

CALL NO. 403
CONTRACT ID. 252353
KNOTT COUNTY
FED/STATE PROJECT NUMBER 060GR25P083-FD51
DESCRIPTION KY 1087, KY 1088, KY 1410 & KY 2759 FEMA REPAIRS
WORK TYPE SLIDE REPAIR
PRIMARY COMPLETION DATE 8/1/2026

# **LETTING DATE: September 25,2025**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME September 25,2025. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

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

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# PART I SCOPE OF WORK

## **ADMINISTRATIVE DISTRICT - 12**

CONTRACT ID - 252353

060GR25P083-FD51 COUNTY - KNOTT

PCN - MP06010872501 FD51 060 1087 001-020

BALL BRANCH ROAD (KY 1087) FROM 0.218 MILES WEST OF SHELBY LANE EXTENDING EAST TO 406 FEET WEST OF BRUCE BRANCH ROAD, A DISTANCE OF 017.94 MILES.FLOOD REPAIR FOR FEMA GEOGRAPHIC COORDINATES LATITUDE 37:23:49.00 LONGITUDE 82:59:57.00 ADT 1,080

PCN - MP06010882501 FD51 060 1088 004-008

LOTTS CREEK ROAD (KY 1088) (MP 4.050) FROM 0.176 MILES WEST OF GAMBLE LANE EXTENDING EAST TO 786 FEET EAST OF FAT ALBERT ROAD (MP 7.243), A DISTANCE OF 03.19 MILES.FLOOD REPAIR FOR FEMA GEOGRAPHIC COORDINATES LATITUDE 37:15:39.00 LONGITUDE 83:03:14.00
ADT 615

PCN - MP06014102501 FD51 060 1410 001-003

BURGEYS CREEK ROAD (KY 1410) (MP 1.248) FROM 0.288 MILES WEST OF DEAD MARE BRANCH EXTENDING EAST TO 221 FEET WEST OF BIG DOUBLES BRANCH (MP 2.268), A DISTANCE OF 01.02 MILES.FLOOD REPAIR FOR FEMA

GEOGRAPHIC COORDINATES LATITUDE 37:15:39.00 LONGITUDE 83:03:14.00 ADT 590

PCN - MP06027592501 FD51 060 2759 000-001

OGDEN ROAD (KY 2759) (MP 0.201) FROM 15 FEET NORTH OF ROBERTS DRIVE EXTENDING NOTRH TO 0.178 MILES SOUTH OF OLD OGDEN ROAD (MP 0.609), A DISTANCE OF 0.41 MILES.FLOOD REPAIR FOR FEMA GEOGRAPHIC COORDINATES LATITUDE 37:20:31.00 LONGITUDE 83:00:08.00 ADT 820

#### **COMPLETION DATE(S):**

COMPLETED BY 08/01/2026

SPECIFIED COMPLETION DATE - ALL ITEMS IN CONTRACT

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## **CONTRACT NOTES**

## **INSURANCE**

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

# **PROPOSAL ADDENDA**

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

## **BID SUBMITTAL**

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

## JOINT VENTURE BIDDING

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

## **UNDERGROUND FACILITY DAMAGE PROTECTION**

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

## REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

foreign entity is not required to obtain a certificate as provided in <u>KRS 14A.9-010</u>, the foreign entity should identify the applicable exception. Foreign entity is defined within <u>KRS 14A.1-070</u>.

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 <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

#### SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by email to <a href="https://kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. 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 (<a href="www.transportation.ky.gov/construction-procurement">www.transportation.ky.gov/construction-procurement</a>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

## **HARDWOOD REMOVAL RESTRICTIONS**

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

## INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

# **ACCESS TO RECORDS**

The state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, agrees that the contracting agency, the

Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this agreement for the purpose of financial audit or program review. The Contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

## **BOYCOTT PROVISIONS**

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

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

#### LOBBYING PROHIBITIONS

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

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

Revised: 1/1/2025

05/05/2025

# 1.0 BUY AMERICA REQUIREMENT.

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

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

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

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

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

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

Use foreign materials only under the following conditions:

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

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

## 2.0 - BUILD AMERICA, BUY AMERICA (BABA)

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

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

BABA permits FHWA participation in the Contract only if all "construction materials" as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

05/05/2025

required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

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

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

#### 4.0 - ADDITIONAL REQUIREMENTS

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

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

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

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

<u>Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway Administration (dot.gov)</u>

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SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

05/05/2025

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

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

Date Submitted:	
Contractor:	
Signature:	
Printed Name:	
Title:	

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

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## 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

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## **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.

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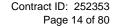
## SPECIAL NOTE FOR GUARDRAIL

## BEAMS, TERMINAL SECTIONS AND ACCESSORIES INCLUDING GALVANIZATION OF BEAMS

Contrary to Section 106.02, 719.02, 814.02, and 814.03, guardrail manufacturers shall conform to either the current AASHTO M180-23 specification or the previous AASHTO M180-18 specification at the date of the bid letting. See CONSTRUCTION MEMORANDUM CM 25-03.

#### **TYPE 1 AND TYPE 4 END TREATMENTS**

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





**Andy Beshear GOVERNOR** 

200 Mero Street Frankfort, Kentucky 406 01 Jim Grav **SECRETARY** 

CM 25-03

**CONSTRUCTION MEMORANDUM MAINTENANCE MEMORANDUM MATERIALS MEMORANDUM** 

TO: **Chief District Engineers** 

Project Delivery and Preservation Branch Managers

**Section Engineers Active CEI Consultants** 

CC: **KY Association of Highway Contractors** 

**KYTC Prequalified Guardrail Contractors** 

Guardrail Manufacturers on KYTC's List of Approved Materials

FROM: Matthew P. Simpson, P.E.

Director

Division of Construction

Allen Myers, P.E. AJM

Director

**Division of Materials** 

Josh Rogers, P.E.

Division of Maintenance

DATE: July 9, 2025

**SUBJECT:** Guardrail and Guardrail Components Manufactured in Accordance with AASHTO M180

The purpose of this memo is to address the concerns pertaining to the latest edition of AASHTO M180 and to notify all stakeholders of KYTC's implementation plan.

According to the KYTC Standard Specifications, Section 814: Manufacturers shall conform to AASHTO M180 for beams, terminal sections and accessories including the galvanization of the beams. In addition, Section 106.02 states "whenever reference is made to the standard of AASHTO, ASTM, Federal Specifications or standards promulgated by other recognized societies or organizations, the current specification at the date of the bid letting is applicable."

This memorandum allows the use of previous versions of AASHTO M180 other than the latest published edition for the reasons stated below.



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The latest AASHTO M180 revision brings significant alterations to the guardrail manufacturing process. Effective immediately, all KYTC construction projects will allow guardrail and components manufactured in accordance with AASHTO M180-18 on jobsites for construction of guardrail per Section 719 of the KYTC Standard Specifications. Materials manufactured in accordance with these AASHTO specifications will be permitted for use on all contracts prior to and including the December 2029 letting. This staggered implementation will allow the use of existing supply and stockpiles and allow manufacturers to adapt their business strategies to meet the new AASHTO manufacturing requirements.

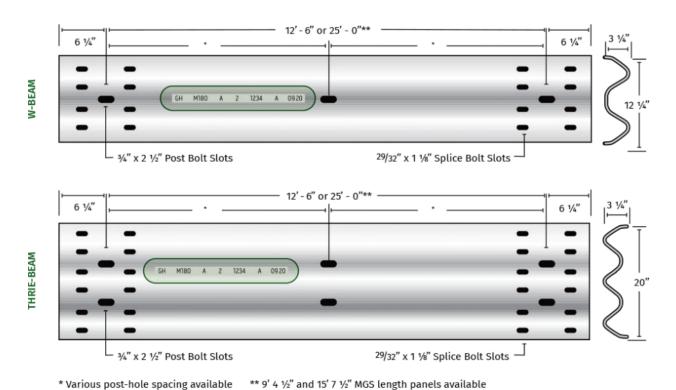
As of the date of this memo, none of the guardrail manufacturers currently comply with AASHTO M180-23. During this transition period, a manufacturer will not be removed from KYTC's List of Approved Materials for not complying with AASHTO M180-23.

