



CALL NO. 423

CONTRACT ID. 252311

MCCRACKEN COUNTY

FED/STATE PROJECT NUMBER 073GR25P073 - FD05 & FD04

DESCRIPTION KENTUCKY AVENUE (US 45X)

WORK TYPE ASPHALT RESURFACING

PRIMARY COMPLETION DATE 10/31/2025

LETTING DATE: July 24,2025

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 24,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 01

CONTRACT ID - 252311
073GR25P073 - FD05 & FD04
COUNTY - MCCRACKEN
PCN - MP073045X25W1
FD05 073 045X 000-003

KENTUCKY AVENUE (US 45X OMIT MP 0.416-1.551) (MP 0.000) BEGIN AT US 45 EXTENDING NORTH TO 42 FEET SOUTH OF KY-3238/US-60X (MP 2.111), A DISTANCE OF 02.11 MILES.ASPHALT RESURFACING
GEOGRAPHIC COORDINATES LATITUDE 37:04:47.00 LONGITUDE 88:36:45.00
ADT 5,236

PCN - MP073045X25W2
FD04 073 045X 000-003

KENTUCKY AVE. (US 45X) (MP 0.000) BEGIN AT US 45 EXTENDING NORTH TO 42 FEET SOUTH OF KY-3238/US-60X (MP 2.111), A DISTANCE OF 02.11 MILES.SIGNS
GEOGRAPHIC COORDINATES LATITUDE 37:04:47.00 LONGITUDE 88:36:45.00
ADT 5,200

COMPLETION DATE(S):
COMPLETED BY 10/31/2025 APPLIES TO ENTIRE CONTRACT

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.

Revised: 1/1/2025

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 \(dot.gov\)](#)

Effective - June 26, 2025, Letting

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.

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

SURFACING AREAS

The Department estimates the mainline surfacing width to be an average of 45 feet.

The Department estimates the total mainline area to be surfaced to be 24,658 square yards.

The Department estimates the shoulder width to be 0 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 0 square yards.

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.

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION A

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

Special Notes Applicable to Project General Notes & Description of Work

CAUTION

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

STATIONING

The contractor is advised that the planned locations of work were established using both stationing and the Route Milepoint Log. The stationing begins at the western edge of the intersection of Washington St. (Kentucky Ave.) and S 28th St. which corresponds to a stationing of 100+00. The begin Milepoint is 0.000 at the intersection of Washington St. (Kentucky Ave.) and S 28th St. **NOTE:** The existing mile marker signs may not correspond to the proposed work locations.

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.

General Notes & Description of Work
Page 2 of 3

DESCRIPTION OF WORK

This project contains work to be paid for using multiple funding sources. The Contractor shall work with the Engineer to document work and the appropriate bid items for measurement by the Engineer. The work and funding source is listed in the following sections. 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:

FD05 073 0045X 000-003

Asphalt Pavement Resurfacing. The asphalt roadway is to be resurfaced from the asphalt-concrete joint located midblock of S 28th St. – S 27th St. to the asphalt-concrete joint located midblock of S 24th St. – Otis Dinning Dr. Additional resurfacing will occur for the asphalt surface between the asphalt-concrete joint at the intersection Walter Jetton Blvd. to just west of the intersection of S 3rd St. before the crosswalk markings. Note that the concrete surface between these resurfacing segments will remain. Other items that may be associated with the pavement resurfacing include removal of existing pavement by milling and texturing, leveling and wedging (if determined by the Engineer), and application of asphalt material for tack.

Striping and Pavement Markings. The Contractor shall layout and pre-mark (with methods approved by the Engineer) 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.

Base Failure Repairs. An area has been identified along the route for Base Failure Repair. The repair location and dimensions listed on the Base Failure Repair Summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Refer to the Special Note for Base Failure Repair for more details on this item of work.

Inlaid Pavement Markers. The corridor surface is planned for inlaid pavement markers to be constructed in the appropriate locations. Refer to the Standard Specifications, Standard Drawings, and the Special Note for Constructing Inlaid Pavement Markers on Portland Cement Pavement for placement information and application details.

Radar Presence Detectors. Work to include the installation and activation of Radar Detection equipment as identified in this proposal, detailed in the Special Note for Radar Presence Detection, and to the satisfaction of the District Traffic Engineer.

Sidewalk Ramp Reconstruction. Sidewalk ramps throughout the corridor are identified for reconstruction. Refer to the summary and Standard Drawings for more information on reconstructing the sidewalk and ramps to be ADA compliant.

Reconstruct Curb and Gutter. Throughout the corridor, lengths of existing standard curb and gutter are damaged and need to be reconstructed. The repair locations listed on the Sidewalk Summary is approximate only. The Engineer will determine actual repair locations at the time of construction.

General Notes & Description of Work
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FD04

Striping and Pavement Markings. The existing striping and markings on the concrete surfaces throughout the corridor are to be removed/water-blasted and replaced according to the relevant summaries and striping plans. The Contractor shall layout and pre-mark (with methods approved by the Engineer) 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.

Proposed Signage. Work will include the installation of proposed signage throughout the corridor with details and locations listed in the Sign Summary. 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. The Contractor shall review the signing layout and adjust to minimize/mitigate potential conflicts. Refer and utilize the information in the Manual on Uniform on Traffic Control Devices (MUTCD). The Contractor shall layout and pre-mark (with methods approved by the Engineer) the proposed signage. Obtain approval of the pre-marked layout from the Engineer and/or District Traffic Engineer prior to ordering or installing the proposed signage.

Pedestrian Refuge Island. To be constructed in the median of the newly striped configuration located at approx. MP 0.300 and STA. 116+35 (midblock of S 25th St. – S 24th St.). Refuge island to be constructed per the Pedestrian Refuge Island Detail Sheet and outfitted with an RRFB system outlined in the US 45X Midblock RRFB Detail Sheet.

Quick Kurb Model L60 Y Mega Marker System. Construction of a median separator curb is planned for the approaches of KY 16 near the railroad crossing at approx. STA. 176+00. The system is to be added within the Two-Way Left-Turn Lane in the orientation depicted in the striping plans.

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 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 BARCODE LABEL ON PERMANENT SIGNS

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

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

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

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

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

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

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

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

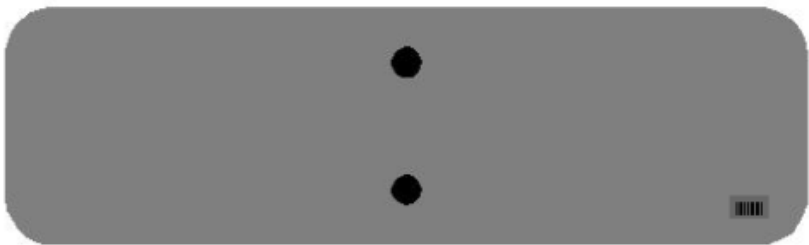
The installation of the permanent sign will be measured in accordance to Section 715.

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

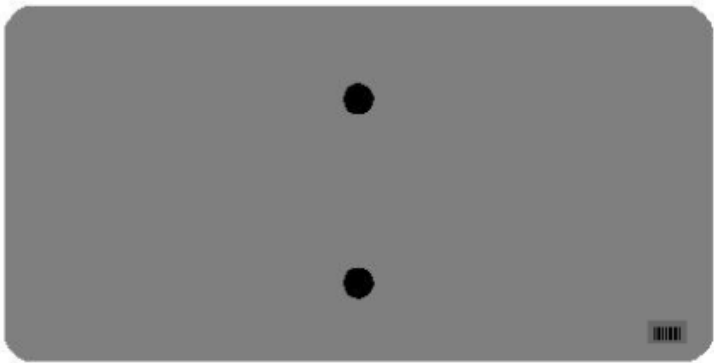
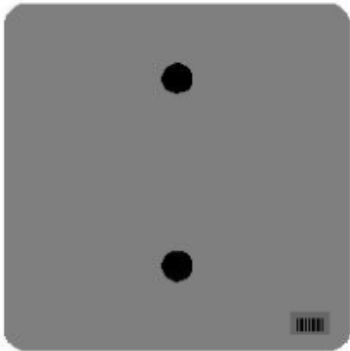
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

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

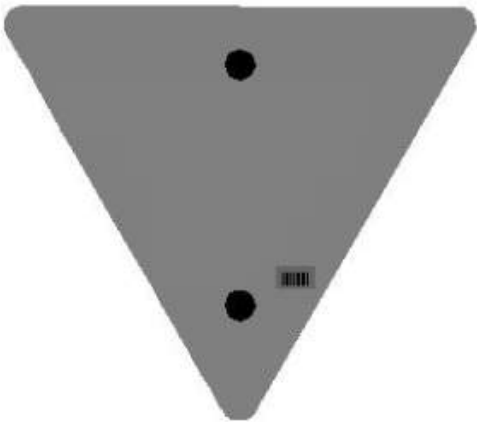
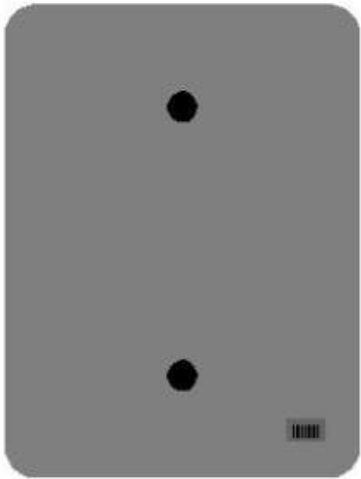
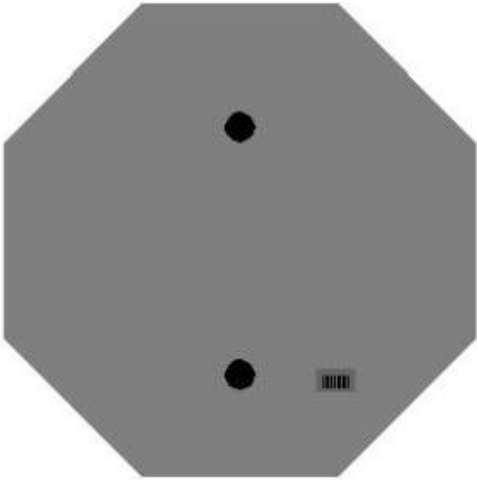
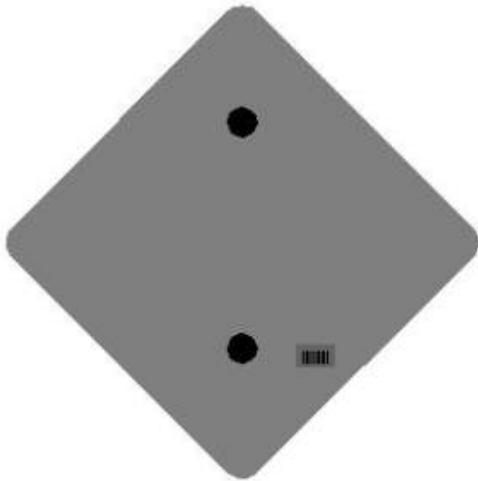
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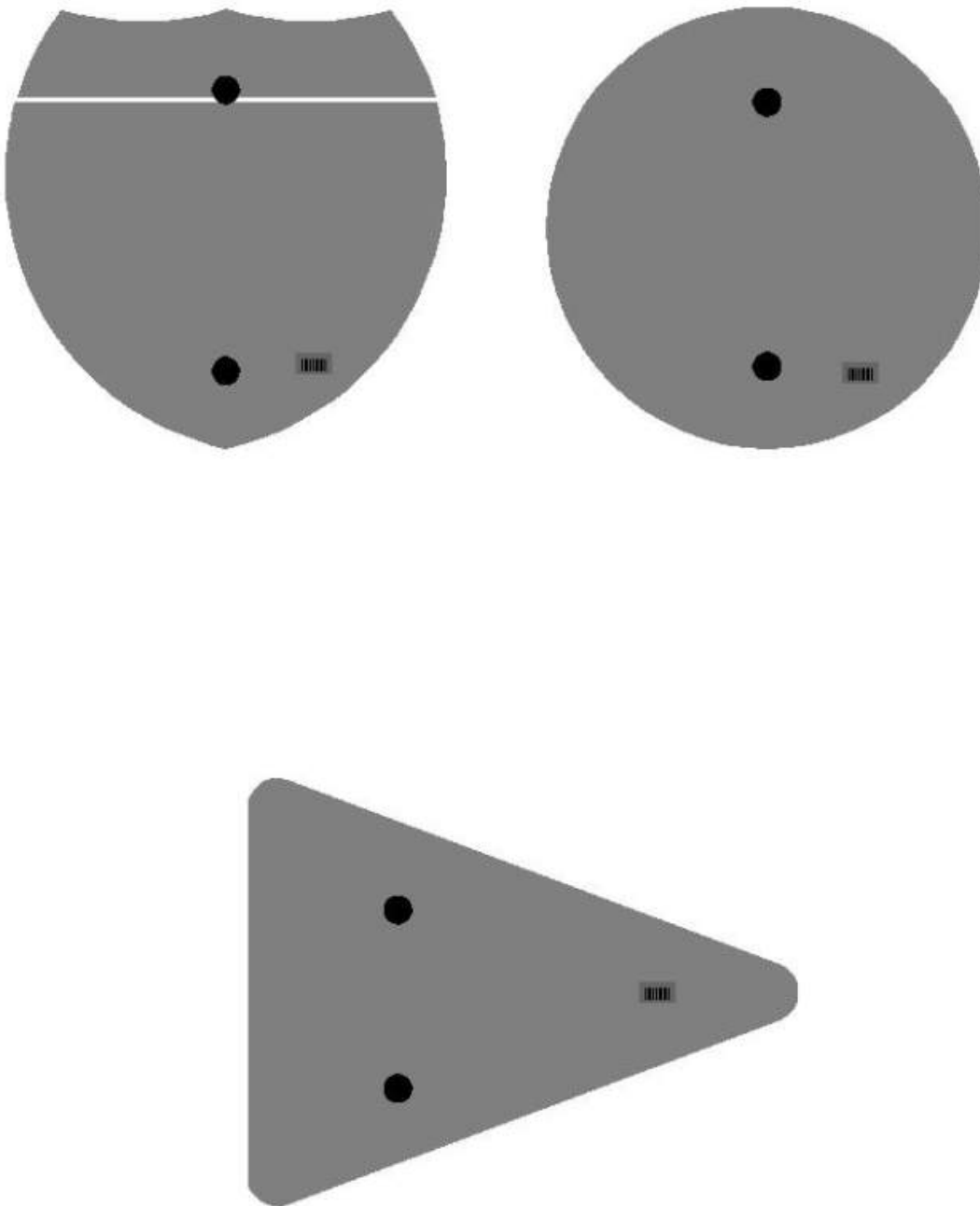
↑
2" Wide Post



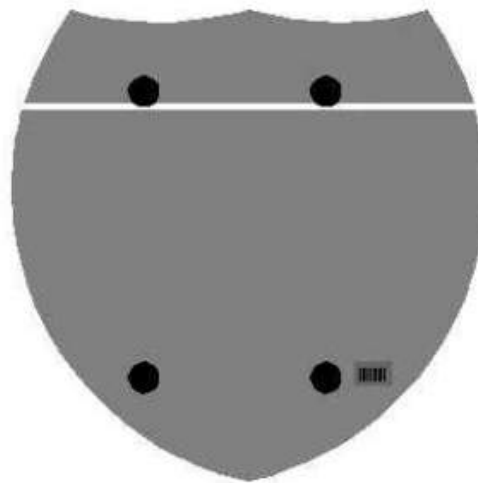
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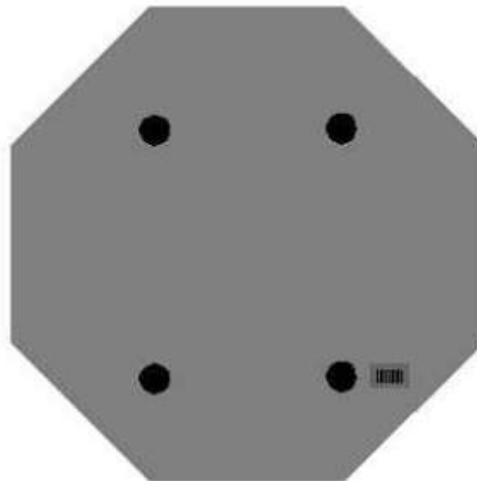
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Double Sign Post

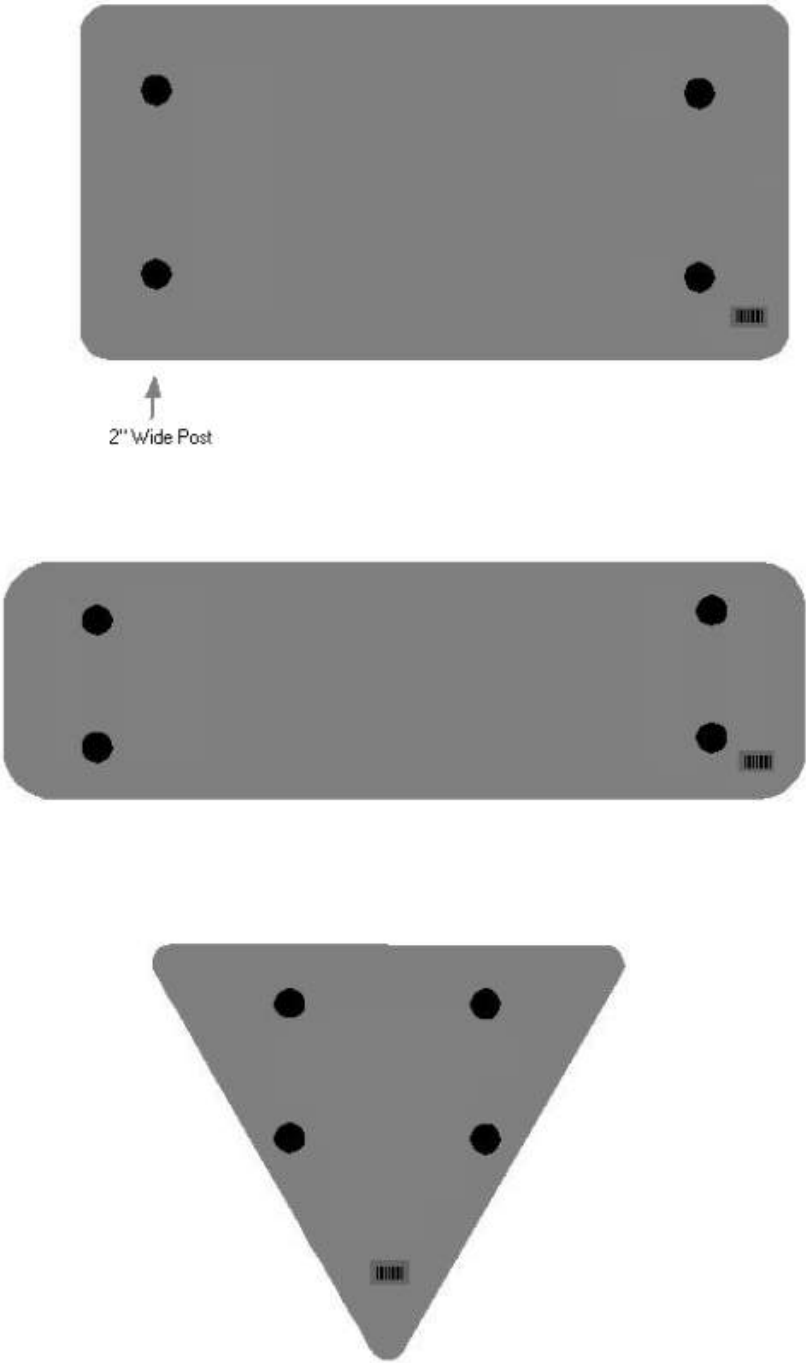


Interstate
Shield



48" Stop

2 Post Signs



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.

III. CONSTRUCTION METHODS

Qwick Curb Median Separator
Page 2 of 2

- 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

The ultimate fixed completion date for this project will be October 31, 2025 or before. 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 that are in place beyond the time frame(s) noted in the Traffic Control Plan and approved by the Engineer.

NOTE: At the sole discretion of the Engineer, all, or part, of these Liquidated Damages may be waived due to unforeseen circumstances, such as unexpected weather.

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 NOTE FOR NON-TRACKING TACK COAT

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

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

2.1.1 Provide a tack conforming to the following material requirements:

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

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

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.
 - 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.
3. CONSTRUCTION.
 - 3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 °F. After the initial heating, between 170 – 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

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

Code
24970EC

Pay Item
Asphalt Material for Tack Non-Tracking

Pay Unit
Ton

Revised: May 23, 2022

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 RECYCLED ASPHALT PAVEMENT (RAP) STOCKPILE MANAGEMENT

I. GENERAL

The use of reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) shall be subject to stockpile management and handling of material as described in this section.

The Department approves RAP on a stockpile basis, following the process set forth in this method. The contractor's responsibilities in the process are as follows:

- To obtain the Department's approval of all RAP prior to its use on a Department project and to deliver test data and samples as required
- To monitor and preserve the quality and uniformity of the approved material during storage and handling, adding no unapproved material to the existing stockpile
- To comply with the Department's requirements regarding replenishment of approved stockpiles

The Department will approve RAP based on its composition and variability in gradation and asphalt content, and on visual inspections of the stockpile, which the Department may conduct at its discretion. The Department may withdraw approval of a stockpile if the requirements of this specification are not followed in good faith.

The Maximum Percentage Allowed in a mix design will be based on these criteria and on the category of RAP source, as defined in this document.

II. APPROVAL PROCESS

Qualified asphalt producers (listed in List of Approved Materials-Asphalt Mixing Plants) may submit requests for RAP stockpile approval to the Asphalt Branch, Division of Materials, in the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment. The requester shall provide test results as prescribed in Part IID. The Division of Materials may, at their discretion, collect samples or inspect a RAP stockpile consistent with Section IIE.

Upon completion of the review of testing results and, if applicable, visual inspection, the Division of Materials, Asphalt Branch will approve or disapprove the material by letter and will assign a Stockpile Identification Number for each approved RAP stockpile. Note: The contractor's average gradation and asphalt content, as listed in the approval letter, shall be the gradation used in subsequent mix designs. The approval letter will state the applicable limits on the use of the material in mix designs and will summarize the Department's findings, listing the average gradation and asphalt content from the contractor's tests and the corresponding values found by the Department. Where the Maximum Percentage Allowed is low due to variability, the contractor may elect to improve the uniformity of the material by further processing and may again sample, test, and request approval for the material.

No material shall be added to a stockpile after it has been approved, except as provided in Parts V, VI, and VII below.

IIA. RAP Quality Management Plan

For a contractor to receive approval to use RAP on any department project, a RAP Quality Management Plan must first be approved by the department. The RAP Quality Management Plan shall be submitted to the

Division of Materials annually for approval as part of the Contractor's Quality Control Plan/Checklist. The Quality Management Plan is required to demonstrate how the Contractor will provide consistency and quality of material utilized in all asphalt mixes produced for use on Department projects. The Quality Management Plan shall include:

- Unprocessed RAP Stockpiles
 - Designation of stockpile(s) as single or multiple source
 - Designation of stockpile(s) as classified or unclassified
 - Designation of stockpile(s) as captive or continuously replenishing
 - Plan for how stockpile(s) is built (layers, slope, etc.)
 - Plan to minimize stockpile(s) contamination
- Processing and Crushing
 - Equipment used to feed screener or crusher
 - Excavation process based on equipment type
- Processing Millings
 - Single Project or Source
 - Screening, Fractionation, or Crushing plan
 - Multiple Source
 - Process to achieve uniform material from stockpile
 - Screening, Fractionation, or Crushing plan
- Processed RAP Stockpiles
 - Minimization of segregation
 - Minimization of moisture

IIB. RAP Stockpile Placement

All processed RAP stockpiles shall be placed on a sloped, paved surface. The requirement for a paved surface may be waived by the Cabinet if the Contractor's RAP Quality Management Plan demonstrates effective material handling that will minimize deleterious material from beneath the processed stockpile entering the plant. *No processed stockpile will be placed directly on grass or dirt.*

IIC. Stockpile Identification Signs

RAP stockpiles shall be identified with posted signs displaying the gradation of material in the stockpile (course, intermediate, or fine). These signs shall be made of weatherproof material and shall be highly visible. Numerals shall be easily readable from outside the stockpile area. If a stockpile exists in two or more parts, each part must have its own sign.

IID. Standard Approval Procedure

The Contractor shall obtain random samples representative of the entire stockpile and shall have each sample tested for gradation and asphalt content according to KM 64-426, KM 64-427, and AASHTO T308. The material samples must be in its final condition after all crushing and screening. At least one sample shall be obtained for each 1,000 tons of processed RAP, with a minimum of five samples per stockpile. Sampling shall be performed according to the method prescribed for asphalt mix aggregates in the Department's Materials Field Testing and Sampling Manual and KM 64-601. The minimum sampling size (after quartering) for tests of RAP samples is 1,500 g. except for samples containing particles more than one inch in diameter, for which the minimum is 2,000 g.

To request approval of a RAP stockpile, submit the following documents to the Division of Materials. It is the requester's responsibility to correctly address, label, and deliver these submittals:

- Submit request for approval at beginning of the paving season as part of the Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment.
- If requesting approval after paving season begins, submit memo, including stockpile portion of the inspection list for Annual Certification for Previously Approved Asphalt Mixing Plants and Related Equipment, to Division of Materials.
- Reports of the tests prescribed above using the Stockpile <INSERT NAME> document.
- A drawing of the plant site showing the location of the stockpile to be approved *and all other stockpiles on the premises*

Mail, deliver or email the request form, with test reports and site drawing, to:

Kentucky Transportation Cabinet
Division of Materials
ATTN: Asphalt Branch Manager
1227 Wilkinson Boulevard
Frankfort, Kentucky 40601

Robert.Semones@ky.gov

III. Tests and inspections by the Department

The Department shall have the right to observe the collection of samples, or to perform the sampling and testing as a verification of contractor submittal. As a condition of approval, the Department may at any time inspect and sample RAP stockpiles for which approval has been requested and may perform additional quality control tests to determine the consistency and quality of the material.

The approval letter issued by the Department will include any results of verification testing performed by the Cabinet. The approved contractor results should be used by mix design technicians in the design calculations.

III. RAP STOCKPILE TIERED MANAGEMENT AND EFFECTIVE BINDER CONTENT

The stockpile management and approval requirements will be tiered based on the maximum cold feed percentages as defined in this section and Table 1. below.

Table 1. Tiered Testing Requirements

Mix Type	0-≤12%	12-≤20%	20-≤35%
Surface	Tier 1	Tier 2	Tier 3
Base	Tier 1	Tier 2	Tier 3

NOTE: All asphalt mixes and binder selection will be subject to Section 409 of the current Standard Specifications.

The following requirements will apply based on the percentage of RAP in the mix.

Tier 1

Tier 1 mixes (less than or equal to 12% RAP) will be subject to the requirements of sections IIA, IIB, and IIC.

Tier 2

Tier 2 mixes (12% to less than 20% RAP) will be subject to the requirements of Section II in its entirety and Table 2 requirements.

Tier 3

Tier 3 Asphalt Base mixes with 20% to less than 35% RAP, Tier 3 Asphalt Surface mixes with 20% to less than 30% RAP will be subject to Section II in its entirety and Table 2 requirements.

IV. MAXIMUM PERCENTAGE OF RAP ALLOWED

The Maximum Percent of RAP allowed in mix designs shall be the lowest percentage determined by the gradation and asphalt content of the RAP, as established under the criteria below, and requirements listed in Section III.

Limits according to range in gradation and bitumen content

The Maximum Percent of RAP Allowed, based on gradation and asphalt content, shall be determined by the Department using the standard deviation of these values. This standard deviation will be calculated using data provided by the contractor from at least five samples. While the contractor is required to provide the data from these tested samples, the Department retains the discretion to perform its own sampling and testing to support or verify its findings. An apparent outlier shall not be considered in determining these ranges. Where one result appears to be unrepresentative of the whole, two or more additional samples shall be tested. The outlying value of all tests shall then be excluded from the range. The maximum percentage of RAP allowable shall be the lowest percentage determined according to Table 2 below.

Table 2. Maximum Percent RAP According to Variability in Test Results

	Standard Deviation as calculated above:		
Surface			
% asphalt content	< 0.4	< 0.5	
% passing No. 200 sieve	< 1.25	< 1.5	
% passing Median Sieve	< 4.0	< 5.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-30%	Tier 2 - 12%-20%	Tier 1 - 0%-12%
Base			
% asphalt content	< 0.5	< 0.75	
% passing No. 200 sieve	< 1.5	< 2.25	
% passing Median sieve	< 5.0	< 7.0	
	Allowable RAP Cold Feed %		
	Tier 3 - 20%-35%	Tier 2 - 12%-20%	Tier 1 - 0%-12%

NOTE: These allowances notwithstanding, the Contractor is required to maintain the mixture within the Mixture Control Tolerances of Kentucky Method 443.

The percentage allowable in mix designs shall be limited to meet the design criteria for viscosity established in the Standard Specifications.

V. GENERAL STOCKPILE REQUIREMENTS AND REPLENISHMENT

V.A. Single Pavement Source

Early approval of material from a single pavement source. When a new stockpile is to consist entirely of millings removed from a single existing pavement, the stockpile may be approved based on samples taken during the milling and processing operations, prior to completion of milling. The initial stockpile may be approved as either a new stockpile or a new stockpile in continual replenishment status.

For continual replenishment status, samples shall be taken from the processed stockpile after it reaches 1,000 tons. A total of five initial samples, plus one additional sample for every 1,000 tons, is required. As prescribed in Part II above, the contractor shall test all samples and deliver the test results, together with a letter request for approval in Continual Replenishment status, to the address indicated. The stockpile shall be subject to initial approval as prescribed above in Part II. Once approved, it may be replenished without further approvals as provided in Part VII below.

V.B. Heterogeneous or contaminated material

Asphalt pavement millings containing traffic detection loops, raised pavement markers, or other debris must be separated and excluded before stockpiling RAP for approval for use in KYTC asphaltic concrete mixtures.

No material other than RAP from an approved stockpile shall be included in mixtures for State projects. The following materials are specifically excluded:

- Material contaminated with foreign matter such as liquids, soil, concrete, or debris
- Plant waste, especially waste containing abnormal concentrations of bitumen, drum build-up, or material from spills or plant clean-up operations

The following materials shall not be added to or placed in proximity to an approved stockpile but may be accumulated in a separate stockpile and submitted for approval according to Part III:

- Production mixtures returned to the plant for any reason.
- Mis-proportioned mixtures, especially those generated at start-up.

VI. REPLENISHMENT OF STOCKPILES

An approved RAP stockpile may be replenished with Department approval, provided the replenishment material meets all necessary requirements for approval and maintains uniformity in gradation and asphalt content as outlined in this document.

VI.A. Procedure and approval criteria

The procedure for requesting approval of a stockpile replenishment, that is not in continual replenishment status, shall be the same as for approval of an original stockpile, and the material for the replenishment shall meet all criteria for approval as a new stockpile. RAP proposed for replenishment shall be sampled and tested by the Contractor for gradation and asphalt cement as prescribed in Section II above. The Laboratory shall

review these results and provide approval for use in Department asphalt mix designs, according to Table 2 above.

