CALL NO. 201

CONTRACT ID. 254404

HARDIN COUNTY

FED/STATE PROJECT NUMBER 047GR25T011-HSIP

DESCRIPTION S. MULBERRY STREET (US 62)

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 11/1/2025

LETTING DATE: June 26,2025

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME June 26,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DBE CERTIFICATION REQUIRED - 0%

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
- SURFACING AREAS
- ASPHALT MIXTURE
- DGA BASE
- ASPHALT PAVEMENT RIDE QUALITY CAT B
- COMPACTION OPTION B
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- LIQUIDATED DAMAGES
- WASTE AND BORROW SITES
- ELECTRONIC DELIVERY MANAGEMENT SYSTEM (E-TICKETING) ASPHALT
- ELECTRONIC DELIVERY MANAGEMENT SYSTEM (E-TICKETING) AGGREGATE
- MANHOLE ADJUSTMENTS
- COORDINATION OF WORK WITH OTHER CONTRACTS
- EDGE KEY (BY LINEAR FEET)
- ASPHALT MILLING AND TEXTURING
- TYPICAL SECTION DIMENSIONS
- SIDEWALK RAMPS & DETECTABLE WARNINGS
- TRAFFIC CONTROL PLAN
- DURABLE PAVEMENT EDGE DETAILS
- SPRAY APPLIED THERMOPLASTIC PAVEMENT MARKING MATERIALS
- RIGHT OF WAY CERTIFICATION
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- KPDES STORM WATER PERMIT, BMP AND ENOI
- MATERIAL SUMMARY
- DETAIL SHEET(S)

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-1I] PORTABLE CHANGEABLE MESSAGE SIGNS
- [SN-11M] BARCODE LABEL ON PERMANENT SIGNS
- 2020 STANDARD DRAWINGS THAT APPLY
- SECURITY PLATE ASSEMBLY
- SILT TRAP TYPE C
- RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS
- SIDEWALK 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 - 04

CONTRACT ID - 254404

047GR25T011-HSIP

COUNTY - HARDIN

PCN - 0404700622503
HSIP 7860(010)

S. MULBERRY STREET (US 62) (MP 17.145) FROM 0.27 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO 0.18 NORTHEAST OF US 31 WB (MP 17.598), A DISTANCE OF 0.45 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 04-00954.00.

GEOGRAPHIC COORDINATES LATITUDE 37:41:19.00 LONGITUDE 85:52:01.00

ADT 15,125

PCN - 0404700622504
HSIP VRU 7860(010)

S. MULBERRY STREET (US 62) (MP 17.145) FROM 0.27 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO 0.18 MILE NORTHEAST OF US 31WB (MP 17.598), A DISTANCE OF 0.45 MILES.SIDEWALK CONSTRUCTION SYP NO. 04-00954.00.

GEOGRAPHIC COORDINATES LATITUDE 37:41:19.00 LONGITUDE 85:52:01.00

ADT 15,125

PCN - 0404700622505
HSIP 7860 (011)

S. MULBERRY STREET (US 62) (MP 17.200) FROM 0.22 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO CS 1418 (MP 18.999), A DISTANCE OF 01.80 MILES.ASPHALT RESURFACING SYP NO. 04-00956.00.

GEOGRAPHIC COORDINATES LATITUDE 37:41:51.33 LONGITUDE 85:51:21.98

ADT 12,500

COMPLETION DATE(S):

COMPLETED BY 11/01/2025 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 05/05/2025

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.

3.0 FINAL RULE – FHWA'S BUY AMERICA REGULATION TO TERMINATE GENERAL APPLICABILITY WAIVER FOR MANUFACTURED PRODUCTS

- **March 17, 2025** (effective date): For all Federal-aid projects obligated on or after March 15, 2025, all iron or steel products, as defined in § 635.410(c)(1)(iii), must comply with FHWA's Buy America requirements for steel and iron in § 635.410(b). In addition, for all Federal-aid projects obligated on or after March 15, 2025, per § 635.410(c)(2), articles, materials, and supplies should be classified as an iron or steel product, a manufactured product, or another product as specified by law or in 2 CFR part 184 (such other products specified by law or in 2 CFR part 184 include "excluded materials" and "construction materials"); an article, material, or supply must not be considered to fall into multiple categories.
- **October 1, 2025:** The final assembly requirement will become effective for Federal-aid projects obligated on or after October 1, 2025. This means that, for manufactured product to be Buy America compliant, for Federal-aid projects obligated on or after October 1, 2025, final assembly of the manufactured product must occur in the United States.
- **October 1, 2026:** The 55 percent requirement will become effective for Federal-aid projects obligated on or after October 1, 2026. This means that, for manufactured product to be Buy America-compliant, for Federal-aid projects obligated on or after October 1, 2026, all manufactured products permanently incorporated into the project must both be manufactured in the United States (satisfy the final assembly requirement) and have the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States be greater than 55 percent of the total cost of all components of the manufactured product (satisfy the 55 percent requirement).

4.0 – ADDITIONAL REQUIREMENTS

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's 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.

SURFACING AREAS

For Item No. 4-956.00, the Department estimates the total mainline area to be surfaced to be 36,073 square yards at a depth of 5/8".

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.

ASPHALT PAVEMENT RIDE QUALITY CATEGORY B

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

OPTION B

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

Special Notes Applicable to 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

Item No. 4-954.00:

US31W Bypass

The contractor is advised that the planned locations of work were established from a beginning Station 997+30 which is Milepoint 0.954 along US 31W Bypass and ends at Station 1010+01 which is Milepoint 1.194.

US 62

The contractor is advised that the planned locations of work were established from a beginning Station 496+06 which is Milepoint 17.145 along US 62 and ends at Station 519+98 which is Milepoint 17.598.

Item No. 4-956.00:

The contractor is advised that the planned locations of work were established from a beginning station number, which is STA 516+75.00 at the entrance of Dairy Queen on US 62 and corresponds to Milepoint 17.574 along US 62.

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

Survey/LIDAR

Item No. 4-954.00:

Field survey was conducted via GPS and connected to the control points supplied in the plans of this proposal. Supplemental information was collected via Statewide LiDAR and 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.

Item No. 4-956.00:

All survey information was collected via Drone Aerial Photogrammetry and 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.

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:

Item No. 4-954.00

US 31W Bypass

Pavement Resurfacing. The existing roadway is to be milled and resurfaced from Station 997+30 to Station 1010+01. Other items that may be associated with the pavement resurfacing include: removal of existing pavement by milling and texturing, construction of edge keys, and application of pavement markings.

US 62

Roundabout Construction. (2) roundabouts are to be constructed on US 62 at the termini of the US 31W Bypass ramps at approximate Station 505+18 and Station 514+97. This work includes milling and texturing of pavement, leveling and wedging, edge keys, longitudinal edge keys, pavement markings, curb and gutter, concrete medians, storm sewer, as well as supportive erosion control. Sheets included in Item

No. 4-954.00 are to be used for constructing the roundabouts. Supplemental information will be provided for the "plans" in full size format.

Pavement Resurfacing. The existing roadway is to be resurfaced from Station 496+06 to Station 519+38. Other items that may be associated with the pavement resurfacing include: removal of existing pavement by milling and texturing, construction of edge keys, tying in adjacent entrances, and application of pavement markings.

Removal of Existing Signing Assemblies and Installation of Proposed Signing. All signing work including removal of existing and installation of proposed to be implemented as indicated in 4-954.00. Sign removal shall be incidental to the Roadway Excavation bid item. All signs within the projects limits to be removed at time of replacement unless otherwise specified. Contact the District Traffic Engineer one week prior to beginning placement of permanent signage.

Temporary Striping. A quantity of Pave Striping – Temp Paint – 6 in has been included in 4-954.00 for US 31W Bypass STA 1002+01 –STA 1010+01. A quantity of Pave Striping – Temp Paint – 6 in has been included in the contract for US 62 STA 496+06 –STA 519+98. 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.

Permanent Striping and Pavement Markings. Quantities have been included in the contract for all permanent pavement markings.

Concrete Islands/Barrier. Details sheets are provided in 4-954.00 to indicate the material type and details including stamping/color. See 4-954.00 sheets R003, R004, and R009.

Sidewalk. A connection to an existing sidewalk is to be constructed on the east end of the project along US 62. The sidewalk is to be constructed as shown on 4-954.00 sheet R004.

Shared Use Path. A shared use path (asphalt) is to be constructed from the entrance of the "Pritchard Community Center" to near the existing Right of Way line at the Southbound US 31W Bypass ramp. The exact location can be seen on 4-954.00 sheet R003.

Lighting. The contractor's lighting scope will include items located in the traffic detail sheets and/or in the General Summary. The contractor will be required to coordinate with KYTC and KU for lighting scope of work.

Item No. 4-956.00

Pavement Resurfacing. The existing roadway is to be resurfaced from Station 516+75 to Station 589+50. Other items that may be associated with the pavement resurfacing include: removal of existing pavement by milling and texturing, construction of edge keys, and application of pavement markings.

Removal of Existing Signing Assemblies and Installation of Proposed Signing. All signing work including removal of existing and installation of proposed to be performed by KYTC D4 staff.

Temporary Striping. A quantity of Pave Striping – Temp Paint – 6 in has been included in Item No. 4-956.00 for MP 17.574 (STA 516+75) – MP 18.952 (STA 589+50). 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.

Permanent Striping & Pavement Markings. Quantities have been included in Item No. 4-956.00 for all pavement markings including bicycle facilities.

Concrete Islands/Barrier. Details are included on 4-956.00 sheets R33 – R35 for construction of concrete islands and the raised bike lane barrier.

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.

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 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 most current version of the Standard Specifications for Road and Bridge Construction.

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 Cored Hole Drainage Box Connector

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. Section references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Contractor staking; (2) Site preparation; (3) Core drill a hole in the side of an existing small drainage structure to connect the outlet end of a proposed pipe, instead of constructing an outlet headwall; (4) Maintain and Control Traffic; and (5) all other work specified as part of 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 the Traffic Control Plan.

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

C. Non-Shrink Grout. Conform to Subsection 601.03.03 (B).

D. Asphalt Mastic Joint Sealing Compound. Conform to Section 807.

E. Pipe. Conform to Subsection 704.02. Furnish the same type and size as the underdrain pipe. **Culvert Pipe**. Furnish the same type and size as the existing culvert pipe being connected to the existing small drainage structure. 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.

F. Flowable Fill. Furnish Flowable Fill for Pipe Backfill per Section 601.03.03(B).

G. Styrofoam Backer Rod. Obtain the Engineer’s approval.

III. CONSTRUCTION.

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

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

C. Site Preparation. Be responsible for all Site Preparation, including but not limited to removing pavement; roadway excavation and structure excavation; removal of obstructions or any other items; embankment and embankment in place; ditching, shouldering, roadside regrading, reshaping, and compacting backfill material; cleaning drainage structures; obtaining borrow and waste sites; disposal of materials, waste, and debris; and restoration, cleanup, and final dressing

D. Core Hole Drainage Box. Cut hole by core drilling into existing drainage structure at the location, or locations, specified in the Contract or where the Engineer directs, without damaging the existing structure. Cut holes of a diameter equal to the outside diameter of the proposed pipe with a tolerance of plus 1/2 inch. Place 2 styrofoam backer rods on the pipe near each wall face and seal the opening around the pipe with mastic material or a non-shrink grout. Use wyes, tees, and ells in the pipe system to reduce the number of holes to be drilled. Patch all damage to the existing wall in the coring operation with non-shrink grout. Apply non-shrink grout according to Subsection 601.03.

IV. MEASUREMENT. The Department will measure the quantity by each individual unit. The Department will not measure pipe, wyes, tees, ells, styrofoam backer rods, or repair of damage to existing wall for payment and will consider them incidental to this item of work.

V. PAYMENT. The Department will make payment for the completed and accepted quantities under the bid item CORED HOLE DRAINAGE BOX CON (Size). The Department will consider payment as full compensation for all work required.

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 NOT 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 Qwick Curb Median Separator

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 Qwick Kurb® brand lane separator curb; 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. Lane Separator Curb. Furnish Qwick Kurb® brand lane separator curb guidance system that includes modular longitudinal curb sections, transition end sections, and upright delineator posts/panels. The longitudinal units of the system shall interface with each other to form a continuous longitudinal channelizing system. The design of the system shall allow a radius or curve as needed by roadway geometry. 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.

1. **Longitudinal Units.** The longitudinal units shall have a mountable design to allow for emergency vehicle crossovers. The longitudinal units shall be designed to allow for cross drainage under the units. Individual units of the system shall have a minimum length of 40 inches, maximum height of 4 inches and maximum width of 12 inches. The longitudinal base shall include retroreflective markings to match the system color. At least one upright post is required for each longitudinal curb unit.

2. **Upright Posts.** Upright posts shall be a minimum of 26 inches in height and a minimum of 2 inches in width. Upright posts are to be uniformly spaced at intervals no greater than 44 inches along the system. Post color should match the longitudinal curb unit and adjacent pavement marking color. Each post shall have retroreflective markings of color matching the post, longitudinal system, 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.

Qwick Curb Median Separator
Page 2 of 2

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 site preparation only as approved or directed by the Engineer.

C. Lane Separator Curb. Assemble and fasten the lane separator curb system to the underlying pavement or bridge deck according to the manufacturer's recommendations.

D. 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.

E. 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. 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. Lane Separator Curb. The Department will measure Qwick Kurb® brand lane separator curb in Linear Feet.

V. BASIS OF PAYMENT

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

B. Lane Separator Curb. The Department will make payment for the completed and accepted quantities under the bid item "Qwick Curb Median Separator." Payment at the Contract unit price per linear foot shall be full compensation for furnishing all materials, equipment, tools, hardware, labor, and incidentals necessary to properly install the Qwick Kurb® brand lane separator curb 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

Item No. 4-954.00:
The ultimate fixed completion date for this project will be November 1, 2025. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09.

Item No. 4-956.00:
The Contractor shall not begin work on this project prior to September 15, 2025. The ultimate fixed completion date for this project will be November 1, 2025. 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 ramp closures 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.

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 ELECTRONIC DELIVERY MANAGEMENT SYSTEM (e-Ticketing) ASPHALT

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 not measure the electronic delivery management system.

5.0 PAYMENT. The Department will not measure this work for payment and will consider all items contained in this note to be incidental to the asphalt mixtures on the project, as applicable.

May 5, 2025

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

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 aggregate material delivered to the project to report loads and provide daily running totals of weighed aggregate 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. Aggregate 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
- Load 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
26248EC	ELECTRONIC DELIVERY MGMT SYSTEM-AGG	LS

May 5, 2025

SPECIAL NOTE FOR MANHOLE ADJUSTMENTS

The City of Elizabethtown is responsible for manhole adjustments. Notify the Engineer a minimum of 30 calendar days prior to beginning any work on the project. Unless directed otherwise by the Engineer, do not begin resurfacing, concrete work, or placing embankment around manholes until the manhole adjustments are completed by the City of Elizabethtown. The Engineer will coordinate the work between the Contractor and City of Elizabethtown.

COORDINATION OF WORK WITH OTHER CONTRACTS

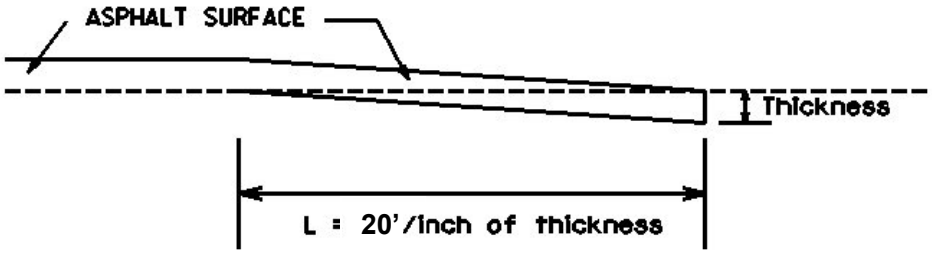
Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR EDGE KEY

Construct Edge Keys at the beginning of project, end of project, at railroad crossings, and at intersections with ramps, as applicable. Unless specified in the Contract or directed by the Engineer, do not construct edge keys at intersecting streets, roads, alleys, or entrances. Cut out the existing asphalt surface to the required depth and width shown on the drawing and heel the new surface into the existing surface. The Department will measure the Edge Key at the joint as the width of the pavement perpendicular to the centerline in linear feet. The Department will pay for this work at the Contract unit price per linear foot, which shall be full compensation for all labor, materials, equipment, and incidentals for removal and disposal of the existing asphalt surface required to construct the edge key.

EDGE KEY



Item No. 4-954.00:

Thickness = 1.5 Inches

L = 30 LF

L = Length of Edge Key

Item No. 4-956.00:

Thickness = 5/8 Inch

L = 12.5 LF

L = Length of Edge Key

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.

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver this material to the State Maintenance facility in Hardin County at 310 Valley Creek Road Elizabethtown, KY.

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

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. Sidewalk ramps shall be incidental to detectable warnings bid item.

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

Item No. 4-954.00 - MAINTENANCE OF TRAFFIC PHASING

Maintenance of traffic shall be conducted as shown on Item No. 4-954.00, sheets R026 – R040. The Contractor may deviate from these plans given the Engineer's approval.

Phase I
Changeable message signs to be positioned on US 31W Bypass and US 62 per Engineer's approval. Detour signage to be installed along detour routes. Barricades to be placed at Southbound US 31W Bypass Ramp to prevent vehicles from entering off-ramp. Contractor to place barrels/cones and temporary striping as indicated on 4-954.00 sheets R026 – R028. Construct areas indicated on Maintenance of Traffic plans.

Phase II
Remove barricades from Southbound US 31W Bypass Ramp and place at Northbound US 31W Bypass Ramp to close it to traffic. Contractor to place barrels/cones and temporary striping as indicated on 4-954.00 sheets R029 – R032. Construct areas indicated on 4-954.00 Maintenance of Traffic plans.

Phase III
Remove barricades from Northbound US 31W Bypass Ramp. Both US 31W Ramps to remain open through construction. Contractor to place barrels/cones and temporary striping as indicated on 4-954.00 sheets R033 – R035. Construct areas indicated on 4-954.00 Maintenance of Traffic plans.

Phase IV
Contractor to place barrels/cones and temporary striping as indicated on 4-954.00 sheets R036 – R038. Construct areas indicated on 4-954.00 Maintenance of Traffic plans.

Item No. 4-954.00 and 4-956.00 - MAINTENANCE OF TRAFFIC

Maintain one lane of traffic in each direction at all times during construction and provide a minimum clear lane width of 10 feet. At locations with one lane, such as at exit and entrance ramps, a partial lane closure is permitted during construction, as long as a minimum clear lane width of 10 is maintained. NOTE: During any lane closure or partial lane, make provisions for the 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.

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

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.

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

Independence Day	7 am Thursday, July 3, 2025 – 11 pm Sunday, July 6, 2025
Heartland Homecoming	7 am Friday, August 23, 2025 – 11 pm Sunday, August 25, 2025
Labor Day	7 am Friday, August 29, 2025 – 11 pm Monday, September 1, 2025

A minimum of one-lane two-way traffic shall be maintained during the following days and/or hours:

Normal Workday Rush Hours
Monday-Friday 7:00 AM – 9:00 AM, and 3:00 PM – 5:00 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.

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

The Contractor shall be required to remove all long-term lane closures after four consecutive calendar days of inactivity on the project, unless approved otherwise by the Engineer. Once notified by the Engineer that a long-term lane closure must be removed due to inactivity, the Contractor shall have 12 hours to remove the long-term lane closure; otherwise, liquidated damages of $1,000 per hour or any fraction of an hour shall apply. The Department will not make any payment to the Contractor for the removal or the reinstallation of a long-term

lane closure other than the initial payment of the initial lane closure installation. If the Contractor is required to remove a long-term lane closure, the roadway must be returned to a condition that satisfies the Pavement Edge Drop-Off requirements noted below.

TRUCK MOUNTED ATTENUATORS

When a traffic lane (or lanes) is closed along a roadway with two or more lanes in one direction of travel and a temporary barrier wall is not in place to protect the work zone, use a Truck Mounted Attenuator (TMA). Furnish and install a TMA in advance of a work area when workers will be within 20 feet from traffic. If there is less than 500 feet between nearby work areas, only a single TMA will be required. The TMAs shall be located at the individual work areas and shall be moved as the work zone moves within the project limits. All details of the TMA installations are to follow manufacture recommendations and/or as directed by the Engineer.

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. For Item No. 4-954.00, a quantity of barricades has been provided to close the US 31W ramps during construction phasing.

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

THERMOPLASTIC INTERSECTION MARKINGS

Place markings as shown on the plan sheets.

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

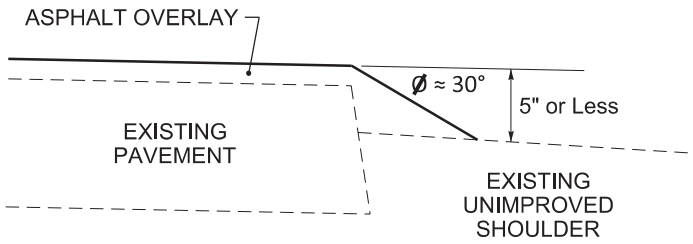
Traffic Control Plan
Page 10 of 10

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	

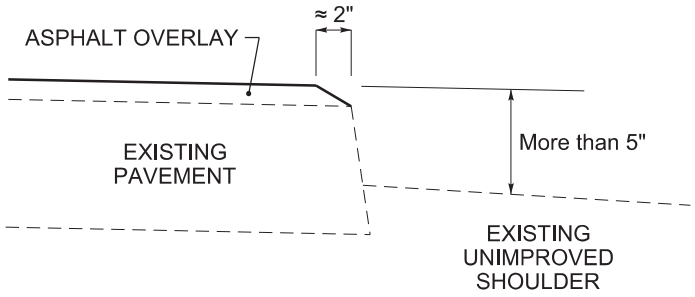
DURABLE PAVEMENT EDGE DETAIL

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



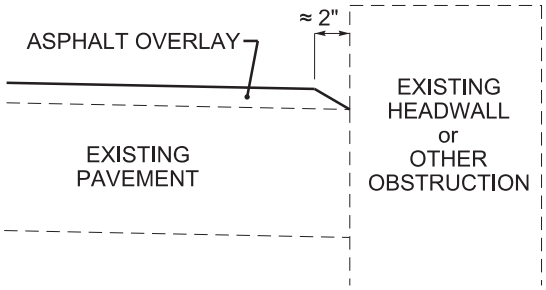
DURABLE PAVEMENT EDGE DETAIL

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



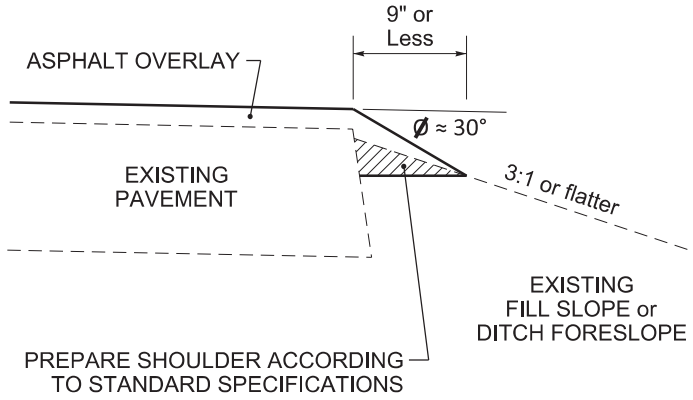
DURABLE PAVEMENT EDGE DETAIL

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



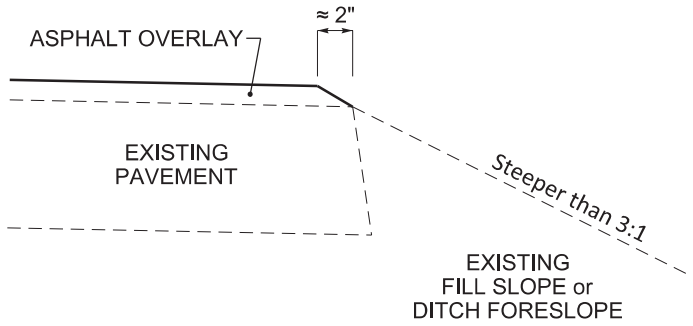
DURABLE PAVEMENT EDGE DETAIL

(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

SPECIAL NOTE FOR SPRAY APPLIED THERMOPLASTIC PAVEMENT MARKING MATERIALS

I. DESCRIPTION

Except as provided herein, all work shall be performed in accordance with the Department's Standard Specifications, Interim Supplemental Specifications, applicable Standard and Sepia Drawings, applicable Special Provisions and Special Notes, 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) Spray applied thermoplastic pavement marking materials with reflectorized glass beads for permanent applications

II. MATERIALS

A. DROP ON BEADS. Use beads that will ensure the pavement marking material will meet retroreflectivity requirements. The Department will evaluate the beads as part of the marking system through retroreflectivity readings.

B. APPROVAL. Select materials that conform to the composition and physical characteristic requirements below when evaluated in accordance with AASHTO T-250 or other test methods as cited. The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material from the date sampled.

C. Composition. Use a maleic-modified glycerol ester resin (alkyd binder) to formulate the thermoplastic material. Ensure the pigment, pre-mix beads, and filler are uniformly dispersed in the resin. Use material that is free from all dirt and foreign material. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content.

COMPOSITION (Percentage by Weight)		
Component	White	Yellow
Binder, [(1)]	26.0 min.	26.0 min.
Glass Beads (Premixed)	30 - 40	30 - 40
Titanium Dioxide (Rutile, Type II)	10.0 min.	—
Calcium Carbonate & Inert Fillers [(2)]	42.0 max.	50.0 max.
Heavy Metals Content	Comply with 40 CFR 261	Comply with 40 CFR 261

[(1)]Use a binder that consists of a mixture of synthetic resins, at least one being solid at room temperature, and high boiling point plasticizers. Ensure that at least one-third of the binder composition is solid maleic-modified glycerol ester resin and is not less than 8 percent by weight of the entire material formulation. Do not use alkyd binder that contains petroleum based hydrocarbon resins.

[(2)]The manufacturer may choose the amount of calcium carbonate and inert fillers, providing all other requirements of this section are met.

D. Physical Characteristics. For thermoplastic material heated for 4 hours at 425ºF under agitation, conform to the following requirements.

a) Color. As determined with a spectrophotometer using D65 illuminant with a 45 degree entrance angle and 0 degree observation angle geometry.

CIELAB Color Coordinates		
	Yellow	White
Daytime Color (CIELAB) Spectrophotometer using illuminant D65 at 45º illumination and 0º viewing with a 2º observer	L* 81.76 a* 19.79 b* 89.89 Maximum allowable variation 6.0ΔE*	L* 93.51 a* -1.01 b* 0.70 Maximum allowable variation 6.0ΔE*
Nighttime Color (CIELAB) Spectrophotometer using illuminant A at 45º illumination and 0º viewing with a 2º observer	L* 86.90 a* 24.80 b* 95.45 Maximum allowable variation 6.0ΔE*	L* 93.45 a* -0.79 b* 0.43 Maximum allowable variation 6.0ΔE*

b) Set Time. Use material that, when applied at a temperature range of 375 ± 25 ºF and thickness of 60 ± 10 mils, sets to bear traffic in not more than 2 minutes when the air and road surface temperature is approximately ≥ 50 ± 3 ºF, and not more than 10 minutes when the air and road surface temperature is approximately < 50 ± 3 ºF.

c) Softening Point. Ensure that the thermoplastic material has a softening point of 180 ± 15 ºF.

d) Bond Strength. Ensure that the bond strength of the thermoplastic material to concrete exceeds 180 psi.

e) Cracking Resistance at Low Temperature. Ensure that the thermoplastic material shows no cracks when observed from a distance exceeding one foot.

f) Impact Resistance. Ensure the impact resistance of the thermoplastic material is a minimum of 50 inch-pounds.

g) Flash Point. Use thermoplastic material that has a flash point not less than 475 °F.

E. PACKAGING. Package thermoplastic material in suitable 50 pound containers to which the material shall not adhere during shipment or storage. Include a label stating that the thermoplastic material is to be maintained with a temperature range of 350 – 400ºF during application. Provide the thermoplastic material in granular form.

F. SHELF LIFE. Ensure that the thermoplastic material conforms to this section for a period of one year. Replace any thermoplastic material not conforming to the above requirements.

G. MANUFACTURER'S TESTING. Perform testing in accordance with AASHTO T-250 on a minimum of one composite sample per 10,000 pounds, or portion thereof, per lot of thermoplastic produced.

H. CERTIFICATION. Submit manufacturer's certification stating conformance to the requirements of this section for each lot of extruded thermoplastic delivered for use on projects. Clearly state the manufacture, formulation identification, product name, color, date of manufacturer, total quantity of lot produced, actual quantity of thermoplastic material represented, sampling method utilized to obtain the samples, and required manufacturer's testing data for each composite sample tested to represent each lot produced.

III. CONSTRUCTION METHODS

A. SURFACE PREPARATION. The contractor will be required to sweep all pavement surfaces prior to striping and maintain the cleaning operation far enough in advance of the striping operation to prevent any dust from the cleaning operation from mixing with the paint. The sweeper must maintain contact with the roadway. When the Engineer determines abnormal amounts of debris or other material have accumulated beyond the capability of the required sweeping unit which will require shoveling or other means to remove, the Engineer will make arrangements, prior to painting, to have the material removed by the Department.

B. INSTALLATION. Install thermoplastic materials in accordance with Section 714, Durable Pavement Striping, and the following exceptions:

- Install the thermoplastic materials at a minimum thickness of 60 mils.
- Ensure the material temperature is maintained between 350 and 400°F.
- Do not allow the material temperature to exceed 400°F.
- Removal of existing stripe on asphalt surfaces is not required.

C. RETROREFLECTIVITY. The Department will evaluate installed markings in accordance with Section 714.03.06, Proving Period for Durable Markings.

IV. METHOD OF MEASUREMENT

A. ACCEPTANCE AND PAYMENT. The Department will accept spray applied thermoplastic materials based on compliance of the manufacturer's certification and conformance of test results obtained by the Department to the requirements of this special note.

Contrary to Section 714.03.08, Acceptance of Non-Specification Thermoplastic Markings, the Department will not accept non-specification compliant markings. Remove non-specification compliant markings by water blasting. The Department will perform random thickness tests on applied markings to determine compliance to thickness requirements

IV. BASIS OF PAYMENT

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

Code	Pay Item	Pay Unit
24995EC	PAVE STRIPING-SPRAY THERMO-6 IN W	LF
24996EC	PAVE STRIPING-SPRAY THERMO-6 IN Y	LF

The Department will consider payment as full compensation for furnishing all labor, materials, equipment, and incidentals required to construct spray applied thermoplastic pavement markings.

Revised: 1/14/2021

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)**
4-954.00	Hardin	FD52 047 0062 017-018	HSIP 7860 (010)
PROJECT DESCRIPTION			

Convert intersections of US 31WB ramps at US 62 to roundabouts.

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

Notes/ Comments (Use Additional Sheet if necessary)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Michael H. Price
Signature		Signature	Michael H Price
Date		Date	4/11/25
Right of Way Director		**FHWA**	
Printed Name		Printed Name	
Signature	Kelly R. Divine Digitally signed by Kelly Divine Date: 2025.04.11 15:25:29 -05'00'	Signature	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Date		Date	

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)**
4-956.00	Hardin	FD52 047 0062 017-019	HSIP 7860 (011)
PROJECT DESCRIPTION			

Roadway reconfiguration and construction of bike/ped facilities on US 62 from milepoint 17.2 to milepoint 18.999

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

Notes/ Comments (Use Additional Sheet if necessary)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Michael H. Price
Signature		Signature	Michael H Price
Date		Date	4/11/25
Right of Way Director		**FHWA**	
Printed Name		Printed Name	
Signature	Kelly R. Divine Digitally signed by Kelly Divine Date: 2025.04.11 15:27:12 -05'00'	Signature	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Date		Date	

UTILITIES AND RAIL CERTIFICATION NOTE

Hardin County Item No. 4-954.00 - HSIP 7860(010) - FD52 047 0062 017-018
Convert intersections of US 31WB ramps at US 62 to roundabouts.
and
Hardin County Item No. 4-956.00 - HSIP 7860(011) - FD52 047 0062 017-019
Roadway Reconfiguration and Construction of Bike/Ped Facilities on US62

PROJECT NOTES ON UTILITIES

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.

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

UTILITIES AND RAIL CERTIFICATION NOTE

Hardin County Item No. 4-954.00 - HSIP 7860(010) - FD52 047 0062 017-018
Convert intersections of US 31WB ramps at US 62 to roundabouts.
and
Hardin County Item No. 4-956.00 - HSIP 7860(011) - FD52 047 0062 017-019
Roadway Reconfiguration and Construction of Bike/Ped Facilities on US62

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

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

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

City of Elizabethtown - Sewer
Kentucky Utilities - Electric Distrib
City of Elizabethtown Gas - Natural Gas
Brandenburg Telephone Co. - Telephone
Windstream Holdings II, LLC - Communication
Hardin County Water District #2 - Water
Kentucky Utilities - Electric Trans
Level 3 Communications, LLC - Communication
Comcast Communications - CATV

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

UTILITIES AND RAIL CERTIFICATION NOTE

Hardin County Item No. 4-954.00 - HSIP 7860(010) - FD52 047 0062 017-018
Convert intersections of US 31WB ramps at US 62 to roundabouts.
and
Hardin County Item No. 4-956.00 - HSIP 7860(011) - FD52 047 0062 017-019
Roadway Reconfiguration and Construction of Bike/Ped Facilities on US62

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

Not Applicable

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

Not Applicable

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

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

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

Form Revised 6/24/16

UTILITIES AND RAIL CERTIFICATION NOTE

Hardin County Item No. 4-954.00 - HSIP 7860(010) - FD52 047 0062 017-018
Convert intersections of US 31WB ramps at US 62 to roundabouts.
and
Hardin County Item No. 4-956.00 - HSIP 7860(011) - FD52 047 0062 017-019
Roadway Reconfiguration and Construction of Bike/Ped Facilities on US62

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
Brandenburg Telephone Co. - Telephone	2840 Leitchfield Rd Elizabethtown KY 42702	Kyle Dalton	2709824466	kyle.dalton@brandenburgtel.com
City of Elizabethtown - Sewer	200 West Dixie Ave. Elizabethtown KY 42701	Michael Page	2702680438	michael.page@elizabethtownky.gov
City of Elizabethtown Gas - Natural Gas	200 West Dixie Ave. Elizabethtown KY 42701	Matthew Hobbs	2702682288	matthew.hobbs@elizabethtownky.gov
Comcast Communications - CATV	2919 Ring Rd. Elizabethtown KY 42701	Steve Gaddie	2704011543	stephen_gaddie@comcast.com
CSX Transportation, Inc. - Railroad	4802 Decoursey Pike Taylor Mill KY 41015	Brad Armstrong	5138531221	Brad_Armstrong@CSX.com
Hardin County Water District #2 - Water	1951 West Park Road Elizabethtown KY 42701	Forrest Pollock	2703079744	fpollock@hcwd2.org

Form Revised 6/24/16

UTILITIES AND RAIL CERTIFICATION NOTE

Hardin County Item No. 4-954.00 - HSIP 7860(010) - FD52 047 0062 017-018
Convert intersections of US 31WB ramps at US 62 to roundabouts.
and
Hardin County Item No. 4-956.00 - HSIP 7860(011) - FD52 047 0062 017-019
Roadway Reconfiguration and Construction of Bike/Ped Facilities on US62

Kentucky Utilities - Electric Distrib	820 West Broadway Louisville KY 40202	Caroline Justice	5026273708	caroline.justice@lge-ku.com
Kentucky Utilities - Electric Trans	820 West Broadway Louisville KY 40202	Caroline Justice	5026273708	caroline.justice@lge-ku.com
Level 3 Communications, LLC - Communication	700 West Mineral Ave Littleton CO 80120	Patrick Barkes	8123417335	Patrick.barkes@lumen.com
Windstream Holdings II, LLC - Communication	932 Citation Boulevard Lexington KY 40511	Steve Johnson	8593576209	steve.johnson@windstream.com

Form Revised 6/24/16

KYTC BMP Plan for Project Item # 4-954.00

Kentucky Transportation Cabinet

Highway District 4 (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 62 in Hardin County (1)

Project: Item # 4-954.00

Revised 3/4/2016

KYTC BMP Plan for Project Item # **4-954.00**

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 4 (1)
2. Resident Engineer: (2)
3. Contractor name: (2)
   Address: (2)

   Phone number: (2)
   Contact: (2)
   Contractor's agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number: (2)
5. Route (Address): (1) US 62 – US 31W Bypass
6. Latitude/Longitude (project mid-point): 37.68874, -85.86684 (1)
7. County (project mid-point): (1) Hardin
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project Item # **4-954.00**

A. Site description:

1. Nature of Construction Activity (from letting project description): (1)
2. Order of major soil disturbing activities: (2) and (3)
3. Projected volume of material to be moved: 6195 CY (Cut) & 1821 CY (Fill); *project does not involve significant cut and fill.* (1)
4. Estimate of total project area (acres): (1) 8.5 AC
5. Estimate of area to be disturbed (acres): (1) 2.3 AC
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: (1) Valley Creek
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 Item # **4-954.00**

_____ 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 Item # **4-954.00**

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. 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.

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 Item # **4-954.00**

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

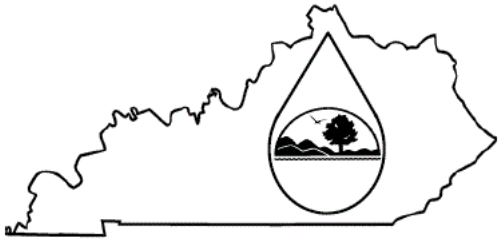
1. Sub-Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner, or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, 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.: 4-954.00
Hardin County
Highway Safety Improvement Project along US 62
from MP 17.145 – 17.598

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: 506103

eForm Transaction ID: 8f16d894-ff41-4542-8701-342cf6322cd3



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:	Permit Number:(✓)
Application for New Permit Coverage	Agency Interest ID	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:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
KYTC District 4	Bradley	MI	Bottoms

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
634 East Dixie Ave	Elizabethtown	Kentucky	42701

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
bradley.bottoms@ky.gov	270-766-5066	___-___-____

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

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)	Status of Owner/Operator(*)	SIC Code(*)
CID 25-XXXXX - SYP 4-954 Convert intersections of US 31WB ramps at US 62 t	State Government	1611 Highway and Street Constr

Company Name:(✓)	First Name:(✓)	M.I.:	Last Name:(✓)
KYTC District 4	Bradley	MI	Bottoms

Site Physical Address:(*)
US 62 @ US31W Bypass

City:(*)	State:(*)	Zip:(*)
Elizabethtown	Kentucky	42701

County:(*)	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal)	Longitude(decimal degrees)(*)
Hardin	37.688740	-85.866840

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)

Convert intersections of US 31WB ramps at US 62 to roundabouts.

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

Yes

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

No

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

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

a. For single projects provide the following information

Total Number of Acres in Project:(✓)	Total Number of Acres Disturbed:(✓)
8.5	2.3
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

b. For common plans of development provide the following information

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

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

	Company Name	
+		

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

Discharge Point(s):(*)

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	
1	No	37.686383	-85.870753	Valley Creek	Delete
2	No	37.688165	-85.868970	Valley Creek	Delete
3	No	37.688655	-85.867382	Valley Creek	Delete
4	No	37.689204	-85.868101	Valley Creek	Delete
+					

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: Elizabethtown 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?: (*)	No
If Yes, describe scope of activity: (✓)	Describe the scope of activity
Is a Clean Water Act 404 permit required?:(*)	No
Is a Clean Water Act 401 Water Quality Certification required?:(*)	

SECTION VII -- NOI PREPARER INFORMATION

First Name:(*)	M.I.:	Last Name:(*)	Company Name:(*)
Joseph	MI	Ferguson	KYTC District 4

Mailing Address:(*)	City:(*)	State:(*)	Zip:(*)
634 East Dixie Ave	Elizabethtown	Kentucky	42701

eMail Address:(*)	Business Phone:(*)	Alternate Phone:
joseph.ferguson@ky.gov	270-766-5066	___-___-____

SECTION VIII -- ATTACHMENTS

Facility Location Map:(*)	Upload file
Supplemental Information:	Upload file

SECTION IX -- CERTIFICATION

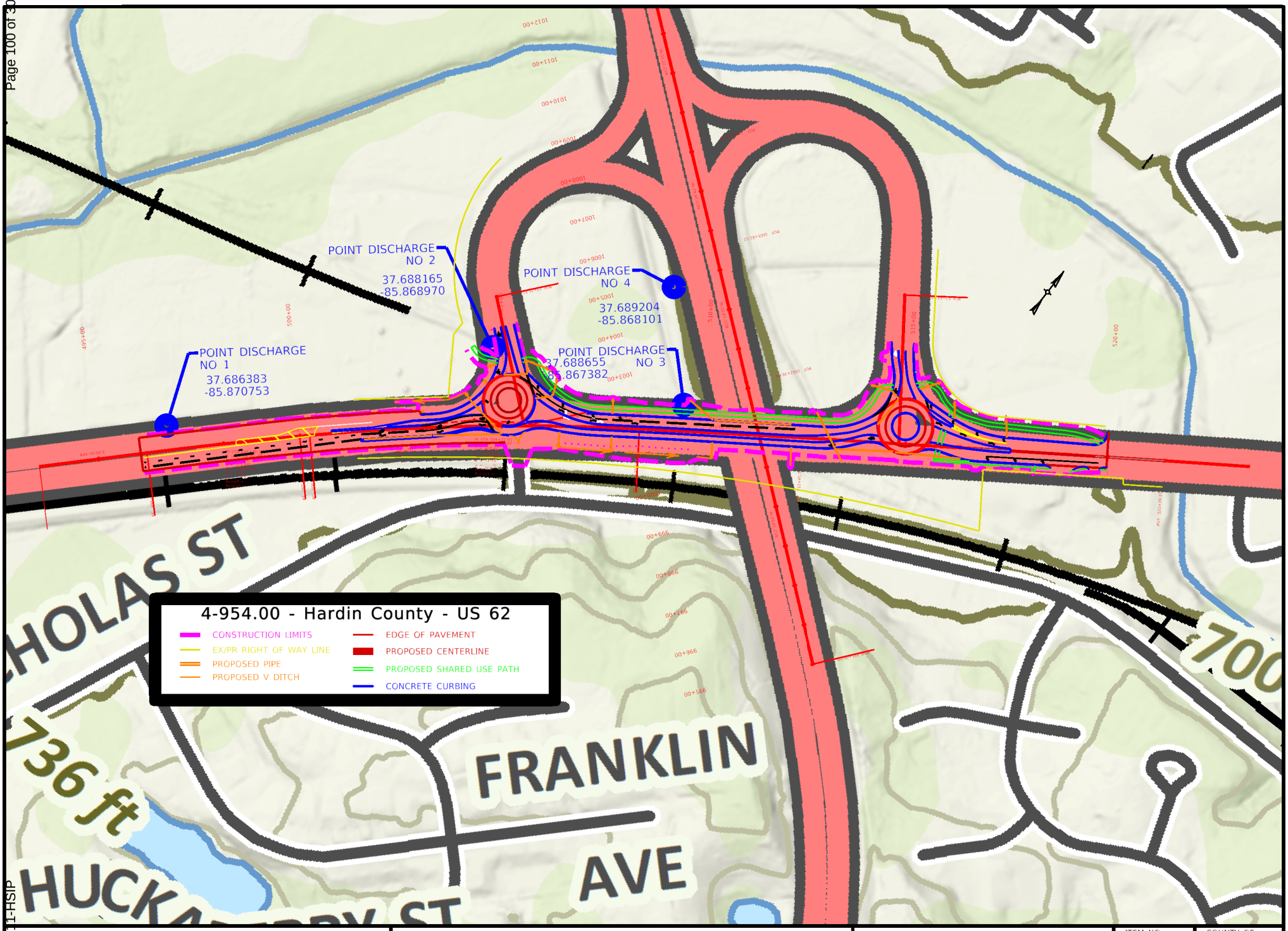
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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:(*)
Bradley Bottoms	Chief District Engineer

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

eMail Address:(*)	Business Phone:(*)	Alternate Phone:	Signature Date:(*)
bradley.bottoms@ky.gov	270-766-5066	___-___-____	Date

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



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

4-954.00 eNOI SHEET

STA. 493+51.72 TO STA. 523+51.72

0' 300' 600' 1200'
HORIZONTAL SCALE: 1"=300'

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. eNOI PLAN SHEET

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\ENOI_SHEETS.DGN

HARDIN COUNTY
0427R25101-HSIP

MATERIAL SUMMARY

CONTRACT ID: 254404 **047GR25T011-HSIP** **0404700622503**

S. MULBERRY STREET (US 62) FROM 0.27 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO 0.18 NORTHEAST OF US 31 WB ASPHALT SURFACE WITH GRADE & DRAIN, A DISTANCE OF .45 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00003	CRUSHED STONE BASE	1,544.00	TON
0010	00078	CRUSHED AGGREGATE SIZE NO 2	578.00	TON
0015	00190	LEVELING & WEDGING PG64-22	278.00	TON
0020	00214	CL3 ASPH BASE 1.00D PG64-22	424.00	TON
0025	00356	ASPHALT MATERIAL FOR TACK	5.50	TON
0030	00387	CL3 ASPH SURF 0.38B PG76-22	1,864.00	TON
0035	02676	MOBILIZATION FOR MILL & TEXT - (HARDIN 4-954 HSIP)	1.00	LS
0040	02677	ASPHALT PAVE MILLING & TEXTURING	216.00	TON
0045	25005EC	CL4 ASPH SURF NO.4A PG76-22	141.00	TON
0050	01810	STANDARD CURB AND GUTTER	6,651.00	LF
0055	01820	LIP CURB AND GUTTER	531.00	LF
0060	01825	ISLAND CURB AND GUTTER	105.00	LF
0065	01921	STANDARD BARRIER MEDIAN TYPE 4	195.00	SQYD
0070	01939	MOUNTABLE MEDIAN TYPE 3 - FIBER REINFORCED	12.00	SQYD
0075	02014	BARRICADE-TYPE III	16.00	EACH
0080	02015	CEMENT CONCRETE ISLAND	577.00	SQYD
0085	02084	JPC PAVEMENT-8 IN	640.00	SQYD
0090	02159	TEMP DITCH	200.00	LF
0095	02160	CLEAN TEMP DITCH	200.00	LF
0100	02200	ROADWAY EXCAVATION	6,195.00	CUYD
0105	02483	CHANNEL LINING CLASS II	12.00	TON
0110	02545	CLEARING AND GRUBBING - (2.3 AC)	1.00	LS
0115	02562	TEMPORARY SIGNS	600.00	SQFT
0120	02585	EDGE KEY	349.00	LF
0125	02602	FABRIC-GEOTEXTILE CLASS 1	21.00	SQYD
0130	02603	FABRIC-GEOTEXTILE CLASS 2	2,300.00	SQYD
0135	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	617.00	SQYD
0140	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS
0145	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0150	02696	SHOULDER RUMBLE STRIPS	1,130.00	LF
0155	02701	TEMP SILT FENCE	1,500.00	LF
0160	02703	SILT TRAP TYPE A	2.00	EACH
0165	02704	SILT TRAP TYPE B	2.00	EACH
0170	02705	SILT TRAP TYPE C	2.00	EACH
0175	02706	CLEAN SILT TRAP TYPE A	2.00	EACH
0180	02707	CLEAN SILT TRAP TYPE B	2.00	EACH
0185	02708	CLEAN SILT TRAP TYPE C	2.00	EACH
0190	02726	STAKING - (HARDIN 4-954 HSIP)	1.00	LS
0195	02775	ARROW PANEL	3.00	EACH
0200	03171	CONC BARRIER WALL TYPE 9T	80.00	LF
0205	05950	EROSION CONTROL BLANKET	510.00	SQYD
0210	05952	TEMP MULCH	7,348.00	SQYD
0215	05953	TEMP SEEDING AND PROTECTION	5,566.00	SQYD

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0220	05963	INITIAL FERTILIZER	0.60	TON
0225	05964	MAINTENANCE FERTILIZER	0.50	TON
0230	05985	SEEDING AND PROTECTION	4,825.00	SQYD
0235	05990	SODDING	5,732.00	SQYD
0240	05992	AGRICULTURAL LIMESTONE	7.00	TON
0245	10020NS	FUEL ADJUSTMENT	3,930.00	DOLL
0250	10030NS	ASPHALT ADJUSTMENT	9,872.00	DOLL
0255	20550ND	SAWCUT PAVEMENT	8,060.00	LF
0260	21289ED	LONGITUDINAL EDGE KEY	866.00	LF
0265	26248EC	ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS
0270	00462	CULVERT PIPE-18 IN	54.00	LF
0275	00521	STORM SEWER PIPE-15 IN	1,358.00	LF
0280	00522	STORM SEWER PIPE-18 IN	586.00	LF
0285	00981	SLOTTED DRAIN PIPE-15 IN	10.00	LF
0290	01000	PERFORATED PIPE-4 IN	635.00	LF
0295	01010	NON-PERFORATED PIPE-4 IN	80.00	LF
0300	01020	PERF PIPE HEADWALL TY 1-4 IN	3.00	EACH
0305	01450	S & F BOX INLET-OUTLET-18 IN	1.00	EACH
0310	01559	DROP BOX INLET TYPE 13G	19.00	EACH
0315	01568	DROP BOX INLET TYPE 13S	5.00	EACH
0320	01642	JUNCTION BOX-18 IN	2.00	EACH
0325	01690	FLUME INLET TYPE 1	1.00	EACH
0330	01691	FLUME INLET TYPE 2	1.00	EACH
0335	01740	CORED HOLE DRAINAGE BOX CON-4 IN	5.00	EACH
0340	24814EC	PIPELINE INSPECTION	1,388.00	LF
0345	26130ED	SLOPED AND MITERED HEADWALL-15 IN	12.00	EACH
0350	26131ED	SLOPED AND MITERED HEADWALL-18 IN	3.00	EACH
0355	02654	TRUCK MOUNTED ATTENUATOR	3.00	EACH
0360	06406	SBM ALUM SHEET SIGNS .080 IN	576.00	SQFT
0365	06407	SBM ALUM SHEET SIGNS .125 IN	467.00	SQFT
0370	06411	STEEL POST TYPE 2	1,183.00	LF
0375	06490	CLASS A CONCRETE FOR SIGNS	1.75	CUYD
0380	06511	PAVE STRIPING-TEMP PAINT-6 IN	23,918.00	LF
0385	06542	PAVE STRIPING-THERMO-6 IN W	8,731.00	LF
0390	06543	PAVE STRIPING-THERMO-6 IN Y	7,483.00	LF
0395	06546	PAVE STRIPING-THERMO-12 IN W	1,500.00	LF
0400	06546	PAVE STRIPING-THERMO-12 IN W - (2' WITH 6' GAPS)	582.00	LF
0405	06562	PAVE MARKING-THERMO R 6 FT	2.00	EACH
0410	06563	PAVE MARKING-R/R XBUCKS 16 IN	43.00	LF
0415	06566	PAVE MARKING-THERMO X-WALK-12 IN	100.00	LF
0420	06568	PAVE MARKING-THERMO STOP BAR-24IN	35.00	LF
0425	06570	PAVE MARKING-PAINT CROSS-HATCH - 2' WITH 20' GAPS, WHITE)	179.00	SQFT
0430	06570	PAVE MARKING-PAINT CROSS-HATCH - 2' WITH 20' GAPS, YELLOW)	120.00	SQFT
0435	06573	PAVE MARKING-THERMO STR ARROW	9.00	EACH
0440	06574	PAVE MARKING-THERMO CURV ARROW	17.00	EACH
0445	06575	PAVE MARKING-THERMO COMB ARROW	11.00	EACH
0450	06576	PAVE MARKING-THERMO ONLY	2.00	EACH
0455	06601NC	PAVE MARKING-PAINT WORDS - "BYPASS"	3.00	EACH
0460	06601NC	PAVE MARKING-PAINT WORDS - "NORTH"	1.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0465	06601NC	PAVE MARKING-PAINT WORDS - "SOUTH"	2.00	EACH
0470	21596ND	GMSS TYPE D	7.00	EACH
0475	21596ND	GMSS TYPE D - (SURFACE MOUNT)	15.00	EACH
0480	22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN	111.00	LF
0485	22664EN	WATER BLASTING EXISTING STRIPE	7,069.00	LF
0490	22680EN	QWICK CURB MEDIAN SEPARATOR	240.00	LF
0495	23871EC	PAVE STRIPE-WET REF TAPE-6 IN Y	473.00	LF
0500	23872EC	PAVE STRIPE-WET REF TAPE-6 IN W	950.00	LF
0505	24115EC	ROUNDABOUT ARROW	9.00	EACH
0510	24631EC	BARCODE SIGN INVENTORY	185.00	EACH
0515	24679ED	PAVE MARK THERMO CHEVRON - (4' AT 40' SPACING, WHITE)	96.00	SQFT
0520	24683ED	PAVE MARKING-THERMO DOTTED LANE EXTEN - (2' WITH 6' GAPS - WHITE)	350.00	LF
0525	24889EC	PAVE MARKING-THERMO U-TURN	2.00	EACH
0530	24899EC	PAVE MARKING-THERMO ELONG ROUTE SHIELD	3.00	EACH
0535	04820	TRENCHING AND BACKFILLING	2,525.00	LF
0540	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	8.00	EACH
0545	21543EN	BORE AND JACK CONDUIT	425.00	LF
0550	24901EC	PVC CONDUIT-2 IN-SCHEDULE 80	2,950.00	LF
0555	02568	MOBILIZATION	1.00	LS
0560	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 254404 **047GR25T011-HSIP** **0404700622504**

S. MULBERRY STREET (US 62) FROM 0.27 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO 0.18 MILE NORTHEAST OF US 31WB SIDEWALK CONSTRUCTION, A DISTANCE OF .45 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0565	00003	CRUSHED STONE BASE	704.00	TON
0570	00221	CL2 ASPH BASE 0.75D PG64-22	232.00	TON
0575	00301	CL2 ASPH SURF 0.38D PG64-22	103.00	TON
0580	00356	ASPHALT MATERIAL FOR TACK	0.50	TON
0585	02720	SIDEWALK-4 IN CONCRETE	245.00	SQYD
0590	10020NS	FUEL ADJUSTMENT	521.00	DOLL
0595	10030NS	ASPHALT ADJUSTMENT	1,310.00	DOLL
0600	23158ES505	DETECTABLE WARNINGS	378.00	SQFT
0605	26248EC	ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS
0610	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 254404 **047GR25T011-HSIP** **0404700622505**

S. MULBERRY STREET (US 62) FROM 0.22 MILE SOUTHWEST OF US 31WB EXTENDING NORTHEAST TO CS 1418 ASPHALT RESURFACING, A DISTANCE OF 1.8 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0615	00356	ASPHALT MATERIAL FOR TACK	9.00	TON
0620	24888EC	CL2 ASPH SURF NO.4B PG64-22	1,240.00	TON
0625	26248EC	ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS
0630	00003	CRUSHED STONE BASE	50.00	TON
0635	01811	STANDARD CURB AND GUTTER MOD	1,260.00	LF
0640	01890	ISLAND HEADER CURB TYPE 1	98.00	LF
0645	02585	EDGE KEY	1,110.00	LF
0650	02650	MAINTAIN & CONTROL TRAFFIC - (HARDIN 4-956 HSIP)	1.00	LS
0655	02654	TRUCK MOUNTED ATTENUATOR	2.00	EACH
0660	02671	PORTABLE CHANGEABLE MESSAGE SIGN	4.00	EACH
0665	02676	MOBILIZATION FOR MILL & TEXT - (HARDIN 4-956 HSIP)	1.00	LS
0670	02775	ARROW PANEL	2.00	EACH
0675	06511	PAVE STRIPING-TEMP PAINT-6 IN	31,334.00	LF
0680	06542	PAVE STRIPING-THERMO-6 IN W	15,076.00	LF
0685	06543	PAVE STRIPING-THERMO-6 IN Y	16,438.00	LF
0690	06546	PAVE STRIPING-THERMO-12 IN W	251.00	LF
0695	06547	PAVE STRIPING-THERMO-12 IN Y	246.00	LF
0700	06566	PAVE MARKING-THERMO X-WALK-12 IN	2,618.00	LF
0705	06568	PAVE MARKING-THERMO STOP BAR-24IN	331.00	LF
0710	06573	PAVE MARKING-THERMO STR ARROW	6.00	EACH
0715	06574	PAVE MARKING-THERMO CURV ARROW	45.00	EACH
0720	06575	PAVE MARKING-THERMO COMB ARROW	3.00	EACH
0725	06578	PAVE MARKING-THERMO MERGE ARROW	3.00	EACH
0730	08100	CONCRETE-CLASS A	25.00	CUYD
0735	10020NS	FUEL ADJUSTMENT	1,930.00	DOLL
0740	10030NS	ASPHALT ADJUSTMENT	4,848.00	DOLL
0745	20782NS714	PAVE MARKING THERMO-BIKE	34.00	EACH
0750	22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN	30.00	LF
0755	22664EN	WATER BLASTING EXISTING STRIPE	165.00	LF
0760	23158ES505	DETECTABLE WARNINGS	18.00	SQFT
0765	23974EC	BIKE PATH	6.00	SQYD
0770	24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	34.00	EACH
0775	24964EC	FINE MILLING	36,047.00	SQYD
0780	02726	STAKING - (HARDIN 4-956 HSIP)	1.00	LS
0785	04916	SIGNAL-PEDESTRIAN	1.00	EACH
0790	23749EC	PEDESTRIAN SIGNAL PEDESTAL	1.00	EACH
0795	26171EC	RECTANGULAR RAPID FLASHING BEACON	2.00	EACH
0800	26192EC	PAVE MARKING-THERMO SHARED LANE MARKING	2.00	EACH
0805	02569	DEMOBILIZATION	1.00	LS

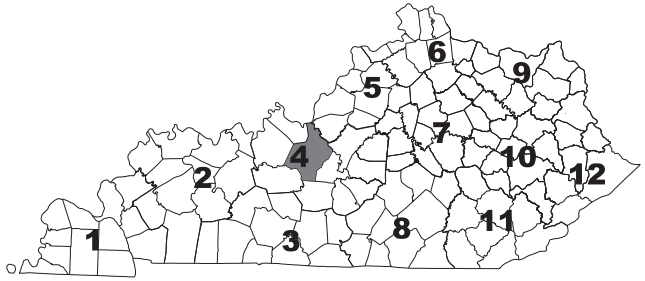
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

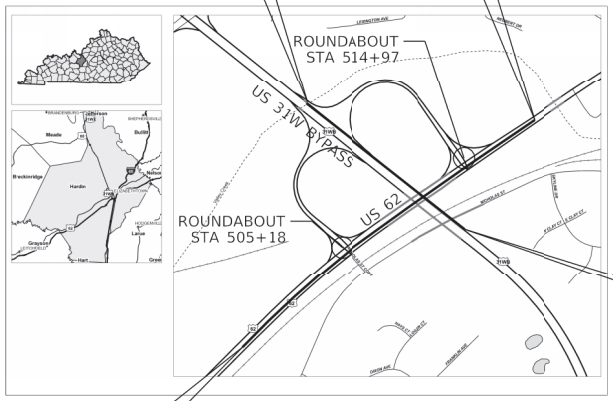
PLANS OF
PROPOSED PROJECT

HARDIN County

US 62 IMPROVEMENTS AT
US 31W BYPASS INTERCHANGE

TEAM KENTUCKY
TRANSPORTATION CABINET





LAYOUT MAP

DESIGN CRITERIA

CLASS OF HIGHWAY	US62 MINOR ARTERIAL / US31WB PRINCIPAL ARTERIAL
TYPE OF TERRAIN	ROLLING
DESIGN SPEED	55 MPH - 45 MPH - 35 MPH
REQUIRED NPSD	N/A
REQUIRED PSD	N/A
LEVEL OF SERVICE	C
ADT PRESENT (2022)	12,933
ADT FUTURE (2045)	15,125
DHV	N/A
D %	N/A
T %	9.95

GEOGRAPHIC COORDINATES

LATITUDE 37 DEGREES 41 MINUTES 19 SECONDS NORTH
LONGITUDE 85 DEGREES 52 MINUTES 01 SECONDS WEST

DESIGNED

% RESTRICTED SD	N/A
LEVEL OF SERVICE	C
MAX. DISTANCE W/O PASSING	N/A

THIS PROJECT IS A PARTIALLY CONTROLLED ACCESS HIGHWAY. ACCESS SHALL BE PROVIDED ONLY WHERE SPECIFICALLY INDICATED ON PLANS.

US 62 IS OFF THE NH SYSTEM

US 31W BYPASS IS ON THE NH SYSTEM

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-0007 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 62	US 31W BYPASS		
LENGTH 2392 LIN. FT. 0.453 MILES	LENGTH 1271 LIN. FT. 0.241 MILES	LENGTH X LIN. FT. X MILES	LENGTH X LIN. FT. X MILES
ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES X LIN. FT.
NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED
RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.	RAILROAD CROSSINGS NO. X LIN. FT.
BRIDGES X LIN. FT.	BRIDGES X LIN. FT.	BRIDGES X LIN. FT.	BRIDGES X LIN. FT.
X	X	X	X
X	X	X	X

PROJECT NUMBER: 04-954.00

US 62 IMPROVEMENTS AT US 31W BYPASS INTERCHANGE

RECOMMENDED BY: DEANNA MILLS, PE — PROJECT MANAGER — DATE:

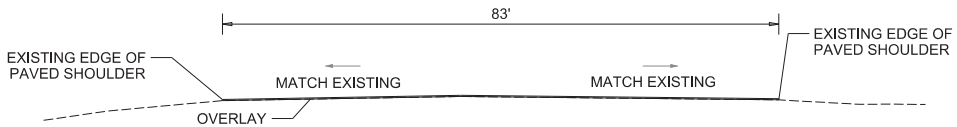
PLAN APPROVED BY: — STATE HIGHWAY ENGINEER — DATE:

LETTING DATE: JUNE 26, 2025
ITEM NO. 04-954.00 COUNTY OF HARDIN
SHEET NO. R001

OpenRoads Designer v10,11,00,115 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\LAYOUT_SHEET.DGN

TYPICAL SECTIONS

US 62
STA 496+05 - STA 500+79
OVERLAY ONLY

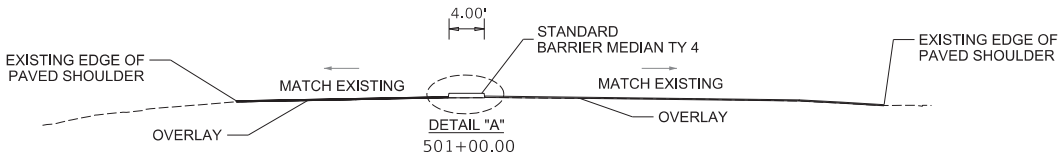


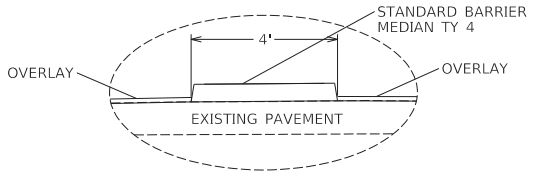
OVERLAY

1.50" CL3 ASPH SURF 0.38B PG76-22

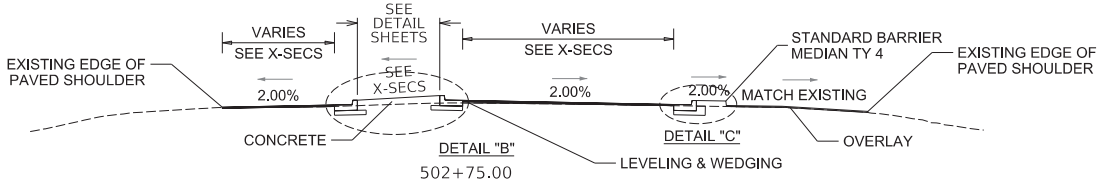
LEVELING & WEDGING

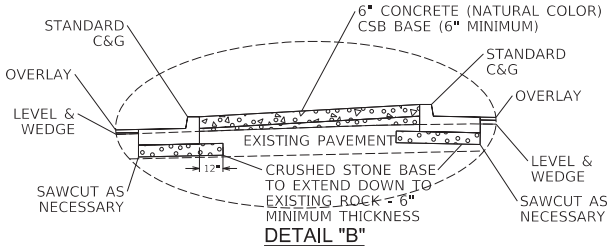
LEVELING & WEDGING PG64-22



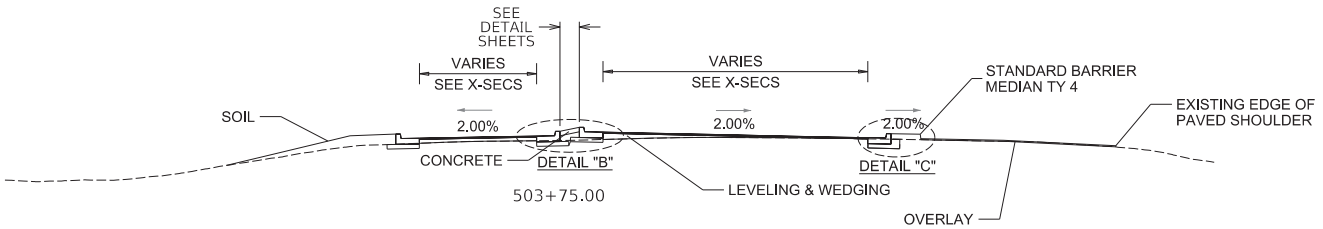


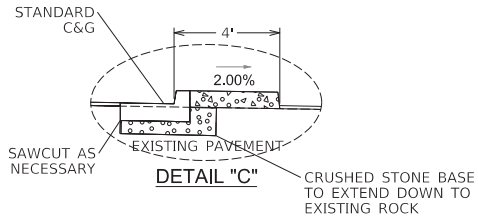
DETAIL "A"





DETAIL "B"





DETAIL "C"

NOTE: SEE DETAIL SHEET R009 FOR CONCRETE TREATMENTS

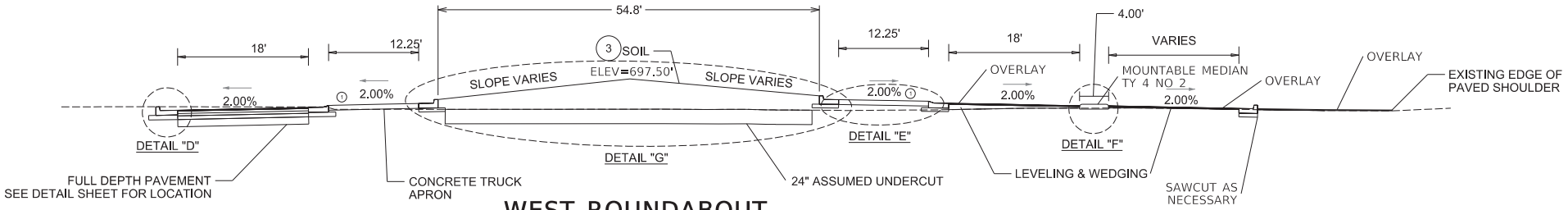
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

TYPICAL SECTIONS

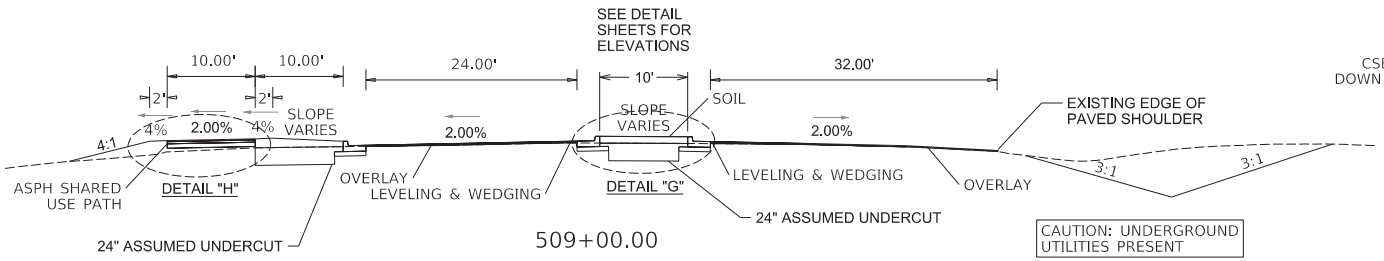
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002

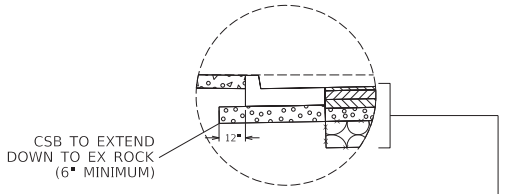
OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\TYPICAL_SECTIONS.DGN

TYPICAL SECTIONS

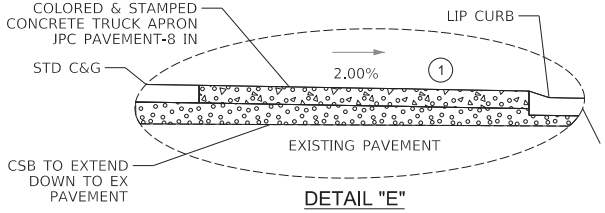


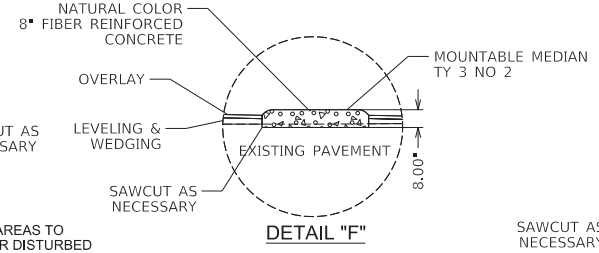
WEST ROUNDABOUT

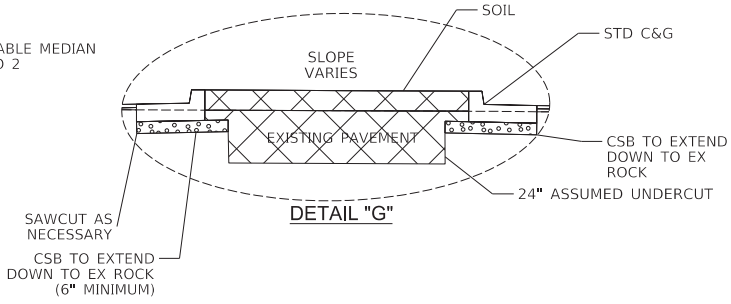




1.50"	CL3 ASPH SURF 0.38B PG76-22
4.00"	CL3 ASPH BASE 1.00D PG64-22
4.00"	CL3 ASPH BASE 1.00D PG64-22
6.00"	CRUSHED STONE BASE
12.00"	CRUSHED AGGREGATE SIZE NO2 WRAPPED IN GEOTEXTILE FABRIC







1 "COLORED & STAMPED" DESIGNATED AREAS SHALL BE STAMPED IN A BRICK PATTERN AND COLORED MEDIUM BROWNISH SHADE OF RED (BAJA RED / CHESTNUT). ENGINEER SHALL APPROVE COLOR AND STAMP PRIOR TO IMPLEMENTATION. COLOR AND STAMP SHALL BE INCIDENTAL TO JPC PAVEMENT-8 IN.

3 SEE SHEET R8 FOR AREAS TO RECEIVE SOD. OTHER DISTURBED AREAS TO BE SEEDED.

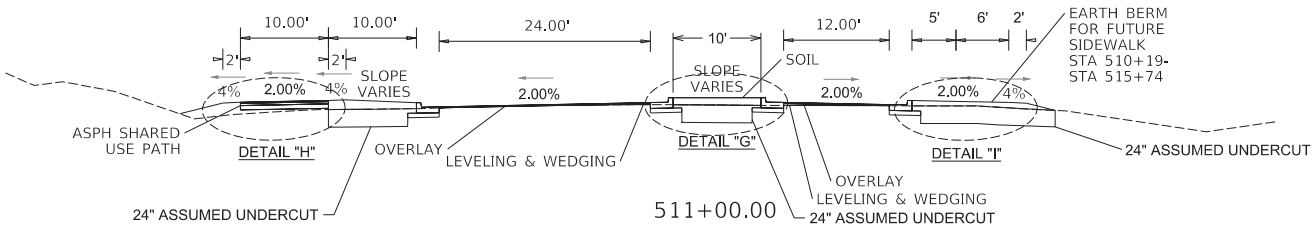
ALL AREAS NOTED "24" ASSUMED UNDERCUT" ON TYPICAL SECTIONS AND IDENTIFIED ON SHEET R008 ARE TO BE EXCAVATED AND MATERIAL REPLACED WITH SUITABLE SOIL. PAYMENT FOR SOIL SHALL BE INCIDENTAL TO ROADWAY EXCAVATION BID ITEM.

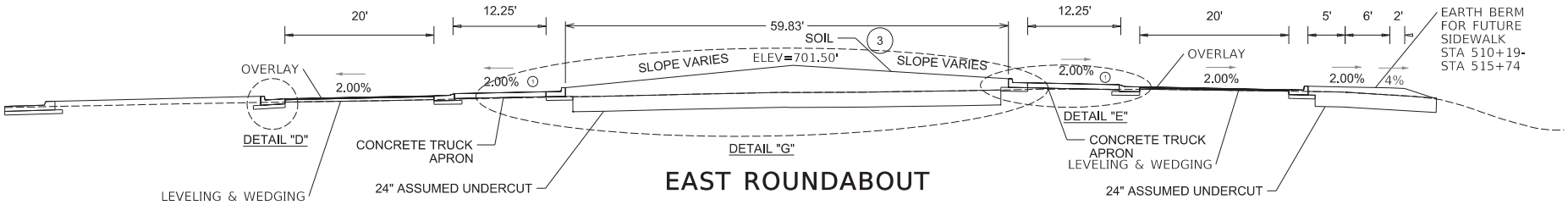
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

TYPICAL SECTIONS

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002A

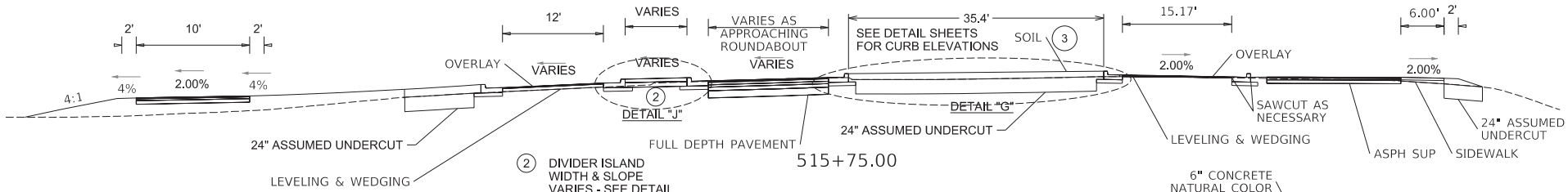
TYPICAL SECTIONS



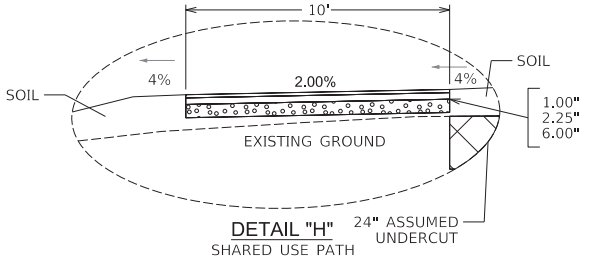


EAST ROUNDABOUT

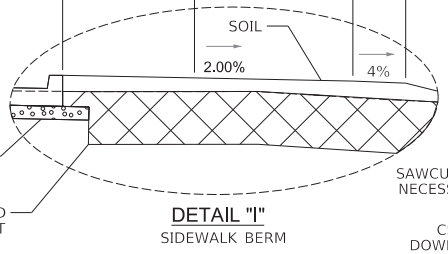
ALL AREAS NOTED "24" ASSUMED UNDERCUT" ON TYPICAL SECTIONS AND IDENTIFIED ON SHEET R008 ARE TO BE EXCAVATED AND MATERIAL REPLACED WITH SUITABLE SOIL. PAYMENT FOR SOIL SHALL BE INCIDENTAL TO ROADWAY EXCAVATION BID ITEM.

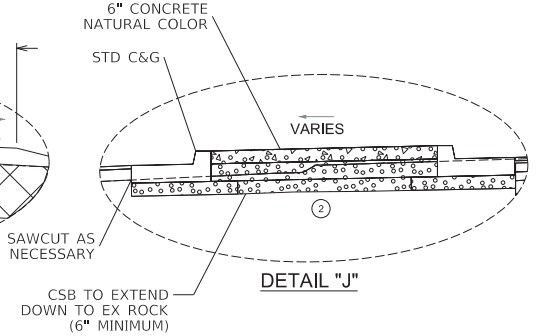


(2) DIVIDER ISLAND WIDTH & SLOPE VARIES - SEE DETAIL SHEETS FOR ELEVATIONS & OFFSETS



CL2 ASPH SURF 0.38D PG64-22
CL2 ASPH BASE 0.75D PG64-22
CRUSHED STONE BASE





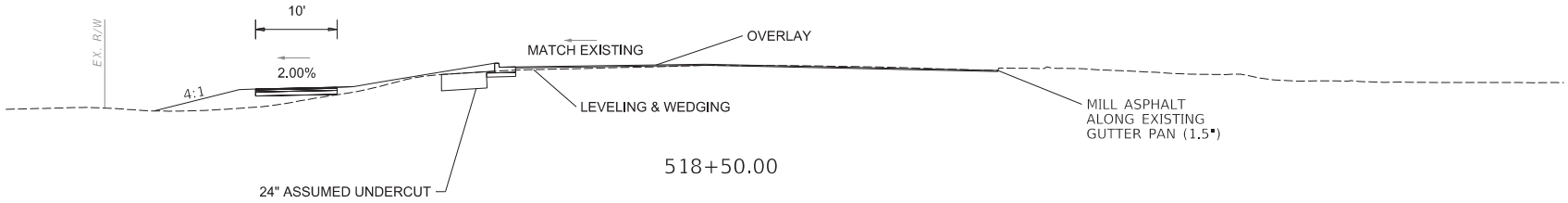
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

TYPICAL SECTIONS

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002B

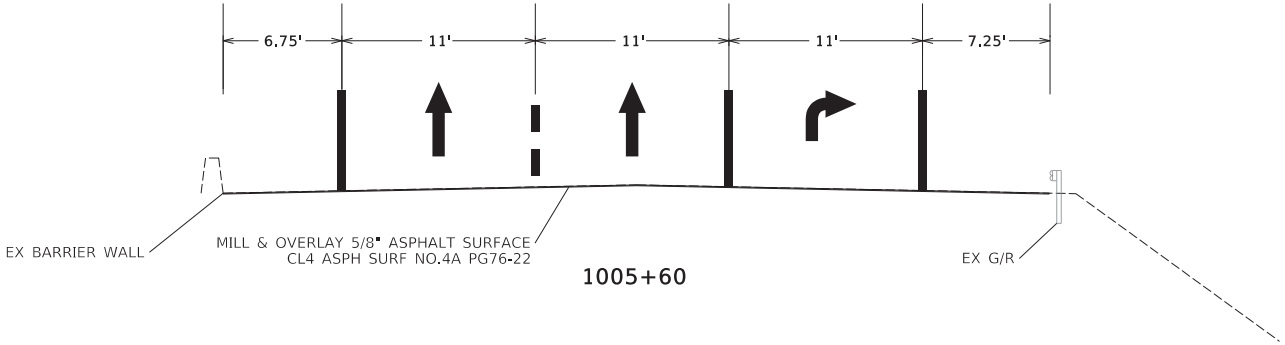
OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\TYPICAL_SECTIONS.DGN

TYPICAL SECTIONS



ALL AREAS NOTED "24" ASSUMED UNDERCUT" ON TYPICAL SECTIONS AND IDENTIFIED ON SHEET R008 ARE TO EXCAVATED AND MATERIAL REPLACED WITH SUITABLE SOIL. PAYMENT FOR SOIL SHALL BE INCIDENTAL TO ROADWAY EXCAVATION BID ITEM.

