



CALL NO. 332

CONTRACT ID. 193323

MONROE COUNTY

FED/STATE PROJECT NUMBER CB06 086 0100 023-025

DESCRIPTION KY 100 (KY 100)

WORK TYPE SLIDE REPAIR

PRIMARY COMPLETION DATE 9/30/2019

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• EXPEDITE WORK ORDER• ASPHALT MIXTURE• DGA BASE FOR SHOULDERS• INCIDENTAL SURFACING• COMPACTION OPTION B• SPECIAL NOTE(S) APPLICABLE TO PROJECT• LIQUIDATED DAMAGES• WASTE AND BORROW SITES• COORDINATION OF WORK WITH OTHER CONTRACTS• ASPHALT MIXTURE FOR PAVEMENT WEDGE• EDGE KEY (BY TON)• GUARDRAIL• ASPHALT MILLING AND TEXTURING• TYPICAL SECTION DIMENSIONS• TRAFFIC CONTROL PLAN 2 LANE• DURABLE PAVEMENT EDGE DETAILS• EROSION CONTROL PLAN FOR MAINTENANCE PROJECTS• SKETCH MAP(S)• SUMMARY SHEET(S)• TYPICAL SECTION(S)• DETAIL SHEET(S)• DETAIL SHEETS FOR SLIDE REPAIR
PART II	SPECIFICATIONS AND STANDARD DRAWINGS
	<ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATION• [SN-11] PORTABLE CHANGEABLE SIGNS• STANDARD DRAWINGS THAT APPLY• DELINEATORS FOR GUARDRAIL
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 - 193323

CB06 086 0100 023-025

COUNTY - MONROE

PCN - 0308601001901

CB06 086 0100 023-025

CENTER POINT ROAD (KY 100) (MP 23.881) FROM 1.663 MILES WEST OF MESHACK CREEK RD EXTENDING EAST TO 1.493 MILES WEST OF MESHACK CREEK RD (MP 24.051), A DISTANCE OF 0.17 MILES.SLIDE REPAIR
GEOGRAPHIC COORDINATES LATITUDE 36:43:29.20 LONGITUDE 85:33:41.00

COMPLETION DATE(S):

COMPLETED BY 09/30/2019

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

EXPEDITE PROJECT WORK ORDER

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to “hand carry” all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

Division of Construction Procurement
200 Mero St.
Frankfort, KY 40602

ASPHALT MIXTURE

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

DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

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.

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 PIPE INSTALLATION

I. DESCRIPTION

Except as specified in these notes, perform all work according to the Department's Current Standard and Supplemental Specifications, applicable Special Provisions and Special Notes, Standard and Sepia Drawings, current editions. Section references are to the Current Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control traffic; (2) Construct new pipe; and (3) all other work required by the Specifications, Standard Drawings, Special Notes and the drawings in the proposal.

II. MATERIALS

The Department will sample and test all materials according to Department's Sampling Manual. Make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

A. Maintain and Control Traffic. See Traffic Control Plan

B. Culvert Pipe. Furnish culvert pipe conforming to Section 810 and Standard Drawings RDI-001-10 and RDI-038-02 designed for a nominal fill cover height of proposed fill and pH range medium. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer's approval of the gauge of pipe and type of coating prior to delivering pipe to the project. Furnish approved connecting bands or pipe anchors.

C. Backfill. Furnish Flowable Fill and Class 2 Asphalt Base 1.00D PG64-22.

D. Erosion Control. See Special Notes for Erosion Control Plan.

III. CONSTRUCTION METHODS

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

B. Erosion Control. See Special Notes for Erosion Control Plan.

Culvert Pipe

Page 2 of 4

C. Removing Pipe and Excavation. If present, remove existing culvert pipe. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. Obtain the Engineer's approval of trench width prior to cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities. Waste excavated materials, and removed pipe at approved sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note For Waste and Borrow.

D. Pipe. Construct culvert pipe at the location designated by the Engineer. 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. Pipe Backfill. Backfill culvert pipe with flowable fill to within (4) inches of the existing pavement grade. Extend flowable fill to a minimum of 1 foot beyond the edge of the normal paved shoulder width. Backfill the remainder of the pipe with allowable materials according to Section 701.03.06, DGA Base and asphalt base.

F. Pavement Restoration. Restore the pavement over the flowable inches of Class 2 Asphalt Base 1.00D PG64-22. The Engineer will not require asphalt prime prior to constructing base.

G. Final Dressing Clean Up and Seeding and Protection. After all work is completed, remove all waste and debris from the job site. Grade all disturbed areas to blend with the adjacent roadway features and to provide a suitable seed bed. Perform Class A Final dressing on all disturbed areas. Seed and protect all disturbed earthen areas according to the Special Notes for Erosion Control Plan.

Culvert Pipe
Page 3 of 4

H. Restoration. Be responsible for all damage to public and/or private property resulting from the work. Restore any roadway features or private property disturbed by the work or the Contractor's operations in like kind materials and design as approved by the Engineer and the property owner(s).

I. On-Site Inspection. Prior to submitting a bid, make a thorough inspection of the site and become thoroughly familiarize 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. Consider information in this proposal and the types and quantities of work listed to be approximate only and do not take as an accurate or complete evaluation of the materials and conditions to be encountered during construction. 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 or time extension if the conditions encountered are not in accordance with the information shown.

K. Waste. Dispose of all waste off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Notes for Waste and Borrow.

IV. METHOD OF MEASUREMENT

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

B. Culvert Pipe. See Section 701.04.01.

C. Pipe Bedding and Backfill. Pipe bedding, Flowable Fill, and earthen materials will not be measured for payment, but shall be incidental to culvert pipe. Asphalt will be incidental to pipe bid item.

D. Erosion Control. See Special Notes for Erosion Control.

V. BASIS OF PAYMENT.

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

Culvert Pipe
Page 4 of 4

B. Culvert Pipe. Accept payment at the contract unit price per linear foot as full compensation for all labor, materials, equipment, and incidentals for site preparation; bedding and installing pipe; flowable fill and other backfill; restoring pavement ; restoring slopes and other disturbed features; final dressing, cleanup, and disposal of all waste.

C. Erosion Control. See Special Notes for Erosion Control.

SPECIAL NOTES FOR SLIDE REPAIR KY-100

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Current Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Furnish all equipment, labor, materials, and incidentals for the following work:

- (1) Maintain and Control Traffic; (2) Site Preparation; (3) Erosion Control;
- (4) Drilled railroad rail piling; (5) Install wall cribbing furnished by the Contractor; (6) Excavation and Backfill; (7) All other work specified as part of this contract.

II. MATERIALS

Provide for materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless otherwise specified herein, make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

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

B. Railroad Rails. Use new or used railroad rail with a nominal weight of 130 pounds per yard or greater. See Typical Identification of Railroad Rail Sizes Classification Stamp. If the manufacturer's classification stamp is unidentifiable, provide certification for nominal weight. Furnish only visibly straight and structurally sound rails with no splices. Obtain the Engineer's approval of the rails prior to use.

C. Wall Cribbing. The Contractor will furnish used steel beam guardrail for cribbing meeting current specifications. Must be inspected and approved before it can be used.

D. Backfill. For backfill around the railroad rails in the drilled sockets, use concrete, free flowing sand, pea gravel, crushed limestone, or crushed sandstone with 100% passing a one-half (1/2) inch sieve. Do not use auger tailings. The Engineer will use visual inspection and/or material testing as applicable to determine acceptability.

Slide Repair
Page 2 of 8

For interior backfill behind cribbing, use Crushed Limestone Aggregate Size No. 2 or Size No. 23 meeting the requirements of Section 805.10. Do not use excavated spoil from the existing roadway. The Engineer will use visual inspection and/or material testing as applicable to determine acceptability.

E. Geotextile Fabric. For interior backfill wrap behind cribbing, furnish Type IV Geotextile Fabric.

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

III. CONSTRUCTION METHODS

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

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

C. Site Preparation. Be responsible for all Site Preparation, including but not limited to, clearing and grubbing, trenching, embankment and embankment in place, sweeping and/or otherwise removing debris from pavement and shoulders, removal of obstructions or any other items; disposal of materials; and final dressing and restoration. Clear and grub the minimum areas required to perform the other items of work; the Department has not determined the acreage of clearing and grubbing and the bidder must draw his own conclusions. Provide positive drainage of pavement, slopes, and ditches at all times during and upon completion of construction. Perform all site preparation only as approved or directed by the Engineer. Dispose of excess excavation, waste, and debris off the right-of-way at sites obtained by the Contractor at no additional cost to the Department or as directed by Engineer. See Special Note for Waste and Borrow.

D. Railroad Rails (Drilled). Consider the extents and depths on the summary break sheet and drawings to be approximate only; the Engineer will determine exact locations at the time of construction. If necessary, excavate a trench behind the proposed location of drilled railroad rails as directed by the Engineer to provide a platform for drilling operations. Install railroad rail in drilled sockets in rock or stable material under the landslides or the eroded areas (see contract drawings) at the specified locations. Contrary to Figure 3 and Table I, unless directed otherwise by the Engineer drill rail sockets parallel to the centerline of the roadway in a double row spaced 3 feet on centers offset by 1.5 feet (see contract drawings). The Department will not allow a change in the scope of work or increase in quantities without prior written approval from the District 3 Project and Delivery and Preservation Branch Manager.

Slide Repair
Page 3 of 8

Drill sockets of not more than 12 inches in diameter to allow free insertion of the railroad rails. Drill sockets to allow installation of the railroad rails such that the pavement and shoulder widths approximate the widths shown on the typical section. If the typical section varies from the adjacent roadway, the Engineer will determine the pavement and shoulder widths to be constructed. Use each drilled socket as a sounding for the rail to be installed in it. Unless directed otherwise by the Engineer, install no less than one-half the free end length as embedment into solid rock (See Fig. 1 and Fig. 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation.

Obtain the Engineer's approval of the row and line spacing prior to drilling at each site.

