAL A
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL A
INSTALL JUNCTION BOX C1, A1, & A3
INSTALL 1-2" CONDUIT FROM CAB C1 TO JB F22
INSTALL 4-2" CONDUIT FROM CAB C1 TO POLE A
INSTALL 1-2" CONDUIT FROM CAB C1 TO JB C1
INSTALL 1-2" CONDUIT FROM CAB C2 TO JB F22
INSTALL 4-2" CONDUIT FROM CAB C2 TO JB C1
INSTALL 2-2" CONDUIT FROM POLE A TO JB A1
INSTALL 2-2" HDPE CONDUIT FROM JB A1 TO JB A2
INSTALL 1-2" RIGID STEEL CONDUIT FROM POLE A TO UTILITY SERVICE PAD (THRU JB A3/A4)
INSTALL 3- 2" CONDUIT FROM JB C1 TO JB C2

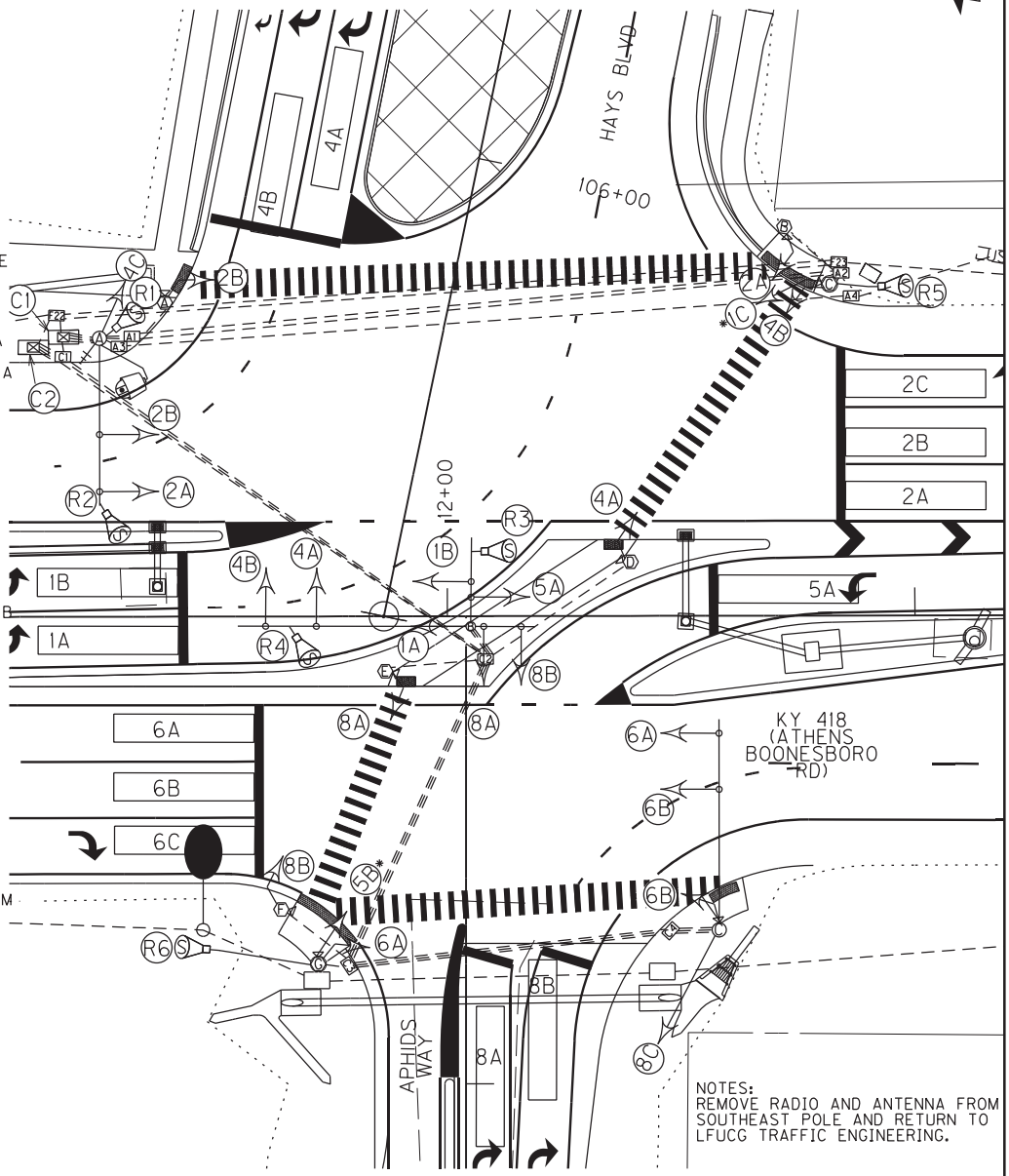
NORTHEAST CORNER:
INSTALL PEDESTAL B
INSTALL 1 PED HEAD & 1 PED DETECTOR ON PEDESTAL B
INSTALL LUMINAIRE POLE C
INSTALL 1 ADVANCE RADAR (R5), 1 PED HEAD, 1 PED DETECTOR, SH 1C (BOTTOM AT 17') ON LUMINAIRE POLE C
INSTALL JUNCTION BOX A2 & A4
INSTALL UTILITY SERVICE (US) PAD NEAR OVERHEAD UTILITY POLE. THIS SERVICE PAD SHALL BE MADE OF 2" ALUMIMUM POSTS AND BE INCASED IN A 2'X2'X1' CONCRETE PAD. THERE SHALL BE A 2" SCHEDULE 80 PVC CONDUIT INSTALL FROM THE US TO THE UTILITY POLE. THIS CONDUIT SHALL BE PLACE ON 6" STAND-OFF FROM UTILITY POLE. ALL ITEMS FOR THE UTITILY SERVICE SHALL BE INCIDETAL TO ITEM 24908EC

MEDIAN:
INSTALL MAST ARM POLE B AT STA. 12+05, 2' RT.
INSTALL 2 STOP BAR RADARS (R3/R4) & SH 1A (BOTTOM AT 12') ON POLE B
INSTALL 3 - 2" CONDUIT FROM JB C2 TO JB C3
INSTALL 3- 2" CONDUIT FROM JB C2 TO POLE B
INSTALL PEDESTAL D & E
INSTALL 1 PED HEAD, 1 PED DETECTOR ON PEDESTAL D
INSTALL 1 PED HEAD, 1 PED DETECTOR ON PEDESTAL E

SOUTHWEST CORNER:
INSTALL PEDESTAL F
INSTALL LUMINAIRE POLE G
INSTALL 1 ADVANCE RADAR (R6), 1 PED HEAD & 1 PED DETECTOR & SH 5B (BOTTOM AT 17') ON LUMINAIRE POLE G
INSTALL 1 PED HEAD, 1 PED DETECTOR ON PEDESTAL F
INSTALL JUNCTION BOX C3
INSTALL 3 - 2" CONDUIT FROM JB C3 TO JB C4

SOUTHEAST CORNER:
INSTALL MAST ARM POLE C AT STA. 12+58, 67' RT.
INSTALL 1 PED HEAD, 1 PED DETECTOR & SH 8C (BOTTOM AT 17') ON POLE C
INSTALL JUNCTION BOX JB C4
INSTALL 3 - 2" CONDUIT FROM JB C4 TO POLE B

RADAR R2 & R3 WILL BE USED FOR DETECTION IN BOTH CABINETS:
R2: PH 1 (C1) & PH 6 (C2)
R3: PH 2 (C1) & PH 5 (C2)



NOTES:
REMOVE RADIO AND ANTENNA FROM SOUTHEAST POLE AND RETURN TO LFUCG TRAFFIC ENGINEERING.

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
1B	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'
2C	2	6' X 30'	0'
4A	4	6' X 30'	0'
4B	4	6' X 30'	0'
5A	5	6' X 30'	0'
6A	6	6' X 30'	0'
6B	6	6' X 30'	0'
6C	6	6' X 30'	0'
8A	8	6' X 30'	0'
8B	8	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	36.0'*	1	20.0'	43.47 K-FT
B	22'	1	18.0'	88.99 K-FT
		2	20.0'	
		3	20.0'	
C	21.0'	1	19.0'	65.22 K-FT

* EXTENDED HEIGHT FOR MOUNTING PTZ CAMERA.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- 1A DETECTION ZONE
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

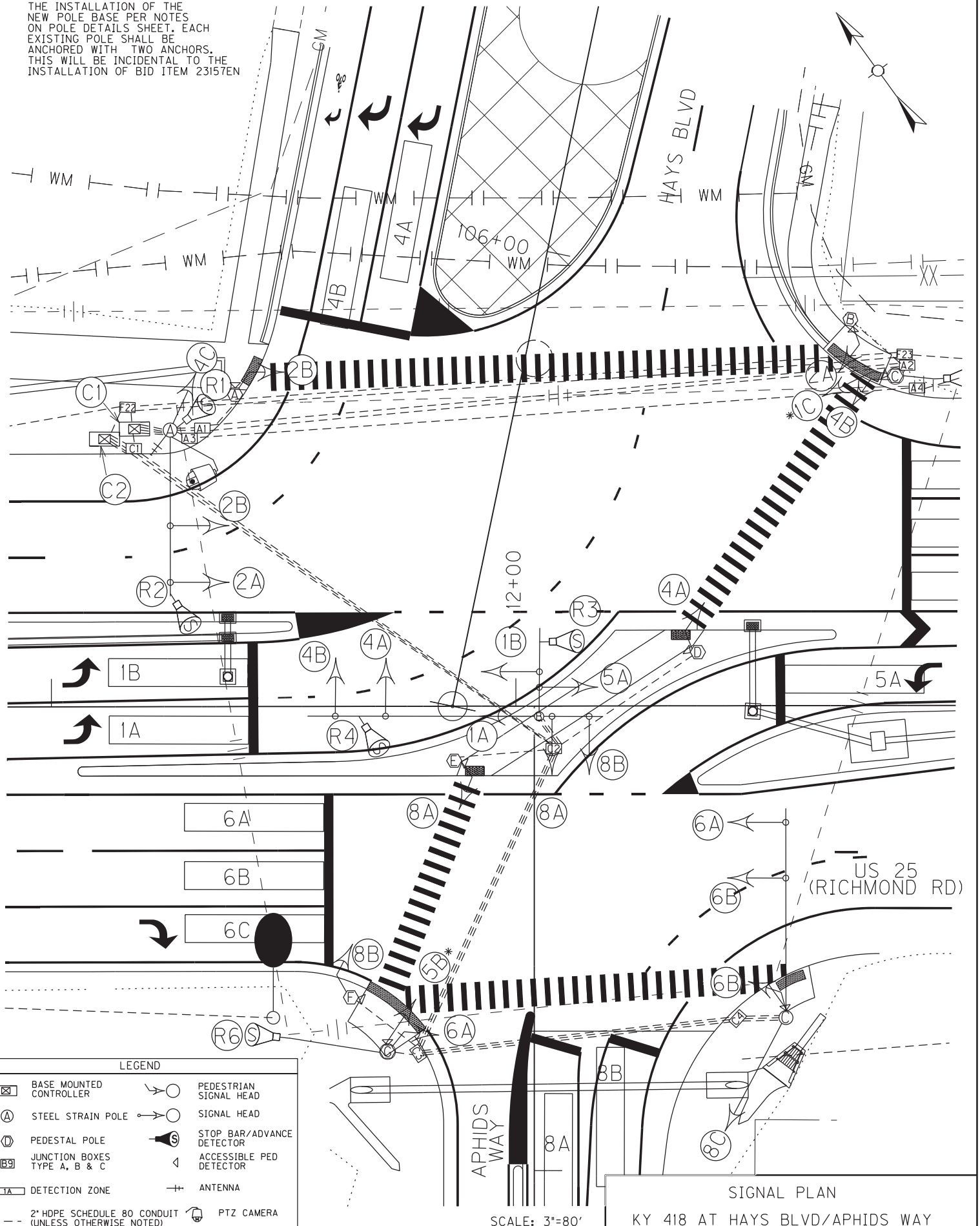
SCALE: 1"=40'

SIGNAL PLAN
KY 418 AT HAYS BLVD/APHIDS WAY

FILE NAME: C:\PW\WORKING\EAST\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME: T01300SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T28

THE CONTRACTOR SHALL ADD A STEEL CASING TO THE INSTALLATION OF THE NEW POLE BASE PER NOTES ON POLE DETAILS SHEET. EACH EXISTING POLE SHALL BE ANCHORED WITH TWO ANCHORS. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF BID ITEM 23157EN

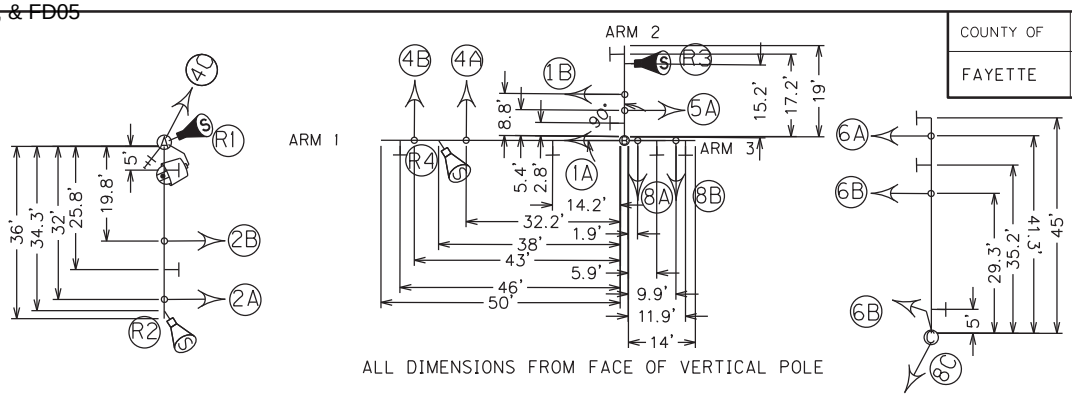


SCALE: 3"=80'

SIGNAL PLAN
KY 418 AT HAYS BLVD/APHIDS WAY

FILE NAME: C:\PWWORKING\EAST01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: January 20, 2025
E-SHEET NAME: T01400SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T29



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR
FOUR-SECTION FYA HEADS

CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

NOTES:

REMOVE AND REINSTALL STREET SIGNS (ARMS/BANDS). IF THE BANS/ARMS ARE NOT REUSABLE, THE CONTRACTOR SHALL SUPPLY MATERIALS. CONNECT A 1-7C TO EACH ILLUMINATED SIGN AND RUN TO THE NEW TRAFFIC CABINET. THE REMOVAL/REINSTALLING OF STREET SIGNS SHALL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER C1	SH 1A	SH 1A
1 - #14/7C	CONTROLLER C1	SH 1B	SH 1B
1 - #14/7C	CONTROLLER C1	SH 2A	SH 2A & 2B
1 - #14/7C	CONTROLLER C1	SH 4B	SH 4A & 4B
1 - #14/7C	CONTROLLER C1	SH 4C	SH 4C
1 - #14/7C	CONTROLLER C2	SH 5A	SH 5A
1 - #14/7C	CONTROLLER C2	SH 5B	SH 5B
1 - #14/7C	CONTROLLER C2	SH 6A	SH 6A & 6B
1 - #14/7C	CONTROLLER C2	SH 8B	SH 8A & 8B
1 - #14/7C	CONTROLLER C2	SH 8C	SH 8C
1 - #14/7C	CONTROLLER C1	PEDESTAL A	PH 2B
1 - #14/7C	CONTROLLER C1	LUMINAIRE POLE B	PH 2A
1 - #14/7C	CONTROLLER C1	PEDESTAL C	PH 4B
1 - #14/7C	CONTROLLER C1	PEDESTAL D	PH 4A
1 - #14/7C	CONTROLLER C2	PEDESTAL E	PH 8A
1 - #14/7C	CONTROLLER C2	PEDESTAL F	PH 8B
1 - #14/7C	CONTROLLER C2	LUMINAIRE POLE G	PH 6A
1 - #14/7C	CONTROLLER C2	POLE C	PH 6B
1 - RADAR CABLE	CONTROLLER C1	POLE A	RADAR - R1
1 - RADAR CABLE	CONTROLLER C1/C2	POLE B-ARM 1	RADAR - R2
1 - RADAR CABLE	CONTROLLER C1/C2	POLE B-ARM 2	RADAR - R3
1 - RADAR CABLE	CONTROLLER C2	POLE C	RADAR - R4
1 - RADAR CABLE	CONTROLLER C1	LUMINAIRE POLE B	RADAR - R5
1 - RADAR CABLE	CONTROLLER C2	LUMINAIRE POLE G	RADAR - R6
1 - PTZ CABLE	CONTROLLER C1	POLE A	PTZ
1 - ETHERNET CABLE	CONTROLLER C1	POLE A	ETHERNET
1 - #14/2C	CONTROLLER C1	PEDESTAL A	PB 2B
1 - #14/2C	CONTROLLER C1	LUMINAIRE POLE B	PB 2A
1 - #14/2C	CONTROLLER C1	PEDESTAL C	PB 4B
1 - #14/2C	CONTROLLER C1	PEDESTAL D	PB 4A
1 - #14/2C	CONTROLLER C2	PEDESTAL E	PB 8A
1 - #14/2C	CONTROLLER C2	PEDESTAL F	PB 8B
1 - #14/2C	CONTROLLER C2	LUMINAIRE POLE G	PB 6A
1 - #14/2C	CONTROLLER C2	POLE C	PB 6B

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	(FUTURE)	SIGN	72"x24"X18"	100 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	R2	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	1	4A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	R4	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
B	1	4B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	1	(FUTURE)	SIGN	36"x36"	16 LBS
B	2	(FUTURE)	SIGN	36"x36"	16 LBS
B	2	1B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
B	2	5A	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
B	2	R3	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
B	2	(FUTURE)	SIGN	36"x36"	16 LBS
B	3	8A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	3	(FUTURE)	SIGN	36"x36"	16 LBS
B	3	8B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
B	3	(FUTURE)	SIGN	36"x36"	16 LBS
C	1	(FUTURE)	SIGN	72"x24"X18"	100 LBS
C	1	6B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
C	1	(FUTURE)	SIGN	36"x36"	16 LBS
C	1	6A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
C	1	(FUTURE)	SIGN	36"x36"	16 LBS

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

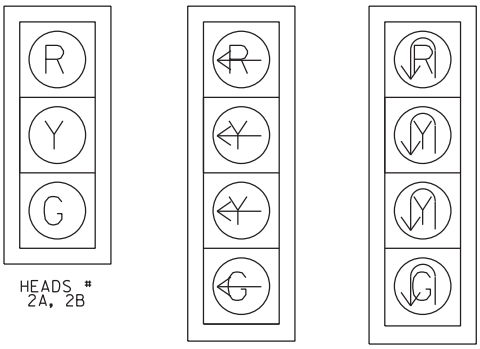
SCALE: 1"=40'

SIGNAL PLAN
KY 418 AT HAYS BLVD/APHIDS WAY

FILE NAME: C:\PW\WORKING\EAST\01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: March 21, 2025
E-SHEET NAME: T01500SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T30

SIGNAL HEADS



HEADS # 2A, 2B

HEADS # 1A, 1B

HEAD # 1C

ALL INDICATIONS L.E.D.
ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES

NOTES:

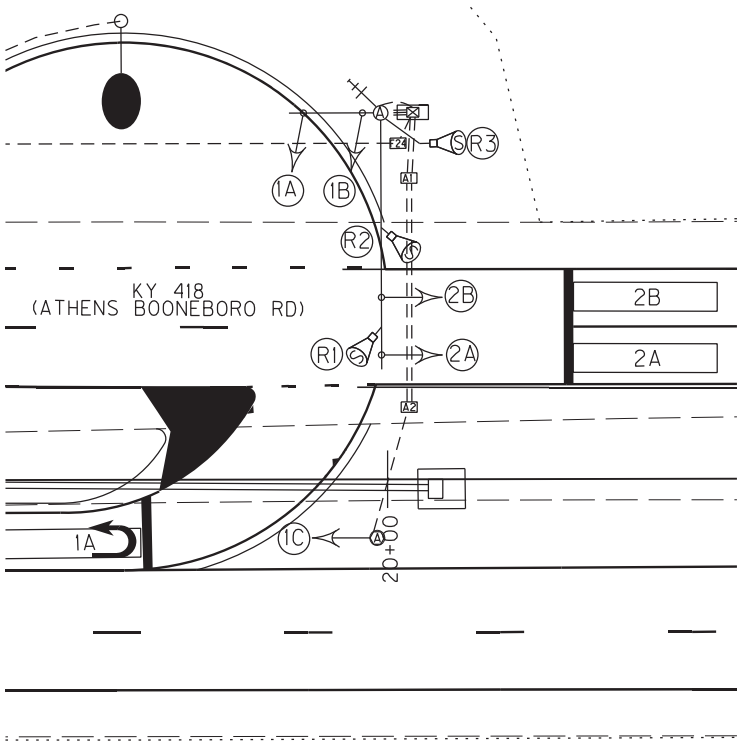
EACH MAST ARM SHALL HAVE A 3 DEGREE RISE.

INSTALL VIBRATION DAMPER ON EACH ARM.

THE CONTRACTOR MAY USE OPEN CUT OR BORE AND JACK TO INSTALL CONDUIT. IF OPEN CUT IS USED FOR INSTALLATION, THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER FOR APPROVAL.

ALL CONDUITS SHALL HAVE A PULL STRING INSTALL BETWEEN JB/POLES/CABINETS. ALL CABINETS SHALL WITHIN 3 TO 6 FOOT OF MAIN POLE.

SH 2A & 2B SHALL HAVE THE MAXIMUM BOTTOM HEIGHT OF 16.6'



INSTALL TYPE ATC CONTROLLER IN MODEL 332 BASE MOUNT
INSTALL MAST ARM POLE A AT STA. 19+99, 76' LT.
INSTALL COORDINATING UNIT IN CABINET AND ANTENNA ON POLE A
INSTALL LUMINAIRE POLE A
INSTALL SH 1C (BOTTOM AT 17.5') ON LUMINAIRE POLE A
INSTALL 2 STOP BAR RADARS (R1/R2) ON MAST ARM & 1 ADVANCE RADAR (R3) ON POLE A
INSTALL JUNCTION BOX JB A1
INSTALL JUNCTION BOX JB A2

INSTALL 1 - 2" CONDUIT FROM CONTROLLER TO JB F24
INSTALL 2 - 2" CONDUIT FROM CONTROLLER TO JB A1
INSTALL 4 - 2" CONDUIT FROM CONTROLLER TO POLE A
INSTALL 2 - 2" CONDUIT FROM JB A1 TO JB A2

WIRING SCHEDULE

CABLE	ORIGIN	ENDING	CONNECTING
1 - #14/7C	CONTROLLER	SH 2B	SH 2A & 2B
1 - #14/7C	CONTROLLER	SH 1B	SH 1A & 1B
1 - #14/7C	CONTROLLER	SH 1C	SH 1C
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R1
1 - RADAR CABLE	CONTROLLER	POLE A - ARM 1	RADAR - R2
1 - RADAR CABLE	CONTROLLER	POLE A	RADAR - R3

MAST ARM POLES

POLE	HEIGHT	ARM	ATT. HT.	CALC. SERV. MOMENT
A	21.0'	1	17.0'	86.57 K-FT
		2	19.0'	

DETECTION AREA SCHEDULE

RADAR	PHASE	SIZE	DIST. FROM STOP BAR
1A	1	6' X 30'	0'
2A	2	6' X 30'	0'
2B	2	6' X 30'	0'

ADVANCE RADAR SHALL HAVE A DETECTION ZONE PLACED AT 300' FROM STOPBARS ACROSS ALL LANES (MAINLINE ONLY)

ALL BREAKAWAY BASES SHALL HAVE FUSE CONNECTOR KITS INSTALL FOR ALL WIRING FOR PEDESTRIAN HEADS AND SIGNAL HEADS. ALL NEUTRALS IN A POLE CAN BE IN SAME KIT, BUT NEEDS A METAL LUG INSTALLED.

ALL PEDESTAL AND LUMINAIRE POLES WITH PEDESTRIAN BUTTONS SHALL BE PLACE ACCORDING THE STANDARD DRAWING TO MEET ADA REQUIREMENTS.

ALL LUMINAIRE POLES SHALL HAVE AN ALUMINUM CAP WITH SET SCREWS INSTALL ON TOP OF POLE. THIS WILL BE INCIDENTAL TO THE INSTALLATION OF THE POLE.

LEGEND

- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

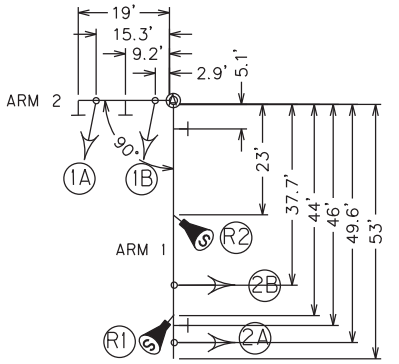
SCALE: 1"=40'

SIGNAL PLAN

KY 418 AT SB LOON FOR APHIDS WAY

FILE NAME: C:\PW\WORKING\EAST\D11D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: December 22, 2024
E-SHEET NAME: T01600SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T31



ALL DIMENSIONS FROM FACE OF VERTICAL POLE

MAST ARM ATTACHMENT CHART

POLE	ARM	SYMBOL	TYPE	SIZE	WEIGHT
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	R2	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	2B	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	1	R1	STOP BAR RADAR	10.6"x13.2"x3.3"	4.2 LBS
A	1	(FUTURE)	SIGN	36"x36"	16 LBS
A	1	2A	3-SECTION SIGNAL HEAD	24"x59"x16"	50 LBS
A	2	1B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS
A	2	1B	4-SECTION SIGNAL HEAD	24"x73"x16"	60 LBS
A	2	(FUTURE)	SIGN	36"x36"	16 LBS

FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS

7-CONDUCTOR FOUR-SECTION FYA HEADS CONNECTION	COLOR	OUTPUT FILE CONNECTION FOR FYA ON PHASE 1	OUTPUT FILE CONNECTION FOR FYA ON PHASE 5
RED ARROW	RED	PHASE 1 RED	PHASE 5 RED
STEADY YELLOW ARROW	ORANGE	PHASE 1 YELLOW	PHASE 5 YELLOW
FLASHING YELLOW ARROW	WHITE/TRACER	PHASE 1 GREEN	PHASE 5 GREEN
GREEN ARROW	GREEN	PED YELLOW PHASE 2	PED YELLOW PHASE 6
NEUTRAL	WHITE	WHITE	WHITE
NOT USED	BLUE		
NOT USED	BLACK		

THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY" TO CONNECTOR "CMU 13,16,R,U" BEHIND THE OUTPUT PANEL. IF IT IS A SOLID STATE CABINET (SIEMENS) ONLY HAVE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER.

LEGEND

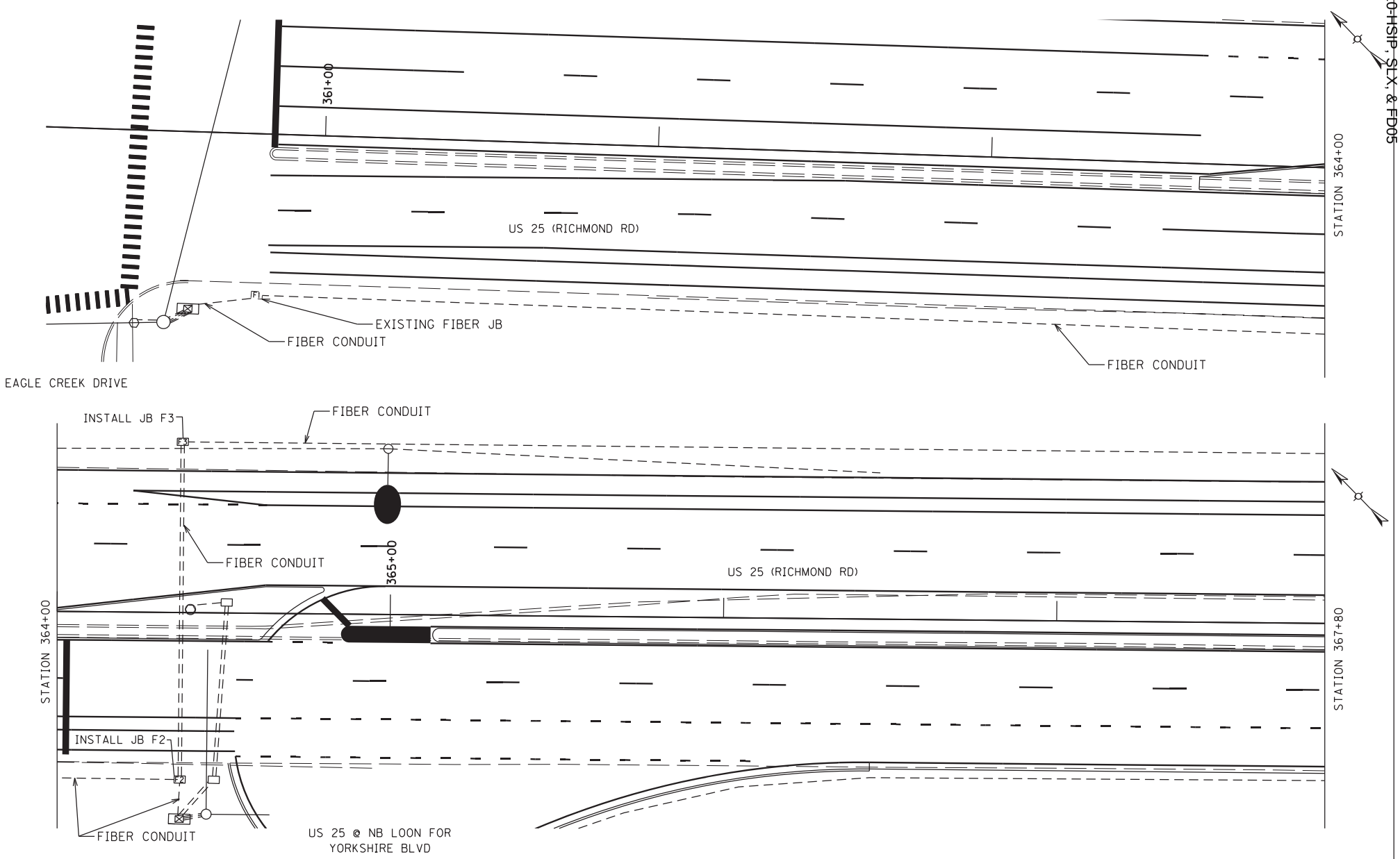
- BASE MOUNTED CONTROLLER
- STEEL STRAIN POLE
- PEDESTAL POLE
- JUNCTION BOXES TYPE A, B & C
- DETECTION ZONE (1A)
- 2" HDPE SCHEDULE 80 CONDUIT (UNLESS OTHERWISE NOTED)
- PEDESTRIAN SIGNAL HEAD
- SIGNAL HEAD
- STOP BAR/ADVANCE DETECTOR
- ACCESSIBLE PED DETECTOR
- ANTENNA
- PTZ CAMERA

SIGNAL PLAN

KY 418 AT SB LOON FOR APHIDS WAY

FILE NAME: C:\PWWORKING\EAST01\D2232416\T01100SG.DGN
USER: SwansegarT
DATE PLOTTED: February 5, 2025
E-SHEET NAME: T01600SG
Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T32



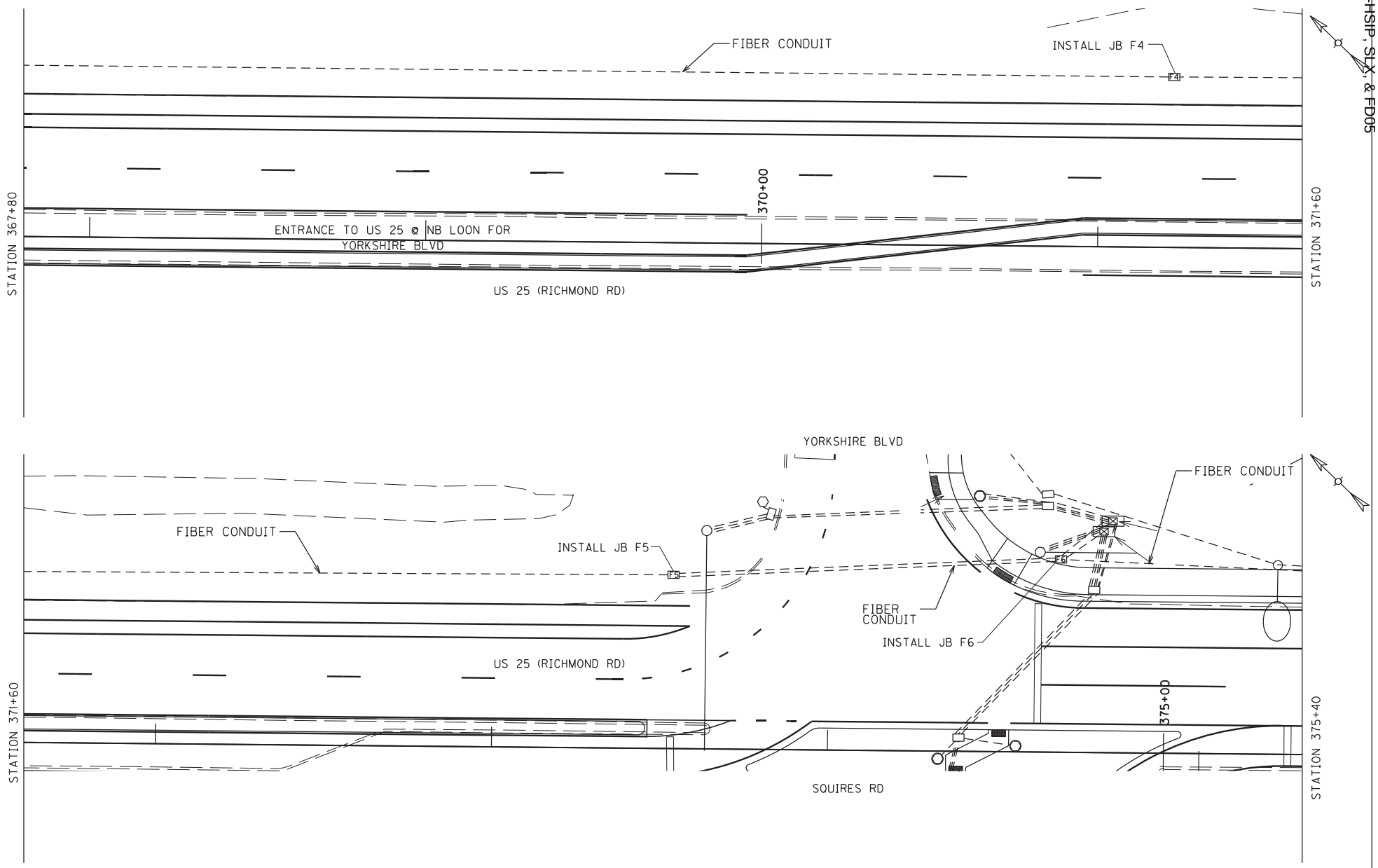
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-US 25 @ EAGLE CREEK DR. US 25 @ NB LOON FOR YORKSHIRE BLVD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T33



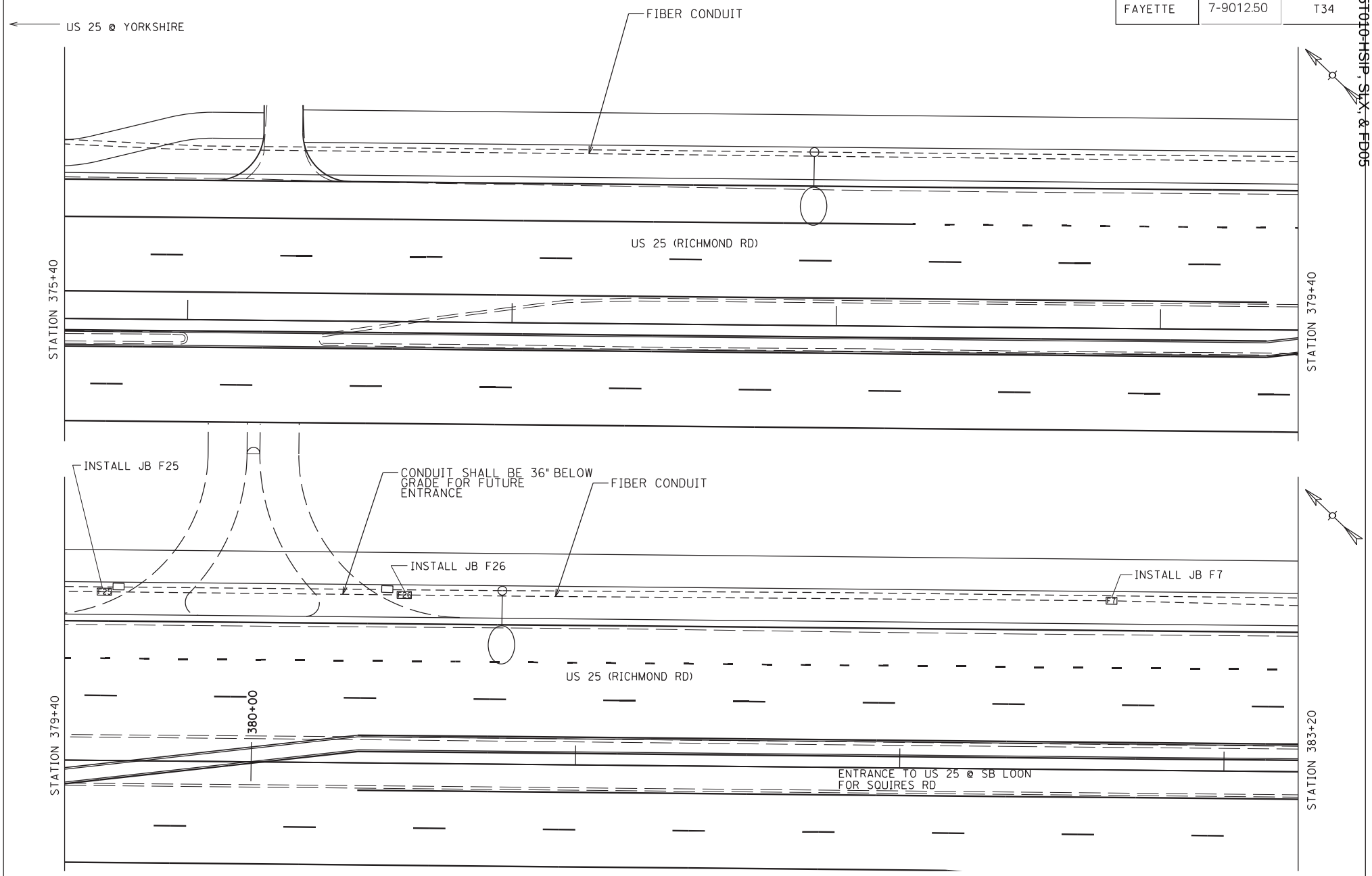
ALL FIBER HDPE CONDUIT
SHALL BE ORANGE

LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-US 25 @ YORKSHIRE BLVD & ENTRANCE TO NB LOON FOR YORKSHIRE BLVD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T34



ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-EB TO US 25 @ YORKSHIRE BLVD & ENTRANCE TO US 25 @ SB LOON FOR SQUIRES RD

FILE NAME: C:\PWWORKING\EAST01\D2232416\T01200SG.DGN

USER: SwansegarT
DATE PLOTTED: December 24, 2024

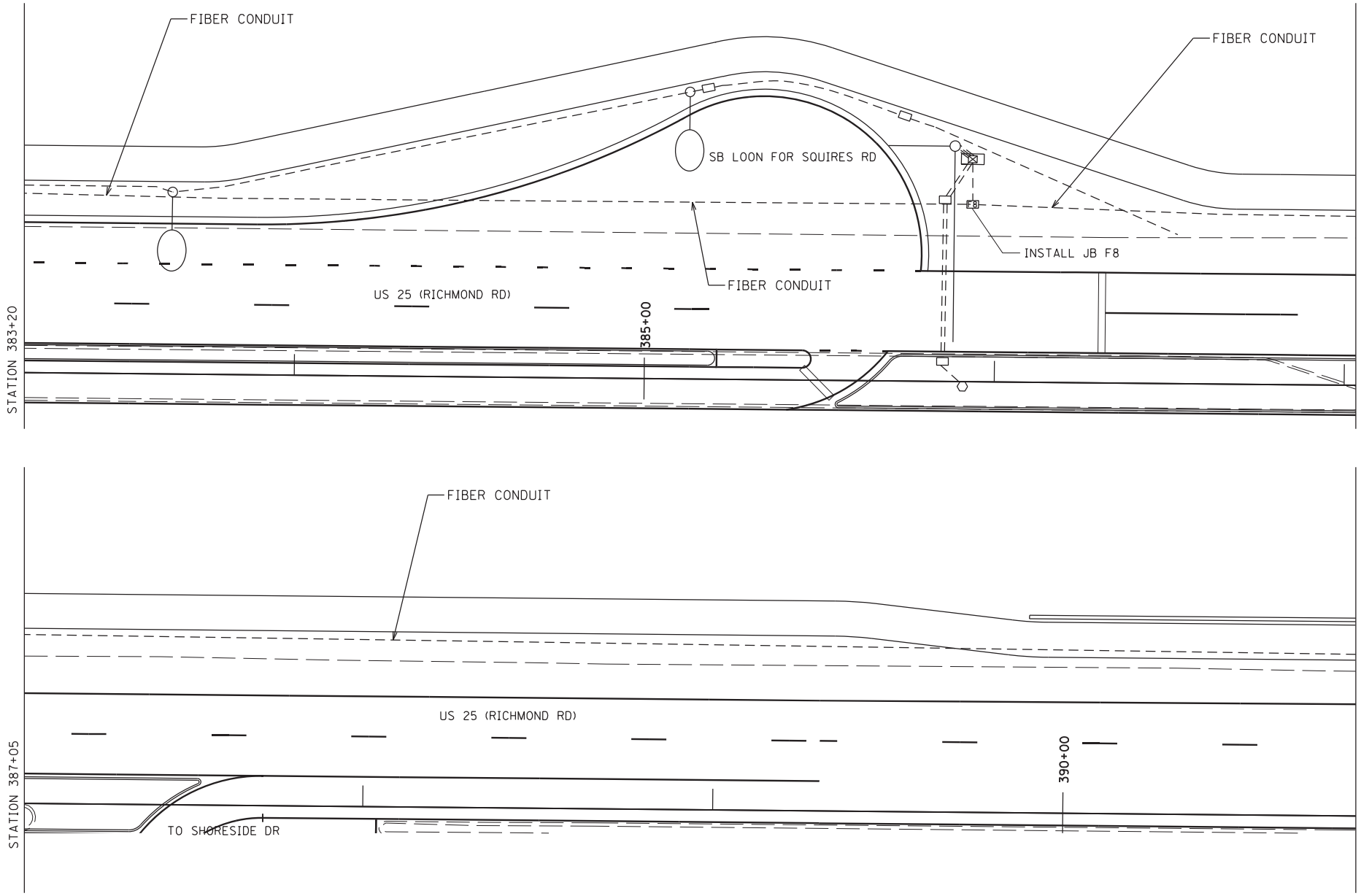
E-SHEET NAME:

Power InRoads v8.11.9.912

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 430 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T35



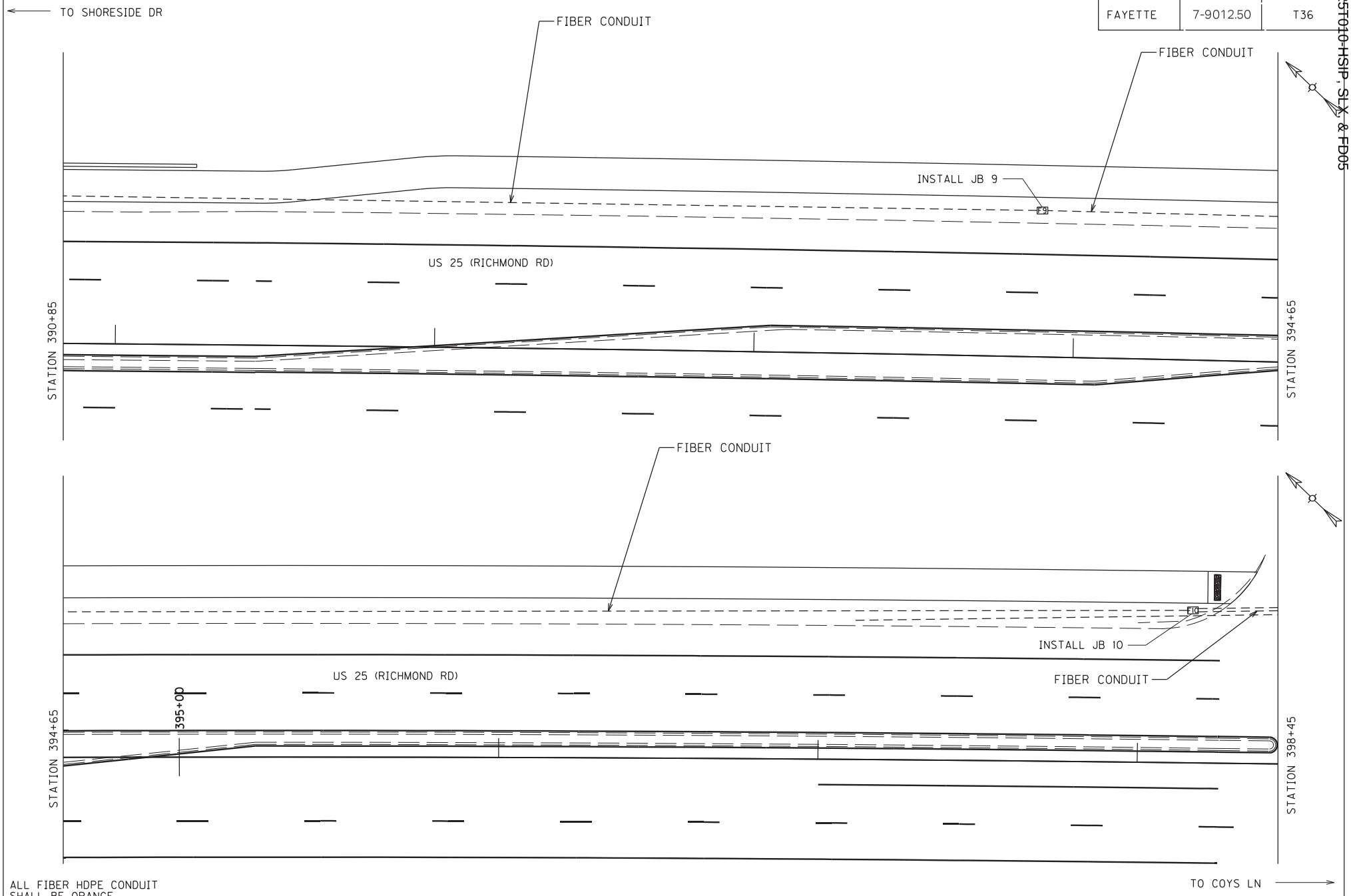
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-US 25 @ SB LOON FOR SQUIRES RD & TO SHORESIDE DR

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T36



ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-BETWEEN SHORESIDE DR & COYS LN

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 432 of 605

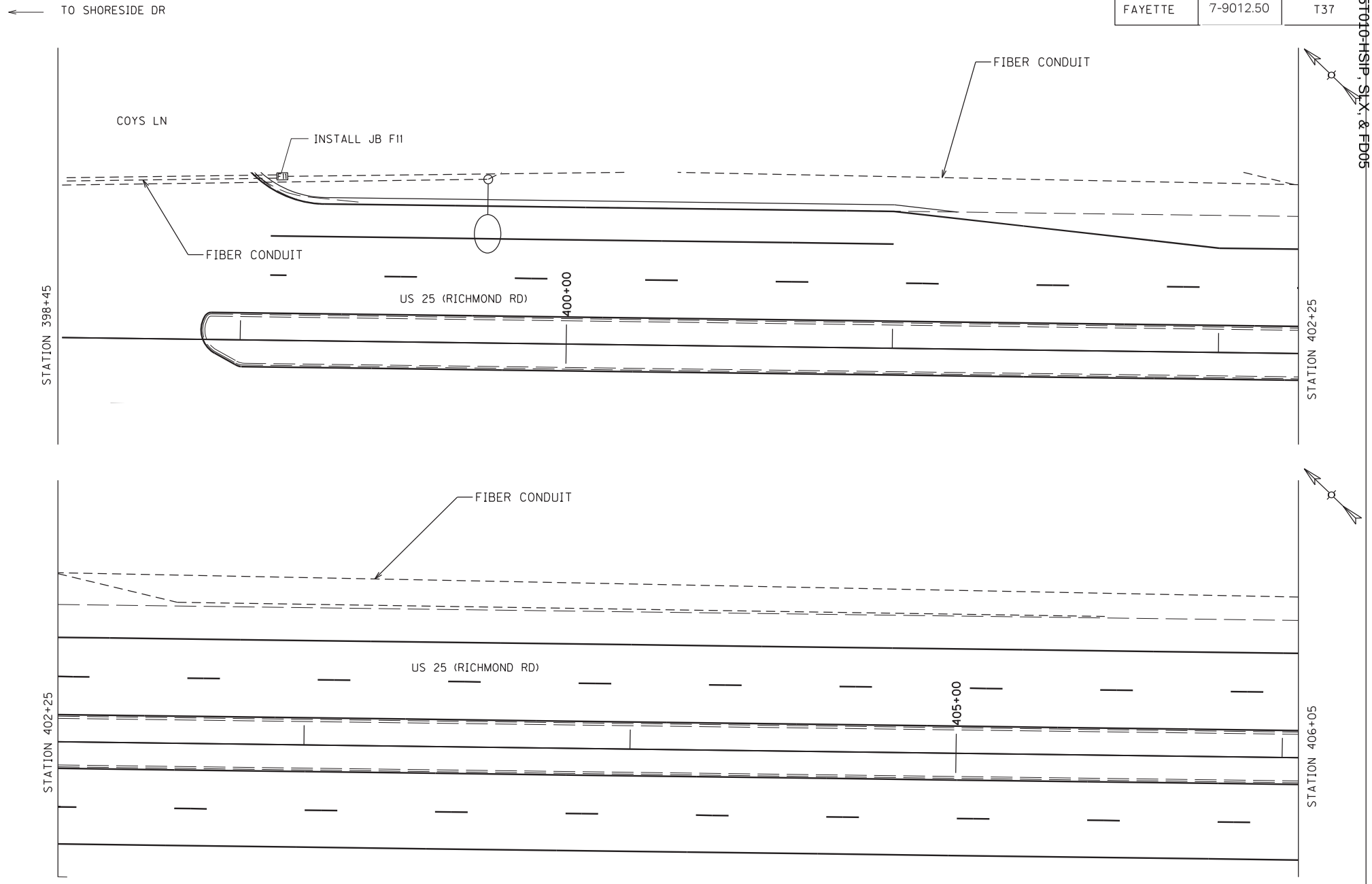
FILE NAME: C:\PWWORKING\EAST01\D2232416\T01200SG.DGN

USER: SwansegarT
DATE PLOTTED: December 24, 2024

E-SHEET NAME:

Power InRoads v8.11.9.912

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T37



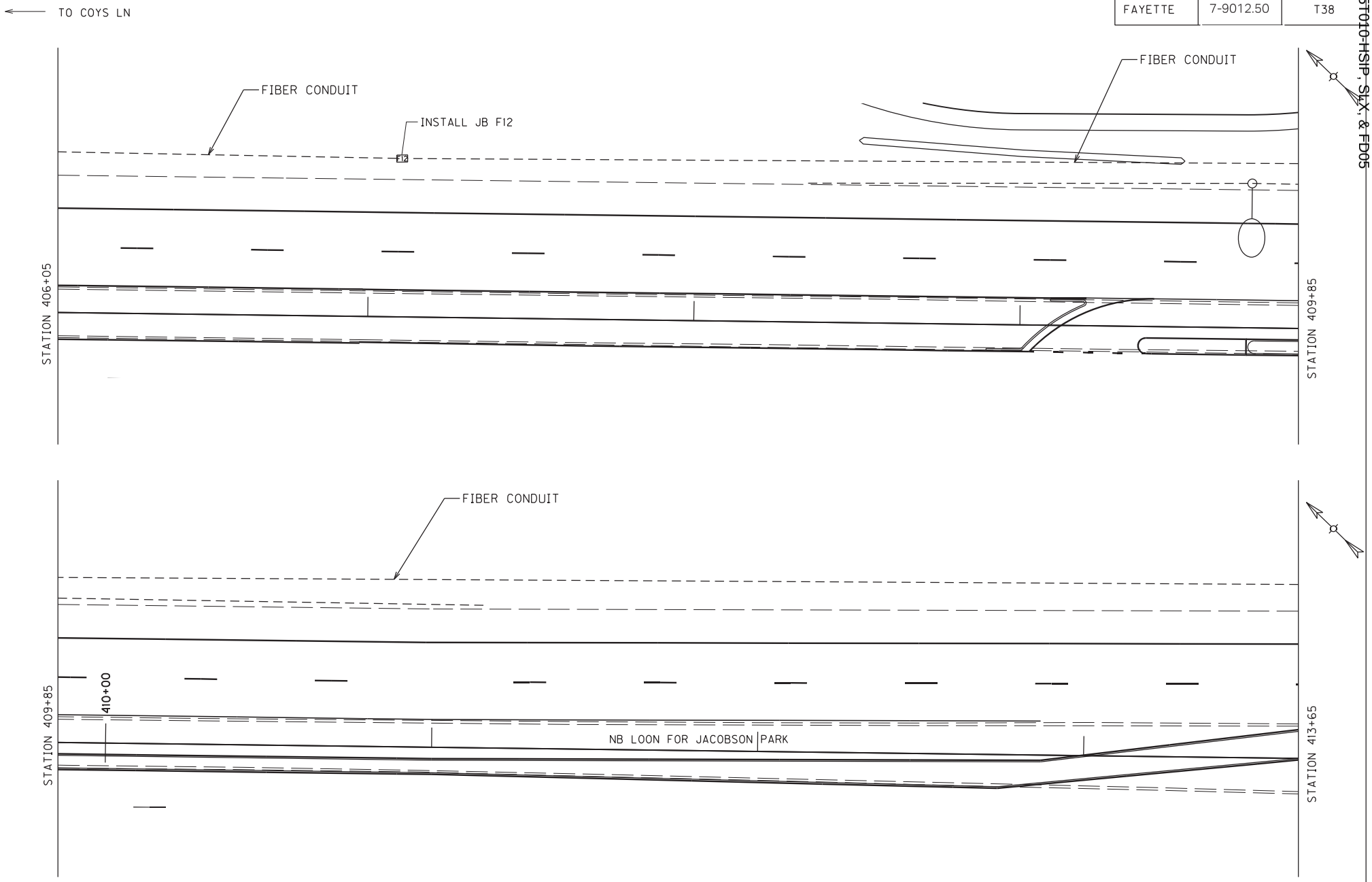
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-BTWEEN COYS LN & SB LOON FOR JACOBSON PARK

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T38



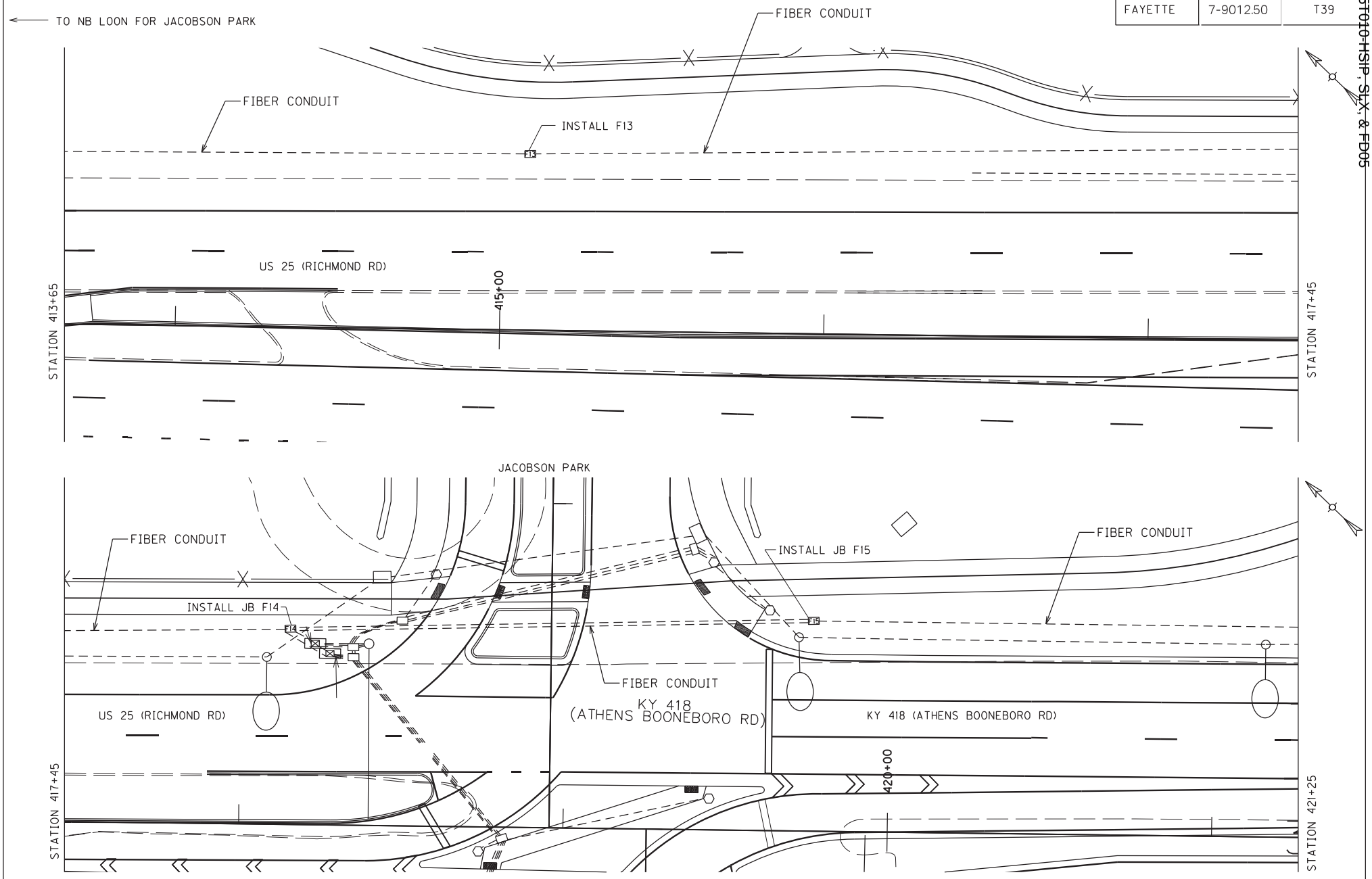
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-FROM COYS LN & NB LOON FOR JACOBSON PARK

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T39



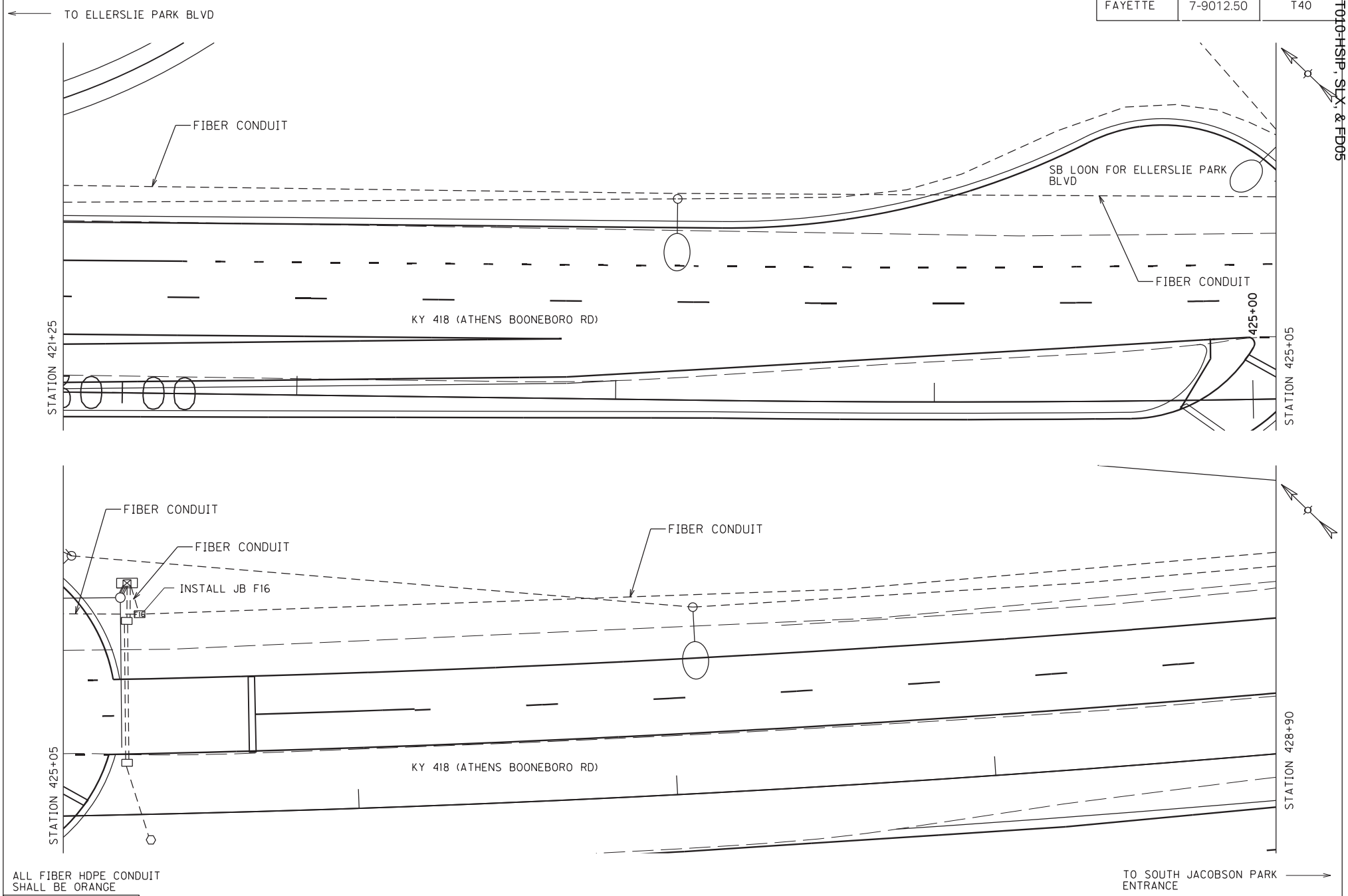
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-FROM NB LOON FOR JACOBSON PARK & ELLERSLIE PARK BLVD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T40

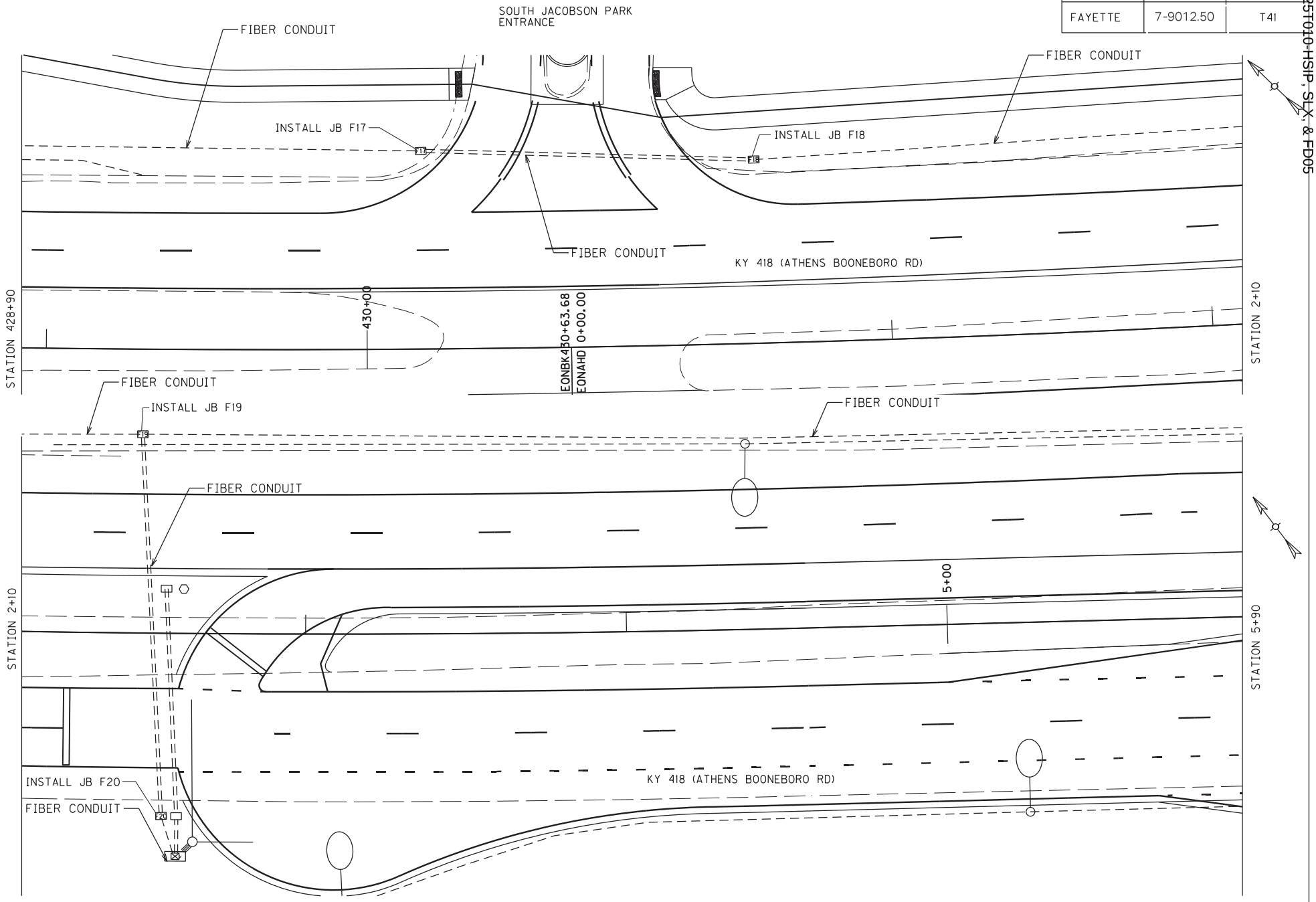


LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-SB LOON FOR ELLERSLIE PARK BLVD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T41