All construction personnel are highly encouraged to familiarize themselves with guardrail certifications and should review the certifications and determine what type of railing is being delivered and installed onsite. All certifications should clearly indicate which AASHTO M180 publication it complies with. All guardrail onsite should have a physical stamp that displays "M180" as shown in the attached photos.

If you have questions, please contact the Division of Construction at 502-564-4780.

**MPS** 

Attachments



<sup>\*</sup>Photo courtesy of Gregory Corporation

#### SPECIAL NOTES FOR SLIDE REPAIR

#### I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's 2019 Standard and Supplemental Specifications, Special Provisions and Special Notes, and 2020 Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Perform the following work:

(1) Maintain and Control Traffic; (2) Site Preparation and Erosion Control; (3) Excavation; (4) Furnish and install Drilled Railroad Rails; (5) Furnish and install Wall Cribbing; (6) Furnish and install Geotextile Fabric and backfill cribbed railroads rails; (7) Furnish and install Channel Lining; (8) Reconstruct shoulders; (9) Remove and Reset Guardrail and furnish and install new End Treatments; (10) Staking; (11) Restoration and final dressing; and (12) All other work required by the contract.

# II. MATERIALS & EQUIPMENT

Except as provided herein or as directed by the Engineer, the Department will sample and test all materials in accordance with the Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Erosion Control.** See Special Note for Erosion Control.
- **C. Railroad Rails.** Furnish new or recycled used railroad rails classified with a nominal weight of 132 lb/yd or greater. Use only visibly straight recycled railroad rails with no splices. The Engineer will verify rail nominal weights by manufacturer's stamp. Provide Certification for nominal weight if the manufacturer's stamp is unidentifiable.
- **D. Wall Cribbing.** Furnish Steel "W" Beam Guardrail elements, new or used, in 12.5-foot lengths. Use only structurally sound and rust-free straight elements. The Engineer will use visual inspection to determine acceptability. The Engineer may approve other material deemed capable of permanently restraining the granular backfill.
- **E. Backfill Material for Drilled Sockets.** Furnish the following for backfill material for drilled sockets: concrete; free flowing sand; pea gravel; crushed limestone; or crushed sandstone. Use backfill material with one hundred percent (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.

Special Note for Slide Repair Page 2 of 7

- **F. Backfill for Crib Wall.** Furnish Crushed Limestone Size No. 2 or Size No. 23 meeting the requirements of Section 805. The Engineer will use visual inspection and/or material testing to determine acceptability.
- **G. Dense Graded Aggregate.** See Section 302.02. Do not furnish Crushed Stone Base In lieu of Dense Graded Aggregate (DGA).
- **H. Seeding and Protection.** Furnish Seed Mixture No. 1. See Special Note for Erosion Control.
- **I. Geotextile Fabric.** Furnish Geotextile Fabric Class 1 according to Section 843.
- J. Guardrail. See Special Note for Guardrail.
- **K. Offset Drill.** Use a truck or track mounted drill capable of drilling a 9-5/8 to 12 inch diameter hole as required by the railroad rails diameter in soil and rock, capable of installing railroad steel up to forty (40) feet in length and weighing up to 140 lbs. per linear yard minimum. Equip the drill with rigging to lift entire lengths of rail and place and seat in the bottom of drilled holes. The drill must be capable of drilling and installing railroad rails in a double or triple row arrangement if necessary (see Figure 3). Drill must be capable to reach out (offset) a minimum of 6 (six) feet from side of drill carrier vehicle to center of drilled hole and be capable of installing the drilled steel a minimum of 4 feet from paved shoulder. Drill rig configuration should minimize protruding into opposing lane of traffic, allowing opposite lane of traffic to remain open as much as possible.
- L. Channel Lining Class II & III. See Section 805.13.

#### III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Staking.** See Special Note for Staking,
- C. Erosion Control. See Special Note for Erosion Control.
- **D. Site Preparation.** Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; temporary pollution and erosion control; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection. The Department has not determined the area to be Cleared and Grubbed and the bidder must draw his own conclusions. If roadway signs are in the construction areas, be responsible for removing, storing, protecting, and resetting the signs. Cover any remaining signs that are not applicable during construction. Replace signs damaged by Contractor's operations or negligence at no additional cost to the Department.

Special Note for Slide Repair Page 3 of 7

**E. Drilled Railroad Rails.** See attached summaries for site locations and estimated quantities of materials required. Contrary to the attached tables and drawings for drilled railroad rails, install only one (1) row of railroad rails on three (3) foot centers. The Department has not determined the depth to solid rock and the bidder must draw his own conclusions.

THE DEPARTMENT WILL ALLOW ABSOLUTELY NO CHANGE IN SCOPE OF WORK OR INCREASE IN QUANTITIES WITHOUT PRIOR WRITTEN APPROVAL FROM THE SECTION ENGINEER OR THE DISTRICT ENGINEER. THE DEPARTMENT WILL NOT BE LIABLE FOR PAYMENTS DUE TO UNAUTHORIZED ADDITIONAL WORK.

Install drilled railroad rail piling in drilled sockets in rock or stable material under the landslides (see Figure 1) or the eroded areas (see Figure 2) as project location dictates or as directed by the Engineer. Drill the socket and install the railroad rails into holes at slide locations. Drill sockets into solid rock, if possible. The Department will monitor each hole, which will serve as a sounding for the rail to be installed in it. Embed the railroad rail into solid rock no less than one-half the free end length of the rail (See figure 1 and figure 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation. Allow adequate size of the drilled socket to allow free insertion of the railroad rail, but the maximum socket size is 1 foot in diameter.

After drilling each hole, immediately install railroad rail with the flanges positioned perpendicular to the direction of the landslide or break (see Figure 3, Case II and Case III). Determine the length of rail needed to reestablish pavement and shoulder typical section. Install rails into the drilled holes and seat the rail to provide firm bearing in the bottom of drilled holes. Cut off excess rail flush with the proposed ground line. Use cutoffs elsewhere in the project if possible; retain possession of unusable cutoffs.

After installing each railroad rail, immediately backfill the drilled hole with the approved materials. Shovel the backfill material into the hole in small amounts. Avoid bridging between the rail and the sides of the hole. Do not use auger tailings as backfill material.

If double or triple rows are required, when approved stagger the rows to obtain the required spacing. Keep the spacing between the rows of rails as close as is practical; do not space between the rows more than two (2) feet, if possible. See Figure 3 Case II and Case III for the diagrams showing two (2) or three (3) rows of rails. Select the spacing as per Table 1 for all 132 pounds per yard rail or greater. The Department shall approve the selection prior to work being performed.

Special Note for Slide Repair Page 4 of 7

- **F. Installation of Wall Cribbing.** Crib any exposed portion of railroad rail before placing backfill. Install cribbing as shown on Figure 1 or Figure 2 and the typical section and/or as directed by the Engineer. Extend wall cribbing two (2) feet below the existing ground line or 12 feet below the proposed roadway elevation, whichever is deeper. If bedded rock is encountered, install the cribbing to the bedded rock only. Install wall cribbing on the railroad rail piling. Lap, bolt or weld, and attach cribbing solid to the drilled railroad rails. The Engineer may direct changes to these procedures.
- **G. Excavation and Backfill for Embankment Repair.** Excavate each repair area as directed by the Engineer to provide a platform for drilling the railroad rails; place cribbing and granular backfill; and excavation as necessary for slopes, ditches, shoulders, and drainage. Limit damage to or removal of the existing pavement. The Engineer may direct that the excavating equipment bucket size and width be adjusted to achieve the excavation minimizing damage to the pavement, utilities, drilled steel, etc. After drilling, place geotextile fabric, and then backfill behind cribbed railroad rails. Construct backfill up to approximately four (4) inches below the existing pavement elevation. Place the backfill in lifts of two (2) feet or less in such a way as to limit settlement to the area and tamp with excavator bucket. Roll the final lift with excavation equipment to ensure the backfill is fully compacted. Place and compact four (4) inches of DGA to provide proper template for the guardrail. Do not pond water on the shoulder area or at the shoulder edge.
- **H. Excavation for Channel Lining.** Excavate for shoulder repair as directed by the Engineer.
- **I. Channel Lining.** Construct repair with Channel Lining Class II and III as directed by the Engineer. Place and compact four (4) inches of DGA to provide proper template for the shoulder and/or guardrail. Do not pond water on the shoulder area or at the shoulder edge.
- J. Guardrail. See Special Note for Guardrail.
- **K. Restoration, Final Dressing, Seeding and Protection**. Do not use excavated spoil material from the site as fill material. Warp and tie slopes into adjacent undisturbed slopes and ditches. Provide positive drainage upon completion of construction. Apply Final Dressing Class A to all disturbed earthen areas, both on and off the right-of-way. Sow with Seed Mixture No. 1.
- **L. Disposal of Waste.** Waste debris from tree and brush removal and excavation on the Right-of-Way at locations designated by the Engineer. Do not use excavation from the site as fill material or waste in flood prone areas or streams. If suitable locations do not exist dispose of the debris at sites off the Right-of-Way obtained by the Contractor at no additional cost to the Department. Dispose of all removed concrete 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.