VI.B. Effect of replenishment on existing approved mix designs

Replenishment of a stockpile may render certain mix designs invalid, depending on the percent RAP allowed in the design and on the difference in average properties between the old and new stockpiles. A replenished stockpile may be used as the RAP ingredient in an existing approved design provided that:

1. The Maximum Percent Allowed for the replenishment stockpile equals or exceeds the percent RAP called for in the mix design. In no case may the Maximum Percent Allowed be exceeded.

However, if a mix design calls for up to 5.0 percent more than the Maximum Percent Allowed for the replenishment, the *design* may be adjusted, with approval, to use the lower percent allowed, provided that the production mixture continues to meet all acceptance criteria. For example, a design which calls for 20 percent RAP may be adjusted and produced with 15 percent if it continues to meet for acceptance.

VII. CONTINUAL REPLENISHMENT WITHOUT RE-APPROVAL

At the request of the contractor, a previously approved stockpile may be placed in Continual Replenishment Status and may be replenished any number of times without re-approval provided that:

1. Replenishment is within six months of the last stockpile addition.
2. The contractor shall continue to monitor and test the materials added to the stockpile and shall forward these results to the Division of Materials for every 1,000 tons of RAP added to the stockpile.
3. The contractor must certify that replenishment materials are free of contaminants.
4. The Department shall be notified by letter to the Director of the Division of Materials that the stockpile is being replenished on a continual basis.
5. The RAP Maximum Percent Allowed for continual replenishment shall be limited by Sections III and IV.

<p>Note: Upon request, one 20-pound sample bag of RAP for each Continual Replenishment Stockpile shall be submitted to the Division of Materials for petrographic analysis every 12 months.</p>
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The Department may inspect, sample, and test such stockpiles at its discretion and may, upon determining that the stockpile is unsuitable, withdraw approval of the material and all mix designs which include it. Approval of the stockpile may be withdrawn at any time based upon extreme or erratic ingredient proportions, unsuitable ingredients, or poor performance, as determined by the Division of Materials, Asphalt Branch. The Department will conduct periodic comparison testing on the opposite quarters of samples submitted by the Contractor for special replenishment approval category. The approval of the stockpile may be withdrawn if

erroneous information was found on the contractor's testing and/or improper sampling procedures were involved after a thorough investigation.

VIII. DEPLETION OF STOCKPILE AND EXPIRATION OF APPROVAL

When a stockpile has been fully depleted, the Contractor may replenish it within 24 months after the date of depletion; a depleted stockpile not replenished after 24 months will be removed from the approved list and may not be replenished.

Approval of a stockpile may be withdrawn if, in the finding of the Division of Materials, Asphalt Branch, the total amount of material used in new mixtures equals the total tonnage of the original stockpile plus all approved replenishments. Six years from the original approval of a stockpile or from its most recent replenishment, a stockpile shall be presumed to be depleted, and its approval shall expire. This shall apply to all stockpiles, regardless of status or history of use.

IX. RECORDS

The Contractor shall maintain records at the plant site on all RAP stockpiles. These records shall be available for inspection by representatives of the Department and shall include the following:

- All test results.
- The Department's approval letter for each stockpile and replenishment, together with the Contractor's requests for approval and all data submitted therewith.
- A current drawing of all stockpile locations at the plant site, including unapproved stockpiles, showing stockpile numbers of all stockpiles approved for State work.

X. RELOCATION OF STOCKPILE

If material from an approved RAP stockpile is to be moved to another location, the contractor shall seek approval from the Department prior to its further use on State projects. A letter request shall be submitted to the Division of Materials indicating the current stockpile location, the total quantity of material to be moved, and the amount, if any, to remain in the current location. The Division of Materials will issue an approval letter applicable to the new location.

June 18, 2025

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 ASPHALT MILLING AND TEXTURING

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

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

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

SPECIAL NOTE FOR BASE FAILURE REPAIR

Repair locations listed on the summary are approximate only. The Engineer will determine actual repair locations and dimensions at the time of construction. Prior to overall milling and/or leveling and wedging, excavate the designated base failure areas by milling to a depth 10 inches below the existing asphalt pavement surface level. Dispose of the excavated materials at waste sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

On the same day trench is excavated, backfill the excavated area with 10 inches of Class 2 Asphalt Base 1.00D PG64-22, in 3 inch minimum and 4.5-inch maximum courses, up to the existing pavement surface. Compact the asphalt base to the proper compaction as required by Section 403. Seal the asphalt base with leveling and wedging. Perform all base failure repairs in such a manner that removal and replacement are completed on the same day. Do this work as one of the Contractor's first operations in order to allow further compaction by traffic. Do not mill or place new asphalt surface over repaired base failure areas until a minimum of 14 calendar days have elapsed after placement of the final course of asphalt base. After the 14-calendar day waiting period, and/or when the Engineer determines the base failure repair areas have sufficiently stabilized, begin milling and/or resurfacing operations. Prior to milling and/or constructing the new asphalt surface, level and wedge any settlement of the repair areas.

The bidder must draw conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation if the materials encountered that are not in accord with the classification shown.

Accept payment at the Contract unit prices per ton for Asphalt Milling and Texturing, Asphalt Base, and Leveling and Wedging as full compensation for all labor, materials, equipment, and incidentals for removing pavement and disposing of the materials, furnishing and placing asphalt base, leveling and wedging, and all other items necessary to complete the work according to these notes to the satisfaction of the Engineer.

1-3605 basefailurerepairmillinlaypayton
01/02/2012

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions
01/02/2012

SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

GENERAL

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

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

MEASUREMENT & PAYMENT

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

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

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

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

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

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

PROJECT PHASING & CONSTRUCTION PROCEDURES

This project is located near a residential area. No work except asphalt paving, placement of striping/markings, and construction of proposed signing shall be conducted between 9 P.M. and 6 A.M., unless otherwise approved by the Engineer.

Maintaining traffic on projects with three or more lanes, two lanes, and/or ramps

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one-way traffic during construction and provide a minimum clear lane width of 9’. 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 feet is maintained. NOTE: During any lane closure or partial lane closure , 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.

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.

For all construction activities, utilize a lane closure, and maintain alternating one-way traffic. This may require part-width construction of certain elements. Provide a minimum clear lane width of 9 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus or emergency vehicle on an official run arrives on the scene, make provisions for the passage of the school bus or emergency vehicle as quickly as possible.

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

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

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

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.

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

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 measure barricades used for road closures and to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure

Traffic Control Plan
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individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure for payment any replacements for damaged barricades, or any barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

THERMOPLASTIC INTERSECTION MARKINGS

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

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.

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

Application

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

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

CMS should not be used for:

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

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Messages

Basic principles that are important to providing proper messages and 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

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Standard Abbreviations

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

<u>Word</u>	<u>Abbrev</u>	<u>Example</u>
Access	ACCS	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

Standard Abbreviations (cont.)

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

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NOT USE THESE ABBREVIATIONS:

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

Typical Messages

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

<u>Reason/Problem</u>	<u>Action</u>
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

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	

SPECIAL NOTE FOR REMOVING EXISTING PAVEMENT MARKERS ON PORTLAND CEMENT PAVEMENT

Before diamond grinding, remove existing Type V Snow-Plowable pavement markers (iron castings) by a clean saw cut and repair the divot with Latex PCC partial depth patching material. Dispose of the removed castings, waste, and debris off the Right-of-way at sites obtained by the contractor at no additional cost to the Department.

Saw the hole to be patched with a vertical face, to a depth and configuration the Engineer directs. After sawing, keep exposure to traffic to a minimum until patching. Keep overcutting beyond the limits of the removed area to a minimum. Prevent saw slurry from entering existing joints and cracks. Clean all saw slurry and other contaminants from overcutting. Repair the overcut area with a low viscosity epoxy compound.

Prepare the patch area by sandblasting and apply a latex grout bond coat. Furnish, place, and cure the latex concrete according to Sections 606.02, 606.03.02, 606.03.08, 606.03.09, and 606.03.17. Ensure the curing materials required by Subsection 606.03.17 A) 4) remain in place for the specified time. Remove and replace all areas of the patches that display cracks or that are not bonded to the underlying pavement.

The Department will measure removal of Type V markers in individual units, Each, determined by dividing the length of each run of markers by their average spacing, plus one. Accept payment as full compensation for removing and disposing of the markers, placing Latex PCC patching material in the resulting recess, and disposing of waste and debris.

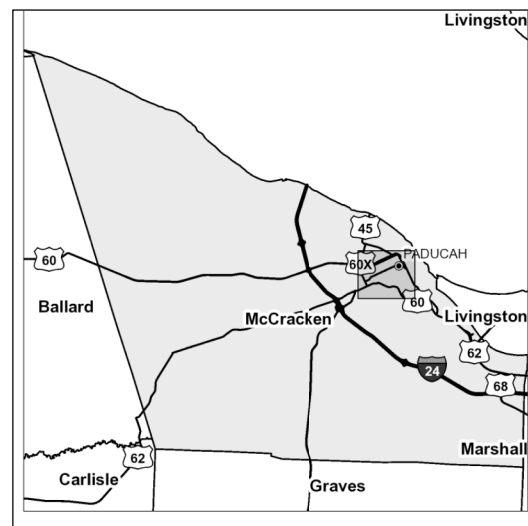
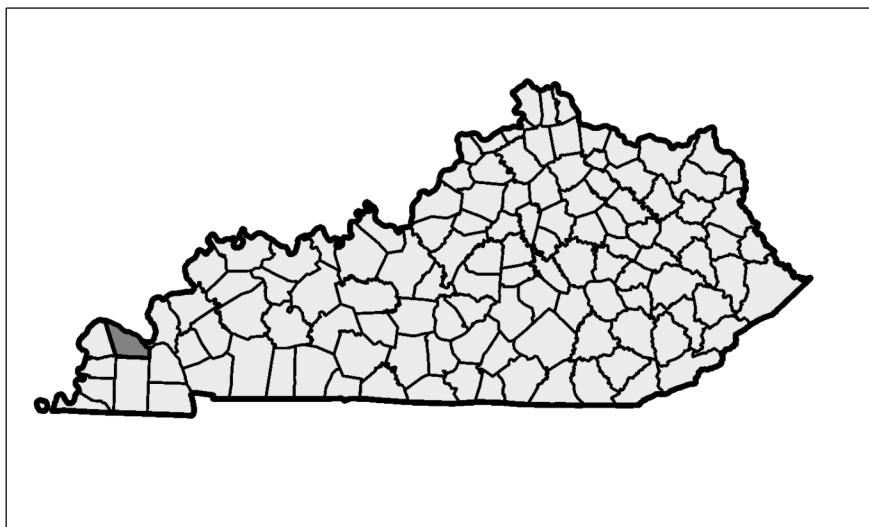
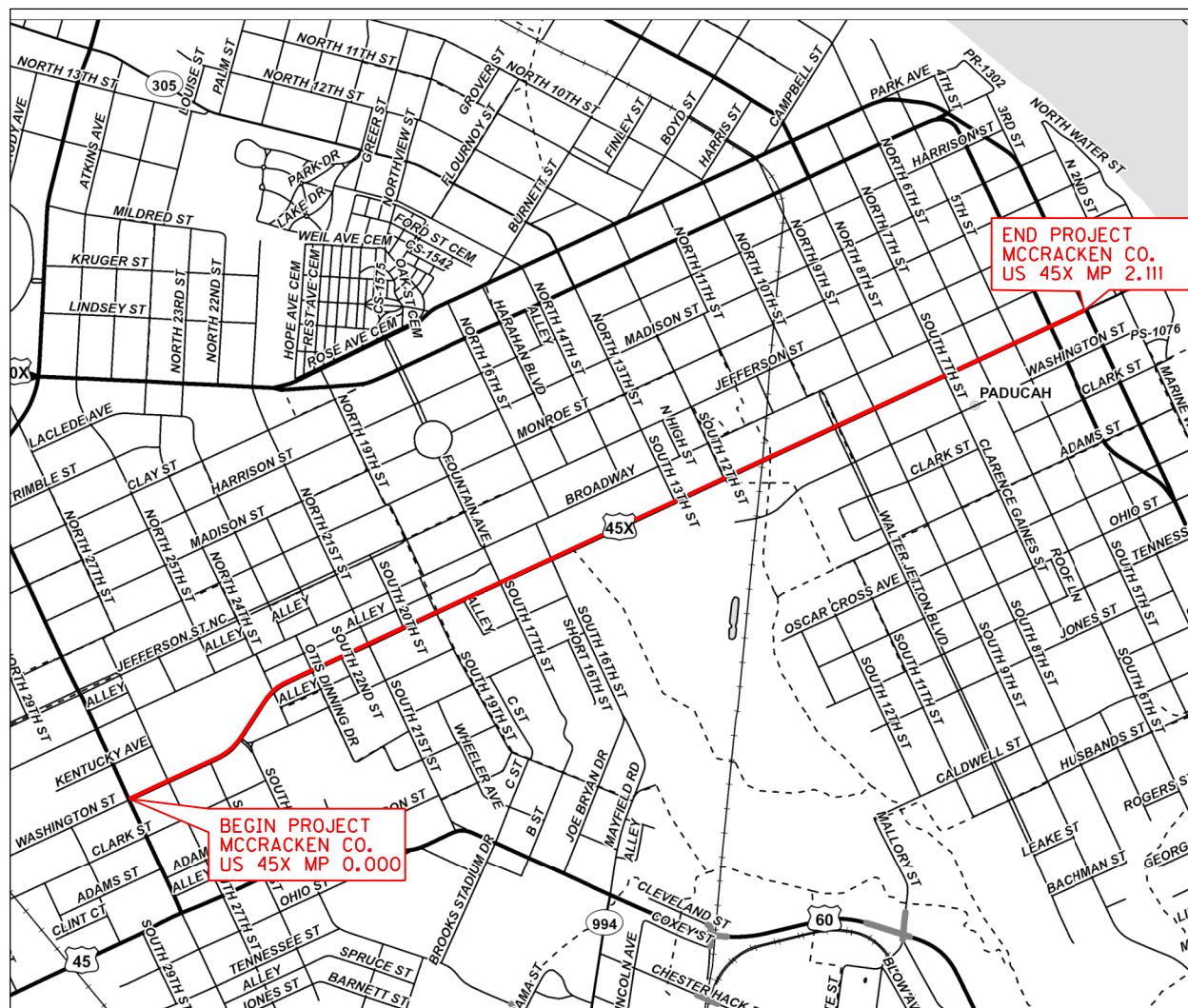
1-3861 Remove Pavement Markers PCC Latex
01/02/2012

INSTALL RADAR PRESENCE DETECTOR TYPE A

Install Radar Presence Detector Type A shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by contractor), and controller interface assembly. Radar Presence Detector Type A bid item shall include all labor required to provide a functional detection system. Radar Presence Detector Type A shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others. This includes the removal of all existing loop lead-in cable, conduits, and junction boxes from cabinet, poles, spans, and the ground.

March 25, 2025

MCCRACKEN

TRANSPORTATION
CABINET

MATERIAL SUMMARY

CONTRACT ID: 252311

073GR25P073 - FD05 & FD04

MP073045X25W1

KENTUCKY AVENUE (US 45X OMIT MP 0.416-1.551) BEGIN AT US 45 EXTENDING NORTH TO 42 FEET SOUTH OF KY-3238/US-60X ASPHALT RESURFACING, A DISTANCE OF 2.11 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00190	LEVELING & WEDGING PG64-22	448.00	TON
0010	02676	MOBILIZATION FOR MILL & TEXT - (FD05)	1.00	LS
0015	02677	ASPHALT PAVE MILLING & TEXTURING	2,570.00	TON
0020	10020NS	FUEL ADJUSTMENT	4,719.00	DOLL
0025	10030NS	ASPHALT ADJUSTMENT	11,854.00	DOLL
0030	00212	CL2 ASPH BASE 1.00D PG64-22	331.00	TON
0035	23362ES403	CL2 ASPH SURF 0.50B PG64-22	2,239.00	TON
0040	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	14.00	TON
0045	01810	STANDARD CURB AND GUTTER	546.00	LF
0050	01812	REMOVE CURB AND GUTTER	546.00	LF
0055	02014	BARRICADE-TYPE III	2.00	EACH
0060	02562	TEMPORARY SIGNS	590.00	SQFT
0065	02650	MAINTAIN & CONTROL TRAFFIC - (FD05)	1.00	LS
0070	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0075	02720	SIDEWALK-4 IN CONCRETE	100.00	SQYD
0080	02775	ARROW PANEL	2.00	EACH
0085	06510	PAVE STRIPING-TEMP PAINT-4 IN	5,432.00	LF
0090	06511	PAVE STRIPING-TEMP PAINT-6 IN	200.00	LF
0095	06514	PAVE STRIPING-PERM PAINT-4 IN	9,852.00	LF
0100	06515	PAVE STRIPING-PERM PAINT-6 IN	10,780.00	LF
0105	06542	PAVE STRIPING-THERMO-6 IN W	648.00	LF
0110	06565	PAVE MARKING-THERMO X-WALK-6 IN	2,544.00	LF
0115	06568	PAVE MARKING-THERMO STOP BAR-24IN	729.00	LF
0120	06569	PAVE MARKING-THERMO CROSS-HATCH	1,056.00	SQFT
0125	06573	PAVE MARKING-THERMO STR ARROW	2.00	EACH
0130	06574	PAVE MARKING-THERMO CURV ARROW	29.00	EACH
0135	06575	PAVE MARKING-THERMO COMB ARROW	2.00	EACH
0140	06576	PAVE MARKING-THERMO ONLY	2.00	EACH
0145	06610	INLAID PAVEMENT MARKER-MW - (CONCRETE)	36.00	EACH
0150	06612	INLAID PAVEMENT MARKER-BY	203.00	EACH
0155	06612	INLAID PAVEMENT MARKER-BY - (CONCRETE)	291.00	EACH
0160	20099ES842	PAVE MARK TEMP PAINT STOP BAR	729.00	LF
0165	20100ES842	PAVE MARK TEMP PAINT LINE ARROW	14.00	EACH
0170	20782NS714	PAVE MARKING THERMO-BIKE	35.00	EACH
0175	22692NS714	PAVEMENT MARKING-THERMO LETTERS	12.00	EACH
0180	23158ES505	DETECTABLE WARNINGS - (NEW)	24.00	SQFT
0185	23158ES505	DETECTABLE WARNINGS - (RETROFIT)	888.00	SQFT
0190	23261EC	PAVE MARK-THERMO-X-WALK-24 IN	304.00	LF
0195	23974EC	BIKE PATH	423.00	SQYD
0200	24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	35.00	EACH
0205	26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	31.00	EACH
0210	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 252311

073GR25P073 - FD05 & FD04

MP073045X25W2

KENTUCKY AVE. (US 45X) BEGIN AT US 45 EXTENDING NORTH TO 42 FEET SOUTH OF KY-3238/US-60X
SIGNS, A DISTANCE OF 2.11 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0215	01917	STANDARD BARRIER MEDIAN TYPE 2	32.00	SQYD
0220	02562	TEMPORARY SIGNS	590.00	SQFT
0225	02650	MAINTAIN & CONTROL TRAFFIC - (FD04)	1.00	LS
0230	02720	SIDEWALK-4 IN CONCRETE	30.00	SQYD
0235	06510	PAVE STRIPING-TEMP PAINT-4 IN	13,686.00	LF
0240	06511	PAVE STRIPING-TEMP PAINT-6 IN	12,122.00	LF
0245	06514	PAVE STRIPING-PERM PAINT-4 IN	13,686.00	LF
0250	06515	PAVE STRIPING-PERM PAINT-6 IN	12,122.00	LF
0255	06531	PAVE STRIPING REMOVAL-6 IN	700.00	LF
0260	06556	PAVE STRIPING-DUR TY 1-6 IN W	574.00	LF
0265	06598	PAVEMENT MARKING REMOVAL	930.00	SQFT
0270	22664EN	WATER BLASTING EXISTING STRIPE	28,512.00	LF
0275	22680EN	QWICK CURB MEDIAN SEPARATOR	112.00	LF
0280	23158ES505	DETECTABLE WARNINGS - (NEW)	48.00	SQFT
0285	23251ES717	PAVE MARK TY 1 TAPE X-WALK-6 IN	631.00	LF
0290	23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	309.00	LF
0295	23266ES717	PAVE MARK TY 1 TAPE R/R X BUCKS-16 IN	20.00	LF
0300	23267ES717	PAVE MARK TY 1 TAPE-BIKE	61.00	EACH
0305	23267ES717	PAVE MARK TY 1 TAPE-BIKE - (BIKE LANE ARROW)	59.00	EACH
0310	23269ES717	PAVE MARK TY 1 TAPE-COMBO ARROW	2.00	EACH
0315	23270ES717	PAVE MARK TY 1 TAPE-CURV ARROW	46.00	EACH
0320	23974EC	BIKE PATH	404.00	SQYD
0325	26171EC	RECTANGULAR RAPID FLASHING BEACON	4.00	EACH
0330	06406	SBM ALUM SHEET SIGNS .080 IN	138.89	SQFT
0335	06410	STEEL POST TYPE 1	243.00	LF
0340	06472	INSTALL SPAN MOUNTED SIGN	1.00	EACH
0345	24631EC	BARCODE SIGN INVENTORY	26.00	EACH
0350	02569	DEMOBILIZATION	1.00	LS

COUNTY OF

FUNDING NO.

MCCRACKEN

FD05 073 045X 000-003

GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
190	LEVELING & WEDGING PG64-22	TON	448
1810	STANDARD CURB AND GUTTER	LF	546
1812	REMOVE CURB AND GUTTER	LF	546
2014	BARRICADE-TYPE III	EACH	2
2562	TEMPORARY SIGNS	SQFT	590
2569	DEMOBILIZATION	LS	1
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2
2676	MOBILIZATION FOR MILL & TEXT	LS	1
2677	ASPHALT PAVE MILLING & TEXTURING	TON	2,570
2720	SIDEWALK-4 IN CONCRETE	SQYD	100
2775	ARROW PANEL	EACH	2
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	5,432
6511	PAVE STRIPING-TEMP PAINT-6 IN	LF	200
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	9,852
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	10,780
6542	PAVE STRIPING-THERMO-6 IN W	LF	648
6565	PAVE MARKING-THERMO X-WALK-6 IN	LF	2,544
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	729
6569	PAVE MARKING-THERMO CROSS-HATCH	SQFT	1,056
6573	PAVE MARKING-THERMO STR ARROW	EACH	2
6574	PAVE MARKING-THERMO CURV ARROW	EACH	29
6575	PAVE MARKING-THERMO COMB ARROW	EACH	2
6576	PAVE MARKING-THERMO ONLY	EACH	2
6610	INLAID PAVEMENT MARKER-MW	EACH	36
6610	INLAID PAVEMENT MARKER-MW (CONCRETE)	EACH	21
6612	INLAID PAVEMENT MARKER-BY	EACH	203
6612	INLAID PAVEMENT MARKER-BY (CONCRETE)	EACH	291
10020NS	FUEL ADJUSTMENT	DOLL	4,719
10030NS	ASPHALT ADJUSTMENT	DOLL	11,854
20099ES842	PAVE MARK TEMP PAINT STOP BAR	LF	729
20100ES842	PAVE MARK TEMP PAINT LINE ARROW	EACH	14
20696ES403	CL2 ASPH BASE 1.00D PG76-22	TON	331
20782NS714	PAVE MARKING THERMO-BIKE	EACH	35
22692NS714	PAVEMENT MARKING-THERMO LETTERS	EACH	12
23158ES505	DETECTABLE WARNINGS	SQFT	924
23261EC	PAVE MARK-THERMO-X-WALK-24 IN	LF	304
23362ES403	CL2 ASPH SURF 0.50B PG64-22	TON	2,239
23974EC	BIKE PATH	SQYD	423
24386EC	PAVE MARKING THERMO-BIKE LANE ARROW	EACH	35
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	TON	14
26119EC	INSTALL RADAR PRESENCE DETECTOR TYPE A	EACH	31

- ① QUANTITY INCLUDES 331 TONS FOR THE REMOVAL OF THE EXISTING ASPHALT IN THE BASE FAILURE REPAIR SUMMARY AND 2,239 TONS IN THE MILLING AND SURFACING SUMMARY.
- ② SEE SPECIAL NOTE FOR CONSTRUCTING INLAID PAVEMENT MARKERS ON PORTLAND CEMENT PAVEMENT FOR PAYMENT OF THE GREEN BIKE LANE MARKING ON ASPHALT SURFACE. PRODUCT TO BE PPG'S MMAX EXTENDED
- ③ SEASON AREA MARKINGS. SEE PRODUCT DATA SHEET ELSEWHERE IN PROPOSAL FOR MATERIAL AND APPLICATION GUIDANCE.

Milling & Surfacing Summary
FD05 073 045X 000-003

Begin MP	End MP	Length (LF)	Avg Width (FT)	Area (SQYD)	Avg Depth (IN)	Quantity (TON)
0.042	0.416	1975	45	9874	1.5	815
1.551	2.111	2957	45	14784	1.5	1220
					Sub-Total	2035
Additional Milling & Surfacing at Sideroads (Estimated at 10%)						204
					Total	2239

Notes:

- 1) Leveling & Wedging estimated at 20% of the Asphalt Surface quantity. The Engineer will determine the actual locations and lift thickness at the time of construction.
- 2) The quantity of Asphalt Material for Tack was estimated based on 130% of the milling & resurfacing area to account for use in leveling & wedging and final surfacing.

**Base Failure
Repair Summary
FD05 073 045X 000-003**

Milepoint	Notes	Length (FT)	Width (FT)	Depth (IN)	Quantity (TON)
0.085	Westbound	40	10	10	24
0.245	Eastbound	70	5	10	22
0.416	Westbound	5	10	10	3
1.569	Eastbound	100	10	10	61
1.600	Westbound	40	10	10	24
1.615	Eastbound	60	10	10	37
1.790	Eastbound	10	5	10	3
1.790	Westbound	30	10	10	18
1.874	Westbound	65	5	10	20
1.940	Westbound	20	10	10	12
1.959	Eastbound	90	10	10	55
1.992	Westbound	25	5	10	8
1.998	Westbound	50	10	10	31
2.072	Westbound	20	10	10	12
ASPH BASE (TON)					331
MILLING (TON)					331

ITEM NO.	DESCRIPTION	UNIT
6514	PAVE STRIPING-PERM PAINT-4 IN	LF
6515	PAVE STRIPING-PERM PAINT-6 IN	LF
6542	PAVE STRIPING-THERMO-6 IN W	LF
	S 28TH ST. TO S 27TH ST.	456 1053
	S 27TH ST. TO S 26TH ST.	797
	S 26TH ST. TO S 25TH ST.	1381
	S 25TH ST. TO S 24TH ST.	629
	S 24TH ST. TO S 23RD ST. / OTIS DINNING DR.	503
	S 23RD ST. / OTIS DINNING DR. TO S 22ND ST.	
	S 22ND ST. TO S 21ST ST.	
	S 21ST ST. TO S 20TH ST.	
	S 20TH ST. TO S 19TH ST.	
	S 19TH ST. TO S 17TH ST.	
	S 17TH ST. TO S 16TH ST.	
	S 16TH ST. TO S 15TH ST.	
	S 15TH ST. TO S 13TH ST.	
	S 13TH ST. TO S 12TH ST.	
	S 12TH ST. TO WALTER JETTON BLVD.	29
	WALTER JETTON BLVD. TO S 9TH ST.	739
	S 9TH ST. TO S 7TH ST. / CLARENCE GAINES ST.	1591
	S 7TH ST. / CLARENCE GAINES ST. TO S 6TH ST.	726
	S 6TH ST. TO S 5TH ST.	721
	S 5TH ST. TO S 4TH ST.	937
	S 4TH ST. TO S 3RD ST.	723
	TOTAL	9852

McCracken County
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FD05 073 045X 000-003

MP	STA	INTERSECTION	X-WALKS		STOP BARS		CURVE		ARROWS		BIKE		BIKE		GREEN BIKE "ONLY"		LETTERS		CROSS HATCHING		NOTES
			6 INCH LF	24 INCH LF	24 INCH LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
0.080	104+85	S 27TH ST.	132		55	4					4	4	4	4	27						
0.165	109+45	S 26TH ST.			22	2					4	4	4	4							
0.245	113+50	S 25TH ST.	427		110	5					5	5	5	5	100				231	493	
0.300	116+35	PEDESTRIAN REFUGE ISLAND	87	64																	
0.360	119+50	S 24TH ST.			40	2					5	5	5	5	29				145	85	
1.560	184+00	WALTER JETTON BLVD.			396	82.5	1				2	2	2	2	56						
1.650	188+75	S 9TH ST.	338		93	3					4	4	4	4	66						
1.800	196+90	S 7TH ST. / CLARENCE GAINES ST	333		93	5					4	4	4	4	66						
1.880	201+00	S 6TH ST.	342		93	2					4	4	4	4	66						
1.950	205+00	S 5TH ST.	176		40	2					2	2	2	2							
2.040	209+00	S 4TH ST.	313	240	78	3	2				1	1	1	1	13	2	12			102	
2.115	212+92	S 3RD ST.			22																
TOTAL			2544	304	729	29	2	2	2	35	35	423	2	12	869		187				

FD05 073 045X 000-003

TOTAL

MPT.	INTERSECTION	RADAR PRESENCE DETECTOR		NOTES
		TYPE A EA	TYPE B EA	
0.000	S 28TH ST.	4		
0.245	S 26TH ST.	4		
0.550	S 21ST ST.	4		
0.950	S 16TH ST.	4		
1.560	WALTER JETTON BLVD.	3		
1.650	S 9TH ST.	4		
1.800	S 7TH ST. / CLARENCE GAINES ST.	4		
2.040	S 4TH ST.	4		
TOTAL		31	0	

NOTES:

GENERAL SUMMARY		COUNTY OF	FUNDING NO.
		MCCRACKEN	FD04

ITEM	DESCRIPTION	UNIT	TOTAL PROJECT
① 1917	STANDARD BARRIER MEDIAN TYPE 2 MOD	SQYD	32
2650	MAINTAIN & CONTROL TRAFFIC	LS	1
2720	SIDEWALK-4 IN CONCRETE	SQYD	30
6406	SBM ALUM SHEET SIGNS .080 IN	SQFT	138.89
6410	STEEL POST TYPE 1	LF	243
6472	INSTALL SPAN MOUNTED SIGN	EACH	1
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	13,686
6511	PAVE STRIPING-TEMP PAINT-6 IN	LF	12,122
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	13,686
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	12,122
6531	PAVE STRIPING REMOVAL-6 IN	LF	700
6556	PAVE STRIPING-DUR TY 1-6 IN W	LF	574
6598	PAVEMENT MARKING REMOVAL	SQFT	930
22664EN	WATER BLASTING EXISTING STRIPE	LF	28,512
② 22680EN	QWICK CURB MEDIAN SEPARATOR	LF	112
① 23158ES505	DETECTABLE WARNINGS	SQFT	48
23251ES717	PAVE MARK TY 1 TAPE X-WALK-6 IN	LF	631
23265ES717	PAVE MARK TY 1 TAPE STOP BAR-24 IN	LF	309
③ 23266ES717	PAVE MARK TY 1 TAPE R/R X BUCKS-16 IN	LF	20
23267ES717	PAVE MARK TY 1 TAPE-BIKE	EACH	61
④ 23267ES717	PAVE MARK TY 1 TAPE-BIKE (BIKE LANE ARROW)	EACH	59
23269ES717	PAVE MARK TY 1 TAPE-COMBO ARROW	EACH	2
23270ES717	PAVE MARK TY 1 TAPE-CURV ARROW	EACH	46
⑤ 23974EC	BIKE PATH	SQYD	404
24631EC	BARCODE SIGN INVENTORY	EACH	26
⑥ 26171EC	RECTANGULAR RAPID FLASHING BEACON	EACH	4

①

REFER TO PEDESTRIAN REFUGE ISLAND DETAIL SHEET FOR MODIFICATION.