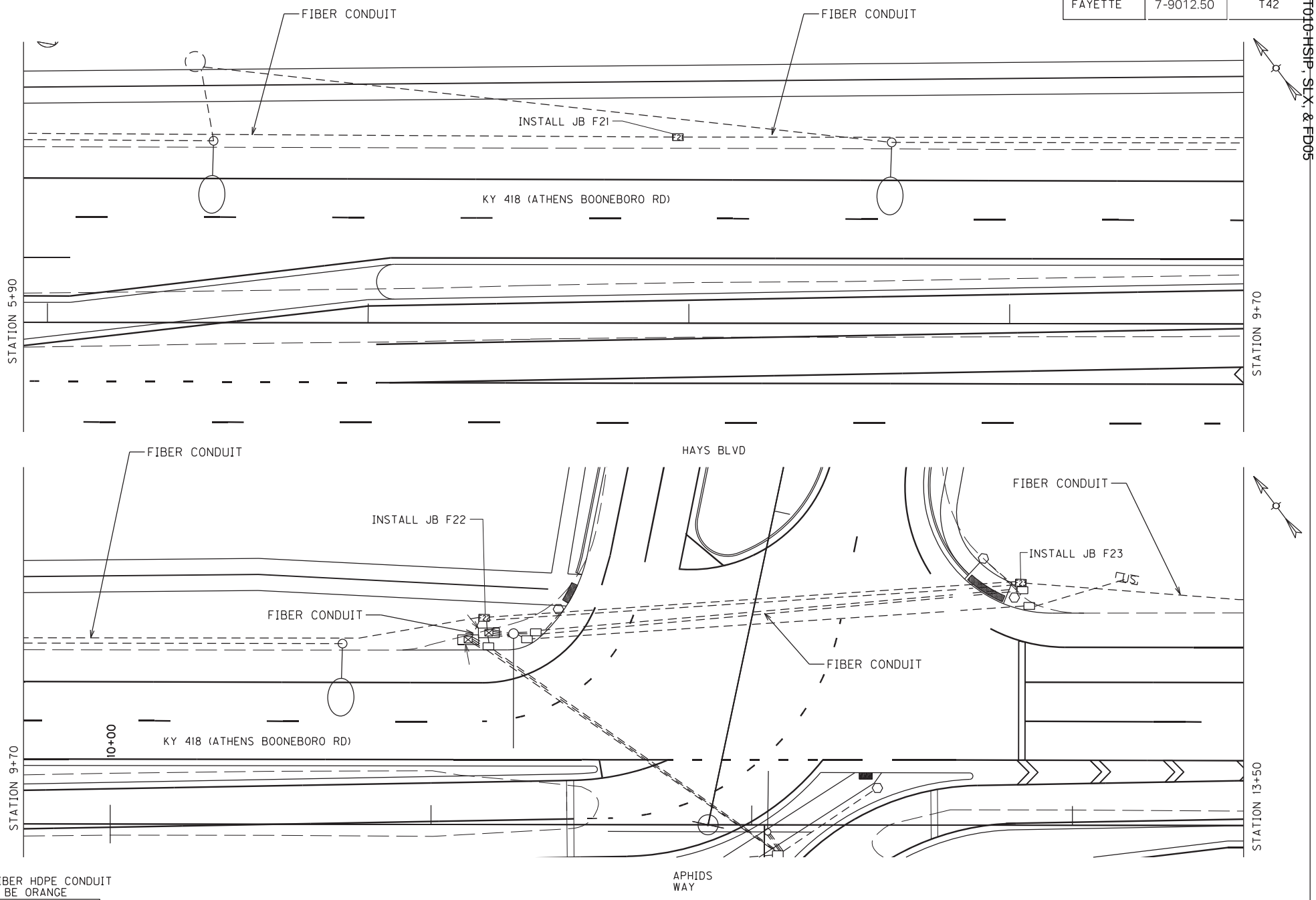
LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

ALL FIBER HDPE CONDUIT SHALL BE ORANGE

SCALE: 1"=40'

FIBER PLAN-SOUTH JACOBSON PARK ENTRANCE & NB LOON FOR HAYS BLVD

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T42



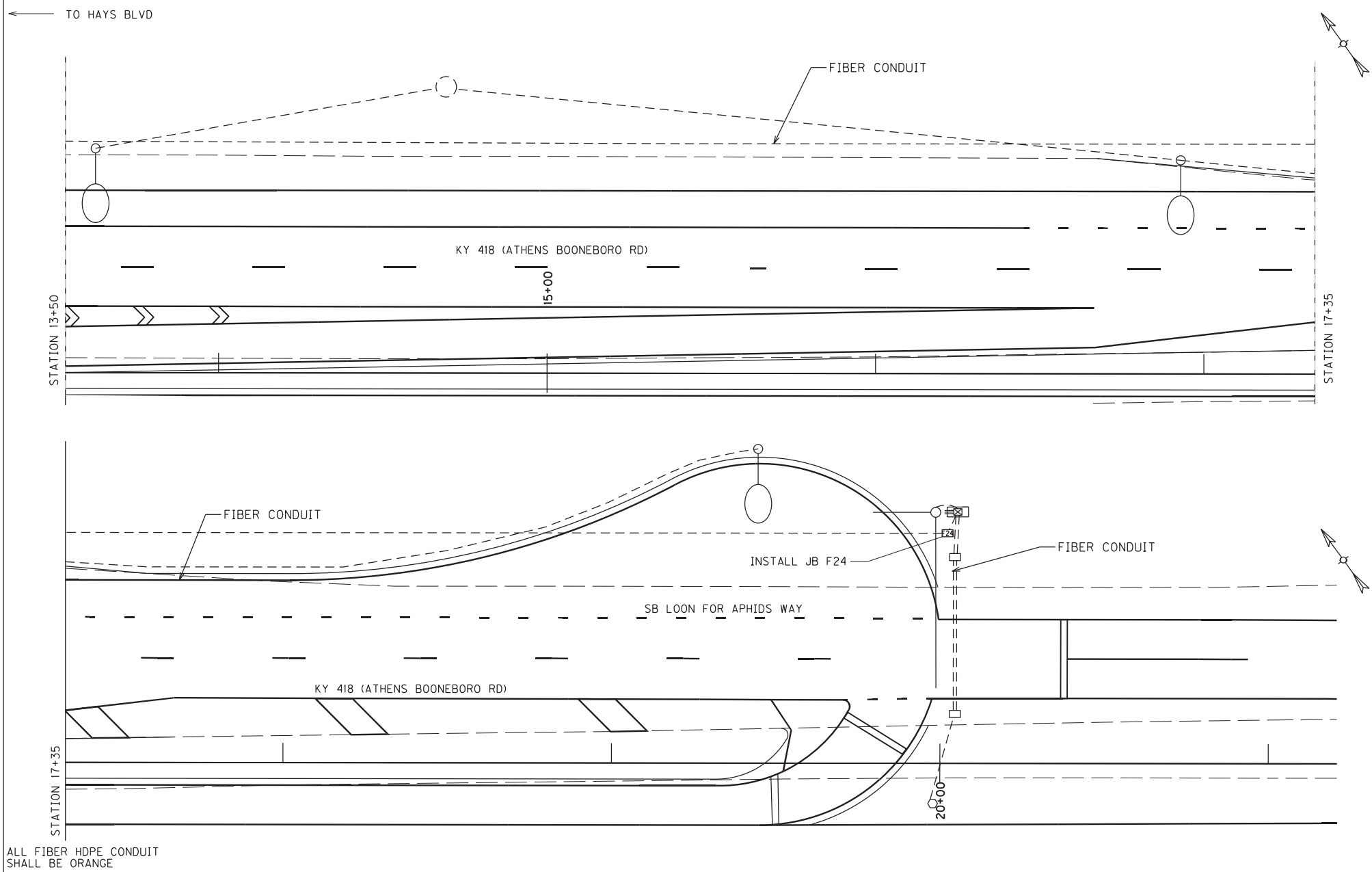
ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND	
— —	2" CONDUIT
= =	2-2" CONDUIT
F9	COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-KY 418 & HAYS BLVD/APHIDS WAY

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	T43



ALL FIBER HDPE CONDUIT SHALL BE ORANGE

LEGEND
— — 2" CONDUIT
= = 2-2" CONDUIT
F9 COMMUNICATION JUNCTION BOX TYPE C

SCALE: 1"=40'

FIBER PLAN-EB FOR HAYS BLVD & KY 418 @ SB LOON FOR APHIDS WAY

FILE NAME: C:\PWWORKING\EAST01\D2232416\T01200SG.DGN

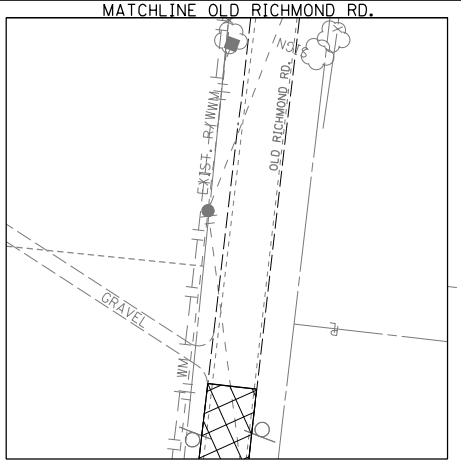
USER: SwansegarT
DATE PLOTTED: December 24, 2024

E-SHEET NAME:

Power InRoads v8.11.9.912

Contract ID: 254301
Page 440 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U1



PI STA 52+77.69
D= 45°24'43.59"
C= 28°38'52.40"
T=83.69
L=158.52
R=200.00
E=16.80

PI STA 59+30.46
D= 95°55'08.29"
C= 16°51'06.12"
T=377.07
L=569.19
R=340.00
E=167.72

STA. 54+50 - 28' LT
10" FM

STA. 54+00 - 28' LT
1 - 10" DIMJ 11.25° BEND
W/THRUST BLOCK

STA. 53+50 - 37.37' LT
1 - TIE-INTO EXIST. 10" FM
1 - 10" DIMJ 11.25° BEND
W/THRUST BLOCK
1 - AIR RELEASE VALVE ASSEMBLY

STA. 55+00 - 28' LT 10" FM
REMOVE EXISTING ARV

STA. 55+50 - 28' LT
BEGIN 22" CASING PIPE

P 36
GREEN PROPERTY
HOLDINGS,LLC

STA. 50+00.00 APHIDS WAY =
STA. 12+03.96 KY 418

PI 52+77.69

PC 55+53.39

PT 61+22.58

APPROX. COMMERCIAL DEVELOPMENT LINE

FUTURE
CONSTRUCTION
BY OTHERS

PROP.R/W

DISTURB LIMITS

TEMP.ESMT.

35:1 TAPER

50' TAPER

I.E.
1024.50

O.E.
1023.56

I.E.
1022.96

O.E.
1022.71

EXIST. R/W

SAN

10" FM

APHIDS WAY

35:1 SHLD.
TAPER

PT 53+52.52

PC 51+94.00

EXIST. R/W & C/A

200 LF - 22" STEEL CASING PIPE
220 LF - 10" DI RES. JOINT PIPE

STA. 57+50 - 32.58' RT
END 22" CASING PIPE
1 - 10" SOLID SLEEVE

STA. 57+62 - 41.53' RT
1 - 10" DIMJ 11.25° BEND
W/THRUST BLOCKS

STA. 58+00 - 64.69' RT
1 - 10" DIMJ 11.25° BEND
1 - TIE-INTO EXIST. 10" FM
W/THRUST BLOCKS

PI 59+30.46

MATCHLINE OLD RICHMOND RD.

P 37
ANDERSON ACQUISITIONS LLC

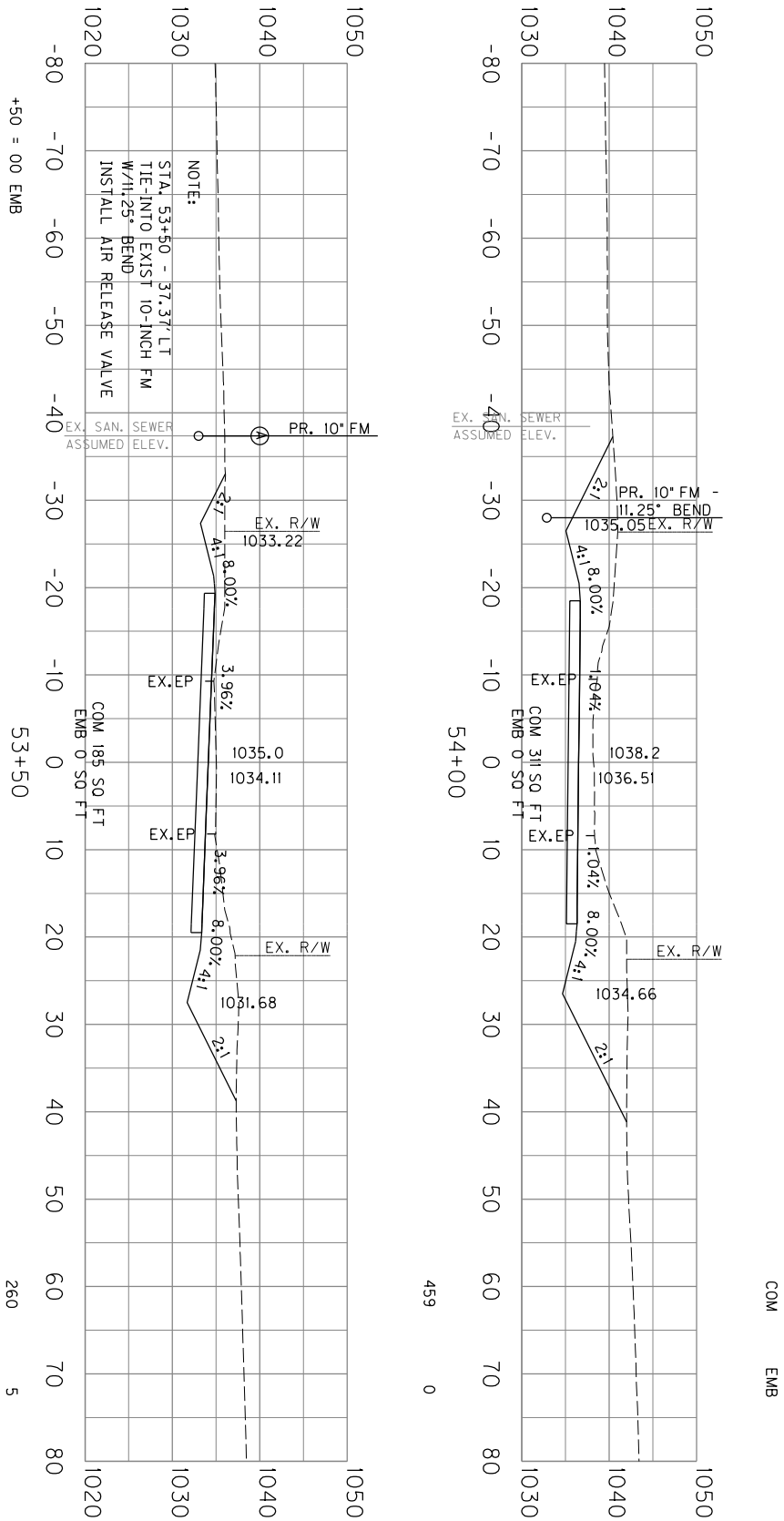
SCALE: 1" = 100'

APHIDS WAY
SANITARY SEWER PLAN
STA. 51+00 TO STA. 62+50

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05

FILE NAME: C:\PWWORKING\EASTON\D3592249\7-9012.50 - U1 UTIL-PLAN_1.DGN
USER: ACAUDILL
DATE PLOTTED: February 25, 2025
MicroStation v8.11.9.919

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: January 16, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\APHIDS XS.DGN



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

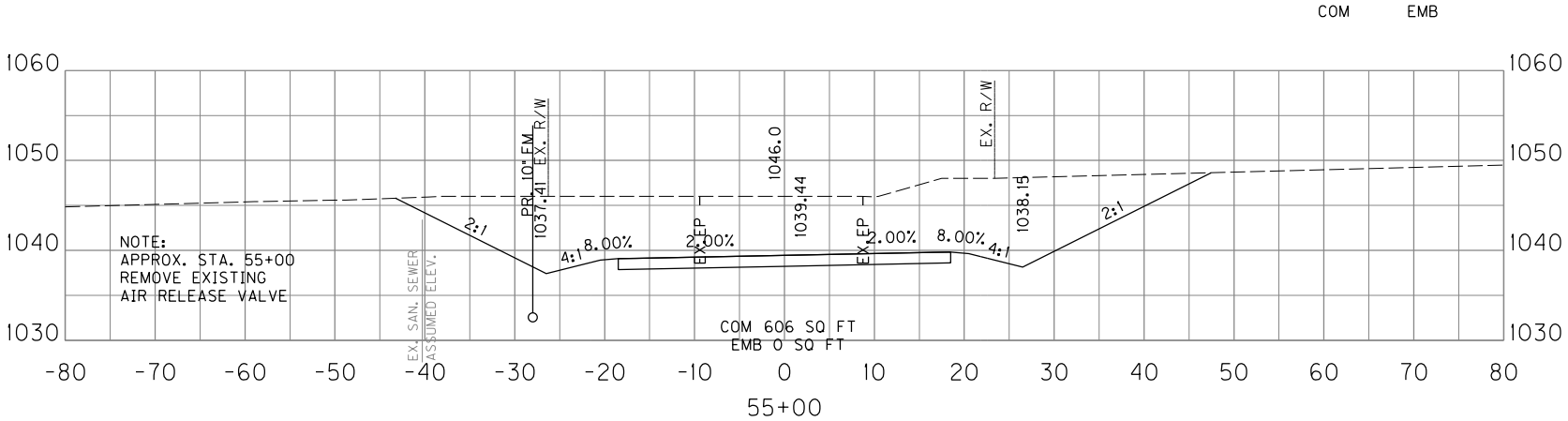
APHIDS WAY
CROSS SECTION SHEET
STA.53+50 TO STA.54+00

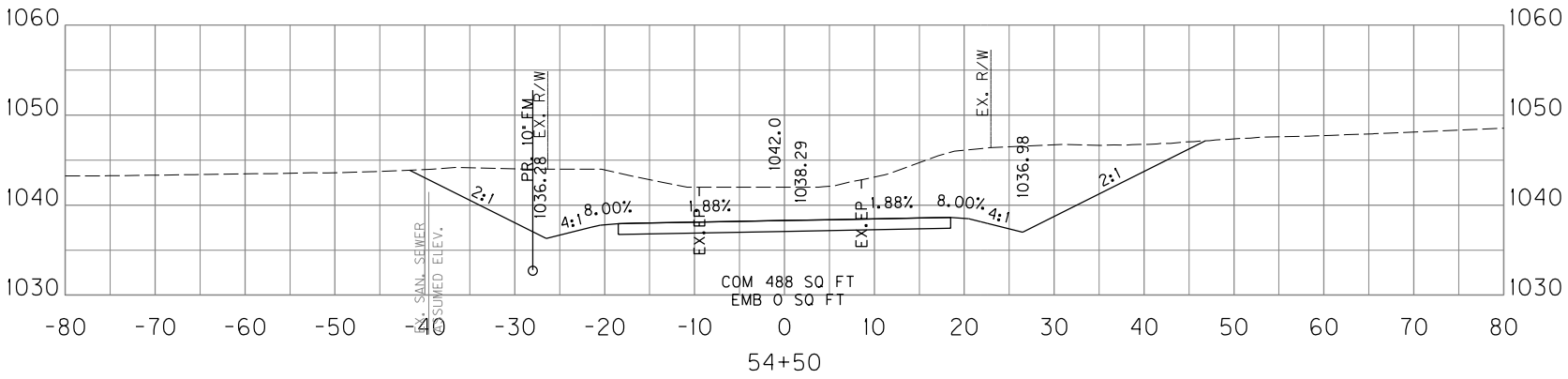
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U2

Contract ID: 254301
Page 442 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U3

STA. 55+44 - 28' LT
BEGIN DI RES. JOINT PIPE



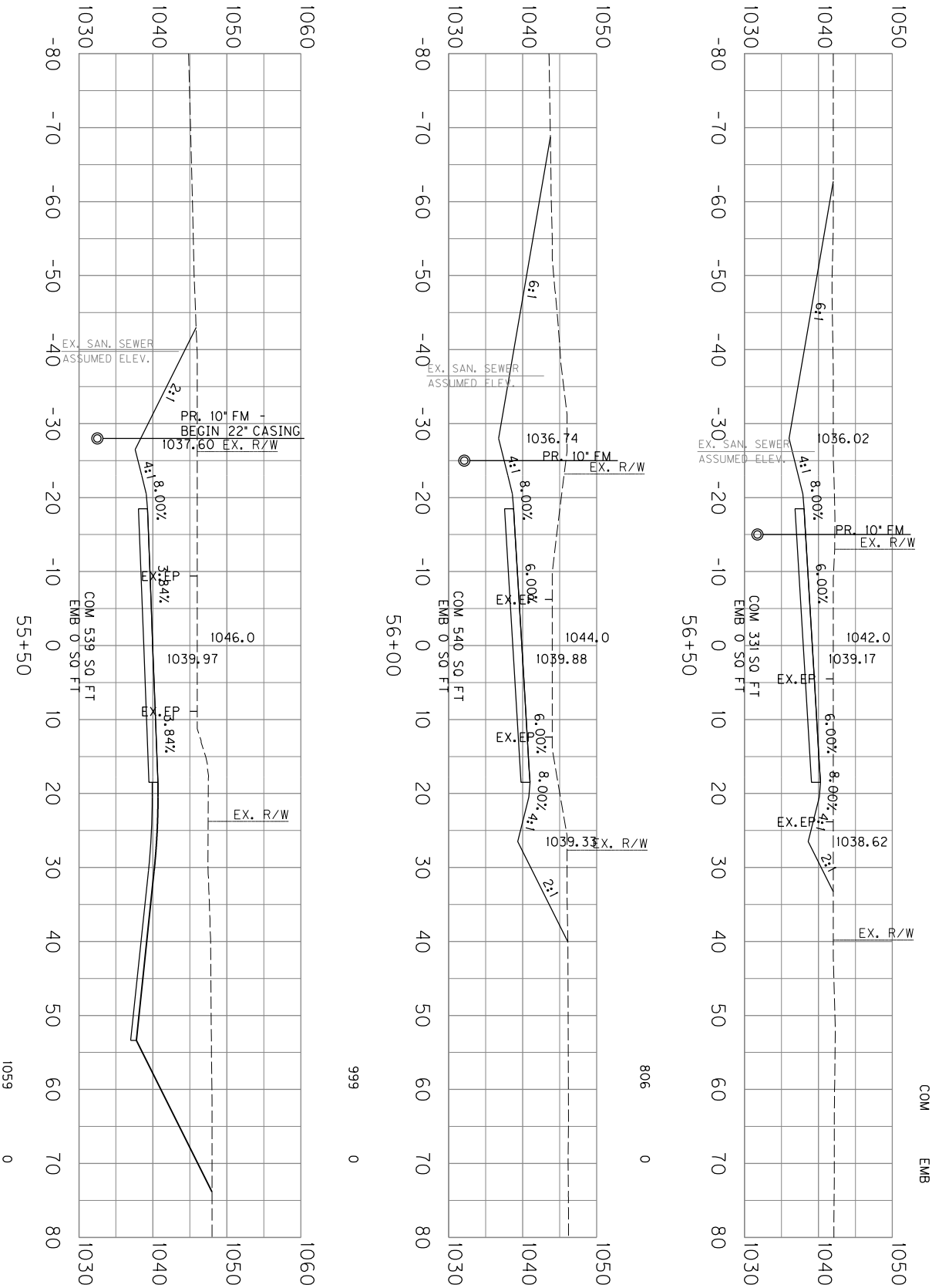


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.54+50 TO STA.55+00

FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: January 16, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\APHIDS XS.DGN

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: January 16, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\APHIDS XS.DGN

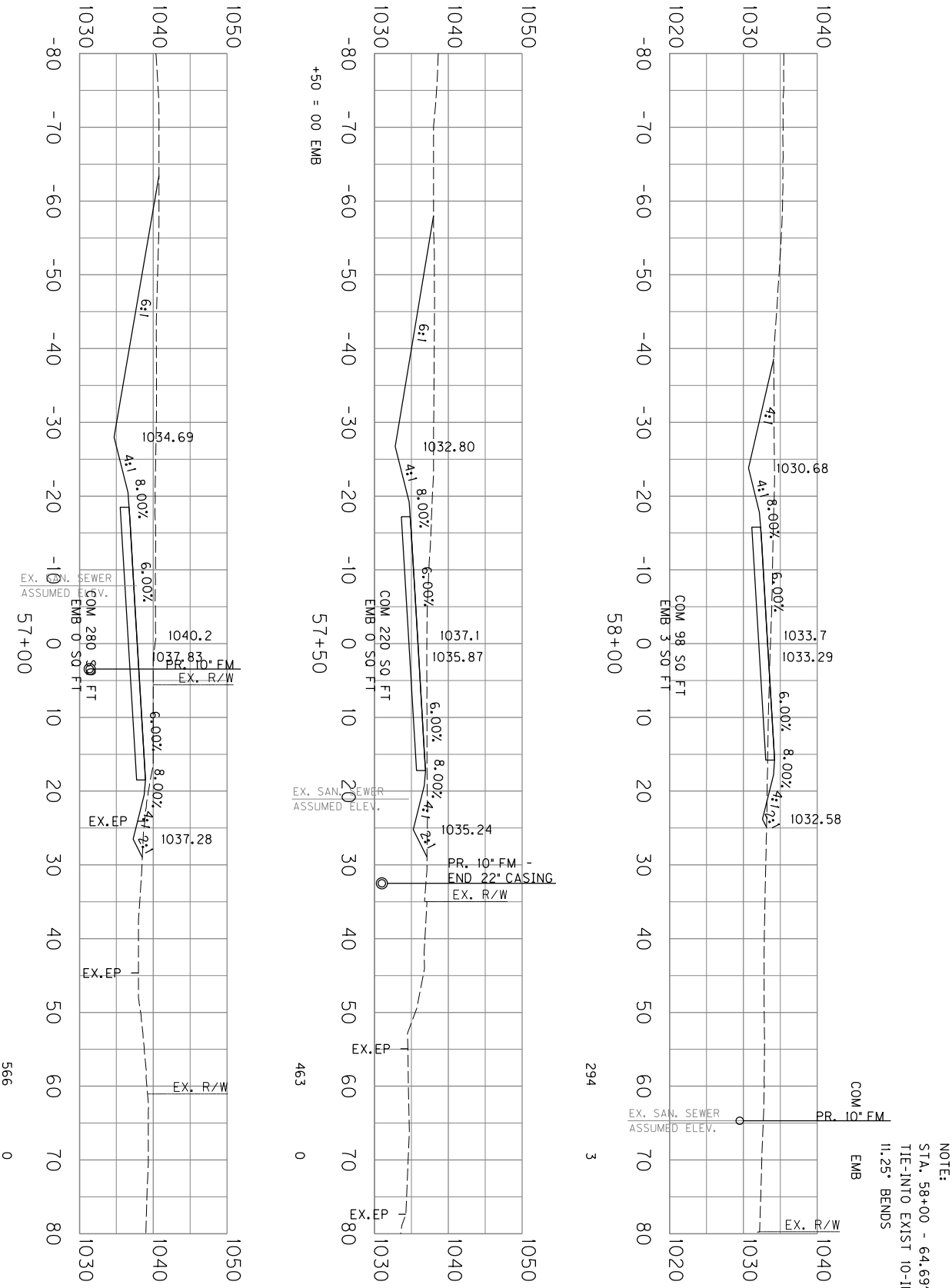


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.55+50 TO STA.56+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U4

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: January 16, 2025 | FILE NAME: C:\PWWORKING\EASTOI\DI641094\APHIDS XS.DGN



NOTE:
STA. 58+00 - 64.69' RT
TIE-INTO EXIST 10-INCH FM
11.25° BENDS

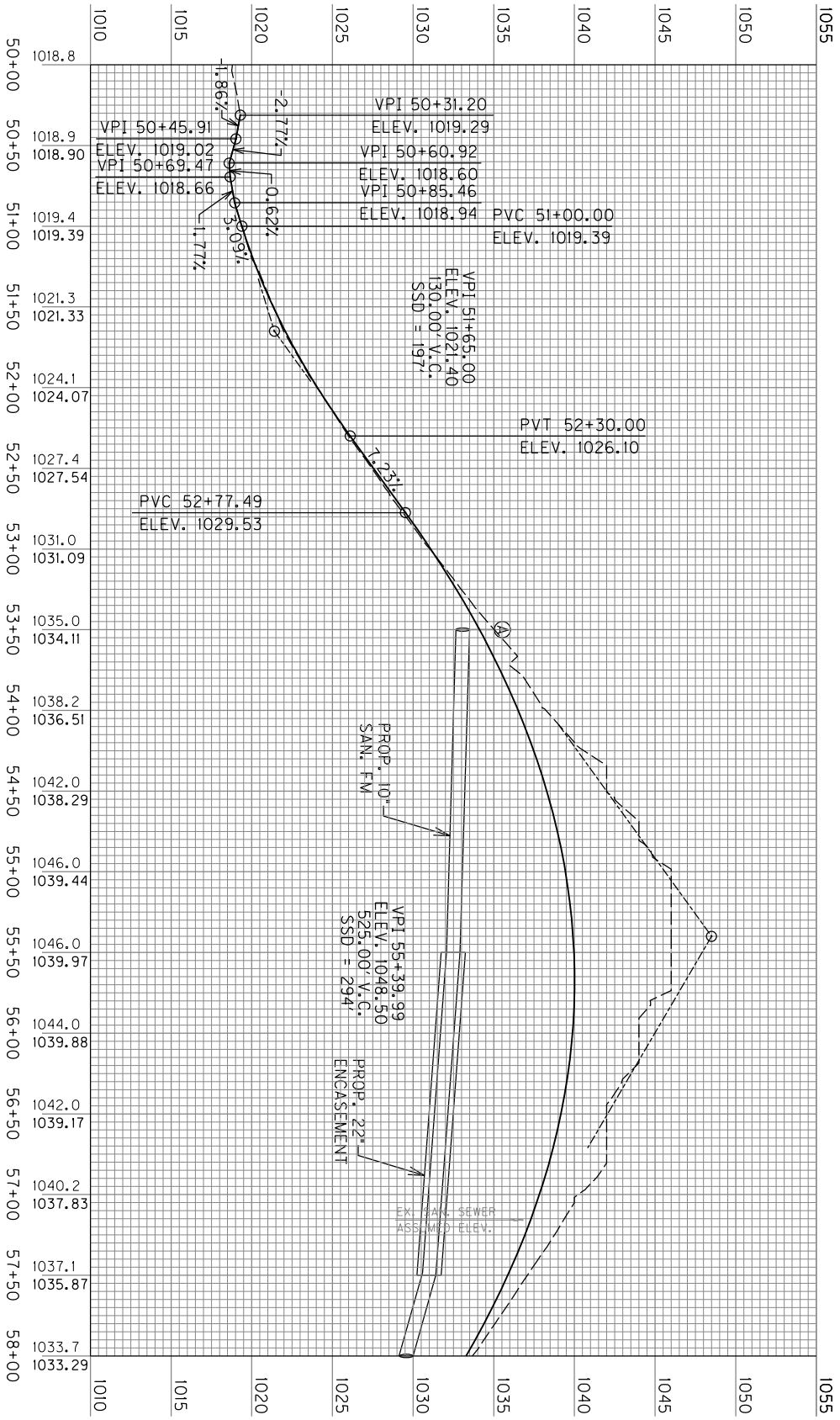
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.57+00 TO STA.58+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U5

MicroStation v8.11.9.919 | USER: ACAUDILL | DATE PLOTTED: February 25, 2025 | FILE NAME: C:\PWWORKING\EASTOI\D3592249\7-9012.50 - U6 -APHIDS PROFILE.DGN

DATUM



SCALE: 1" = 100 HORIZONTAL
1" = 10 VERTICAL

APHIDS WAY
PROFILE SHEET
STA. 50+00 TO STA. 58+00

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	U6

DATUM

Contract ID: 254301
Page 446 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	U7

ITEM CODE	ITEM	UNIT	5
15021	S ENCASEMENT STEEL OPEN CUT RANGE 2	LF	200
15026	S FORCE MAIN AIR RLS/VAC VLV 02 IN	EA	1
15062	S FORCE MAIN PVC 10 INCH	LF	500
15076	S FORCE MAIN TIE-IN 10 INCH	EA	2
15122	S STRUCTURE REMOVAL	EA	1

NOTE: ANY FITTINGS (INCLUDING BENDS) NECESSARY ARE INCIDENTAL TO PIPE

CONTRACTOR SHALL COORDINATE SANITARY SEWER FORCE MAIN WORK WITH LFUCG DIVISION OF WATER QUALITY (859.425.2400) PRIOR TO ANY WORK BEING DONE ON THE SANITARY SEWER FORCE MAIN.

"FOR FORCE MAIN RECONSTRUCTION ONLY"

SCALE: 1" = 100'

KY 418 SANITARY SEWER
GENERAL SUMMARY

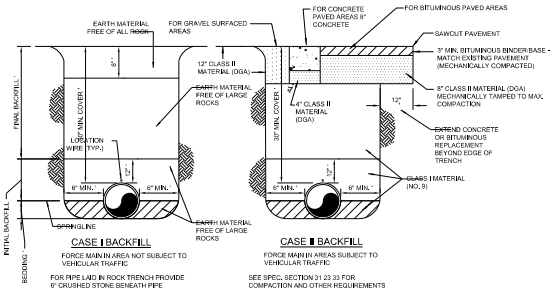
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: February 18, 2025
FILE NAME: C:\PWWORKING\EASTON\D3592249\7-9012.50 - U7 - GENERAL SUMMARY.DGN

Contract ID: 254301 Page 447 of 605

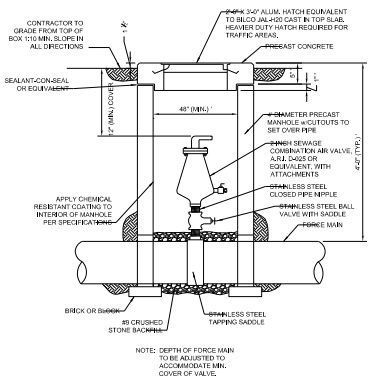
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	U8

NOTES (APPLY TO GRAVITY SEWER AND FORCE MAIN TRENCHING AND BACKFILL DETAIL):

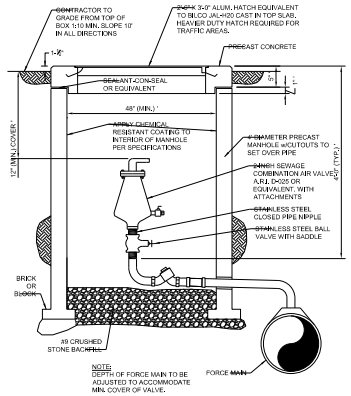
1. FOR PIPE LAID IN ROCK TRENCH PROVIDE 6" CLASS I CRUSHED STONE BENEATH PIPE.
2. TRENCH WIDTH SHALL BE OD OF PIPE + 16 INCHES.
3. BEDDING UNDER THE SEWER AT THE BELL SHALL BE A MIN. OF 4".
4. SEE SPEC SECTION 31 23 33 FOR COMPACTION AND OTHER REQUIREMENTS.
5. TEMPORARY DGA MAY BE PLACED IN TRENCH TO ALLOW SETTLING IF ANY.



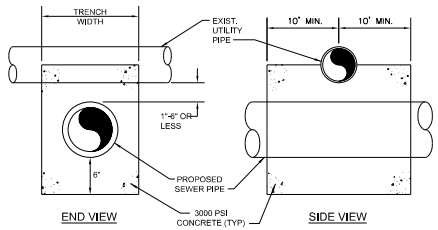
FORCE MAIN
BEDDING AND BACKFILLING DETAILS
NTS



SEWAGE COMBINATION AIR VALVE & VAULT
NOT TO SCALE



OFFSET SEWAGE COMBINATION AIR VALVE & VAULT
NOT TO SCALE



NOTES:

1. CONCRETE ENCASEMENT SHALL BE USED WHEN CLEARANCE BETWEEN SEWER AND UTILITY PIPE IS 1'-6" OR LESS. CONCRETE SHALL BE CLASS "B" MEETING THE REQUIREMENTS OF SECTION 601 OF THE KDOH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
2. "UTILITY PIPE" INCLUDES UNDERGROUND WATER, NATURAL GAS, TELEPHONE, ELECTRICAL CONDUITS, STORM SEWER OR TYPICALLY NON-CONTAMINATING FACILITIES.
3. PROPOSED SEWER TO BE FULLY ENCASED WHETHER ABOVE OR BELOW EXISTING UTILITY PIPE. IF ABOVE EXISTING UTILITY PIPE, PROTECT UTILITY PIPE WITH PIPE SADDLE BEFORE PLACING CONCRETE.

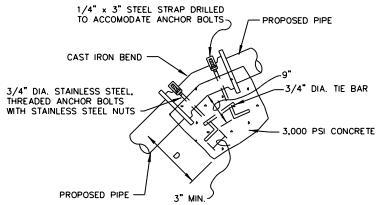
UTILITY CROSSING FOR SEWER INSTALLATION
CONCRETE ENCASEMENT
NTS

SCALE: N/A

APHIDS WAY SANITARY SEWER
DETAIL SHEET

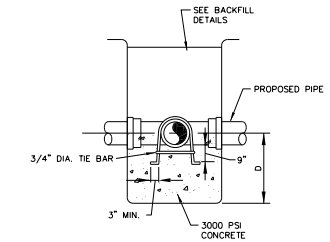
FAYETTE COUNTY
0346R25T010-HSIP, SLX, & FD05
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: February 25, 2025
FILE NAME: C:\PWWORKING\EASTON\D3592249\7-9012.50 - U8 - 05C-01.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	7-9012.50	U9

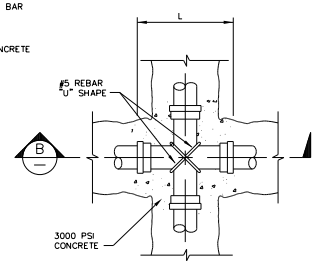


VERTICAL BENDS

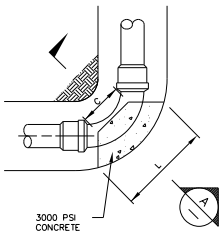
VERTICAL BENDS BLOCKING
NTS



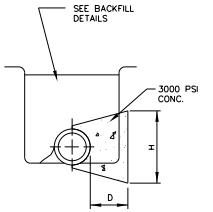
SECTION B-B



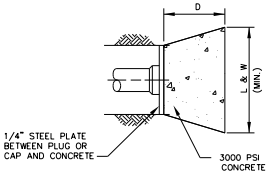
CROSS ANCHORING
NTS



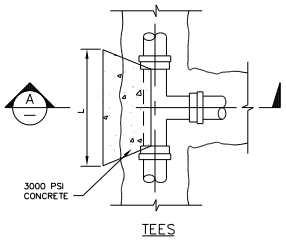
45°, 90° BENDS



SECTION A-A



PLUGS



TEES

CONCRETE THRUST BLOCKS
NTS

PLUGS

SIZE	3"	4"	6"	8"	10"	12"
D	7"	9"	12"	16"	20"	25"
L & W	14"	17"	24"	32"	39"	45"

TEES

SIZE	3"	4"	6"	8"	10"	12"
D	5"	5"	6"	9"	11"	14"
L	20"	22"	28"	36"	44"	52"
H	7"	10"	15"	20"	25"	30"
C (Max.)	11"	13"	16"	18"	22"	24"

90-Ells (Quarter Bends)

SIZE	3"	4"	6"	8"	10"	12"
D	7"	8"	12"	17"	20"	25"
L	24"	28"	40"	52"	62"	74"
H	11"	16"	20"	26"	32"	38"
C (Max.)	11"	13"	16"	18"	22"	24"

45-Ells (Eighth Bends)

SIZE	3"	4"	6"	8"	10"	12"
D	5"	6"	9"	13"	16"	19"
L	15"	20"	28"	36"	44"	52"
H	9"	12"	15"	20"	25"	30"
C (Max.)	6"	8"	10"	11"	13"	15"

22 1/2-Ells (Sixteenth Bends)

SIZE	3"	4"	6"	8"	10"	12"
D	3"	4"	5"	7"	9"	11"
L	12"	16"	20"	24"	30"	36"
H	6"	7"	11"	16"	20"	22"
C (Max.)	6"	8"	10"	11"	13"	15"

11 1/4-Ells (Thirty-Second Bends)

SIZE	3"	4"	6"	8"	10"	12"
D	3"	4"	5"	6"	7"	8"
L	12"	16"	20"	22"	26"	30"
H	6"	6"	7"	9"	12"	15"
C (Max.)	6"	8"	10"	11"	13"	15"

Crosses

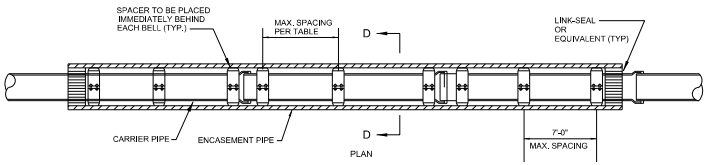
SIZE	3"	4"	6"	8"	10"	12"
D	15"	15"	15"	15"	18"	18"
L	18"	20"	23"	25"	29"	31"

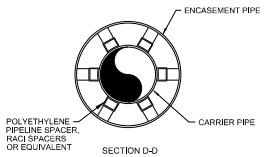
Vertical Bends (45-Ell or less)

SIZE	3"	4"	6"	8"	10"	12"
D	18"	18"	24"	30"	36"	42"
Volume (Cu. Ft.)	13	19	38	66	99	139

NOTES:
1. TABLES ARE BASED ON A SOIL BEARING CAPACITY OF 2000 POUNDS/SQUARE FOOT (PSF)
2. IF SOIL BEARING CAPACITY IS LESS THAN 2000 PSF, OR PIPE IS LAID IN FILL, CONSULT ENGINEER.
3. ALL FIGURES ARE MINIMUM UNLESS OTHERWISE STATED.
4. BLOCKS MUST BE PLACED AGAINST UNDISTURBED EARTH.

THRUST BLOCK SCHEDULE





ENCASEMENT PIPE NOTES:

1. ENCASEMENT PIPE SHALL BE NEW GRADE B STEEL PIPE, INSTALLED WITHOUT BENDS.
2. ALL JOINTS IN ENCASEMENT PIPE SHALL BE WELDED. WELDS SHALL BE SOLID BUTT-WELDS WITH A SMOOTH NON-OBSTRUCTING JOINT INSIDE AND SHALL CONFORM TO AMERICAN WELDING SOCIETY SPECIFICATIONS.
3. MINIMUM ENCASEMENT PIPE WALL THICKNESS IS SPECIFIED IN SECTION 33 05 23.
4. PIPELINE SPACERS SHALL BE SELECTED AND INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.

TYPICAL ENCASEMENT PIPE INSTALLATION
N.T.S.

SCALE: N/A

APHIDS WAY SANITARY SEWER
DETAIL SHEET

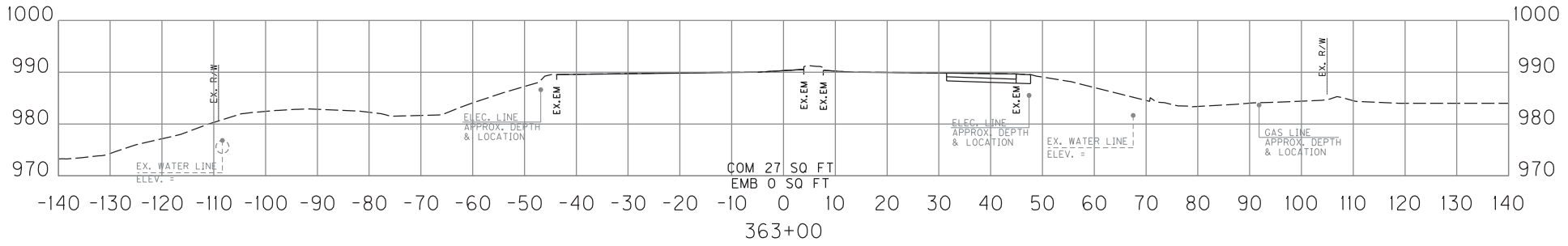
FAYETTE COUNTY
034CR25T010-HSIP, SLX, & FD05
FILE NAME: C:\PWWORKING\EASTOI\D3592249\7-9012.50 - U9 - 05C-02.DGN
USER: ACAUDILL
DATE PLOTTED: February 25, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	XI

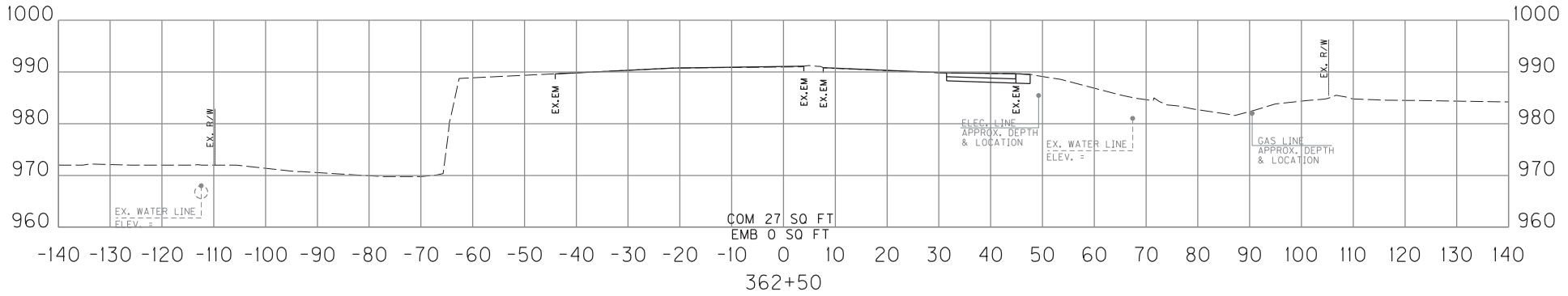
NOTES:

1. ALL WORK IS TO BE DONE WITHIN EXISTING RIGHT OF WAY UNLESS DIRECTED BY THE ENGINEER. SEE SPECIAL NOTES APPLICABLE TO THE PROJECT.
2. ELEVATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD. GRADE DITCHES TO DRAIN.
3. BEWARE OF UTILITIES IN THE AREA. SOME UTILITIES WILL BE RELOCATED AND OTHERS WILL REMAIN IN PLACE. SEE UTILITY NOTE FOR FURTHER DETAILS.

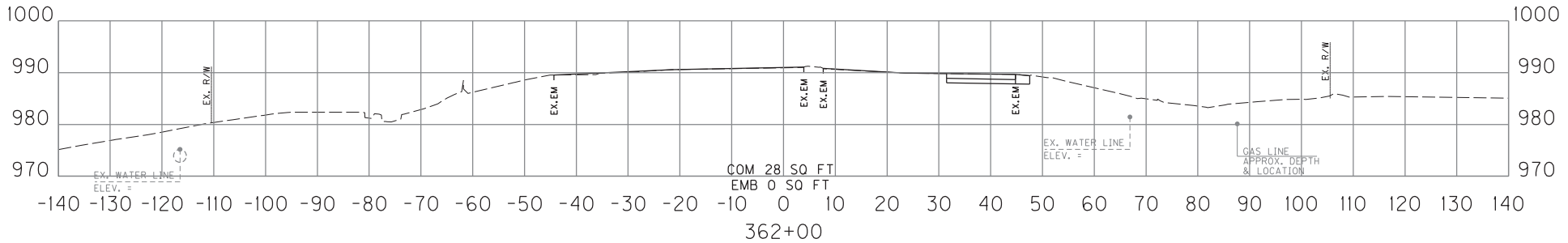
COM EMB



49 0



51 0



360+60 = 00 COM

74 0

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

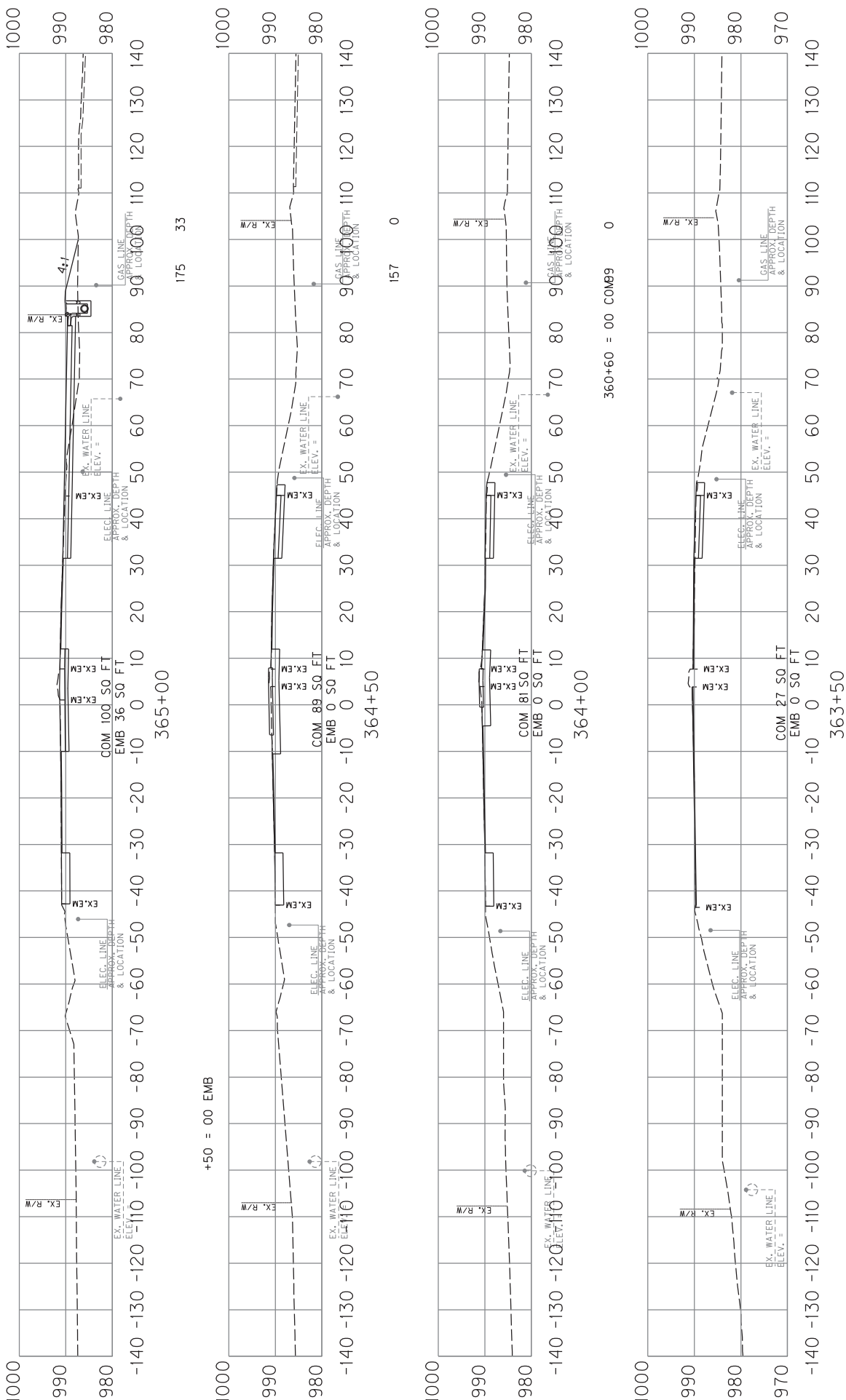
US 25
CROSS SECTION SHEET
STA. 362+00 TO STA. 363+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOU\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

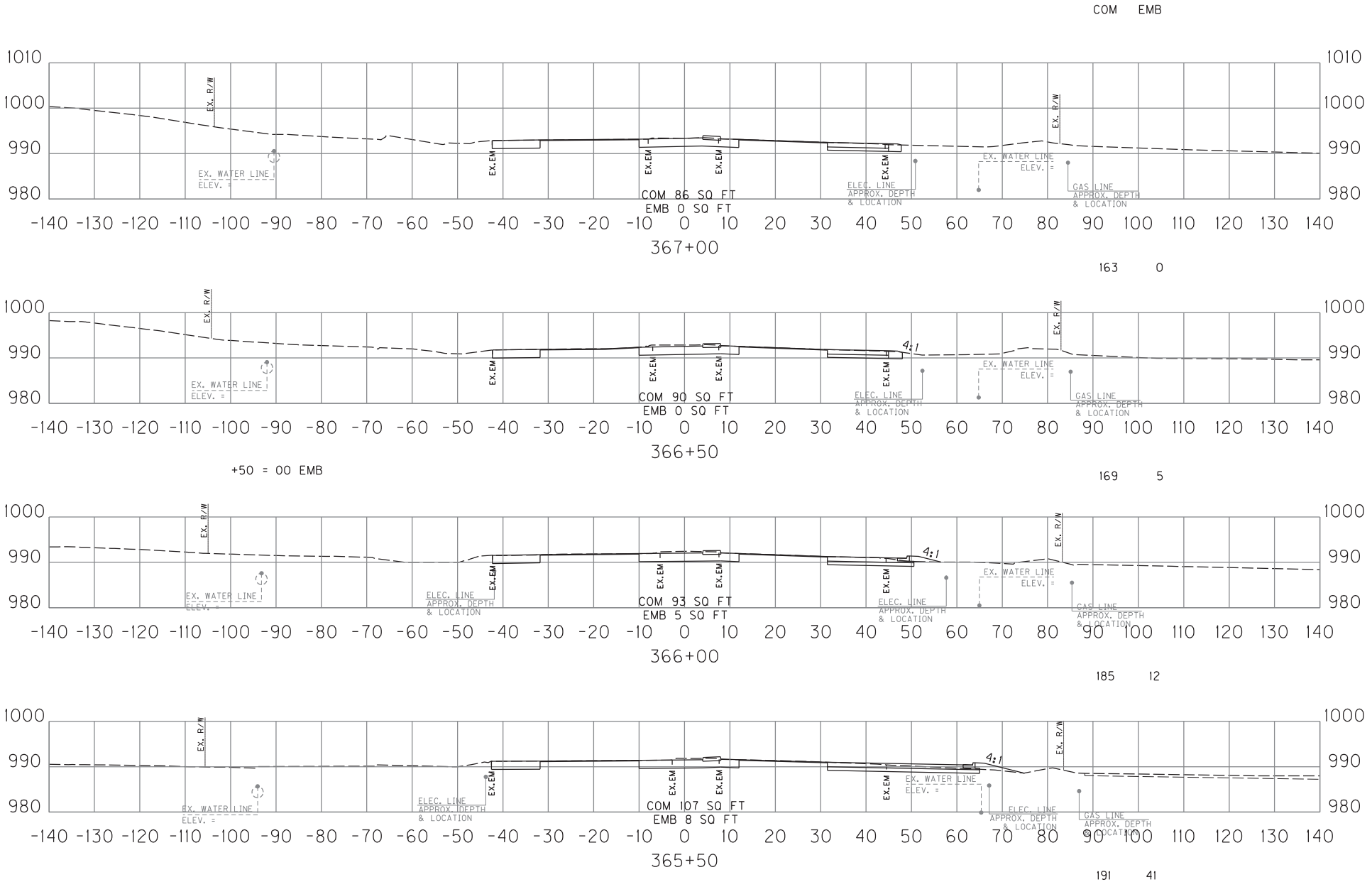
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X2

US 25
CROSS SECTION SHEET
STA. 363+50 TO STA. 365+00

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



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X3

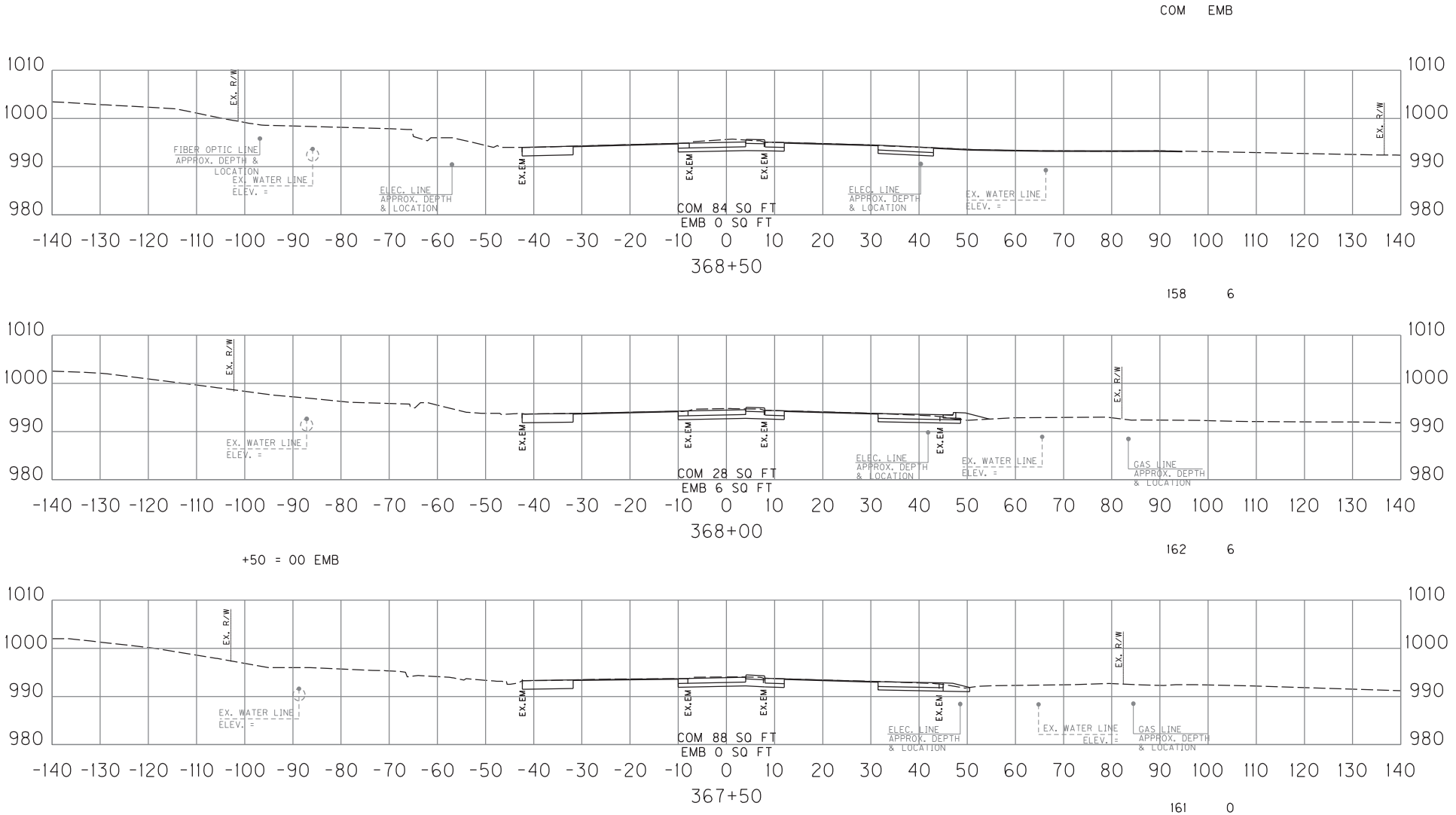


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 365+50 TO STA. 367+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X4

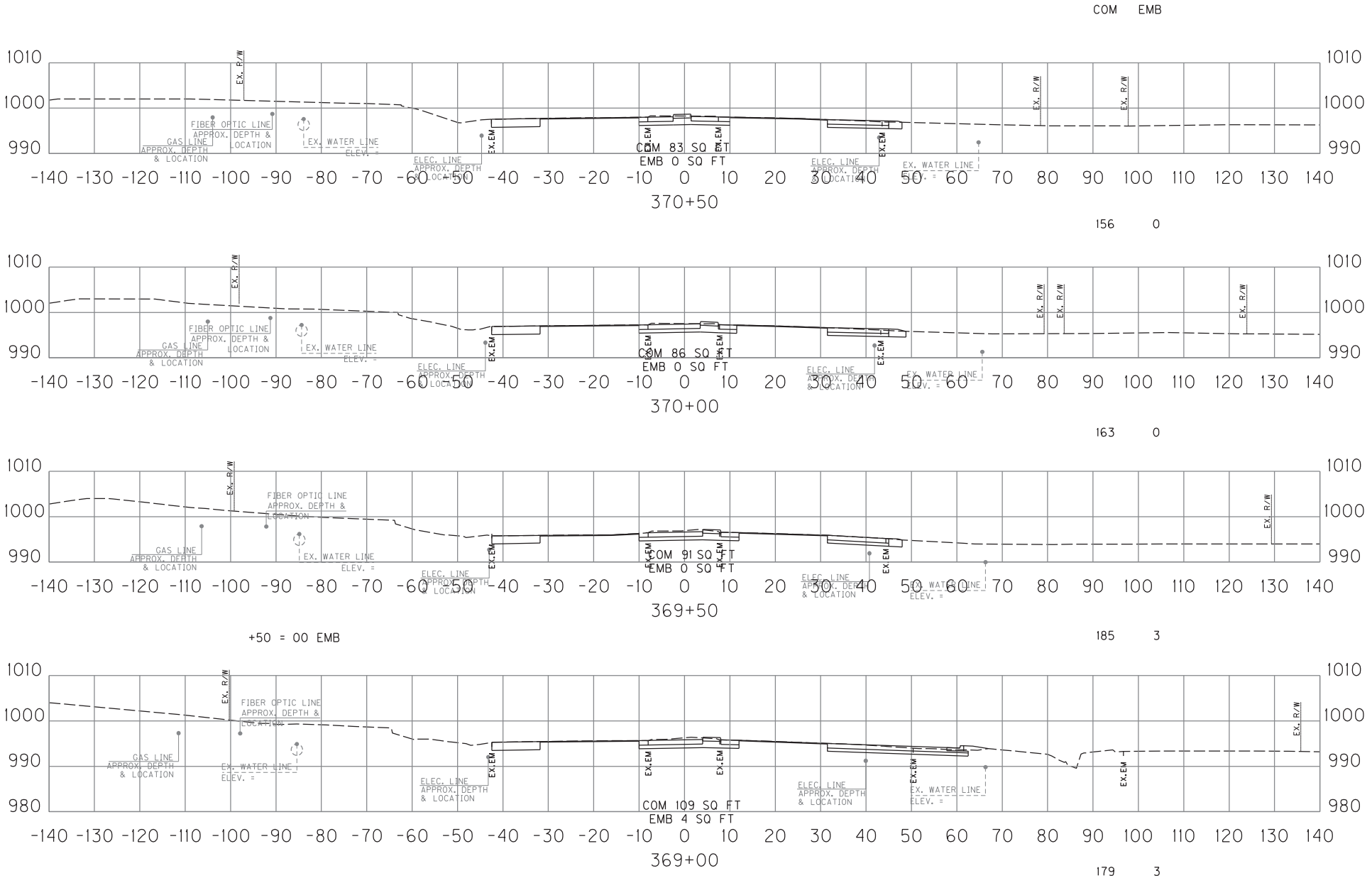


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA.367+50 TO STA.368+50

FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X5



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

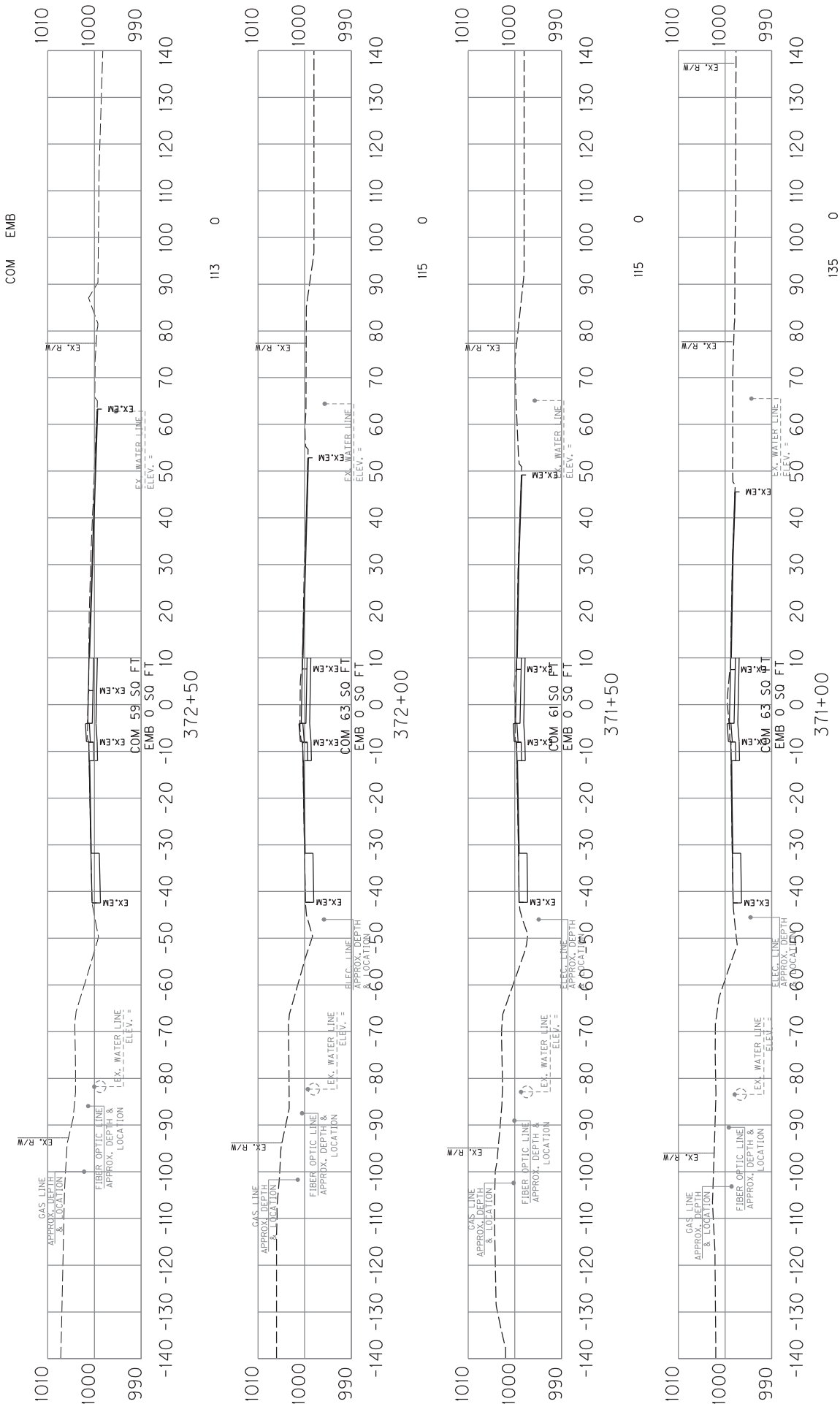
US 25
CROSS SECTION SHEET
STA. 369+00 TO STA. 370+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