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- M. On-Site Inspection. Make a thorough inspection of each site prior to submitting a bid and be thoroughly familiar with the existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider s submission of a bid evidence of this inspection having been made.
- **N. 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.
- **O. 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.
- **P. Coordination with Utility Companies.** Locate all underground, above ground and overhead utilities prior to beginning construction. Do not disturb existing overhead or underground utilities. Be responsible for repairing all utility damage that occurs because of the Contractor's operations at NO ADDITIONAL COST to the Department

These projects may have utilities on some sites that will need to be relocated and/or adjusted. In the event the work is contingent upon the utility companies work, be responsible for contacting and maintaining communication with all the appropriate utility companies located within the project limits. If utility companies are affected, the provide the Engineer with bi-weekly written status updates on progress made with the utility companies. Provide the Engineer with details requested. The Engineer may charge Liquidated Damages if Contractor fails to provide these written updates for two consecutive periods.

At sites and routes in the contract not affected by utilities not completed by the Primary Completion Date, Liquidated Damages will be assessed. No time extensions will be granted for any site or sites that are not affected by utilities, as well as sites, in which the Contractor has failed to provide the required progress updates

**Q. 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 Note for ErosionControl.

#### IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** The Department will measure Site Preparation as a single Lump Sum for the sites listed for payment on the project. The Department will not measure Clearing and Grubbing, Final Dressing, Seeding and Protection, and Waste Disposal, but shall be incidental to Site Preparation.

Special Note for Slide Repair Page 6 of 7

- C. Erosion Control. See Special Note for Erosion Control.
- **D. Railroad Rails-Drilled.** The Department will measure Drilled Railroad Rails in Linear Feet of finished in-place length. The Department will not measure cutoffs, excess, and waste. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured, and 50% of the depth shall be paid as "Railroad Rails-Drilled".
- **E. Wall Cribbing.** The Department will measure Cribbing in square feet of finished inplace area. The Department will not measure laps, cutoffs, excess, and waste.
- **F. Geotextile Fabric Class 1.** The Department will field measure the quantity in square yards of finished in place area. The Department will not measure laps, seams, cut offs, excess, or waste.
- **G. Excavation and Backfill (Drilled Rail Road Rails).** The Department will field measure Excavation and Backfill in cubic yards according to Section 204.04.08.
- **H. Excavation (Channel Lining).** The Department will field measure Excavation and Backfill in cubic yards according to Section 204.04.08.
- I. Channel Lining Class II & III. See Section 703.04.05.
- J. Dense Graded Aggregate. See Section 302.04
- **K. Guardrail.** See Special Note for Guardrail.

#### V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Accept payment at the Contract Lump Sum unit prices as full compensation for all materials, labor, and equipment for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection.
- C. Erosion Control. See Special Note for Erosion Control.
- **D. Railroad Rail-Drilled.** Accept payment at the Contract unit price as full compensation for all materials, labor, equipment, and incidentals for drilling the socket, furnishing and installing the railroad rails, and backfilling the socket around the installed rail.

Special Note for Slide Repair Page 7 of 7

- **E. Wall Cribbing.** Accept payment at the Contract unit price as full compensation for all materials, labor, equipment, and incidentals for furnishing, installing, and attaching the cribbing on the drilled railroad rails.
- **F. Geotextile Fabric Class 1.** Accept payment at the Contract unit price as full compensation for all materials, labor, equipment, and incidentals for furnishing and installing the Geotextile Fabric.
- **G. Excavation and Backfill (Drilled Rail Road Rails).** Accept payment at the Contract unit price as full compensation for all materials, labor, equipment, and incidentals for excavating and backfilling the cribbed railroad rails.
- **H. Excavation (Channel Lining).** Accept payment at the Contract unit price as full compensation for all materials, labor, equipment, and incidentals for excavating for shoulder repair.
- I. Channel Lining Class II & III. See Section 703.05.
- J. Dense Graded Aggregate. See Section 302.05
- K. Guardrail. See Special Note for Guardrail.

## SPECIAL NOTE FOR CONTRACTOR STAKING

Contrary to Section 201, perform only 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 profiles, and final ditch profiles to insure positive drainage during and upon completion of construction.

Except as provided herein, the Department will perform Staking.

Contrary to Section 201, the Department will not measure Contractor Staking for separate payment, but shall be incidental to the applicable items of the work.

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# 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 OTHERS**

Be advised, there may be active project(s) adjacent to or within this project. These may be KYTC administered contracts, work being performed as part of a KYTC issued encroachment permit, or work being performed by Department forces. The Engineer will coordinate the work of any other Contractors, permit holders, or the Department's forces. See Sections 105.06, 107.06 and 107.14 of the 2019 Standard Specifications.

# SPECIAL NOTE FOR SHOULDER PREPARATION

Grade, shape, and compact shoulder as shown on the typical section and as directed by the Engineer to provide proper template and foundation for shoulders and guardrail. The Department will not measure grading, shaping, and compacting shoulders for separate payment, but shall be incidental to the asphalt base and/or surface placed on the shoulder.

#### SPECIAL NOTES FOR GUARDRAIL

#### I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2019 Standard and Supplemental Specifications and the 2030 Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

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

(1) Site Preparation; (2) Remove and Reset existing guardrail systems; (3) Construct guardrail systems; (4) Furnish and install Delineators for guardrail; (5) Maintain and Control Traffic; and (6) all other work specified as part of this contract.

#### II. MATERIALS

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

- A Maintain and Control Traffic. See Traffic Control Plan.
- **B. Guardrail.** Furnish guardrail system components according to section 814 and the Standard and Sepia Drawings, except use steel posts only, no alternates.
- **C. Delineators for Guardrail.** Furnish Delineators for Guardrail according to Standard Drawing RBR-055-01.
- **D. Erosion Control.** See Special Notes for Erosion Control.

#### III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; filling voids left as the result of removing existing guardrail and guard posts with dry sand; 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.

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- C. Remove & Reset Guardrail. Remove and Reset existing guardrail as shown on the Summaries or as directed by the Engineer according to Section 719.03.03 and 719.03.07, except deliver any salvageable components not reset to the Department's Knott County maintenance facility. Reset Guardrail according to paragraph D below. If the Engineer determines that work on a channel lining repair site can be done with the guardrail left in place, the Engineer may delete Remove and Reset Guardrail at that site..
- **D. Guardrail.** Except as specified herein, construct guardrail systems according to Section 719 and the Standard and Sepia Drawings. Consider locations listed on the summary and/or shown on the drawings to be approximate only. The Engineer will determine the exact termini for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, match the existing shoulder widths.

Erect guardrail to the lines and grades shown on current Standard Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

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

- **E. Delineators for Guardrail.** Install delineators for guardrail according to Standard Drawing RBR-055-01, except space at 50 feet on centers.
- **F. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.
- **G. Coordination with Utility Companies.** Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require 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.
- **H. 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.

Guardrail Page 3 of 3

- **I. Disposal of Waste.** Dispose of all removed concrete, timber posts, 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.
- **J. 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.
- **K. Erosion Control.** See Special Notes for Erosion Control.

#### IV. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site preparation.** The Department will measure Site Preparation as one (1) Lump Sum for the listed sites.
- C. Guardrail and Remove Guardrail. See Section 719.04.
- **D. Delineators for Guardrail.** See Standard Drawing RBR-055-01.
- **E. Erosion Control.** See Special Notes for Erosion Control.

## V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Accept payment at the Contract Lump Sum unit price as full compensation for all materials, labor, and equipment for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection.
- C. Guardrail and Remove Guardrail. See Section 719.05.
- **D. Delineators for Guardrail.** See Standard Drawing RBR-055-01.
- **E. Erosion Control.** See Special Notes for Erosion Control.