②

QWICK KURB L60 Y MEGA MARKER. REFER TO STRIPING AND SIGNING SHEETS 19-20.

③

FOR TWO INSTALLATIONS OF THE RAILROAD WARNING MARKINGS. THE CONSTRUCTION OF TWO DURABLE TYPE 1 TAPE "R" MARKINGS (6' HEIGHT) FOR EACH INSTALLATION IS TO BE INCIDENTAL TO THE UNIT PRICE OF THIS ITEM.

④

FOR PAYMENT OF A DURABLE TYPE 1 BIKE LANE ARROW.
FOR PAYMENT OF THE GREEN BIKE LANE MARKING ON CONCRETE SURFACE. PRODUCT TO BE PPG'S MMAX

⑤

EXTENDED SEASON AREA MARKINGS. SEE PRODUCT DATA SHEET ELSEWHERE IN PROPOSAL FOR MATERIAL AND APPLICATION GUIDANCE.

⑥

ITEM INCLUDES INSTALLATION, SIGNAGE, AND ALL OTHER COMPONENTS PER ASSEMBLY. REFER TO US 45X MIDBLOCK RRFB DETAIL SHEET.

McCracken County
STRIPING SUMMARY
FD04

ITEM NO.	DESCRIPTION	UNIT	S 28TH ST. TO S 27TH ST.	S 27TH ST. TO S 26TH ST.	S 26TH ST. TO S 25TH ST.	S 25TH ST. TO S 24TH ST.	S 24TH ST. TO S 23RD ST. / OTIS DINNING DR.	S 23RD ST. / OTIS DINNING DR. TO S 22ND ST.	S 22ND ST. TO S 21ST ST.	S 21ST ST. TO S 20TH ST.	S 20TH ST. TO S 19TH ST.	S 19TH ST. TO S 17TH ST.	S 17TH ST. TO S 16TH ST.	S 16TH ST. TO S 15TH ST.	S 15TH ST. TO S 13TH ST.	S 13TH ST. TO S 12TH ST.	S 12TH ST. TO WALTER JETTON BLVD.	WALTER JETTON BLVD. TO S 9TH ST.	S 9TH ST. TO S 7TH ST. / CLARENCE GAINES ST.	S 7TH ST. / CLARENCE GAINES ST. TO S 6TH ST.	S 6TH ST. TO S 5TH ST.	S 5TH ST. TO S 4TH ST.	S 4TH ST. TO S 3RD ST.	TOTAL	
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	406					351	711	800	774	1662	1217	1667	1548	1286	2724								13686
6515	PAVE STRIPING-PERM PAINT-6 IN	LF	485					281	601	617	833	635	1329	1145	1507	1249	1056	2385							12122
6556	PAVE STRIPING-DUR TY 1-6 IN W	LF						37	46	39	41	43	80	64	28	29	61	107							574

McCracken County
DURABLE TAPE INTERSECTION PAVEMENT MARKINGS SUMMARY
FD04

0.000	100+30	S 28TH ST.	120	52	2	2	2	2	4	30									
0.450	124+25	S 23RD ST. / OTIS DINNING DR.			4	2	4	2	2	20									
0.515	127+65	S 22ND ST.			4	4	4	4	4	9									
0.550	130+80	S 21ST ST.	168	53	4	4	4	4	4	66									
0.650	134+85	S 20TH ST.			2	4	4	4	4	8									
0.720	138+50	S 19TH ST.			4	3	3	3	3	24									
0.850	145+80	S 17TH ST.			4	7	7	7	7	22									
0.950	151+85	S 16TH ST.	174	53	4	5	5	5	5	68									
1.090	159+25	S 15TH ST.			4	6	6	6	6										
1.215	165+90	S 13TH ST.	84	53	4	7	7	7	7	73									
1.345	171+60	S 12TH ST.			2	2	2	2	2	8									
1.415	176+00	RAILROAD		71	4	8	8	8	8	50								20	
1.550	184+50	WALTER JETTON BLVD.	84	27	4	5	5	5	5	25									

SIGN LOCATION					SHEETING										Barcode						
Assembly ID	Side of Road	Approx Offset (ft)	Approx Station	Approx. Mile Point	Facing Traffic Traveling	WUTCD Code	Sign Description	Sign Text / Remarks	Sign Dimensions (in x in)	Text/ Symbol Color	Background Color	Sheeting Type	SBM Alum Sheet Signs 0.080 IN (SQ Ft)	SBM Alum Sheet Signs 0.125 IN (SQ Ft)	Installation Type	Bracing Req'd	# of Posts	Estimated Length of 2" Post (ft)	Estimated Length of 2-1/2" Post (ft)	2-1/4" Stiffener Req'd (includ to post)	TOTAL Estimated Sign Post Length (LF)
1	LT	14'	100+00	0.000	WB	R10-11	No Turn on Red Ball		24 x 30	Red & Black	White	XI	5.00		On Existing Signal Span Wire		1	10			1
2	RT	27'	100+85	0.016	WB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
3	LT	28'	100+86	0.016	WB	R10-6a	Stop Here on Red		24 x 30	Black	White	XI	5.00		Strnd w/ Soil Plate		1	11			1
4	RT	25'	102+32	0.044	EB	R3-7bP	Except Bicycles (plaque)		24 x 12	Black	White	XI	2.00		Strnd w/ Soil Plate		1	11			1
5	RT	42'	112+70	0.241	EB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11			1
6	LT	34'	112+76	0.242	WB	R3-17	Right Lane Must Turn Right		30 x 30	Black	White	XI	6.25		Strnd w/ Soil Plate		1	10	10		1
7	RT	34'	114+50	0.275	EB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
8	RT	27'	120+26	0.384	EB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11			1
9	LT	25'	128+62	0.542	WB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11	11		1
10	RT	25'	131+21	0.591	EB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
11	RT	25'	132+77	0.621	WB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11	11		1
12	LT	28'	149+58	0.939	WB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11	11		1
13	LT	28'	151+20	0.970	WB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
14	RT	25'	152+68	0.998	EB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
15	RT	25'	154+20	1.027	EB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11	11		1
16	RT	25'	170+19	1.329	EB	W10-1	Rail Road Crossing Warning		Dia = 36	Black	Yellow	XI	7.07		Strnd w/ Soil Plate		1	11	11		1
17	LT	25'	179+35	1.503	WB	W10-1	Rail Road Crossing Warning		Dia = 36	Black	Yellow	XI	7.07		Strnd w/ Soil Plate		1	11	11		1
18	LT	25'	182+19	1.557	WB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11			1
19	LT	25'	183+73	1.586	WB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
20	RT	25'	185+15	1.613	EB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10	10		1
21	RT	25'	190+74	1.719	EB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11			1
22	LT	25'	194+79	1.795	WB	R3-9b	Two-Way Left Turn ONLY		24 x 36	Black	White	XI	6.00		Strnd w/ Soil Plate		1	11	11		1
23	RT	26'	207+67	2.039	EB	R3-17	Bike Lane		30 x 24	Black	White	XI	5.00		Strnd w/ Soil Plate		1	10			1
24	LT	26'	208+75	2.060	WB	R3-17dP	ENDS		30 x 12	Black	White	XI	2.50		Strnd w/ Soil Plate		1	10	10		1

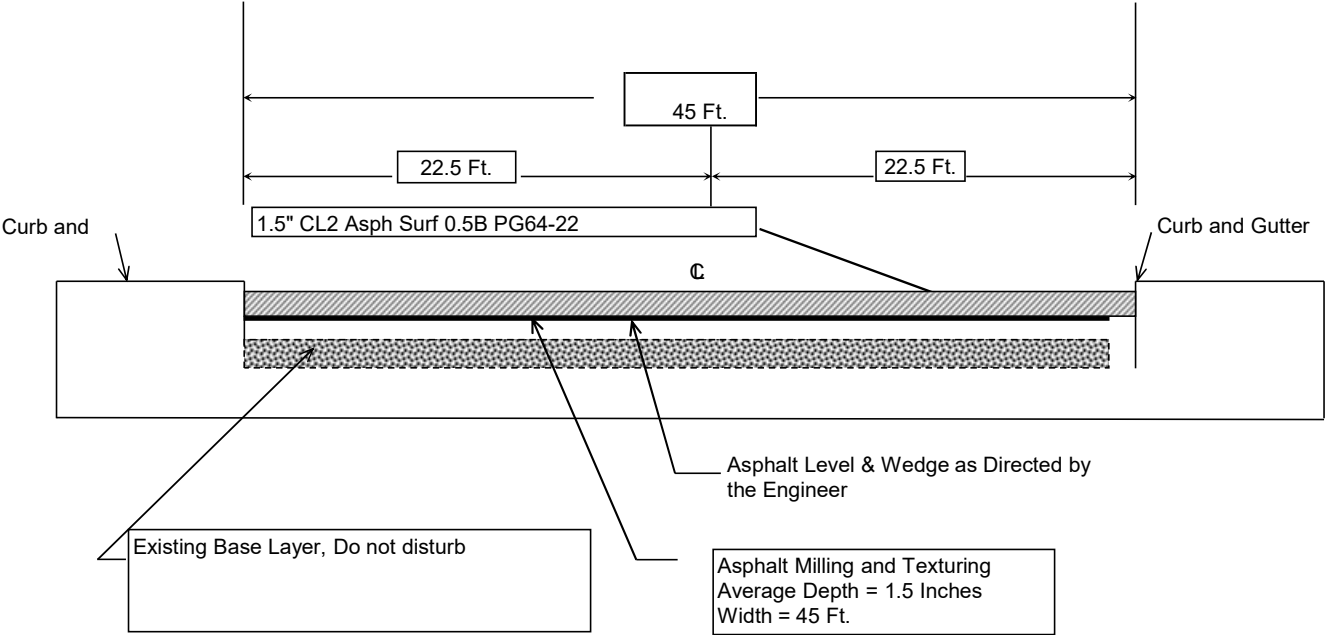
Summary of Items			
Steel Post - Type 1		243	LF
GMSS Type D		0	EACH
GMSS Type D (Surface Mount)		0	EACH
Class A Concrete for Signs		0	CU YD

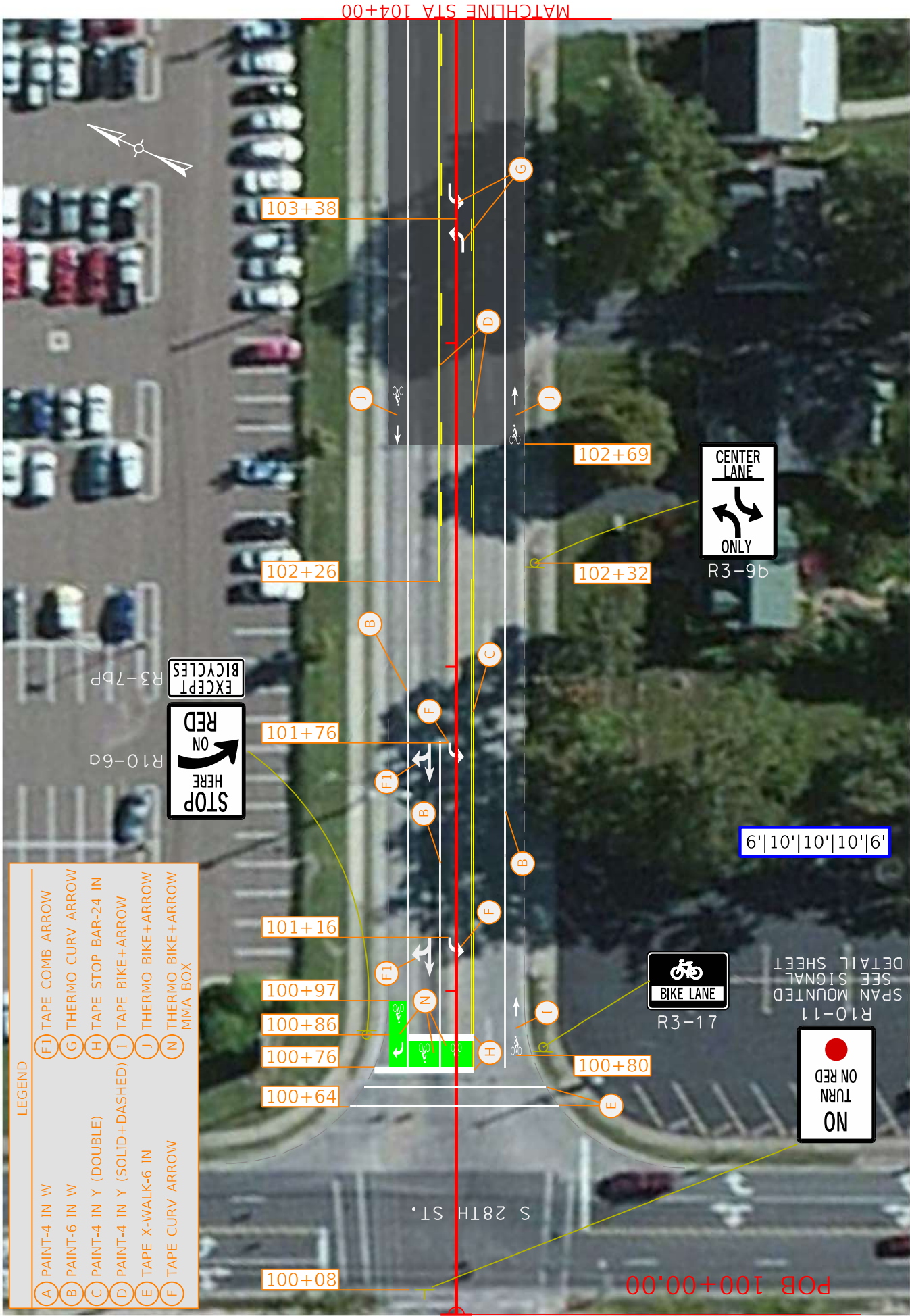
Summary of Items			
SBM Alum Sheet Signs 0.080 INCH		138.89	SQ FT
SBM Alum Sheet Signs 0.125 INCH		0.00	SQ FT
Barcode Sign Inventory		26	EACH
Remove & Relocate Sheet Signs			EACH
Remove & Relocate Sign Assemblies			EACH
Install Span Mounted Sign		1	EACH

McCracken County
SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY
FD04

[illegible]

**McCracken County
TYPICAL SECTION
FD05 073 0045X 000-003
MP 0.042 to 0.416
MP 1.551 to 2.111**





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING

STA. 100+00.00 TO STA. 104+00.00

ITEM NO. US-45X
SHEET NO. PLAN 1

COUNTY OF MCCRACKEN

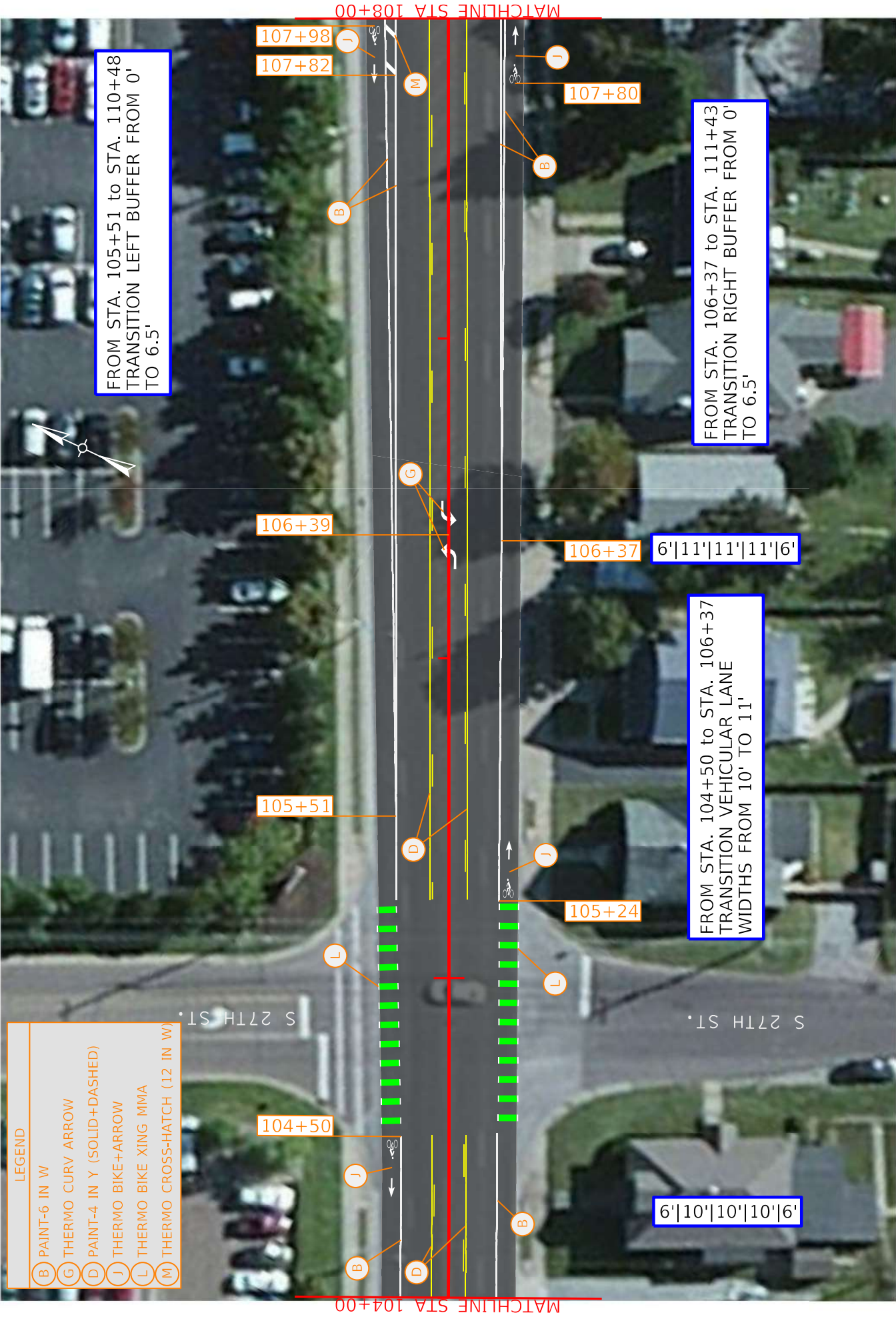
0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'

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OpenRoads Designer v10.12.03.2
FILE NAME: CATMP/PW/ISE/DO145486/STRIPINGPLAN.DGN

USER: slugans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING
STA. 104+00.00 TO STA. 108+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 2

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

OpenRoads Designer v10.12.03.2
FILE NAME: CATMP/PWSE/DO145486/STRIPINGPLAN.DGN

USER: aligans

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LEGEND	
(A)	PAINT-4 IN W
(B)	PAINT-6 IN W
(C)	PAINT-4 IN Y (DOUBLE)
(D)	PAINT-4 IN Y (SOLID+DASHED)
(G)	THERMO CURV ARROW
(J)	THERMO BIKE+ARROW
(L)	THERMO BIKE XING MMA
(M)	THERMO CROSS-HATCH (12 IN W)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DESIGN-BUILD PARTNERSHIP

DRAWING TITLE: STRIPING AND SIGNING

STA. 108+00.00 TO STA. 112+00.00

ITEM NO. US-45X

SHEET NO. PLAN 3

COUNTY OF MCCRACKEN

0' 40' 80' 160'

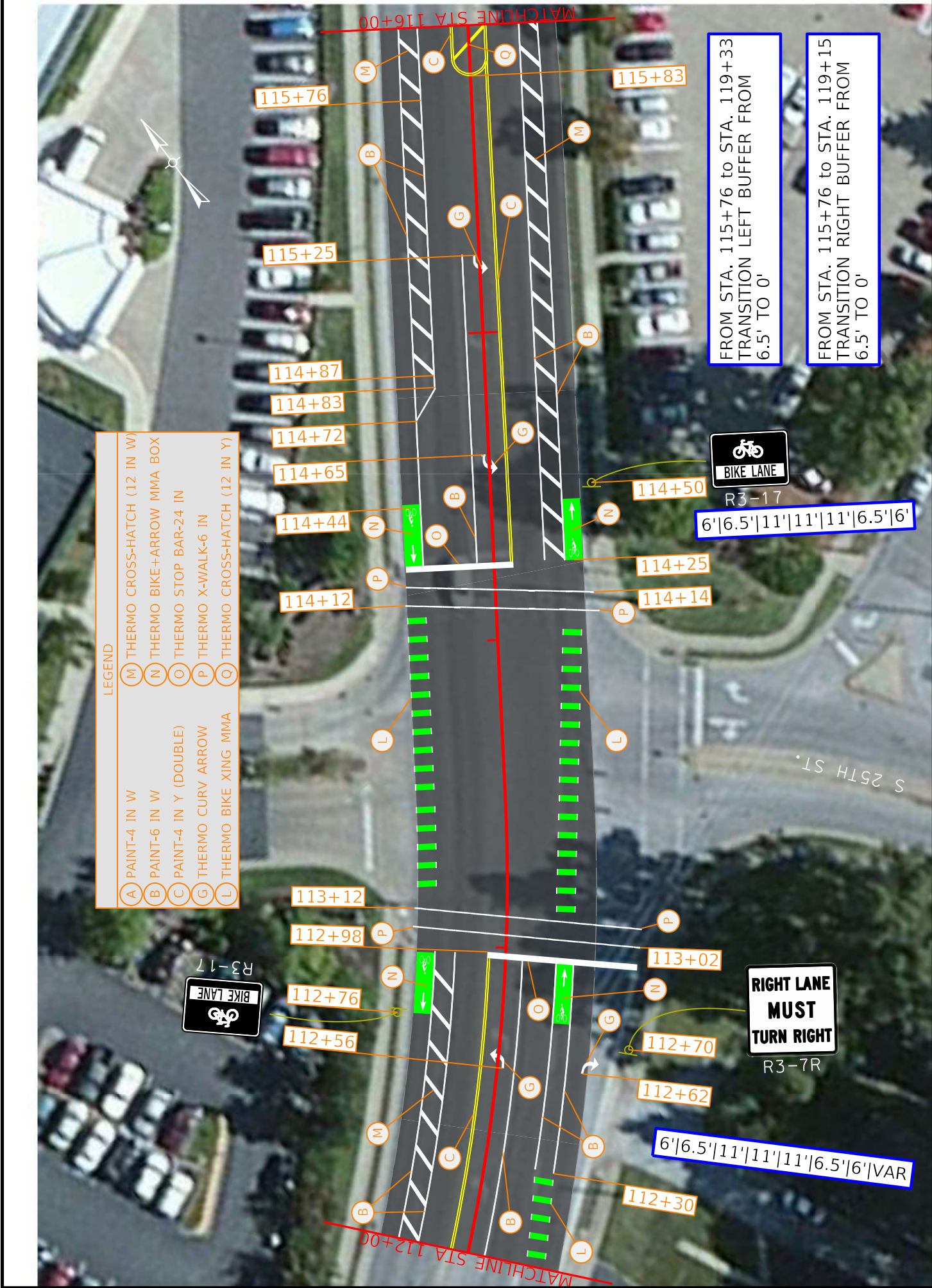
HORIZONTAL SCALE: 1"=40'

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OpenRoads Designer v10.12.03.2

FILE NAME: CATMP/PWSE/DO145486/STRIPINGPLAN.DGN

USER: aligans



LEGEND	
(A)	PAINT-4 IN W
(B)	PAINT-6 IN W
(C)	PAINT-4 IN Y (DOUBLE)
(G)	THERMO CURV ARROW
(L)	THERMO BIKE XING MMA
(M)	THERMO CROSS-HATCH (12 IN W)
(N)	THERMO BIKE+ARROW MMA BOX
(O)	THERMO STOP BAR-24 IN
(P)	THERMO X-WALK-6 IN
(Q)	THERMO CROSS-HATCH (12 IN Y)

FROM STA. 115+76 TO STA. 119+33
TRANSITION LEFT BUFFER FROM
6.5' TO 0'

FROM STA. 115+76 TO STA. 119+15
TRANSITION RIGHT BUFFER FROM
6.5' TO 0'

BIKE LANE
R3-17
6'|6.5'|11'|11'|11'|6.5'|6'

RIGHT LANE
MUST
TURN RIGHT
R3-7R

6'|6.5'|11'|11'|11'|6.5'|6'|VAR

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

OpenRoads Designer v10.12.03.2

FILE NAME: C:\TMP\PIWSE\DO145486\STRIPING\PLAN.DGN

USER: aligans

DRAWING TITLE: STRIPING AND SIGNING

STA. 112+00.00 TO STA. 116+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 4

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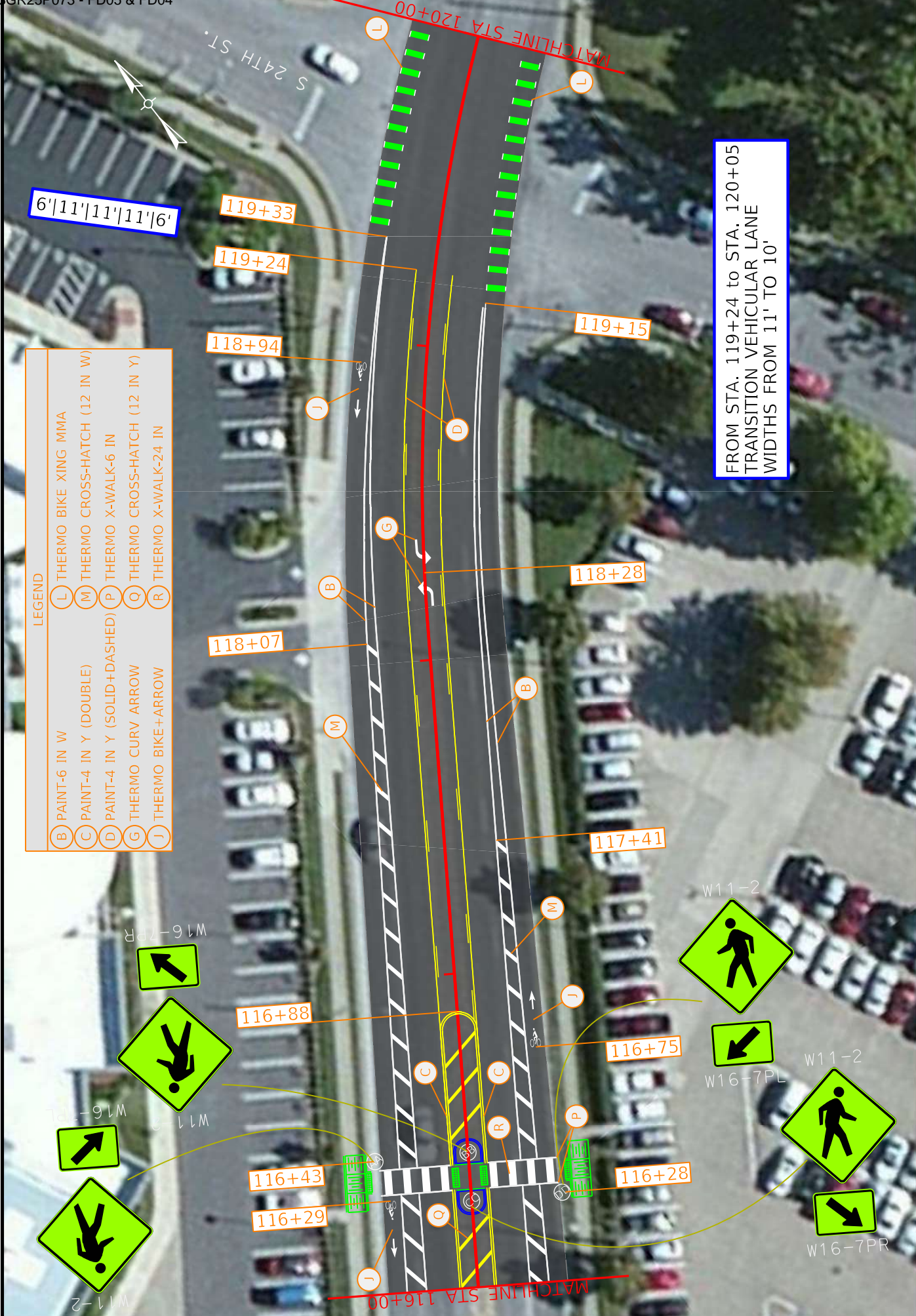
0'

40'

80'

160'

HORIZONTAL SCALE: 1"=40'



LEGEND	
(B) PAINT-6 IN W	(L) THERMO BIKE XING MMA
(C) PAINT-4 IN Y (DOUBLE)	(M) THERMO CROSS-HATCH (12 IN W)
(D) PAINT-4 IN Y (SOLID+DASHED)	(P) THERMO X-WALK-6 IN
(G) THERMO CURV ARROW	(O) THERMO CROSS-HATCH (12 IN Y)
(J) THERMO BIKE+ARROW	(R) THERMO X-WALK-24 IN

COMMONWEALTH OF KENTUCKY

DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

TRANSPORTATION

DRAWING TITLE: STRIPING AND SIGNING

STA. 116+00.00 TO STA. 120+00.00

ITEM NO. US-45X

COUNTY OF MCCRACKEN

SHEET NO. PLAN 5

SCALE: 1"=40'

0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'