US 31W BYPASS
RIGHT TURN LANE



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

TYPICAL SECTIONS

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002C

OpenRoads Designer v23.00.01.11
USER: CRFRAR
FILE NAME: C:\PWWORKING\EAST01\D4011546\TYPICAL_SECTIONS.DGN

4-954.00 GENERAL SUMMARY

ITEM	DESCRIPTION		UNIT	US 62/ RAMPS	US31W BYPASS	SHARED USE PATH/ SIDEWALK	TOTAL
00003	CRUSHED STONE BASE	6	TON	1544	-	704	2248
00078	CRUSHED AGGREGATE SIZE NO 2		TON	578	-	-	578
00190	LEVELING & WEDGING PG64-22		TON	278	-	-	278
00214	CL3 ASPHALT BASE 1.00D PG64-22		TON	424	-	-	424
00221	CL2 ASPH BASE 0.75D PG64-22 (SHARED USE PATH)		TON	-	-	232	232
00301	CL2 ASPH SURF 0.38D PG64-22 (SHARED USE PATH)		TON	-	-	103	103
00356	ASPHALT MATERIAL FOR TACK	7	TON	4.40	1.03	0.5	6
00387	CL3 ASPHALT SURFACE 0.38B PG76-22		TON	1864	-	-	1864
00462	CULVERT PIPE-18 IN		LF	54	-	-	54
00521	STORM SEWER PIPE-15 IN		LF	1358	-	-	1358
00522	STORM SEWER PIPE-18 IN		LF	586	-	-	586
00981	SLOTTED DRAIN PIPE-15 IN		LF	10	-	-	10
01000	PERFORATED PIPE-4 IN	11	LF	635	-	-	635
01010	NON-PERFORATED PIPE-4 IN		LF	80	-	-	80
01020	PERF PIPE HEADWALL TY 1-4 IN		EACH	3	-	-	3
01450	S & F BOX INLET-OUTLET-18 IN		EACH	1	-	-	1
01559	DROP BOX INLET TYPE 13G		EACH	19	-	-	19
01568	DROP BOX INLET TYPE 13S		EACH	5	-	-	5
01642	JUNCTION BOX-18 IN	1	EACH	2	-	-	2
01690	FLUME INLET TYPE 1		EACH	1	-	-	1
01691	FLUME INLET TYPE 2		EACH	1	-	-	1
01740	CORED HOLE DRAINAGE BOX CON-4 IN		EACH	5	-	-	5
01810	STANDARD CURB AND GUTTER		LF	6651	-	-	6651
01820	LIP CURB AND GUTTER		LF	531	-	-	531
01825	ISLAND CURB AND GUTTER		LF	105	-	-	105
01921	STANDARD BARRIER MEDIAN TYPE 4		SQYD	195	-	-	195
01939	MOUNTABLE MEDIAN TYPE 3 (FIBER REINFORCED)	12	SQYD	12	-	-	12
02014	BARRICADE-TYPE III		EACH	8	8		16
02015	CEMENT CONCRETE ISLAND		SQYD	577	-	-	577
02084	JPC PAVEMENT-8 IN	9	SQYD	640	-	-	640
02159	TEMP DITCH		LF	200	-	-	200
02160	CLEAN TEMP DITCH		LF	200	-	-	200
02200	ROADWAY EXCAVATION	10	CUYD	6195	-	-	6195
02483	CHANNEL LINING CLASS II		TON	12	-	-	12
02545	CLEARING AND GRUBBING (2.30 AC)		LS	-	-	-	1
02562	TEMPORARY SIGNS		SQFT	400	200		600
02568	MOBILIZATION		LS	-	-	-	1
02569	DEMOBILIZATION		LS	-	-	-	1
02585	EDGE KEY		LF	244	105	-	349
02602	FABRIC-GEOTEXTILE CLASS 1		SQYD	21	-	-	21
02603	FABRIC-GEOTEXTILE CLASS 2		SQYD	2300	-	-	2300
02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE		SQYD	617	-	-	617
02650	MAINTAIN AND CONTROL TRAFFIC	2	LS	-	-	-	1
02654	TRUCK MOUNTED ATTENUATOR		EACH	1	2		3
02671	PORTABLE CHANGEABLE MESSAGE SIGN		EACH	2	2	-	4
02676	MOBILIZATION FOR MILL & TEXT		LS	-	1	-	1
02677	ASPHALT PAVE MILLING & TEXTURING		TON	75	141	-	216
02696	SHOULDER RUMBLE STRIPS - SAWED		LF	-	1130	-	1130
02701	TEMP SILT FENCE		LF	1500	-	-	1500
02703	SILT TRAP TYPE A		EACH	2	-	-	2
02704	SILT TRAP TYPE B		EACH	2	-	-	2
02705	SILT TRAP TYPE C		EACH	2	-	-	2
02706	CLEAN SILT TRAP TYPE A		EACH	2	-	-	2
02707	CLEAN SILT TRAP TYPE B		EACH	2	-	-	2
02708	CLEAN SILT TRAP TYPE C		EACH	2	-	-	2
02720	SIDEWALK-4 IN CONCRETE		SQYD	-	-	245	245
02726	STAKING		LS	-	-	-	1
02775	ARROW PANEL		EACH	2	1		3
02950	PVC CONDUIT - 2 INCH - SHCEDULE 80		LF	2950	-	-	2950

4-954.00 GENERAL SUMMARY

ITEM	DESCRIPTION		UNIT	US 62/ RAMPS	US31W BYPASS	SHARED USE PATH/ SIDEWALK	TOTAL
03171	CONCRETE BARRIER WALL TYPE 9T		LF	80	-	-	80
04820	TRENCHING AND BACKFILLING		LF	2525	-	-	2525
05950	EROSION CONTROL BLANKET		SQYD	510	-	-	510
05952	TEMP MULCH		SQYD	7348	-	-	7348
05953	TEMP SEEDING AND PROTECTION		SQYD	5566	-	-	5566
05963	INITIAL FERTILIZER	4	TON	0.6	-	-	0.6
05964	MAINTENANCE FERTILIZER	3	TON	0.5	-	-	0.5
05985	SEEDING AND PROTECTION		SQYD	4825	-	-	4825
05990	SODDING		SQYD	5732	-	-	5732
05992	AGRICULTURAL LIMESTONE	5	TON	7	-	-	7
06406	SBM ALUM SHEET SIGNS 0.080 INCH		SQFT	576	-	-	576
06407	SBM ALUM SHEET SIGNS 0.125 INCH		SQFT	467	-	-	467
06410	STEEL POST - TYPE 1		LF	1183	-	-	1183
06490	CLASS A CONCRETE FOR SIGNS		CUYD	1.75	-	-	1.75
06511	PAVE STRIPING-TEMP PAINT-6 IN		LF	19136	4782	-	23918
06542	PAVE STRIPING-THERMO -6 IN W		LF	6910	1821	-	8731
06543	PAVE STRIPING-THERMO 6 IN Y		LF	6797	686	-	7483
06546	PAVE STRIPING THERMO -12 IN W		LF	1500	-	-	1500
06546	PAVE STRIPING THERMO -12 IN W 2'-6' GAP		LF	582	-	-	582
06562	PAVE MARKING THERMO R 6FT		EACH	2	-	-	2
06563	PAVE MARKING R/R XBUCKS 16 IN		LF	43	-	-	43
06566	PAVE MARKING-THERMO X-WALK - 12 IN		LF	100	-	-	100
06568	PAVE MARKING - THERMO STOP BAR - 24 IN		SQFT	35	-	-	35
06570	PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING WHITE		SQFT	179	-	-	179
06570	PAVE MARKING THERMO CROSS-HATCH - 2' - 20' SPACING YELLOW		SQFT	120	-	-	120
06573	PAVE MARKING - THERMO STR ARROW		EACH	9	-	-	9
06574	PAVE MARKING - THERMO CURV ARROW		EACH	14	3	-	17
06575	PAVE MARKING - THERMO COMBO ARROW		EACH	11	-	-	11
06576	PAVE MARKING-THERMO ONLY		EACH	2	-	-	2
20391NS835	ELECTRICAL JUNCTION BOX TYPE A		EACH	8	-	-	8
20550ND	SAWCUT PAVEMENT		LF	8060	-	-	8060
21289ED	LONGITUDINAL EDGE KEY		LF	866	-	-	866
21543EN	BORE AND JACK CONDUIT		LF	425	-	-	425
21596ND	GMSS Type D		EACH	7	-	-	7
21596ND	GMSS Type D (SURFACE MOUNT)		EACH	15	-	-	15
22520EN	PAVE MARKING-THERMO YIELD BAR -36 IN		LF	111	-	-	111
22664EN	WATER BLASTING EXISTING STRIPE		LF	6000	1069	-	7069
22680EN	QWICK CURB MEDIAN SEPARATOR		LF	240	-	-	240
23158ES505	DETECTABLE WARNINGS	13	SQFT	-	-	348	348
23871EC	PAVE STRIPE-WET REF TAPE-6 IN Y		LF	-	473	-	473
23872EC	PAVE STRIPE-WET REF TAPE-6 IN W		LF	-	950	-	950
24115EC	PAVE MARKING -THERMO ROUNDABOUT ARROW		EACH	9	-	-	9
24631EC	BARCODE SIGN INVENTORY		EACH	185	-	-	185
24679ED	PAVE MARKING THERMO CHEVRON - 4'- 40' SPACING WHITE		SQFT	96	-	-	96
24683ED	PAVE MARKING-THERMO DOTTED LANE EXTEN		LF	350	-	-	350
24814EC	PIPELINE INSPECTION		LF	1388	-	-	1388
24889EC	PAVE MARKING - THERMO U-TURN ARROW		EACH	2	-	-	2
24899EC	PAVE MARKING-THERMO ELONG ROUTE SHIELD		EACH	3	-	-	3
25005EC	CL4 ASPH SURF NO.4A PG76-22	8	TON	-	141	-	141
26130ED	SLOPED AND MITERED HEADWALL-15 IN		EACH	12	-	-	12
26131ED	SLOPED AND MITERED HEADWALL-18 IN		EACH	3	-	-	3
6601NC	PAVE MARKING - PAINT WORDS - "SOUTH"		EACH	2	-	-	2
6601NC	PAVE MARKING - PAINT WORDS - "NORTH"		EACH	1	-	-	1
6601NC	PAVE MARKING - PAINT WORDS - "BYPASS"		EACH	3	-	-	3

4-954.00 GENERAL SUMMARY NOTES

1. ALL ASPHALT MIXTURES ESTIMATED AT 110 LBS. PER SQYD PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.
2. ANY PIPE, FITTINGS, ETC. NECESSARY FOR CONNECTION TO JUNCTION BOX SHALL BE INCIDENTAL TO THE BID ITEM
3. WATER FOR CONTROLLING DUST INCIDENTAL TO BID ITEM
4. 300 LBS PER ACRE
5. 500 LBS PER ACRE
6. 3 TONS PER ACRE
7. ESTIMATED AT 115 LBS. PER SQYD PER INCH OF DEPTH
8. ESTIMATED AT 0.5 LBS PER SQYD
9. APPLIED AT A DEPTH OF 5/8"
10. USE FOR TRUCK APRONS - COLOR & STAMP INCIDENTAL TO BID ITEM
11. SUITABLE MEDIAN REFILL SOIL SHALL BE INCIDENTAL TO THE BID ITEM.
12. EARTHWORK VOLUMES ARE ESTIMATED FOR INFORMATION ONLY:
    CUT: 6195 CUYD FILL:1821 CUYD
13. TO BE USED AT ENGINEER'S DISCRETION TO DRAIN CONCRETE MEDIANS PLACED ON EXISTING ASPHALT
14. FIBER REINFORCEMENT SHALL BE INCIDENTAL TO THE BID ITEM
15. SIDEWALK RAMPS SHALL BE INCIDENTAL TO THE BID ITEM

4-954.00 PIPE SUMMARY

LOCATION AND STATION	CULVERT PIPE	STORM SEWER PIPE		S&M CONCRETE HEADWALL	S&M CONCRETE HEADWALL	S&F BOX IN-OUT	FLUME INLET TY 1	FLUME INLET TY 2	CHANNEL LINING CLASS II	FABRIC-GEOXTEXTILE CLASS		DROP BOX INLET		JUNCTION BOX TYA	MANHOLE TYPE B	SLOTTED DRAIN PIPE	PIPELINE VIDEO INSPECTION	NON-PERFORATED PIPE-4 IN	PERFORATED PIPE-4 IN	PERF PIPE HEADWALL TY 1-4IN	CORED HOLE DRAINAGE BOX CON-4IN
	18"	15"	18"	15"	18"	18"				1	2	13G	13S	18"		15"					
ITEM CODE	462	521	522	26130ED	26131ED	1450	1690	1691	2483	2602	2603	1559	1568	1642	1761	981	24814EC	1010	1000	1020	1740
UNIT TO BID	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	TON	SQYD	SQYD	EACH	EACH	EACH	EACH	LF	LF	LF	LF	EACH	EACH
501+57 - 503+27		168									56	1					126				
503+27 - 505+00		168									56	1					126				
505+00 - 504+25			112								37		1				84				
504+25			21		1						7		1				16				
506+44		40		1							13	1					30				
507+72		35		1							12	1					26				
510+22		41		1							14	1					31				
512+15		47		1							16	1					35				
513+28 - 514+73			140								47				1		105				
514+73 - 516+39			163								54		1				122				
516+39													1								
517+50		45		1							15	1					34				
516+15		45		1							15	1					34				
51+30		57		1							19	1				5	43				
514+30 - 51+08		80									27	1					60				
51+08 - 51+25		25									8	1					19				
51+25		53		1							18	1				5	40				
512+15 - 510+22		192									64	1					144				
510+22		76		1							25	1					57				
507+72		39		1							13	1					29				
20+60 - 506+25		44									15	1					33				
506+25		88		1							29	1					66				
20+27 - 21+43	54					1					18			1			41				
21+23 - 21+33		91									30	1	1				68				
21+62		24		1							8	1					18				
503+06								1	8	14											
504+70							1		4	7											
504+60																		16		1	
505+82																		40		1	
515+49																		24		1	
TOTAL	54	1358	436	12	1	1	1	1	12	21	616	19	5	1	1	10	1386	80	635	3	5

4-954.00 Stripe Quantitites				
Legend #	Item #	Name	Unit Value	Total
1	6542	PAVE STRIPING-THERMO -6 IN W	LF	8731
2	6542	PAVE STRIPING-THERMO -6 IN W - 2'-6' GAP	LF	350
3	6546	PAVE STRIPING THERMO -12 IN W	LF	1500
4	6546	PAVE STRIPING THERMO -12 IN W 2'-6' GAP	LF	582
5	6542	PAVE STRIPING THERMO- 6 IN W 3'-9' GAP	LF	0
6	6543	PAVE STRIPING-THERMO 6 IN Y	LF	6518
7	6543	PAVE STRIPING-THERMO 6 IN Y - DOUBLE YELLOW	LF	438
8	6543	PAVE STRIPING-THERMO 6 IN Y - SOLID/10'-30' GAP	LF	353
9	6570	PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING WHITE	SQFT	179
10	24679ED	PAVE MARKING THERMO CHEVRON - 4'- 40' SPACING WHITE	SQFT	96
11	6570	PAVE MARKING THERMO CROSS-HATCH - 2' - 20' SPACING YELLOW	SQFT	120
12	24115EC	PAVE MARKING -THERMO ROUNDABOUT ARROW	EACH	9
13	6574	PAVE MARKING - THERMO CURV ARROW	EACH	17
14	6575	PAVE MARKING - THERMO COMBO ARROW	EACH	11
15	24889EC	PAVE MARKING - THERMO U-TURN ARROW	EACH	2
16	6573	PAVE MARKING - THERMO STR ARROW	EACH	9
17	6563	PAVE MARKING R/R XBUCKS 16 IN	LF	43
18	6562	PAVE MARKING THERMO R 6FT	EACH	2
19	6576	PAVE MARKING-THERMO ONLY	EACH	2
20	22520EN	PAVE MARKING-THERMO YIELD BAR -36 IN	LF	111
21	6566	PAVE MARKING-THERMO X-WALK - 12 IN	LF	100
22	24899EC	PAVE MARKING-THERMO ELONG ROUTE SHIELD	EACH	3
23	6601NC	PAVE MARKING - PAINT WORDS - "SOUTH"	EACH	2
24	6601NC	PAVE MARKING - PAINT WORDS - "NORTH"	EACH	1
25	6601NC	PAVE MARKING - PAINT WORDS - "BYPASS"	EACH	3
26	6568	PAVE MARKING - THERMO STOP BAR - 24 IN	SQFT	35
	6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	23918
	22664EN	WATER BLASTING EXISTING STRIPE	LF	7069
	23871EC	PAVE STRIPE-WET REF TAPE-6 IN Y	LF	473
	23872EC	PAVE STRIPE-WET REF TAPE-6 IN W	LF	950

Sign Summary — Hardin County — 4-954.00 Route US 62

SIGN LOCATION						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)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-1	RT	49	494+41	9.364	EAST	M2-1	Junction		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	13			13	1
				0.000	EAST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00									1
				0.000	EAST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00									1
S-2	RT	49	496+41	9.402	EAST	W2-6	Circular Intersection		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	13			13	1
S-3	RT	47	498+42	9.440	EAST	R2-1	Speed Limit XX		30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	12			12	1
S-4	RT	53	499+42	9.459	EAST	D1-1	Destination (1 line)	TO Nicholas St	78 x 18	White	Green	XI		9.75	Stnd w/ Soil Plate	Yes	2	11			22	1
S-5L	RT	45	500+42	9.478	EAST	M3-3	South		24 x 12	Black	White	XI	2.00		Type D	Yes	1		19		19	1
				0.000	EAST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	EAST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1
				0.000	EAST	M5-3	Advance Roundabout Turn Arrow		21 x 15	Black	White	XI	2.19			Yes						1
				0.000	EAST	M4-5	To		24 x 12	White	Blue	XI	2.00			Yes						1
				0.000	EAST	M1-1	Interstate Route Sign (2-digit)	65	24 x 24	White	Blue & Red	XI	4.00			Yes						1
				0.000	EAST	KY PKWY	WESTERN KENTUCKY PARKWAY	WENDELL H. FORD WESTERN KY PARKWAY	30 x 24	White/Blue	Blue/White/ Red	XI	5.00			Yes						1
				0.000	EAST	M5-3	Advance Roundabout Turn Arrow		21 x 15	White	Blue	XI	2.19			Yes						1
S-5R	RT	56	500+42	9.478	EAST	M3-1	North		24 x 12	Black	White	XI	2.00		Type D	Yes	1		17		17	1
				0.000	EAST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	EAST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1
				0.000	EAST	M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19			Yes						1
				0.000	EAST	M4-5	To		24 x 12	White	Green	XI	2.00			Yes						1
				0.000	EAST	I3-5	Airport		24 x 24	White	Green	XI	4.00			Yes						1
				0.000	EAST	M6-3	Straight Arrow		21 x 15	White	Green	XI	2.19			Yes						1
S-6	RT	43	500+55	9.480	EAST	R6-2L	One Way		30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	12			12	1
S-7	RT	50	502+55	9.518	EAST	D1-3d	Circular Intersection Destination (3 lines)	Radcliff / Fort Knox / Leitchfield	66 x 42	White	Green	XI		19.25	Stnd w/ Soil Plate	Yes	2	13			26	1
S-8	RT	46	504+05	9.546	EAST	W10-1	Rail Road Crossing Warning		Dia = 36	Black	Yellow	XI	7.07		Stnd w/ Soil Plate		1					1
				0.000	EAST	W16-5PR	Turn Arrow (Right)		21 x 15	Black	Yellow	XI	2.19									1
S-9	MED	34	504+50	9.555	EAST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Type D Surface Mount	Yes	1	16			16	1
				0.000	EAST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-10	MED	14	504+60	9.557	EAST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Type D Surface Mount	Yes	1	16			16	1
				0.000	EAST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-11	MED	44	505+02	9.565	EAST	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	EAST	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-12	MED	84	505+04	9.565	SOUTH	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	SOUTH	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-13	MED	75	505+39	9.572	WEST	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	WEST	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-14	MED	23	505+50	9.574	NORTH	R4-20	ALL TRAFFIC		24 x 30	Black	White	XI	5.00		Type D Surface Mount		1	12			12	1
				0.000	NORTH	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-15	MED	16	505+70	9.578	EAST	M3-2	East		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	13			13	1
				0.000	EAST	M1-4	US Route Sign (1 or 2 digit)	62	24 x 24	Black	White	XI	4.00									1
				0.000	EAST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1
S-16	MED	22	506+78	9.598	EAST	W4-1R	Traffic Merging from Right		36 x 36	Black	Yellow	XI	9.00		Type D		1	13			13	1
S-17L	RT	47	509+97	9.659	EAST	M3-1	North		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000	EAST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	EAST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1

Sign Summary — Hardin County — 4-954.00 Route US 62

SIGN LOCATION						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)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
				0.000	EAST	M5-3	Advance Roundabout Turn Arrow		21 x 15	Black	White	XI	2.19			Yes						1
S-17R	RT	52	509+97	9.659	EAST	M4-5	To		24 x 12	White	Green	XI	2.00		Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000	EAST	I3-5	Airport		24 x 24	White	Green	Xi	4.00			Yes						1
				0.000	EAST	M5-3	Advance Roundabout Turn Arrow		21 x 15	White	Green	XI	2.19			Yes						1
S-18	RT	53	511+97	9.696	EAST	D1-3d	Circular Intersection Destination (3 lines)	Elizabethtown/ Radcliff/ Fort Knox	78 x 42	White	Green	XI		22.75	Stnd w/ Soil Plate	Yes	2	13			26	1
S-19	RT	7	514+23	9.739	EAST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000		R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-20	MED	23	514+80	9.750	EAST	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	EAST	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-21	MED	65	514+81	9.750	SOUTH	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	SOUTH	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-22	MED	56	515+20	9.758	WEST	R6-2R	One Way		30 x 36	Black	White	XI	7.50		Type D Surface Mount		1	14			14	1
				0.000	WEST	OM1-3	Object Marker Type 1		18 x 18	n/a	Yellow	XI	2.25									1
S-23	MED	13	515+64	9.766	EAST	M3-2	East		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1					1
				0.000	EAST	M1-4	US Route Sign (1 or 2 digit)	62	24 x 24	Black	White	XI	4.00									1
				0.000	EAST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1
S-24	RT	20	515+85	9.770	EAST	W11-2	Pedestrian		30 x 30	Black	Fl Yellow Green	XI	6.25		Stnd w/ Soil Plate		1	14			14	1
				0.000	EAST	W16-7PL	Downward Diagonal Arrow (Left)		21 x 15	Black	Fl Yellow Green	XI	2.19									1
S-25	RT	34	515+83	9.770	WEST	W11-2	Pedestrian		30 x 30	Black	Fl Yellow Green	XI	6.25		Stnd w/ Soil Plate		1	14			14	1
				0.000	WEST	W16-7PR	Downward Diagonal Arrow (Right)		21 x 15	Black	Fl Yellow Green	XI	2.19									1
S-26	MED	0	517+55	9.802	WEST	R4-7	Keep Right		24 x 30	Black	White	XI	5.00		Stnd w/ Soil Plate		1	11			11	1
S-27	LT	39	522+15	9.889	WEST	M2-1	Junction		21 x 15	Black	White	XI	2.19		Stnd w/ Soil Plate		1	14			14	1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00									1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00									1
S-28	LT	41	521+21	9.871	WEST	R2-1	Speed Limit XX		30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	12			12	1
S-29	LT	41	520+57	9.859	WEST	W2-6	Circular Intersection		30 x 30	Black	Yellow	XI	6.25		Stnd w/ Soil Plate		1	13			13	1
S-30L	LT	33	519+57	9.840	WEST	M3-3	South		24 x 12	Black	White	XI	2.00		Type D	Yes	1		19		19	1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1
				0.000	WEST	M6-3	Straight Arrow		21 x 15	Black	White	XI	2.19			Yes						1
				0.000	WEST	M4-5	To		24 x 12	White	Blue	XI	2.00			Yes						1
				0.000	WEST	M1-1	Interstate Route Sign (2-digit)		24 x 24	White	Blue & Red	XI	4.00			Yes						1
				0.000	WEST	KY PKWY	WESTERN KENTUCKY PARKWAY	WENDELL H. FORD WESTERN KY PARKWAY	30 x 24	White/Blue	Blue/White/ Red	XI	5.00			Yes						1
				0.000	WEST	M6-3	Straight Arrow		21 x 15	White	Blue	XI	2.19			Yes						1
S-30R	LT	31	519+57	9.840	WEST	M3-1	North		24 x 12	Black	White	XI	2.00		Type D	Yes	1		19		19	1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1
				0.000	WEST	M5-2R	Advance Right 45° Turn Arrow		21 x 15	Black	White	XI	2.19			Yes						1
				0.000	WEST	M4-5	To		24 x 12	White	Green	XI	2.00			Yes						1
				0.000	WEST	I3-5	Airport		24 x 24	White	Green	XI	4.00			Yes						1
				0.000	WEST	M5-2R	Advance Right 45° Turn Arrow		21 x 15	White	Green	XI	2.19			Yes						1
S-31	LT	48	519+80	9.845	WEST	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate		1	6			6	1

Sign Summary — Hardin County — 4-954.00 Route US 62

SIGN LOCATION						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)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-32	LT	44	517+57	9.802	WEST	D1-3d	Circular Intersection Destination (3 lines)	Leitchfield / Raddcliff / Fort Knox	66 x 42	White	Green	XI		19.25	Stnd w/ Soil Plate	Yes	2	13			26	1
S-33	LT	83	516+04	9.773	WEST	W11-2	Pedestrian		36 x 36	Black	Fl Yellow Green	XI	9.00		Stnd w/ Soil Plate		1	14			14	1
				0.000	WEST	W16-7PL	Downward Diagonal Arrow (Left)		21 x 15	Black	Fl Yellow Green	XI	2.19									1
S-34	LT	71	515+81	9.769	WEST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Type D Surface Mount	Yes	1	15			15	1
				0.000	WEST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-35	MED	107	515+67	9.766	WEST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000	WEST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-36	MED	116	515+09	9.755	WEST	M3-1	North		24 x 12	Black	White	XI	2.00		Type D Surface Mount		1	14			14	1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00									1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00									1
				0.000	WEST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1
S-37	RT	45	51+56	0.977	NORTH	W11-15	Bicycle / Pedestrian		36 x 36	Black	Fl Yellow Green	XI	9.00		Stnd w/ Soil Plate		1	15			15	1
				0.000	NORTH	W16-7PL	Downward Diagonal Arrow (Left)		21 x 15	Black	Fl Yellow Green	XI	2.19									1
				0.000	WEST	R1-1	Stop		18 x 18	White	Red	XI	2.25									1
S-38	RT	49	51+36	0.973	EAST	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate		1	6			6	1
S-39	MED	0	55+67	1.054	SOUTH	W2-6	Circular Intersection		48 x 48	Black	Yellow	XI		16.00	Type D Surface Mount		2	14			28	1
S-40	LT	34	55+67	1.054	SOUTH	W2-6	Circular Intersection		48 x 48	Black	Yellow	XI		16.00	Stnd w/ Soil Plate		2	14			28	1
S-41L	LT	34	54+00	1.023	SOUTH	M3-2	East		36 x 18	Black	White	XI	4.50		Stnd w/ Soil Plate	Yes	1	17			17	1
				0.000	SOUTH	M1-4	US Route Sign (1 or 2 digit)	62	36 x 36	Black	White	XI	9.00			Yes						1
				0.000	SOUTH	M5-3	Advance Roundabout Turn Arrow		30 x 21	Black	White	XI	4.38			Yes						1
S-41R	LT	34	54+00	1.023	SOUTH	M3-4	West		36 x 18	Black	White	XI	4.50		Stnd w/ Soil Plate	Yes	1	17			17	1
				0.000	SOUTH	M1-4	US Route Sign (1 or 2 digit)	62	36 x 36	Black	White	XI	9.00									1
				0.000	SOUTH	M5-1R	Advance Right Turn Arrow		30 x 21	Black	White	XI	4.38									1
S-42	LT	33	52+55	0.995	SOUTH	D1-1d	Circular Intersection Destination (1 line)	Elizabethtown	78 x 18	White	Green	XI		9.75	Stnd w/ Soil Plate	Yes	2	10			20	1
S-43	LT	25	51+34	0.972	SOUTH	W11-15	Bicycle / Pedestrian		48 x 48	Black	Fl Yellow Green	XI		16.00	Stnd w/ Soil Plate		2	16			32	1
				0.000	SOUTH	W16-7PL	Downward Diagonal Arrow (Left)		30 x 21	Black	Fl Yellow Green	XI	4.38									1
				0.000	EAST	R1-1	Stop		18 x 18	White	Red	XI	2.25									1
S-44	LT	24	51+51	0.976	WEST	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate		1	6			6	1
S-45	MED	59	50+43	0.955	WEST	M3-4	West		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	13			13	1
				0.000	WEST	M1-4	US Route Sign (1 or 2 digit)	62	24 x 24	Black	White	XI	4.00									1
				0.000	WEST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1
S-46	MED	0	51+20	0.970	NORTH	R5-1	Do Not Enter		48 x 48	White	Red	XI		16.00	Type D	Yes	2	17			34	1
				0.000	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75		Yes						1
				0.000	WEST	R6-1L	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	EAST	R6-1R	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	SOUTH	R1-2	Yield		60 x 60 x 60	White	Red	XI		10.83		Yes						1
				0.000	SOUTH	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-47	LT	33	51+15	0.969	NORTH	R5-1	Do Not Enter		48 x 48	White	Red	XI		16.00		Yes	2	17			34	1
				0.000	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75		Yes						1
				0.000	WEST	R6-1L	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	EAST	R6-1R	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	SOUTH	R1-2	Yield		60 x 60 x 60	White	Red	XI		10.83		Yes						1
				0.000	SOUTH	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1

Sign Summary — Hardin County — 4-954.00 Route US 62

SIGN LOCATION						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)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-48L	LT	36	511+63	9.690	WEST	M3-3	South		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate	Yes	1	14			14	1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00			Yes						1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00			Yes						1
				0.000	WEST	M5-1R	Advance Right Turn Arrow		21 x 15	Black	White	XI	2.19			Yes						1
S-48R	LT	36	511+63	9.690	WEST	M4-5	To		24 x 12	White	Blue	XI	2.00		Stnd w/ Soil Plate	Yes	1	14			14	1
				0.000	WEST	M1-1	Interstate Route Sign (2-digit)	65	24 x 24	White	Blue & Red	XI	4.00			Yes						1
				0.000	WEST	KY PKWY	WESTERN KENTUCKY PARKWAY	WENDELL H. FORD WESTERN KY PARKWAY	30 x 24	White/Blue	Blue/White/ Red	XI	5.00			Yes						1
				0.000	WEST	M5-1R	Advance Right Turn Arrow		21 x 15	White	Blue	XI	2.19			Yes						1
S-49	LT	40	509+62	9.652	WEST	D1-1d	Circular Intersection Destination (1 line)	TO Nicholas St	66 x 18	White	Green	XI		8.25	Stnd w/ Soil Plate	Yes	2	11			22	1
S-50	LT	42	507+61	9.614	WEST	D1-1d	Circular Intersection Destination (1 line)		78 x 18	White	Green	XI		9.75		Yes	2	11			22	1
S-51	LT	116	505+87	9.581	WEST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000	WEST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-52	MED	59	505+86	9.581	WEST	R1-2	Yield		48 x 48 x 48	White	Red	XI		6.93	Stnd w/ Soil Plate	Yes	1	15			15	1
				0.000	WEST	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-53	MED	8	21+32	0.404	WEST	M3-3	South		24 x 12	Black	White	XI	2.00		Type D Surface Mount		1					1
				0.000	WEST	M4-2	By-Pass		24 x 12	Black	White	XI	2.00									1
				0.000	WEST	M1-4a	US Route Sign (3 digit)	31W	30 x 24	Black	White	XI	5.00									1
				0.000	WEST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1
S-54	RT	36	21+66	0.410	NORTH	W11-15	Bicycle / Pedestrian		36 x 36	Black	Fl Yellow Green	XI	9.00		Stnd w/ Soil Plate		1	15			15	1
				0.000	NORTH	W16-7PL	Downward Diagonal Arrow (Left)		21 x 15	Black	Yellow	XI	2.19									1
S-55	LT	38	21+47	0.407	EAST	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate		1	6			6	1
S-56	MED	0	25+35	0.480	SOUTH	W2-6	Circular Intersection		48 x 48	Black	Yellow	XI		16.00	Type D Surface Mount		2	14			28	1
S-57	LT	29	25+35	0.480	SOUTH	W2-6	Circular Intersection		48 x 48	Black	Yellow	XI		16.00	Stnd w/ Soil Plate		2	14			28	1
S-58L	LT	29	24+50	0.464	SOUTH	M3-2	East		36 x 18	Black	White	XI	4.50		Stnd w/ Soil Plate	Yes	1	17			17	1
				0.000	SOUTH	M1-4	US Route Sign (1 or 2 digit)	62	36 x 36	Black	White	XI	9.00			Yes						1
				0.000	SOUTH	M5-3	Advance Roundabout Turn Arrow		30 x 21	Black	White	XI		4.38		Yes						1
S-58R	LT	32	24+50	0.464	SOUTH	M3-4	West		36 x 18	Black	White	XI	4.50		Stnd w/ Soil Plate	Yes	1	17			17	1
				0.000	SOUTH	M1-4	US Route Sign (1 or 2 digit)	62	36 x 36	Black	White	XI	9.00			Yes						1
				0.000	SOUTH	M5-1R	Advance Right Turn Arrow		30 x 21	Black	White	XI	4.38			Yes						1
S-59	LT	34	22+66	0.429	SOUTH	D1-1d	Circular Intersection Destination (1 line)	Elizabethtown	78 x 18	White	Green	XI		9.75	Stnd w/ Soil Plate	Yes	2					1
				0.000	SOUTH	D1-1d	Circular Intersection Destination (1 line)	TO Nicholas St	78 x 18	White	Green	XI		9.75		Yes						1
S-60	LT	34	21+85	0.414	WEST	R5-3	No Motor Vehicles		24 x 24	Black	White	XI	4.00		Stnd w/ Soil Plate		1	6			6	1
S-61	LT	38	21+65	0.410	SOUTH	W11-15	Bicycle / Pedestrian		48 x 48	Black	Fl Yellow Green	XI		16.00	Stnd w/ Soil Plate		2					1
				0.000	SOUTH	W16-7PL	Downward Diagonal Arrow (Left)		30 x 21	Black	Fl Yellow Green	XI	4.38									1
				0.000	EAST	R1-1	Stop		18 x 18	White	Red	XI	2.25									1
S-62	MED	94	20+72	0.392	WEST	M3-4	West		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	13			13	1
				0.000	WEST	M1-4	US Route Sign (1 or 2 digit)	62	24 x 24	Black	White	XI	4.00									1
				0.000	WEST	M6-2R	Upward Right Diagonal Arrow		21 x 15	Black	White	XI	2.19									1

Sign Summary — Hardin County — 4-954.00 Route US 62

SIGN LOCATION						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)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (incdntl to post)	TOTAL Estimated Sign Post Length (LF)	Barcode Sign Inv. (EACH)
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling					Text/ Symbol Color	Background Color	Sheeting Type										
S-63	LT	49	21+43	0.406	NORTH	R5-1	Do Not Enter		48 x 48	White	Red	XI		16.00	Type D Surface Mount	Yes	2	17			34	1
				0.000	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75		Yes						1
				0.000	WEST	R6-1L	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	EAST	R6-1R	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	SOUTH	R1-2	Yield		60 x 60 x 60	White	Red	XI		10.83		Yes						1
				0.000	SOUTH	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-64	MED	13	21+41	0.405	NORTH	R5-1	Do Not Enter		48 x 48	White	Red	XI		16.00	Type D	Yes	2	17			34	1
				0.000	NORTH	R5-1a	Wrong Way		42 x 30	White	Red	XI		8.75		Yes						1
				0.000	WEST	R6-1L	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	EAST	R6-1R	One Way		48 x 18	Black	White	XI		6.00								1
				0.000	SOUTH	R1-2	Yield		60 x 60 x 60	White	Red	XI		10.83		Yes						1
				0.000	SOUTH	R6-5P	Roundabout Circulation		30 x 30	Black	White	XI	6.25									1
S-65	LT	51	502+88	9.524	WEST	D1-1d	Circular Intersection Destination (1 line)	TO Nicholas St	78 x 18	White	Green	XI		9.75	Stnd w/ Soil Plate	Yes	2	11			22	1
S-66	LT	52	501+88	9.505	WEST	R3-4d	Trucks No U Turn	Trucks No U Turn	24 x 36	Black/Red	White	XI	6.00		Stnd w/ Soil Plate		1	11			11	1
S-67	LT	52	500+89	9.487	WEST	R3-4d	Trucks No U Turn	Trucks No U Turn	24 x 36	Black/Red	White	XI	6.00		Stnd w/ Soil Plate		1	11			11	1
S-68	LT	45	498+62	9.444	WEST	R2-1	Speed Limit XX	55	30 x 36	Black	White	XI	7.50		Stnd w/ Soil Plate		1	12			12	1
S-69	LT	43	496+63	9.406	WEST	M3-4	West		24 x 12	Black	White	XI	2.00		Stnd w/ Soil Plate		1	12			12	1
				0.000	WEST	M1-4	US Route Sign (1 or 2 digit)	62	24 x 24	Black	White	XI	4.00									1
				0.000			#N/A		?? ?? ??	#N/A	#N/A	#N/A	??	??								

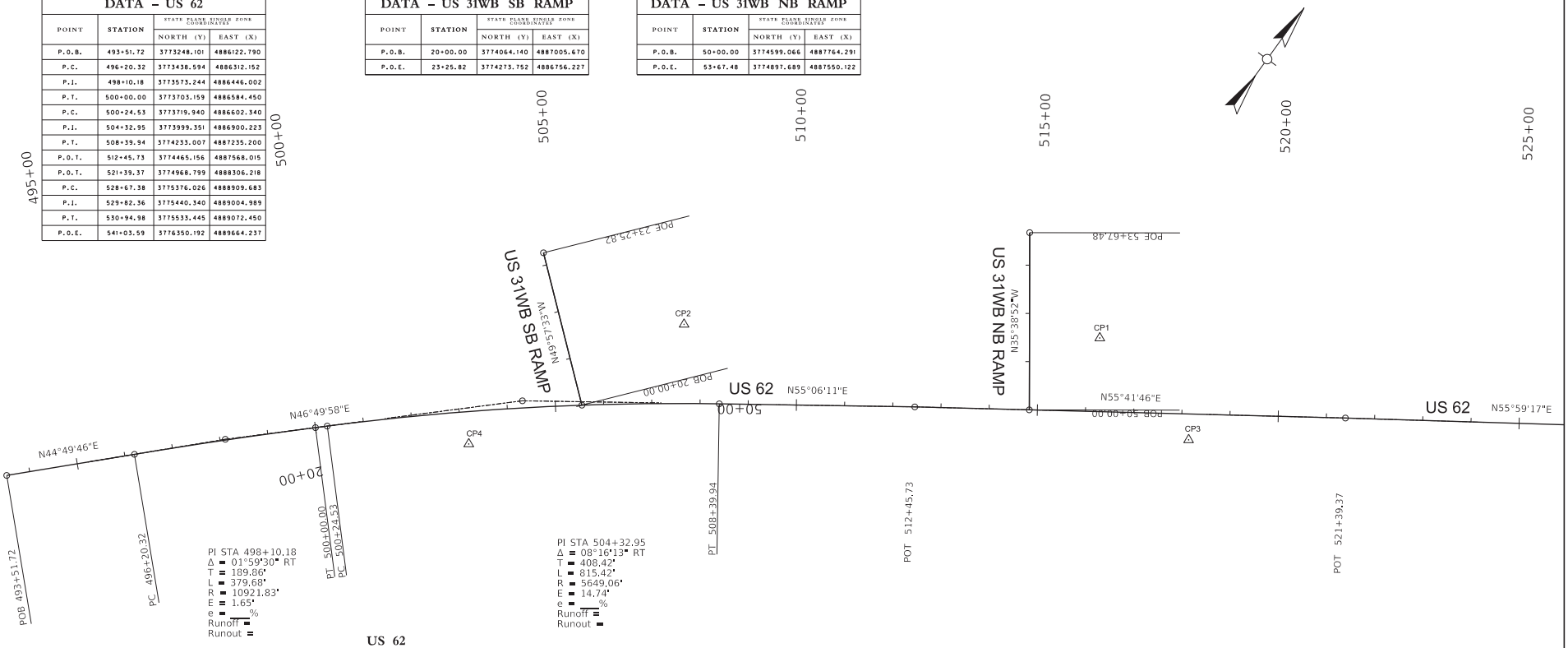
Summary of Items		
SBM Alum Sheet Signs 0.080 INCH	576.10	SQ FT
SBM Alum Sheet Signs 0.125 INCH	467.21	SQ FT
Barcode Sign Inventory	185	EACH

Summary of Items		
Steel Post - Type 1	1183	LF
GMSS Type D	7	EACH
GMSS Type D (Surface Mount)	15	EACH
Class A Concrete for Signs	1.75	CU YD

CENTERLINE COORDINATE DATA – US 62			
POINT	STATION	STATE PLANE SINGLE ZONE COORDINATES	
		NORTH (Y)	EAST (X)
P.O.B.	493+51.72	3773248.101	4886122.790
P.C.	496+20.32	3773438.594	4886312.152
P.I.	498+10.18	3773573.244	4886446.002
P.T.	500+00.00	3773703.159	4886584.450
P.C.	500+24.53	3773719.940	4886602.340
P.I.	504+32.95	3773999.351	4886900.223
P.T.	508+39.94	3774233.007	4887235.200
P.O.T.	512+45.73	3774465.156	4887568.015
P.O.T.	521+39.37	3774968.799	4888306.218
P.C.	528+67.38	3775376.026	4888909.683
P.I.	529+82.36	3775440.340	4889004.989
P.T.	530+94.98	3775533.445	4889072.450
P.O.E.	541+03.59	3776350.192	4889664.237

CENTERLINE COORDINATE DATA – US 31WB SB RAMP			
POINT	STATION	STATE PLANE SINGLE ZONE COORDINATES	
		NORTH (Y)	EAST (X)
P.O.B.	20+00.00	3774064.140	4887005.670
P.O.E.	23+25.82	3774273.752	4886756.227

CENTERLINE COORDINATE DATA – US 31WB NB RAMP			
POINT	STATION	STATE PLANE SINGLE ZONE COORDINATES	
		NORTH (Y)	EAST (X)
P.O.B.	50+00.00	3774599.066	4887764.291
P.O.E.	53+67.48	3774897.689	4887550.122



US 62
HARDIN COUNTY

PROJECT COORDINATES
COORDINATES FOR HORIZONTAL CONTROL WERE OBTAINED BY GPS OBSERVATIONS ON JANUARY 18, 2024 AND WERE ADJUSTED TO NGS OPUS SOLUTION BASED ON THE NAD83 KENTUCKY STATE PLANE COORDINATE SYSTEM, KY SINGLE ZONE, US SURVEY FEET. COORDINATES SHOWN ARE STATE PLANE COORDINATES, US SURVEY FEET. NO PROJECT DATUM FACTOR WAS CALCULATED OR USED FOR THIS PROJECT.

BASIS OF ELEVATIONS
ELEVATIONS WERE ESTABLISHED BY GPS OBSERVATIONS ON JANUARY 18, 2024 ON THE NAVD88 VERTICAL DATUM, GEOID12B UTILIZING NGS OPUS SOLUTION BASED ON THE ELEVATION OF CP#1 = 693.04'.

COORDINATE CONTROL POINTS						
POINT	DESCRIPTION	STATE PLANE SINGLE ZONE COORDINATES			STATION	OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)		
CP1	1/2" REBAR & CAP	3774805.4190	4887795.8540	693.036	516+25.70	152.67 LT
CP2	1/2" REBAR & CAP	3774324.0200	4887079.6920	690.572	507+66.60	164.10 LT
CP3	1/2" REBAR & CAP	3774741.9280	4888068.8120	697.924	518+15.40	53.61 RT
CP4	1/2" REBAR & CAP	3773861.5890	4886862.3260	690.296	503+14.63	67.19 RT

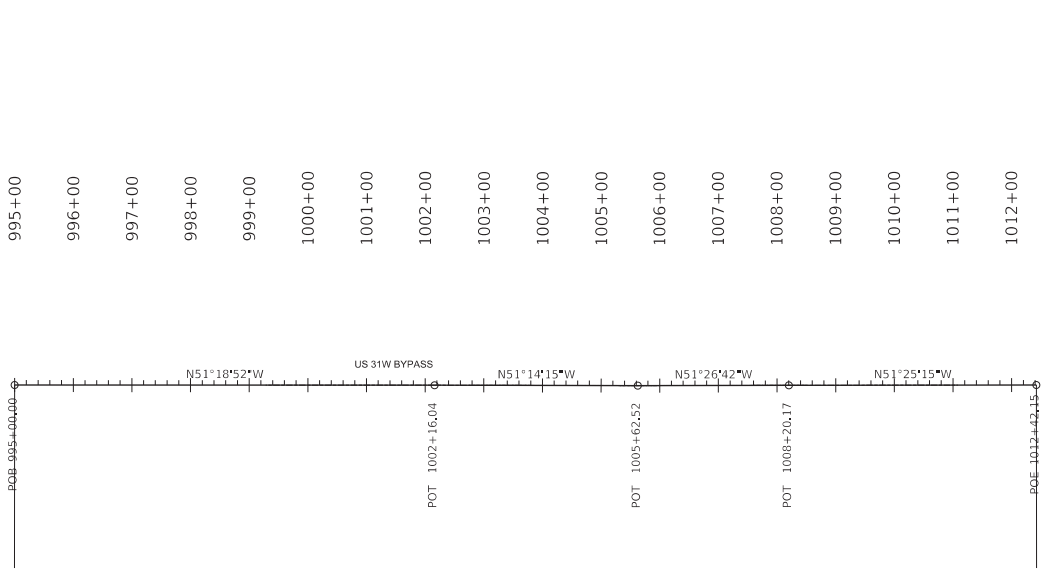
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

COORDINATE CONTROL - US 62

HORIZONTAL SCALE
SCALE: 1" = 100'
0' 100' 200' 400'

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002D

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\COORDINATE_CONTROL_SHEET.DGN



CENTERLINE COORDINATE DATA – US 31W BYPASS

POINT	STATION	STATE PLANE SINGLE ZONE COORDINATES	
		NORTH (Y)	EAST (X)
P.O.B.	995+00.00	3774039.51	4887931.17
P.O.T.	1002+16.04	3774487.06	4887372.24
P.O.T.	1005+62.52	3774703.99	4887102.07
P.O.T.	1008+20.17	3774864.58	4886900.58
P.O.E.	1012+42.15	3775127.72	4886570.70

COORDINATE CONTROL POINTS

POINT	DESCRIPTION	STATE PLANE SINGLE ZONE COORDINATES		
		NORTH (Y)	EAST (X)	ELEV. (Z)
CP1	1/2" REBAR & CAP	3774805.4190	4887795.8540	693.036
CP2	1/2" REBAR & CAP	3774324.0200	4887079.6920	690.572
CP3	1/2" REBAR & CAP	3774741.9280	4888068.8120	697.924
CP4	1/2" REBAR & CAP	3773861.5890	4886862.3260	690.296

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

COORDINATE CONTROL - US 31W BYPASS

HORIZONTAL SCALE
SCALE: 1" = 100'

0' 100' 200' 400'

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002E

OpenRoads Designer v23.00.01.11 USER: CREBAR FILE NAME: C:\PWWORKING\EAST01\D4011546\COORDINATE_CONTROL_SHEET_US31WB.DGN

Corporate Limits
County Line
Easement
Fence COA
Mineral Parcel
Property Line
Right of Way Line
All Overhead Utility Lines
Cable Underground Electric With Quality Levels
Duct Underground Electric With Quality Levels
Cable Underground Fiber With Quality Levels
Cable Underground Telephone With Quality Levels
Duct Underground Telephone With Quality Levels
Cable Underground TV With Quality Levels
Main Gas With Quality Levels
Main Water With Quality Levels
Main Water Greater Than 12 With Quality Levels
Sewer Sanitary With Quality Levels
Sewer Sanitary Force Main With Quality Levels
Sewer Storm With Quality Levels
Multi Utility Bank Quality Levels
Oil Line Quality Levels
Steam Line Quality Levels
Cable Underground Electric Marker
Duct Underground Electric Marker
Cable Underground Fiber Marker
Cable Underground Telephone Marker
Duct Underground Telephone Marker
Cable Underground TV Marker
Main Gas Marker

Main Water Marker
Main Water Greater Than 12 Marker
Sewer Sanitary Marker
Sewer Sanitary Force Main Marker
Sewer Storm Marker
Multi Utility Bank Marker
Oil Line Marker
Steam Line Marker
Cable Guardrail
Ditch
Edge of Water
Fence Hedge
Fence
Flow Line/Thalweg/ Int. Stream or Ditch
Guardrail
Railroad
Shrub Line
Sink Hole
Tree Line
Wall (WSM or DSM)
Blue Line Stream
Lakes and Ponds
Regulated Floodway
RDZ Line
ADA Ramp
Anchor Pole
Benchmark
Bike Lane Symbol
Bollard
Centerline
Centerline Stationing
Control Monument
Control Point
Core Hole
Crash Cushion TY 6 D
Crash Cushion TY 6 A
Crash Cushion TY 9A

Crash Cushion TY 9
Cross Notch
Curb Box Inlet
Curb Notch
Combination Pole
Delineator Post
Drop Box
Existing Spring
Electric Manhole
Electric Meter
Electric Pedestal
Electric Pole
Electric Junction Box
Fire Hydrant
Flag Pole
Force Main Sewer Valve
Fuel Tank Inlet
Fuel Tank Vent
Gas Meter
Gas Monitoring Well
Gas Valve
Gas Vent
Gas Well
Guidewires & Anchors
Headstone
Interstate Shield
Iron Pin
Light Pole
Low Wire
Mag Nail
Mailbox
Manhole
Mile Marker Post
Mineral Parcel
Misc Location Point
Monitoring Well
Parking Meter
Pedestrian Signal
Pins/Pipes
PK Nail

Point (Misc)
Pole
Pole (Light)
Post
Power Pole
Quarry
Random (Ground Shot)
Railroad Mile Marker
Railroad Spike
Right of Way Marker
Right of Way Monument
RR Traffic Signal Pole
RW Parcel
Sanitary Cleanout
Sanitary Manhole
Satellite Dish
Septic Tank Cleanout
Service Pole
Sewer Air Release Valve
Shrub
Sign
Sign Post (Single)
Sign with 2 posts
Sign group (4)
Station Stamp
Storm Manhole
Stub Power
Stub Telephone
Survey Cross Notch
Survey Curb Notch
Survey Nail
Survey Spike
Survey Stone Marker
Swamp
Telephone Booth
Telephone Junction Box
Telephone Line Overhead
Telephone Manhole

Telephone Pedestal
Telephone Pole
Temporary Benchmark
Traffic Light
Traffic Signal Control Box
Traffic Signal Junction Box
Traffic Signal Pole
Traverse Point
Tree
TV Junction Box
Utility Pole
Underground Storage Tank
Utility Test Hole
Water Line Marker
Water Meter
Water Spigot
Water Valve
Water Well
Yard Light
Yard Sprinkler
Yard Sprinkler Water Valve

Utility Owners

BRANDENBURG TELEPHONE CO.
KYLE DALTON 270.982.4466

CITY OF ELIZABETHTOWN SEWER
MICHAEL PAGE 270.268.0438

CITY OF ELIZABETHTOWN NATURAL GAS
MATTHEW HOBBS 270.268.2288

COMCAST COMMUNICATIONS
STEVE GADDIE 270.401.1543

CSX TRANSPORTATION INC.
BRAD ARMSTRONG 513.853.1221

HARDIN COUNTY WATER #2
FORREST POLLOCK 270.307.9744

KU ELECTRIC DISTRIBUTION
CAROLINE JUSTICE 502.627.3708

KU ELECTRIC TRANSMISSION
CAROLINE JUSTICE 502.627.3708

LEVEL 3 COMMUNICATIONS LLC
PATRICK BARKES 812.341.7335

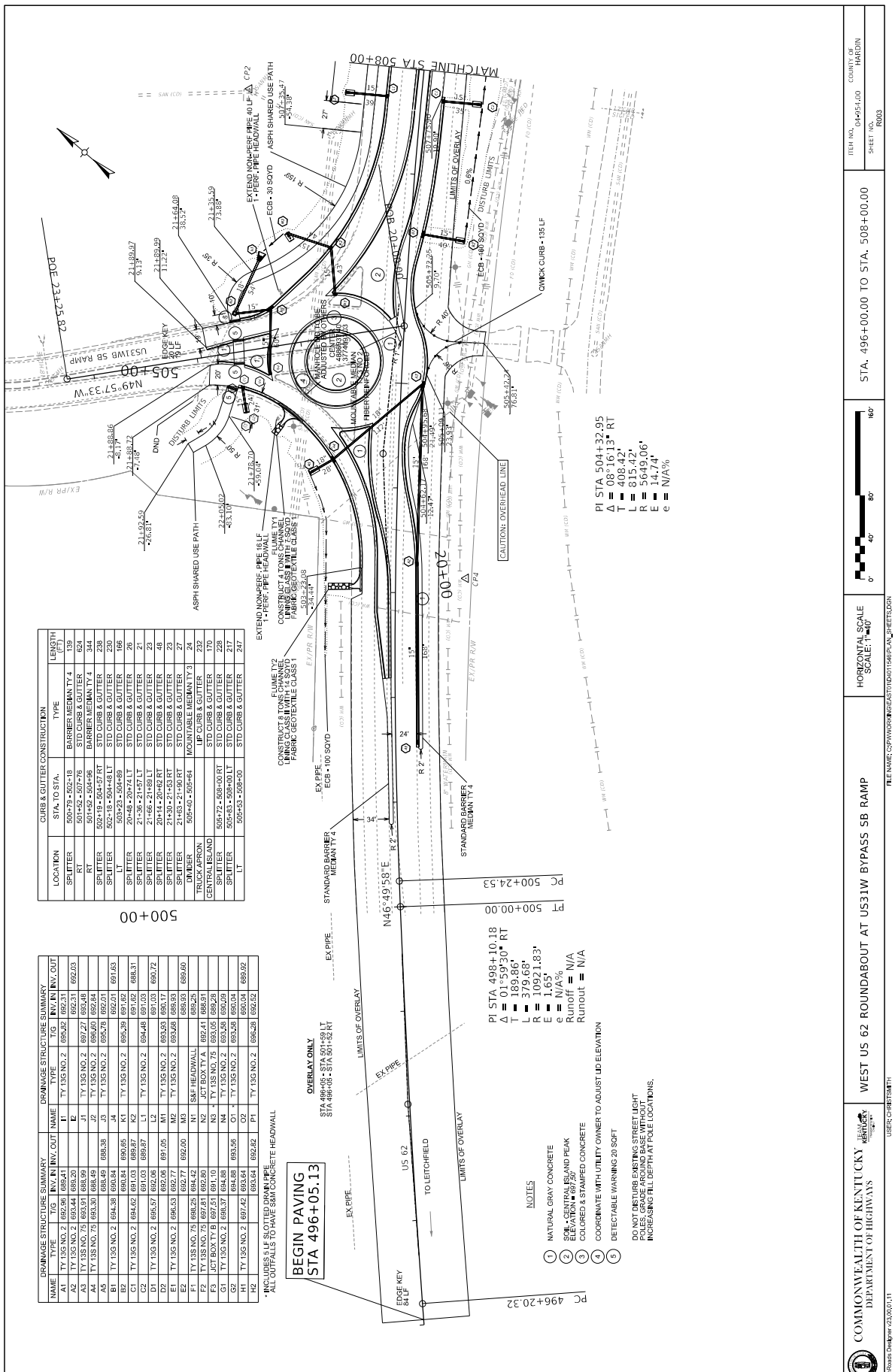
WINDSTREAM HOLDINGS II, LLC
STEVE JOHNSON 859.357.6209

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

LEGEND/UTILITY OWNERS

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R002F

OpenRoads Designer v23,00,01,11
USER; CREBAR
FILE NAME; C:\PWWORKING\EAST01\D4011546\PLAN_SHEETS.DGN



DRAINAGE STRUCTURE SUMMARY

NAME	TYPE	T/G	INV. IN	INV. OUT
A1	TY 13G NO. 2	692.96	689.41	
A2	TY 13G NO. 2	693.44	689.20	
A3	TY 13S NO. 75	693.91	689.99	
A4	TY 13S NO. 75	693.30	689.49	
A5	TY 13S NO. 75	693.30	689.49	
B1	TY 13G NO. 2	694.38	690.84	
B2			690.84	690.65
C1	TY 13G NO. 2	694.62	691.03	689.87
C2			691.03	689.87
D1	TY 13G NO. 2	695.57	692.06	
D2			692.06	691.05
E1	TY 13G NO. 2	696.53	692.77	
E2			692.77	692.00
F1	TY 13S NO. 75	698.25	694.42	
F2	TY 13S NO. 75	697.81	692.80	
F3	JCT BOX TY B	697.51	691.10	
G1	TY 13G NO. 2	697.37	694.88	
G2			694.88	693.56
H1	TY 13G NO. 2	697.42	693.64	
H2			693.64	692.82

DRAINAGE STRUCTURE SUMMARY

NAME	TYPE	T/G	INV. IN	INV. OUT
1*	TY 13G NO. 2	695.92	692.31	
2*			692.31	692.03
J1	TY 13G NO. 2	697.27	693.46	
J2	TY 13G NO. 2	695.80	692.64	
J3	TY 13G NO. 2	695.79	692.64	
J4			692.01	691.63
K1	TY 13G NO. 2	695.39	691.82	
K2			691.82	689.31
L1	TY 13G NO. 2	694.48	691.03	
L2			691.03	690.72
M1	TY 13G NO. 2	693.93	690.17	
M2	TY 13G NO. 2	693.68	689.93	
M3			689.93	689.60
N1	S&P HEADWALL		689.25	
N2	JCT BOX TY A	692.41	686.91	
N3 *	TY 13S NO. 75	693.05	689.28	
N4	TY 13G NO. 2	693.58	690.09	
O1 *	TY 13G NO. 2	693.58	690.04	
O2			690.04	689.92
P1	TY 13G NO. 2	696.28	692.52	

*INCLUDES 5 LF SLOTTED DRAIN PIPE
ALL OUTFALLS TO HAVE 36IN CONCRETE HEADWALL

CURB & GUTTER CONSTRUCTION

LOCATION	STA. TO STA.	TYPE	LENGTH (FT)
SPLITTER	500+79 - 502+18	BARRIER MEDIAN TY 4	139
RT	501+52 - 507+76	STD CURB & GUTTER	624
RT	501+52 - 504+96	BARRIER MEDIAN TY 4	344
SPLITTER	502+19 - 504+57 RT	STD CURB & GUTTER	238
SPLITTER	502+18 - 504+48 LT	STD CURB & GUTTER	230
LT	503+23 - 504+89	STD CURB & GUTTER	166
SPLITTER	20+48 - 20+74 LT	STD CURB & GUTTER	26
SPLITTER	21+36 - 21+57 LT	STD CURB & GUTTER	21
SPLITTER	21+66 - 21+89 LT	STD CURB & GUTTER	23
SPLITTER	20+14 - 20+62 RT	STD CURB & GUTTER	48
SPLITTER	21+30 - 21+53 RT	STD CURB & GUTTER	23
SPLITTER	21+63 - 21+90 RT	STD CURB & GUTTER	27
DIVIDER	505+40 - 505+64	MOUNTABLE MEDIAN TY 3	24
TRUCK APRON		LIP CURB & GUTTER	232
CENTRAL ISLAND		STD CURB & GUTTER	279
SPLITTER	505+72 - 508+00 RT	STD CURB & GUTTER	228
SPLITTER	505+45 - 508+00 LT	STD CURB & GUTTER	217
LT	505+43 - 508+00	STD CURB & GUTTER	247

DRAINAGE STRUCTURE SUMMARY					DRAINAGE STRUCTURE SUMMARY				
NAME	TYPE	T/G	INV. IN	INV. OUT	NAME	TYPE	T/G	INV. IN	INV. OUT
A1	TY 13G NO. 2	692.96	689.41		I1	TY 13G NO. 2	695.82	692.31	
A2	TY 13G NO. 2	693.44	689.20		I2			692.31	692.03
A3	TY 13S NO. 75	693.91	688.99		J1	TY 13G NO. 2	697.27	693.48	
A4	TY 13S NO. 75	693.30	688.49		J2	TY 13G NO. 2	696.60	692.84	
A5			688.49	688.38	J3	TY 13G NO. 2	695.78	692.01	
B1	TY 13G NO. 2	694.38	690.84		J4			692.01	691.63
B2			690.84	690.65	K1	TY 13G NO. 2	695.39	691.62	
C1	TY 13G NO. 2	694.62	691.03	689.87	K2			691.62	688.31
C2			691.03	689.87	L1	TY 13G NO. 2	694.48	691.03	
D1	TY 13G NO. 2	695.57	692.06		L2			691.03	690.72
D2			692.06	691.05	M1	TY 13G NO. 2	693.93	690.17	
E1	TY 13G NO. 2	696.53	692.77		M2	TY 13G NO. 2	693.68	689.93	
E2			692.77	692.00	M3			689.93	689.60
F1	TY 13S NO. 75	698.25	694.42		N1	S&F HEADWALL		689.25	
F2	TY 13S NO. 75	697.81	692.80		N2	JCT BOX TY A	692.41	688.91	
F3	JCT BOX TY B	697.51	691.10		N3	TY 13S NO. 75	693.05	689.28	
G1	TY 13G NO. 2	698.37	694.88		N4	TY 13G NO. 2	693.58	690.09	
G2			694.88	693.56	O1	TY 13G NO. 2	693.58	690.04	
H1	TY 13G NO. 2	697.42	693.64		O2			690.04	689.92
H2			693.64	692.82	P1	TY 13G NO. 2	696.28	692.52	

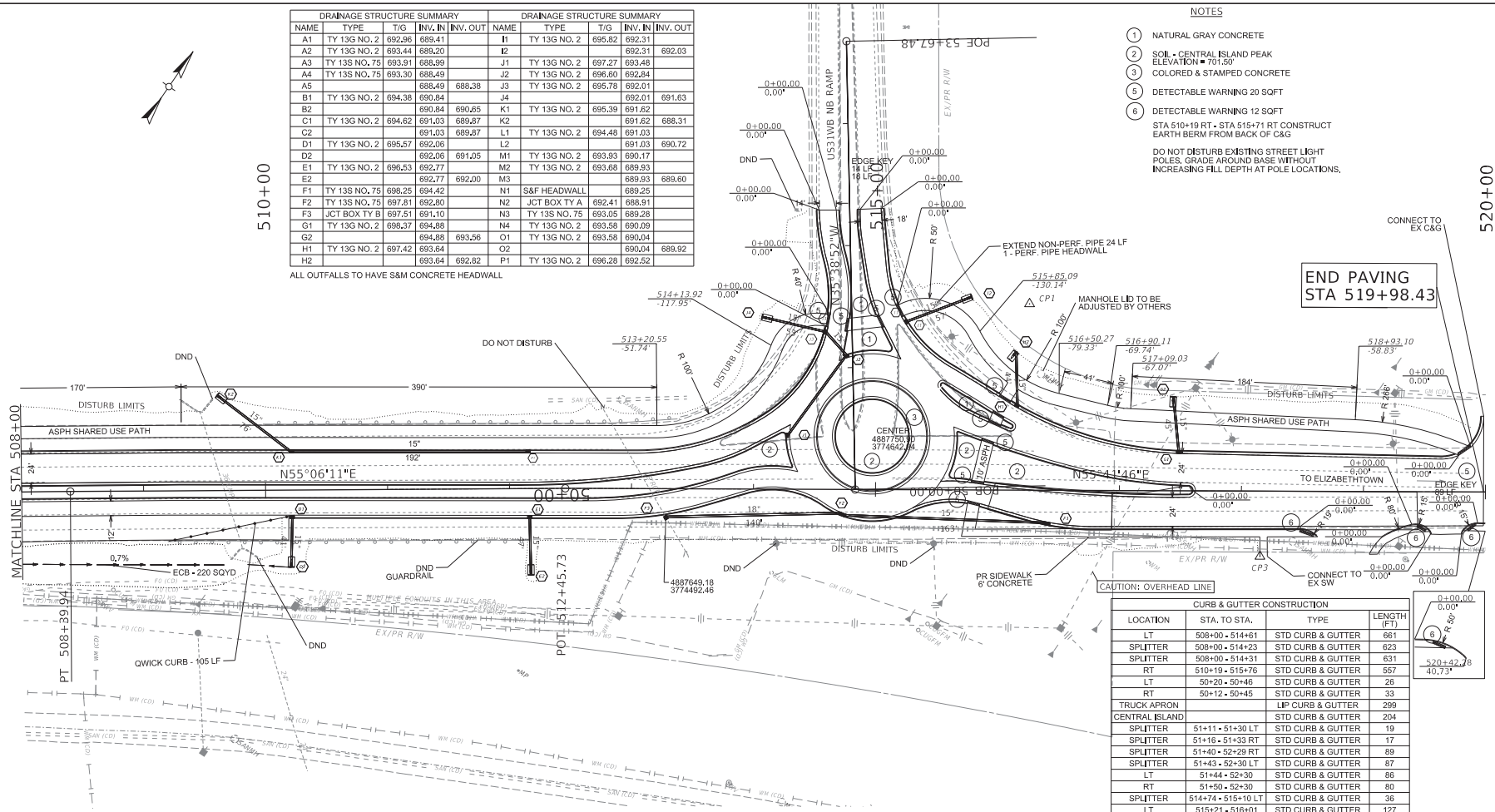
ALL OUTFALLS TO HAVE S&M CONCRETE HEADWALL

NOTES

1. NATURAL GRAY CONCRETE
2. SOIL - CENTRAL ISLAND PEAK ELEVATION = 701.50'
3. COLORED & STAMPED CONCRETE
5. DETECTABLE WARNING 20 SQFT
6. DETECTABLE WARNING 12 SQFT

STA 510+19 RT - STA 515+71 RT CONSTRUCT EARTH BERM FROM BACK OF C&G

DO NOT DISTURB EXISTING STREET LIGHT POLES, GRADE AROUND BASE WITHOUT INCREASING FILL DEPTH AT POLE LOCATIONS.



CURB & GUTTER CONSTRUCTION			
LOCATION	STA. TO STA.	TYPE	LENGTH (FT)
LT	508+00 - 514+61	STD CURB & GUTTER	661
SPLITTER	508+00 - 514+23	STD CURB & GUTTER	623
SPLITTER	508+00 - 514+31	STD CURB & GUTTER	631
RT	510+19 - 515+76	STD CURB & GUTTER	557
LT	50+20 - 50+46	STD CURB & GUTTER	26
RT	50+12 - 50+45	STD CURB & GUTTER	33
TRUCK APRON		LIP CURB & GUTTER	299
CENTRAL ISLAND		STD CURB & GUTTER	204
SPLITTER	51+11 - 51+30 LT	STD CURB & GUTTER	19
SPLITTER	51+16 - 51+33 RT	STD CURB & GUTTER	17
SPLITTER	51+40 - 52+29 RT	STD CURB & GUTTER	89
SPLITTER	51+43 - 52+30 LT	STD CURB & GUTTER	87
LT	51+44 - 52+30	STD CURB & GUTTER	86
RT	51+50 - 52+30	STD CURB & GUTTER	80
SPLITTER	514+74 - 515+10 LT	STD CURB & GUTTER	36
LT	515+21 - 516+01	STD CURB & GUTTER	127
DIVIDER	515+53 - 515+97 LT	ISLAND CURB & GUTTER	44
DIVIDER	515+53 - 515+93 RT	ISLAND CURB & GUTTER	40
SPLITTER	515+63 - 515+78 RT	STD CURB & GUTTER	15
SPLITTER	515+67 - 515+87 LT	STD CURB & GUTTER	20
RT	515+86 - 518+48	STD CURB & GUTTER	262
SPLITTER	515+88 - 517+60 RT	STD CURB & GUTTER	163
SPLITTER	515+97 - 517+60 LT	STD CURB & GUTTER	163
DIVIDER	516+02 - 516+14 RT	ISLAND CURB & GUTTER	12
DIVIDER	516+05 - 516+14	ISLAND CURB & GUTTER	9
LT	516+10 - 519+78	STD CURB & GUTTER	368
LT	519+88 - 519+98	STD CURB & GUTTER	10
RT	519+15 - 519+40	STD CURB & GUTTER	25
RT	519+81 - 520+42	STD CURB & GUTTER	61

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

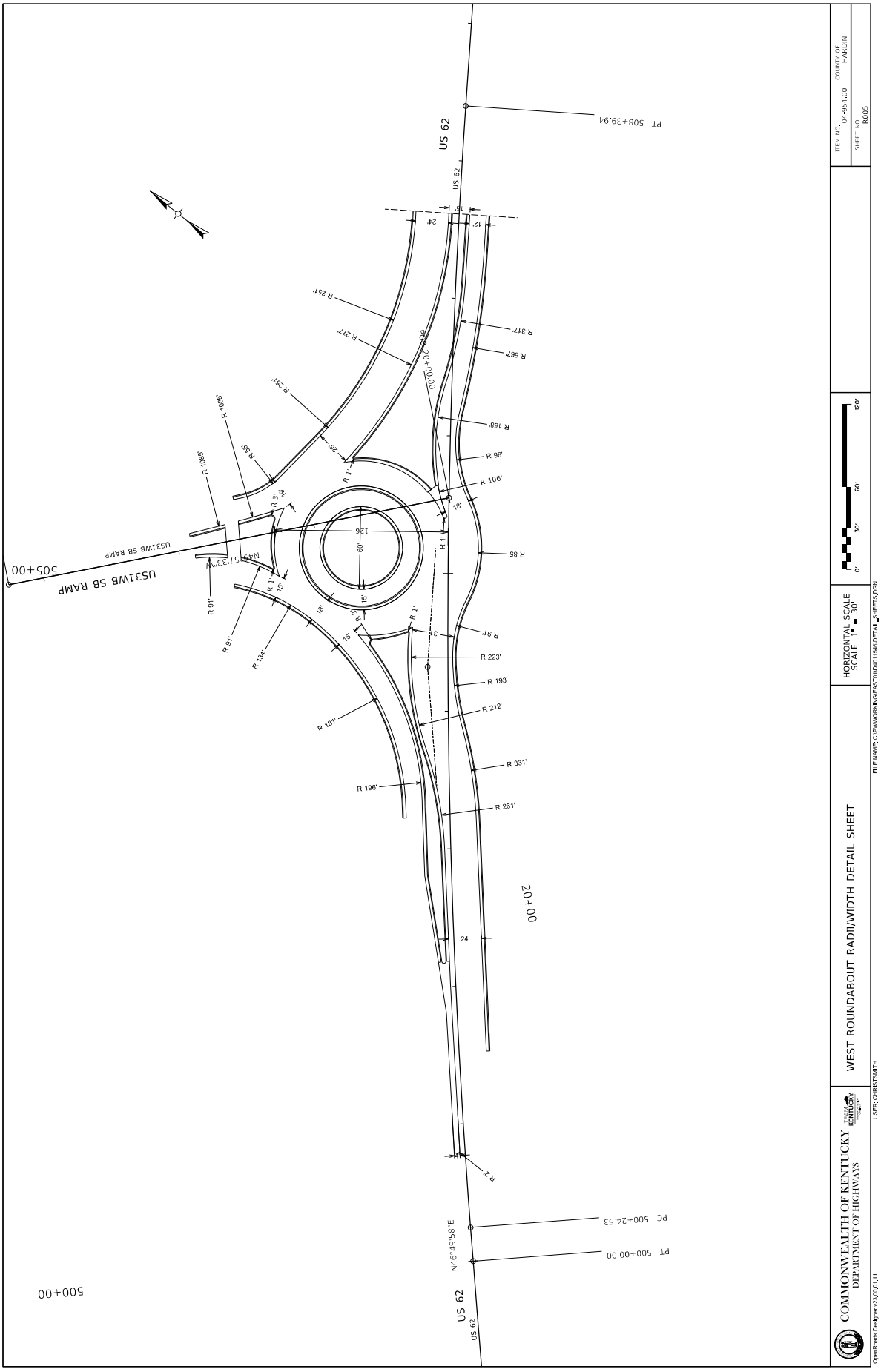
US 62 ROUNDABOUT AT US31WB NB RAMP

HORIZONTAL SCALE
SCALE: 1"=40'
0' 40' 80' 160'

STA. 508+00.00 TO STA. 520+00.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R004

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\PLAN_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

WEST ROUNDABOUT RADII/WIDTH DETAIL SHEET

HORIZONTAL SCALE
SCALE: 1" = 30'

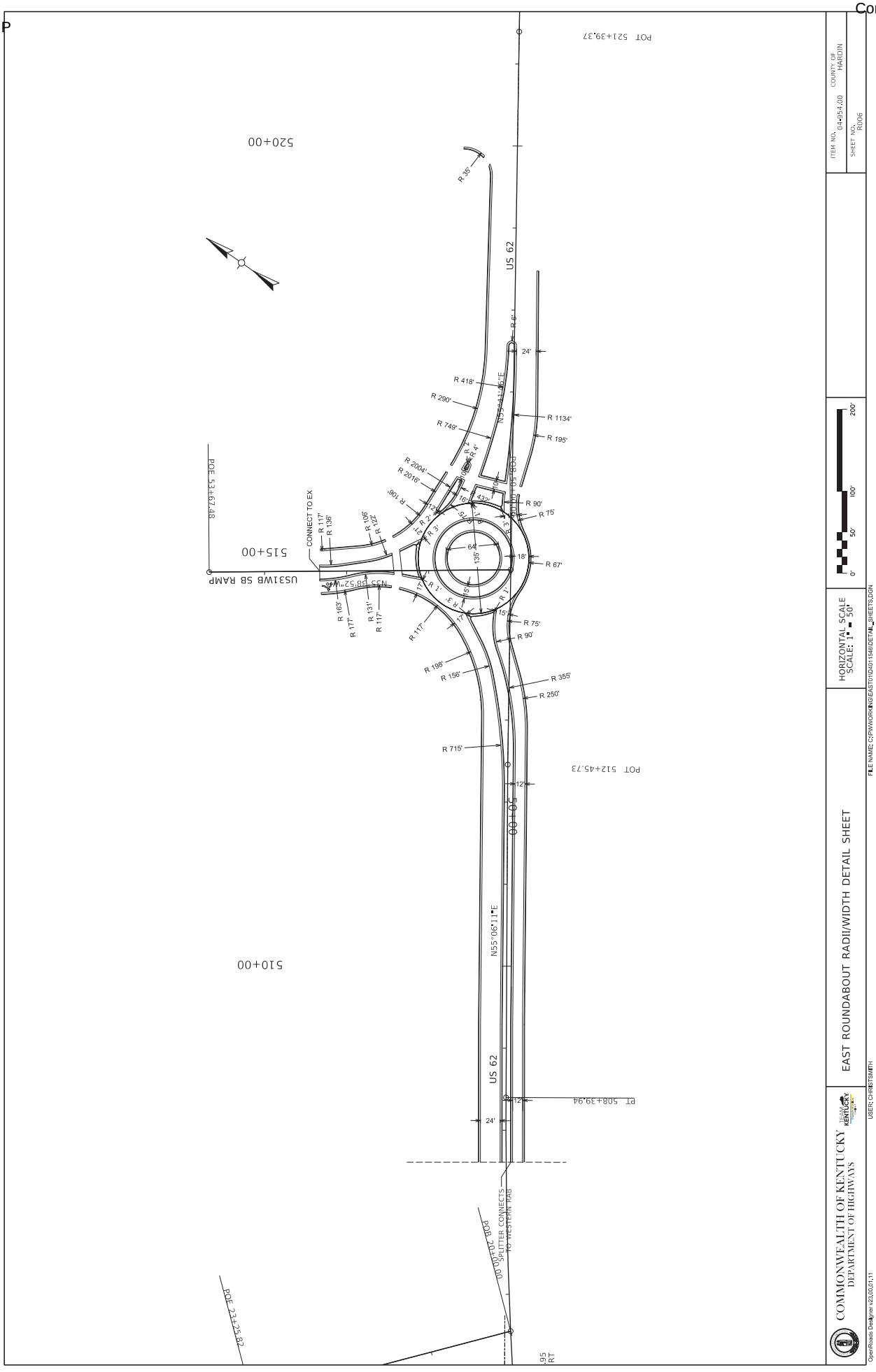
0' 30' 60' 120'

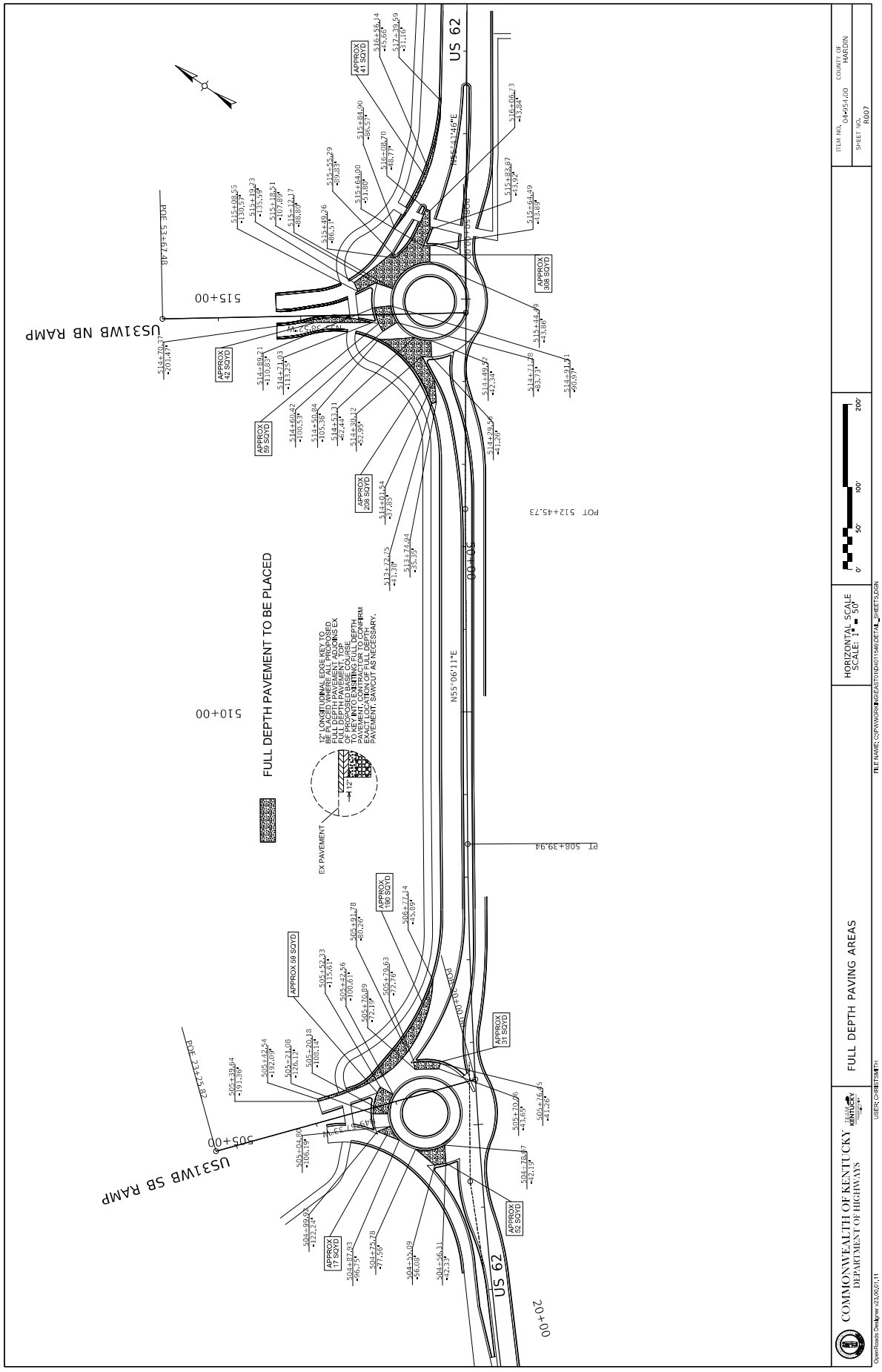
ITEM NO. 04-054.00 COUNTY OF HARDIN
SHEET NO. R005

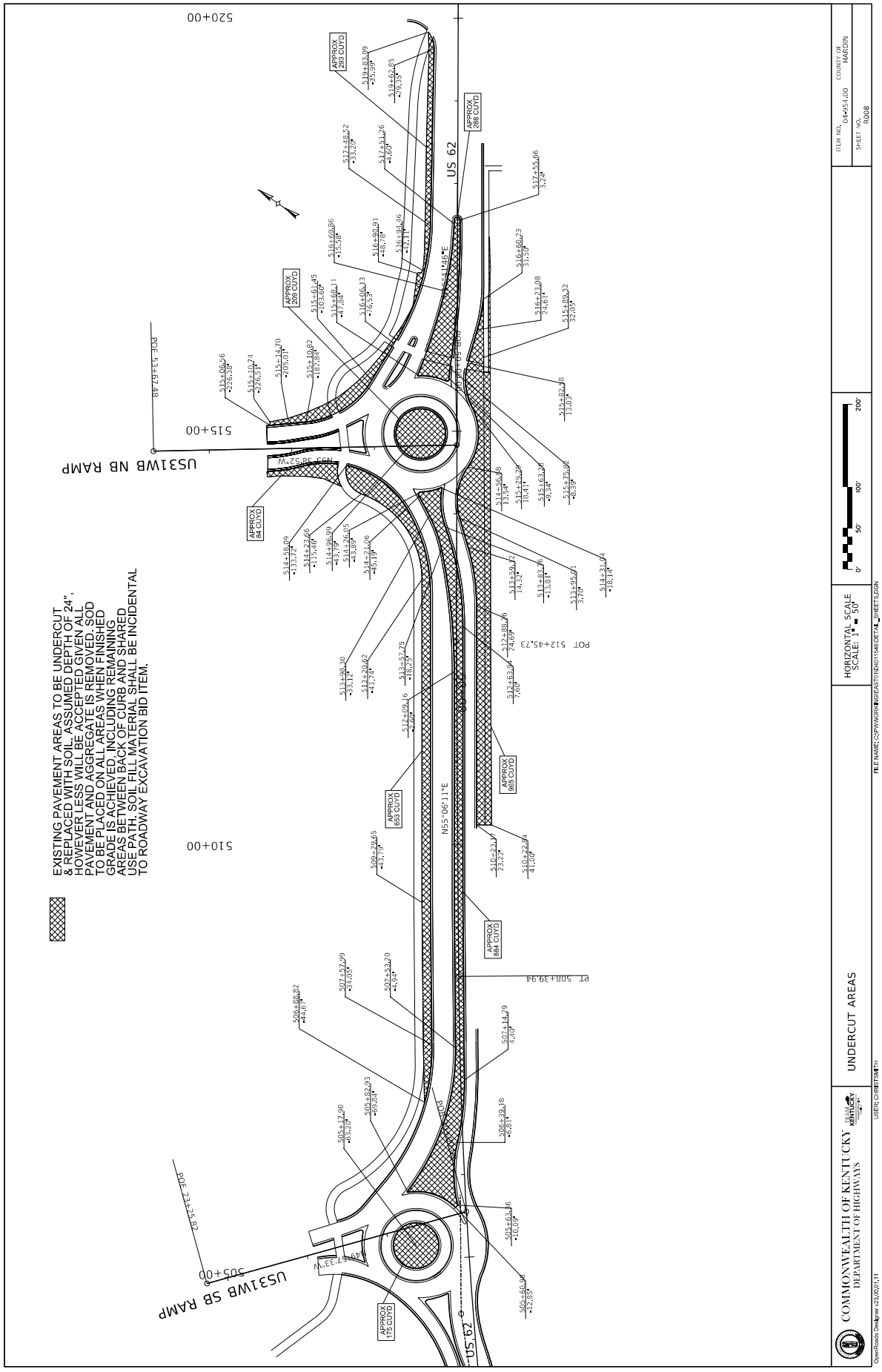
FILE NAME: C:\PW\WORK\ENGE\ASTOND\d0715461\DETAIL_SHEETS.DGN

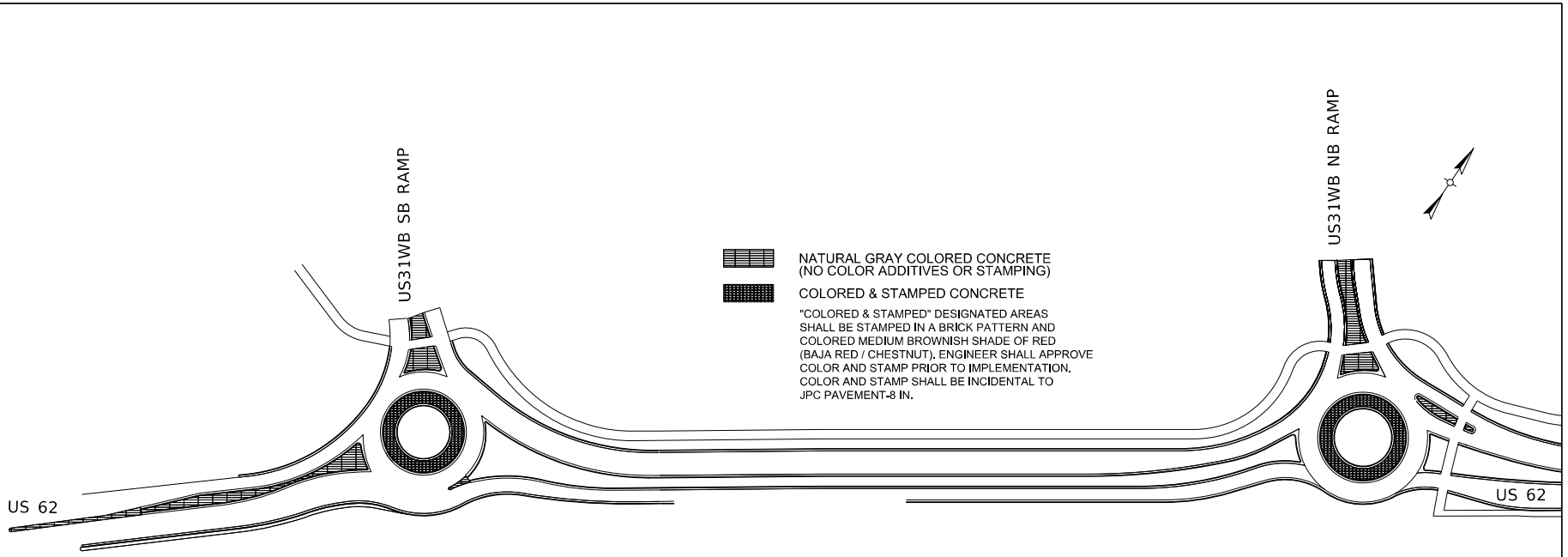
USER: CHRISTSMITH

OpenRoads Designer v23.00.01.11


US 62
US 62
520+00
515+00
510+00
505+00
POT 521+39.37
POT 512+45.73
PT 508+39.94
POE 523+97.48
POE 23+25.82
POB 0+00.00
SPLITTER CONNECTS TO WESTERN RAMP
CONNECT TO EX
US31WB SB RAMP
N55°41'06"E
N55°06'11"E
N55°38'52"W
R 35'
R 418'
R 290'
R 749'
R 1134'
R 195'
R 2004'
R 2016'
R 106'
R 90'
R 75'
R 67'
R 117'
R 136'
R 122'
R 163'
R 177'
R 131'
R 198'
R 156'
R 355'
R 250'
R 715'
24'
12'
64'
135'
18'
15'
0'
50'
100'
200'
HORIZONTAL SCALE
SCALE: 1" = 50'
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R006
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
EAST ROUNDABOUT RADII/WIDTH DETAIL SHEET
FILE NAME: C:\PW\WORKING\EAST\01\D40115460\DET\ML_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11


FULL DEPTH PAVEMENT TO BE PLACED
EX PAVEMENT
12"
"X" LONGITUDINAL EDGE MEET TO BE ADJUSTED WHERE ALL PROPOSED FULL DEPTH PAVEMENT ADJOINS EX FULL DEPTH PAVEMENT TO PROVIDE A MINIMUM 12" OVERLAP OF PROPOSED BASE COURSE TO KEY INTO EXISTING FULL DEPTH PAVEMENT. FIELD VERIFY AND CONFIRM EXACT LOCATION OF FULL DEPTH PAVEMENT. SAWCUT AS NECESSARY.
US 62
US31WB NB RAMP
US31WB SB RAMP
N55°06'11"E
N55°41'46"E
APPROX 41 SQYD
APPROX 42 SQYD
APPROX 49 SQYD
APPROX 208 SQYD
APPROX 90 SQYD
APPROX 41 SQYD
APPROX 52 SQYD
APPROX 17 SQYD
APPROX 59 SQYD
APPROX 30 SQYD
PT 508+39.94
POT 512+45.73
POT 504+70.06
POC 234+75.92
POC 534+67.48
510+00
515+00
505+00
20+00
HORIZONTAL SCALE
SCALE: 1" = 50'
0'
50'
100'
200'
FULL DEPTH PAVING AREAS
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
ITEM NO. 047-054.00
SHEET NO. R007
COUNTY OF HARDIN
FILE NAME: C:\PAVWORK\INDIGE\ASTOND\401546\DETAIL_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11