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# 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

#### TRAFFIC CONTROL GENERAL

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

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

At this time, no restrictions are anticipated. At the discretion of the Engineer, additional days and hours may be added when lane closures will not be allowed.

The Contractor may maintain alternating one way traffic during construction. The clear lane width shall be 9 Feet. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, the Contractor shall make provisions for the passage of the bus as quickly as possible. The Contractor shall provide additional traffic control or flag persons as directed by the Engineer.

If the work site conditions require that all traffic be stopped while the drilling operation is in progress, traffic may be stopped for the length of time required to drill and set one rail. All waiting traffic shall be allowed to pass before starting the next hole. If an emergency vehicle or school bus is present in the queue, stop drilling and allow traffic to pass immediately.

#### **SIGNS**

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

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Traffic Control Plan
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## LANE CLOSURES

Lane closures shall not be left in place during non-working hours.

## **BARRICADES**

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement or shoulder removal areas or drop offs will be bid as each according to Section 112.04.04.

#### PAVEMENT EDGE DROP-OFFS

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

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than or equal to 2" - No protection required. Warning signs should be placed in advance and throughout the drop-off area.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. Wedge with asphalt mixture for pavement wedge with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Place Type III Barricades directly in front of drop-off facing oncoming traffic in both directions. Place plastic drums, vertical panels, or barricades every 25 feet.

#### SPECIAL NOTE FOR EROSION CONTROL

#### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's 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) 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 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

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local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between theses 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.

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## IV. MEASUREMENT

**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 as one lump sum. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC 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, but shall be incidental to Erosion Control.

# 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.

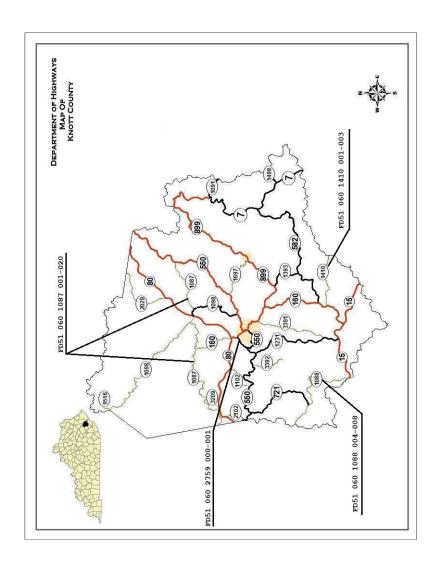
**Channel Lining.** If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

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> Erosion Control. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for Erosion Control, shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC 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.

1-561 erosion Control Note for Maintenance Projects 06/08/2012



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### **MATERIAL SUMMARY**

CONTRACT ID: 252353	060GR25P083-FD51	MP06010872501
ON I RACT ID: 252353	000GKZ3P003-FD31	WIPU601U6/2501

BALL BRANCH ROAD (KY 1087) FROM 0.218 MILES WEST OF SHELBY LANE EXTENDING EAST TO 406 FEET WEST OF BRUCE BRANCH ROAD FLOOD REPAIR FOR FEMA, A DISTANCE OF 17.94 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00001	DGA BASE	67.00	TON
0010	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	7.00	EACH
0015	02187	SITE PREPARATION - (KY 1087)	1.00	EACH
0020	02383	REMOVE & RESET GUARDRAIL	200.00	LF
0025	02483	CHANNEL LINING CLASS II	64.00	TON
0030	02484	CHANNEL LINING CLASS III	259.00	TON
0035	02562	TEMPORARY SIGNS	350.00	SQFT
0040	02602	FABRIC-GEOTEXTILE CLASS 1	715.00	SQYD
0045	02650	MAINTAIN & CONTROL TRAFFIC - (KY 1087)	1.00	LS
0050	03234	RAILROAD RAILS-DRILLED	1,365.00	LF
0055	03235	EXCAVATION AND BACKFILL	175.00	CUYD
0060	03236	CRIBBING	1,164.00	SQFT
0065	21415ND	EROSION CONTROL - (KY 1087)	1.00	LS
0070	21554EN	EXCAVATION	103.00	CUYD
0075	02569	DEMOBILIZATION	1.00	LS

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### **MATERIAL SUMMARY**

CONTRACT ID: 252353 060G	R25P083-FD51	MP06010882501

LOTTS CREEK ROAD (KY 1088) FROM 0.176 MILES WEST OF GAMBLE LANE EXTENDING EAST TO 786 FEET EAST OF FAT ALBERT ROAD FLOOD REPAIR FOR FEMA, A DISTANCE OF 3.19 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0800	00001	DGA BASE	67.00	TON
0085	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	18.00	EACH
0090	02187	SITE PREPARATION - (KY 1088)	1.00	EACH
0095	02351	GUARDRAIL-STEEL W BEAM-S FACE	200.00	LF
0100	02360	GUARDRAIL TERMINAL SECTION NO 1	1.00	EACH
0105	02371	GUARDRAIL END TREATMENT TYPE 7	6.00	EACH
0110	02383	REMOVE & RESET GUARDRAIL	387.50	LF
0115	02483	CHANNEL LINING CLASS II	43.00	TON
0120	02484	CHANNEL LINING CLASS III	172.00	TON
0125	02562	TEMPORARY SIGNS	350.00	SQFT
0130	02602	FABRIC-GEOTEXTILE CLASS 1	1,632.00	SQYD
0135	02650	MAINTAIN & CONTROL TRAFFIC - (KY 1088)	1.00	LS
0140	03234	RAILROAD RAILS-DRILLED	5,538.00	LF
0145	03235	EXCAVATION AND BACKFILL	793.00	CUYD
0150	03236	CRIBBING	5,331.00	SQFT
0155	21415ND	EROSION CONTROL - (KY 1088)	1.00	LS
0160	21554EN	EXCAVATION	69.00	CUYD
0165	02569	DEMOBILIZATION	1.00	LS

### Contract ID: 252353 Page 41 of 80

### **MATERIAL SUMMARY**

CONTRACT ID: 252353	060GR25P083-FD51	MP06014102501
CONTRACT ID: 252353	060GR25P083-FD51	MP06014102501

BURGEYS CREEK ROAD (KY 1410) FROM 0.176 MILES WEST OF GAMBLE LANE EXTENDING EAST TO 786 FEET EAST OF FAT ALBERT ROAD FLOOD REPAIR FOR FEMA, A DISTANCE OF 1.02 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0170	00001	DGA BASE	22.00	TON
0175	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH
0180	02187	SITE PREPARATION - (KY 1410)	1.00	EACH
0185	02351	GUARDRAIL-STEEL W BEAM-S FACE	75.00	LF
0190	02371	GUARDRAIL END TREATMENT TYPE 7	4.00	EACH
0195	02483	CHANNEL LINING CLASS II	15.00	TON
0200	02484	CHANNEL LINING CLASS III	61.00	TON
0205	02562	TEMPORARY SIGNS	350.00	SQFT
0210	02602	FABRIC-GEOTEXTILE CLASS 1	277.00	SQYD
0215	02650	MAINTAIN & CONTROL TRAFFIC - (KY 1410)	1.00	LS
0220	03234	RAILROAD RAILS-DRILLED	741.00	LF
0225	03235	EXCAVATION AND BACKFILL	97.00	CUYD
0230	03236	CRIBBING	650.00	SQFT
0235	21415ND	EROSION CONTROL - (KY 1410)	1.00	LS
0240	21554EN	EXCAVATION	24.00	CUYD
0245	02569	DEMOBILIZATION	1.00	LS