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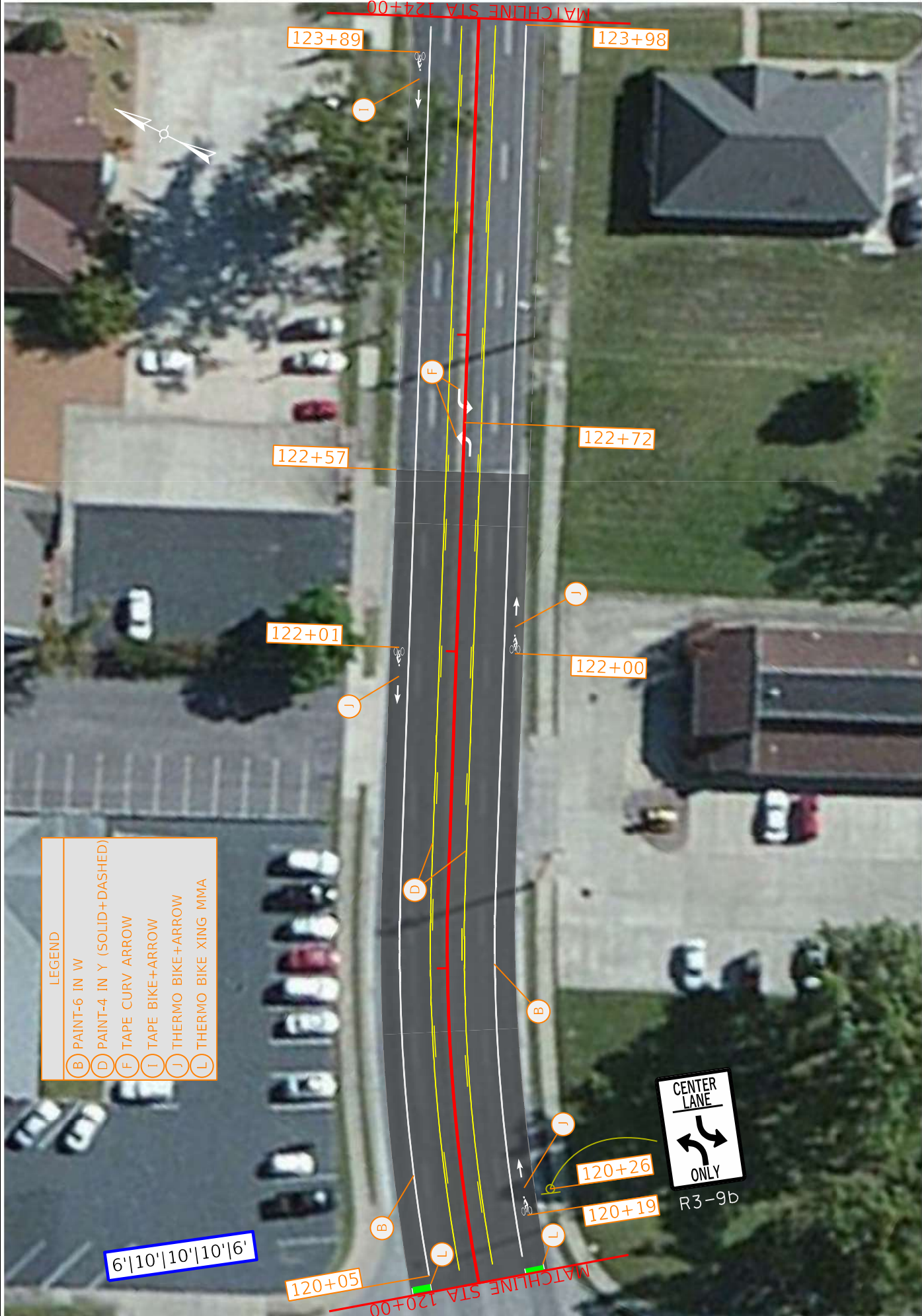
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OpenRoads Designer v10.12.03.2

FILE NAME: CATMP/PWSE/DO145486/STRIPINGPLAN.DGN

USER: aulgans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DRAWING TITLE: STRIPING AND SIGNING

STA. 120+00.00 TO STA. 124+00.00

ITEM NO. US-45X

COUNTY OF MCCRACKEN

SHEET NO. PLAN 6

160'

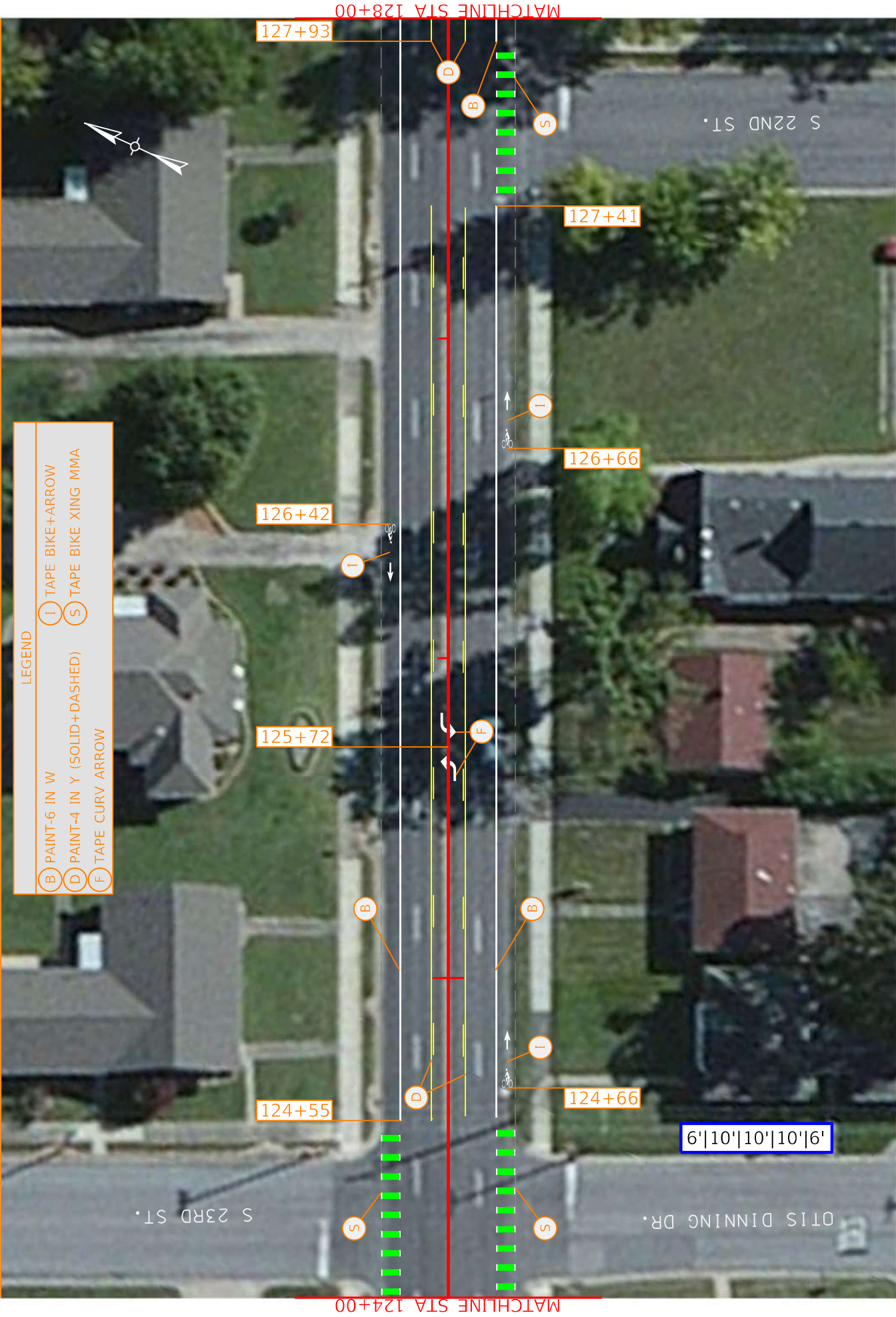
80'

40'

0'

HORIZONTAL SCALE: 1"=40'

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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING
STA. 124+00.00 TO STA. 128+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 7

HORIZONTAL SCALE: 1"=40'

OpenRoads Designer v10.12.03.2

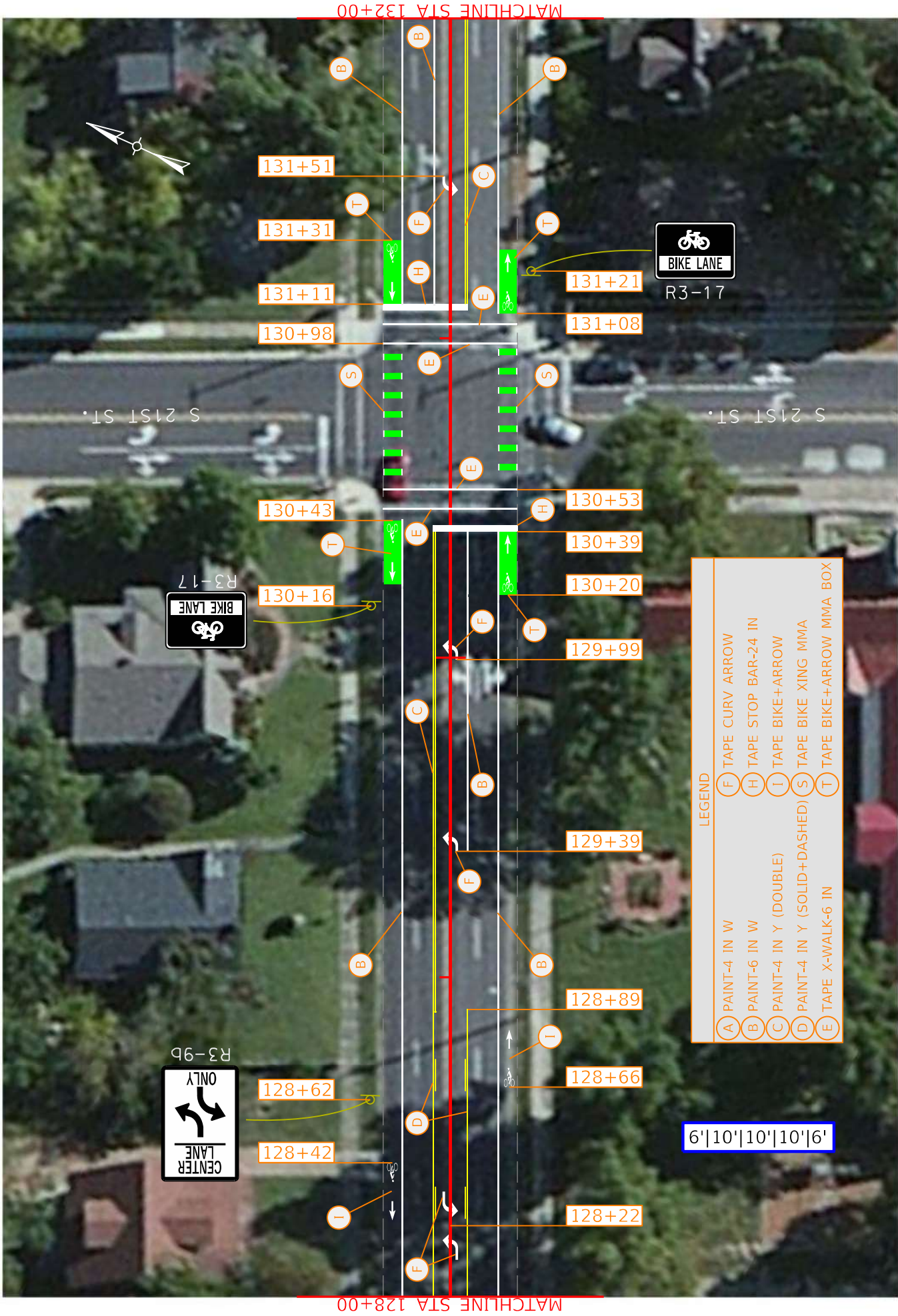
FILE NAME: CATMP\PIWSE\00145486\STRIPING\PLAN.DGN

USER: aljgans

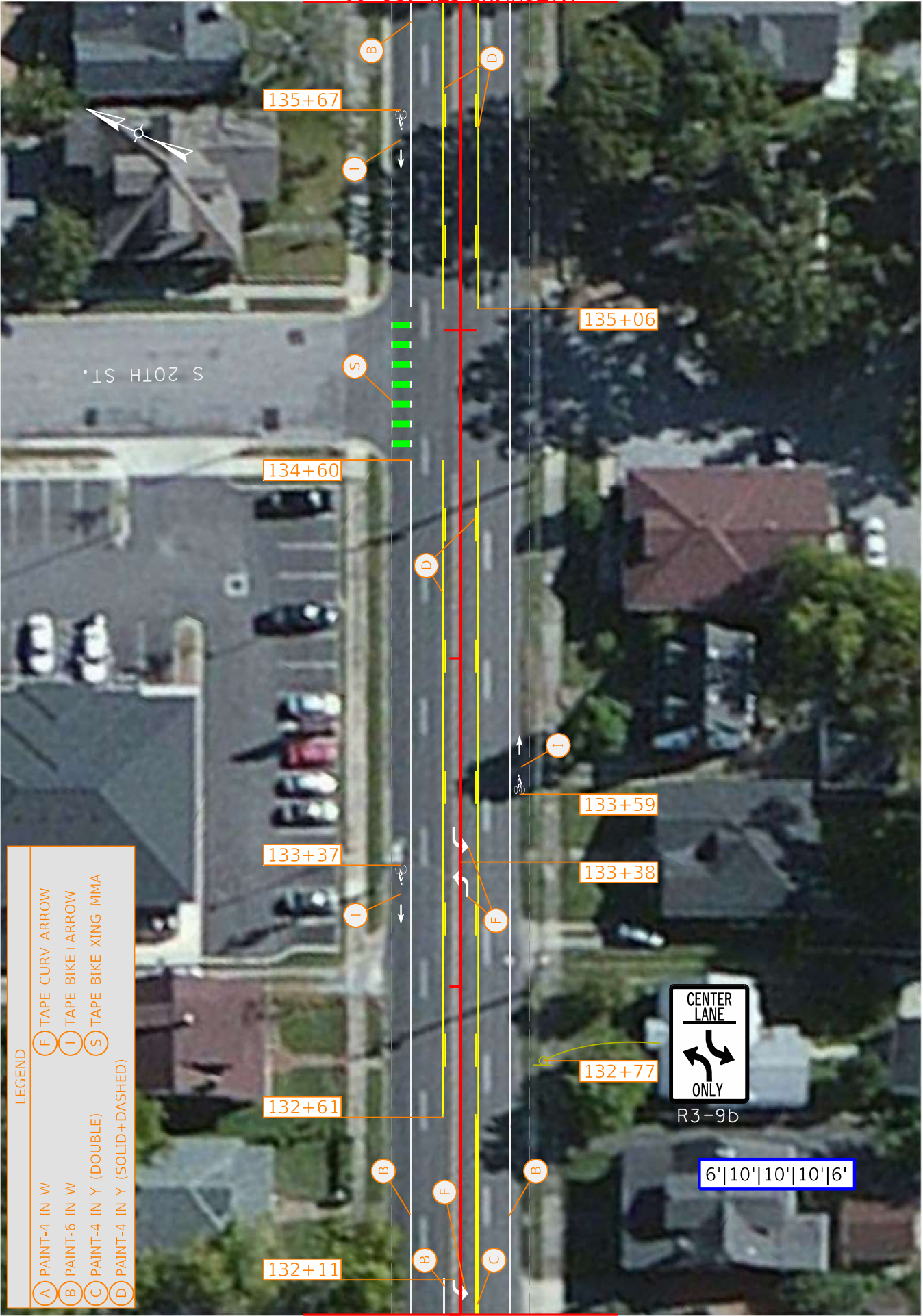
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LEGEND	
(A)	PAINT-4 IN W
(B)	PAINT-6 IN W
(C)	PAINT-4 IN Y (DOUBLE)
(D)	PAINT-4 IN Y (SOLID+DASHED)
(E)	TAPE X-WALK-6 IN
(F)	TAPE CURV ARROW
(H)	TAPE STOP BAR-24 IN
(I)	TAPE BIKE+ARROW
(S)	TAPE BIKE XING MMA
(T)	TAPE BIKE+ARROW MMA BOX



LEGEND	
(A) PAINT-4 IN W	(F) TAPE CURV ARROW
(B) PAINT-6 IN W	(I) TAPE BIKE+ARROW
(C) PAINT-4 IN Y (DOUBLE)	(S) TAPE BIKE XING MMA
(D) PAINT-4 IN Y (SOLID+DASHED)	

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DESIGN-BUILD PARTNERSHIP

DRAWING TITLE: STRIPING AND SIGNING

STA. 132+00.00 TO STA. 136+00.00

ITEM NO. US-45X

COUNTY OF MCCRACKEN

SHEET NO. PLAN 9

160'

80'

40'

HORIZONTAL SCALE: 1"=40'

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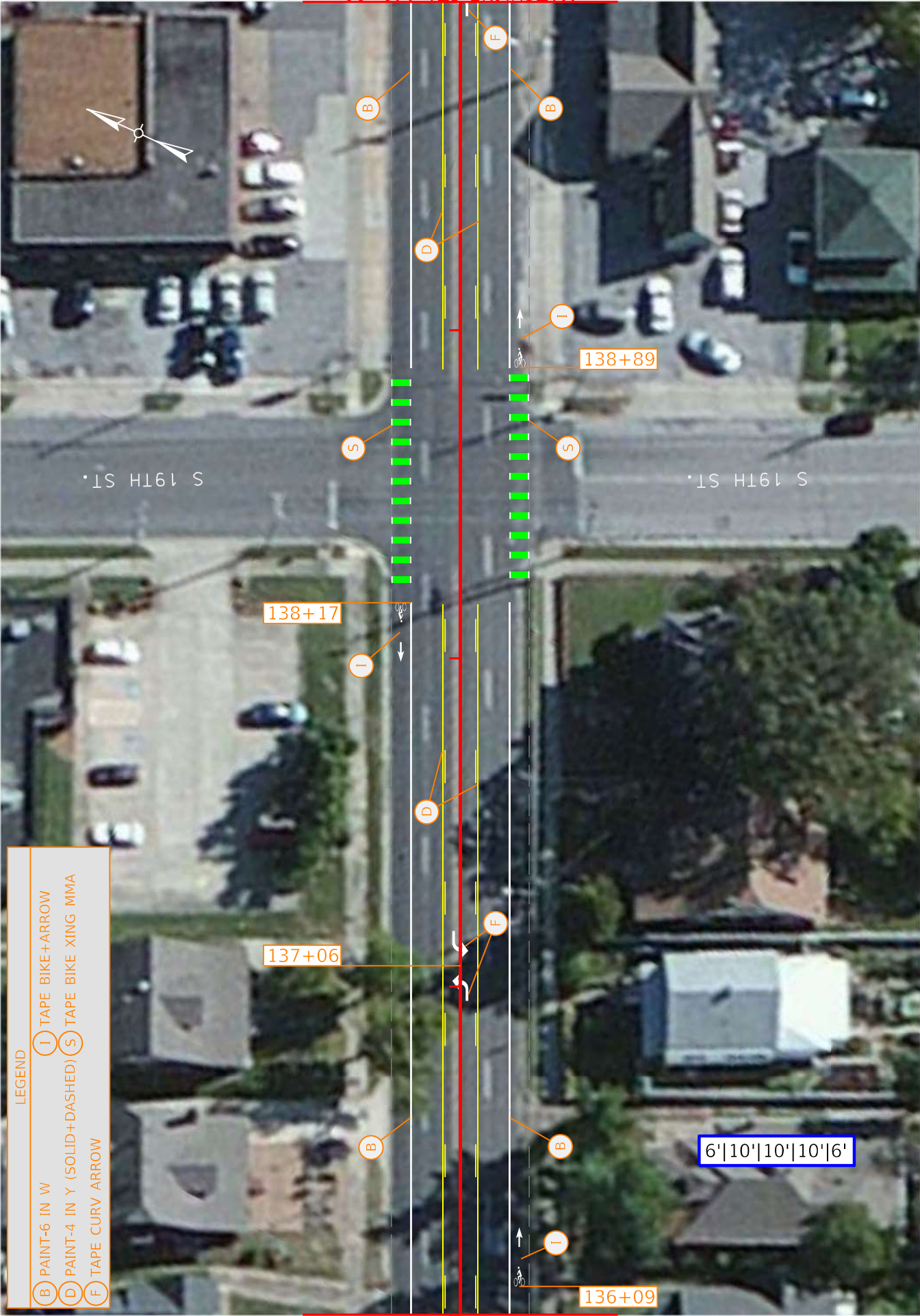
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OpenRoads Designer v10.12.03.2

FILE NAME: C:\TMP\PIWSE\DO145486\STRIPING\PLAN.DGN

USER: aligans



LEGEND	
(B) PAINT-6 IN W	(I) TAPE BIKE+ARROW
(D) PAINT-4 IN Y (SOLID+DASHED)	(S) TAPE BIKE XING MVA
(E) TAPE CURV ARROW	

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
Infrastructure

USER: jlgans

DRAWING TITLE: STRIPING AND SIGNING

STA. 136+00.00 TO STA. 140+00.00

ITEM NO. US-45X

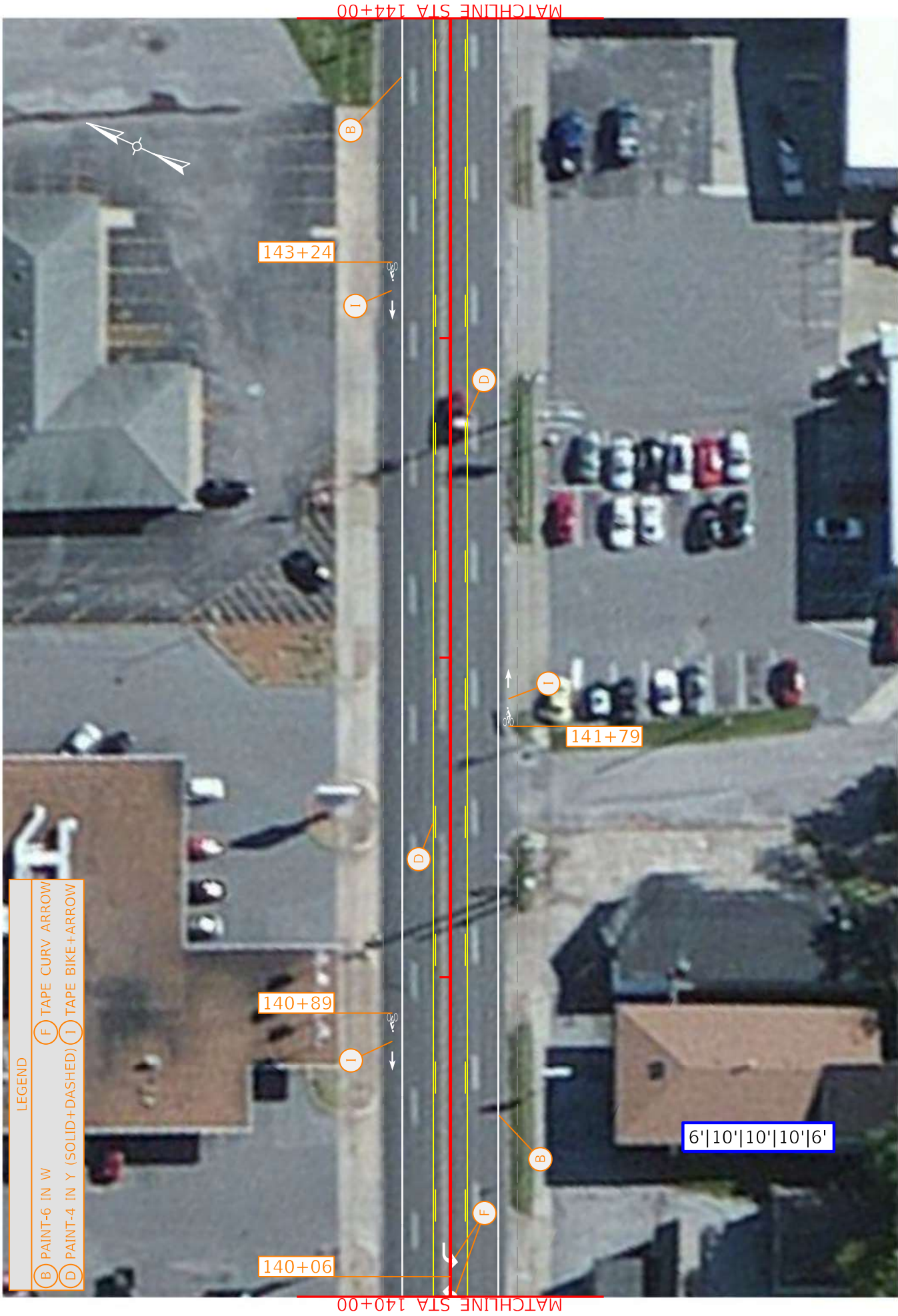
COUNTY OF MCCRACKEN

SHEET NO. PLAN 10

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0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'



LEGEND

(B) PAINT-6 IN W

(F) TAPE CURV. ARROW

(D) PAINT-4 IN Y (SOLID+DASHED)

(I) TAPE BIKE+ARROW

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION

USER: alugans

DRAWING TITLE: STRIPING AND SIGNING

STA. 140+00.00 TO STA. 144+00.00

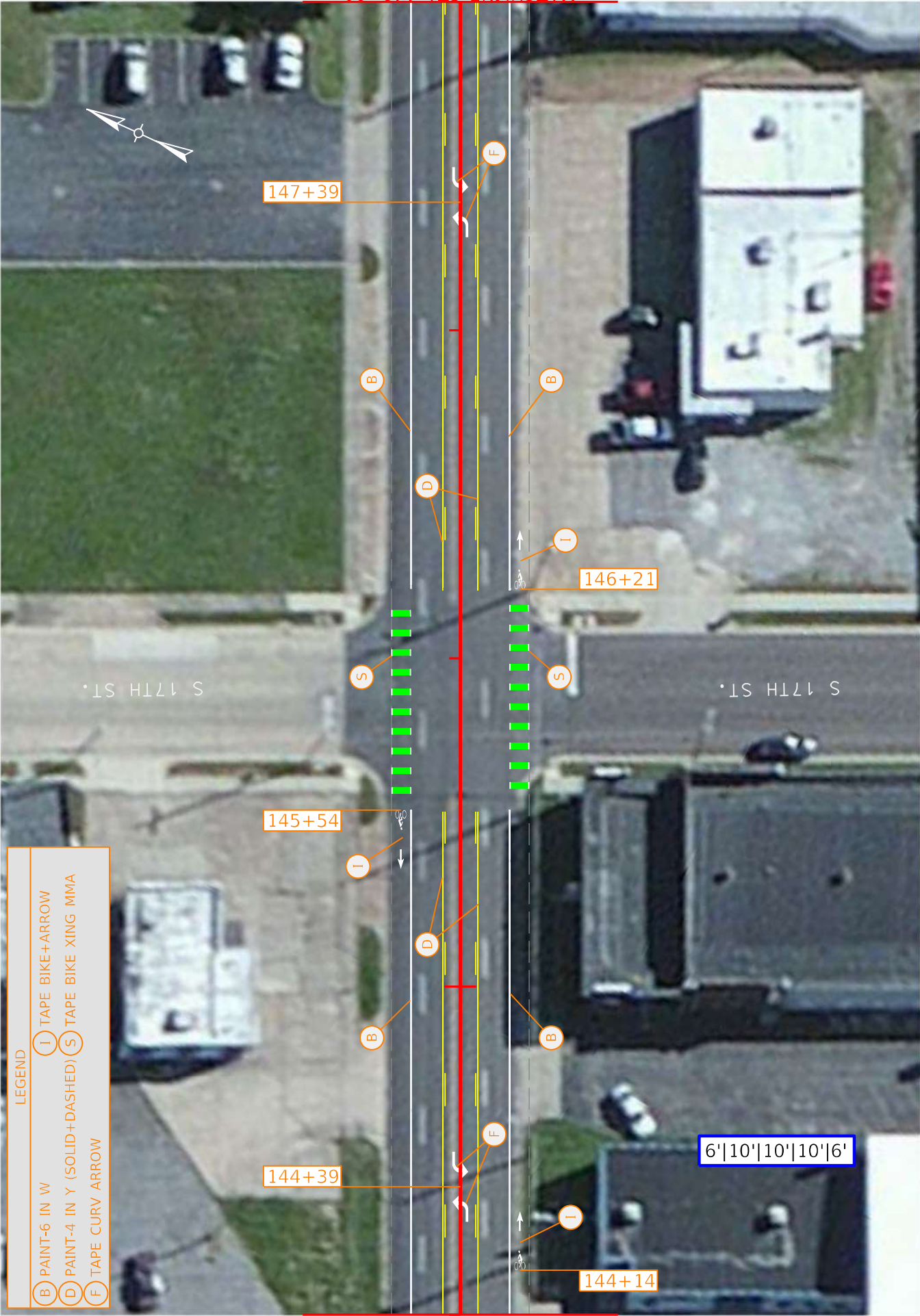
ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 11

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HORIZONTAL SCALE: 1"=40'



LEGEND	
(B) PAINT-6 IN W	(I) TAPE BIKE+ARROW
(D) PAINT-4 IN Y (SOLID+DASHED)	(S) TAPE BIKE XING MMA
(E) TAPE CURV ARROW	

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DESIGN-BUILD PARTNERSHIP

DRAWING TITLE: STRIPING AND SIGNING

STA. 144+00.00 TO STA. 148+00.00

ITEM NO. US-45X

COUNTY OF MCCRACKEN

SHEET NO. PLAN 12

SCALE: 1"=40'

0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'

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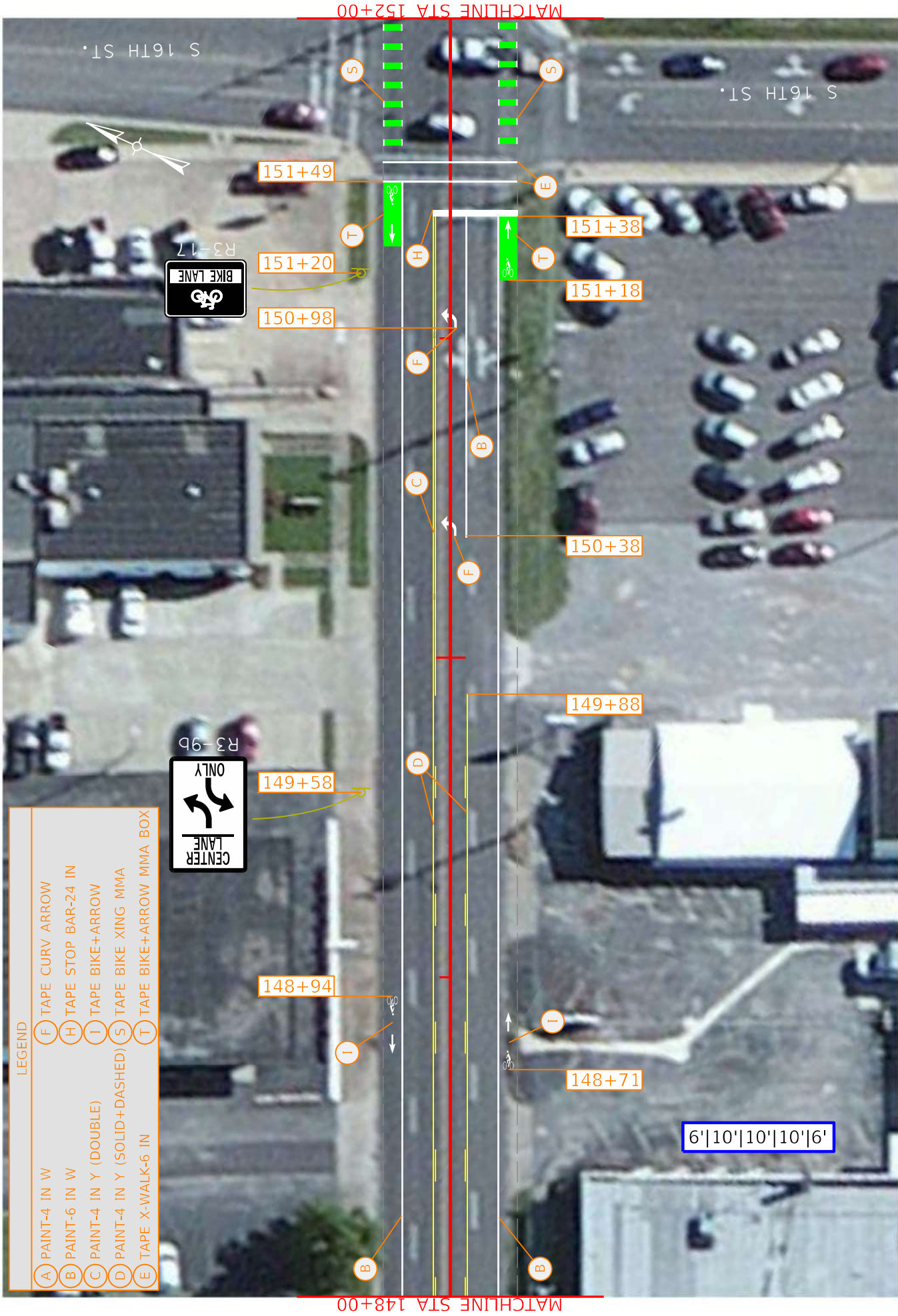
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FILE NAME: CATMP/PW/SE/DO145486/STRIPINGPLAN.DGN