After each hole is drilled, immediately install the railroad rail with the flanges positioned perpendicular to the direction of the landslide or break (see Figure 3). Set height of rail to that needed to reestablish pavement and shoulder typical section. Immediately after the railroad rail is installed, backfill the drilled hole. Shovel the material into the hole in small amounts so as to avoid bridging between the rail and the sides of the hole. Do not use auger tailings for backfilling the socket. Cut off any excess rail length flush with the proposed ground line. If possible, use cutoffs elsewhere in the project. Retain possession of unusable cutoffs.

E. Cribbing. Expose the railroad rail before backfilling. Erect and Install Cribbing to restrain the proposed backfill as shown on Figures 1 and 2 or other location in contract. Attach the cribbing by welding to the railroad steel with a minimum of three welded connections per section of guardrail, placed so that the guardrail ends align with and overlap at the installed railroad rail, and are not spliced between installed railroad rails. Extend cribbing to the rock line. The Engineer may direct specific methods and procedures as required by site conditions.

F. Excavation and Backfill. Excavate a two (2) foot trench at the rock line on the roadway side of the drilled rails. Excavate the embankment on a 1:1 slope up to the roadway subgrade. Excavate the subgrade as shown on the paving details. Backfill the excavated trench behind the installed cribbing with the crushed stone backfill wrapped in Type IV Geotextile Fabric to approximate the existing roadway and shoulder widths as shown on the typical section or as directed by the Engineer. Do not use excavated spoil from the existing roadway as fill material.

G. Restoration. Consider the extents and depths on the summary break sheets to be approximate only; the Engineer will determine exact locations at the time of

Slide Repair
Page 4 of 8

construction. Use suitable excavated earth and/or borrow material aerated to proper moisture content prior to use for embankment and restoration in areas outside the limits of the drilled railroad rail wall. Obtain approval from the Engineer prior to reuse of the excavated soil. Do not use spoil material excavated from the slide areas.

Excavate for ditches, slopes, and pavement drainage and construct embankments, slopes, and channel lining according to Sections 206 and 703 or as directed by the Engineer. Warp and tie the slopes into the adjacent existing roadway to match existing slopes and ditches. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction.

If sufficient quantities of excavation are not available to construct embankments, obtain borrow for embankment in place from approved sources off the right of way obtained by the Contractor at no additional cost to the Department. Excess excavation may be wasted at sites on the right of way only if approved by the Engineer. The Engineer will not approve sites in streams or flood plains. If suitable sites are not available on the right of way, waste excess excavation and excavation unsuitable for reuse 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.

Reconstruct shoulder and pavement areas to the approximate existing elevation and width of the adjacent undisturbed roadway typical section; however provide a minimum shoulder width as shown on the paving detail at each site. Provide positive drainage and do not allow water to pond on the shoulder area or at the shoulder edge.

I. Final Dressing, Clean Up, and Seeding. After all work is completed, perform Class A Final Dressing on all disturbed areas, both on and off the Right of-Way, including fertilizer. Dispose of all waste and debris 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 and Special Note for Erosion Control for additional requirements.

J. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged property and other disturbed areas in like kind materials and design or as directed by the Engineer.

Slide Repair
Page 5 of 8

K. Disposal of Waste. Dispose of all removed pipe, pavement, debris, excess and unsuitable excavation, and all other waste and debris 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.

L. On-Site Inspection. Make a thorough inspection of the site prior to submitting bid and become 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. The Department will not honor any claims resulting from site conditions.

M. Right-of-Way Limits. The Department has not established exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way and 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.

N. Utility Clearance. The Department has not located utilities. Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Work around and do not disturb existing utilities. Be responsible for repairing all utility damage that occurs as a result of the work

The Department does not anticipate that utilities will require relocation; however, if utility relocation is required, the utility companies will work concurrently with the Contractor while relocating their facilities. Notify the Engineer and the utility owner(s) immediately when it is discovered or anticipated that any utility conflict could delay the Contractor's operations. If utility relocation is required, the Department will not charge working days for those days on which work on the controlling item is delayed, 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; however no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated. Comply with applicable sections of Chapter 107.

O. Caution. Consider the information in this proposal and shown on the drawings and the type of work listed herein to be approximate only and do not take the information as an accurate evaluation of the materials and conditions to be encountered during construction. Be aware that any reference to rock, earth, excavation, embankment, or any other material on the drawings, 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

Slide Repair
Page 6 of 8

any other material involved. The bidder must draw his own conclusions. The Department does not give any guarantee as to the accuracy of the data and will not consider any claims for money or time extensions if the conditions encountered are not in accordance with the information shown.

P. Control. Perform all work included in this contract under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. By submitting bid, the Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed for payment. The Department will consider all other items required to complete the work incidental to the listed items.

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

B. Site Preparation. Other than the bid items listed, the Department will measure Site Preparation as one lump sum.

C. Embankment. The Department will not measure embankment outside the limits of the roadway, railroad rails and cribbing for separate payment but shall be incidental to Site Preparation.

D. Railroad Rail-Drilled. The Department will measure drilled railroad rails in linear feet of finished in-place length. The Department will not measure cutoffs not used elsewhere in the work, rails rejected by the Engineer, excess, and waste. The Department will not measure the drilled sockets for separate payment, but shall be incidental to Railroad Rails-Drilled; however, if the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that

Slide Repair
Page 7 of 8

socket, 50% of the drilled depth will be measured for payment as Railroad Rail-Drilled.

E. Cribbing. The Department will measure installed Cribbing furnished by the Contractor in square feet of finished in-place area. The Department will not measure laps, cutoffs, excess, and waste.

F. Geotextile Fabric. The Department will measure Geotextile Fabric Type IV behind cribbed railroad rails in square yards of finished in place area. The Department will not measure laps, cutoffs, excess, and waste.

G. Excavation and Backfill. The Department will not measure backfill for the drilled sockets, but shall be incidental to Railroad Rail-Drilled. The Department will measure backfill behind cribbed railroad rails as Granular Embankment in Cubic Yards, field measurement according to Section 204 or other accepted methods of measurement determined by the Engineer. Excavation behind cribbed railroad rails and for French drain will not be measured but shall be incidental to Granular Embankment.

H. Erosion Control. See Special Note for Erosion Control.

V. BASIS OF PAYMENT

The Department will not make direct payment other than for the bid items listed. The Department will consider payment for all other items required to complete the work incidental to the listed items.

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

B. Site Preparation. Accept payment at the Contract lump sum price for Site Preparation as full compensation for all labor, equipment, materials, and incidentals for clearing and grubbing, trenching, embankment and embankment in place, removal of obstructions or any other items; disposal of materials; and final dressing and restoration.

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

D. Railroad Rail-Drilled. Accept payment at the Contract unit price per linear foot of finished in place length as full compensation for all labor, equipment, materials, and incidentals necessary to drill the hole and socket, furnish and install

Slide Repair
Page 8 of 8

the railroad rail, and backfill the hole and socket. The Department will not measure quantities in excess of plan quantities not authorized by the Engineer.

E. Wall Cribbing. Accept payment at the contract unit price per square foot of finished in place area as full compensation for all labor, equipment, materials, and incidentals necessary to pick up and load cribbing furnished by the Department, deliver cribbing to the project site, and install on the drilled railroad rails.

F. Excavation and Backfill. Accept payment at the contract unit price per cubic yard of Granular Embankment as full compensation for all labor, equipment, materials and incidentals for furnishing and placing crushed limestone backfill wrapped in geotextile fabric behind the cribbed railroad rails and in French drains.

G. Geotextile Fabric. Accept payment at the contract unit price per square yard of finished in place area as full compensation for all labor, equipment, materials and incidentals for furnishing and placing Geotextile Fabric to wrap the crushed limestone backfill behind the cribbed railroad rails and in the French Drains.

SPECIAL NOTE FOR INSTALLATION OF NEW GUARDRAIL

KY 100 MP 23-25

A double row of railroad steel will be installed and cribbing will be placed in front of the 1st row. Install new guardrail 3' from edge of pavement.

Through Slide area only as directed by engineer nest guardrail. All rail through the slide limits shall be extra length posts incidental to the guardrail pay item. Bid item G/R Steel W Beam-S Face-(Nested) and paid by linear feet. Normal single ply guardrail outside limits of slide paid as W-Beam s face guardrail. Place type 3 for one end treatment ending at entrance with radius. Install Radius from same entrance down grade and install pad for Type 1 End approximately 925 feet of rail total.

Shoulders and slopes prior to installation of rail shall be graded and prepared by contractor and shall be incidental to the new rail bid item.

SPECIAL NOTE FOR CONTRACTOR STAKING DRILLED RAILROAD RAIL REPAIRS

In addition to the requirements of Section 201, perform the following items:

1. Be responsible for field layout of the drilled railroad rails on designated spacing; and
2. Control the drilling and setting of the railroad rails to ensure the rails are plumb and installed at the designated spacing; and
3. Determine the height of rail that is needed to reestablish pavement and shoulder typical section and mark cut-offs; and
4. Establish proper slope elevations and ratios, shoulder widths, existing ditch profile, and final ditch profiles to insure positive drainage; and
5. Determine and establish proper final centerline, flow lines, skew and fill cover heights of pipe installations to insure positive drainage; and
6. Obtain the Engineer's approval of all designs and drawings to be provided by contractor;
7. Provide as built plans.

**SPECIAL NOTE FOR CONTRACT COMPLETION DATE
AND LIQUIDATED DAMAGES**

In addition to the liquidated damages specified in Section 108.09, additional Liquidated Damages in the amount of \$1,500 per calendar day will be assessed for each calendar day or part of a day a lane closure remains in place during prohibited dates or hours as specified in the Traffic Control Plan.