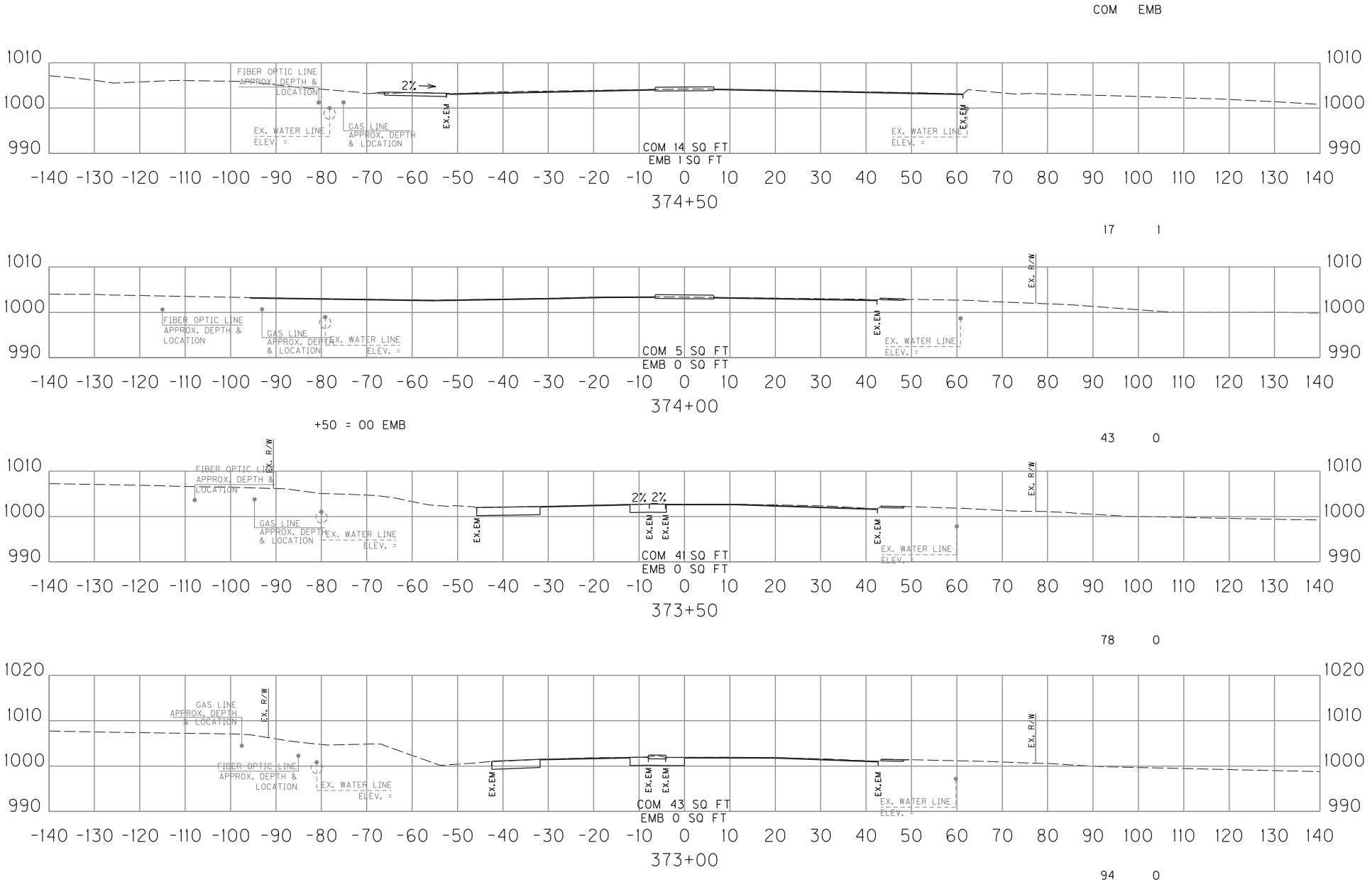
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X6

US 25
CROSS SECTION SHEET
STA.371+00 TO STA.372+50

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



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X7

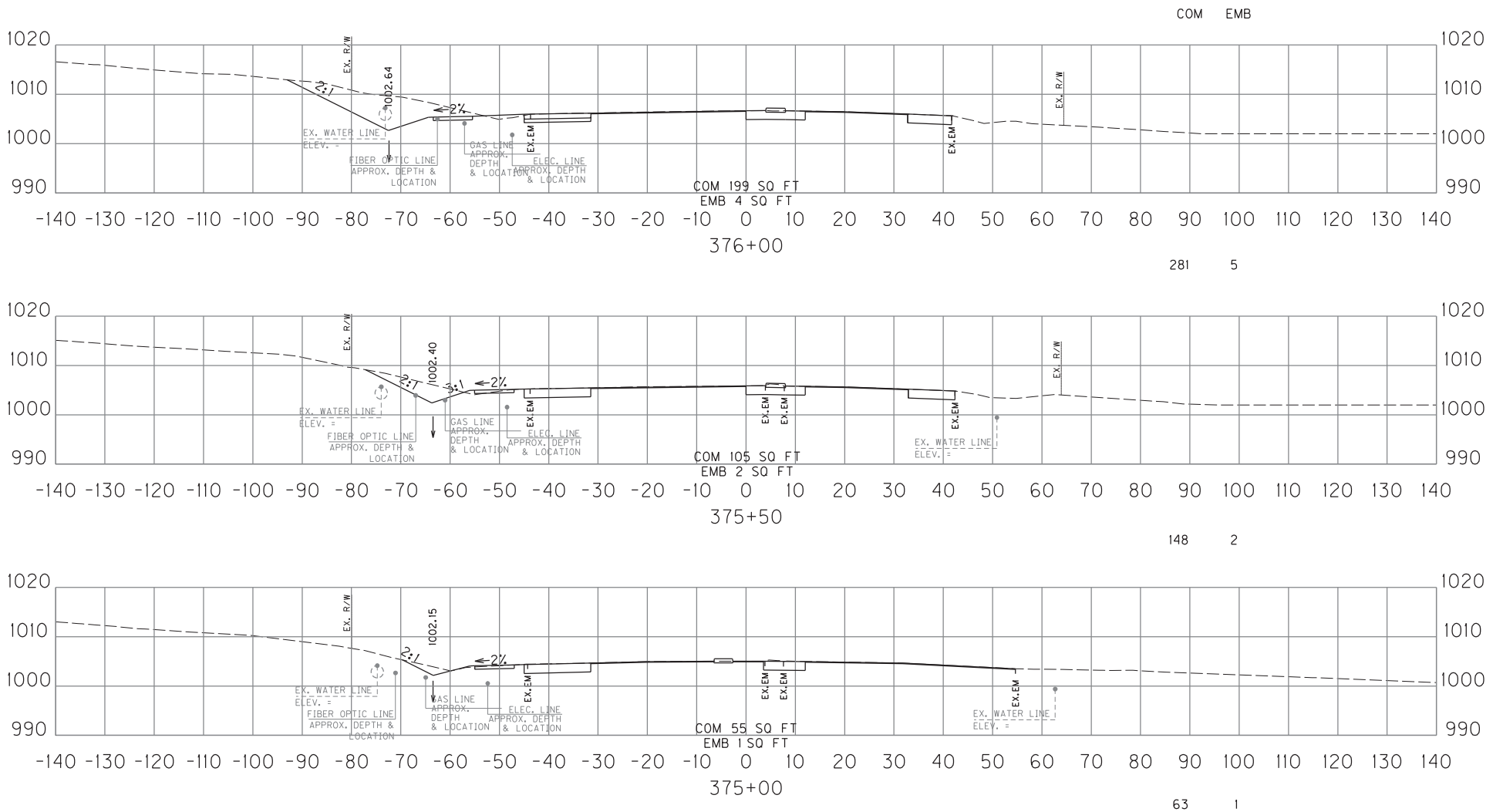


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 373+00 TO STA. 374+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X8

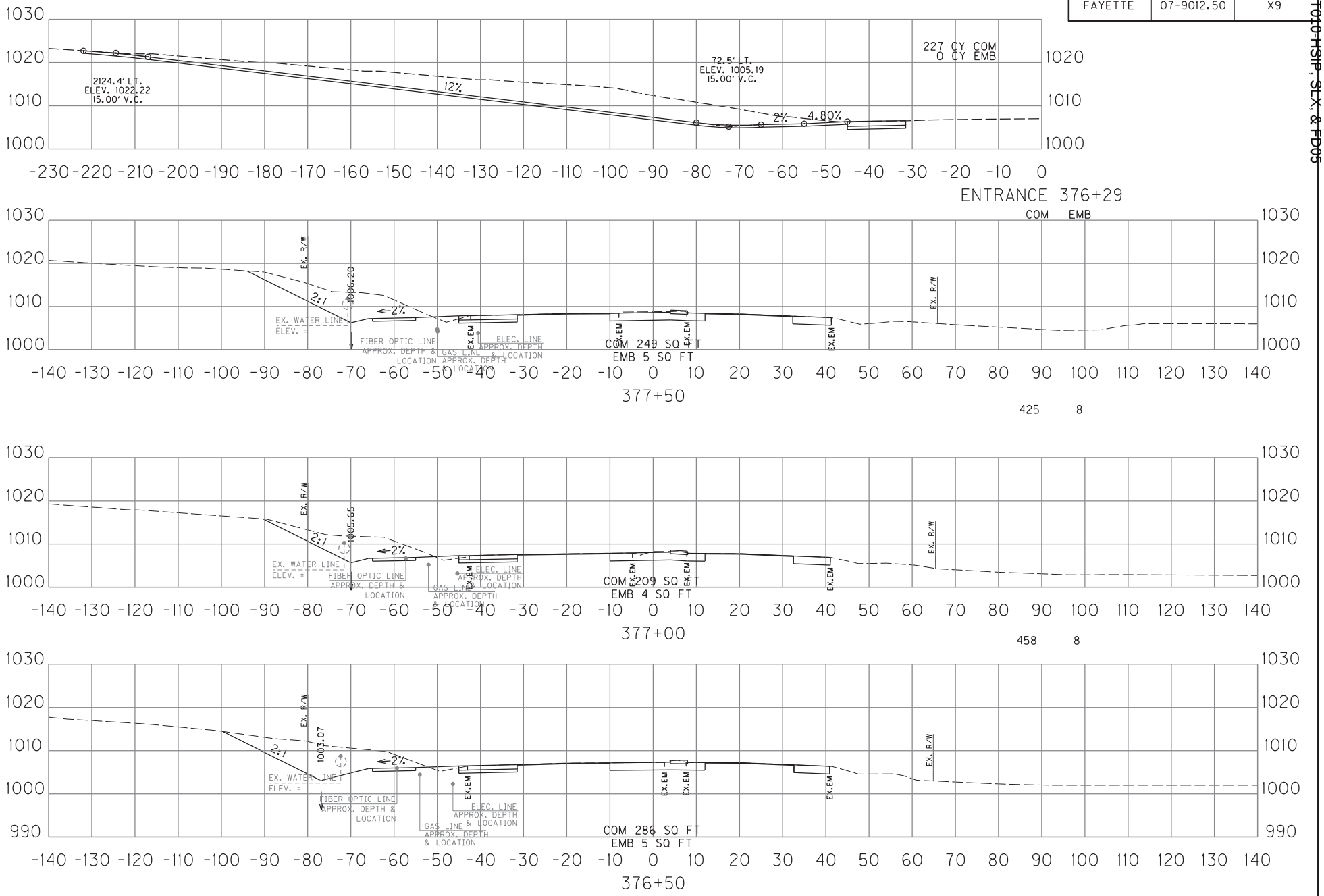


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA.375+00 TO STA.376+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X9

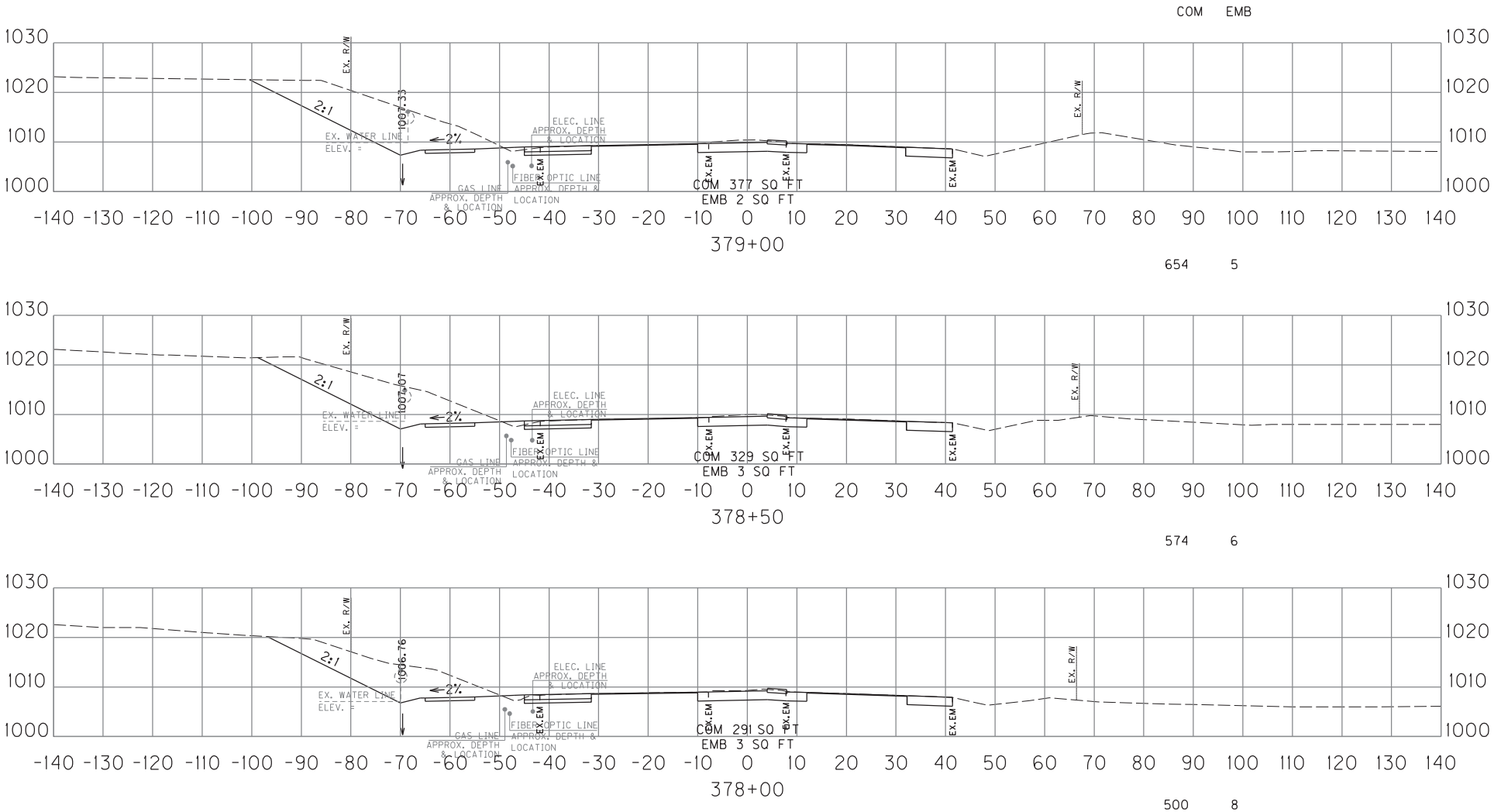


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 376+50 TO STA. 377+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X10

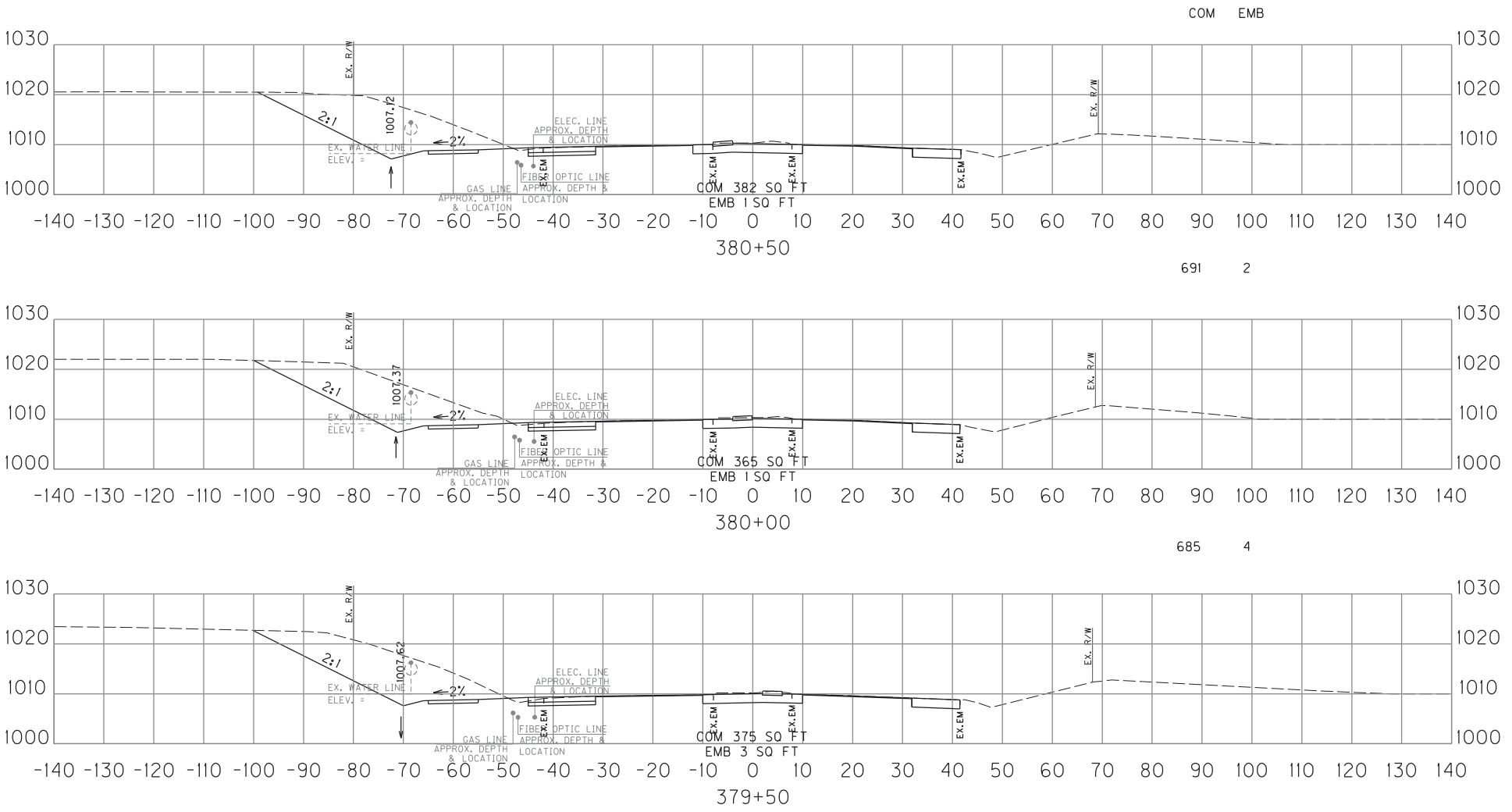


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA.378+00 TO STA.379+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X11

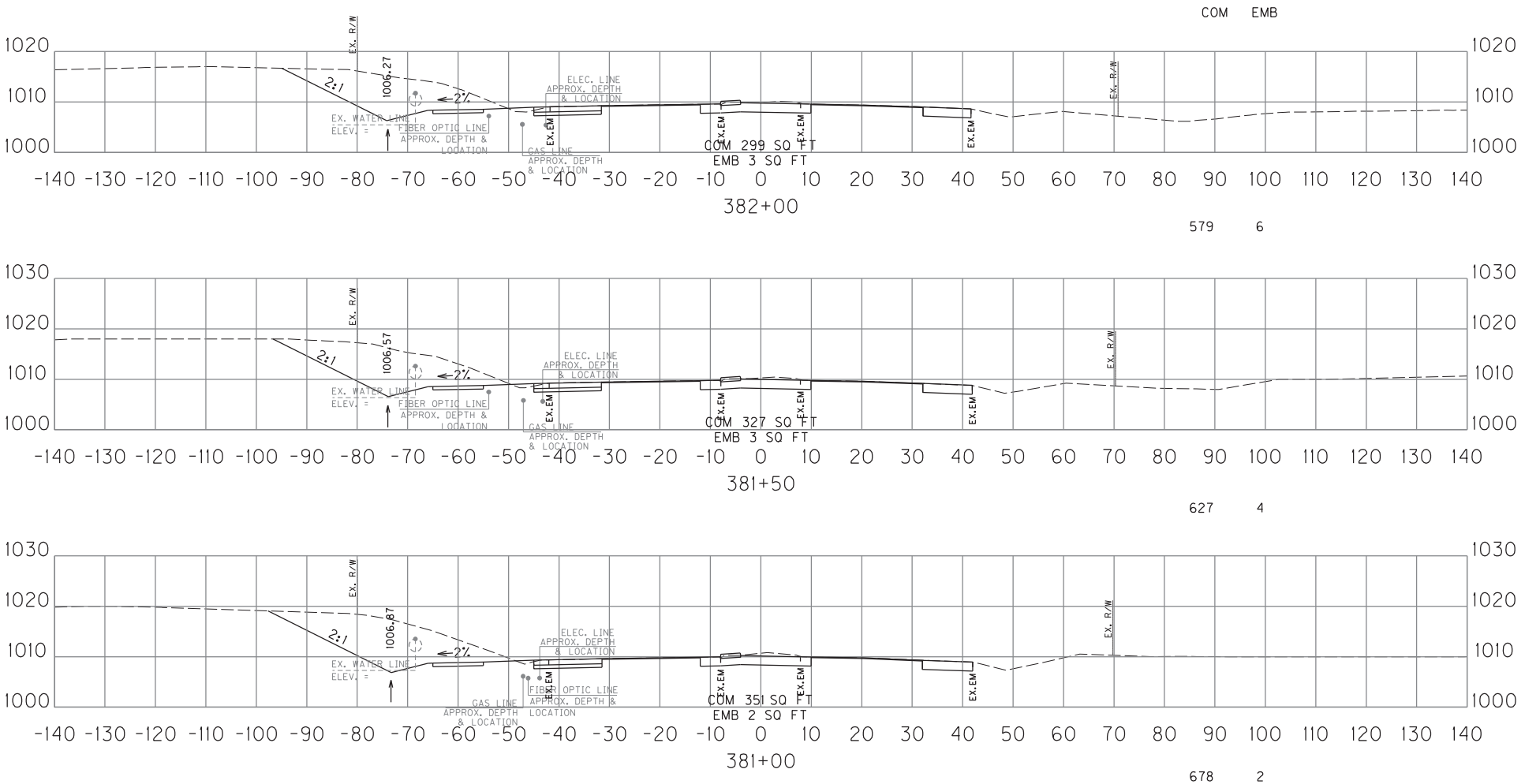


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 379+50 TO STA. 380+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X12

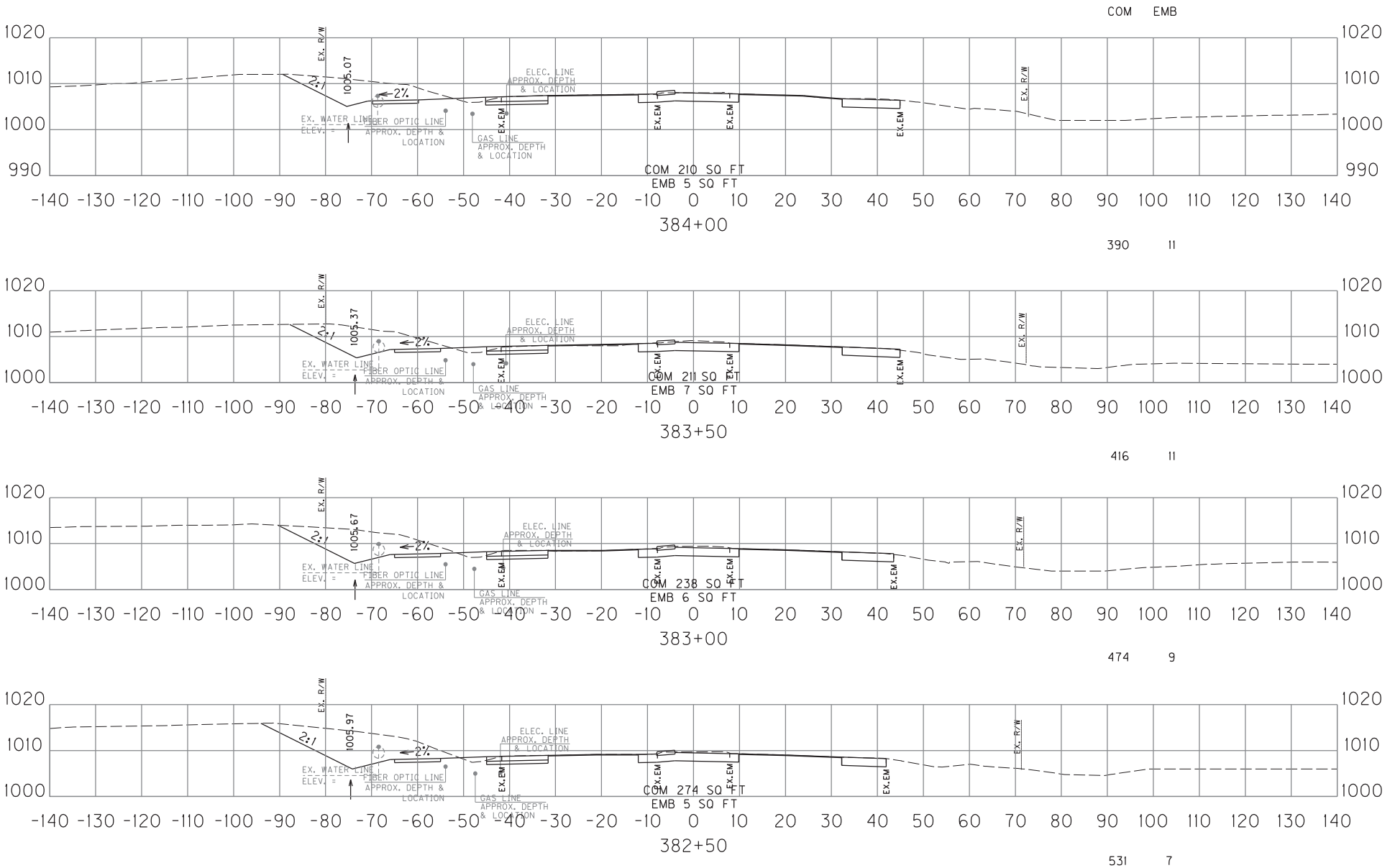


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 381+00 TO STA. 382+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X13

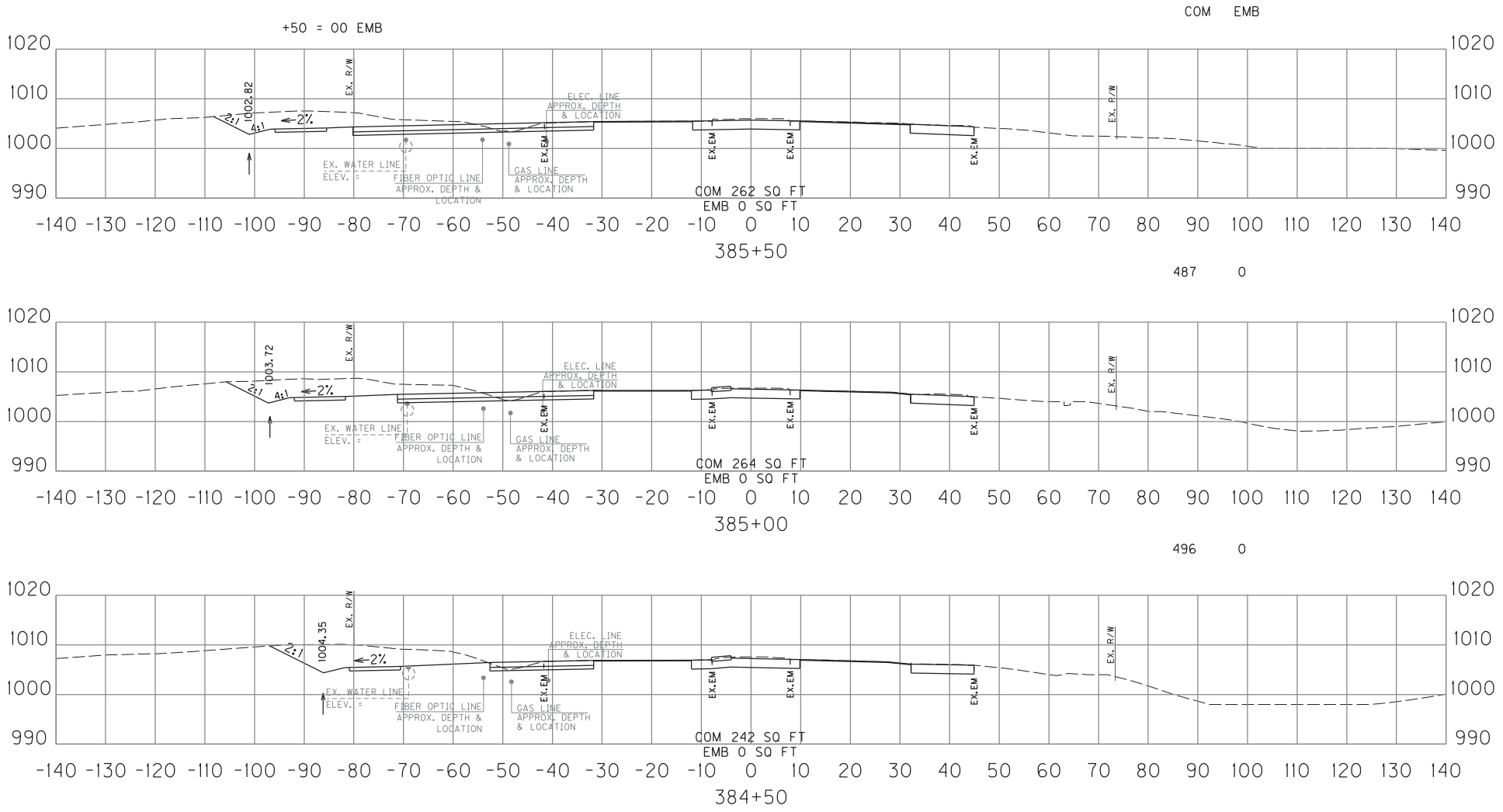


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 382+50 TO STA. 384+00

FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X14

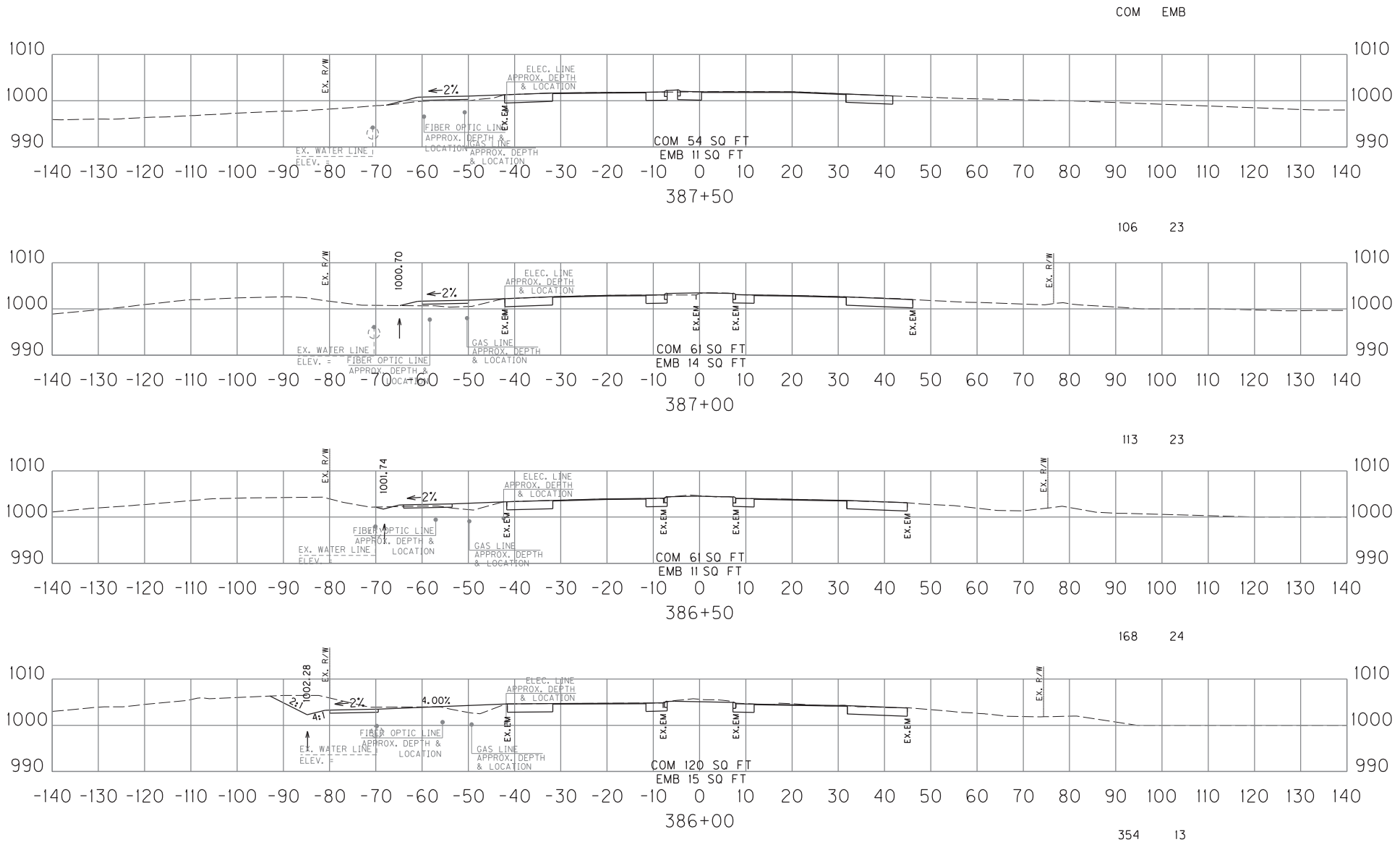


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 384+50 TO STA. 385+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X15



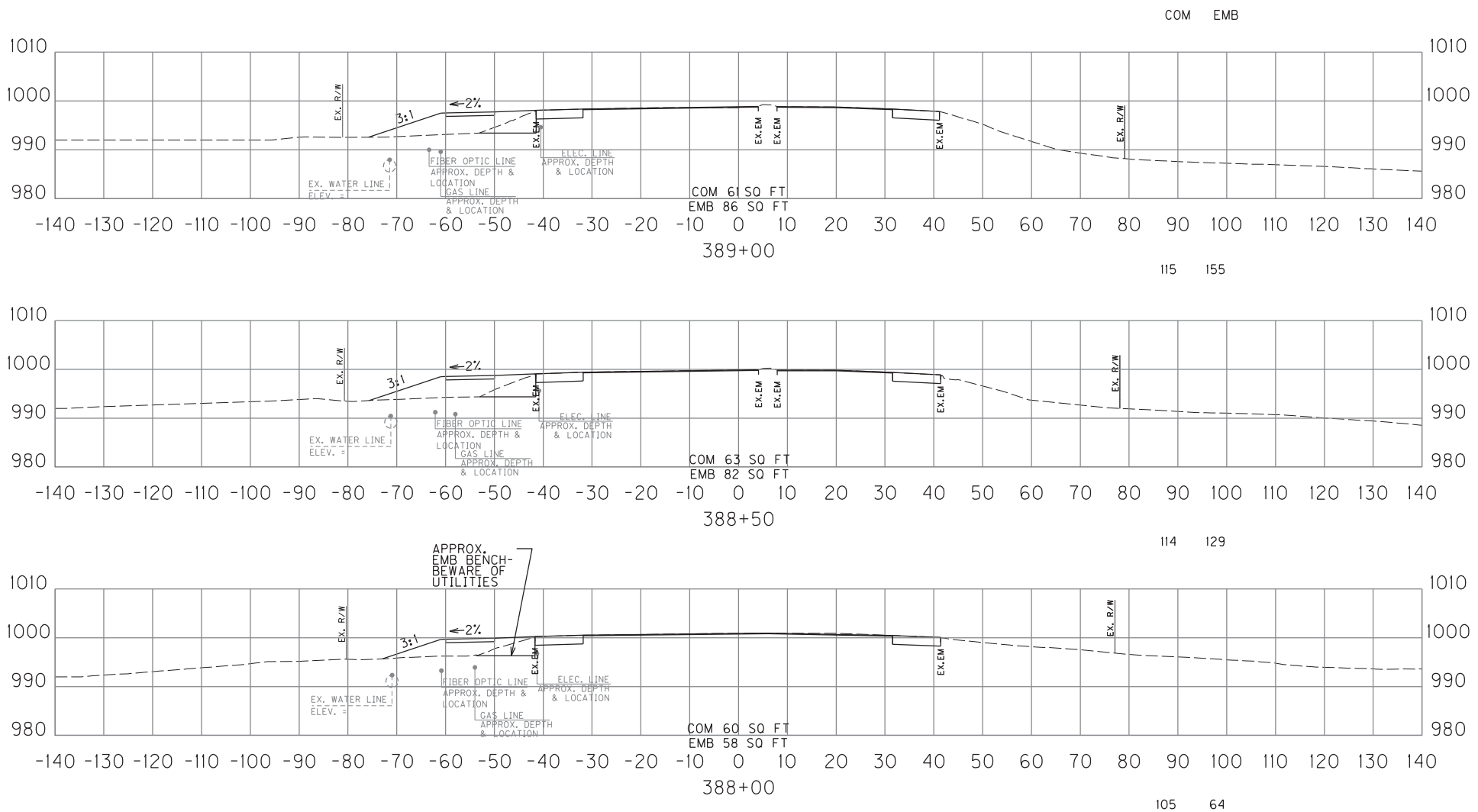
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 386+00 TO STA. 387+50

FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X16

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.



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

US 25
CROSS SECTION SHEET
STA. 388+00 TO STA. 389+00

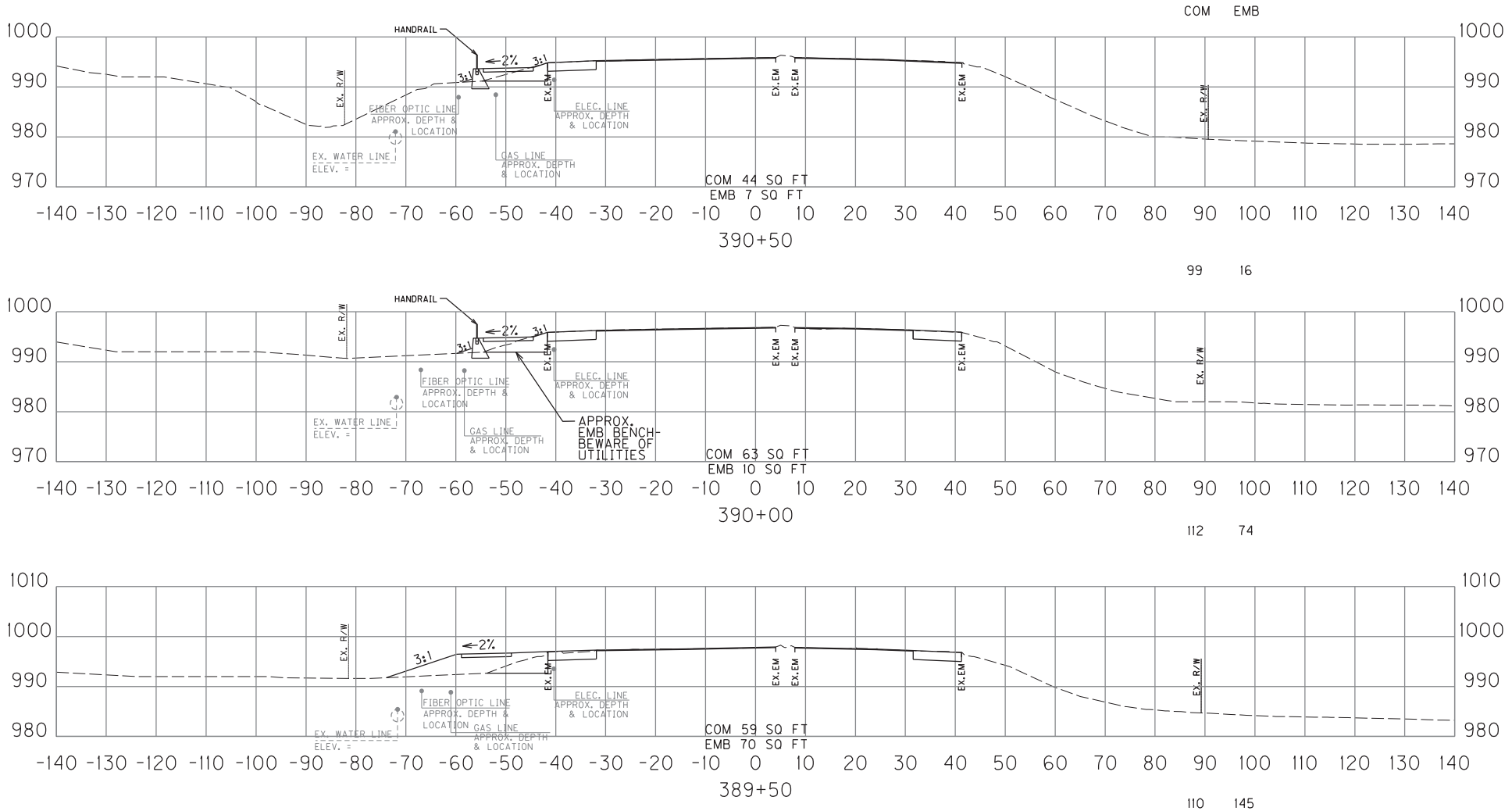
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USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

Contract ID: 254301
Page 464 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X17

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.

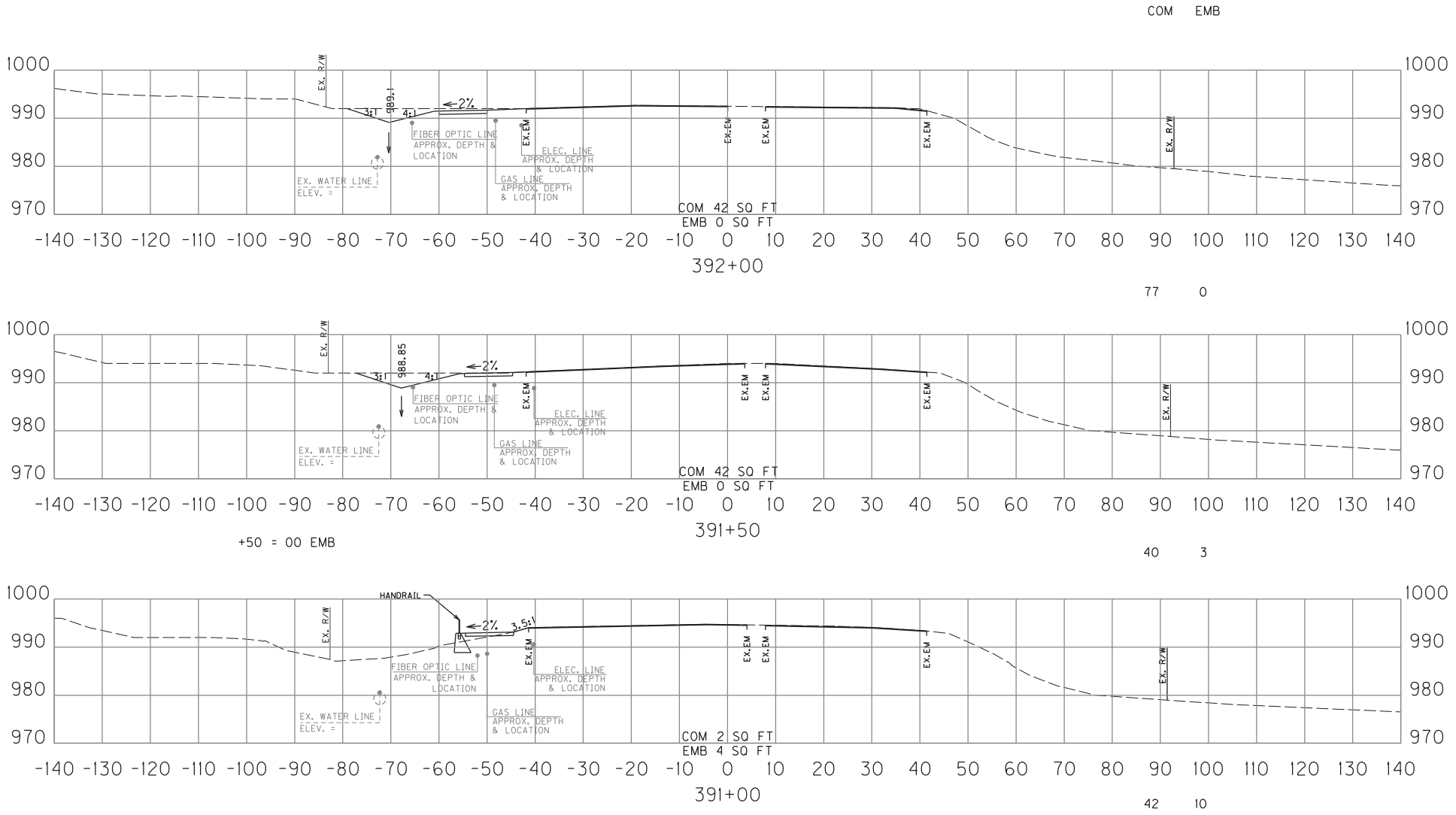


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 389+50 TO STA. 390+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X18



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

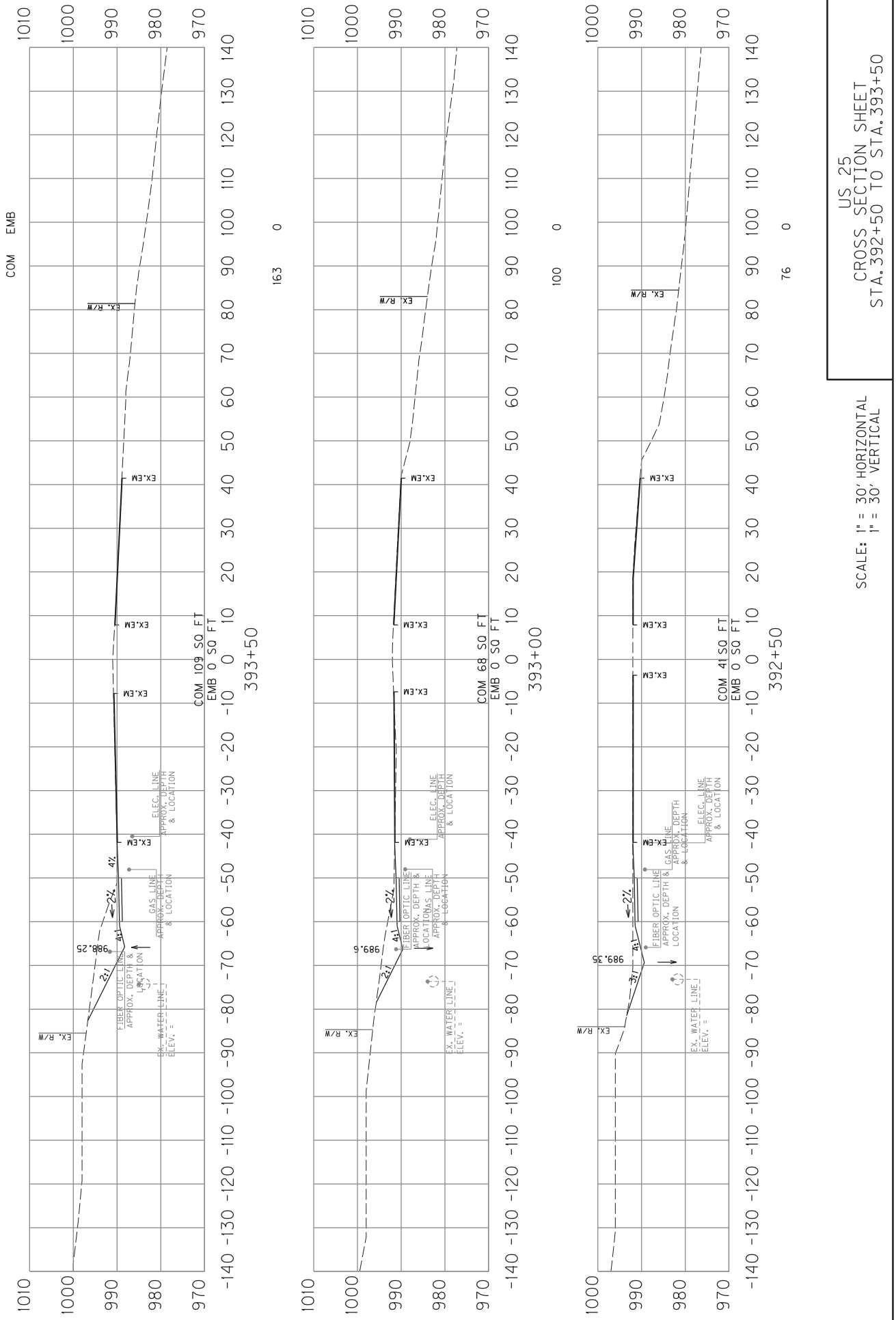
US 25
CROSS SECTION SHEET
STA. 391+00 TO STA. 392+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

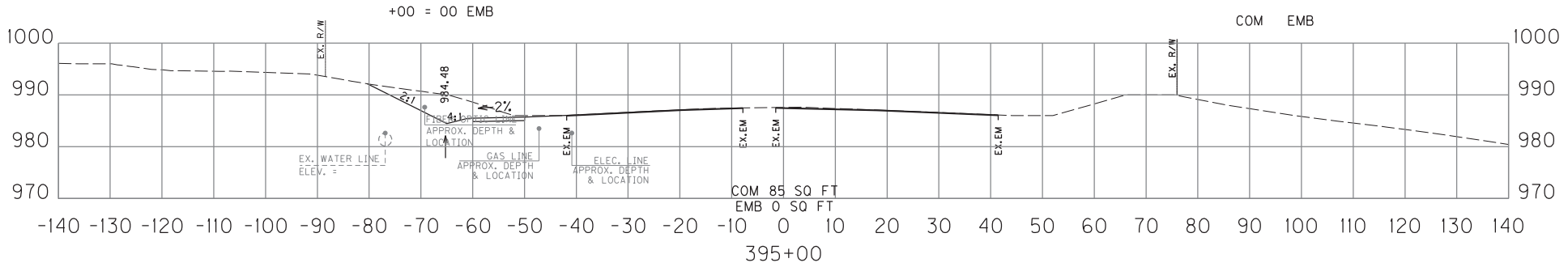
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X19

US 25
CROSS SECTION SHEET
STA.392+50 TO STA.393+50

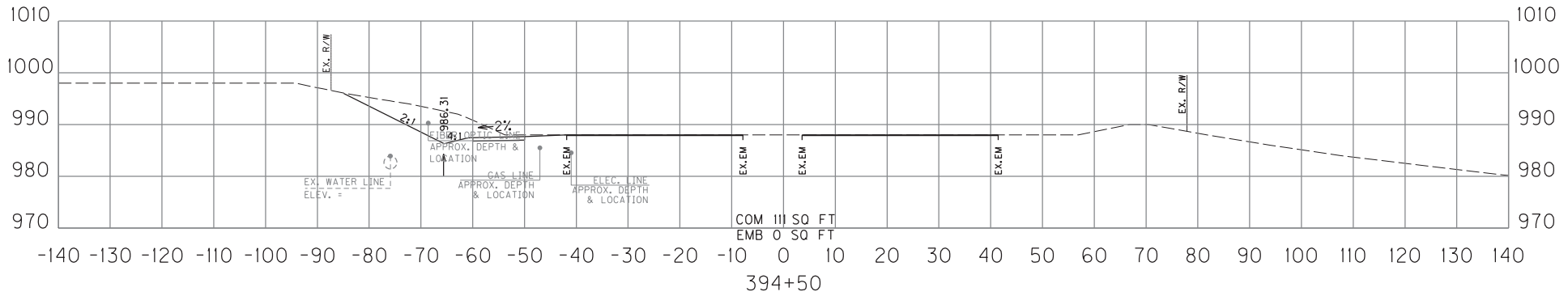
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL



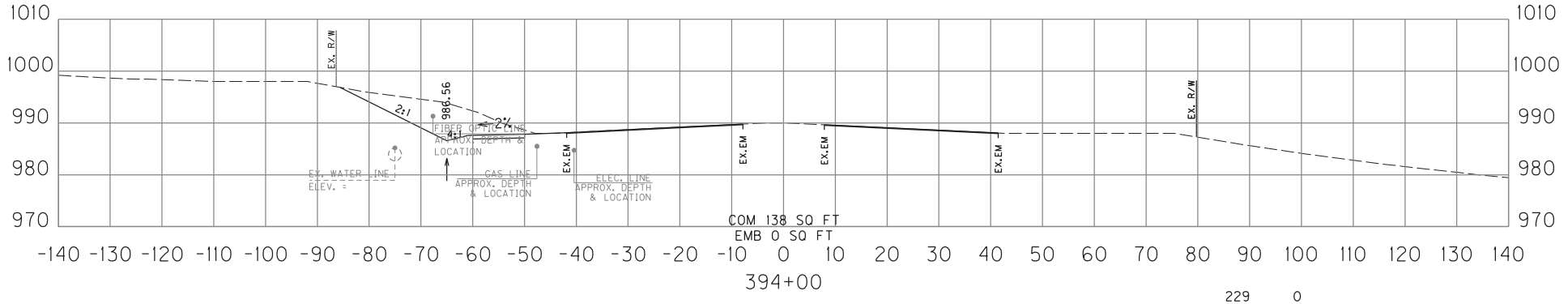
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X20



182 0



231 0



229 0

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

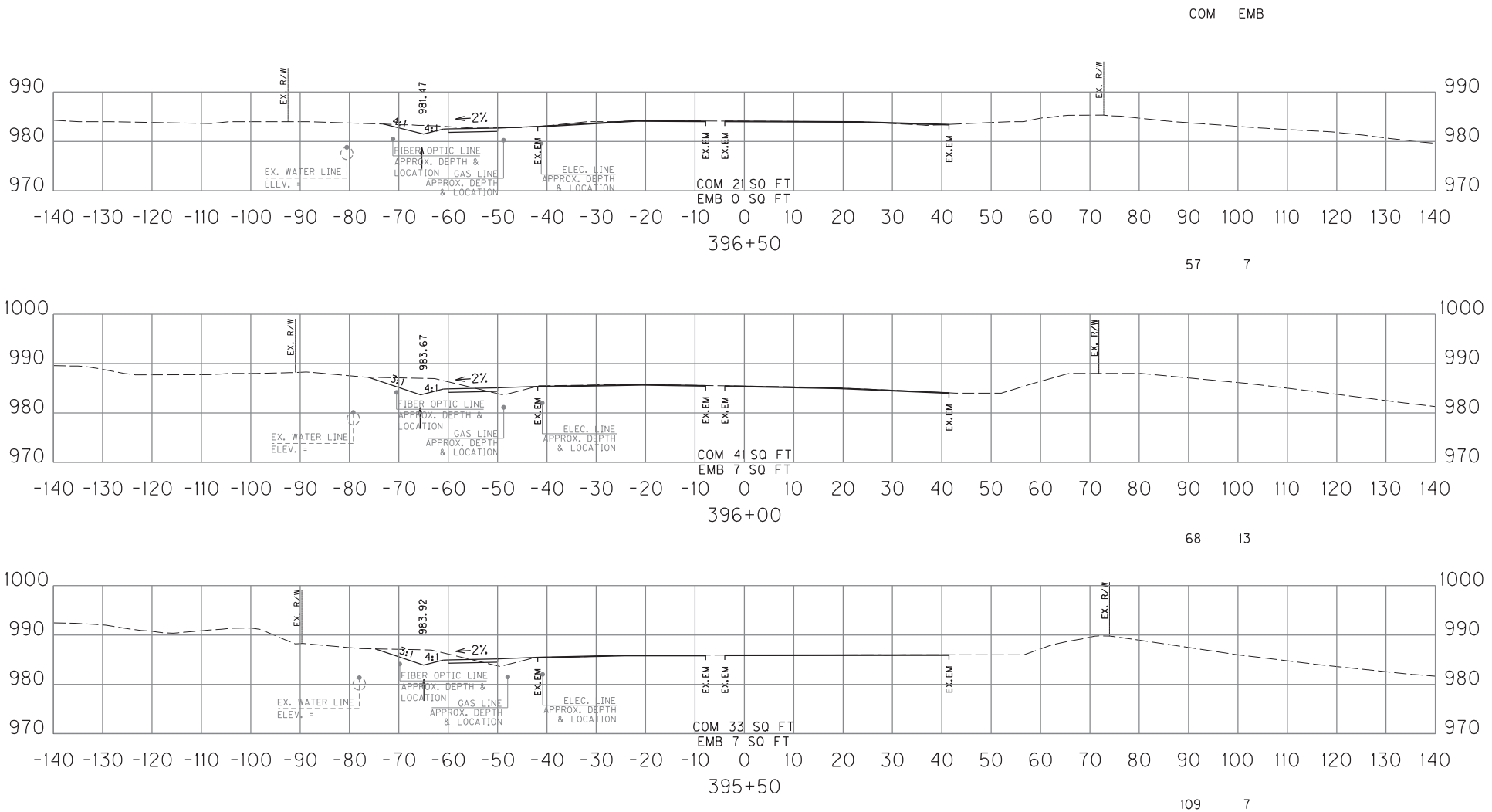
US 25
CROSS SECTION SHEET
STA. 394+00 TO STA. 395+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

Contract ID: 254301
Page 468 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X21

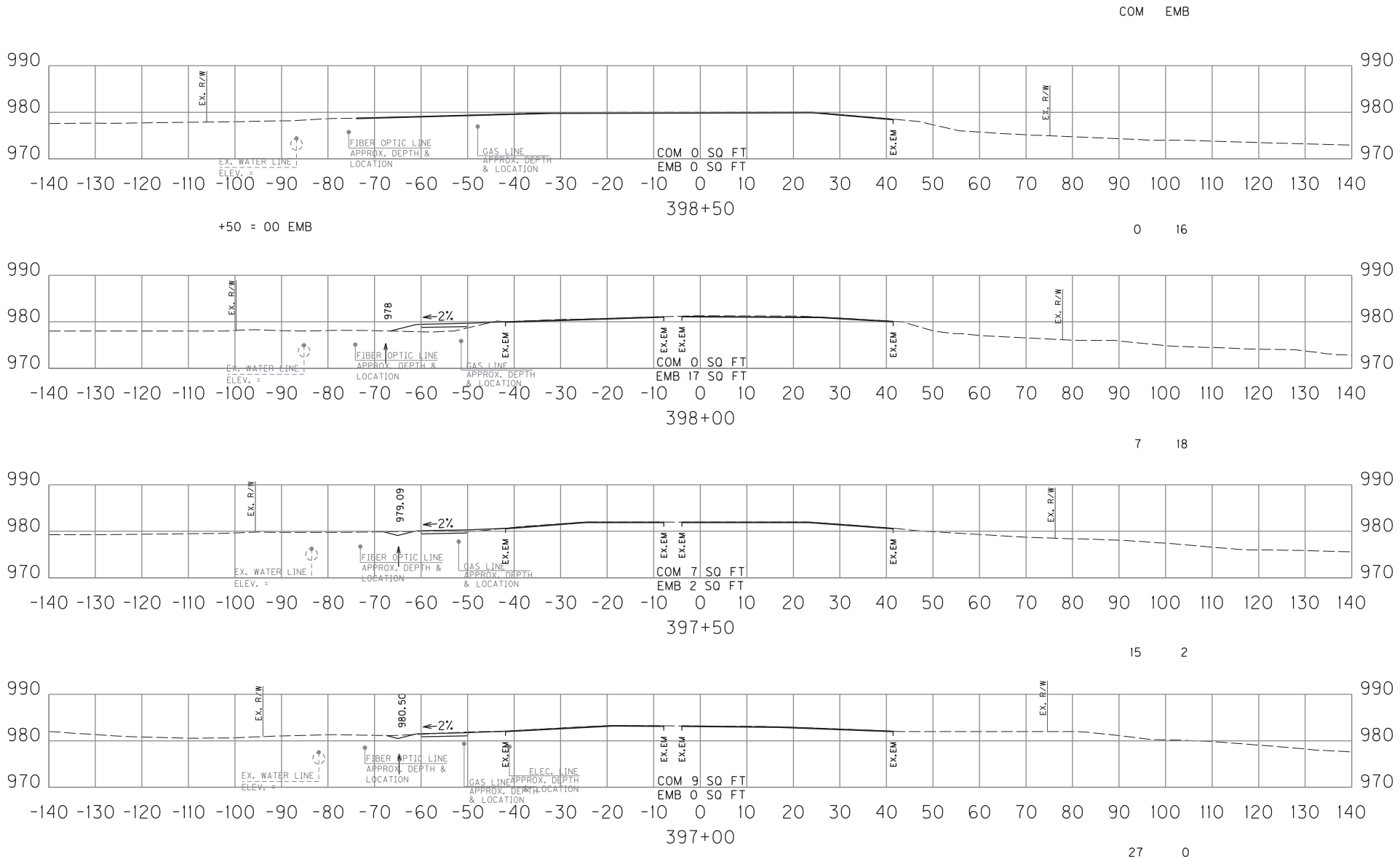


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 395+50 TO STA. 396+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

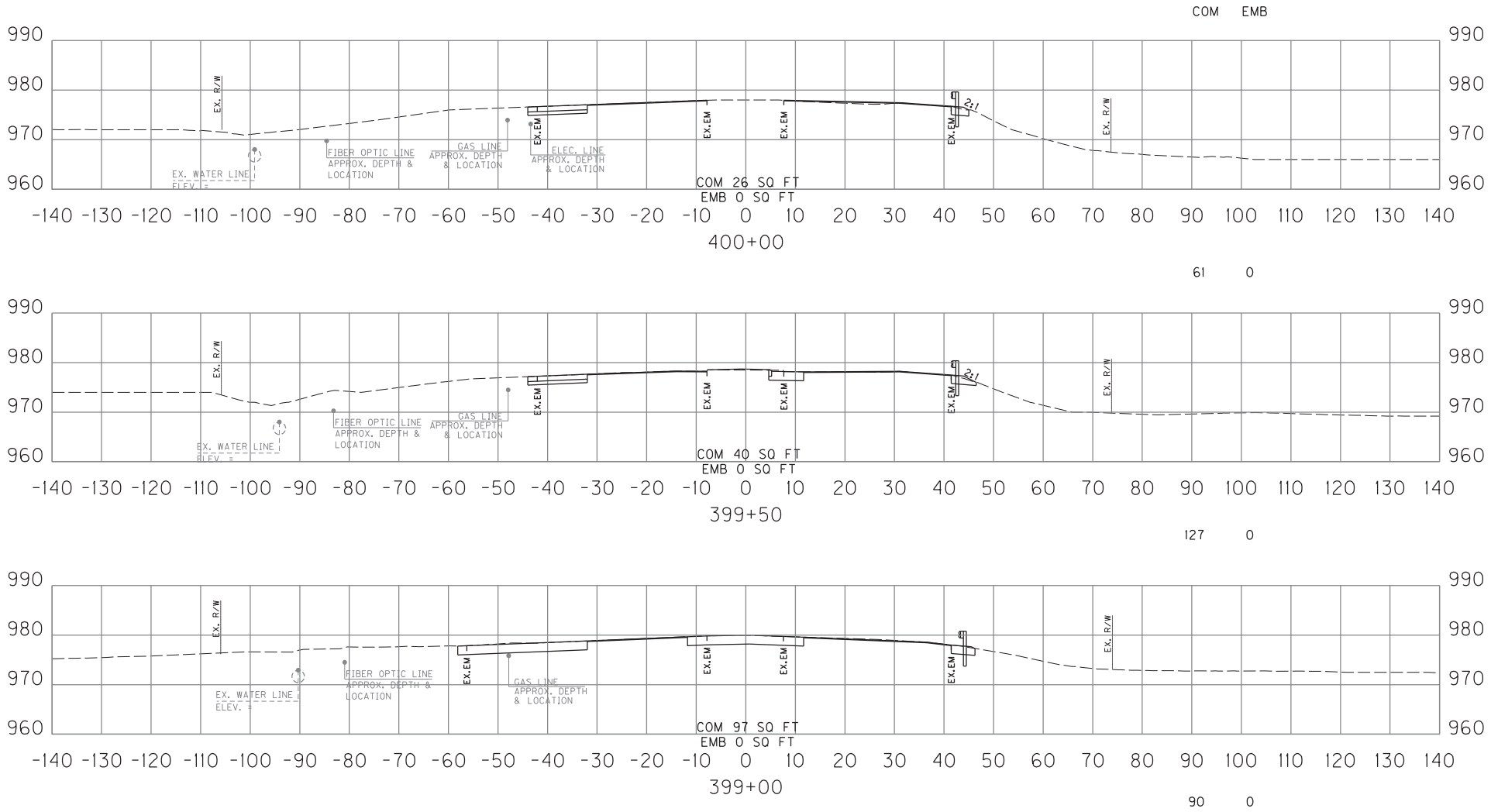
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X22



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

US 25
CROSS SECTION SHEET
STA. 397+00 TO STA. 398+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X23



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

US 25
CROSS SECTION SHEET
STA. 399+00 TO STA. 400+00

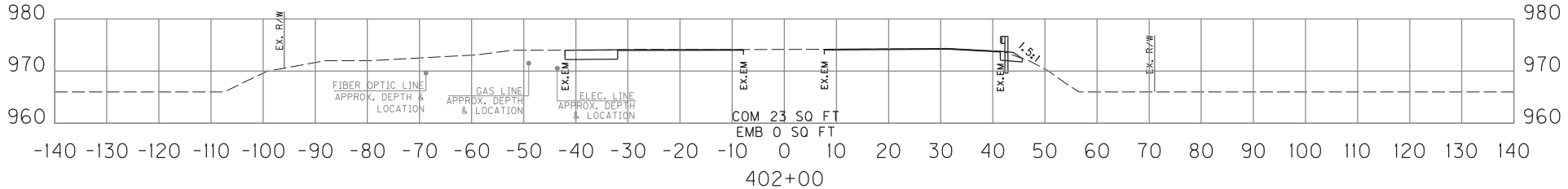
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

Contract ID: 254301
Page 471 of 605

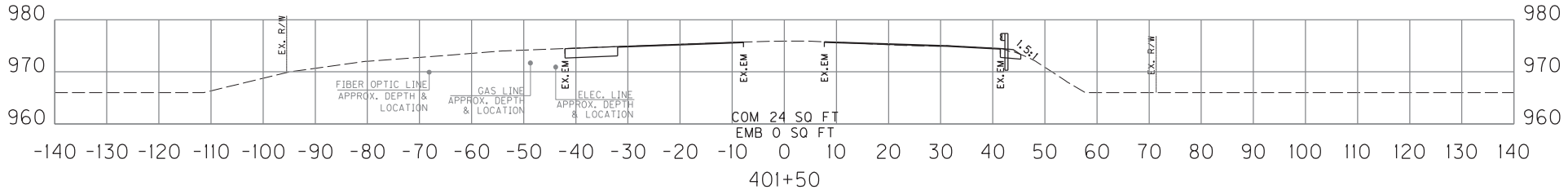
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X24

