



CALL NO. 402

CONTRACT ID. 192273

MONROE COUNTY

FED/STATE PROJECT NUMBER 086GR19P0418 - FD05 & FD04

DESCRIPTION MONROE COUNTY (KY 100 & KY 163)

WORK TYPE ASPHALT RESURFACING

PRIMARY COMPLETION DATE 11/15/2019

LETTING DATE: July 26,2019

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 26,2019. 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.

TABLE OF CONTENTS

PART I	SCOPE OF WORK <ul style="list-style-type: none">• PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES• CONTRACT NOTES• STATE CONTRACT NOTES• SURFACING AREAS• ASPHALT MIXTURE• INCIDENTAL SURFACING• FUEL AND ASPHALT PAY ADJUSTMENT• COMPACTION OPTION B• SPECIAL NOTE(S) APPLICABLE TO PROJECT• MANHOLE ADJUSTMENTS• COORDINATION OF WORK WITH OTHER CONTRACTS• ASPHALT MIX PAVEMENT WEDGE MONOLITHIC OPERATION• EDGE KEY (BY TON)• ASPHALT MILLING AND TEXTURING• BASE FAILURE REPAIR• TYPICAL SECTION DIMENSIONS• SIDEWALK RAMPS & DETECTABLE WARNINGS• TRAFFIC CONTROL PLAN 2 LANE• TRAFFIC CONTROL PLAN• DURABLE PAVEMENT EDGE DETAILS• SKETCH MAP(S)• MATERIAL SUMMARY• SUMMARY SHEET(S)• TYPICAL SECTION(S)• DETAIL SHEET(S)• BRIDGE DETAIL FOR PAVING PROJECT
PART II	SPECIFICATIONS AND STANDARD DRAWINGS <ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATION• [SN-1I] PORTABLE CHANGEABLE SIGNS• 2016 STANDARD DRAWINGS THAT APPLY• SHOULDER AND EDGE LINE RUMBLE STRIP DETAILS• EDGE LINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS
PART III	EMPLOYMENT, WAGE AND RECORD REQUIREMENTS <ul style="list-style-type: none">• LABOR AND WAGE REQUIREMENTS• EXECUTIVE BRANCH CODE OF ETHICS• KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE• PROJECT WAGE RATES / STATE
PART IV	INSURANCE
PART V	BID ITEMS

PART I
SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 03

CONTRACT ID - 192273

086GR19P0418 - FD05 & FD04

COUNTY - MONROE

PCN - MP08601001901

FD05 086 0100 014-021

NORTH MAGNOLIA STREET/CENTER POINT ROAD (KY 100) (MP 14.402) BEGIN AT THE INTERSECTION OF KY 163/1446 EXTENDING EAST TO 0.018 MILES EAST OF KY 214 (MP 20.943), A DISTANCE OF 06.54 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 36:42:52.07 LONGITUDE 85:38:23.06

PCN - MP08601631901

FD04 086 0163 008-009

EAST FOURTH STREET (KY 163) (MP 8.412) BEGIN AT SCHOLL DRIVE EXTENDING NORTH TO KY 163/KY 63 (MP 8.530), A DISTANCE OF 0.11 MILES.ASPHALT RESURFACING

GEOGRAPHIC COORDINATES LATITUDE 36:42:05.06 LONGITUDE 85:41:26.06

COMPLETION DATE(S):

COMPLETED BY 11/15/2019

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

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

FD05 086 0100 014-021

SURFACING AREAS

The Department estimates the mainline surfacing width to be varied 19 to 33 feet.

The Department estimates the total mainline area to be surfaced to be 85,108 square yards.

The Department estimates the shoulder width to be varied 1 to 1.5 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 10,036 square yards.

FD05 086 0163 008-009

SURFACING AREAS

The Department estimates the mainline surfacing width to be varied 22 to 49 feet.

The Department estimates the total mainline area to be surfaced to be 4,268 square yards.

The Department estimates the shoulder width to be varied 1 to 2 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 129 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 B

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

SPECIAL NOTES FOR STORM SEWER PIPE

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2019 Standard Specifications and current Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings. Section references are to the Standard Specifications. This work shall consist of:

- (1) Site preparation and erosion control;
- (2) Constructing Storm Sewer Pipe;
- (3) Backfill with flowable fill;
- (4) Restore pavement, curbs, and fences, if applicable;
- (5) Final dressing, cleanup, and seeding;
- (6) Maintaining and controlling traffic; and
- (7) Any other work as specified by this contract.

II. MATERIALS AND DESIGN

All materials shall be sampled and tested in accordance with the Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

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

B. Backfill. Storm Sewer pipe backfill shall be in accordance with Section 701. Installations under existing pavement shall use flowable fill conforming to Section 701.02.05.

C. Erosion Control. See Erosion Control notes.

D. Asphalt Pavement. Use Class 2 Asphalt Base 0.75D PG64-22.

III. CONSTRUCTION METHODS

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

B. Site Preparation. Be responsible for all site preparation, including, but not limited to: all clearing and grubbing, removal of obstructions or any other items; excavation; structure excavation, removal of existing structures, foundation preparation and bedding, embankment and backfilling; waste and disposal of materials and debris; cleaning inlet and outlet ditches; and slope restoration, cleanup and final dressing. All site preparation shall be only as approved or directed by the Engineer.

C. Excavation. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench as directed or approved by the Engineer without disturbing existing underground utilities. Be responsible for all excavation (common, roadway, structure, solid rock, and unclassified) required for foundation preparation, inlet boxes, toe walls, and all other excavation required for construction. Excavate rock in channel as required to allow for construction of foundation and construction of any inlet boxes.

Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials not incorporated into the work at sites off the right of way obtained by the Contractor at no additional cost to the Department (see Special Note for

Waste and Borrow). Perform all excavation and removal of obstructions only as approved or directed by the Engineer.

D. Culvert Pipe and Foundation Preparation. Construct culvert pipes according to the Drainage Structure Replacement Schedule. The Engineer will establish final centerline, flow lines and skew to obtain the best fit of the existing ditches and channels. Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer's approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.

E. Backfilling and Asphalt Resurfacing. Backfill trench around the pipe with flowable fill to subgrade elevation. Restore pavement with CL2 ASPH BASE 0.75D, PG 64-22 (4 inch maximum lifts) up to finished grade. Backfill excavated area around the new drainage structure inlets according to Section 710.03.

F. Final Dressing, Clean Up, and Seeding and Protection. After all work is completed, completely remove debris from the construction site. Perform Final Dressing on all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with Seed Mix Type I. Top-Dressing will not be required.

G. Disposal of Waste. Dispose of all excess materials, waste, and debris off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow Sites.

H. Property Damage and Restoration. The Contractor shall be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design at no additional cost to the Department.

I. On-Site Inspection. Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims resulting from site conditions.

J. Caution. Do not take information shown on the plans and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction. Without regard to the materials encountered, all excavation shall be unclassified. It shall be distinctly understood that any reference to rock, earth, or any other material on the plans or cross sections, whether in numbers or words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

L. Right-of-Way Limits. The Department has not determined exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary Easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.

M. Utility Clearance. Work around and do not disturb existing utilities. It is not anticipated that any utility facilities will require relocation and/or adjustment; however, in the event utilities are discovered that require relocation, the utility companies will work concurrently with the Contractor while relocating their facilities. Working days will not be charged for those days on which work on the controlling item is delayed due to the utility company's phase of the work, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work.

IV. METHOD OF MEASUREMENT

Only the items listed in Section V. will be measured for payment. All other items required to complete the work according to the Drawings, Specifications, these notes, and as directed by the Engineer shall be incidental to the applicable listed items.

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

B. Site Preparation. Site Preparation will be considered incidental to other items of work.

C. Erosion Control. See Erosion Control notes.

D. Restoration, Final Dressing, Clean Up, and Seeding and Protection. The Department will not measure Restoration, Final Dressing, clean up, and Seeding and Protection for separate payment, but shall be incidental to other items of work.

V. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

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

B. Storm Sewer Pipe. Accept payment at the contract unit price per linear foot as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for furnishing and installing the Storm Sewer Pipe and backfilling the Storm Sewer Culvert Pipe.

C. Safeloading. Accept payment at the contract unit price per cubic yard as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for Safeloading pipe structures.

KY 163 Drainage Structure Replacement Schedule FD04 086 0163 008-009				
*Location	Diameter (IN)	*Length (LF)	Action	Notes
	18	364	REPLACE	STORM SEWER PIPE
	24	388	REPLACE	STORM SEWER PIPE

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

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

2.0 Equipment

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

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

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

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

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

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

3.0 Testing Requirements

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

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

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

3.2.2 Number of Specimens and Conditioning. Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance to KM 64-411. KYCT mix design specimens shall be short-term aged conditioned for four hours at compaction temperature in accordance to KM 64-411. Plant produced bituminous material will not be required for age conditioning and shall be fabricated immediately after the gyratory acceptance specimens have been fabricated. An acceptable transport container will be required to prevent the asphalt mixture from losing heat and to maintain the compaction temperature of the asphalt mixture until the KYCT gyratory samples can be fabricated. This will eliminate reheating of the asphalt mixture. To insure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is strongly discouraged. If reheating does occur, provide documentation on the Asphalt Mixtures Acceptance Workbook (AMAW).

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

3.2.4 File Name. As according to section 7.12 of The Kentucky Method for KYCT Index Testing, save the filename with the following format; "CID_Approved Mix Number_Lot Number_Sublot Number_Date"

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

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

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

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

4.0 Data

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

5.0 KYCT Video Demonstration

<https://youtu.be/84j0bM45-hg>

6.0 Payment

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

June 3, 2019

SPECIAL NOTE FOR MANHOLE ADJUSTMENTS

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

1-3181 Manhole Adjustments
01/01/2009

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 PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

1.0 MATERIALS. Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



3.0 MEASUREMENT. The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

SPECIAL NOTE FOR EDGE KEY

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

EDGE KEY



Thickness = 1.0 Inches

L = 100 LF

L= Length of Edge Key

1-3309 Edge key by Ton
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 8 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 8 inches of Class 2 Asphalt Base 1.00 D PG64-22 in 4 inch maximum courses up to the existing pavement surface. Line the bottom of Excavation in Type IV Geotextile Fabric before beginning placement of asphalt base. Compact the asphalt base to the compaction required in Section 403.03.10. 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 7 calendar days have elapsed after placement of the asphalt base. After a minimum of 7 calendar days and 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 square yard for Base Failure repair and per ton for 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.

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 **FD05 086 0100 014-021**

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The Engineer may specify days and hours when lane closures will not be allowed.

Maintain alternating one way traffic during construction. Provide a minimum clear lane width of 8.5 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 on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

Do not leave lane closures in place during non-working hours.

SIGNS

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

Traffic Control Plan
Page 2 of 3

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties and apartments or apartment complexes of four or more units at all times.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

THERMOPLASTIC INTERSECTION MARKINGS

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

BARRICADES

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

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

Traffic Control Plan
Page 3 of 3

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

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

PAVEMENT EDGE DROP-OFFS

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

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

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

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

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

KY 163 DRAINAGE WORK TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Do not install or maintain lane closures on the following days:

All State celebrated holidays

Any event(s) listed that pertain to 4th street or Main St or surrounding streets at the below Link:

<https://www.monroecountykychamber.com/events.html>

Including but not limited to Watermelon Festival, Parades, etc.

The Engineer may specify additional days and hours when Lane and/or Road closures will not be allowed. One week prior to beginning any work provide a proposed lane closure and work schedule for the approval of the engineer. Provide notification to local schools, emergency services and local businesses within project limits one week before any road closures. Notify Engineer immediately and obtain prior approval of any proposed deviations from the approved schedule. Coordinate Intersection Signal timing and phasing with District 3 Traffic division as applicable for all phases of work.

- Phase I – Install Shoulder Closure for KY 163 for Left stations 0+59 to 5+65. Perform storm sewer work for this section of project. Complete Phase I and II before moving to Phase III work.
- Phase II – Close KY 1446 to traffic. Perform work within roadway of KY 1446. Complete storm sewer work and reopen to traffic before beginning next phase of work.
- Phase III – Install shoulder closure for KY 163 right stations 1+83 to 3+78 and KY 100 detour and close KY 100 to traffic. Perform work within roadway of KY 100 and along right shoulder stations. Complete storm sewer work and reopen to traffic before beginning next phase of work.
- Phase IV -- Complete all remaining drainage work for KY 163 project and remove any remaining closures. Complete remaining contract work.