USER: aligans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING
STA. 148+00.00 TO STA. 152+00.00

ITEM NO. US-45X
SHEET NO. PLAN 13

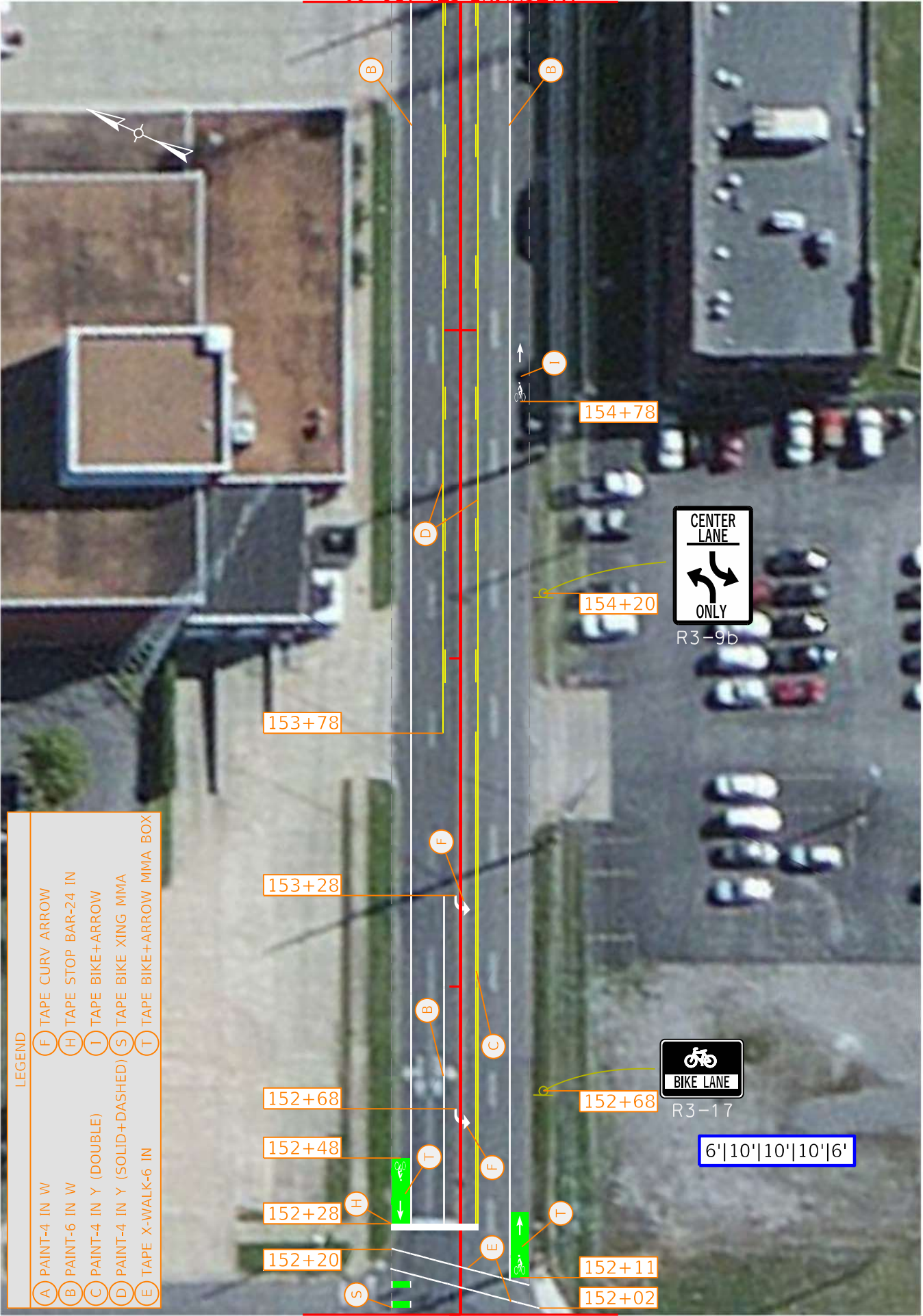
COUNTY OF MCCRACKEN

FILE NAME: CATMP/PW/SE/DO145466/STRIPINGPLAN.DGN
OpenRoads Designer v10.12.03.2
USER: slugans

HORIZONTAL SCALE: 1"=40'

0' 40' 80' 160'

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LEGEND	
(A) PAINT-4 IN W	(F) TAPE CURV ARROW
(B) PAINT-6 IN W	(H) TAPE STOP BAR-24 IN
(C) PAINT-4 IN Y (DOUBLE)	(I) TAPE BIKE+ARROW
(D) PAINT-4 IN Y (SOLID+DASHED)	(S) TAPE BIKE XING MMA
(E) TAPE X-WALK-6 IN	(T) TAPE BIKE+ARROW MMA BOX

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION

USER: alugans

DRAWING TITLE: STRIPING AND SIGNING

STA. 152+00.00 TO STA. 156+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

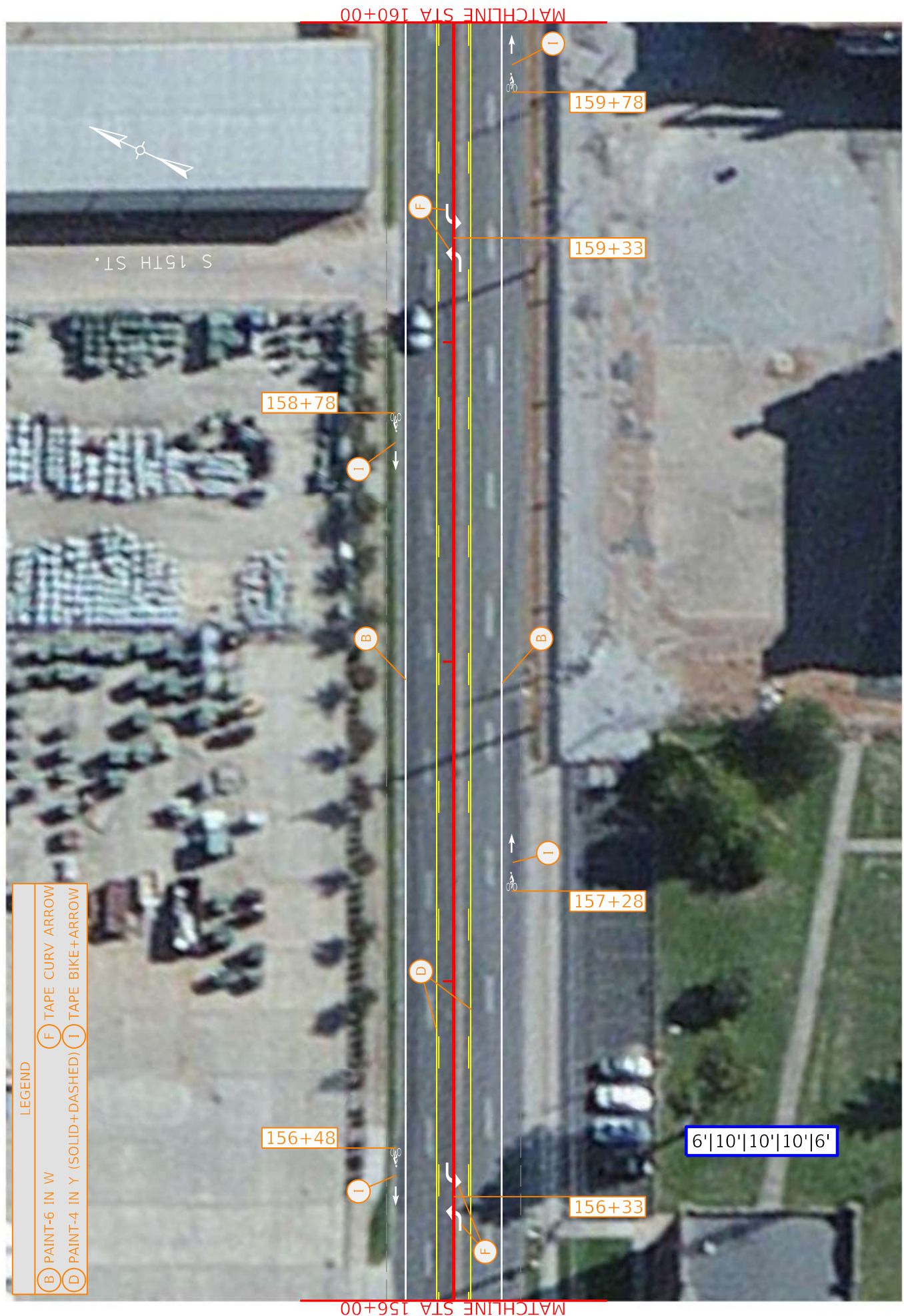
SHEET NO.
PLAN 14

HORIZONTAL SCALE: 1"=40'

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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION

USER: aligans

DRAWING TITLE: STRIPING AND SIGNING

STA. 156+00.00 TO STA. 160+00.00

ITEM NO. US-45X

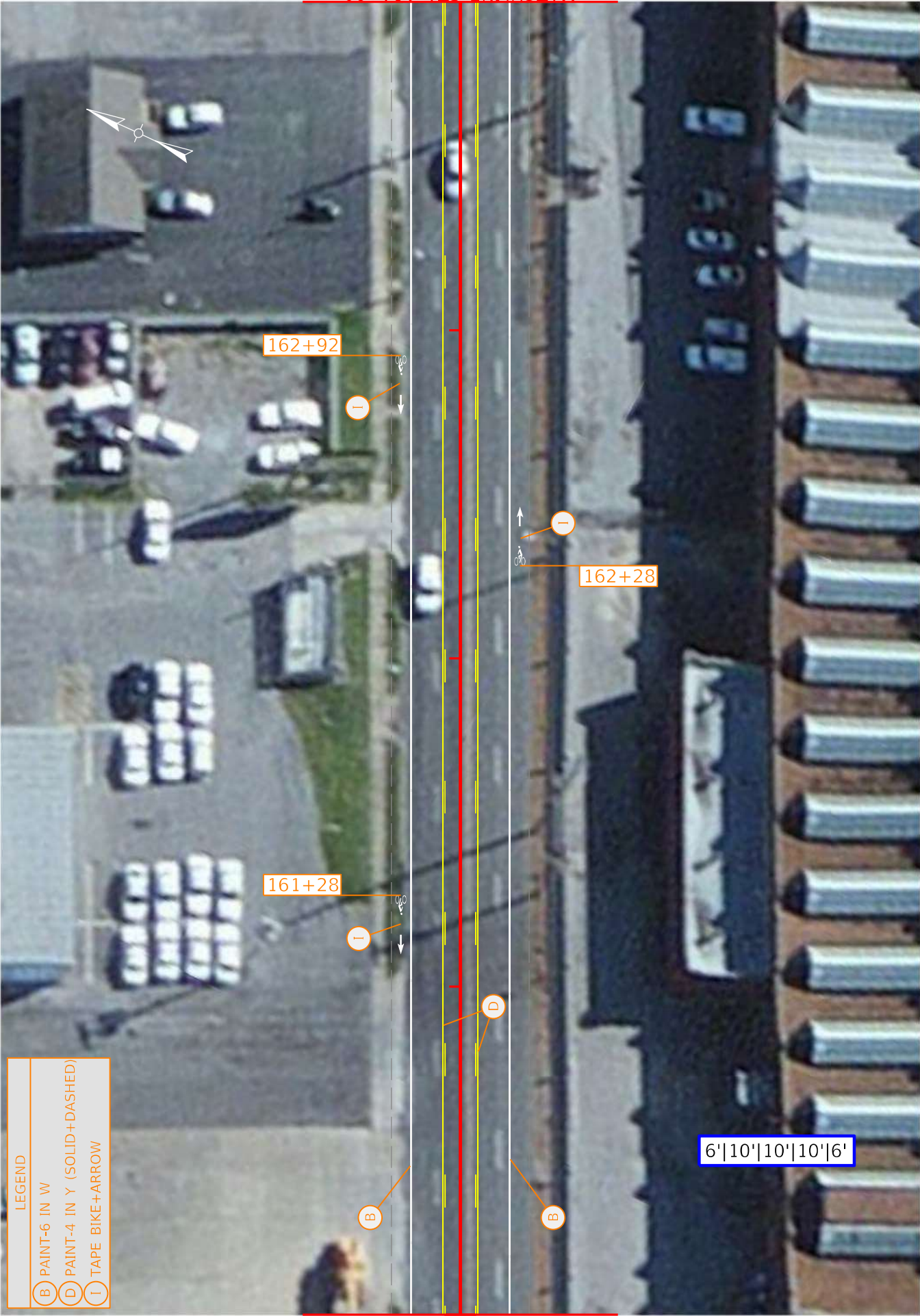
SHEET NO. PLAN 15

COUNTY OF MCCRACKEN

0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'

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COUNTY OF
MCCRACKEN

ITEM NO.
US-45X

SHEET NO.
PLAN 16

HORIZONTAL SCALE: 1"=40'

0' 40' 80' 160'

DRAWING TITLE: STRIPING AND SIGNING
STA. 160+00.00 TO STA. 164+00.00

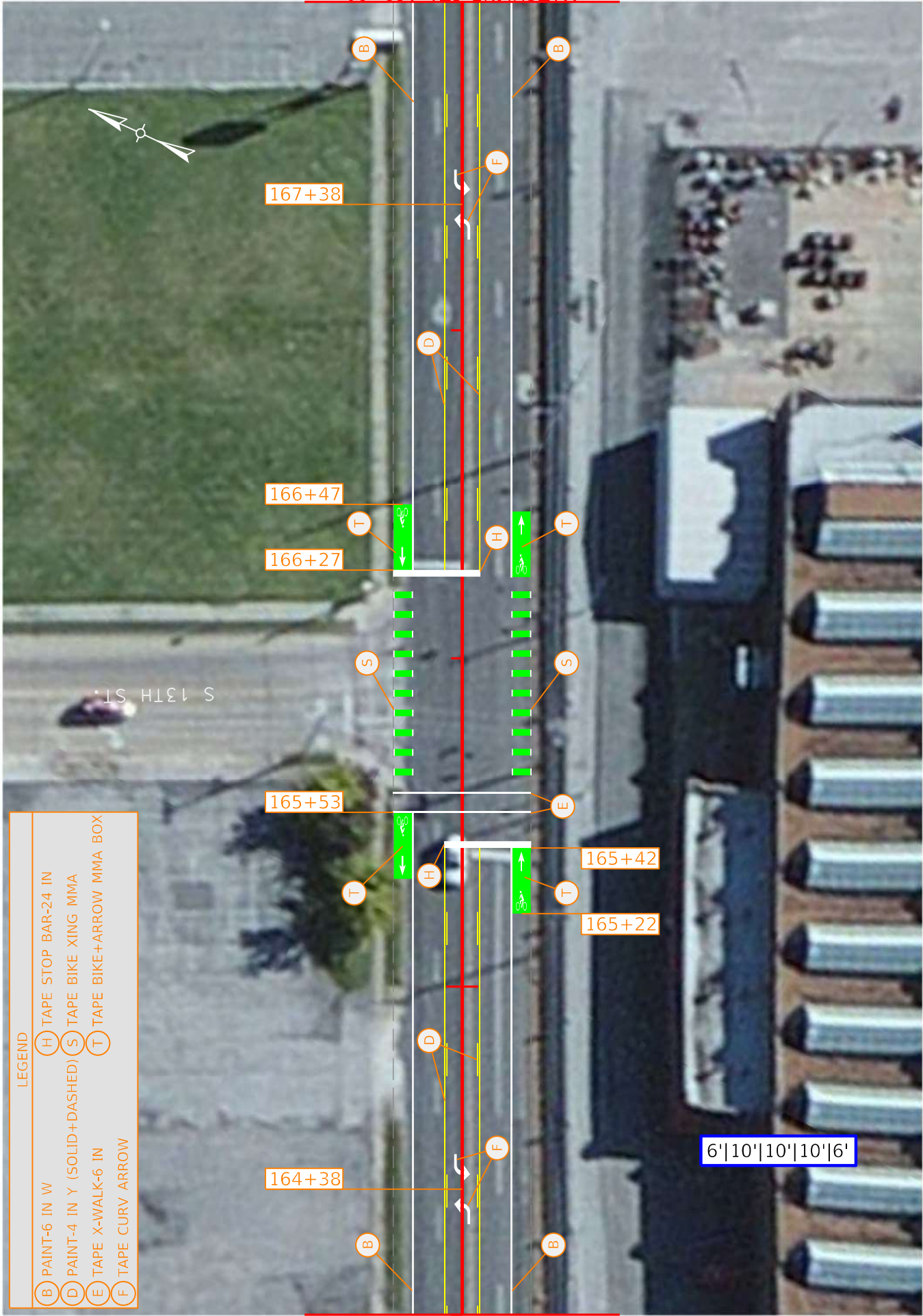
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

OpenRoads Designer v10.12.03.2
FILE NAME: CATMP/PW/SE/D0145486/STRIPING/PLAN.DGN

USER: aligans

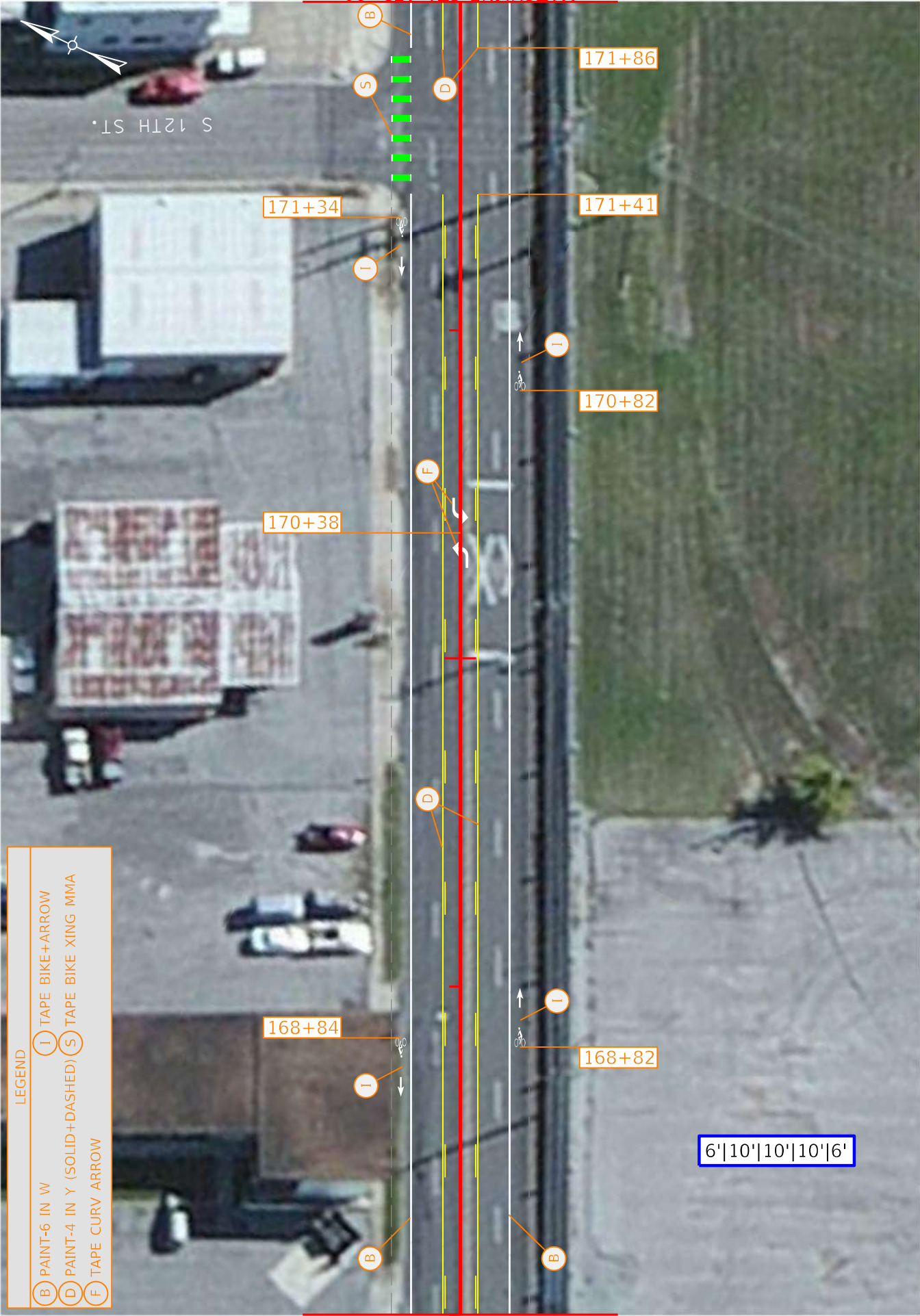
LEGEND	
(B) PAINT-6 IN W	(H) TAPE STOP BAR-24 IN
(D) PAINT-4 IN Y (SOLID+DASHED)	(S) TAPE BIKE XING MMA
(E) TAPE X-WALK-6 IN	(T) TAPE BIKE+ARROW MMA BOX
(F) TAPE CURV ARROW	



ITEM NO. US-45X
COUNTY OF MCCRACKEN
SHEET NO. PLAN 17

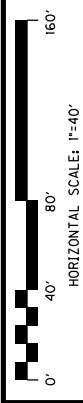
DRAWING TITLE: STRIPING AND SIGNING
STA. 164+00.00 TO STA. 168+00.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
USER: aligans



DRAWING TITLE: STRIPING AND SIGNING
STA. 168+00.00 TO STA. 172+00.00

COUNTY OF
MCCRACKEN
ITEM NO.
US-45X
SHEET NO.
PLAN 18

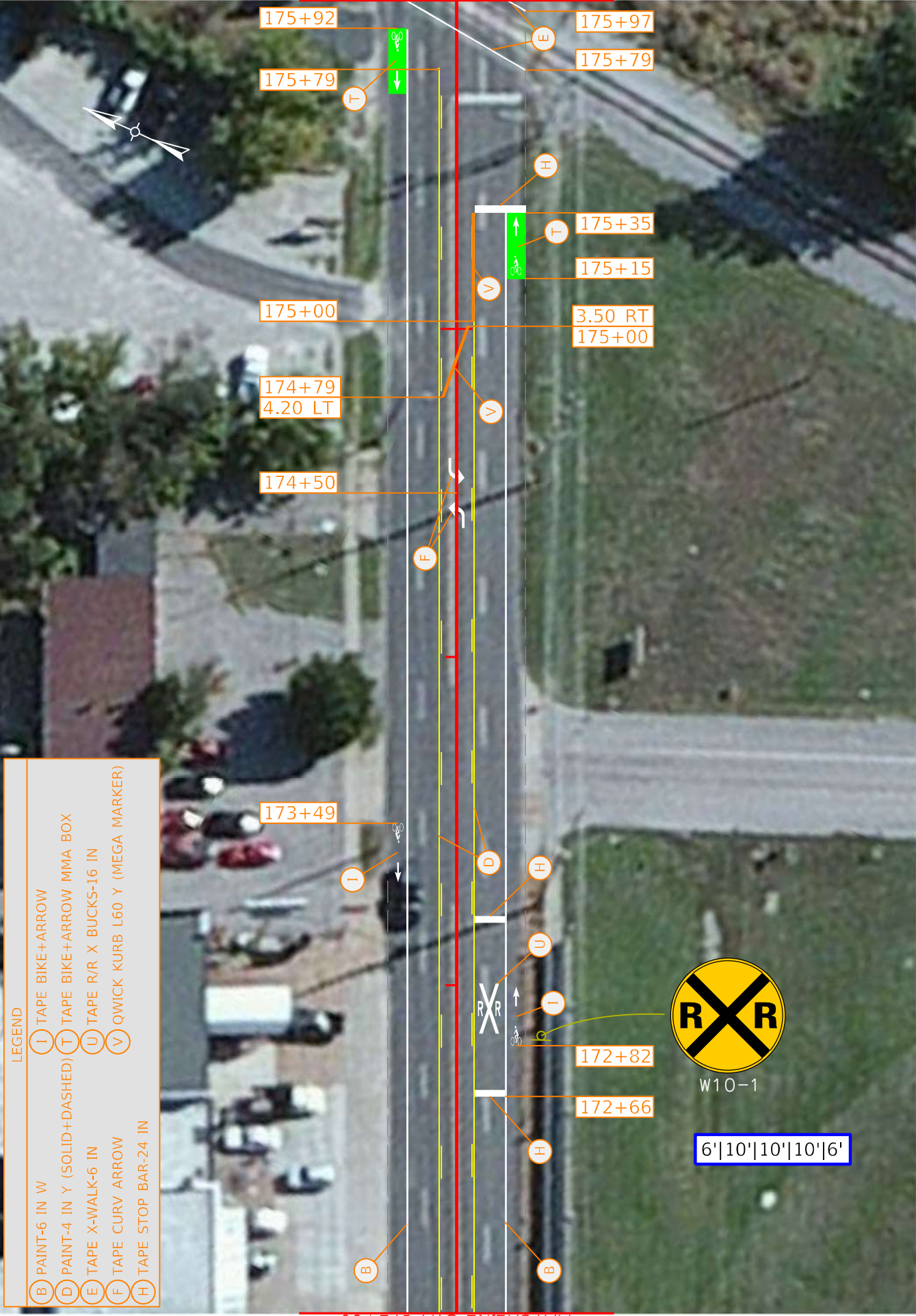


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
DESIGN-BUILD PARTNERSHIP

OpenRoads Designer v10.12.03.2
FILE NAME: C:\TMP\PIWSE\00145486\STRIPING\PLAN.DGN
USER: alugans

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LEGEND	
(B) PAINT-6 IN W	(I) TAPE BIKE+ARROW
(D) PAINT-4 IN Y (SOLID+DASHED)	(T) TAPE BIKE+ARROW MMA BOX
(E) TAPE X-WALK-6 IN	(U) TAPE R/R X BUCKS-16 IN
(F) TAPE CURV ARROW	(V) QWICK KURB L60 Y (MEGA MARKER)
(H) TAPE STOP BAR-24 IN	



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING
STA. 172+00.00 TO STA. 176+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

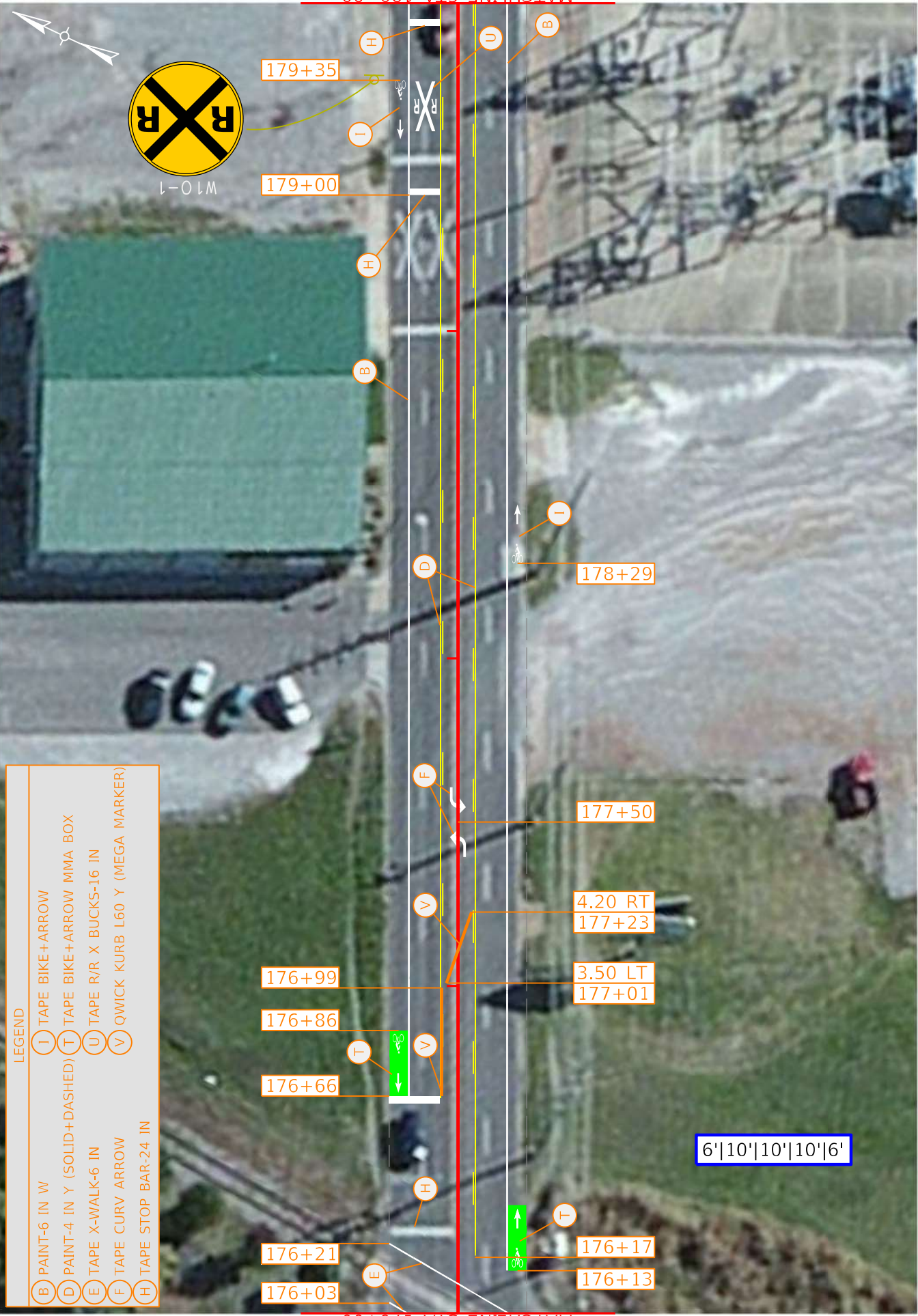
SHEET NO.
PLAN 19

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0'
40'
80'
160'

HORIZONTAL SCALE: 1"=40'

USER: aligans
FILE NAME: CATMP/PW/SE/DO145486/STRIPINGPLAN.DGN
OpenRoads Designer v10.12.03.2