COM EMB



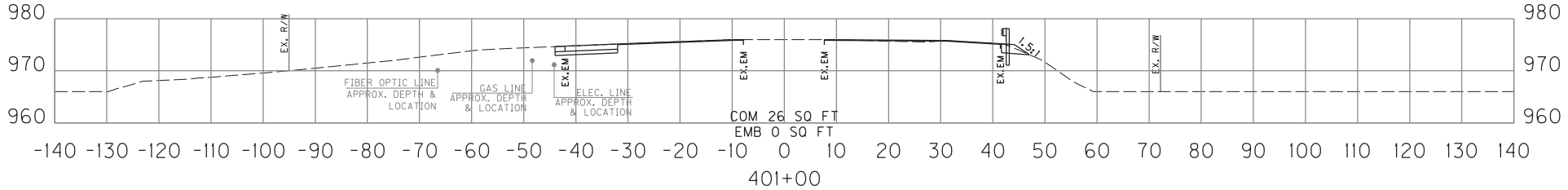
402+00

43 0



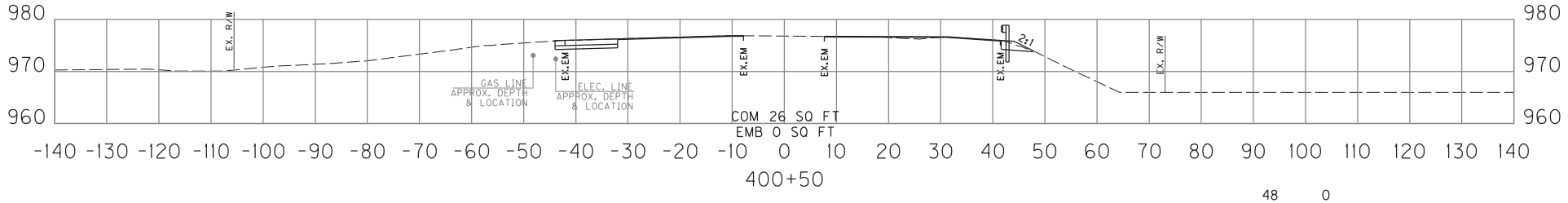
401+50

45 0



401+00

48 0



400+50

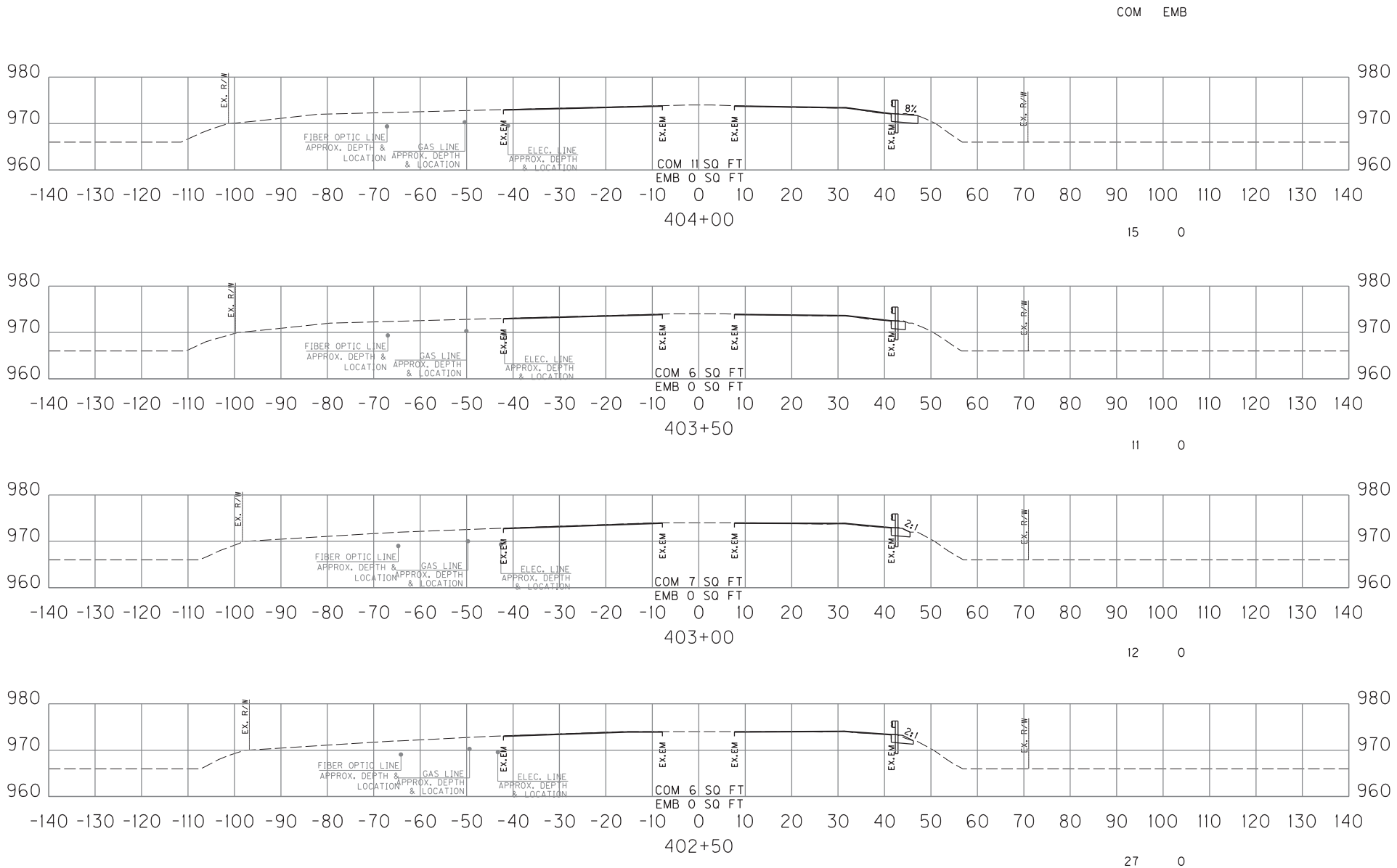
48 0

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

US 25
CROSS SECTION SHEET
STA. 400+50 TO STA. 402+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X25



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

US 25
CROSS SECTION SHEET
STA. 402+50 TO STA. 404+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

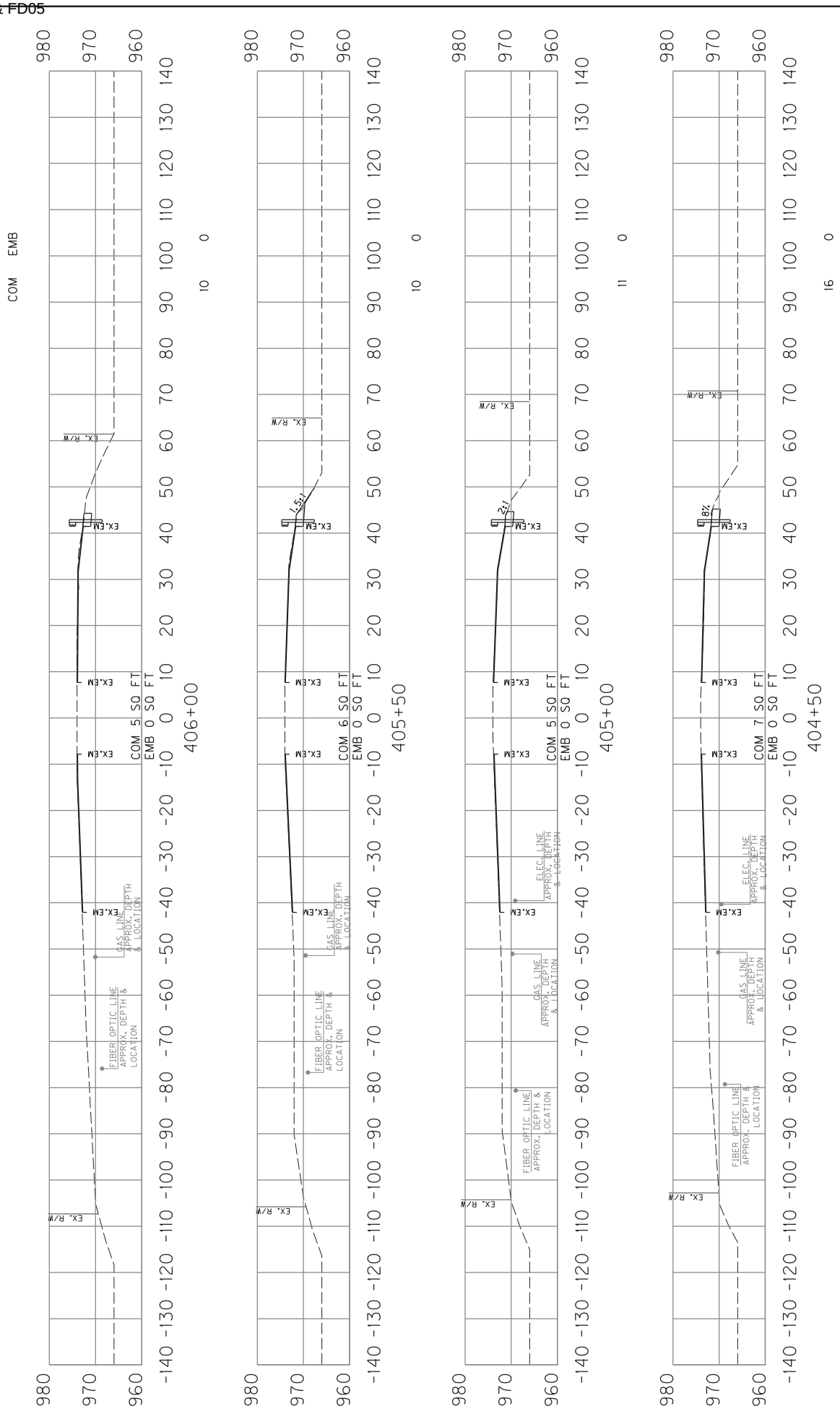
FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

Contract ID: 254301
Page 473 of 605

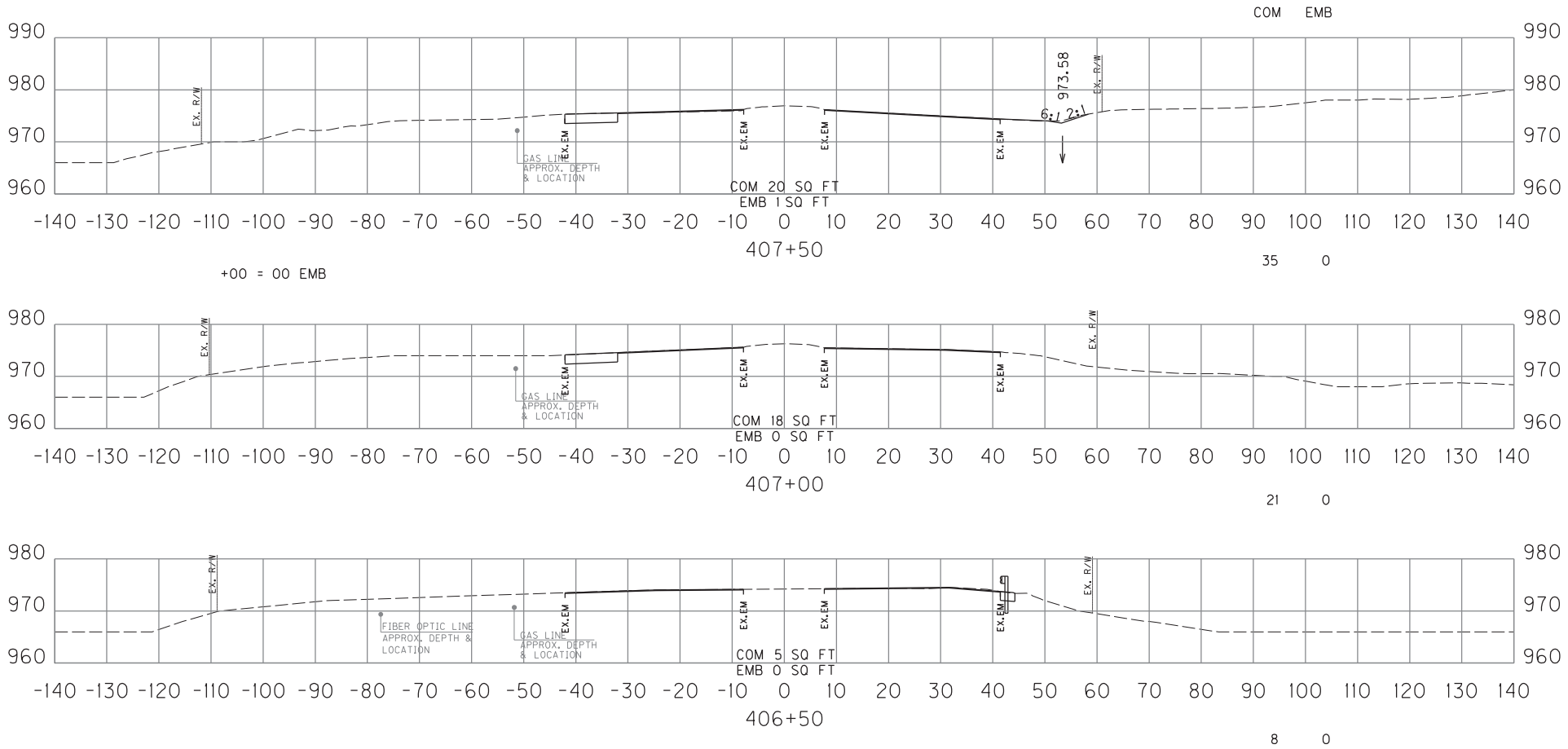
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X26

US 25
CROSS SECTION SHEET
STA.404+50 TO STA.406+00

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



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X27

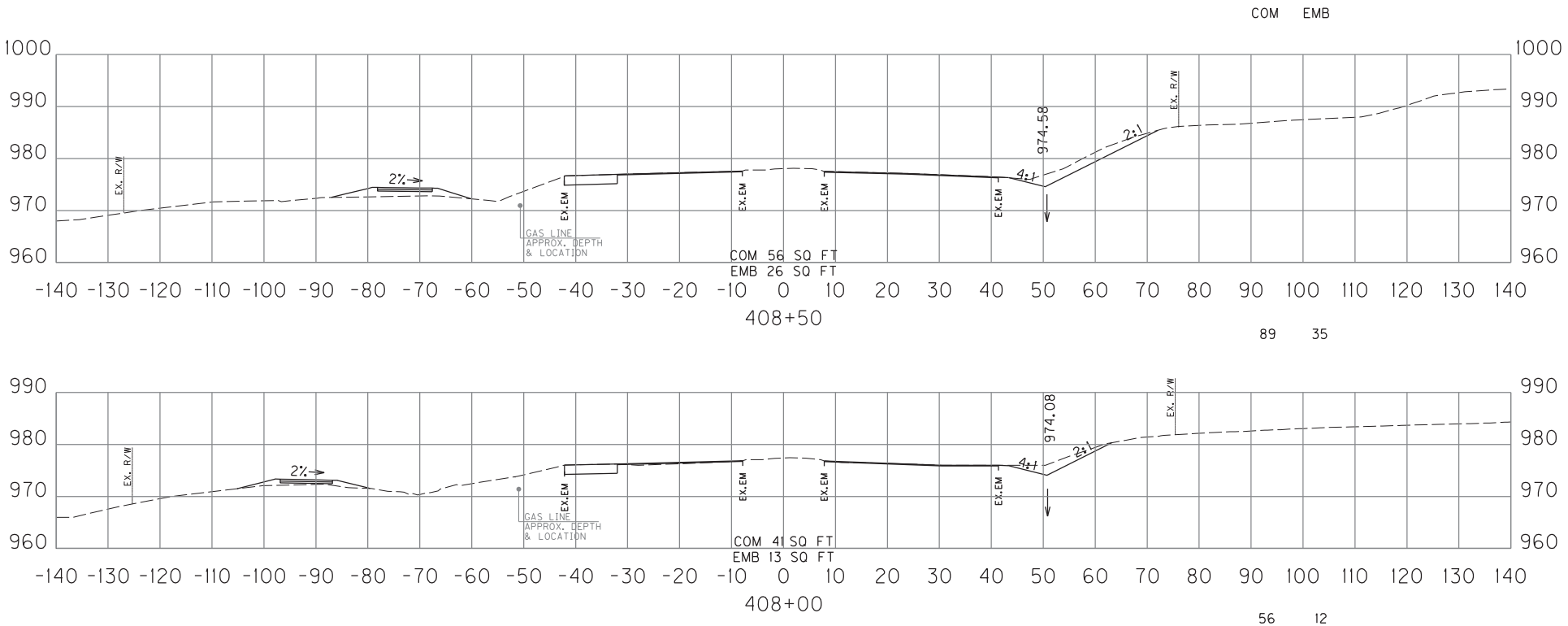


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 406+50 TO STA. 407+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X28

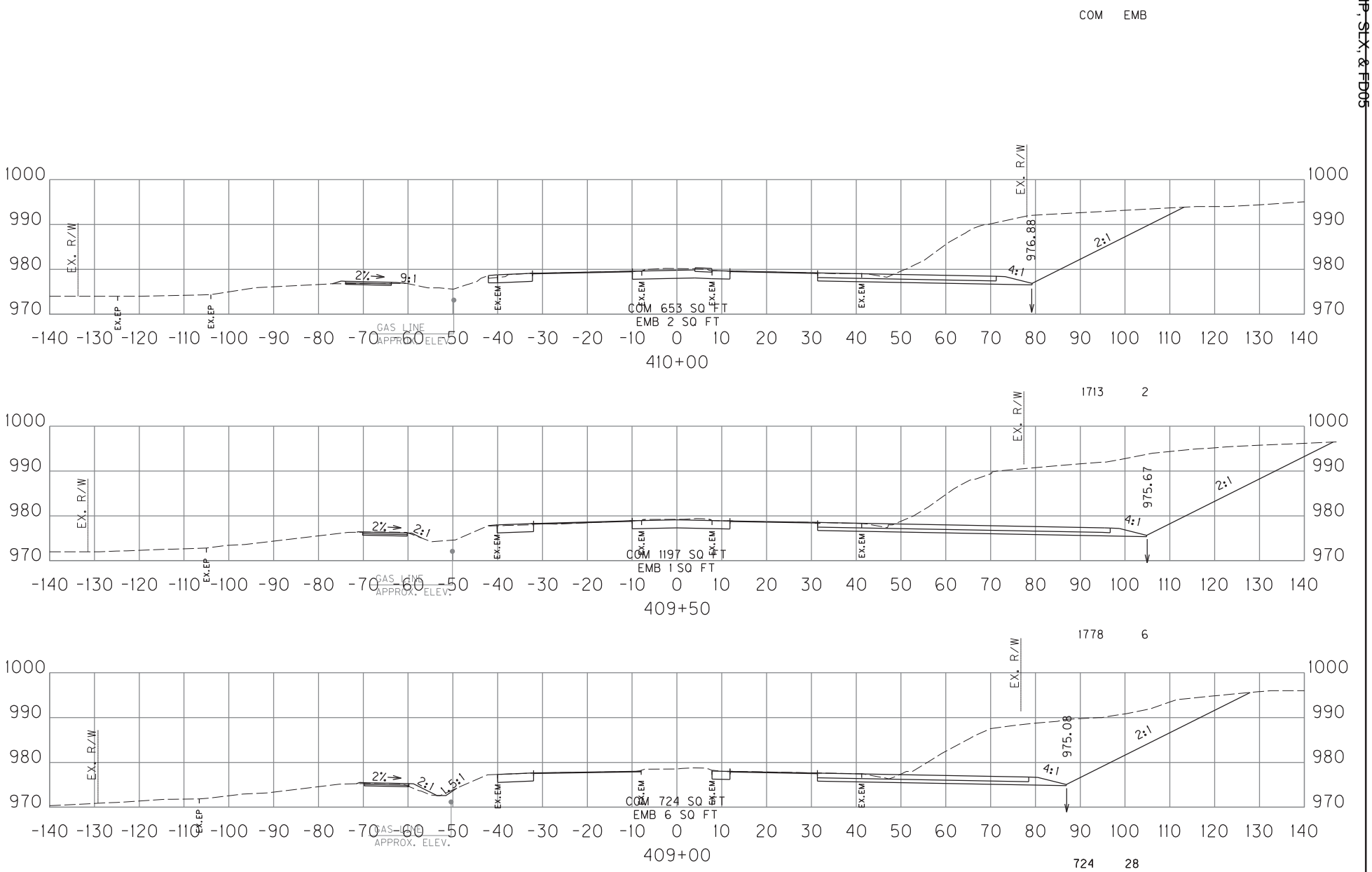


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 408+00 TO STA. 408+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 YORKSHIRE RCUT CROSS SECTIONS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X29

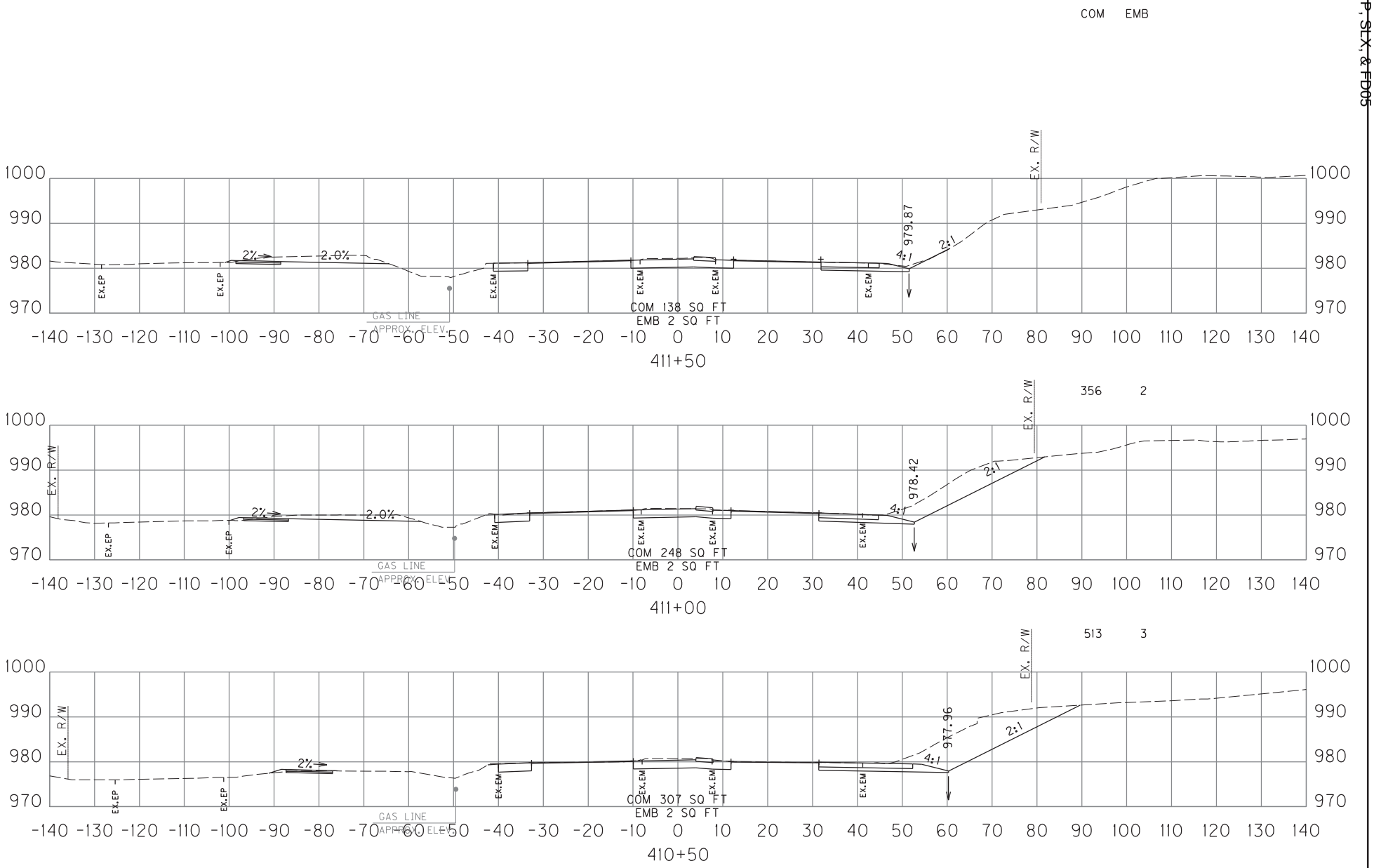


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 409+00 TO STA. 410+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X30

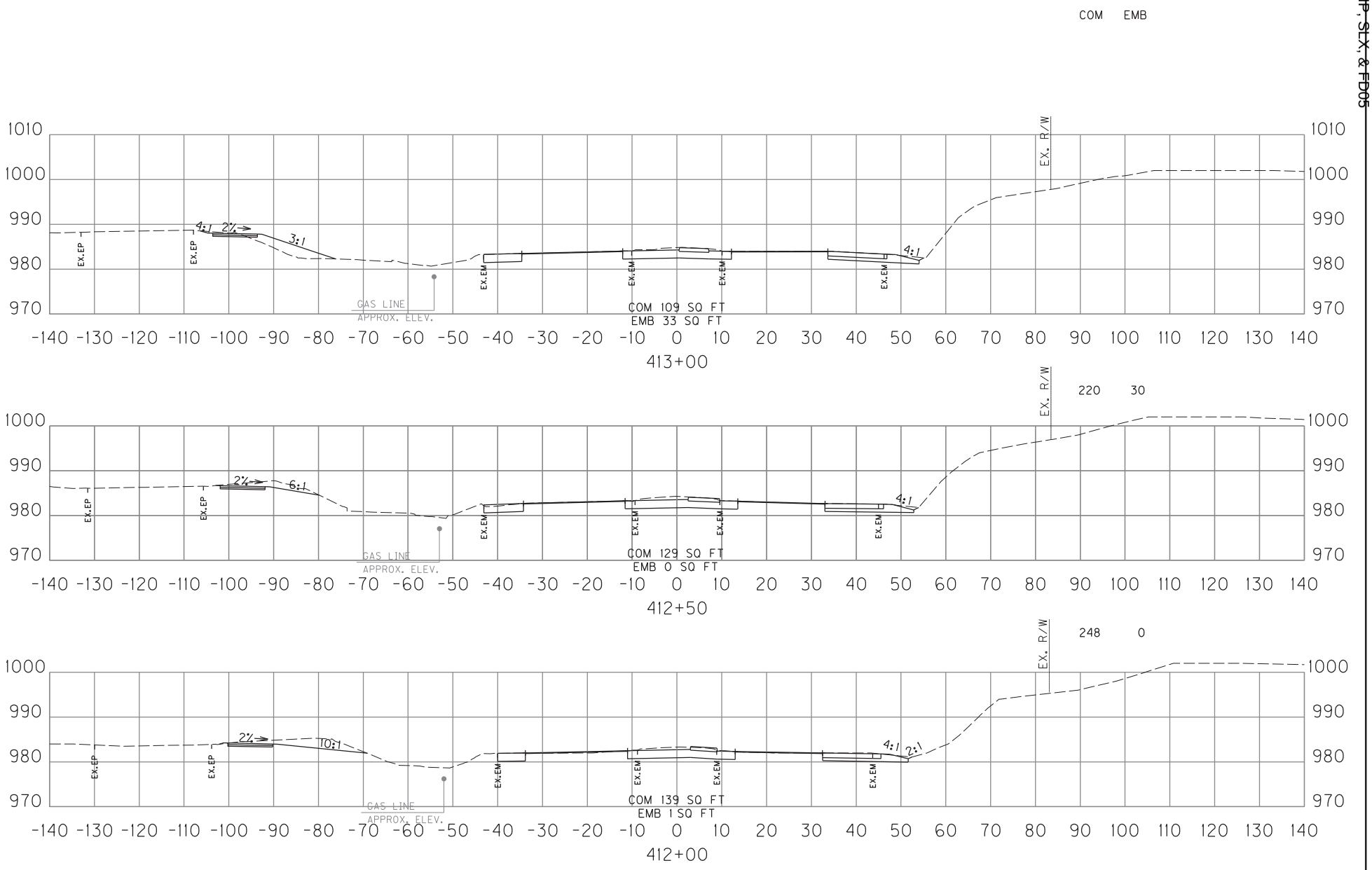


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 410+50 TO STA. 411+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X31

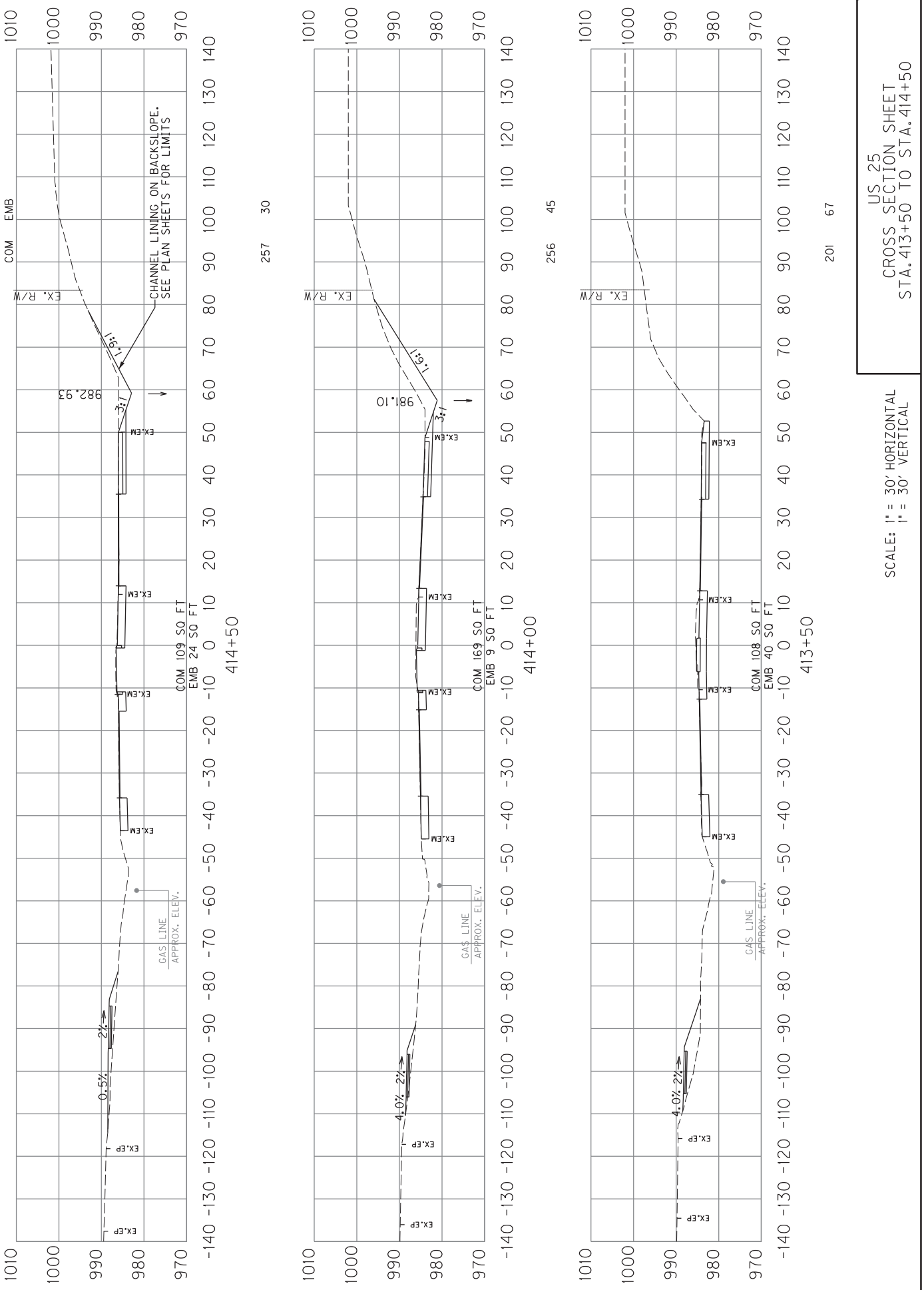


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 412+00 TO STA. 413+00

FILE NAME: C:\PWWORKING\EASTOI\D1641094\XY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

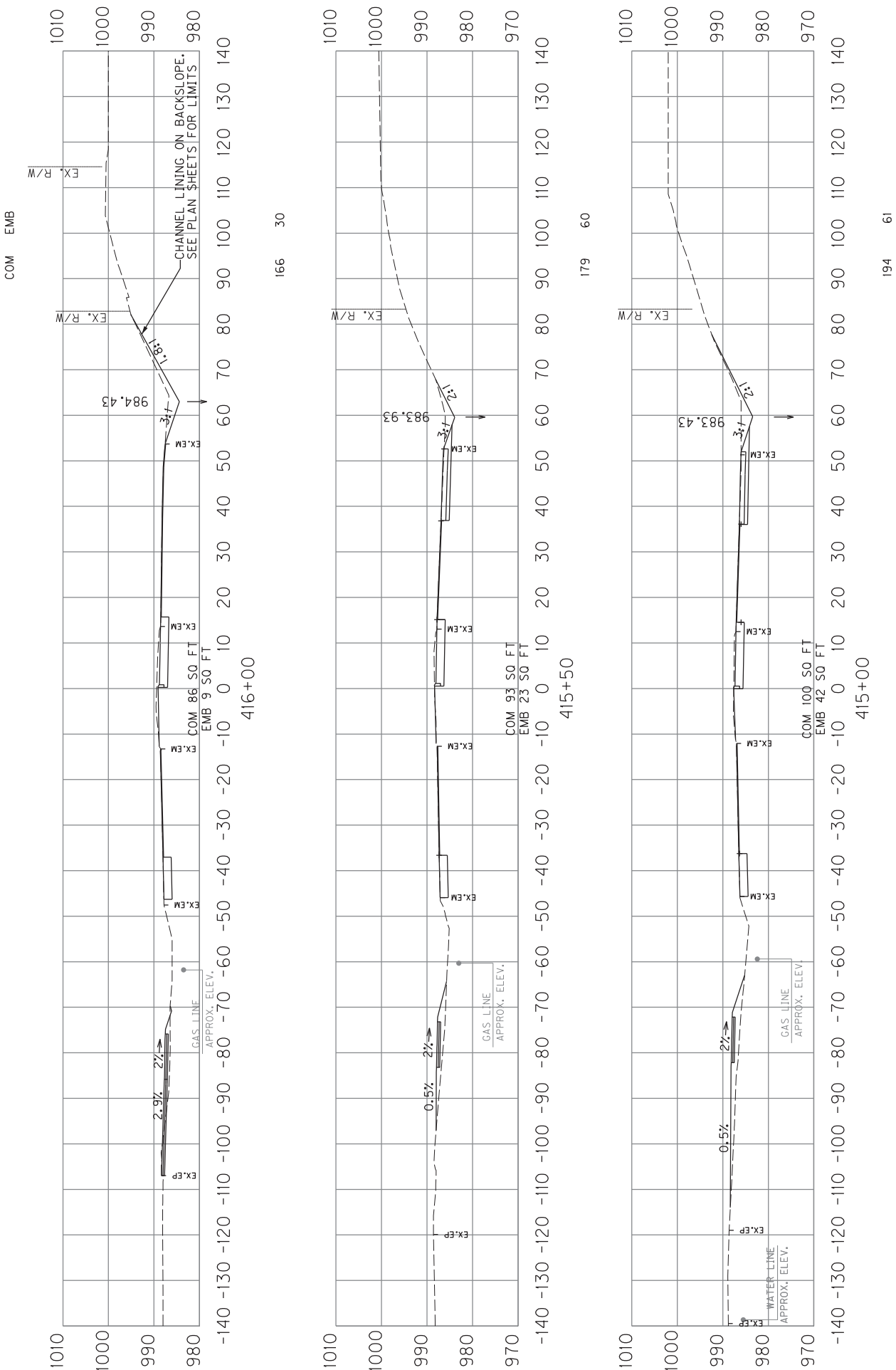
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X32



COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X33

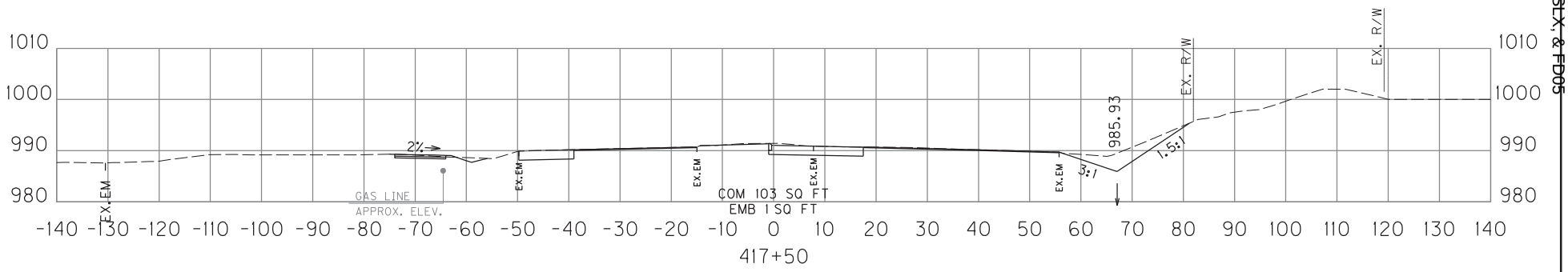
US 25
CROSS SECTION SHEET
STA. 415+00 TO STA. 416+00

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



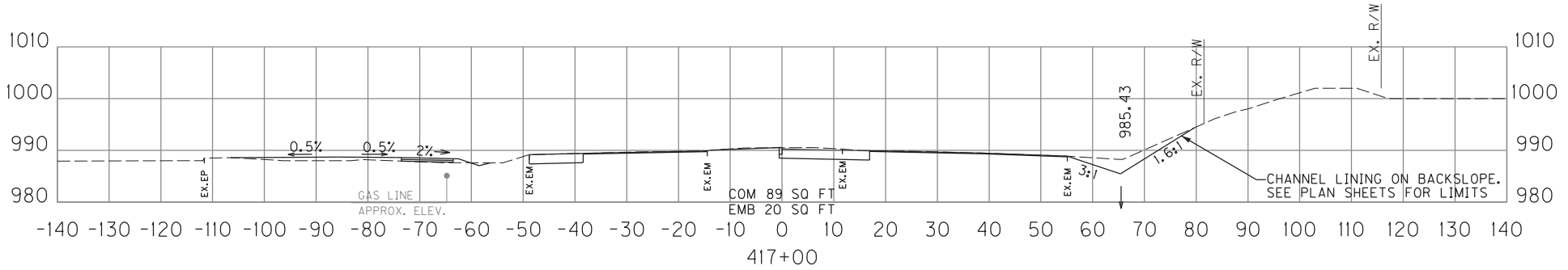
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X34

COM EMB



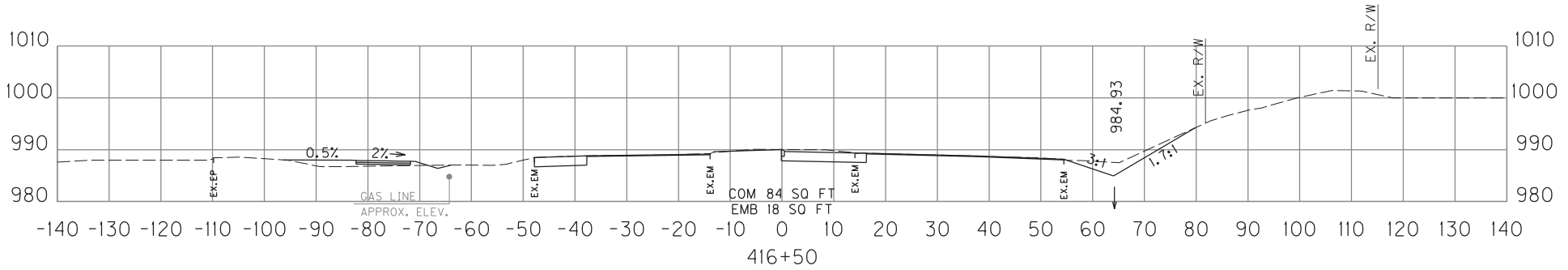
417+50

177 19



417+00

159 35



416+50

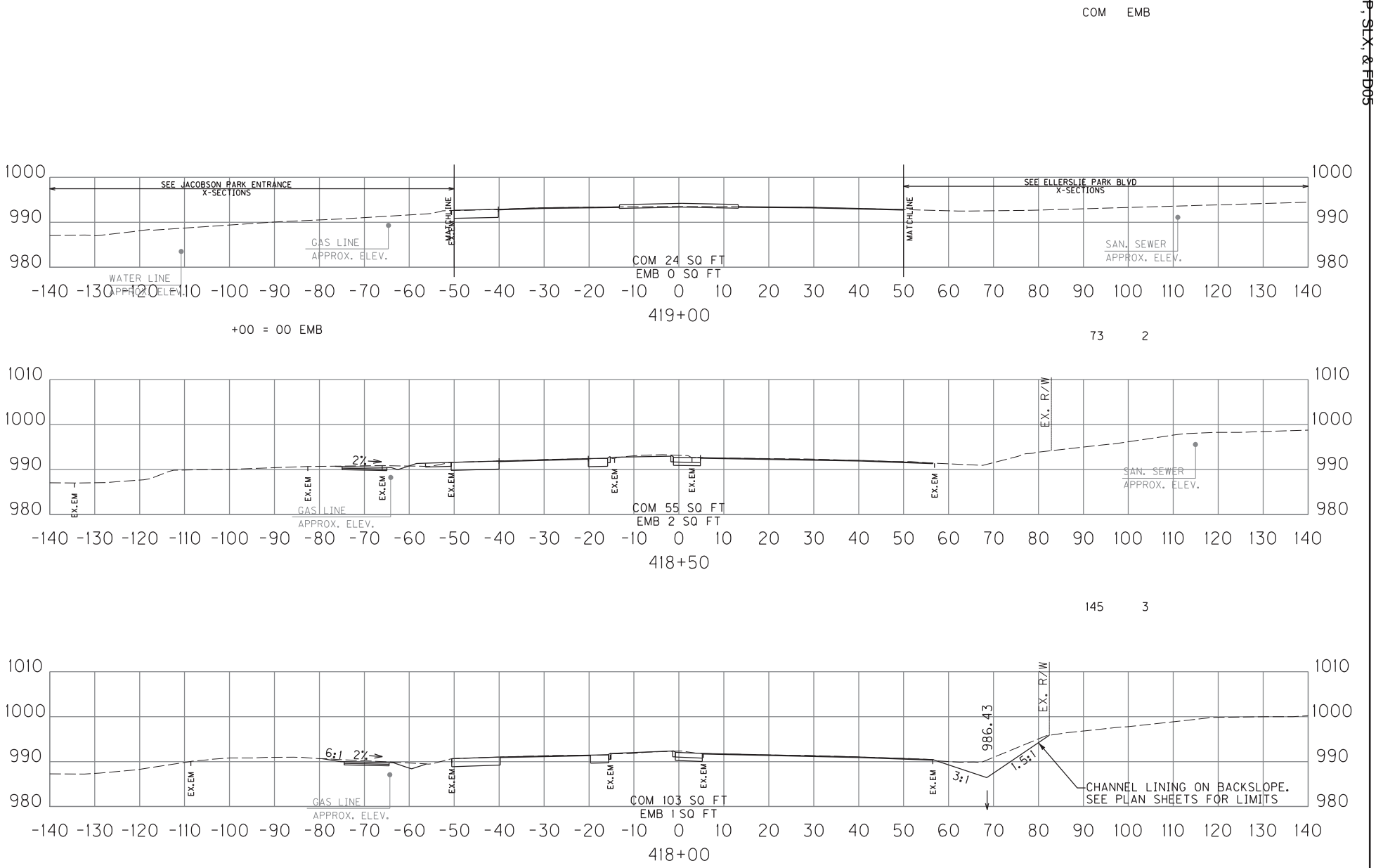
157 25

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

US 25
CROSS SECTION SHEET
STA. 416+50 TO STA. 417+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X35



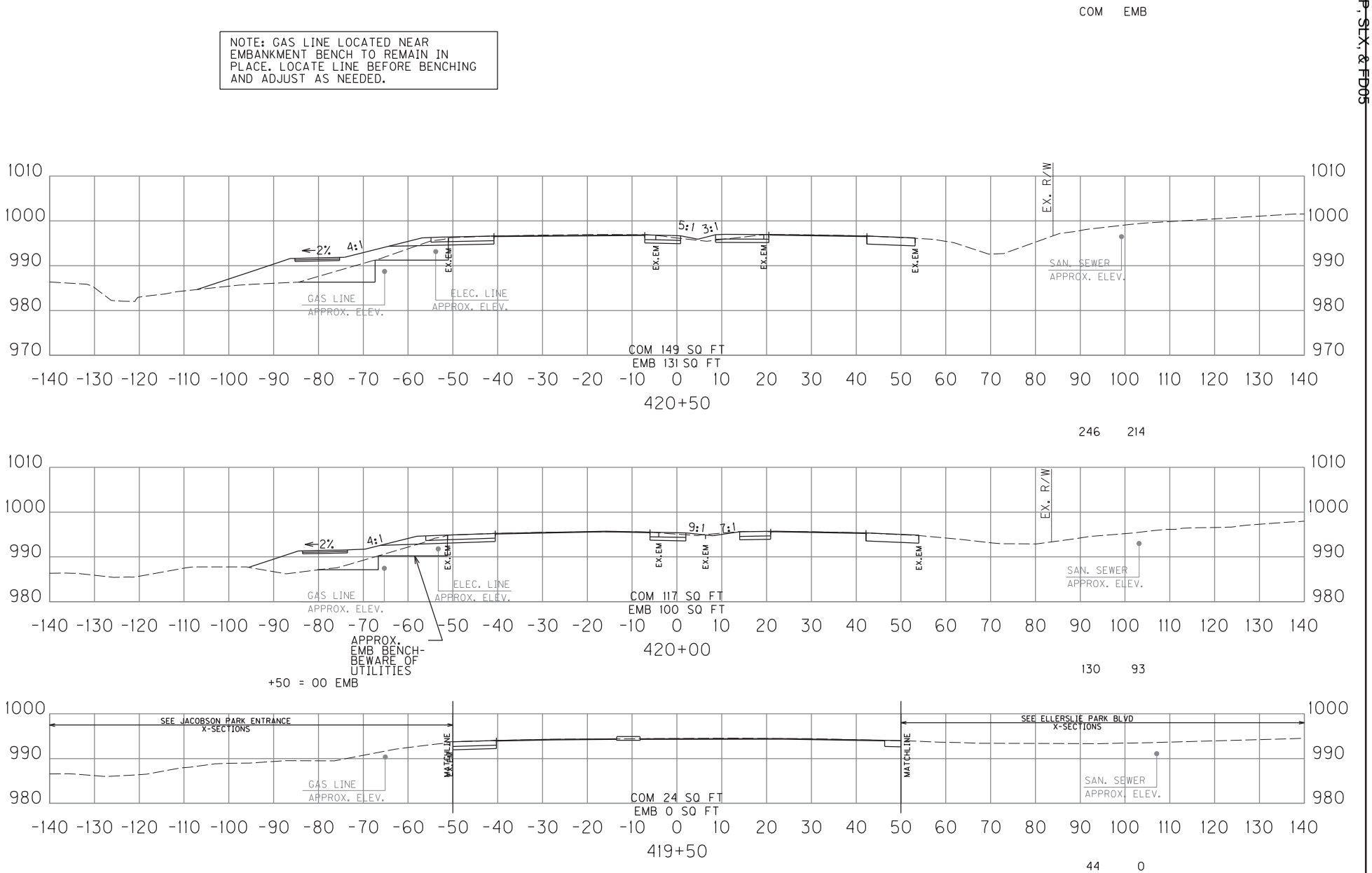
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 418+00 TO STA. 419+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\XY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X36

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.



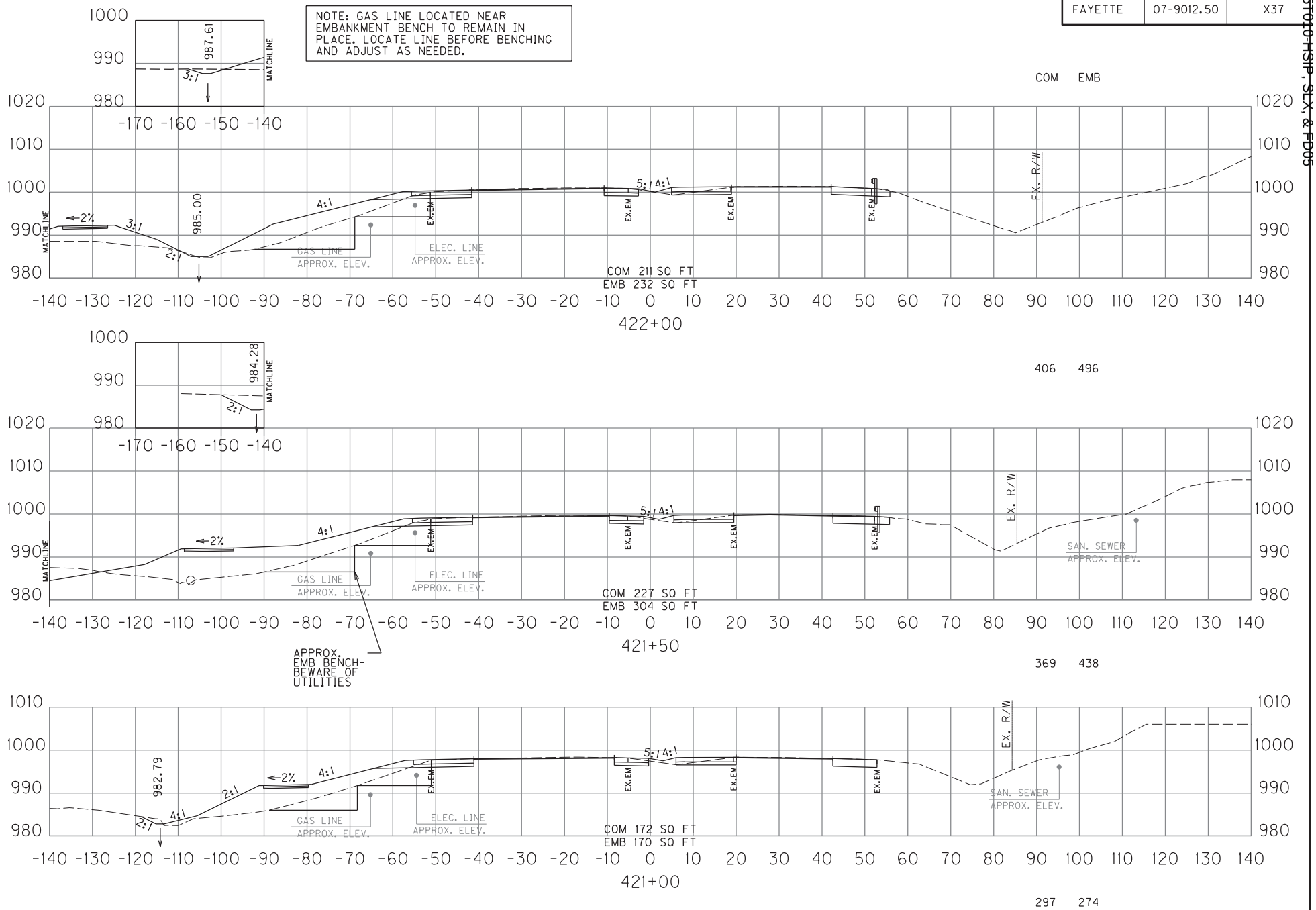
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 419+50 TO STA. 420+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X37

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.



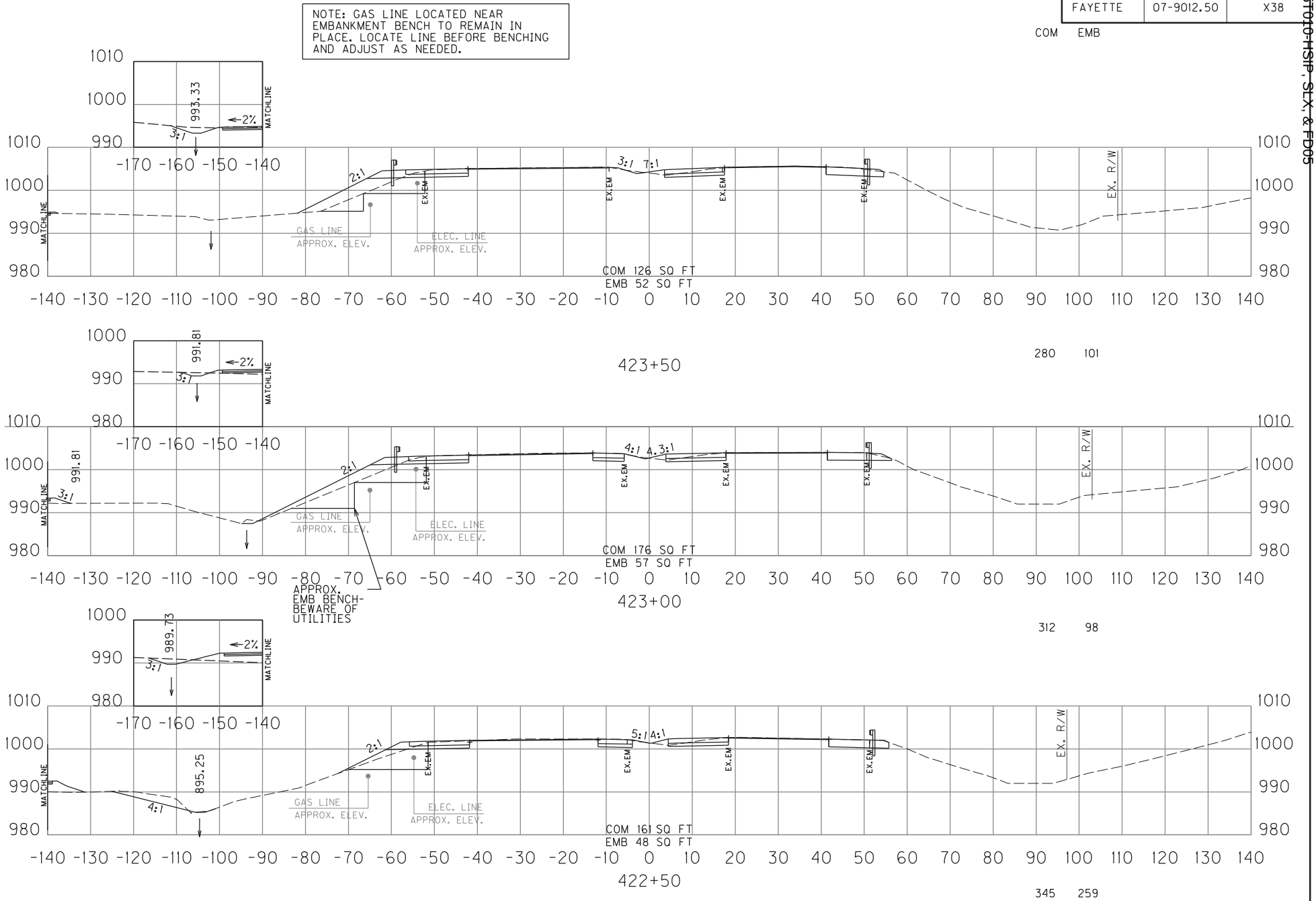
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 421+00 TO STA. 422+00

FILE NAME: C:\PWWORKING\EASTOV\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X38

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.

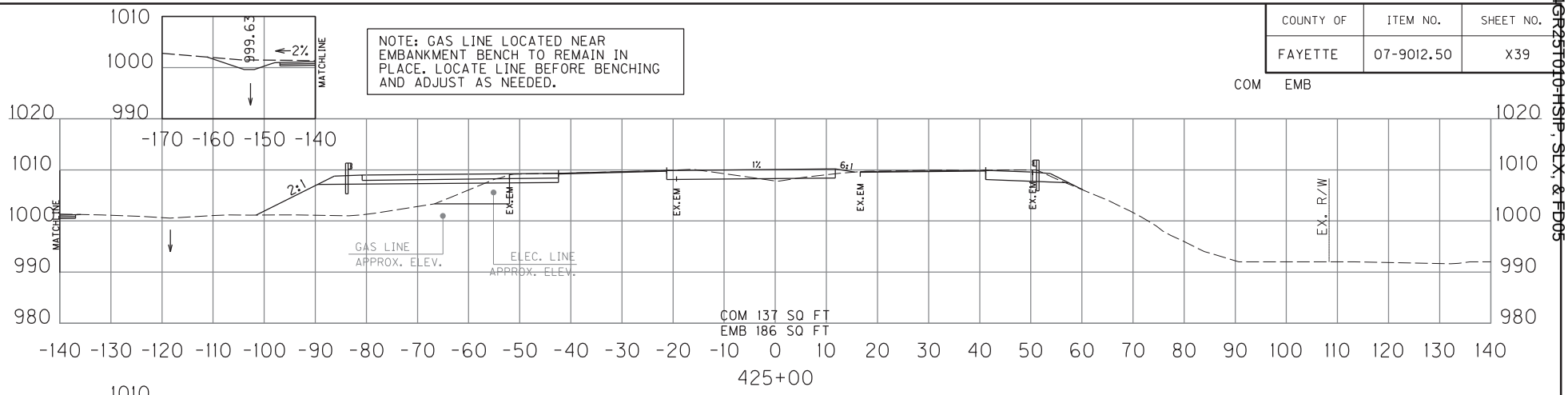


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

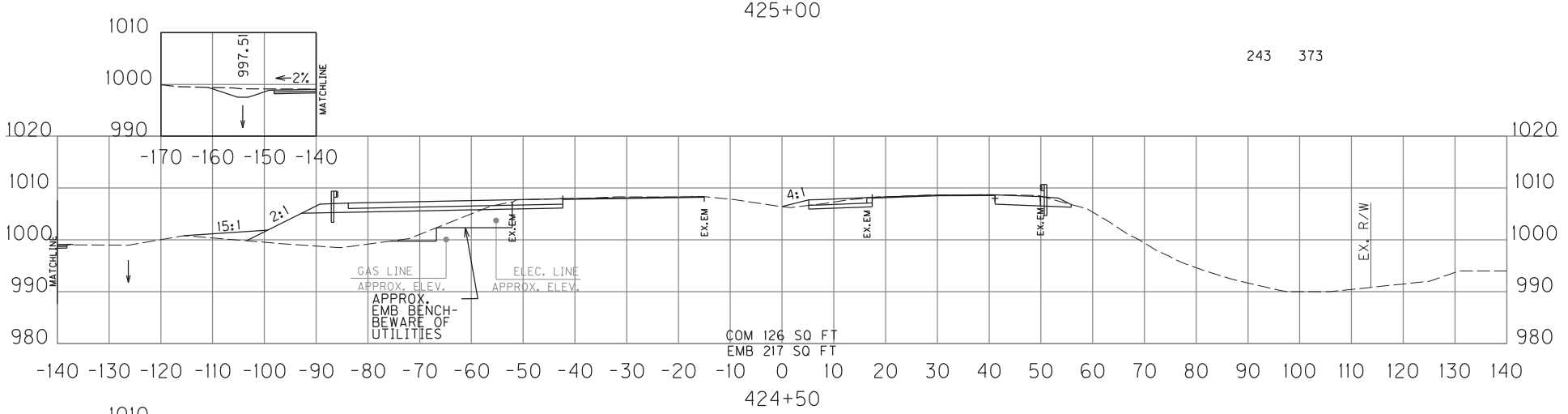
US 25
CROSS SECTION SHEET
STA. 422+50 TO STA. 423+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X39

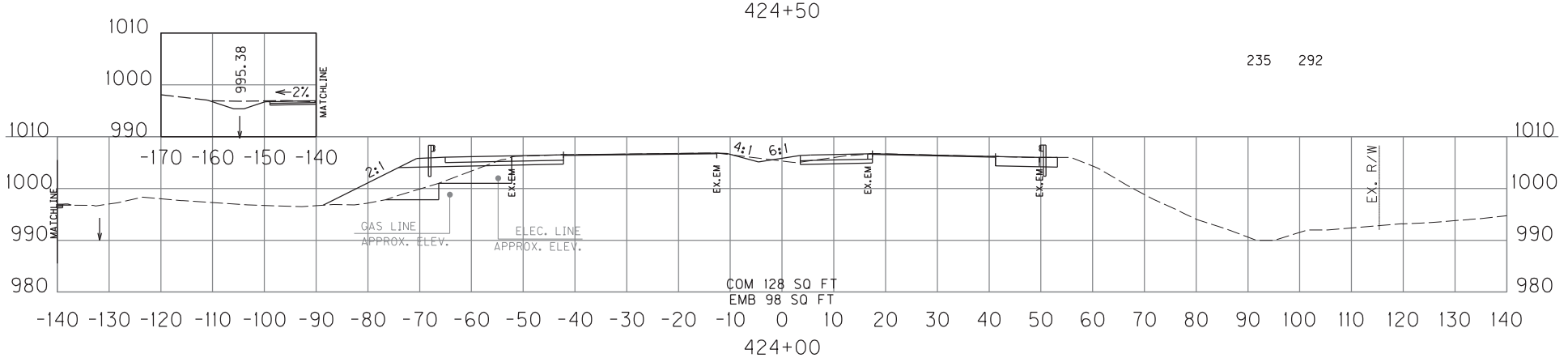
NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.



243 373



235 292



236 139

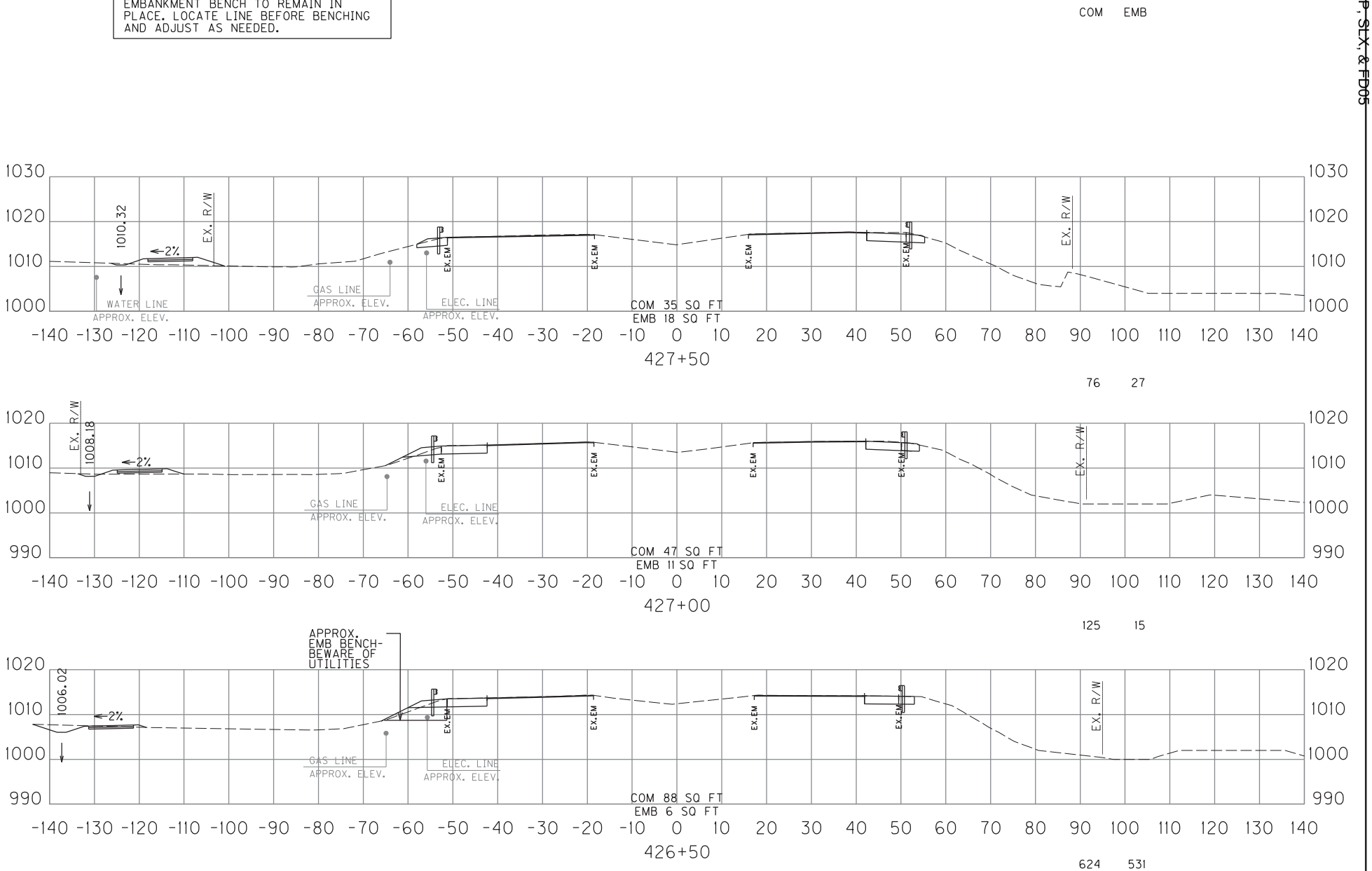
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 424+00 TO STA. 425+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\XY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X40

NOTE: GAS LINE LOCATED NEAR EMBANKMENT BENCH TO REMAIN IN PLACE. LOCATE LINE BEFORE BENCHING AND ADJUST AS NEEDED.