Phase II completion of August 13th, 2019
Road closures in excess of Phase II by 6am August 13th
Completion date of September 30th, 2019

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

SPECIAL PROVISION FOR WASTE AND BORROW SITES

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

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

COORDINATION OF WORK WITH OTHER CONTRACTS

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

1-3193 Coordination Contracts
01/02/2012

SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER SEPARATE OPERATION

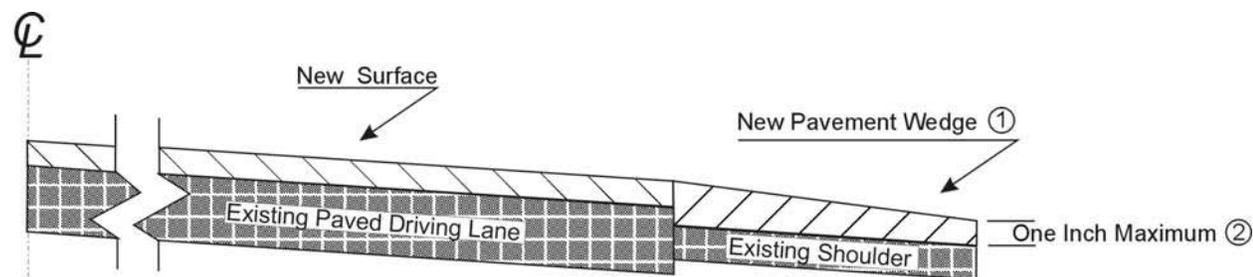
1.0 MATERIALS. Provide an Asphalt Mixture for Pavement Wedge conforming to Section 407 of the Standard Specifications or an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.

2.0 CONSTRUCTION. Place the Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture as a separate operation from the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Sections 407.03 and 403.03 as applicable.

When the Engineer deems it appropriate to pave both the driving lane and the adjoining wedge monolithically, 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 driving lanes. Where existing site conditions permit, limit the outside edge thickness of the new paving limits to one inch above the existing shoulder wedge elevation. If an Asphalt Surface Mixture is furnished for the pavement wedge, texture according to Section 403.03.08.

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.



- ① Slope varies, but is down from the driving lanes except on outside of some curves where superelevation controls.
- ② Where existing site conditions permit.

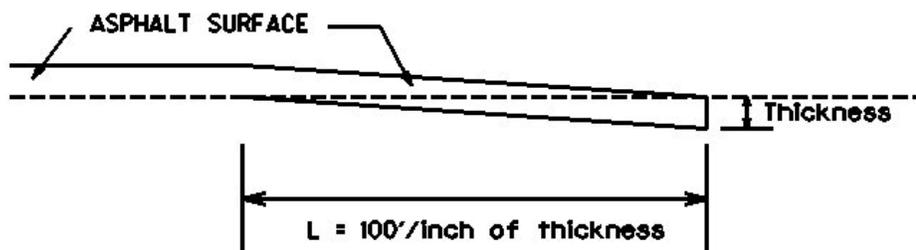
3.0 MEASUREMENT. The Department will measure Asphalt Mixture for Pavement Wedge or Asphalt Surface Mixture placed as the pavement wedge according to Sections 403 and 407 as applicable.

4.0 PAYMENT. The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures placed as pavement wedge according to Section 403. The Department will make payment for the completed and accepted quantities of Asphalt Mixture for Pavement Wedge according to Section 407.

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 Inch

L = 100 LF

L= Length of Edge Key

1-3309 Edge key by Ton
01/02//2012

SPECIAL NOTES FOR GUARDRAIL

I. DESCRIPTION

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

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

(1) Site preparation; (2) Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections, as applicable; (3) Delineators for guardrail; (4) Maintain and control traffic; and (5) all other work specified as part of this contract.

II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

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

B. Guardrail. Furnish guardrail system components according to section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.

C. Delineators for Guardrail. Furnish Delineators for Guardrail according to the Sepia Drawing.

D. Erosion Control. See Special Notes for Erosion Control.

III. CONSTRUCTION METHODS

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

B. Contractor Site Preparation. Be responsible for all site preparation, including but not limited to removal of all obstructions or any other items; temporary pollution and erosion control; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the Engineer.

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

Erect guardrail to the lines and grades shown on current Standard and Sepia Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags. Support cantilevered terminal sections with an additional post.

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

D. Delineators for Guardrail. Install delineators for guardrail according to Standard and Sepia Drawings.

E. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

F. Coordination with Utility Companies. Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.

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

H. Disposal of Waste. Dispose of all removed concrete, debris, and other waste and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See Special; Note for Waste and Borrow.

I. Final Dressing, Clean Up, and Seeding and Protection. Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas according to the Special Notes for Erosion Control.

J. Erosion Control. See Special Notes for Erosion Control.

IV. METHOD OF MEASUREMENT

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

B. Site preparation. Other than the bid items listed, the Department will not measure Site Preparation for separate payment but shall be incidental to Guardrail, End Treatments, Bridge End Connectors, and Terminal Sections as applicable.

C. Guardrail. See Section 719.04.

D. Delineators for Guardrail. See the Sepia Drawing.

E. Erosion Control. See Special Notes for Erosion Control.

V. BASIS OF PAYMENT

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

B. Guardrail. See Section 719.05.

C. Delineators for Guardrail. See the Sepia Drawing.

D. Erosion Control. See Special Notes for Erosion Control.

SPECIAL NOTE FOR ASPHALT MILLING AND TEXTURING

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

Contrary to Section 408, the Department will retain possession of the material obtained from the milling operations. Deliver this material to the State Maintenance facility in Monroe County. The Contractor, at his option, may elect to keep this material at an agreed cost of \$7.50 per ton. If the Contractor elects this option, the Department will deduct the cost for this material from money due on the Contract.

NOTICE TO CONTRACTOR: The Department considers transfer of millings to the state maintenance facility to be a part of the construction project, therefore truck operators are subject to receiving prevailing wages.

1-3526 48hours contractor option \$7.50
01/2/2012

SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

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

1-3725 Typical Section Dimensions
01/02/2012

TRAFFIC CONTROL PLAN FOR SLIDE CORRECTION DRILLED RAILROAD RAIL PILING

TRAFFIC CONTROL GENERAL

Except as specified 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, furnish all other items necessary to maintain and control traffic incidental to the Contract lump sum price 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 the devices in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

At the discretion of the Engineer, the Department may specify days and hours when lane closures will not be allowed. Prior to beginning work, provide a proposed lane closure and work schedule for the approval of the Engineer. The Department will provide public notification except for the school and emergency services as provided for Phase I. Notify the Engineer immediately and obtain prior approval of any proposed deviations from the approved schedule.

PHASE I: - Notify the US Postal Service, Monroe County Schools, and Emergency Services in advance of any road closures. Install detour signs as detailed in detour plan for phase I. Coordinate with the department the removal of the state maintained traffic signals from location 1 and begin Phase II

PHASE II: - Road closures will only be allowed while Monroe county schools are dismissed for the summer break and school busses have stopped their routes. Dismissal was May 22nd and expected return August 13th. Obtain engineers approval for allowed closure dates.

Close KY 100 23-25 mile point slide 1 location to through traffic and maintain the road closure during this phase, notifying locals one week in advance. Perform all repairs except milling, final resurfacing, and striping. Compact the asphalt base to the compaction required in Section 403.03.10. Seal the asphalt base with leveling and wedging. Complete this part of Phase II and reopen the road to a minimum one way alternating traffic no later than 6 am August 13. .

PHASE III: - Once recycled railroad cribbing, backfill, and culvert pipe installation is completed, milling, final resurfacing, and permanent striping shall not be done until after a minimum of 7 days of open road vehicular traffic. Level and wedge any settlement of the repair areas until the Engineer determines the backfill and culvert pipe area are sufficiently stabilized for placement of final surface.

Traffic Control Plan for Slide Correction Page 2 of 4

PHASE IV: – Once the Engineer determines the backfill and culvert pipe area are sufficiently stabilized, level and wedge any settlement of the repair areas and perform milling, final resurfacing, and permanent striping.

Alternating one way traffic for an individual slide location may be allowed concurrent with any Phase if prior approved by Engineer. During Phases III and IV, maintain alternating one way traffic during working hours. Unless directed otherwise by the Engineer, provide a minimum clear lane width of eight (8) feet. Do not leave **lane** closures in place during non-working hours unless sufficient alternating one lane traffic can be maintained. Shoulder closures may be maintained during nonworking hours; however do not park vehicles or store materials on a closed shoulder during non-working hours. If traffic should be stopped due to construction operations under a lane closure, and a school bus on an official run arrives on the scene, immediately make provisions for the passage of the bus. Except for placement of the final course of asphalt surface, the Engineer will permit night work. Obtain the Engineer's approval of the method of lighting prior to use. Road closures will not have a signed detour.

All work necessary for installing and maintaining all closures road/lane shall be incidental to Maintain control traffic.

CHANGEABLE MESSAGE SIGNS

The Department will furnish, operate, and maintain Changeable Message Signs. One sign is to be setup at intersection of KY 100 and KY 214. Another shall be setup at the intersection of KY 100 and KY 2439. Additional maybe directed by the engineer.

SIGNS

Contrary to section 112.04.02, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure; short term signs (signs intended to be left in place for 3 days or less) for payment, but shall be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are erected or relocated.

Relocate and reset or cover existing permanent signs as required by the work. Obtain the Engineer's approval before removing or covering an existing sign. The Department will not measure relocating and resetting or covering existing permanent signs, but shall be incidental to Maintain and Control Traffic.

During or upon completion of construction, the Department will erect any additional permanent signing deemed necessary by the Engineer. The Engineer will coordinate the Department's operations with the Contractor's work.

BARRICADES

The Department will not measure Barricades used in lieu of barrels and cones for channelization or

Traffic Control Plan for Slide Correction Page 3 of 4

delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01. The Department will measure Barricades used for protection of pavement removal areas according to Section 112.04.04.

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 directed by the Engineer to be replaced due to poor condition or reflectivity. Retain possession of the barricades upon completion of the work.

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.

TEMPORARY ENTRANCES

Within the project limits and during phases of work 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 required for actual operations in the vicinity of the entrance, and do not extend the time for the Contractor's convenience, and in no case allow an entrance closure to exceed six (8) 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. 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.