### Contract ID: 252353 Page 42 of 80

### **MATERIAL SUMMARY**

CONTRACT ID: 252353 060GR25P083-FD51 MP0602759250 <sup>-</sup>
ONTRACTID. 202000 WIF0002709200

OGDEN ROAD (KY 2759) FROM 15 FEET NORTH OF ROBERTS DRIVE EXTENDING NOTRH TO 0.178 MILES SOUTH OF OLD OGDEN ROAD FLOOD REPAIR FOR FEMA, A DISTANCE OF .41 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0250	00001	DGA BASE	25.00	TON
0255	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	10.00	EACH
0260	02187	SITE PREPARATION - (KY 2759)	1.00	EACH
0265	02351	GUARDRAIL-STEEL W BEAM-S FACE	37.50	LF
0270	02371	GUARDRAIL END TREATMENT TYPE 7	2.00	EACH
0275	02383	REMOVE & RESET GUARDRAIL	275.00	LF
0280	02483	CHANNEL LINING CLASS II	22.00	TON
0285	02484	CHANNEL LINING CLASS III	86.00	TON
0290	02562	TEMPORARY SIGNS	350.00	SQFT
0295	02602	FABRIC-GEOTEXTILE CLASS 1	382.00	SQYD
0300	02650	MAINTAIN & CONTROL TRAFFIC - (KY 2759)	1.00	LS
0305	03234	RAILROAD RAILS-DRILLED	1,170.00	LF
0310	03235	EXCAVATION AND BACKFILL	129.00	CUYD
0315	03236	CRIBBING	847.00	SQFT
0320	21415ND	EROSION CONTROL - (KY 2759)	1.00	LS
0325	21554EN	EXCAVATION	34.00	CUYD
0330	02569	DEMOBILIZATION	1.00	LS

### Knott County KY 1087

							•					
Site	Mile Point	Length	Cribbing Depth	Cribbing Excavation Depth Width	Depth to Rock	Number of Rows	Rail Spacing (FT)	Cribbing Amount (SQ FT)	Drilled RR Rails (FT)	Excav. & Backfill (CU YD)	Cribbing Drilled RR Excav. & Geotextile Fabric Amount Rails Backfill Class 1 (SQ FT) (FT) (CU YD) (SQ YD)	DGA (TONS)
<b>←</b>	1.740	38	12	4	26	₽	4	456	429	89	118	4
7	1.976	47	9	18			Site to be	repaired us	Site to be repaired using channel lining	lining		
3A	3.322	23	2	2			Site to be	repaired us	Site to be repaired using channel lining	lining		
3B		21	2	2			Site to be	repaired us	Site to be repaired using channel lining	lining		
4	4.436	24	6	12			Site to be	repaired us	Site to be repaired using channel lining	lining		
2	8.518	19	2	2			Site to be	repaired us	Site to be repaired using channel lining	lining		
9	15.277	56	<b>∞</b>	2			Site to be	repaired us	Site to be repaired using channel lining	lining		
7	18.429	31	7	4	56	1	4	217	351	33	62	c
8A	18.715	32	4	4	56	₽	4	128	351	19	43	3
8B		19	4	4	56	П	4	9/	234	12	25	2
တ	19.265	126	3	9			Site to be	repaired us	Site to be repaired using channel lining	lining		
10	19.678	41	7	4	26	1	4	287	* *	43	82	4
						-	TOTALS	1164	1365	175	330	16

\*\* Existing drilled rail steel site to be recribbed

# Knott County KY 1087 CHANNEL LINING

_														_
DGA (TON)		11	2	2	9	4	9				15		0	52
Class I Fabric (SQ YD)	illed RR rails	125	18	16	26	15	29	illed RR rails	illed RR rails	illed RR rails	126	illed RR rails	0	385
Excavation (CU YD)	Site to be repaired using drilled RR rails	47	3	2	24	2	4	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	21	Site to be repaired using drilled RR rails	0	103
Class III Channel Lining (TON)	ite to be repa	119	2	9	61	4	10	ite to be repa	ite to be repa	ite to be repa	54	ite to be repa	0	259
Class II Channel Lining (TON)	S	30	П	2	15	П	2	S	S	S	13	Sil	0	64
Width	4	18	2	2	12	2	2	4	4	4	9	4	•	TOTALS
Depth	12	9	2	2	6	2	∞	7	4	4	3	7		
Length	38	47	23	21	24	19	56	31	32	19	126	41		
Mile Point	1.740	1.976	3.322		4.436	8.518	15.277	18.429	18.715		19.265	19.678		
Site	_	2	3A	3B	4	2	9	7	8A	8B	6	10		

### **Knott County KY 1088**

Site	Mile Point	Length	Cribbing Depth	<b>Excavation</b> Width	Depth to Rock	Number of Rows	Rail Spacing (FT)	Cribbing Amount (SQ FT)		Excav. & Backfill (CU YD)	Drilled RR Excav. & Geotextile Fabric Rails Backfill Class 1 FT) (CU YD) (SQ YD)	DGA (TONS)
	7 058	83	7	_	90	,	_	1070	O D	160	77.0	×
- c	0,0,0	5 5	Ç c	† <	0 7 6	⊣ ←	† 5	201	000	2 5	777	o (
N	5.026	20	ת	4	97	7	4	504	285	۲)	13/	٥
⋖	5.262	96	10	4	56	T	4	096	975	143	256	10
3B		72	10	4	56	П	4	720	741	107	192	7
O		64	10	4	56	1	4	640	663	92	171	7
4	5.485	86	10	4	56	1	4	086	1014	146	261	10
10	6.787	41	∞	4	56	П	4	328	468	49	91	4
⋖	7.125	21	10	6			Site to be	repaired us	Site to be repaired using channel lining	lining		
В		20	9	4	56	1	4	120	234	18	36	2
O		12	4	9			Site to be	repaired us	Site to be repaired using channel lining	lining		
	7.243	87	9	10			Site to be	repaired us	Site to be repaired using channel lining	lining		
				1								

54

5,538

# Knott County KY 1088 CHANNEL LINING

_		_						T						ı
DGA (TON)								2		1	10	0		13
Class I Fabric (SQ YD)	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	44	Site to be repaired using drilled RR rails	13	155	0		212
Excavation (CU YD)	aired using d	18	aired using d	3	48	0		69						
Class III Channel Lining (TON)	ite to be rep	44	ite to be rep	9	122	0		172						
Class II Channel Lining (TON)	S	S	S	S	S	S	S	11	S	2	30	0		43
Width	4	4	4	4	4	4	4	6	4	9	10			TOTALS
Depth	13	6	10	10	10	10	∞	10	9	4	9		-	•
Length	83	26	96	72	64	86	41	21	20	12	87			
Mile Point	4.058	5.026	5.262			5.485	6.787	7.125			7.243			
Site	~	2	3A	3B	30	4	2	6A	6B	90	7			

### Knott County KY 1410

DGA (TONS)		7	7		14
Cribbing Drilled RR Excav. & Geotextile Fabric Amount Rails Backfill Class 1 (SQ FT) (FT) (CU YD) (SQ YD)		120	53		173
Excav. & Backfill (CU YD)		29	30		97
Drilled RR Rails (FT)	el lining	202	234		741
Cribbing Amount (SQ FT)	sing channe	450	200		650
Rail Spacing (FT)	Site to be repaired using channel lining	4	4		TOTALS
Number of Rows	Site to be	П	1	'	
Depth to Rock (FT)		56	56		
Excavation Width (FT)	4	4	4		
Cribbing Depth (FT)	6	10	10		
Length (FT)	72	45	20		
Mile Point	1.248	1.423	2.268		
Site	~	7	က		

## Knott County KY 1410 CHANNEL LINING

DGA (TON)	∞			0	8
Class I Fabric (SQ YD)	104	rilled RR rails	rilled RR rails	0	104
Excavation (CU YD)	24	site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	0	24
Class III Channel Lining (TON)	61	ite to be rep	ite to be rep	0	61
Class II Channel Lining (TON)	15	S	S	0	15
Width	4	4	4		FOTALS
					12
Depth	6	10	10		I <sub>E</sub>
Length Depth	72 9	45 10	20 10		I <sup>2</sup>
Mile Length Depth Point			20		I₽
Length		45	20		I₽

### Knott County KY 2759

								) ) !				
Site	Mile Point	Length	<b>Cribbing</b> <b>Depth</b>	<b>Excavation</b> Width	Depth to Rock	Number of Rows	Rail Spacing (FT)	Cribbing Amount (SQ FT)	Drilled RR Rails (FT)	Excav. & Backfill (CU YD)	Excav. & Geotextile Fabric Backfill Class 1 (CU YD) (SQ YD)	DGA (TONS)
_	0.205	21	9	4	56	1	4	126	273	19	37	2
2A	0.311	25	9	4	56	⊣	4	150	312	23	44	3
2B		88	9	7			Site to be	repaired us	Site to be repaired using channel lining	lining		
3A	0.596	16	9	4	56	T	4	96	* *	15	28	2
3B		35	9	4	56	$\vdash$	4	210	* *	32	62	4
3C		53	2	4	26	1	4	265	282	40	82	2
						,						
						_	TOTALS	847	1170	129	255	15