EXISTING PAVEMENT AREAS TO BE UNDERCUT & REPLACED WITH SOIL. ASSUMED DEPTH OF 24", HOWEVER LESS WILL BE ACCEPTED GIVEN ALL PAVEMENT AND AGGREGATE IS REMOVED. SOD TO BE PLACED ON ALL AREAS WHEN FINISHED GRADE IS ACHIEVED, INCLUDING REMAINING AREAS BETWEEN BACK OF CURB AND SHARED USE PATH. SOIL FILL MATERIAL SHALL BE INCIDENTAL TO ROADWAY EXCAVATION BID ITEM.
US 62
US31WB NB RAMP
US31WB SB RAMP
APPROX 84 CUYD
APPROX 209 CUYD
APPROX 283 CUYD
APPROX 288 CUYD
APPROX 653 CUYD
APPROX 965 CUYD
APPROX 864 CUYD
APPROX 175 CUYD
HORIZONTAL SCALE
SCALE: 1" = 50'
0' 50' 100' 200'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
UNDERCUT AREAS
ITEM NO. 04-054.00
COUNTY OF HARDIN
SHEET NO. R008
FILE NAME: C:\PW\WORK\INDIGE\ASTON\D401546\DETAIL_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

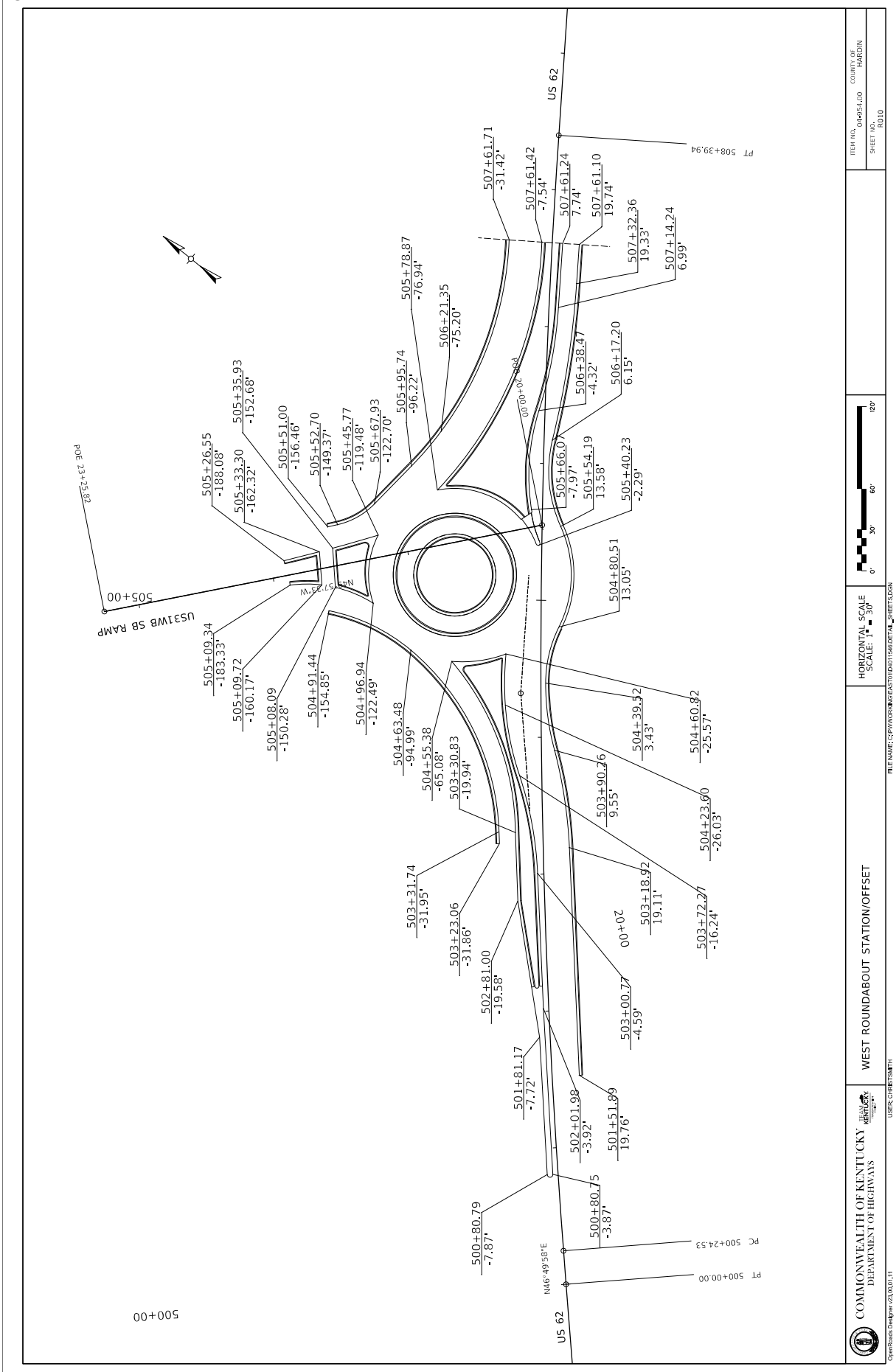
CONCRETE DESIGNATION

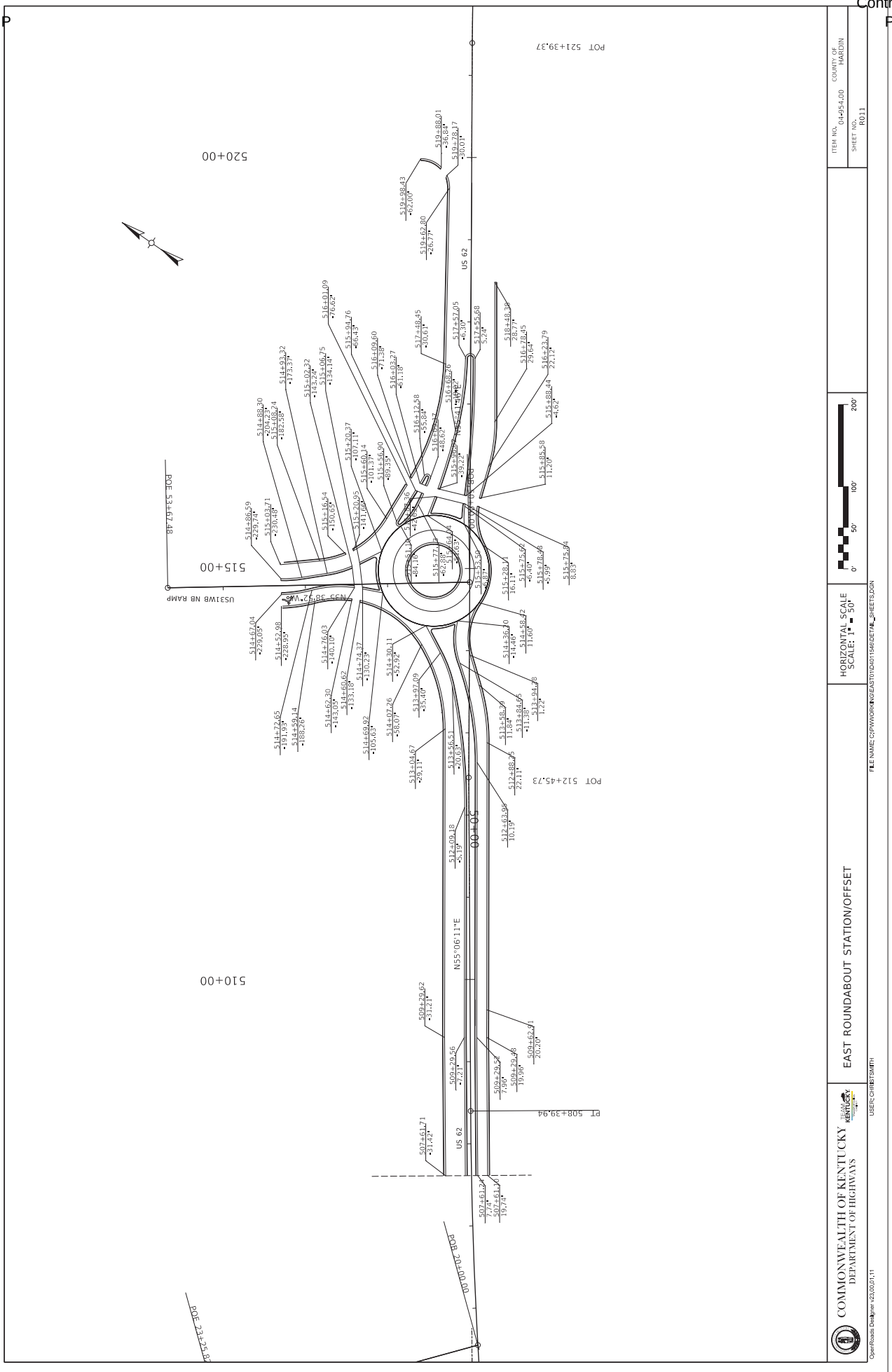
HORIZONTAL SCALE
SCALE: 1" = 50'

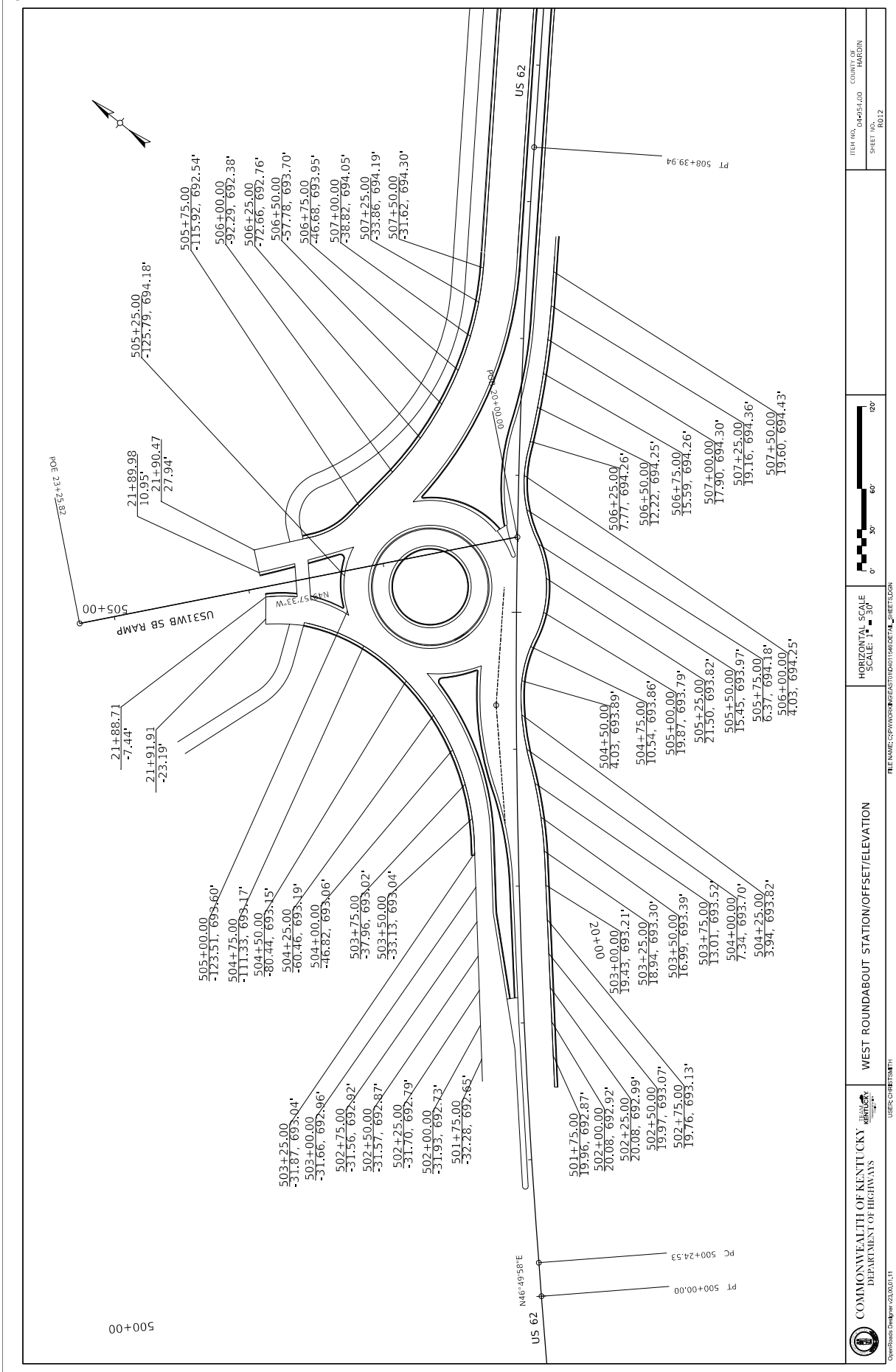
0' 50' 100' 200'

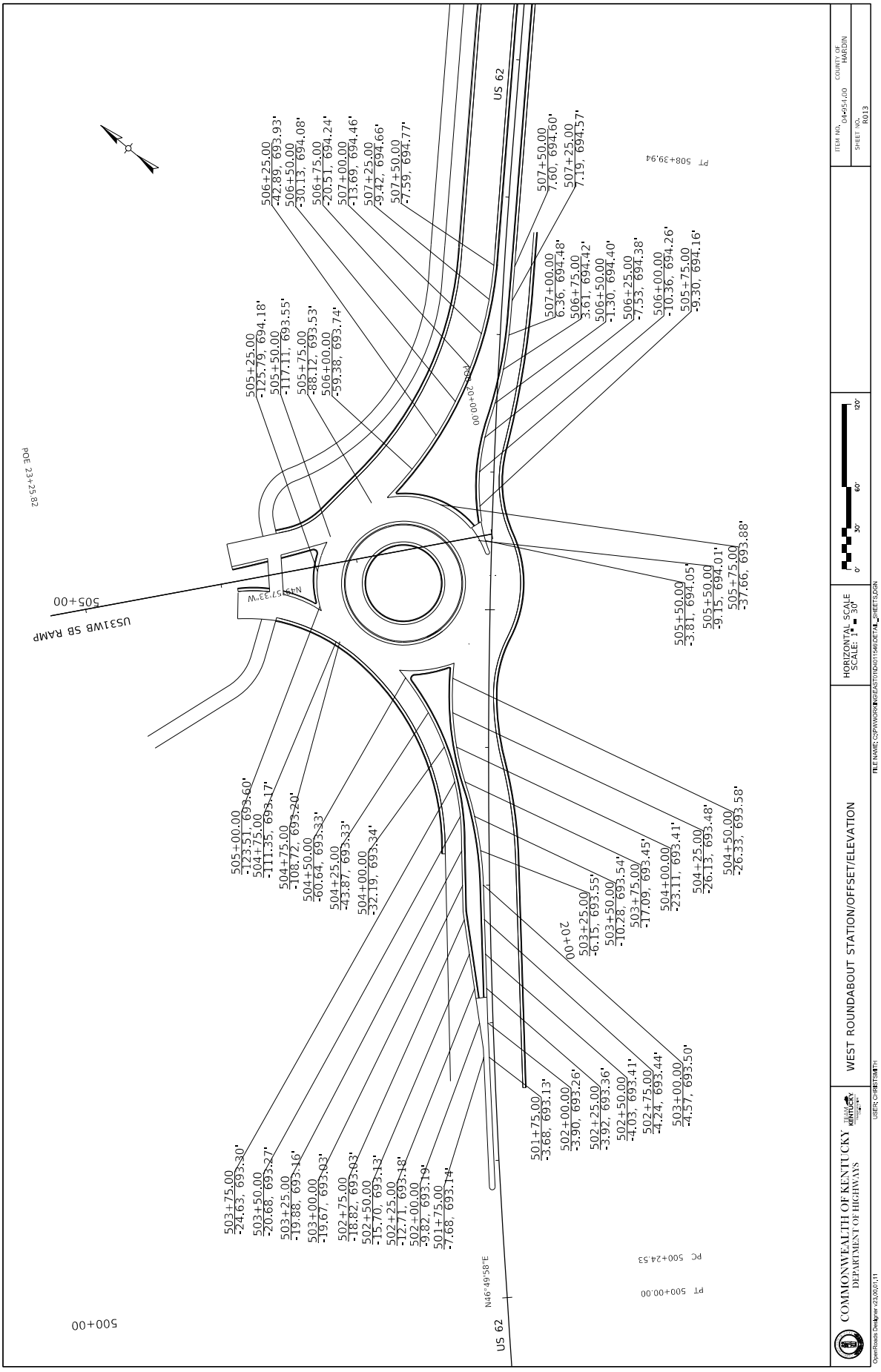
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R009

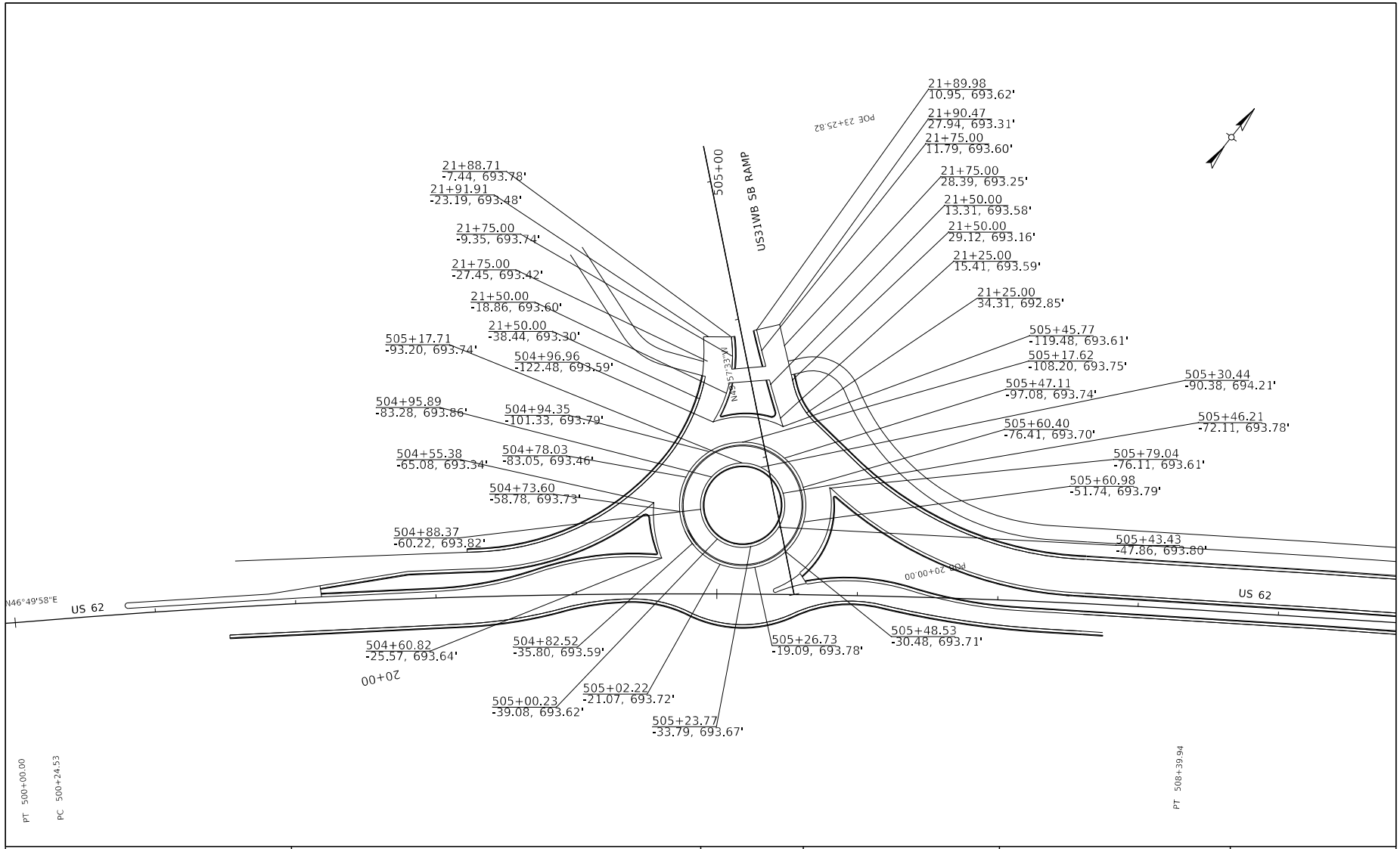
OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\DETAIL_SHEETS.DGN


US 62
US 62
US31WB SB RAMP
POE 23+25.82
PT 508+39.94
PC 500+24.53
PT 500+00.00
N46°49'58"E
505+00
500+00
20+00
505+26.55 -188.08'
505+33.30 -162.32'
505+35.93 -152.68'
505+51.00 -156.46'
505+52.70 149.37'
505+45.77 -119.48'
505+67.93 -122.70'
505+95.74 -96.22'
505+78.87 -76.94'
506+21.35 -75.20'
507+61.71 -31.42'
507+61.42 -7.54'
507+61.24 7.74'
507+61.10 19.74'
507+32.36 19.33'
507+14.24 6.99'
506+17.20 6.15'
506+38.47 -4.32'
505+66.07 -7.97'
505+54.19 13.58'
505+40.23 -2.29'
504+80.51 13.05'
505+09.34 -183.33'
505+09.72 -160.17'
505+08.09 -150.28'
504+91.44 -154.85'
504+96.94 -122.49'
504+63.48 -94.99'
504+55.38 -65.08'
503+30.83 -19.94'
504+39.32 3.43'
504+60.82 -25.57'
503+90.26 9.55'
504+23.60 -26.03'
503+31.74 -31.95'
503+23.06 -31.86'
502+81.00 -19.58'
503+18.92 19.11'
503+72.27 -16.24'
503+00.27 -4.59'
501+81.17 -7.72'
502+01.98 -3.92'
501+51.89 19.76'
500+80.75 -3.87'
500+80.79 -7.87'
HORIZONTAL SCALE
SCALE: 1" = 30'
0' 30' 60' 120'
ITEM NO. 04-054.00
SHEET NO. R010
COUNTY OF HARDIN
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TRANSPORTATION CABINET
WEST ROUNDABOUT STATION/OFFSET
FILE NAME: C:\PW\WORK\DGE\ASTOND\d0715461\DET\M_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
EAST ROUNDABOUT STATION/OFFSET
HORIZONTAL SCALE
SCALE: 1" = 50'
0'
50'
100'
200'
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R011
FILE NAME: C:\PW\WORKING\EAST\01D\401546\DET\ML_SHEETS.DGN
USER: CHIRSTSMITH
OpenRoads Designer v23.00.01.11
POT 521+39.37
POT 512+45.73
PT 508+39.94
POE 534+67.48
POE 23+25.82
POB 204+00.00
US 62
US31WB NB RAMP
N55°06'11"E
N55°38'52"W
510+00
515+00
520+00


US 62
US 62
US31WB SB RAMP
N46°49'58"E
N46°57'33"W
PT 508+39.94
PC 500+24.53
PT 500+00.00
POE 23+25.82
POE 20+01.09
505+75.00
-115.92, 692.54'
506+00.00
-92.29, 692.38'
506+25.00
-72.66, 692.76'
506+50.00
-57.78, 693.70'
506+75.00
-46.68, 693.95'
507+00.00
-38.82, 694.05'
507+25.00
-33.86, 694.19'
507+50.00
-31.62, 694.30'
505+25.00
-125.79, 694.18'
21+89.98
10.95'
21+90.47
27.94'
21+88.71
-7.44'
21+91.91
-23.19'
505+00.00
-123.51, 693.60'
504+75.00
-111.33, 693.17'
504+50.00
-80.44, 693.15'
504+25.00
-60.46, 693.19'
504+00.00
-46.82, 693.06'
503+75.00
-37.96, 693.02'
503+50.00
-33.13, 693.04'
503+25.00
-31.87, 693.04'
503+00.00
-31.66, 692.96'
502+75.00
-31.56, 692.92'
502+50.00
-31.57, 692.87'
502+25.00
-31.70, 692.79'
502+00.00
-31.93, 692.73'
501+75.00
-32.28, 692.65'
501+75.00
19.96, 692.87'
502+00.00
20.08, 692.92'
502+25.00
20.08, 692.99'
502+50.00
19.97, 693.07'
502+75.00
19.76, 693.13'
503+00.00
19.43, 693.21'
20+00
503+25.00
18.94, 693.30'
503+50.00
16.99, 693.39'
503+75.00
13.01, 693.52'
504+00.00
7.34, 693.70'
504+25.00
3.94, 693.82'
504+50.00
4.03, 693.89'
504+75.00
10.54, 693.86'
505+00.00
19.87, 693.79'
505+25.00
21.50, 693.82'
505+50.00
15.45, 693.97'
505+75.00
6.37, 694.18'
506+00.00
4.03, 694.25'
506+25.00
7.77, 694.26'
506+50.00
12.22, 694.25'
506+75.00
15.59, 694.26'
507+00.00
17.90, 694.30'
507+25.00
19.16, 694.36'
507+50.00
19.60, 694.43'
500+00
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
WEST ROUNDABOUT STATION/OFFSET/ELEVATION
HORIZONTAL SCALE
SCALE: 1" = 30'
0'
30'
60'
120'
ITEM NO. 04-054.00
COUNTY OF HARDIN
SHEET NO. R012
FILE NAME: C:\PW\WORK\DGE\ASTON\D40154\DET\M_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11


WEST ROUNDABOUT STATION/OFFSET/ELEVATION
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
HORIZONTAL SCALE
SCALE: 1" = 30'
ITEM NO. 04-254.00
COUNTY OF HARDIN
SHEET NO. R013
US 62
US31WB SB RAMP
505+00
500+00
20+00
PT 508+39.94
PC 500+24.53
PT 500+00.00
505+25.00
-125.79, 694.18'
505+50.00
-117.11, 693.55'
505+75.00
-88.12, 693.53'
506+00.00
-59.38, 693.74'
506+25.00
-42.89, 693.93'
506+50.00
-30.13, 694.08'
506+75.00
-20.51, 694.24'
507+00.00
-13.69, 694.46'
507+25.00
-9.42, 694.66'
507+50.00
-7.59, 694.77'
507+00.00
6.36, 694.48'
506+75.00
3.61, 694.42'
506+50.00
-1.30, 694.40'
506+25.00
-7.53, 694.38'
506+00.00
-10.36, 694.26'
505+75.00
-9.30, 694.16'
505+50.00
-3.81, 694.05'
505+50.00
-9.15, 694.01'
505+75.00
-37.66, 693.88'
504+50.00
-26.33, 693.58'
504+25.00
-26.13, 693.48'
504+00.00
-23.11, 693.41'
503+75.00
-17.09, 693.45'
503+50.00
-10.28, 693.54'
503+25.00
-6.15, 693.55'
502+50.00
-4.03, 693.41'
502+75.00
-4.24, 693.44'
503+00.00
-4.57, 693.50'
502+25.00
-3.92, 693.36'
502+00.00
-3.90, 693.26'
501+75.00
-3.68, 693.13'
505+00.00
-123.51, 693.60'
504+75.00
-111.35, 693.17'
504+75.00
-108.72, 693.20'
504+50.00
-60.64, 693.33'
504+25.00
-43.87, 693.33'
504+00.00
-32.19, 693.34'
503+75.00
-24.63, 693.30'
503+50.00
-20.68, 693.27'
503+25.00
-19.88, 693.16'
503+00.00
-19.67, 693.03'
502+75.00
-18.82, 693.83'
502+50.00
-15.70, 693.13'
502+25.00
-12.71, 693.18'
502+00.00
-9.82, 693.19'
501+75.00
-7.68, 693.14'
N46°49'58"E
N43°57'33"W
USER: CHRISTSMITH
FILE NAME: C:\PW\WORK\INGE\ASTOND\d0115461\DETAIL_SHEETS.DGN
OpenRoads Designer v23.00.01.11



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

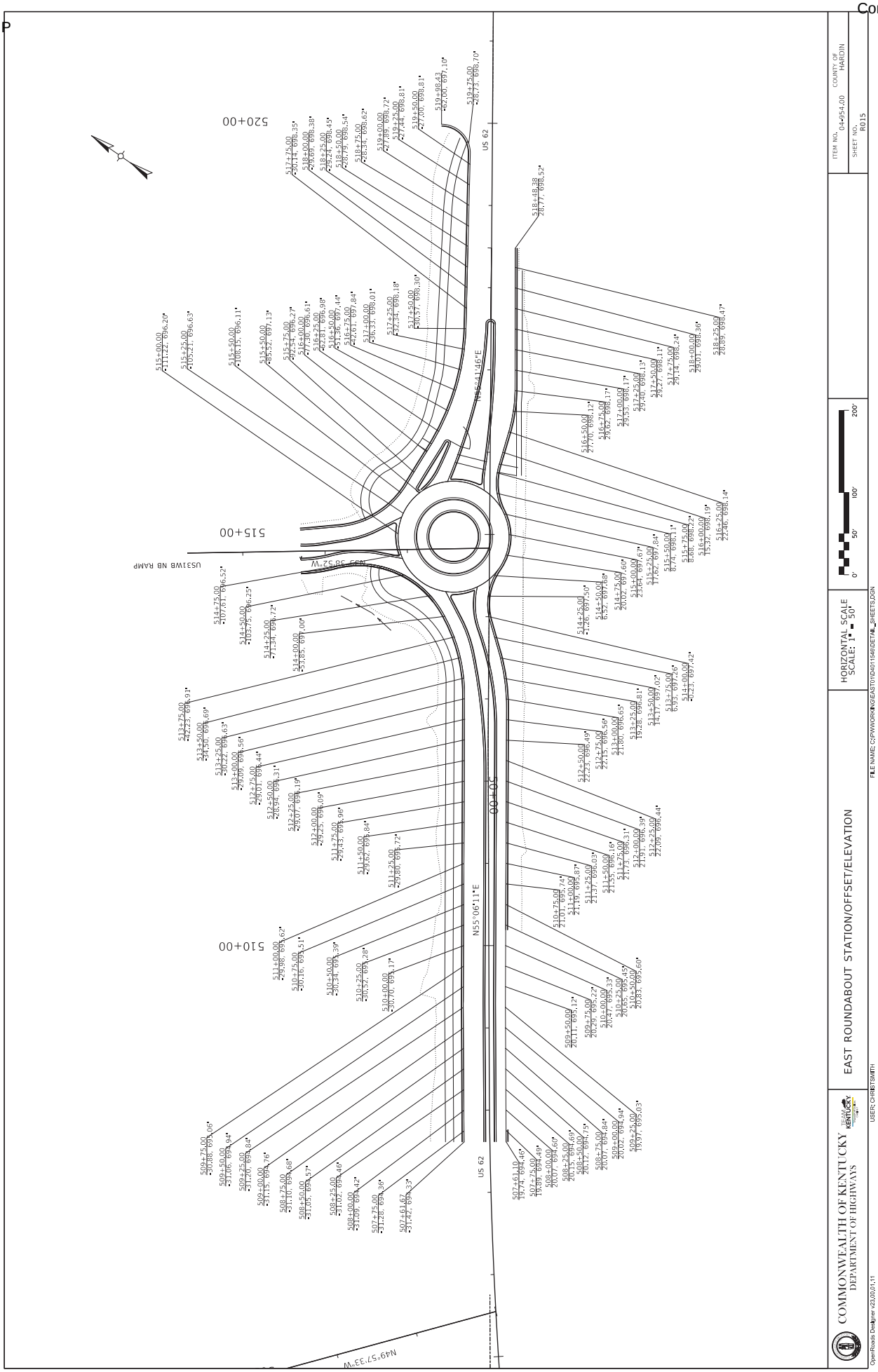
WEST ROUNDABOUT STATION/OFFSET/ELEVATION

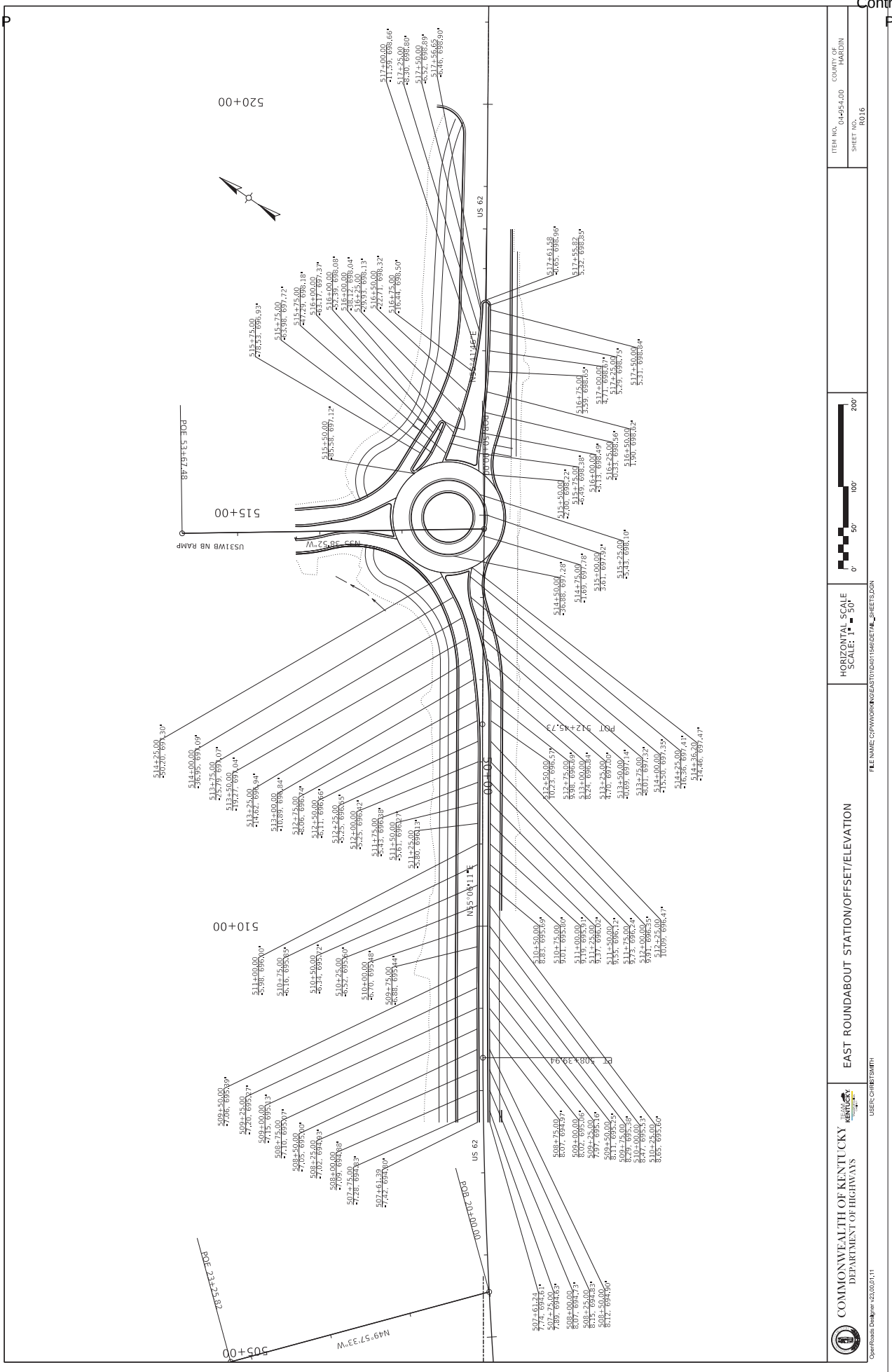
HORIZONTAL SCALE
SCALE: 1" = 30'

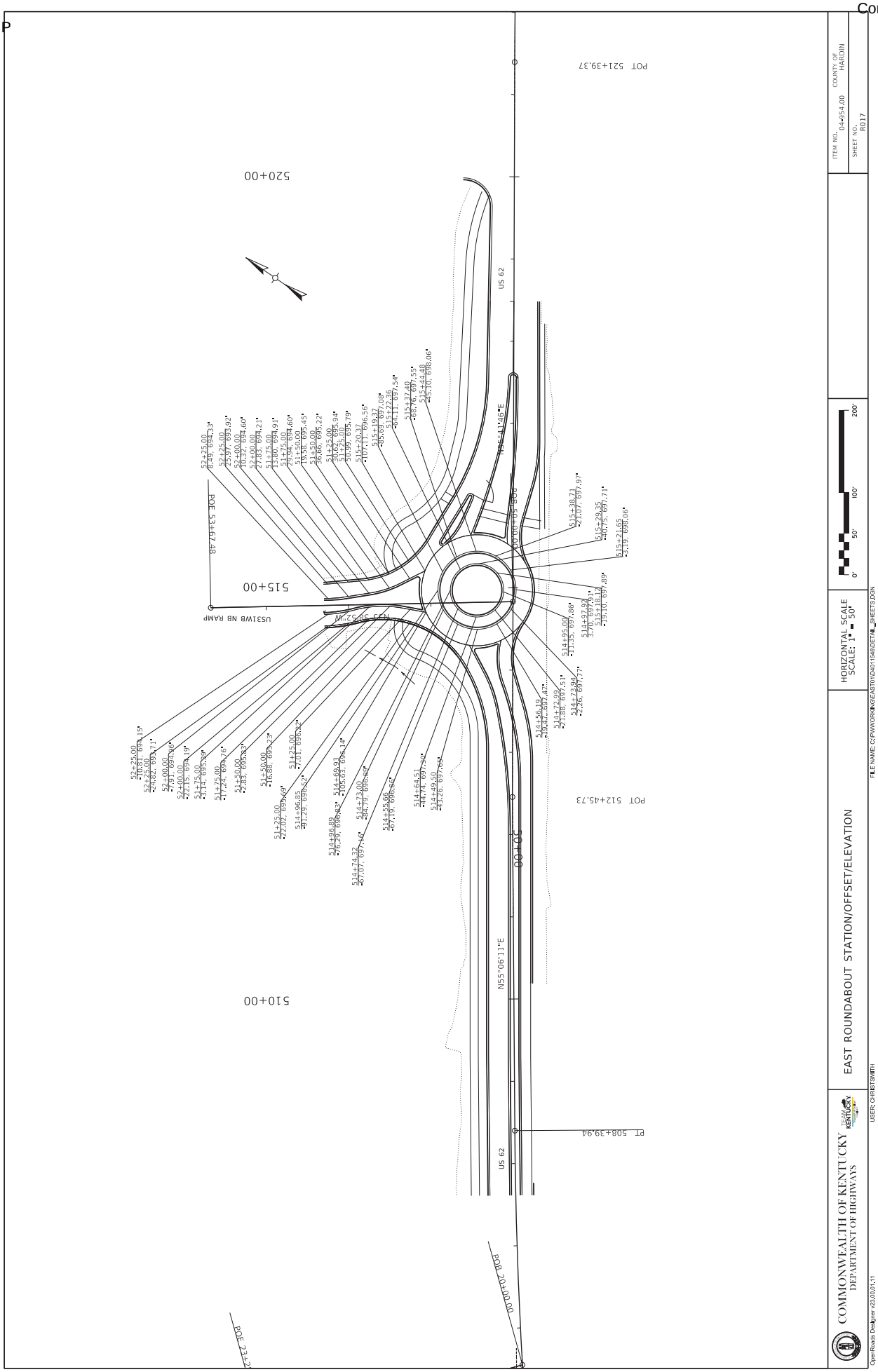
0' 30' 60' 120'

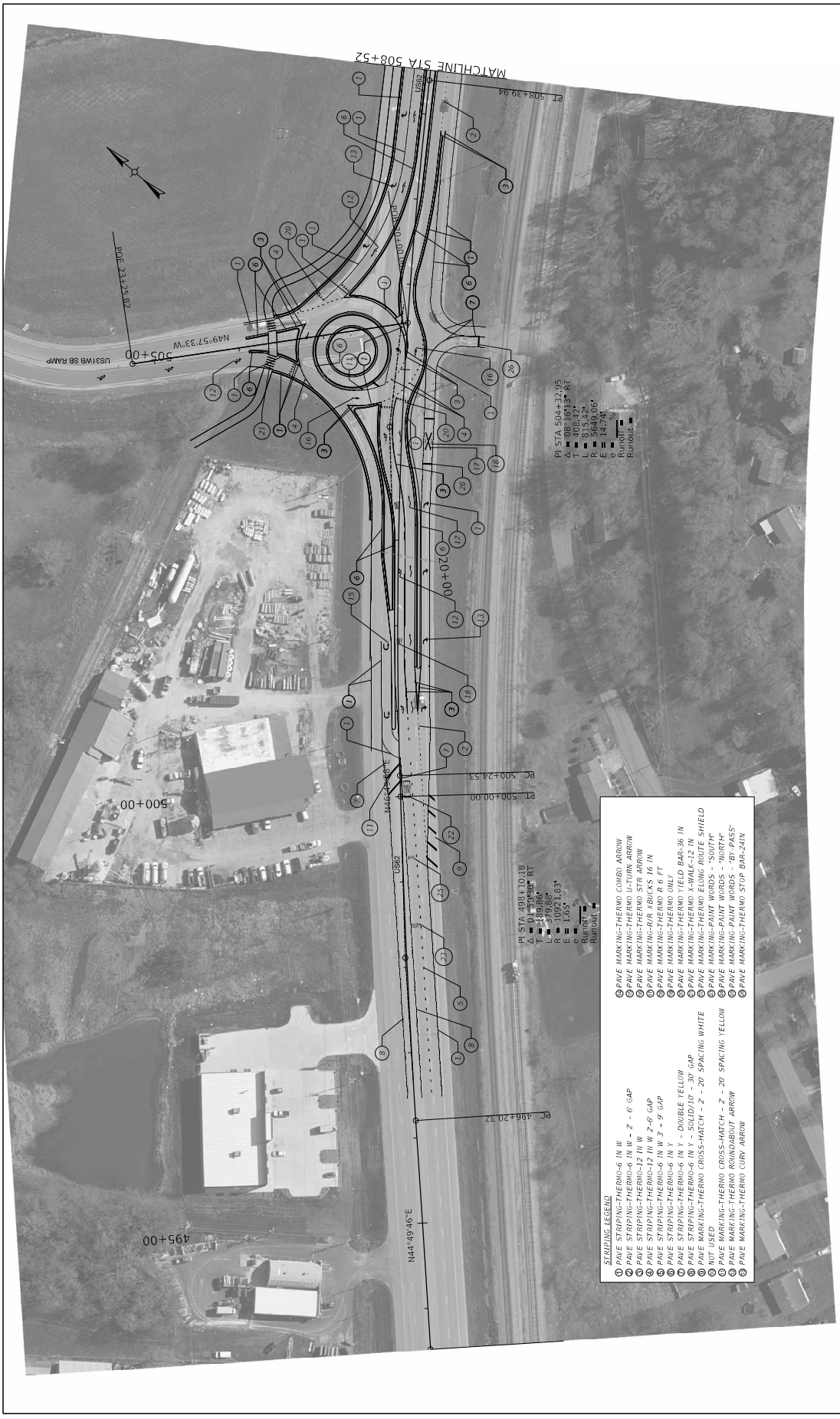
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R014

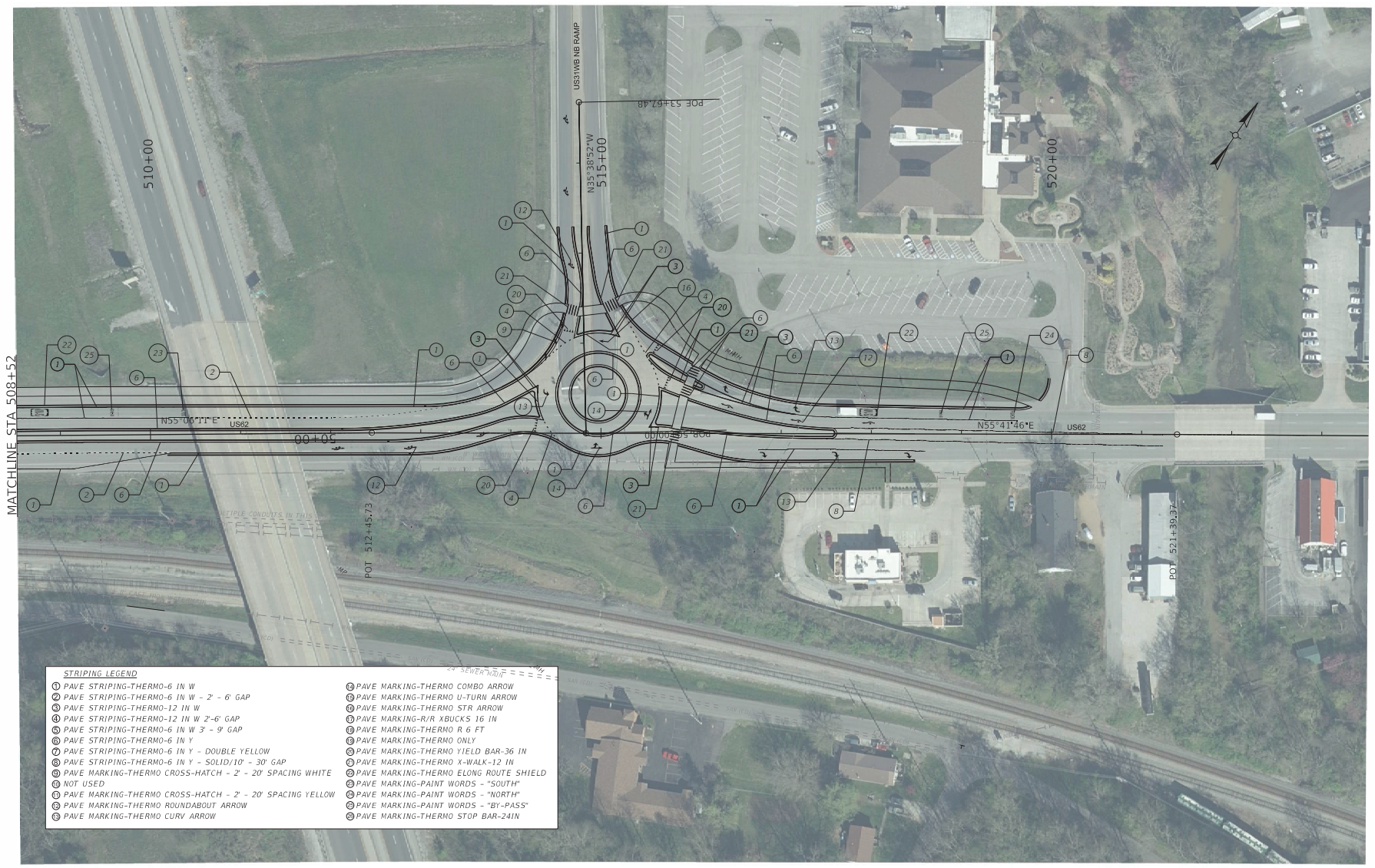
OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\DETAIL_SHEETS.DGN


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
EAST ROUNDABOUT STATION/OFFSET/ELEVATION
HORIZONTAL SCALE
SCALE: 1" = 50'
0'
50'
100'
200'
ITEM NO. 04-954.00
SHEET NO. R015
COUNTY OF HARDIN
US 62
US31WB NB RAMP
N55°06'11"E
N49°57'33"W
510+00
515+00
520+00
USER: CHRISTSMITH
FILE NAME: C:\PW\WORKING\EAST\01D401154\DETAIL_SHEETS.DGN
OpenRoads Designer v23.00.01.11


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
EAST ROUNDABOUT STATION/OFFSET/ELEVATION
HORIZONTAL SCALE
SCALE: 1" = 50'
0'
50'
100'
200'
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R016
FILE NAME: C:\PW\WORKING\EAST\01D\401546\DET\IL_SHEETS.DGN
USER: CHRISTSMITH
OpenRoads Designer v23.00.01.11
US 62
US31WB NB RAMP
505+00
510+00
515+00
520+00
POB 505+39.94
POB 0+00.00
POE 23+55.82
POE 53+67.48
N49°57'37"W
N55°40'14"E
N55°40'14"E
N55°38'52"W


EAST ROUNDABOUT STATION/OFFSET/ELEVATION
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
HORIZONTAL SCALE
SCALE: 1" = 50'
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R017
US 62
US31WB NB RAMP
POT 521+39.37
POT 512+45.73
PT 508+39.94
POE 534+67.48
POE 23+27.00
POB 10+00.00
N55°06'11"E
N55°11'46"E
N33°30'52"W
510+00
515+00
520+00
30+00
0'
50'
100'
200'


MATCHLINE STA 508+52
ROE 23+25.82
N49°57'33"W
US31WB SB RAMP
505+00
500+00
495+00
N44°49'46"E
US62
PC 496+20.32
PC 500+24.53
PT 500+00.00
PI STA 493+10.18
Δ = 01°39'00" RT
T = 189.86'
L = 379.68'
R = 1092.83'
E = 1.65'
e = 1.5%
Runoff
Runout
PI STA 504+32.95
Δ = 08°16'13" RT
T = 40.17'
L = 80.42'
R = 5649.06'
E = 14.74'
e = 1.5%
Runoff
Runout
STRIPING LEGEND
① PAVE STRIPING-THERMO-6 IN W
② PAVE STRIPING-THERMO-6 IN W - 2' - 6' GAP
③ PAVE STRIPING-THERMO-12 IN W
④ PAVE STRIPING-THERMO-12 IN W 2'-6' GAP
⑤ PAVE STRIPING-THERMO-6 IN W 3' - 9' GAP
⑥ PAVE STRIPING-THERMO-6 IN Y
⑦ PAVE STRIPING-THERMO-6 IN Y - DOUBLE YELLOW
⑧ PAVE STRIPING-THERMO-6 IN Y - SOLID/10' - 30' GAP
⑨ PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING WHITE
⑩ NOT USED
⑪ PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING YELLOW
⑫ PAVE MARKING-THERMO ROUNDABOUT ARROW
⑬ PAVE MARKING-THERMO CURV ARROW
⑭ PAVE MARKING-THERMO COMBO ARROW
⑮ PAVE MARKING-THERMO U-TURN ARROW
⑯ PAVE MARKING-THERMO STR ARROW
⑰ PAVE MARKING-R/R XBUCKS 16 IN
⑱ PAVE MARKING-THERMO R 6 FT
⑲ PAVE MARKING-THERMO ONLY
⑳ PAVE MARKING-THERMO YIELD BAR-36 IN
㉑ PAVE MARKING-THERMO X-WALK-12 IN
㉒ PAVE MARKING-THERMO ELONG ROUTE SHIELD
㉓ PAVE MARKING-PAINT WORDS - "SOUTH"
㉔ PAVE MARKING-PAINT WORDS - "NORTH"
㉕ PAVE MARKING-PAINT WORDS - "BY-PASS"
㉖ PAVE MARKING-THERMO STOP BAR-24IN
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
US 62 PAVEMENT MARKING SHEET
HORIZONTAL SCALE
SCALE: 1"=50'
0' 50' 100' 200'
STA. 493+51.72 TO STA. 508+51.72
ITEM NO. 04-054.00
SHEET NO. R018
COUNTY OF HARDIN
USER: CHRISTSMITH
FILE NAME: C:\PW\WORKING\EASTOND\d0115461\ST\STRIPING_SHEETS.DGN
OpenRoads Designer v23.00.01.11



STRIPING LEGEND

1. PAVE STRIPING-THERMO-6 IN W
2. PAVE STRIPING-THERMO-6 IN W - 2' - 6' GAP
3. PAVE STRIPING-THERMO-12 IN W
4. PAVE STRIPING-THERMO-12 IN W 2'-6' GAP
5. PAVE STRIPING-THERMO-6 IN W 3' - 9' GAP
6. PAVE STRIPING-THERMO-6 IN Y
7. PAVE STRIPING-THERMO-6 IN Y - DOUBLE YELLOW
8. PAVE STRIPING-THERMO-6 IN Y - SOLID/10' - 30' GAP
9. PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING WHITE
10. NOT USED
11. PAVE MARKING-THERMO CROSS-HATCH - 2' - 20' SPACING YELLOW
12. PAVE MARKING-THERMO ROUNDABOUT ARROW
13. PAVE MARKING-THERMO CURV ARROW
14. PAVE MARKING-THERMO COMBO ARROW
15. PAVE MARKING-THERMO U-TURN ARROW
16. PAVE MARKING-THERMO STR ARROW
17. PAVE MARKING-R/R XBUCKS 16 IN
18. PAVE MARKING-THERMO R 6 FT
19. PAVE MARKING-THERMO ONLY
20. PAVE MARKING-THERMO YIELD BAR-36 IN
21. PAVE MARKING-THERMO X-WALK-12 IN
22. PAVE MARKING-THERMO ELONG ROUTE SHIELD
23. PAVE MARKING-PAINT WORDS - "SOUTH"
24. PAVE MARKING-PAINT WORDS - "NORTH"
25. PAVE MARKING-PAINT WORDS - "BY-PASS"
26. PAVE MARKING-THERMO STOP BAR-24IN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

US 62 PAVEMENT MARKING SHEET

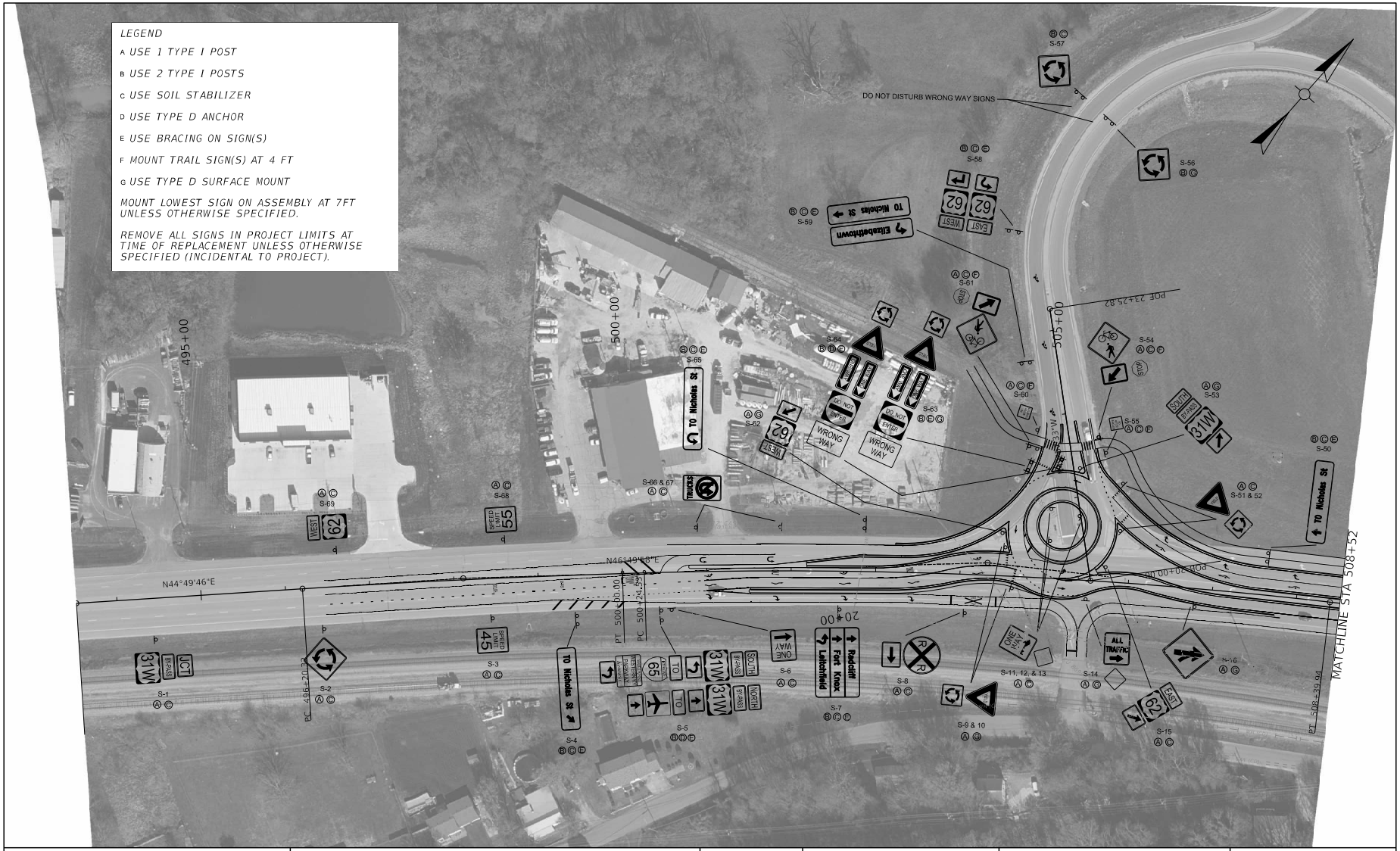
HORIZONTAL SCALE
SCALE: 1"=50'

0' 50' 100' 200'

STA. 508+51.72 TO STA. 523+51.72

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R019

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\STRIPING_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

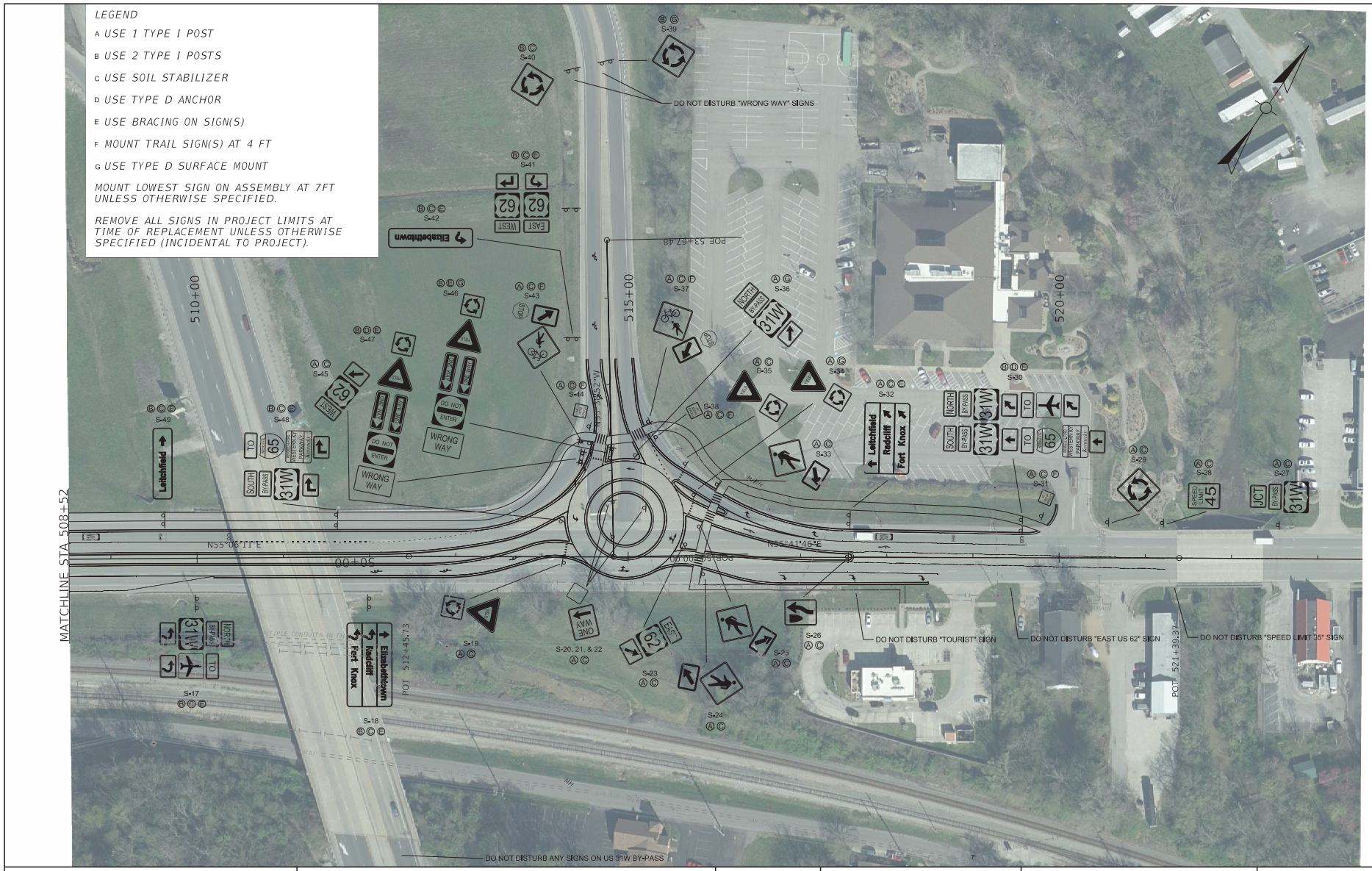
US 62 SIGNING SHEET

HORIZONTAL SCALE
SCALE: 1"=50'
0' 50' 100' 200'

STA. 493+51.72 TO STA. 508+51.72

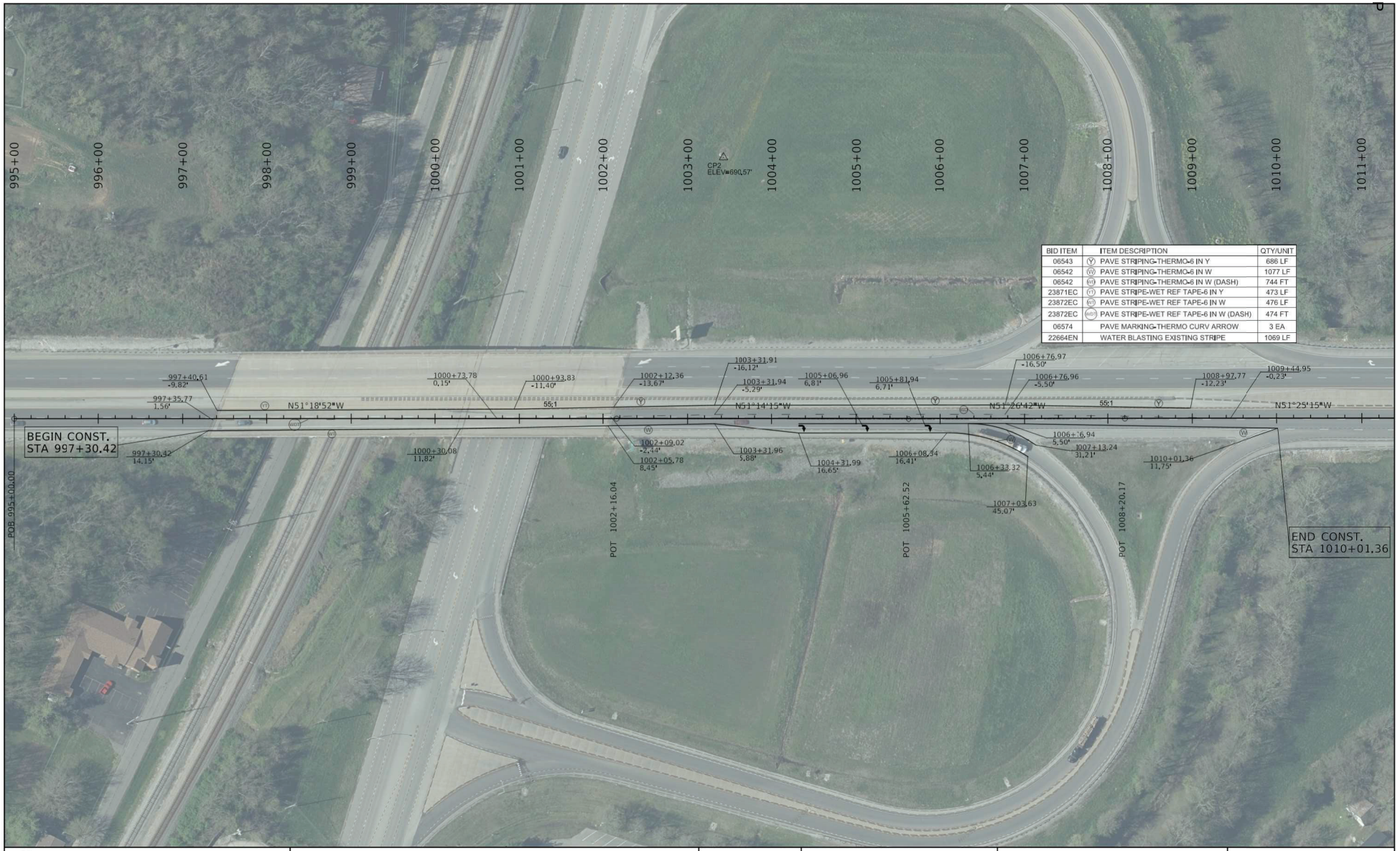
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R020

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\SIGNING_SHEETS.DGN



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	US 62 SIGNING SHEET	HORIZONTAL SCALE SCALE: 1"=50'	0' 50' 100' 200'	STA. 508+51.72 TO STA. 523+51.72	ITEM NO. 04-954.00 COUNTY OF HARDIN SHEET NO. R021

OpenRoads Designer v23.00.01.11 USER: CREBAR FILE NAME: C:\PWWORKING\EAST01\D4011546\SIGNING_SHEETS.DGN



BID ITEM	ITEM DESCRIPTION	QTY/UNIT
06543	(Y) PAVE STRIPING-THERMO-6 IN Y	686 LF
06542	(W) PAVE STRIPING-THERMO-6 IN W	1077 LF
06542	(W(DT)) PAVE STRIPING-THERMO-6 IN W (DASH)	744 FT
23871EC	(T) PAVE STRIPE-WET REF TAPE-6 IN Y	473 LF
23872EC	(W) PAVE STRIPE-WET REF TAPE-6 IN W	476 LF
23872EC	(W(DT)) PAVE STRIPE-WET REF TAPE-6 IN W (DASH)	474 FT
06574	PAVE MARKING-THERMO CURV ARROW	3 EA
22664EN	WATER BLASTING EXISTING STRIPE	1069 LF

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

US31W BYPASS RIGHT TURN LANE PAVEMENT MARKING SHEET

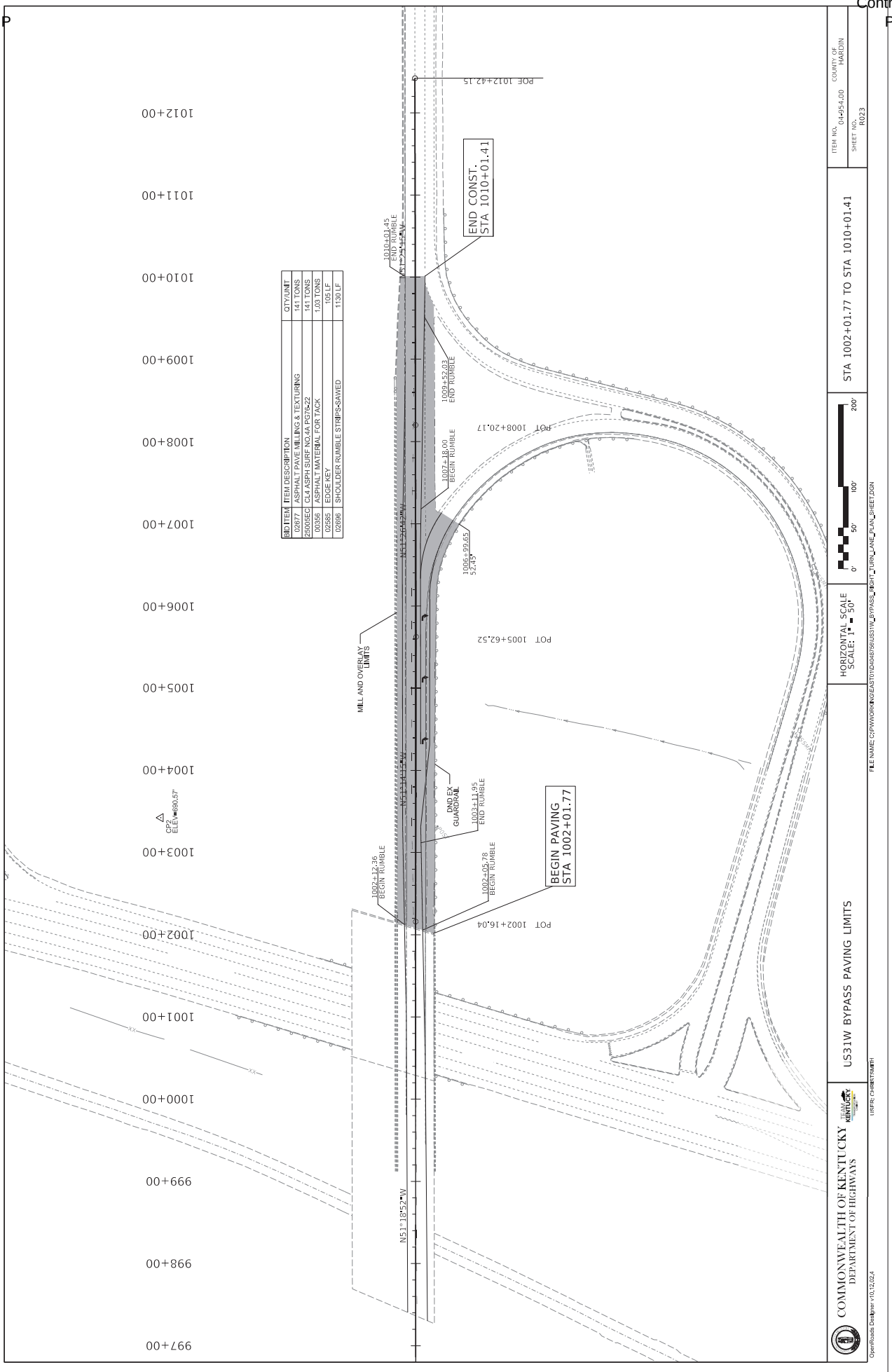
HORIZONTAL SCALE
SCALE: 1" = 50'

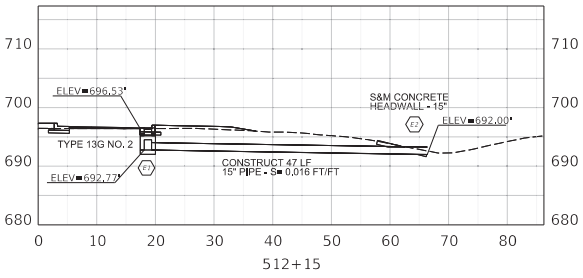
0' 50' 100' 200'

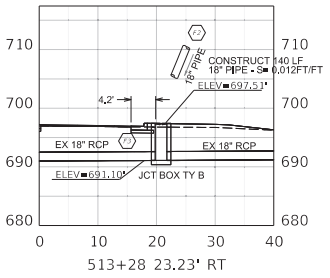
STA 997+30.42 TO 1010+01.36

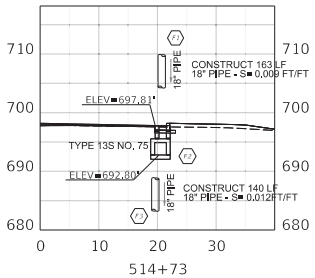
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R022

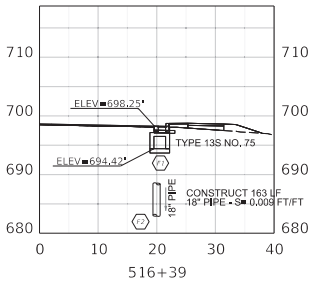
OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4048756\US31W_BYPASS_RIGHT_TURN_LANE_PLAN_SHEET.DGN

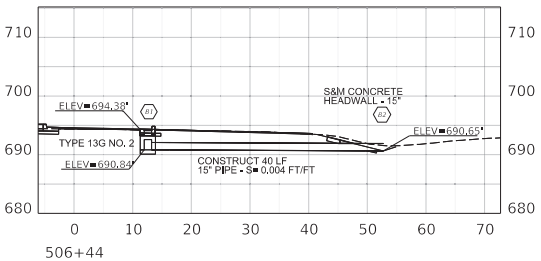

BEGIN PAVING
STA 1002+01.77
END CONST.
STA 1010+01.41
MILL AND OVERLAY LIMITS
DND EX GUARDRAIL
1002+12.36 BEGIN RUMBLE
1002+05.78 BEGIN RUMBLE
1002+11.95 END RUMBLE
1007+18.00 BEGIN RUMBLE
1009+32.83 END RUMBLE
1010+01.45 BEGIN RUMBLE
1006+99.65 52.45'
CP2 ELEV=690.57'
N51°18'52"W
POE 1012+42.15
POT 1008+20.17
POT 1005+62.52
POT 1002+16.04
1012+00
1011+00
1010+00
1009+00
1008+00
1007+00
1006+00
1005+00
1004+00
1003+00
1002+00
1001+00
1000+00
999+00
998+00
997+00
BID ITEM | ITEM DESCRIPTION | QTY/UNIT
02677 | ASPHALT PAVE MILLING & TEXTURING | 141 TONS
25005EC | CL4 ASPH SURF NO.4A PG76-22 | 141 TONS
00356 | ASPHALT MATERIAL FOR TACK | 1.03 TONS
02585 | EDGE KEY | 105 LF
02696 | SHOULDER RUMBLE STRIPS-SAWED | 1130 LF
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
US31W BYPASS PAVING LIMITS
HORIZONTAL SCALE
SCALE: 1" = 50'
0' 50' 100' 200'
STA 1002+01.77 TO STA 1010+01.41
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R023
FILE NAME: C:\PW\WORKING\EAST\D10\D0487S\US31W_BYPASS_RIGHT_TURN_LANE_PLAN_SHEET.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4

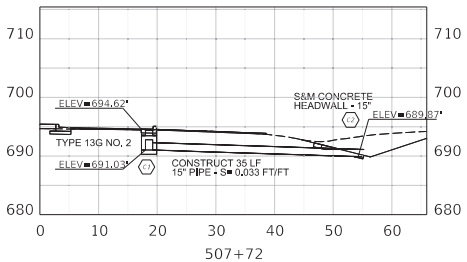


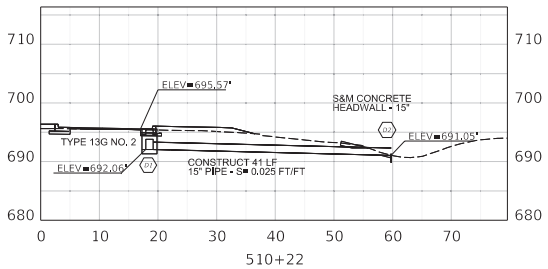


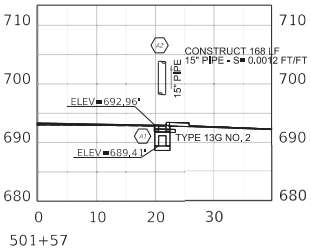


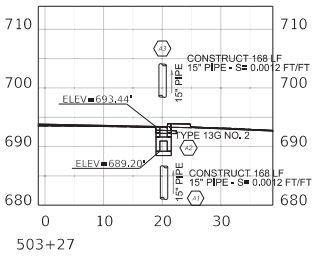


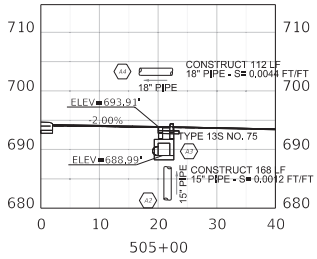


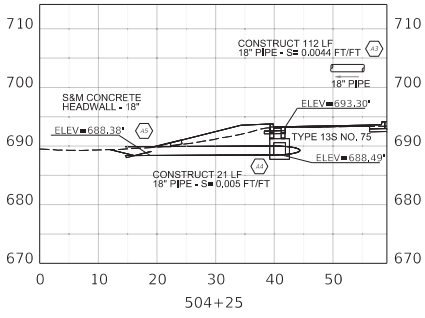












COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

PIPE SHEET 1 OF 3

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

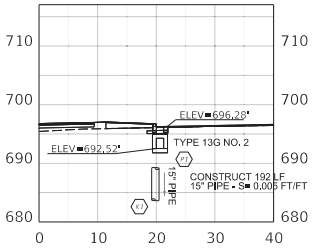
A1 - F3

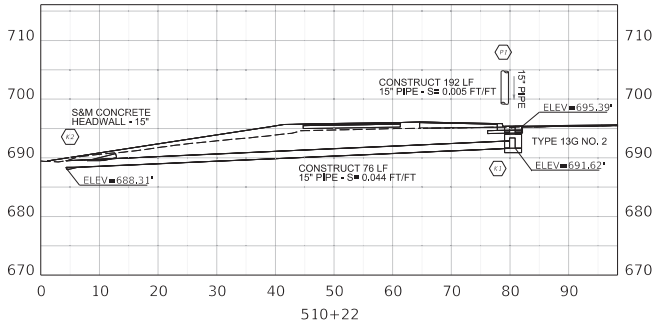
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R024

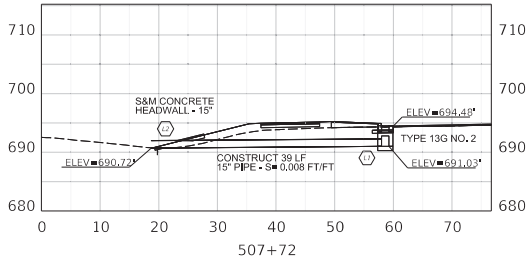
OpenRoads Designer v23.00.01.11

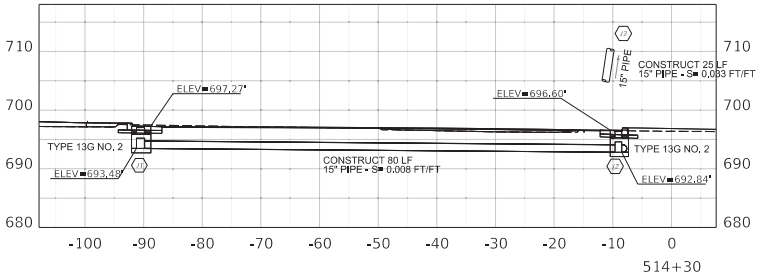
USER: CHRISTSMITH

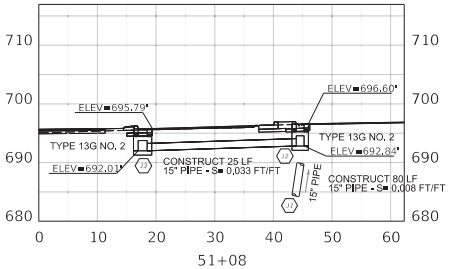
FILE NAME: C:\PWWORKING\EAST01\D4011546\PIPE_SHEETS.DGN

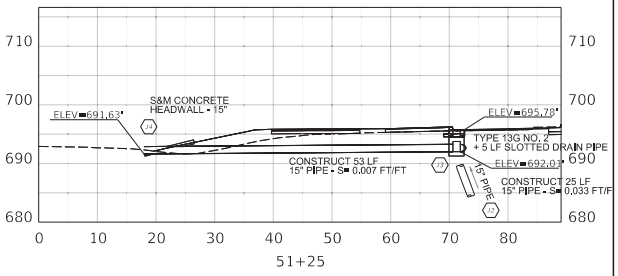


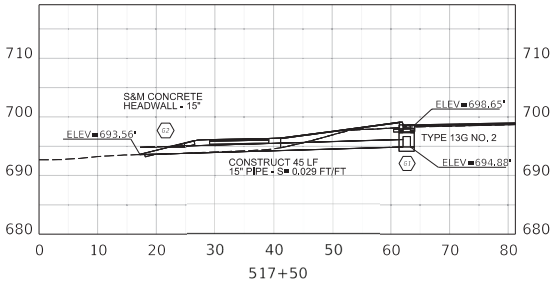


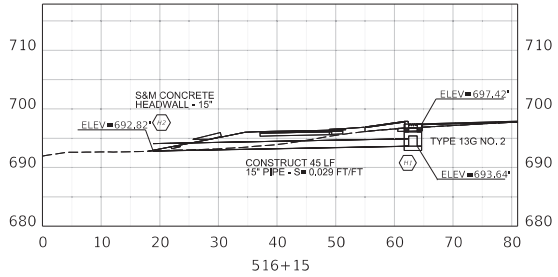


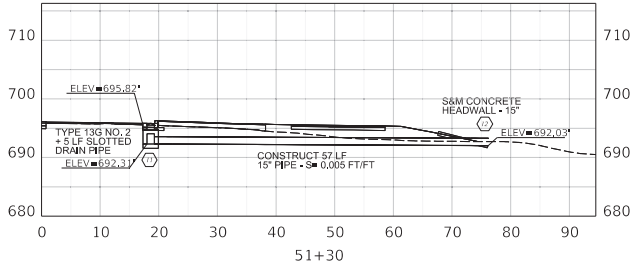












COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

PIPE SHEET 2 OF 3

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

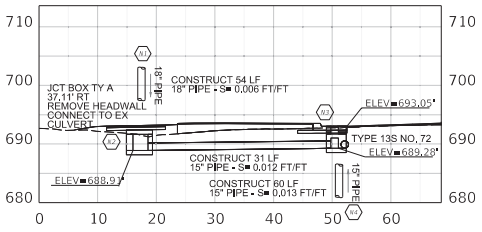
G1 - L2

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R025

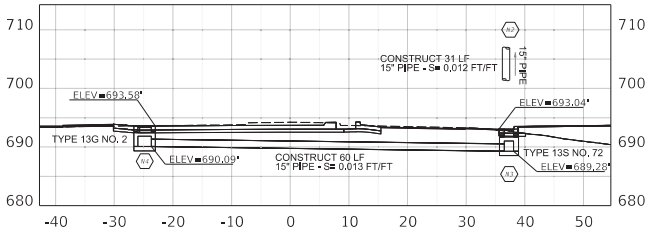
OpenRoads Designer v10.12.02.4

USER: CHRISTSMITH

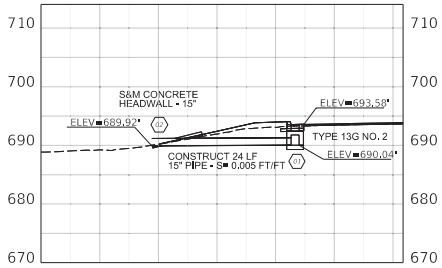
FILE NAME: C:\PWWORKING\EAST01\D4011546\PIPE_SHEETS.DGN



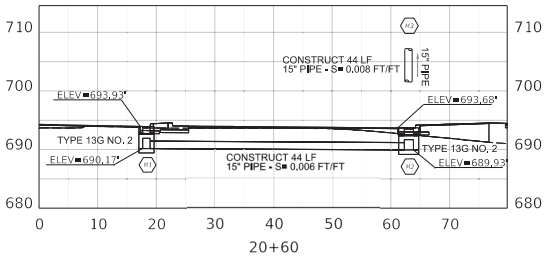
21+23



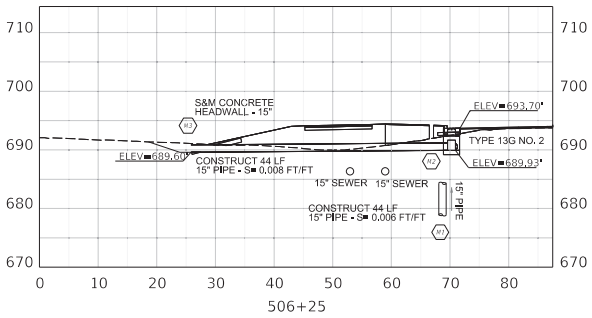
21+33



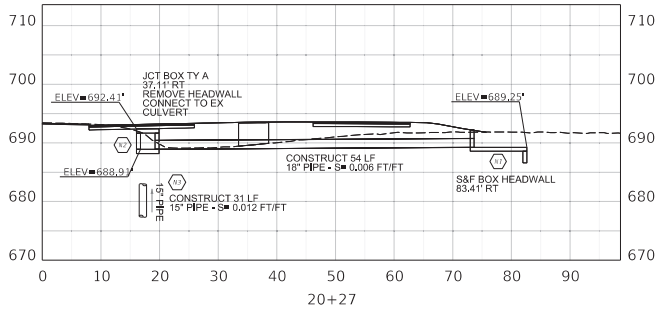
21+62



20+60



506+25



20+27

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

PIPE SHEET 3 OF 3

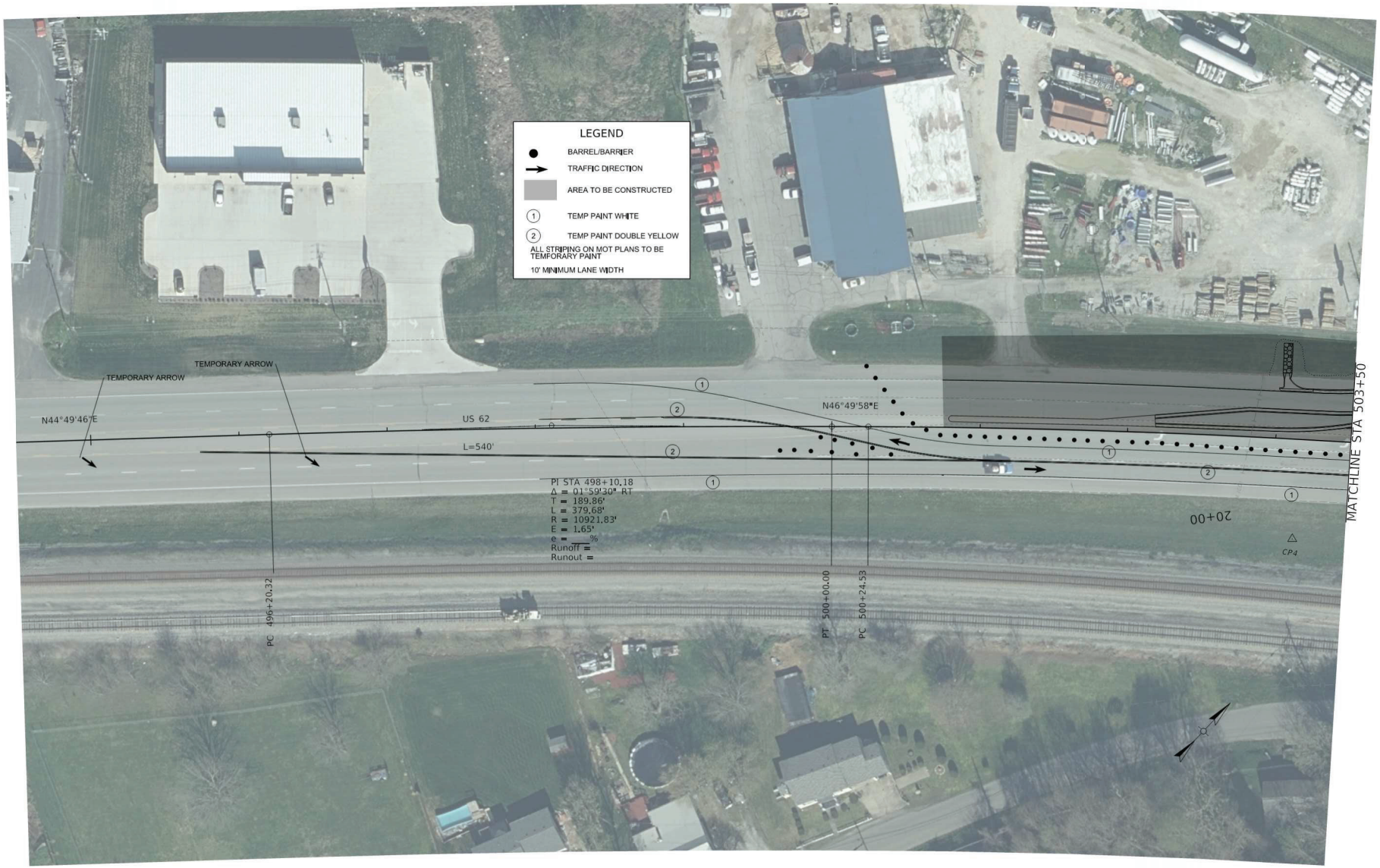
HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