PAVEMENT EDGE DROP-OFFS

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

Treat 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. The Engineer will allow cones to be used in lieu of plastic drums, panels, and barricades during daylight working hours only. Wedge drop-offs within 10 feet of traffic with DGA or asphalt mixture for leveling and wedging as directed or approved by the Engineer with a 1:1 or

Traffic Control Plan for Slide Correction
Page 4 of 4

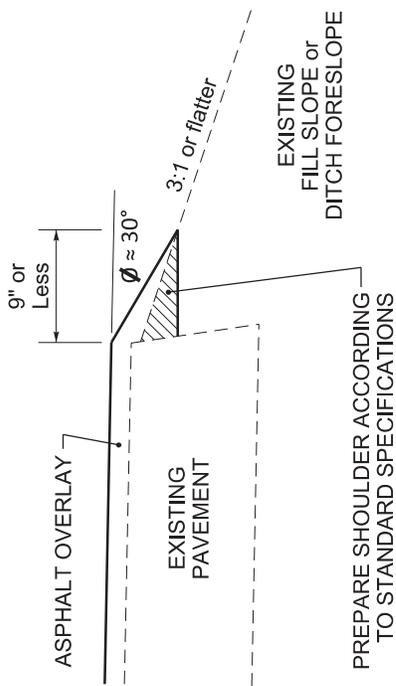
flatter slope in daylight working hours, or 3:1 or flatter slope during nighttime hours or when work is not active in the drop-off area.

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 and Bicycles – Protect pedestrians and bicycles as directed by the Engineer.

DURABLE PAVEMENT EDGE DETAIL

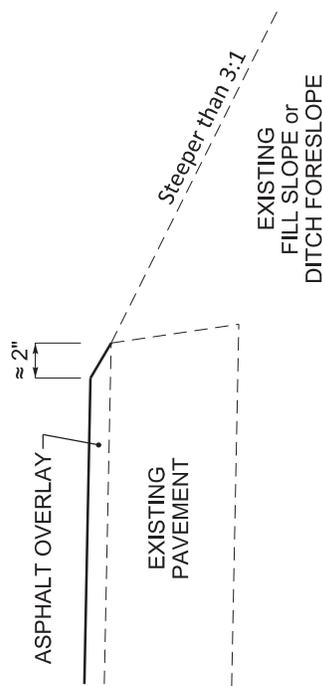
(Resurfacing adjacent to fill slope or ditch foreslope that is 3:1 or less)



PREPARE SHOULDER ACCORDING TO STANDARD SPECIFICATIONS

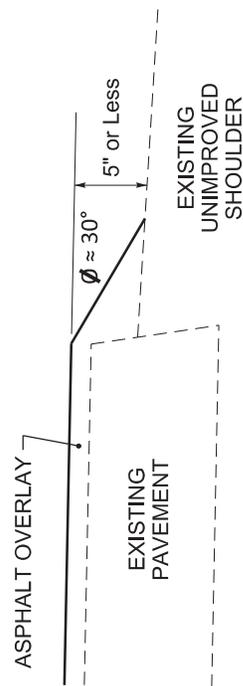
DURABLE PAVEMENT EDGE DETAIL

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



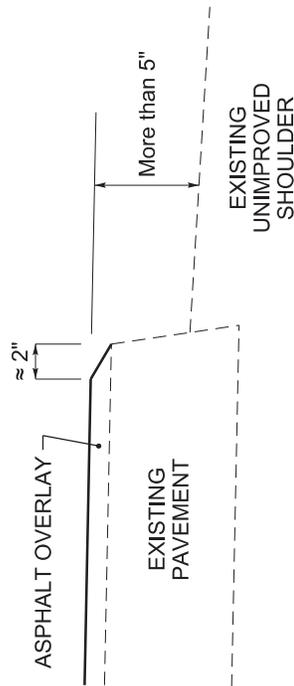
DURABLE PAVEMENT EDGE DETAIL

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



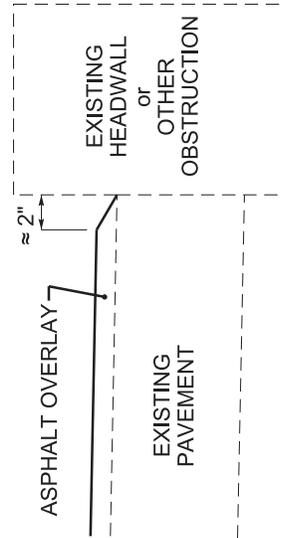
DURABLE PAVEMENT EDGE DETAIL

(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

SPECIAL NOTE FOR EROSION CONTROL

I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's Current Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC-RI) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible

Erosion Control

Page 2 of 4

for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between these notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

IV. MEASUREMENT

Erosion Control
Page 3 of 4

Erosion Control Blanket. If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

Sodding. If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

Channel Lining. If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

Erosion Control. Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will measure Erosion Control, including but not limited to, developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, as one lump sum.

V. Basis of Payment

Erosion Control Blanket. If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

Sodding. If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

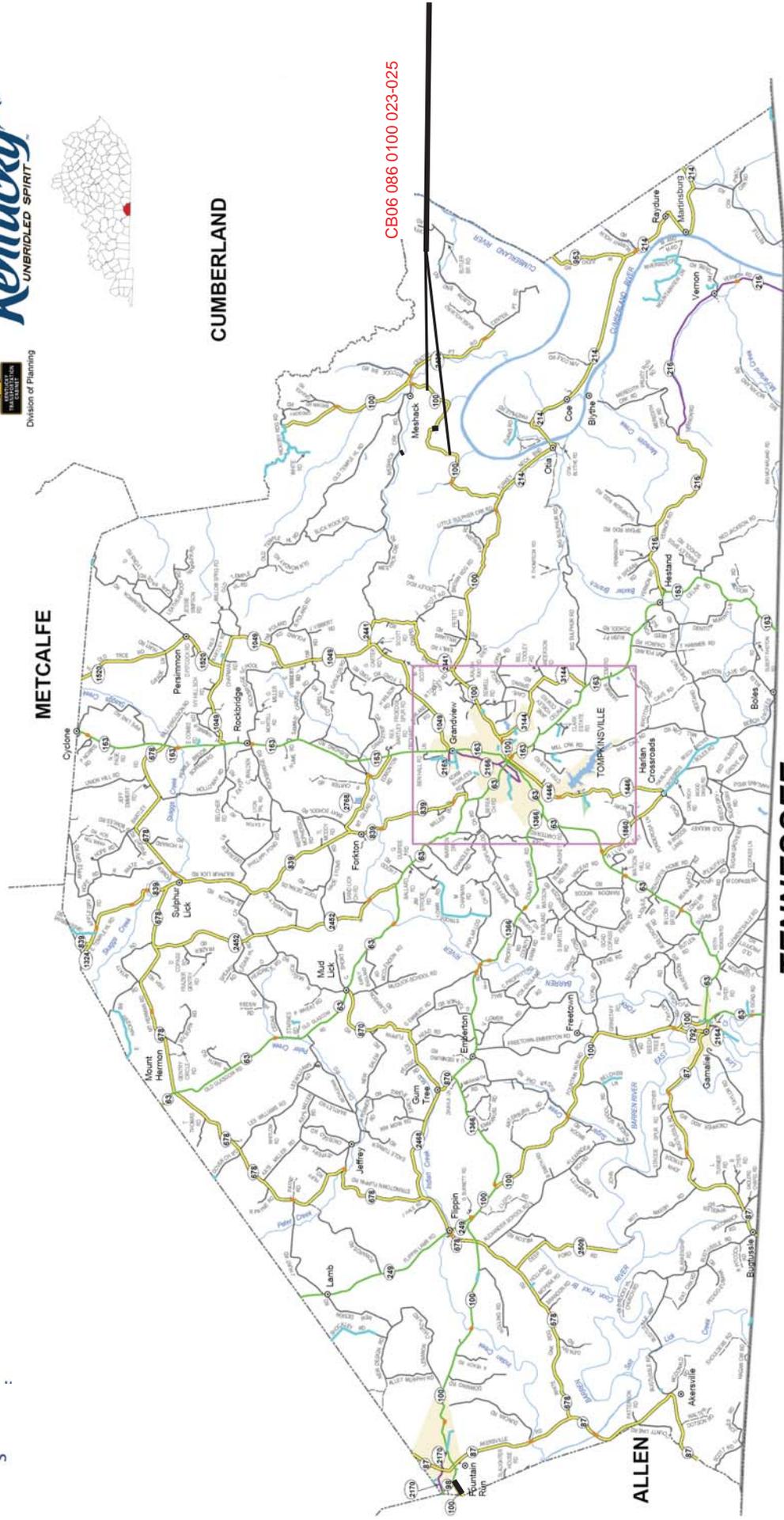
Channel Lining. If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

Erosion Control. Accept payment at the contract lump sum price as full compensation for all labor, equipment, materials, and incidentals necessary for developing, updating, and maintaining a BMP plan for each site; providing a KEPSC-RI qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil

Erosion Control
Page 4 of 4

Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer

State Primary Road System
MONROE COUNTY



CUMBERLAND

METCALFE

ALLEN

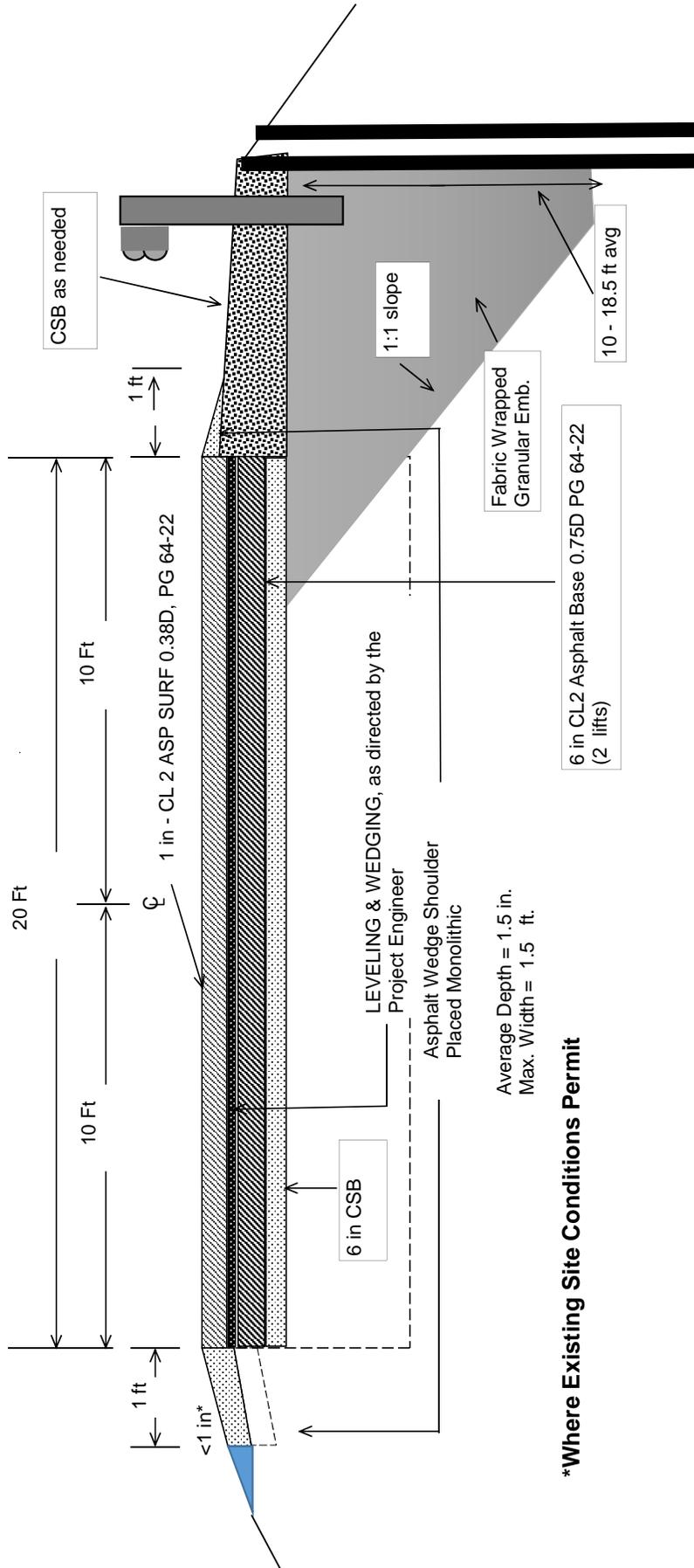
TENNESSEE

CB06 086 0100 023-025

DRILLED RAILROAD RAIL SUMMARY
 CB06 086 0100 023-025

Site	Milepoint	Length (FT)	Cribbing avg Depth (FT)	Excavation Width (FT)	Depth of Steel (FT)	Number of Rows	Rail Spacing (FT)	Cribbing Amount (SQFT)	Railroad rails (FT)	Granular Embankm ent (CY)	Type IV Geotextile Fabric (SY)
1	23-25	170	17	Varies	40	2	3	2890	4600	1134	1230

**MONROE COUNTY
CB06-086-0100-023-025
TYPICAL SECTION
MILEPOINTS**

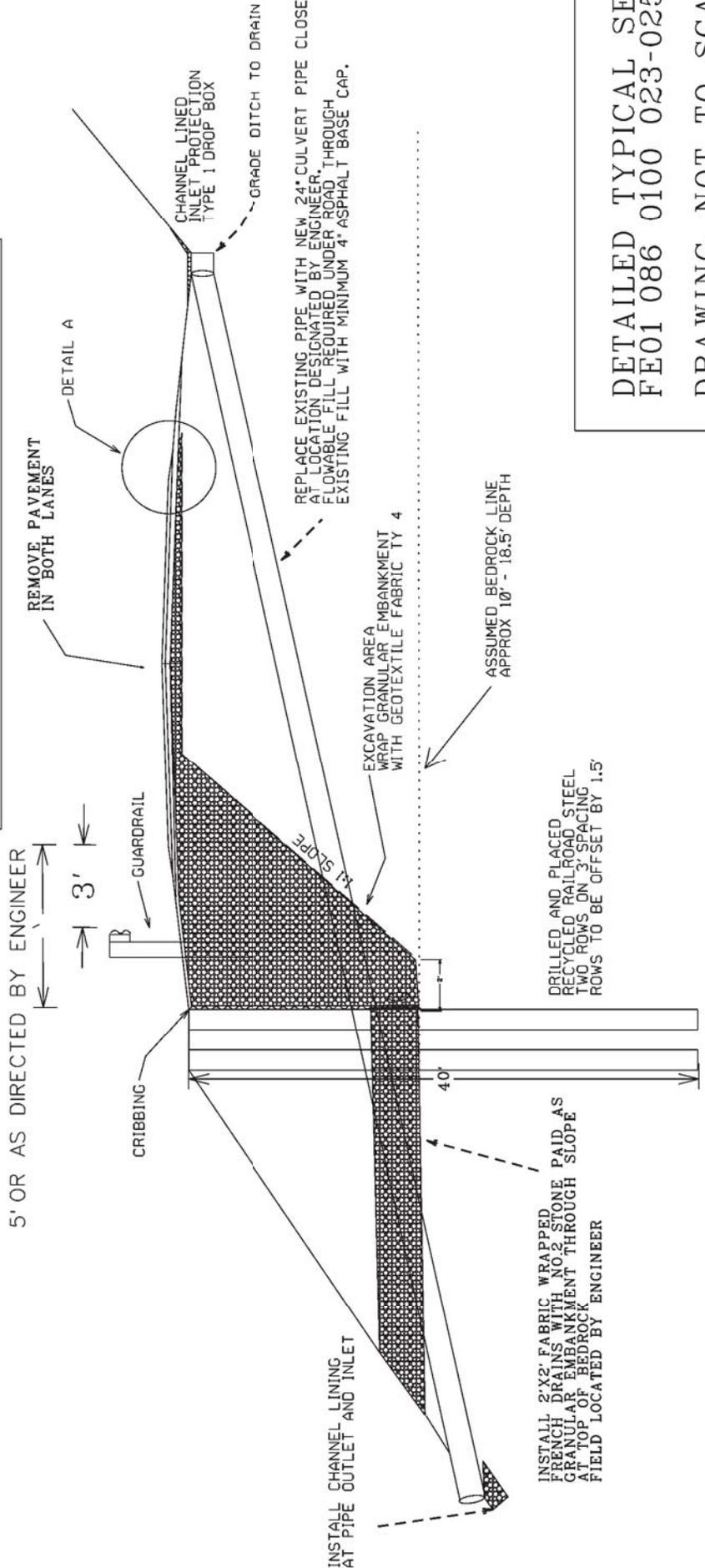


***Where Existing Site Conditions Permit**

PAVEMENT DESIGN

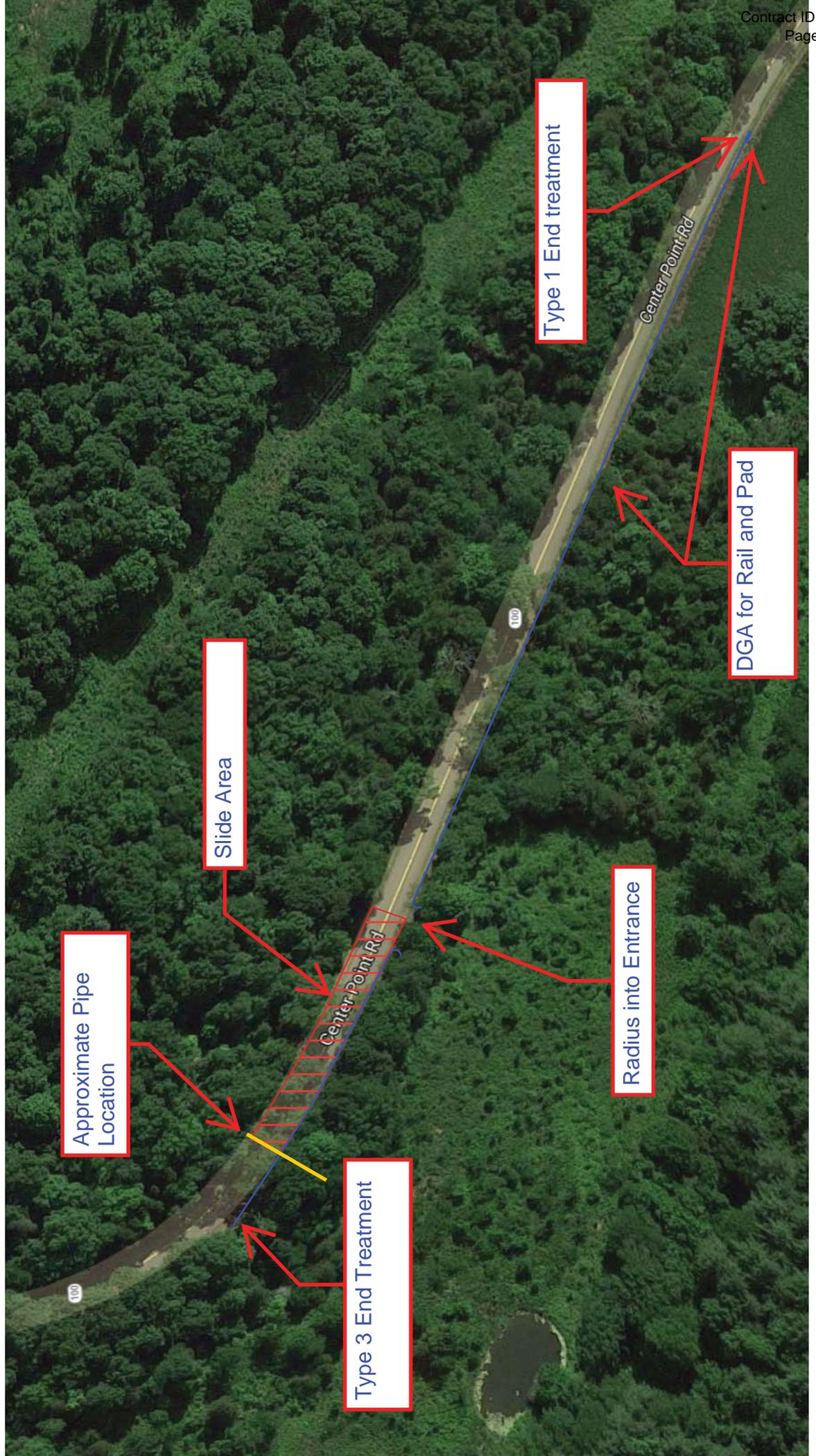
- 1" CL2 ASPH SURF 0.38D PC 64-22
- 3" CL2 ASPH BASE 0.75D PC 64-22
- 3" CL2 ASPH BASE 0.75D PC 64-22
- 6" CRUSHED STONE BASE