\*\* Existing drilled rail steel site to be recribbed

## Knott County KY 2759 CHANNEL LINING

DGA (TON)			10			
Class I Fabric (SQ YD)	illed RR rails	illed RR rails	127	illed RR rails	illed RR rails	illed RR rails
Excavation (CU YD)	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	34	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails	Site to be repaired using drilled RR rails
Class III Channel Lining (TON)	ite to be repa	ite to be repa	98	ite to be repa	ite to be repa	ite to be repa
Class II Channel Lining (TON)	S	S	22	S	S	S
Width	4	4	7	4	4	4
Depth	9	9	9	9	9	2
Length	21	25	88	16	35	53
Mile Point	0.205	0.311		0.596		
Site	_	2A	2B	3A	3B	30

98

22

### REMOVE & RESET GUARDRAIL KY 1087

LANE	BEGIN MILEPOINT	END MILEPOINT	LIN FEET	REMARKS
Right	1.734	1.745	62.5	
Left	18.424	18.433	50.0	
Right	18.707	18.722	87.5	

Total = 200

				5	UARDR	GUARDRAIL SUMMARY KY 1088	KY 108	m			
			<b>NEW GUARDRAIL</b>	RAIL				RE	REMOVE GUARDRAIL	DRAIL	
LANE	END TREAT.	BEGIN	END MILEPOINT	END TREAT.	LIN FEET	REMARKS	LANE	BEGIN	END MILEPOINT LIN FEET	LIN FEET	REMARKS
Right	Type 7	4.050	4.065	Type 7	87.5						
Right	Type 7	5.020	5.031	Type 7	62.5						
							Right	5.237	5.286	262.5	Remove & Reset
Right	Tie to Existing	5.489	5.489	Type 7	0.0	Replace Type 7	Right	5.480	5.489	50.0	Remove & Reset
Left	Term Sect 1	6.782	6.791	Type 7	50.0						
							Left	7.118	7.131	75.0	Remove & Reset
				TOTAL =	200.0				TOTAL =	387.5	
Type 1		0.000	0								
Type 2A		0.000	0								
Type 3		0.000	0								
Type 4		0.000	0								
Type 7		000'9	0								
Terminal		1.000	0								

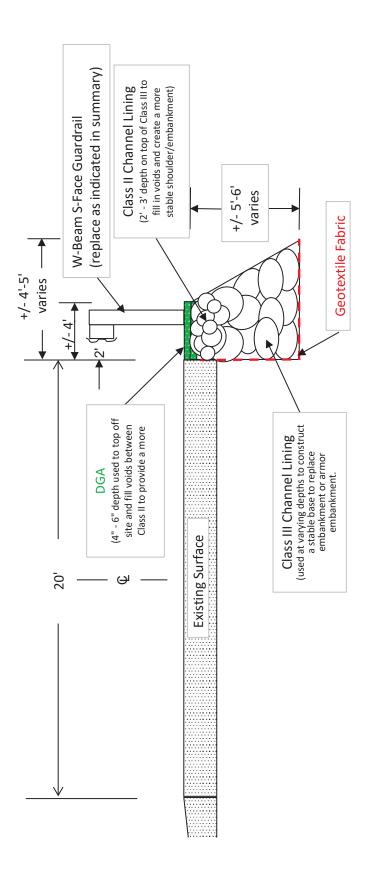
## **GUARDRAIL SUMMARY KY 1410**

			<b>NEW GUARDRAIL</b>	SAIL				RE	REMOVE GUARDRAIL	DRAIL	
LANE	END TREAT.	BEGIN	END MILEPOINT	END TREAT.	LIN FEET	REMARKS	LANE	BEGIN	END MILEPOINT LIN FEET	LIN FEET	REMARKS
Right	Type 7	1.418	1.427	Type 7	50.0						
Right	Type 7	2.266	2.269	Type 7	25.0						
Totals				TOTAL =	75.0				TOTAL =	0	
Type 1		0									
Type 2A		0									
Type 3		0									
Type 4		0									

### **GUARDRAI SUMMARY KY 2759**

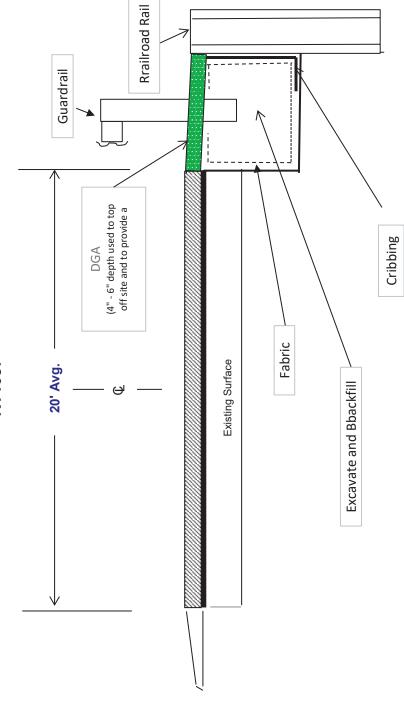
			<b>NEW GUARDRAIL</b>	SAIL				RE	REMOVE GUARDRAIL	DRAIL	
LANE	END TREAT.	BEGIN	END MILEPOINT	END TREAT.	LIN FEET	REMARKS	LANE	BEGIN	END MILEPOINT LIN FEET	LIN FEET	REMARKS
Right	Type 7	0.201	0.208	Type 7	37.5						
							Left	0.299	0.322	125.0	Remove & Reset
							Left	0.582	609.0	150.0	Remove & Reset
Totals				TOTAL =	37.5				TOTAL =	275.0	
Type 1		0									
Type 2A		0									
Type 3		0									
Type 4		0									
Type 7		2									
Terminal		0									

TYPICAL SECTION Channel Lining Repair KY 1087

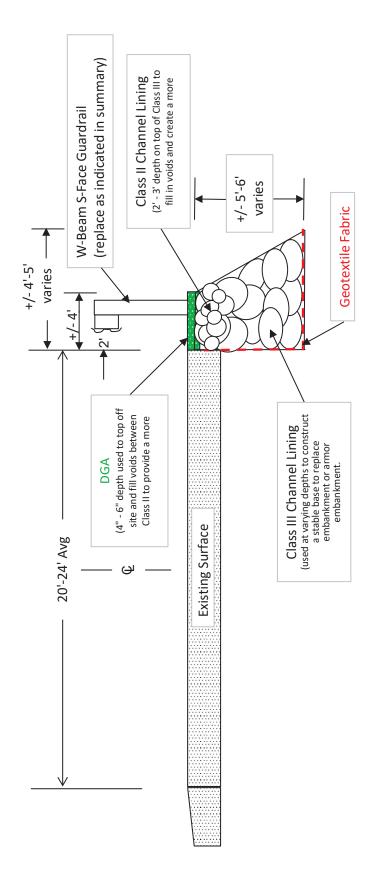


TYPICAL SECTION

### KNOTT COUNTY DRILLED RAILROAD DRAILS KY1087

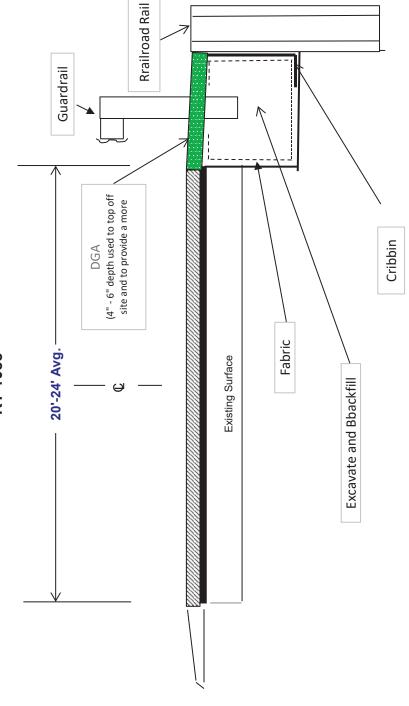


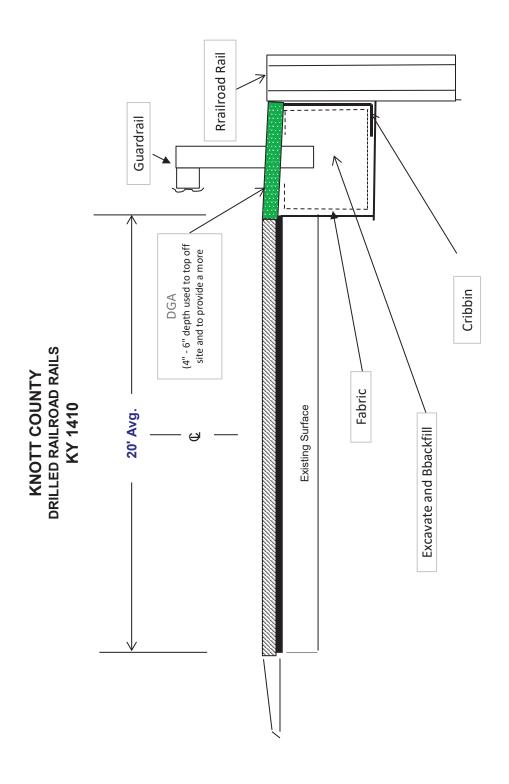
TYPICAL SECTION
Channel Lining Repair
KY 1088