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

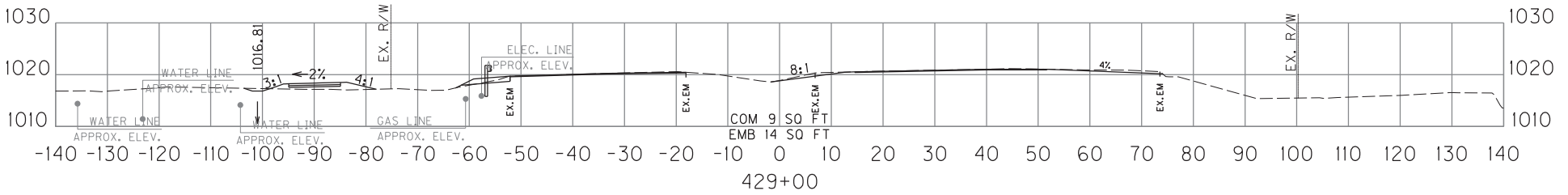
US 25
CROSS SECTION SHEET
STA. 426+50 TO STA. 427+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

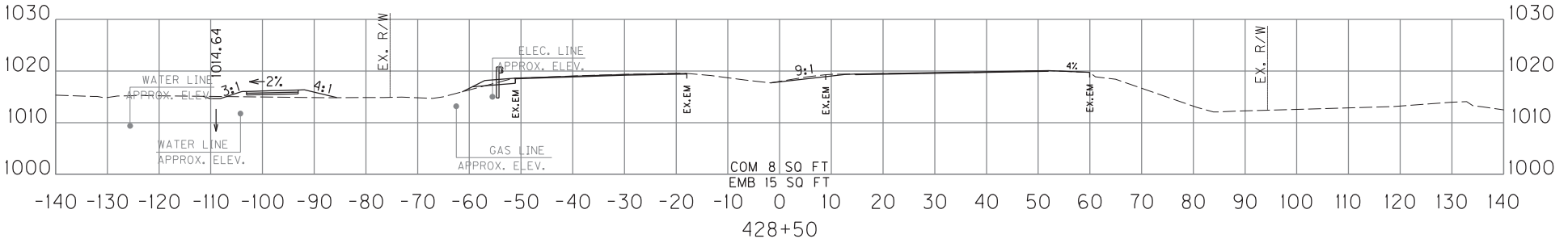
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X41

NOTE: APPROX. GRADE TO DRAIN OF OLD RICHMOND ROAD PAVEMENT REMOVAL SHOWN ON THE SECTIONS. WORK TO BE PAID UNDER PAVEMENT REMOVAL BID ITEM AND IS NOT INCLUDED IN THE EXCAVATION AREA.

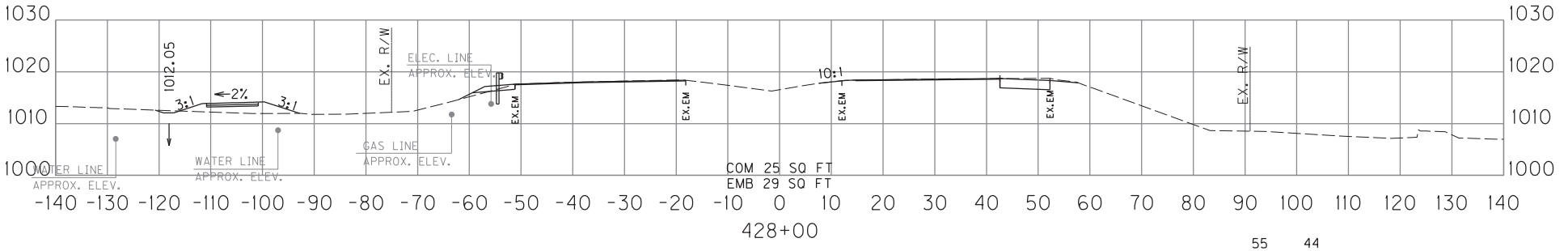
COM EMB



15 27



30 41



55 44

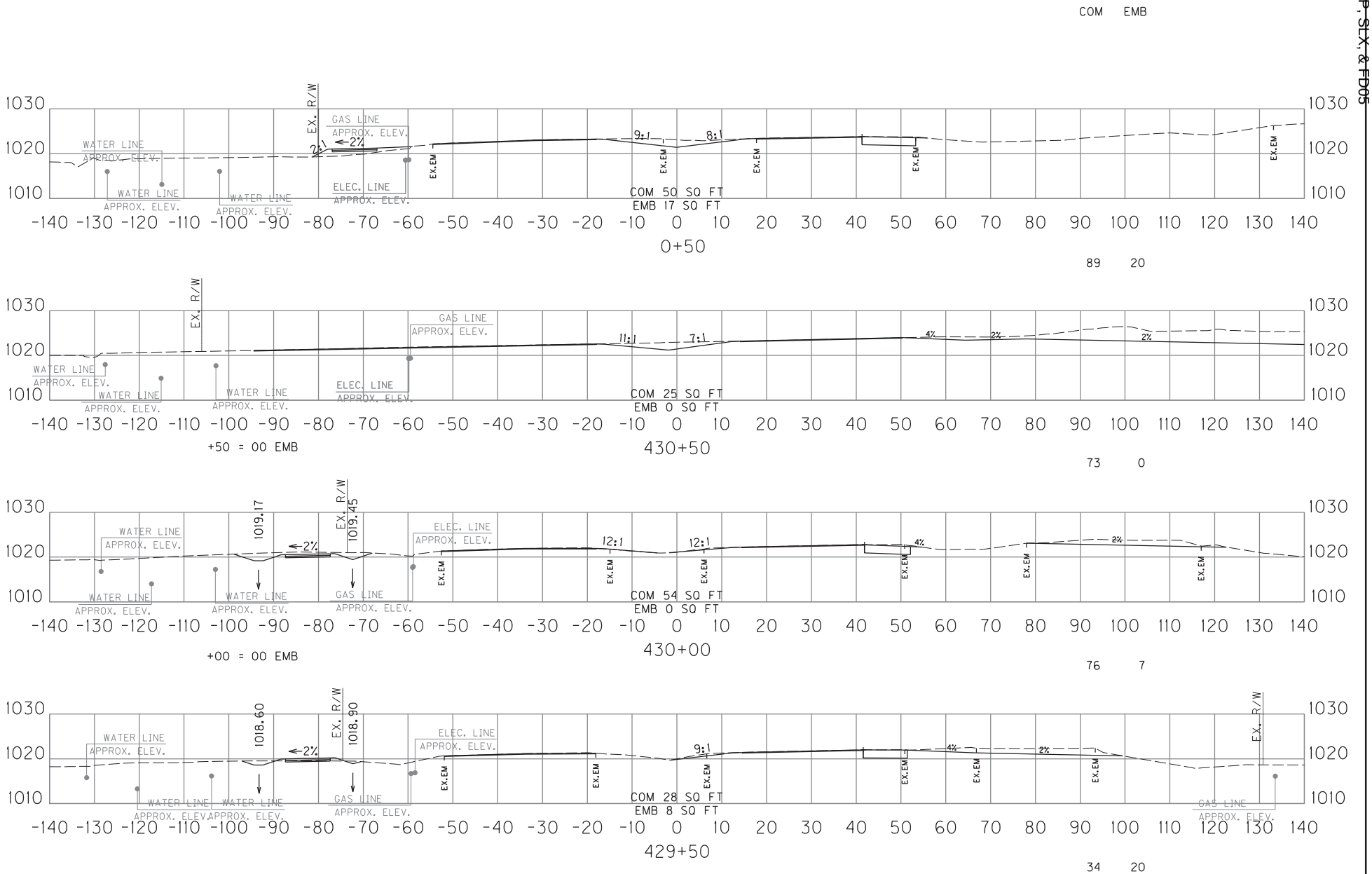
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25
CROSS SECTION SHEET
STA. 428+00 TO STA. 429+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X42

NOTE: APPROX. GRADE TO DRAIN OF OLD RICHMOND ROAD PAVEMENT REMOVAL SHOWN ON THE SECTIONS. WORK TO BE PAID UNDER PAVEMENT REMOVAL BID ITEM AND IS NOT INCLUDED IN THE EXCAVATION AREA.



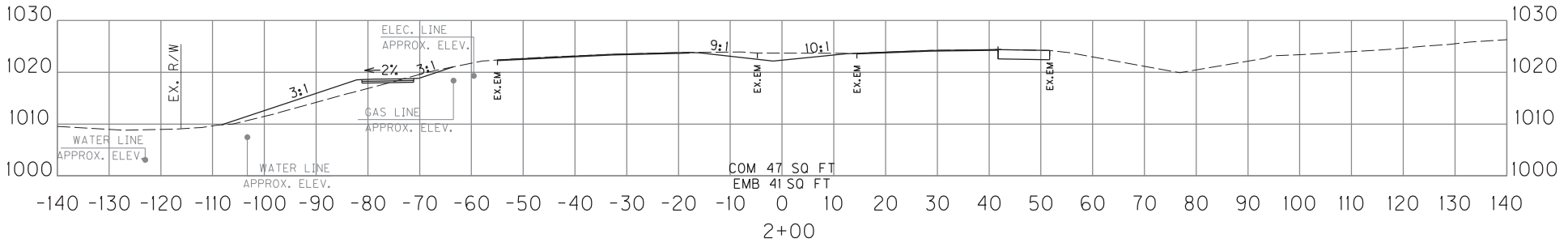
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

US 25 / KY 418
CROSS SECTION SHEET
STA. 429+50 TO STA. 0+50

FILE NAME: C:\PWWORKING\EASTO\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

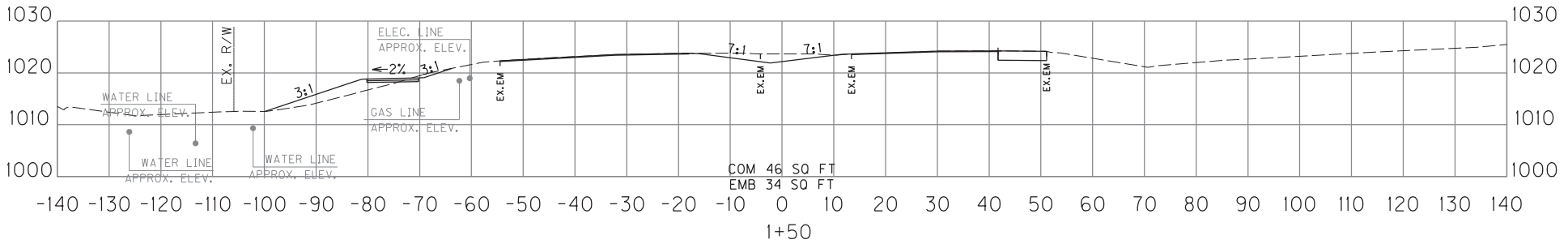
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X43

COM EMB



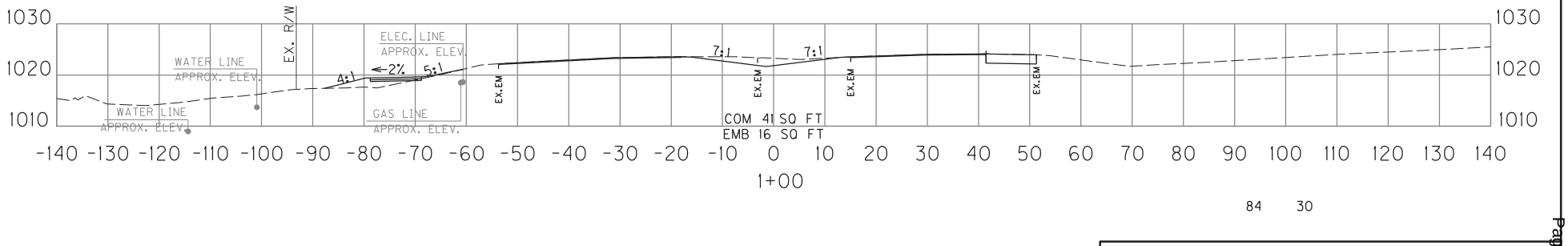
2+00

87 70



1+50

81 47



1+00

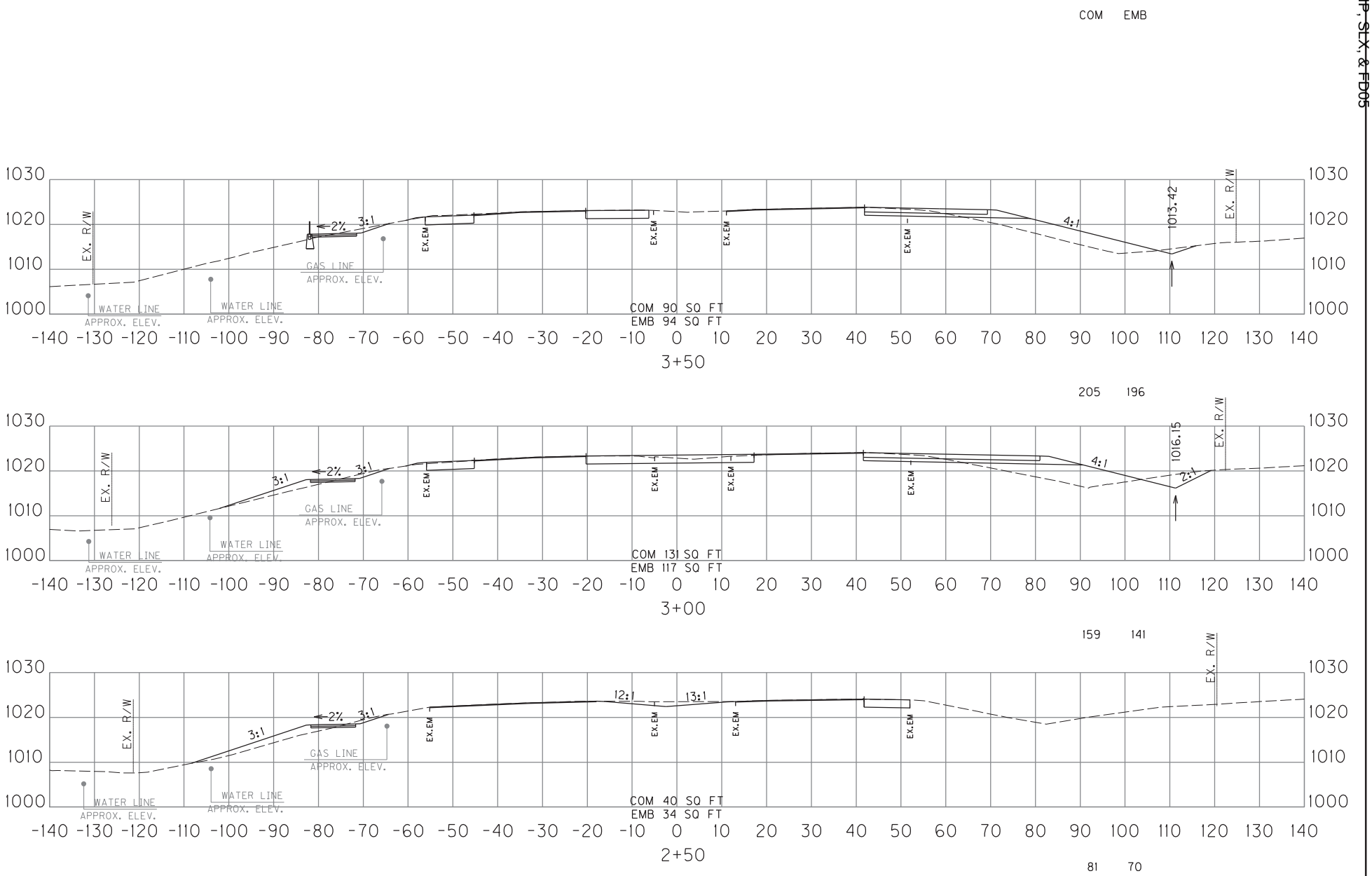
84 30

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

KY 418
CROSS SECTION SHEET
STA. 1+00 TO STA. 2+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X44

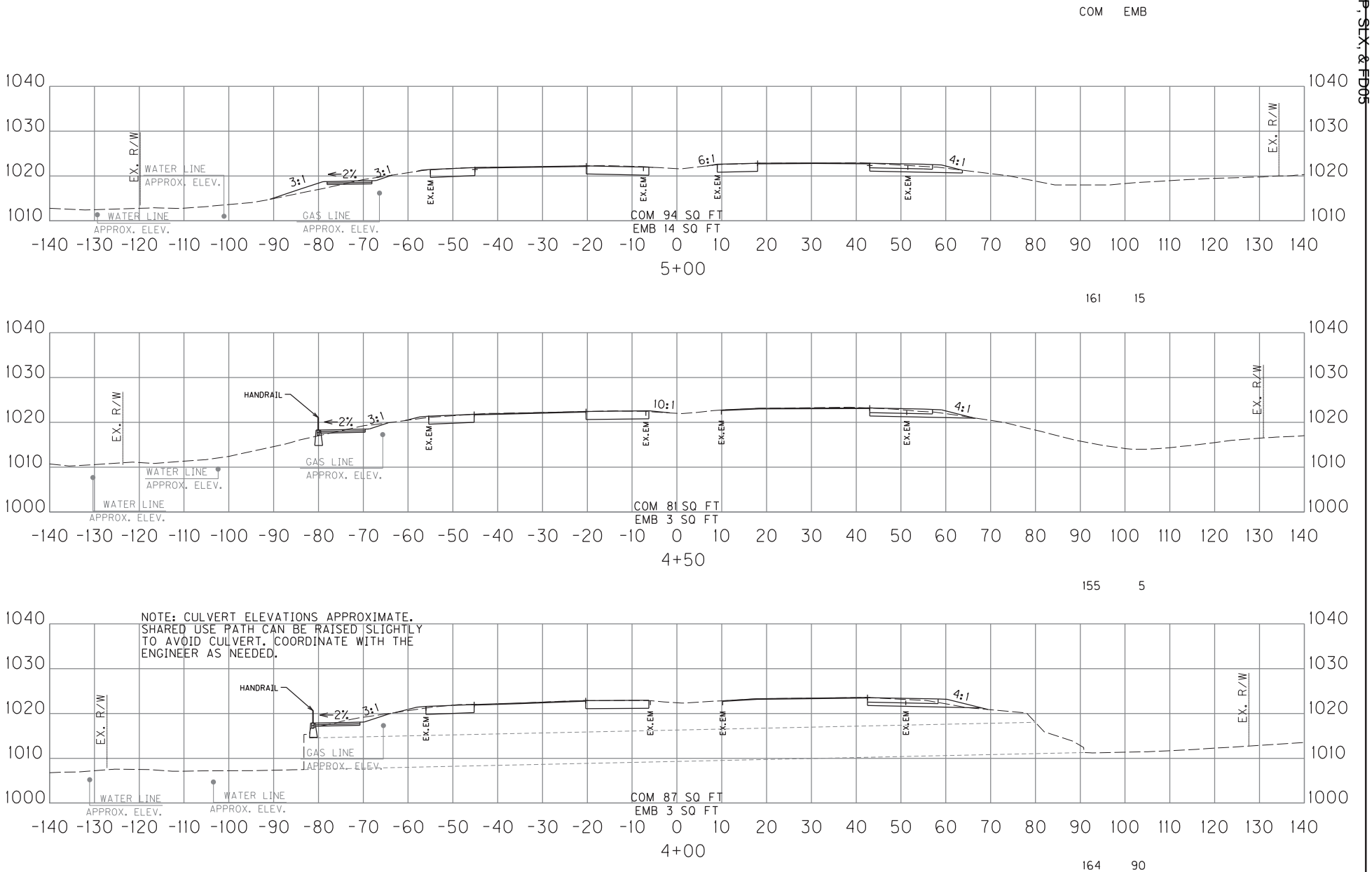


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 2+50 TO STA. 3+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X45



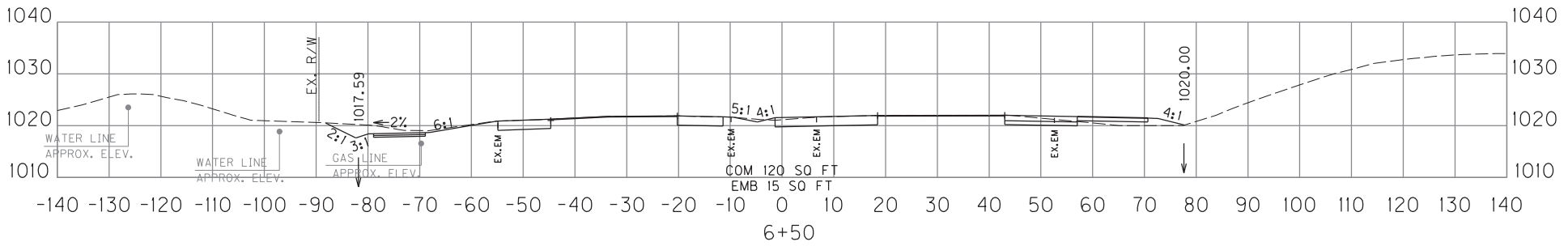
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 4+00 TO STA. 5+00

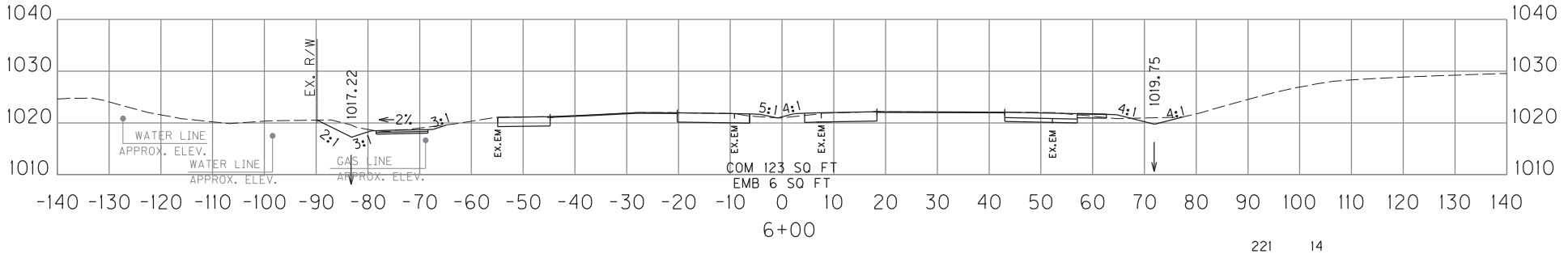
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X46

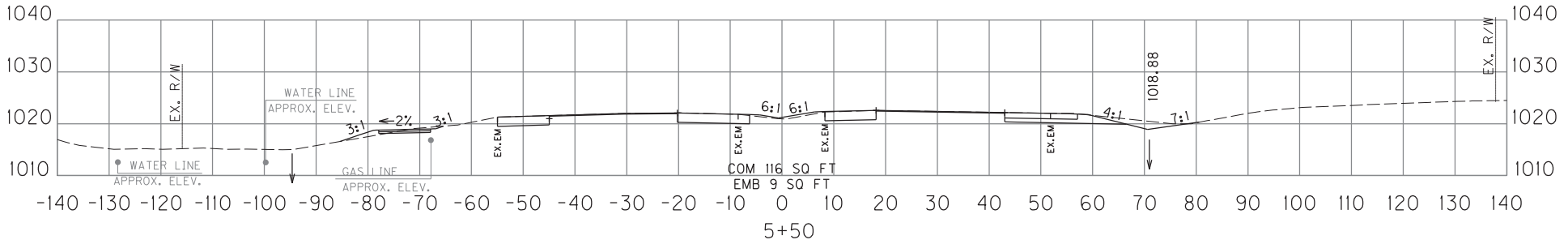
COM EMB



224 19



221 14



194 22

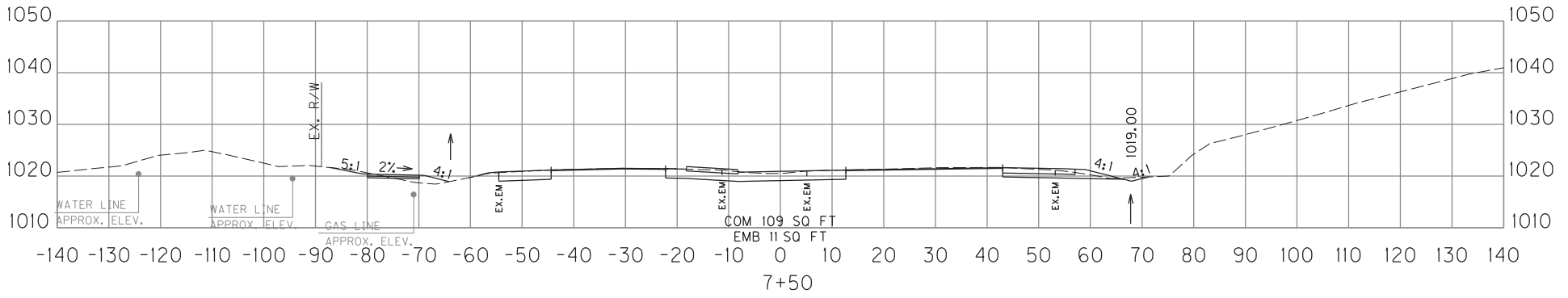
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 5+50 TO STA. 6+50

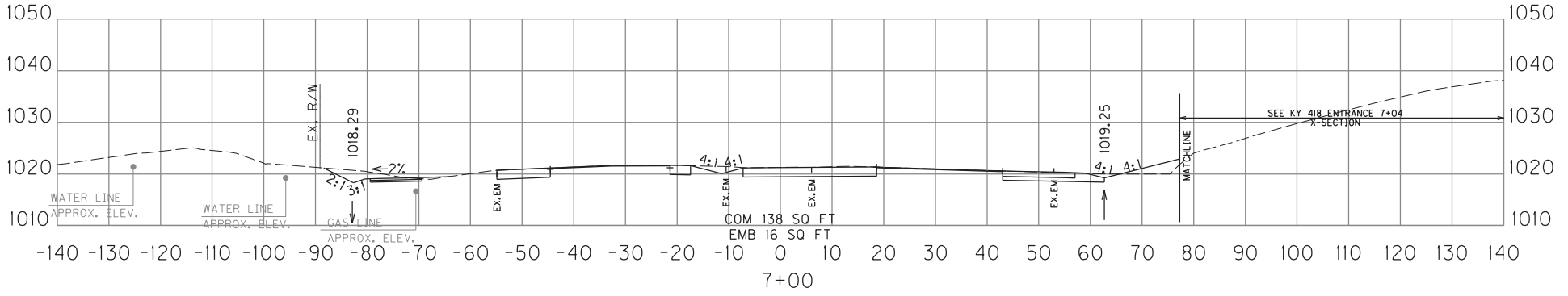
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X47

COM EMB



229 25



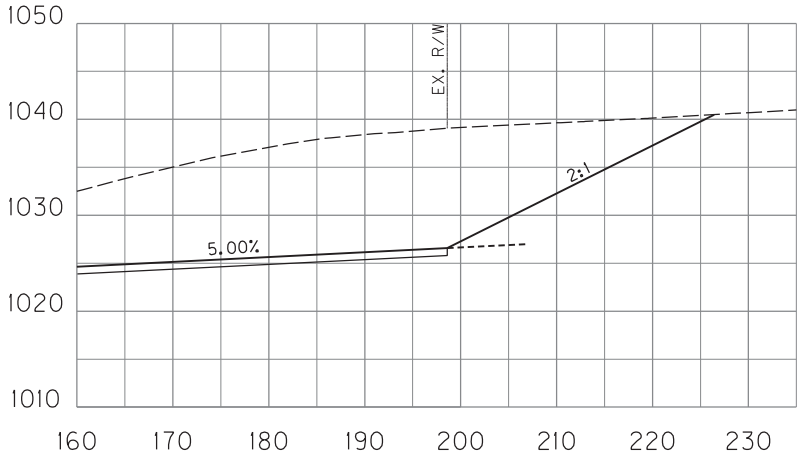
239 29

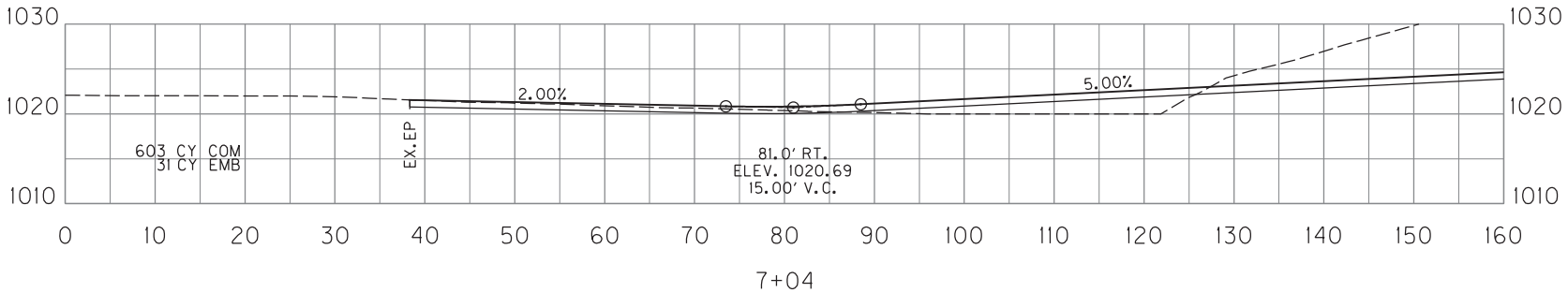
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 7+00 TO STA. 7+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X48





7+04

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

KY 418
CROSS SECTION SHEET
ENTRANCE STA. 7+04

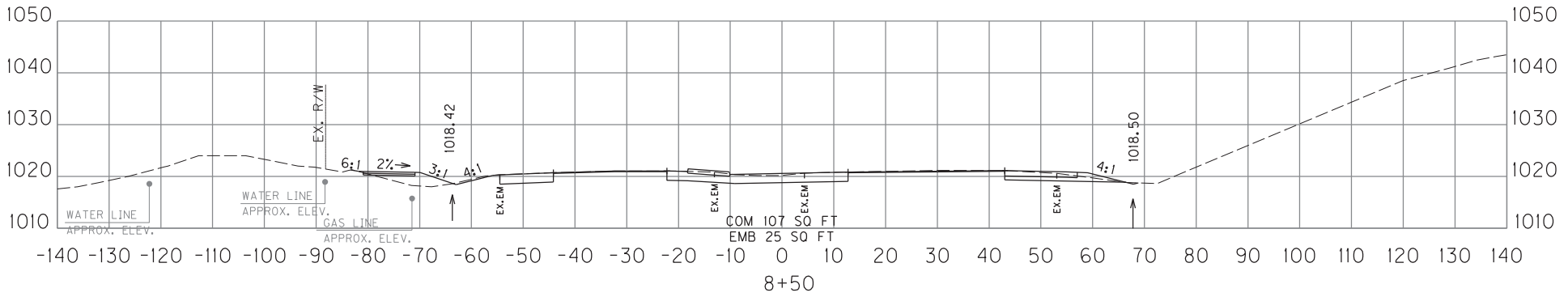
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\APHIDS XS.DGN

FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

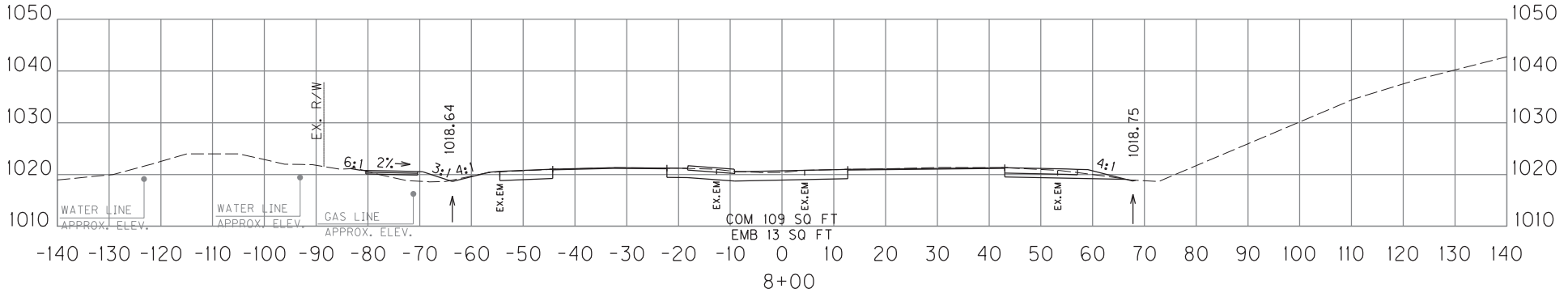
Contract ID: 254301
Page 496 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X49

COM EMB



200 35



201 22

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

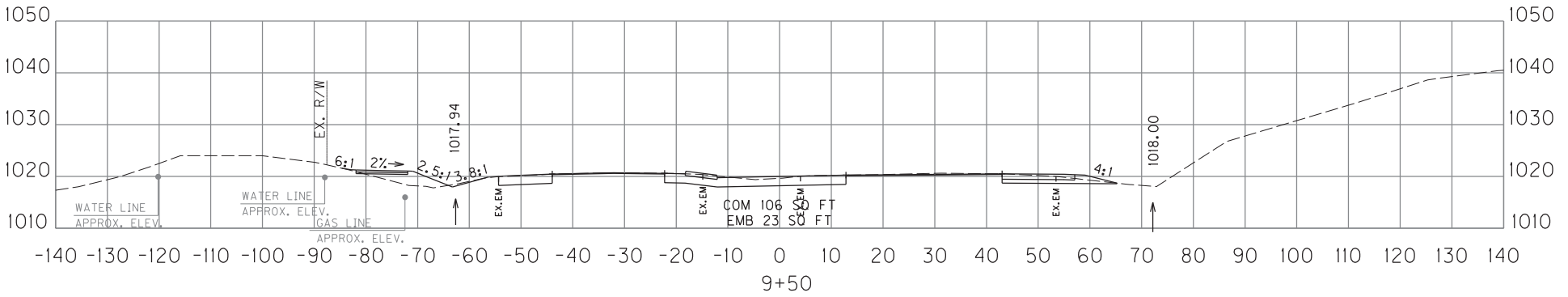
KY 418
CROSS SECTION SHEET
STA. 8+00 TO STA. 8+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN

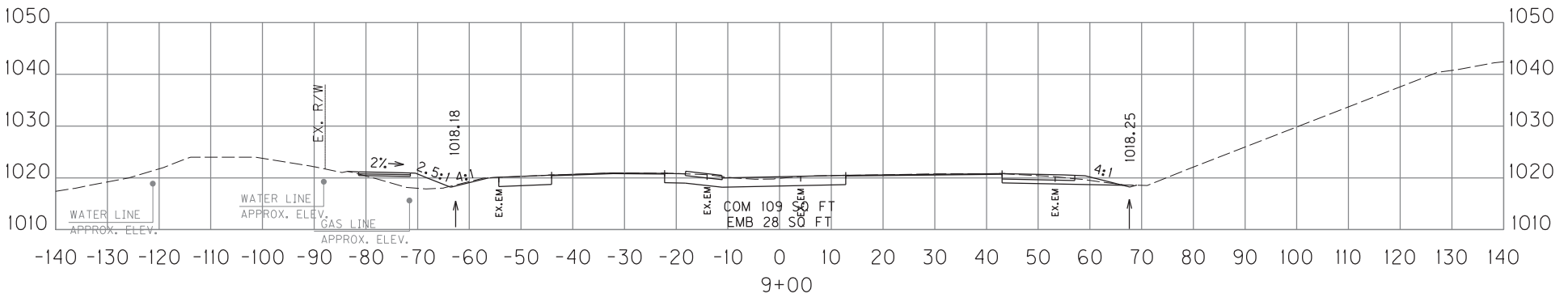
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COM EMB



199 47

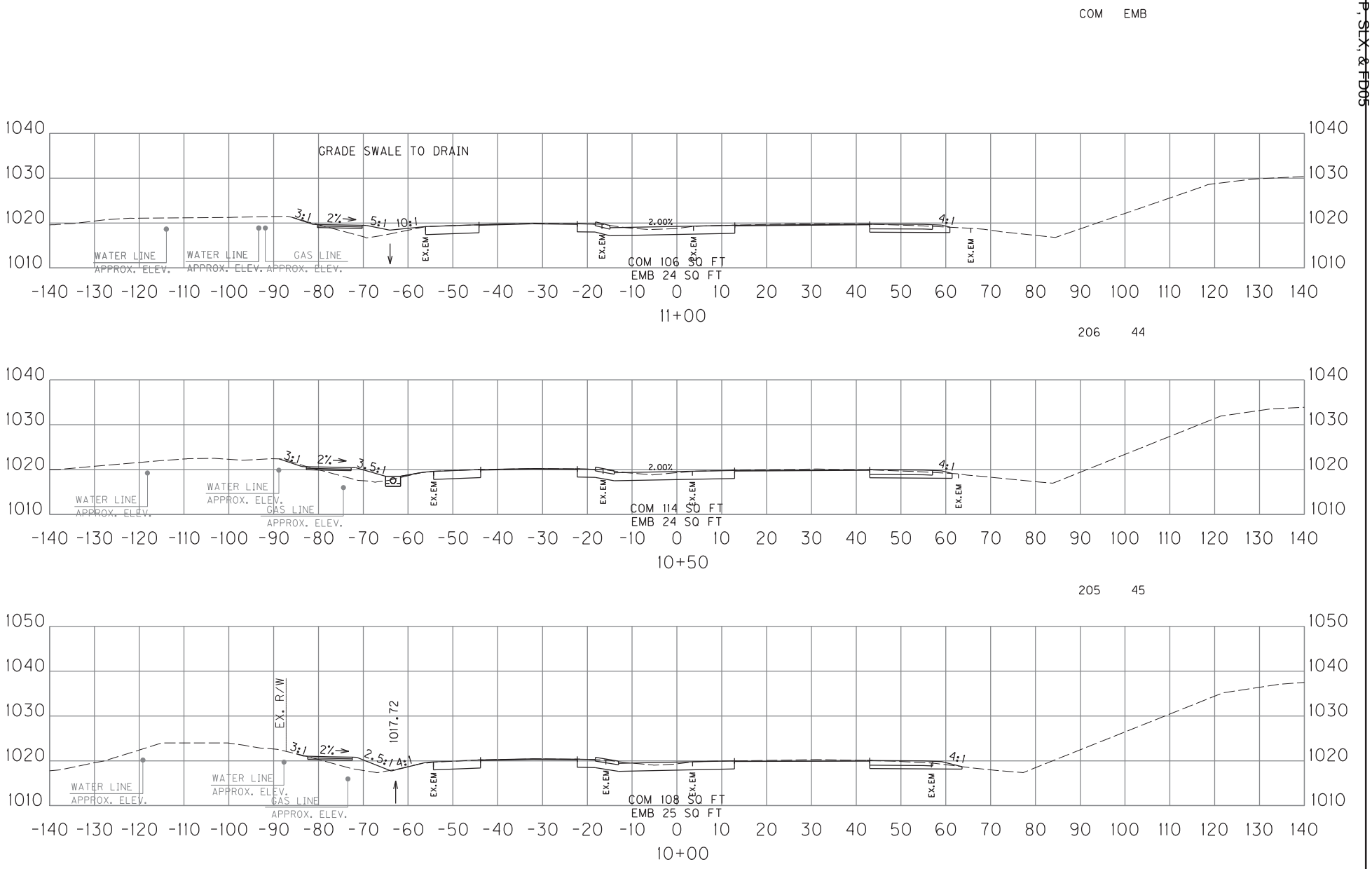


200 49

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

KY 418
CROSS SECTION SHEET
STA. 9+00 TO STA. 9+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X51

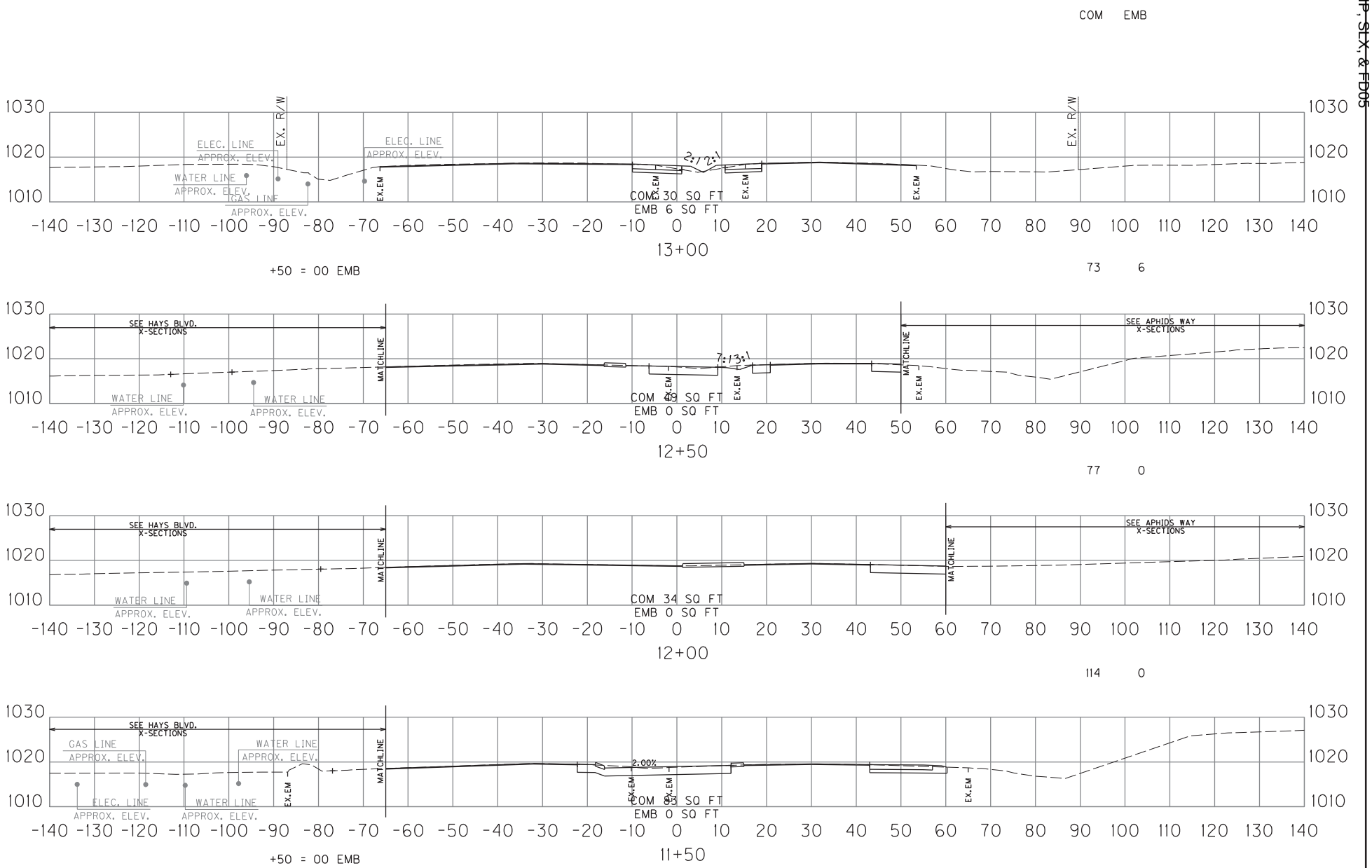


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 10+00 TO STA. 11+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X52

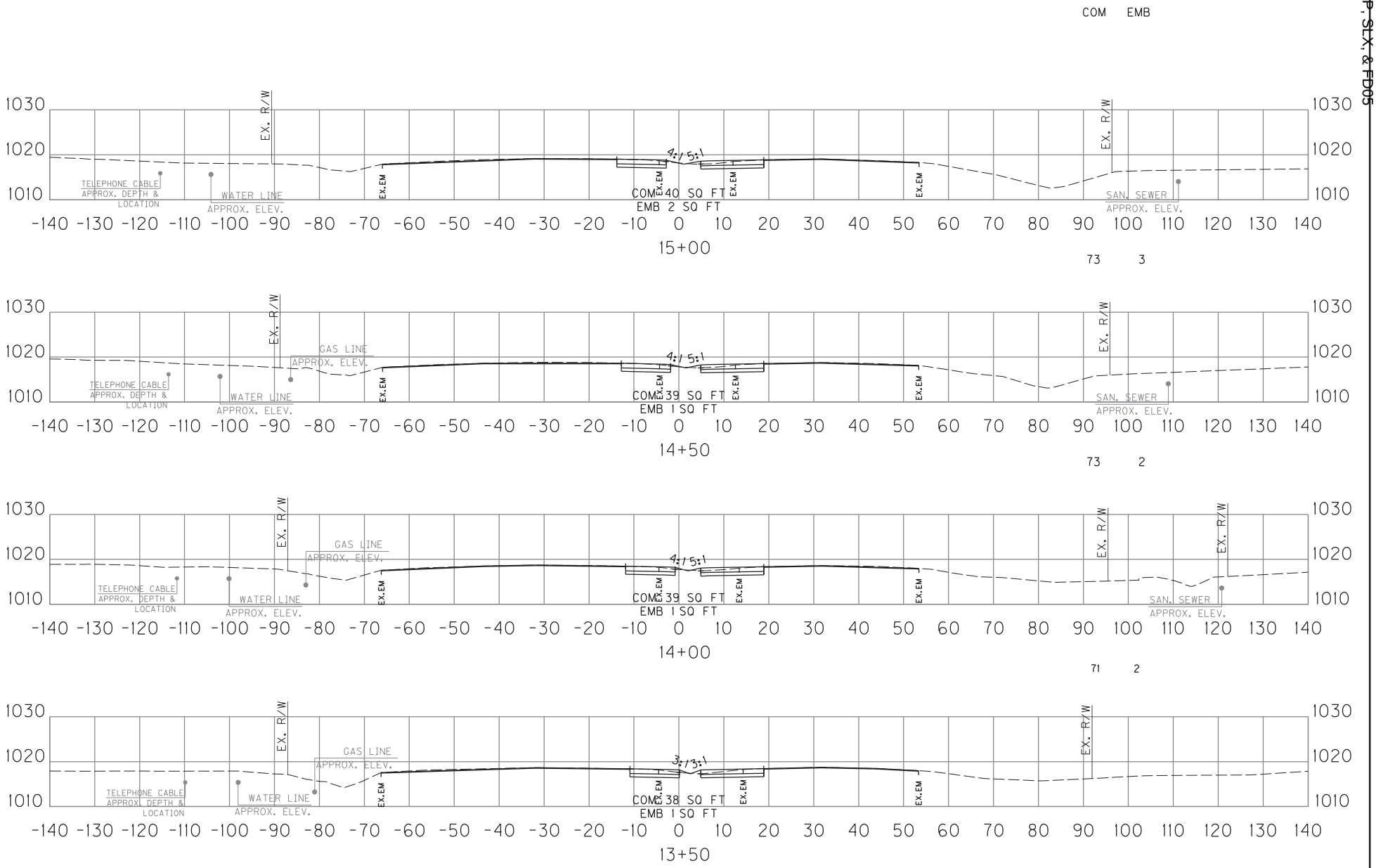


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 11+50 TO STA. 13+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X53



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

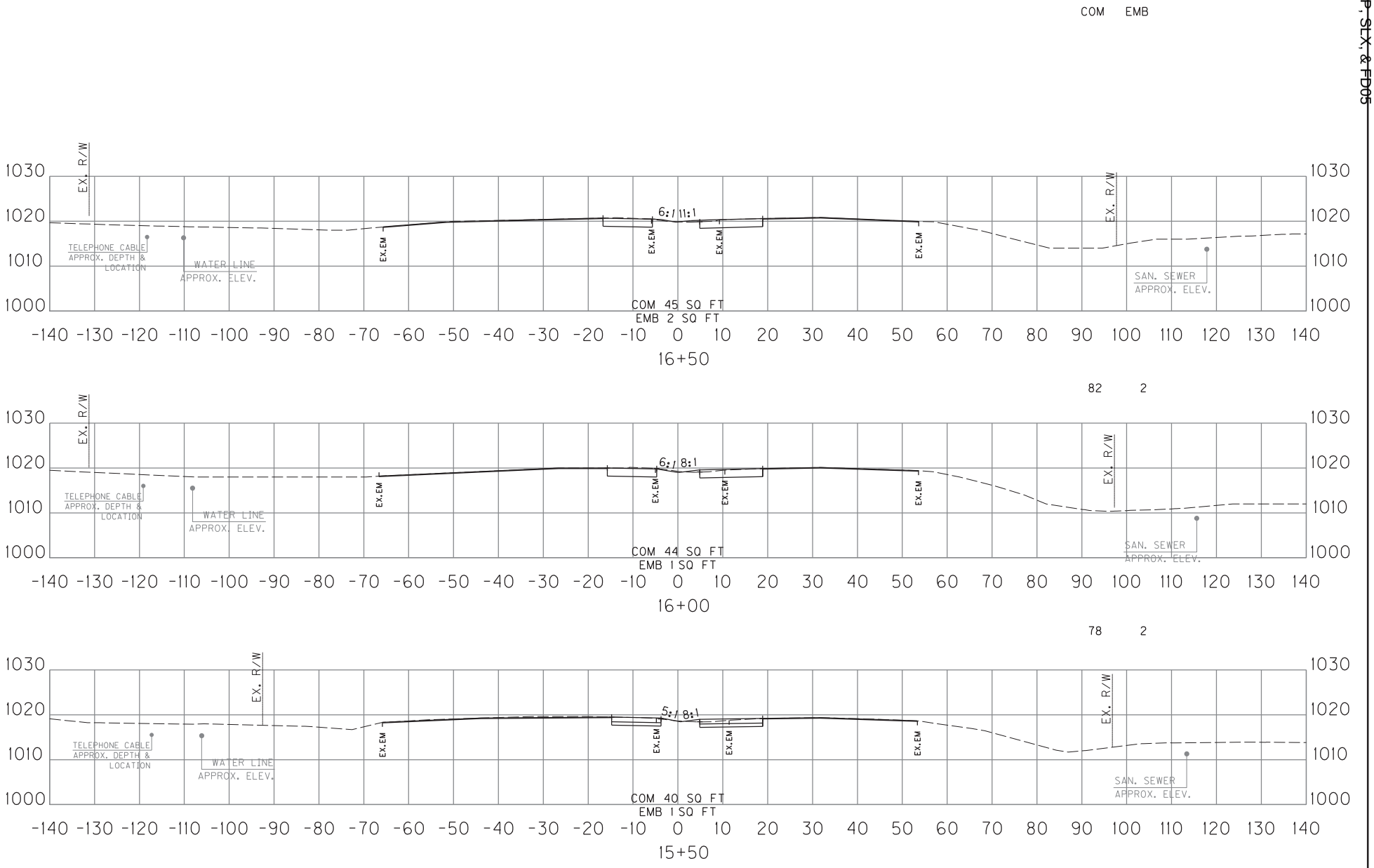
KY 418
CROSS SECTION SHEET
STA. 13+50 TO STA. 15+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034-GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 501 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X54

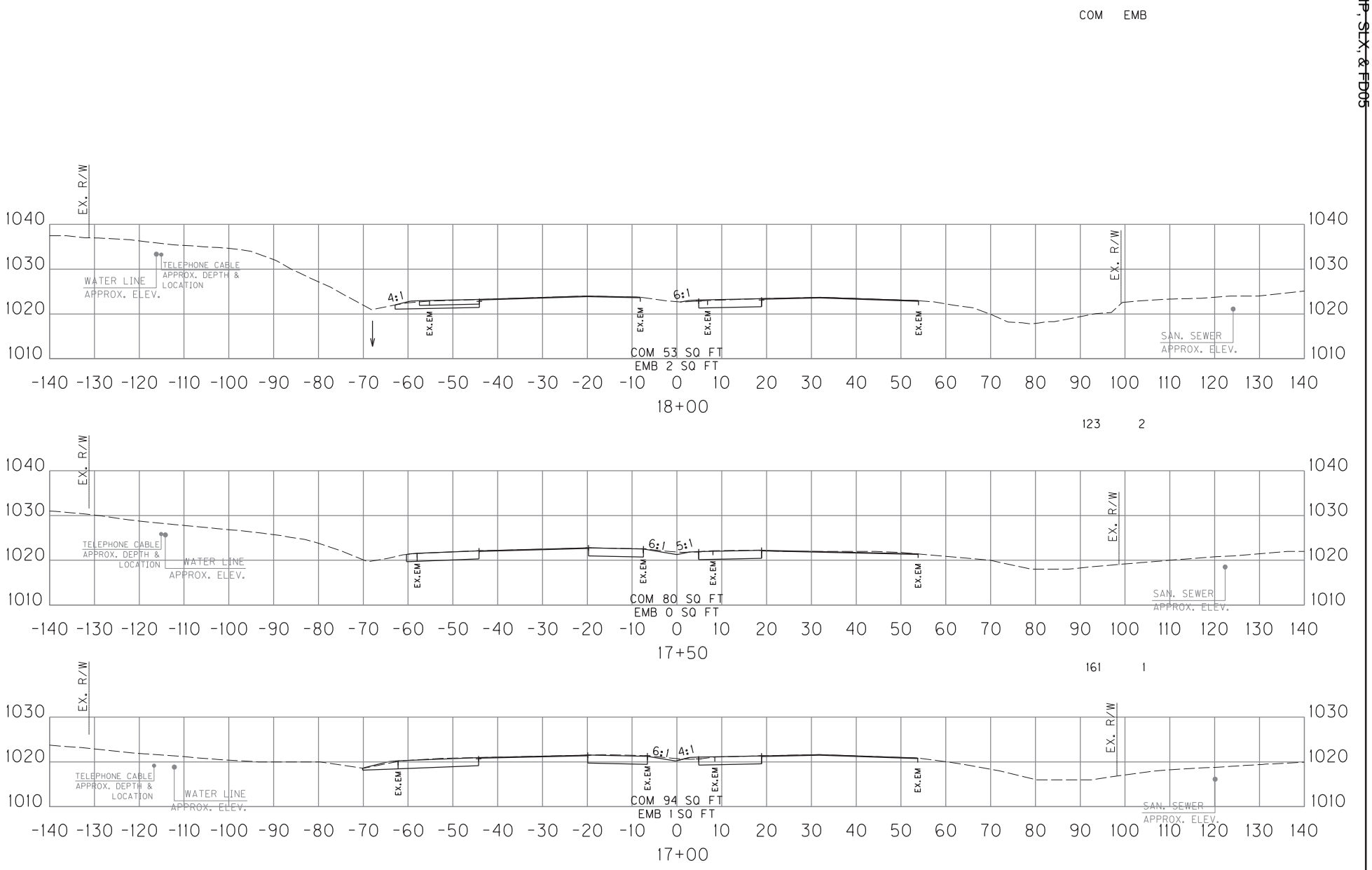


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 15+50 TO STA. 16+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X55



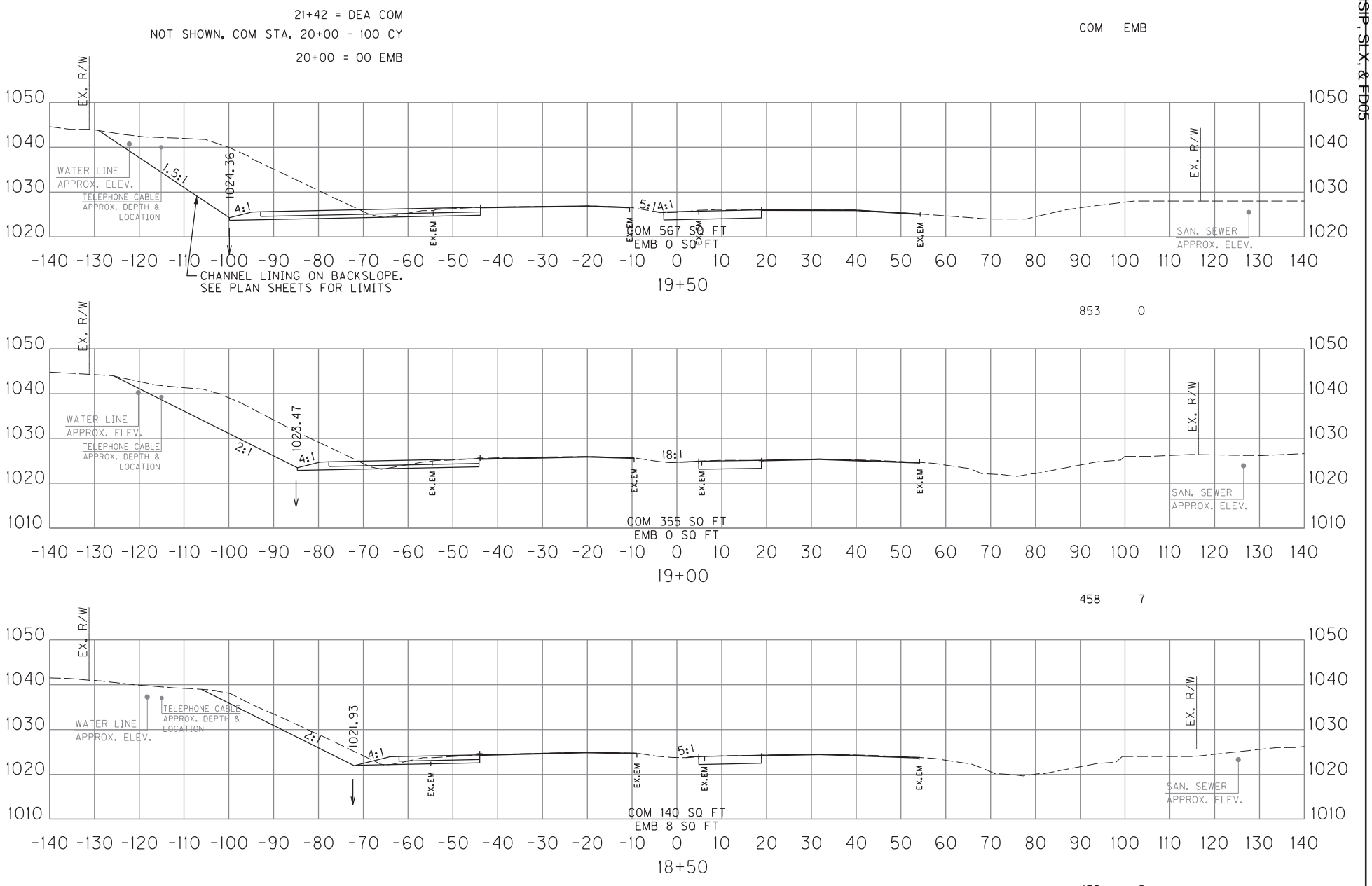
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 17+00 TO STA. 18+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X56

NOTE: SECTIONS BETWEEN STA. 19+50
AND STA. 45+00 ARE NOT SHOWN.



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

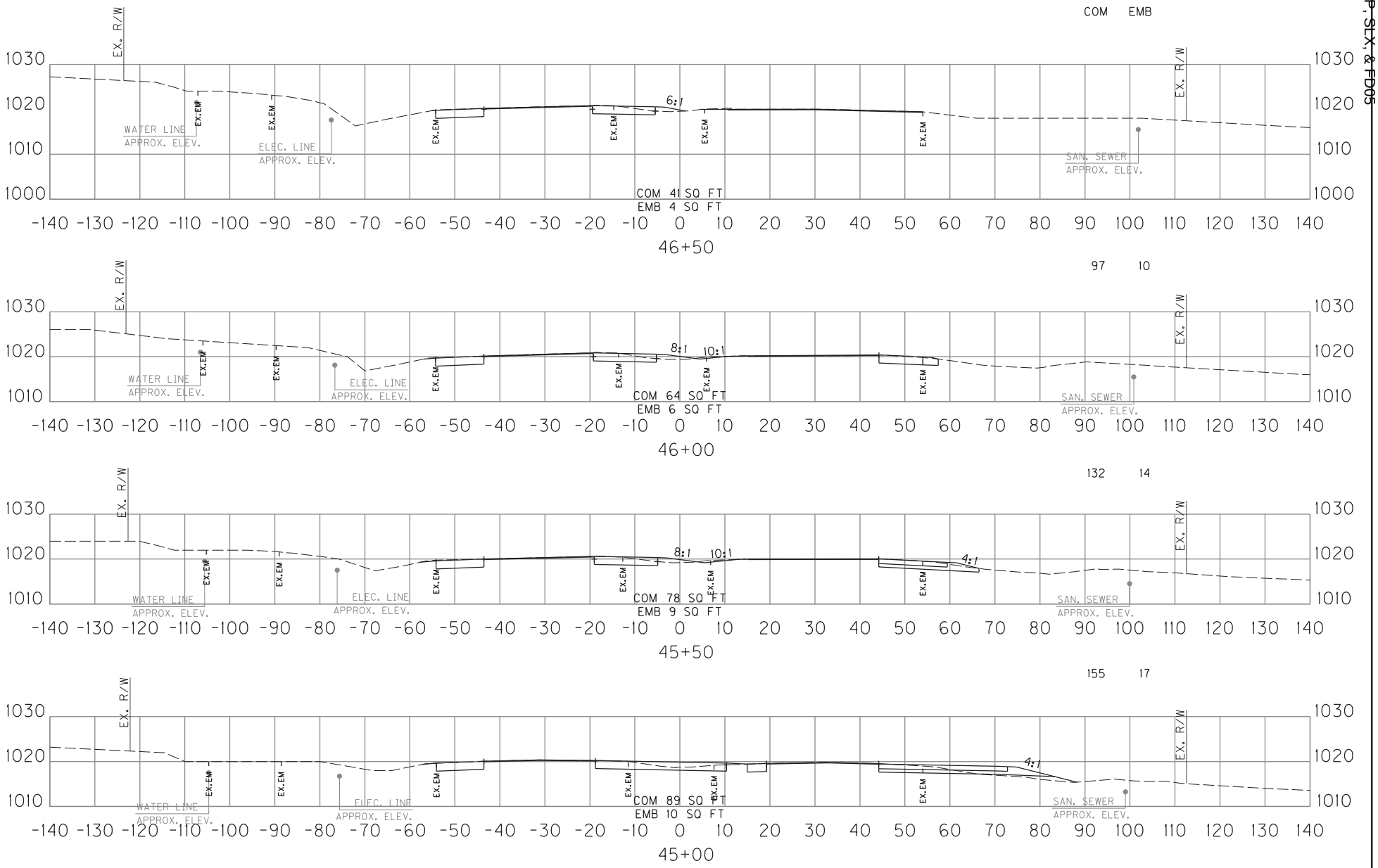
KY 418
CROSS SECTION SHEET
STA. 18+50 TO STA. 19+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034-GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 504 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X57



EARTHWORK NOT SHOWN.
STA. 43+19 TO STA. 45+00
COM - 355 CY, EMB - 25 CY

43+19 = DEA COM
43+69 = 00 EMB

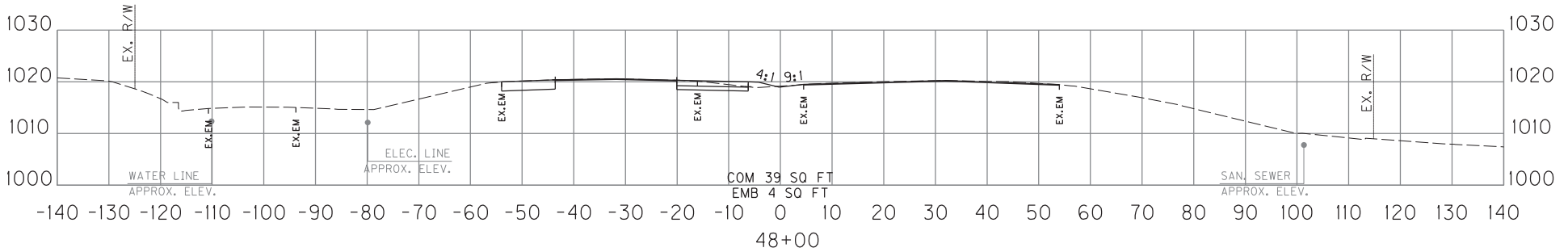
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 45+00 TO STA. 46+50

FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

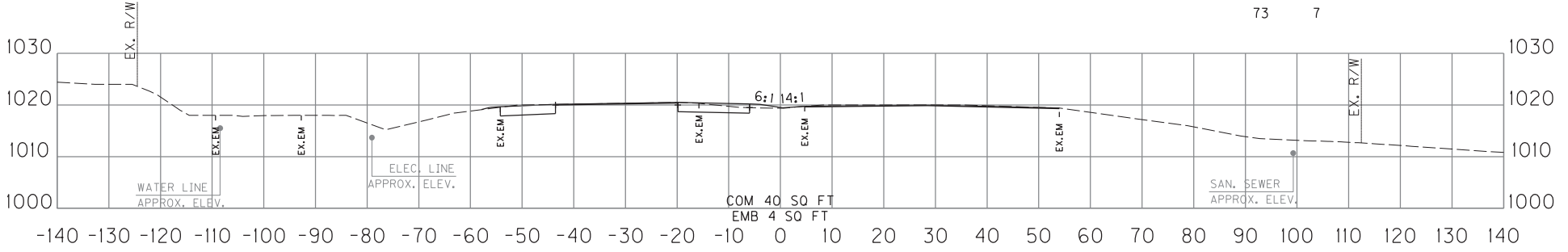
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X58

COM EMB



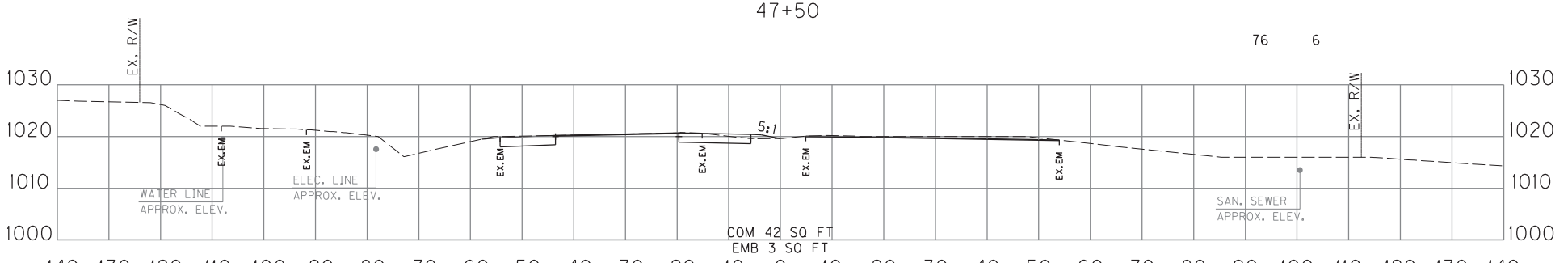
48+00

73 7



47+50

76 6



47+00

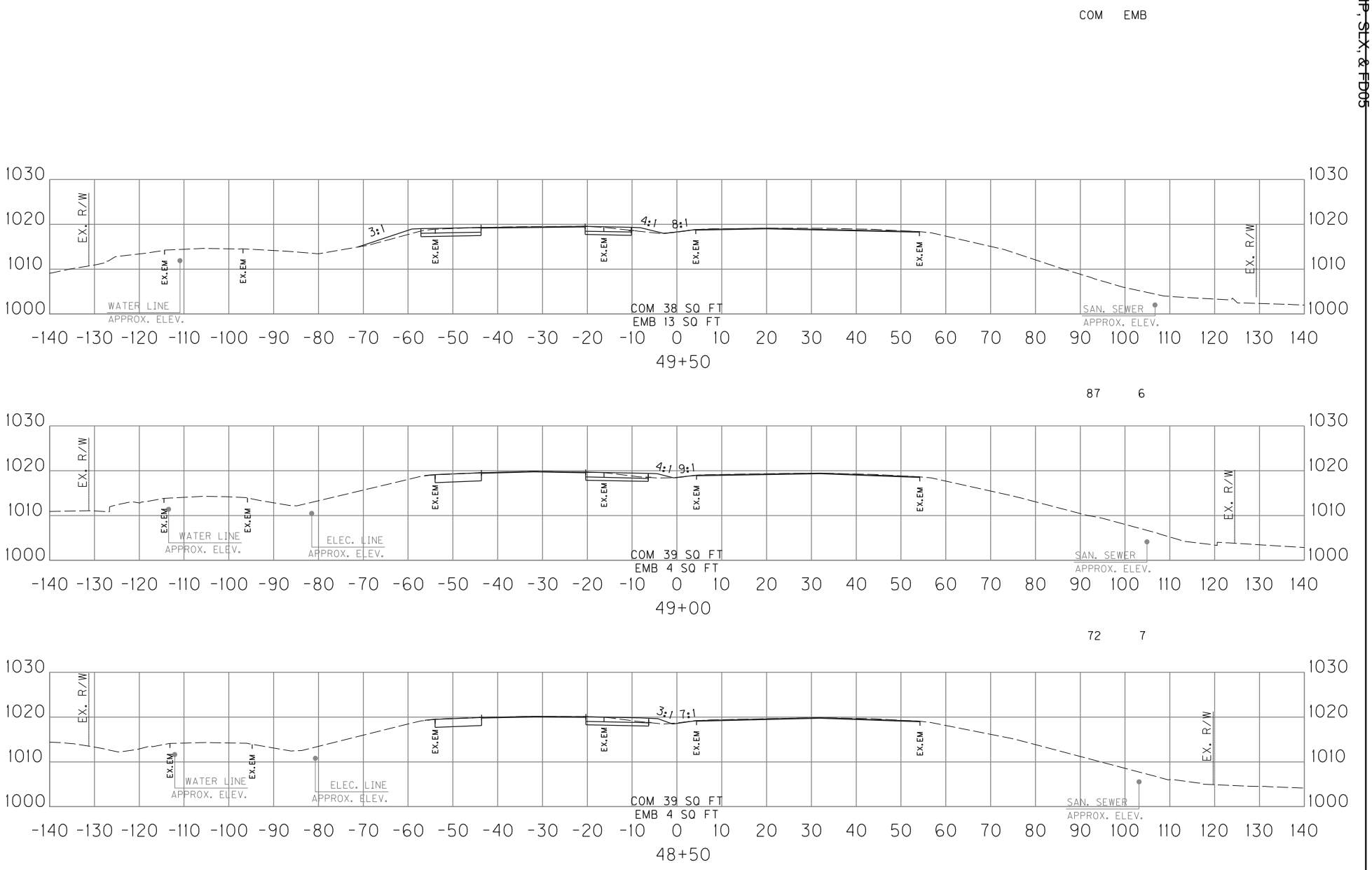
77 7

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

KY 418
CROSS SECTION SHEET
STA. 47+00 TO STA. 48+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X59



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

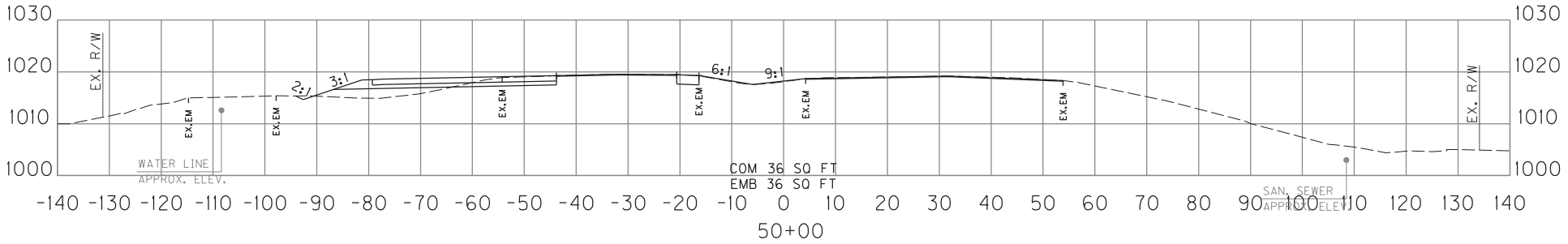
KY 418
CROSS SECTION SHEET
STA. 48+50 TO STA. 49+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X60

COM EMB

+46 = 00 EMB
+46 = DEA COM



94 44

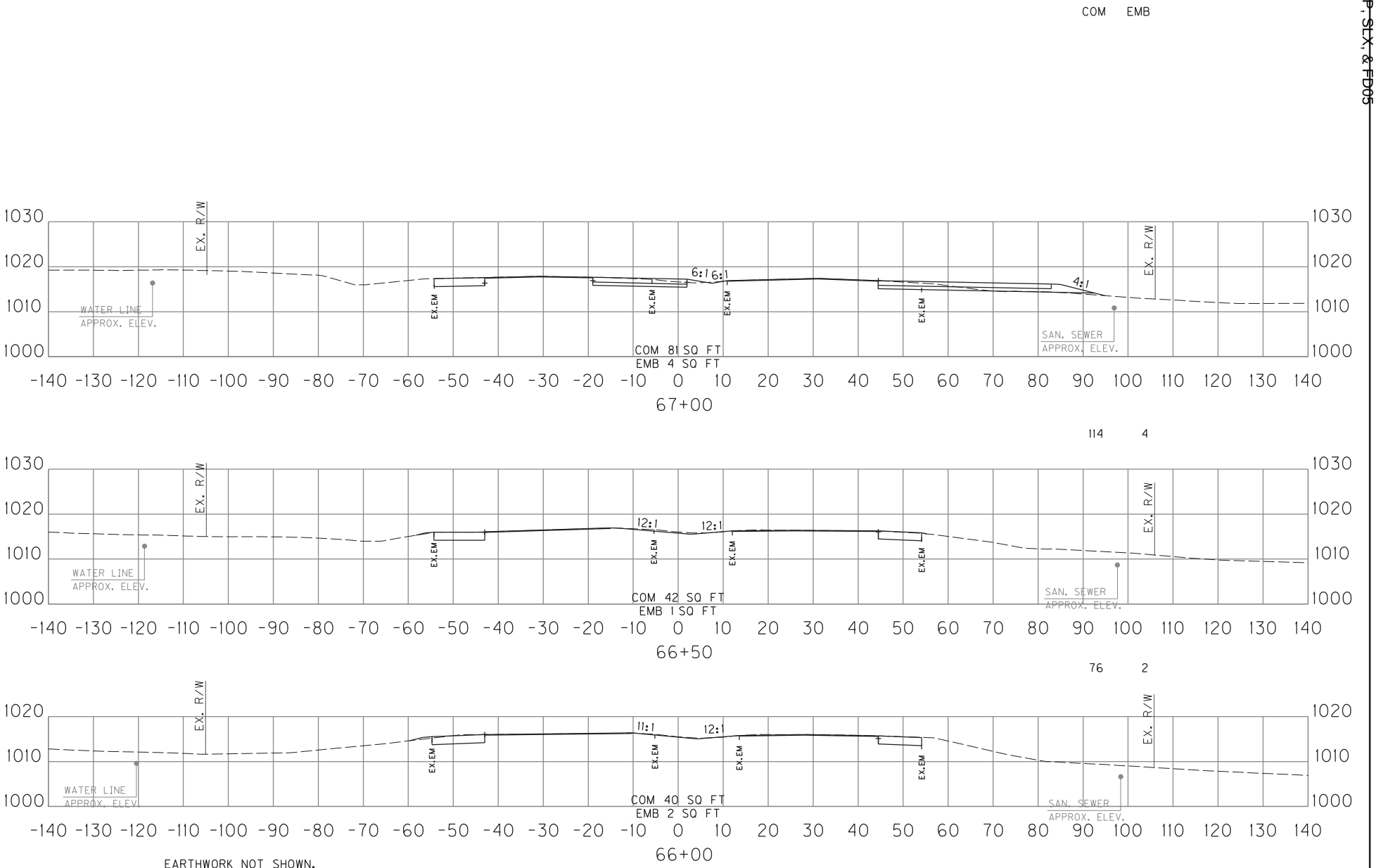
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 50+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X61

NOTE: SECTIONS BETWEEN STA. 50+00
AND STA. 66+00 ARE NOT SHOWN.