DETAIL A



DETAILED TYPICAL SECTION
 FE01 086 0100 023-025
 DRAWING NOT TO SCALE

KY 100 MP 23-25 Slide Repair and Guardrail



Approximate Pipe Location

Slide Area

Type 3 End Treatment

Type 1 End treatment

Radius into Entrance

DGA for Rail and Pad

100

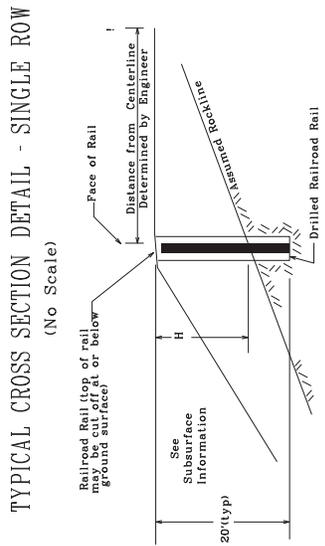
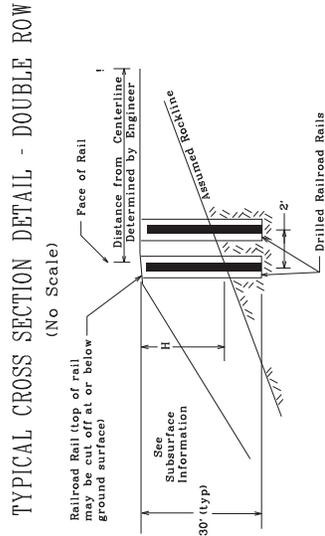
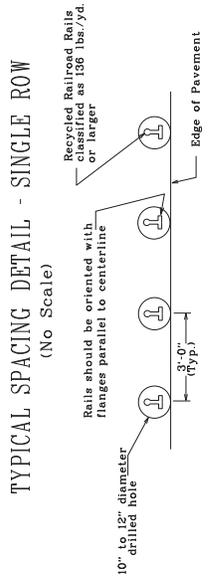
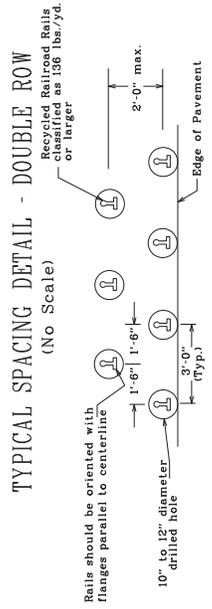
100

Center Point Rd

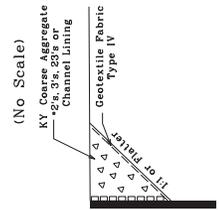
Center Point Rd

COUNTY OF	ITEM NO.	SHEET NO.

TYPICAL PLAN VIEW
 (NO SCALE)



TYPICAL CROSS SECTION WITH BACKFILL
 (Use with Either Double or Single Row)



DESIGNED BY: _____
 DATE SUBMITTED: _____

COMTOWSEALTH
 DEPARTMENT OF HIGHWAYS
 COUNTY OF _____

PROJECT NUMBER: _____

GEOLOGIST'S SUBSURFACE LOG

Project ID: <u>L-119-2018</u>	<u>Monroe - KY-100 MP 24.0-</u>	Project Type: <u>Landslide</u>
Item Number: <u>03-0000.00</u>		Project Manager: <u>Adam Ross</u>

Hole Number <u>1</u>	Immediate Water Depth <u>NA</u>	Start Date <u>12/18/2018</u>	Hole Type <u>sounding</u>
Surface Elevation <u>'</u>	Static Water Depth <u>NA</u>	End Date <u>12/18/2018</u>	Rig_Number <u>0094-320</u>
Total Depth <u>10.5'</u>	Driller <u>Mark Holbrook</u>	Latitude(83) <u>__</u>	<u>GQ-</u>
Location <u>0+45.00 CL</u>	Geologist <u>__</u>	Longitude(83) <u>__</u>	

Lithology		Description	Overburden	Sample No.	Depth (ft)	Rec. (ft)	SPT Blows	Sample Type	Remarks
Elevation	Depth		Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	
5									5
10									10
15		(Bottom of Hole 10.5') (Refusal @ 10.5)							15
20									20
25									25
30									30
35									35
40									40
45									45
50									50

Top of Rock = 10.5'
 Elevation = '

Drilling Firm: Kentucky Transportation Cabinet
 For: Division of Structural Design
 Geotechnical Branch

GEOLOGIST'S SUBSURFACE LOG

Printed: 1/22/19

Page 1 of 1

Project ID: <u>L-119-2018</u>		<u>Monroe - KY-100 MP 24.0-</u>			Project Type: <u>Landslide</u>				
Item Number: <u>03-0000.00</u>					Project Manager: <u>Adam Ross</u>				
Hole Number <u>2</u>		Immediate Water Depth <u>NA</u>		Start Date <u>12/18/2018</u>		Hole Type <u>sounding</u>			
Surface Elevation <u>'</u>		Static Water Depth <u>NA</u>		End Date <u>12/18/2018</u>		Rig_Number <u>0094-320</u>			
Total Depth <u>21.4'</u>		Driller <u>Mark Holbrook</u>		Latitude(83) <u>__</u>		<u>GQ-</u>			
Location <u>0+85.00 CL</u>		Geologist <u>__</u>		Longitude(83) <u>__</u>					
Lithology		Description	Overburden	Sample No.	Depth (ft)	Rec. (ft)	SPT Blows	Sample Type	Remarks
Elevation	Depth		Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	
5									5
10									10
15									15
20									20
25		(Bottom of Hole 21.4') (Refusal @ 16)							25
30									30
35									35
40									40
45									45
50									50
Top of Rock = 16.0' Elevation = '									

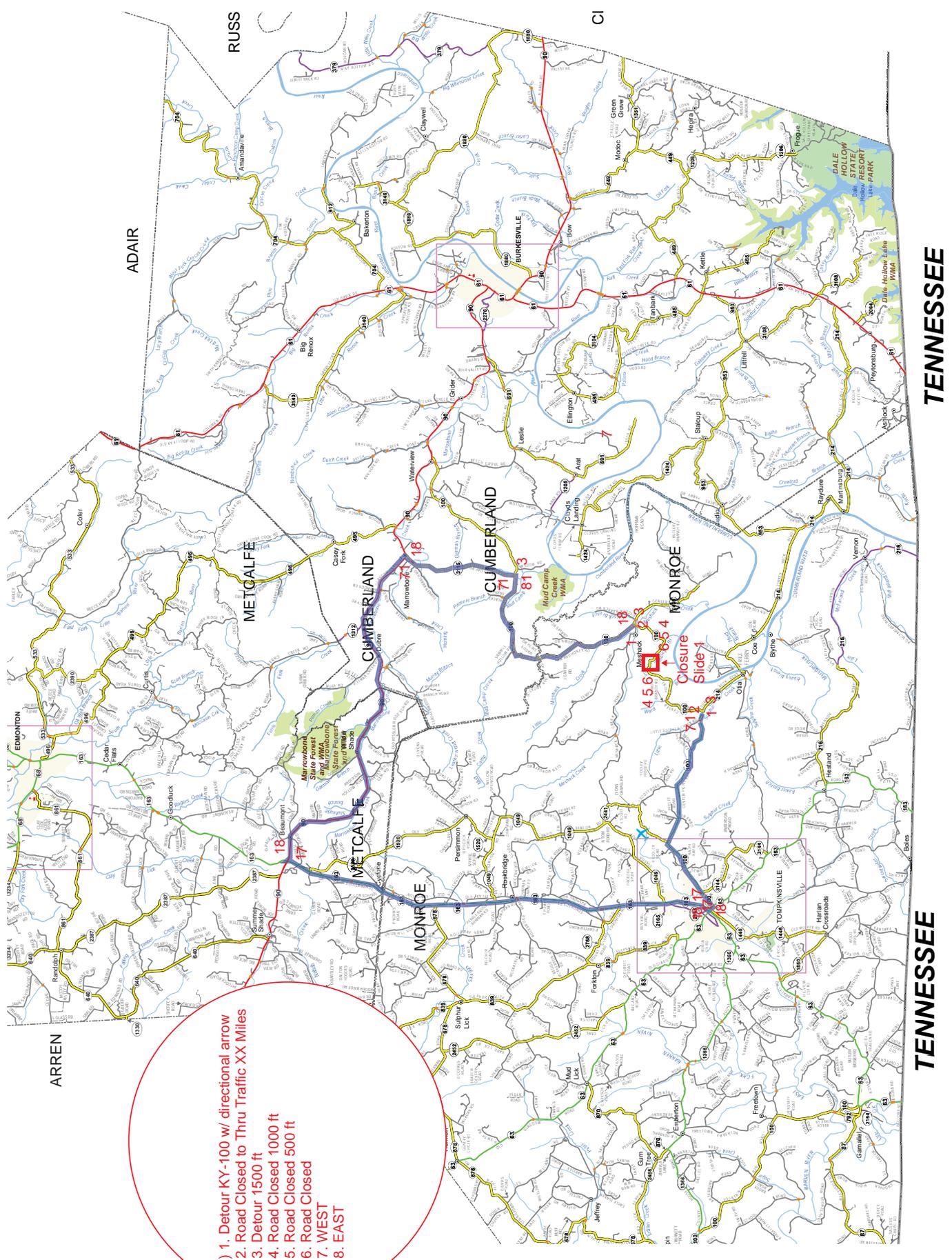
Drilling Firm: Kentucky Transportation Cabinet
 For: Division of Structural Design
 Geotechnical Branch