M1 - O2

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R026

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\PIPE_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE I

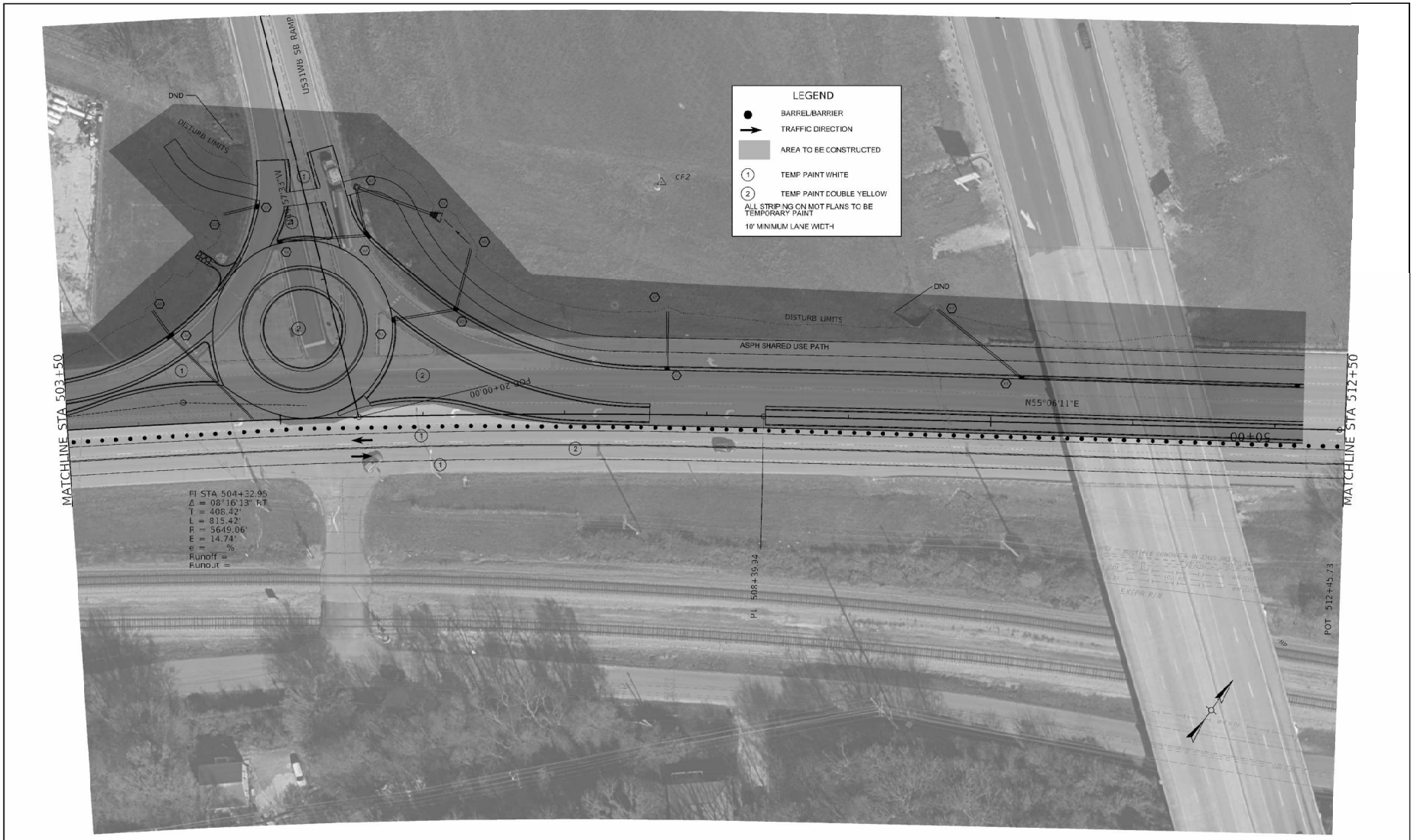
HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 494+50.00 TO STA. 503+50.00

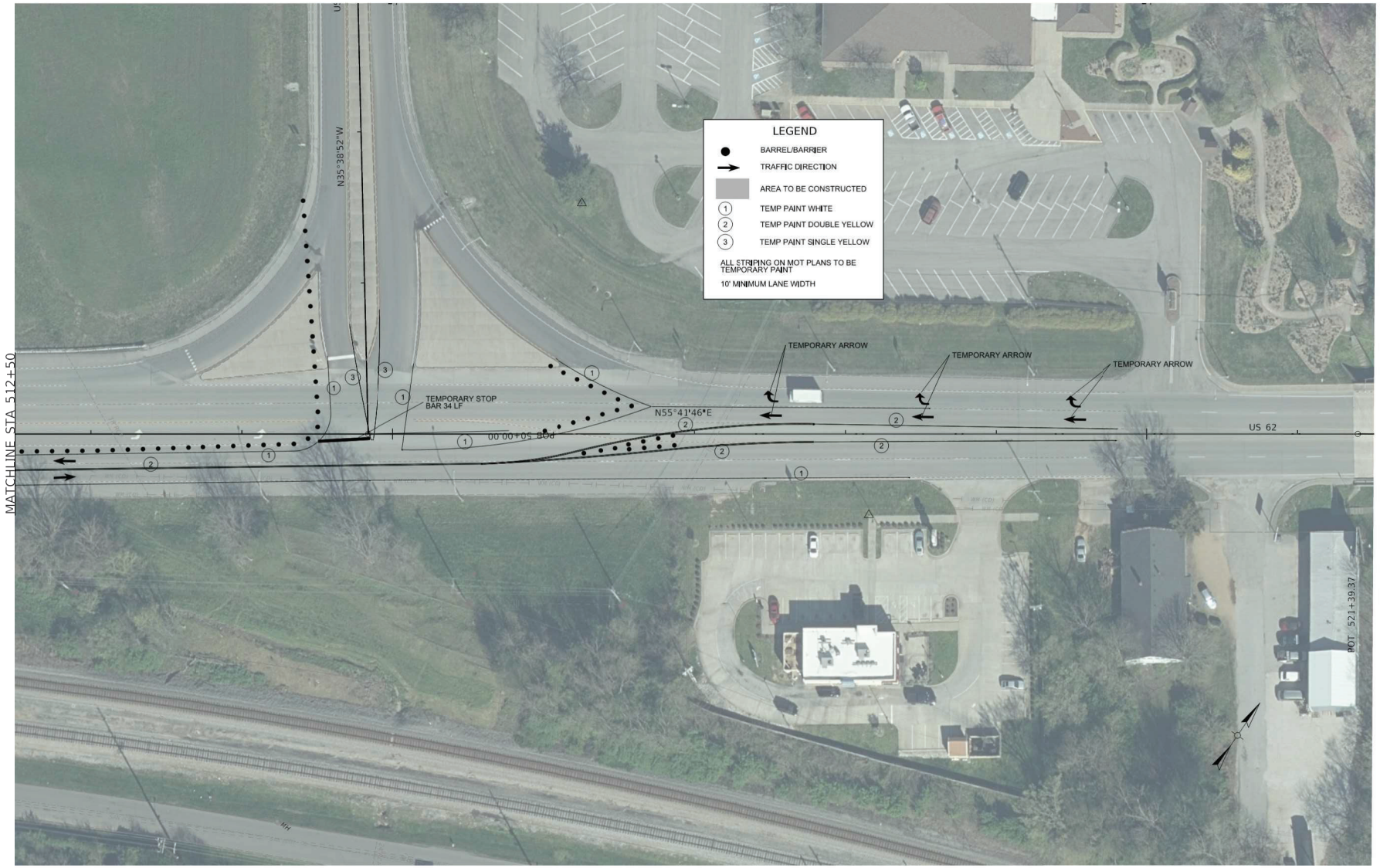
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R027

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	MAINTENANCE OF TRAFFIC - PHASE I	HORIZONTAL SCALE SCALE: 1"=30'	0' 30' 60' 120'	STA. 503+50.00 TO STA. 512+50.00	ITEM NO. 04-954.00 COUNTY OF HARDIN SHEET NO. R028

OpenRoads Designer v23.08.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE I

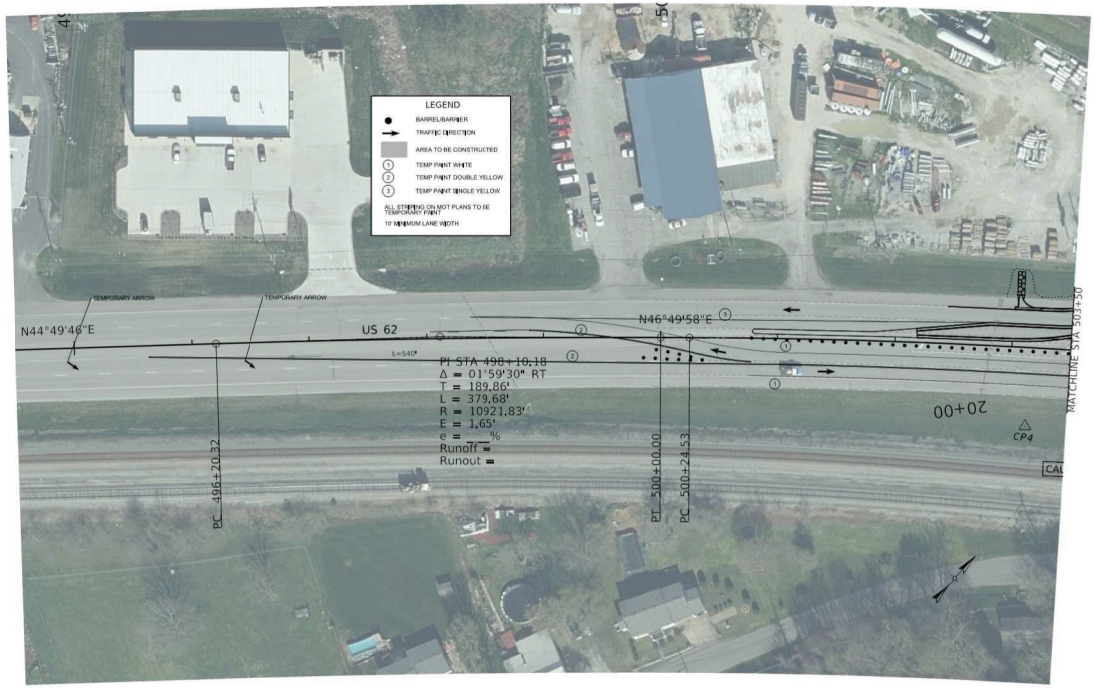
HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 512+50.00 TO STA. 521+50.00

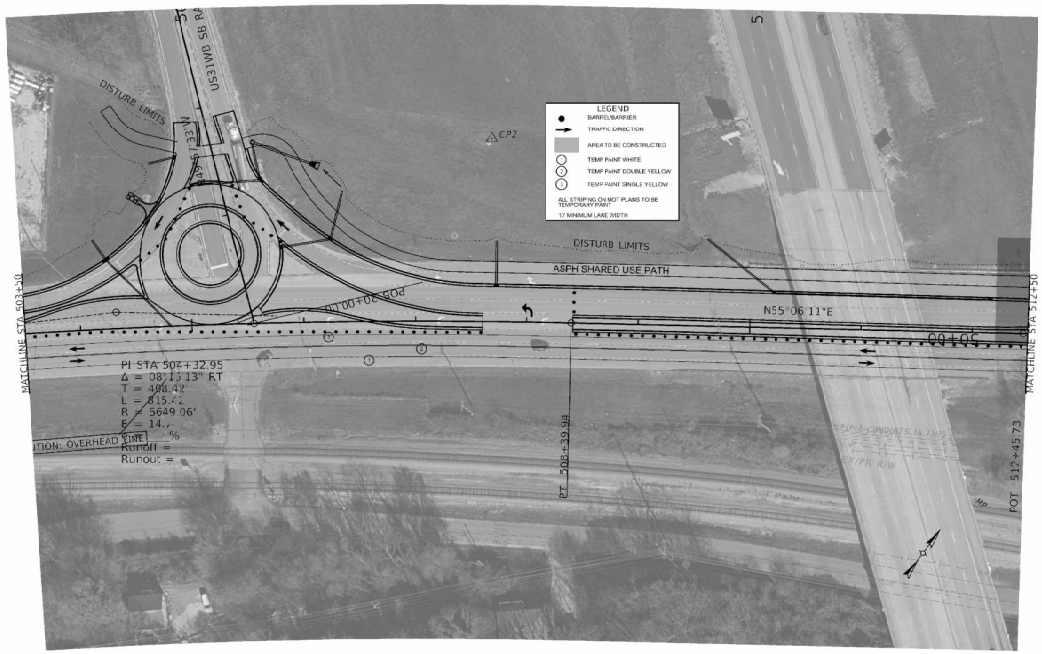
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R029

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	MAINTENANCE OF TRAFFIC - PHASE II	HORIZONTAL SCALE SCALE: 1"=30'	0' 30' 60' 120'	STA. 494+50.00 TO STA. 503+50.00	ITEM NO. 04-954.00 COUNTY OF HARDIN SHEET NO. R030

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE II

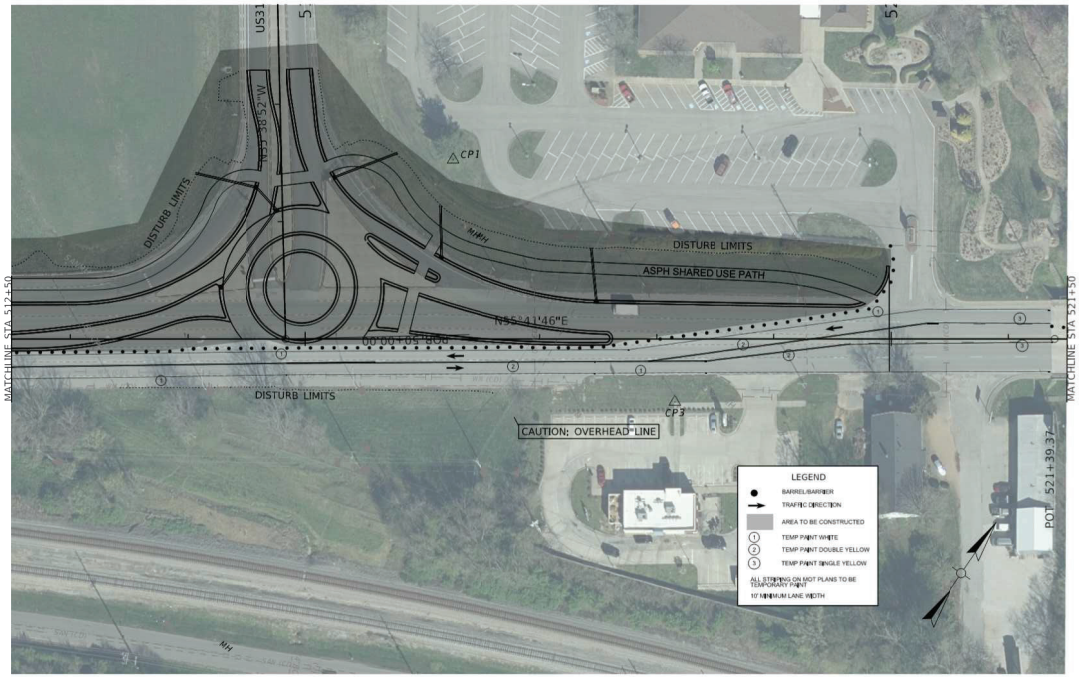
HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 503+50.00 TO STA. 512+50.00

ITEM NO. 04-954.00 COUNTY OF HARDIN
SHEET NO. R031

OpenRoads Designer v23.06.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE II

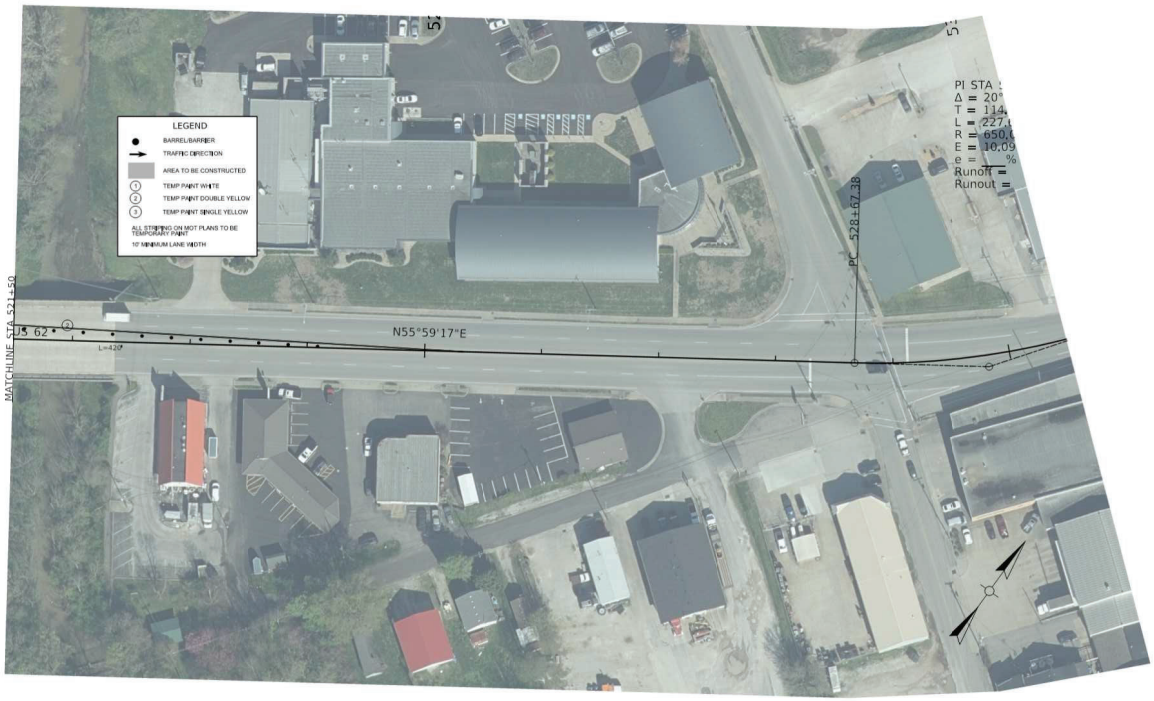
HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 512+50.00 TO STA. 521+50.00

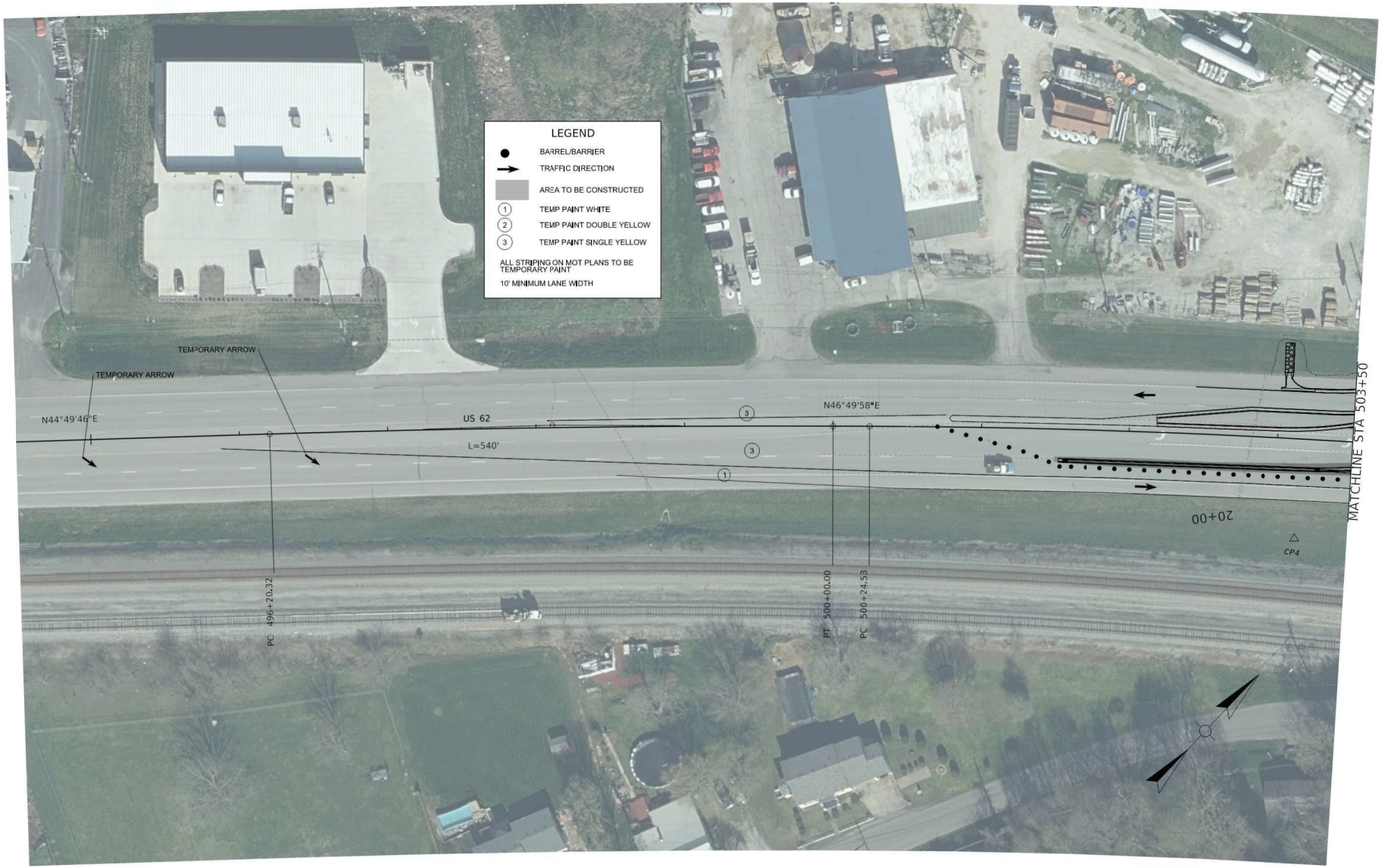
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R032

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	MAINTENANCE OF TRAFFIC - PHASE II	HORIZONTAL SCALE SCALE: 1"=30'	0' 30' 60' 120'	STA. 521+50.00 TO STA. 530+50.00	ITEM NO. 04-954.00 COUNTY OF HARDIN SHEET NO. R033

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE III

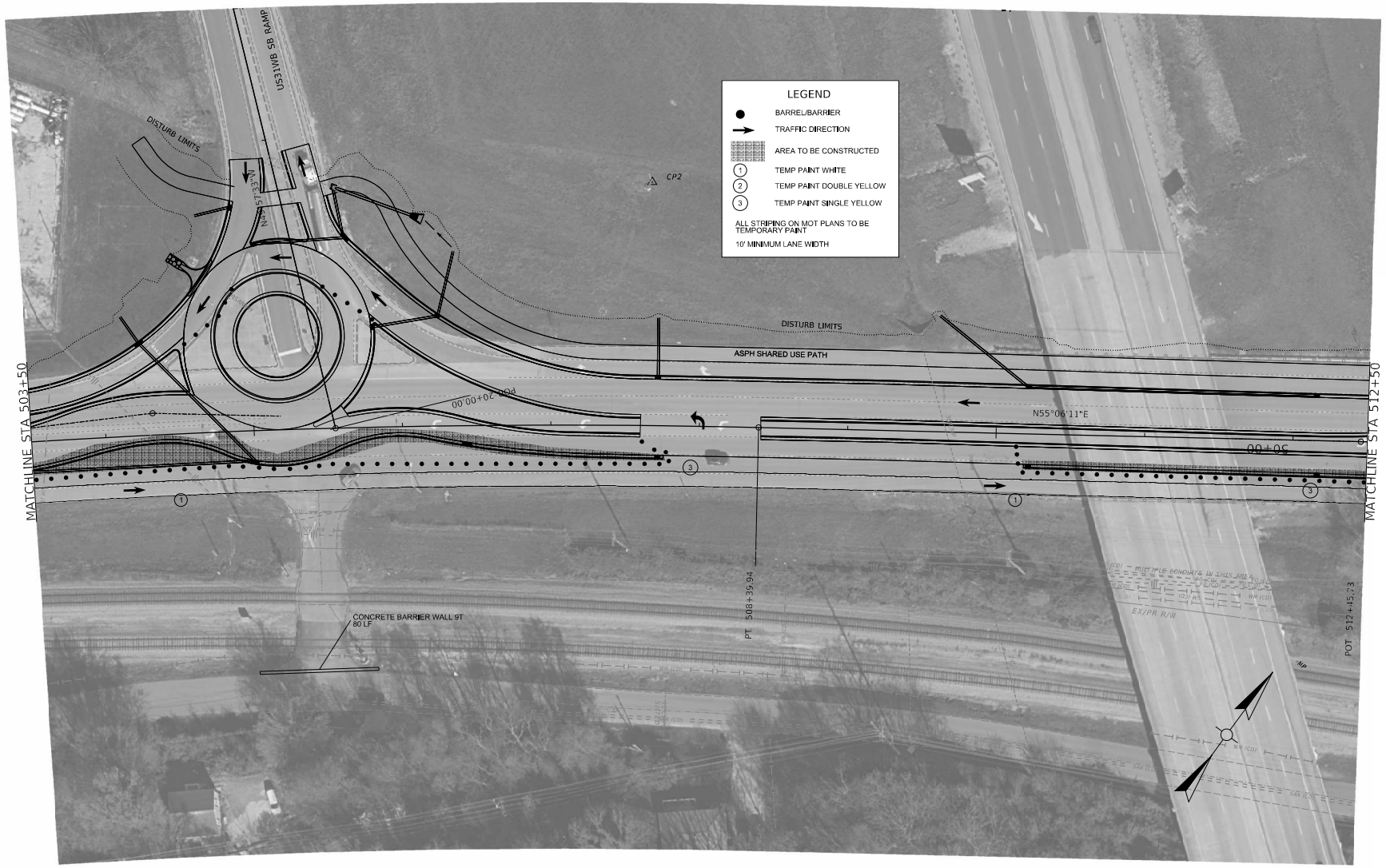
HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 494+50.00 TO STA. 503+50.00

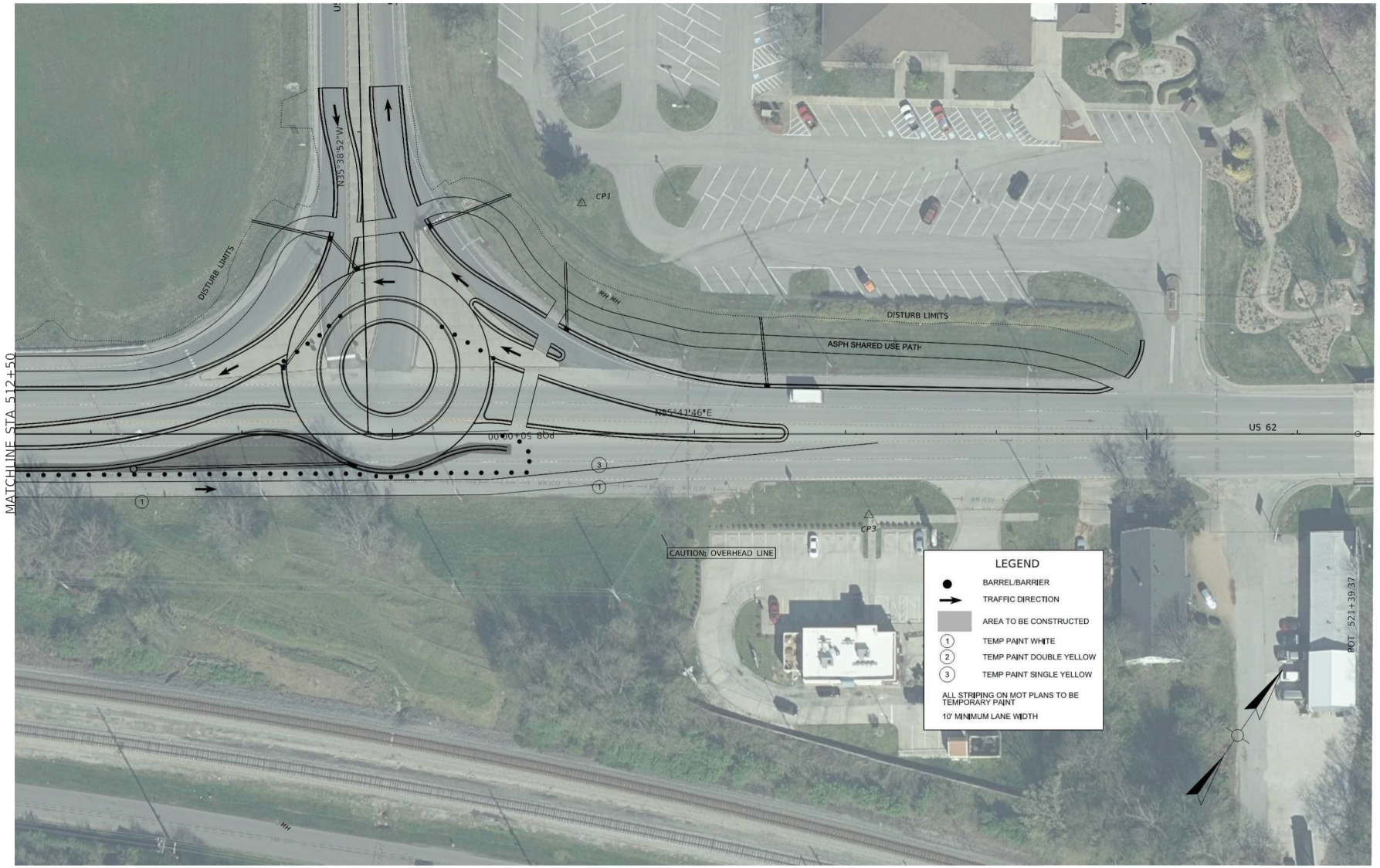
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R034

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	DRAWING TITLE: MAINTENANCE OF TRAFFIC - PHASE III	HORIZONTAL SCALE SCALE: 1"=30'	0' 30' 60' 120'	STA. 503+50.00 TO STA. 512+50.00	ITEM NO. 04-954.00 COUNTY OF HARDIN SHEET NO. R035

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE III

HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 512+50.00 TO STA. 521+50.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R036

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE IV

HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

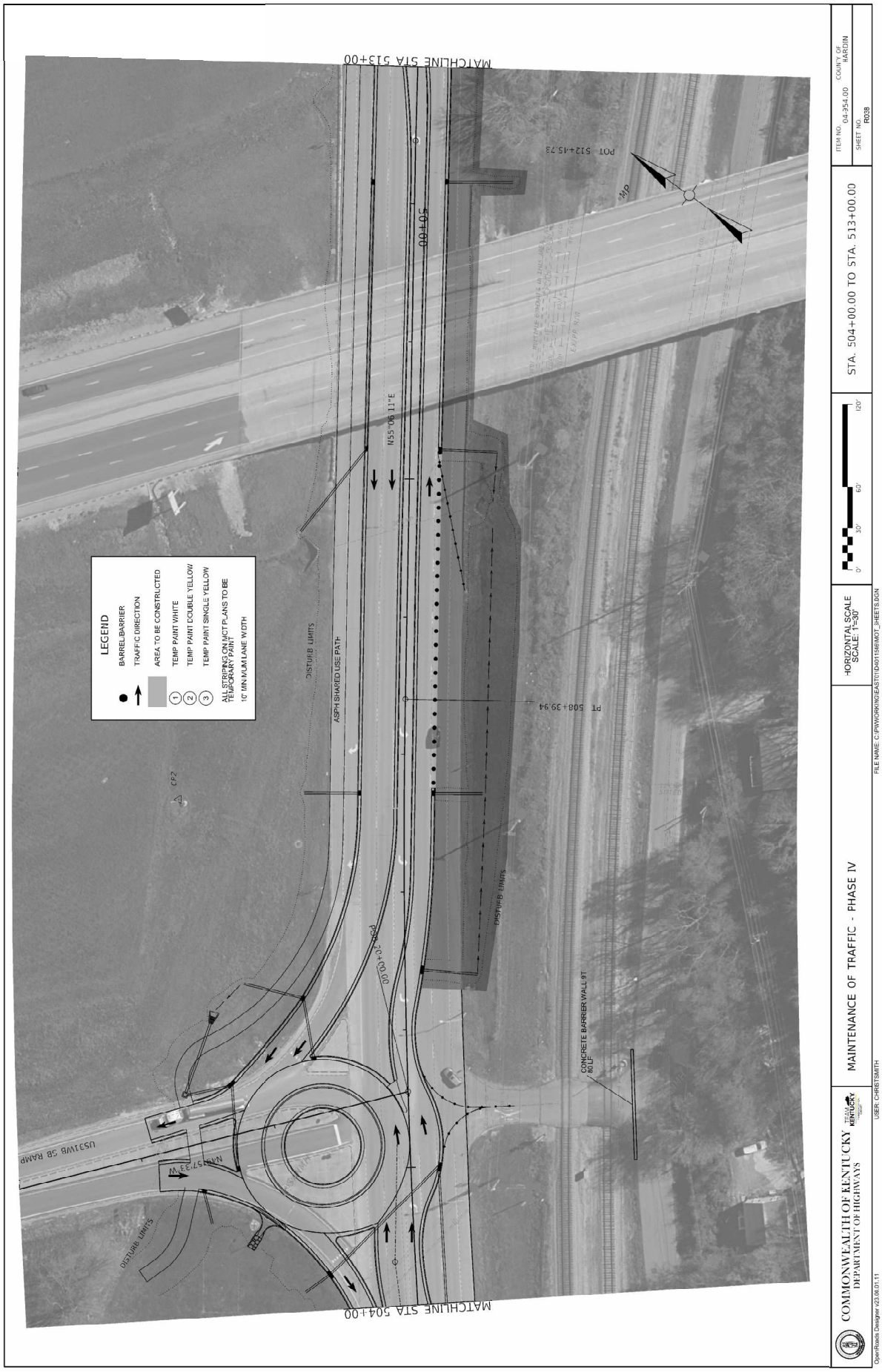
STA. 495+00.00 TO STA. 504+00.00

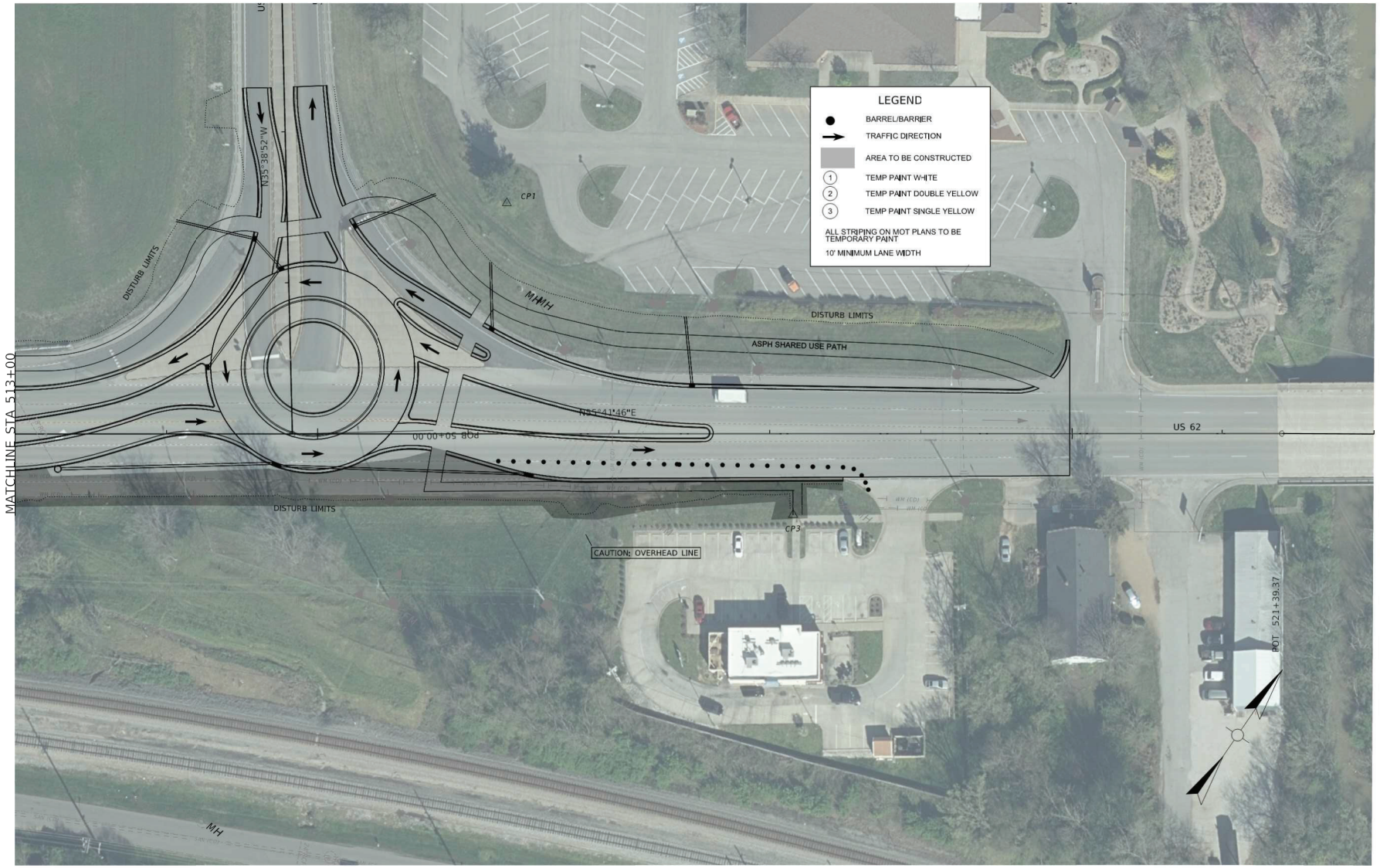
ITEM NO. 04-954.00 COUNTY OF HARDIN
SHEET NO. R037

FILE NAME: C:\PW\WORKING\EAST\01040115480\MOT_SHEETS.DGN

USER: CHRISTSMITH

OpenRoads Designer v23.00.01.11


MATCHLINE STA 513+00
MATCHLINE STA 504+00
LEGEND
BARREL BARRIER
TRAFFIC DIRECTION
AREA TO BE CONSTRUCTED
TEMP PAINT WHITE
TEMP PAINT DOUBLE YELLOW
TEMP PAINT SINGLE YELLOW
ALL STRIPING ON MOT PLANS TO BE TEMPORARY PAINT
10' MINIMUM LANE WIDTH
DISTURB LIMITS
ASPH SHARED USE PATH
CONCRETE BARRIER WALL 9T
60 LF
US31WB SB RAMP
N55°06'11"E
PT 508+39.94
POT 512+45.73
MP
CF2
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
MAINTENANCE OF TRAFFIC - PHASE IV
HORIZONTAL SCALE
SCALE: 1"=30'
STA. 504+00.00 TO STA. 513+00.00
ITEM NO. 04-354.00
COUNTY OF HARDIN
SHEET NO. R038
OpenRoads Designer v23.06.01.11
USER: CHRISTSMITH
FILE NAME: C:\PW\WORKING\EAST\D1\D401154\R\MOT_SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

MAINTENANCE OF TRAFFIC - PHASE IV

HORIZONTAL SCALE
SCALE: 1"=30'

0' 30' 60' 120'

STA. 513+00.00 TO STA. 522+00.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R039

OpenRoads Designer v23.00.01.11
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011540\MOT_SHEETS.DGN



SIGNS SHALL BE PLACED IN SUITABLE LOCATION DETERMINED BY ENGINEER.
SIGNS SHALL BE SPACED A MINIMUM OF 50' FROM OTHER EXISTING SIGNS (150' PREFERED).

DETOUR SIGNAGE:

A — QTY: 4



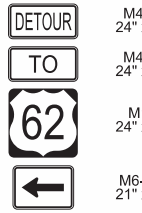
W20-2
48" x 48"

B — QTY: 10



M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4 24" x 24"

C — QTY: 2



M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4 24" x 24"

D — QTY: 2



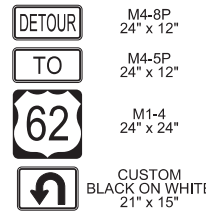
M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4 24" x 24"

E — QTY: 1



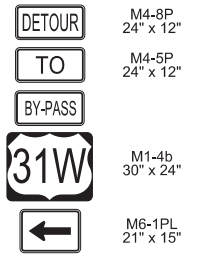
M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4 24" x 24"

F — QTY: 1



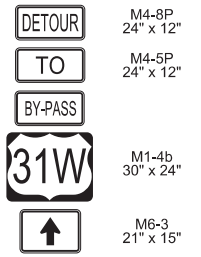
M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4 24" x 24"

G — QTY: 1



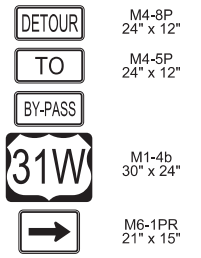
M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4b 30" x 24"

H — QTY: 8



M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4b 30" x 24"

J — QTY: 2



M4-8P 24" x 12"
M4-5P 24" x 12"
M1-4b 30" x 24"

K — QTY: 2



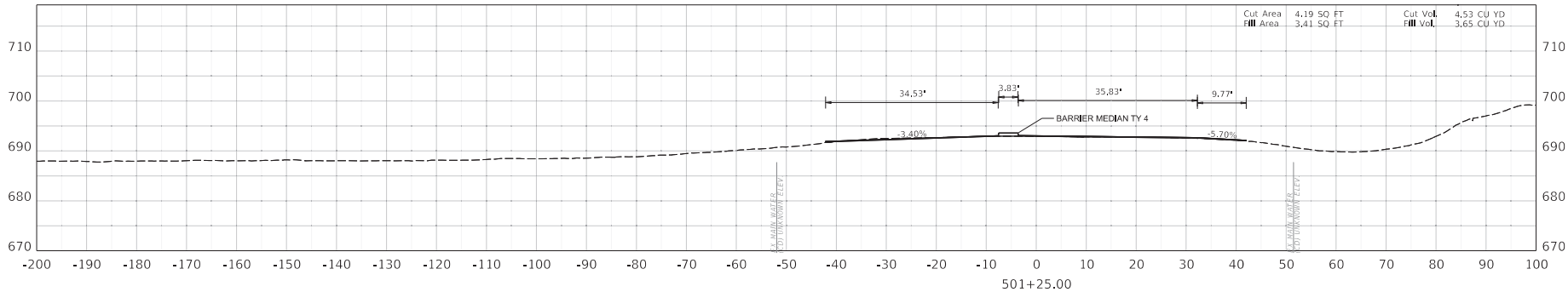
M4-8a
24" x 18"

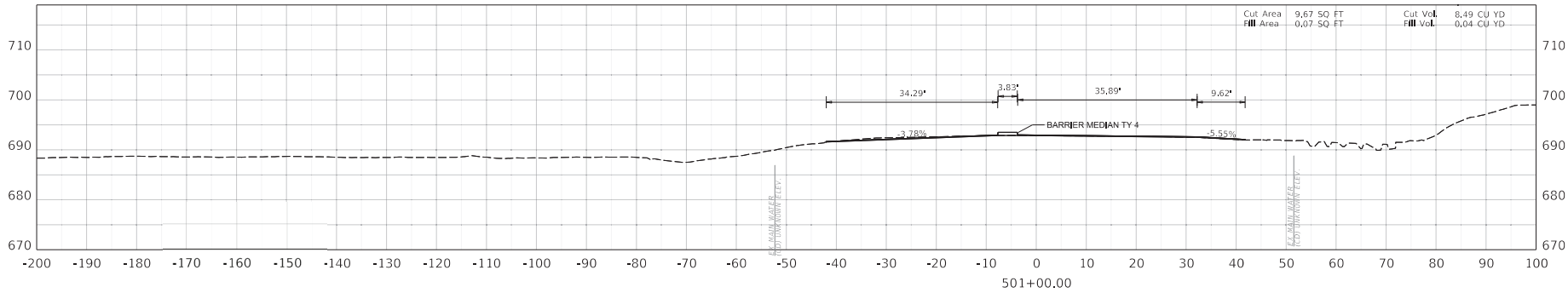
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

SIGNED DETOUR (ALL PHASES)

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. R040

OpenRoads Designer v23.00.01.11 USER: CHRISTSMITH FILE NAME: C:\PWWORKING\EAST01\D4011546\MOT_SHEETS.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

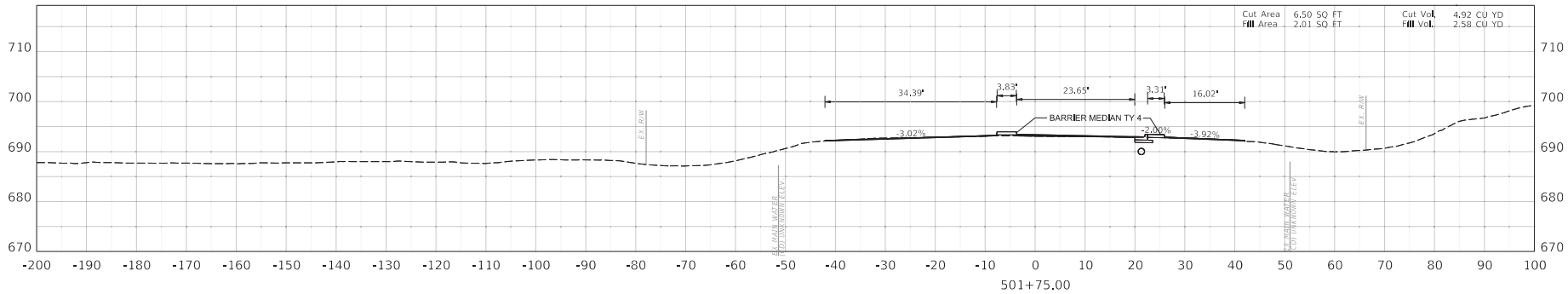
CROSS SECTIONS

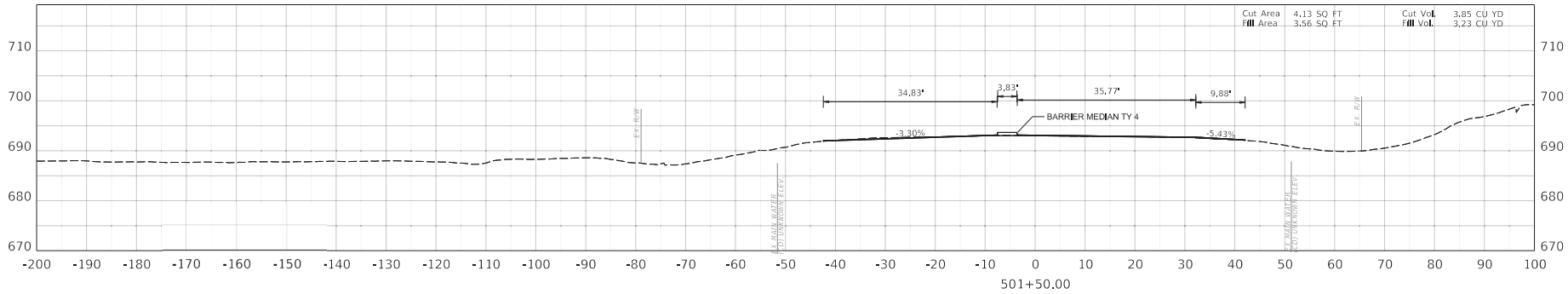
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 501+00.00 TO STA. 501+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X001

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

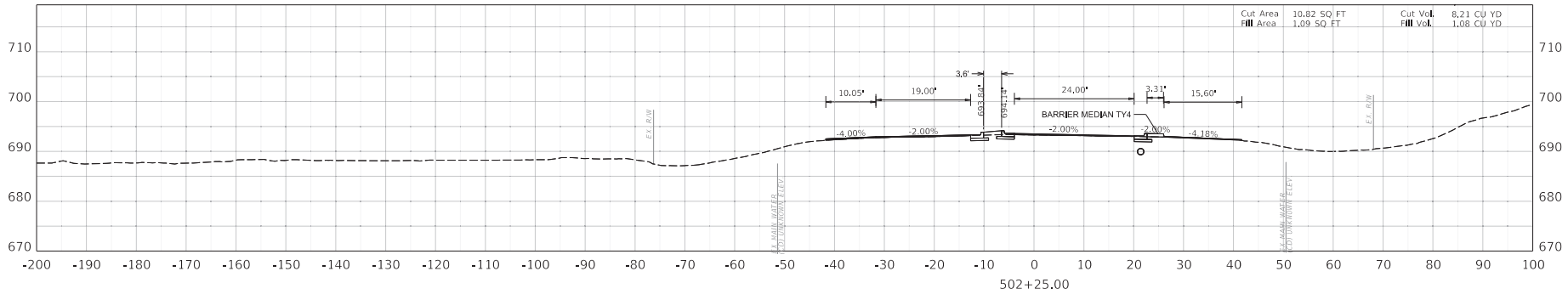
CROSS SECTIONS

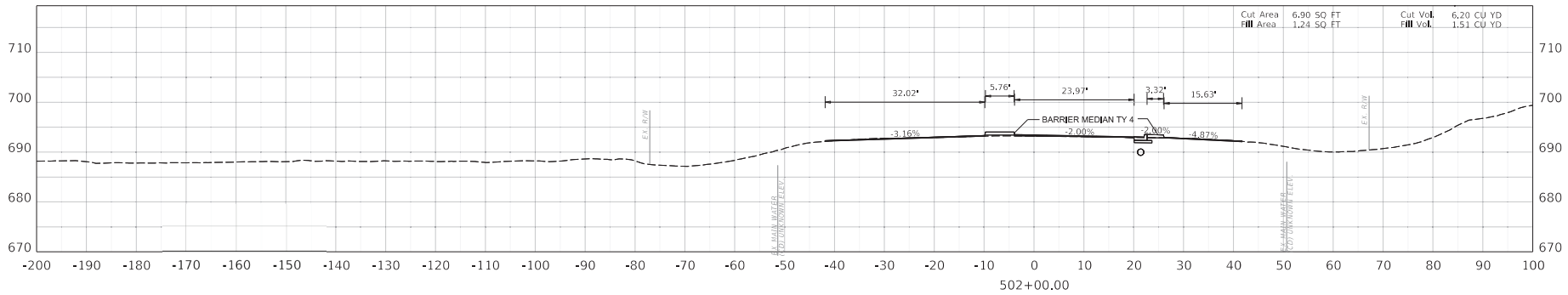
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 501+50.00 TO STA. 501+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X002

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

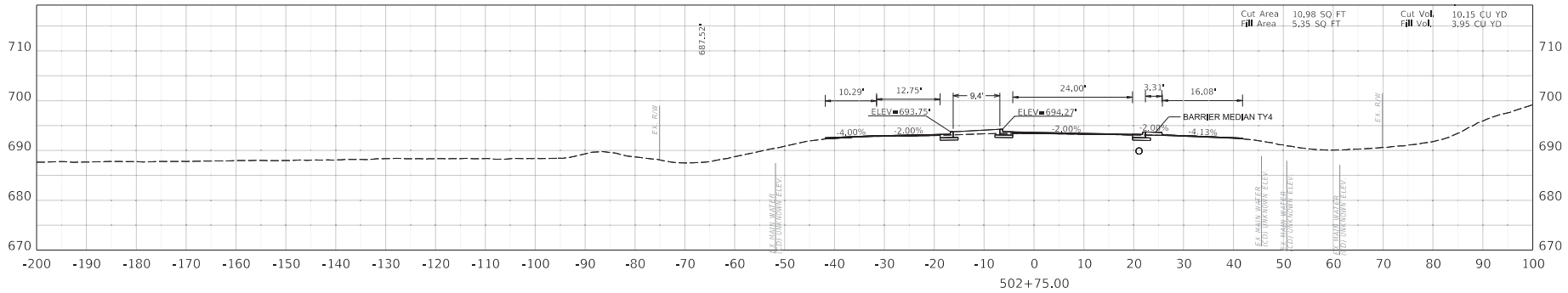
CROSS SECTIONS

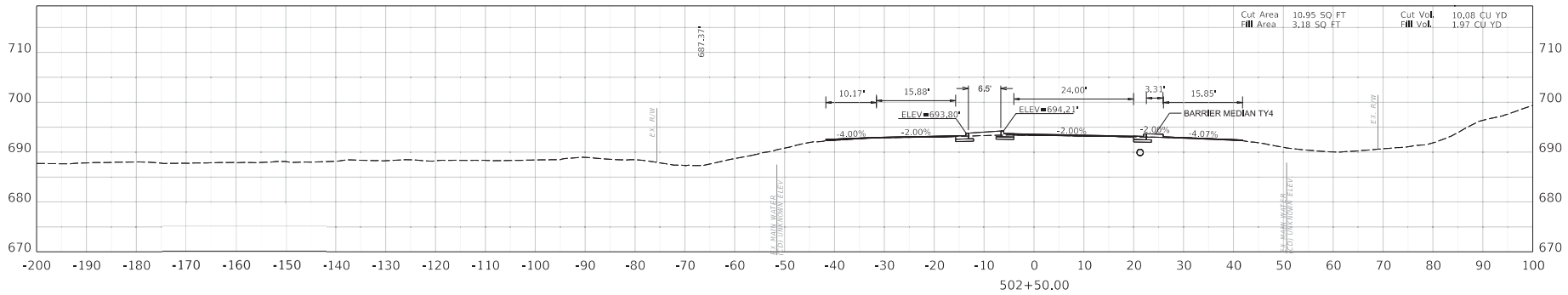
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 502+00.00 TO STA. 502+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X003

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

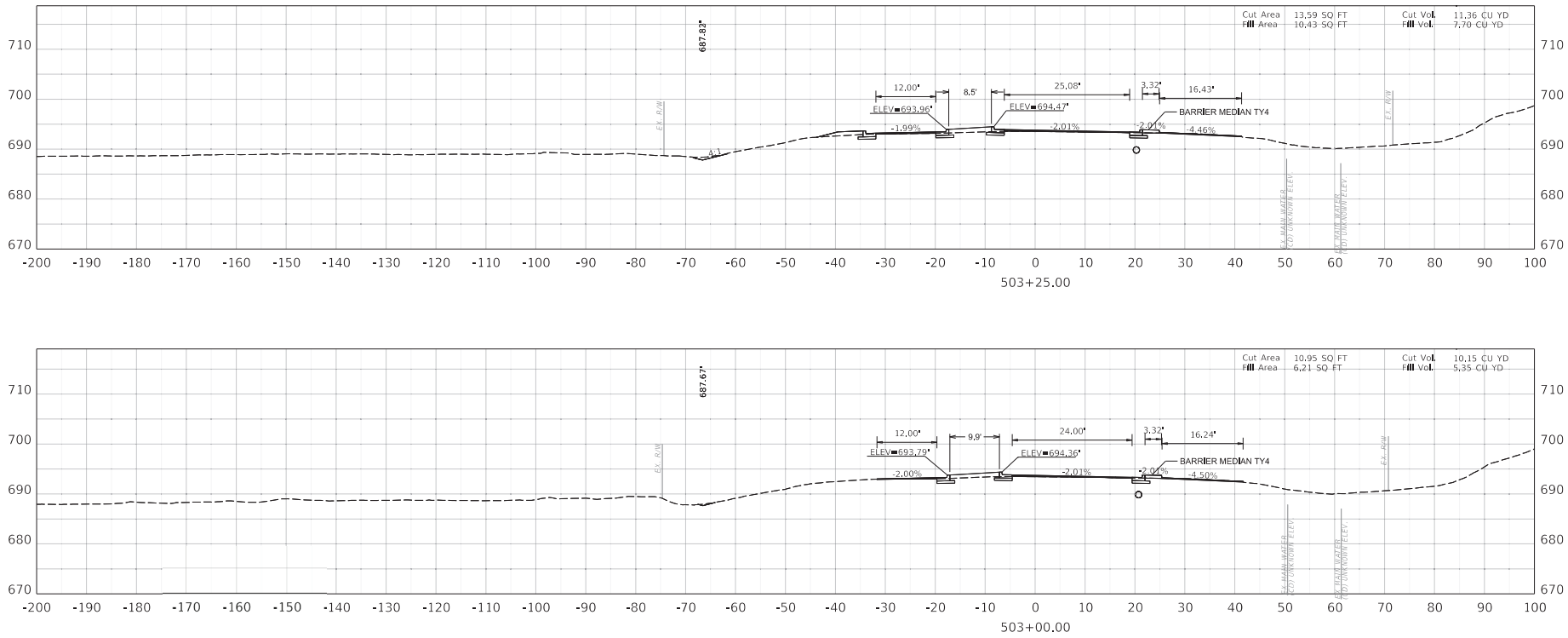
CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 502+50.00 TO STA. 502+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X004

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

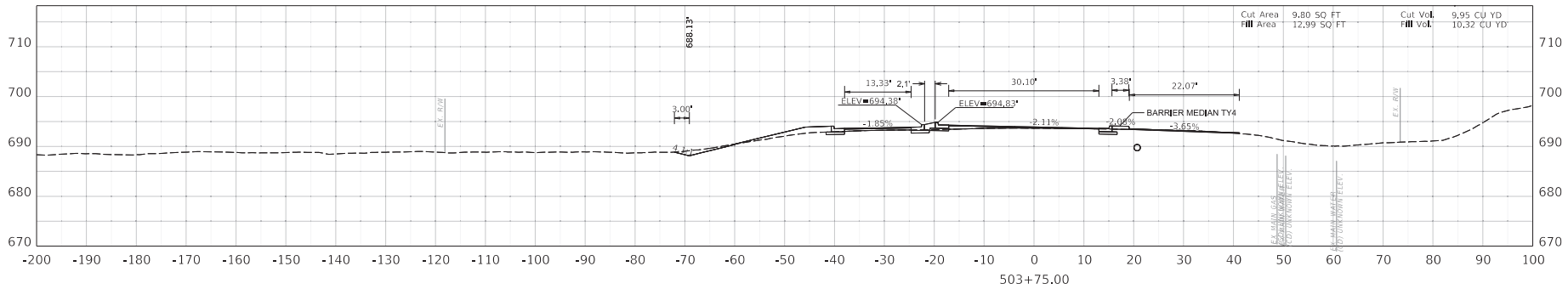
CROSS SECTIONS

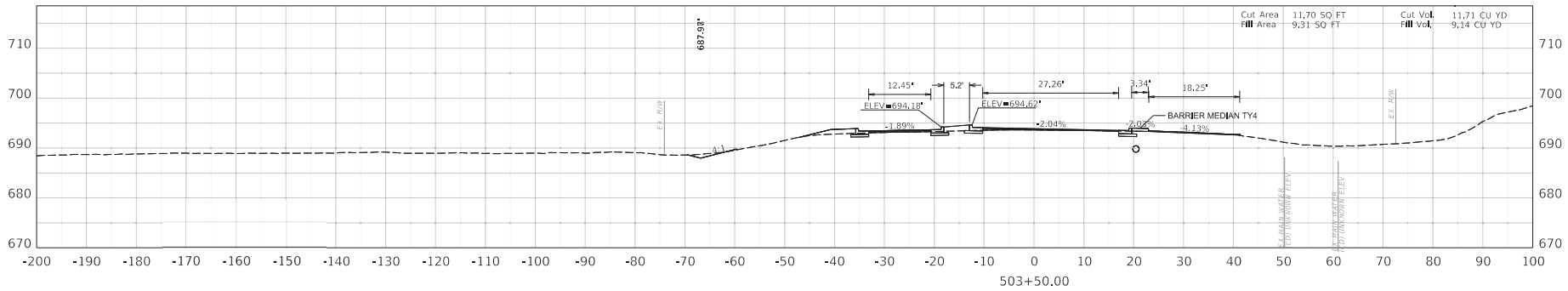
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 503+00.00 TO STA. 503+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X005

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

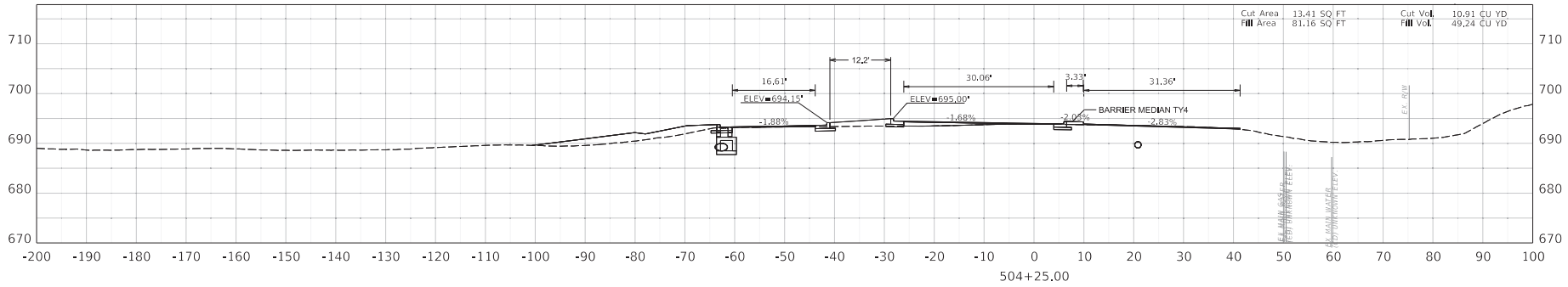
CROSS SECTIONS

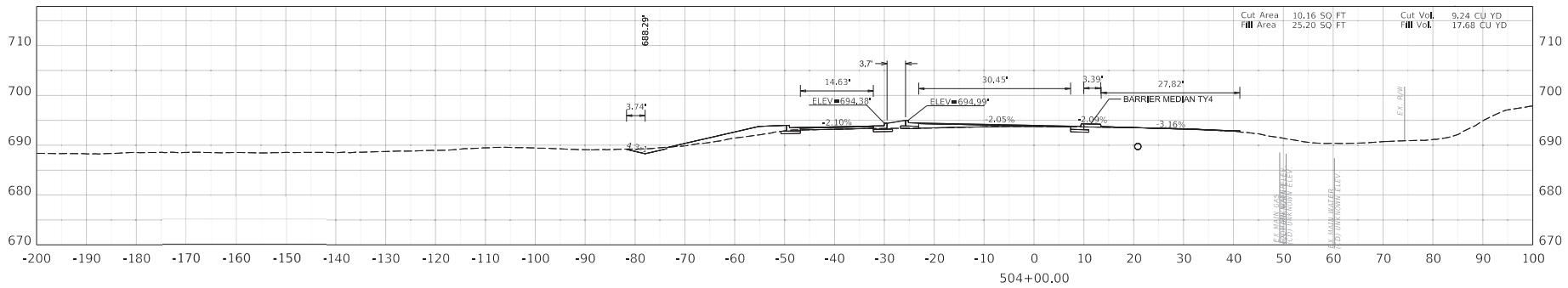
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 503+50.00 TO STA. 503+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X006

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

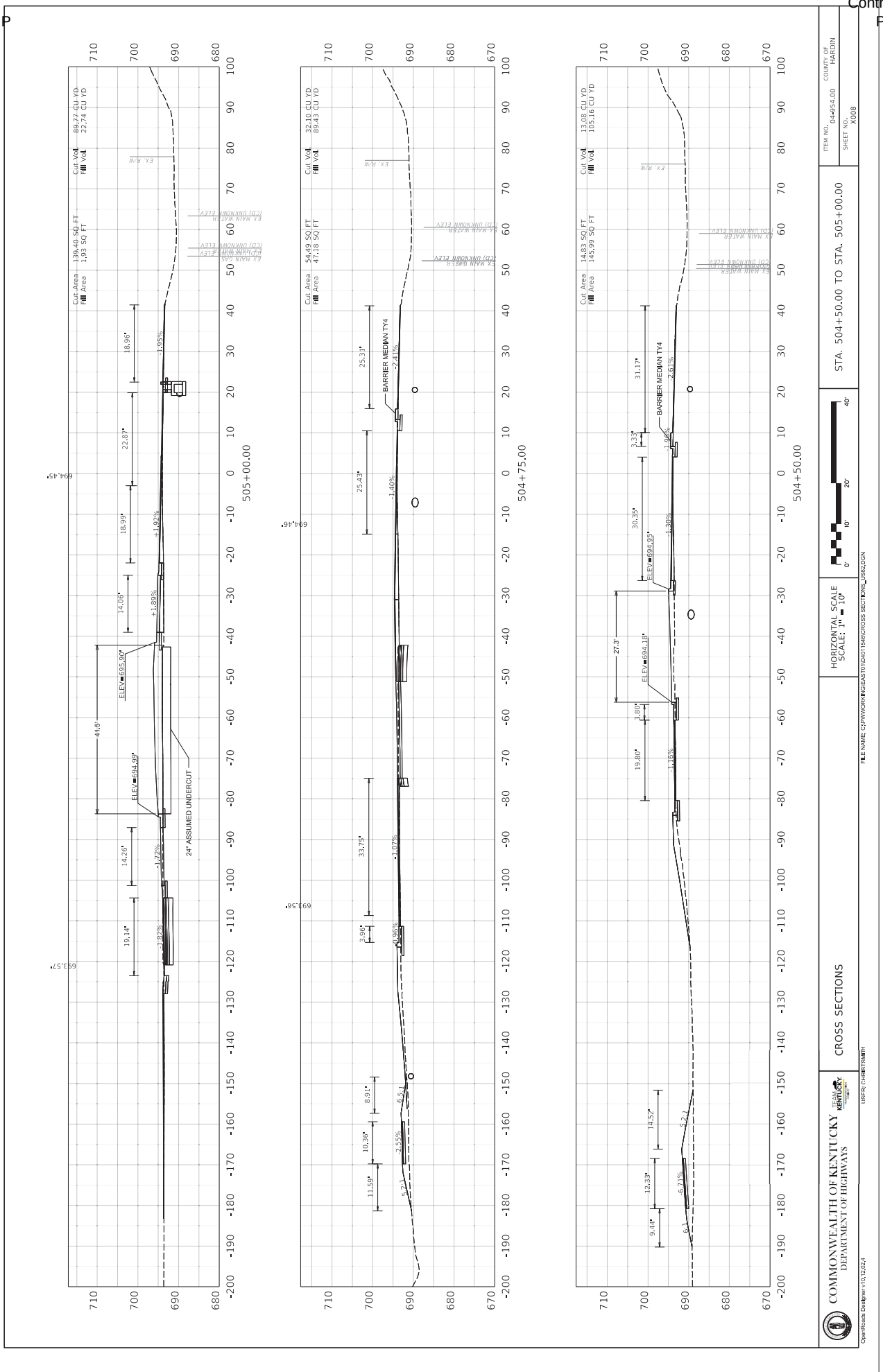
CROSS SECTIONS

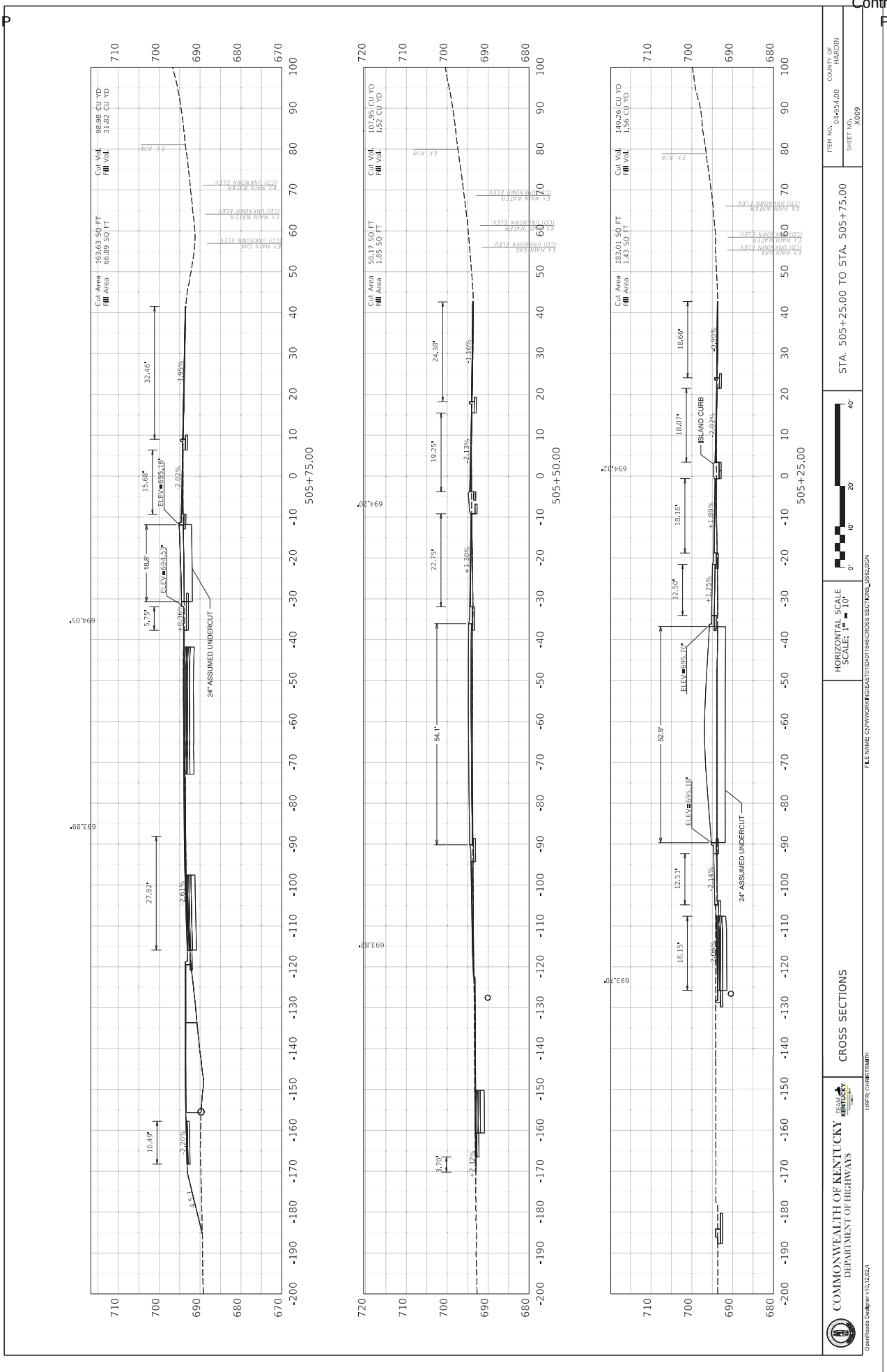
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

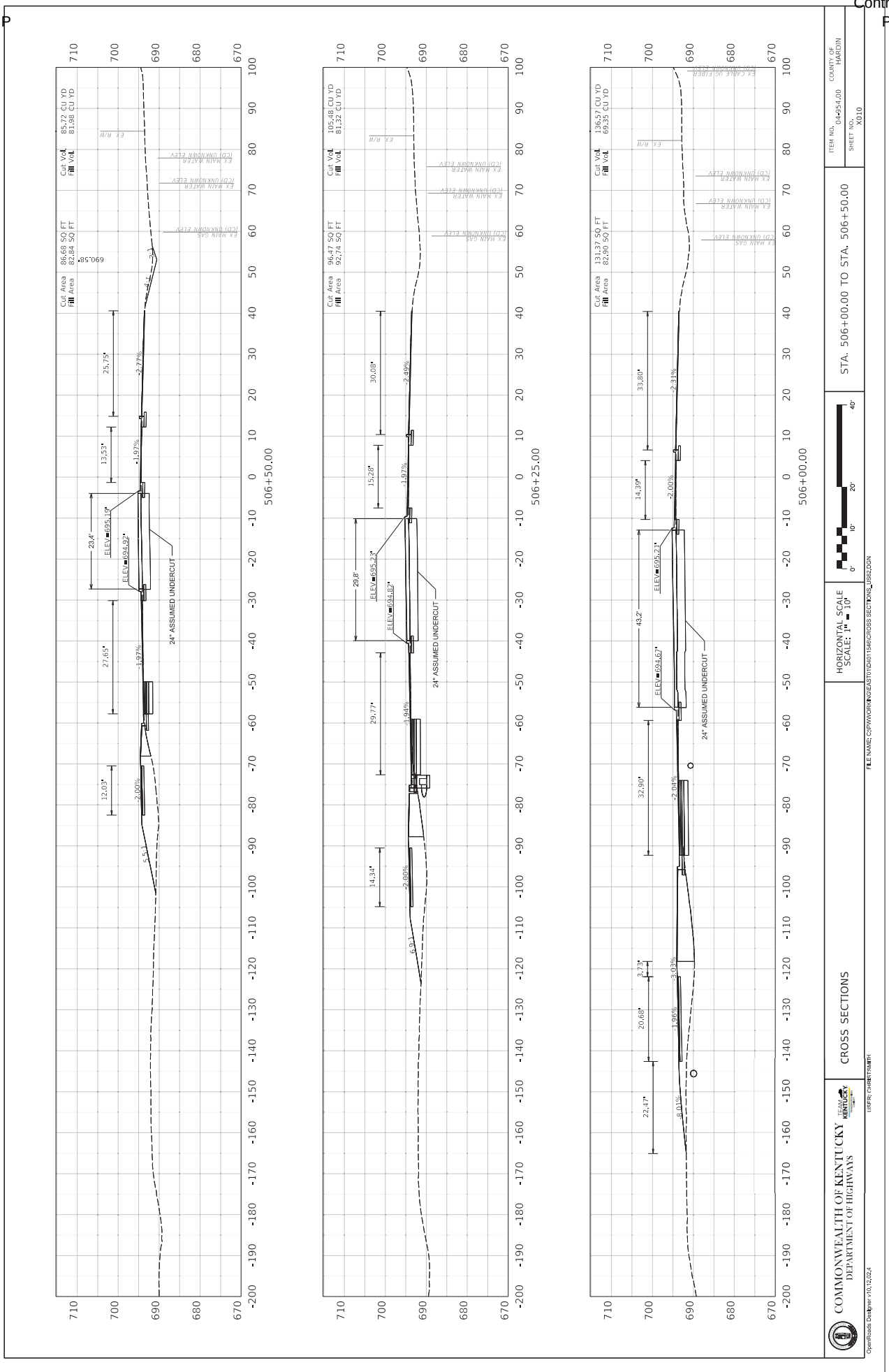
STA. 504+00.00 TO STA. 504+25.00

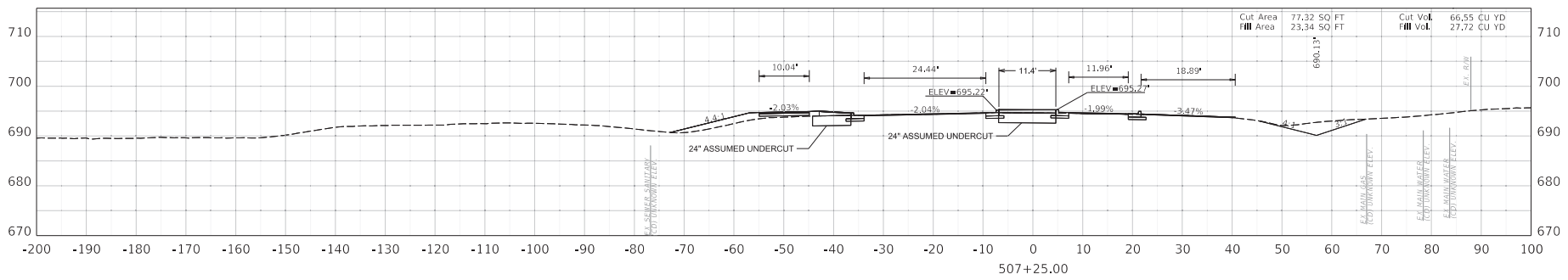
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X007

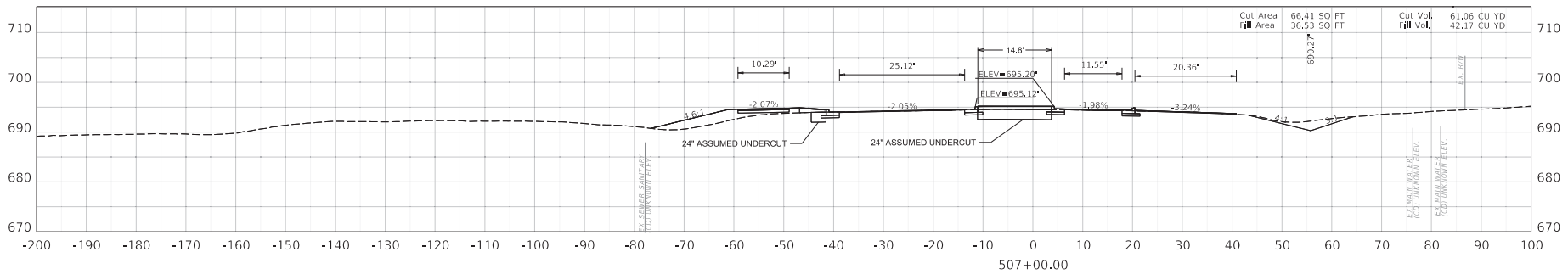
OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN

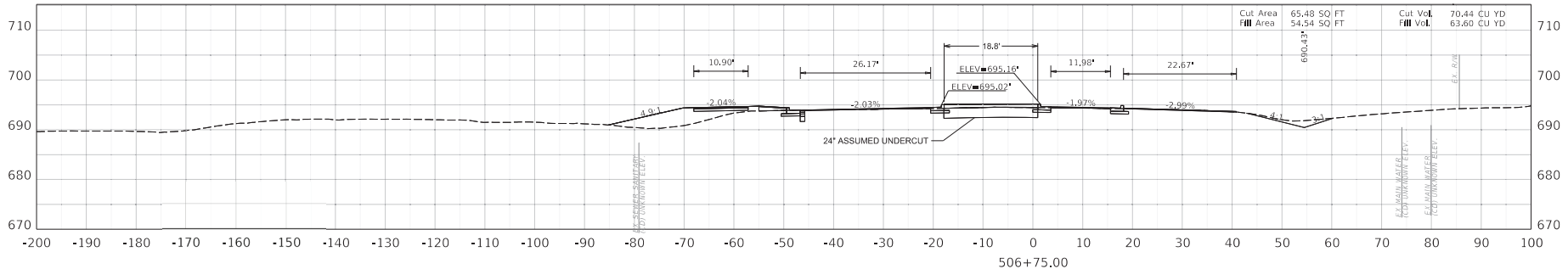

505+00.00
504+75.00
504+50.00
Cut Area 139.40 SQ FT
Fill Area 1.93 SQ FT
Cut Vol. 89.77 CU YD
Fill Vol. 22.74 CU YD
Cut Area 54.49 SQ FT
Fill Area 47.18 SQ FT
Cut Vol. 32.10 CU YD
Fill Vol. 89.43 CU YD
Cut Area 14.83 SQ FT
Fill Area 145.99 SQ FT
Cut Vol. 13.08 CU YD
Fill Vol. 105.16 CU YD
EX. R/W
EX MAIN GAS (TO) UNKNOWN ELEV.
EX MAIN WATER (TO) UNKNOWN ELEV.
EX MAIN WATER (TO) UNKNOWN ELEV.
EX MAIN WATER (TO) UNKNOWN ELEV.
EX MAIN WATER (TO) UNKNOWN ELEV.
694.45'
693.57'
694.46'
693.56'
ELEV=695.00'
ELEV=694.99'
ELEV=694.95'
ELEV=694.18'
24" ASSUMED UNDERCUT
BARRIER MEDIAN TY4
BARRIER MEDIAN TY4
44.8'
25.3'
25.4'
33.75'
31.17'
30.35'
27.3'
19.80'
18.96'
22.87'
18.99'
14.06'
19.14'
14.26'
8.91'
10.36'
11.59'
14.52'
12.33'
9.44'
1.95%
-1.92%
-1.89%
-1.72%
-1.82%
-2.41%
-1.40%
-1.07%
-0.96%
-2.55%
-2.61%
-1.30%
-1.96%
-1.16%
-6.71%
0'
10'
20'
40'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
STA. 504+50.00 TO STA. 505+00.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X008
FILE NAME: C:\PWWORKING\EAST\D10\D4011546\CROSS SECT\XNS_DS52.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4


505+75.00
505+50.00
505+25.00
Cut Area 163.63 SQ FT
Fill Area 66.89 SQ FT
Cut Vol. 98.98 CU YD
Fill Vol. 31.82 CU YD
Cut Area 50.17 SQ FT
Fill Area 1.85 SQ FT
Cut Vol. 107.95 CU YD
Fill Vol. 1.52 CU YD
Cut Area 183.01 SQ FT
Fill Area 1.43 SQ FT
Cut Vol. 149.26 CU YD
Fill Vol. 1.56 CU YD
EX. R/W
EX MAIN WATER
(TO) UNKNOWN ELEV.
EX MAIN GAS
24" ASSUMED UNDERCUT
ISLAND CURB
ELEV=695.70'
ELEV=694.53'
ELEV=695.18'
694.05'
693.89'
694.20'
693.82'
694.32'
693.70'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
STA. 505+25.00 TO STA. 505+75.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X009
FILE NAME: C:\PWWORKING\EAST\D10\D4011546\CROSS SECT\XNS_LSS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4


506+50.00
506+25.00
506+00.00
24" ASSUMED UNDERCUT
ELEV=695.19'
ELEV=694.93'
ELEV=695.27'
ELEV=694.67'
ELEV=695.23'
ELEV=694.63'
EX. R/W
EX MAIN WATER
EX MAIN GAS
EX CABLE UG FIBER
(CD) UNKNOWN ELEV.
Cut Area
Fill Area
Cut Vol.
Fill Vol.
86.68 SQ FT
82.84 SQ FT
85.72 CU YD
81.98 CU YD
96.47 SQ FT
92.74 SQ FT
105.48 CU YD
81.32 CU YD
131.37 SQ FT
82.90 SQ FT
136.57 CU YD
69.35 CU YD
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
STA. 506+00.00 TO STA. 506+50.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X010
FILE NAME: C:\PW\WORKING\EAST\01D4011546\CROSS SECT\XNS_US62.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