EARTHWORK NOT SHOWN,
STA. 65+43 TO STA. 66+00
COM - 69 CY, EMB - 2 CY

65+43 = 00 EMB

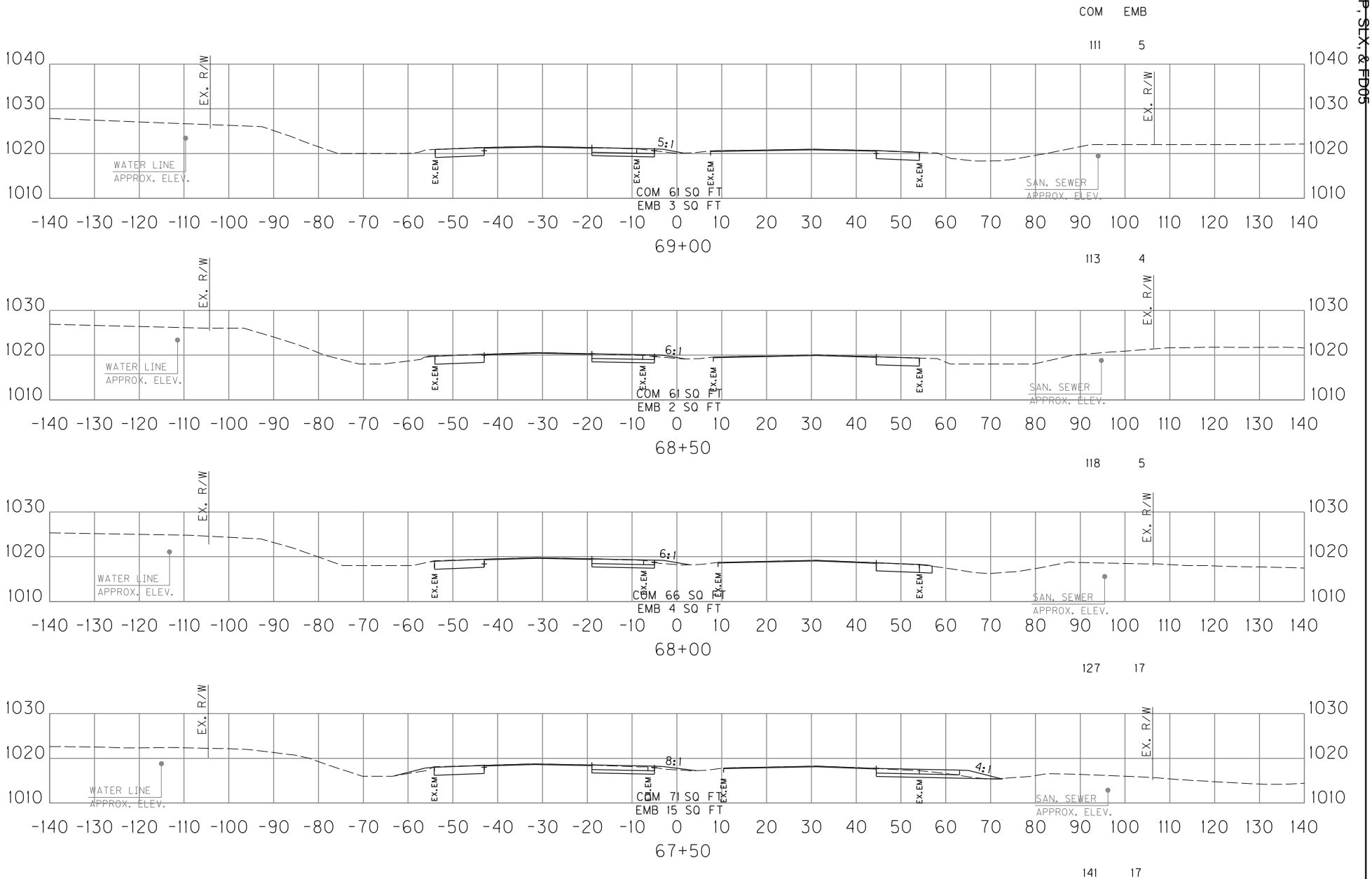
65+43 = DEA COM

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

KY 418
CROSS SECTION SHEET
STA. 66+00 TO STA. 67+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X62



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

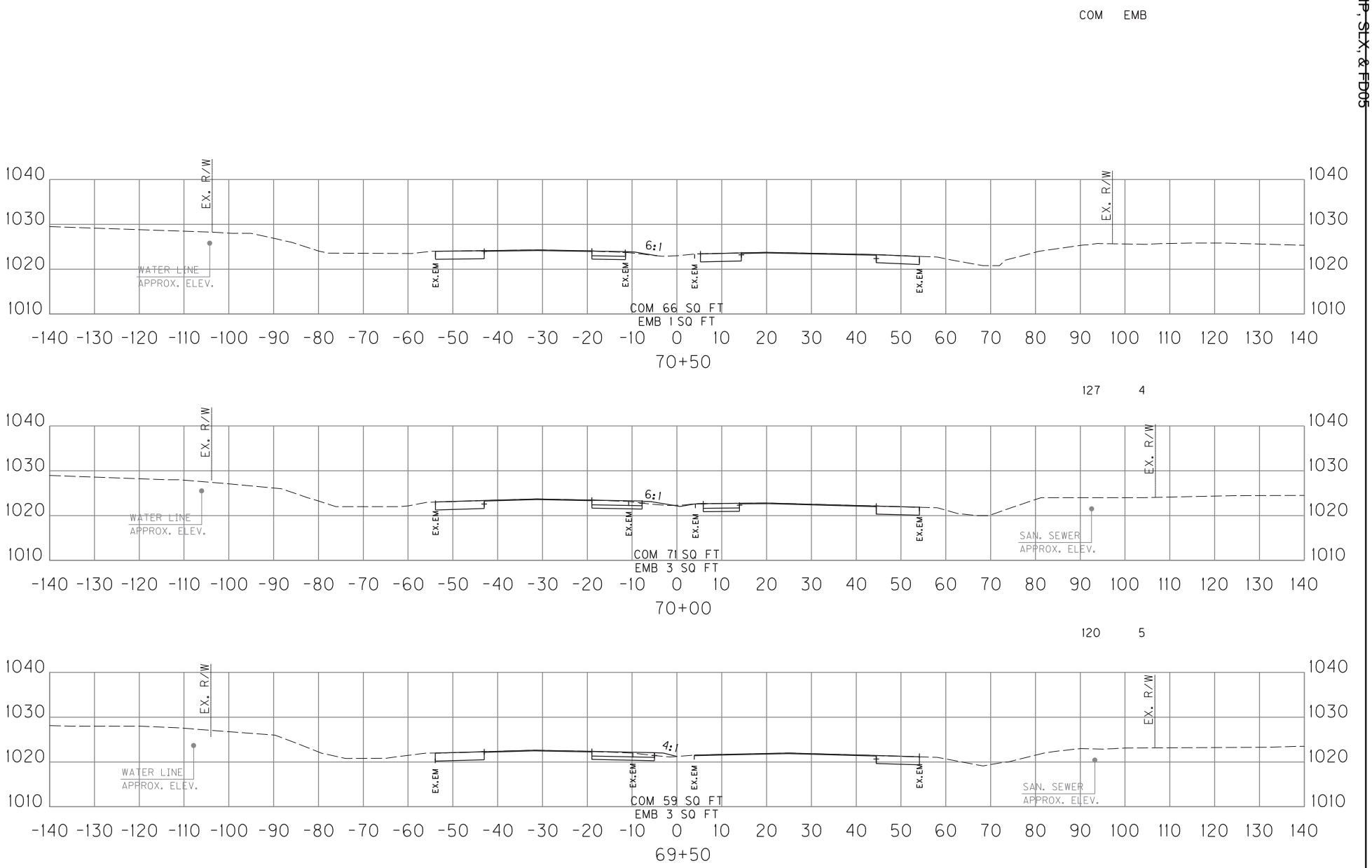
KY 418
CROSS SECTION SHEET
STA. 67+50 TO STA. 69+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010HSIP, SLX, & FD05

Contract ID: 254301
Page 510 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X63



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

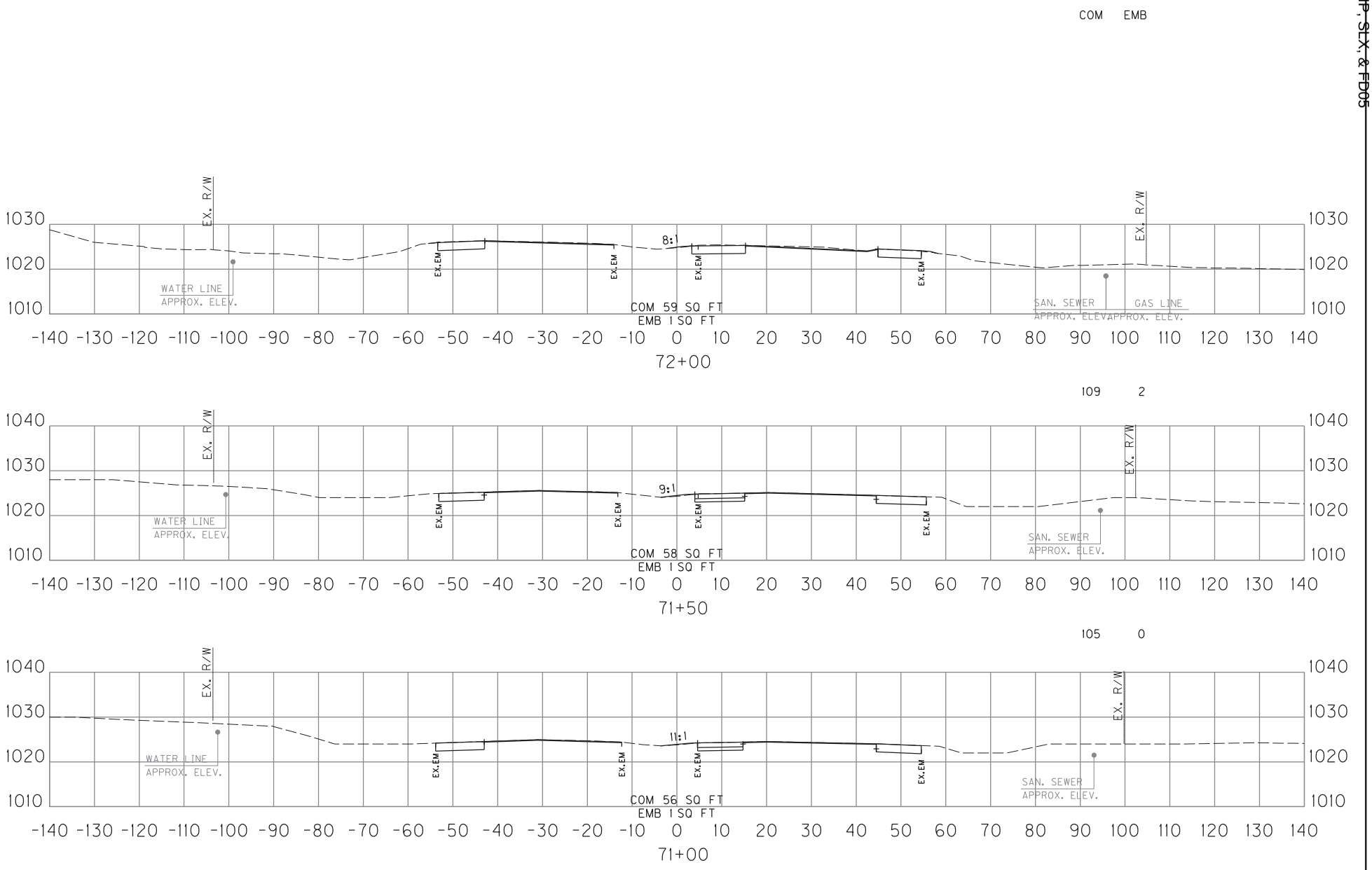
KY 418
CROSS SECTION SHEET
STA. 69+50 TO STA. 70+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05

Contract ID: 254301
Page 511 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X64



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

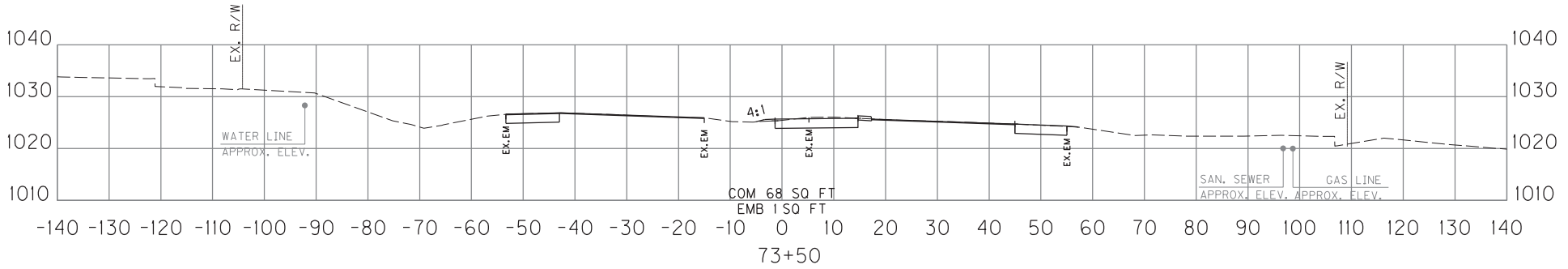
KY 418
CROSS SECTION SHEET
STA. 71+00 TO STA. 72+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X65

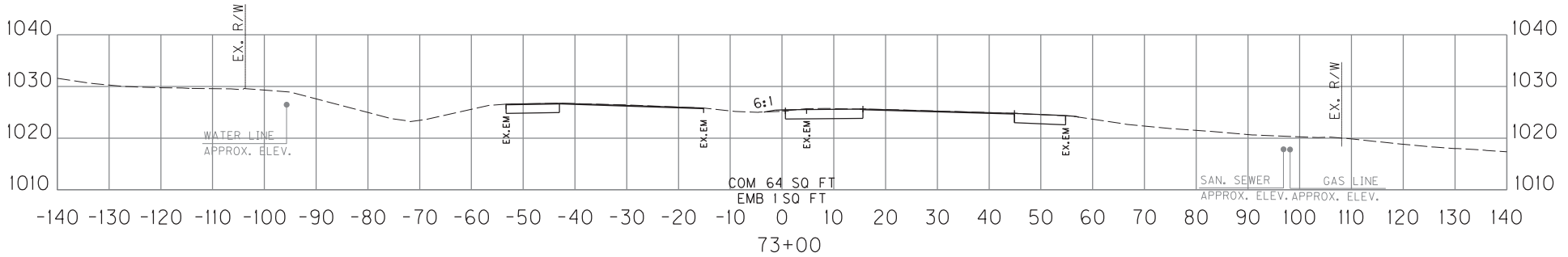
FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COM EMB



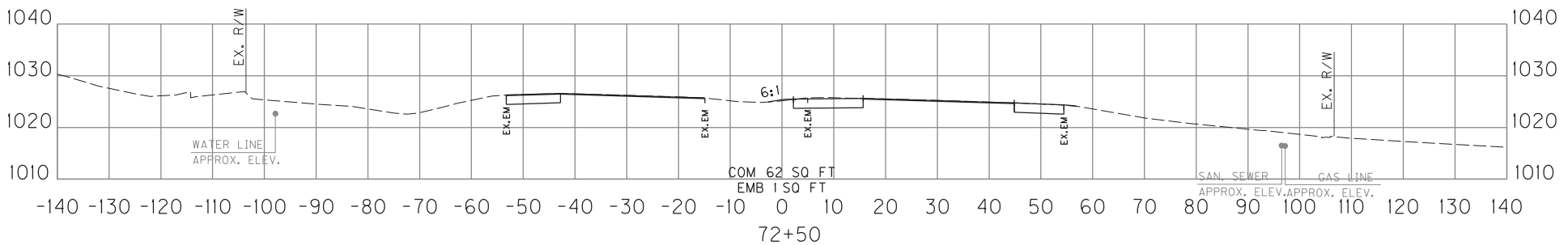
73+50

122 2



73+00

116 2



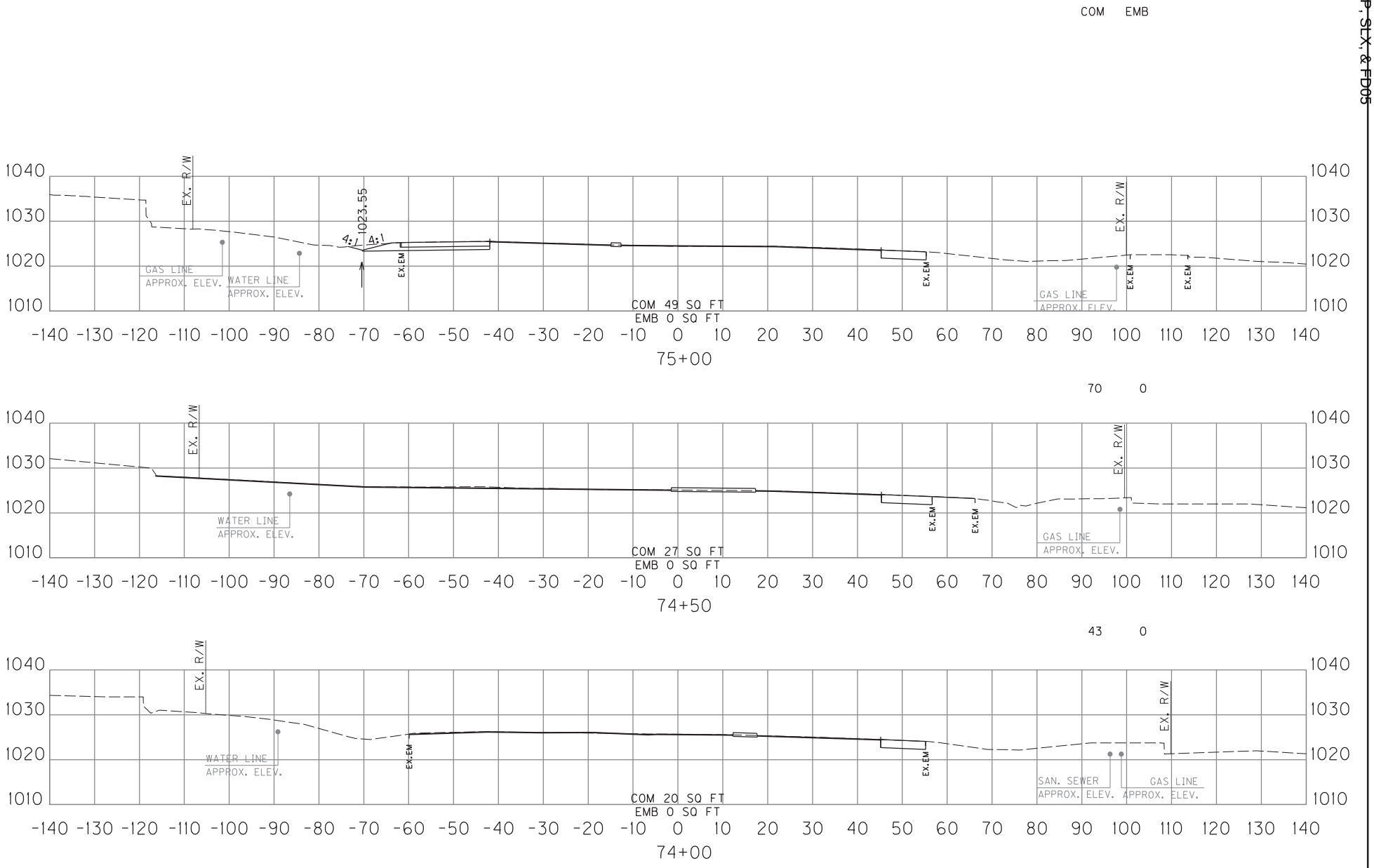
72+50

112 2

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

KY 418
CROSS SECTION SHEET
STA. 72+50 TO STA. 73+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X66



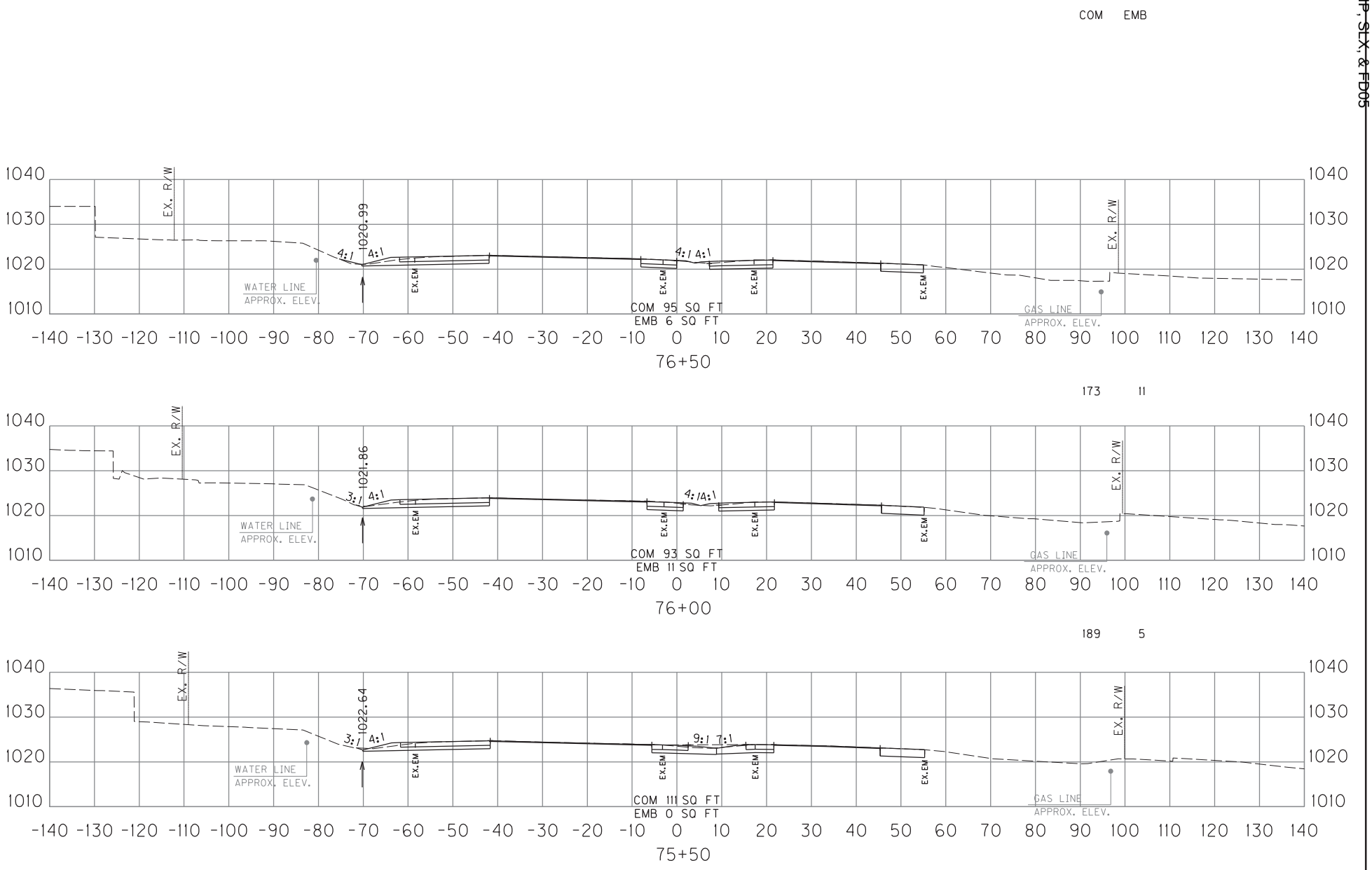
+00 = 00 EMB

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

KY 418
CROSS SECTION SHEET
STA. 74+00 TO STA. 75+00

FILE NAME: C:\PWWORKING\EAST01\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X67



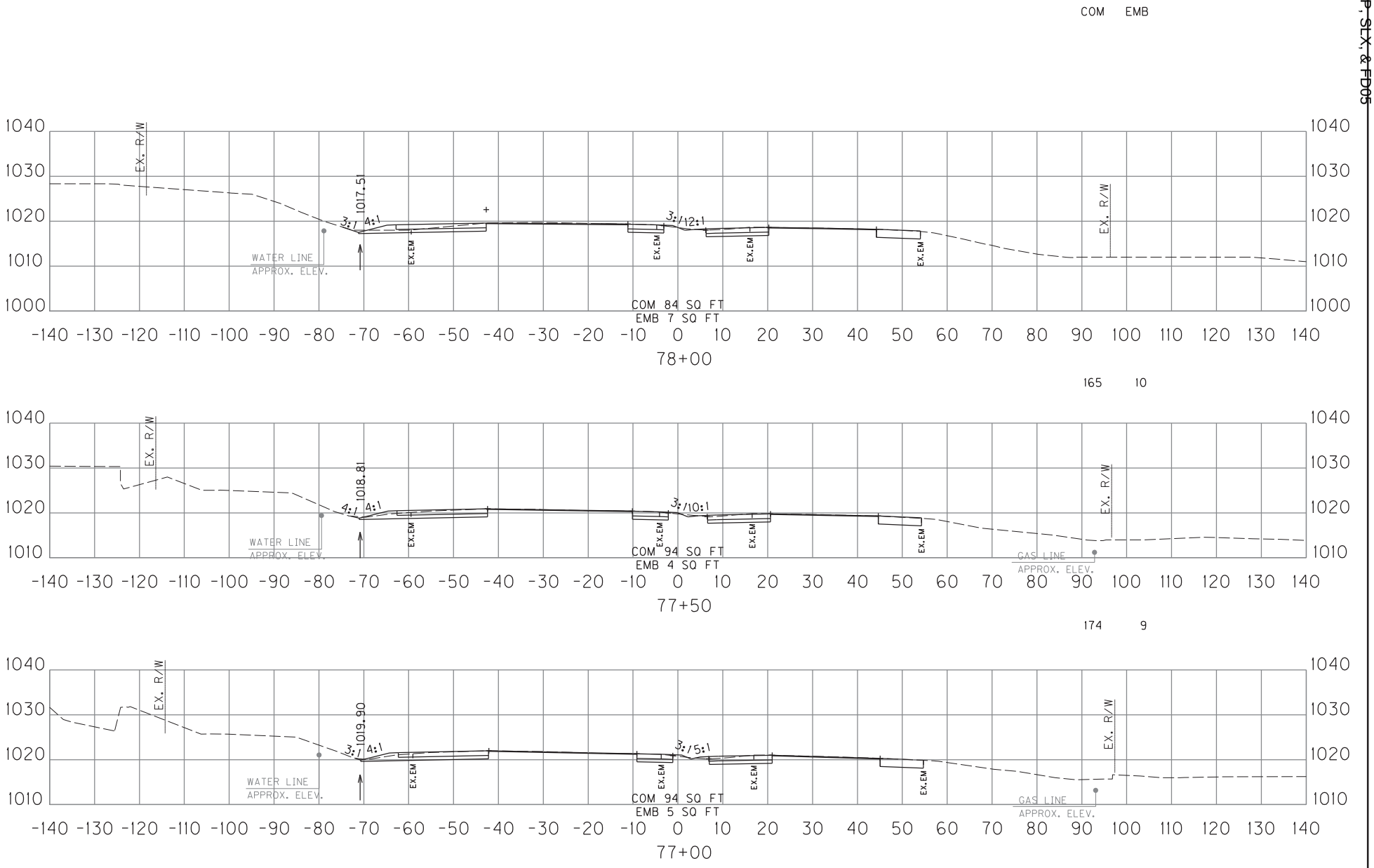
+50 = 00 EMB

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

KY 418
CROSS SECTION SHEET
STA. 75+50 TO STA. 76+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X68

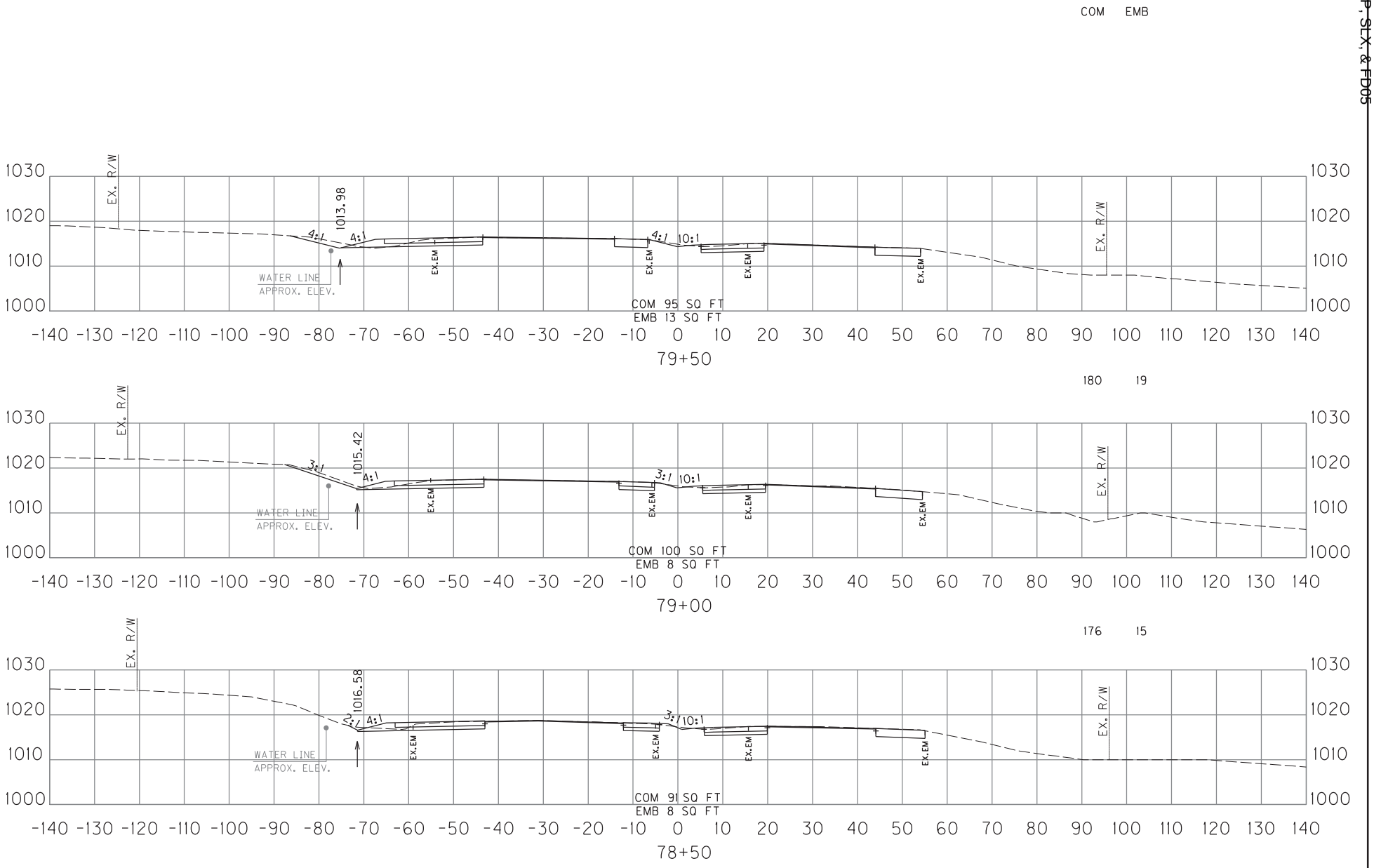


SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

KY 418
CROSS SECTION SHEET
STA. 77+00 TO STA. 78+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X69



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

KY 418
CROSS SECTION SHEET
STA. 78+50 TO STA. 79+50

FILE NAME: C:\PWWORKING\EASTOI\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

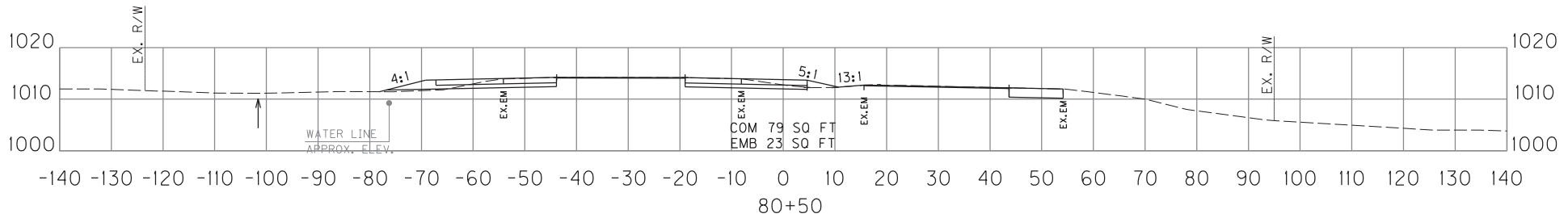
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X70

	COM	EMB
US 25 / KY 418 TOTAL	44,257	6,632

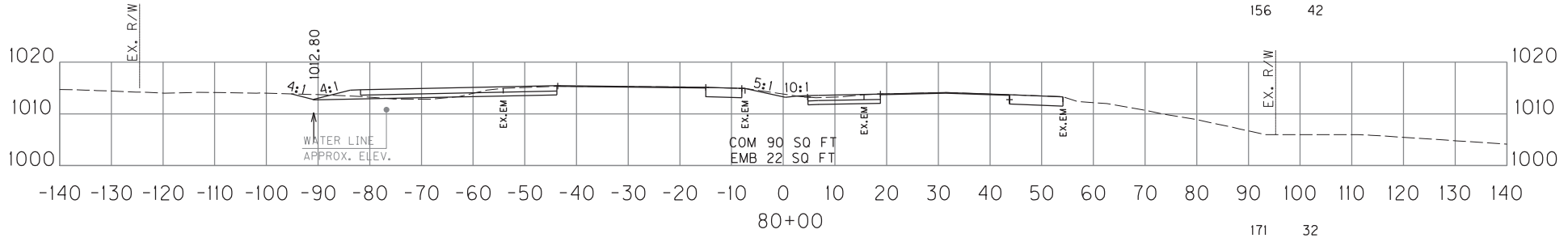
82+31 = 00 EMB

82+31 = DEA COM

EARTHWORK NOT SHOWN,
STA. 80+50 TO STA. 82+31
COM - 339 CY, EMB - 53 CY



156 42



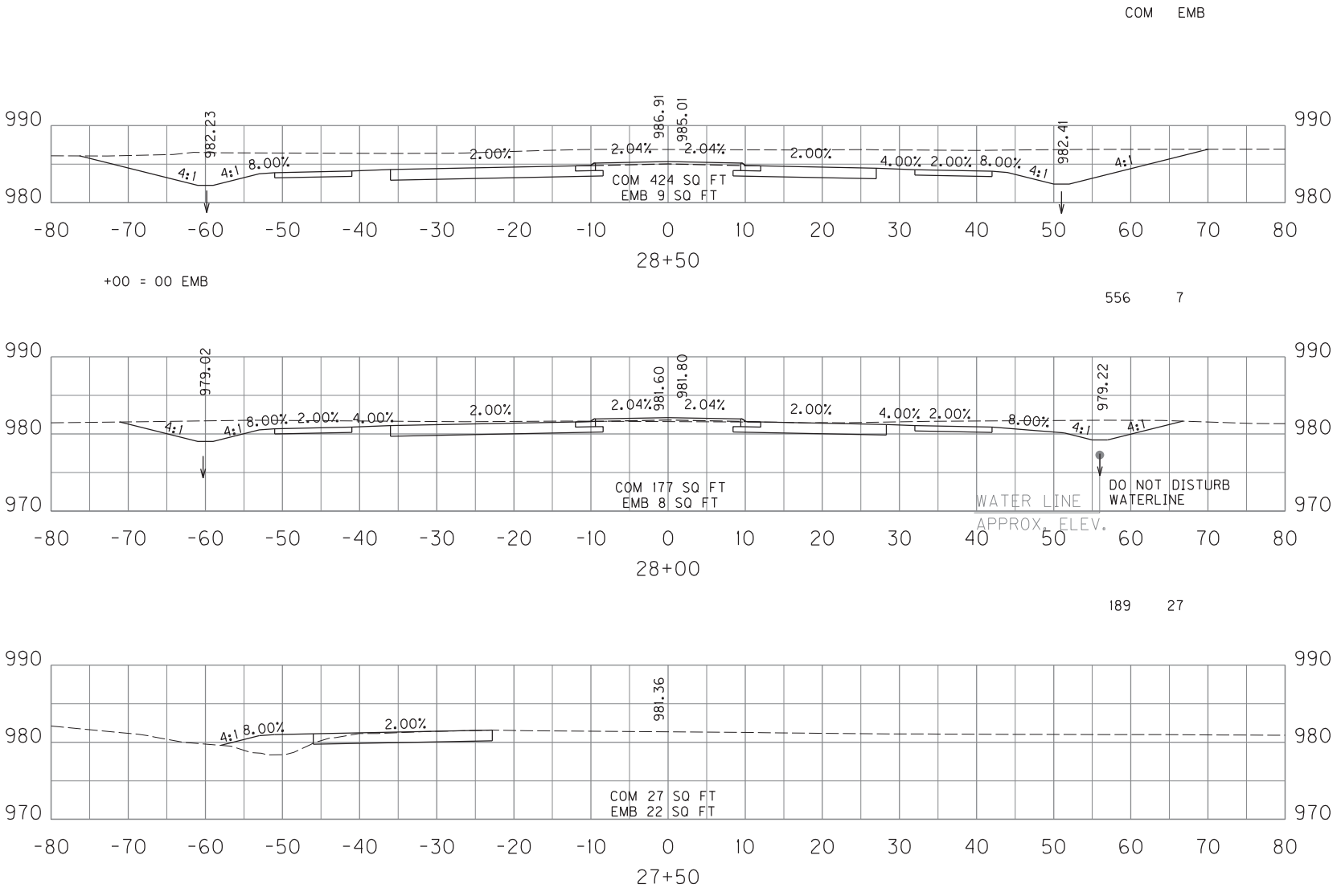
171 32

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

KY 418
CROSS SECTION SHEET
STA. 80+00 TO STA. 80+50

FILE NAME: C:\PWWORKING\EASTON\D1641094\KY 418 XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X71



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

JACOBSON PARK ENTRANCE
CROSS SECTION SHEET
STA.27+50 TO STA.28+50

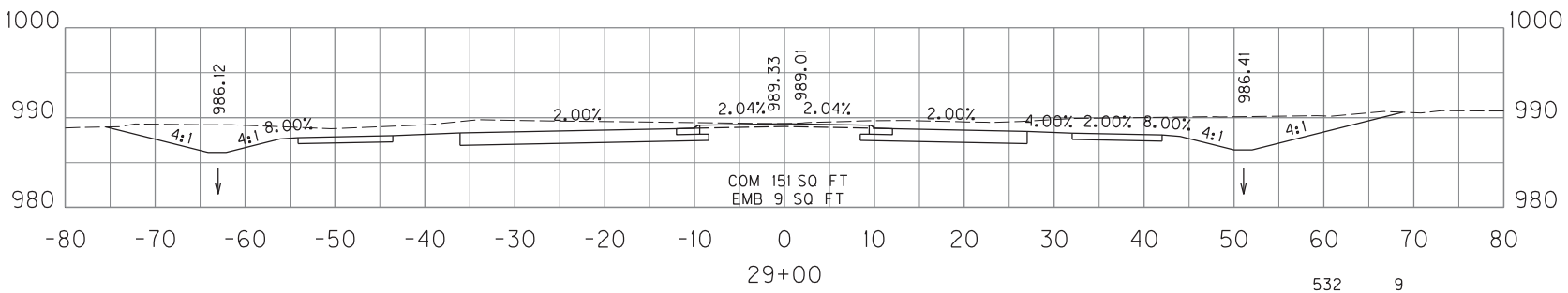
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\NEW PARK ENTRANCE(ELLERSLIE) XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X72

COM EMB

+50 = DEA COM
+50 = DEA EMB

394 21



532 9

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

JACOBSON PARK ENTRANCE
CROSS SECTION SHEET
STA.29+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\NEW PARK ENTRANCE(ELLERSLIE) XS.DGN

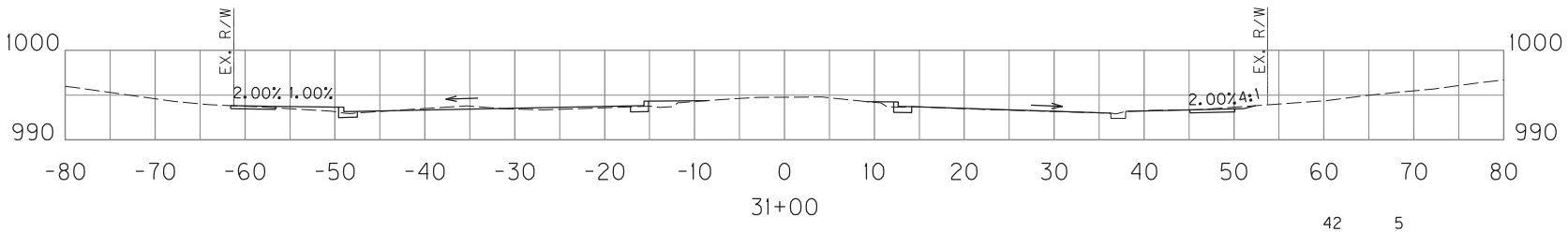
COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X73

	COM	EMB
JACOBSON PARK ENTRANCE / ELLSERSLIE PARK BLVD. TOTAL	1,743	71

31+47 = DEA COM

+21 = 00 EMB

30 2



42 5

+00 = 00 EMB

+50 = DEA COM

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

ELLERSLIE PARK BLVD
CROSS SECTION SHEET
STA. 31+00

MicroStation v8.11.9.919

USER: ACAUDILL
DATE PLOTTED: March 19, 2025

FILE NAME: C:\PWWORKING\EASTON\D1641094\NEW PARK ENTRANCE(ELLERSLIE) XS.DGN

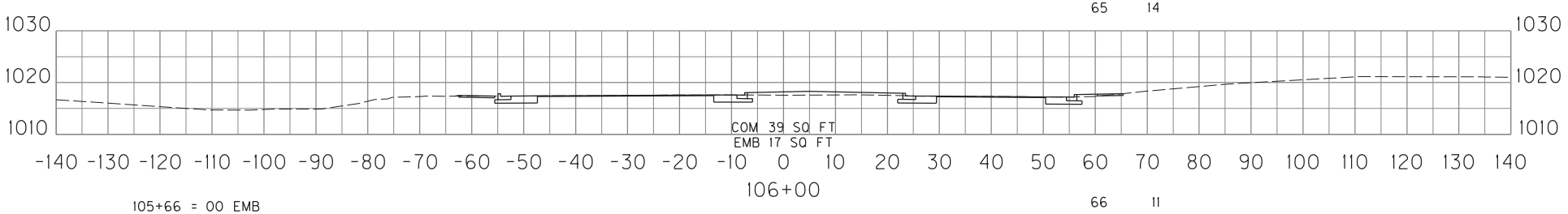
FAYETTE COUNTY
034GR25T010-HSIP, SLX, & FD05
Contract ID: 254301
Page 521 of 605

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X74

	COM	EMB
HAYS BLVD. TOTAL	242	25

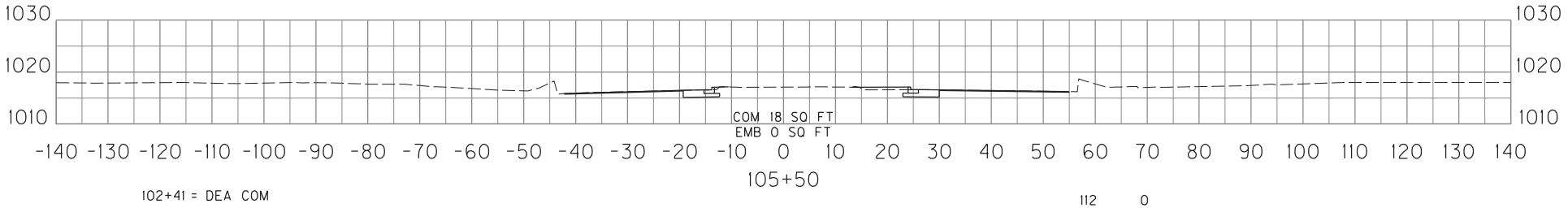
106+45 = 00 EMB
106+45 = DEA COM

65 14



105+66 = 00 EMB

66 11



102+41 = DEA COM

112 0

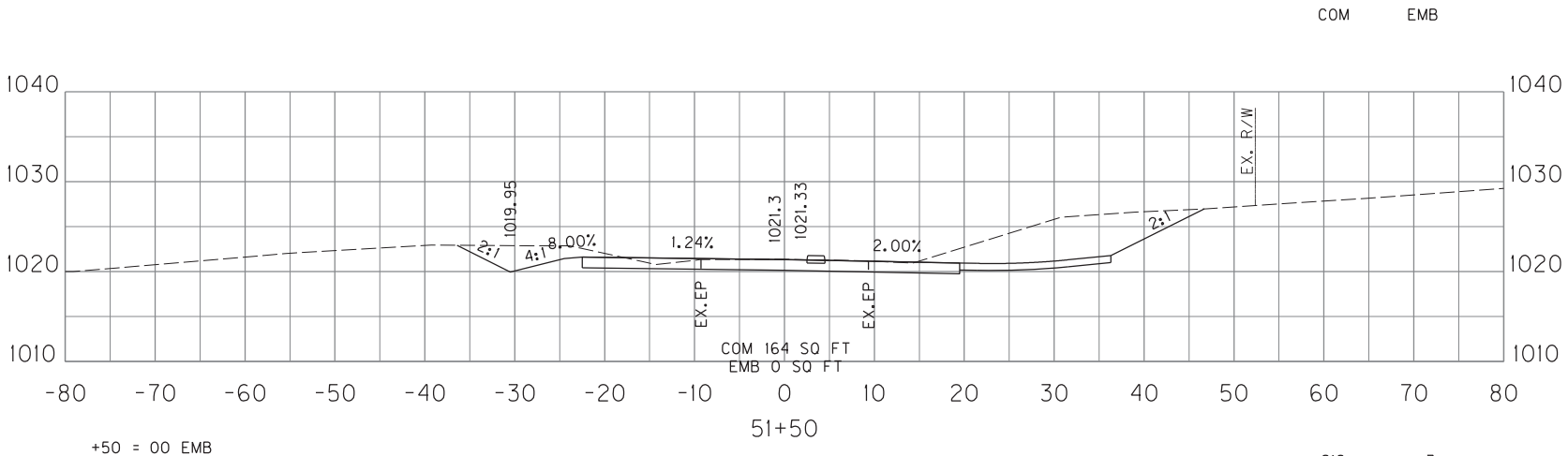
SCALE: 1" = 30' HORIZONTAL
1" = 30' VERTICAL

HAYS BLVD
CROSS SECTION SHEET
STA.105+50 TO STA.106+00

FILE NAME: C:\PWWORKING\EASTON\D1641094\HAYS XS.DGN
USER: ACAUDILL
DATE PLOTTED: March 19, 2025
MicroStation v8.11.9.919

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X75

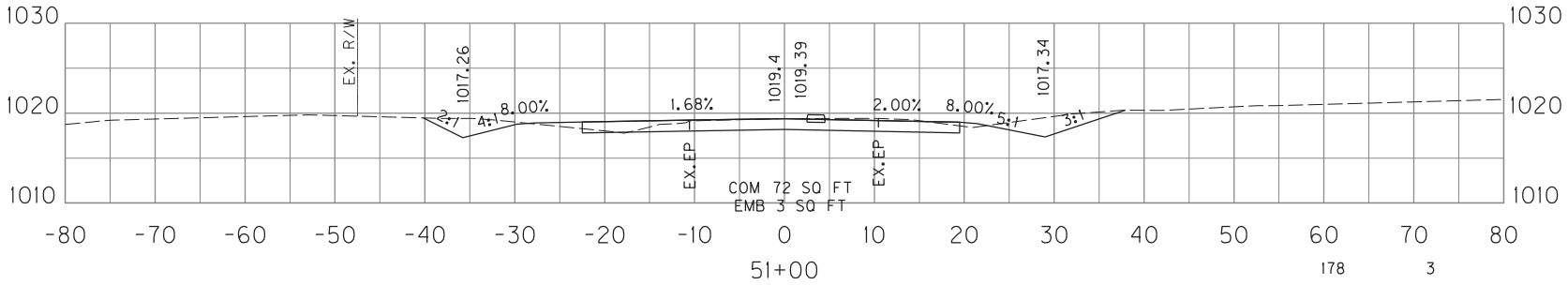
MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\APHIDS XS.DGN



+50 = 00 EMB

218 3

+28.75 END RUNOUT, BEGIN RUNOFF



50+60 = DEA COM
50+60 = 00 EMB

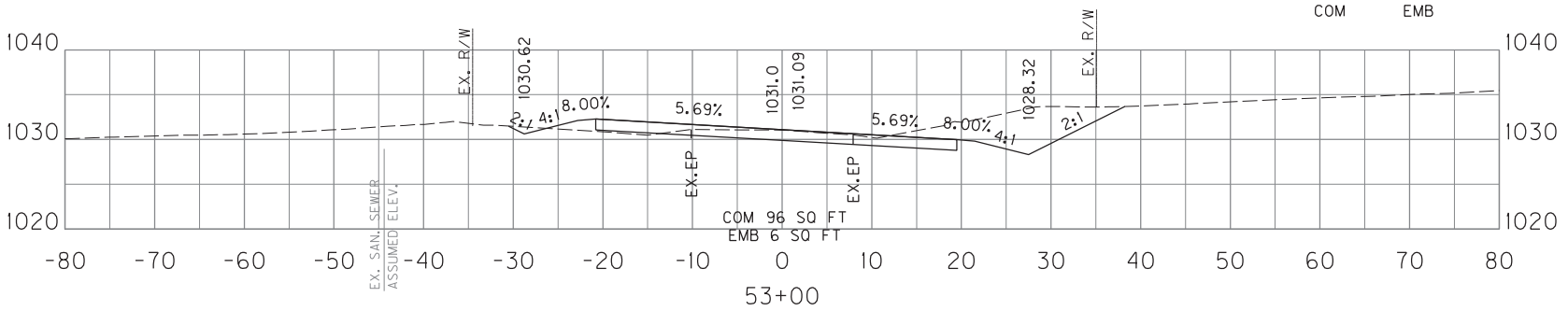
178 3

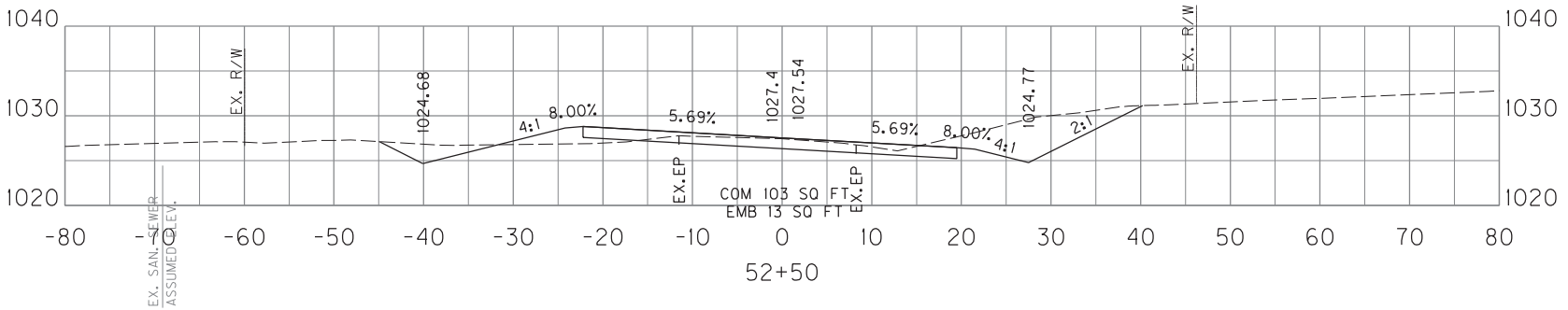
+94.54 END NORMAL CROWN, BEGIN RUNOUT

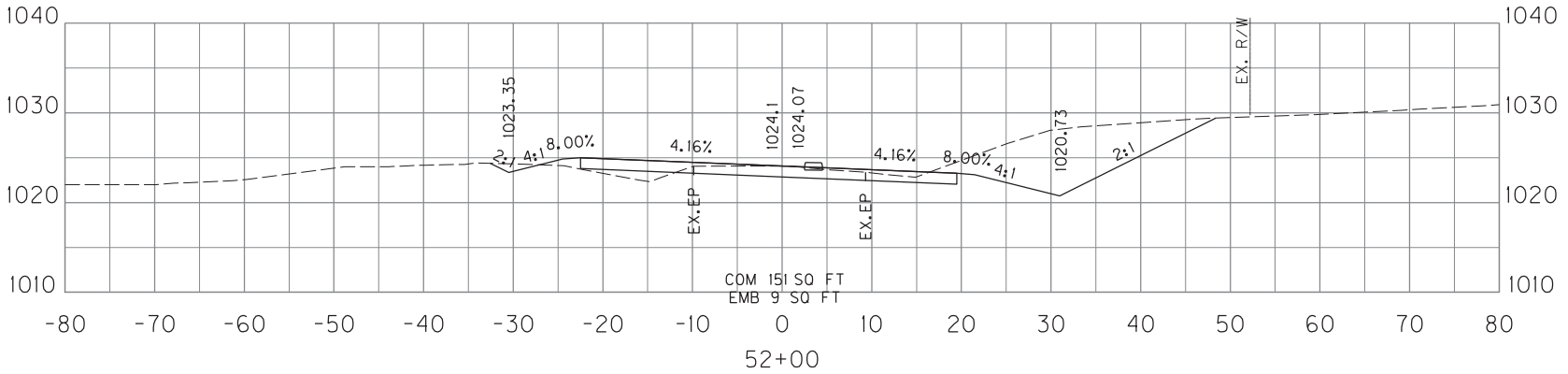
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.51+00 TO STA.51+50

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X76







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

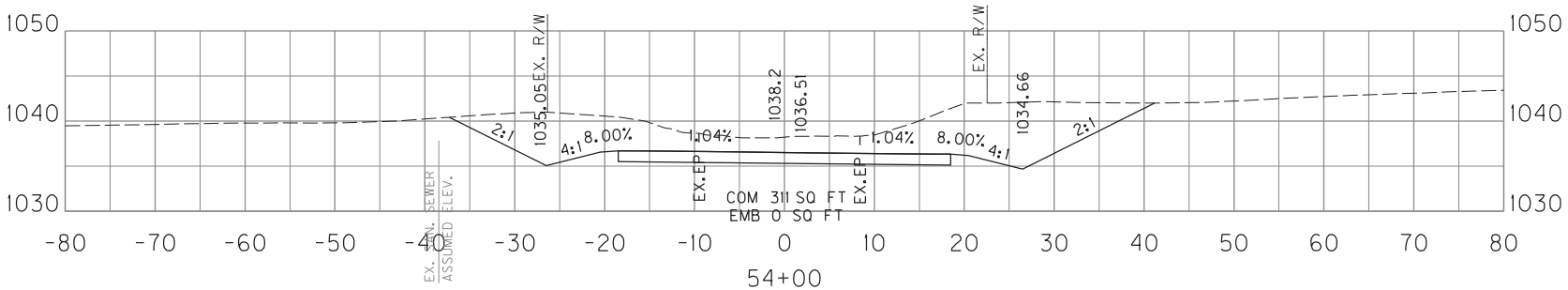
APHIDS WAY
CROSS SECTION SHEET
STA.52+00 TO STA.53+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X77

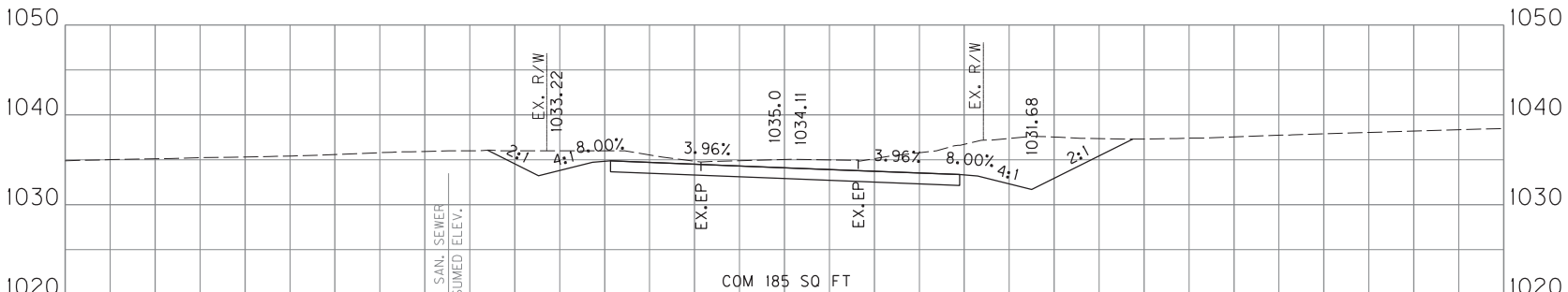
+17.77 END RUNOFF, BEGIN RUNOUT

COM EMB



54+00

459 0



+50 = 00 EMB

53+50

260 5

+20.38 END FULL SUPER, BEGIN RUNOFF

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

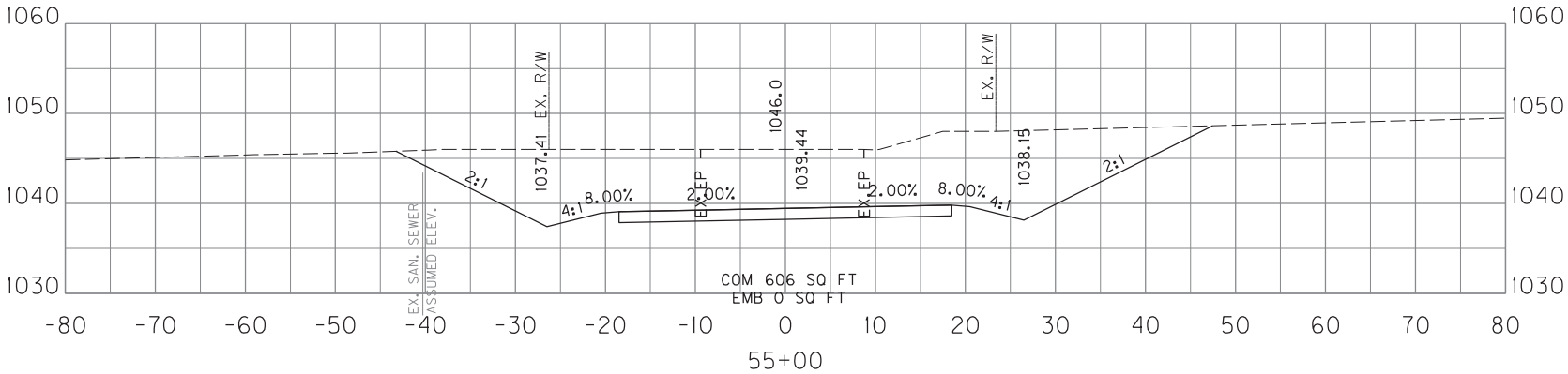
APHIDS WAY
CROSS SECTION SHEET
STA.53+50 TO STA.54+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X78