GEOLOGIST'S SUBSURFACE LOG

Printed: 1/22/19

Page 1 of 1

Project ID: <u>L-119-2018</u>		<u>Monroe - KY-100 MP 24.0-</u>			Project Type: <u>Landslide</u>				
Item Number: <u>03-0000.00</u>					Project Manager: <u>Adam Ross</u>				
Hole Number <u>3</u>		Immediate Water Depth <u>NA</u>		Start Date <u>12/18/2018</u>		Hole Type <u>sounding</u>			
Surface Elevation <u>'</u>		Static Water Depth <u>NA</u>		End Date <u>12/18/2018</u>		Rig_Number <u>0094-320</u>			
Total Depth <u>20.0'</u>		Driller <u>Mark Holbrook</u>		Latitude(83) <u>__</u>		<u>GQ-</u>			
Location <u>1+20.00 CL</u>		Geologist <u>__</u>		Longitude(83) <u>__</u>					
Lithology		Description	Overburden	Sample No.	Depth (ft)	Rec. (ft)	SPT Blows	Sample Type	Remarks
Elevation	Depth		Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	
5									5
10									10
15									15
20									20
25		(Bottom of Hole 20.0') (Refusal @ 18.5)							25
30									30
35									35
40									40
45									45
50									50



- (14) 1. Detour KY-100 w/ directional arrow
 (2) 2. Road Closed to Thru Traffic XX Miles
 (3) 3. Detour 1500 ft
 (2) 4. Road Closed 1000 ft
 (2) 5. Road Closed 500 ft
 (2) 6. Road Closed
 (6) 7. WEST
 (6) 8. EAST

TENNESSEE

TENNESSEE

TYPICAL SECTION DEPICTING INSTALLATION OF RECYCLED RAILROAD RAIL PLACED IN DRILLED SOCKET FOR LANDSLIDE CORRECTION

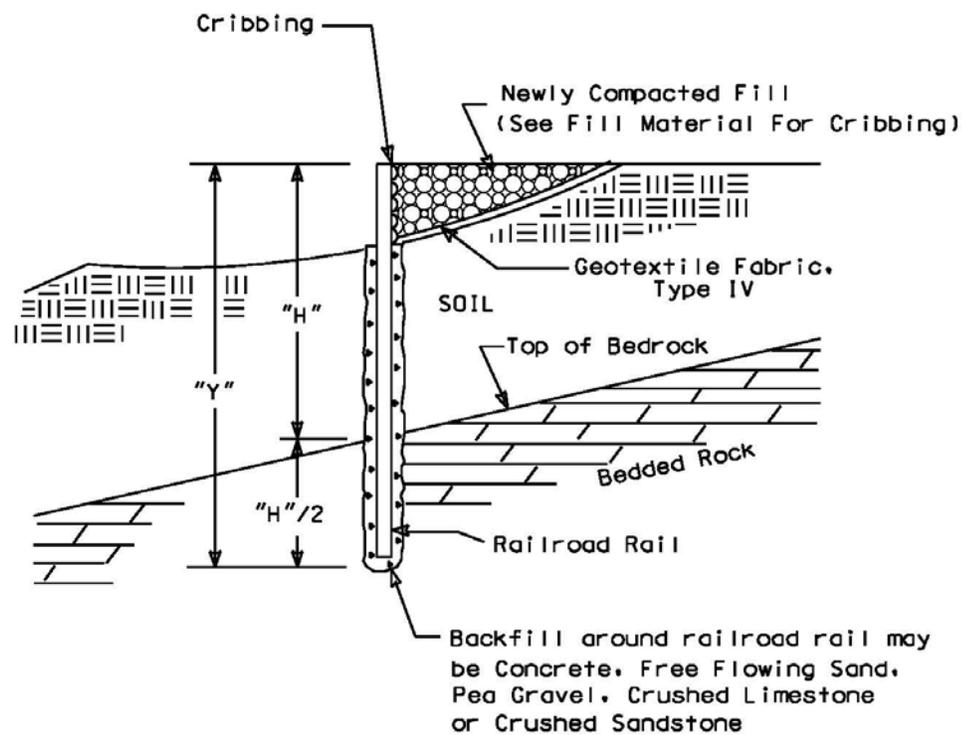
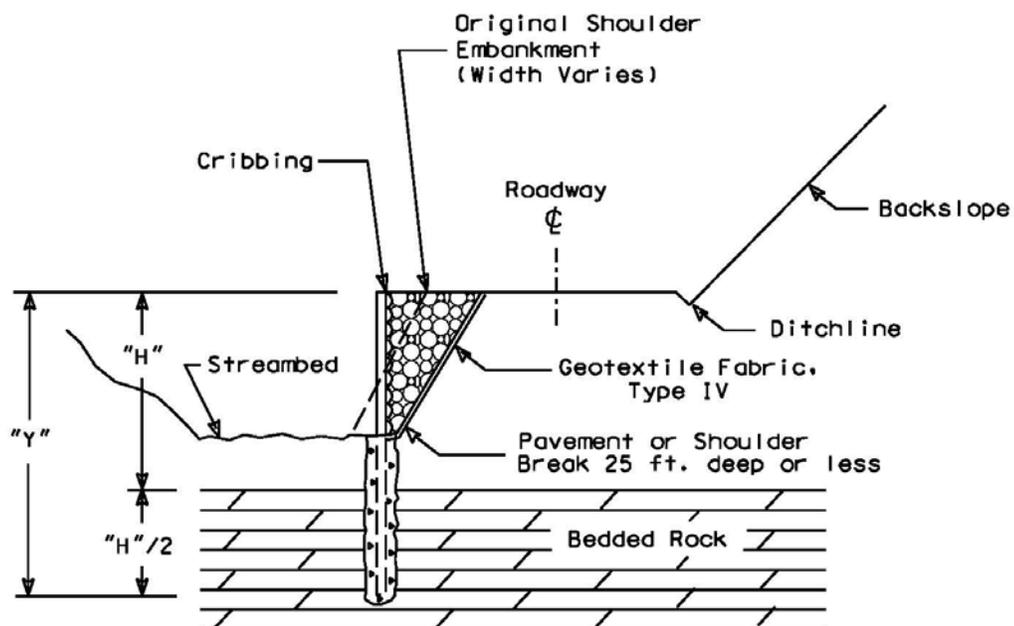


Figure 1

TYPICAL CROSS SECTION OF ROADWAY REPAIRS UTILIZING RECYCLED RAILROAD RAILS IN DRILLED SOCKETS FOR EMBANKMENT EROSION CORRECTION

NOTE:
Spacing from edge to
edge of drilled
socket : 3 ft. max.



NOTE :
"H"/2 Depth of Rail into bedded rock =
1/3 total length where rock is present.

Figure 2

ALTERNATE SCHEMES FOR INSTALLING RAILROAD RAILS IN DRILLED SOCKETS

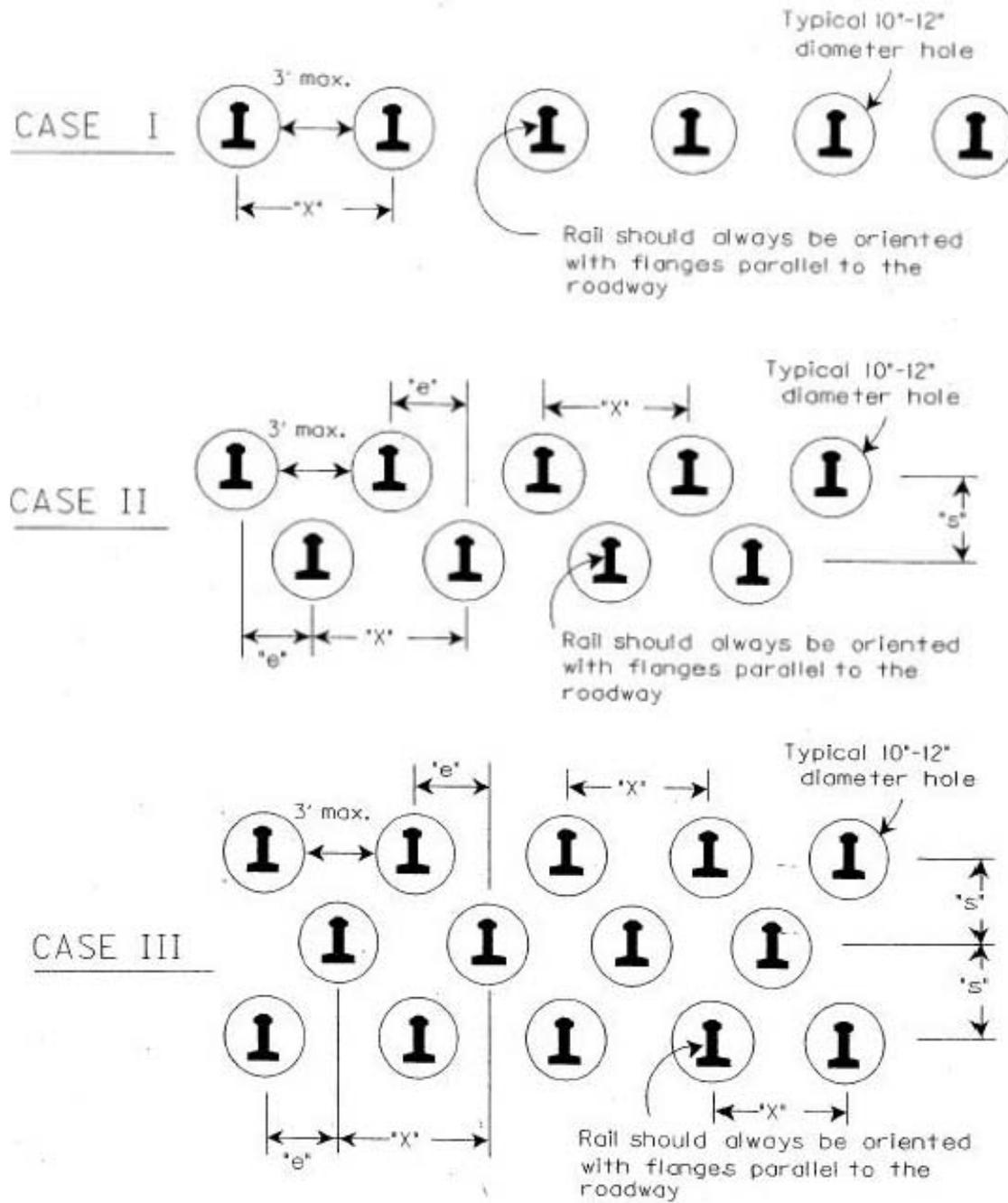


FIGURE 3

**DESIGN CHART FOR 130LBS/YD TO 133 LBS/YD RECYCLED (USED) RAILROAD RAILS
 FACTOR OF SAFETY = 1**

Soil Depth to Bedded Rock "H" (Feet)	Minimum Embedment into Bedded Rock "H/2" (Feet)	Total Length of Installed Railroad Rail "Y" (Feet)	Required Number of Rows	Maximum Spacing Between Rails "X" (Max. 48") (Inches)	Effective Spacing Between Rows of Rails "e" (Inches)
8	4	12	1	48	N/A
9	4.5	13.5	1	48	N/A
10	5	15	1	48	N/A
11	5.5	16.5	1	48	N/A
12	6	18	1	48	N/A
13	6.5	19.5	1	48	N/A
14	7	21	1	32	N/A
15	7.5	22.5	2	48	24
16	8	24	2	44	22
17	8.5	25.5	2	36	18
18	9	27	2	28	14
19	9.5	28.5	2	24	12
20	10	30	3	33	11
21	10.5	31.5	3	28.5	9.5
>21	N/A	N/A	N/A	N/A	N/A

NOTES: 1. REFER TO FIGURES 1, 2, & 3 FOR DIMENSIONS SHOWN
 2. FOR SOIL DEPTHS "H" GREATER THAN 21 FEET CONTACT THE ENGINEER.