Traffic Control Plan
Page 2 of 11

Install all closures according to current standard drawings or MUTCD as applicable. Limits and signage is for informational purposes only.

If used in conjunction with phased shoulder closures KY 163 lane closures must maintain at least one lane alternating one-way traffic at all times. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

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

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

LANE CLOSURES

Do not leave lane closures in place during non-working hours. Shoulder and Road Closures may be left in place during non-working hours but work should progress continuous to the Engineers satisfaction within closures once erected.

PROJECT TRAFFIC COORDINATOR

In addition to the requirements of Section 112.03.12(B), during any period when a lane closure is in place, the Project Traffic Coordinator shall arrange for qualified personnel to be present on the project at all times to inspect the traffic control and to maintain the signing and devices. Provide the project personnel with access on the project to a radio or telephone to be used in case of emergencies or accidents

SIGNS

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Detour signage if so approved shall be incidental to other signs and or Maintain control traffic.

CHANGEABLE MESSAGE SIGNS

Provide changeable message signs in advance of and within the project at locations determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs 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 within 24 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 relocated during the duration of the project. The Department will not measure replacements for damaged Changeable Message Signs or for signs the Engineer directs be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties and apartments or apartment complexes of four or more units at all times. Must provide notice to all businesses and churches that will have a direct impact from proposed work a minimum of one week prior to any work that impacts said businesses.

The Department will measure asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not measure aggregates, excavation, and/or embankment, but shall be incidental to Maintain and Control Traffic. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

TRAFFIC SIGNAL LOOPS

Traffic Control Plan
Page 4 of 11

Install traffic signal loops according to the Special Notes for Traffic Signal Loop Replacement. Coordinate the placement of the loops with the Engineer.

THERMOPLASTIC INTERSECTION MARKINGS

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

BARRICADES

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

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

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 exceptions:

1. Include edge lines in Temporary Striping; and
2. Place Temporary or Permanent Striping before opening a lane to traffic; and
3. If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is

Traffic Control Plan
Page 5 of 11

expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

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

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

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

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

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

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

Application

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

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

CMS should not be used for:

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

Traffic Control Plan
Page 7 of 11

Messages

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

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- Nor more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to insure that the signs 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 thief (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use
-

Traffic Control Plan
 Page 8 of 11

Standard Abbreviations

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

<u>Word</u>	<u>Abbrev.</u>	<u>Example</u>
Access	ACCS	ACCIDENT AHEAD/USE ACCS RD NEXT RIGHT
Alternate	ALT	ACCIDENT AHEAD/USE ALT RTE NEXT RIGHT
Avenue	AVE	FIFTH AVE CLOSED/DETOUR NEXT LEFT
Blocked	BLKD	FIFTH AVE BLKD/MERGE LEFT
Boulevard	BLVD	MAIN BLVD CLOSED/USE ALT RTE
Bridge	BRDG	SMITH BRDG CLOSED/USE ALT RTE
Cardinal Directions	N, S, E, W	N I75 CLOSED/ DETOUR EXIT 30
Center	CNTR	CNTR LANE CLOSED/MERGE LEFT
Commercial	COMM	OVRSZ COMM VEH/USE I275
Condition	COND	ICY COND POSSIBLE
Congested	CONG	HVY CONG NEXT 3 MI
Construction	CONST	CONST WORK AHEAD/EXPECT DELAYS
Downtown	DWNTN	DWNTN TRAF USE EX 40
Eastbound	E-BND	E-BND I64 CLOSED/DETOUR EXIT 20
Emergency	EMER	EMER VEH AHEAD/PREPARE TO STOP
Entrance, Enter	EX, EXT	DWNTN TRAF USE EX 40
Expressway	EXPWY	WTRSN EXPWY CLOSED/DETOUR EXIT 10
Freeway	FRWY, FWY	GN SYNDR FWY CLOSED/DETOUR EXIT 15
Hazardous Materials	HAZMAT	HAZMAT IN ROADWAY/ALL TRAF EXIT 25
Highway	HWY	ACCIDENT ON AA HWY/EXPECT DELAYS
Hour	HR	ACCIDENT ON AA HWY/2 HR DELAY
Information	INFO	TRAF INFO TUNE TO 1240 AM
Interstate	I	E-BND I64 CLOSED/DETOUR EXIT 20
Lane	LN	LN CLOSED/MERGE LEFT
Left	LFT	LANE CLOSED/MERGE LFT
Local	LOC	LOC TRAF USE ALT RTE
Maintenance	MAINT	MAINT WRK ON BRDG/SLOW
Major	MAJ	MAJ DELWAYS I75/USE ALT RTE

Traffic Control Plan
Page 9 of 11

Mile	MI	ACCIDENT 3 MI AHEAD/ USE ALT RTE
Minor	MNR	ACCIDENT 3 MI MNR DELAY
Minutes	MIN	ACCIDENT 3 MI/30 MIN DELAY
Northbound	N-BND	N-BND I75 CLOSED/ DETOUR EXIT 50
Oversized	OVRSZ	OVRSZ COMM VEH/USE I275 NEXT RIGHT
Parking	PKING	EVENT PKING NEXT RGT
Parkway	PKWY	CUM PKWAY TRAF/DETOUR EXIT 60
Prepare	PREP	ACCIDENT 3 MIL/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
Street	ST	MAIN ST CLOSED/USE ALT RTE
Traffic	TRAF	CUM PKWAY TRAF/DETOUR EXIT 60
Vehicle	VEH	OVRSZ COMM VEH/USE I275 NEXT RIGHT
Westbound	W-BND	W-BND I64 CLOSED/DETOUR EXIT 50
Work	WRK	CONST WRK 2MI/POSSIBLE DELAYS

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

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

Traffic Control Plan
Page 10 of 11

TEMP
WRNG

Temporary
Warning

Temperature
Wrong

TYPICAL MESSAGES

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

Reason/Problem

ACCIDENT
ACCIDENT/XX MILES
XX ROAD CLOSED
XX EXIT CLOSED
BRIDGE CLOSED
BRIDGE/(SLIPPERY, ICE, ETC.)
CENTER/LANE/CLOSED
DELAY(S), MAJOR/DELAYS
DEBRIS AHEAD
DENSE FOG
DISABLED/VEHICLE
EMER/VEHICLES/ONLY
EVENT PARKING
EXIT XX CLOSED
FLAGGER XX MILES
FOG XX MILES
FREEWAY CLOSED
FRESH OIL
HAZMAT SPILL
ICE
INCIDENT AHEAD
LANES (NARROW, SHIFT, MERGE, ETC.)
LEFT LANE CLOSED
LEFT LANE NARROWS
LEFT 2 LANES CLOSED
LEFT SHOULDER CLOSED
LOOSE GRAVEL
MEDIAN WORK XX MILES
MOVING WORK ZONE, WORKERS IN ROADWAY
NEXT EXIT CLOSED
NO OVERSIZED LOADS
NO PASSING
NO SHOULDER
ONE LANE BRIDGE

Action

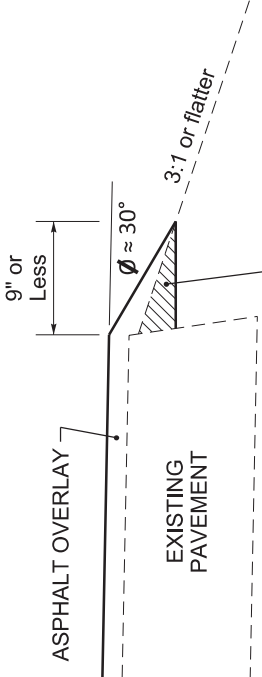
ALL TRAFFIC EXIT RT
AVOID DELAY USE XX
CONSIDER ALT ROUTE
DETOUR
DETOUR XX MILES
DO NOT PASS
EXPECT DELAYS
FOLLOW ALT ROUTE
KEEP LEFT
KEEP RIGHT
MERGE XX MILES
MERGE LEFT
MERGE RIGHT
ONE-WAY TRAFFIC
PASS TO LEFT
PASS TO RIGHT
PREPARE TO STOP
REDUCE SPEED
SLOW
SLOW DOWN
STAY IN LANE
STOP AHEAD
STOP XX MILES
TUNE RADIO 1610 AM
USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE
USE NEXT EXIT
USE RIGHT LANE
WATCH FOR FLAGGER

Traffic Control Plan
Page 11 of 11

PEOPLE CROSSING
RAMP CLOSED
RAMP (SLIPPERY, ICE, ETC.)
RIGHT LANE CLOSED
RIGHT LANE NARROWS
RIGHT SHOULDER CLOSED
ROAD CLOSED
ROAD CLOSED XX MILES
ROAD (SLIPPERY, ICE, ETC.)
ROAD WORK
ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)
ROAD WORK XX MILES
SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)
NEW SIGNAL XX MILES
SLOW 1 (OR 2) - WAY TRAFFIC
SOFT SHOULDER
STALLED VEHICLES AHEAD
TRAFFIC BACKUP
TRAFFIC SLOWS
TRUCK CROSSING
TRUCKS ENTERING
TOW TRUCK AHEAD
UNEVEN LANES
WATER ON ROAD
WET PAINT
WORK ZONE XX MILES
WORKERS AHEAD

DURABLE PAVEMENT EDGE DETAIL

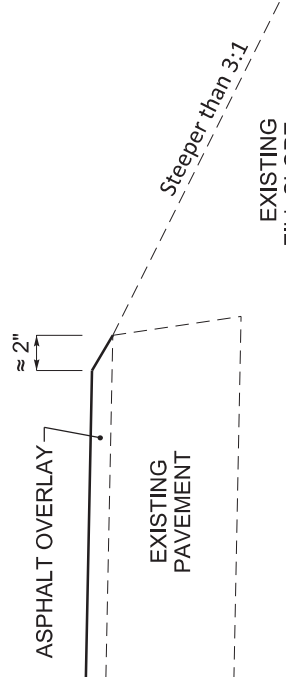
(Resurfacing adjacent to fill slope or ditch foreslope that is 3:1 or less)