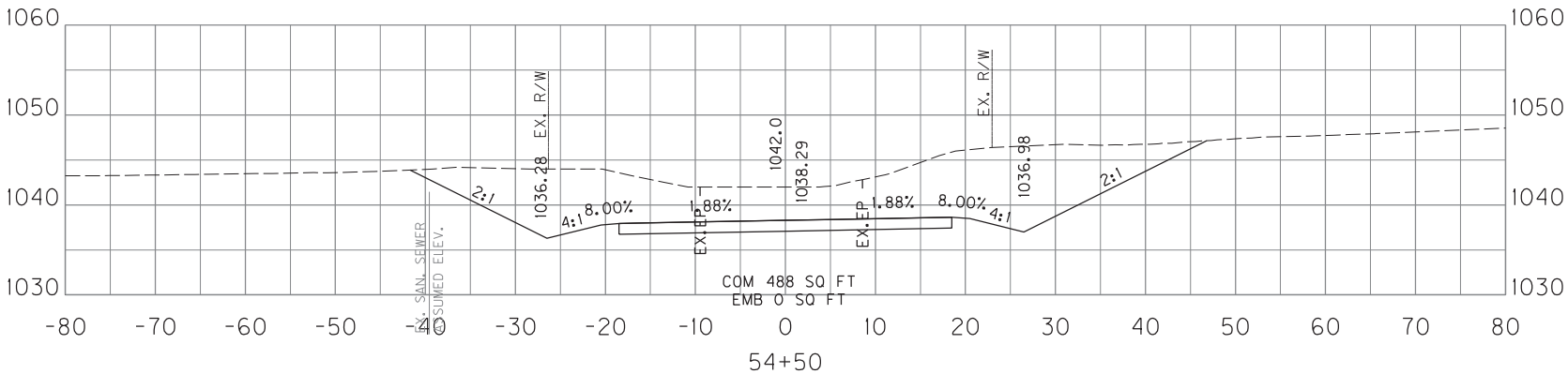
+14.33 END REVERSE CROWN, BEGIN RUNOFF

COM EMB



1013 0

+51.98 END RUNOUT, BEGIN REVERSE CROWN



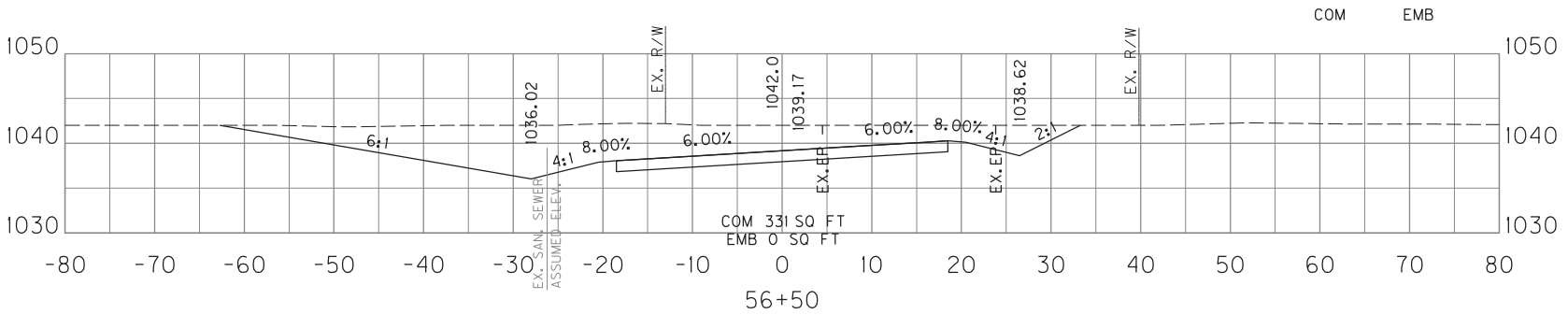
740 0

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

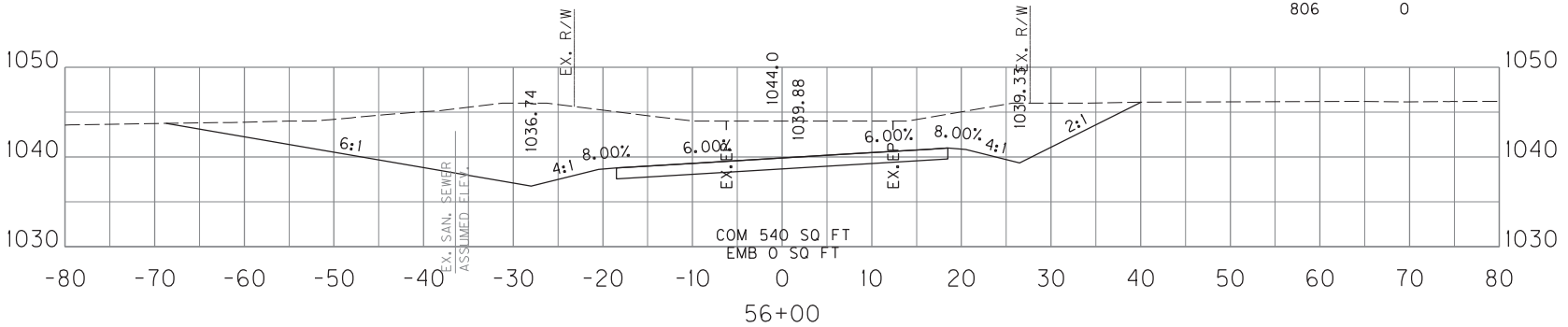
APHIDS WAY
CROSS SECTION SHEET
STA.54+50 TO STA.55+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X79

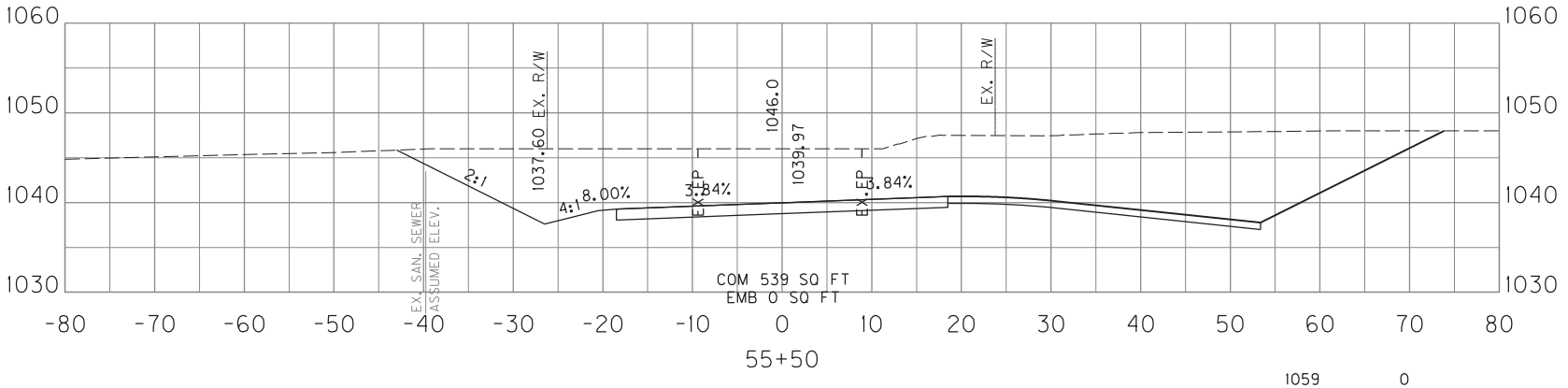


806 0



999 0

+91.67 END RUNOFF, BEGIN FULL SUPER



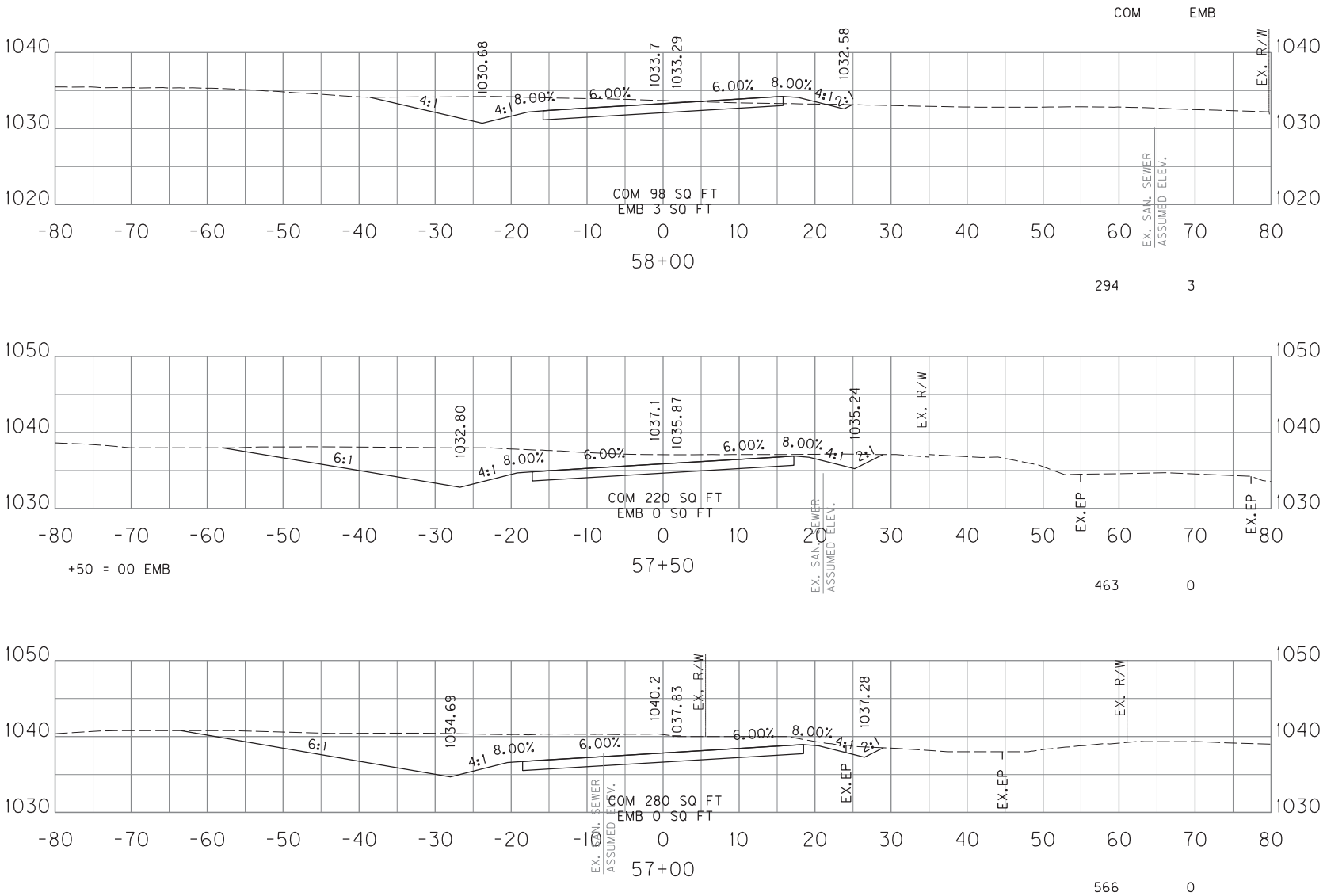
1059 0

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

APHIDS WAY
CROSS SECTION SHEET
STA.55+50 TO STA.56+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTOI\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X80

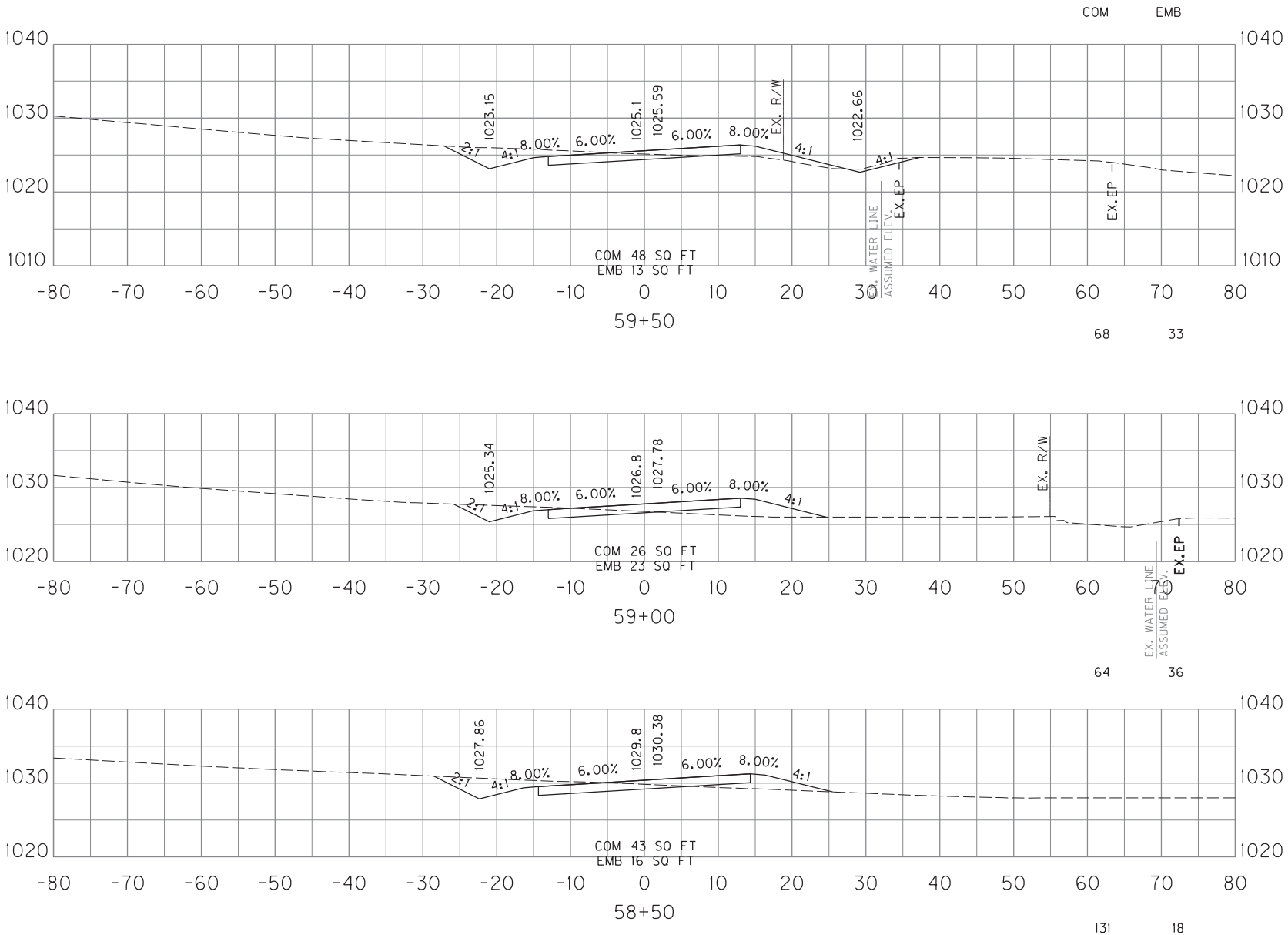


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.57+00 TO STA.58+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EAST01\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X81

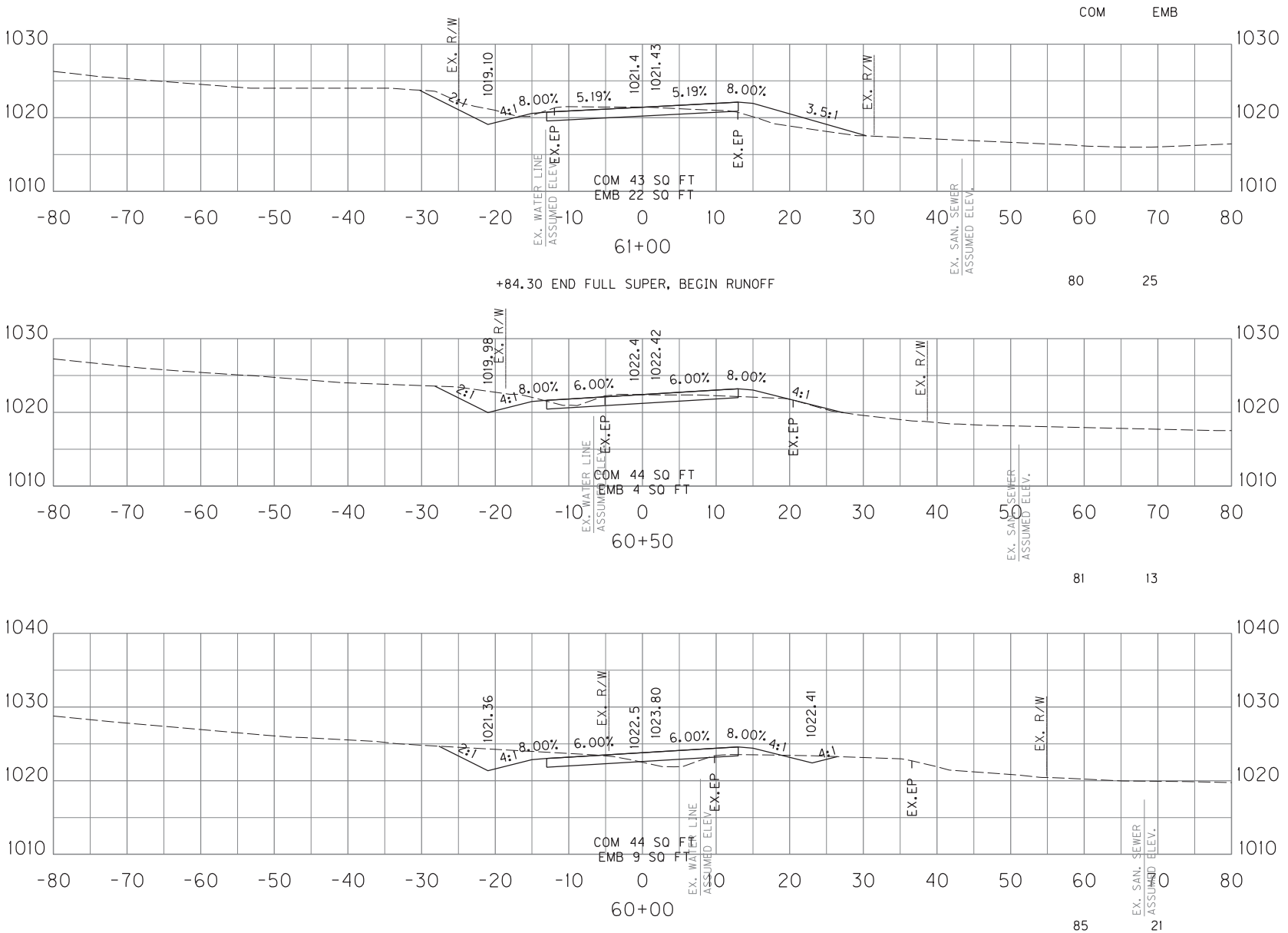


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.58+50 TO STA.59+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EAST01\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X82

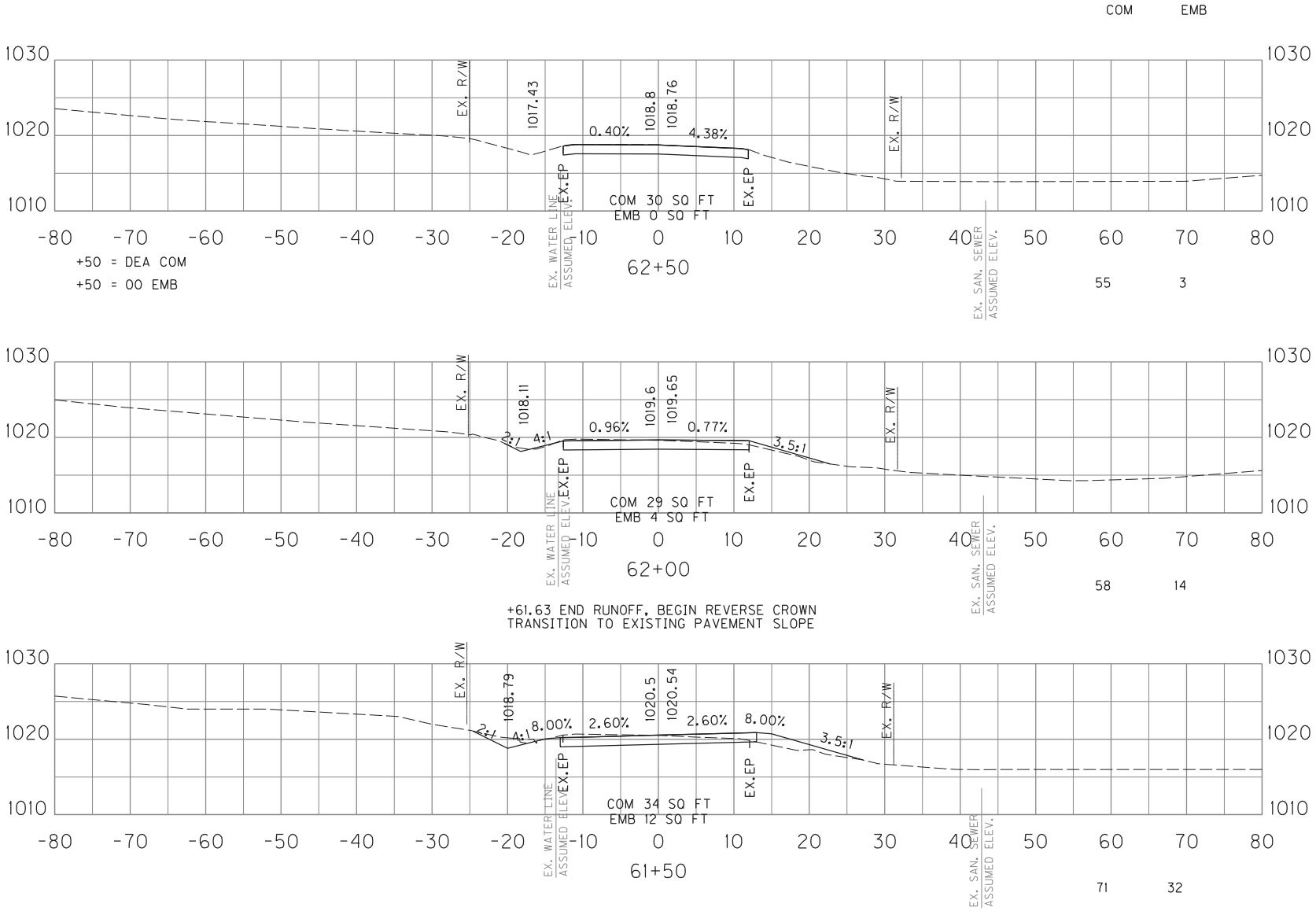


SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.60+00 TO STA.61+00

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X83

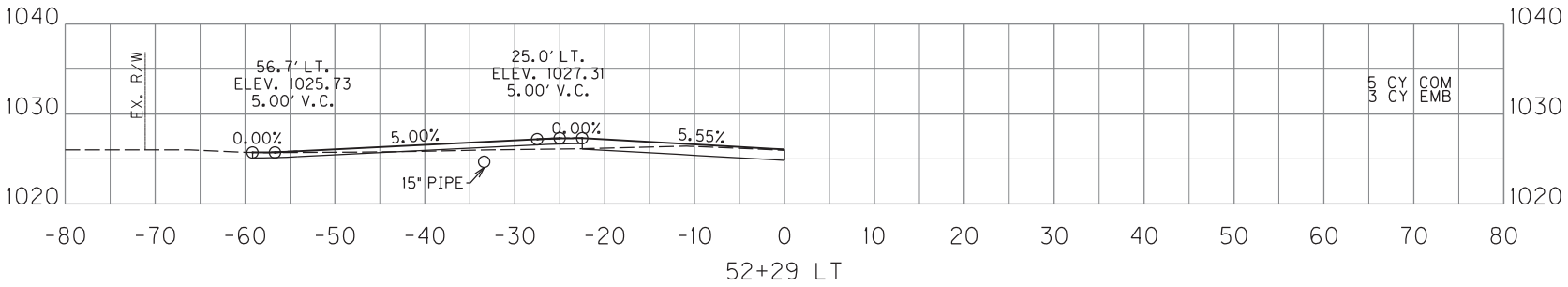


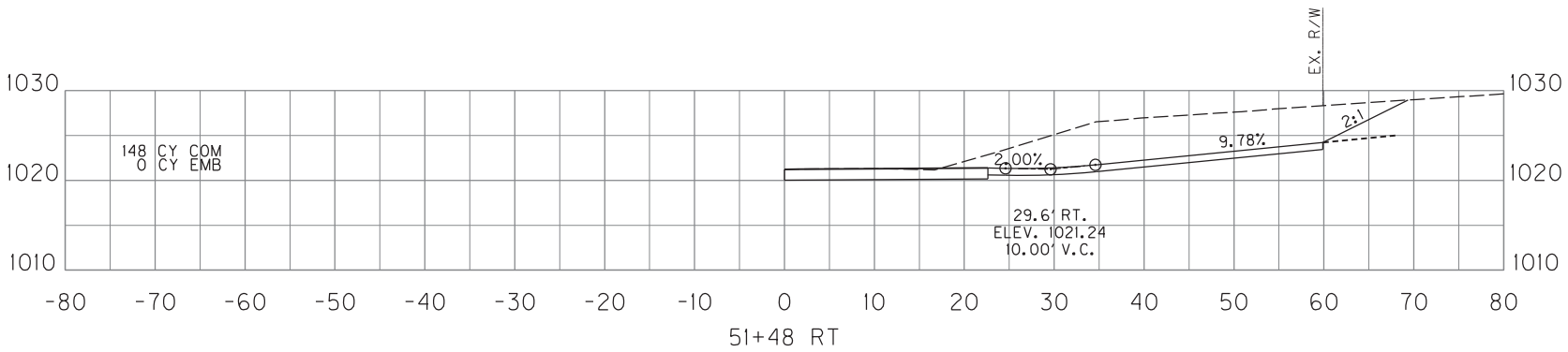
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

APHIDS WAY
CROSS SECTION SHEET
STA.61+50 TO STA.62+50

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EAST01\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X84





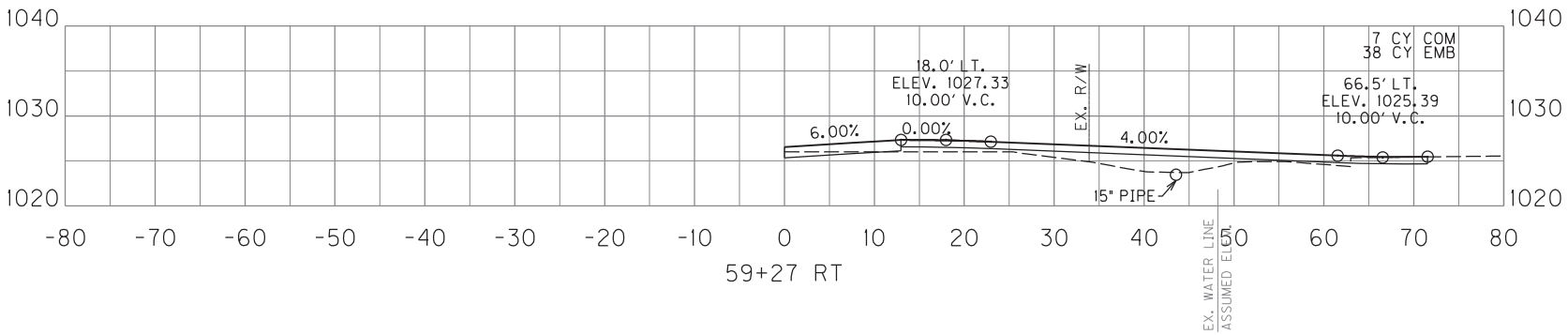
SCALE: 1" = 20' HORIZONTAL
1" = 20' VERTICAL

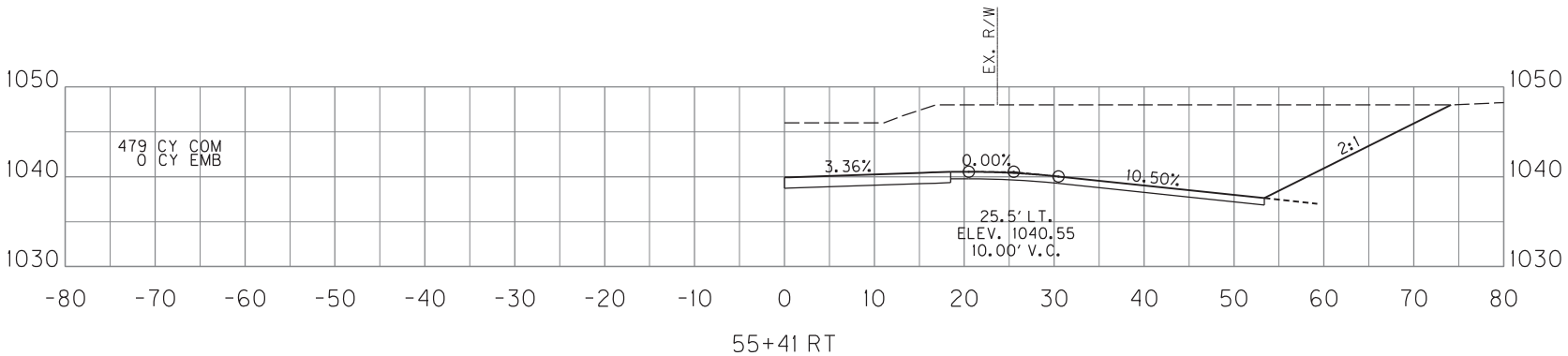
APHIDS WAY
CROSS SECTION SHEET
ENTRANCE STA. 51+48 & STA. 52+29

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTON\D1641094\APHIDS XS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
FAYETTE	07-9012.50	X85

	COM	EMB
US 25 / KY 418 TOTAL	44,257	6,632
JACOBSON PARK ENTRANCE / ELLSERSLIE PARK BLVD. TOTAL	1,743	71
HAYS BLVD. TOTAL	242	25
APHIDS WAY TOTAL	9,125	296
PROJECT TOTAL	55,367	7,024





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

APHIDS WAY
CROSS SECTION SHEET
ENTRANCE STA. 55+41 & STA. 59+27

MicroStation v8.11.9.919
USER: ACAUDILL
DATE PLOTTED: March 11, 2025
FILE NAME: C:\PWWORKING\EASTO\D1641094\APHIDS XS.DGN

GUARDRAIL DELIVERY VERIFICATION SHEET

Contract Id: _____ **Contractor: _____**

Section Engineer: _____ **District & County: _____**

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

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

Printed Section Engineer's Representative_____ & Date_____

Signature Section Engineer's Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

Printed Bailey Bridge Yard Representative_____ & Date_____

Signature Bailey Bridge Yard Representative_____& Date_____

Printed Contractor's Representative_____& Date_____

Signature Contractor's Representative_____& Date_____

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

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

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

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

1I

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

1I

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

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

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

2.3 Power.

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

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

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

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

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

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

1I

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

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

Code	Pay Item	Pay Unit
02671	Portable Changeable Message Sign	Each

Effective June 15, 2012

11F

SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's Current Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, channels with high shear stresses, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Properties	Type 1	Type 2	Type 3	Type 4
Maximum Slope (H:V)	1:1	1:1	0.5:1	0.5:1
Un-vegetated Shear	≥ 2.0 lbs/ft^2 (≥ 96 Pa)	≥ 2.0 lb/ft2 (≥ 96 Pa)"	≥ 2.0 lb/ft2 (≥ 96 Pa)	≥ 2.0 lb/ft2 (≥ 96 Pa)

11F

Stress[b, c, d] ASTM D6460				
Vegetated Shear Stress [c, d, e, f] ASTM D6460	≥ 6.0 lbs/ft^2 (≥ 287 Pa)	≥ 8.0 lb/ft2 (≥ 383 Pa)	≥ 10.0 lb/ft2 (≥ 479 Pa)	≥ 12.0 lb/ft2 (≥ 575 Pa)
Seedling Emergence [d] ASTM D7322	≥ 250%	≥ 250%	≥ 250%	≥ 250%
MD Material Tensile Strength [d, f] ASTM D6818	≥ 150 lbs/ft (≥ 2.2 kN/m)	≥ 175 lbs/ft (≥ 2.6 kN/m)	≥ 200 lbs/ft (≥ 2.9 kN/m)	≥ 1,500 lbs/ft (≥ 21.9 kN/m)
TD Material Tensile Strength [d, f] ASTM D6818	≥ 150 lbs/ft (≥ 2.2 kN/m)	≥ 175 lbs/ft (≥ 2.6 kN/m)	≥ 200 lbs/ft (≥ 2.9 kN/m)	≥ 1,500 lbs/ft (≥ 21.9 kN/m)
Mass Per Unit Area [d] ASTM D6566	≥ 8.0 oz/yd^2 (≥ 271 g/m^2))	≥ 8.0 oz/yd^2 (≥ 271 g/m2)	≥ 8.0 oz/yd^2 (≥ 271 g/m2)	≥ 8.0 oz/yd2 (≥ 271 g/m2)
Material Thickness [d] ASTM D6525	≥ 0.25 in (≥ 6.35 mm)	≥ 0.25 in (≥ 6.35 mm)	≥ 0.25 in (≥ 6.35 mm)	≥ 0.25 in (≥ 6.35 mm)
UV Stability [c, e] ASTM D4355	≥ 80% @ 500 hrs	≥ 80% @ 500 hrs	≥ 80% @ 1,000 hrs	≥ 90% @ 1,000 hrs

a. For Type 4 mats, property values tested per ASTM D6818 and D6525 are reported as minimum average roll values (MARVs). MARVs are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.

b. Required minimum shear stress TRM (un-vegetated) can sustain without physical damage or excess erosion (> 12.7 mm (0.5 in.) soil loss during successive, minimum 30 minute flow events in large scale testing.

c. Acceptable large-scale testing protocol may include ASTM D6460, or other independent testing deemed acceptable by the engineer. Large-scale performance testing typically involves limited soil types and vegetative stands, therefore it is recommended that an appropriate factor of safety be used in design and product selection (see Guidance Document for further information).

d. Typical values are calculated as the average value, it yields a 50% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.

e. Required minimum shear stress TRM (fully vegetated) can sustain without physical damage or excess erosion (> 12.7 mm (0.5 in.) soil loss during successive, minimum 30 minute flow events in large scale testing.

f. For TRMs containing degradable components, property values must be obtained on the non-degradable portion of the matting alone.

NOTE: TRMs are typically used in hydraulic applications, such as high flow ditches and channels, steep slopes, stream banks, and shorelines, where erosive forcers may exceed the limits of natural, unreinforced vegetation or in areas where limited vegetation establishment is anticipated.

2.3 Quality Assurance Sampling, Testing, and Acceptance

A) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure

97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

B) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.

C) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.

D) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

Current mats meeting the above criteria are shown on the Department's List of Approved Materials. Mats that exceed the criteria for KYTC Types 1-4 are available. Contact an erosion control material supplier for more information.

2.4 Fasteners. When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer's Representative. Provide staples with colored tops when requested by the Engineer.

3.0 CONSTRUCTION., Provide a Manufacturer's Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department's criteria and the Manufacturer's criteria, construct using the more restrictive. The Engineer and Manufacturer's Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer's recommendations and the following as minimum installation technique:

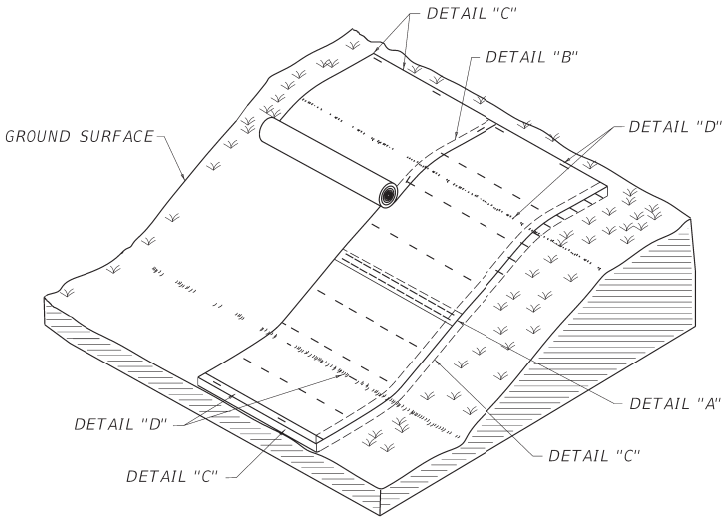
3.1 Site Preparation. Smoothly grade areas to be treated with matting and compact. Remove large
rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.

3.2 Installation. Install mats according to Standard Drawing Sepias "Turf Mat Channel Installation" and "Turf Mat Slope Installation." Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer's Representative. The mat should be in direct contact with the soil surface. Infill and overfill the mat with a minimum of ½" of soil as directed by the Manufacturer.

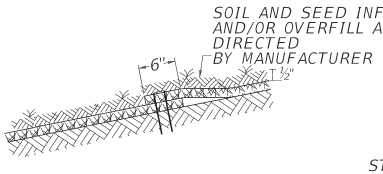
4.0 MEASUREMENT. The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer's Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.

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

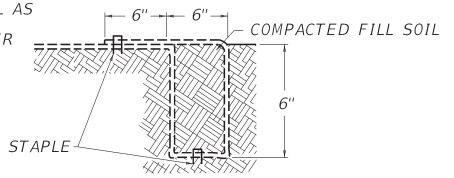
Code	Pay Item	Pay Unit
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard



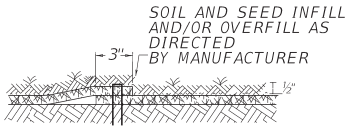
TURF MAT
SLOPE INSTALLATION



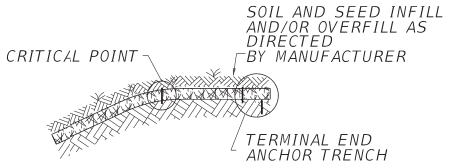
TRANSVERSE OVERLAP
DETAIL "A"

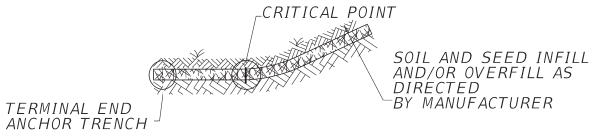


ANCHOR TRENCH
DETAIL "C"



LONGITUDINAL OVERLAP
DETAIL "B"





CRITICAL POINTS
DETAIL "D"

~ NOTES ~

1. CONSTRUCT A 6" X 6" ANCHOR TRENCH AT THE BEGINNING OF THE SLOPE. LINE THE ANCHOR TRENCH WITH TURF REINFORCING MAT LEAVING 12" EXTENDING PAST THE ANCHOR TRENCH. FASTEN THE MAT MATERIAL INTO THE ANCHOR TRENCH ON 12" CENTERS BACKFILL THE TRENCH WITH TOPSOIL AND COMPACT. COVER THE AREA WITH THE REMAINING 12" OF THE MAT'S TERMINAL END LEAVING 6" TO OVERLAP THE TURF REINFORCING MAT. SECURE THE 6" OVERLAP WITH STAPLES ON 12" CENTERS.
2. UNROLL THE MAT DOWN THE SLOPE AND PLACE IN DIRECT CONTACT WITH THE SOIL SURFACE. INSURE THAT THE SOIL SURFACE IS GRADED SMOOTHLY AND DOES NOT CONTAIN IRREGULARITIES.
3. SECURELY FASTEN THE MAT TO THE SOIL BY INSTALLING STAPLES AT A MINIMUM RATE OF 1.5 PER SQ. YD. ANCHORS SHALL BE SELECTED SO THAT THEY HAVE SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. INCREASE ANCHORING FREQUENCY FOR SITE CONDITIONS (LOOSE, SANDY, OR WET SOILS) AS DIRECTED BY THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE.
4. OVERLAP EDGES OF MATS ACCORDING TO THE LONGITUDINAL AND TRANSVERSE OVERLAP DETAILS. STAPLE LONGITUDINAL OVERLAPS WITH 2 ROWS OF STAPLES STAGGERED AT 4". STAPLE TRANSVERSE OVERLAPS WITH 1 ROW OF STAPLES SPACED AT 12'.
5. CONSTRUCT A 6"X 12" ANCHOR TRENCH AT THE TOE OF THE SLOPE FOLLOWING SIMILAR PROCEDURE DENOTED FOR THE TOP OF THE SLOPE ANCHOR TRENCH.
6. ENSURE THAT THE MAT IS IN DIRECT CONTACT WITH THE SOIL SURFACE WITH NO PROJECTIONS OR PROTRUSIONS.
7. INFILL AND OVERFILL THE MAT WITH A MINIMUM OF ½" TOPSOIL. APPLY SEEDING AND PROTETION AS DIRECTED BY THE MANUFACTURER. USE SEED MIX TYPE 1 AS DEFINED IN SECTION 212.03.03. TOPSOIL IS THE SOIL PROFILE DEFINED TECHNICALLY AS "A" HORIZON BY THE SOIL SCIENCE SOCIETY OF AMERICA. USE LOOSE, FRIABLE TOPSOIL THAT IS FREE OF STONES 1" OR GREATER IN OVERALL DIMENSIONS, ADMIXTURE OF SUBSOIL, REFUSE, STUMPS, ROOTS, BRUSH, WEEDS AND OTHER MATERIALS THAT PREVENT THE FORMATION OF A SUITABLE SEED BED. DO NOT USE TOPSOIL FROM SITES HAVING JOHNSON GRASS, CANADA THISTLE, QUACK GRASS, NODDING THISTLE OR EXCESSIVE AMOUNTS OF WEEDS OR THEIR RHIZOMES.

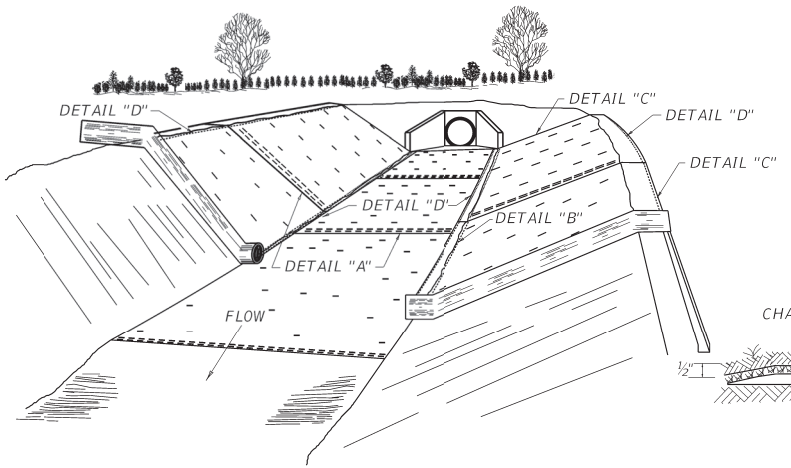
SUBMITTED W. J. Layman 01-24-2023
DIVISION DIRECTOR DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

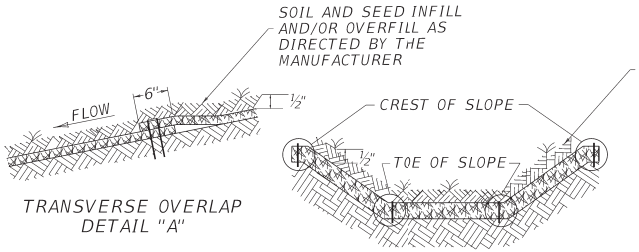
DRAWING TITLE: SEPIA 22 - TURF MAT SLOPE INSTALLATION

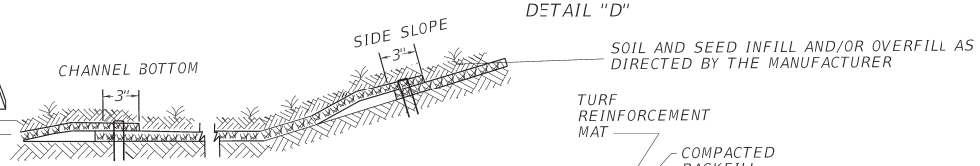
ITEM NO. COUNTY OF
SHEET NO.

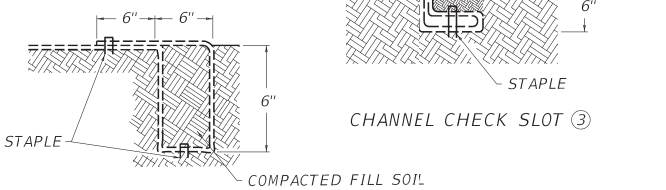
OpenRoads Designer v10.16.2.267 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2168265\RDI040 - TURF MAT SLOPE INSTALLATION.DGN



TURF MAT
CHANNEL INSTALLATION







~ NOTES ~

1. CONSTRUCT A 6" X 6" ANCHOR TRENCH AT THE UPSTREAM END OF THE CHANNEL. LINE THE ANCHOR TRENCH WITH TURF REINFORCIG MAT LEAVING 12" EXTENDING PAST THE ANCHOR TRENCH. FASTEN THE MAT MATERIAL INTO THE ANCHOR TRENCH ON 12" CENTERS BACKFILL THE TRENCH WITH TOPSOIL AND COMPACT. COVER THE AREA WITH THE REMAINING 12" OF THE MAT'S TERMINAL END LEAVING 6" TO OVERLAP THE TURF REINFORCING MAT. SECURE THE 6" OVERLAP WITH STAPLES ON 12" CENTERS.
2. UNROLL THE MAT PARALLEL TO THE PRIMARY DIRECTION OF WATER FLOW AND PLACE IN DIRECT CONTACT WITH THE SOIL SURFACE. INSURE THAT THE SOIL SURFACE GRADED SMOOTHLY AND DOES NOT CONTAIN IRREGULARITIES.

③ EXCAVATE 6" X 6" CHECK SLOTS EVERY 25' ALONG THE LENGTH OF THE CHANNEL. LINE THE SIDE AND BOTTOM OF THE SLOT WITH THE MAT AND THEN PULL BACK OVER. FASTEN WITH STAPLES ON 12" CENTERS. FILL THE CHECK SLOT WITH TOPSOIL, COMPACT, AND CONTINUE UNROLLING MAT DOWN THE CHANNEL.

4. CONTINUE UNROLLING THE MAT DOWNSTREAM OVER THE COMPACTED SLOT TO THE NEXT CHECK SLOT OR TERMINAL ANCHOR TRENCH. IF MORE THAN ONE SECTION OF MAT, AS SHOWN IN THE TRANSVERSE OVERLAP DETAIL, IS USED OVERLAP UPSTREAM MATS OVER TOP OF THE DOWNSTREAM MAT 6" AND SECURE. IF MATS ARE PLACED PARALLEL TO EACH OTHER ALONG THE CHANNEL, PLACE CHANNEL SECTIONS FIRST, THEN OVERLAP SIDE SLOPE SECTIONS 3" OVER THE CHANNEL SECTIONS AS SHOWN IN THE LONGITUDINAL OVERLAP DETAIL, AND SECURE WITH STAPLES ON 12" CENTERS. PROCEED UP THE SIDE SLOPES IN THE SAME MANNER UNTIL THE TOP OF CHANNEL IS REACHED.
5. SECURE MATS WHILE UNROLLING ON SIDESLOPES AND CHANNEL BOTTOMS WITH STAPLES AT A FREQUENCY THE TABLE INDICATES. USE STAPLES HAVING SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. INCREASE ANCHORING FREQUENCY AS DIRECTED BY THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE.
6. INFILL AND OVERFILL THE MAT WITH A MINIMUM OF ½" TOPSOIL. APPLY SEEDING AND PROTECTION AS DIRECTED BY THE MANUFACTURER. USE SEED MIX TYPE 1 AS DEFINED IN SECTION 212.03.03. TOPSOIL IS THE SOIL PROFILE DEFINED TECHNICALLY AS "A" HORIZON BY THE SOIL SCIENCE SOCIETY OF AMERICA. USE LOOSE, FRIABLE TOPSOIL THAT IS FREE OF STONES 1" OR GREATER IN OVERALL DIMENSIONS, ADMIXTURE OF SUBSOIL, REFUSE, STUMPS, ROOTS, BRUSH, WEEDS AND OTHER MATERIALS THAT PREVENT THE FORMATION OF A SUITABLE SEED BED. DO NOT USE TOPSOIL FROM SITES HAVING JOHNSON GRASS, CANADA THISTLE, QUACK GRASS, NODDING THISTLE OR EXCESSIVE AMOUNTS OF WEEDS OR THEIR RHIZOMES.

SLOPE GRADE	ANCHORING FREQUENCY
UP TO 2H:1V	1.5 ANCHORS/SQYD
2H:1V TO 1H:1V	2.0 ANCHORS/SQYD
STEEPER THAN 1H:1V AND CHANNEL BOTTOMS	3.0 ANCHORS/SQYD

SUBMITTED W. J. Logan 01-24-2023
DIVISION DIRECTOR DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 23 - TURF MAT CHANNEL INSTALLATION

ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.16.2.267 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2168266\RDI041 - TURF MAT CHANNEL INSTALLATION.DGN

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).

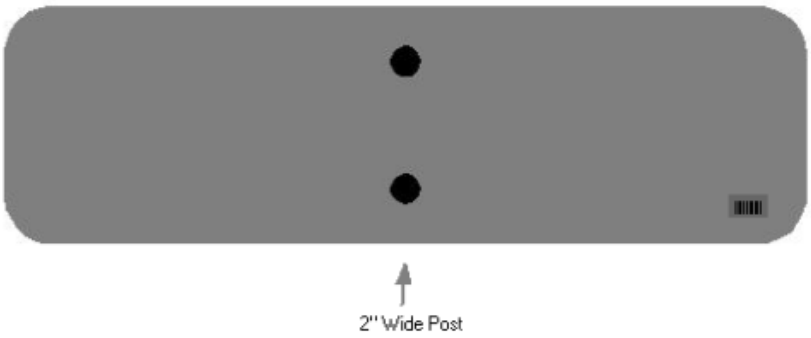
The installation of the permanent sign will be measured in accordance to Section 715.

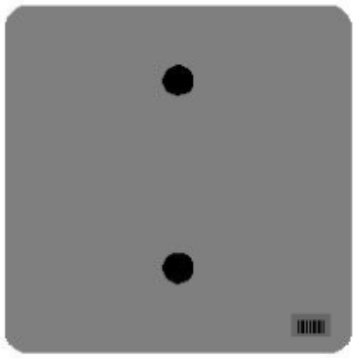
5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
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.

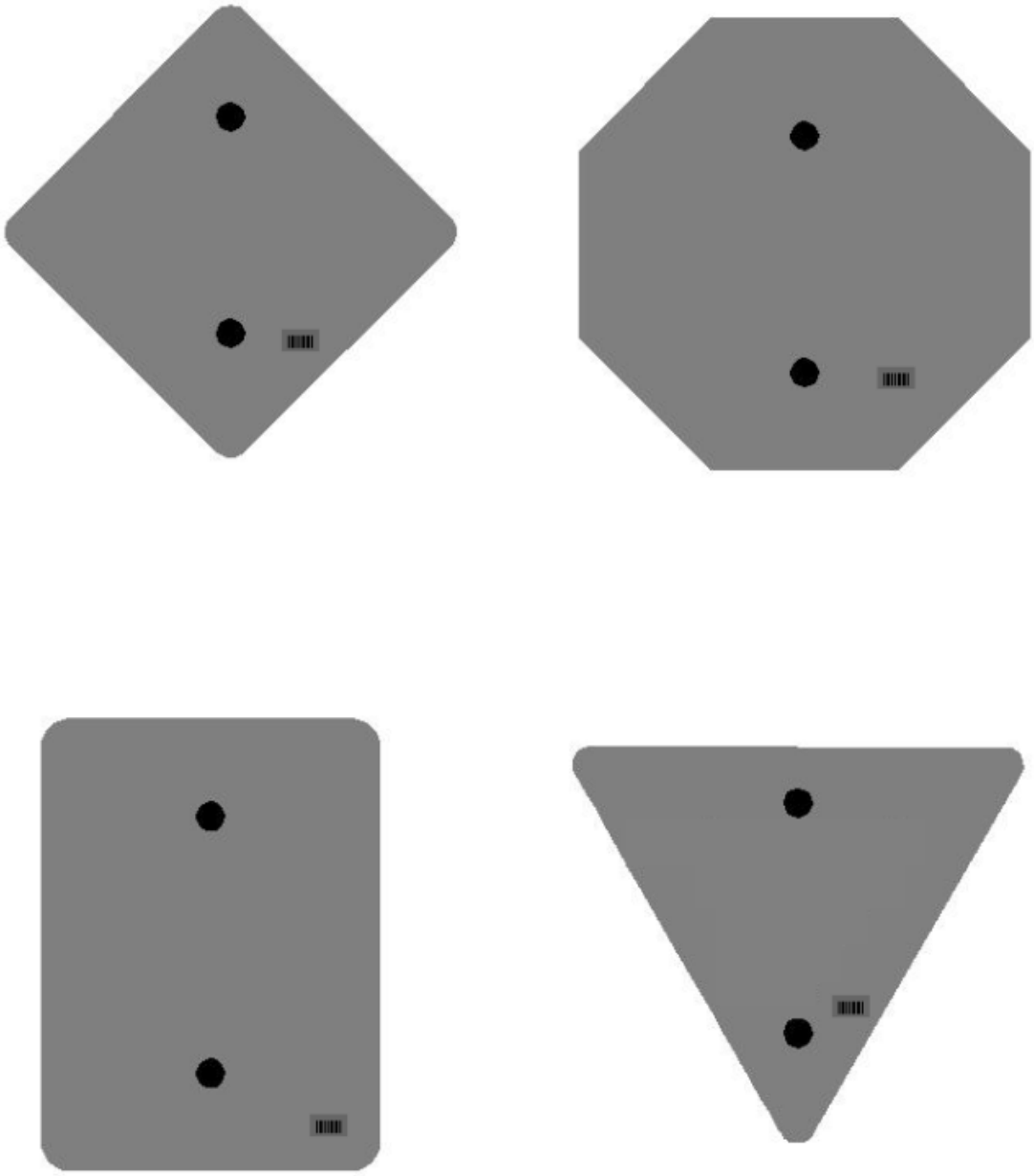
One Sign Post



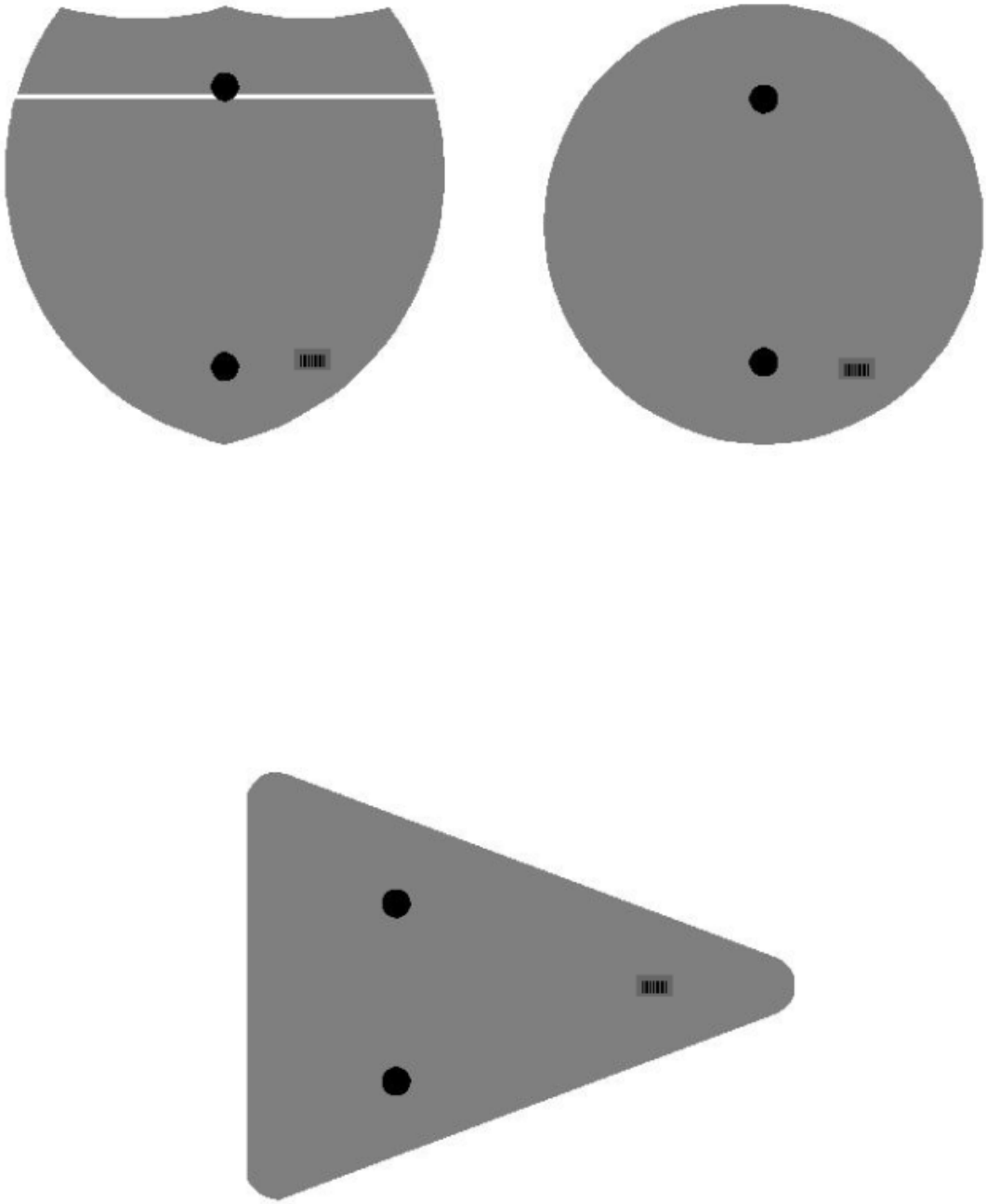




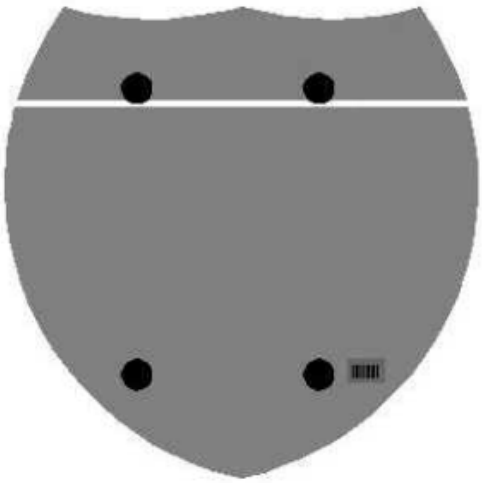
One Sign Post



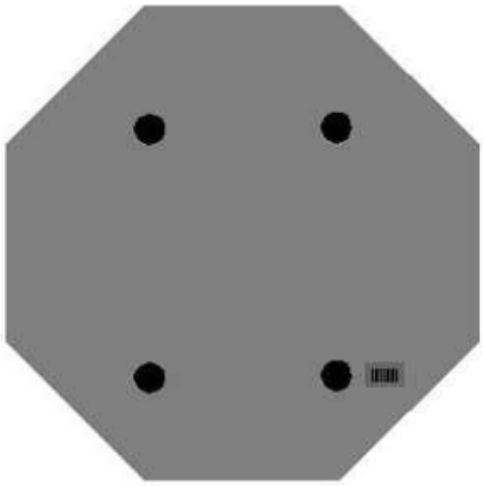
One Sign Post



Double Sign Post



Interstate
Shield

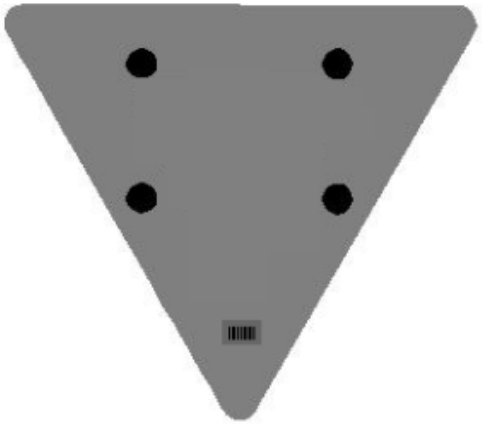


48" Stop

2 Post Signs







2020 STANDARD DRAWINGS THAT APPLY

ROADWAY

~ BARRIERS ~

TYPICAL BARRIER INSTALLATIONS

TYPICAL GUARDRAIL INSTALLATIONS RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS RBI-002-07
TYPICAL INSTALLATION FOR GUARDRAIL END TREATMENT TYPE 2A RBI-003-09
INSTALLATION OF GUARDRAIL END TREATMENT TYPE 1 ..... RBI-004-06

GUARDRAIL HARDWARE

STEEL BEAM GUARDRAIL (W-BEAM) RBR-001-13
GUARDRAIL COMPONENTS RBR-005-11
GUARDRAIL TERMINAL SECTIONS RBR-010-06
STEEL GUARDRAIL POSTS RBR-015-06
GUARDRAIL END TREATMENT TYPE 1 ..... Sepia 034
GUARDRAIL END TREATMENT TYPE 2A RBR-025-06
GUARDRAIL END TREATMENT TYPE 4A ..... Sepia 035
DELINEATORS FOR GUARDRAIL RBR-005-01

~ DRAINAGE ~

BOX INLETS AND OUTLETS

DROP BOXES

DROP BOX INLET TYPE 5A-5B-5C-5D-5E & 5F RDB-005-09
DROP BOX INLET TYPE 13 (DETAIL SHEET) RDB-013-07
DROP BOX INLET TYPE 13 AND TYPE 16 (FRAME & GRATE DETAILS) RDB-014-06
DROP BOX INLET TYPE 13 (DETAIL & BAR CHART FOR LID) RDB-015-04
DROP BOX INLET TYPE 13 (PIPE CHAMBER - GRADE CONDITION) RDB-016-03

SLOPED BOXES

SLOPED BOX OUTLET TYPE 1 ..... RDB-100-05
GRATES FOR SLOPED BOX OUTLET TYPE 1 ..... RDB-101-05
SLOPED AND FLARED BOX INLET-OUTLET 18”-24”-30”-36” ALL SKEWS RDB-105-06
GRATES FOR SLOPED AND FLARED BOX INLET-OUTLET RDB-106-05
SLOPED BOX INLET OR OUTLET TYPE 1 ..... RDB-110-08

CURB BOXES

CURB BOX INLET TYPE A (DETAIL DRAWING) RDB-270-09
CURB BOX INLET TYPE A (STEEL DRAWING) RDB-271-05
CURB BOX INLET TYPE A (TOP PHASE TABLES) RDB-272-07
CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8” LID) RDB-273-06
BOX INLET PIPE CHAMBER RDB-410-06
BOX INLET PIPE CHAMBER (ADDITIONAL STEEL) RDB-420-05

Standard Drawings That Apply
Page 2 of 4

PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS

CHANNEL LINING CLASS II AND III RDD-040-05

PIPE AND BOX CULVERT HEADWALLS

12" – 27" - SINGLE LINE PIPE

SLOPED AND FLARED HEADWALLS FOR 12" TO 27" PIPE..... RDH-020-03

30" – 108" - SINGLE LINE PIPE

PIPE CULVERT HEADWALLS, 0° SKEW (LAYOUT AND STEEL PATTERN)..... RDH-110-02
DIMENSIONS AND QUANTITIES, 30" TO 108" HEADWALLS, CIRCULAR PIPE, 0° SKEW RDH-210-03
BILL OF REINFORCEMENT 30" TO 90" DIAMETER, CIRCULAR PIPE, HEADWALLS, 0° SKEW RDH-310-04

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12" – 24" PIPE) RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (27" – 42" PIPE) RDI-002-05
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE RDI-020-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER, REINFORCED CONC. PIPE RDI-021-01
PIPE BEDDING, TRENCH CONDITION RDI-025-06
PIPE BEDDING, TRENCH CONDITION, REINFORCED CONC. PIPE RDI-026-01
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE RDI-035-02
EROSION CONTROL BLANKET SLOPE INSTALLATION..... Sepia 022
EROSION CONTROL BLANKET CHANNEL INSTALLATION ..... Sepia 023

MANHOLES

MANHOLE TYPE A RDM-001-07
MANHOLE TYPE C (CHAMBER LAYOUT) RDM-010-06
MANHOLE TYPE C (TOWER APPLICATION) RDM-011-05
MANHOLE TYPE C (STEEL PATTERN)..... RDM-012-03
MANHOLE TYPE C (TABLE OF QUANTITIES)..... RDM-013-04
MANHOLE STEPS RDM-055
FRAME AND LID TYPE 1 ..... RDM-100-03

MISCELLANEOUS DRAINAGE

JUNCTION BOX TYPE B..... RDX-005-03
TEMPORARY SILT FENCE..... RDX-210-03
SILT TRAP - TYPE B RDX-225-01
SILT TRAP - TYPE C ..... Sepia 025

~ GENERAL ~

CURVE WIDENING AND SUPERELEVATION

CURVE WIDENING AND SUPERELEVATION TRANSITIONS.....RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENTS RGS-002-06

Standard Drawings That Apply
Page 3 of 4

MISCELLANEOUS STANDARDS

RIGHT OF WAY MONUMENTS RGX-005-06
TYPICAL EMBANKMENT FOUNDATION BENCHES RGX-010-04
HANDRAIL TYPE A, A-1, A-2, A-3, A-4 ..... RGX-030-07
DETECTABLE WARNINGS RGX-040-03
TYPE D BREAKAWAY SIGN SUPPORT RGX-065-02

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

STANDARD BARRIER MEDIAN RPM-010-06
CURB AND GUTTER, CURBS AND VALLEY GUTTER RPM-100-11
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT RPM-110-07
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK ..... Sepia 039
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK ..... Sepia 040
SIDEWALK RAMPS ..... Sepia 041

STANDARD REINFORCED CONCRETE PAVEMENT

CONCRETE PAVEMENT JOINT DETAILS RPS-010-11

MISCELLANEOUS PAVING

PREFORMED COMPRESSION JOINT SEAL FOR CONCRETE PAVEMENT RPX-010-05
HOT POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT RPX-015-04
SILICONE RUBBER SEALS USED IN PORTLAND CONCRETE PAVEMENT RPX-020-06
ACCESSIBLE PARKING SPACE DETAILS RPX-100-03

TRAFFIC

~ PERMANENT ~

MARKERS

INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS ..... Sepia 006
INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS ..... Sepia 007
INLAID PAVEMENT MARKER ARRANGEMENTS MULTI-LANE ROADWAYS ..... Sepia 008
INLAID PAVEMENT MARKER ARRANGEMENTS TWO-LANE TWO-WAY ROADWAYS ..... Sepia 009
INLAID PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANE ..... Sepia 015
INLAID PAVEMENT MARKER ARRANGEMENT CHANNELIZED INTERSECTION ..... Sepia 016
PAVEMENT STRIPING DETAILS FOR TWO LANE TWO WAY ROADWAYS ..... Sepia 032