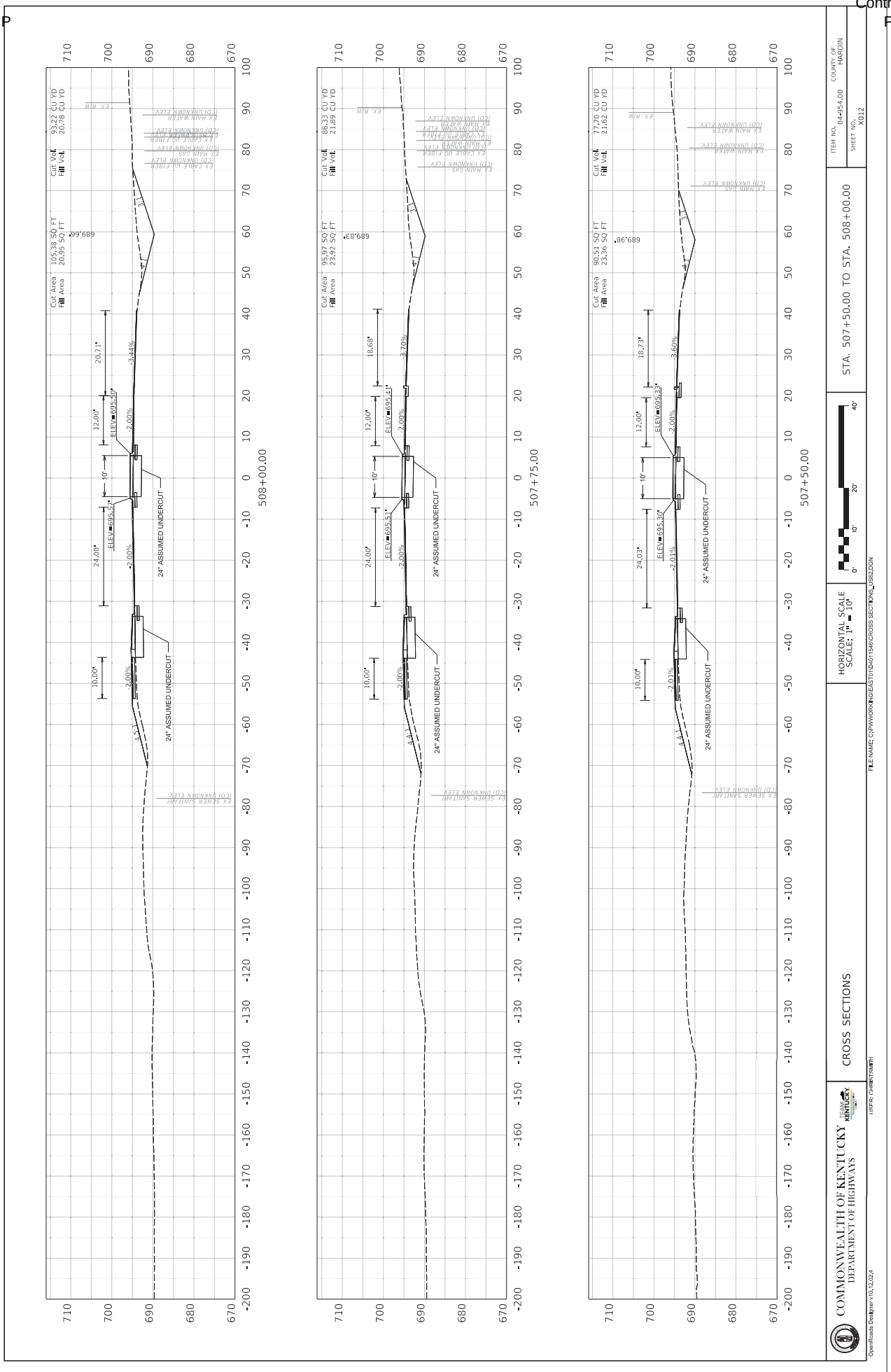
CROSS SECTIONS

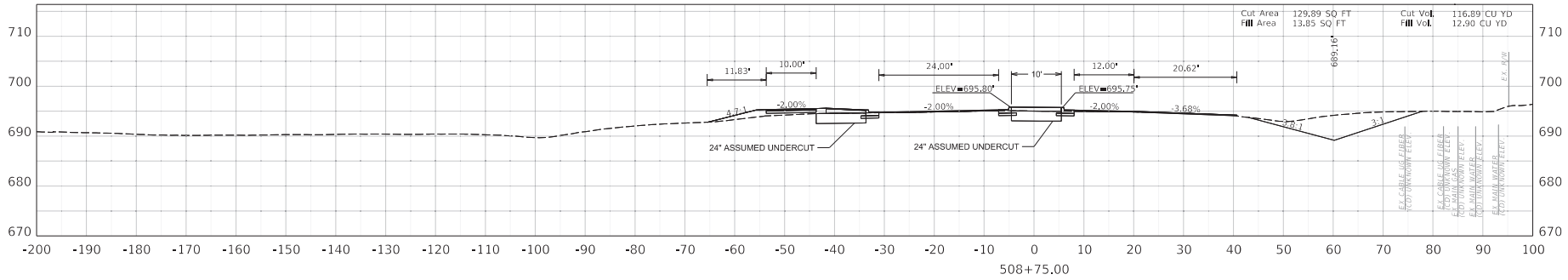
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

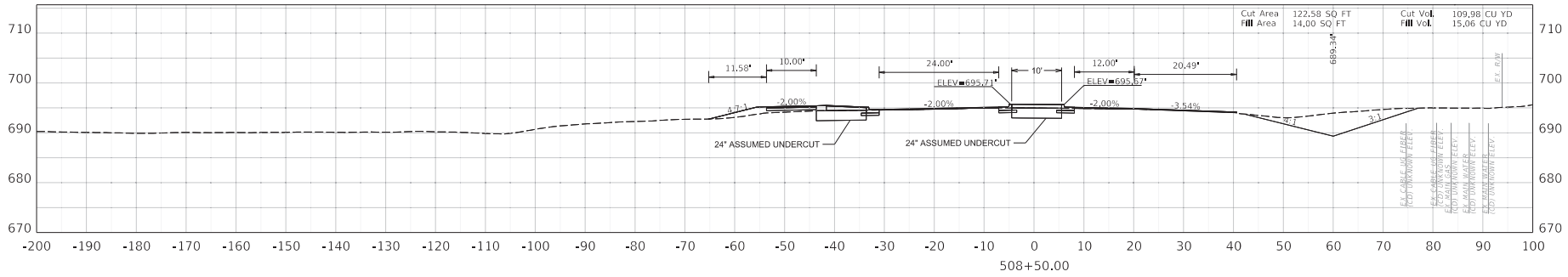
STA. 506+75.00 TO STA. 507+25.00

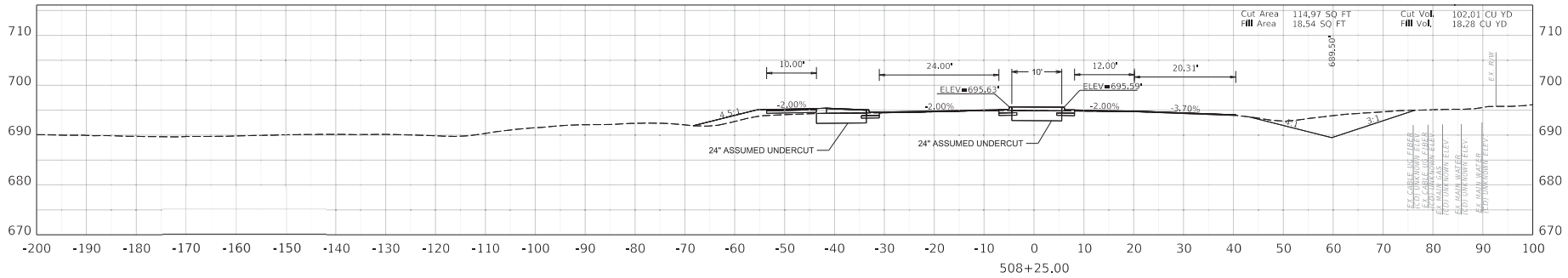
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X011

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN


508+00.00
507+75.00
507+50.00
Cut Area 105.38 SQ FT
Fill Area 20.95 SQ FT
Cut Vol. 93.22 CU YD
Fill Vol. 20.78 CU YD
Cut Area 95.97 SQ FT
Fill Area 23.92 SQ FT
Cut Vol. 86.33 CU YD
Fill Vol. 21.89 CU YD
Cut Area 90.51 SQ FT
Fill Area 23.36 SQ FT
Cut Vol. 77.70 CU YD
Fill Vol. 21.62 CU YD
24' ASSUMED UNDERCUT
EX. R/W
EX. SEWER SANITARY (TO) UNKNOWN ELEV.
EX. MAIN WATER (TO) UNKNOWN ELEV.
EX. MAIN GAS (TO) UNKNOWN ELEV.
EX. CABLE TV FIBER (TO) UNKNOWN ELEV.
EX. CABLE HI FIBER (TO) UNKNOWN ELEV.
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
STA. 507+50.00 TO STA. 508+00.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X012
FILE NAME: C:\PW\WORKING\EAST\D10\D4011546\CROSS SECT\XNS_DS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

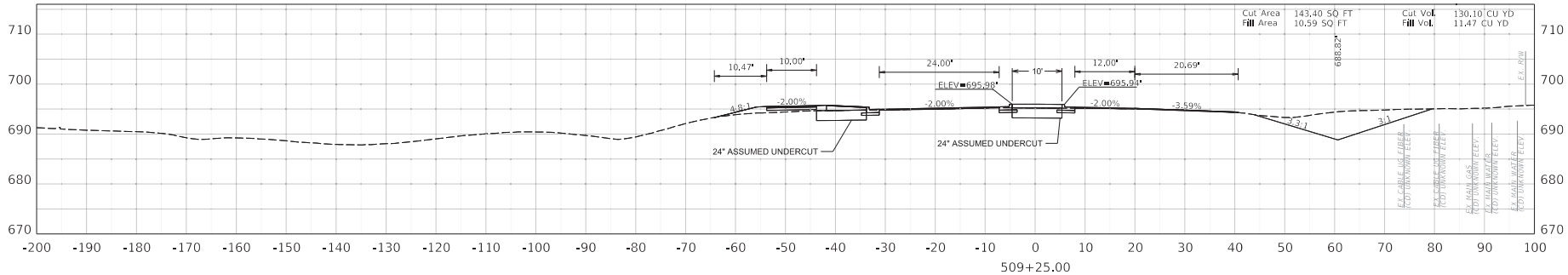
CROSS SECTIONS

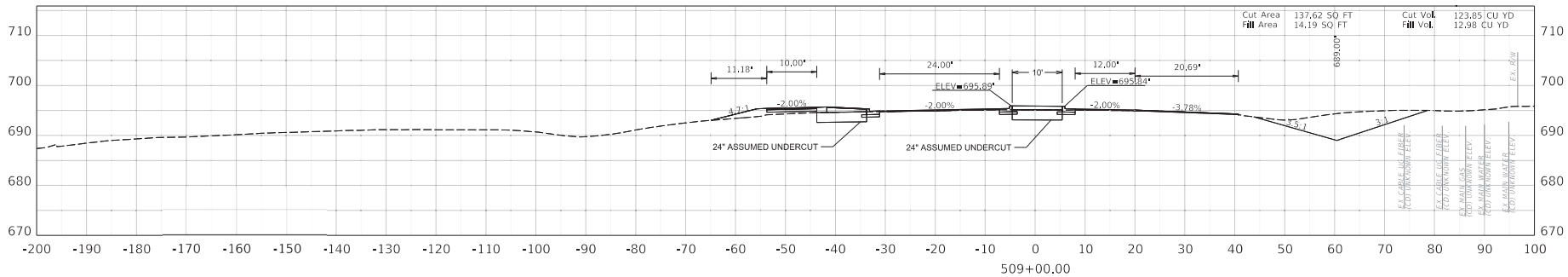
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 508+25.00 TO STA. 508+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X013

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

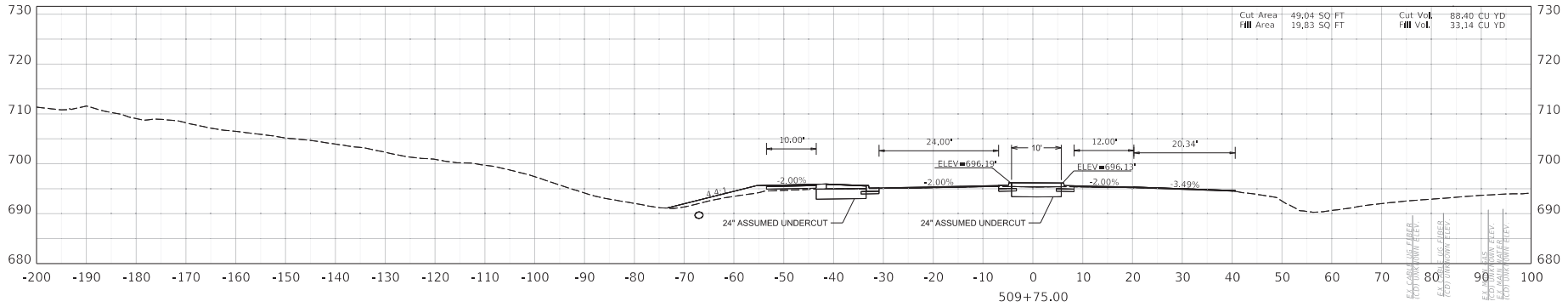
CROSS SECTIONS

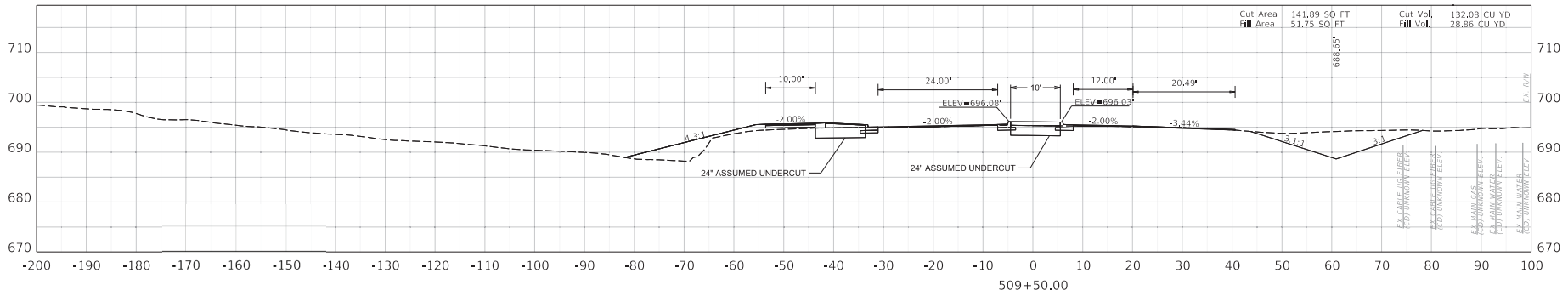
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 509+00.00 TO STA. 509+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X014

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

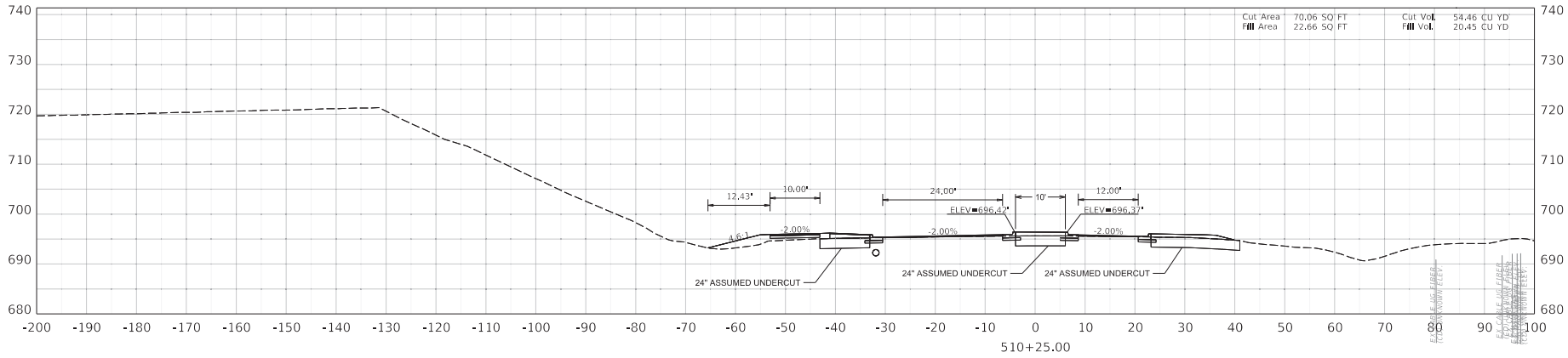
CROSS SECTIONS

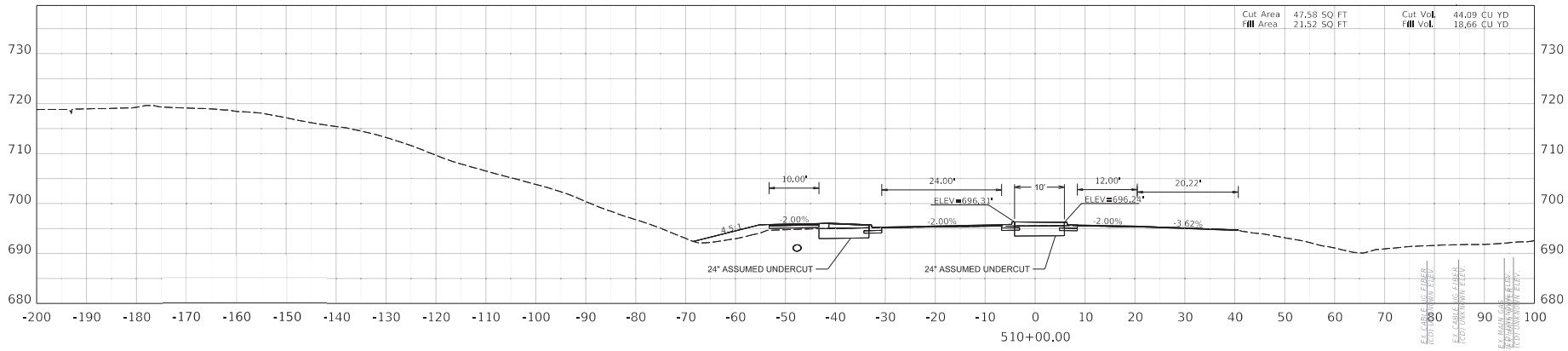
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 509+50.00 TO STA. 509+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X015

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

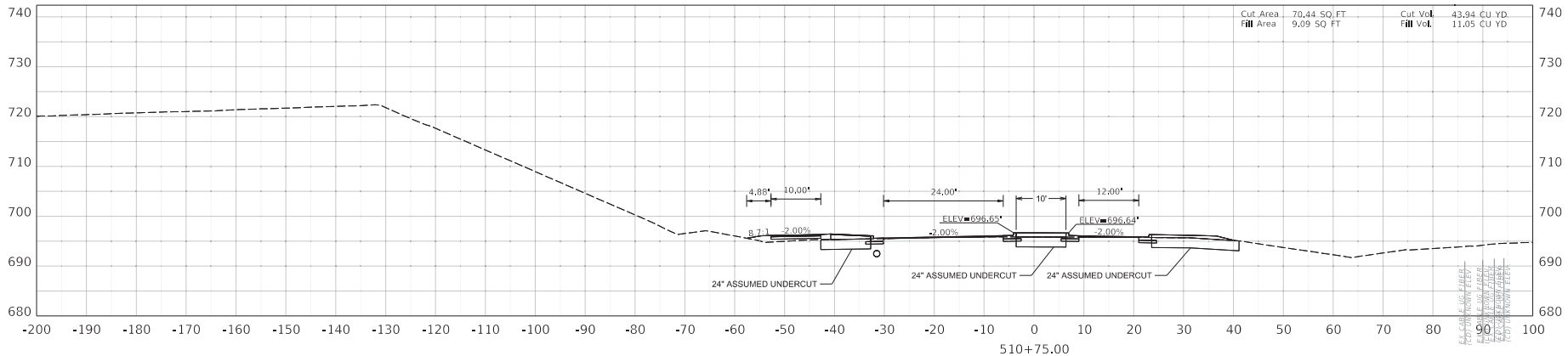
CROSS SECTIONS

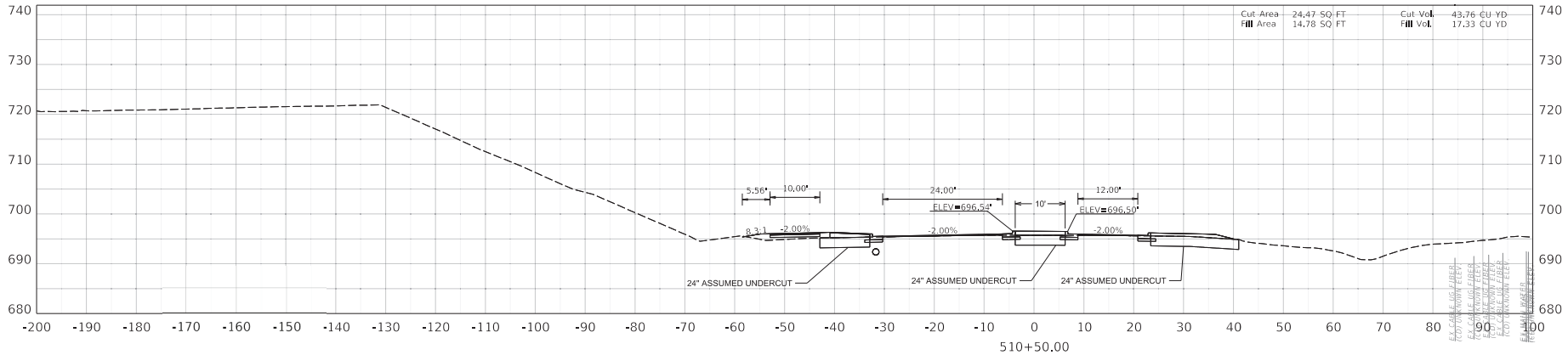
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 510+00.00 TO STA. 510+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X016

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

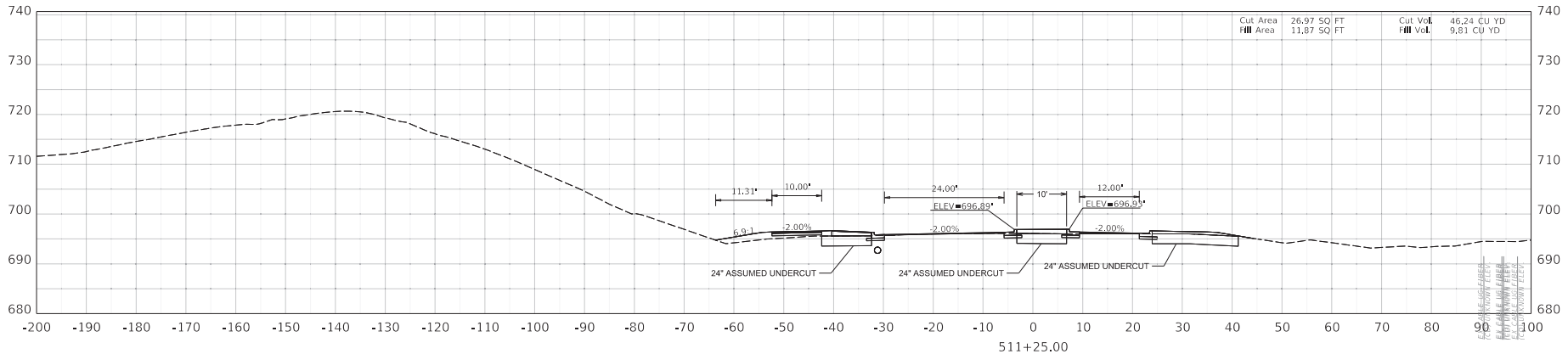
CROSS SECTIONS

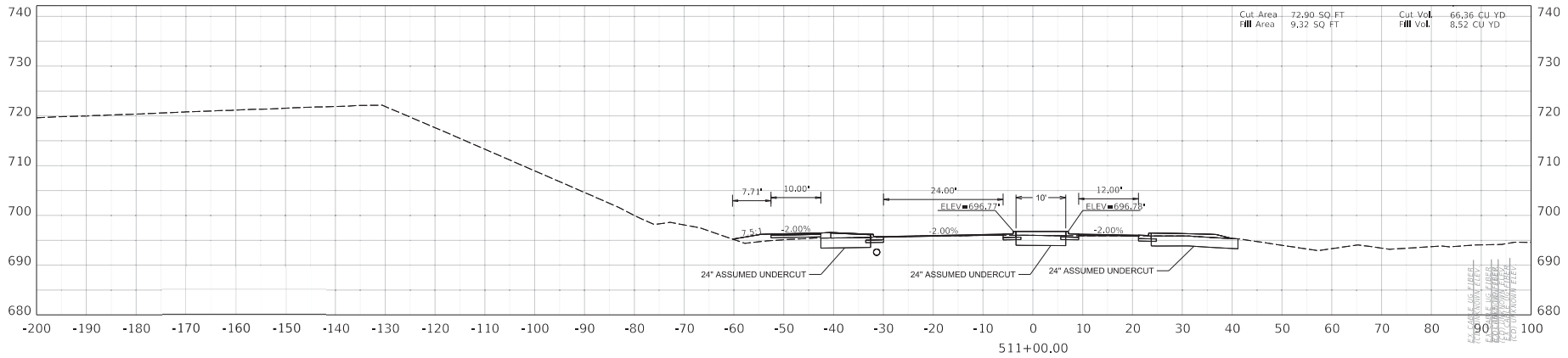
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 510+50.00 TO STA. 510+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X017

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

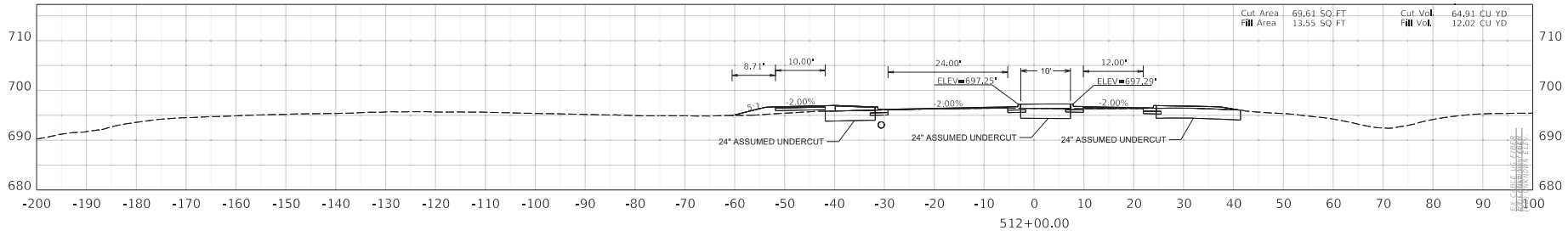
CROSS SECTIONS

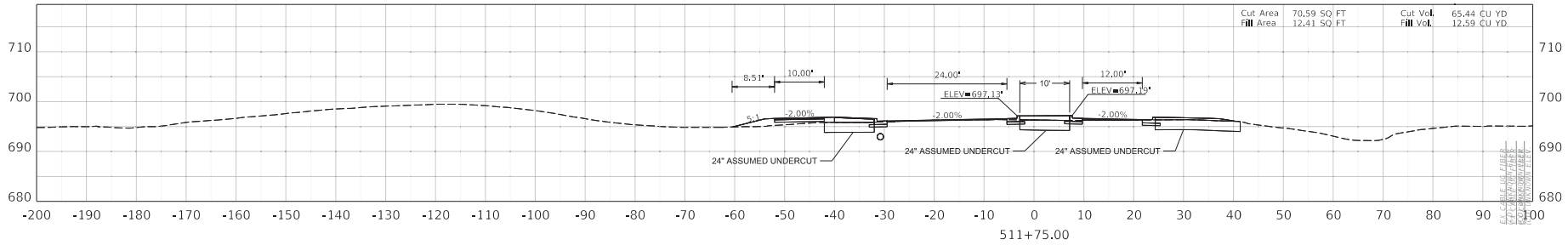
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

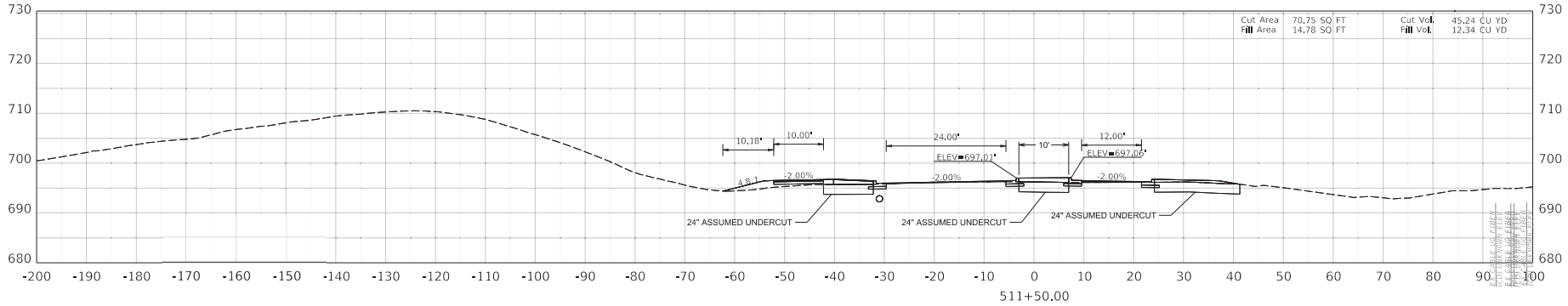
STA. 511+00.00 TO STA. 511+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X018

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

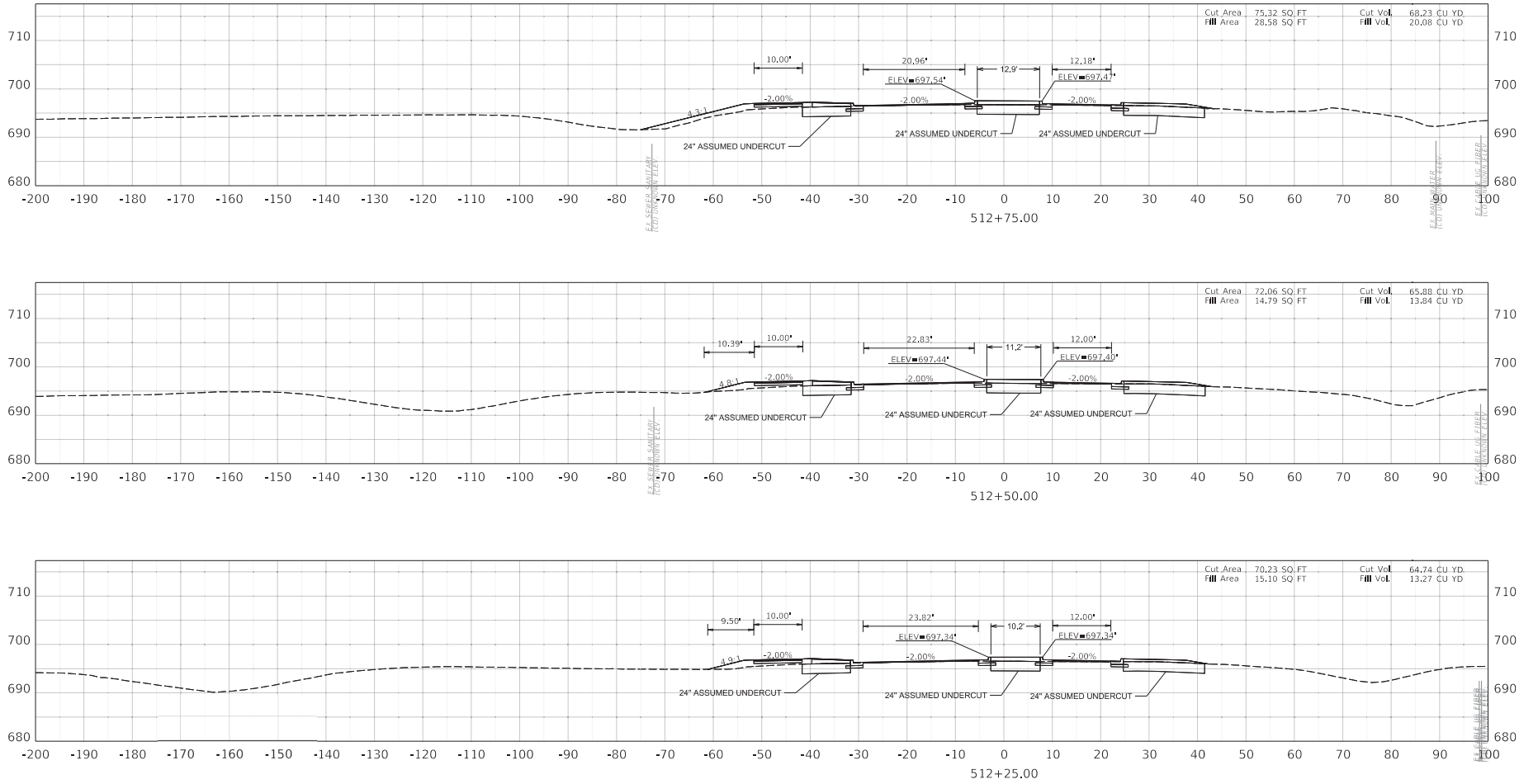
CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 511+50.00 TO STA. 512+00.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X019

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

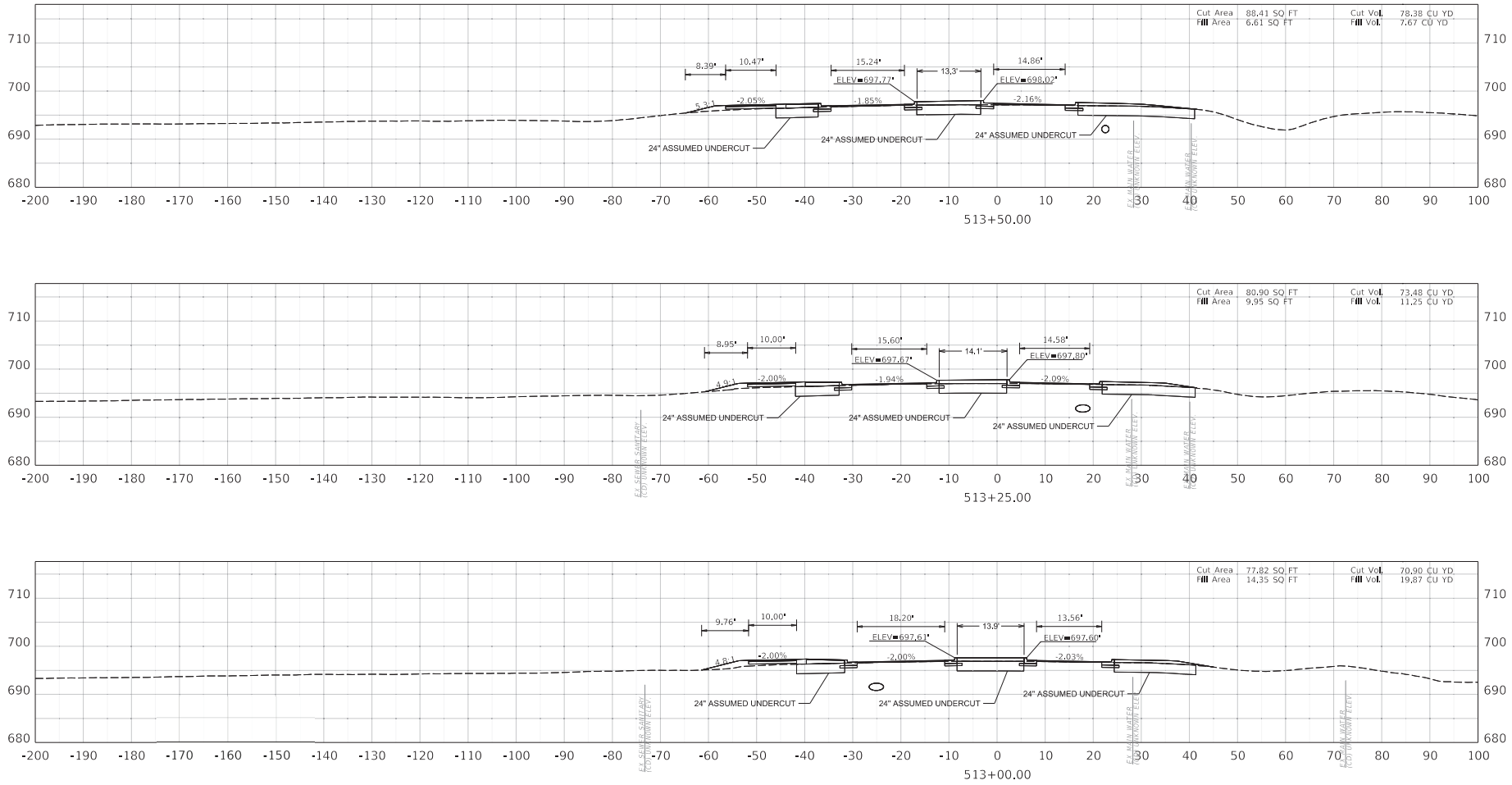
CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 512+25.00 TO STA. 512+75.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X020

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

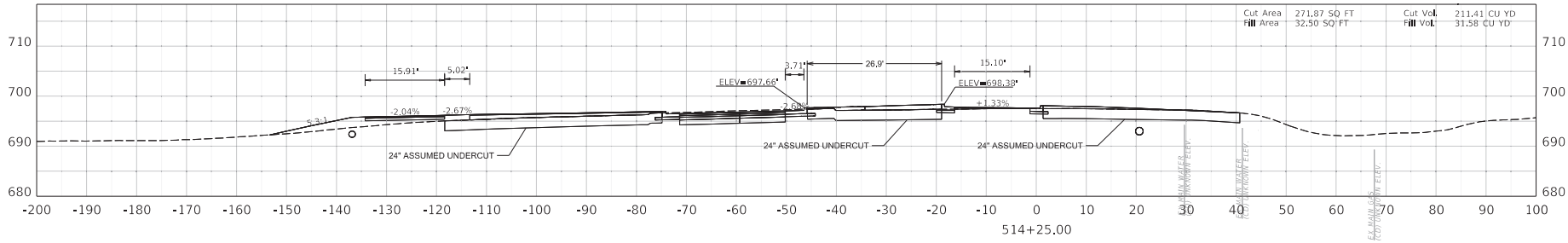
CROSS SECTIONS

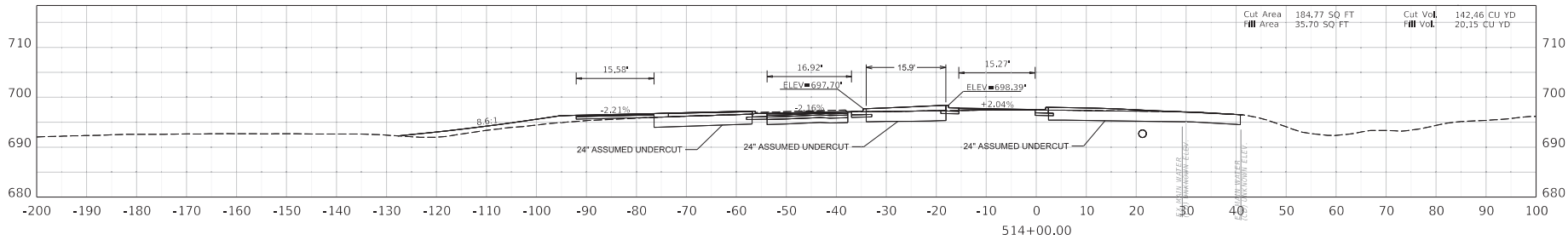
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

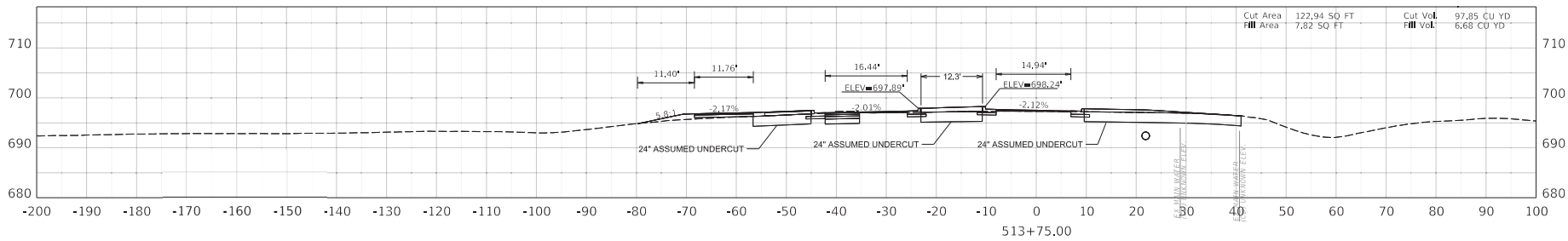
STA. 513+00.00 TO STA. 513+50.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X021

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

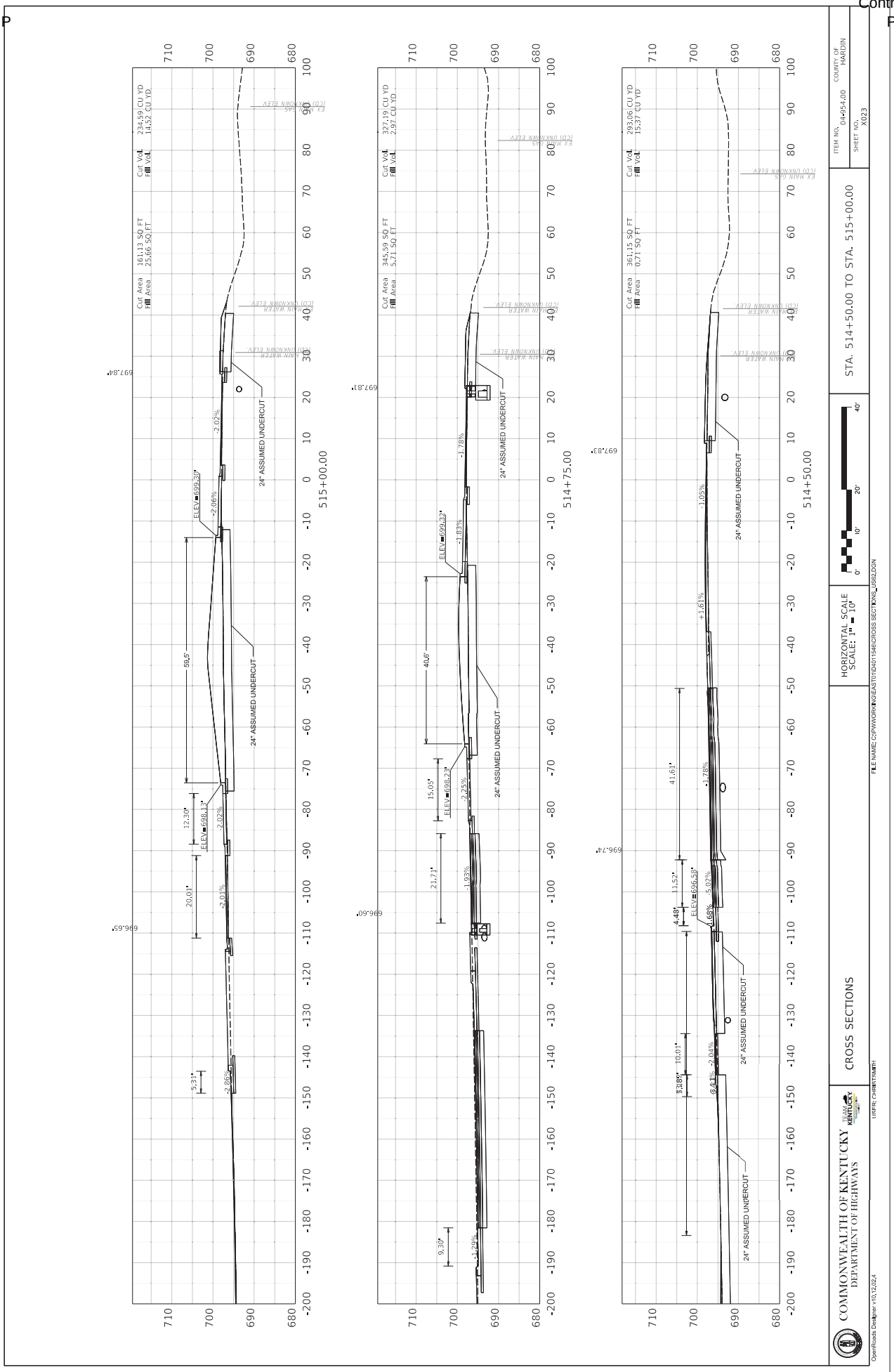
CROSS SECTIONS

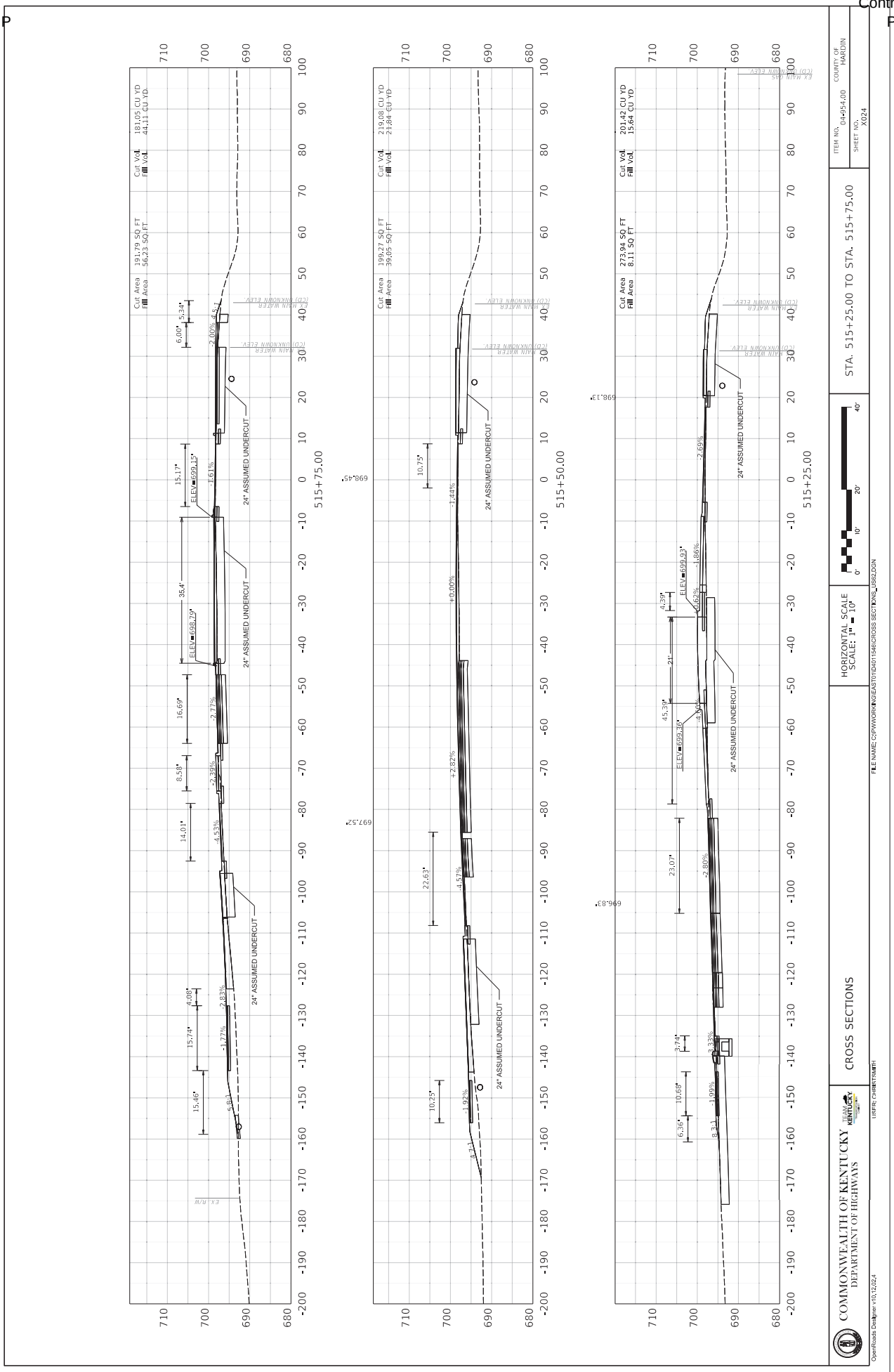
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

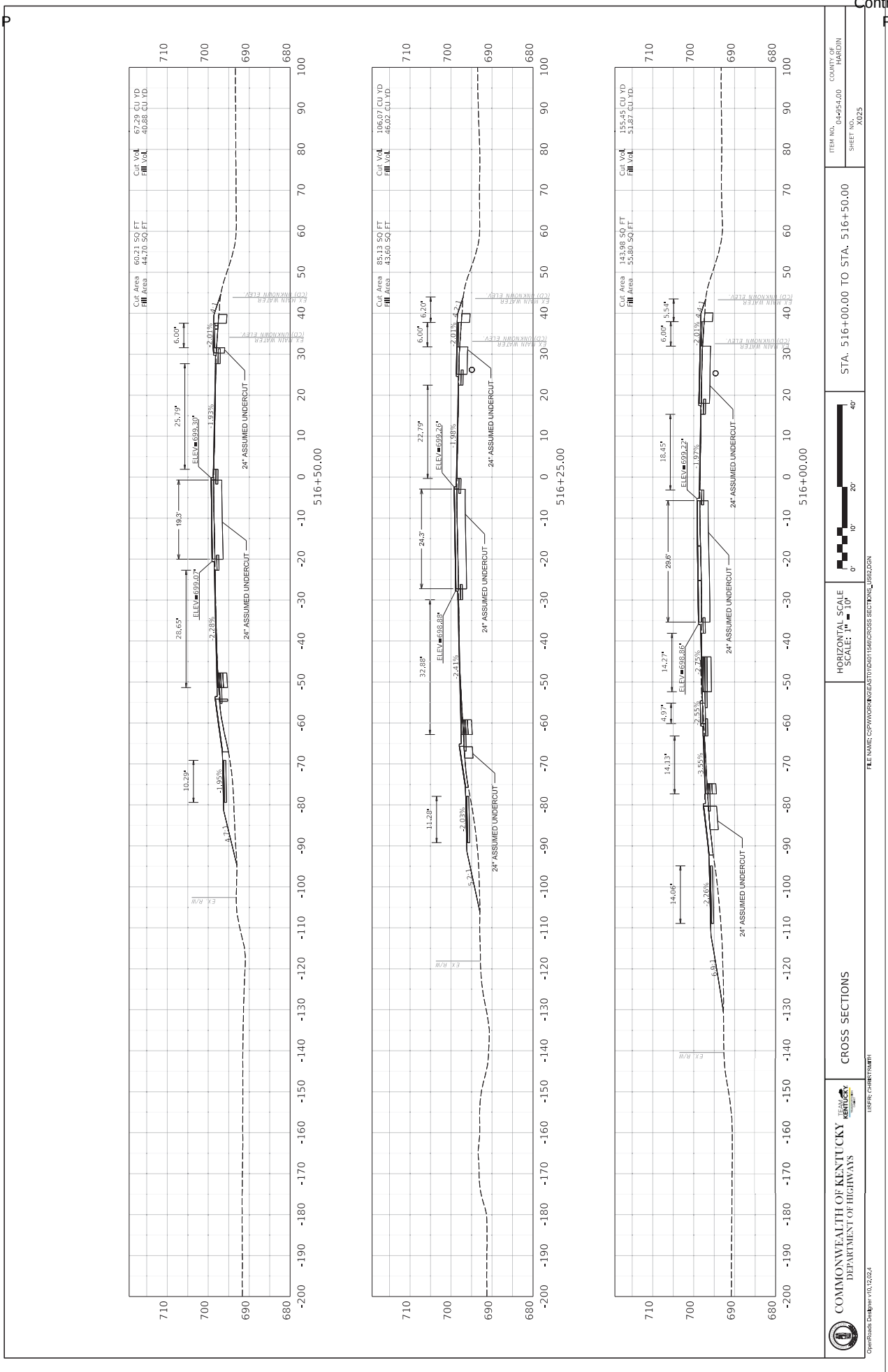
STA. 513+75.00 TO STA. 514+25.00

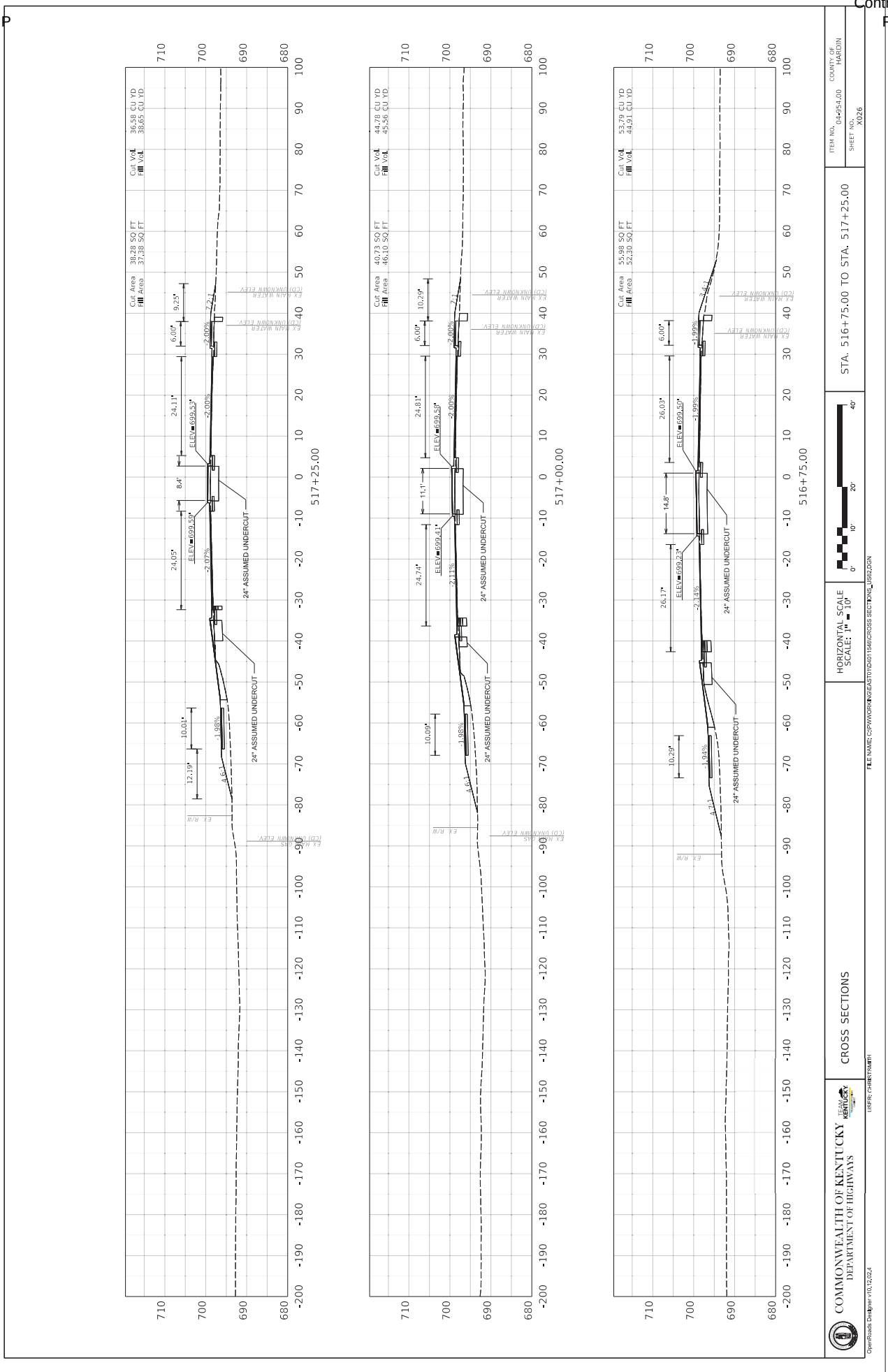
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X022

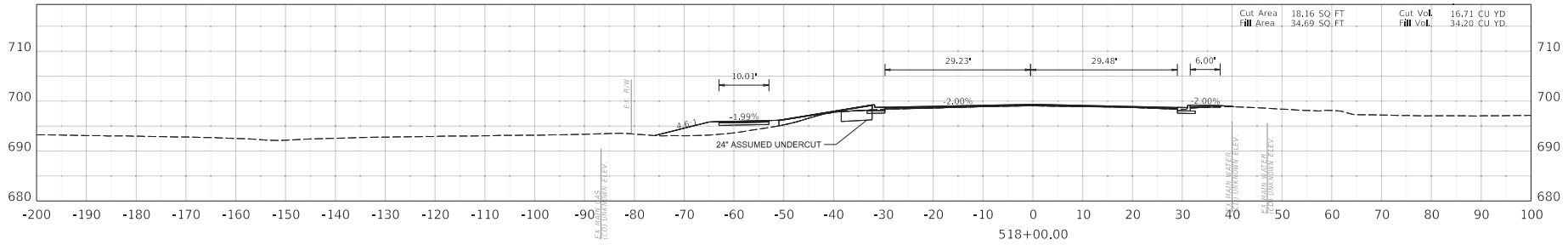
OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN

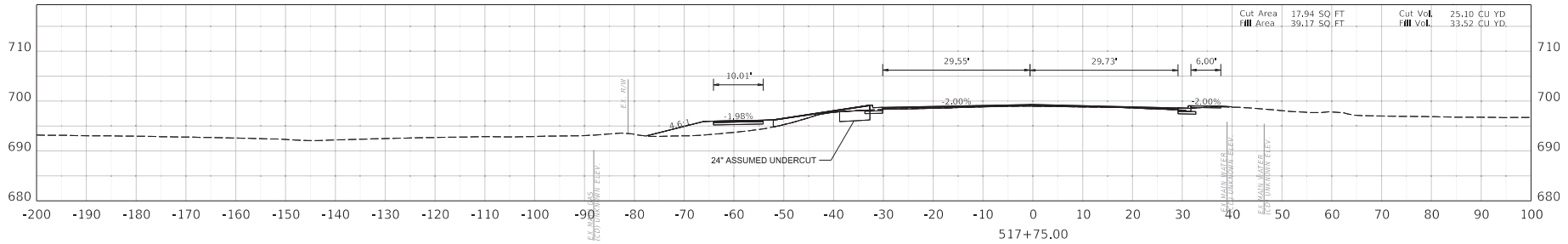

Cut Area 161.13 SQ. FT
Fill Area 25.86 SQ. FT
Cut Vol. 234.59 CU YD
Fill Vol. 14.52 CU YD.
515+00.00
697.84'
696.65'
24" ASSUMED UNDERCUT
ELEV=699.30'
ELEV=698.13'
59.5
12.30'
20.01'
5.31'
-2.02%
-2.06%
-2.01%
-2.86%
Cut Area 345.59 SQ. FT
Fill Area 5.71 SQ. FT
Cut Vol. 327.19 CU YD
Fill Vol. 2.97 CU YD
514+75.00
697.81'
696.60'
ELEV=699.32'
ELEV=698.23'
40.6'
15.05'
21.71'
9.30'
-1.78%
-1.83%
-2.25%
-1.93%
-1.20%
Cut Area 361.15 SQ. FT
Fill Area 0.71 SQ. FT
Cut Vol. 293.06 CU YD
Fill Vol. 15.37 CU YD
514+50.00
697.83'
696.74'
ELEV=696.63'
41.61'
11.52'
4.48'
10.01'
8.38'
-1.05%
-1.61%
-1.78%
-5.02%
-2.04%
-0.68%
-0.41%
EX MAIN GAS
(CD) UNKNOWN ELEV
EX MAIN WATER
(CD) UNKNOWN ELEV
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
STA. 514+50.00 TO STA. 515+00.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X023
FILE NAME: C:\PW\WORK\NGI\EAST\01\D4011546\CROSS SECT\XNS_LSS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4

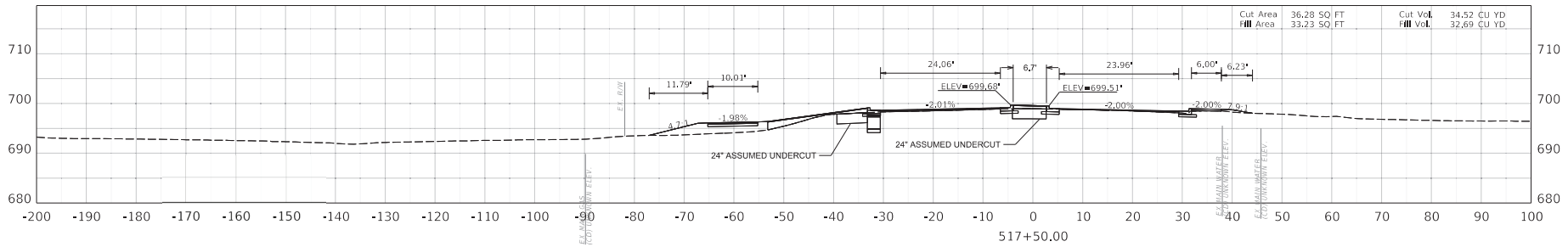

515+75.00
515+50.00
515+25.00
24" ASSUMED UNDERCUT
EX. R/W
EX. MAIN WATER
(TD) UNKNOWN ELEV.
ELEV=699.15'
ELEV=698.79'
ELEV=699.36'
ELEV=698.43'
698.45'
697.52'
698.13'
696.83'
Cut Area 191.79 SQ FT
Fill Area 56.23 SQ FT
Cut Vol. 181.05 CU YD
Fill Vol. 44.11 CU YD
Cut Area 199.27 SQ FT
Fill Area 39.05 SQ FT
Cut Vol. 219.08 CU YD
Fill Vol. 21.84 CU YD
Cut Area 273.94 SQ FT
Fill Area 8.11 SQ FT
Cut Vol. 201.42 CU YD
Fill Vol. 15.64 CU YD
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
STA. 515+25.00 TO STA. 515+75.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X024
FILE NAME: C:\PW\WORK\NGI\EAST\01\D4011546\CROSS SECT\XNS_DS52.DGN
USER: CHRISTOPHER
OpenRoads Designer v10.12.02.4


516+50.00
516+25.00
516+00.00
Cut Area 60.21 SQ FT
Fill Area 44.70 SQ FT
Cut Vol. 67.29 CU YD
Fill Vol. 40.88 CU YD.
Cut Area 85.13 SQ FT
Fill Area 43.60 SQ FT
Cut Vol. 106.07 CU YD
Fill Vol. 46.02 CU YD.
Cut Area 143.98 SQ FT
Fill Area 55.80 SQ FT
Cut Vol. 155.45 CU YD
Fill Vol. 51.87 CU YD.
24" ASSUMED UNDERCUT
ELEV=699.30'
ELEV=699.07'
ELEV=699.26'
ELEV=699.22'
ELEV=698.88'
ELEV=698.85'
EX. MAIN WATER
(CD) UNKNOWN ELEV.
EX. R/W
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'
STA. 516+00.00 TO STA. 516+50.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X025
FILE NAME: C:\PW\WORKING\EAST\01\D4011546\CROSS SECT\XNS_025S2.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4


517+25.00
517+00.00
516+75.00
Cut Area 38.28 SQ FT
Fill Area 37.38 SQ FT
Cut Vol. 36.58 CU YD
Fill Vol. 38.65 CU YD
Cut Area 40.73 SQ FT
Fill Area 46.10 SQ FT
Cut Vol. 44.78 CU YD
Fill Vol. 45.56 CU YD
Cut Area 55.98 SQ FT
Fill Area 52.30 SQ FT
Cut Vol. 53.79 CU YD
Fill Vol. 44.91 CU YD
24" ASSUMED UNDERCUT
EX. MAIN WATER
(CO) UNKNOWN ELEV.
EX. R/W
EX. MAIN GAS
(CO) UNKNOWN ELEV.
ELEV=699.59'
ELEV=699.41'
ELEV=699.50'
ELEV=699.27'
2.00%
2.07%
2.11%
1.99%
1.98%
1.94%
24.05'
24.74'
24.81'
26.17'
26.03'
24.11'
10.01'
10.09'
10.29'
12.19'
14.8'
11.1'
8.4'
6.00'
9.25'
10.29'
A.6
A.11
2.21
2.41
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
STA. 516+75.00 TO STA. 517+25.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X026
FILE NAME: C:\PW\WORKING\EAST\01\D4011546\CROSS SECT\XNS_DS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

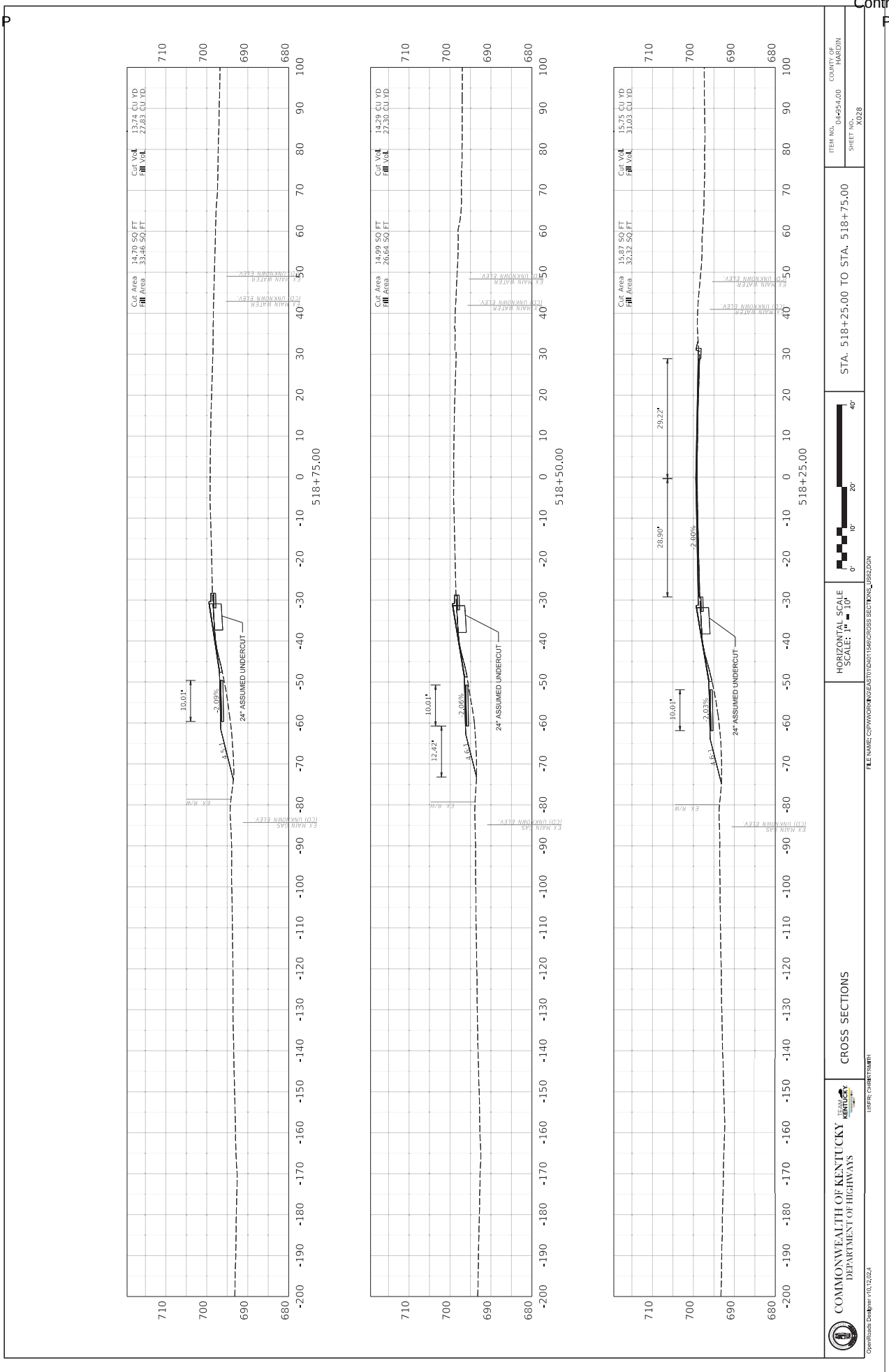
STA. 517+50.00 TO STA. 518+00.00

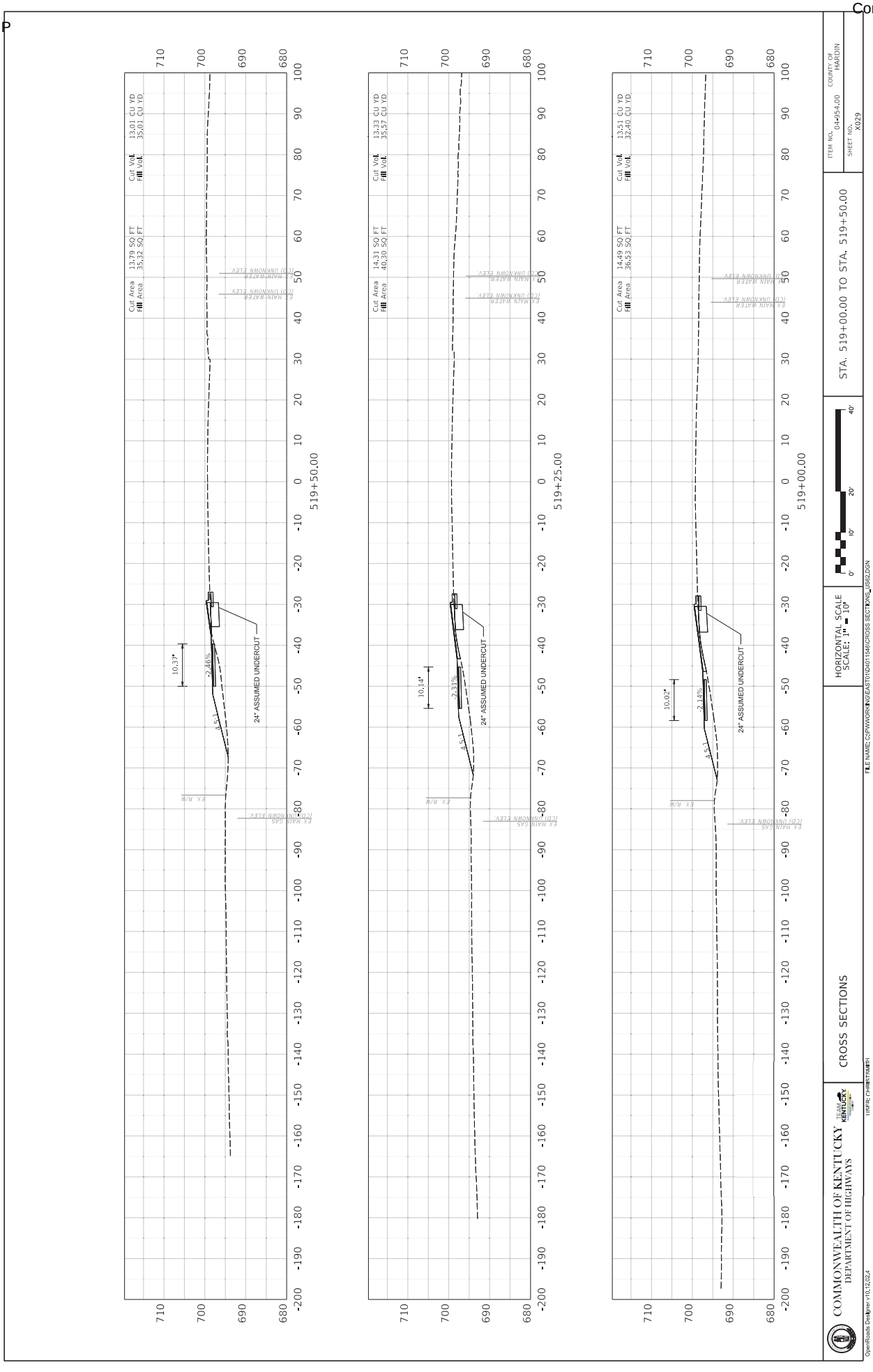
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X027

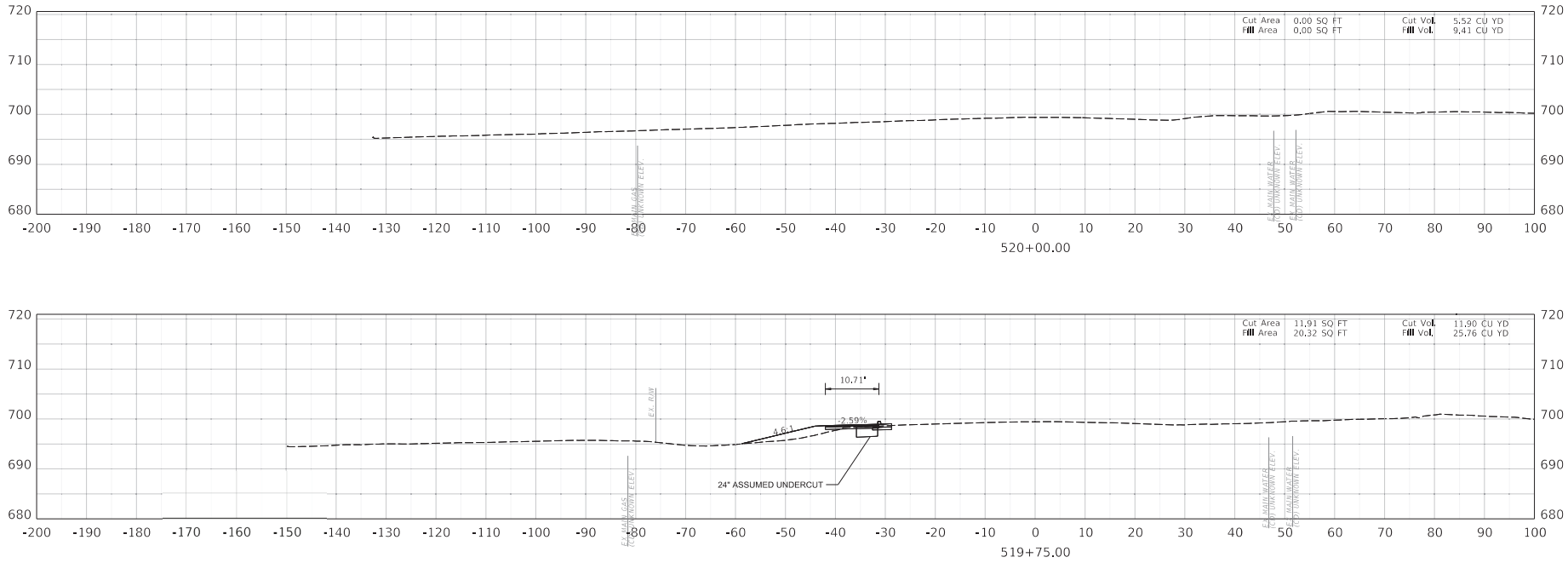
OpenRoads Designer v10.12.02.4

USER: CHRISTSMITH

FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN


518+75.00
518+50.00
518+25.00
Cut Area 14.70 SQ FT
Fill Area 33.46 SQ FT
Cut Vol. 13.74 CU YD
Fill Vol. 27.83 CU YD
Cut Area 14.99 SQ FT
Fill Area 26.64 SQ FT
Cut Vol. 14.29 CU YD
Fill Vol. 27.30 CU YD
Cut Area 15.87 SQ FT
Fill Area 32.32 SQ FT
Cut Vol. 15.75 CU YD
Fill Vol. 31.03 CU YD
24" ASSUMED UNDERCUT
10.01'
12.42'
29.22'
28.90'
2.09%
2.06%
2.03%
4.61
EX. R/W
EX MAIN WATER
(CD) UNKNOWN ELEV.
EX MAIN GAS
EX MAIN WATER
(CD) UNKNOWN ELEV.
EX MAIN GAS
EX MAIN WATER
(CD) UNKNOWN ELEV.
EX MAIN GAS
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
STA. 518+25.00 TO STA. 518+75.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X028
FILE NAME: C:\PWWORKING\EAST\D10\D4011546\CROSS SECT\XNS_LSS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4


519+50.00
519+25.00
519+00.00
Cut Area 13.79 SQ FT
Fill Area 35.32 SQ FT
Cut Vol. 13.01 CU YD
Fill Vol. 35.01 CU YD
Cut Area 14.31 SQ FT
Fill Area 40.30 SQ FT
Cut Vol. 13.33 CU YD
Fill Vol. 35.57 CU YD
Cut Area 14.49 SQ FT
Fill Area 36.53 SQ FT
Cut Vol. 13.51 CU YD
Fill Vol. 32.40 CU YD
24" ASSUMED UNDERCUT
10.37'
10.14'
10.02'
-2.46%
-2.31%
-2.14%
4.5:1
EX. R/W
EX. MAIN WATER
EX. MAIN GAS
(CD) UNKNOWN ELEV.
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
STA. 519+00.00 TO STA. 519+50.00
ITEM NO. 04-9540.00
COUNTY OF HARDIN
SHEET NO. X029
FILE NAME: C:\PW\WORKING\EAST\01D401154\6\CROSS SECT\XNS_LSS02.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

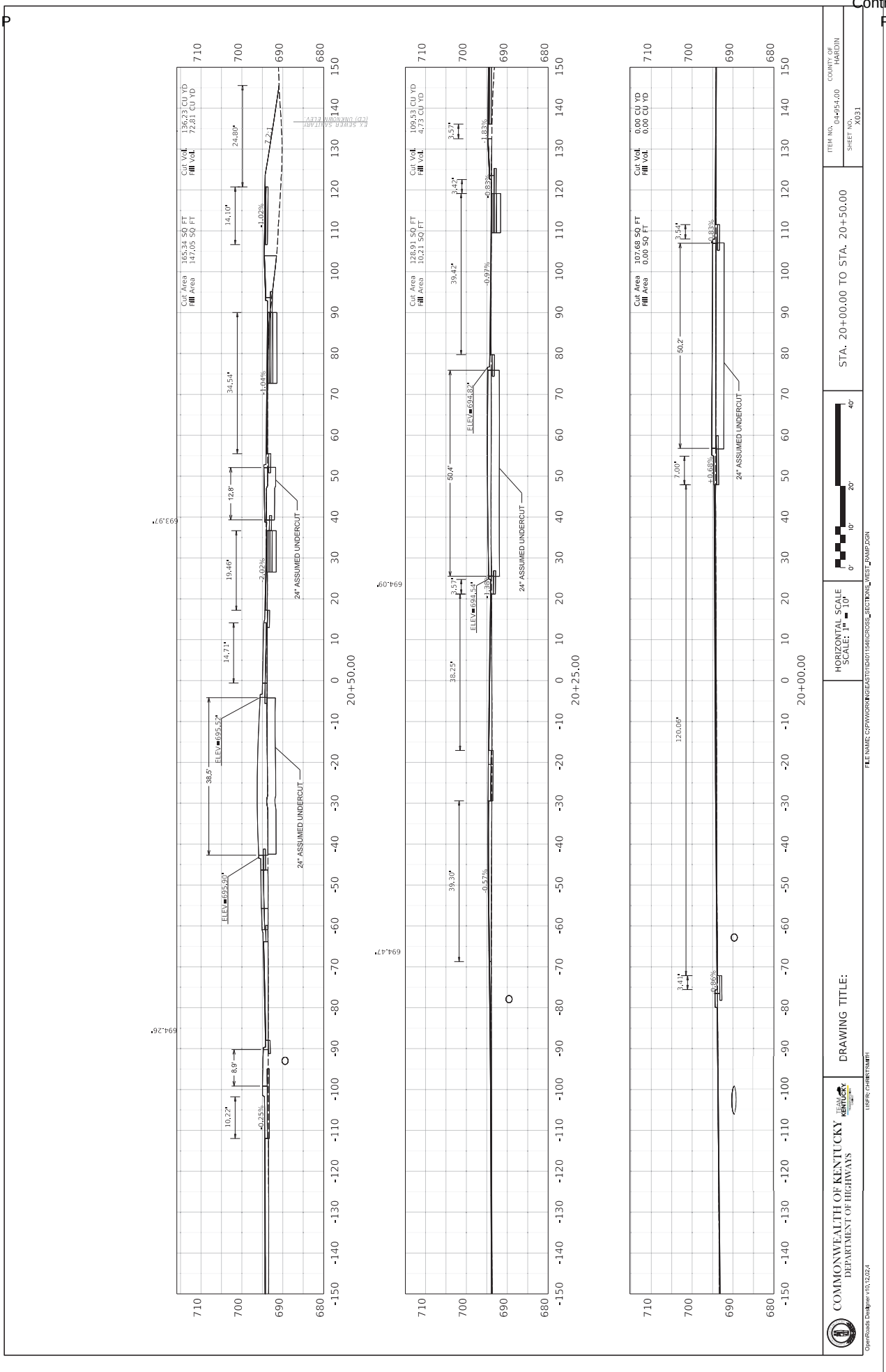
CROSS SECTIONS

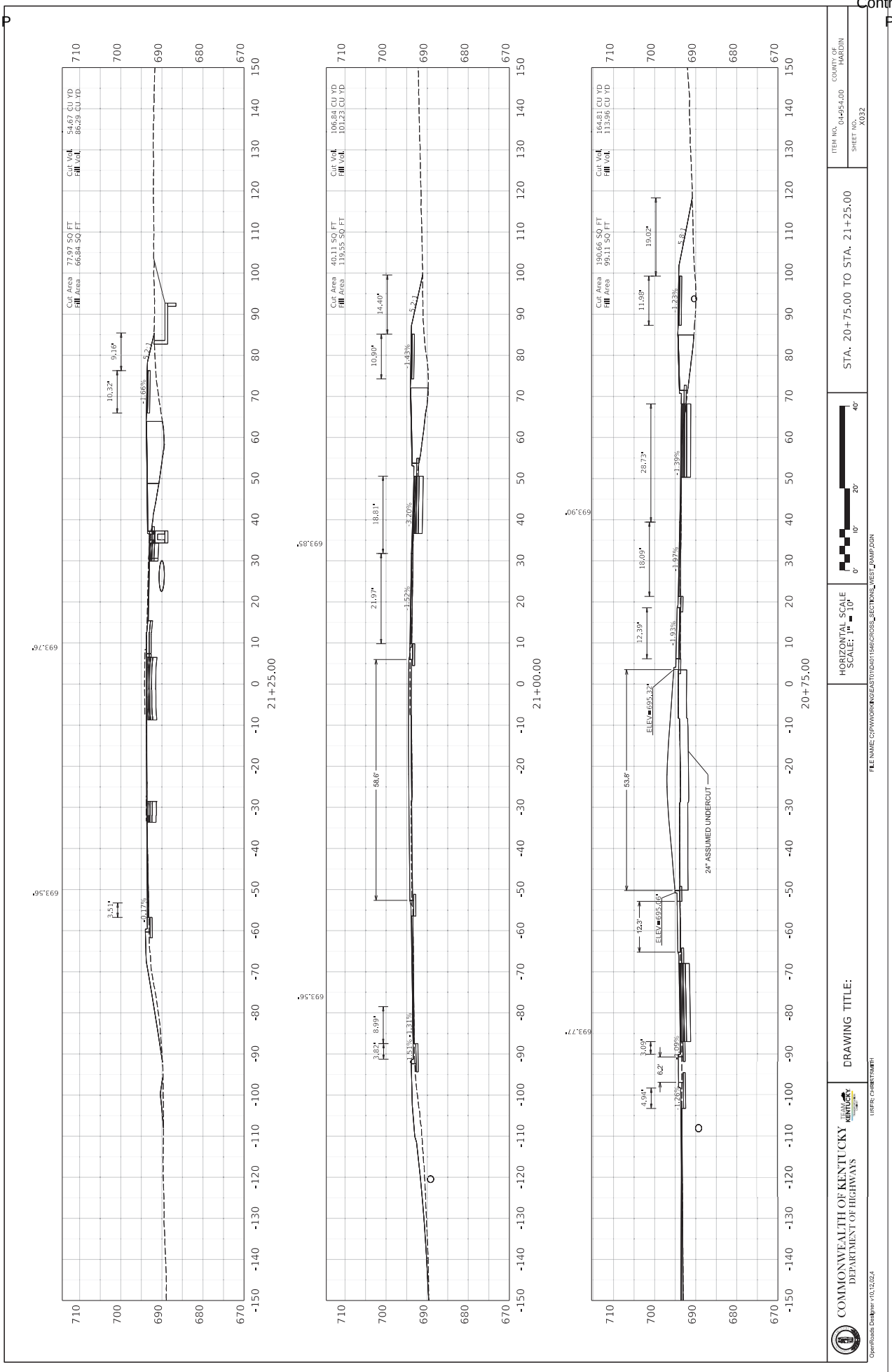
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