PREPARE SHOULDER ACCORDING TO STANDARD SPECIFICATIONS

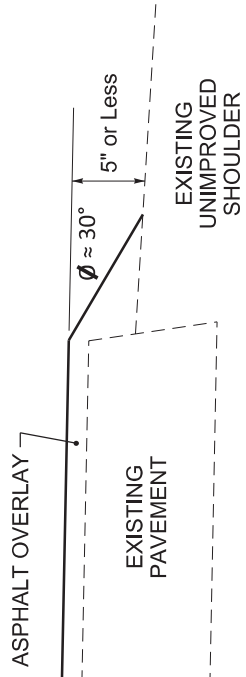
DURABLE PAVEMENT EDGE DETAIL

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



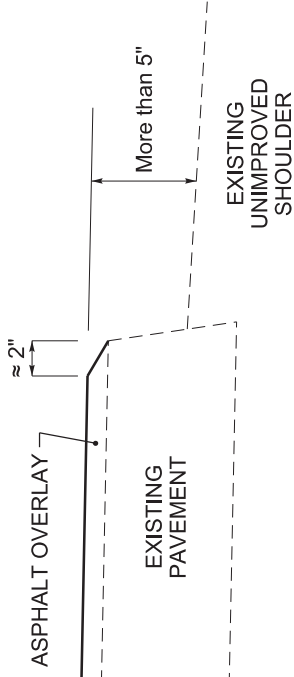
DURABLE PAVEMENT EDGE DETAIL

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



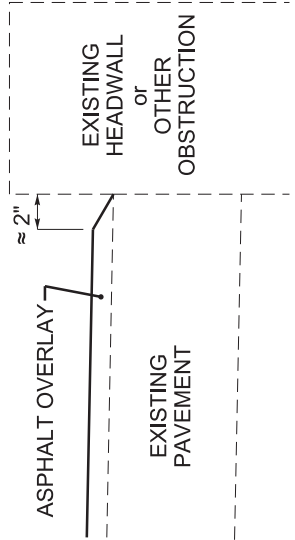
DURABLE PAVEMENT EDGE DETAIL

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



DURABLE PAVEMENT EDGE DETAIL

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

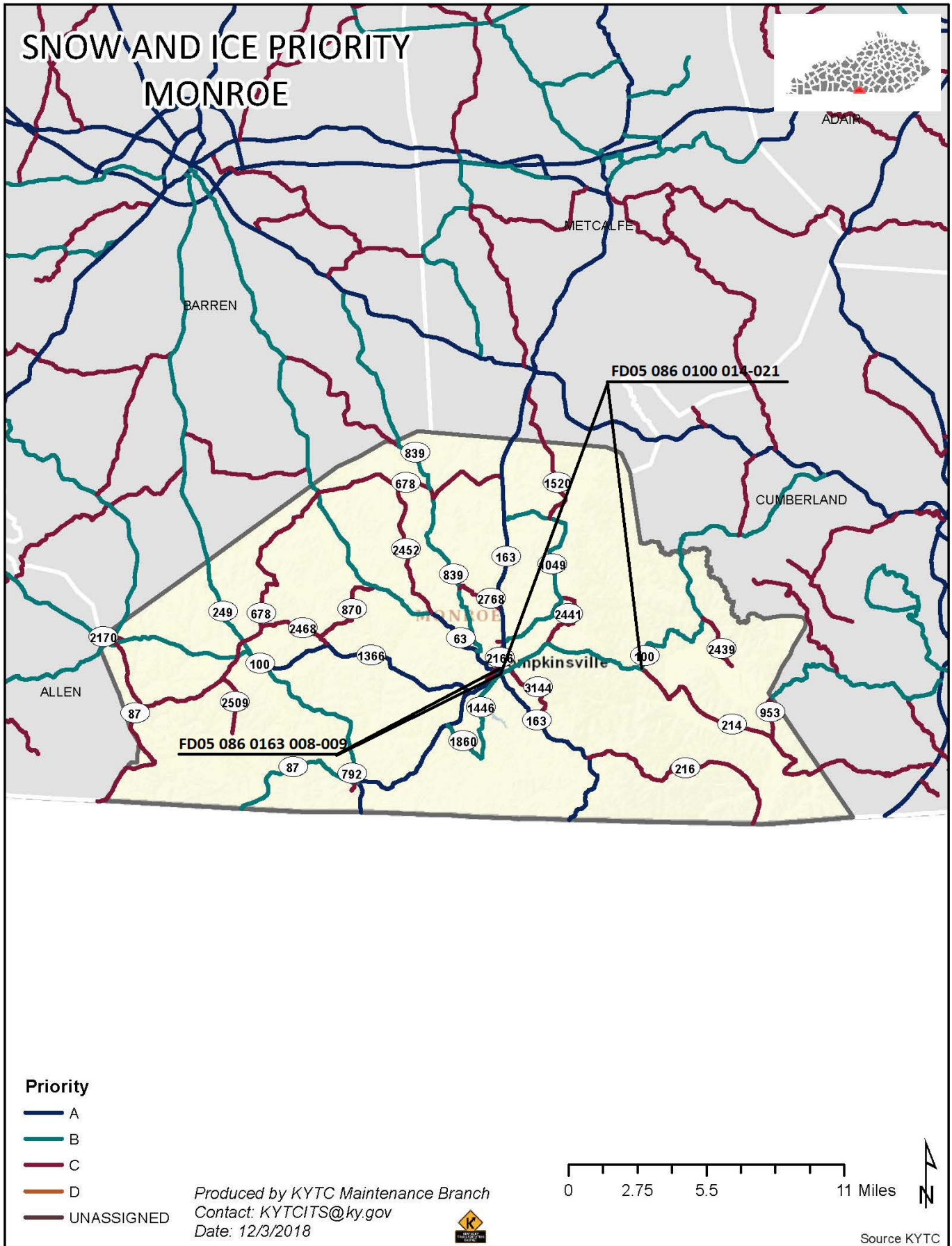


NOTES

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

DRAWING NOT TO SCALE

DURABLE PAVEMENT EDGE DETAILS



MATERIAL SUMMARY

CONTRACT ID: 192273

086GR19P0418 - FD05 & FD04

MP08601001901

NORTH MAGNOLIA STREET/CENTER POINT ROAD (KY 100) BEGIN AT THE INTERSECTION OF KY 163/1446 EXTENDING EAST TO 0.018 MILES EAST OF KY 214 ASPHALT RESURFACING, A DISTANCE OF 6.54 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	10030NS	ASPHALT ADJUSTMENT	23,658.00	DOLL
0010	10020NS	FUEL ADJUSTMENT	9,419.00	DOLL
0015	02562	TEMPORARY SIGNS	530.00	SQFT
0020	02650	MAINTAIN & CONTROL TRAFFIC - (FD05)	1.00	LS
0025	00301	CL2 ASPH SURF 0.38D PG64-22	5,240.00	TON
0030	00356	ASPHALT MATERIAL FOR TACK	47.00	TON
0035	00190	LEVELING & WEDGING PG64-22	768.00	TON
0040	02676	MOBILIZATION FOR MILL & TEXT - (FD05)	1.00	LS
0045	02677	ASPHALT PAVE MILLING & TEXTURING	145.00	TON
0050	02697	EDGE LINE RUMBLE STRIPS	62,716.00	LF
0055	03240	BASE FAILURE REPAIR	595.00	SQYD
0060	06514	PAVE STRIPING-PERM PAINT-4 IN	130,700.00	LF
0065	06510	PAVE STRIPING-TEMP PAINT-4 IN	69,073.00	LF
0070	06568	PAVE MARKING-THERMO STOP BAR-24IN	490.00	LF
0075	22950NN	PAVE MARKING-THERMO STOP	2.00	EACH
0080	06574	PAVE MARKING-THERMO CURV ARROW	2.00	EACH
0085	02720	SIDEWALK-4 IN CONCRETE	9.00	SQYD
0090	23158ES505	DETECTABLE WARNINGS - (NEW)	16.00	SQFT
0095	23158ES505	DETECTABLE WARNINGS - (RETROFIT)	24.00	SQFT
0100	00001	DGA BASE	1,010.00	TON
0105	02569	DEMOBILIZATION	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 192273

086GR19P0418 - FD05 & FD04

MP08601631901

EAST FOURTH STREET (KY 163) BEGIN AT SCHOLL DRIVE EXTENDING NORTH TO KY 163/KY 63 ASPHALT RESURFACING, A DISTANCE OF .11 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0110	02569	DEMOBILIZATION	1.00	LS
0115	02562	TEMPORARY SIGNS	230.00	SQFT
0120	02650	MAINTAIN & CONTROL TRAFFIC - (FD04)	1.00	LS
0125	00301	CL2 ASPH SURF 0.38D PG64-22	235.00	TON
0130	00221	CL2 ASPH BASE 0.75D PG64-22	70.00	TON
0135	00190	LEVELING & WEDGING PG64-22	47.00	TON
0140	02676	MOBILIZATION FOR MILL & TEXT - (FD04)	1.00	LS
0145	02677	ASPHALT PAVE MILLING & TEXTURING	125.00	TON
0150	23158ES505	DETECTABLE WARNINGS - (NEW)	8.00	SQFT
0155	02720	SIDEWALK-4 IN CONCRETE	8.00	SQYD
0160	06514	PAVE STRIPING-PERM PAINT-4 IN	2,492.00	LF
0165	06510	PAVE STRIPING-TEMP PAINT-4 IN	1,246.00	LF
0170	06568	PAVE MARKING-THERMO STOP BAR-24IN	123.00	LF
0175	02014	BARRICADE-TYPE III	6.00	EACH
0180	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
0185	02726	STAKING	1.00	LS
0190	01541	DROP BOX INLET TYPE 10	4.00	EACH
0195	01544	DROP BOX INLET TYPE 11	2.00	EACH
0200	01550	DROP BOX INLET TYPE 12A	1.00	LF
0205	00522	STORM SEWER PIPE-18 IN	364.00	LF
0210	00524	STORM SEWER PIPE-24 IN	388.00	LF
0215	02690	SAFELOADING	12.00	CUYD
0220	01585	REMOVE DROP BOX INLET	5.00	EACH
0225	01650	JUNCTION BOX	1.00	EACH
0230	24845EC	UTILITY COORDINATION	1.00	LS
0235	02483	CHANNEL LINING CLASS II	50.00	TON
0240	01545	DROP BOX INLET TYPE 11 MOD	1.00	EACH

Monroe County
SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY
FD05 086 0100 014-021

	INTERSECTION	RAMP TYPE	RAMP SY	DETECTABLE WARNING QUANTITY	DETECTABLE WARNING Retro SF	NOTES
14.402	KY 163 / 1446					
14.526	Cherry St West	Type 1	5.5	8		To be done with FD04 estimate
14.526	Cherry St East	Type 1	3.5	8		
14.622	White St West				8	
14.622	White St East				8	
14.703	Monroe Dr West				8	
TOTAL				16	24	

**Monroe County
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FD04 086 0163 008-009**

MPT.	INTERSECTION	X-WALKS		STP BARS		CURVE		ARROWS		"ONLY"		"STOP"		CATRAXX		"R" 6 FOOT		RAILROAD		NOTES	
		6 INCH LF	6 INCH LF	24 INCH LF	24 INCH LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		
8.412	School Drive			32																	
8.468	Cherry St/ Crawford St			31																	
8.83	KY 100/ KY 1466			60																	
TOTAL																					

123

Monroe County
SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY
FD04 086 0163 008-009

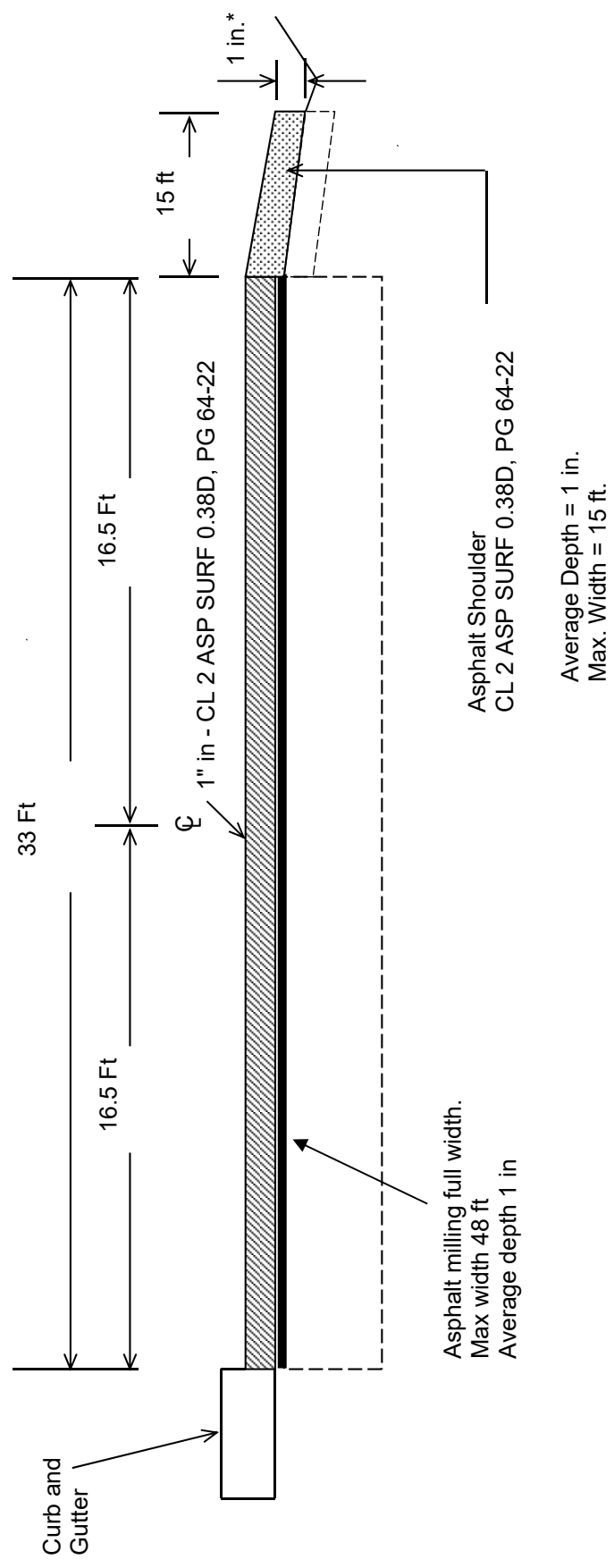
	INTERSECTION	RAMP TYPE	RAMP SY	DETECTABLE WARNING QUANTITY	DETECTABLE WARNING SF	NOTES
1	KY 100/163/N Magnolia St	3	8	8		New installation detectable.
				TOTAL	8	