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

Standard Drawings That Apply
Page 4 of 4

RUMBLE STRIPS

SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS ..... Sepia 028
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS ..... Sepia 029
EDGEILNE RUMBLE STRIP DETAILS TWO LANE ROADWAYS NOTES ..... Sepia 029N
RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS ..... Sepia 030

~ TEMPORARY ~

TRAFFIC CONTROL

LANE CLOSURE USING TRAFFIC SIGNALS TTC-110-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE I TTC-115-04
SHOULDER CLOSURE TTC-135-03
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR CONSTRUCTION ZONES TTC-155-02
TEMPORARY PAVEMENT MARKER ARRANGEMENTS FOR LANE CLOSURES TTC-160-02

DEVICES

DOUBLE FINES ZONE SIGNS TTD-120-03
PAVEMENT CONDITION WARNING SIGNS TTD-125-03
SPEED ZONE SIGNING FOR WORK ZONES TTD-130

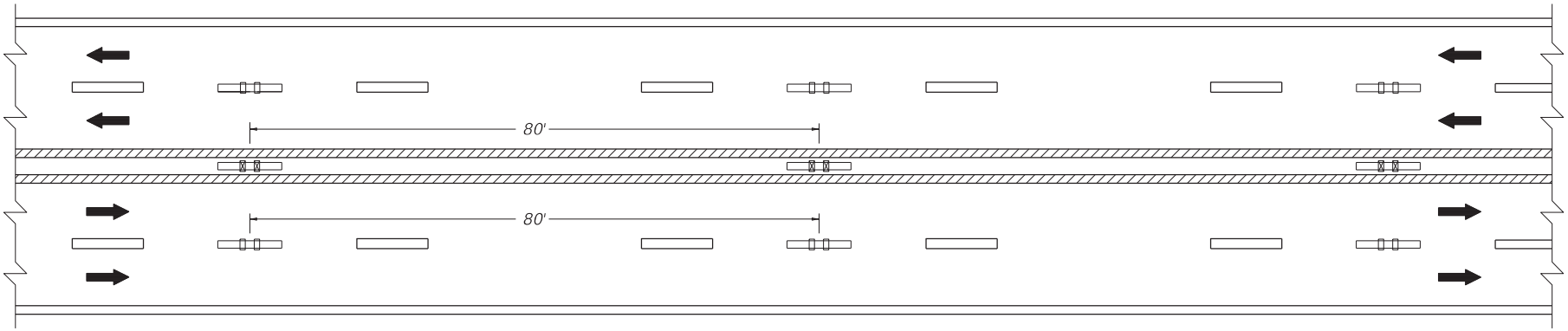
STRIPING OPERATIONS

MOBILE OPERATION FOR DURABLE STRIPING CASE I TTS-120-02

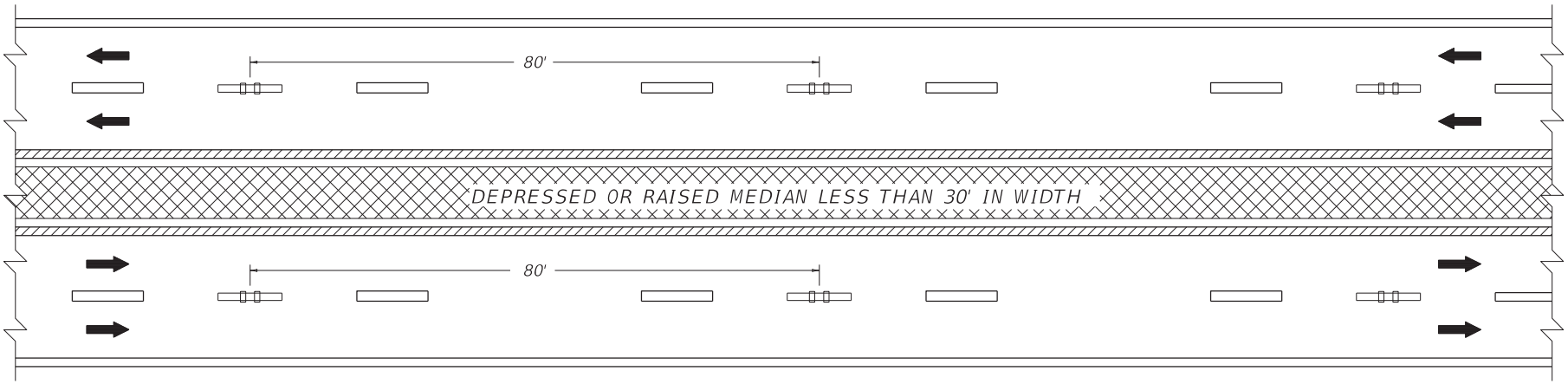
BRIDGES

~ GENERAL ~

STANDARD GRAVITY WALL BGX-023
STANDARD GRAVITY WALL BGX-024



ARRANGEMENT "A" (UNDIVIDED HIGHWAY)



ARRANGEMENT "B" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN LESS THAN 30' IN WIDTH)

~ NOTES ~

1. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHOULD BE PLACED BETWEEN THE TWO LINES.
2. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)
- DEPRESSED OR RAISED MEDIAN

DRAWING NOT TO SCALE

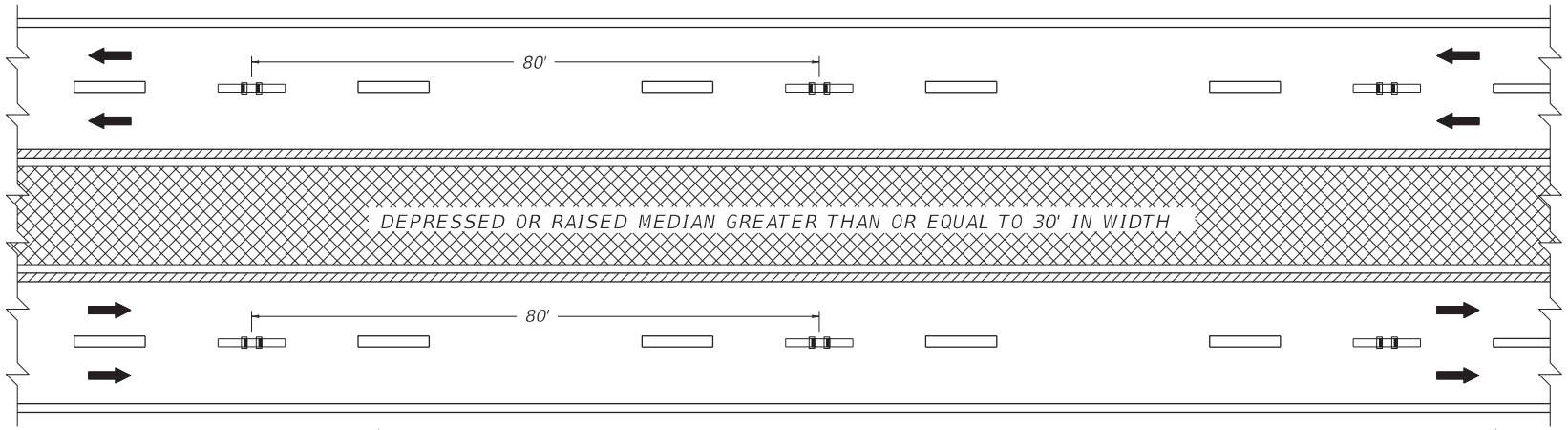
KENTUCKY
DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

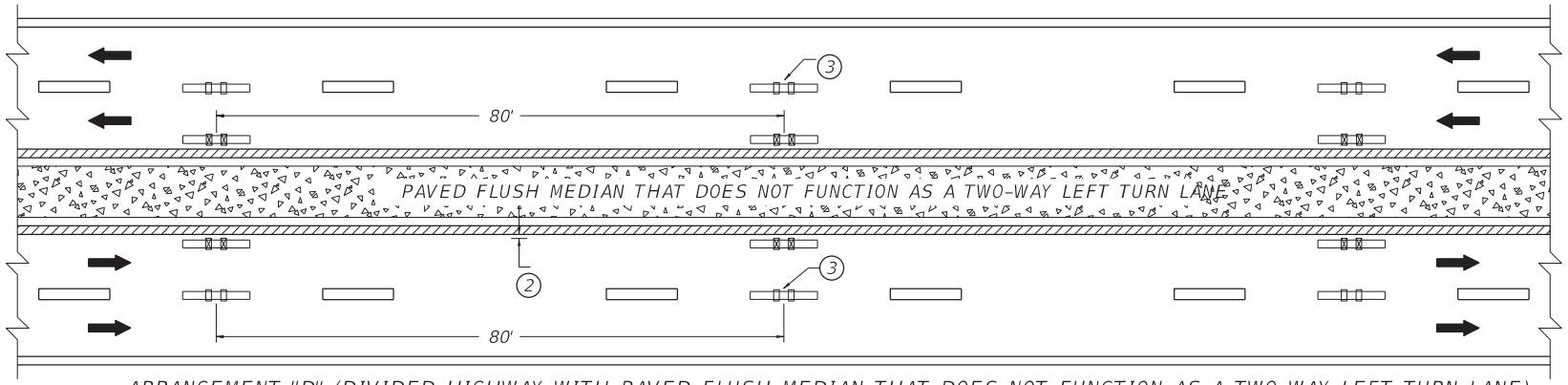
SUBMITTED _____ DIVISION DIRECTOR

06-09-21
DATE

006



ARRANGEMENT "C" (DIVIDED HIGHWAY WITH DEPRESSED OR RAISED MEDIAN GREATER THAN OR EQUAL TO 30' IN WIDTH)



ARRANGEMENT "D" (DIVIDED HIGHWAY WITH PAVED FLUSH MEDIAN THAT DOES NOT FUNCTION AS A TWO-WAY LEFT TURN LANE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHOULD BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES SHOULD BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. IF WIDTH OF PAVED FLUSH MEDIAN IS GREATER THAN OR EQUAL TO 30', BI-DIRECTIONAL (WHITE-RED) MARKERS SHALL BE USED ALONG THE LANE LINES IN LIEU OF MONO-DIRECTIONAL (WHITE) MARKERS.
4. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
5. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH
06613 - INLAID PAVEMENT MARKER - B W/R	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- BI-DIRECTIONAL PAVEMENT MARKER (WHITE-RED)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)
- FLUSH MEDIAN
- DEPRESSED OR RAISED MEDIAN

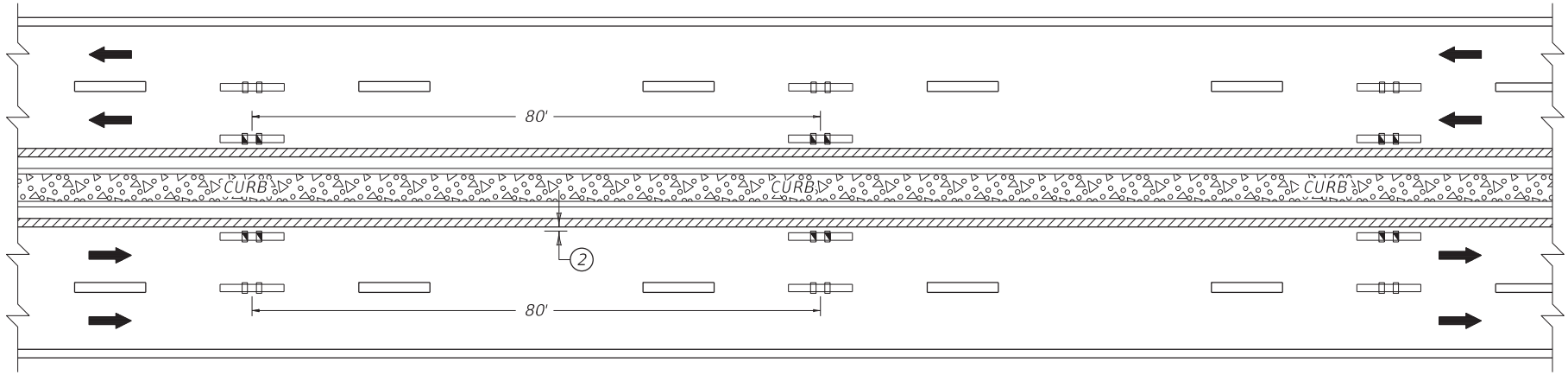
DRAWING NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

007



ARRANGEMENT "E" (DIVIDED HIGHWAY WITH CURB WITHIN 8' OF DRIVING LANE)

~ NOTES ~

1. MARKERS INSTALLED ALONG LANE LINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.
4. MARKERS SHALL BE INSTALLED AT 40' SPACING ALONG SOLID WHITE AUXILIARY LANES. MARKER COLOR SHALL MATCH THE MARKERS INSTALLED ALONG THE WHITE LANE LINES.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06611 - INLAID PAVEMENT MARKER - MY	EACH

LEGEND

- MONO-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

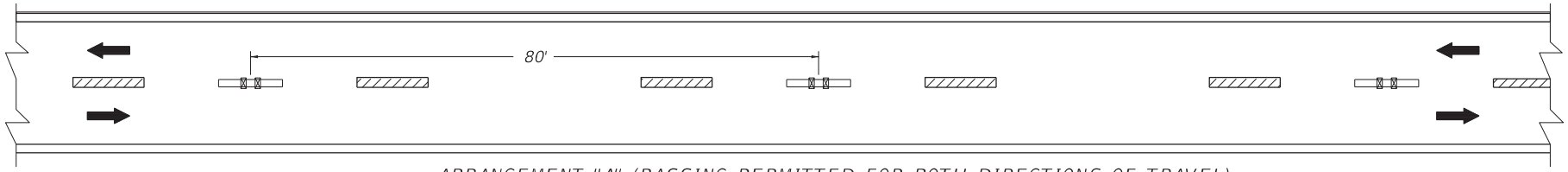
DRAWING NOT TO SCALE

KENTUCKY
DEPARTMENT OF HIGHWAYS

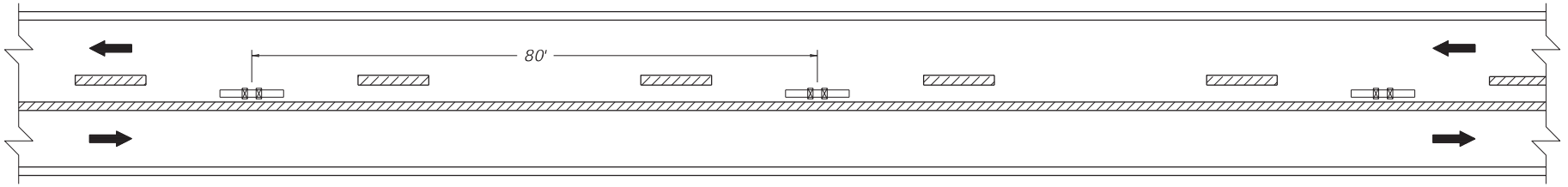
INLAID PAVEMENT MARKER
ARRANGEMENTS
MULTI-LANE ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

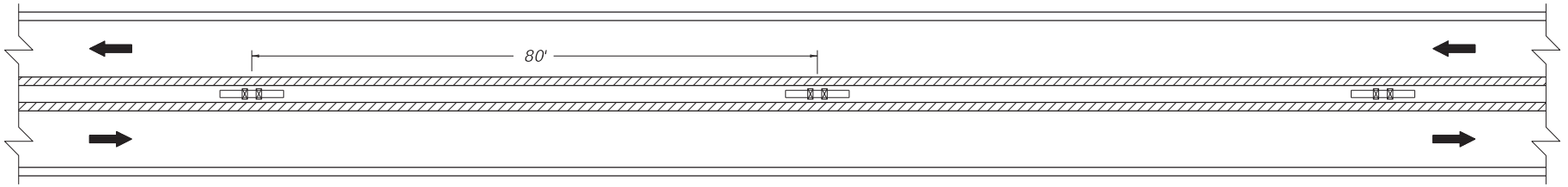
008



ARRANGEMENT "A" (PASSING PERMITTED FOR BOTH DIRECTIONS OF TRAVEL)



ARRANGEMENT "B" (PASSING PERMITTED FOR ONE DIRECTION OF TRAVEL)



ARRANGEMENT "C" (PASSING PROHIBITED FOR BOTH DIRECTIONS OF TRAVEL)

~ NOTES ~

1. MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE DASHES.
2. MARKERS INSTALLED WITH DOUBLE YELLOW CENTERLINES SHALL BE PLACED BETWEEN THE TWO LINES.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS	UNIT TO BID
06612 - INLAID PAVEMENT MARKER - BY	EACH

LEGEND

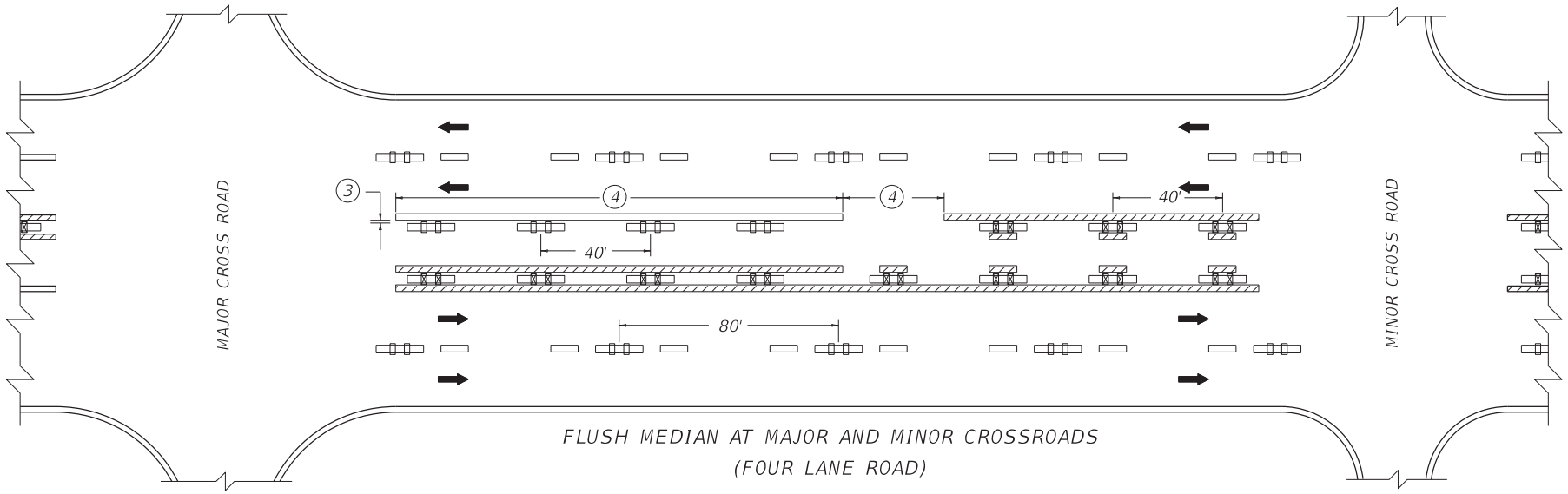
- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

KENTUCKY
DEPARTMENT OF HIGHWAYS

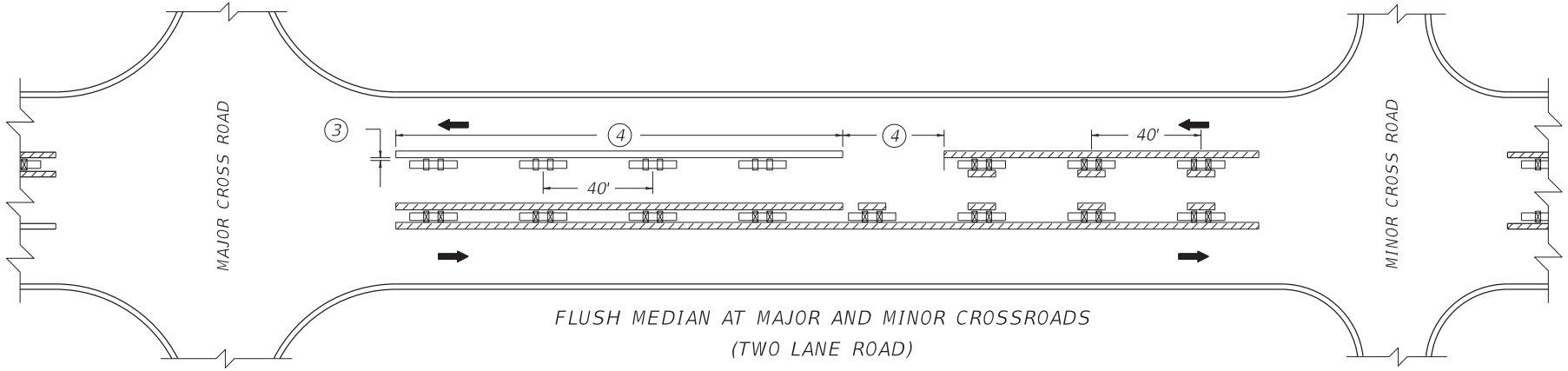
INLAID PAVEMENT MARKER ARRANGEMENTs
TWO-LANE, TWO-WAY ROADWAYS

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

009



FLUSH MEDIAN AT MAJOR AND MINOR CROSSROADS
(FOUR LANE ROAD)



FLUSH MEDIAN AT MAJOR AND MINOR CROSSROADS
(TWO LANE ROAD)

~ NOTES ~

1. MARKERS INSTALLED AT DOUBLE YELLOW CENTERLINES SHALL BE PLACED BETWEEN THE TWO LINES.
2. MARKERS INSTALLED ALONG LANE LINES OR DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.

(3) MARKERS INSTALLED ALONG EDGE LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.

(4) LENGTH TO BE DETERMINED ON A PROJECT BY PROJECT BASIS.

5. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS	UNIT TO BID
06610 – INLAID PAVEMENT MARKER – MW	EACH
06612 – INLAID PAVEMENT MARKER – BY	EACH

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWG.
TPM-207

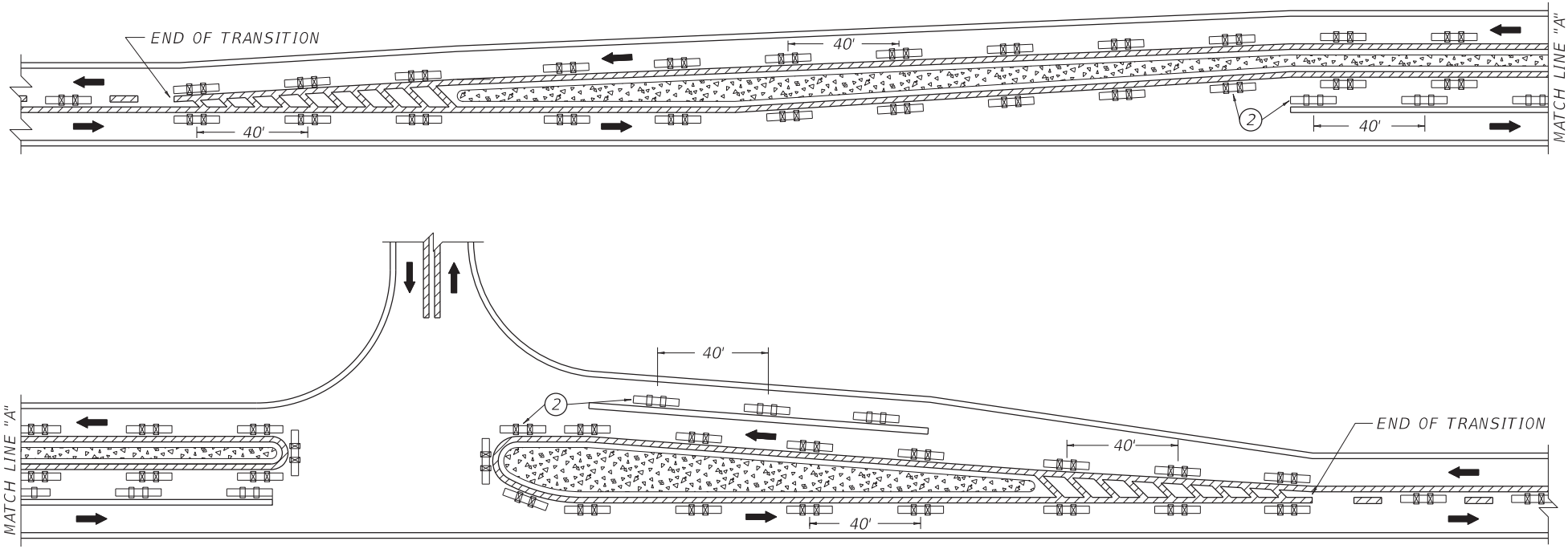
KENTUCKY
DEPARTMENT OF HIGHWAYS

INLAID PAVEMENT MARKER
ARRANGEMENTS
TWO-WAY, LEFT-TURN LANE

SUBMITTED _____ DIVISION DIRECTOR

06-09-21
DATE

015



CHANNELIZED INTERSECTION ON A TWO DIRECTIONAL TWO LANE FACILITY

LEGEND

- BI-DIRECTIONAL PAVEMENT MARKER (YELLOW)
- MONO-DIRECTIONAL PAVEMENT MARKER (WHITE)
- CURBED OR FLUSH MEDIAN
- MARKINGS (YELLOW)
- MARKINGS (WHITE)

~ NOTES ~

1. MARKERS INSTALLED ALONG DASHED YELLOW CENTERLINES SHALL BE PLACED BETWEEN AND IN LINE WITH THE SKIPS.
2. MARKERS INSTALLED ALONG EDGE LINES OR CHANNELIZING LINES SHALL BE PLACED SO THAT THE NEAR EDGE OF THE GROOVE IS NO MORE THAN 1" FROM THE NEAR EDGE OF THE LINE.
3. MARKERS SHALL NOT BE INSTALLED ON TOP OF THE PAVEMENT JOINT. OFFSET MARKERS A MINIMUM OF 2" FROM THE PAVEMENT JOINT. ENSURE THAT THE FINISHED LINE OF MARKERS IS STRAIGHT WITH MINIMAL LATERAL DEVIATION. MARKERS MAY BE ELIMINATED OR PLACEMENT ADJUSTED AT THE DISCRETION OF THE ENGINEER.

BID ITEMS	UNIT TO BID
06610 - INLAID PAVEMENT MARKER - MW	EACH
06612 - INLAID PAVEMENT MARKER - BY	EACH

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWG.
TPM-205

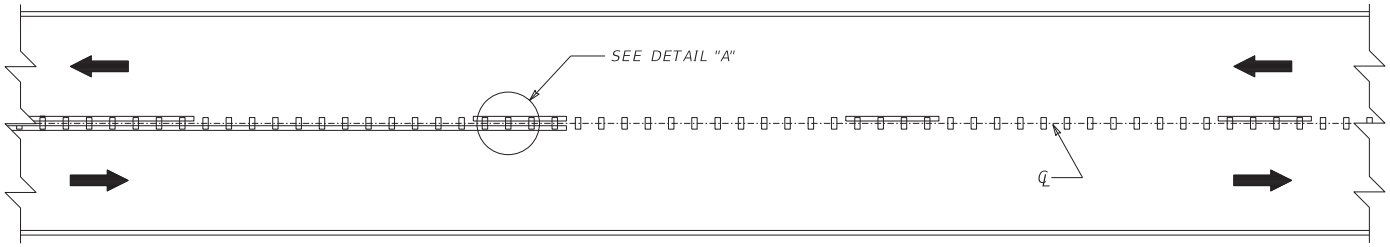
KENTUCKY
DEPARTMENT OF HIGHWAYS

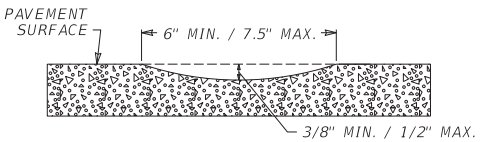
INLAID PAVEMENT MARKER
ARRANGEMENT
CHANNELIZED
INTERSECTION

SUBMITTED _____ DIVISION DIRECTOR 06-09-21 DATE

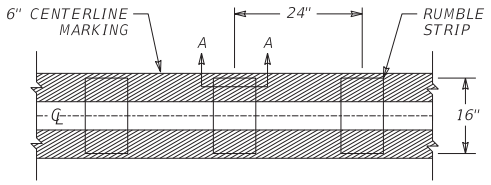
016

PLAN VIEW

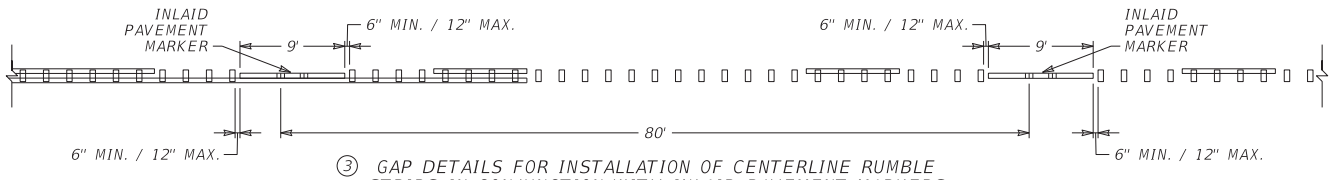




SECTION A-A



DETAIL "A"



③ GAP DETAILS FOR INSTALLATION OF CENTERLINE RUMBLE STRIPS IN CONJUNCTION WITH INLAID PAVEMENT MARKERS

~ NOTES ~

1. DISTANCES SHOWN ARE APPROXIMATE. MAINTAIN RUMBLE STRIP DIMENSIONS AND SPACING AS MUCH AS POSSIBLE.
2. CENTERLINE RUMBLE STRIPS SHALL BE INSTALLED IN LINE WITH THE CENTER OF THE ROADWAY AS MUCH AS POSSIBLE.
③ FOR ROADWAYS WHERE BOTH INLAID PAVEMENT MARKERS AND CENTERLINE RUMBLE STRIPS ARE TO BE INSTALLED, DISCONTINUE THE CENTERLINE RUMBLE STRIPS 6" MIN. / 12" MAX. BEFORE AND AFTER THE GROOVE FOR EACH INLAID PAVEMENT MARKER. INSTALL AS MANY RUMBLE STRIPS AS POSSIBLE BETWEEN ADJACENT PAVEMENT MARKERS WHILE MAINTAINING THE 24" CYCLE.
4. DO NOT INSTALL CENTERLINE RUMBLE STRIPS IN AREAS INDICATED ON TPR-100.
5. CENTERLINE RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS, OR WHERE LANE WIDTHS ARE LESS THAN 11 FT.

BID ITEM AND UNIT TO BID
CENTERLINE RUMBLE STRIPS LF

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWGS. TPR-100, TPR-120, AND TPR-125

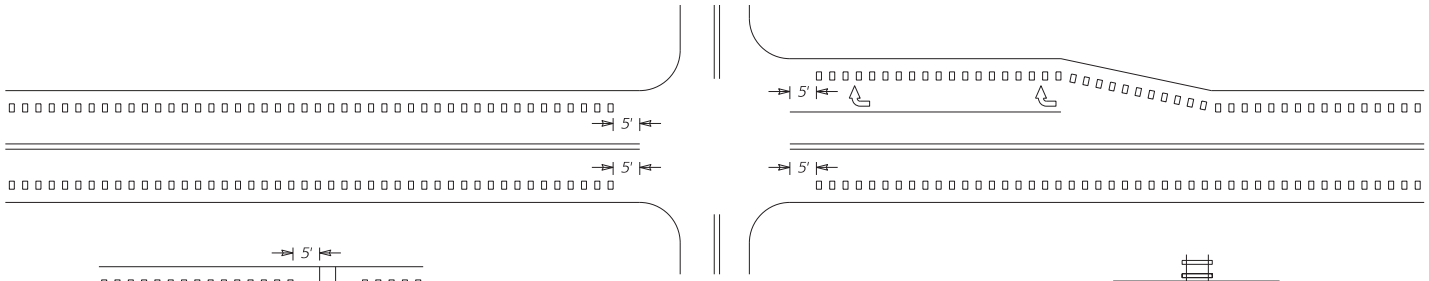
SUBMITTED _____ DIVISION DIRECTOR 08-21-2023 DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

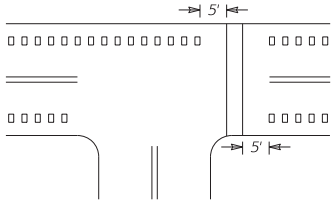
DRAWING TITLE: SEPIA 027 - CENTERLINE RUMBLE STRIPS 6 INCH SPACING

ITEM NO. COUNTY OF
SHEET NO.

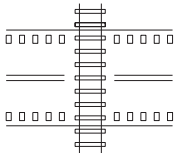
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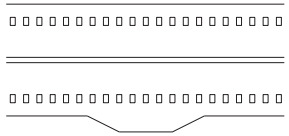
INTERSECTIONS WITH OR WITHOUT (1)
RIGHT TURN LANES



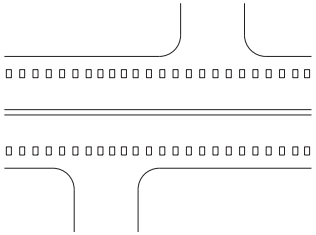
MARKED CROSSWALK (2)



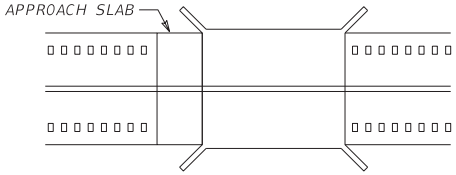
HIGHWAY-RAIL GRADE CROSSINGS (3)



MAILBOX TURNOUTS (6)



DRIVEWAYS/MINOR
COMMERCIAL ENTRANCES (5)



BRIDGE DECK/APPROACH SLAB (4)

~ NOTES ~

(1) EDGELINE RUMBLE STRIPS SHALL BE OMITTED THROUGH MAJOR INTERSECTIONS WITH, OR WITHOUT, RIGHT-TURN LANES. OMIT EDGELINE RUMBLE STRIPS APPROXIMATELY 5' IN ADVANCE OF THE AREA WHERE EDGELINE PAVEMENT MARKINGS HAVE BEEN OMITTED (NORMALLY WHERE THE SIDE STREET RADIUS INTERSECTS THE MAINLINE).

(2) EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED THROUGH MARKED CROSSWALKS. OMIT EDGELINE RUMBLE STRIPS APPROXIMATELY 5 FT IN ADVANCE OF MARKED CROSSWALKS.

(3) EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED ACROSS HIGHWAY-RAIL GRADE CROSSINGS.

(4) EDGELINE RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS OR APPROACH SLABS.

(5) EDGELINE RUMBLE STRIPS SHALL BE INSTALLED THROUGH DRIVEWAYS & MINOR COMMERCIAL ENTRANCES.

(6) EDGELINE RUMBLE STRIPS SHALL BE INSTALLED THROUGH MAILBOX TURNOUTS.

7. EDGELINE RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS.

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWGS.
TPR-120, TPR-125, AND
TPR-130

BID ITEMS AND UNIT TO BID
EDGELINE RUMBLE STRIPS LF

SUBMITTED _____ DIVISION DIRECTOR 08-21-2023 DATE

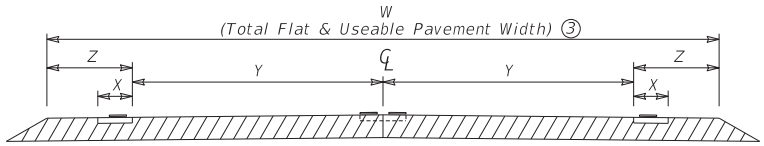
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 028 - EDGELINE RUMBLE STRIP PLACEMENT DETAILS

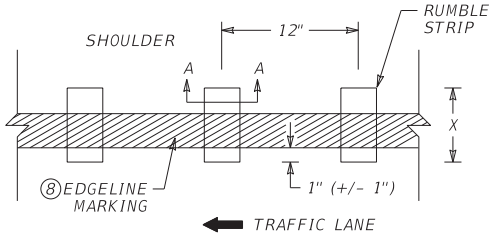
ITEM NO. COUNTY OF
SHEET NO.

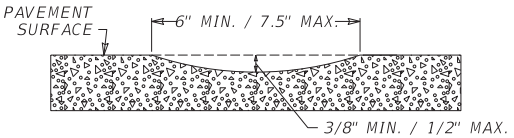
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PAVEMENT WIDTH (W) ③	TYPES OF RUMBLE STRIPS TO INSTALL	LANE WIDTH (Y) ⑤	SHOULDER WIDTH (Z) ⑥	LENGTH OF EDGELINE RUMBLE (X) ⑦
20'	④ OPTIONAL: EDGELINE RUMBLE STRIPS	9'	1'	8"
21'		9.5'	1'	8"
22'	STANDARD: INSTALL ONLY EDGELINE RUMBLE STRIPS	10'	1'	8"
23'		10'	1.5'	8"
24'		10.5'	1.5'	8"
25'	STANDARD: INSTALL BOTH EDGELINE AND CENTERLINE RUMBLE STRIPS	11'	1.5'	8"
26'		11'	2'	8"
27'		11'	2.5'	8"
28'		11'	3'	8"
29'		11'	3.5'	8"
30'		11'	4'	8"
31'		11'	4.5'	8"
32'		11'	5'	8"
33'		11'	5.5'	8"
34'		11'	6'	8"
35'		11.5'	6'	8"
36'		12'	6'	8"
37'		12'	6.5'	12"
38'		12'	7'	12"
39'		12'	7.5'	12"
>=40'		12'	>=8'	16"

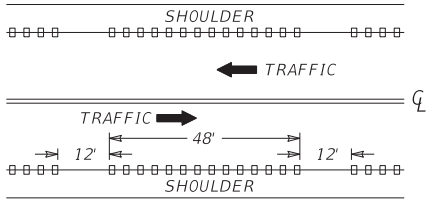


PAVEMENT CROSS-SECTION





SECTION A-A



BICYCLE GAPS ⑨

~ NOTES ~

SEE CURRENT STANDARD DRAWING NUMBER TPR-120N FOR ALL NOTES.

APPLICATION OF THE TABLE ABOVE: THE TOTAL PAVEMENT WIDTH (W) IS THE STARTING POINT IN USING THE TABLE. THE TOTAL PAVEMENT WIDTH (W) IS THE TOTAL PAVEMENT THAT IS FLAT AND USEABLE FOR DRIVING. WHEN MEASURING THE TOTAL PAVEMENT WIDTH (W) DO NOT INCLUDE THE WIDTH OF ANY PAVEMENT THAT IS NOT FLAT AND USEABLE FOR DRIVING, SUCH AS PAVEMENT WEDGES. ONCE THE TOTAL PAVEMENT WIDTH (W) IS DETERMINED, USE THIS VALUE AND THE TABLE ABOVE TO DETERMINE THE TYPE(S) OF RUMBLE STRIPS TO INSTALL AND THE RECOMMENDED LANE WIDTH (Y) AND SHOULDER WIDTH (Z).

BID ITEM AND UNIT TO BID	
EDGELINE RUMBLE STRIPS	LF
CENTERLINE RUMBLE STRIPS	LF

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWGS. TPR-100, TPR-105, TPR-110, TPR-115 AND TPR-120N

SUBMITTED _____ DIVISION DIRECTOR 08-21-2023 DATE

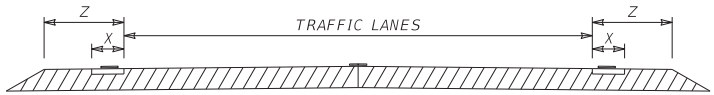
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 029 - EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS

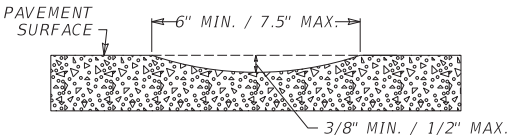
ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.12.02.4 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2267498\TPR120.DGN

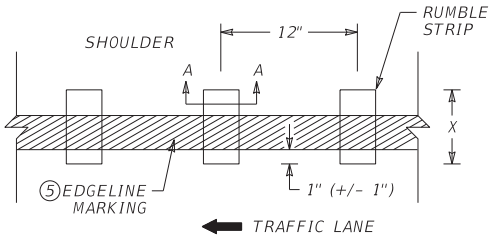
SHOULDER WIDTH (Z) ②	RUMBLE TYPE ①	RUMBLE LENGTH (X) ③
>=1' up to <3'	ELRS	8"
>=3' up to <6.5'	ELRS ⑥	8"
>=6.5' up to <8'	ELRS ⑥	12"
>=8'	ELRS ⑥	16"



PAVEMENT CROSS-SECTION
(FOR EDGELINE RUMBLE STRIPS)



SECTION A-A



~ NOTES ~

① FOR MULTI-LANE ROADWAYS, THE RUMBLE TYPE TO BE INSTALLED IS EDGELINE RUMBLE STRIPS (ELRS).

② FOR EDGELINE RUMBLE STRIPS, THE SHOULDER WIDTH (Z) IS FROM THE LANE SIDE EDGE OF THE EDGELINE RUMBLE STRIP TO THE OUTSIDE EDGE OF SHOULDER PAVEMENT.

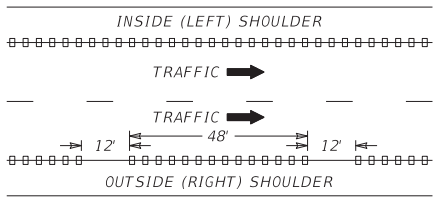
③ THE RUMBLE LENGTH (X) MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.

4. THE DIMENSIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. MAINTAIN RUMBLE STRIP DIMENSIONS AND SPACING AS MUCH AS POSSIBLE.

⑤ PLACE THE EDGELINE MARKING SO THAT THE LANE SIDE EDGE OF THE MARKING GENERALLY FOLLOWS THE LANE SIDE EDGE OF THE RUMBLE STRIP. THE TARGET IS FOR THE LANE SIDE EDGE OF THE MARKING TO BE 1" BEYOND THE LANE SIDE EDGE OF THE RUMBLE STRIP WITH AN ACCEPTABLE VARIANCE OF +/- 1".

⑥ EDGELINE RUMBLE STRIPS ALONG OUTSIDE (RIGHT) SHOULDERS THAT ARE 3' OR WIDER SHALL INCLUDE BICYCLE GAPS AS DETAILED. BICYCLE GAPS ARE NOT REQUIRED ON INSIDE (LEFT) SHOULDERS.
NOTE: BICYCLE GAPS SHALL NOT BE USED ON INTERSTATES AND PARKWAYS.

7. RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS, OR WHEN THE SHOULDER WIDTH (Z) IS LESS THAN 1 FT.



BICYCLE GAPS ⑥

DRAWING NOT TO SCALE

USE WITH CUR. STD. DWG.
TPR-115

SUBMITTED _____ DIVISION DIRECTOR 08-21-2023 DATE

BID ITEMS AND UNIT TO BID
SHOULDER RUMBLE STRIPS LF
EDGELINE RUMBLE STRIPS LF

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 030 - EDGELINE RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS

ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.12.02.4 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2267500\TPR130.DGN

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 – Revised October 23, 2023

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated 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. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

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

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

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) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).

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, sexual orientation, gender identity, 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 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 or other knowledgeable company official.

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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, 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, 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. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient 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 recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

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 more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must 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. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to *DBAconformance@dol.gov*. 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.

(4) 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 will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must 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.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 29 CFR part 3; and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, 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 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 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* 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.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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” in paragraph 1 of Section VI 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: (based on longstanding interpretation)

(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. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

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 Part 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. 23 CFR 635.108.

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 Part 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). 29 CFR 1926.10.

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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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. 2 CFR 180.220 and 1200.220.

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. 2 CFR 180.320.

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. 2 CFR 180.325.

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. 2 CFR 180.345 and 180.350.

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, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 180.330.

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. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

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 CFR 180.325.

* * * * *

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 CFR 180.335;.

(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, 2 CFR 180.800;

(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **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). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

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, Subpart I, 180.900 – 180.1020, 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 recipient or subrecipient 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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.

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. 2 CFR 180.220 and 1200.220.

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 System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should 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 Part 20, App. A.

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.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. 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. 46 CFR 381.7.

2. 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 (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
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 administrating 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

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her 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 one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her 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 to obtain private benefits.

If you have worked for the executive branch of state government within the past year, 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, 1025 Capital Center Drive, Suite 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

"General Decision Number: KY20250038 04/04/2025

Superseded General Decision Number: KY20240038

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.75 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 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a

conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2025
1	03/07/2025
2	04/04/2025

BRIN0004-003 06/01/2024

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER	$ 33.70	16.57

BRKY0001-005 06/01/2024

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

	Rates	Fringes
BRICKLAYER	$ 35.00	17.13

BRKY0002-006 06/01/2024

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER	$ 35.00	17.13

BRKY0007-004 06/01/2024

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

	Rates	Fringes
BRICKLAYER	$ 41.05	21.79

BRKY0017-004 06/01/2024

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

	Rates	Fringes
BRICKLAYER	$ 35.00	17.13

CARP0064-001 04/01/2024

	Rates	Fringes
CARPENTER	$ 32.90	23.33
Diver	$ 49.73	23.33
PILEDRIVERMAN	$ 33.40	23.33

ELEC0212-008 06/05/2024

BRACKEN, GALLATIN and GRANT COUNTIES

	Rates	Fringes
ELECTRICIAN	$ 35.43	22.05

ELEC0212-014 11/27/2023

BRACKEN, GALLATIN & GRANT COUNTIES:

	Rates	Fringes
Sound & Communication Technician	$ 27.20	14.54

ELEC0317-012 06/03/2024

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

	Rates	Fringes
ELECTRICIAN (Wiremen)	$ 38.30	23.12

ELEC0369-007 05/29/2024

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 37.88	21.38

ELEC0575-002 05/29/2023

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 37.00	22.26

ENGI0181-018 07/01/2024

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	$ 40.05	19.10
GROUP 2	$ 37.19	19.10
GROUP 3	$ 37.64	19.10
GROUP 4	$ 36.87	19.10

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill;

Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

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

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

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

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

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* IRON0044-009 06/01/2024

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON,
BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);

MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);
NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);
OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);
SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

	Rates	Fringes
IRONWORKER		
Fence Erector	$ 33.60	23.60
Structural	$ 35.37	23.60

IRON0070-006 06/01/2024

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD
BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

	Rates	Fringes
IRONWORKER	$ 34.59	25.00

IRON0769-007 06/01/2024

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN
CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson);
FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford);
MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale);
NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

	Rates	Fringes
IRONWORKER		
ZONE 1	$ 37.66	29.24

ZONE 2	$ 38.06	29.24
ZONE 3	$ 39.66	29.24

ZONE 1 - (no base rate increase) Up to 10 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 2 - (add $0.40 per hour to base rate) 10 to 50 mile radius of Union Hall, 1643 Greenup Ave, Ashland, KY.

ZONE 3 - (add $2.00 per hour to base rate) 50 mile radius & over of Union Hall, 1643 Greenup Ave, Ashland, KY.

LABO0189-003 07/01/2024

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 23.96	18.58
GROUP 2	$ 24.21	18.58
GROUP 3	$ 24.26	18.58
GROUP 4	$ 24.86	18.58

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster;

& Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

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LABO0189-008 07/01/2024

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

	Rates	Fringes
Laborers:		
GROUP 1	$ 23.96	18.58
GROUP 2	$ 24.21	18.58
GROUP 3	$ 24.26	18.58
GROUP 4	$ 24.86	18.58

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

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

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LABO0189-009 07/01/2024

BRECKINRIDGE & GRAYSON COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 23.96	18.58
GROUP 2	$ 24.21	18.58
GROUP 3	$ 24.26	18.58
GROUP 4	$ 24.86	18.58

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer); Brickmason Tender; Mortar Mixer Operator; Scaffold Builder; Burner & Welder; Bushammer; Chain Saw Operator; Concrete Saw Operator; Deckhand Scow Man; Dry Cement Handler; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level C; Forklift Operator for Masonary; Form Setter; Green Concrete Cutting; Hand Operated Grouter & Grinder Machine Operator; Jackhammer; Pavement Breaker; Paving Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

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

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PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER		
Bridge/Equipment Tender and/or Containment Builder	$ 18.90	5.90
Brush & Roller	$ 21.30	5.90
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	$ 22.30	5.90

Sandblasting & Waterblasting	$ 22.05	5.90
Spray	$ 21.80	5.90

PAIN0012-017 05/01/2015

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping)		
Bridge Equipment Tender and Containment Builder	$ 20.73	9.06
Brush & Roller	$ 23.39	9.06
Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement	$ 24.39	9.06
Sandblasting & Water Blasting	$ 24.14	9.06
Spray	$ 23.89	9.06

PAIN0118-004 06/01/2018

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

	Rates	Fringes
PAINTER		
Brush & Roller	$ 22.00	12.52
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning	$ 23.00	12.52

PAIN1072-003 12/01/2024

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

	Rates	Fringes
Painters:		
Bridges; Locks; Dams; Tension Towers & Energized Substations	$ 37.53	23.95
Power Generating Facilities	$ 34.29	23.95

PLUM0248-003 06/01/2024

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

	Rates	Fringes
Plumber and Steamfitter	$ 41.50	25.01

PLUM0392-007 06/01/2024

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

	Rates	Fringes

Plumbers and Pipefitters.....$ 40.70 26.75

PLUM0502-003 08/01/2024

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	Rates	Fringes
PLUMBER	$ 41.90	24.89

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* SUKY2010-160 10/08/2001

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 16.57 **	7.34
GROUP 2	$ 16.68 **	7.34
GROUP 3	$ 16.86 **	7.34
GROUP 4	$ 16.96 **	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

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

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($17.75) or 13658 ($13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

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 https://www.dol.gov/agencies/whd/government-contracts.

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) (iii)).

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

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or

by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION"

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

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

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

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

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

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

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

OVERTIME:

Overtime is to be paid 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

PART IV

BID ITEMS

254301

PROPOSAL BID ITEMS

Report Date 5/1/25

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	32,223.00	TON		$	
0020	00100		ASPHALT SEAL AGGREGATE	52.00	TON		$	
0030	00103		ASPHALT SEAL COAT	7.00	TON		$	
0040	00190		LEVELING & WEDGING PG64-22	111.00	TON		$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	3,317.00	TON		$	
0060	00217		CL4 ASPH BASE 1.00D PG64-22	18,273.00	TON		$	
0070	00219		CL4 ASPH BASE 1.00D PG76-22	7,113.00	TON		$	
0080	00307		CL2 ASPH SURF 0.38B PG64-22	1,329.00	TON		$	
0090	00342		CL4 ASPH SURF 0.38A PG76-22	14,269.00	TON		$	
0100	02084		JPC PAVEMENT-8 IN	524.00	SQYD		$	
0110	02676		MOBILIZATION FOR MILL & TEXT (CID 254301)	1.00	LS		$	
0120	02677		ASPHALT PAVE MILLING & TEXTURING	11,939.00	TON		$	
0130	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	115.60	TON		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0140	01811		STANDARD CURB AND GUTTER MOD	1,614.00	LF		$	
0150	01812		REMOVE CURB AND GUTTER	470.00	LF		$	
0160	01891		ISLAND HEADER CURB TYPE 2	1,201.00	LF		$	
0170	01917		STANDARD BARRIER MEDIAN TYPE 2	1,538.00	SQYD		$	
0180	01921		STANDARD BARRIER MEDIAN TYPE 4	640.00	SQYD		$	
0190	02091		REMOVE PAVEMENT	9,646.00	SQYD		$	
0200	02159		TEMP DITCH	9,550.00	LF		$	
0210	02160		CLEAN TEMP DITCH	4,772.00	LF		$	
0220	02200		ROADWAY EXCAVATION	55,367.00	CUYD		$	
0230	02203		STRUCTURE EXCAV-UNCLASSIFIED	125.70	CUYD		$	
0240	02223		GRANULAR EMBANKMENT	63.30	CUYD		$	
0250	02242		WATER	1,808.00	MGAL		$	
0260	02429		RIGHT-OF-WAY MONUMENT TYPE 1	27.00	EACH		$	
0270	02432		WITNESS POST	27.00	EACH		$	
0280	02483		CHANNEL LINING CLASS II	1,264.00	TON		$	
0290	02545		CLEARING AND GRUBBING (APPROX. 92.2 ACRES)	1.00	LS		$	
0300	02555		CONCRETE-CLASS B	64.00	CUYD		$	
0310	02562		TEMPORARY SIGNS	550.00	SQFT		$	
0320	02603		FABRIC-GEOTEXTILE CLASS 2	218.00	SQYD		$	
0330	02611		HANDRAIL-TYPE A-1	235.00	LF		$	
0340	02650		MAINTAIN & CONTROL TRAFFIC (FAYETTE KY 418 FD05)	1.00	LS		$	
0350	02650		MAINTAIN & CONTROL TRAFFIC (FAYETTE US 25 FD05)	1.00	LS		$	
0360	02650		MAINTAIN & CONTROL TRAFFIC (FAYETTE US 25/KY 418 HSIP)	1.00	LS		$	

254301

PROPOSAL BID ITEMS

Report Date 5/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0370	02650		MAINTAIN & CONTROL TRAFFIC (FAYETTE US 25/KY 418 SLX TRAFFIC SIGNALS)	1.00	LS		$	
0380	02671		PORTABLE CHANGEABLE MESSAGE SIGN	7.00	EACH		$	
0390	02697		EDGELINE RUMBLE STRIPS	51,092.00	LF		$	
0400	02701		TEMP SILT FENCE	9,550.00	LF		$	
0410	02704		SILT TRAP TYPE B	50.00	EACH		$	
0420	02705		SILT TRAP TYPE C	50.00	EACH		$	
0430	02707		CLEAN SILT TRAP TYPE B	50.00	EACH		$	
0440	02708		CLEAN SILT TRAP TYPE C	50.00	EACH		$	
0450	02720		SIDEWALK-4 IN CONCRETE	505.00	SQYD		$	
0460	02721		REMOVE CONCRETE SIDEWALK	109.00	SQYD		$	
0470	02726		STAKING (FAYETTE KY 418 FD05)	1.00	LS		$	
0480	02726		STAKING (FAYETTE US 25 FD05)	1.00	LS		$	
0490	02726		STAKING (FAYETTE US 25/KY 418 HSIP)	1.00	LS		$	
0500	02726		STAKING (FAYETTE US 25/KY 418 SLX TRAFFIC SIGNALS)	1.00	LS		$	
0510	02726		STAKING (HSIP-VRU SHARED USE PATH)	1.00	LS		$	
0520	02775		ARROW PANEL	6.00	EACH		$	
0530	03225		TUBULAR MARKERS (PEXCO CITY POST EMBEDDED ANCHOR CUP)	42.00	EACH		$	
0540	04933		TEMP SIGNAL 2 PHASE	1.00	EACH		$	
0550	05950		EROSION CONTROL BLANKET	9,846.00	SQYD		$	
0560	05952		TEMP MULCH	148,627.00	SQYD		$	
0570	05953		TEMP SEEDING AND PROTECTION	111,470.00	SQYD		$	
0580	05963		INITIAL FERTILIZER	12.40	TON		$	
0590	05964		MAINTENANCE FERTILIZER	7.50	TON		$	
0600	05985		SEEDING AND PROTECTION	222,940.00	SQYD		$	
0610	05989		SPECIAL SEEDING CROWN VETCH	10,484.00	SQYD		$	
0620	05990		SODDING	2,256.00	SQYD		$	
0630	05992		AGRICULTURAL LIMESTONE	148.00	TON		$	
0640	06511		PAVE STRIPING-TEMP PAINT-6 IN	162,005.00	LF		$	
0650	06515		PAVE STRIPING-PERM PAINT-6 IN	381.00	LF		$	
0660	06542		PAVE STRIPING-THERMO-6 IN W	65,475.00	LF		$	
0670	06543		PAVE STRIPING-THERMO-6 IN Y	38,460.00	LF		$	
0680	06546		PAVE STRIPING-THERMO-12 IN W	4,068.00	LF		$	
0690	06566		PAVE MARKING-THERMO X-WALK-12 IN	4,754.00	LF		$	
0700	06568		PAVE MARKING-THERMO STOP BAR-24IN	1,063.00	LF		$	
0710	06569		PAVE MARKING-THERMO CROSS-HATCH	3,285.00	SQFT		$	
0720	06574		PAVE MARKING-THERMO CURV ARROW	170.00	EACH		$	
0730	06575		PAVE MARKING-THERMO COMB ARROW	6.00	EACH		$	
0740	06576		PAVE MARKING-THERMO ONLY	29.00	EACH		$	
0750	06598		PAVEMENT MARKING REMOVAL	31.00	SQFT		$	
0760	06610		INLAID PAVEMENT MARKER-MW	765.00	EACH		$	
0770	06611		INLAID PAVEMENT MARKER-MY	102.00	EACH		$	
0780	06612		INLAID PAVEMENT MARKER-BY	33.00	EACH		$	

254301

PROPOSAL BID ITEMS

Report Date 5/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0790	06613		INLAID PAVEMENT MARKER-B W/R	338.00	EACH		$	
0800	10020NS		FUEL ADJUSTMENT	90,145.00	DOLL	$1.00	$	$90,145.00
0810	10030NS		ASPHALT ADJUSTMENT	174,087.00	DOLL	$1.00	$	$174,087.00
0820	20206EC		PAVE MARK HANDICAP SYMBOL	1.00	EACH		$	
0830	20411ED		LAW ENFORCEMENT OFFICER	102.00	HOUR		$	
0840	20430ED		SAW CUT	37,177.00	LF		$	
0850	20782NS714		PAVE MARKING THERMO-BIKE	2.00	EACH		$	
0860	21417ES717		PAVE MARK THERMO CONE CAP-SOLID YELLOW	4,208.00	SQFT		$	
0870	22000ED		WOOD PLANK FENCE	1,006.00	LF		$	
0880	23010EN		PAVE MARK TEMP PAINT STOP BAR-24 IN	400.00	LF		$	
0890	23158ES505		DETECTABLE WARNINGS	312.00	SQFT		$	
0900	23274EN11F		TURF REINFORCEMENT MAT 1	3,902.00	SQYD		$	
0910	24261EC		ISLAND CURB AND GUTTER(MODIFIED)	42.00	LF		$	
0920	24386EC		PAVE MARKING THERMO-BIKE LANE ARROW	2.00	EACH		$	
0930	24679ED		PAVE MARK THERMO CHEVRON	837.00	SQFT		$	
0940	24768EC		LANE SEPARATOR CURB	167.00	LF		$	
0950	24889EC		PAVE MARKING-THERMO U-TURN	54.00	EACH		$	
0960	26192EC		PAVE MARKING-THERMO SHARED LANE MARKING	4.00	EACH		$	
0970	26228EC		ELECTRONIC DELIVERY MGMT SYSTEM (FAYETTE KY 418 FD05)	1.00	LS		$	
0980	26228EC		ELECTRONIC DELIVERY MGMT SYSTEM (FAYETTE US 25 FD05)	1.00	LS		$	
0990	26228EC		ELECTRONIC DELIVERY MGMT SYSTEM (FAYETTE US 25/KY 418 HSIP)	1.00	LS		$	
1000	26228EC		ELECTRONIC DELIVERY MGMT SYSTEM (HSIP-VRU SHARED USE PATH)	1.00	LS		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1010	00440		ENTRANCE PIPE-15 IN	196.00	LF		$	
1020	00461		CULVERT PIPE-15 IN	54.00	LF		$	
1030	00462		CULVERT PIPE-18 IN	95.00	LF		$	
1040	00464		CULVERT PIPE-24 IN	8.00	LF		$	
1050	00468		CULVERT PIPE-36 IN	8.00	LF		$	
1060	00469		CULVERT PIPE-42 IN	38.00	LF		$	
1070	00521		STORM SEWER PIPE-15 IN	2,405.00	LF		$	
1080	00522		STORM SEWER PIPE-18 IN	226.00	LF		$	
1090	00526		STORM SEWER PIPE-30 IN	8.00	LF		$	
1100	01202		PIPE CULVERT HEADWALL-15 IN	1.00	EACH		$	
1110	01214		PIPE CULVERT HEADWALL-42 IN	2.00	EACH		$	
1120	01310		REMOVE PIPE	117.00	LF		$	
1130	01432		SLOPED BOX OUTLET TYPE 1-15 IN	4.00	EACH		$	
1140	01433		SLOPED BOX OUTLET TYPE 1-18 IN	1.00	EACH		$	
1150	01440		SLOPED BOX INLET-OUTLET TYPE 1	2.00	EACH		$	
1160	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		$	
1170	01456		CURB BOX INLET TYPE A	3.00	EACH		$	

254301

PROPOSAL BID ITEMS

Report Date 5/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1180	01505		DROP BOX INLET TYPE 5B	5.00	EACH		$	
1190	01511		DROP BOX INLET TYPE 5D	3.00	EACH		$	
1200	01517		DROP BOX INLET TYPE 5F	3.00	EACH		$	
1210	01559		DROP BOX INLET TYPE 13G	5.00	EACH		$	
1220	01756		MANHOLE TYPE A	1.00	EACH		$	
1230	01767		MANHOLE TYPE C	2.00	EACH		$	
1240	23952EC		DRAINAGE JUNCTION BOX TY B	4.00	EACH		$	
1250	24575ES610		HEADWALL (DBL PIPE CULVERT HEADWALL 36" MOD)	1.00	EACH		$	
1260	24814EC		PIPELINE INSPECTION	2,648.00	LF		$	
1270	26131ED		SLOPED AND MITERED HEADWALL-18 IN	3.00	EACH		$	

Section: 0004 - SANITARY SEWER

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1280	15021		S ENCASEMENT STEEL OPEN CUT RANGE 2	200.00	LF		$	
1290	15026		S FORCE MAIN AIR RLS/VAC VLV 02 IN	1.00	EACH		$	
1300	15062		S FORCE MAIN PVC 10 INCH	500.00	LF		$	
1310	15076		S FORCE MAIN TIE-IN 10 INCH	2.00	EACH		$	
1320	15122		S STRUCTURE REMOVAL	1.00	EACH		$	

Section: 0005 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1330	06406		SBM ALUM SHEET SIGNS .080 IN	2,307.00	SQFT		$	
1340	06407		SBM ALUM SHEET SIGNS .125 IN	1,236.00	SQFT		$	
1350	06410		STEEL POST TYPE 1	3,992.00	LF		$	
1360	06490		CLASS A CONCRETE FOR SIGNS	9.50	CUYD		$	
1370	21596ND		GMSS TYPE D	38.00	EACH		$	
1380	21596ND		GMSS TYPE D (SURFACE MOUNT)	19.00	EACH		$	
1390	24631EC		BARCODE SIGN INVENTORY	514.00	EACH		$	

Section: 0006 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1400	04740		POLE BASE	15.00	EACH		$	
1410	04780		FUSED CONNECTOR KIT	123.00	EACH		$	
1420	04795		CONDUIT-2 IN	200.00	LF		$	
1430	04820		TRENCHING AND BACKFILLING	12,842.00	LF		$	
1440	04821		OPEN CUT ROADWAY	3,396.00	LF		$	
1450	04835		WIRE-NO. 4	800.00	LF		$	
1460	04841		CABLE-NO. 14/2C	4,317.00	LF		$	
1470	04845		CABLE-NO. 14/7C	14,045.00	LF		$	
1480	04881		MAST ARM POLE	14.00	EACH		$	
1490	04884		ANCHOR	10.00	EACH		$	

254301

PROPOSAL BID ITEMS

Report Date 5/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1500	04886		MESSENGER-15400 LB	600.00	LF		$	
1510	04927		COORDINATING UNIT	2.00	EACH		$	
1520	04932		INSTALL STEEL STRAIN POLE	4.00	EACH		$	
1530	04933		TEMP SIGNAL 2 PHASE	5.00	EACH		$	
1540	04934		TEMP SIGNAL MULTI PHASE	3.00	EACH		$	
1550	04953		TEMP RELOCATION OF SIGNAL HEAD	126.00	EACH		$	
1560	06472		INSTALL SPAN MOUNTED SIGN	1.00	EACH		$	
1570	20093NS835		INSTALL PEDESTRIAN HEAD-LED	32.00	EACH		$	
1580	20188NS835		INSTALL LED SIGNAL-3 SECTION	53.00	EACH		$	
1590	20266ES835		INSTALL LED SIGNAL- 4 SECTION	34.00	EACH		$	
1600	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	17.00	EACH		$	
1610	20392NS835		ELECTRICAL JUNCTION BOX TYPE C	39.00	EACH		$	
1620	20457NS835		INSTALL PED DETECTOR-AUDIBLE	28.00	EACH		$	
1630	21077ED		FIBER OPTIC CABLE	10,107.00	LF		$	
1640	21543EN		BORE AND JACK CONDUIT	7,277.00	LF		$	
1650	22403NN		WEB CAMERA ASSEMBLY	4.00	EACH		$	
1660	22939ND		INSTALL LUMINAIRE POLE	16.00	EACH		$	
1670	23157EN		TRAFFIC SIGNAL POLE BASE	63.00	CUYD		$	
1680	23222EC		INSTALL SIGNAL PEDESTAL	12.00	EACH		$	
1690	24121EC		HDPE CONDUIT-2 IN-SCHEDULE 80	18,880.00	LF		$	
1700	24908EC		INSTALL SIGNAL CONTROLLER-TY ATC	12.00	EACH		$	
1710	24923EC		CABINET FIBER TERMINATION PANEL	12.00	EACH		$	
1720	24955ED		REMOVE SIGNAL EQUIPMENT	4.00	EACH		$	
1730	26119EC		INSTALL RADAR PRESENCE DETECTOR TYPE A	26.00	EACH		$	
1740	26120EC		INSTALL RADAR ADVANCE DETECTOR TYPE B	13.00	EACH		$	
1750	26169EC		INSTALL MAST ARM DAMPENER	19.00	EACH		$	

Section: 0007 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1760	04740		POLE BASE	34.00	EACH		$	
1770	04820		TRENCHING AND BACKFILLING	8,482.00	LF		$	
1780	04821		OPEN CUT ROADWAY	842.00	LF		$	
1790	04940		REMOVE LIGHTING (FAYETTE US 25/KY 418 HSIP)	1.00	LS		$	
1800	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	10.00	EACH		$	
1810	21543EN		BORE AND JACK CONDUIT	842.00	LF		$	
1820	24900EC		PVC CONDUIT-1 1/4 IN-SCHEDULE 80	6,920.00	LF		$	
1830	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	2,404.00	LF		$	

Section: 0008 - GUARDRAIL

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1840	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	22.00	EACH		$	
1850	02351		GUARDRAIL-STEEL W BEAM-S FACE	2,037.50	LF		$	

PROPOSAL BID ITEMS

254301

Report Date 5/1/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1860	02360		GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH		$	
1870	02367		GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		$	
1880	02369		GUARDRAIL END TREATMENT TYPE 2A	3.00	EACH		$	
1890	02381		REMOVE GUARDRAIL	2,794.00	LF		$	
1900	02391		GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH		$	

Section: 0009 - MOBILIZATION AND DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1910	02568		MOBILIZATION	1.00	LS		$	
1920	02569		DEMOBILIZATION	1.00	LS		$	