DRAWING TITLE: STRIPING AND SIGNING
STA. 176+00.00 TO STA. 180+00.00

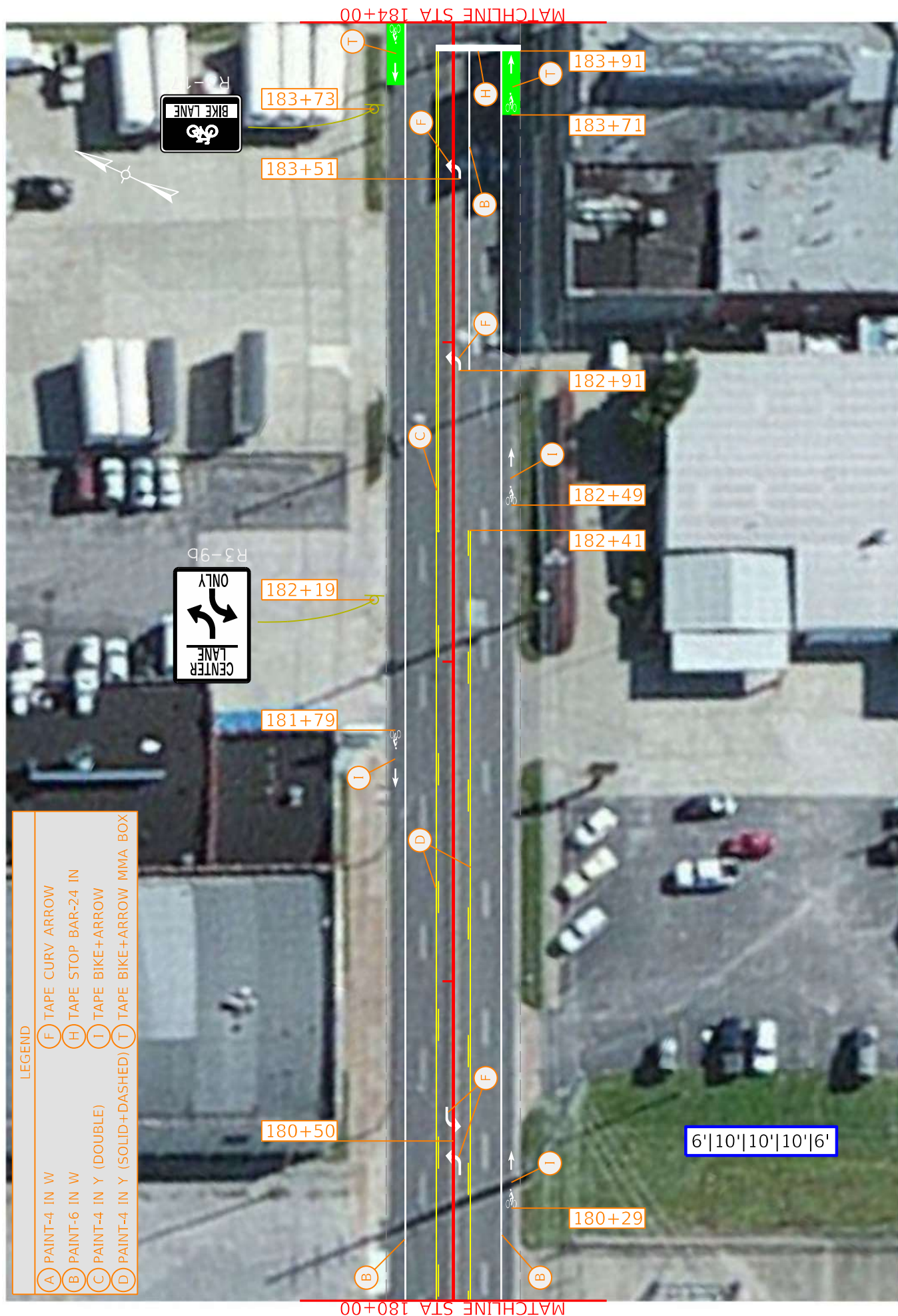
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



ITEM NO.
US-45X
SHEET NO.
PLAN 20

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

COUNTY OF
MCCRACKEN
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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: STRIPING AND SIGNING
STA. 180+00.00 TO STA. 184+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 21

0' 40' 80' 160'

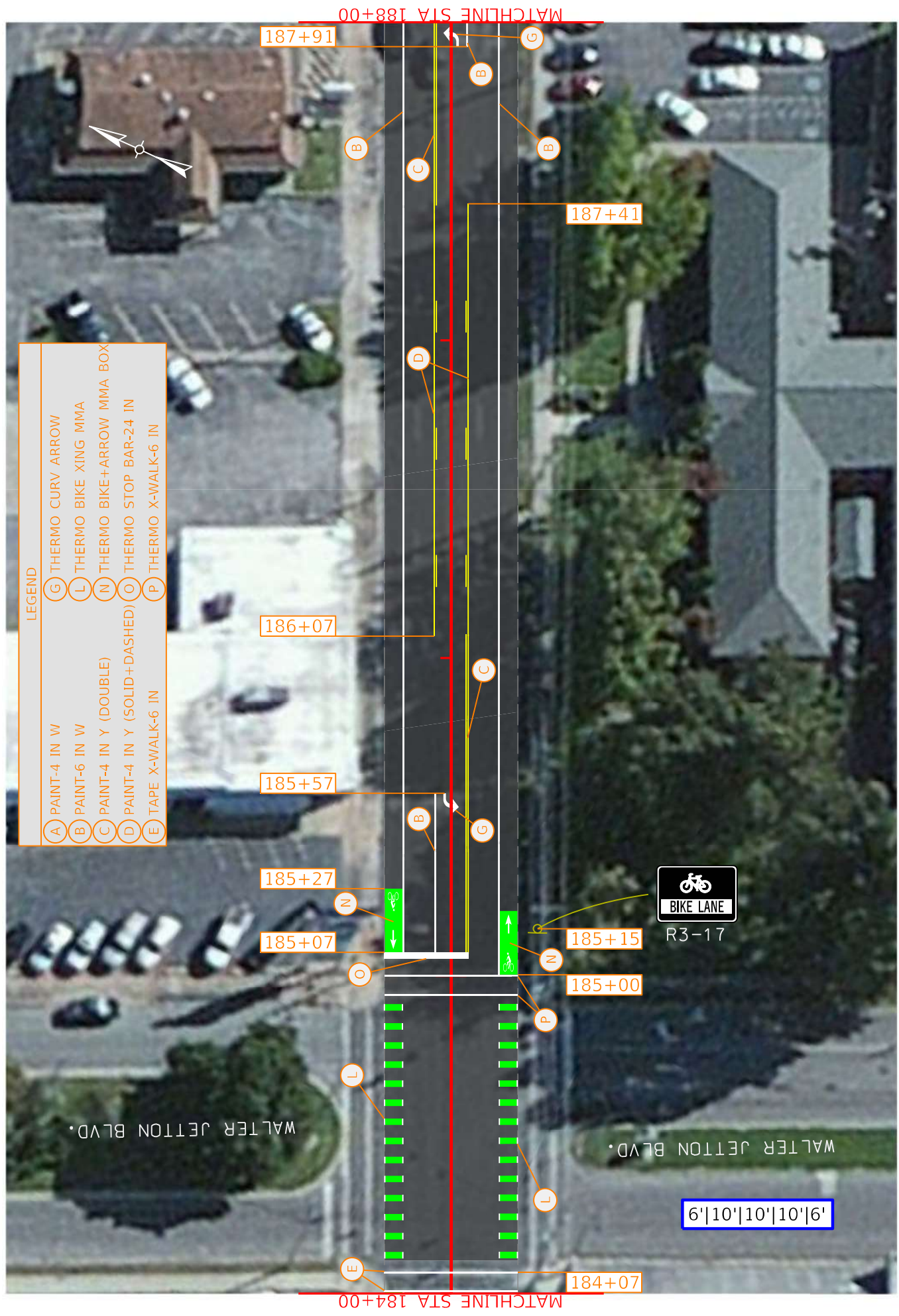
HORIZONTAL SCALE: 1"=40'

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FILE NAME: C:\TMP\PIWSE\10145486\STRIPING\PLAN.DGN
USER: aligans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DESIGN-BUILD PARTNERSHIP

DRAWING TITLE: STRIPING AND SIGNING

STA. 184+00.00 TO STA. 188+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 22

0' 40' 80' 160'

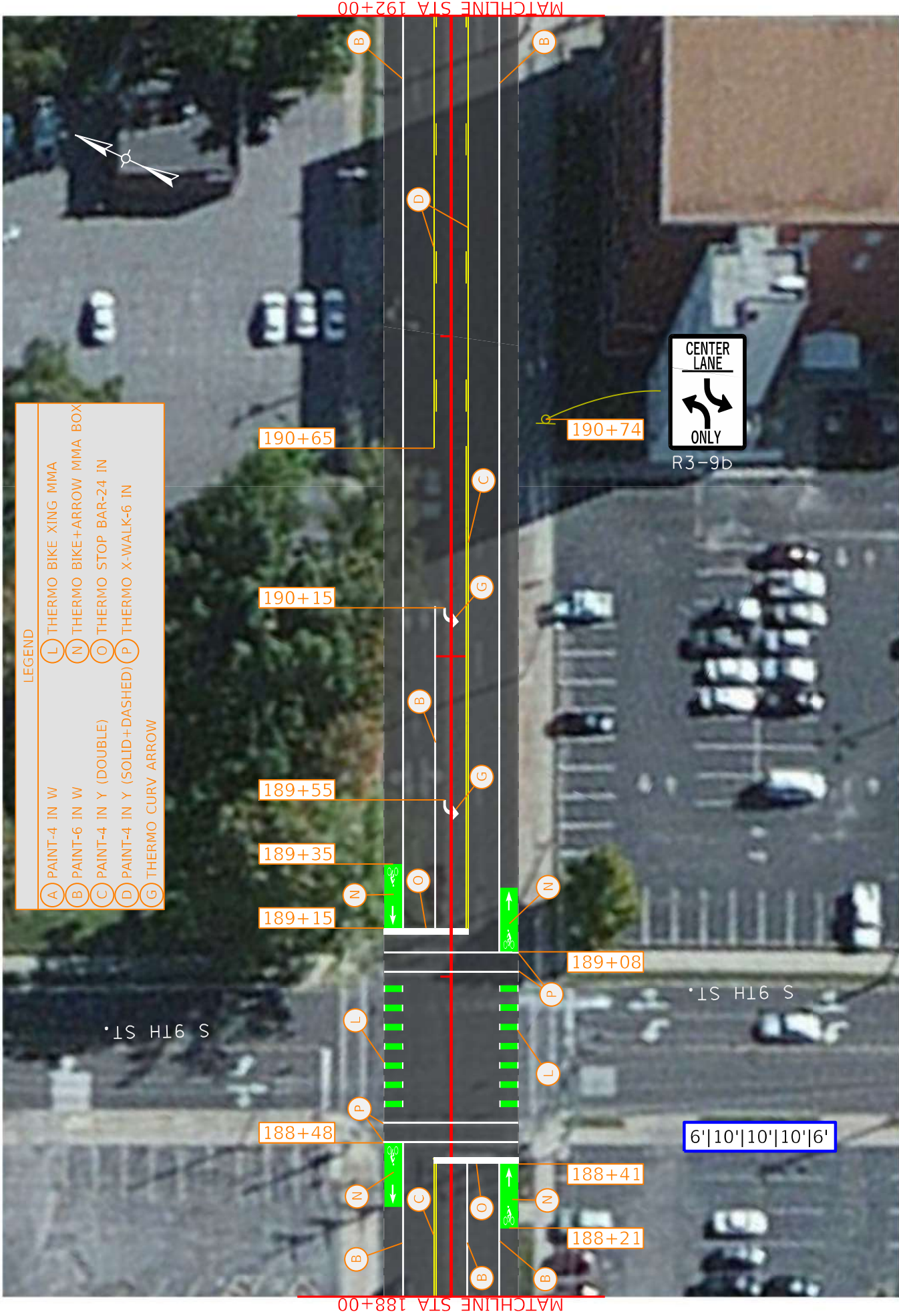
HORIZONTAL SCALE: 1"=40'

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OpenRoads Designer v10.12.03.2

FILE NAME: C:\TMP\PIWSE\10145486\STRIPING\PLAN.DGN

USER: aligans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DESIGN-BUILD PARTNERSHIP

DRAWING TITLE: STRIPING AND SIGNING

STA. 188+00.00 TO STA. 192+00.00

ITEM NO. US-45X

COUNTY OF MCCRACKEN

SHEET NO. PLAN 23

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0' 40' 80' 160'

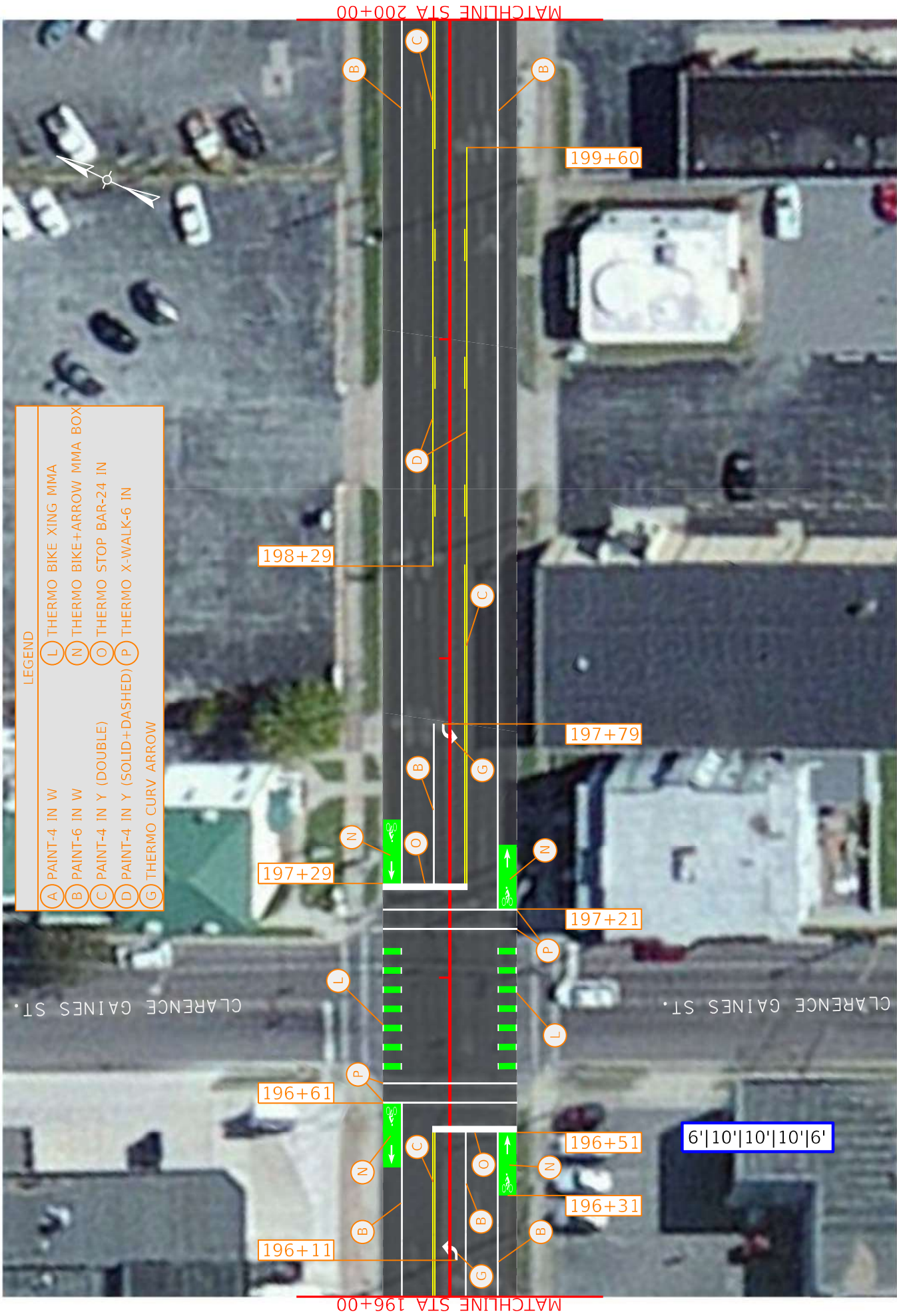
HORIZONTAL SCALE: 1"=40'

OpenRoads Designer v10.12.03.2

FILE NAME: C:\TMP\PIWSE\10145466\STRIPING\PLAN.DGN

USER: alugans





LEGEND

(A)	PAINT-4 IN W	(L)	THERMO BIKE XING MMA
(B)	PAINT-6 IN W	(N)	THERMO BIKE+ARROW MMA BOX
(C)	PAINT-4 IN Y (DOUBLE)	(O)	THERMO STOP BAR-24 IN
(D)	PAINT-4 IN Y (SOLID+DASHED)	(P)	THERMO X-WALK-6 IN
(G)	THERMO CURV ARROW		

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 25

HORIZONTAL SCALE: 1"=40'

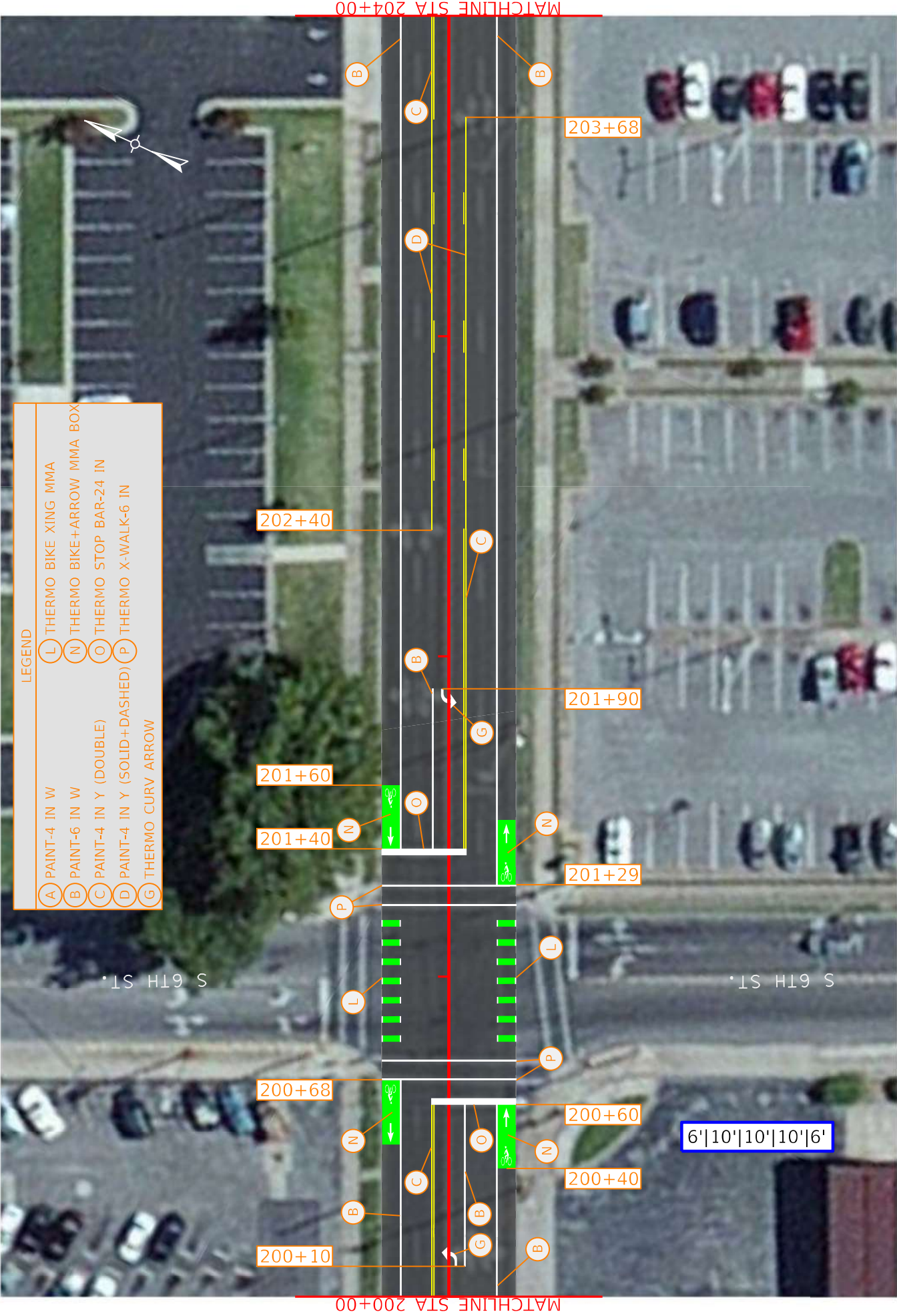
0' 40' 80' 160'

DRAWING TITLE: STRIPING AND SIGNING
STA. 196+00.00 TO STA. 200+00.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION

USER: jlgans



LEGEND	
(A)	PAINT-4 IN W
(B)	PAINT-6 IN W
(C)	PAINT-4 IN Y (DOUBLE)
(D)	PAINT-4 IN Y (SOLID+DASHED)
(G)	THERMO CURV ARROW
(L)	THERMO BIKE XING MMA
(N)	THERMO BIKE+ARROW MMA BOX
(O)	THERMO STOP BAR-24 IN
(P)	THERMO X-WALK-6 IN

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION

DRAWING TITLE: STRIPING AND SIGNING
STA. 200+00.00 TO STA. 204+00.00

ITEM NO.
US-45X

COUNTY OF
MCCRACKEN

SHEET NO.
PLAN 26

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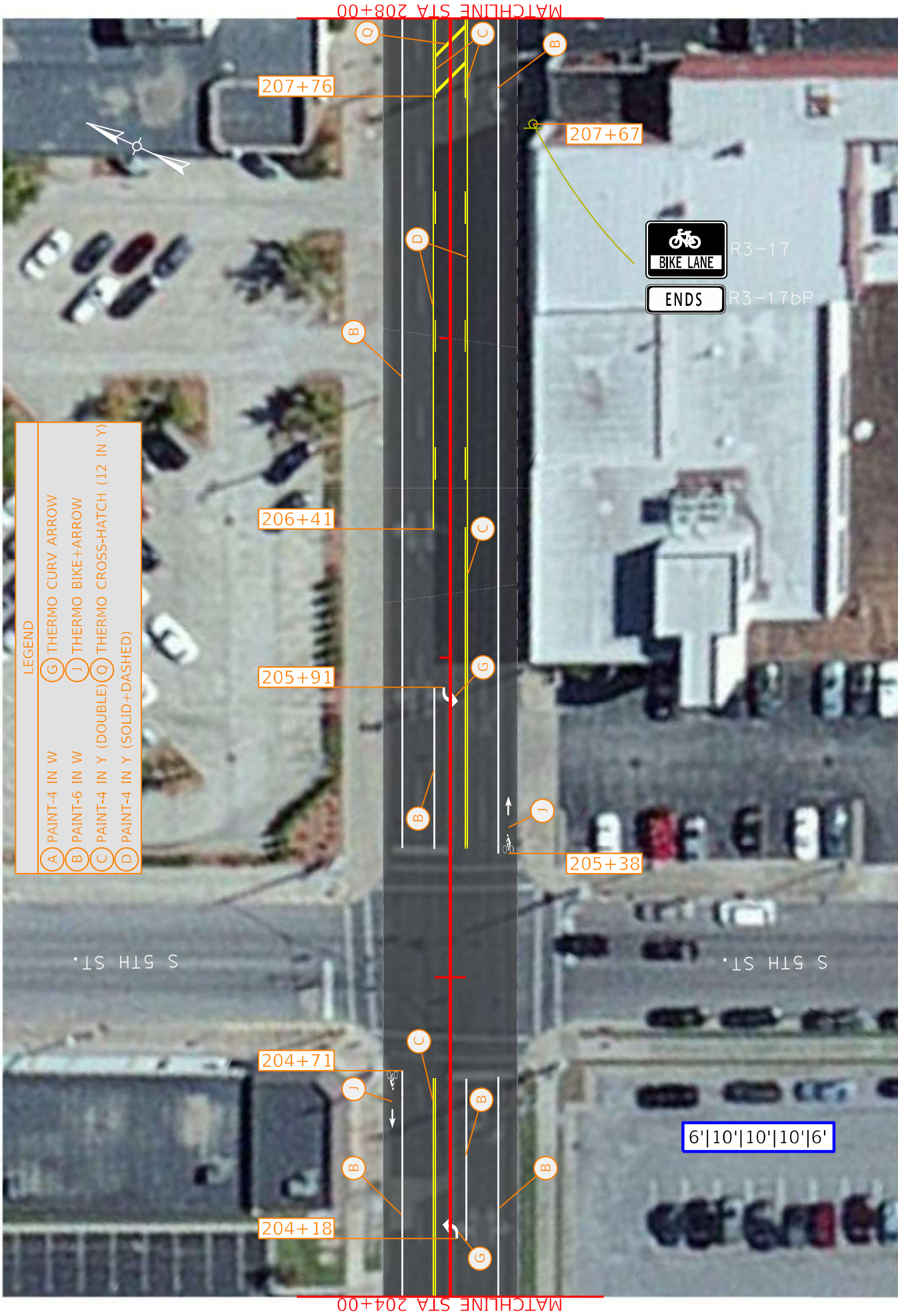
0' 40' 80' 160'

HORIZONTAL SCALE: 1"=40'

OpenRoads Designer v10.12.03.2

FILE NAME: CATMP/PWSE/DO145466/STRIPINGPLAN.DGN

USER: aligans



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

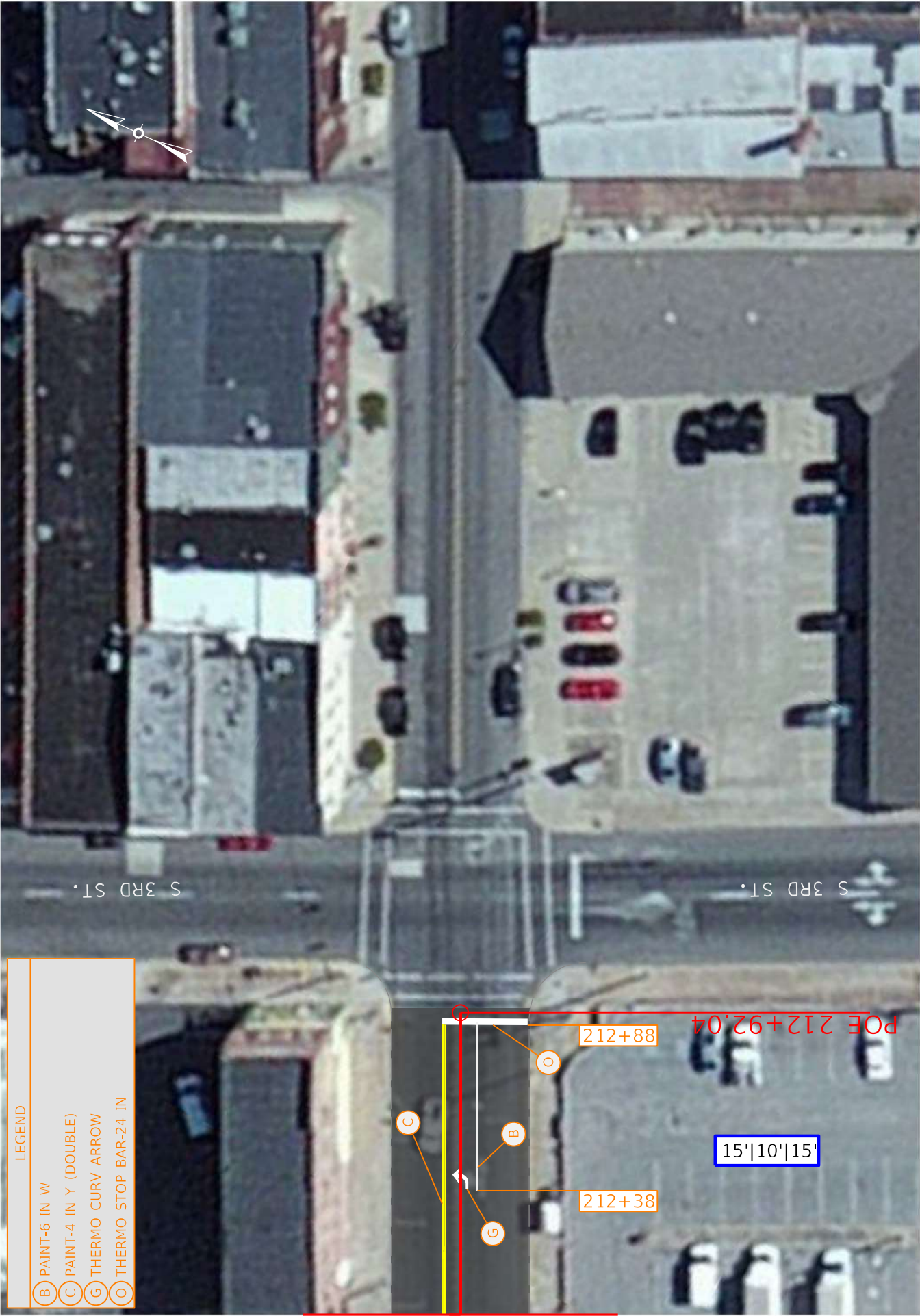
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STA. 204+00.00 TO STA. 208+00.00

ITEM NO. US-45X
COUNTY OF MCCRACKEN
SHEET NO. PLAN 27

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

© 2025 Microsoft Corporation © 2025 Maxar © 2025 OpenStreetMap contributors
OpenRoads Designer v10.12.03.2
FILE NAME: C:\TMP\PIWSE\1045466\STRIPING\PLAN.DGN
USER: slugans





ITEM NO.	COUNTY OF
US-45X	MCCRACKEN
SHEET NO.	PLAN 29

HORIZONTAL SCALE: 1"=40'

0' 40' 80' 160'

DRAWING TITLE: STRIPING AND SIGNING

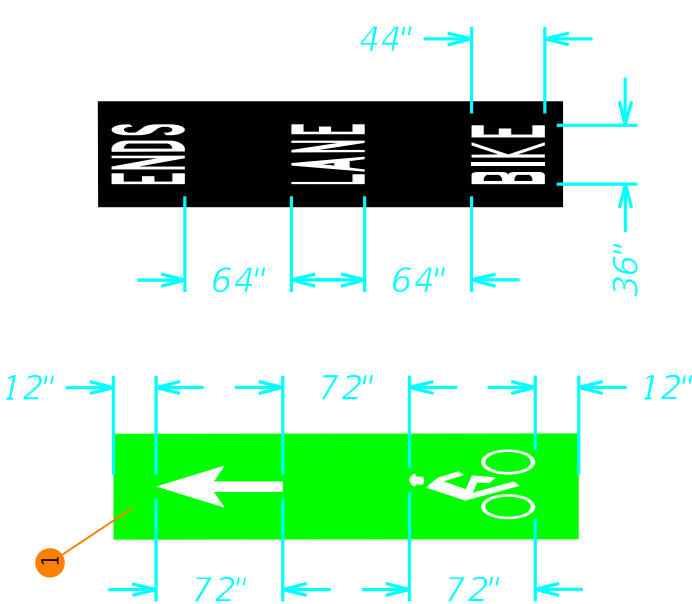
STA. 212+00.00 TO STA. 216+00.00

	COMMONWEALTH OF KENTUCKY	
	DEPARTMENT OF HIGHWAYS	

USER: aligans

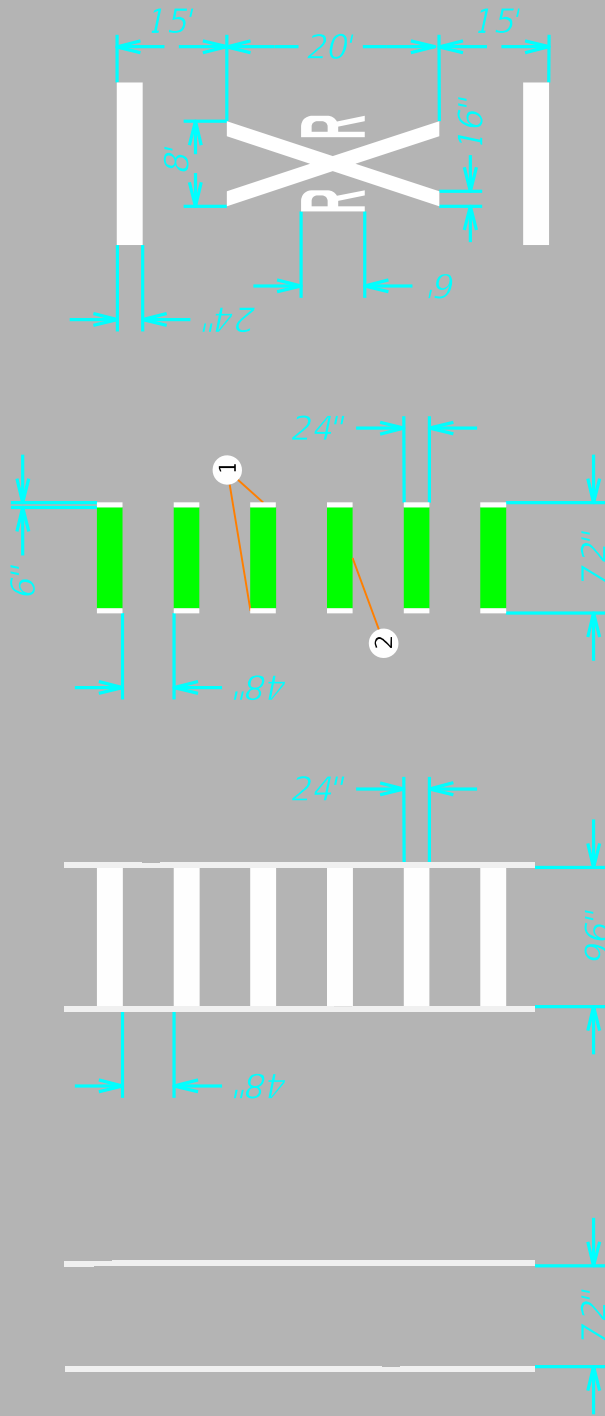
GENERAL NOTES

- Dimensions provided are approximate. Verify prior to installation if stripe locations are adequate and adjust as necessary.
- Install new crosswalk and stop bar markings at existing cross-street locations within resurfacing limits.
- Shaded area may not represent actual resurfacing limits.
- Crosshatch to be 12" (X) with 120" spacing (Y).
- Stop bars to be a minimum of 4' from crosswalk or further if conditions warrant.
- Pavement markings to be centered in lane.