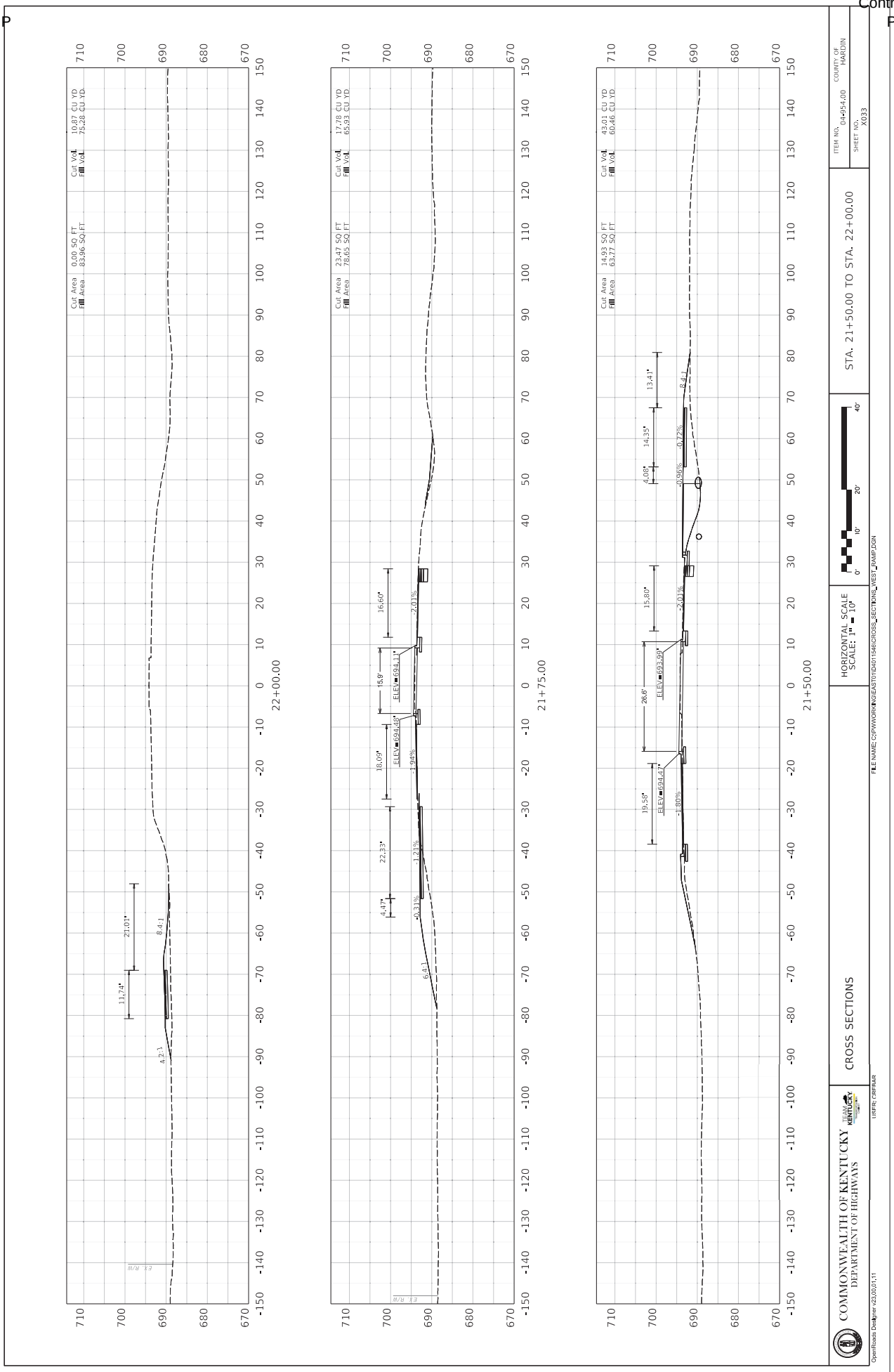
STA. 519+75.00 TO STA. 520+00.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X030

OpenRoads Designer v10.12.02.4
USER: CHRISTSMITH
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS SECTIONS_US62.DGN


Cut Area 165.34 SQ FT
Fill Area 147.05 SQ FT
Cut Vol. 136.23 CU YD
Fill Vol. 72.81 CU YD
EX. SEWER SANITARY (TCD) UNKNOWN ELEV.
693.97'
694.26'
24" ASSUMED UNDERCUT
ELEV=695.30'
ELEV=695.62'
38.5'
8.9'
10.22'
14.71'
19.46'
12.8'
34.54'
24.80'
14.10'
-0.25%
-2.02%
-1.04%
-1.02%
20+50.00
Cut Area 128.91 SQ FT
Fill Area 10.21 SQ FT
Cut Vol. 109.53 CU YD
Fill Vol. 4.73 CU YD
694.09'
694.47'
ELEV=694.18'
ELEV=694.54'
50.4'
39.42'
38.25'
39.30'
3.57'
3.42'
2.57'
-1.38%
-0.97%
-0.57%
-1.83%
20+25.00
Cut Area 107.68 SQ FT
Fill Area 0.00 SQ FT
Cut Vol. 0.00 CU YD
Fill Vol. 0.00 CU YD
120.06'
50.2'
7.00'
3.41'
3.54'
-0.86%
-10.68%
-10.83%
20+00.00
710
700
690
680
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
24" ASSUMED UNDERCUT
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
DRAWING TITLE:
HORIZONTAL SCALE
SCALE: 1" = 10'
0'
10'
20'
40'
STA. 20+00.00 TO STA. 20+50.00
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X031
FILE NAME: C:\PW\WORKING\EAST\D10\D4011546\CROSS_SECTIONS_WEST_RAMP.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4


Cut Area 77.97 SQ FT
Fill Area 66.84 SQ FT
Cut Vol. 54.67 CU YD
Fill Vol. 86.29 CU YD
693.76'
693.56'
21+25.00
Cut Area 40.11 SQ FT
Fill Area 119.55 SQ FT
Cut Vol. 106.84 CU YD
Fill Vol. 101.23 CU YD
693.85'
693.56'
21+00.00
Cut Area 190.66 SQ FT
Fill Area 99.11 SQ FT
Cut Vol. 164.81 CU YD
Fill Vol. 113.96 CU YD
693.90'
693.77'
20+75.00
24" ASSUMED UNDERCUT
ELEV=695.32'
ELEV=695.06'
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
DRAWING TITLE:
STA. 20+75.00 TO STA. 21+25.00
ITEM NO. 04-954.00
SHEET NO. X032
COUNTY OF HARDIN
FILE NAME: C:\PW\WORKING\EAST\D10\D4011546\CROSS_SECTIONS_WEST_RAMP.DGN
USER: CHRISTSMITH
OpenRoads Designer v10.12.02.4



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

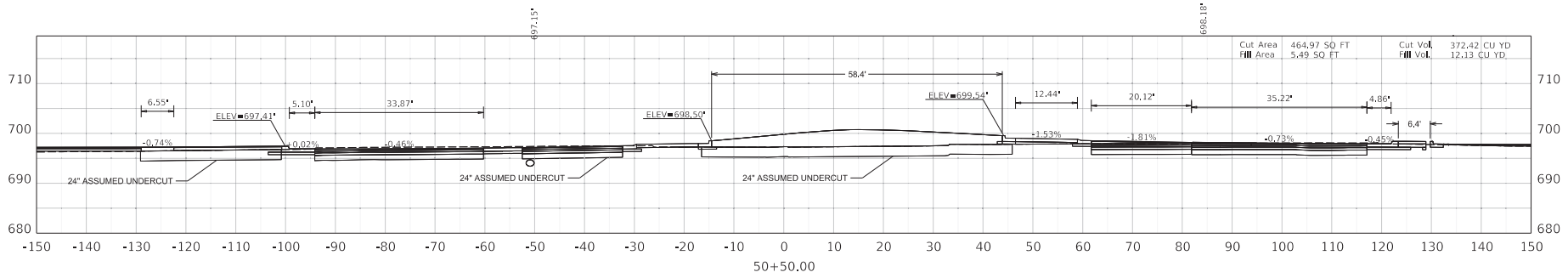
STA. 21+50.00 TO STA. 22+00.00

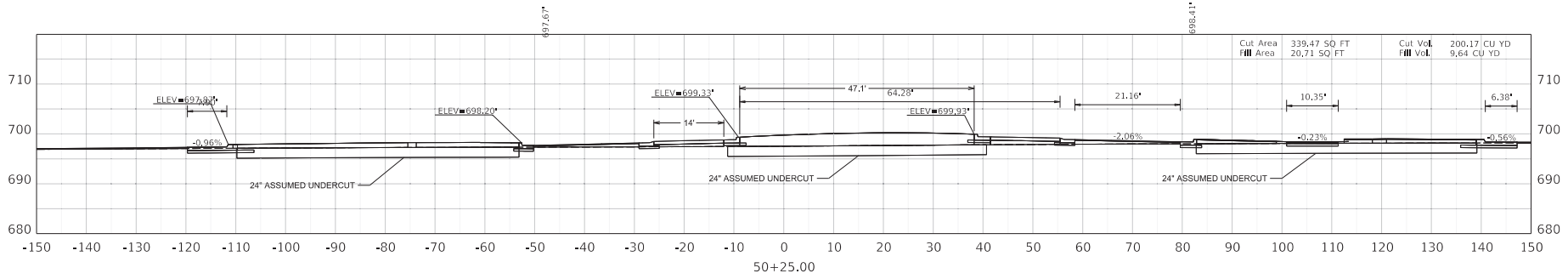
ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X033

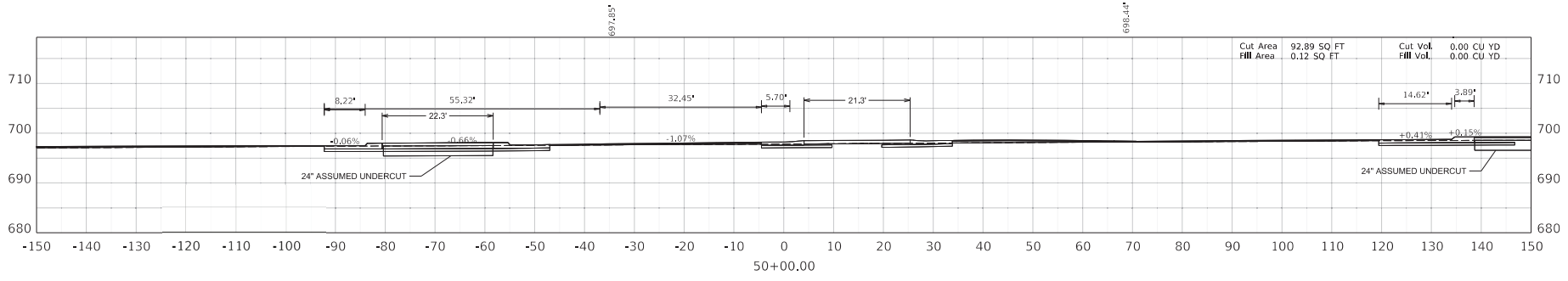
FILE NAME: C:\PW\WORKING\EAST\01D4011546\CROSS_SECTIONS_WEST_RAMP.DGN

USER: CBERRA

OpenRoads Designer v23.00.01.11







COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'

0' 10' 20' 40'

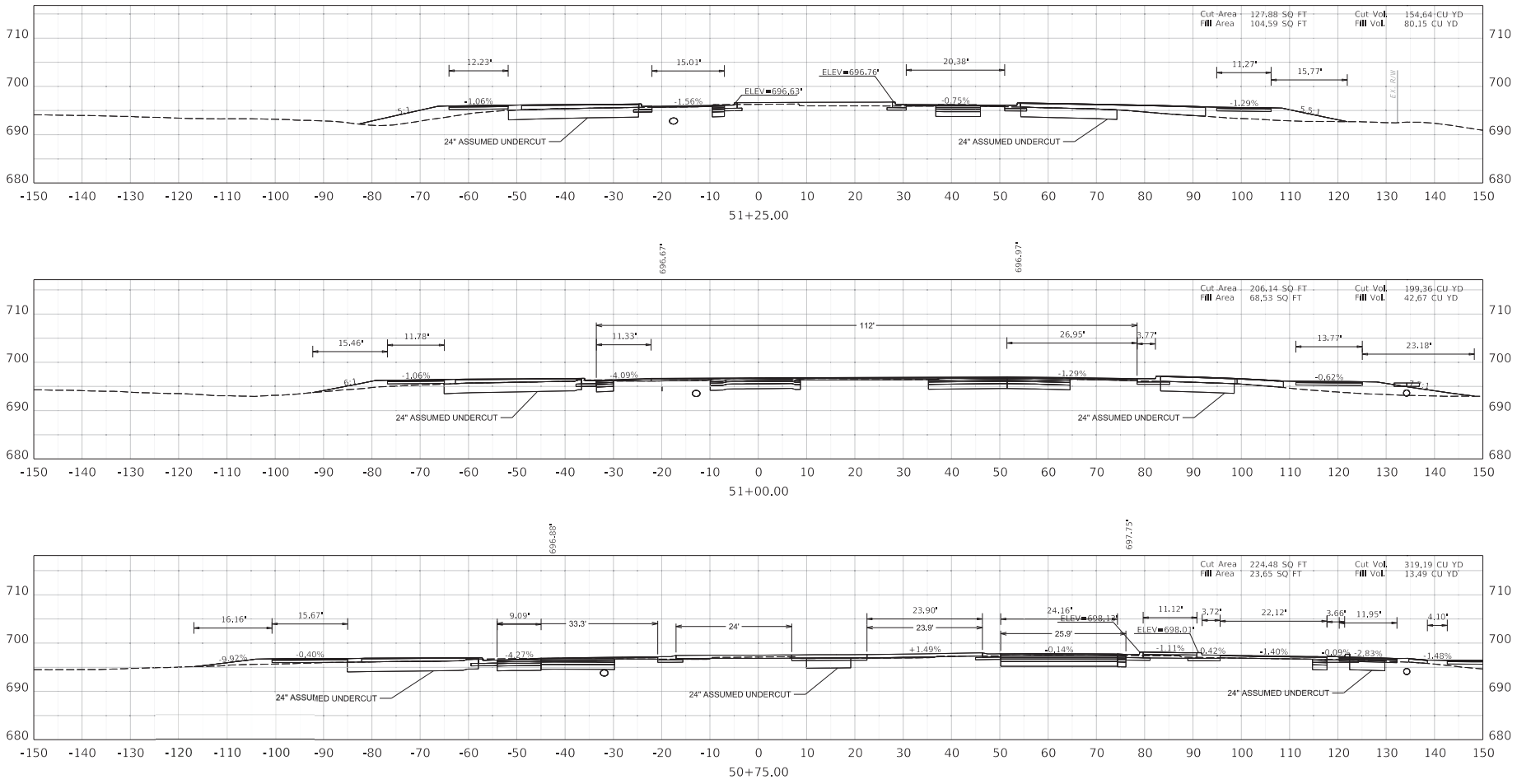
STA. 50+00.00 TO STA. 50+50.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X034

OpenRoads Designer v23.00.01.11

USER: CRFRAR

FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS_SECTIONS_EAST_RAMP.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

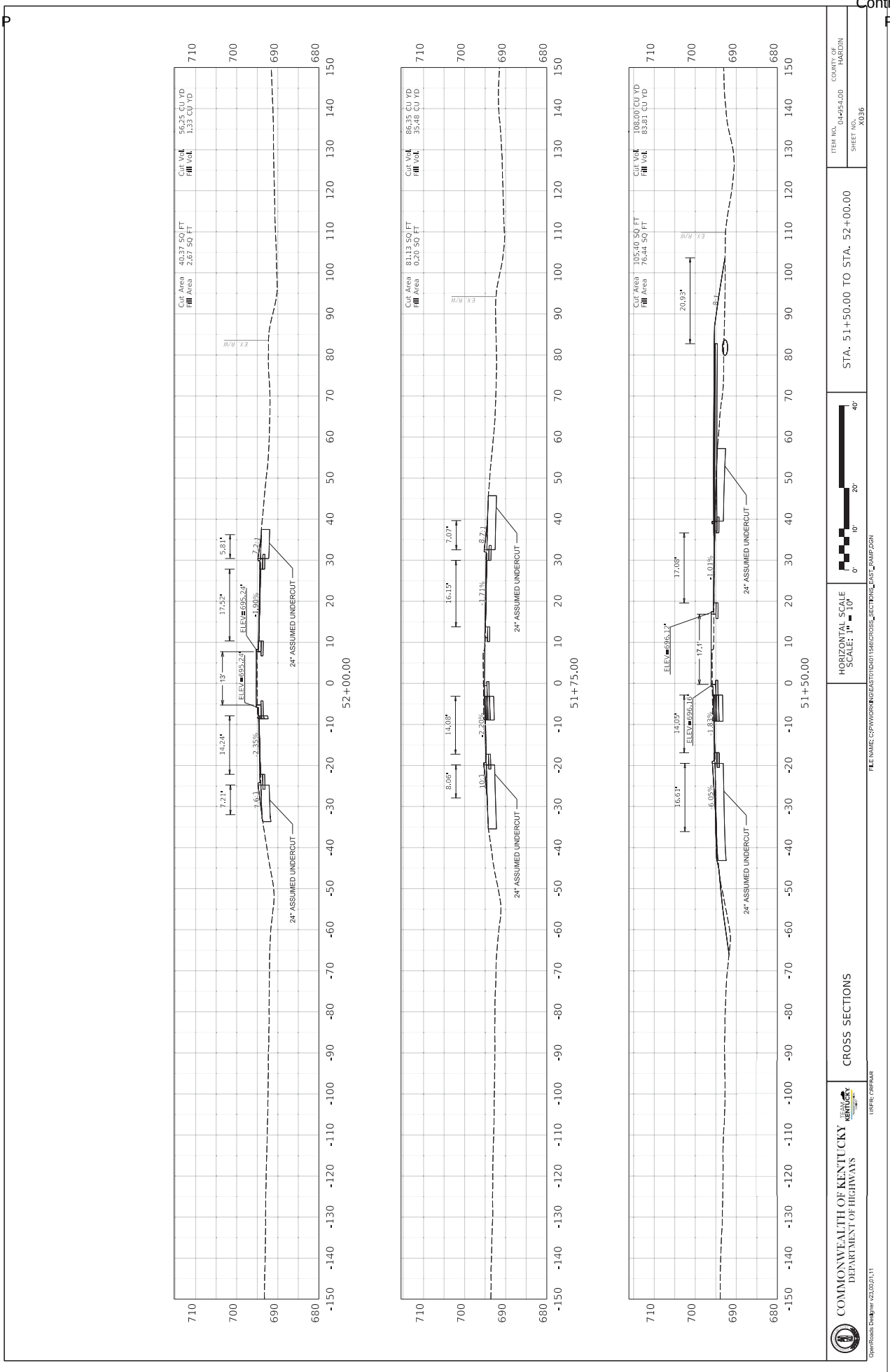
CROSS SECTIONS

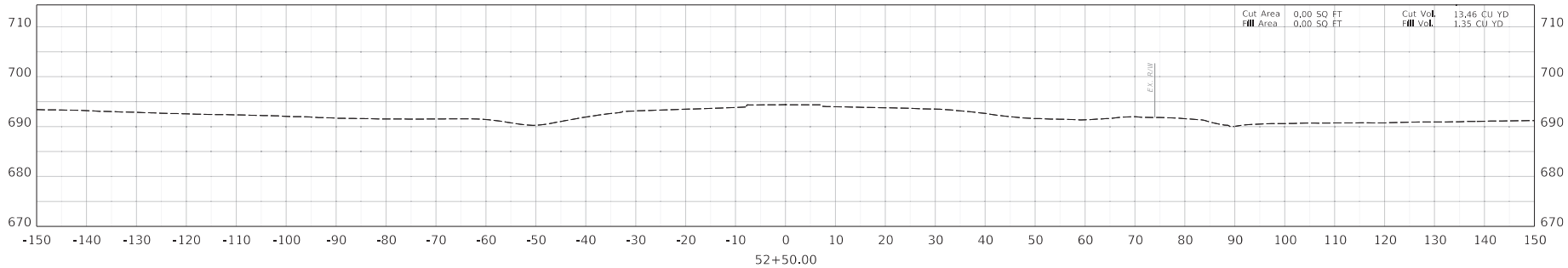
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

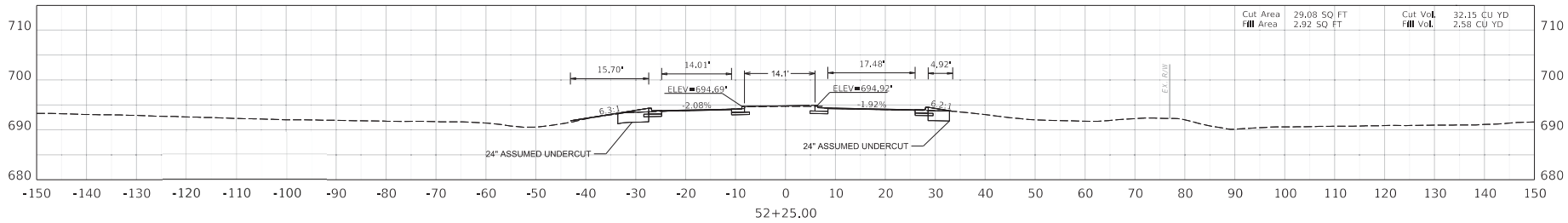
STA. 50+75.00 TO STA. 51+25.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X035

OpenRoads Designer v23.00.01.11
USER: CRFRAR
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS_SECTIONS_EAST_RAMP.DGN


52+00.00
51+75.00
51+50.00
24" ASSUMED UNDERCUT
ELEV=695.24'
ELEV=696.17'
ELEV=696.18'
-1.90%
2.35%
-2.70%
1.71%
-1.01%
1.83%
6.05%
EX. R/W
Cut Area 40.37 SQ FT
Fill Area 2.67 SQ FT
Cut Vol. 56.25 CU YD
Fill Vol. 1.33 CU YD
Cut Area 81.13 SQ FT
Fill Area 0.20 SQ FT
Cut Vol. 86.35 CU YD
Fill Vol. 35.48 CU YD
Cut Area 105.40 SQ FT
Fill Area 76.44 SQ FT
Cut Vol. 108.00 CU YD
Fill Vol. 83.81 CU YD
HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
CROSS SECTIONS
STA. 51+50.00 TO STA. 52+00.00
ITEM NO. 04-954.00
SHEET NO. X036
COUNTY OF HARDIN
FILE NAME: C:\PW\WORKING\EAST\01D401154\CROSS_SECTIONS_EAST_PMP.DGN
USER: CBERRAR
OpenRoads Designer v23.00.01.11





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 10'
0' 10' 20' 40'

STA. 52+25.00 TO STA. 52+50.00

ITEM NO. 04-954.00
COUNTY OF HARDIN
SHEET NO. X037

OpenRoads Designer v23.00.01.11 USER: CRFRAR
FILE NAME: C:\PWWORKING\EAST01\D4011546\CROSS_SECTIONS_EAST_RAMP.DGN

COUNTY OF	ITEM NO.	SHEET NO.
HARDIN	4-954.00	T1

ROADWAY LIGHTING ESTIMATE OF QUANTITIES

TOTAL	UNITS	CODE	ITEM DESCRIPTION
2,525	LIN FT	4820	TRENCHING AND BACKFILLING
8	EACH	20391NS835	ELECTRICAL JUNCTION BOX TYPE A
425	LIN FT	21543EN	BORE AND JACK CONDUIT
2950	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.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.10: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

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.

DESIGNED BY: C WEITZEL	
DATE SUBMITTED: 5/19/2025	

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

HARDIN

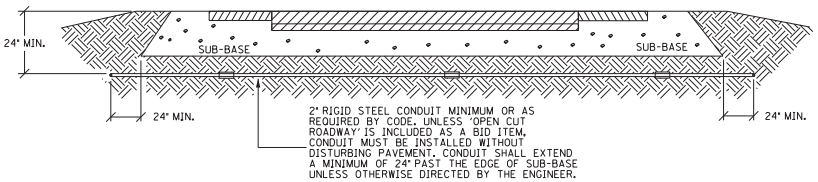
PROJECT NUMBERS:

ROADWAY LIGHTING ESTIMATES OF QUANTITIES

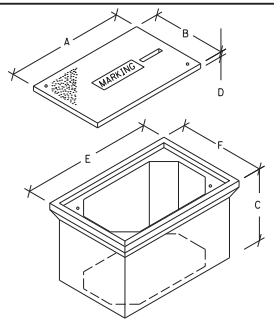
11-18-2024

Power InRoads v8.11.9.397 | E-SHEET NAME: | USER: Charles.Weitzel DATE PLOTTED: May 19, 2025 | FILE NAME: C:\PWWORK\KYTC.CHARLES.WEITZEL\D2467512\ALL LIGHTING STANDARDS.DGN

COUNTY OF	ITEM NO.	SHEET NO.
HARDIN	4-954.00	T2

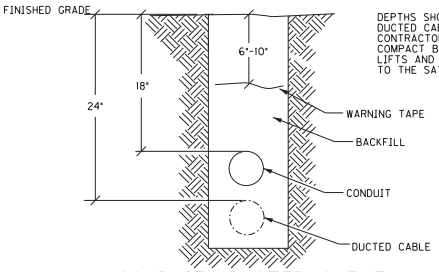


CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL



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"

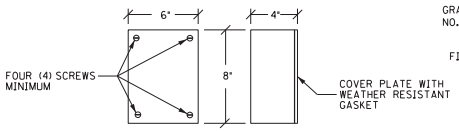
* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED



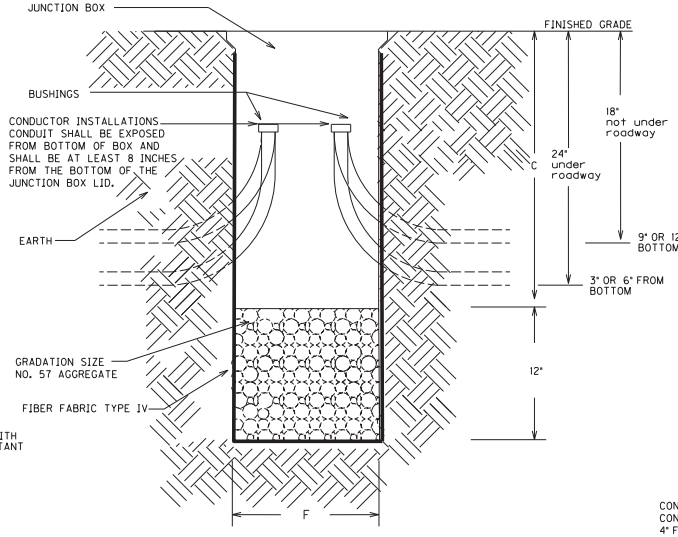
DEPTHS SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN 9" MAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

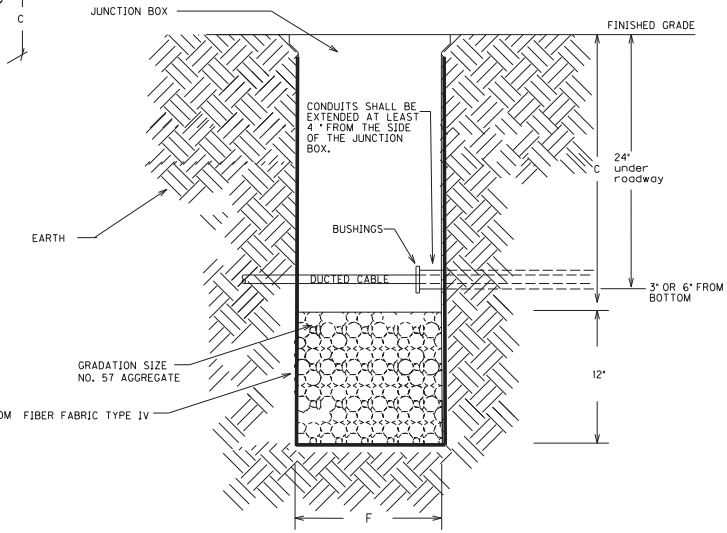
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



ABOVE GROUND BOX

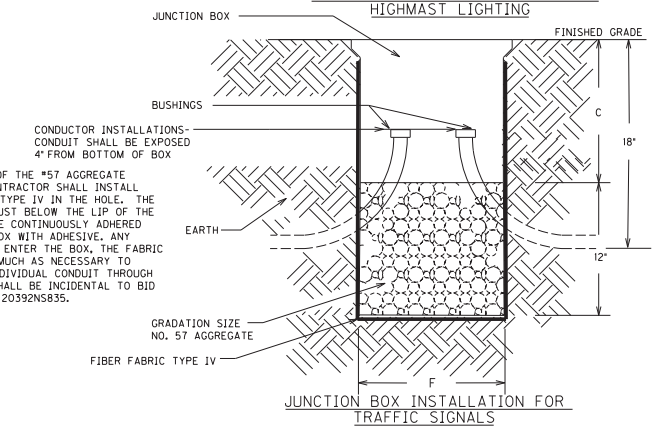


JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING

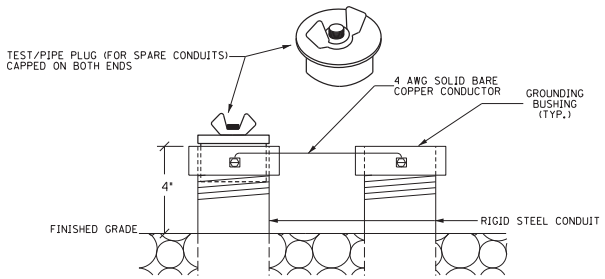


JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING

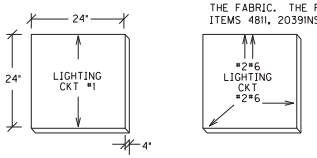
BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS 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.



JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS



TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL



CONCRETE CABLE MARKERS

3/13/2017

TRAFFIC SIGNAL AND ROADWAY LIGHTING
JUNCTION BOX AND CONDUIT DETAILS

FILE NAME: C:\PWWORK\KYTC.CHARLES.WEITZEL\D2467512\ALL LIGHTING STANDARDS.DGN
USER: Charles.Weitzel
DATE PLOTTED: May 15, 2025
E-SHEET NAME:
Power InRoads v8.11.9.397

NOTES:

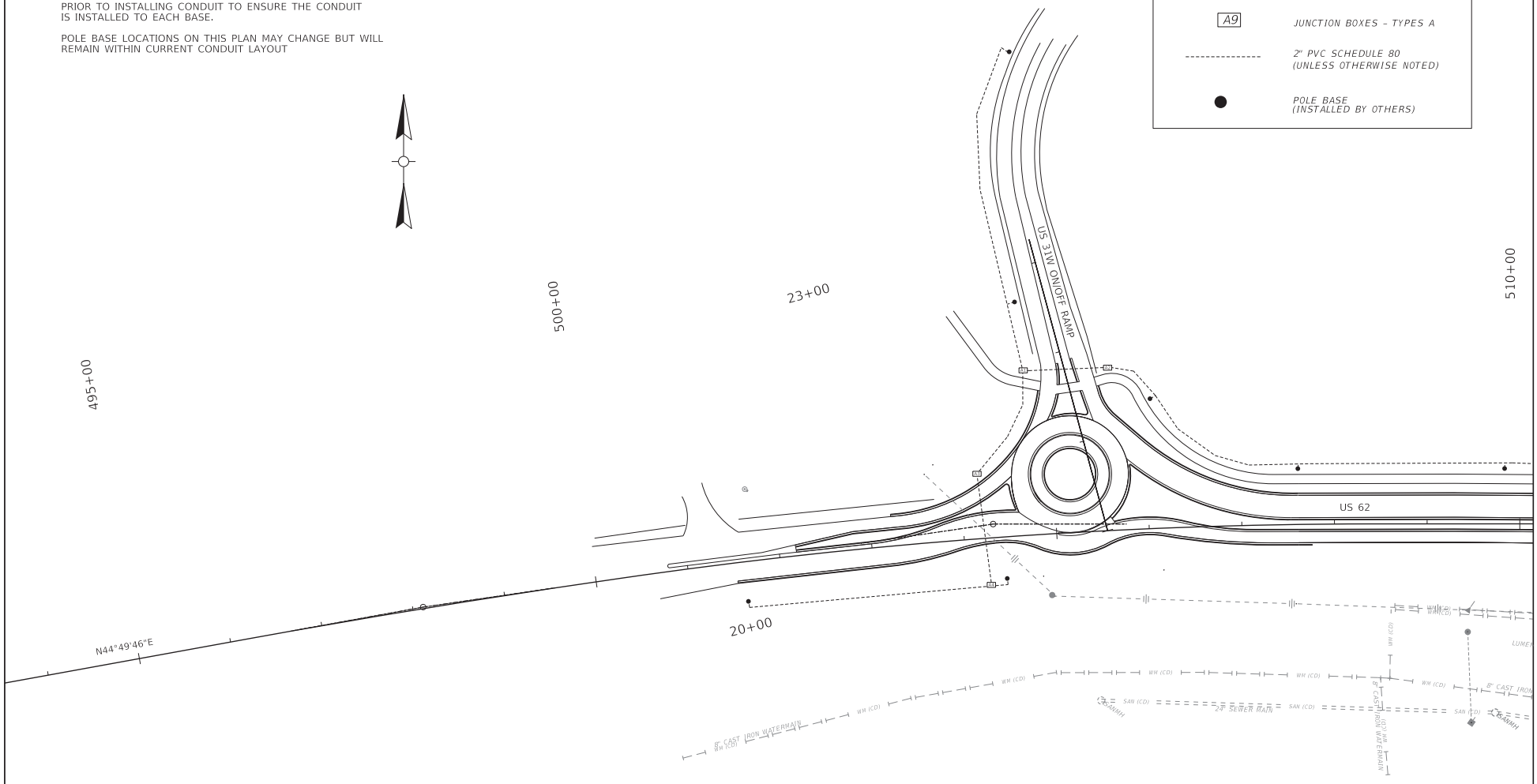
POLE BASES WILL BE INSTALLED BY CITY AND LOCAL UTILITY. CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY PRIOR TO INSTALLING CONDUIT TO ENSURE THE CONDUIT IS INSTALLED TO EACH BASE.

POLE BASE LOCATIONS ON THIS PLAN MAY CHANGE BUT WILL REMAIN WITHIN CURRENT CONDUIT LAYOUT

Scale 1" = 50'

LEGEND

- A9 — JUNCTION BOXES – TYPES A
- ---------- — 2" PVC SCHEDULE 80 (UNLESS OTHERWISE NOTED)
- ● — POLE BASE (INSTALLED BY OTHERS)



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	DRAWING TITLE: US 31W @ US 62 ROUNDABOUT 1 CONDUIT PLAN SHEET	HORIZONTAL SCALE SCALE: 1" = 50'	0' XX' XX' XX'	STA TO	ITEM NO. 4-954.00 COUNTY OF HARDIN SHEET NO. T3

OpenRoads Designer v23.00.01.11 USER: Charles.Weltzel FILE NAME: C:\PWWORK\KYTC_CHARLES.WEITZEL\D2462836\LINEWORK_REFERENCE.DGN

NOTES:

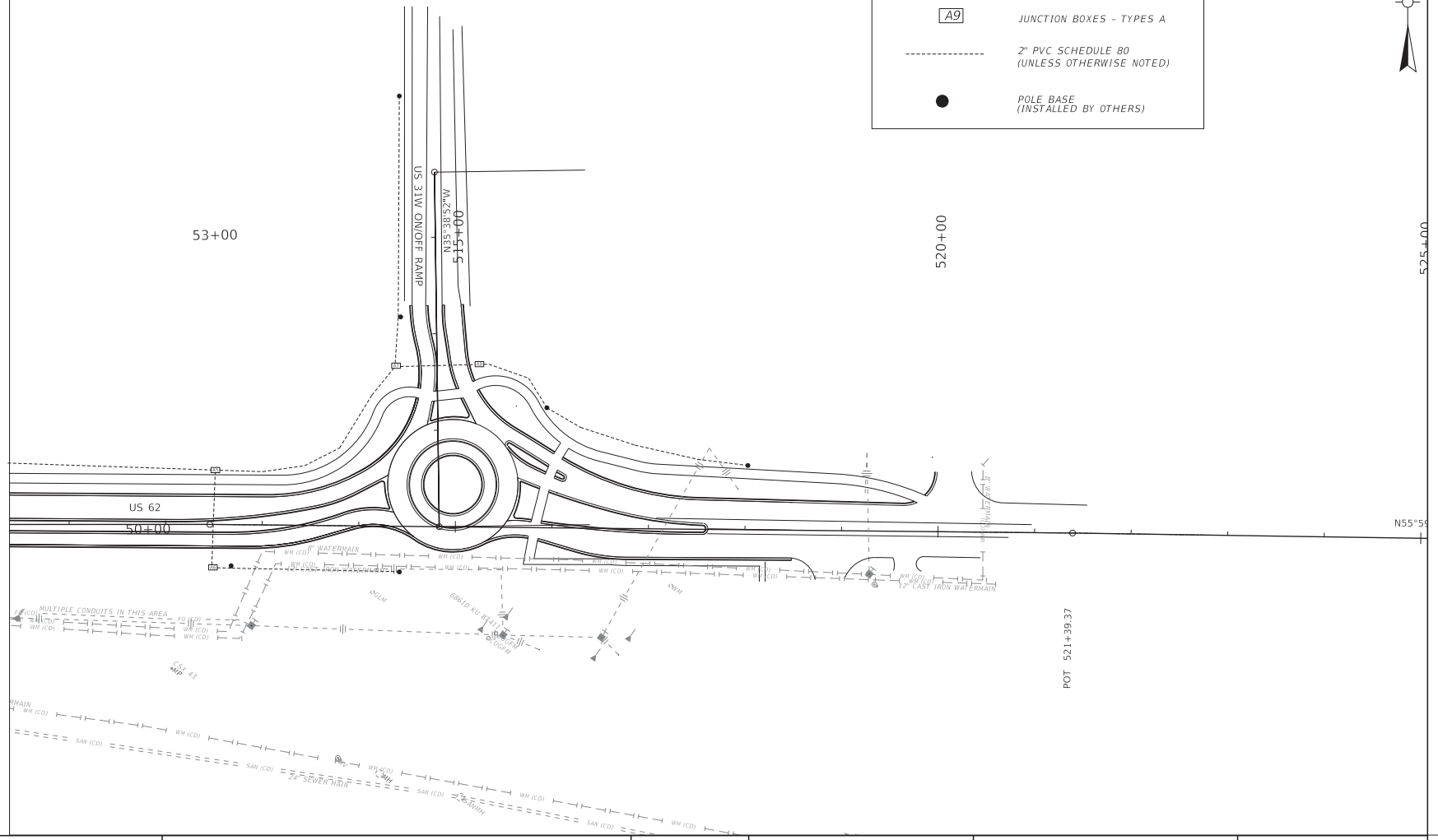
POLE BASES WILL BE INSTALLED BY CITY AND LOCAL UTILITY. CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY PRIOR TO INSTALLING CONDUIT TO ENSURE THE CONDUIT IS INSTALLED TO EACH BASE.

POLE BASE LOCATIONS ON THIS PLAN MAY CHANGE BUT WILL REMAIN WITHIN CURRENT CONDUIT LAYOUT

Scale 1" = 50'

LEGEND

A9	JUNCTION BOXES - TYPES A
----------	2" PVC SCHEDULE 80 (UNLESS OTHERWISE NOTED)
●	POLE BASE (INSTALLED BY OTHERS)



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS TEAM KENTUCKY	DRAWING TITLE: US 31W @ US 62 ROUNDABOUT 2 CONDUIT PLAN SHEET	HORIZONTAL SCALE SCALE: 1" = 50'	0' XX' XX' XX'	STA TO	ITEM NO. 4-954.00 COUNTY OF HARDIN SHEET NO. T4

OpenRoads Designer v23.00.01.11 USER: Charles.Weltzel FILE NAME: C:\PWWORK\KYTC_CHARLES.WEITZEL\D2462836\LINEWORK_REFERENCE.DGN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT
HARDIN County
HSIP - US62 COMPLETE STREET



LAYOUT MAP

INDEX OF SHEETS

R1	LAYOUT SHEET
R2- R5	AUXILIARY SHEETS
R6-R33	PLAN SHEETS
R34-R36	DETAIL SHEETS

STANDARD DRAWINGS

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

PROJECT NUMBER: HSIP 7860 (011)

PROJECT DESCRIPTION: HSIP - US62 COMPLETE STREET

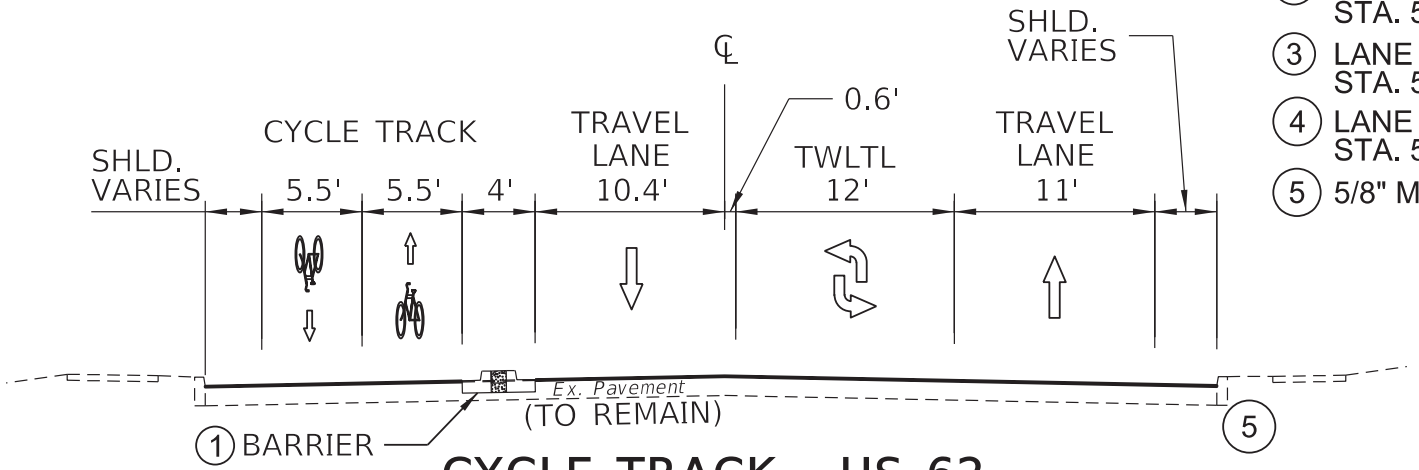
LETTING DATE: 1/1/2020

ITEM NO. 4-956.00 COUNTY OF HARDIN

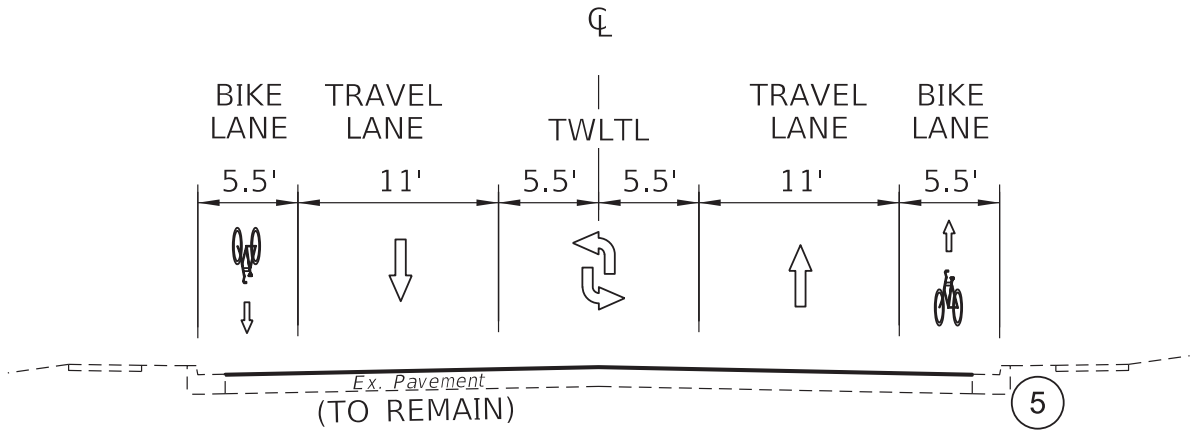
SHEET NO. R1

OpenRoads Designer v10.11.00.115 USER: Patrick.Stone
FILE NAME: C:\KYTC_STANDARDS\ORGANIZATION-CIVIL\KYTC_STANDARDS_OC_KYTC\DGNLIB\SHEET SEEDS\KYTC PLAN SEED 8_5X11.DGNLIB

1. SEE DETAIL SHEET R35.
2. LANE SHIFT AND TAPER FROM STA. 517+55.7 TO STA. 521+23.5.
3. LANE SHIFT AND TAPER FROM STA. 528+30 TO STA. 530+80.
4. LANE SHIFT AND TAPER FROM STA. 587+00 TO STA. 589+50.
5. 5/8" MILL AND OVERLAY.



CYCLE TRACK - US 62
STA. 519+00 TO STA. 530+80 (2)(3)



DIRECTIONAL BIKE LANES - US 62
STA. 530+80 TO STA. 589+50 (4)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TYPICAL SECTIONS

HORIZONTAL SCALE: N.T.S.

ITEM NO.	COUNTY OF
04-956.00	HARDIN
SHEET NO.	
R2	

OpenRoads Designer v10.11.00.115 USER: Patrick.Stone
FILE NAME: C:\KYTC_STANDARDS\ORGANIZATION-CIVIL\KYTC_STANDARDS_OC_KYTC\DGNLIB\SHEET SEEDS\KYTC PLAN SEED 8_5X11.DGNLIB

ITEM NO.	DESCRIPTION	UNIT	TOTAL
00003	CRUSHED STONE BASE	TONS	50
00356	ASPHALT MATERIAL FOR TACK	TON	9
01811	STANDARD CURB AND GUTTER MOD (8)	LF	1260
01890	ISLAND HEADER CURB TYPE 1	LF	98
02585	EDGE KEY (12)	LF	1110
02650	MAINTAIN & CONTROL TRAFFIC	LS	1
02654	TRUCK MOUNTED ATTENUATOR	EACH	2
02671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	4
02676	MOBILIZATION FOR MILL & TEXT	LS	1
02726	STAKING	LS	1
02775	ARROW PANEL	EACH	2
04916	SIGNAL-PEDESTRIAN	EACH	1
06511	PAVE STRIPING-TEMP PAINT-6 IN	LF	31334
06542	PAVE STRIPING-THERMO-6 IN W	LF	15076
06543	PAVE STRIPING-THERMO-6 IN Y	LF	16438
06546	PAVE STRIPING-THERMO-12 IN W (1) (2)	LF	251
06547	PAVE STRIPING-THERMO-12 IN Y	LF	246
06566	PAVE MARKING-THERMO X-WALK-12 IN	LF	2618
06568	PAVE MARKING-THERMO STOP BAR-24IN	LF	331
06573	PAVE MARKING-THERMO STR ARROW	EACH	6
06574	PAVE MARKING-THERMO CURV ARROW	EACH	45
06575	PAVE MARKING-THERMO COMB ARROW (5)	EACH	3
06578	PAVE MARKING-THERMO MERGE ARROW (3)	EACH	3
08100	CONCRETE-CLASS A	CUYD	25
20782NS714	PAVE MARKING THERMO-BIKE	EACH	34
22520EN	PAVE MARKING-THERMO YIELD BAR-36 IN (7)	LF	30
22664EN	WATER BLASTING EXISTING STRIPE	LF	165
23158ES505	DETECTABLE WARNINGS (10) (13)	SQFT	18
23749EC	PEDESTRIAN SIGNAL PEDESTAL	EACH	1
23974EC	BIKE PATH	SQ YD	6
24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	EACH	34
24888EC	CL2 ASPH SURF NO. 4B PG64-22 (9)	TON	1240
24964EC	FINE MILLING (6)	SQ YD	36047
26171EC	RECTANGULAR RAPID FLASHING BEACON (14)	EACH	2
26192EC	PAVE MARKING-THERMO SHARED LANE MARKING	EACH	2

NOTES

(1) ALL STRIPING SHALL NOT CONTINUE ACROSS CROSSWALK.

(2) CROSSWALKS SHALL BE 6 FEET WIDE.

(3) BIKE LANE MARKINGS SHALL BE THE HELMETED BICYCLIST.

(4) ALL MARKINGS SHALL CONFORM TO THE LATEST VERSION OF THE KYTC STANDARD DRAWINGS.

(5) CONCRETE ISLANDS ARE 4-5/8" (4.625") THICK.

(6) MILLING IS 5/8", SEE PLAN FOR LIMITS.

(7) 9 SF PER LOCATION.

(8) SEE DETAIL SHEET R35.

(9) PROPOSED ASPHALT SURFACE 5/8" THICK.

(10) INCLUDES WHITE THERMO EDGING FOR BIKE CROSS WALK.

(11) ALL SIGNAGE TO BE INSTALLED BY KYTC

(12) QUANTITY PROVIDED FOR APPROACH ROADS.

(13) USE PPG'S MMAX EXTENDED SEASON AREA MARKINGS FOR THE GREEN BIKE LANE MARKINGS. SEE PPG MMAX PRODUCT DATA SHEET INCLUDED IN THIS PROPOSAL.

(14) THIS BID ITEM SHALL BE ALL INCLUSIVE OF THE MATERIALS NEEDED FOR THE RECTANGULAR RAPID FLASHING BEACON ASSEMBLY. INCLUDING, BUT NOT LIMITED TO, SIGNS, POST, HARDWARE, WIRING, RRFB UNIT, INTEGRATED SOLAR UNIT, ETC. SEE SHEET 36 FOR ASSEMBLY DETAIL. RRFB TO BE PROVIDED AND INSTALLED BY CONTRACTOR.

(15) ALL TRAFFIC SIGNS SHOWN IN PLANS ARE FOR REFERENCE ONLY, SIGNS TO BE PROVIDED, INSTALLED, AND REMOVED BY KYTC.

CONTROL LINE DATA - PR US 62											
POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
START	N46°50'00"E	24.58'	3773703.1596	4886584.4502		500+00.00					
HPI	N55°06'11"E	814.17'	3773999.3670	4886900.2462	500+24.58	504+32.97	508+39.94	08°16'11"	5649.06'	815.36'	408.39'
HPI	N55°41'46"E	893.64'	3774465.1556	4887568.0153		512+45.73					
HPI	N55°59'17"E	728.01'	3774968.7989	4888306.2179		521+39.37					
HPI	N35°55'33"E	1032.11'	3775440.3399	4889004.9889	528+67.38	529+82.36	530+94.98	20°03'44"	-650.00'	227.60'	114.98'
HPI	N35°17'19"E	242.07'	3776276.1193	4889610.5666		540+12.12					
HPI	N35°43'17"E	215.29'	3776473.7063	4889750.4072		542+54.18					
HPI	N37°03'17"E	301.38'	3776648.4963	4889876.1054		544+69.48					
HPI	N36°04'17"E	305.53'	3776889.0194	4890057.7124		547+70.86					
HPI	N35°51'50"E	601.00'	3777135.9716	4890237.6036		550+76.39					
HPI	N35°38'36"E	281.61'	3777623.0261	4890589.7031		556+77.38					
HPI	N35°17'38"E	777.12'	3777851.8797	4890753.8086		559+58.99					
HPI	N53°32'50"E	2556.90'	3778673.6706	4891335.5365	567+36.11	569+65.84	571+91.68	18°15'12"	1430.00'	455.57'	229.73'
END			3780192.8774	4893392.1753		595+18.85					

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.

COORDINATE SYSTEM

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

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

PROPOSED US 62 ALIGNMENT TABLE

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R4

GENERAL NOTES

THE BIKE PATH BID ITEM SHALL BE FOR THE CONSTRUCTION OF THE GREEN METHYL METHACRYLATE (MMA) BIKE LANE MARKINGS. THE BID ITEM SHALL BE CONSTRUCTED, MEASURED, AND PAID IN ACCORDANCE WITH SECTION 714 AND 717 OF THE STANDARD SPECIFICATIONS. THE FOLLOWING BID ITEM WILL BE APPLICABLE:

CODE	DESCRIPTION	UNIT
23974EC	BIKE PATH	SQYD

PRODUCT DATA SHEET

ENNIS-FLINT by PPG

Extended Season MMAX® Colored Lane Treatment with Corundum

PRODUCT DESCRIPTION: Extended Season MMAX® colored lane treatment is a preferential lane treatment system combining methyl methacrylate resins with hardwearing aggregate and colorfast pigments to deliver an extremely durable, non-slip, highly visible, and color-stable area marking that can be applied year-round. MMAX® colored lane treatment can be used to delineate bike lanes, bus lanes, or other specialty applications, where a durable area marking is required.

ADVANTAGES:

- Extended season application in summer and winter
- Durable
- Color-stable
- Fast back-to-traffic
- Non-slip surface
- Easy to apply; pre-packaged for on-site mixing and convenience

AVAILABLE COLORS:

- EF Green (PMS 361C) - 999670G-KIT
- Transit Lane Red (PMS 7622C) - 999670TRAN-KIT
- Truffle (PMS 7530C) - 999670TR-KIT
- Terracotta (PMS 7595C) - 999670TC-KIT
- Brick Red (PMS 7624C) - 999670BR-KIT
- Hollywood Green (PMS 7484C) - 999670G349-KIT
- Red (PMS 200C) - 999670R-KIT
- White - 999670W-KIT

TECHNICAL DATA:

ASTM Testing	Results	Test Method
Hardness	50-60 Shore D Corundum only: 9	D2240 Mohs Scale
Elongation	> 30%	D638 Type I
No Pick-Up Time at 77°F	< 30 minutes	D711
Density	18.5 +/- 0.5 lbs/gallon	D1475
Viscosity	85-105 Krebs	2195-99
Total Solids	> 99%	D2369
Pot Life	< 15 minutes	AASHTO T-237
VOC	< 100 grams/liter	D3960-05
Skid	> 60 BPN	E303
Water Absorption	< 0.25%	D570

PACKAGING:

One kit includes:

- MMAX® colored lane treatment resin: 2 gallons / 7.57 liters
- Supplied in 5 gallon pail for easy mixing
- MMAX® material aggregate: 1 – 25.0 lbs. / 11.34 kg bag
- Catalyst: 8 fl. oz. / 236 ml (0.52 lbs. / 0.24 kg)

THEORETICAL COVERAGE: Each MMAX® colored lane treatment kit mixes to 2.79 gallons and covers approximately 45-50 sq. ft. @ 90-mil build thickness. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, method of application, surface irregularities, overthinning, climate conditions, or excessive film build.

DRY TIME: MMAX® colored lane treatment dries to a lab ASTM D711 no pickup in less than 30 minutes when ambient and surface temperature are 77° F at 50±5% humidity. Dry time is temperature, humidity, and film thickness dependent. MMAX® colored lane treatment must be 100% cured, which will be a hardened, solid state, before traffic is permitted. Curing typically takes 30-60 minutes and is based on temperature and amount of catalyst added.

PRODUCT DATA SHEET

ENNIS-FLINT by PPG

Extended Season MMAX® Colored Lane Treatment with Corundum

STORAGE: Avoid extreme storage temperatures. Keep materials in dry, protected areas, between 40°F-80°F. Keep out of the direct sunlight and protected from open flame.

SHELF LIFE: Shelf life is one year in unopened packaging.

PRODUCT APPLICATION INSTRUCTIONS

RECOMMENDED EQUIPMENT: Squeegees shall be designed for heavy-duty usage and sourced locally. Rollers shall be medium nap in texture and require a roller cage and handle. Sprayers shall be capable of 98:2 mix ratios by weight of resin to catalyst. Drill shall be high speed, high torque, capable of supplying enough power to thoroughly mix MMAX® colored lane treatment additives when paired with a paint mixing paddle.

SURFACE PREPARATION: MMAX® colored lane treatment can be applied on stable, well compacted asphalt or non-bituminous concrete surfaces, such as Portland cement concrete. New substrates should be allowed to age harden or cure for minimum 15 days (asphalt) to 30 days (concrete) before installation. Clean the application area thoroughly. All loose particles - dirt, sand dust, etc. - must be removed. Use a broom and power blower or compressed air. The surface must be clean, dry, and free of all dust, oil, debris, and any other material that might interfere with the bond between the material and surface to be treated. Clean areas containing chemical contaminants such as vehicle fluids using a degreasing solution. Ensure removal of contaminants and degreasing solution well in advance of the application. All curing compounds shall be completely removed from concrete surfaces prior to installation by shot blasting, water blasting, or grinding. Existing concrete surfaces shall be wire brushed but may require blasting or grinding, dependent on condition. Aged surfaces containing reflective cracking should be repaired or it should be expected that the reflective cracking may reappear.

OBSTACLES: Pavement markings that are to be left in place, utilities, drainage structures, curbs, and any other structure within or adjacent to the treatment location shall be masked to protect from application. Existing pavement markings conflicting with the surface treatment should be removed by grinding or water blasting. Extra care should be taken to thoroughly remove the dust and debris caused from grinding.

MIXING: Catalyst quantity shall be based on pavement temperature per the materials mixing guide below and must be mixed very thoroughly with the resin using a drill. Check spray equipment capabilities to determine whether to add aggregate to mix or broadcast during application. Material with aggregate shall mix to approximately 2.79 gallons (10.55 liters) and weigh approximately 52 lbs. (23.6 kg). Clean the mixing paddle between uses or material will immediately initiate curing if exposed to previously catalyzed material (and not cleaned).

MATERIALS MIXING GUIDE

Component	Quantity	Unit
Resin	2 (7.6)	gallons (liters)
Aggregate	25.0 (11.34)	lbs (kg)
Powder Catalyst < 80°F (< 27°C)	0.52 (0.24) 8 (0.24)	lbs (kg) fluid ounces (liters)
Powder Catalyst 80°F to 130°F (27°C to 54°C)	0.26 (0.12) 4 (0.12)	lbs (kg) fluid ounces (liters)
Powder Catalyst 130°F to 150°F (54°C to 65°C)	0.24 (0.108) 3.5 (0.10)	lbs (kg) fluid ounces (liters)

INSTALLATION WITHOUT SPECIALIZED EQUIPMENT: Mixed MMAX® colored lane treatment shall immediately be poured onto the pavement and distributed at 45-50 sq. ft. per pail using a squeegee. Trowels can be used where a squeegee is not effective. Use roller to back roll the material to remove working lines and create a consistent, anti-slip texture. Remove masking as material gels, but before it cures.

INSTALLATION WITH SPECIALIZED SPRAY EQUIPMENT: Sprayers shall be capable of 98:2 mix ratios by weight of resin to catalyst. Aggregate can either be broadcast after the first spray pass, followed by a second pass; or mixed into the resin part depending on spray equipment capabilities.

CLEAN UP: Clean all tools in acetone before material is cured. Clean in well ventilated areas and do not come into direct contact with solvents - use proper personal protective equipment per the Safety Data Sheet. Acetone is extremely flammable; take proper handling measures to reduce static discharge and combustion. Dispose of all contaminated materials in accordance with all applicable federal, state and local laws and regulations.

PRODUCT DATA SHEET

ENNIS-FLINT by PPG

Extended Season MMAX® Colored Lane Treatment with Corundum

LIMITATIONS OF LIABILITY:

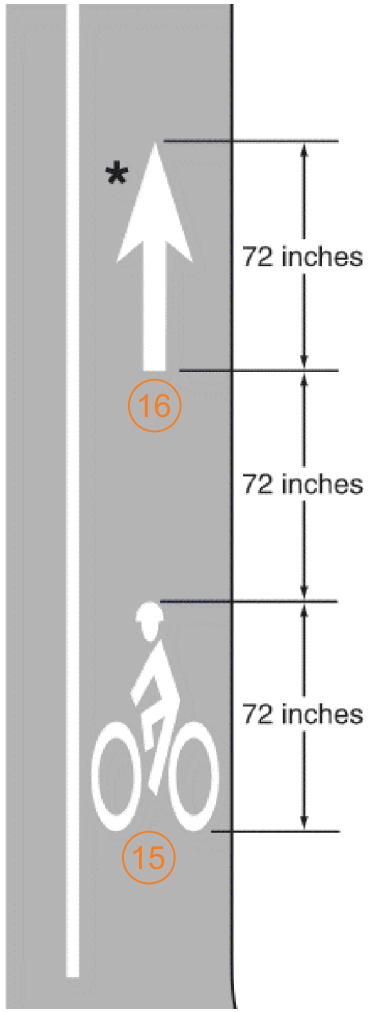
The product data offered herein is based on test conducted by or on behalf of PPG and is, to the best of our knowledge, true and accurate. All statements are made without warranty, expressed or implied. Statements regarding the suitability of products for certain types of applications are based on PPG's knowledge of typical requirements that are often placed on PPG products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's sole responsibility to validate that a particular product is suitable for use in a particular application. Because the conditions of use are beyond our control, neither PPG nor its agents shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product described herein. As PPG has neither control over the installation of product described herein nor control of the environmental factors the installed markings are subjected to, there is no guarantee as to the durability or the retroreflective properties of any marking system applied. No person is authorized to make any statement or recommendation not contained in the Product Data, and any such statement or recommendation, if made, shall not bind PPG. Further, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents, and no license under the claims of any patent is either implied or granted.

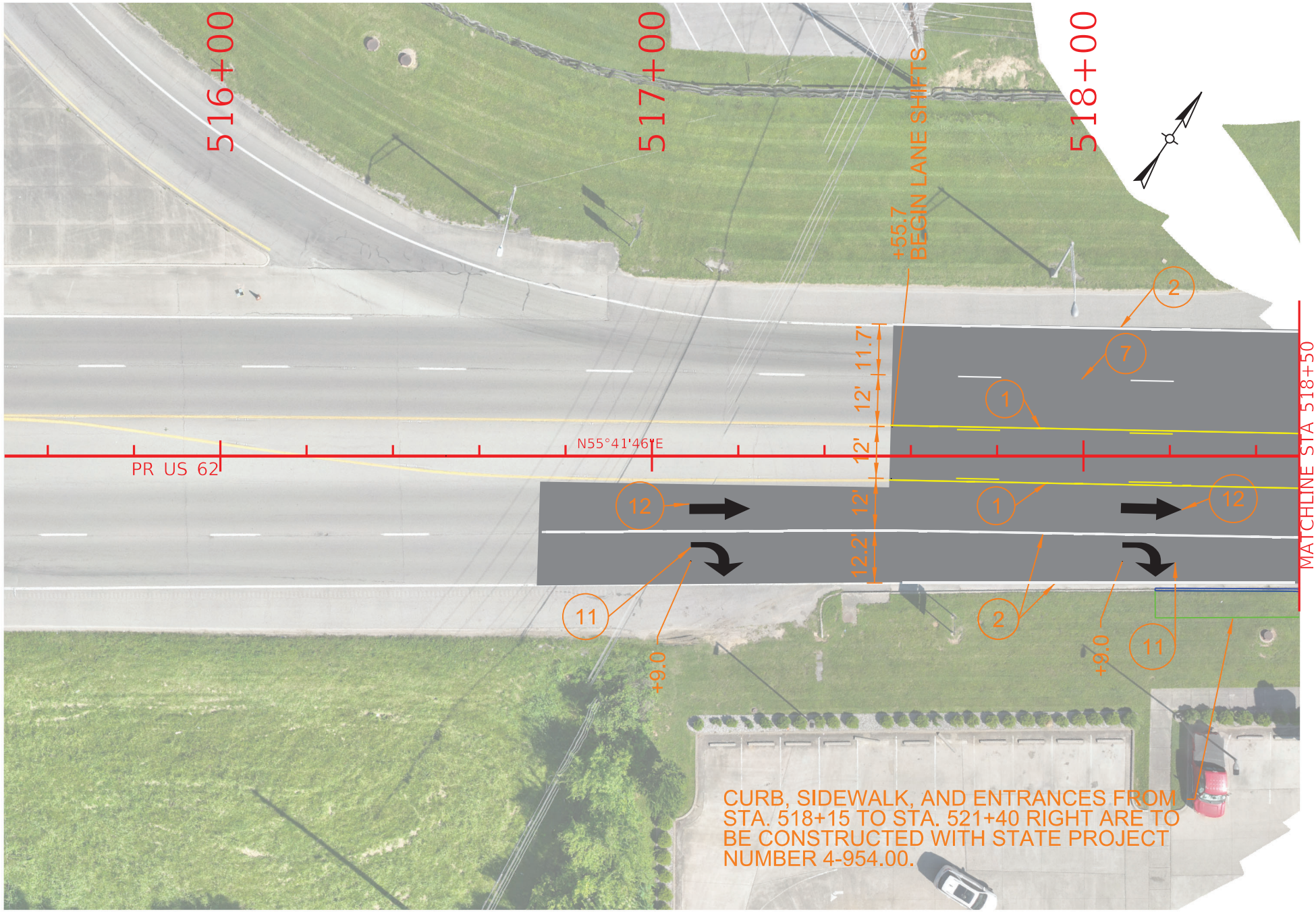
The PPG logo, and all other PPG marks are the property of the PPG group of companies. All other third-party marks are the property of their respective owners.

STRIPING AND PAVEMENT MARKING LEGEND

1. 6" YELLOW THERMOPLASTIC - SOLID/10' WITH 30' GAPS
2. 6" WHITE THERMOPLASTIC - SOLID
3. 6" YELLOW THERMOPLASTIC - DOUBLE SOLID
4. 12" WHITE THERMOPLASTIC - SOLID
5. 6" YELLOW THERMOPLASTIC - SOLID
6. 6" WHITE THERMOPLASTIC - 2' WITH 4' GAPS
7. 6" WHITE THERMOPLASTIC - 10' WITH 30' GAPS
8. WHITE THERMOPLASTIC - 24' STOP BAR
9. 12" YELLOW THERMOPLASTIC - SOLID WITH 10' SPACING
10. 12" WHITE THERMOPLASTIC - 12" ON 3' CENTERS
11. WHITE THERMOPLASTIC - TURN ARROW
12. WHITE THERMOPLASTIC - THRU ARROW
13. WHITE THERMOPLASTIC - 36" YIELD BAR
14. WHITE THERMOPLASTIC - COMBO THRU/TURN ARROW
15. WHITE THERMOPLASTIC - HELMETED BICYCLIST FOR BIKE LANE
16. WHITE THERMOPLASTIC - THRU ARROW FOR BIKE LANE
17. WHITE THERMOPLASTIC - TURN ARROW FOR BIKE LANE
18. GREEN METHYL METHACRYL - 12" ON 3' CENTERS WITH WHITE EDGES
19. GREEN METHYL METHACRYL
20. WHITE THERMOPLASTIC - BIKE SHARROW
21. WHITE THERMOPLASTIC - MERGE ARROW
22. 6" YELLOW THERMOPLASTIC - 2' WITH 4' GAPS
23. 12" WHITE THERMOPLASTIC - SOLID WITH 10' SPACING

BIKE LANE PAVEMENT MARKING SPACING DETAIL





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

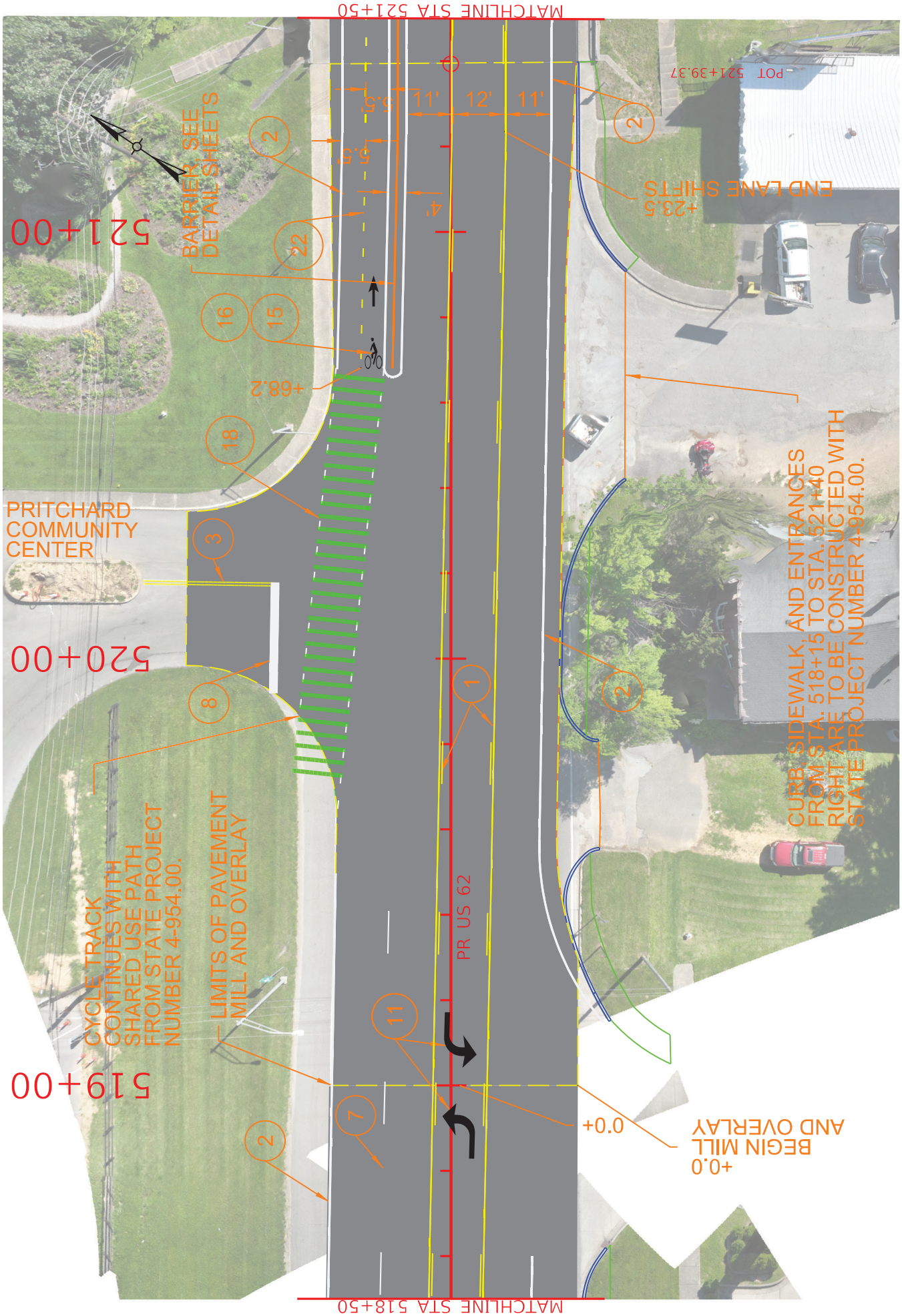
DRAWING TITLE: PLAN SHEET - US 62

STA. 515+50.00 TO STA. 518+50.00

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R7

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R8

DRAWING TITLE: PLAN SHEET - US 62

STA. 518+50.00 TO STA. 521+50.00

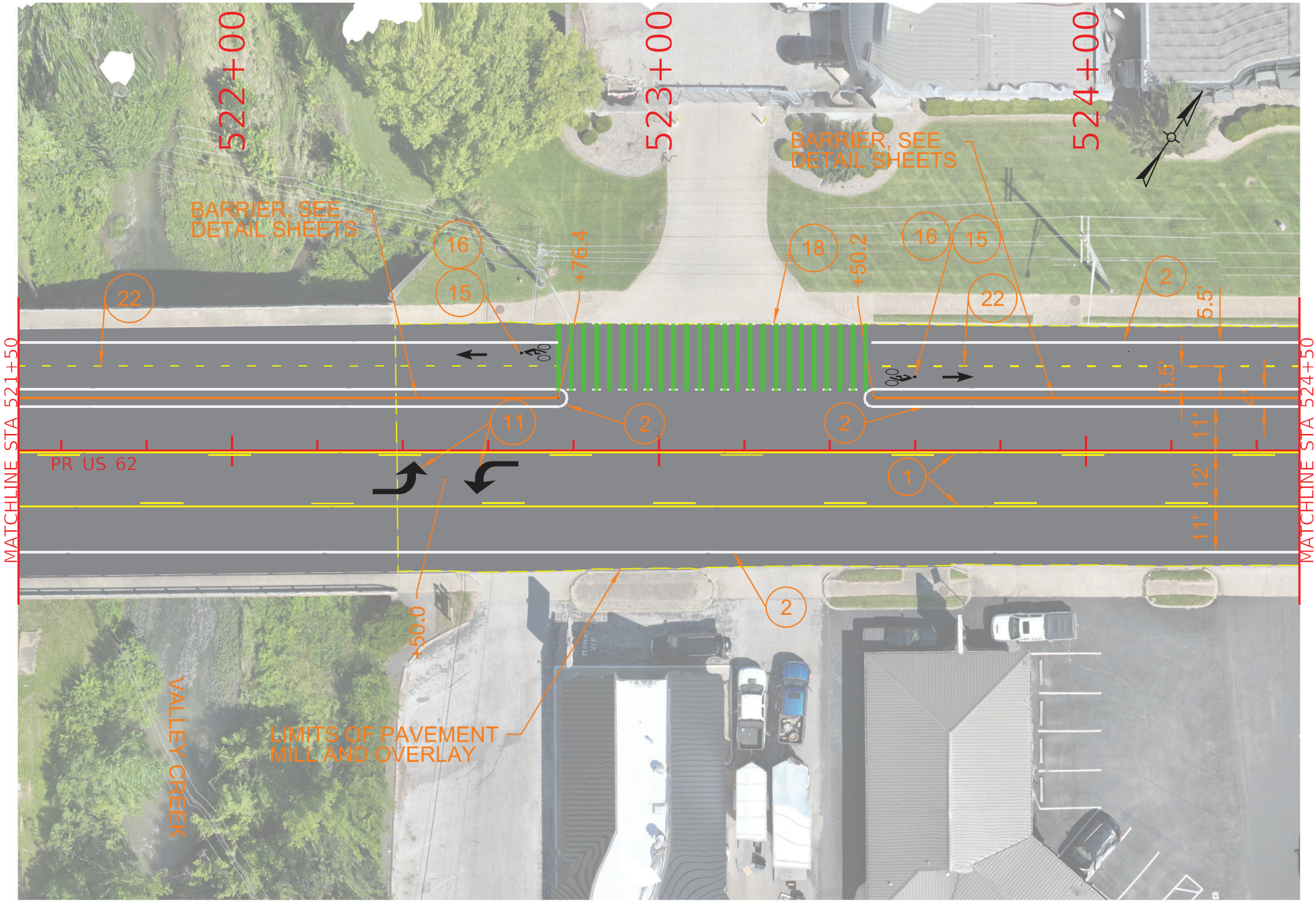
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11

FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



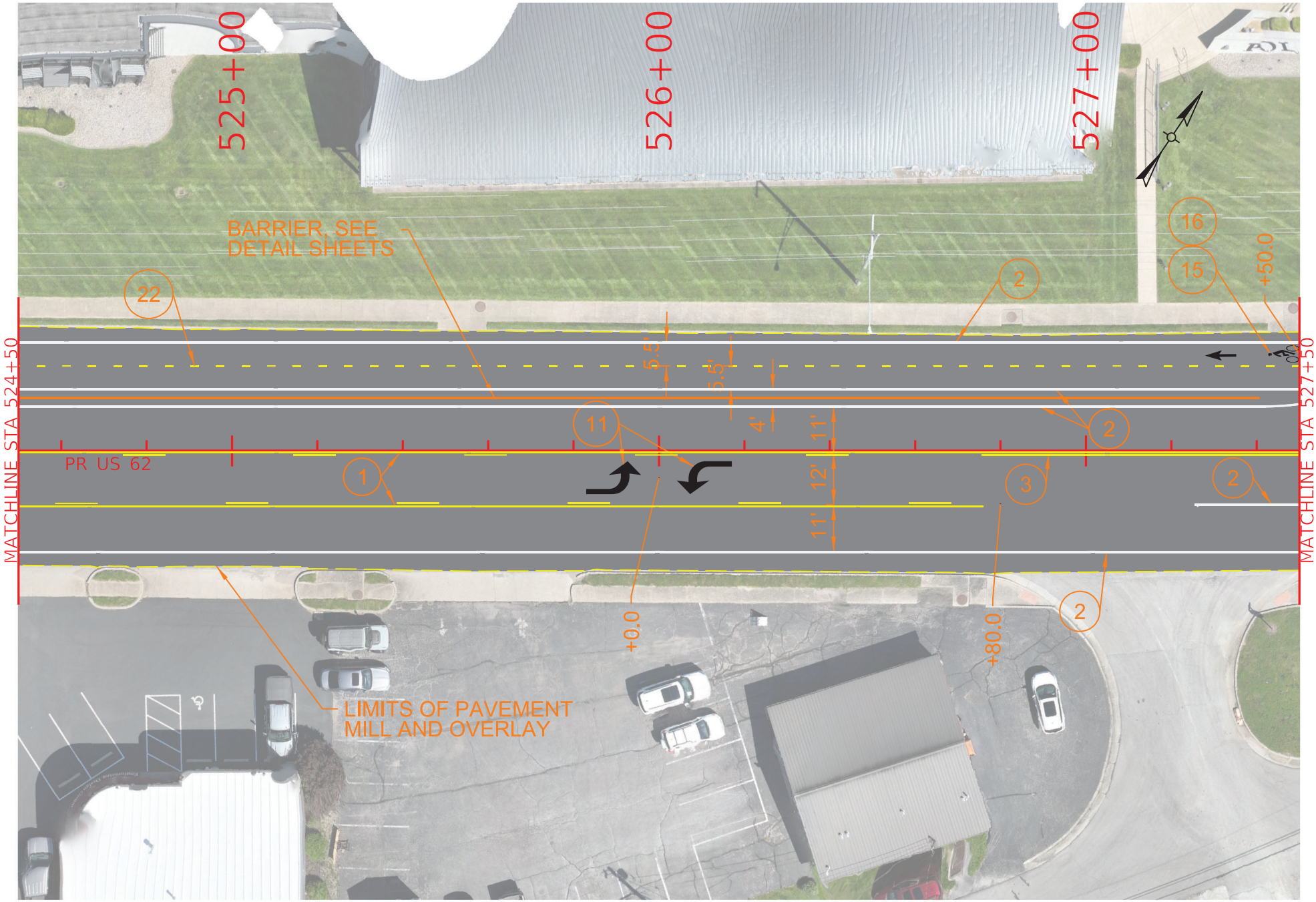
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62
STA. 521+50.00 TO STA. 524+50.00

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R9

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62

STA. 524+50.00 TO STA. 527+50.00

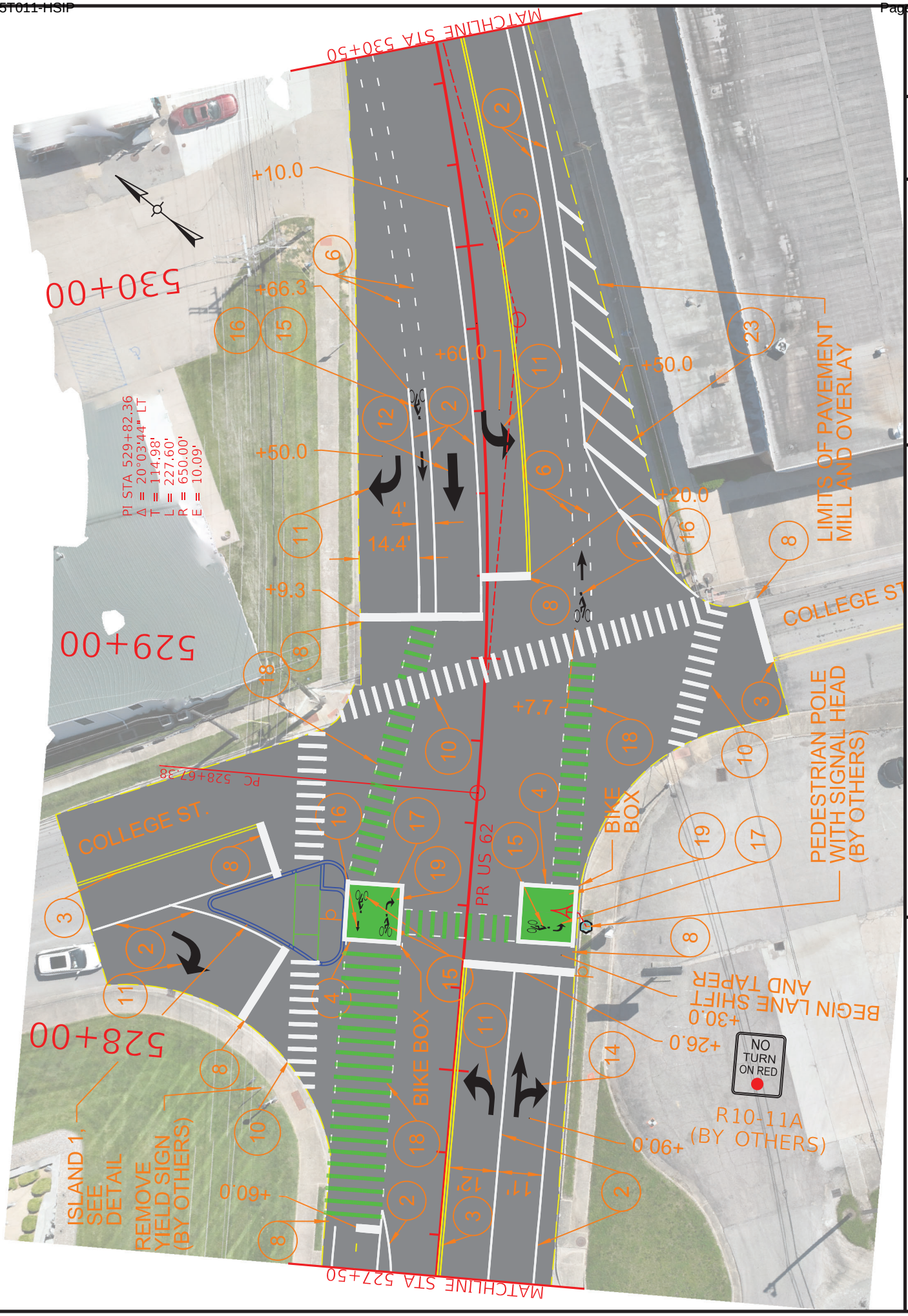
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R10

OpenRoads Designer v23.00.01.11
USER: BSAYLOR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
04 TCR 2T011 HSIP

Contract ID: 254404
Page 214 of 304



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R11

DRAWING TITLE: PLAN SHEET - US 62

STA. 527+50.00 TO STA. 530+50.00

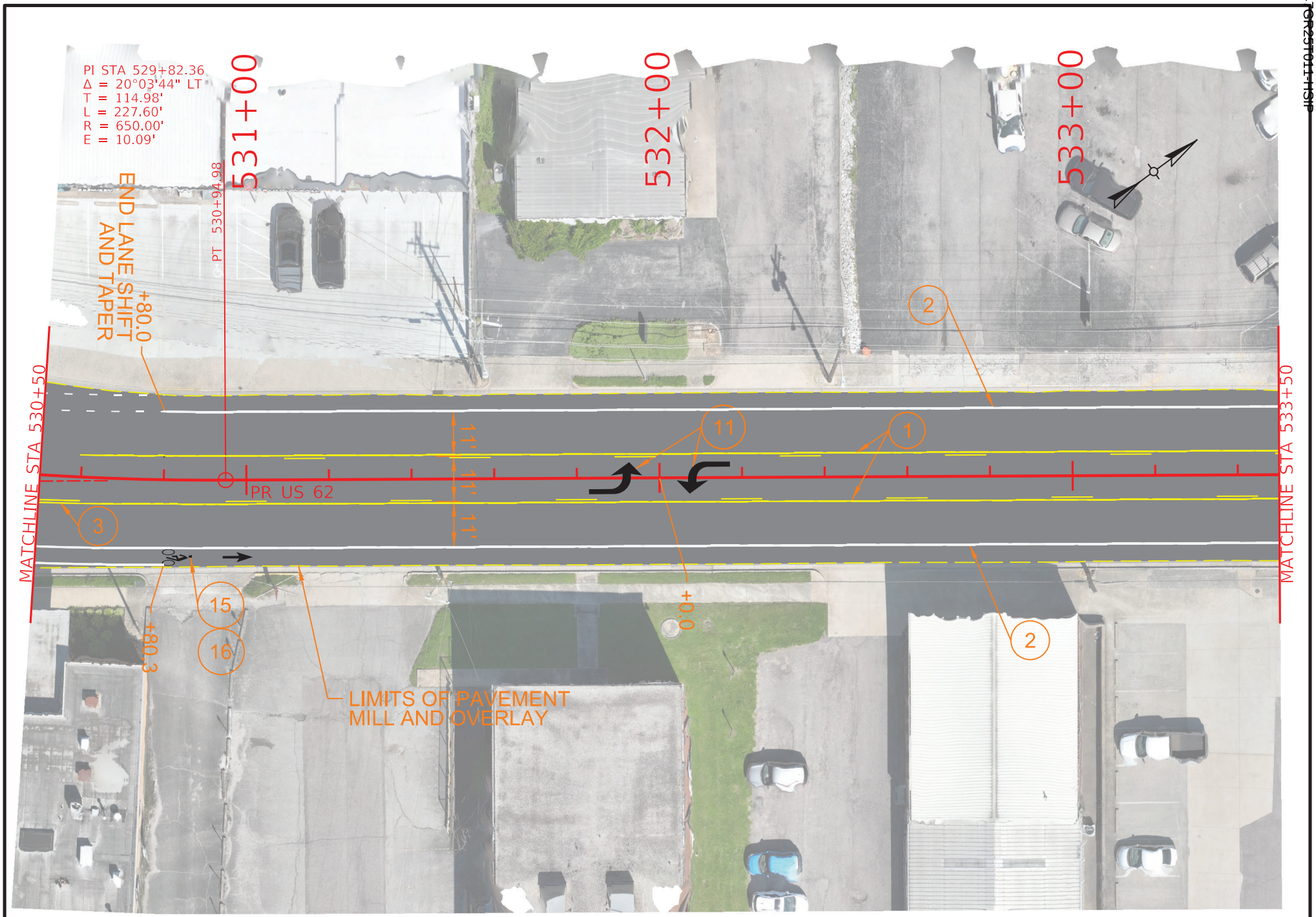
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11

FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62

STA. 530+50.00 TO STA. 533+50.00

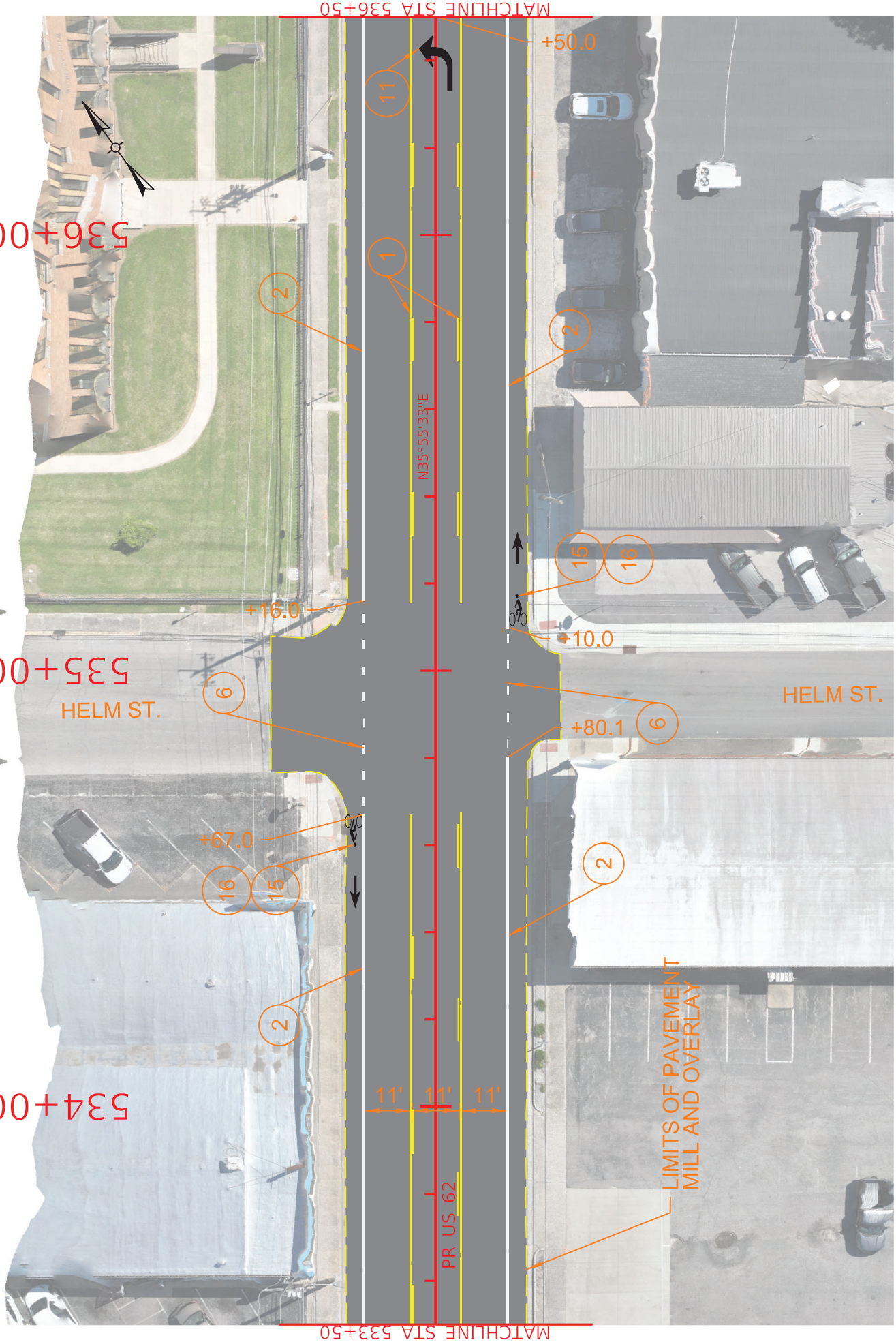
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R12

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
047CR2511+1SIP

Contract ID: 254404
Page 210 of 304



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R13

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

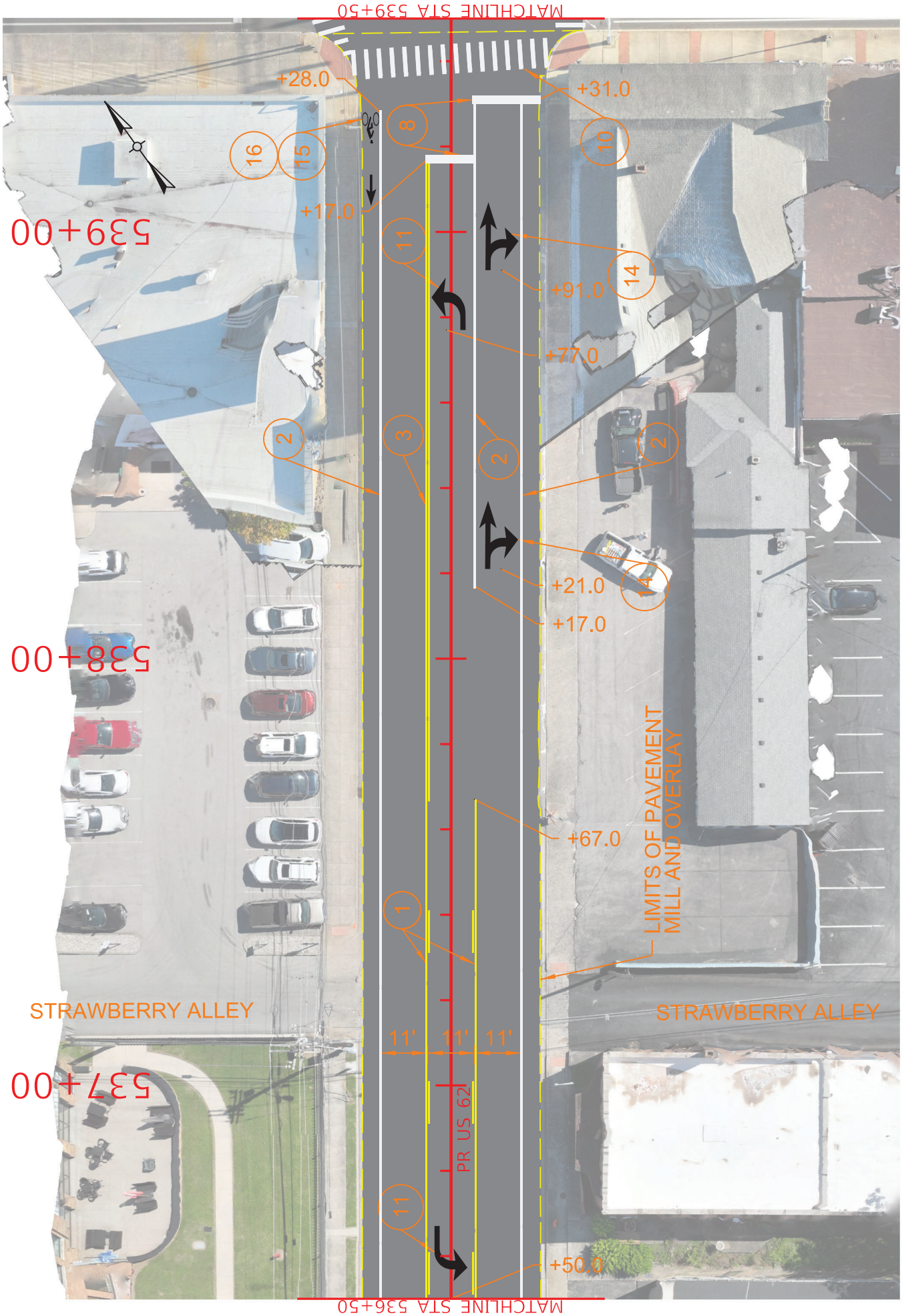
DRAWING TITLE: PLAN SHEET - US 62
STA. 533+50.00 TO STA. 536+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R14

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

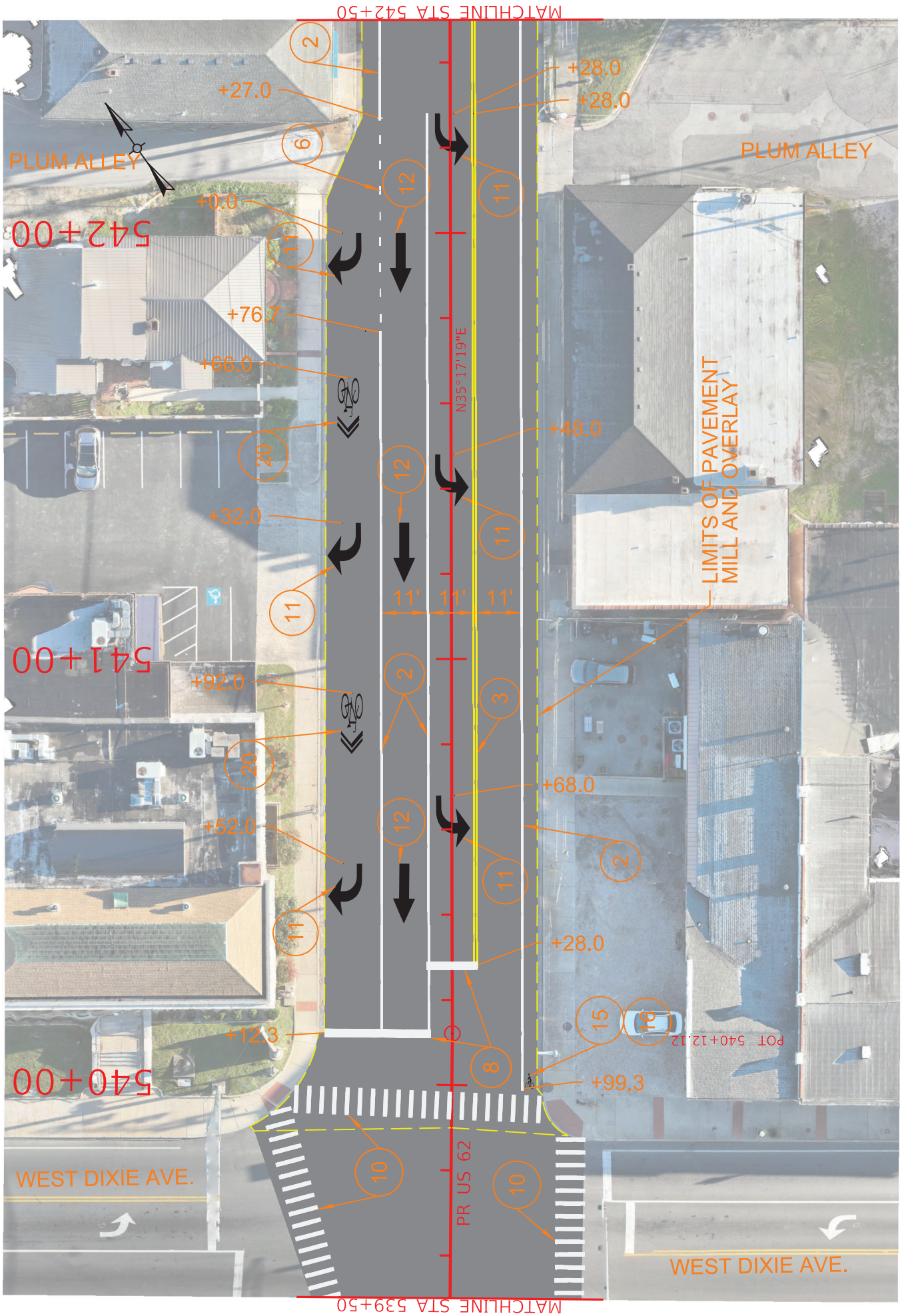
DRAWING TITLE: PLAN SHEET - US 62
STA. 536+50.00 TO STA. 539+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R15

HORIZONTAL SCALE: 1"=30'
0' 15' 30' 60'

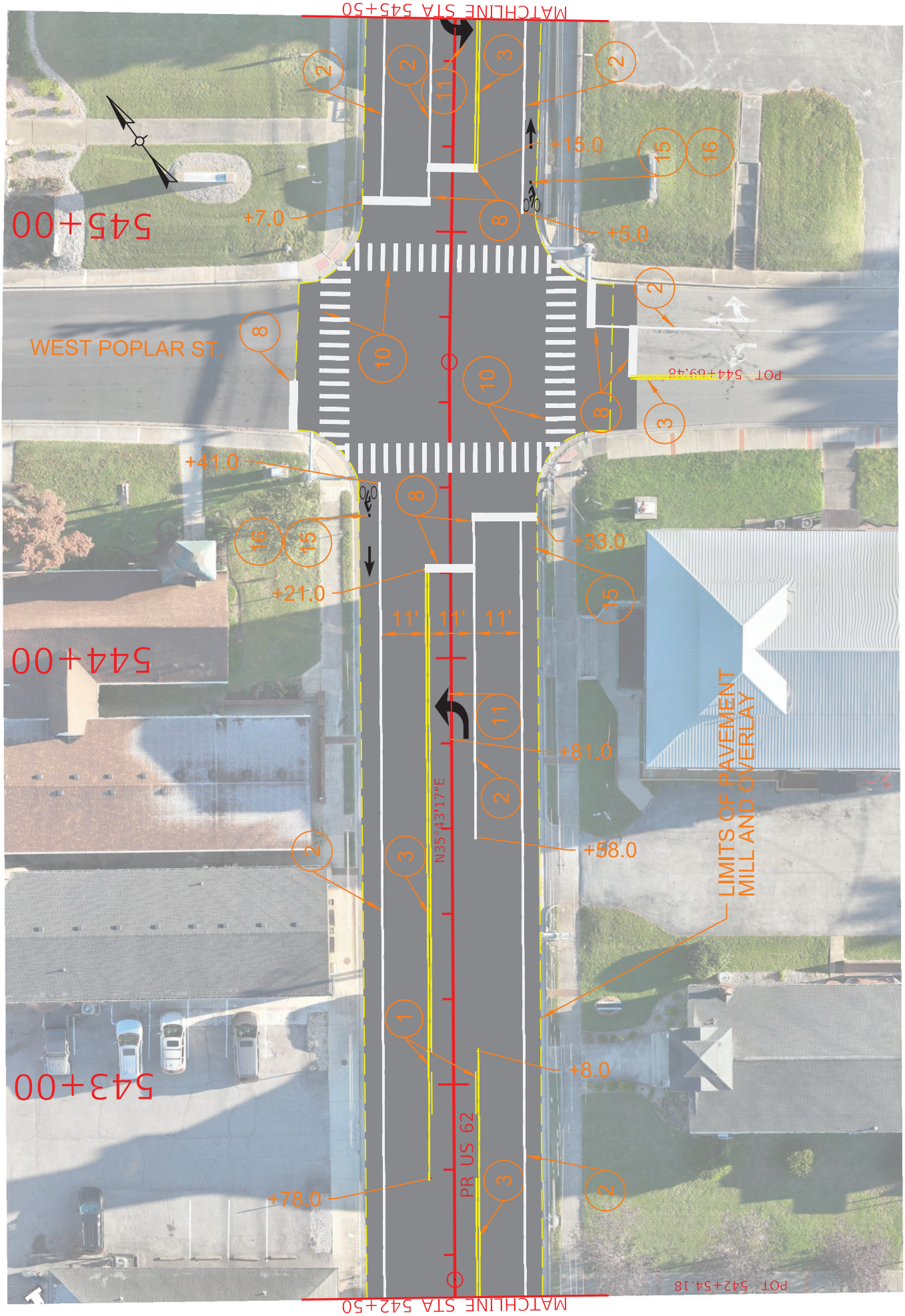
DRAWING TITLE: PLAN SHEET - US 62
STA. 539+50.00 TO STA. 542+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN
ITEM NO. 4-956.00
SHEET NO. R16

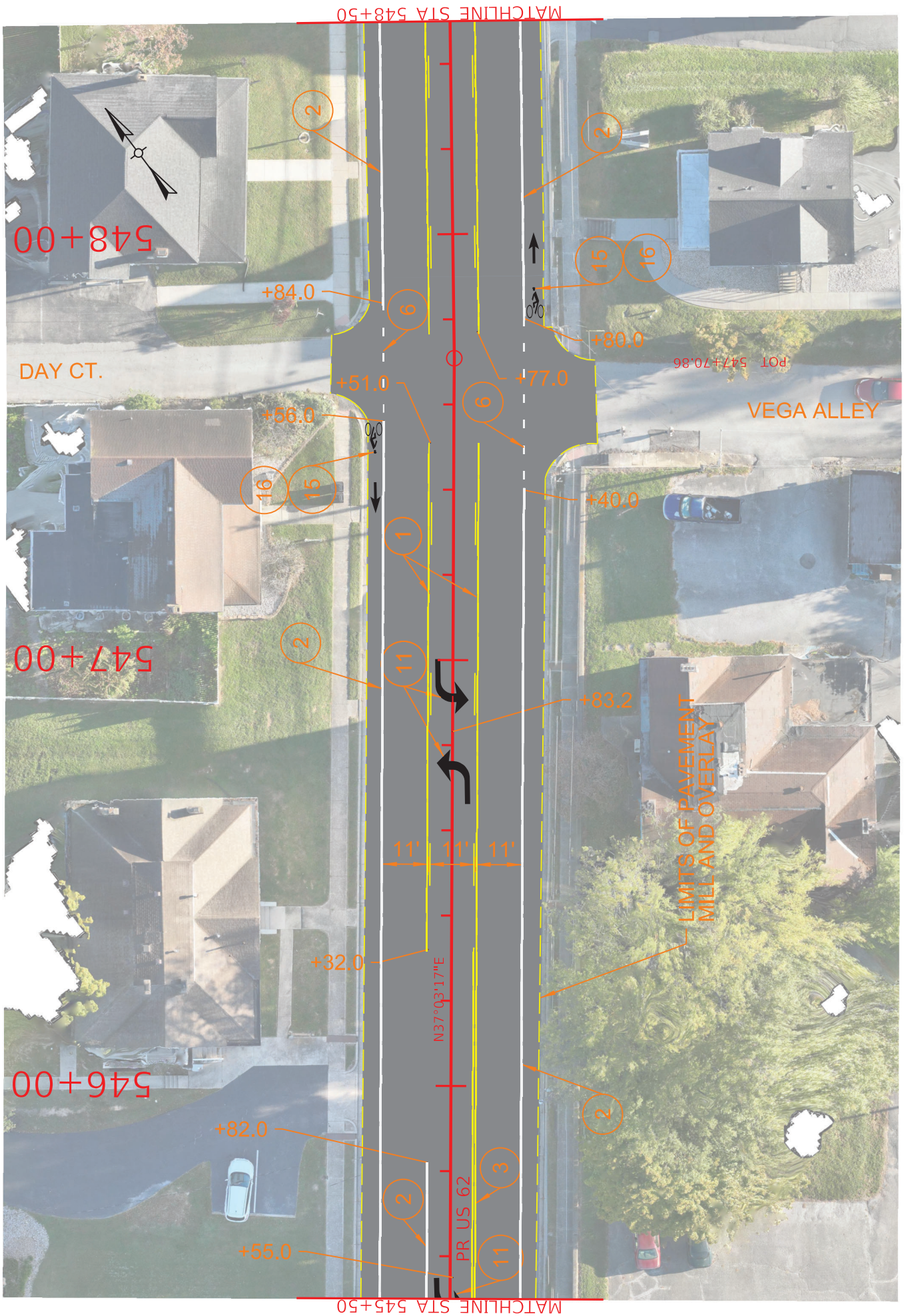
HORIZONTAL SCALE: 1"=30'
0' 15' 30' 60'

DRAWING TITLE: PLAN SHEET - US 62
STA. 542+50.00 TO STA. 545+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R17

HORIZONTAL SCALE: 1"=30'
0' 15' 30' 60'

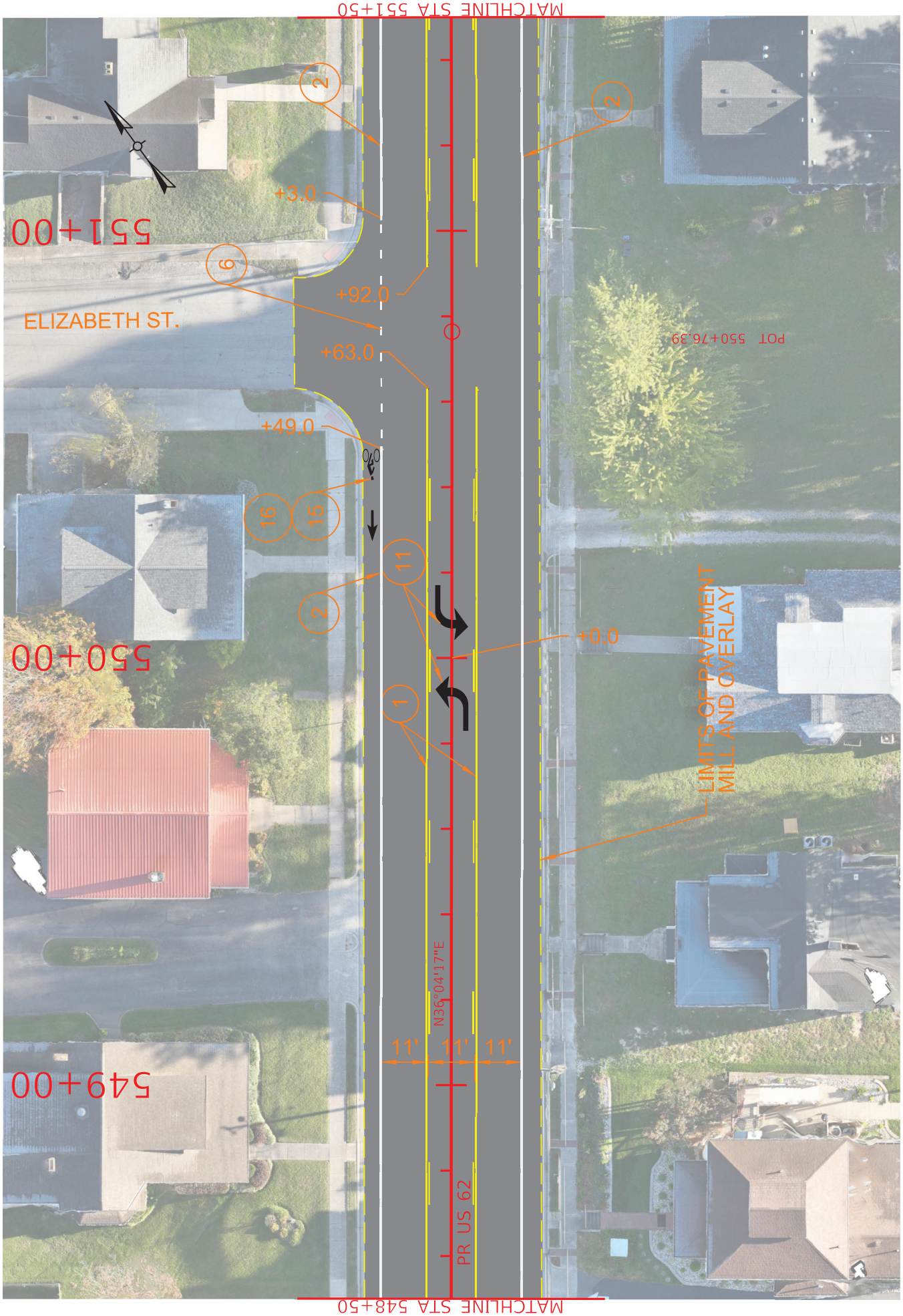
DRAWING TITLE: PLAN SHEET - US 62
STA. 545+50.00 TO STA. 548+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R18

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

DRAWING TITLE: PLAN SHEET - US 62

STA. 548+50.00 TO STA. 551+50.00

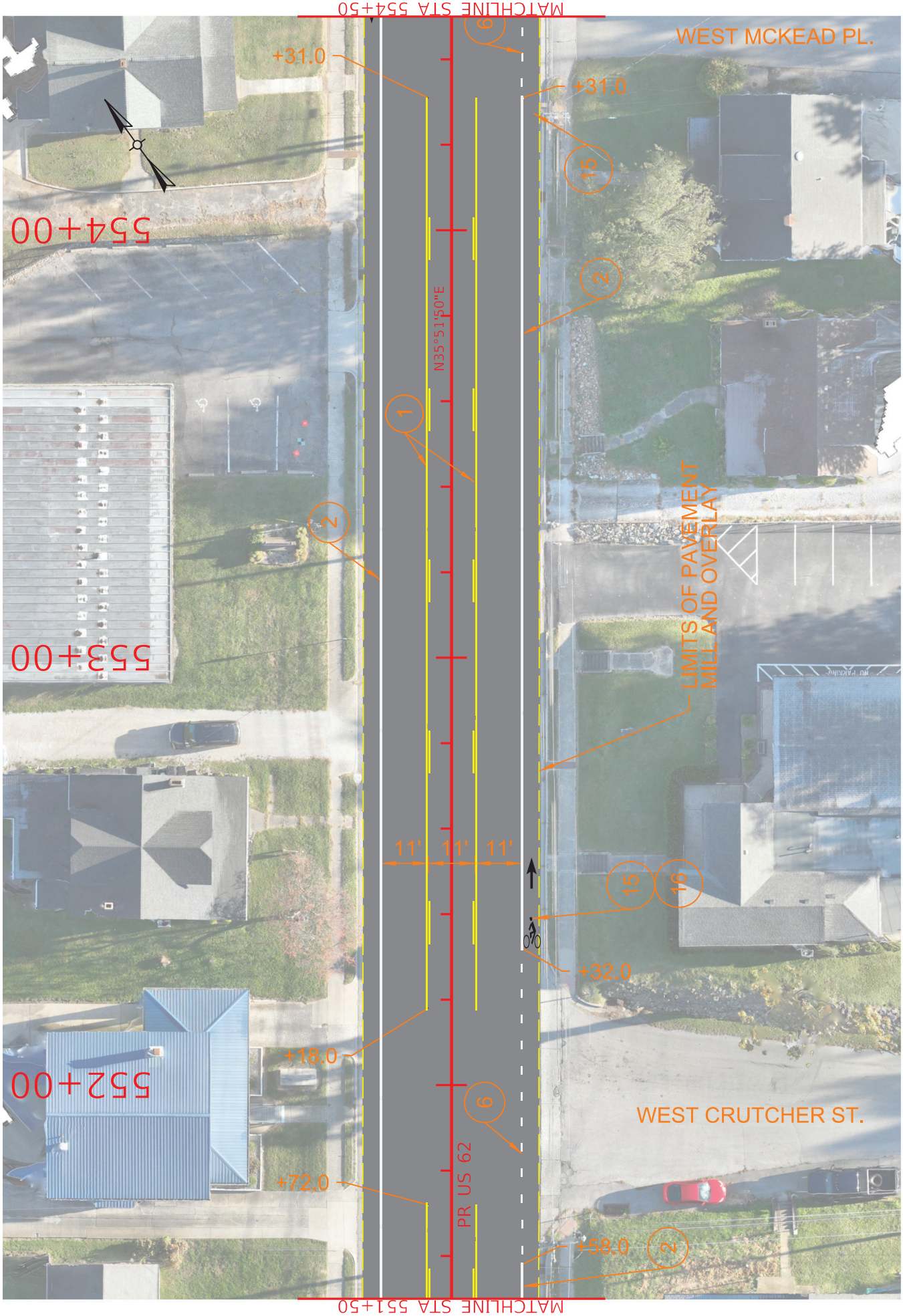
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11

FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R19

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

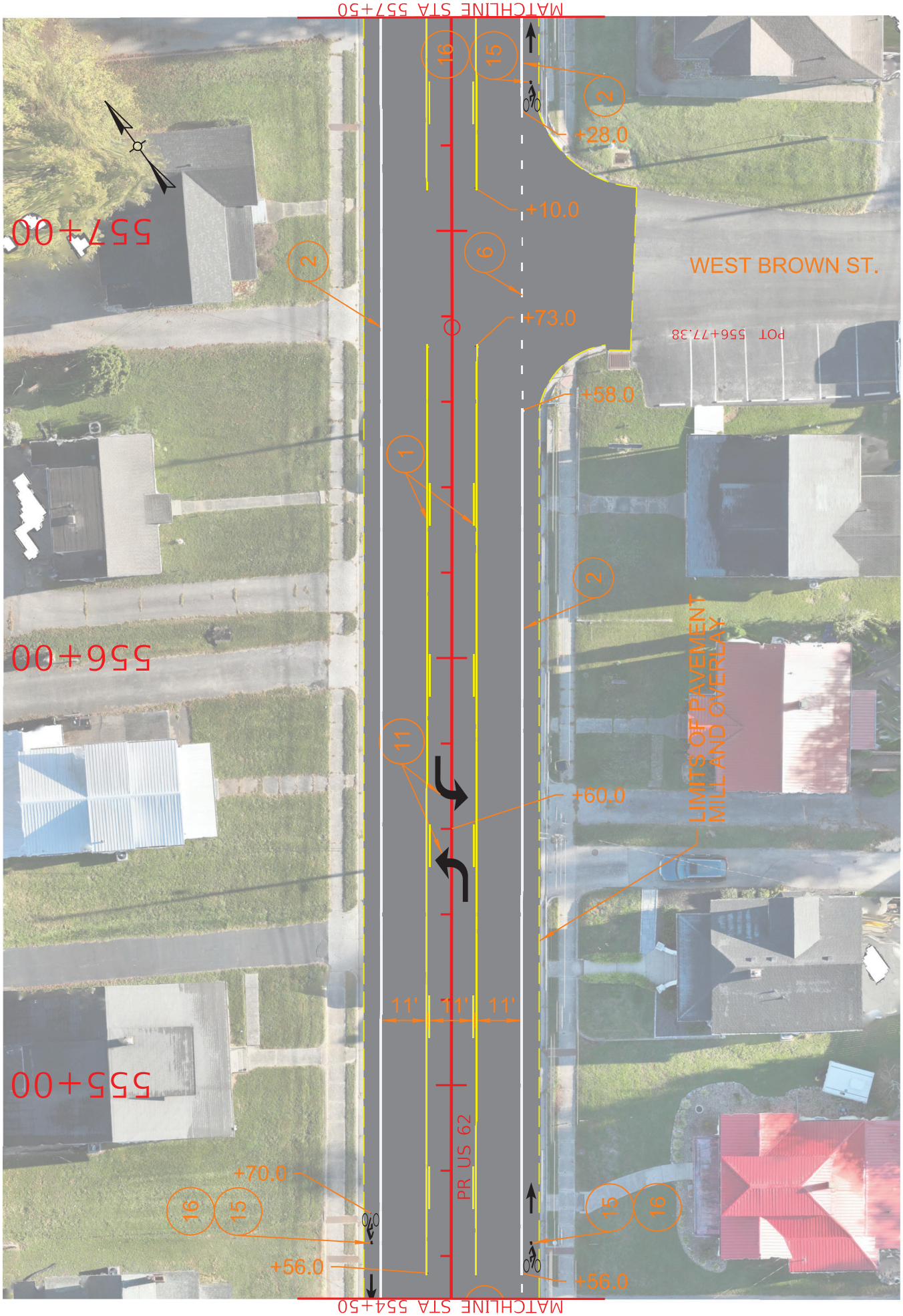
DRAWING TITLE: PLAN SHEET - US 62
STA. 551+50.00 TO STA. 554+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R20

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

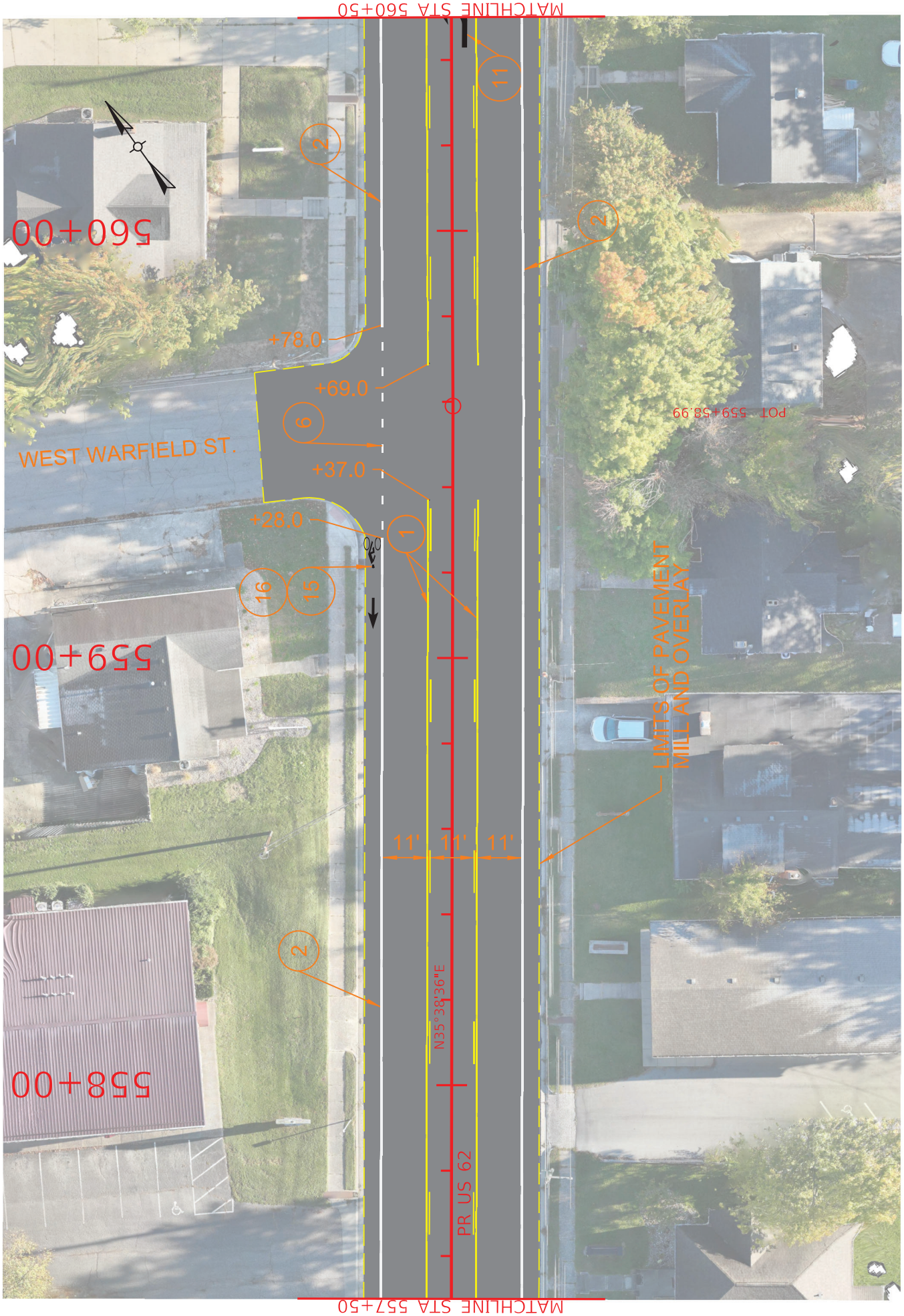
DRAWING TITLE: PLAN SHEET - US 62
STA. 554+50.00 TO STA. 557+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN
ITEM NO. 4-956.00
SHEET NO. R21

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

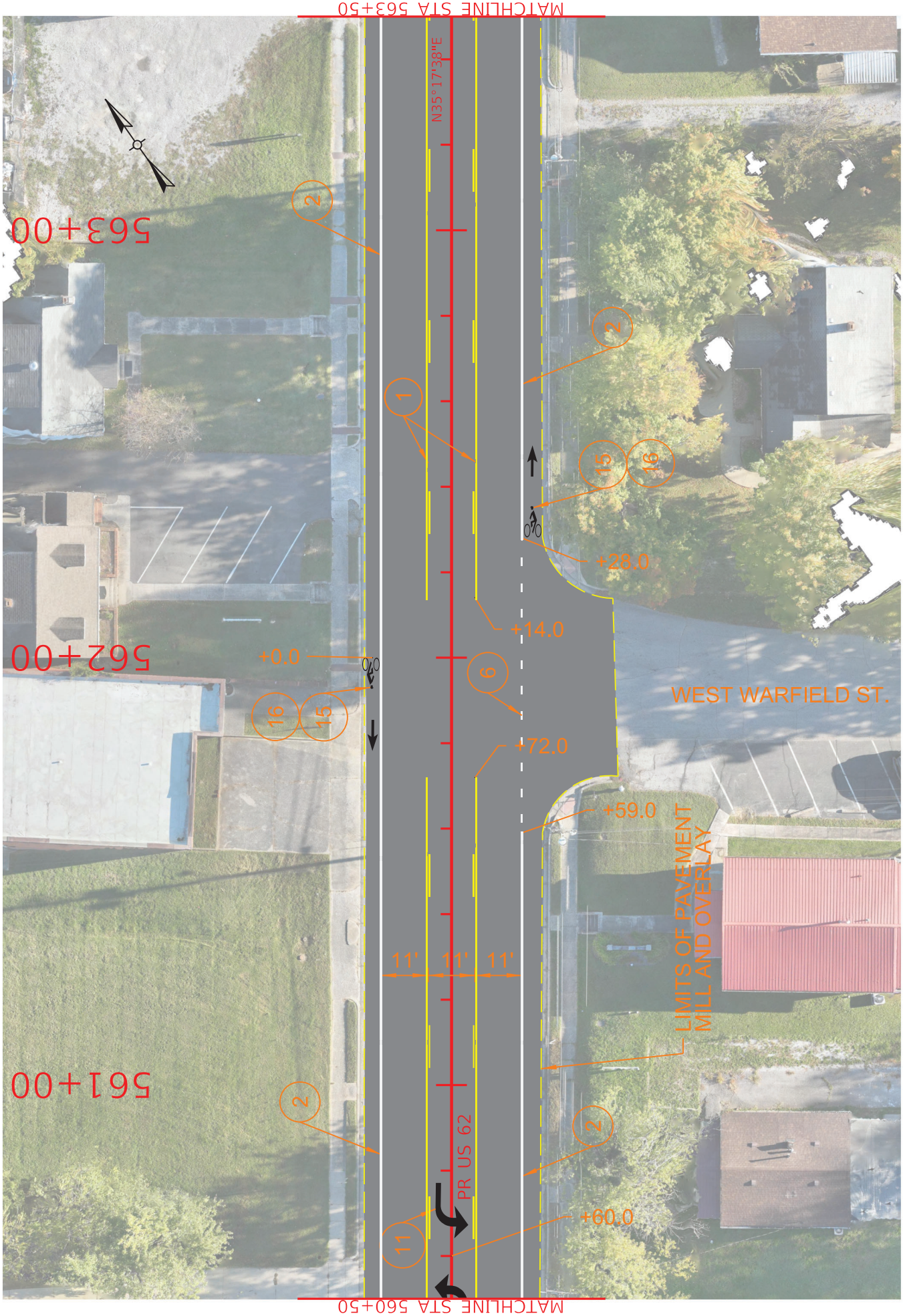
DRAWING TITLE: PLAN SHEET - US 62
STA. 557+50.00 TO STA. 560+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R22

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

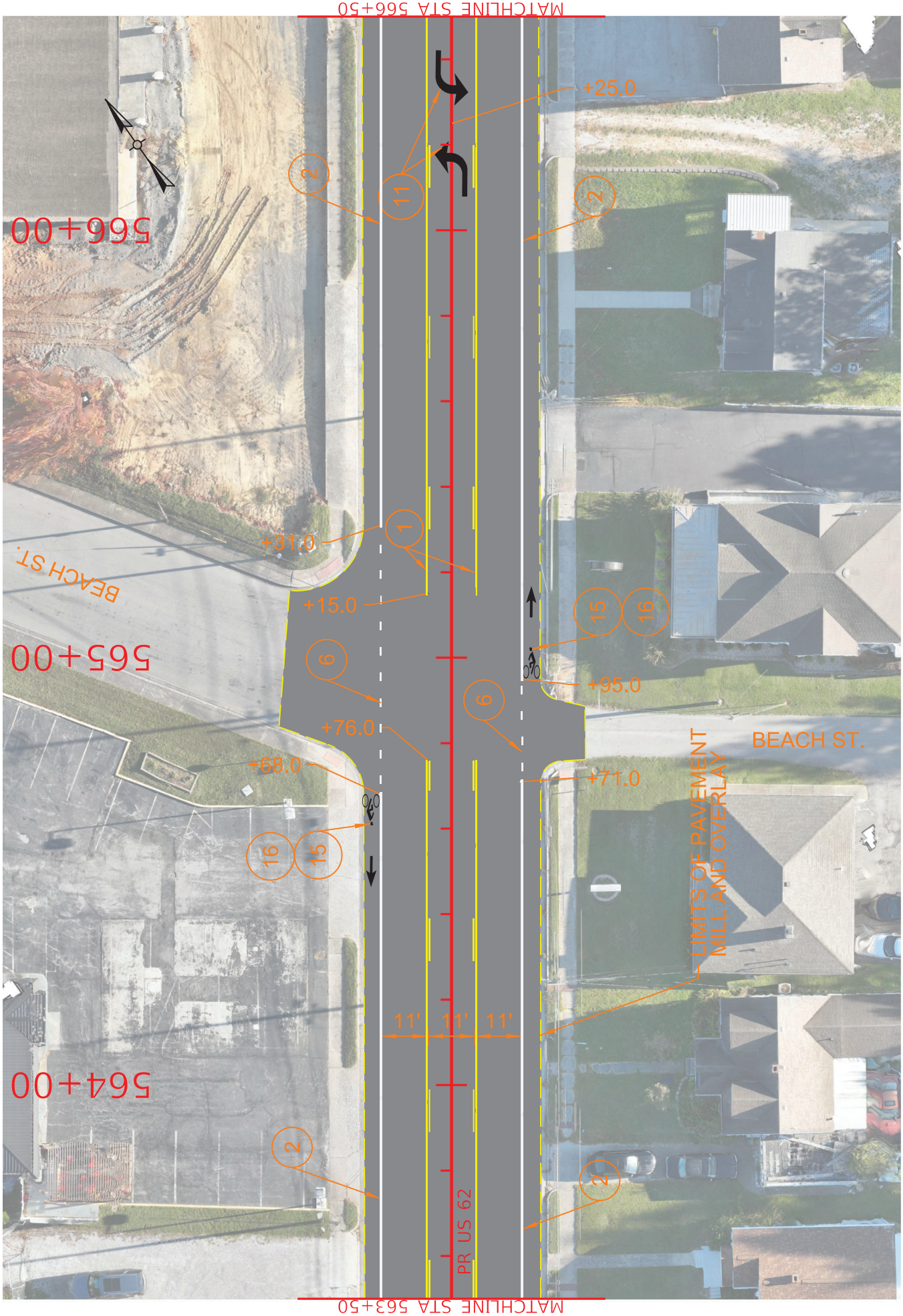
DRAWING TITLE: PLAN SHEET - US 62
STA. 560+50.00 TO STA. 563+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN
ITEM NO. 4-956.00
SHEET NO. R23

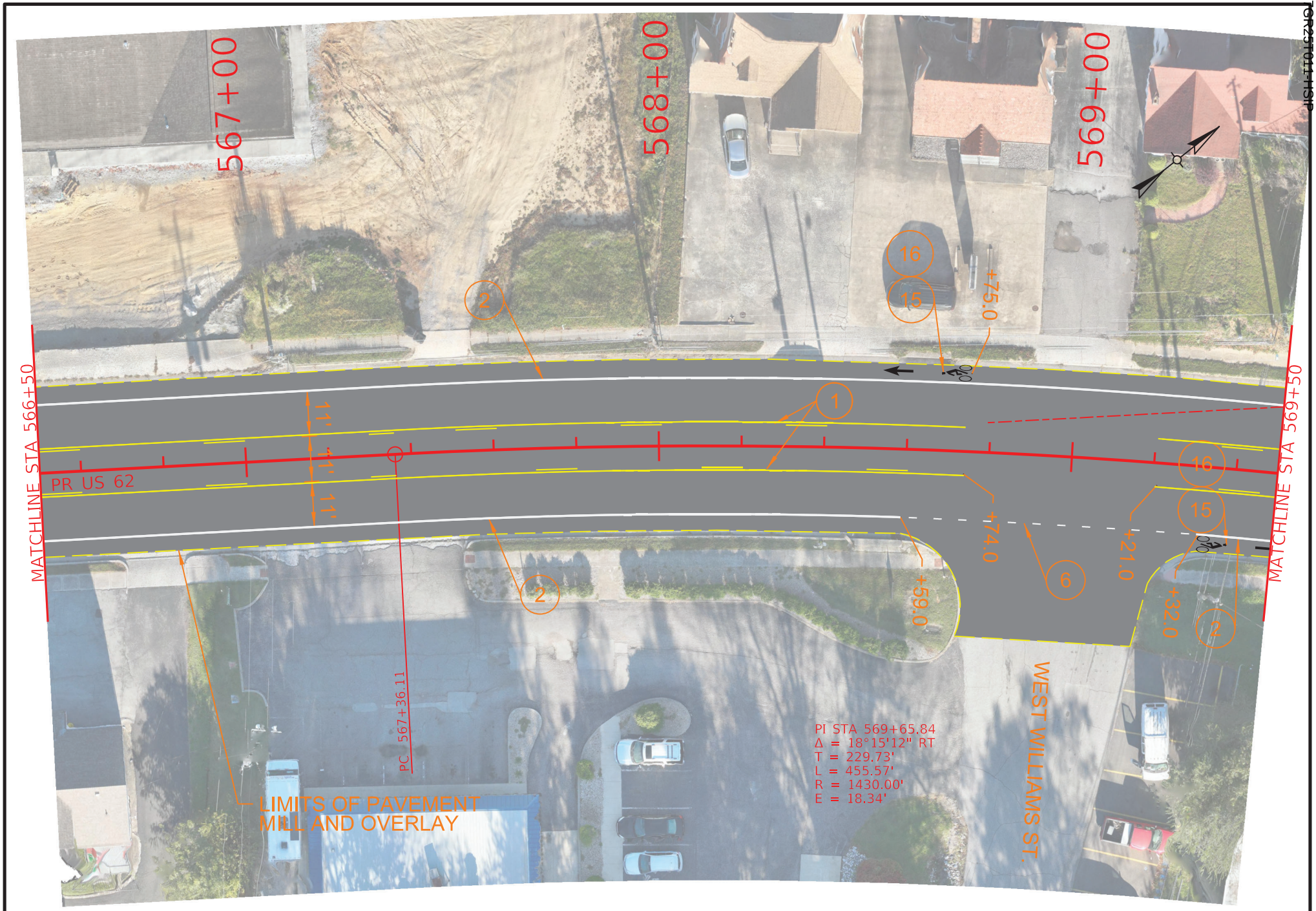
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

DRAWING TITLE: PLAN SHEET - US 62
STA. 563+50.00 TO STA. 566+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62

STA. 566+50.00 TO STA. 569+50.00

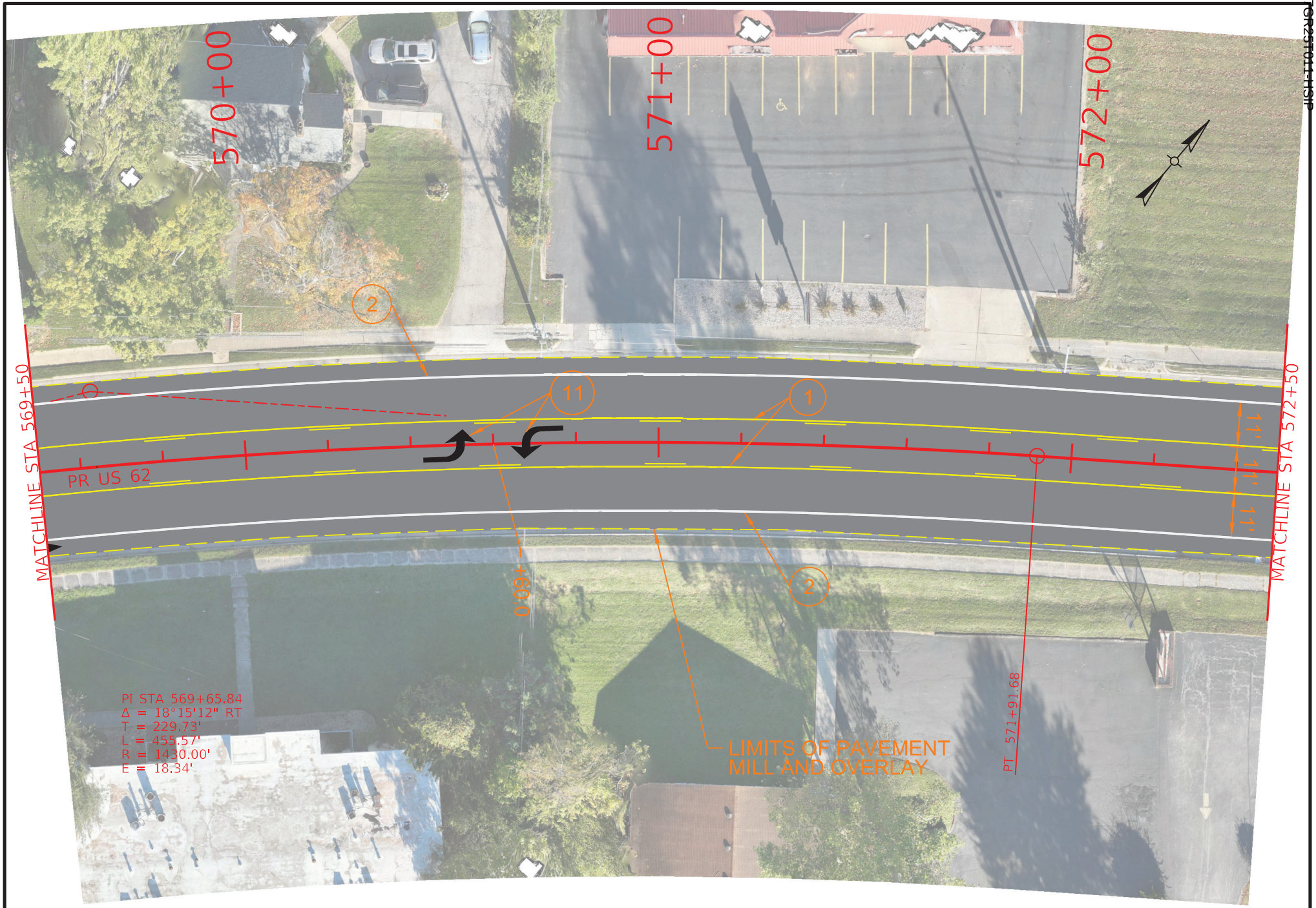
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R24

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
047CR21011 HSIP

Contract ID: 254404
Page 229 of 304



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62

STA. 569+50.00 TO STA. 572+50.00

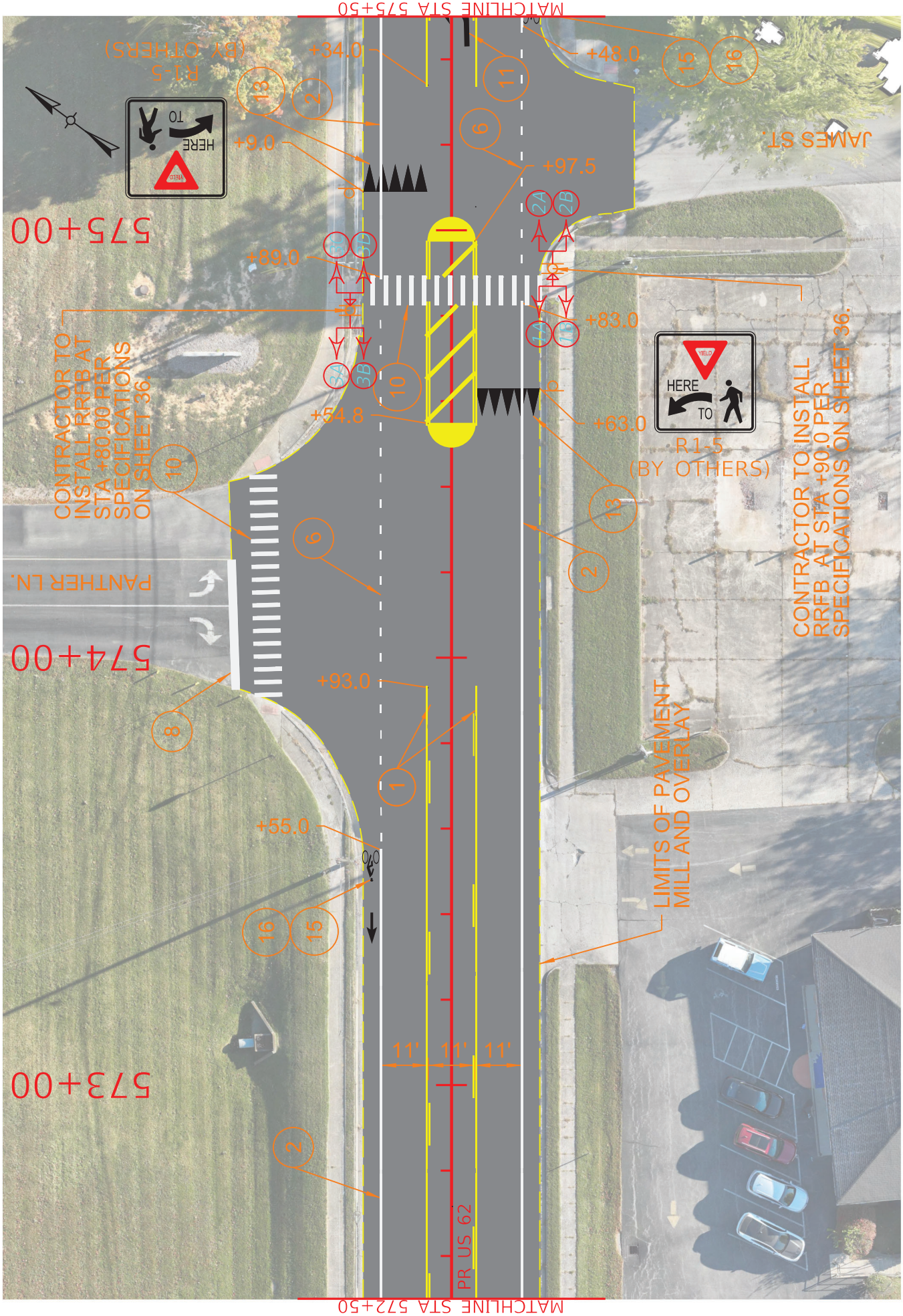
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R25

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
04 TCR 21011 HSIP

Contract ID: 254404
Page 229 of 304



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R26

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

DRAWING TITLE: PLAN SHEET - US 62

STA. 572+50.00 TO STA. 575+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11

FILE NAME: C:\PW\WORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62

STA. 575+50.00 TO STA. 578+50.00

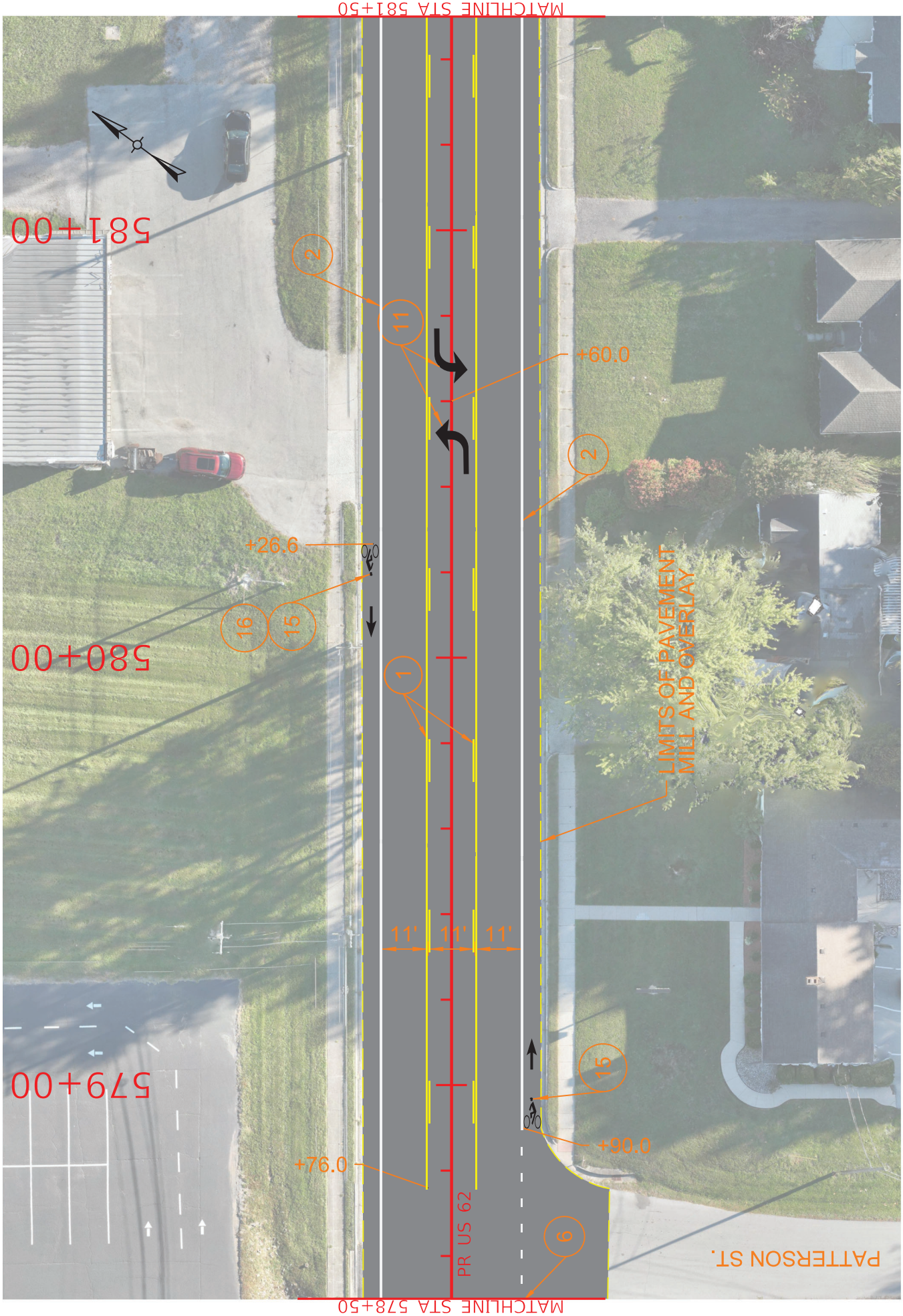
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R27

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
047CR2371011HSIP

Contract ID: 254404
Page 231 of 304



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R28

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

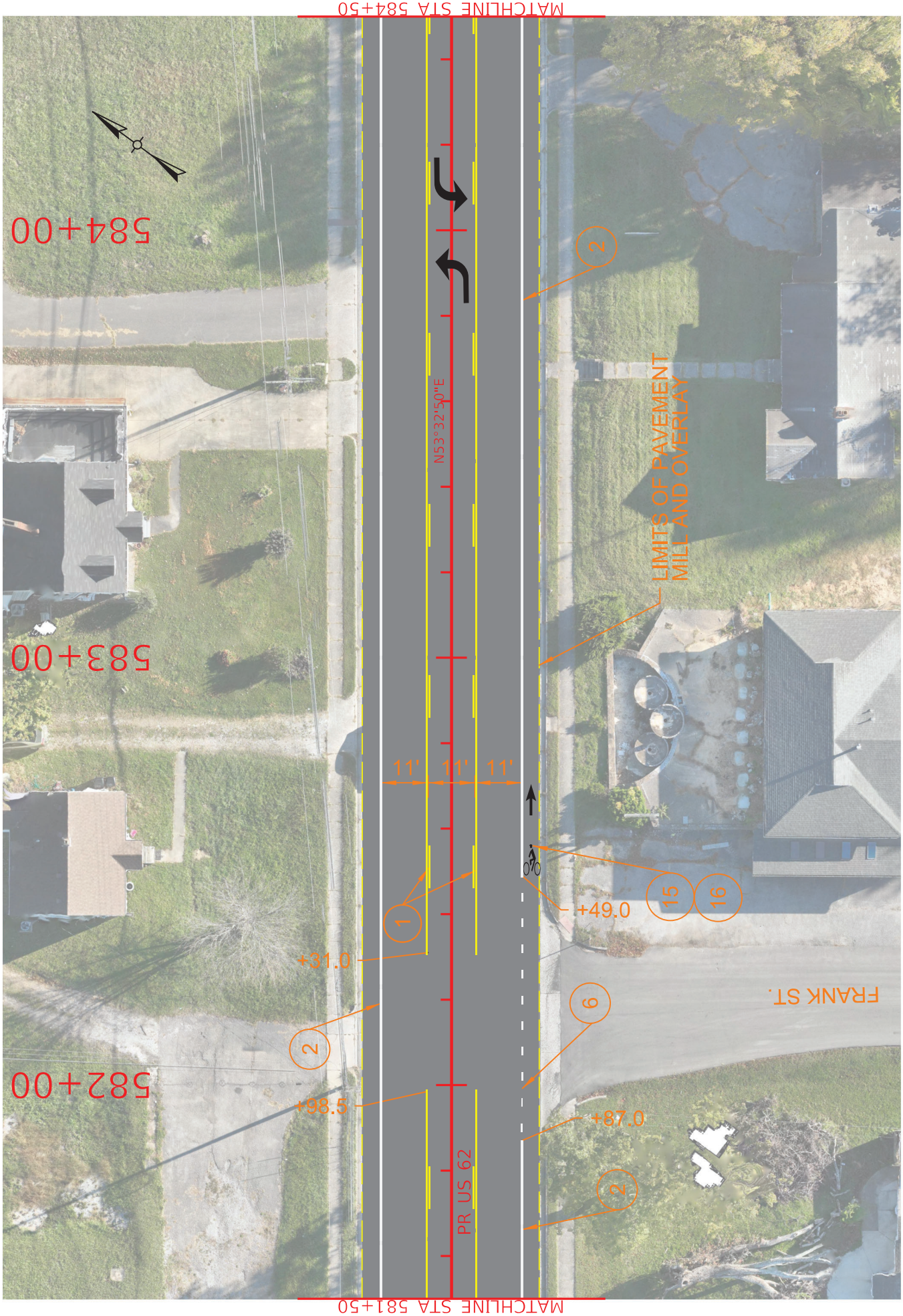
DRAWING TITLE: PLAN SHEET - US 62
STA. 578+50.00 TO STA. 581+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R29

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

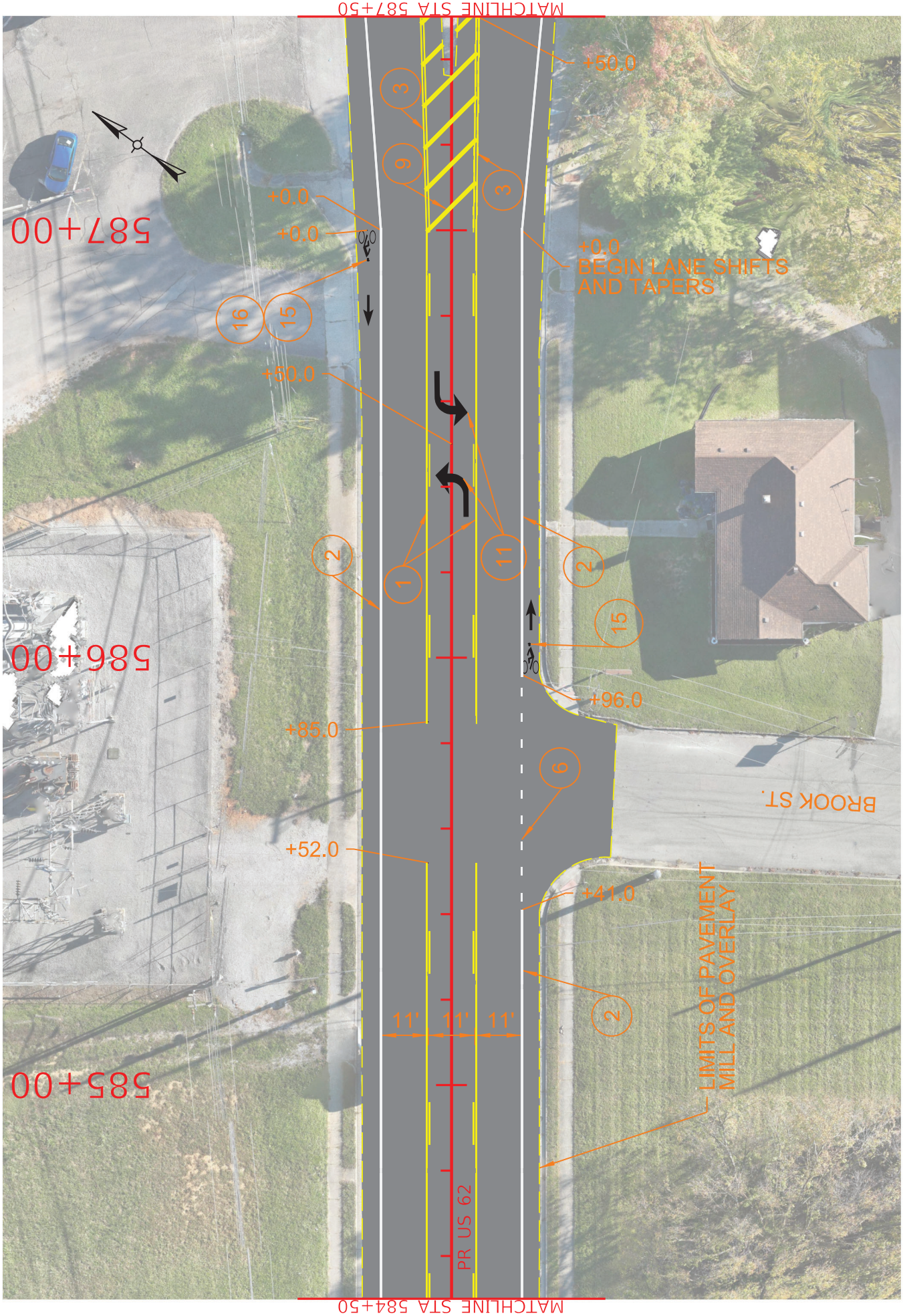
DRAWING TITLE: PLAN SHEET - US 62
STA. 581+50.00 TO STA. 584+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COUNTY OF HARDIN

ITEM NO. 4-956.00

SHEET NO. R30

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

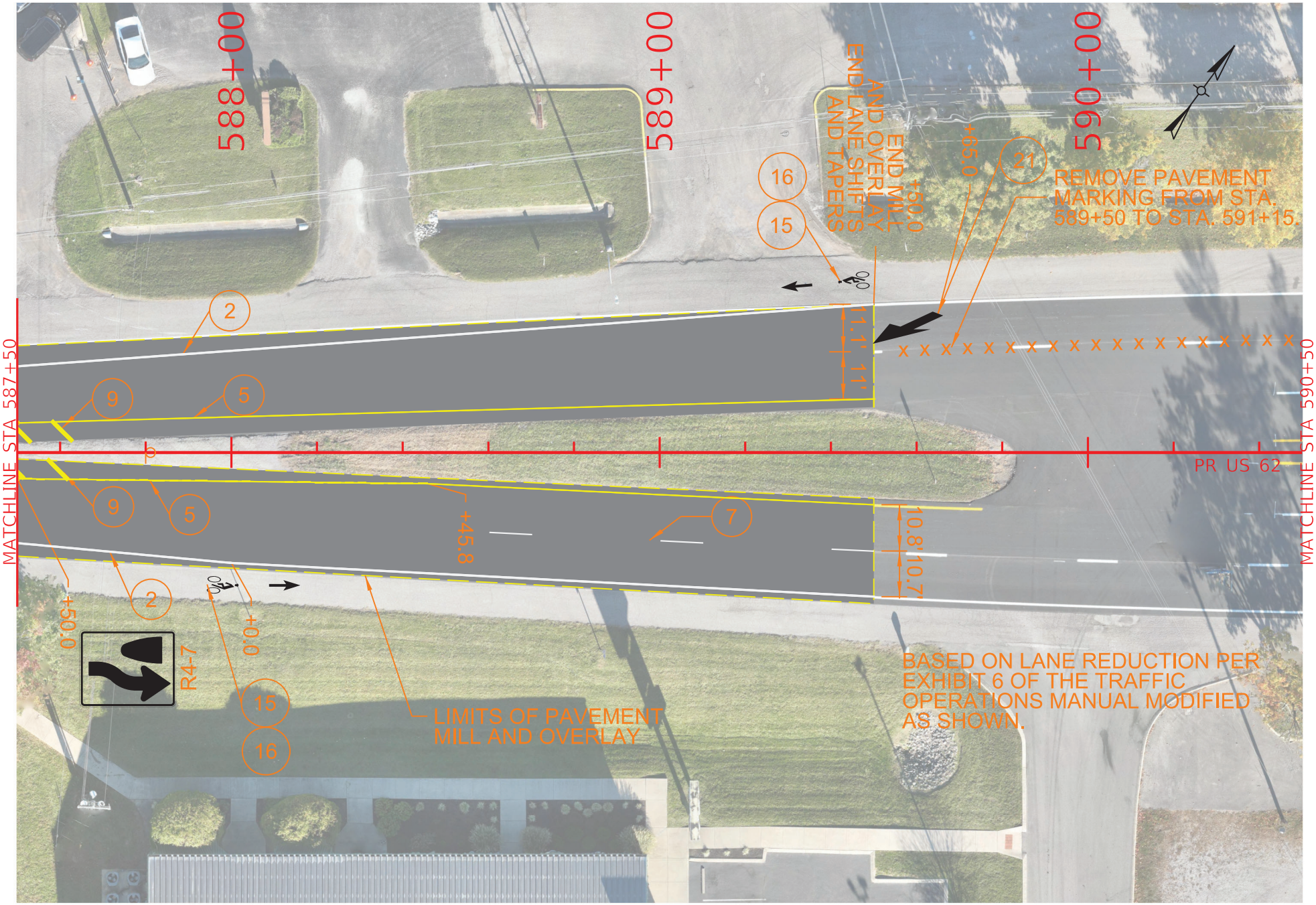
DRAWING TITLE: PLAN SHEET - US 62
STA. 584+50.00 TO STA. 587+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

USER: CREBAR

OpenRoads Designer v23.00.01.11
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

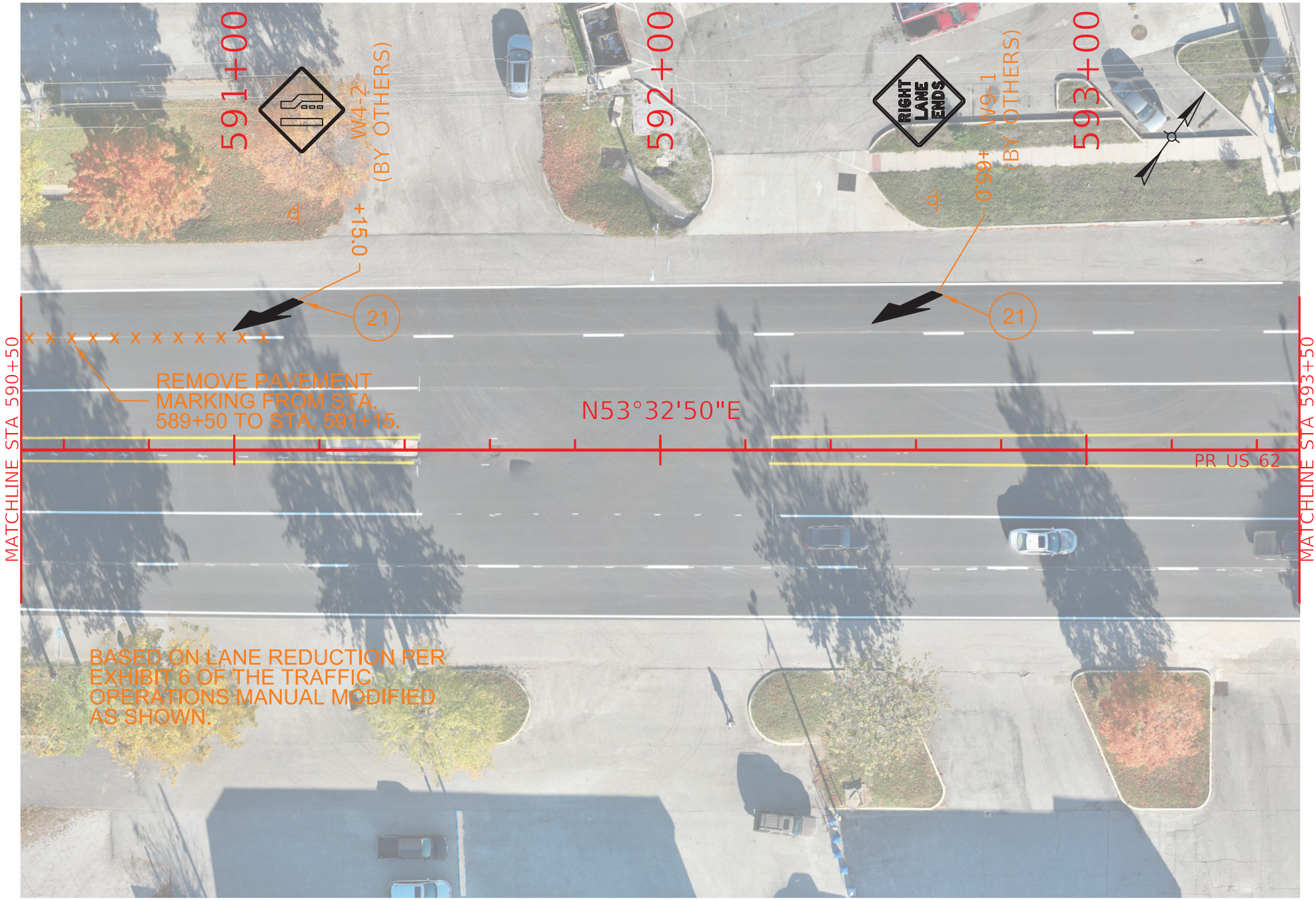
DRAWING TITLE: PLAN SHEET - US 62

STA. 587+50.00 TO STA. 590+50.00

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R31

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



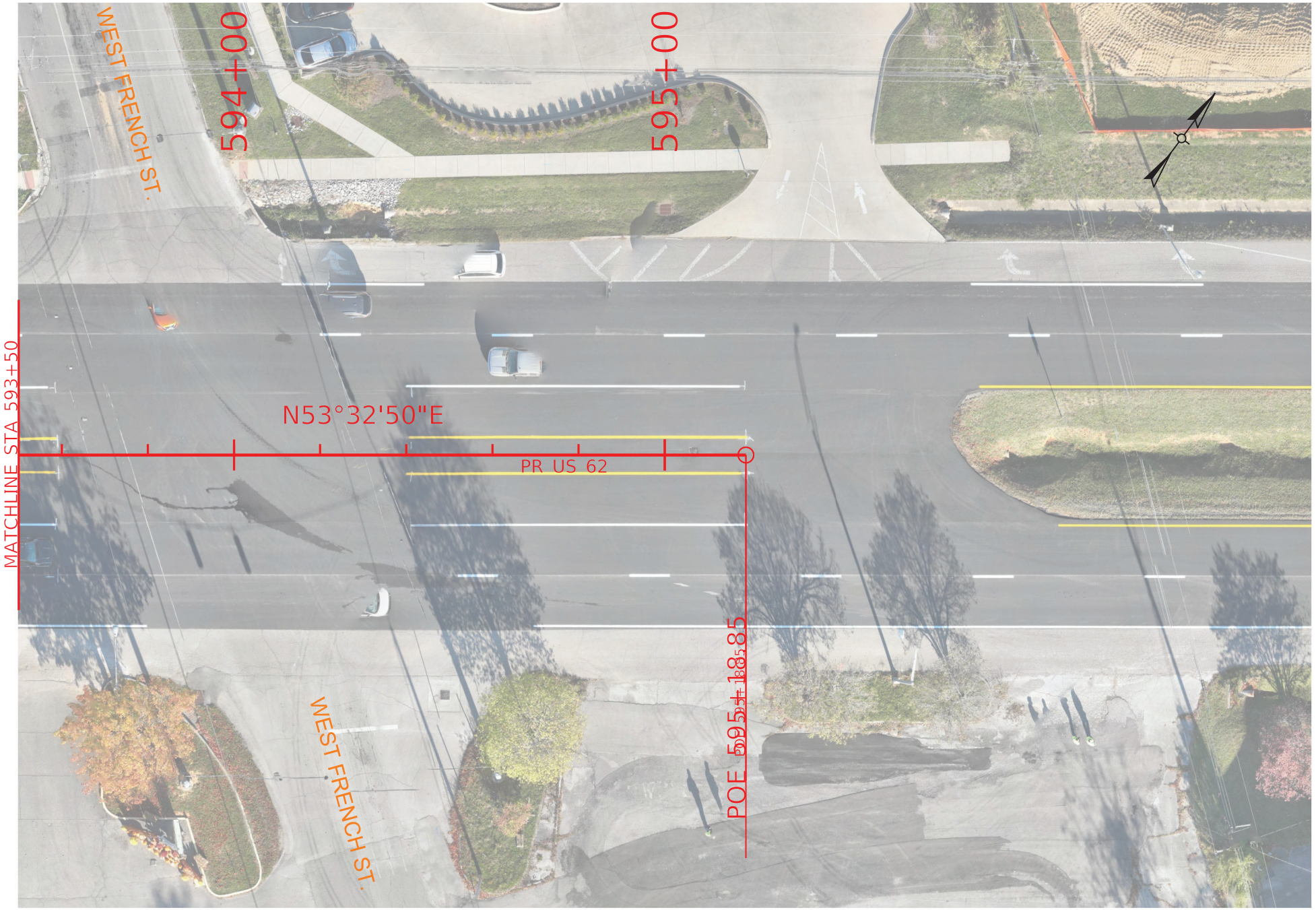
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62
STA. 590+50.00 TO STA. 593+50.00

0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R32

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: PLAN SHEET - US 62
STA. 593+50.00 TO STA. 596+50.00

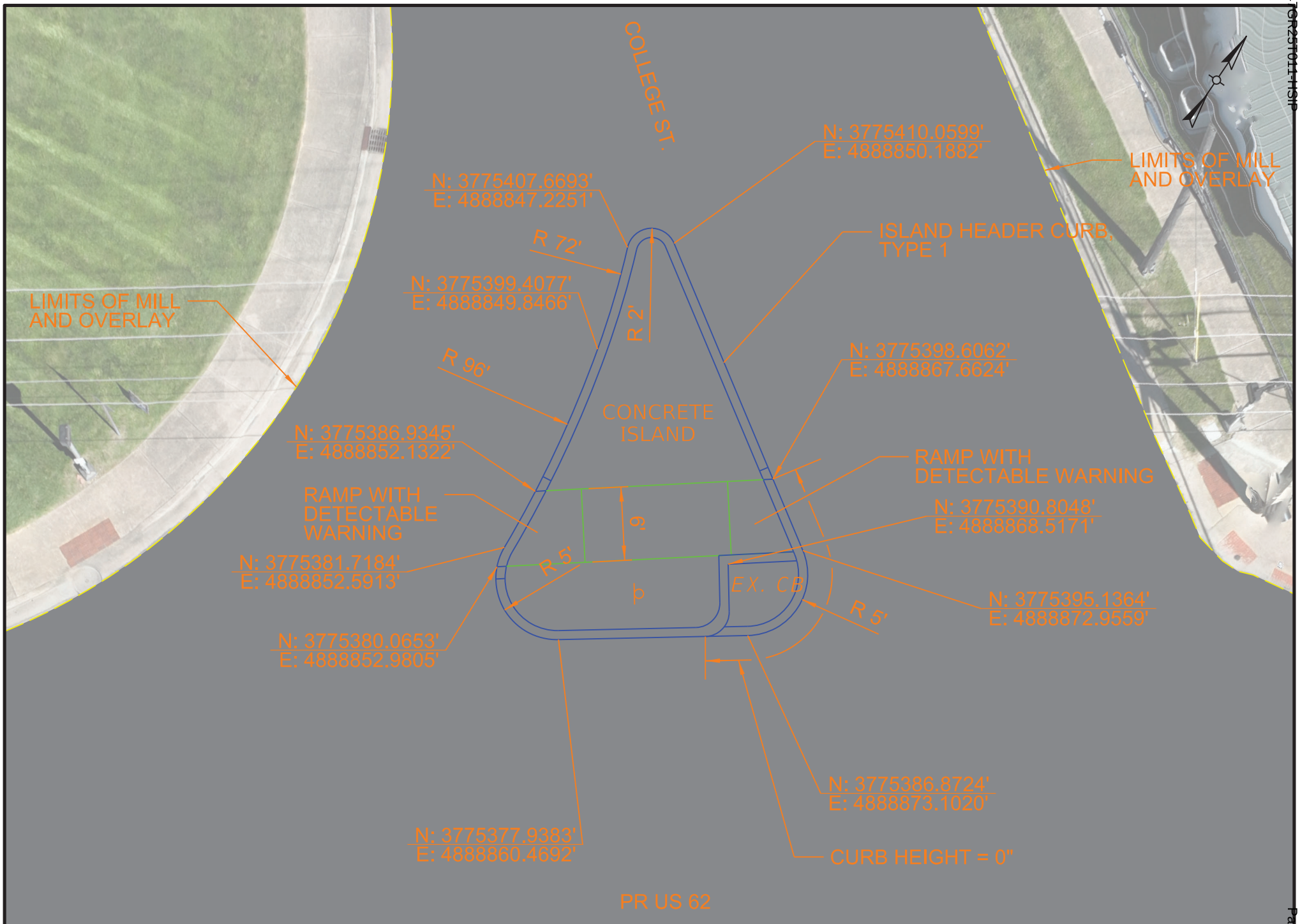
0' 15' 30' 60'
HORIZONTAL SCALE: 1"=30'

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R33

OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_PLAN SHEETS.DGN

HARDIN COUNTY
04 CR 2T011 HSIP

Contract ID: 254404
Page 237 of 304



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

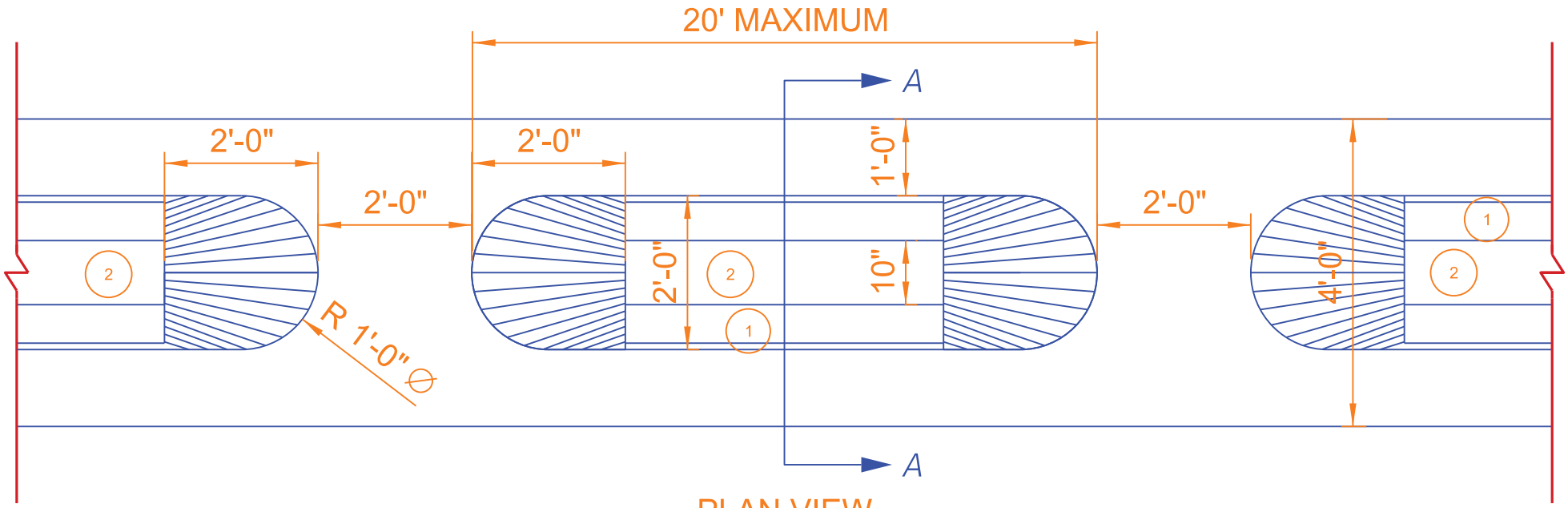
ISLAND 1

0' 5' 10' 20'
HORIZONTAL SCALE: 1"=10'

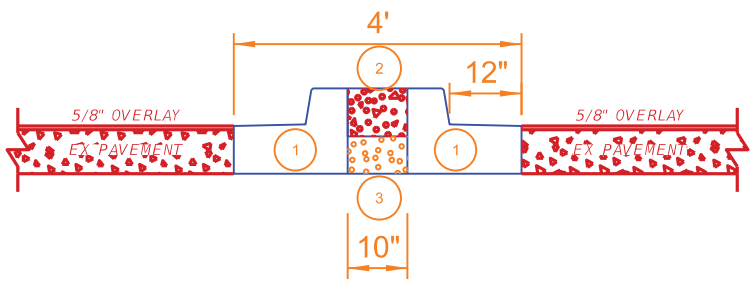
ITEM NO.	COUNTY OF
4-956.00	HARDIN

SHEET NO. R34

OpenRoads Designer v10.11.00.115 USER: Patrick.Stone
FILE NAME: C:\KYTC_STANDARDS\ORGANIZATION-CIVIL\KYTC_STANDARDS_OC_KYTC\DGNLIB\SHEET SEEDS\KYTC PLAN SEED 8_5X11.DGNLIB

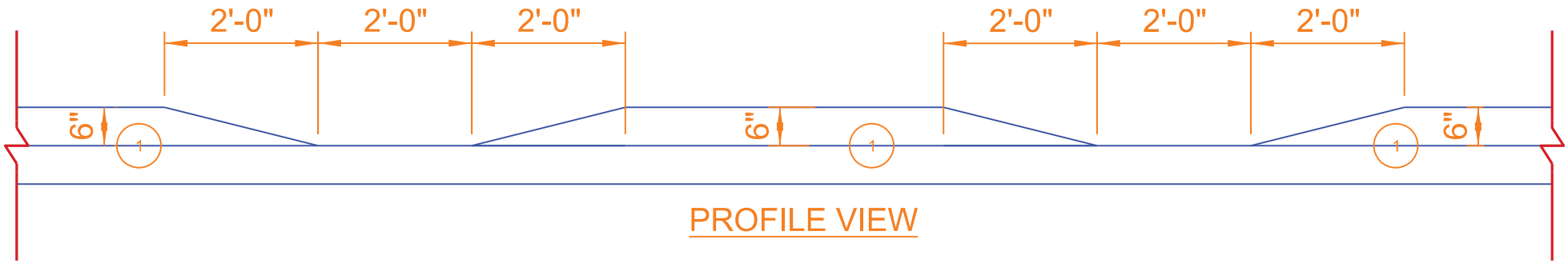


PLAN VIEW



DETAIL A

1. STANDARD CURB & GUTTER MODIFIED
2. 8" CONCRETE CAP
3. 6.25" CRUSHED STONE BASE



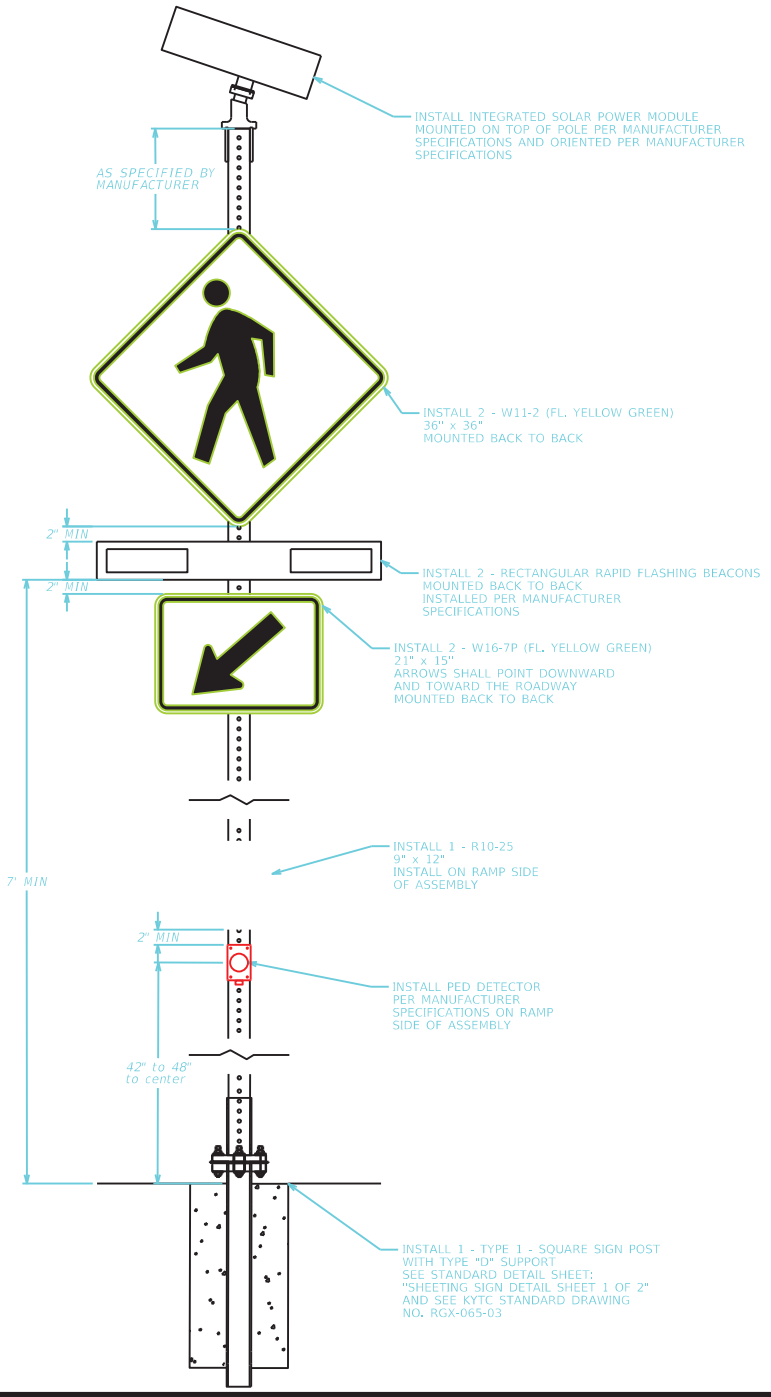
PROFILE VIEW

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

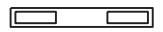
DETAIL SHEET
RAISED BIKE LANE BARRIER

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R35

RRFB ASSEMBLY DETAIL



BEACONS



RECTANGULAR RAPID FLASHING BEACON (RRFB)
RRFBs A1, A2, B1, B2
QUANTITY: 4

SIGNS



W11-2
BLACK ON FL. YELLOW GREEN
36" x 36"
QUANTITY: 4



W16-7PL
BLACK ON FL. YELLOW GREEN
21" x 15"
QUANTITY: 2



W16-7PR
BLACK ON FL. YELLOW GREEN
21" x 15"
QUANTITY: 2

R10-25
BLACK ON WHITE
9" x 12"
QUANTITY: 2

CONTRACTOR SHALL INSTALL RRFB, SOLAR POWER MODULE, AND PED DETECTOR PER MANUFACTURER SPECIFICATIONS.