MONROE COUNTY

FD05 086 0100 014-021

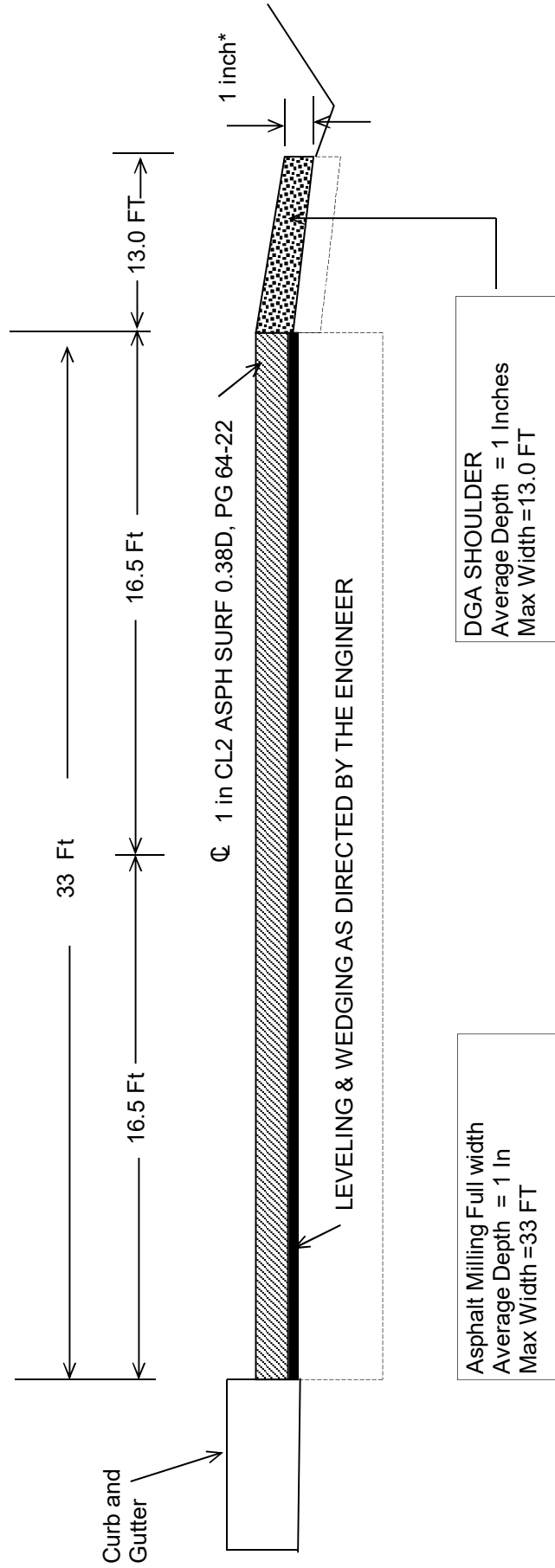
TYPICAL SECTION

MILEPOINTS 14.402 to 14.425



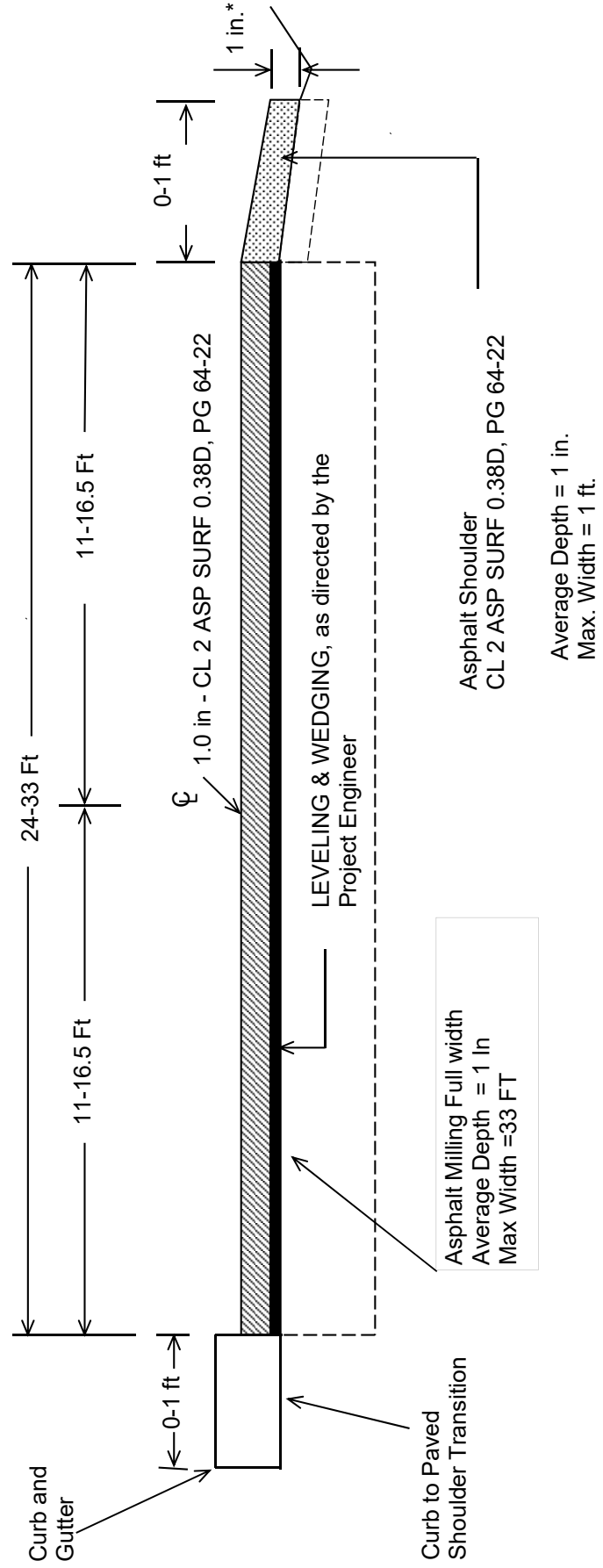
***Where Existing Site Conditions Permit**

**MONROE COUNTY
TYPICAL SECTION
FD05 086 0100 014-021
MP's 14.425 - 14.453**



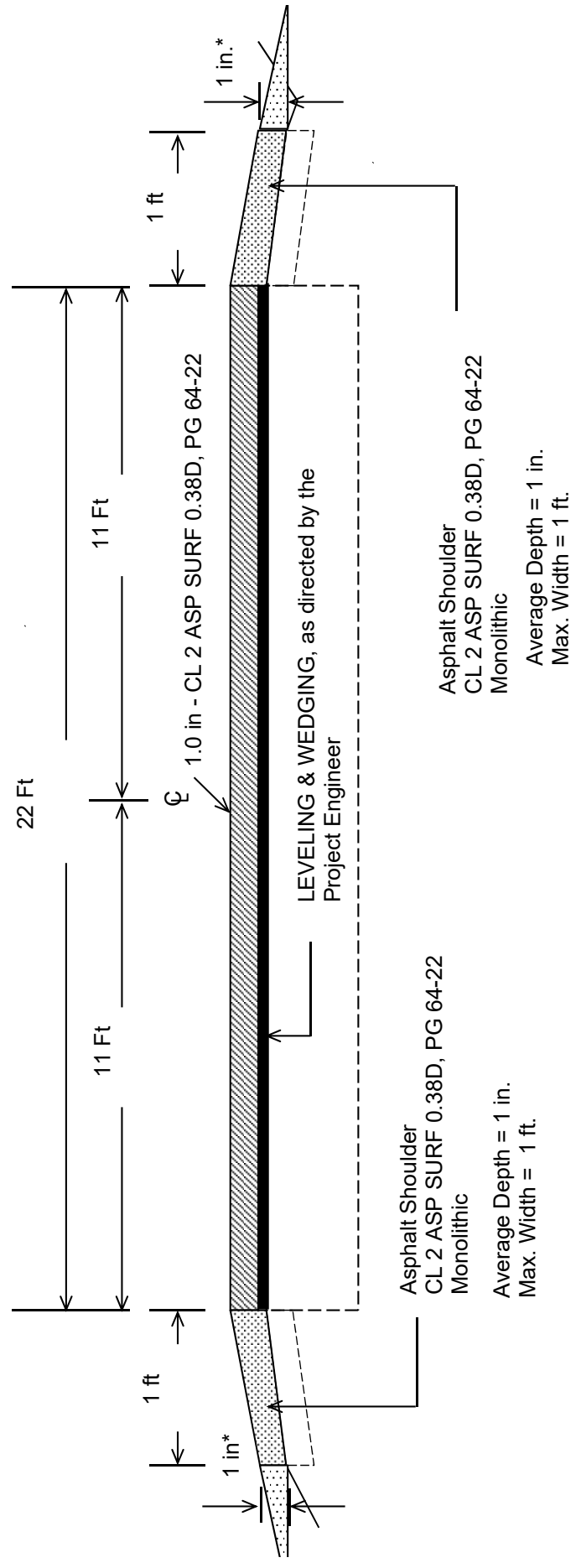
*** Where Existing Site Conditions Permit**

MONROE COUNTY
FD05 086 0100 014-021
TYPICAL SECTION
MILEPOINTS 14.453 to 14.490



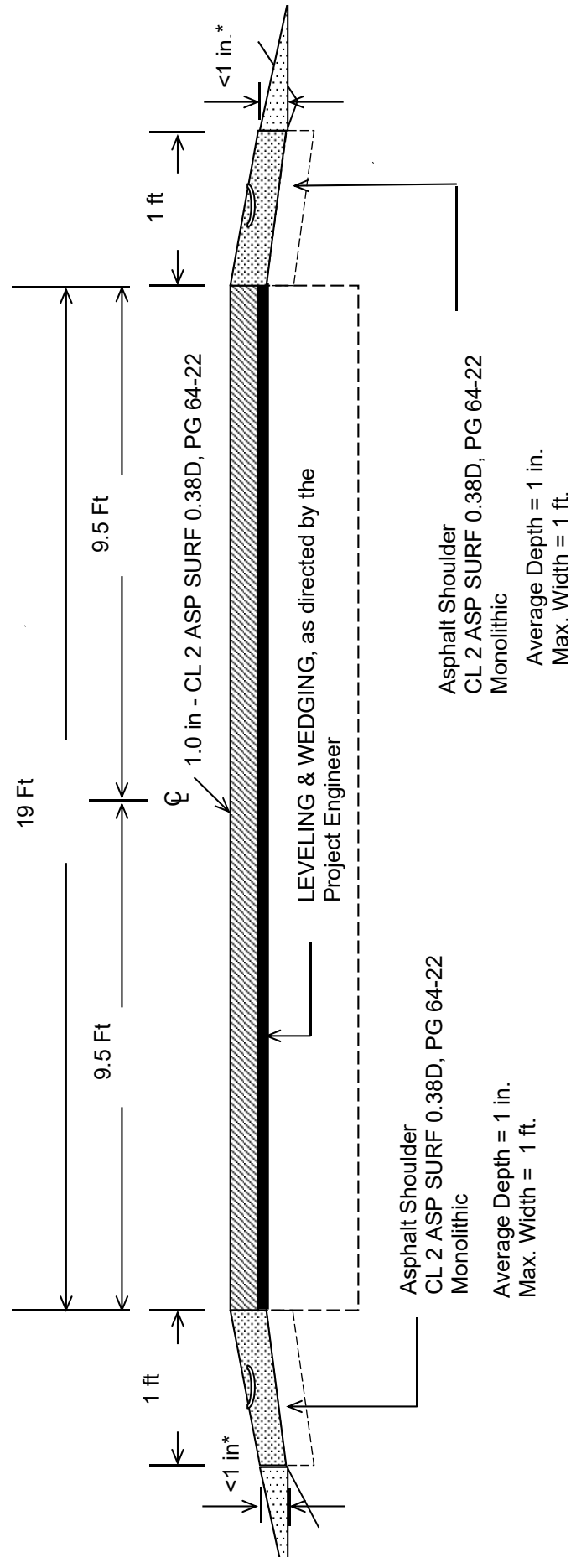
***Where Existing Site Conditions Permit**