BIKE + ARROW
MMA BOX
1 METHYL METHACRYLATE GREEN

"BIKE LANE ENDS" pavement marking detail



Crosswalk
pavement
marking detail

Enhanced
crosswalk
pavement
marking detail

Bike crossing
with MMA
pavement
marking detail

Railroad
crossing
pavement
marking detail

- 1 TAPE/THERMO-6 IN W
(2' DASH 4' SKIP)
- 2 METHYL METHACRYLATE
GREEN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS







DRAWING TITLE: GENERAL NOTES AND CROSSING DETAILS

SCALE: N. T. S.

ITEM NO.
US-45X

SHEET NO.
Gen. Notes & Crossing Details

COUNTY OF
MCCRACKEN

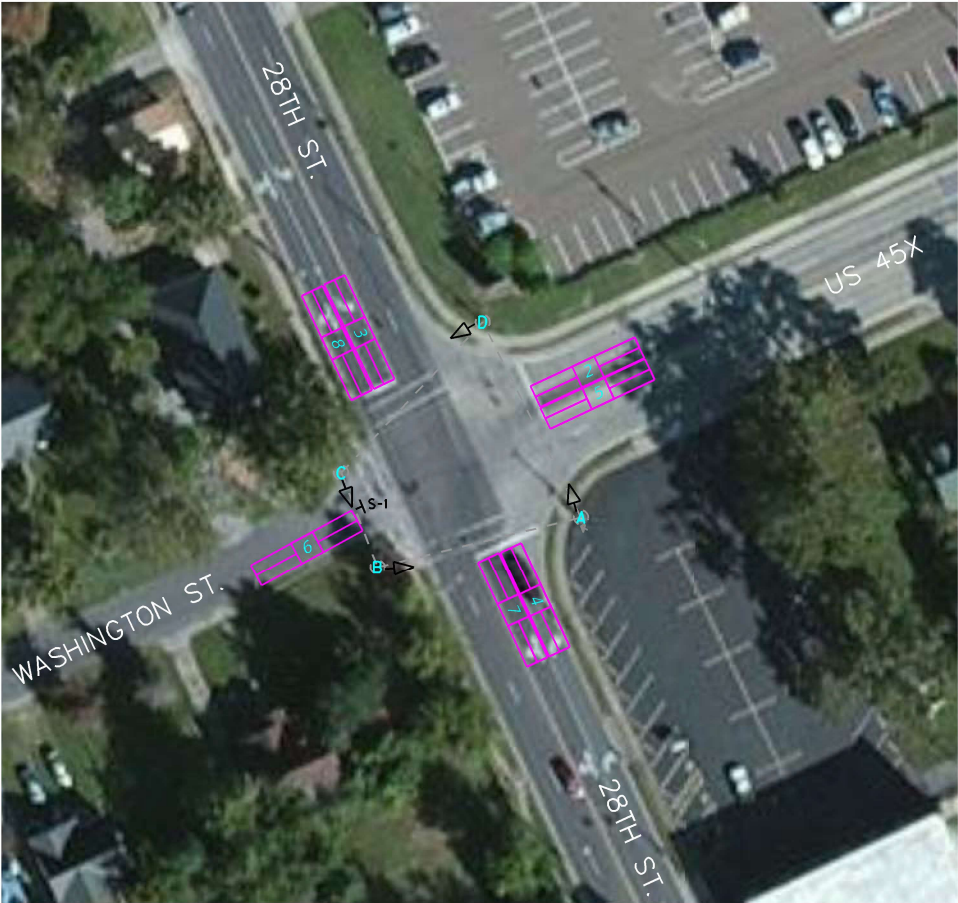
LEGEND	
	EX. POLE-MOUNTED CONTROLLER
	EX. STEEL STRAIN POLE
	EX. MESSENGER CABLE
	PROP. DETECTION ZONE
	PROP. RADAR DETECTOR
	SPAN MOUNTED SIGN

COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003




INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONE 6.

INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 2 & 8.



INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 4 & 7.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 2 & 5.

SIGN	IMAGE
S-1 (R10-11)	


- SIGNAL PHASING TO BE ALTERED TO PROHIBIT WESTBOUND RIGHT ON RED.
- PAID BY FD04

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6	6	10' X 30'	0'
2	5	5	5	10' X 30'	0'
3	2	2	2	10' X 30'	0'
4	3	3	3	10' X 30'	0'
5	8	8	8	10' X 30'	0'
6	7	7	7	10' X 30'	0'
7	4	4	4	10' X 30'	0'


SCALE: 1"=80'

US 45X AT 28TH ST.
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



EX. MESSENGER CABLE

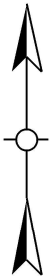


PROP. DETECTION ZONE



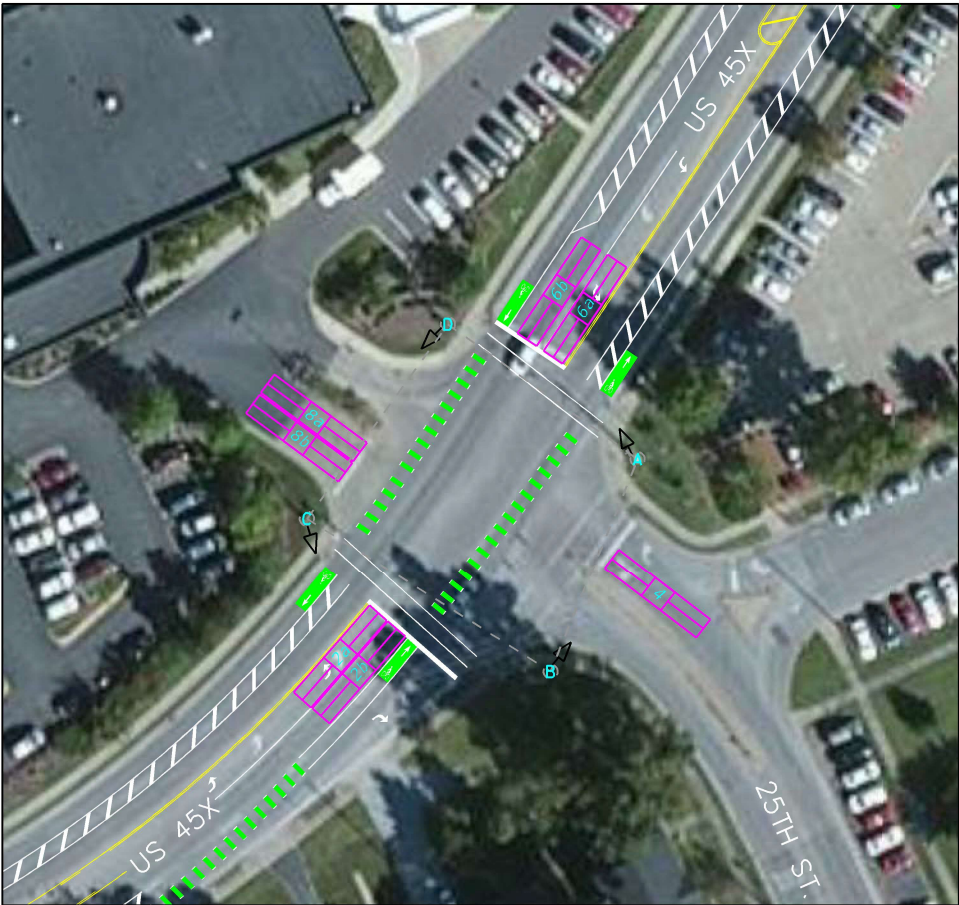
PROP. RADAR DETECTOR

COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003



INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 8a & 8b.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 6a & 6b.



INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONES 2a & 2b.


INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONE 4.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	8	8A	8	10' X 30'	0'
6	8	8B	18	10' X 30'	0'
7	4	4	4	10' X 30'	0'


SCALE: 1"=80'

US 45X AT 25TH ST.
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



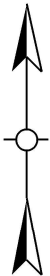
EX. MESSENGER CABLE



PROP. DETECTION ZONE



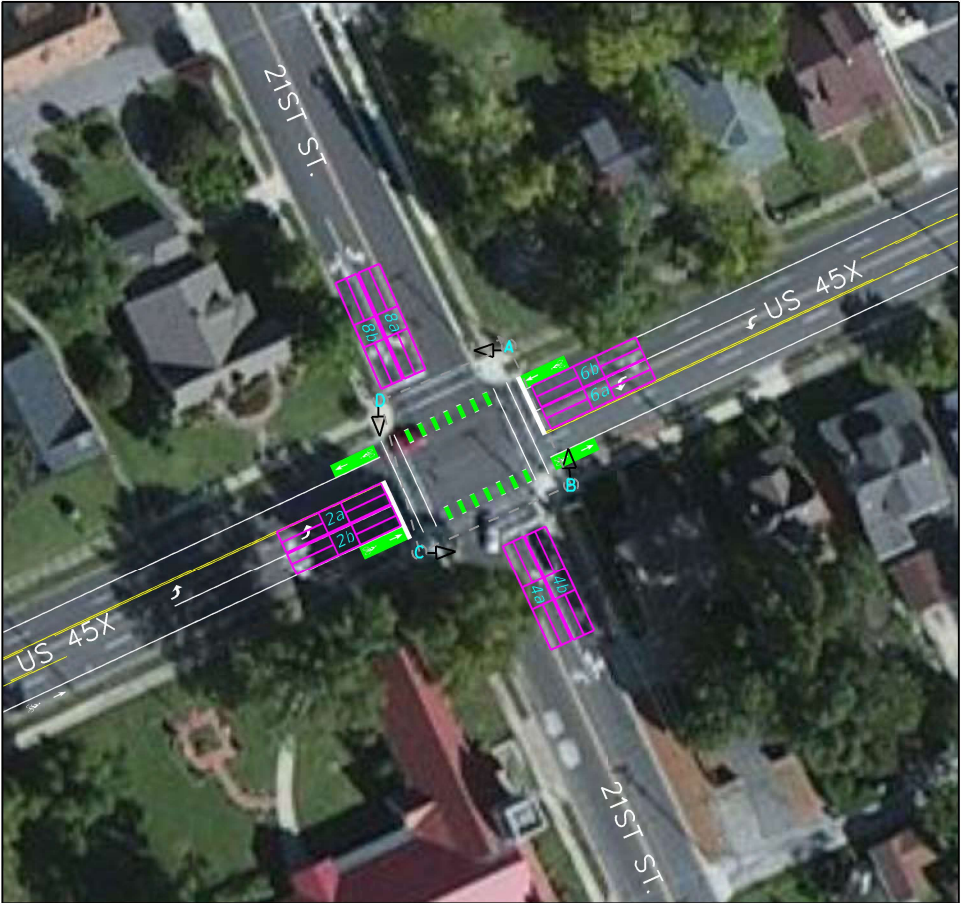
PROP. RADAR DETECTOR



COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003

INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 2a & 2b.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 8a & 8b.



INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONES 4a & 4b.


INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 6a & 6b.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	8	8A	8	10' X 30'	0'
6	8	8B	18	10' X 30'	0'
7	4	4A	4	10' X 30'	0'
8	4	4B	14	10' X 30'	0'


SCALE: 1"=80'

US 45X AT 21ST ST.
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



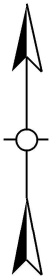
EX. MESSENGER CABLE



PROP. DETECTION ZONE



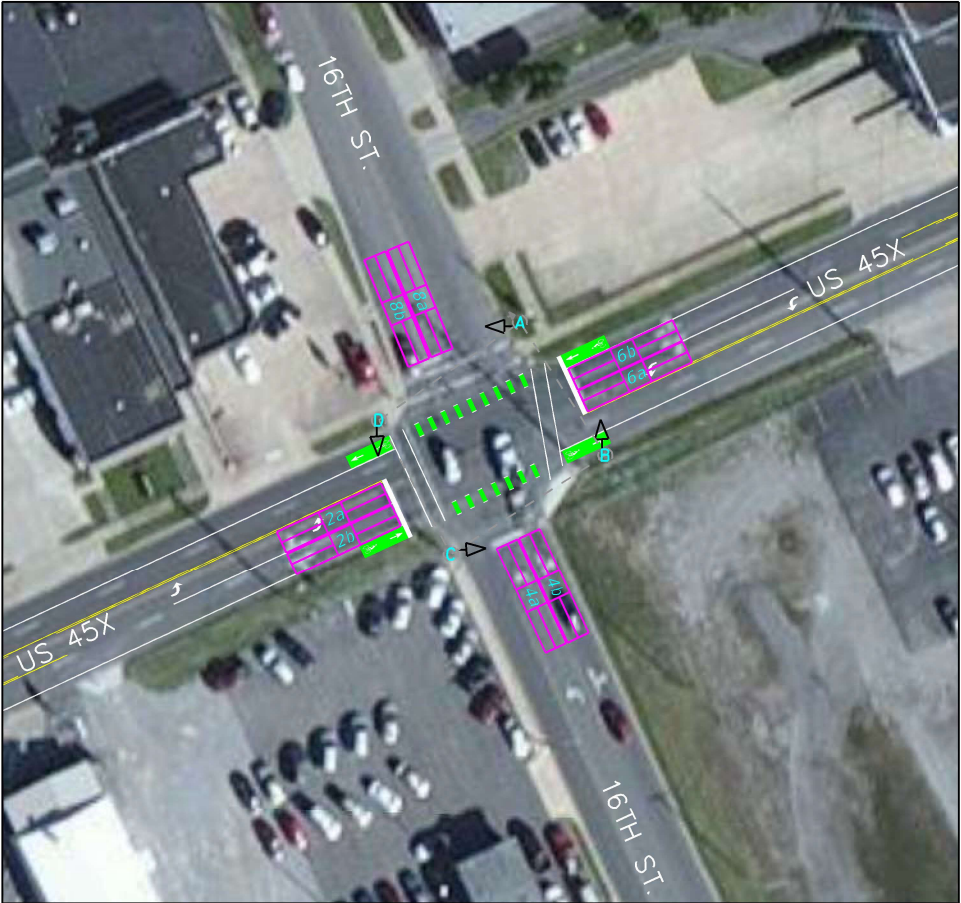
PROP. RADAR DETECTOR



COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003

INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 2a & 2b.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 8a & 8b.



INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONES 4a & 4b.


INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 6a & 6b.


RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	8	8A	8	10' X 30'	0'
6	8	8B	18	10' X 30'	0'
7	4	4A	4	10' X 30'	0'
8	4	4B	14	10' X 30'	0'


SCALE: 1"=80'


US 45X AT 16TH ST.
DETECTION DETAIL SHEET


LEGEND

 EX. POLE-MOUNTED CONTROLLER

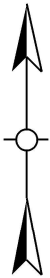
 EX. STEEL STRAIN POLE

 EX. MESSENGER CABLE

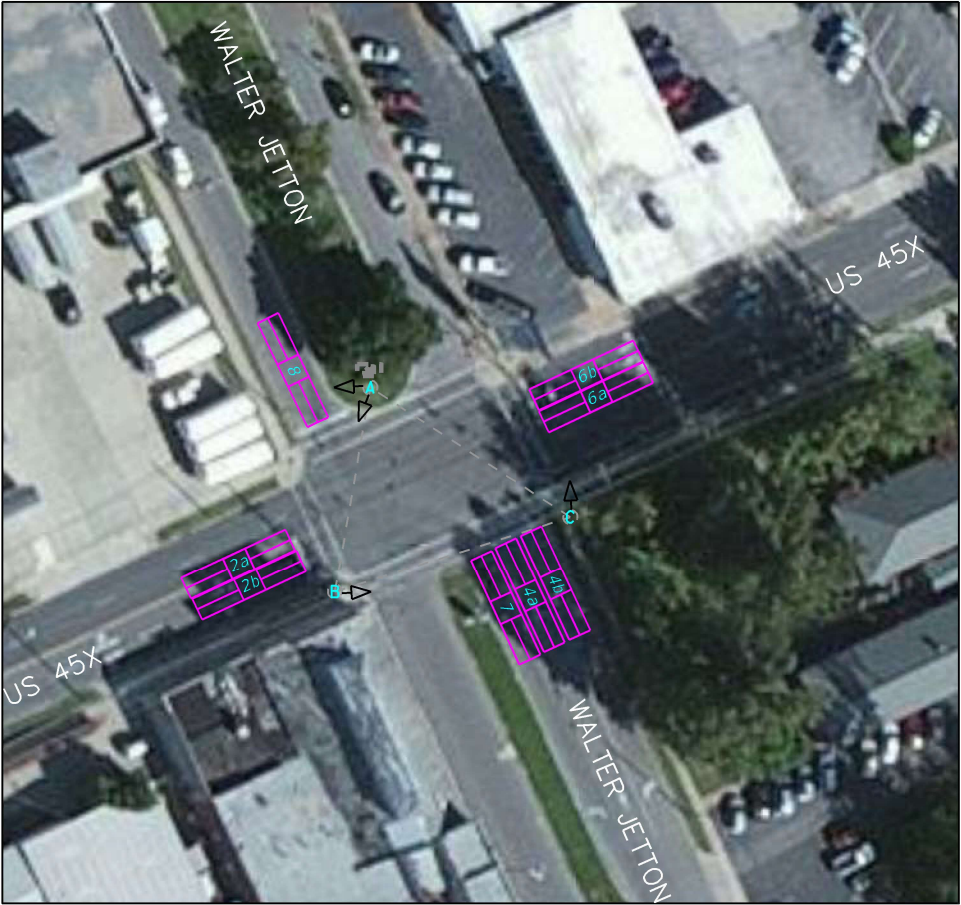
 PROP. DETECTION ZONE

 PROP. RADAR DETECTOR

COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003



INSTALL 2 RADAR PRESENCE DETECTORS ON
POLE A FOR DETECTION ZONE 8 AND 2a & 2b.



INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 7, 4a, & 4b.


INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONES 6a & 6b.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	8	8	8	10' X 30'	0'
6	7	7	7	10' X 30'	0'
7	4	4A	4	10' X 30'	0'
8	4	4B	14	10' X 30'	0'


SCALE: 1"=80'

US 45X AT WALTER JETTON
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



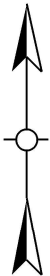
EX. MESSENGER CABLE



PROP. DETECTION ZONE



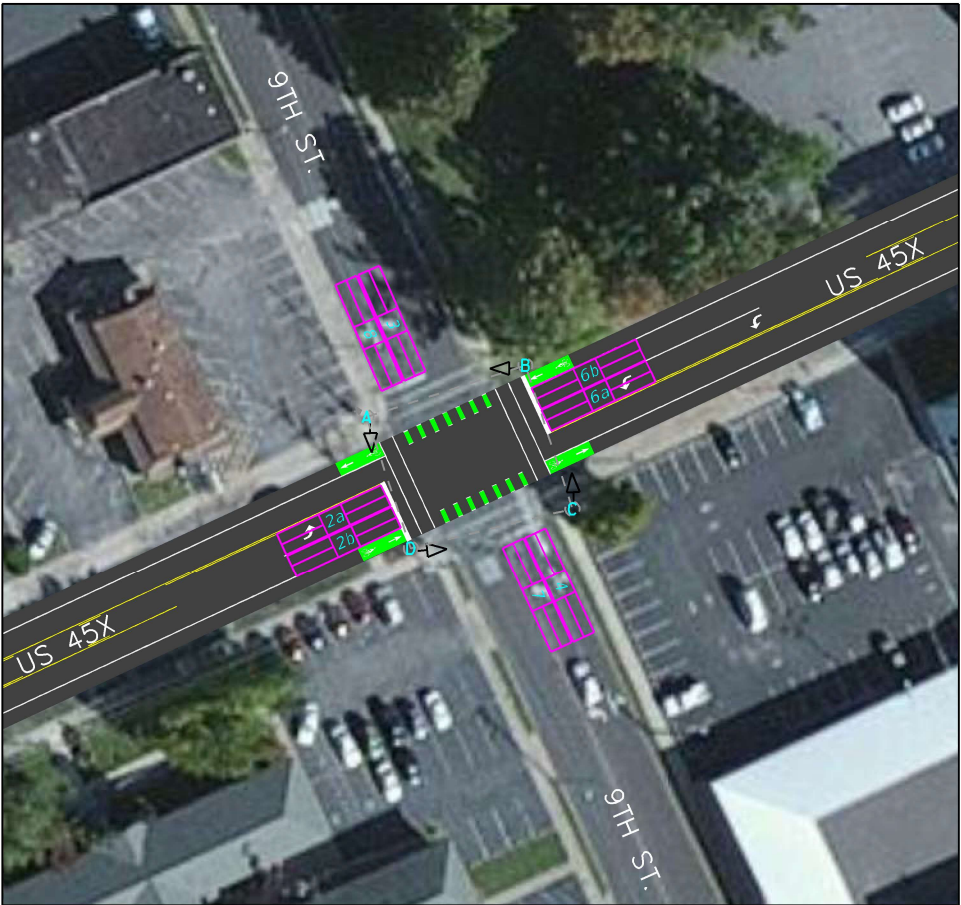
PROP. RADAR DETECTOR



COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 2a & 2b.

INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 3 & 8.



INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 4 & 7.


INSTALL RADAR PRESENCE DETECTOR ON
POLE C FOR DETECTION ZONES 6a & 6b.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	3	3	3	10' X 30'	0'
6	8	8	8	10' X 30'	0'
7	7	7	7	10' X 30'	0'
8	4	4	4	10' X 30'	0'


SCALE: 1"=80'

US 45X AT 9TH ST.
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



EX. MESSENGER CABLE

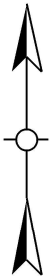


PROP. DETECTION ZONE



PROP. RADAR DETECTOR

COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003



INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONES 2a & 2b.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONE 8.



INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONE 4.


INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 6a & 6b.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2A	2	10' X 30'	0'
4	2	2B	12	10' X 30'	0'
5	8	8	8	10' X 30'	0'
6	4	4	4	10' X 30'	0'


SCALE: 1"=80'

US 45X AT 7TH ST.
DETECTION DETAIL SHEET


LEGEND




EX. POLE-MOUNTED CONTROLLER




EX. STEEL STRAIN POLE



EX. MESSENGER CABLE

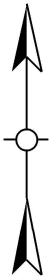


PROP. DETECTION ZONE



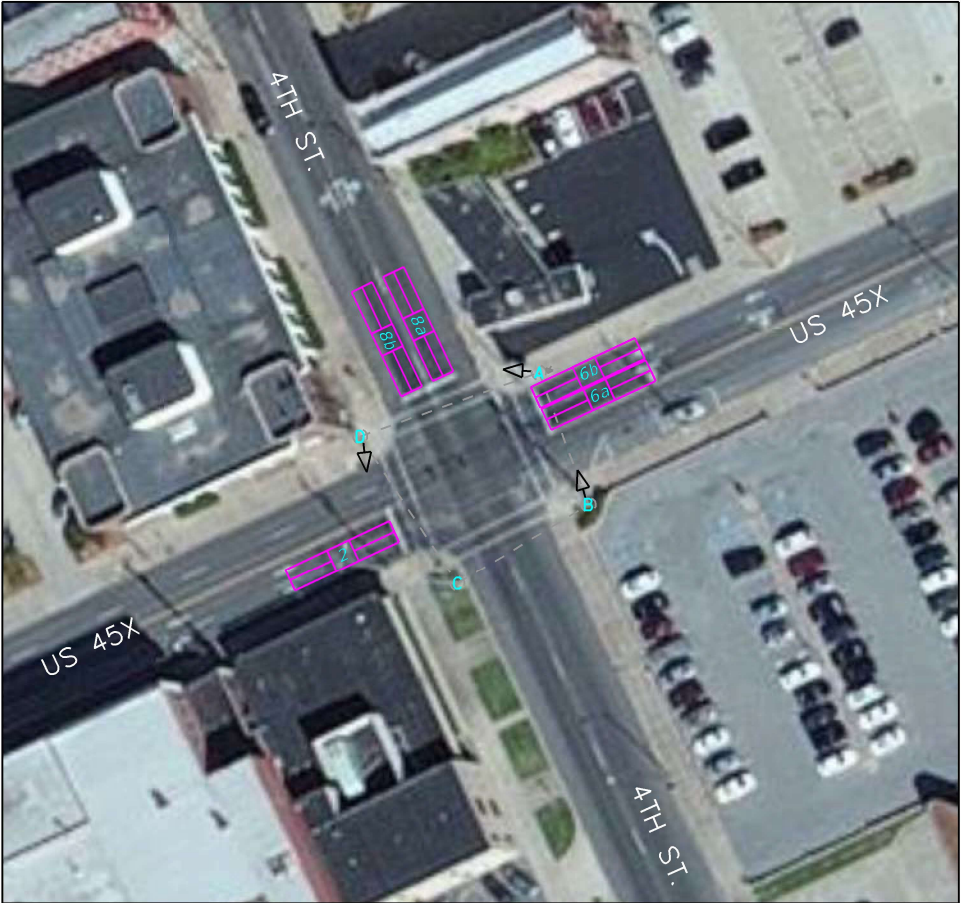
PROP. RADAR DETECTOR

COUNTY OF	FUNDING NO.
MCCRACKEN	FD05 073 0045X 000-003



INSTALL RADAR PRESENCE DETECTOR ON
POLE D FOR DETECTION ZONE 2.

INSTALL RADAR PRESENCE DETECTOR ON
POLE A FOR DETECTION ZONES 8a & 8b.



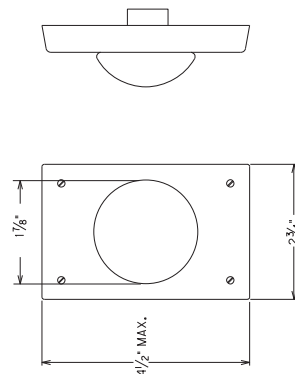
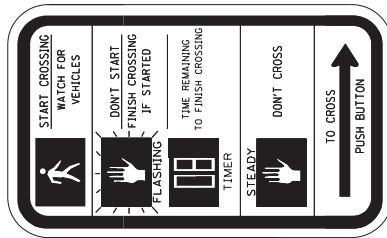
INSTALL RADAR PRESENCE DETECTOR ON
POLE B FOR DETECTION ZONES 6a & 6b.