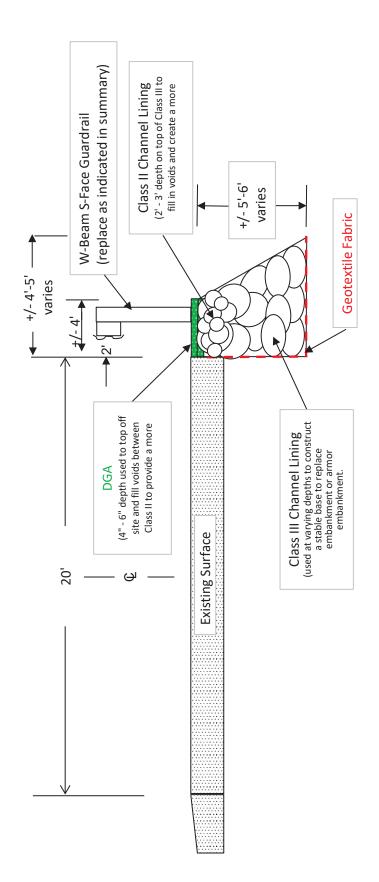
TYPICAL SECTION

KNOTT COUNTY DRILLRD RAILROAD RAILS KY 1088

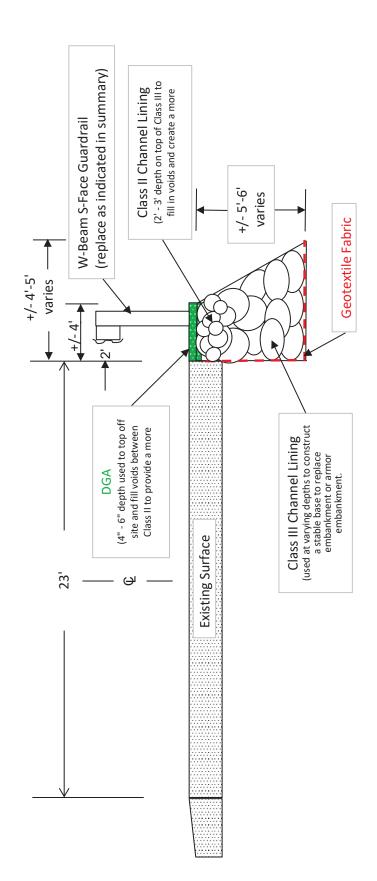




TYPICAL SECTION Channel Lining Repair KY 1410

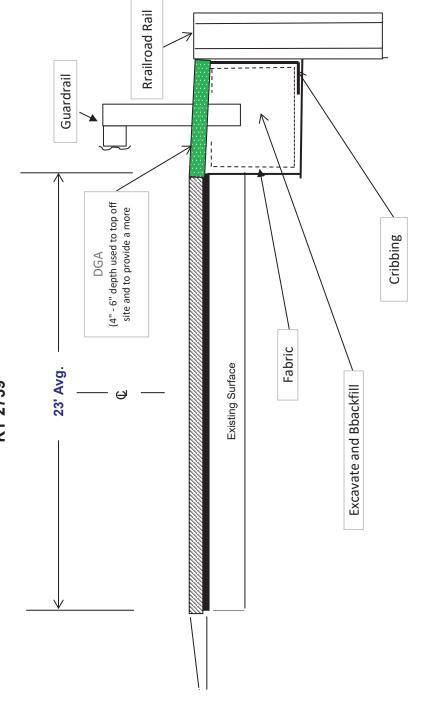


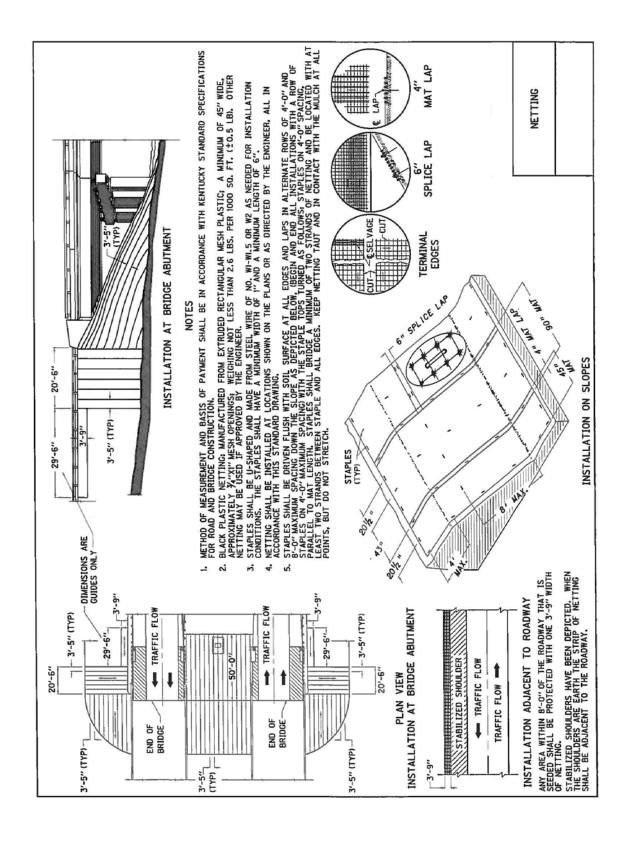
TYPICAL SECTION Channel Lining Repair KY 2759