TABLE I

IDENTIFICATION OF RAILROAD RAIL SIZES

1. Typically classified in units of lbs-per-yard.

Examples :

155 lbs/yd, 140 lbs/yd, 132 lbs/yd, 90 lbs/yd

2. Each rail has a classification stamped in web:

Example :

112 25 RE OH ILLINOIS USA 1935 IIIIII



Weight in lbs/yd

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 STANDARD DRAWINGS THAT APPLY

ROADWAY ~GENERAL~

MISCELLANEOUS STANDARDS

MISCELLANEOUS STANDARDS PART 1.....RGX-001-06

~PAVEMENT~

MEDIANS, CURBS, APPROACHES, ENTRANCES, ETC.

APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT.....RPM-110-07

TRAFFIC ~TEMPORARY~

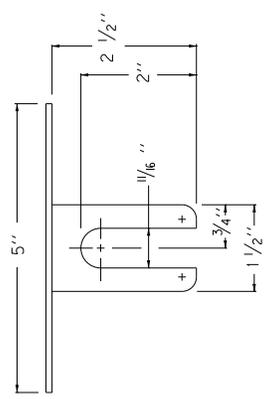
DEVICES

LANE CLOSURE TWO-LANE HIGHWAYTTC-100-04

COUNTY OF	ITEM NO.	SHEET NO.

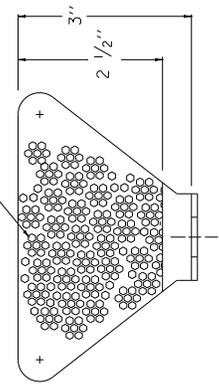
~ NOTES ~

- BID ITEMS AND UNIT TO BID
 DELINEATOR FOR GUARDRAIL B/W EACH
 DELINEATOR FOR GUARDRAIL M/W EACH
 DELINEATOR FOR GUARDRAIL M/Y EACH
1. DELINEATORS SHALL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE EACH AND SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR ONE COMPLETE INSTALLATION.
 2. DELINEATOR SHAPE AND DIMENSIONS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. TYPES OF DELINEATORS PERMITTED SHALL BE FROM THE LIST OF APPROVED MATERIALS.
 3. GUARDRAIL DELINEATORS SHALL BE REQUIRED ON ALL GUARDRAIL.
 4. DELINEATORS SHALL NOT BE INSTALLED WITHIN THE PAY LIMITS OF THE END TREATMENT.
 5. DELINEATORS SHALL BE MANUFACTURED FROM 12 GA. GALVANIZED STEEL.
 6. DIMENSIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
 7. WHEN CONCRETE BARRIERS EXTEND ACROSS BRIDGE STRUCTURES IN LIEU OF STEEL BEAM GUARDRAIL, DELINEATORS SHALL BE INSTALLED AT SAME VERTICAL ALIGNMENT AS ON THE GUARDRAIL, AND DELINEATORS SHALL COMPLY WITH CURRENT STANDARD DRAWING RBM-020.
 8. DELINEATORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

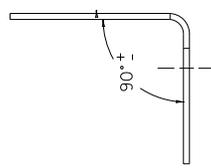


PLAN VIEW

TYPE IX SHEETING,
 YELLOW OR WHITE

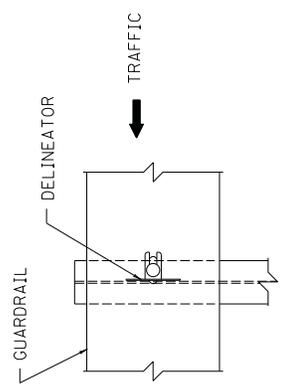


FRONT VIEW

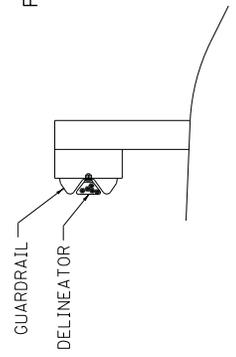


SIDE VIEW

DIMENSIONS SHOWN ARE FOR ONE VERSION OF A WEB-MOUNTED GUARDRAIL DELINEATOR. DELINEATORS WITH ALTERNATE DIMENSIONS MAY BE CONSIDERED FOR INCLUSION ON THE APPROVED PRODUCTS LIST.

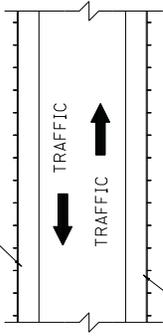


FRONT VIEW

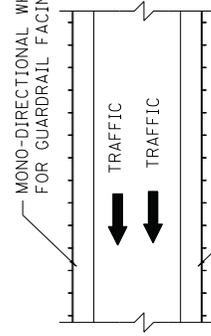


SIDE VIEW

BI-DIRECTIONAL WHITE DELINEATOR FOR GUARDRAIL FACING TRAFFIC



BI-DIRECTIONAL WHITE DELINEATOR FOR GUARDRAIL FACING TRAFFIC



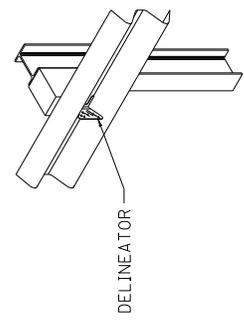
MONO-DIRECTIONAL WHITE DELINEATOR FOR GUARDRAIL FACING TRAFFIC

MONO-DIRECTIONAL YELLOW DELINEATOR FOR GUARDRAIL FACING TRAFFIC

PLACEMENT OF DELINEATORS FOR GUARDRAIL

APPROXIMATE DELINEATOR SPACING	
TANGENT	100'
CURVE	50'

SPACING SHOULD BE ADJUSTED IN CURVES SO THAT SEVERAL DELINEATORS ARE ALWAYS SIMULTANEOUSLY VISIBLE TO THE ROAD USER.



ISOMETRIC VIEW
 USE WITH CUR. STD. DWGS.
 RBM-020, RBR-060

KENTUCKY DEPARTMENT OF HIGHWAYS	
DELINEATORS FOR GUARDRAIL	
SUBMITTED: <i>Mark P. Pickett</i> DIRECTOR DIVISION OF DESIGN	DATE: 11-17-12
032	

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 administrating 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

193323

Page 1 of 2

Report Date 7/1/19

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	145.00	TON		\$	
0020	00190		LEVELING & WEDGING PG64-22	25.00	TON		\$	
0030	00221		CL2 ASPH BASE 0.75D PG64-22	130.00	TON		\$	
0040	00301		CL2 ASPH SURF 0.38D PG64-22	55.00	TON		\$	
0050	00356		ASPHALT MATERIAL FOR TACK	1.00	TON		\$	
0060	02676		MOBILIZATION FOR MILL & TEXT (KY 100 023-025)	1.00	LS		\$	
0070	02677		ASPHALT PAVE MILLING & TEXTURING	45.00	TON		\$	
0080	06510		PAVE STRIPING-TEMP PAINT-4 IN	634.00	LF		\$	
0090	06514		PAVE STRIPING-PERM PAINT-4 IN	634.00	LF		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0100	00001		DGA BASE	150.00	TON		\$	
0110	02014		BARRICADE-TYPE III	4.00	EACH		\$	
0120	02223		GRANULAR EMBANKMENT	1,134.00	CUYD		\$	
0130	02483		CHANNEL LINING CLASS II	50.00	TON		\$	
0140	02562		TEMPORARY SIGNS	460.00	SQFT		\$	
0150	02599		FABRIC-GEOTEXTILE TYPE IV	1,230.00	SQYD		\$	
0160	02650		MAINTAIN & CONTROL TRAFFIC (KY 100 023-025)	1.00	LS		\$	
0170	02726		STAKING (KY 100 023-025)	1.00	LS		\$	
0180	03234		RAILROAD RAILS-DRILLED	4,600.00	LF		\$	
0190	03236		CRIBBING	2,890.00	SQFT		\$	
0200	05950		EROSION CONTROL BLANKET	570.00	SQYD		\$	
0210	21415ND		EROSION CONTROL (KY 100 023-025)	1.00	LS		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0220	00461		CULVERT PIPE-15 IN	40.00	LF		\$	
0230	00464		CULVERT PIPE-24 IN	65.00	LF		\$	
0240	01370		METAL END SECTION TY 1-15 IN	1.00	EACH		\$	
0250	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	
0260	02237		DITCHING	270.00	LF		\$	

Section: 0004 - GUARDRAIL

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0270	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	20.00	EACH		\$	
0280	02351		GUARDRAIL-STEEL W BEAM-S FACE	812.50	LF		\$	

PROPOSAL BID ITEMS

193323

Page 2 of 2

Report Date 7/1/19

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0290	02360		GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH		\$	
0300	02367		GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		\$	
0310	02373		GUARDRAIL END TREATMENT TYPE 3	1.00	EACH		\$	
0320	24381EC		G/R STEEL W BEAM-S FACE (NESTED)	175.00	LF		\$	

Section: 0005 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0330	02569		DEMOBILIZATION	1.00	LS		\$	