RADAR DETECTION ZONE SCHEDULE					
INPUT POINT	PHASE	ZONE	INDEX	SIZE	DISTANCE FROM STOP BAR
1	6	6A	6	10' X 30'	0'
2	6	6B	16	10' X 30'	0'
3	2	2	2	10' X 30'	0'
4	8	8A	8	10' X 30'	0'
5	8	8B	18	10' X 30'	0'

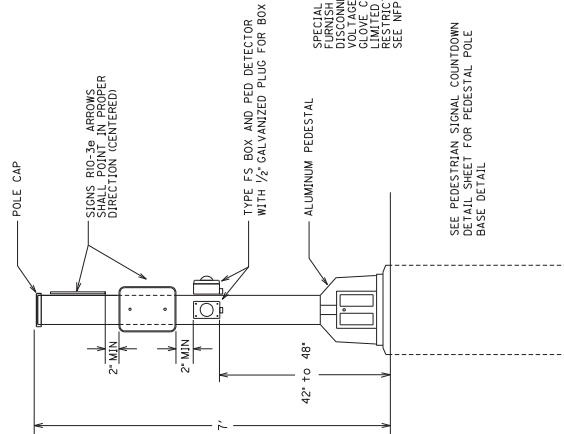
SCALE: 1"=80'

US 45X AT 4TH ST.
DETECTION DETAIL SHEET

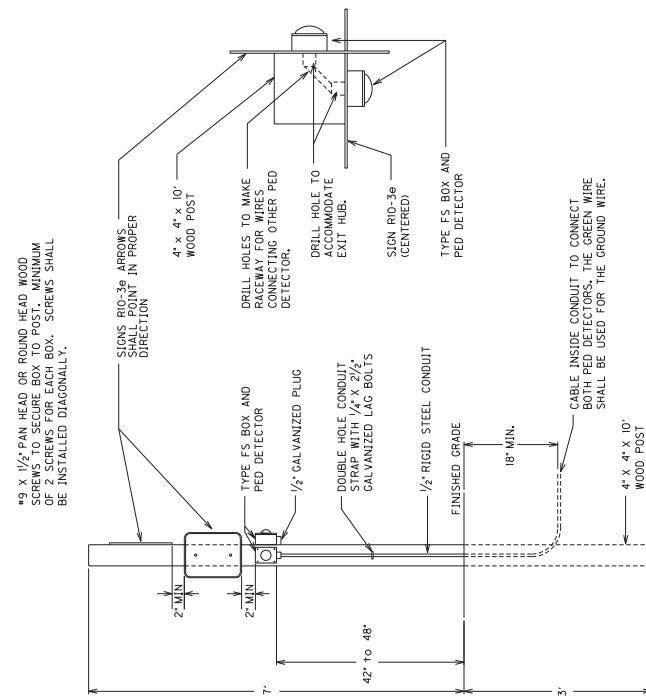
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R10-3e SIGN (9" X 15")
FOR COUNTDOWN ONLY



SPECIAL NOTE FOR TRANSFORMER DOOR:
FURNISH A SHOCK HAZARD WARNING STICKER ON
DISCONNECT WITH THE FOLLOWING INFORMATION:
VOLTAGE (20 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70F FOR ADDITIONAL PPE REQUIRED

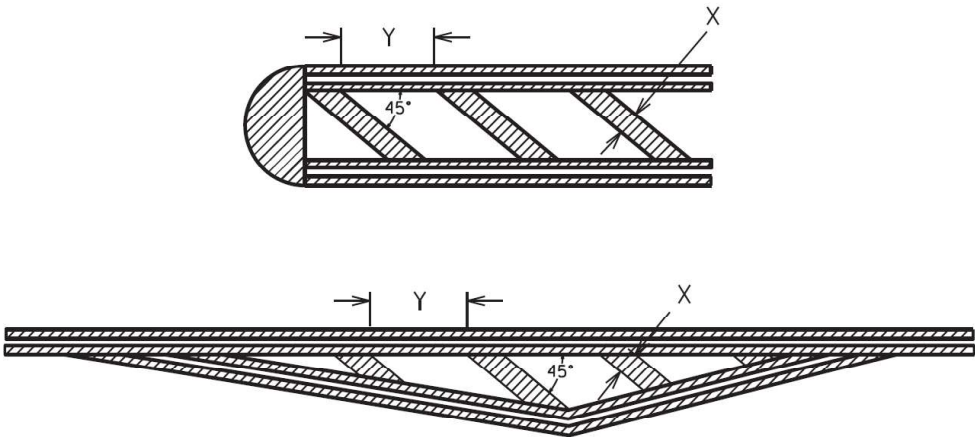


PED DETECTOR ON WOOD POST DETAIL

PEDESTRIAN DETECTOR DETAIL

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:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
06569	Pave Marking-Thermo Cross-Hatch	Square Foot
23253ES717	Pave Mark TY 1 Tape Cross Hatch	Square Foot

PRODUCT DATA SHEET

ENNIS-FLINT



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



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



Extended Season MMAX® Colored Lane Treatment with Corundum

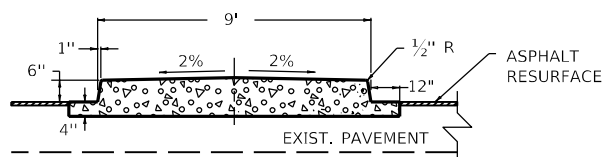
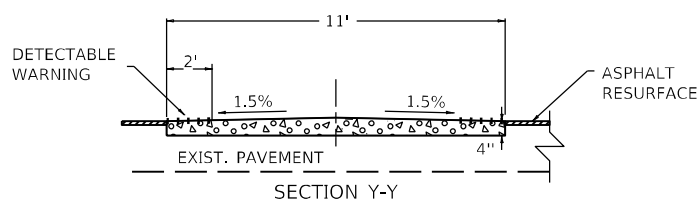
LIMITATIONS OF LIABILITY:

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.

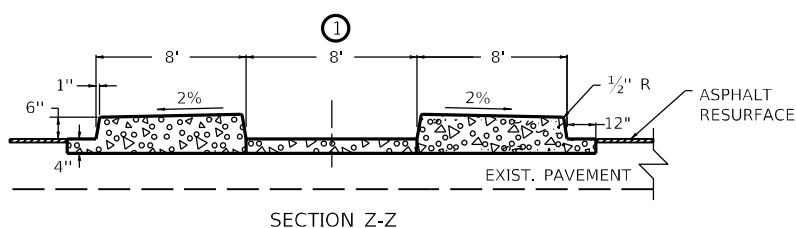
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- ① MATCH EXISTING ROADWAY GRADE
- ② SAWCUT AND PAVEMENT REMOVAL INCIDENTAL
- ③ CONSTRUCT SIDEWALK-4 IN CONCRETE
MATCHING EXISTING SIDEWALK WIDTH AND
GRADE
- ④ CONSTRUCTED SIDEWALK RAMPS TO BE TYPE 4
PER STANDARD DRAWING
- ⑤ DETECTABLE WARNINGS TO BE 2 FT X 6 FT



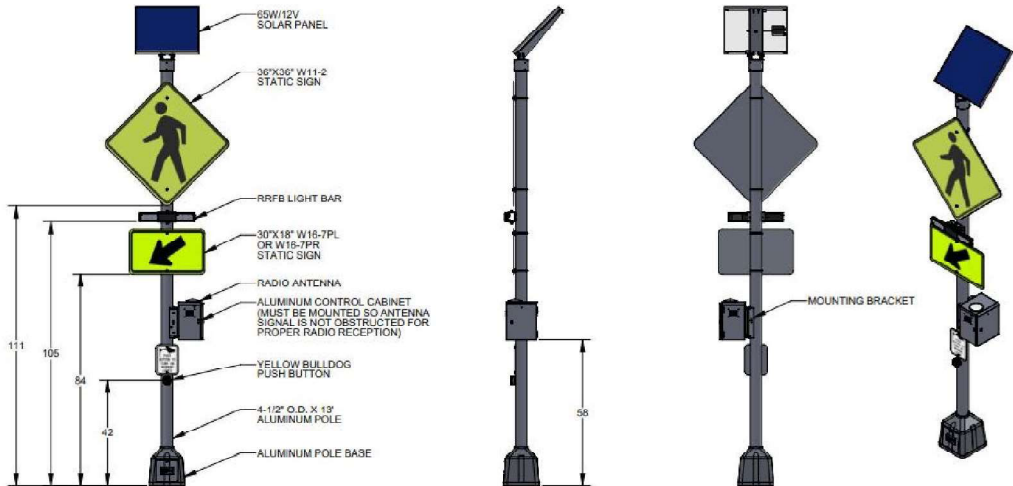
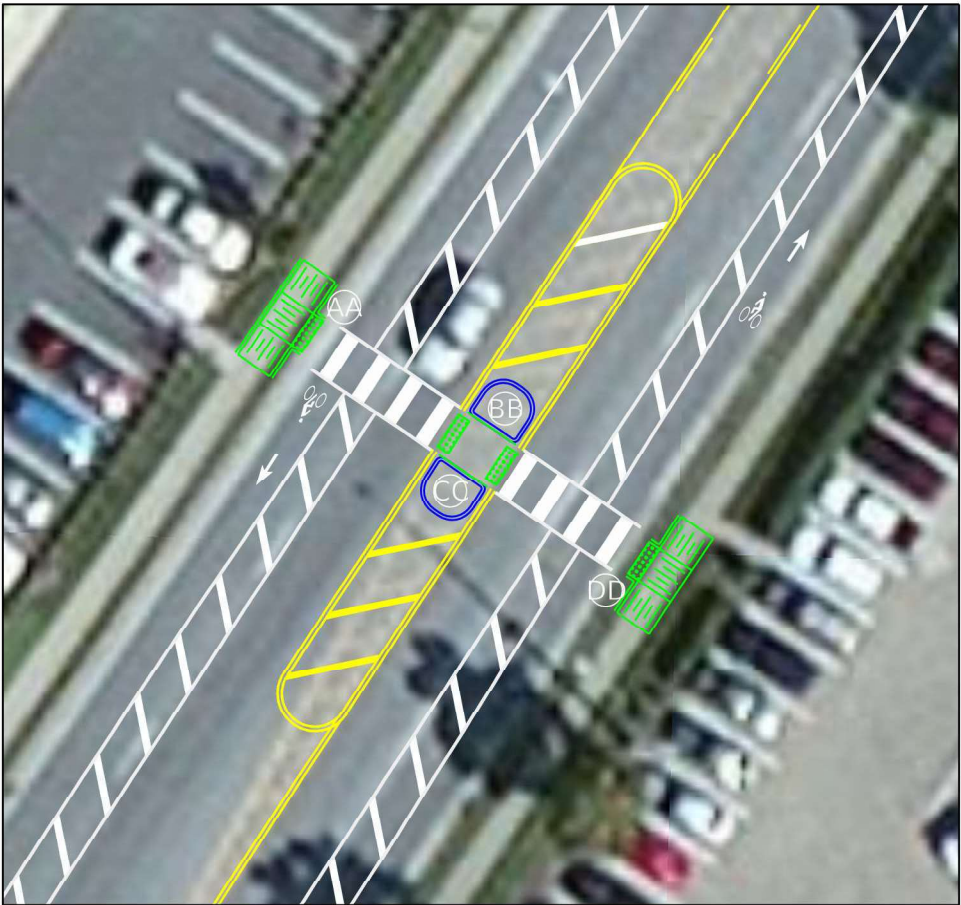
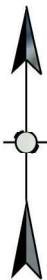
SECTION X-X
BARRIER MEDIAN
WITH EXISTING PAVEMENT
(TYPE 2 MOD)



LEGEND	
	PR. RRFB ASSEMBLY

COUNTY OF	FUNDING NO.
MCCRACKEN	FD04

INSTALL RRFB ASSEMBLIES AA,BB,CC, AND DD.



NOTES:
1. ORIENT SOLAR PANEL TOWARDS SOUTHERN SKY FOR MAXIMUM SOLAR EXPOSURE
2. CONTROL CABINET HEIGHT MAY VARY.
3. WORM CLAMPS ARE PROVIDED, STANDARD 3/4" S/S BANDING IS RECOMMENDED
4. J-BOLTS NOT SHOWN
5. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

US 45X MIDBLOCK RRFB

SCALE: 1"=30'

Figure 1 illustrates the typical cross-sections of a three-lane highway with a 4' minimum shoulder. The diagram shows three cross-sections labeled 3 DIGITS, 2 DIGITS, and 1 DIGIT. Each section includes a 4'-0" minimum shoulder, a 48" travel lane, and a 36" travel lane. The lane markings include 10' SERIES 'D' and 4' SERIES 'B' lines. The elevation edge of pavement is indicated. The total width of the travel lanes is 84" for 3 DIGITS, 72" for 2 DIGITS, and 60" for 1 DIGIT.

[illegible]

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

[illegible]

Technical drawings illustrating various roadway configurations and dimensions:

- Top Left:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".
- Top Right:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".
- Middle Left:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".
- Middle Right:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".
- Bottom Left:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".
- Bottom Right:** A cross-section of a roadway with a 3' MIN. (914 MM) x 7" (178 MM) depth. The width is 3' 7".

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

CONVENTION AND/OR MILE MARKER

PAVEMENT

SHOULDER

30°

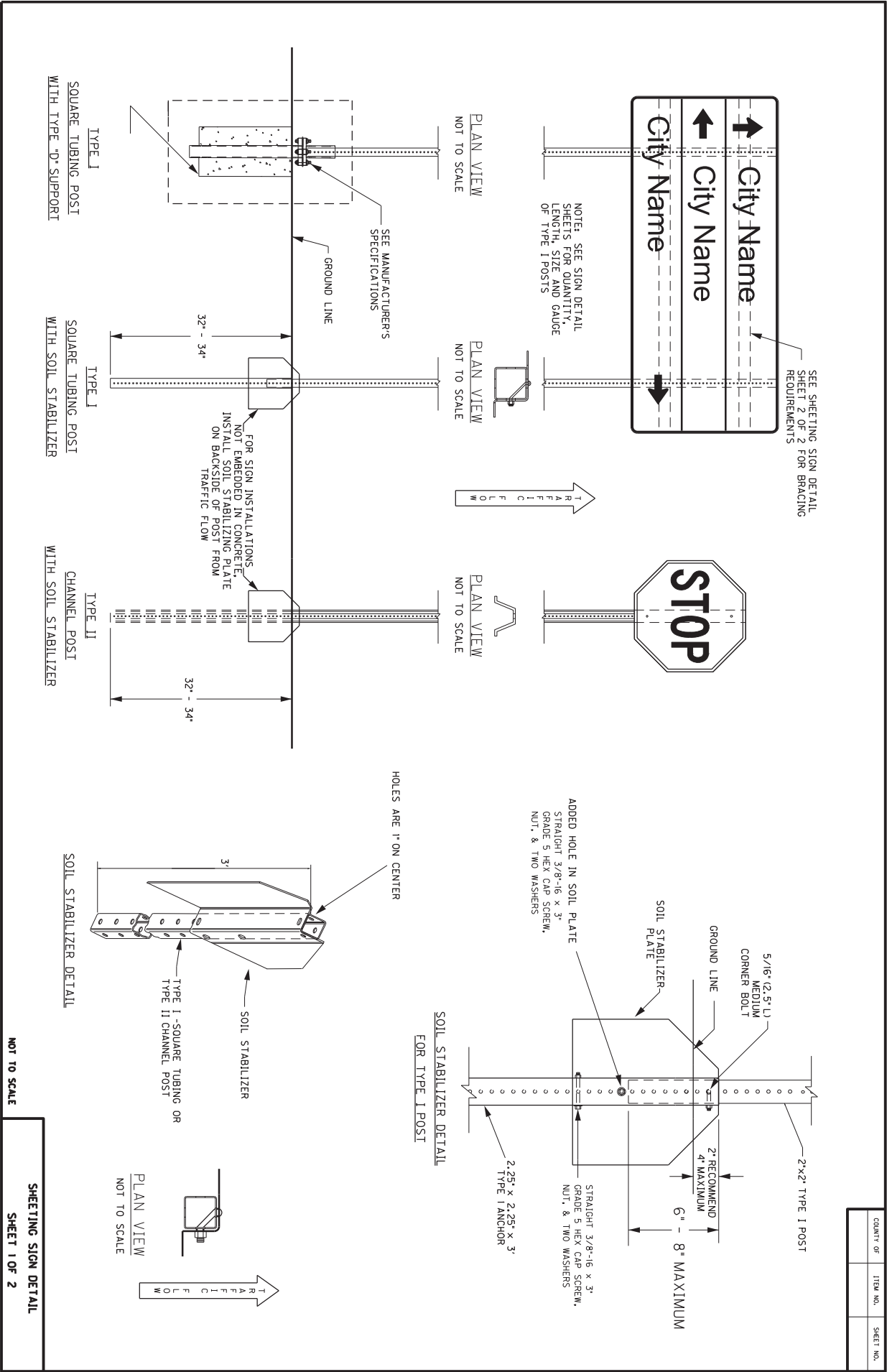
3'

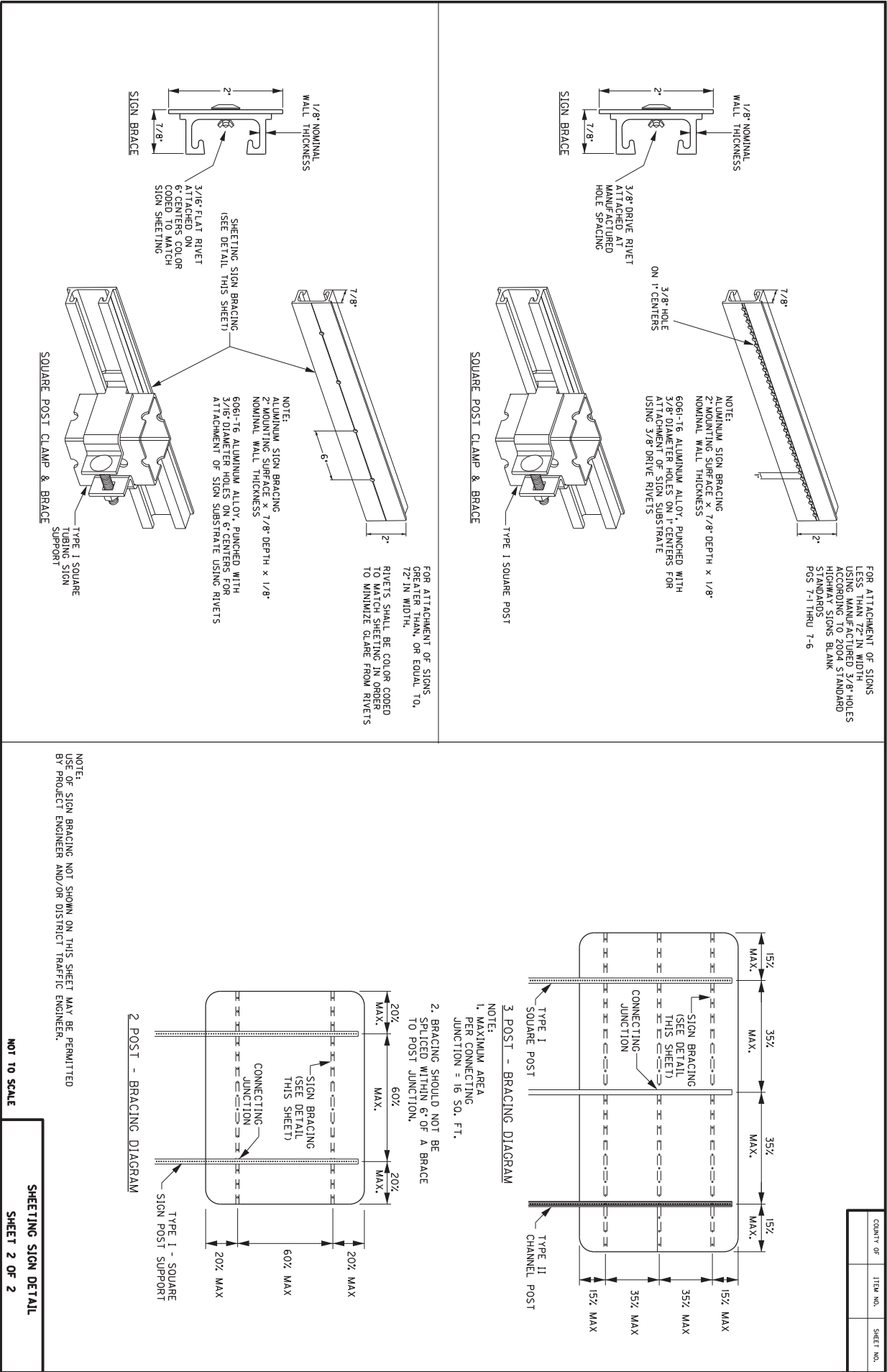
FACE OF SIGN OR MILE MARKER (ANGLE 3° AWAY FROM TRAFFIC)

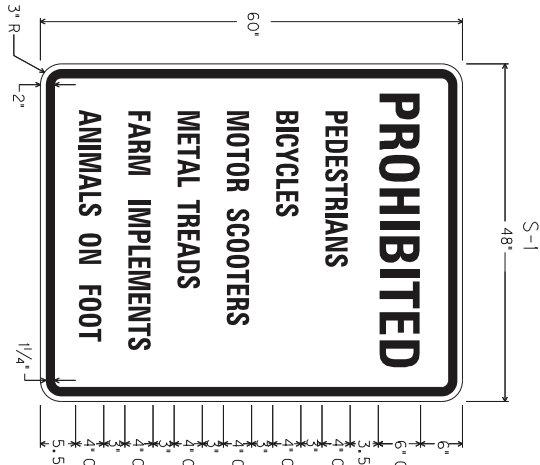
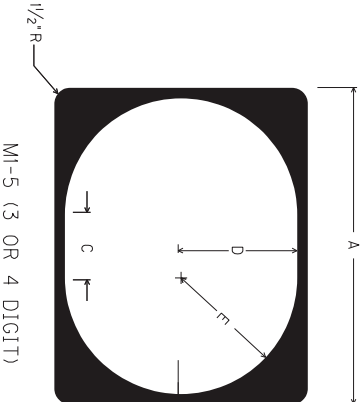
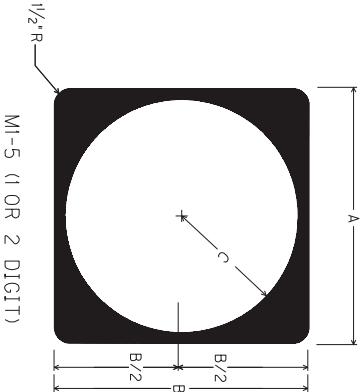
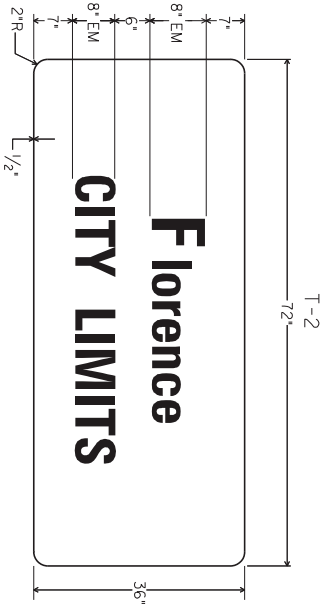
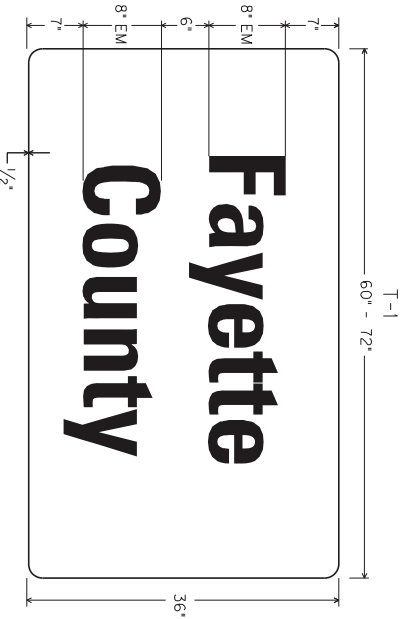
TRAFFIC

SIGNING POSITION

SIGNING POSITIONING DETAIL SHEET







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

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

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

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

NOT TO SCALE

TYPICAL SIGNS

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>

2012 STANDARD DRAWINGS THAT APPLY

ROADWAY
~ GENERAL ~

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS PART 1RGX-001-06
DETECTABLE WARNINGS.....RGX-040-03
TYPE D BREAKAWAY SIGN SUPPORTRGX-065-02

~ PAVEMENT ~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

CURB AND GUTTER, CURBS AND VALLEY GUTTER.....RPM-100-11
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK.....Sepia 040
SIDEWALK RAMPS.....Sepia 041

TRAFFIC
~ PERMANENT ~

RAISED PAVEMENT MARKERS

PAVEMENT MARKER ARRANGEMENTS TWO-WAY LEFT TURN LANESepia 015
PAVEMENT MARKER ARRANGEMENT CHANNELIZED INTERSECTION.....Sepia 016

~ TEMPORARY ~
TRAFFIC CONTROL

LANE CLOSURE MULTI-LANE HIGHWAY CASE ITTC-115-04
LANE CLOSURE MULTI-LANE HIGHWAY CASE II.....TTC-120-04
MEDIAN Crossover CASE I.....TTC-140-03
MEDIAN Crossover CASE I.....TTC-141-03
MEDIAN Crossover CASE II.....TTC-145-03
MEDIAN Crossover CASE II.....TTC-146-03

DEVICES

DOUBLE FINE ZONE SIGNSTTD-120-03
PAVEMENT CONDITION WARNING SIGNS.....TTD-125-03
SPEED ZONE SIGNING FOR WORK ZONESTTD-130

STRIPING OPERATIONS

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

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

**TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

**LABOR AND WAGE REQUIREMENTS
APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS**

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

II. NONDISCRIMINATION OF EMPLOYEES

**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.

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

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:
<https://www.eProcurement.ky.gov>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25 PER HOUR

BEGINNING JULY 24, 2009

- OVERTIME PAY

At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.
- CHILD LABOR

An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

No more than

 - **3** hours on a school day or **18** hours in a school week;
 - **8** hours on a non-school day or **40** hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.
- TIP CREDIT

Employers of “tipped employees” must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee’s tips combined with the employer’s cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.
- ENFORCEMENT

The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act’s child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.
- ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
 - Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
 - Some state laws provide greater employee protections; employers must comply with both.
 - The law requires employers to display this poster where employees can readily see it.
 - Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
 - Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.



For additional information:

1-866-4-USWAGE

(1-866-487-9243) TTY: 1-877-889-5627



U.S. Wage and Hour Division

WWW.WAGEHOUR.DOL.GOV

PART IV

BID ITEMS

252311

PROPOSAL BID ITEMS

Report Date 6/18/25

Page 1 of 2

252311

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00190		LEVELING & WEDGING PG64-22	448.00	TON		\$	
0020	00212		CL2 ASPH BASE 1.00D PG64-22	331.00	TON		\$	
0030	02676		MOBILIZATION FOR MILL & TEXT (FD05)	1.00	LS		\$	
0040	02677		ASPHALT PAVE MILLING & TEXTURING	2,570.00	TON		\$	
0050	10020NS		FUEL ADJUSTMENT	4,719.00	DOLL	\$1.00	\$	\$4,719.00
0060	10030NS		ASPHALT ADJUSTMENT	11,854.00	DOLL	\$1.00	\$	\$11,854.00
0070	23362ES403		CL2 ASPH SURF 0.50B PG64-22	2,239.00	TON		\$	
0080	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	14.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0090	01810		STANDARD CURB AND GUTTER	546.00	LF		\$	
0100	01812		REMOVE CURB AND GUTTER	546.00	LF		\$	
0110	01917		STANDARD BARRIER MEDIAN TYPE 2	32.00	SQYD		\$	
0120	02014		BARRICADE-TYPE III	2.00	EACH		\$	
0130	02562		TEMPORARY SIGNS	1,180.00	SQFT		\$	
0140	02650		MAINTAIN & CONTROL TRAFFIC (FD04)	1.00	LS		\$	
0150	02650		MAINTAIN & CONTROL TRAFFIC (FD05)	1.00	LS		\$	
0160	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0170	02720		SIDEWALK-4 IN CONCRETE	130.00	SQYD		\$	
0180	02775		ARROW PANEL	2.00	EACH		\$	
0190	06510		PAVE STRIPING-TEMP PAINT-4 IN	19,118.00	LF		\$	
0200	06511		PAVE STRIPING-TEMP PAINT-6 IN	12,322.00	LF		\$	
0210	06514		PAVE STRIPING-PERM PAINT-4 IN	23,538.00	LF		\$	
0220	06515		PAVE STRIPING-PERM PAINT-6 IN	22,902.00	LF		\$	
0230	06531		PAVE STRIPING REMOVAL-6 IN	700.00	LF		\$	
0240	06542		PAVE STRIPING-THERMO-6 IN W	648.00	LF		\$	
0250	06556		PAVE STRIPING-DUR TY 1-6 IN W	574.00	LF		\$	
0260	06565		PAVE MARKING-THERMO X-WALK-6 IN	2,544.00	LF		\$	
0270	06568		PAVE MARKING-THERMO STOP BAR-24IN	729.00	LF		\$	
0280	06569		PAVE MARKING-THERMO CROSS-HATCH	1,056.00	SQFT		\$	
0290	06573		PAVE MARKING-THERMO STR ARROW	2.00	EACH		\$	
0300	06574		PAVE MARKING-THERMO CURV ARROW	29.00	EACH		\$	
0310	06575		PAVE MARKING-THERMO COMB ARROW	2.00	EACH		\$	
0320	06576		PAVE MARKING-THERMO ONLY	2.00	EACH		\$	
0330	06598		PAVEMENT MARKING REMOVAL	930.00	SQFT		\$	
0340	06610		INLAID PAVEMENT MARKER-MW (CONCRETE)	36.00	EACH		\$	
0350	06612		INLAID PAVEMENT MARKER-BY	203.00	EACH		\$	

Report Date 6/18/25

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0360	06612		INLAID PAVEMENT MARKER-BY (CONCRETE)	291.00	EACH		\$	
0370	20099ES842		PAVE MARK TEMP PAINT STOP BAR	729.00	LF		\$	
0380	20100ES842		PAVE MARK TEMP PAINT LINE ARROW	14.00	EACH		\$	
0390	20782NS714		PAVE MARKING THERMO-BIKE	35.00	EACH		\$	
0400	22664EN		WATER BLASTING EXISTING STRIPE	28,512.00	LF		\$	
0410	22680EN		QWICK CURB MEDIAN SEPARATOR	112.00	LF		\$	
0420	22692NS714		PAVEMENT MARKING-THERMO LETTERS	12.00	EACH		\$	
0430	23158ES505		DETECTABLE WARNINGS (NEW)	72.00	SQFT		\$	
0440	23158ES505		DETECTABLE WARNINGS (RETROFIT)	888.00	SQFT		\$	
0450	23251ES717		PAVE MARK TY 1 TAPE X-WALK-6 IN	631.00	LF		\$	
0460	23261EC		PAVE MARK-THERMO-X-WALK-24 IN	304.00	LF		\$	
0470	23265ES717		PAVE MARK TY 1 TAPE STOP BAR-24 IN	309.00	LF		\$	
0480	23266ES717		PAVE MARK TY 1 TAPE R/R X BUCKS-16 IN	20.00	LF		\$	
0490	23267ES717		PAVE MARK TY 1 TAPE-BIKE	61.00	EACH		\$	
0500	23267ES717		PAVE MARK TY 1 TAPE-BIKE (BIKE LANE ARROW)	59.00	EACH		\$	
0510	23269ES717		PAVE MARK TY 1 TAPE-COMBO ARROW	2.00	EACH		\$	
0520	23270ES717		PAVE MARK TY 1 TAPE-CURV ARROW	46.00	EACH		\$	
0530	23974EC		BIKE PATH	827.00	SQYD		\$	
0540	24386EC		PAVE MARKING THERMO-BIKE LANE ARROW	35.00	EACH		\$	
0550	26119EC		INSTALL RADAR PRESENCE DETECTOR TYPE A	31.00	EACH		\$	
0560	26171EC		RECTANGULAR RAPID FLASHING BEACON	4.00	EACH		\$	

Section: 0003 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0570	06406		SBM ALUM SHEET SIGNS .080 IN	138.89	SQFT		\$	
0580	06410		STEEL POST TYPE 1	243.00	LF		\$	
0590	06472		INSTALL SPAN MOUNTED SIGN	1.00	EACH		\$	
0600	24631EC		BARCODE SIGN INVENTORY	26.00	EACH		\$	

Section: 0004 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0610	02569		DEMOBILIZATION	1.00	LS		\$	