MONROE COUNTY
FD05 086 0100 014-021
TYPICAL SECTION
MILEPOINTS 14.490 to 14.752



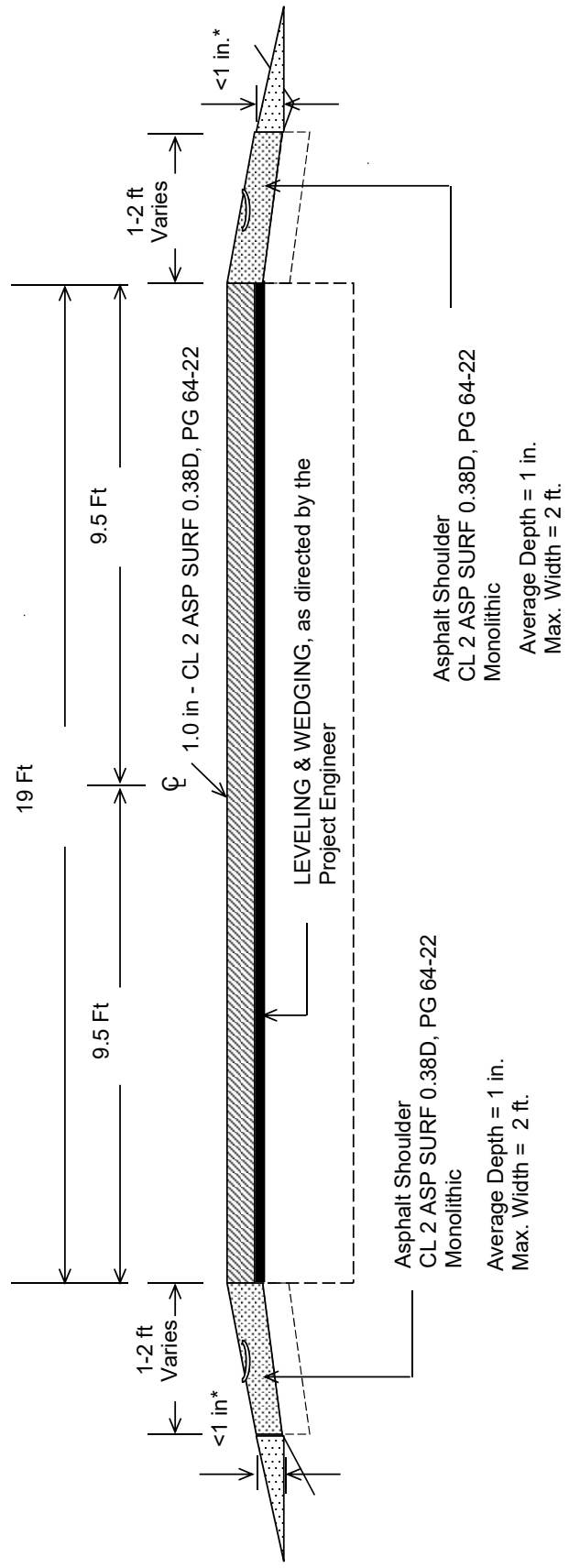
***Where Existing Site Conditions Permit**
*** Use DGA for EOP dropoffs or as designated by engineer**

MONROE COUNTY
FD05 086 0100 014-021
TYPICAL SECTION
MILEPOINTS 14.752 to 18.394 and
20.140 to 20.943



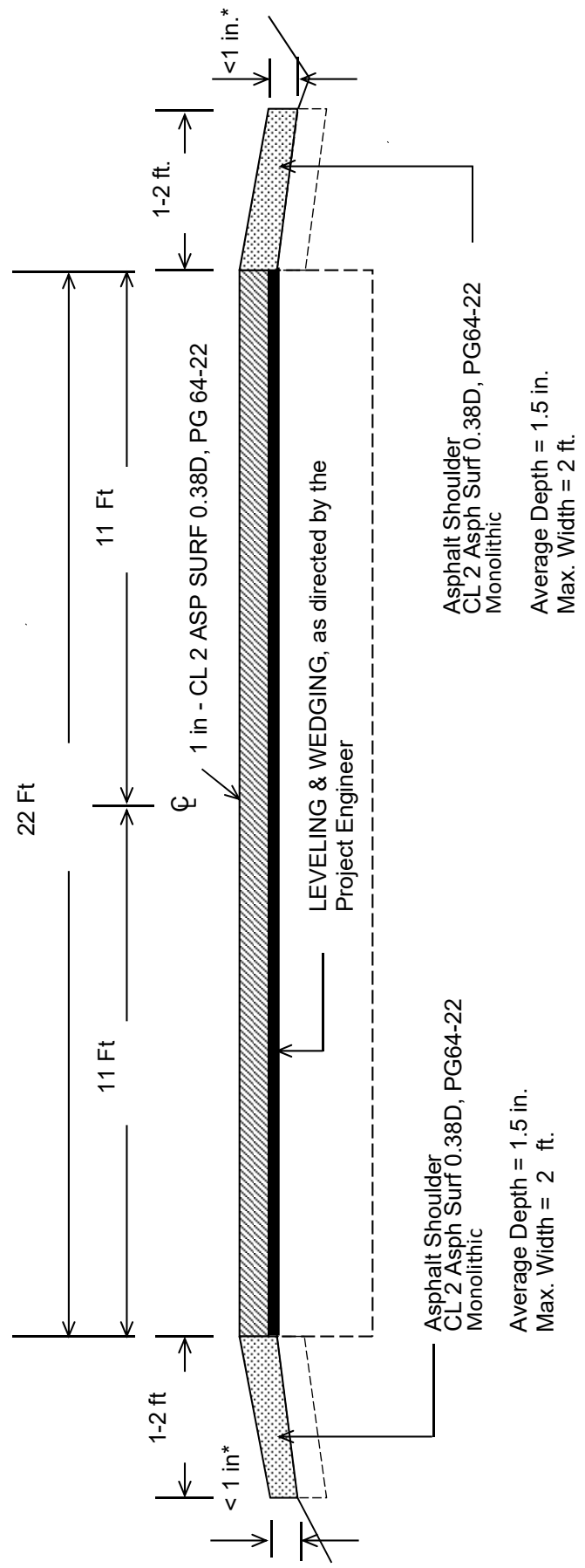
- *Where Existing Site Conditions Permit
- * Use DGA for EOP dropoffs or as designated by engineer
- Edgeline rumbles from 15.008 to 20.943

MONROE COUNTY
FD05 086 0100 014-021
TYPICAL SECTION
MILEPOINTS 18.394 to 20.140



***Where Existing Site Conditions Permit**
*** Use DGA for EOP dropoffs or as designated by engineer.**
Edgeline rumbles
 Superelevation slopes to be adjusted as needed with leveling and wedging as directed by engineer.

Monroe County
TYPICAL SECTION
MILEPOINTS
MP 8.412 - 8.467



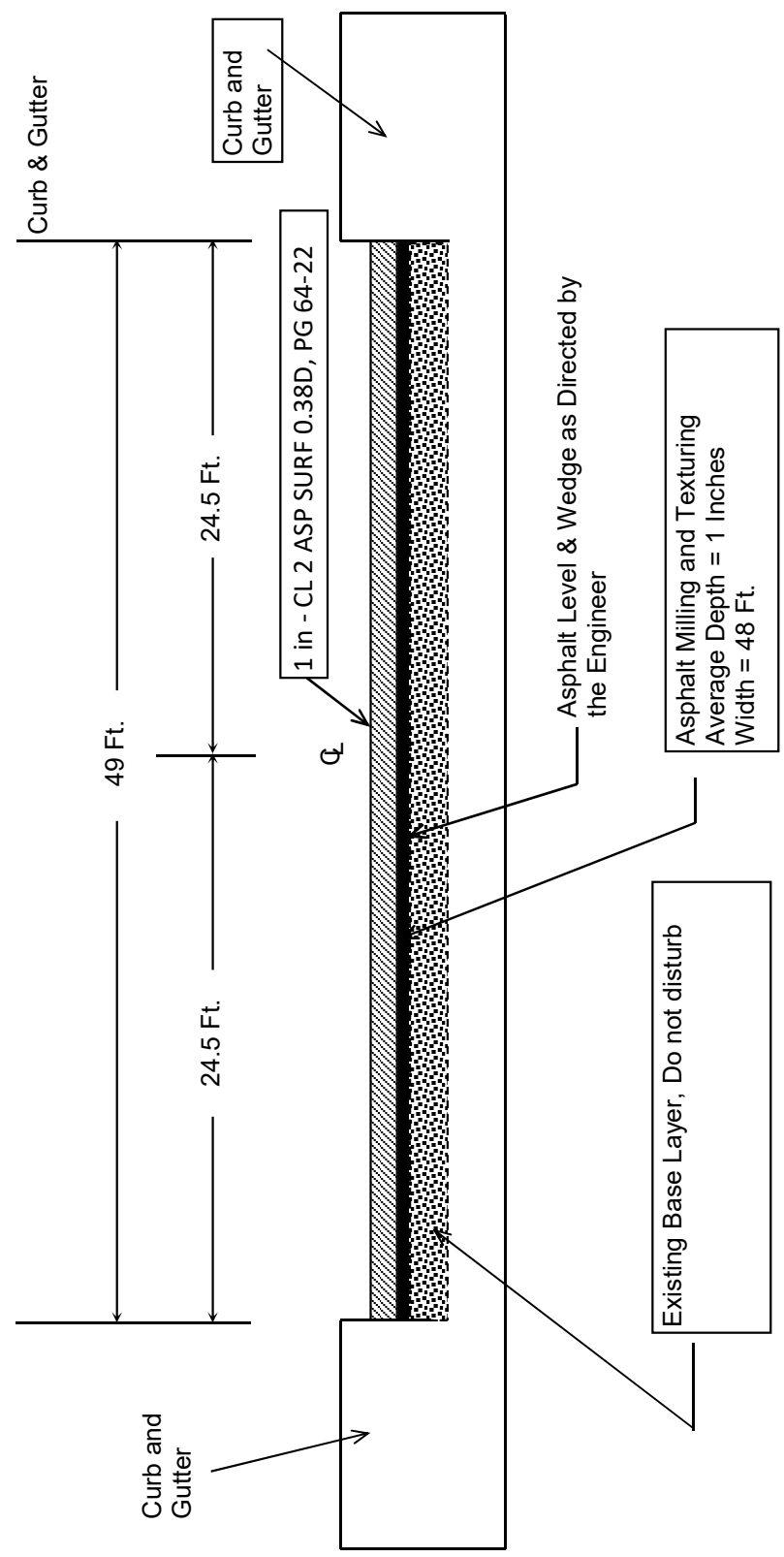
***Where Existing Site Conditions Permit**