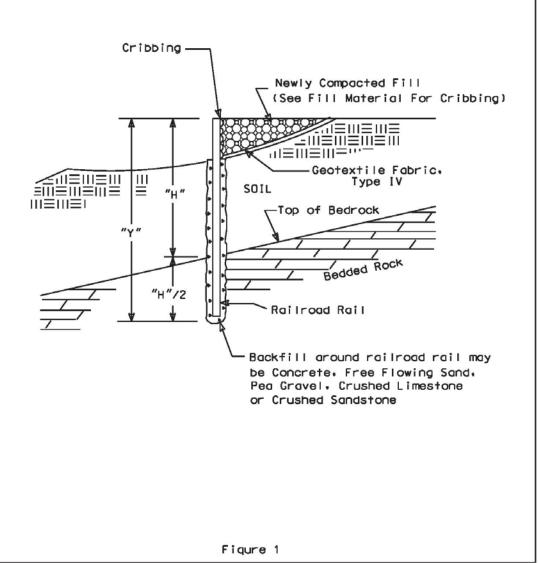
TYPICAL SECTION

KNOTT COUNTY DRILLED RAILROAD RAILS KY 2759



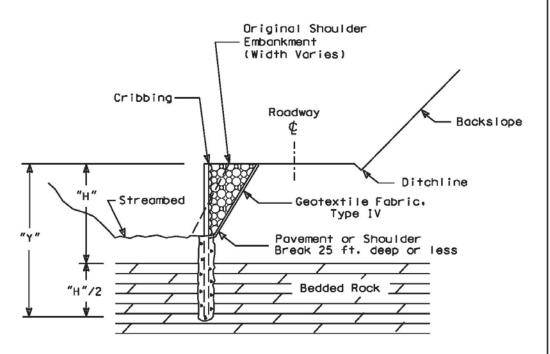


### TYPICAL SECTION DEPICTING INSTALLATION OF RECYCLED RAILROAD RAIL PLACED IN DRILLED SOCKET FOR LANDSLIDE CORRECTION



### 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

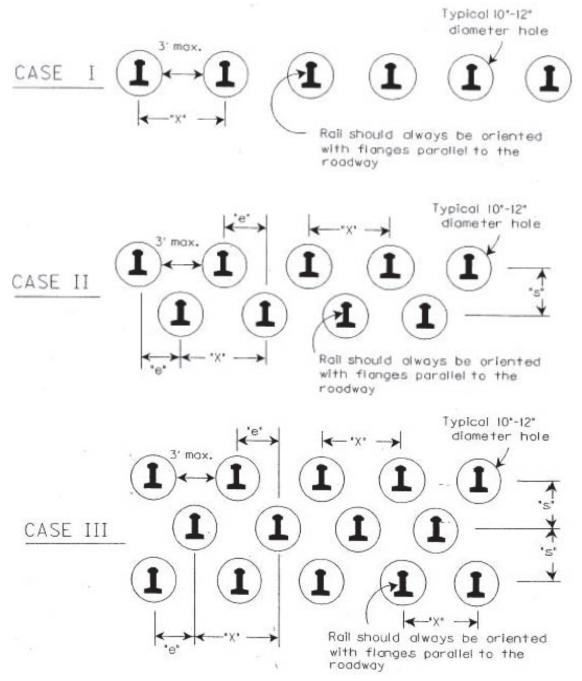


FIGURE 3

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

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

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

TABLE I

### IDENTIFICATION OF RAILROAD RAIL SIZES

Typically classified in units of Ibs-per-yard.

Examples:

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

Each rail has a classification stamped in web: à

Example:

≣ 1935 USA ILLINOIS HO R 112 25

Weight in Ibs/yd

### Contract ID: 252353 Page 69 of 80

### **Guardrail Delivery Verification Sheet CONTRACT ID:**

GUARDRAIL, END TREATMENT, TERMINAL SECTION, OR POST TYPE	<u>UNIT</u>	FIELD VERIFIED  AMOUNT	<u>DELIV</u> <u>AMO</u>	
GUARDRAIL-STEEL W BEAM	LF			
TEMPORARY GUARDRAIL	LF			
GUARDRAIL TERMINAL SECTION	EACH			
CRASH CUSHION TYPE IX-A	EACH			
GUARDRAIL END TREATMENT TYPE 1	EACH			
GUARDRAIL END TREATMENT TYPE 2A	EACH			
GUARDRAIL END TREATMENT TYPE 3	EACH			
GUARDRAIL END TREATMENT TYPE 4A	EACH			
GUARDRAIL END TREATMENT TYPE 7	EACH			
GUARDRAIL CONNECTOR TO BRIDGE END	EACH			
GUARDRAIL CONNECTOR TO CONC MED BARR	EACH			
GUARDRAIL CONNECT-SHLD BRIDGE PIER	EACH			
STEEL GUARDRAIL POST	EACH			
STEEL BLOCKOUTS	EACH			
Deliver removed guardrail, end treatments, terminal se facility, neatly stacked in accordance with section 719. County Maintenance facility representative must all sig	.03.07 of the gn off on this	standard specifications. The	Contractor, Engineer, and	
Resident Engineer (or representative)				
Contractor (or Representative)				
Knott County Maintence Reprsentative				

### PART II

### SPECIFICATIONS AND STANDARD DRAWINGS

### **STANDARD SPECIFICATIONS**

Any reference in the plans or proposal to previous editions of the Standard Specifications for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

### **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link: <a href="http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx">http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx</a>

### **2020 KENTUCKY STANDARD DRAWINGS**

TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-12
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-07
STEEL BEAM GUARDRAIL ("W"-BEAM)	RBR-001-13
GUARDRAIL COMPONENTS	
GUARDRAIL TERMINAL SECTIONS	
STEEL GUARDRAIL POSTS	
GUARDRAIL SYSTEM TRANSITION	
GUARDRAIL END TREATMENT TYPE 7	RBR-050-08
GUARDRAIL END TREATMENT TYPE 7 ALTERNATE ANCHOR	RBR-051-01
DELINEATORS FOR GUARDRAIL	
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
CHANNEL LINING CLASS II AND III	
MISCELLANEOUS STANDARDS	
ONE POINT PROCTER FAMILY OF CURVES	
TEMPORARY SILT FENCE	
SILT TRAP TYPE A	RDX-220-05
SILT TRAP TYPE B	RDX-225-01
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-05
SHOULDER CLOSURE	
PAVEMENT CONDITION WARNING SIGNS	TTD-125-03
CHANNELIZING DEVICES	SEPIA 033

### Contract ID: 252353 Page 73 of 80

### **PART III**

### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

### Contract ID: 252353 Page 74 of 80

### 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.

### 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.

- 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

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### **EXECUTIVE BRANCH CODE OF ETHICS**

The Executive Branch Code of Ethics created by Kentucky Revised Statutes (KRS) Chapter 11A, effective July 14, 1992, establishes the ethical standards that govern the conduct of all executive branch employees. The Executive Branch Code of Ethics, which states, in part:

### KRS 11A.040 (7) provides:

A present or former public servant listed in KRS 11A.010(9)(a) to (g) shall not, within one (1) year following termination of his or her office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of one (1) year, he or she personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his or her tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

### KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 105, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: March 11, 2025

### **Kentucky Equal Employment Opportunity Act of 1978**

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

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

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

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

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THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

### **FEDERAL MINIMUM WAGE**

**\$7.25** 

PEK 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.



### **PART IV**

### **BID ITEMS**

252353

### **PROPOSAL BID ITEMS**

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### 252353

Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
010	00001	DGA BASE	181.00	TON		\$	
020	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	39.00	EACH		\$	
030	02187	SITE PREPARATION (KY 1087)	1.00	EACH		\$	
040	02187	SITE PREPARATION (KY 1088)	1.00	EACH		\$	
050	02187	SITE PREPARATION (KY 1410)	1.00	EACH		\$	
060	02187	SITE PREPARATION (KY 2759)	1.00	EACH		\$	
070	02351	<b>GUARDRAIL-STEEL W BEAM-S FACE</b>	312.50	LF		\$	
080	02360	<b>GUARDRAIL TERMINAL SECTION NO 1</b>	1.00	EACH		\$	
090	02371	<b>GUARDRAIL END TREATMENT TYPE 7</b>	12.00	EACH		\$	
100	02383	REMOVE & RESET GUARDRAIL	862.50	LF		\$	
0110	02483	CHANNEL LINING CLASS II	144.00	TON		\$	
120	02484	CHANNEL LINING CLASS III	578.00	TON		\$	
130	02562	TEMPORARY SIGNS	1,400.00	SQFT		\$	
0140	02602	FABRIC-GEOTEXTILE CLASS 1	3,006.00	SQYD		\$	
0150	02650	MAINTAIN & CONTROL TRAFFIC (KY 1087)	1.00	LS		\$	
0160	02650	MAINTAIN & CONTROL TRAFFIC (KY 1088)	1.00	LS		\$	
0170	02650	MAINTAIN & CONTROL TRAFFIC (KY 1410)	1.00	LS		\$	
0180	02650	MAINTAIN & CONTROL TRAFFIC (KY 2759)	1.00	LS		\$	
190	03234	RAILROAD RAILS-DRILLED	8,814.00	LF		\$	
200	03235	<b>EXCAVATION AND BACKFILL</b>	1,194.00	CUYD		\$	
0210	03236	CRIBBING	7,992.00	SQFT		\$	
0220	21415ND	EROSION CONTROL (KY 1087)	1.00	LS		\$	
0230	21415ND	EROSION CONTROL (KY 1088)	1.00	LS		\$	
0240	21415ND	EROSION CONTROL (KY 1410)	1.00	LS		\$	
0250	21415ND	EROSION CONTROL (KY 2759)	1.00	LS		\$	
0260	21554EN	EXCAVATION	230.00	CUYD		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY		INIT	<b>UNIT PRIC</b>	FΡ	AMOUNT
0270	02569		DEMOBILIZATION	1.0	00	LS		\$	

KNOTT COUNTY 060GR25P083-FD51

252353

**PROPOSAL BID ITEMS** 

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