RRFB SHALL BE OPERATED BY THE PED DETECTOR. CONTRACTOR SHALL ENSURE EACH SET OF RRFBs (LOCATED AT SAME CROSSWALK) WORK SYNCHRONOUSLY.

SIGNS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN ON THE SIGN STANDARD DETAIL SHEETS AND KYTC STANDARD DRAWINGS.

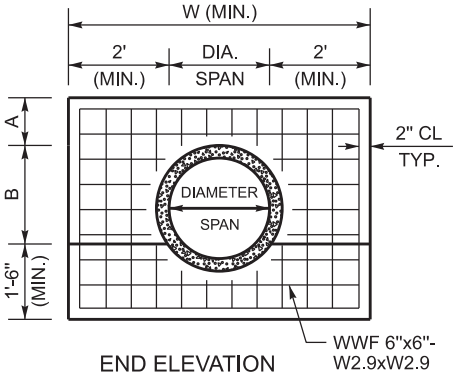
THE BID ITEM SHALL ASSOCIATED WITH RECTANGULAR RAPID FLASHING BEACON ASSEMBLY SHALL BE INCLUSIVE OF THE MATERIALS NEEDED FOR THE RECTANGULAR RAPID FLASHING BEACON ASSEMBLY. INCLUDING, BUT NOT LIMITED TO, SIGNS, POST, HARDWARE, ANCHOR, WIRING, RRFB UNIT, INTEGRATED SOLAR UNIT, ETC.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

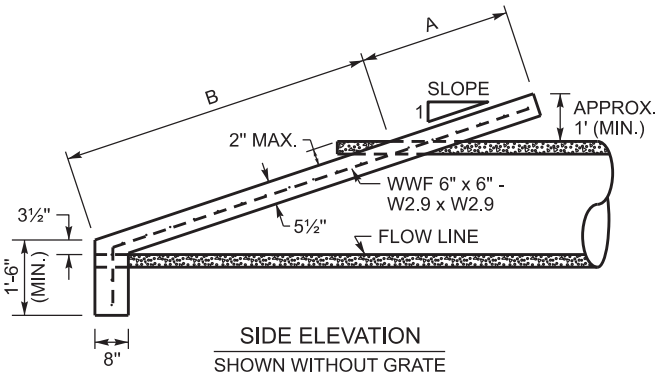
RECTANGULAR RAPID FLASHING BEACON DETAIL

ITEM NO. 4-956.00
COUNTY OF HARDIN
SHEET NO. R36

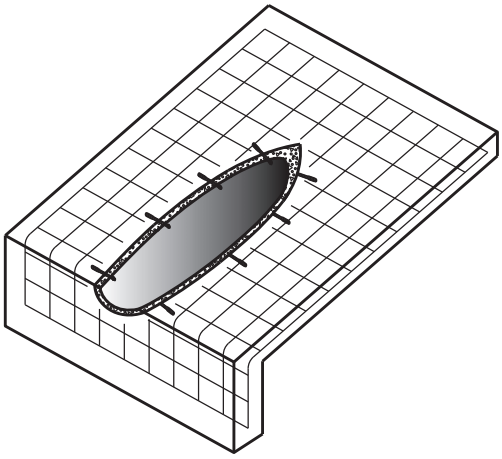
OpenRoads Designer v23.00.01.11
USER: CREBAR
FILE NAME: C:\PWWORKING\EAST01\D4145033\US62_DETAIL SHEET_RRFB.DGN



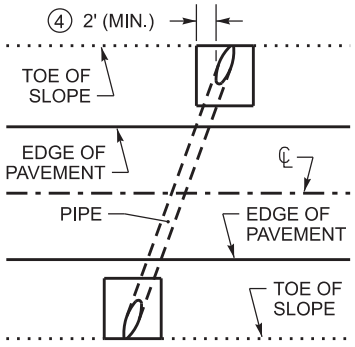
END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT



SIDE ELEVATION
SHOWN WITHOUT GRATE



ISOMETRIC VIEW
SHOWN WITH WOVEN WIRE REINFORCEMENT AND WEDGE ANCHORS



PLAN VIEW
SHOWN WHEN THE PIPE IS ON A SKEW ④

~ NOTES ~

1. FOR PIPES THAT RECEIVE THE SLOPED & MITERED CONCRETE HEADWALL, THE PIPE LENGTH SHALL BE MEASURED TO THE FURTHEST POINT ALONG THE MITERED END OF THE PIPE.
2. THE EMBANKMENT FILL MATERIAL IS TO BE PLACED, COMPACTED, AND GRADED AROUND THE PIPE BEFORE THE CONCRETE SLOPE PAVING IS PLACED. THE INTENT IS FOR THE SLOPED & MITERED HEADWALL TO MATCH THE FINAL EMBANKMENT SLOPE.
3. THE PIPE SHALL BE MITERED AFTER THE CONCRETE SLOPE PAVING HAS BEEN PLACED AND SUFFICIENTLY CURED. THE PIPE SHOULD BE MITERED AS CLOSE TO FLUSH WITH THE SLOPE PAVING AS POSSIBLE, AND NO HIGHER THAN 2" ABOVE THE SLOPE PAVING. HAND FINISHING AND/OR CUTTING MAY BE NECESSARY.

④ WHEN THE PIPE IS ON A SKEW, INSTALL THE HEADWALL AND MITER THE PIPE SO THAT THE CONCRETE SLOPE PAVING IS PERPENDICULAR TO THE ROADWAY. FOR HEADWALLS ON SKEWED PIPES, THE HEADWALL WIDTH, W, SHALL BE WIDENED, AS NEEDED, SO THAT THE OUTSIDE EDGE OF THE CONCRETE SLOPE PAVING IS A MINIMUM OF 2' FROM THE OUTER MOST EDGE OF THE PIPE.

5. THE DIMENSION 'A' IS BASED ON THE FINAL GRADED SLOPE. THE DIMENSION 'B' IS BASED ON CIRCULAR REINFORCED CONCRETE PIPE AT 0° SKEW FOR THE LISTED SLOPE. THE DIMENSION 'W' IS BASED ON THE DIAMETER, OR SPAN, OF THE PIPE. THE FINAL HEADWALL DIMENSIONS AND CONCRETE QUANTITIES MAY VARY BASED ON THE FINAL GRADED SLOPE, PIPE SKEW, AND/OR TYPE OF PIPE.
6. WOVEN WIRE REINFORCEMENT (WWF 6"x6" - W2.9xW2.9) IS REQUIRED FOR THE SLOPE PAVING AND TOE WALL. UTILIZE 2" CLEARANCE FROM ALL EDGES.
7. DIMENSIONS AND CONCRETE QUANTITIES SHOWN ARE FOR ONE (1) HEADWALL, INSTALLED ON A PIPE WITH SKEW = 0°.
8. AFTER THE PIPE HAS BEEN MITERED, ANCHOR THE PIPE TO THE CONCRETE SLOPE PAVING BY CORE DRILLING AND INSTALLING 1/2" DIAMETER x 7" LENGTH STEEL WEDGE ANCHORS (3" MINIMUM EMBEDMENT) ON 18" CENTERS ALONG THE SIDES OF THE PIPE. HOLE SIZE & DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE. NOTE: STEEL WEDGE ANCHORS ARE NOT REQUIRED FOR REINFORCED CONCRETE PIPE.

⑨ THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH A GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
SEE SHEET 2 FOR GRATE DETAILS

10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.

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

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) ④													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
15"	3'	3'-7½"	5'-3"	0.79	4'	4'-8¾"	5'-3"	0.97	6'	6'-11¾"	5'-3"	1.35	NO
18"	3'	4'-5¾"	5'-6"	0.89	4'	5'-10"	5'-6"	1.10	6'	8'-7¼"	5'-6"	1.54	NO
24"	3'	6'-2½"	6'-0"	1.11	4'	8'-1"	6'-0"	1.38	6'	11'-11"	6'-0"	1.93	SEE ⑨
30"	3'	7'-10¾"	6'-6"	1.33	4'	10'-3¾"	6'-6"	1.67	6'	15'-2½"	6'-6"	2.35	SEE ⑨

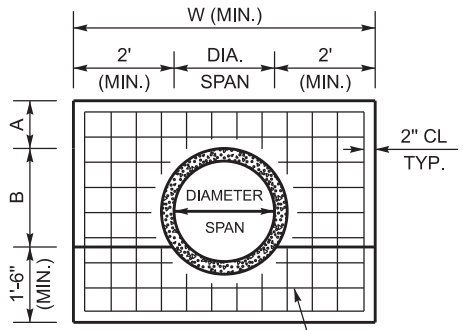
++ SEE SHEET 2 FOR DIMENSIONS OF HEADWALLS FOR PIPE OVER 30" DIAMETER ++

BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _ IN EACH

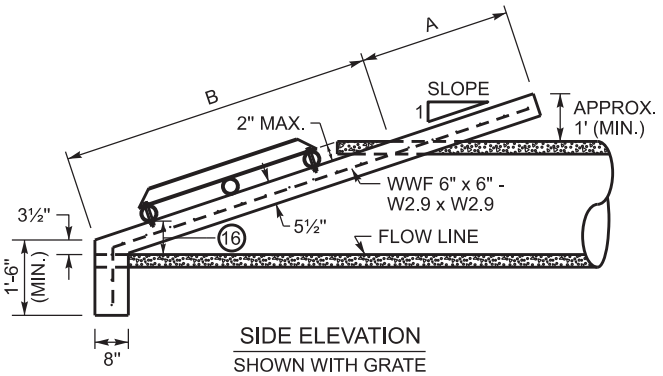
BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

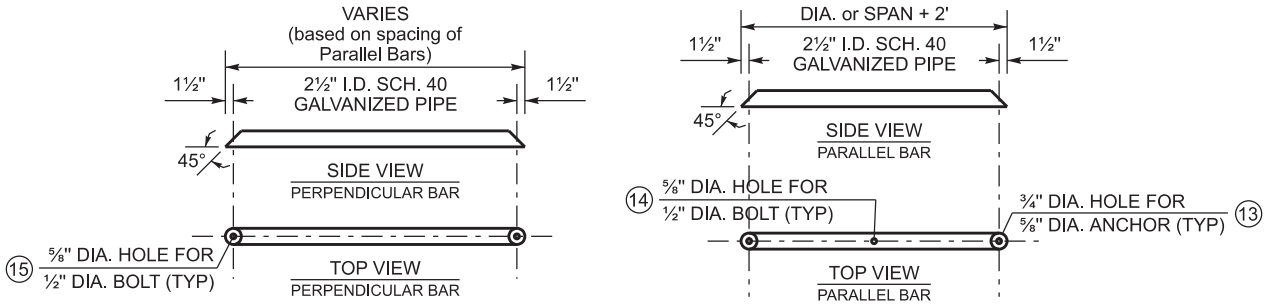
SLOPED & MITERED CONCRETE HEADWALL (SHEET 1 OF 2)



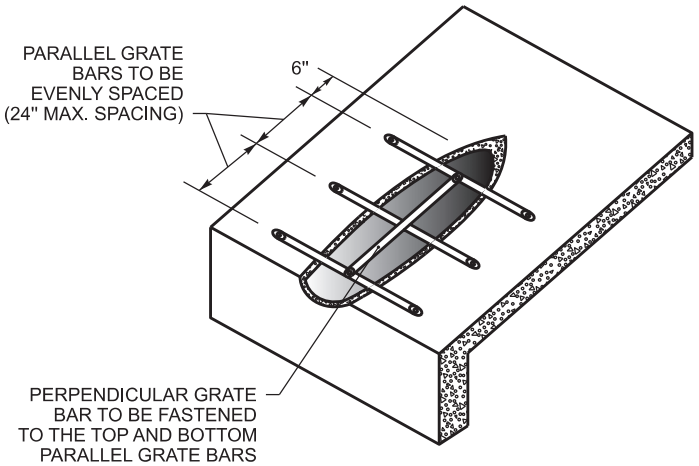
END ELEVATION
SHOWN WITH WOVEN WIRE REINFORCEMENT



SIDE ELEVATION
SHOWN WITH GRATE



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



ISOMETRIC VIEW
SHOWING HEADWALL WITH GRATE

~ NOTES ~

SEE SHEET 1 FOR NOTES 1 THRU 8

9. THE FOLLOWING SITUATIONS REQUIRE A HEADWALL WITH GRATE:
-24" DIAMETER PIPE ON GREATER THAN 30° SKEW
-30" DIAMETER PIPE ON GREATER THAN 15° SKEW
-PIPE WITH GREATER THAN 30" DIAMETER.
-ELLIPTICAL PIPE GREATER THAN 24" EQUIVALENT DIAMETER
10. ALL BOLTS AND HARDWARE SHALL BE RUST RESISTANT: ZINC PLATED, STAINLESS STEEL, OR STEEL THAT HAS BEEN GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
11. THE PIPE USED TO CONSTRUCT THE GRATE SHALL BE STEEL, SCHEDULE 40, CONFORMING TO ASTM A53, AND GALVANIZED IN ACCORDANCE WITH AASHTO M 111 AFTER FABRICATION.
12. ANY RAW METAL EXPOSED BY FIELD CUTTING AND/OR DRILLING SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND.
13. FASTEN PARALLEL BARS TO HEADWALL WITH ⅝" DIA. x 4½" LENGTH STEEL WEDGE ANCHORS, MINIMUM EMBEDMENT = 2¾" HOLE SIZE AND DEPTH, TORQUE, & INSTALLATION PROCEDURES PER RECOMMENDATION OF ANCHOR MANUFACTURE.
14. CENTER BOLT HOLE SHALL ONLY BE DRILLED IN THE TOP AND BOTTOM PARALLEL BARS.
15. FASTEN THE PERPENDICULAR BAR TO THE TOP AND BOTTOM PARALLEL BARS WITH ½" DIA. x 4" LENGTH HEX HEAD BOLTS, HEX HEAD NUTS, & FLAT WASHERS.
16. THE BOTTOM PARALLEL BAR IS TO BE PLACED SO THAT IT IS APPROX. 6" ABOVE THE FLOWLINE OF THE PIPE.

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

DIMENSIONS AND CONCRETE QUANTITIES (FOR PIPE WITH SKEW = 0°) (4)													
PIPE SIZE	3:1 SLOPE				4:1 SLOPE				6:1 SLOPE				GRATE REQUIRED
	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	A	B	W	CU. YDS. CONCRETE	
36"	3'	9'-7½"	7'-0"	1.57	4'	12'-6½"	7'-0"	1.98	6'	18'-6"	7'-0"	2.80	YES
42"	3'	11'-4"	7'-6"	1.83	4'	14'-9¼"	7'-6"	2.31	6'	21'-9½"	7'-6"	3.27	YES
48"	3'	12'-11"	8'-0"	2.07	4'	16'-10"	8'-0"	2.40	6'	24'-10"	8'-0"	3.33	YES

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

BID ITEM AND UNIT TO BID FOR PIPES BETWEEN 15 - 42 INCHES:
SLOPED & MITERED HEADWALL - _ IN EACH

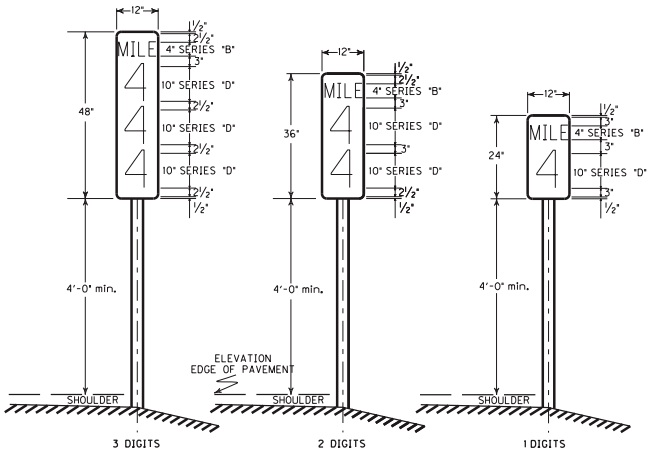
BID ITEM AND UNIT TO BID FOR PIPES LARGER THAN 42 INCHES:
HEADWALL (SLOPED & MITERED FOR _ INCH PIPE) EACH

NOT TO SCALE

SLOPED & MITERED CONCRETE HEADWALL (SHEET 2 OF 2)

COUNTY OF	ITEM NO.	SHEET NO.

MILEPOST MARKERS



TYPICAL SIGN PANEL DIMENSIONS AND MILEPOST LOCATIONS

MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

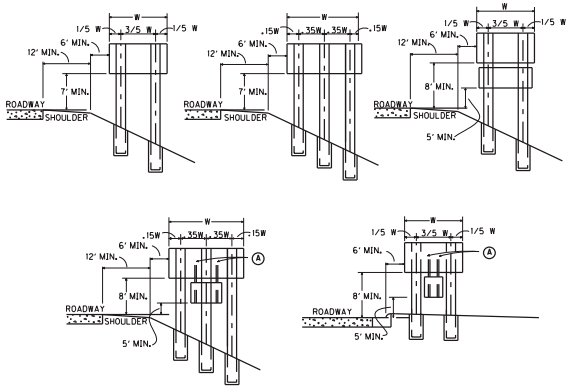
MILE POST NUMBER	STATION NUMBER * ____ BOUND LANE (S)

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:

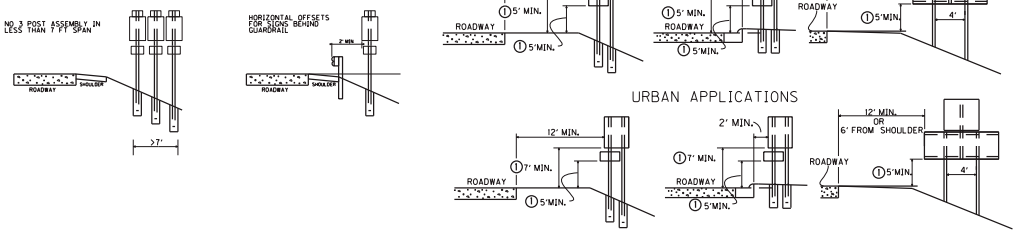
901 WEST MAIN STREET
LOUISVILLE, KY 40202
502-587-6624
270-307-7456

PANEL SIGNS



Ⓐ ATTACHMENT OF SECONDARY SIGN TO MAJOR SIGN IS TO BE MADE WITH TWO (2) 3" X 3" X 3/16" 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.

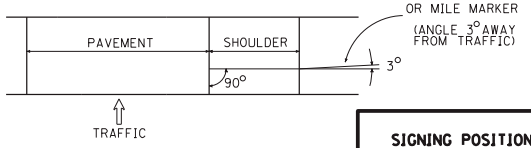
SHEETING SIGNS



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.

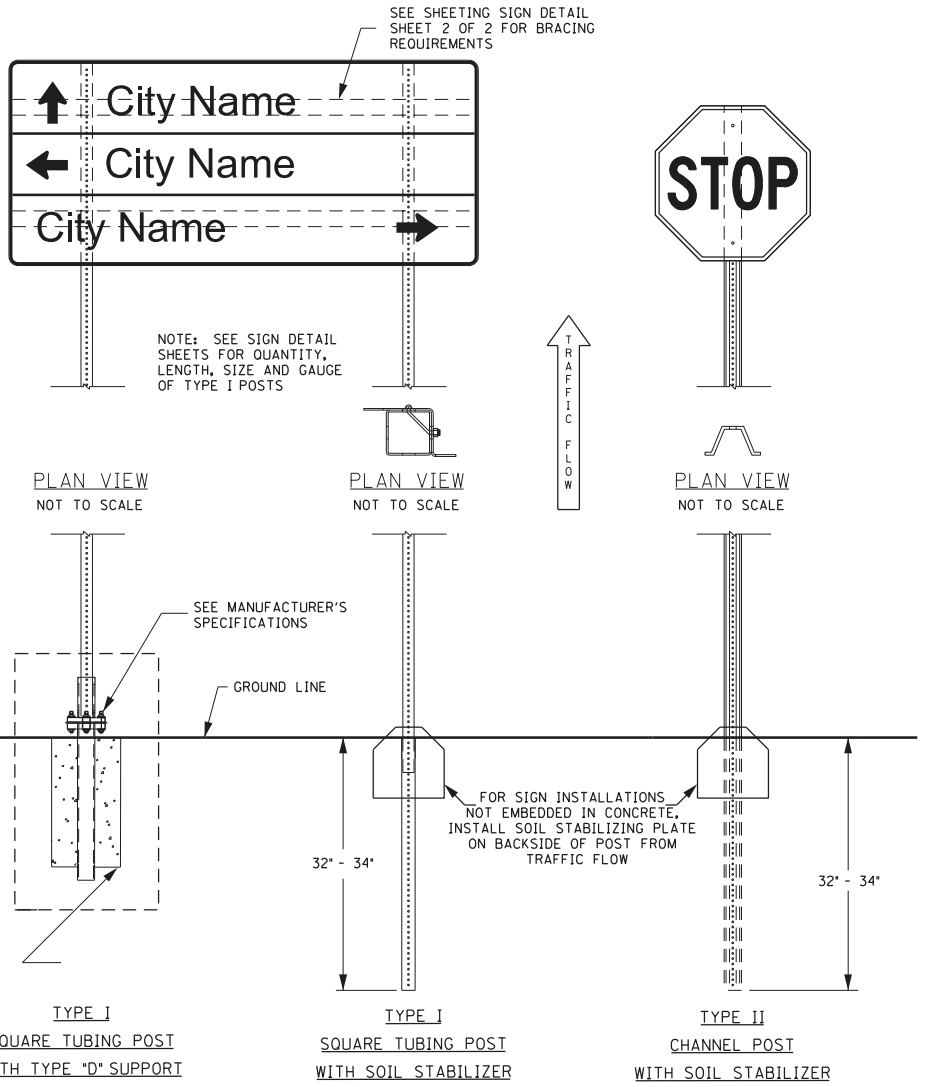
① NOT TO EXCEED 8' IN URBAN AREAS AND 6' IN RURAL AREAS UNLESS SPECIFIED BY THE ENGINEER

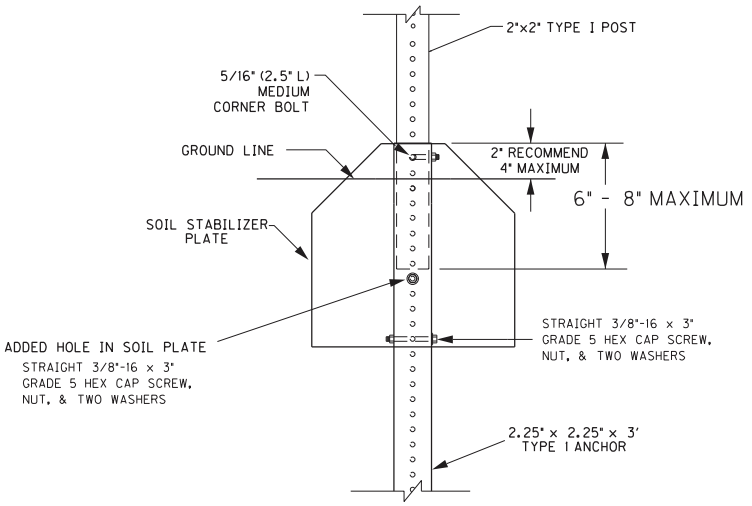
ORIENTATION ANGLE



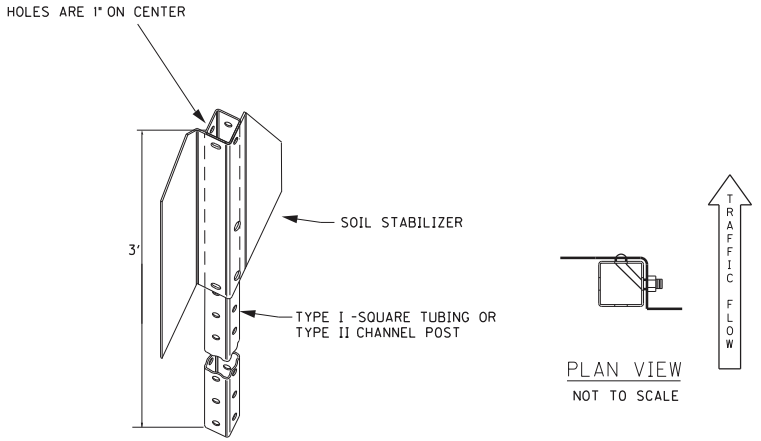
SIGNING POSITIONING DETAIL SHEET

COUNTY OF	ITEM NO.	SHEET NO.





SOIL STABILIZER DETAIL
FOR TYPE I POST



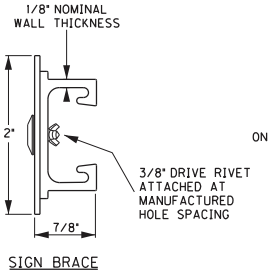
SOIL STABILIZER DETAIL

NOT TO SCALE

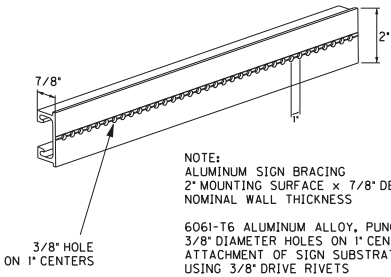
SHEETING SIGN DETAIL
SHEET 1 OF 2

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

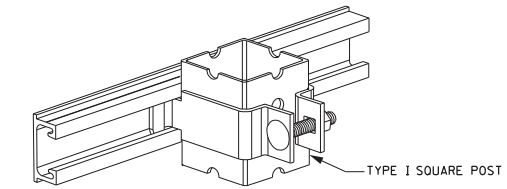


SIGN BRACE



NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8"
NOMINAL WALL THICKNESS

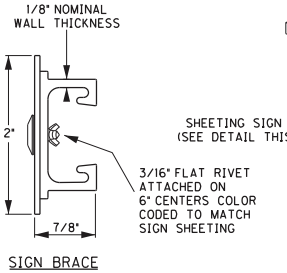
6061-T6 ALUMINUM ALLOY, PUNCHED WITH
3/8" DIAMETER HOLES ON 1" CENTERS FOR
ATTACHMENT OF SIGN SUBSTRATE
USING 3/8" DRIVE RIVETS



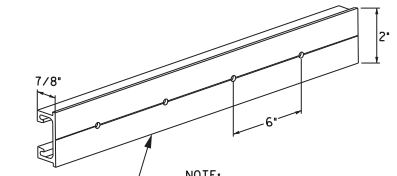
SQUARE POST CLAMP & BRACE

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

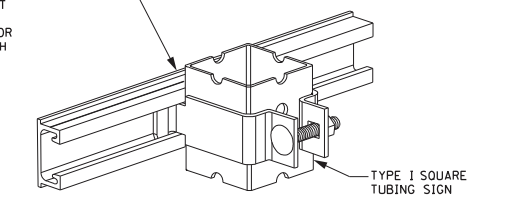


SIGN BRACE

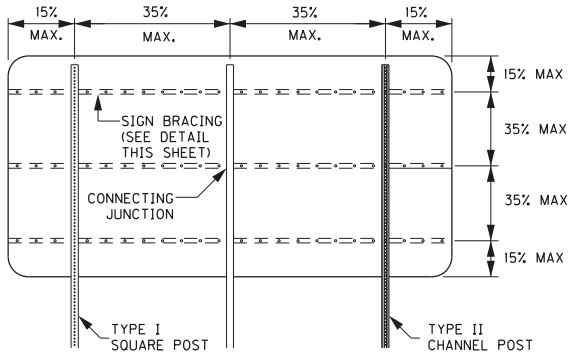


NOTE:
ALUMINUM SIGN BRACING
2" MOUNTING SURFACE x 7/8" DEPTH x 1/8"
NOMINAL WALL THICKNESS

6061-T6 ALUMINUM ALLOY, PUNCHED WITH
3/16" DIAMETER HOLES ON 6" CENTERS FOR
ATTACHMENT OF SIGN SUBSTRATE USING RIVETS



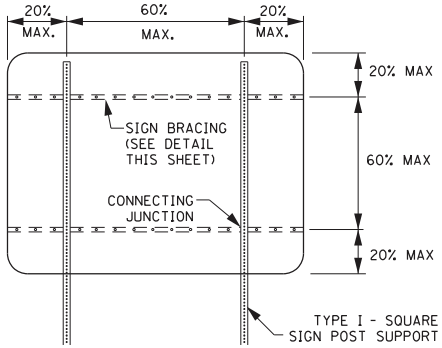
SQUARE POST CLAMP & BRACE



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.

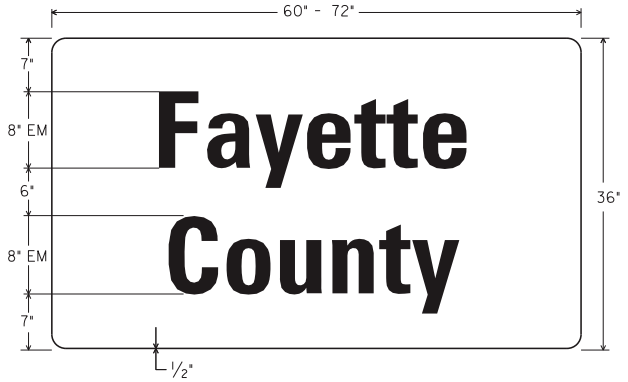
NOT TO SCALE

SHEETING SIGN DETAIL

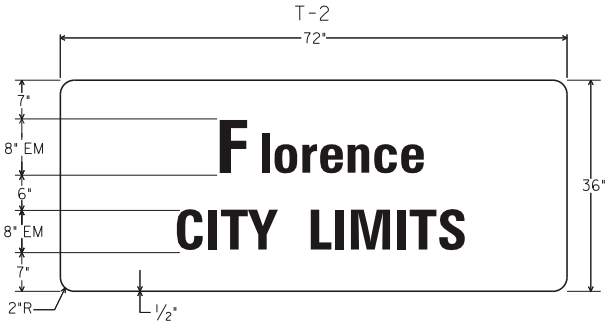
SHEET 2 OF 2

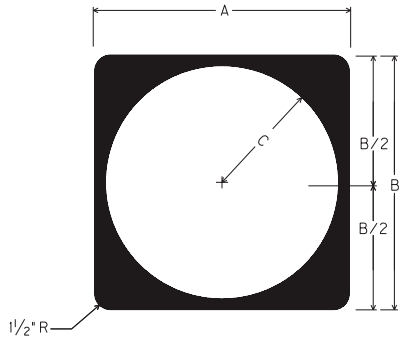
COUNTY OF	ITEM NO.	SHEET NO.

T-1

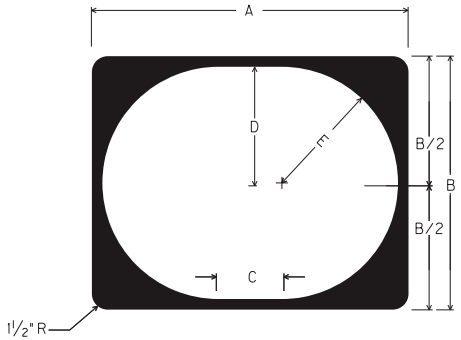


T-2





M1-5 (1 OR 2 DIGIT)



M1-5 (3 OR 4 DIGIT)

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

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

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

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

S-1

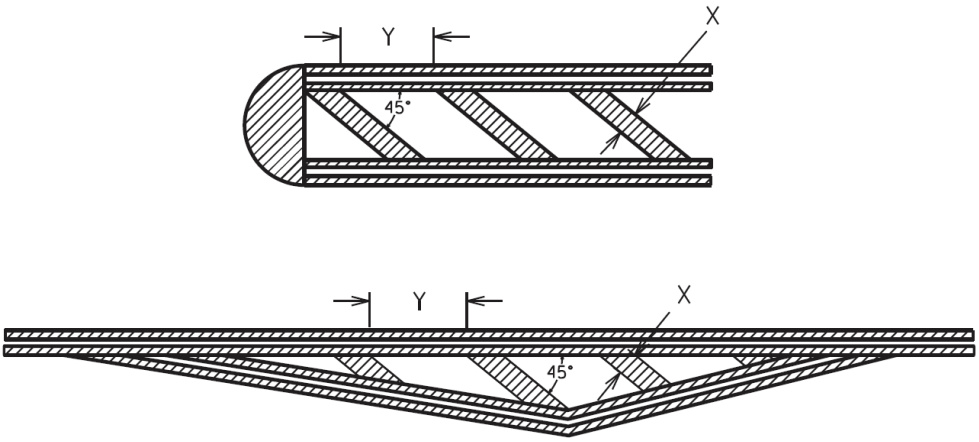


NOT TO SCALE

TYPICAL SIGNS

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.

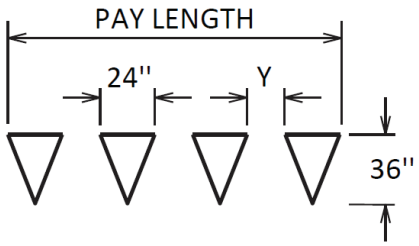
The Department will measure the finished in-place area of Cross-Hatch Pavement Markings in Square Feet. The Department will NOT measure overlaps or the void space between cross-hatching. See Section 717.04 for additional measurement information.

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

YIELD BAR PAVEMENT MARKING DETAIL

YIELD BAR DETAILS



NOTE: SPACING (Y) BETWEEN
TRIANGLES SHOULD BE 3'' - 12''

Triangles should be evenly spaced. The spacing (Y) between triangles will depend on the width of the lane the yield bar is for. Unless otherwise directed by the Engineer, space the triangles according to the lane width as follows:

Lane Width	# of Triangles	Spacing (Y)
9’	4	4”
10’	4	8”
11’	5	3”
12’	5	6”
13’	5	9”
14’	6	4”
15’	6	7”
16’	7	4”

In the event of larger lane widths, install triangles on equal spacing, as close to the 3” minimum 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 Yield Bars in Linear Feet. The measurement will include the void space between triangles. See Section 717.04 for additional measurement information.

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

Code	Pay Item	Pay Unit
22520EN	Pave Marking-Thermo Yield Bar-36 Inch	Linear Foot
26165ES717	Pave Mark TY 1 Tape Yield Bar-36 Inch	Linear Foot

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

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).

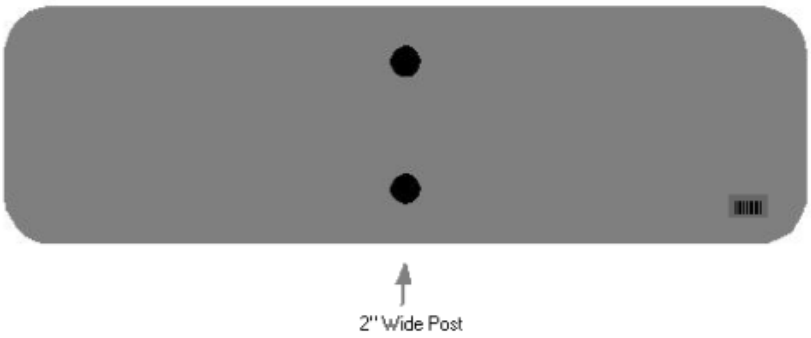
The installation of the permanent sign will be measured in accordance to Section 715.

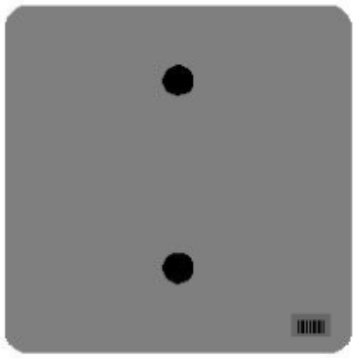
5.0 PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

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.

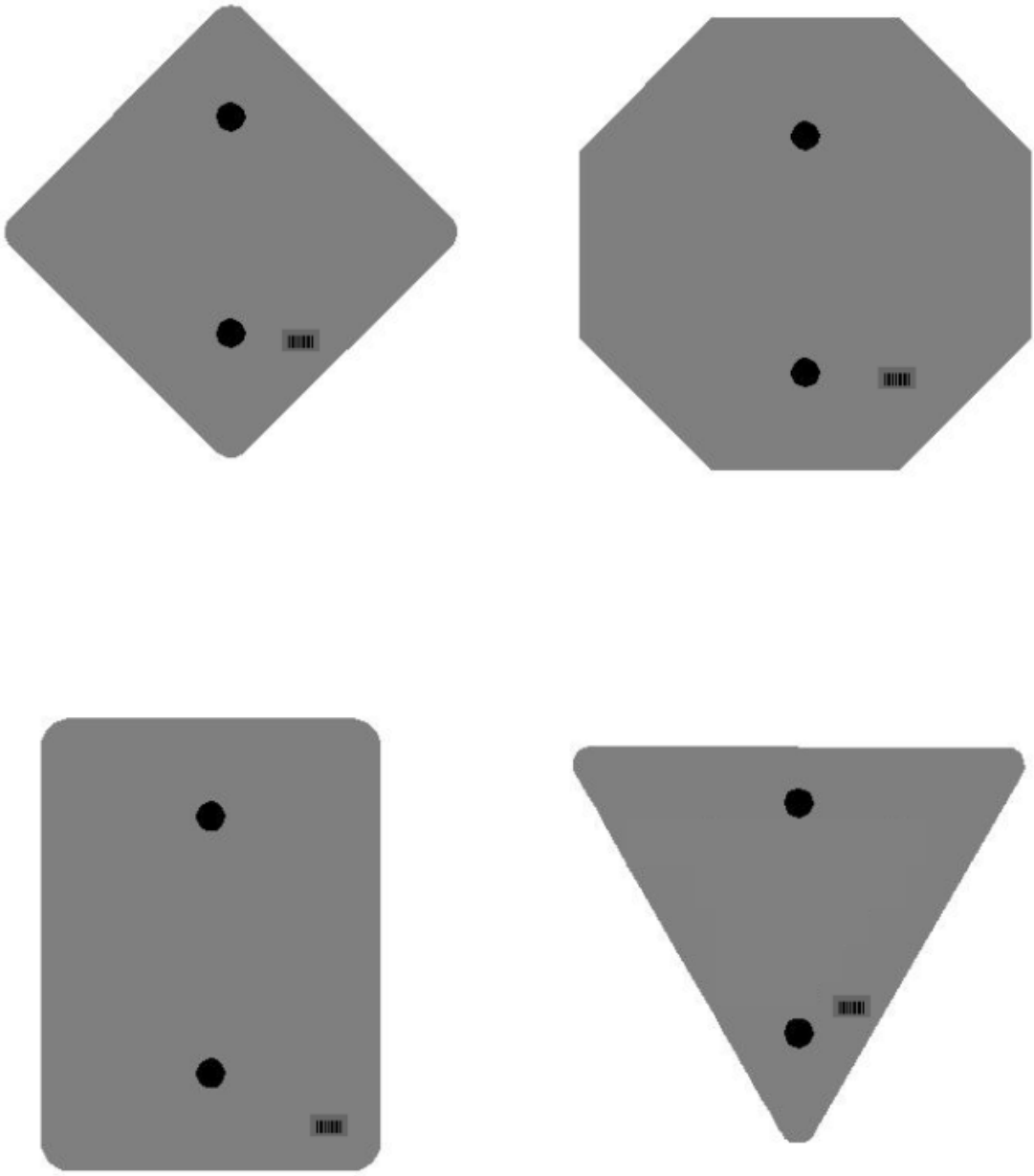
One Sign Post



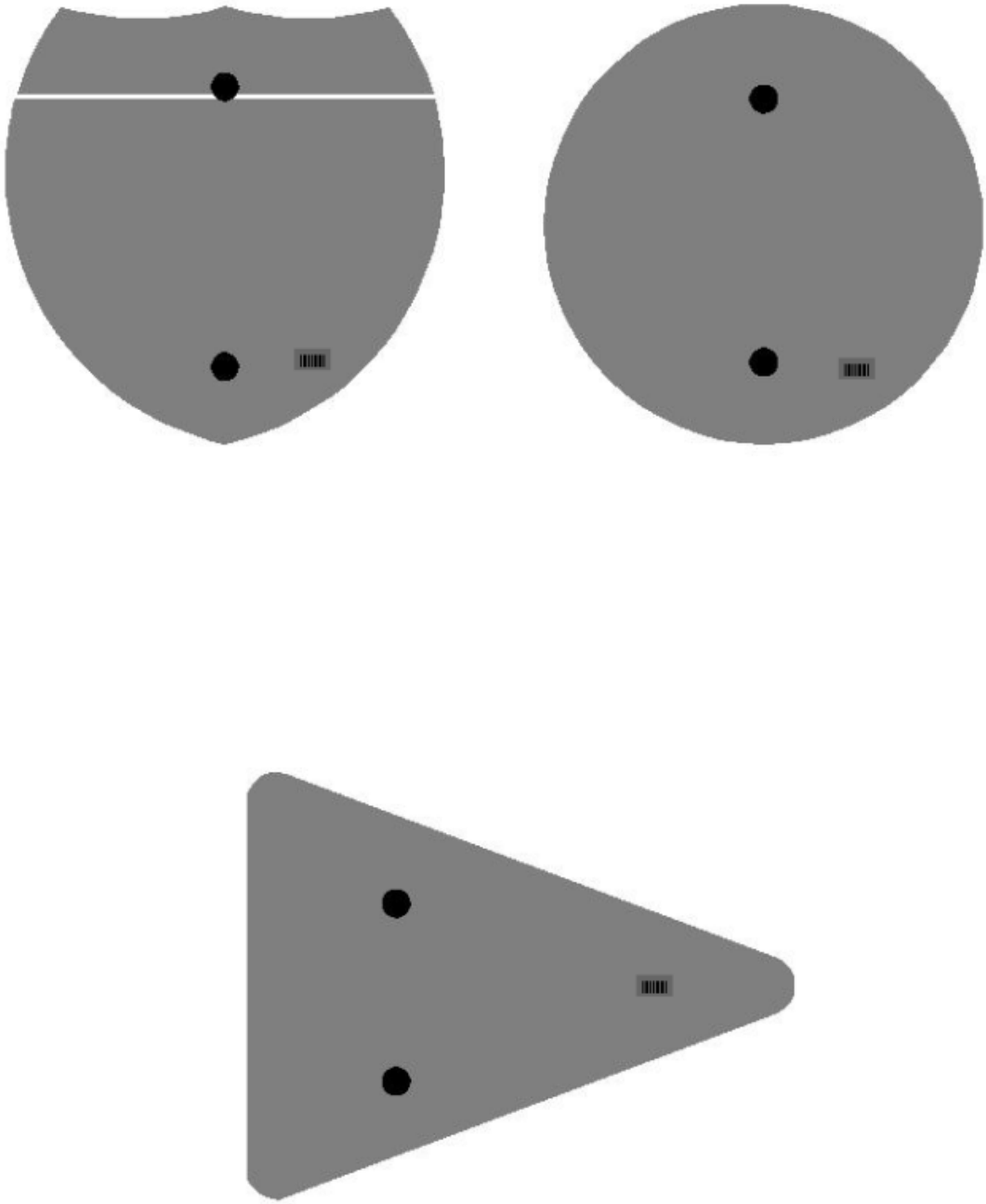




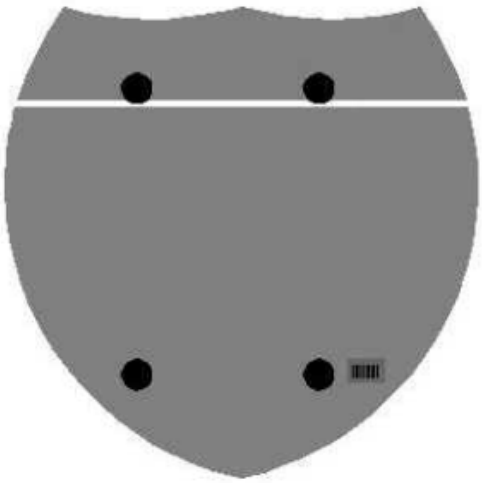
One Sign Post



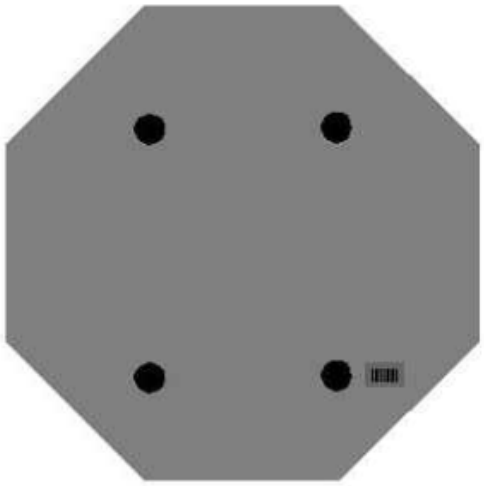
One Sign Post



Double Sign Post



Interstate
Shield

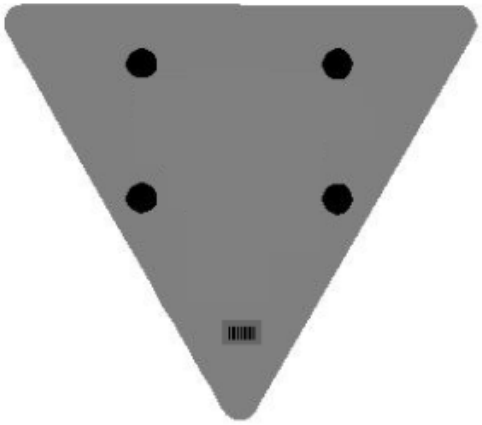


48" Stop

2 Post Signs







2020 STANDARD DRAWINGS THAT APPLY

ROADWAY

CONCRETE MEDIAN BARRIERS

CONCRETE BARRIER WALL TYPE 9T (TEMPORARY) RBM-115-10

~ DRAINAGE ~

BOX INLETS AND OUTLETS

DROP BOXES

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
DROP BOX INLET TYPE 13 (PIPE CHAMBER - SAG CONDITION) RDB-017-03
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - RISER) RDB-018-04
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - CHAMBER) RDB-019-04

SLOPED BOXES

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

PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS

FLUME INLET TYPE 1 ..... RDD-020-07
FLUME INLET TYPE 2 ..... RDD-021-07
CHANNEL LINING CLASS II AND III RDD-040-05

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS (12” – 24” PIPE) RDI-001-10
PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER PIPE RDI-020-10
EROSION CONTROL BLANKET SLOPE INSTALLATION RDI-040-01
EROSION CONTROL BLANKET CHANNEL INSTALLATION RDI-041-01
BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS, AND THEIR COMBINATIONS RDI-120-04
SLOTTED DRAIN PIPE (DETAIL SHEET) RDI-200-05

PERFORATED PIPE

PERFORATED PIPE TYPES AND COVER HEIGHTS RDP-001-06
PERFORATED PIPE FOR SUBGRADE DRAINAGE ON TWO-LANE (CLASS 2) AND MULTI-LANE ROADS RDP-005-05
PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE) RDP-006-04
PERFORATED PIPE HEADWALLS RDP-010-09

MISCELLANEOUS DRAINAGE

JUNCTION BOX RDX-001-06
JUNCTION BOX (DIMENSIONS AND QUANTITIES) RDX-002-04
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS RDX-160-06

Standard Drawings That Apply
Page 2 of 2

TEMPORARY SILT FENCE RDX-210-03
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC RDX-215-01
SILT TRAP - TYPE A RDX-220-05
SILT TRAP - TYPE B RDX-225-01

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS RGX-001-06
DETECTABLE WARNINGS RGX-040-03

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

STANDARD BARRIER MEDIAN RPM-010-06
MOUNTABLE MEDIAN RPM-011-06
CURB AND GUTTER, CURBS AND VALLEY GUTTER RPM-100-11
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT RPM-110-07
ISLAND CURB CONSTRUCTION DETAILS (RIGID & FLEXIBLE PAVEMENT) RPM-120-07

TRAFFIC

~ PERMANENT ~

TYPICAL MARKINGS AT SIGNALIZED INTERSECTIONS TPM-203
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

RUMBLE STRIPS

SHOULDER & EDGELINE RUMBLE STRIPS PLACEMENT DETAILS TPR-115

~ TEMPORARY ~

TRAFFIC CONTROL

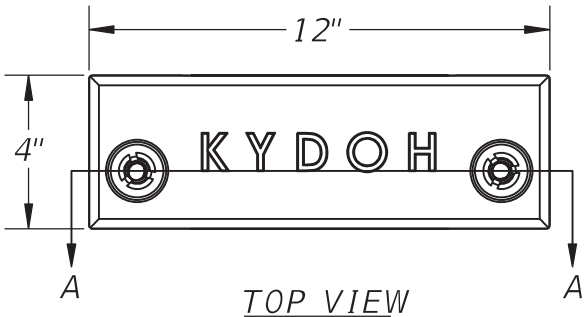
LANE CLOSURE MULTI-LANE HIGHWAY CASE I TTC-115-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE II TTC-120-04
SHOULDER CLOSURE TTC-135-03

DEVICES

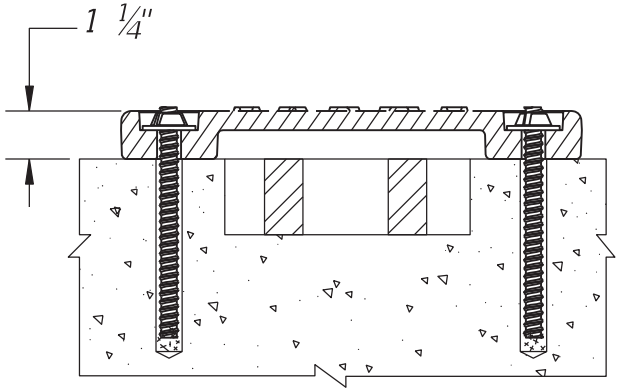
PAVEMENT CONDITION WARNING SIGNS TTD-125-03

STRIPING OPERATIONS

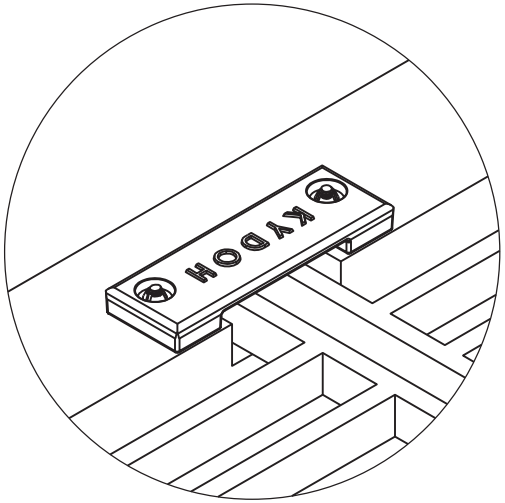
MOBILE OPERATION FOR PAINT STRIPING CASE I TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II TTS-105-02
MOBILE OPERATION FOR PAINT STRIPING CASE III TTS-110-02
MOBILE OPERATION FOR PAINT STRIPING CASE IV TTS-115-02
MOBILE OPERATION FOR DURABLE STRIPING CASE I TTS-120-02



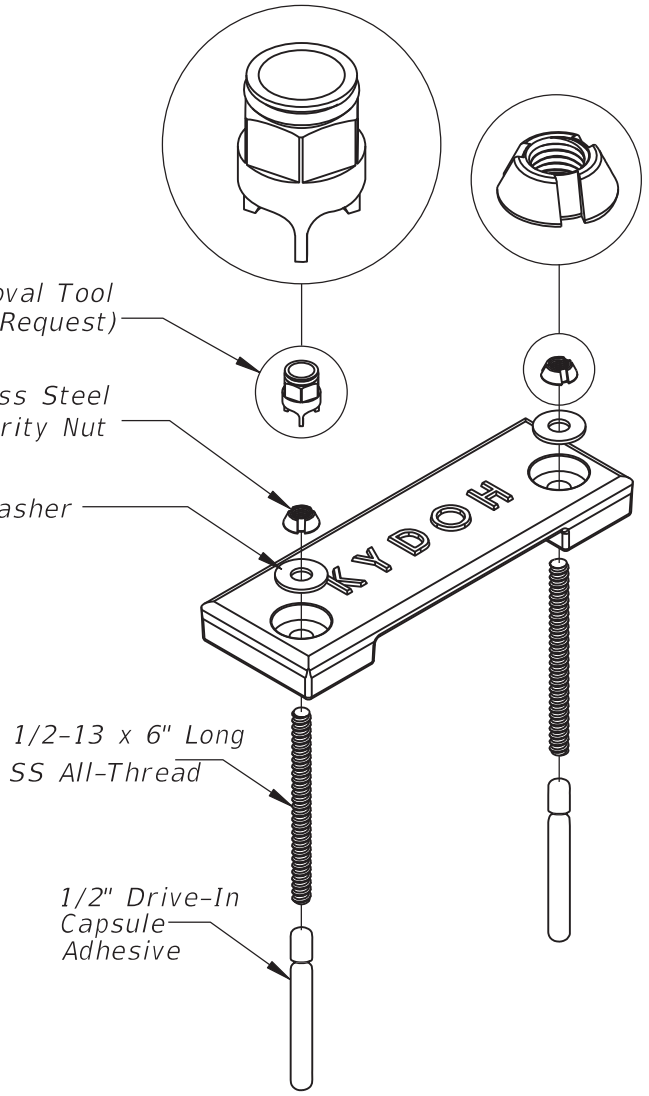
TOP VIEW



SECTION A-A



MOUNTED



BID ITEMS AND UNITS TO BID

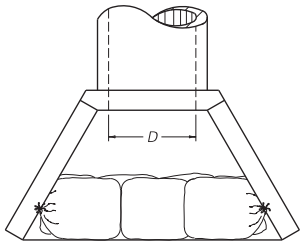
24585EC SECURITY PLATE ASSEMBLY	EACH

KENTUCKY
DEPARTMENT OF HIGHWAYS

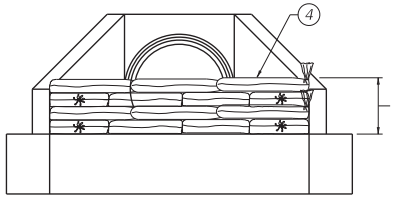
SECURITY PLATE
ASSEMBLY

SUBMITTED W. T. Sapp 02-26-2021
DIVISION DIRECTOR DATE

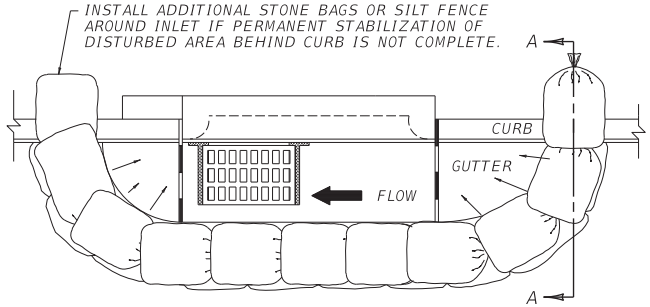
020



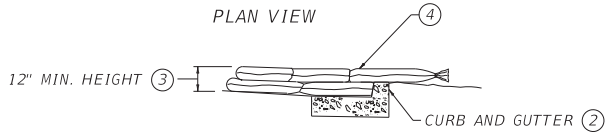
PLAN VIEW



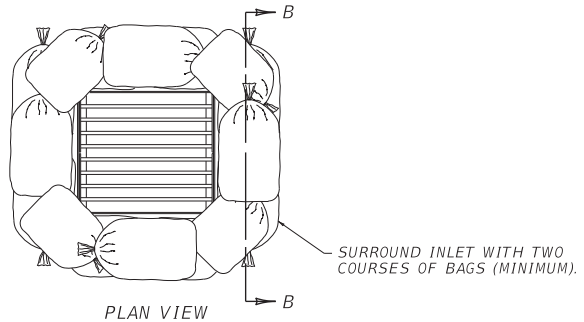
FRONT ELEVATION



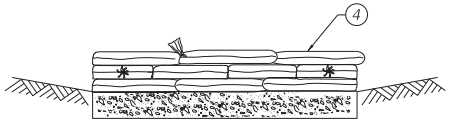
PLAN VIEW



SECTION A~A



PLAN VIEW



SECTION B~B

~ NOTES ~

BID ITEMS AND UNIT TO BID:

SILT TRAP TYPE C	EACH
CLEAN SILT TRAP TYPE C	EACH

1. SILT TRAP TYPE C SHALL INCLUDE GEOTEXTILE FABRIC BAGS, NO. 57 STONE, LABOR AND ALL INCIDENTALS NECESSARY FOR ONE COMPLETE INSTALLATION.
2. INLET PROTECTION IS SUITABLE FOR USE IN BOTH PAVED AND UNPAVED AREAS.
3. THE HEIGHT REQUIREMENT IS WAIVED IN CASES WHERE IT WILL CREATE AN UNACCEPTABLE PONDING SITUTATION ON THE PAVEMENT OR ON AN ADJACENT PROPERTY.
4. INTERWEAVE BAG ENDS TO FILL GAPS BETWEEN BAGS.
5. CONSTRUCT 18" X 30" BAGS OF NON-WOVEN CLASS 1 OR 2 GEOTEXTILE FABRIC CONFORMING TO SECTION 843 OF THE STANDARD SPECIFICATIONS. DOUBLE STITCH BAG SEAMS WITH 1 LB. POLYESTER THREAD. ATTACH ONE (1) TIE STRING TO EACH BAG. BAG OPENING SHALL BE ON 18" SIDE.
6. FILL BAGS WITH NO. 57 STONE BETWEEN ½ TO ⅔ FULL (50 LB TO 60 LB).
7. SILT TRAP TYPE C SHALL NOT BE USED IN BLUE LINE STREAMS.

SUBMITTED W. T. Sapon 05-08-2023
DIVISION DIRECTOR DATE

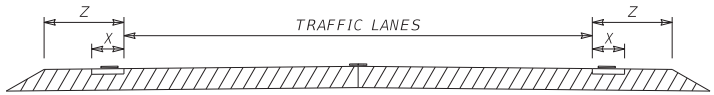
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 025 - SILT TRAP TYPE C

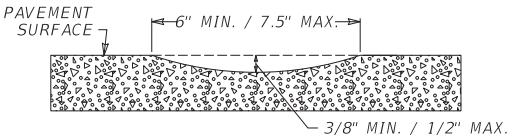
ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.16.2.267 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2168268\RDX230.DGN

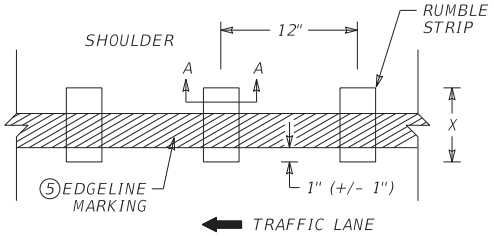
SHOULDER WIDTH (Z) ②	RUMBLE TYPE ①	RUMBLE LENGTH (X) ③
>=1' up to <3'	ELRS	8"
>=3' up to <6.5'	ELRS ⑥	8"
>=6.5' up to <8'	ELRS ⑥	12"
>=8'	ELRS ⑥	16"



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.

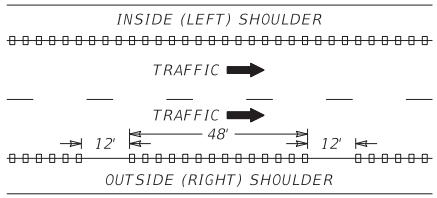
③ THE RUMBLE LENGTH (X) MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.

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

BID ITEMS AND UNIT TO BID

SHOULDER RUMBLE STRIPS	LF
EDGELINE RUMBLE STRIPS	LF

SUBMITTED _____ DIVISION DIRECTOR

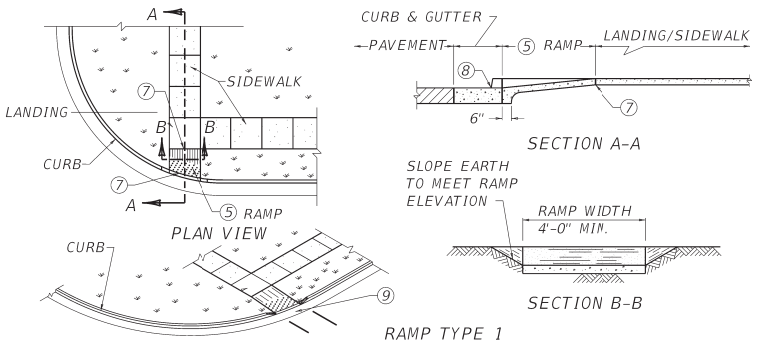
08-21-2023
DATE

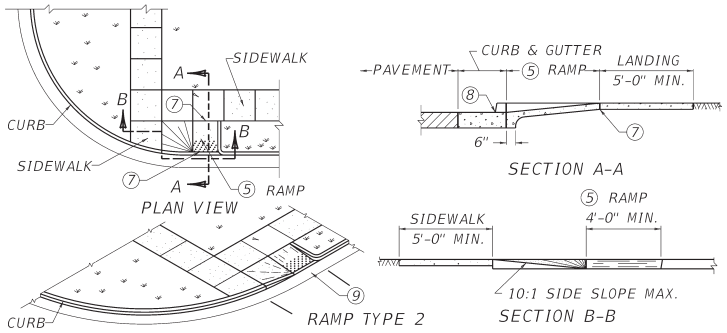
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

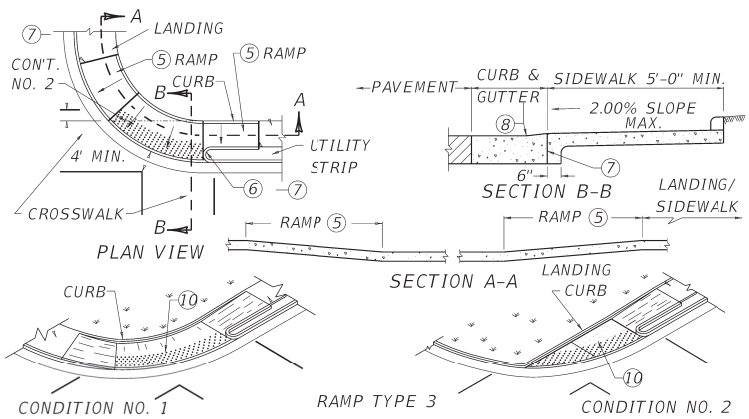
DRAWING TITLE: SEPIA 030 - EDGELINE RUMBLE STRIP DETAILS MULTI-LANE ROADWAYS AND RAMPS

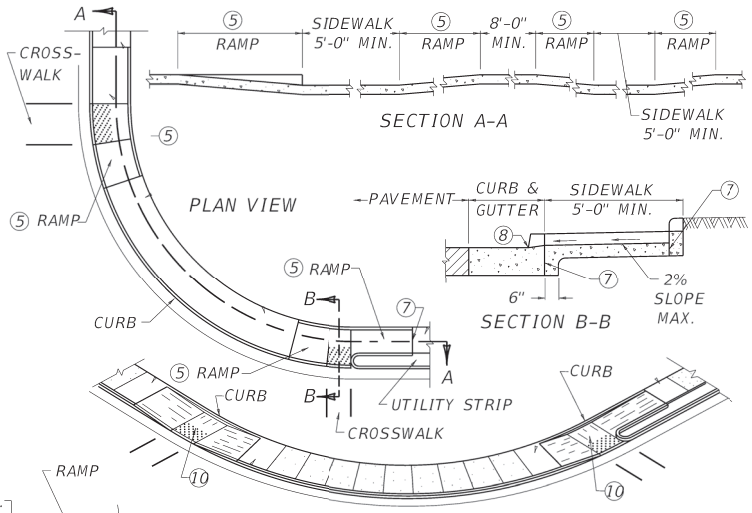
ITEM NO. COUNTY OF
SHEET NO.

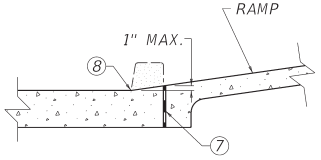
OpenRoads Designer v10.12.02.4 USER: cwillmerdinger FILE NAME: C:\PWWORK\KYTC_CWILLMERDINGER\D2267500\TPR130.DGN











~ NOTES ~

1. THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.
2. RAMPS SHALL BE PAID PER SQ. YD. OF 4" CONCRETE SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, CURB BEHIND RAMP AND LANDING. AND INCIDENTALS NECESSARY FOR CONSTRUCTION.
3. THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
4. RAMP TYPE 3 SHOULD BE USED PRIMARILY IN A RETROFIT TYPE CONDITION.

(5) CURB RAMP GRADE SHALL NOT EXCEED 12:1, CROSS SLOPE SHALL NOT EXCEED 2.00%. ON RETROFIT CURB RAMPS, GRADES OF 12.5% for 2'-0" OR 10% FOR 5'-0" ARE PERMISSABLE.

(6) CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4' OR GREATER. FOR UTILITY STRIPS LESS THAN 4', THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.

(7) ½" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.

(8) NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT. RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

(9) LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 5% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.

(10) LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 2.00% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.

BID ITEMS AND UNIT TO BID

SIDEWALK-4 IN CONCRETE	SQYD
DETECTABLE WARNINGS	SQFT

USE WITH CUR. STD. DWG.RGX-040

SUBMITTED W.T. Layson DIVISION DIRECTOR 05-03-2024 DATE

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: SEPIA 041 - SIDEWALK RAMPS

ITEM NO. COUNTY OF
SHEET NO.

OpenRoads Designer v10.12.02.4 USER: corinne.schurman FILE NAME: C:\PWWORK\CORRINE.SCHURMAN\D2341931\SEPIA041.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 05/16/2025

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
3	05/16/2025

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 04/01/2025

	Rates	Fringes
CARPENTER	$ 33.89	24.06
Diver	$ 51.21	24.06

PILEDRIVERMAN.....$ 34.39 24.06

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.

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

---

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

---

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

---

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

---

* SUKY2010-160 10/08/2001

	Rates	Fringes
Truck drivers:		
GROUP 1	$ 16.57 **	7.34
GROUP 2	$ 16.68 **	7.34
GROUP 3	$ 16.86 **	7.34
GROUP 4	$ 16.96 **	7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

GROUP 4 - Euclid & Other Heavy Earthmoving Equipment & Lowboy; Articulator Cat; 5-Axle Vehicle; Winch & A-Frame when used in transporting materials; Ross Carrier; Forklift when used to transport building materials; & Pavement Breaker

---

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

==========

** 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.

==========

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

254404

PROPOSAL BID ITEMS

Report Date 5/29/25

254404

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	1,544.00	TON		$	
0020	00078		CRUSHED AGGREGATE SIZE NO 2	578.00	TON		$	
0030	00190		LEVELING & WEDGING PG64-22	278.00	TON		$	
0040	00214		CL3 ASPH BASE 1.00D PG64-22	424.00	TON		$	
0050	00356		ASPHALT MATERIAL FOR TACK	14.50	TON		$	
0060	00387		CL3 ASPH SURF 0.38B PG76-22	1,864.00	TON		$	
0070	02676		MOBILIZATION FOR MILL & TEXT (HARDIN 4-954 HSIP)	1.00	LS		$	
0080	02677		ASPHALT PAVE MILLING & TEXTURING	216.00	TON		$	
0090	24888EC		CL2 ASPH SURF NO.4B PG64-22	1,240.00	TON		$	
0100	25005EC		CL4 ASPH SURF NO.4A PG76-22	141.00	TON		$	
0110	26248EC		ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0120	00003		CRUSHED STONE BASE	754.00	TON		$	
0130	00221		CL2 ASPH BASE 0.75D PG64-22	232.00	TON		$	
0140	00301		CL2 ASPH SURF 0.38D PG64-22	103.00	TON		$	
0150	00356		ASPHALT MATERIAL FOR TACK	0.50	TON		$	
0160	01810		STANDARD CURB AND GUTTER	6,651.00	LF		$	
0170	01811		STANDARD CURB AND GUTTER MOD	1,260.00	LF		$	
0180	01820		LIP CURB AND GUTTER	531.00	LF		$	
0190	01825		ISLAND CURB AND GUTTER	105.00	LF		$	
0200	01890		ISLAND HEADER CURB TYPE 1	98.00	LF		$	
0210	01921		STANDARD BARRIER MEDIAN TYPE 4	195.00	SQYD		$	
0220	01939		MOUNTABLE MEDIAN TYPE 3 FIBER REINFORCED	12.00	SQYD		$	
0230	02014		BARRICADE-TYPE III	16.00	EACH		$	
0240	02015		CEMENT CONCRETE ISLAND	577.00	SQYD		$	
0250	02084		JPC PAVEMENT-8 IN	640.00	SQYD		$	
0260	02159		TEMP DITCH	200.00	LF		$	
0270	02160		CLEAN TEMP DITCH	200.00	LF		$	
0280	02200		ROADWAY EXCAVATION	6,195.00	CUYD		$	
0290	02483		CHANNEL LINING CLASS II	12.00	TON		$	
0300	02545		CLEARING AND GRUBBING (2.3 AC)	1.00	LS		$	
0310	02562		TEMPORARY SIGNS	600.00	SQFT		$	
0320	02585		EDGE KEY	1,459.00	LF		$	
0330	02602		FABRIC-GEOTEXTILE CLASS 1	21.00	SQYD		$	
0340	02603		FABRIC-GEOTEXTILE CLASS 2	2,300.00	SQYD		$	
0350	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	617.00	SQYD	$2.00	$	$1,234.00
0360	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		$	

254404

PROPOSAL BID ITEMS

Report Date 5/29/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0370	02650		MAINTAIN & CONTROL TRAFFIC (HARDIN 4-956 HSIP)	1.00	LS		$	
0380	02654		TRUCK MOUNTED ATTENUATOR	2.00	EACH		$	
0390	02671		PORTABLE CHANGEABLE MESSAGE SIGN	8.00	EACH		$	
0400	02676		MOBILIZATION FOR MILL & TEXT (HARDIN 4-956 HSIP)	1.00	LS		$	
0410	02696		SHOULDER RUMBLE STRIPS	1,130.00	LF		$	
0420	02701		TEMP SILT FENCE	1,500.00	LF		$	
0430	02703		SILT TRAP TYPE A	2.00	EACH		$	
0440	02704		SILT TRAP TYPE B	2.00	EACH		$	
0450	02705		SILT TRAP TYPE C	2.00	EACH		$	
0460	02706		CLEAN SILT TRAP TYPE A	2.00	EACH		$	
0470	02707		CLEAN SILT TRAP TYPE B	2.00	EACH		$	
0480	02708		CLEAN SILT TRAP TYPE C	2.00	EACH		$	
0490	02720		SIDEWALK-4 IN CONCRETE	245.00	SQYD		$	
0500	02726		STAKING (HARDIN 4-954 HSIP)	1.00	LS		$	
0510	02775		ARROW PANEL	5.00	EACH		$	
0520	03171		CONC BARRIER WALL TYPE 9T	80.00	LF		$	
0530	05950		EROSION CONTROL BLANKET	510.00	SQYD		$	
0540	05952		TEMP MULCH	7,348.00	SQYD		$	
0550	05953		TEMP SEEDING AND PROTECTION	5,566.00	SQYD		$	
0560	05963		INITIAL FERTILIZER	0.60	TON		$	
0570	05964		MAINTENANCE FERTILIZER	0.50	TON		$	
0580	05985		SEEDING AND PROTECTION	4,825.00	SQYD		$	
0590	05990		SODDING	5,732.00	SQYD		$	
0600	05992		AGRICULTURAL LIMESTONE	7.00	TON		$	
0610	06511		PAVE STRIPING-TEMP PAINT-6 IN	31,334.00	LF		$	
0620	06542		PAVE STRIPING-THERMO-6 IN W	15,076.00	LF		$	
0630	06543		PAVE STRIPING-THERMO-6 IN Y	16,438.00	LF		$	
0640	06546		PAVE STRIPING-THERMO-12 IN W	251.00	LF		$	
0650	06547		PAVE STRIPING-THERMO-12 IN Y	246.00	LF		$	
0660	06566		PAVE MARKING-THERMO X-WALK-12 IN	2,618.00	LF		$	
0670	06568		PAVE MARKING-THERMO STOP BAR-24IN	331.00	LF		$	
0680	06573		PAVE MARKING-THERMO STR ARROW	6.00	EACH		$	
0690	06574		PAVE MARKING-THERMO CURV ARROW	45.00	EACH		$	
0700	06575		PAVE MARKING-THERMO COMB ARROW	3.00	EACH		$	
0710	06578		PAVE MARKING-THERMO MERGE ARROW	3.00	EACH		$	
0720	08100		CONCRETE-CLASS A	25.00	CUYD		$	
0730	10020NS		FUEL ADJUSTMENT	6,381.00	DOLL	$1.00	$	$6,381.00
0740	10030NS		ASPHALT ADJUSTMENT	16,030.00	DOLL	$1.00	$	$16,030.00
0750	20550ND		SAWCUT PAVEMENT	8,060.00	LF		$	
0760	20782NS714		PAVE MARKING THERMO-BIKE	34.00	EACH		$	
0770	21289ED		LONGITUDINAL EDGE KEY	866.00	LF		$	
0780	22520EN		PAVE MARKING-THERMO YIELD BAR-36 IN	30.00	LF		$	
0790	22664EN		WATER BLASTING EXISTING STRIPE	165.00	LF		$	
0800	23158ES505		DETECTABLE WARNINGS	396.00	SQFT		$	
0810	23974EC		BIKE PATH	6.00	SQYD		$	
0820	24386EC		PAVE MARKING THERMO-BIKE LANE ARROW	34.00	EACH		$	
0830	24964EC		FINE MILLING	36,047.00	SQYD		$	

254404

PROPOSAL BID ITEMS

Report Date 5/29/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0840	26248EC		ELECTRONIC DELIVERY MGMT SYSTEM - AGG	1.00	LS		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0850	00462		CULVERT PIPE-18 IN	54.00	LF		$	
0860	00521		STORM SEWER PIPE-15 IN	1,358.00	LF		$	
0870	00522		STORM SEWER PIPE-18 IN	586.00	LF		$	
0880	00981		SLOTTED DRAIN PIPE-15 IN	10.00	LF		$	
0890	01000		PERFORATED PIPE-4 IN	635.00	LF		$	
0900	01010		NON-PERFORATED PIPE-4 IN	80.00	LF		$	
0910	01020		PERF PIPE HEADWALL TY 1-4 IN	3.00	EACH		$	
0920	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		$	
0930	01559		DROP BOX INLET TYPE 13G	19.00	EACH		$	
0940	01568		DROP BOX INLET TYPE 13S	5.00	EACH		$	
0950	01642		JUNCTION BOX-18 IN	2.00	EACH		$	
0960	01690		FLUME INLET TYPE 1	1.00	EACH		$	
0970	01691		FLUME INLET TYPE 2	1.00	EACH		$	
0980	01740		CORED HOLE DRAINAGE BOX CON-4 IN	5.00	EACH		$	
0990	24814EC		PIPELINE INSPECTION	1,388.00	LF		$	
1000	26130ED		SLOPED AND MITERED HEADWALL-15 IN	12.00	EACH		$	
1010	26131ED		SLOPED AND MITERED HEADWALL-18 IN	3.00	EACH		$	

Section: 0004 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1020	02654		TRUCK MOUNTED ATTENUATOR	3.00	EACH		$	
1030	06406		SBM ALUM SHEET SIGNS .080 IN	576.00	SQFT		$	
1040	06407		SBM ALUM SHEET SIGNS .125 IN	467.00	SQFT		$	
1050	06411		STEEL POST TYPE 2	1,183.00	LF		$	
1060	06490		CLASS A CONCRETE FOR SIGNS	1.75	CUYD		$	
1070	06511		PAVE STRIPING-TEMP PAINT-6 IN	23,918.00	LF		$	
1080	06542		PAVE STRIPING-THERMO-6 IN W	8,731.00	LF		$	
1090	06543		PAVE STRIPING-THERMO-6 IN Y	7,483.00	LF		$	
1100	06546		PAVE STRIPING-THERMO-12 IN W	1,500.00	LF		$	
1110	06546		PAVE STRIPING-THERMO-12 IN W (2' WITH 6' GAPS)	582.00	LF		$	
1120	06562		PAVE MARKING-THERMO R 6 FT	2.00	EACH		$	
1130	06563		PAVE MARKING-R/R XBUCKS 16 IN	43.00	LF		$	
1140	06566		PAVE MARKING-THERMO X-WALK-12 IN	100.00	LF		$	
1150	06568		PAVE MARKING-THERMO STOP BAR-24IN	35.00	LF		$	
1160	06570		PAVE MARKING-PAINT CROSS-HATCH 2' WITH 20' GAPS, WHITE)	179.00	SQFT		$	
1170	06570		PAVE MARKING-PAINT CROSS-HATCH 2' WITH 20' GAPS, YELLOW)	120.00	SQFT		$	
1180	06573		PAVE MARKING-THERMO STR ARROW	9.00	EACH		$	
1190	06574		PAVE MARKING-THERMO CURV ARROW	17.00	EACH		$	

PROPOSAL BID ITEMS

254404

Report Date 5/29/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1200	06575		PAVE MARKING-THERMO COMB ARROW	11.00	EACH		$	
1210	06576		PAVE MARKING-THERMO ONLY	2.00	EACH		$	
1220	06601NC		PAVE MARKING-PAINT WORDS "BYPASS"	3.00	EACH		$	
1230	06601NC		PAVE MARKING-PAINT WORDS "NORTH"	1.00	EACH		$	
1240	06601NC		PAVE MARKING-PAINT WORDS "SOUTH"	2.00	EACH		$	
1250	21596ND		GMSS TYPE D	7.00	EACH		$	
1260	21596ND		GMSS TYPE D (SURFACE MOUNT)	15.00	EACH		$	
1270	22520EN		PAVE MARKING-THERMO YIELD BAR-36 IN	111.00	LF		$	
1280	22664EN		WATER BLASTING EXISTING STRIPE	7,069.00	LF		$	
1290	22680EN		QWICK CURB MEDIAN SEPARATOR	240.00	LF		$	
1300	23871EC		PAVE STRIPE-WET REF TAPE-6 IN Y	473.00	LF		$	
1310	23872EC		PAVE STRIPE-WET REF TAPE-6 IN W	950.00	LF		$	
1320	24115EC		ROUNDABOUT ARROW	9.00	EACH		$	
1330	24631EC		BARCODE SIGN INVENTORY	185.00	EACH		$	
1340	24679ED		PAVE MARK THERMO CHEVRON (4' AT 40' SPACING, WHITE)	96.00	SQFT		$	
1350	24683ED		PAVE MARKING-THERMO DOTTED LANE EXTEN (2' WITH 6' GAPS - WHITE)	350.00	LF		$	
1360	24889EC		PAVE MARKING-THERMO U-TURN	2.00	EACH		$	
1370	24899EC		PAVE MARKING-THERMO ELONG ROUTE SHIELD	3.00	EACH		$	

Section: 0005 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1380	02726		STAKING (HARDIN 4-956 HSIP)	1.00	LS		$	
1390	04916		SIGNAL-PEDESTRIAN	1.00	EACH		$	
1400	23749EC		PEDESTRIAN SIGNAL PEDESTAL	1.00	EACH		$	
1410	26171EC		RECTANGULAR RAPID FLASHING BEACON	2.00	EACH		$	
1420	26192EC		PAVE MARKING-THERMO SHARED LANE MARKING	2.00	EACH		$	

Section: 0006 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1430	04820		TRENCHING AND BACKFILLING	2,525.00	LF		$	
1440	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	8.00	EACH		$	
1450	21543EN		BORE AND JACK CONDUIT	425.00	LF		$	
1460	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	2,950.00	LF		$	

Section: 0007 - DEMOBILIZATION

PROPOSAL BID ITEMS

254404

Page 5 of 5

Report Date 5/29/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1470	**02568**		**MOBILIZATION**	**1.00**	**LS**		**$**	
1480	**02569**		**DEMOBILIZATION**	**1.00**	**LS**		**$**	