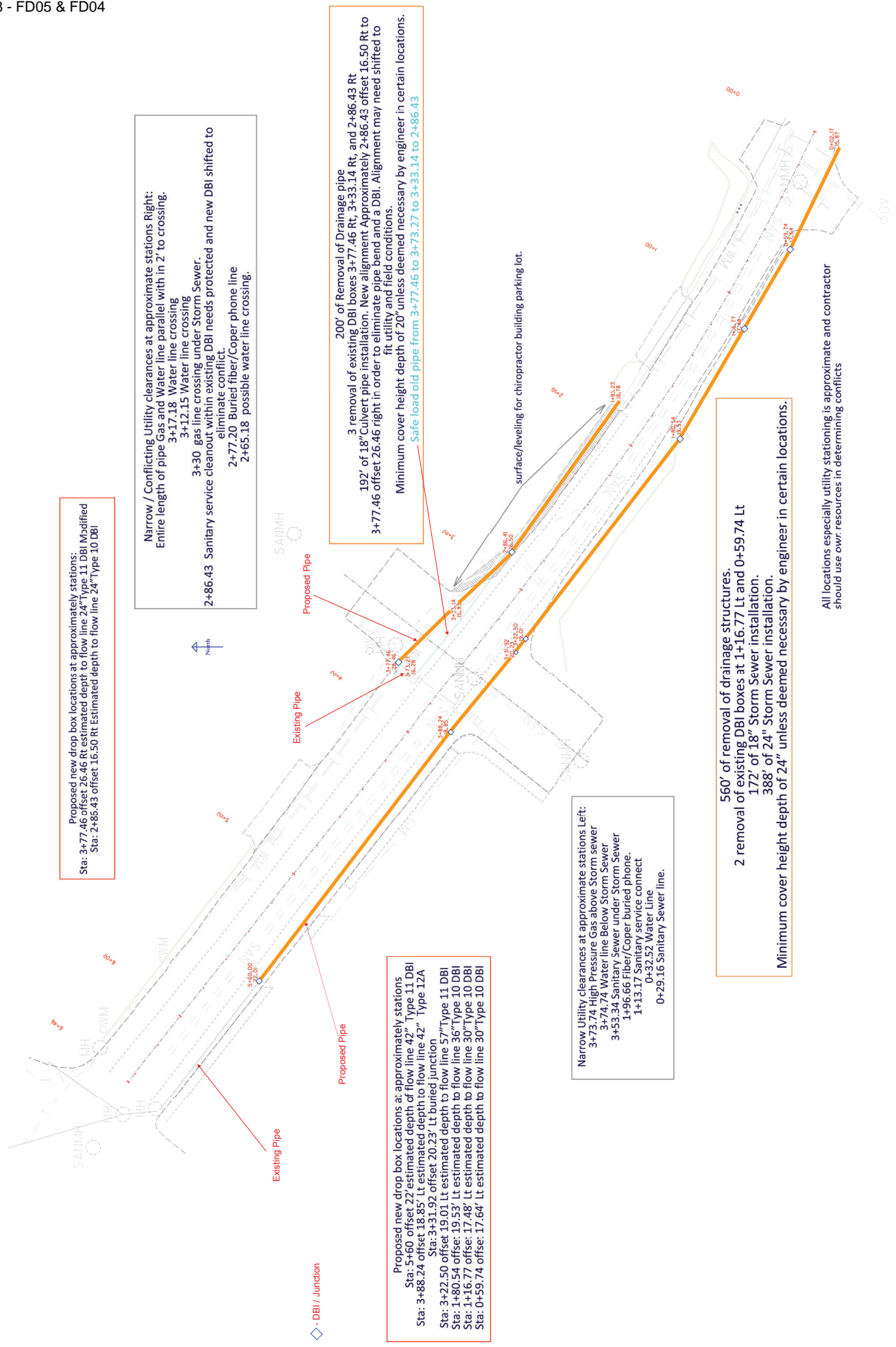
TS2LNAsphMixPaveshld (4)
typical 2 lane

TYPICAL SECTION

MONROE COUNTY

KY 163 8.467 - 8.530 KY 100 14.346 -14.402





Proposed new drop box locations at approximately stations:
Sta: 3+77.46 offset 26.46 Rt estimated depth to flow line 24" Type 11 DBI Modified
Sta: 2+86.43 offset 16.50 Rt Estimated depth to flow line 24" Type 10 DBI

Narrow / Conflicting Utility clearances at approximate stations Right:
Entire length of pipe Gas and Water line parallel with in 2' to crossing.
3+17.18 Water line crossing
3+12.15 Water line crossing
3+30 gas line crossing under Storm Sewer.
2+86.43 Sanitary service cleanout within existing DBI needs protected and new DBI shifted to eliminate conflict.
2+77.20 Buried fiber/Coper phone line
2+65.18 possible water line crossing.

200' of Removal of Drainage pipe
3 removal of existing DBI boxes 3+77.46 Rt, 3+33.14 Rt, and 2+86.43 Rt
192' of 18" Culvert pipe installation. New alignment Approximately 2+86.43 offset 16.50 Rt to 3+77.46 offset 26.46 right in order to eliminate pipe bend and a DBI. Alignment may need shifted to fit utility and field conditions.
Minimum cover height depth of 20" unless deemed necessary by engineer in certain locations.
Safe load old pipe from 3+73.27 to 3+33.14 to 2+86.43

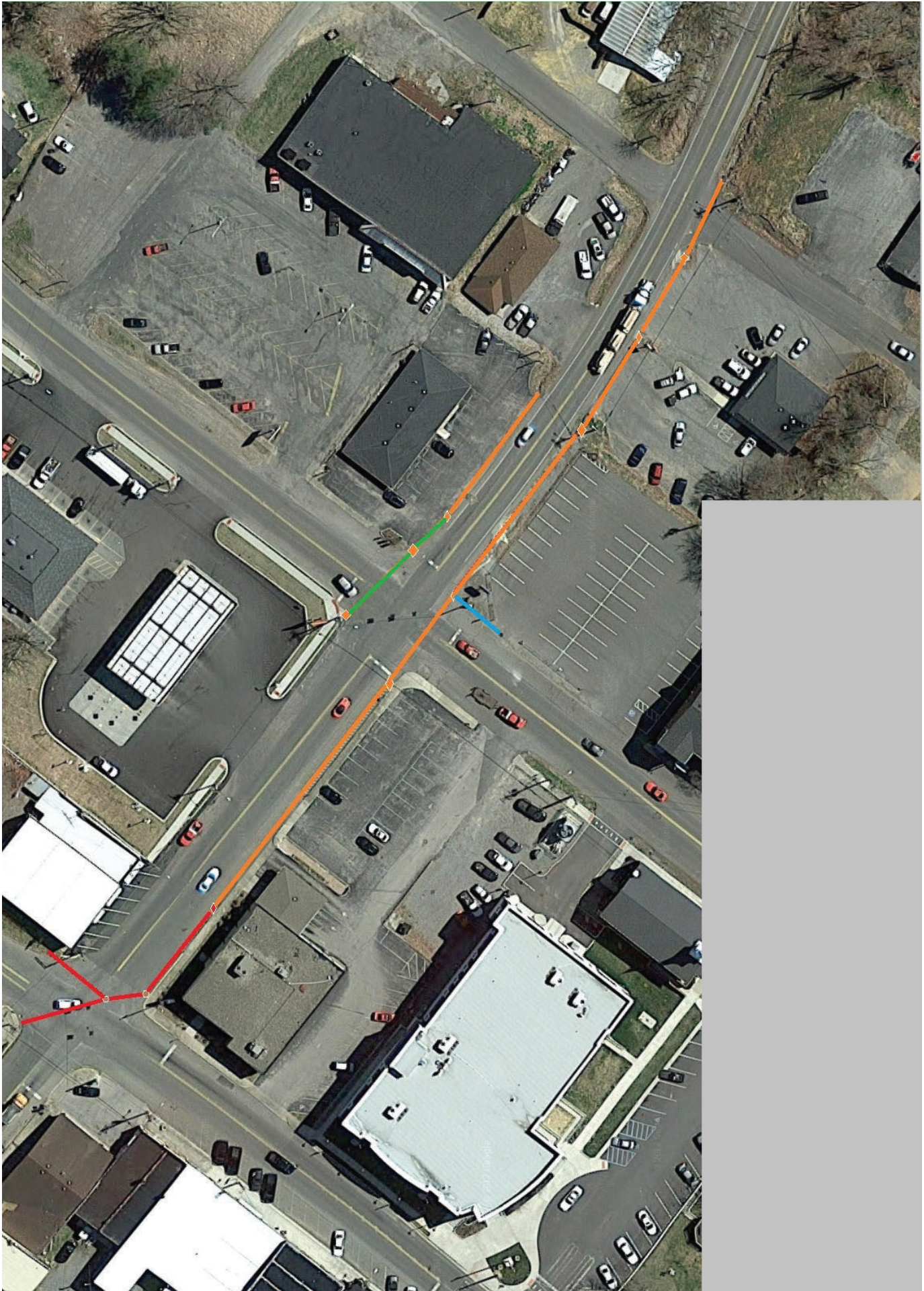
Proposed new drop box locations at approximately stations
Sta: 5+60 offset 22' estimated depth of flow line 42" Type 11 DBI
Sta: 3+88.24 offset 18.85' Lt estimated depth to flow line 42" Type 12A
Sta: 3+31.92 offset 20.23' Lt buried junction
Sta: 3+22.50 offset 19.01' Lt estimated depth to flow line 57" Type 11 DBI
Sta: 1+80.54 offset 19.53' Lt estimated depth to flow line 36" Type 10 DBI
Sta: 1+16.77 offset 17.48' Lt estimated depth to flow line 30" Type 10 DBI
Sta: 0+59.74 offset 17.64' Lt estimated depth to flow line 30" Type 10 DBI

Narrow Utility clearances at approximate stations Left:
3+73.74 High Pressure Gas above Storm sewer
3+74.74 Water line Below Storm Sewer
3+53.34 Sanitary Sewer under Storm Sewer
1+96.66 Fiber/Coper buried phone.
1+13.17 Sanitary service connect
0+32.52 Water Line
0+29.16 Sanitary Sewer line.

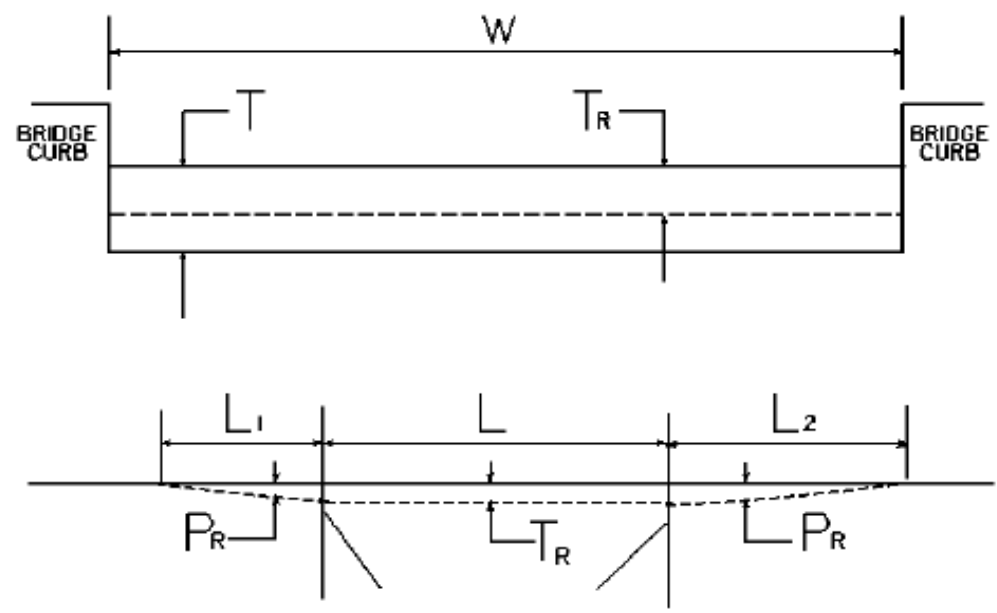
560' of removal of drainage structures.
2 removal of existing DBI boxes at 1+16.77 Lt and 0+59.74 Lt
172' of 18" Storm Sewer installation.
388' of 24" Storm Sewer installation.
Minimum cover height depth of 24" unless deemed necessary by engineer in certain locations.

All locations especially utility stationing is approximate and contractor should use own resources in determining conflicts

◇ DBI / Junction



**FD05 086 0100 014-021
BRIDGE DETAIL FOR PAVING PROJECT**



W = bridge width curb to curb
 T = thickness of existing asphalt overlay
 L = length of bridge
 L₁ & L₂ = length of approach pavement to be removed
 T_R = thickness to be removed and replaced on bridge
 P_R = thickness to be removed and replaced on pavement
 Note: L₁ & L₂ lengths shall be determined by using a transition rate of 100 ft/in of thickness

Route	Bridge No.	MP	W (ft)	T (in)	L ₁ (ft)	L ₂ (ft)	T _R (in)	L (ft)	P _R (in)
KY 100	B00005N	14.758	18.000	N/A	100.000	100.000	N/A	65.000	1.000
KY 100	B00006N	20.670	19.500	N/A	100.000	100.000	N/A	43.000	1.000

PART II
SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2016*.

SUPPLEMENTAL SPECIFICATIONS

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

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

/KEEP/RIGHT/=>=>=>/	/MIN/SPEED/**MPH/
/KEEP/LEFT/<<<</	/ICY/BRIDGE/AHEAD/ /ONE
/LOOSE/GRAVEL/AHEAD/	LANE/BRIDGE/AHEAD/
/RD WORK/NEXT/**MILES/	/ROUGH/ROAD/AHEAD/
/TWO WAY/TRAFFIC/AHEAD/	/MERGING/TRAFFIC/AHEAD/
/PAINT/CREW/AHEAD/	/NEXT/***/MILES/
/REDUCE/SPEED/**MPH/	/HEAVY/TRAFFIC/AHEAD/
/BRIDGE/WORK/***0 FT/	/SPEED/LIMIT/**MPH/
/MAX/SPEED/**MPH/	/BUMP/AHEAD/
/SURVEY/PARTY/AHEAD/	/TWO/WAY/TRAFFIC/

*Insert numerals as directed by the Engineer.
Add other messages during the project when required by the Engineer.

2.3 Power.

- 1) Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.

3.0 CONSTRUCTION. Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

11

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

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

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

Effective June 15, 2012

**2016 KENTUCKY STANDARD DRAWINGS
SUPPLEMENTS TO STANDARD SPECIFICATIONS
TABLE OF CONTENTS**

**~ DRAINAGE ~
BOX INLETS AND OUTLETS**

DROP BOXES

DROP BOX INLET TYPE 1	RDB-001-12
DROP BOX INLET TYPE 2	RDB-002-12
DROP BOX INLET TYPE 3	RDB-003-08
DROP BOX INLET TYPE 4	RDB-004-10
DROP BOX INLET TYPE 5A-5B-5C-5D-5E AND 5F.....	RDB-005-09
DROP BOX INLET TYPE 6A-6B-6C-6D-6E AND 6F.....	RDB-006-08
DROP BOX INLET TYPE 7 (LAYOUT & STEEL PATTERN)	RDB-007-03
DROP BOX INLET TYPE 7 (DIMENSION & STEEL CHARTS).....	RDB-008-04
DROP BOX INLET TYPE 10	RDB-010-07
DROP BOX INLET TYPE 11	RDB-011-08
DROP BOX INLET TYPE 12 OR 12A.....	RDB-012-10
DROP BOX INLET TYPE 13 (DETAIL SHEET).....	RDB-013-07
DROP BOX INLET TYPE 13 AND TYPE 16 (FRAME & GRATE DETAILS).....	RDB-014-06
DROP BOX INLET TYPE 13 (DETAIL & BAR CHART FOR LID).....	RDB-015-04
DROP BOX INLET TYPE 13 (PIPE CHAMBER - GRADE CONDITION).....	RDB-016-03
DROP BOX INLET TYPE 13 (PIPE CHAMBER - SAG CONDITION).....	RDB-017-03
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - RISER).....	RDB-018-04
DROP BOX INLET TYPE 13 (ADDITIONAL STEEL - CHAMBER)	RDB-019-04
DROP BOX INLET TYPE 14 & 15	RDB-020-05
DROP BOX INLET TYPE 16 (DETAIL SHEET).....	RDB-030-04
DROP BOX INLET TYPE 16 (STEEL SHEET)	RDB-031-04
DROP BOX INLET TYPE 16 (DETAIL & BAR CHART FOR LID).....	RDB-032-04
DROP BOX INLET TYPE 16 (DIMENSIONS & ESTIMATE OF QUANTITIES).....	RDB-033-03
DROP BOX INLET TYPE 16 (ADDITIONAL STEEL - RISER).....	RDB-034-04
DROP BOX INLET TYPE 16 (ADDITIONAL STEEL - CHAMBER)	RDB-035-04

SLOPED BOXES

SLOPED BOX OUTLET TYPE 1.....	RDB-100-05
GRATES FOR SLOPED BOX OUTLET TYPE 1.....	RDB-101-05
SLOPED AND FLARED BOX INLET-OUTLET 18"-24"-30"-36" ALL SKEWS	RDB-105-06
GRATES FOR SLOPED AND FLARED BOX INLET-OUTLET	RDB-106-05
SLOPED BOX INLET OR OUTLET TYPE 1	RDB-110-08
SLOPED BOX INLET OR OUTLET TYPE 2.....	RDB-111-08
METAL END SECTION TYPE 1 & 2 (PARALLEL STRUCTURES).....	RDB-150-02
METAL END SECTION TYPE 3 & 4 (CROSS STRUCTURES).....	RDB-155-02
DIMENSIONS FOR METAL END SECTIONS.....	RDB-160-02

CURB BOXES

CONCRETE MEDIAN BARRIER BOX INLET (CAST-IN-PLACE).....	RDB-230-09
CONCRETE MEDIAN BARRIER BOX INLET (SLIP-FORM).....	RDB-231-11
CONCRETE MEDIAN BARRIER BOX INLET (50" TALL WALL CAST-IN-PLACE).....	RDB-240-02
CONCRETE MEDIAN BARRIER BOX INLET (50" TALL WALL SLIP-FORM).....	RDB-241-02
CURB BOX INLET TYPE A (DETAIL DRAWING)	RDB-270-09
CURB BOX INLET TYPE A (STEEL DRAWING).....	RDB-271-05
CURB BOX INLET TYPE A (TOP PHASE TABLE).....	RDB-272-07

CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID).....	RDB-273-06
CURB BOX INLET TYPE B (DETAIL DRAWING)	RDB-280-06
CURB BOX INLET TYPE B (STEEL DRAWING).....	RDB-281-03
CURB BOX INLET TYPE B (TOP PHASE TABLE).....	RDB-282-04
CURB BOX INLET TYPE B (DETAIL & BAR CHART FOR 8" LID).....	RDB-283-04
CURB BOX INLET TYPE F.....	RDB-320-06
BOX INLET RISER.....	RDB-400-05
BOX INLET PIPE CHAMBER	RDB-410-06
BOX INLET PIPE CHAMBER (ADDITIONAL STEEL).....	RDB-420-05

PAVED DITCHES, FLUME INLETS AND CHANNEL LININGS

PAVED DITCH TYPE 1	RDD-001-06
PAVED DITCH TYPE 2	RDD-002-07
FLUME INLET TYPE 1	RDD-020-07
FLUME INLET TYPE 2.....	RDD-021-07
CHANNEL LINING CLASS IA (MATTRESS UNITS).....	RDD-030-08
CHANNEL LINING CLASS II AND III.....	RDD-040-05

PIPE AND BOX CULVERT AND HEADWALLS

FOR ALL PIPE AND BOX CULVERT HEADWALLS (RDH SERIES) SEE HEADWALL SUPPLEMENT

TYPICAL DRAINAGE INSTALLATIONS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-002-05
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-003-05
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-004-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-005-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-006-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-007-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-008-04
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-011-03
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-012-03
NON-CIRCULAR PIPE ALTERNATES	RDI-016-03
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER PIPE.....	RDI-020-09
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER REINFORCED CONC.PIPE.....	RDI-021-01
PIPE BEDDING, TRENCH CONDITION.....	RDI-025-05
PIPE BEDDING, TRENCH CONDITION REINFORCED CONC. PIPE.....	RDI-026-01
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE	RDI-035-02
EROSION CONTROL BLANKET SLOPE INSTALLATION.....	RDI-040-01
EROSION CONTROL BLANKET CHANNEL INSTALLATION.....	RDI-041-01
TYPICAL MEDIAN DRAIN INSTALLATIONS.....	RDI-045-02
FILL HEIGHTS FOR PRECAST REINFORCED CONCRETE BOX CULVERTS.....	RDI-100-05
BEDDING FOR PRECAST BOX CULVERTS, SEWERS, STORM DRAINS AND THEIR COMBINATIONS	RDI-120-04
.....	RDI-120-04
SLOTTED DRAIN PIPE (DETAIL SHEET).....	RDI-200-05

MANHOLES

MANHOLE TYPE A	RDM-001-07
MANHOLE TYPE B	RDM-005-06
MANHOLE TYPE C (CHAMBER LAYOUT).....	RDM-010-06
MANHOLE TYPE C (TOWER APPLICATIONS)	RDM-011-05
MANHOLE TYPE C (STEEL PATTERN).....	RDM-012-03
MANHOLE TYPE C (TABLE OF QUANTITIES)	RDM-013-04
TRAPPED MANHOLE	RDM-050-07

MANHOLE STEPS	RDM-055
FRAME AND LID TYPE 1	RDM-100-03
FRAME AND LID TYPE 2	RDM-105-03

PERFORATED PIPE

PERFORATED PIPE TYPES AND COVER HEIGHTS	RDP-001-06
PERFORATED PIPE FOR SUBGRADE DRAINAGE ON TWO-LANE (CLASS 2) AND MULTI-LANE ROADS	RDP-005-05
PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE)	RDP-006-04
PERFORATED PIPE DETAILS (SOLID ROCK)	RDP-007-04
PERFORATED PIPE HEADWALLS	RDP-010-09

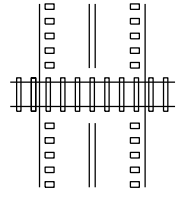
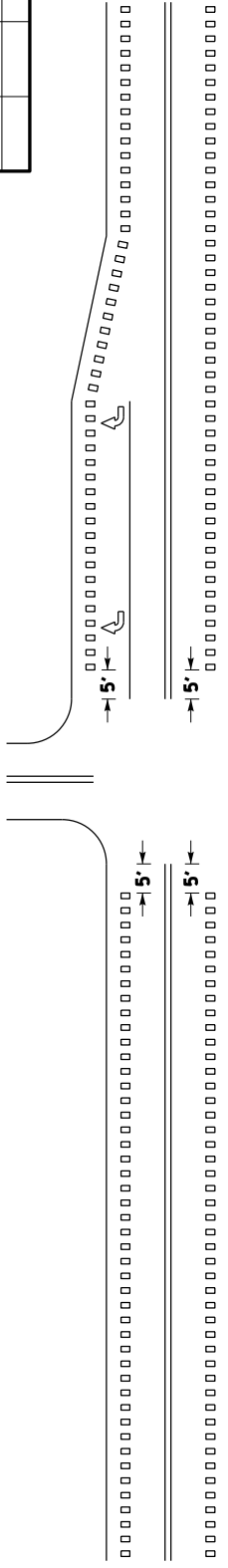
MISCELLANEOUS DRAINAGE

JUNCTION BOX	RDX-001-06
JUNCTION BOX (DIMENSIONS AND QUANTITIES)	RDX-002-04
JUNCTION BOX TYPE B	RDX-005-03
SPRING BOX INLET TYPE "A"	RDX-010-05
SPRING BOX INLET TYPE "B"	RDX-011-05
TRAP FOR BOX INLETS	RDX-020-05
SUBGRADE DRAINAGE - CONCRETE PAVEMENT	RDX-050-05
INTERMEDIATE AND END ANCHORS FOR CIRCULAR PIPE	RDX-060-04
INTERMEDIATE AND END ANCHORS FOR NON-CIRCULAR PIPE	RDX-065-04
SIDE TAPERED INLETS - 30" TO 60" DIA. ALL SLOPES - ALL SKEWS	RDX-150-06
SECURITY DEVICES FOR FRAMES, GRATES AND LIDS	RDX-160-06
TEMPORARY SILT FENCE	RDX-210-03
TEMPORARY SILT FENCE WITH WOVEN WIRE FENCE FABRIC	RDX-215-01
SILT TRAP - TYPE A	RDX-220-05
SILT TRAP - TYPE B	RDX-225-01
SILT TRAP - TYPE C	RDX-230-01
CHANNEL HABITAT IMPROVEMENT STRUCTURES (DUMPED STONE)	RDX-240-04
CHANNEL HABITAT IMPROVEMENT STRUCTURES (GABIONS)	RDX-245-04
PRECAST BOX CULVERT EXTENSION	RDX-300-04
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENT	RGS-002-06

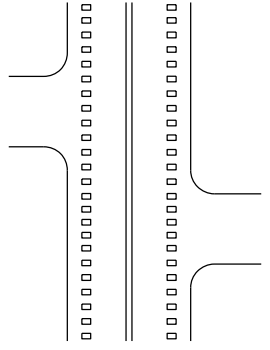
MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS	RGX-001-06
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-150-08
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-152-08
SIDEWALK RAMPS	RPM-170-09
SIDEWALK RAMP WITH HANDRAIL	RPM-172-07
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
SHOULDER CLOSURE	TTC-135-02
PAVEMENT CONDITION WARNING SIGNS	TTD-125-02
MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-105-02

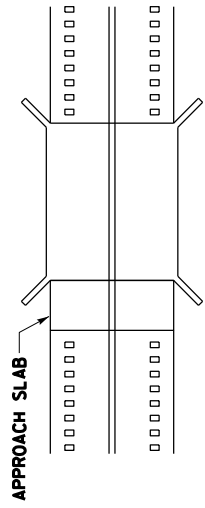
COUNTY OF	SHEET NO.
TERMINI	



HIGHWAY-RAIL GRADE CROSSINGS ③



DRIVEWAYS/MINOR COMMERCIAL ENTRANCES ⑤



BRIDGE DECK/APPROACH SLAB ④

MAILBOX TURNOUTS ⑥

~ NOTES ~

- ① RUMBLE STRIPS SHALL BE OMITTED THROUGH MAJOR INTERSECTIONS WITH, OR WITHOUT, RIGHT-TURN LANES. OMIT RUMBLE STRIPS APPROXIMATELY 5' IN ADVANCE OF THE AREA WHERE EDGELINE PAVEMENT MARKINGS HAVE BEEN OMITTED (NORMALLY WHERE SIDE STREET RADIUS INTERSECTS MAINLINE).
- ② RUMBLE STRIPS SHALL NOT BE INSTALLED THROUGH MARKED CROSSWALKS. OMIT RUMBLE STRIPS APPROXIMATELY 5' IN ADVANCE OF MARKED CROSSWALKS.
- ③ RUMBLE STRIPS SHALL NOT BE INSTALLED ACROSS HIGHWAY-RAIL GRADE CROSSINGS.
- ④ RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS OR APPROACH SLABS.
- ⑤ RUMBLE STRIPS SHALL BE INSTALLED THROUGH DRIVEWAYS & MINOR COMMERCIAL ENTRANCES.
- ⑥ RUMBLE STRIPS SHALL BE INSTALLED THROUGH MAILBOX TURNOUTS.
7. RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS.

DRAWING NOT TO SCALE

USE WITH SEPIA 006, 007, AND 008

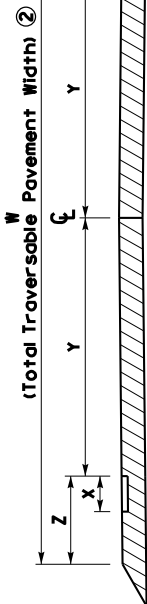
KENTUCKY
 DEPARTMENT OF HIGHWAYS
 SHOULDER & EDGELINE
 RUMBLE STRIP DETAILS

SUBMITTED: *B. [Signature]* DATE: 11-23-16
 005

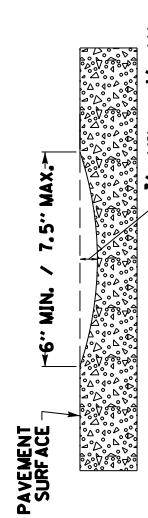
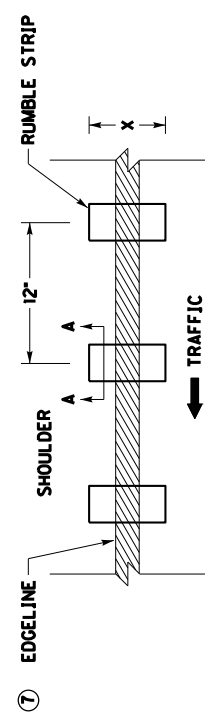
BID ITEMS AND UNIT TO BID
 EDGELINE RUMBLE STRIPS
 SHOULDER RUMBLE STRIPS

LF
 LF

COUNTY OF	TIERING	SHEET NO.



PAVEMENT CROSS-SECTION



PAVEMENT WIDTH (W) ②	RUMBLE LENGTH (X) ⑤	ELRS ONLY		CLRS & ELRS	
		LANE WIDTH (Y) ③	SHOULDER WIDTH (Z) ④	LANE WIDTH (Y) ③	SHOULDER WIDTH (Z) ④
20'	8"	9'	1'	N/A	N/A
21'	8"	9.5'	1'	N/A	N/A
22'	8"	10'	1'	N/A	N/A
23'	8"	10'	1.5'	N/A	N/A
24'	8"	10.5'	1.5'	N/A	N/A
25'	8"	N/A	N/A	11'	1.5'
26'	8"	N/A	N/A	11'	2'
27'	8"	N/A	N/A	11.5'	2'
28'	8"	N/A	N/A	12'	2'
29'	8"	N/A	N/A	12'	2.5'
30'	8"	N/A	N/A	12'	3'
31'	8"	N/A	N/A	12'	3.5'
32'	8"	N/A	N/A	12'	4'
33'	8"	N/A	N/A	12'	4.5'

NOTES

1. EDGELINE RUMBLE STRIPS SHOULD BE INSTALLED ACCORDING TO THE DIMENSIONS PROPOSED ABOVE UNLESS THERE IS AN ENGINEERING BASIS THAT SUPPORTS A CHANGE IN DIMENSION. FOR EXAMPLE, IF THE EXISTING LANE WIDTH IS NARROWER THAN THE LANE WIDTH PROPOSED IN THIS DRAWING AND THE EXISTING SHOULDER PAVEMENT DEPTH IS NOT SUITABLE TO BE CONVERTED INTO A PORTION OF THE PROPOSED LANE WIDTH, THEN THE EXISTING LANE WIDTH SHOULD BE USED INSTEAD OF THE WIDTH PROPOSED IN THIS DRAWING. NOTE: CENTERLINE RUMBLE STRIPS SHOULD BE OMITTED WHEN THE LANE WIDTH (Y) IS LESS THAN 11 FT.
2. PAVEMENT WIDTH (W) IS THE TOTAL WIDTH OF TRAVERSABLE PAVEMENT. DO NOT INCLUDE THE WIDTH OF ANY NON-TRAVERSABLE PAVEMENT, SUCH AS PAVEMENT WEDGES, WHEN MEASURING THE PAVEMENT WIDTH (W).
3. LANE WIDTH (Y) TO BE MEASURED FROM CENTER OF ROAD TO LANE SIDE EDGE OF RUMBLE STRIP.
4. PAVED SHOULDER WIDTH (Z) TO BE MEASURED FROM LANE SIDE EDGE OF RUMBLE STRIP TO OUTSIDE EDGE OF TRAVERSABLE PAVEMENT. DISTANCES SHOWN ARE APPROXIMATE. MAINTAIN RUMBLE STRIP DIMENSIONS AND SPACING AS MUCH AS POSSIBLE. IF THE TYPICAL SECTION SHOWS A LANE WIDTH (Y) AND/OR SHOULDER WIDTH (Z) THAT DIFFERS FROM THE WIDTHS LISTED IN THIS DRAWING, THE ENGINEER SHALL DETERMINE THE LANE WIDTH (Y) AND/OR SHOULDER WIDTH (Z) AT THE TIME OF CONSTRUCTION. NOTE: CENTERLINE RUMBLE STRIPS SHOULD BE OMITTED WHEN THE LANE WIDTH (Y) IS LESS THAN 11 FT.
5. RUMBLE LENGTH (X) MAY BE MODIFIED AS THE ENGINEER DIRECTS. IF THE SHOULDER WIDTH (Z) IS EQUAL TO OR LESS THAN THE PROPOSED RUMBLE LENGTH (X).
6. PLACE THE EDGELINE MARKING IN THE CENTER OF THE RUMBLE STRIP.
7. EDGELINE RUMBLE STRIPS SHOULD BE OMITTED WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS.

BID ITEM AND UNIT TO BID
 EDGELINE RUMBLE STRIPS

LF

DRAWING NOT TO SCALE

USE WITH SEPIA 005

KENTUCKY DEPARTMENT OF HIGHWAYS
EDGELINE RUMBLE STRIP DETAILS TWO LANE ROADWAYS
SUBMITTED: <i>B. [Signature]</i> 11-23-16 DATE
006

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

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

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



WWW.WAGEHOUR.DOL.GOV

PART IV
INSURANCE

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

PART V
BID ITEMS

PROPOSAL BID ITEMS

192273

Page 1 of 2

Report Date 6/26/19

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	1,010.00	TON		\$	
0020	00190		LEVELING & WEDGING PG64-22	768.00	TON		\$	
0030	00301		CL2 ASPH SURF 0.38D PG64-22	5,240.00	TON		\$	
0040	00356		ASPHALT MATERIAL FOR TACK	47.00	TON		\$	
0050	02562		TEMPORARY SIGNS	530.00	SQFT		\$	
0060	02650		MAINTAIN & CONTROL TRAFFIC (FD05)	1.00	LS		\$	
0070	02676		MOBILIZATION FOR MILL & TEXT (FD05)	1.00	LS		\$	
0080	02677		ASPHALT PAVE MILLING & TEXTURING	145.00	TON		\$	
0090	02697		EDGELINE RUMBLE STRIPS	62,716.00	LF		\$	
0100	02720		SIDEWALK-4 IN CONCRETE	9.00	SQYD		\$	
0110	03240		BASE FAILURE REPAIR	595.00	SQYD		\$	
0120	06510		PAVE STRIPING-TEMP PAINT-4 IN	69,073.00	LF		\$	
0130	06514		PAVE STRIPING-PERM PAINT-4 IN	130,700.00	LF		\$	
0140	06568		PAVE MARKING-THERMO STOP BAR-24IN	490.00	LF		\$	
0150	06574		PAVE MARKING-THERMO CURV ARROW	2.00	EACH		\$	
0160	10020NS		FUEL ADJUSTMENT	9,419.00	DOLL	\$1.00	\$	\$9,419.00
0170	10030NS		ASPHALT ADJUSTMENT	23,658.00	DOLL	\$1.00	\$	\$23,658.00
0180	22950NN		PAVE MARKING-THERMO STOP	2.00	EACH		\$	
0190	23158ES505		DETECTABLE WARNINGS (NEW)	16.00	SQFT		\$	
0200	23158ES505		DETECTABLE WARNINGS (RETROFIT)	24.00	SQFT		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0210	00190		LEVELING & WEDGING PG64-22	47.00	TON		\$	
0220	00221		CL2 ASPH BASE 0.75D PG64-22	70.00	TON		\$	
0230	00301		CL2 ASPH SURF 0.38D PG64-22	235.00	TON		\$	
0240	02014		BARRICADE-TYPE III	6.00	EACH		\$	
0250	02562		TEMPORARY SIGNS	230.00	SQFT		\$	
0260	02650		MAINTAIN & CONTROL TRAFFIC (FD04)	1.00	LS		\$	
0270	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0280	02676		MOBILIZATION FOR MILL & TEXT (FD04)	1.00	LS		\$	
0290	02677		ASPHALT PAVE MILLING & TEXTURING	125.00	TON		\$	
0300	02720		SIDEWALK-4 IN CONCRETE	8.00	SQYD		\$	
0310	06510		PAVE STRIPING-TEMP PAINT-4 IN	1,246.00	LF		\$	
0320	06514		PAVE STRIPING-PERM PAINT-4 IN	2,492.00	LF		\$	
0330	06568		PAVE MARKING-THERMO STOP BAR-24IN	123.00	LF		\$	
0340	23158ES505		DETECTABLE WARNINGS (NEW)	8.00	SQFT		\$	

Section: 0000 - DRAINAGE

PROPOSAL BID ITEMS

192273

Page 2 of 2

Report Date 6/26/19

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0350	00522		STORM SEWER PIPE-18 IN	364.00	LF		\$	
0360	00524		STORM SEWER PIPE-24 IN	388.00	LF		\$	
0370	01541		DROP BOX INLET TYPE 10	4.00	EACH		\$	
0380	01544		DROP BOX INLET TYPE 11	2.00	EACH		\$	
0390	01545		DROP BOX INLET TYPE 11 MOD	1.00	EACH		\$	
0400	01550		DROP BOX INLET TYPE 12A	1.00	LF		\$	
0410	01585		REMOVE DROP BOX INLET	5.00	EACH		\$	
0420	01650		JUNCTION BOX	1.00	EACH		\$	
0430	02483		CHANNEL LINING CLASS II	50.00	TON		\$	
0440	02690		SAFELOADING	12.00	CUYD		\$	
0450	02726		STAKING	1.00	LS		\$	
0460	24845EC		UTILITY COORDINATION	1.00	LS		\$	

Section: 0004 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	02569		DEMOBILIZATION	1.00	LS		\$	