

CALL NO. 105
CONTRACT ID. 141068
NICHOLAS COUNTY
FED/STATE PROJECT NUMBER STP BRO 5215(014)
DESCRIPTION KY-32 OVER SCRUBGRASS CREEK
WORK TYPE BRIDGE WITH GRADE, DRAIN & SURFACE
PRIMARY COMPLETION DATE 160 WORKING DAYS

LETTING DATE: November 21,2014

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN STANDARD TIME November 21,2014. Bids will be publicly announced at 10:00 AM EASTERN STANDARD TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 4%

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

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- FEDERAL CONTRACT NOTES
- ASPHALT MIXTURE
- DGA BASE
- DGA BASE FOR SHOULDERS
- INCIDENTAL SURFACING
- FUEL AND ASPHALT PAY ADJUSTMENT
- COMPACTION OPTION A
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- BRIDGE DEMOLITION, RENOVATION
- ASBESTOS ABATEMENT REPORT
- RAILROAD NOTES
- RIGHT OF WAY NOTES
- UTILITY CLEARANCE
- WATERLINE SPECIFICATIONS
- DEPT OF ARMY NATIONWIDE PERMIT
- WATER QUALITY CERTIFICATION
- KPDES STORM WATER PERMIT, BMP AND NOI

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- SPECIFICATIONS REFERENCE
- SUPPLEMENTAL SPECIFICATION
- TURF REINFORCEMENT MAT
- EMBANKMENT AT BRIDGE END BENT STRUCTURES

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- FEDERAL-AID CONSTRUCTION CONTRACTS FHWA 1273
- NONDISCRIMINATION OF EMPLOYEES
- EXECUTIVE BRANCH CODE OF ETHICS
- PROJECT WAGE RATES LOCALITY 3 / FEDERAL & STATE
- NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO NICHOLAS

PART IV INSURANCE

PART V BID ITEMS

PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 09

CONTRACT ID - 141068 STP BRO 5215(014) COUNTY - NICHOLAS

PCN - DE09100321468 STP BRO 5215(014)

KY-32 OVER SCRUBGRASS CREEK REPLACE BRIDGE ON KY-32 (MP 13.896)OVER TTI RR AND SCRUBGRASS CREEK 4.2 MILE NORTHEAST OF JCT KY-1455.BRIDGE WITH GRADE, DRAIN & SURFACE SYP NO. 09-01074.00. GEOGRAPHIC COORDINATES LATITUDE 38:23:32.00 LONGITUDE 83:57:47.00

COMPLETION DATE(S):

160 WORKING DAYS

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

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 is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

SPECIAL NOTE FOR PIPE INSPECTION

Contrary to Section 701.03.08 of the 2012 Standard Specifications for Road and Bridge Construction and Kentucky Method 64-114, certification by the Kentucky Transportation Center for prequalified Contractors to perform laser/video inspection is not required on this contract. It will continue to be a requirement for the Contractor performing any laser/video pipe inspection to be prequalified for this specialized item with the Kentucky Transportation Cabinet-Division of Construction Procurement.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of

this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

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

10/29/12



Steven L. Beshear Governor Lori H. Flanery Secretary

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785

OFFICE OF THE SECRETARY

SECRETARY'S ORDER 11-004

FINANCE AND ADMINISTRATION CABINET

Vendor Document Disclosure

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

NOW, THEREFORE, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

FEDERAL CONTRACT NOTES

The Kentucky Department of Highways, in accordance with the Regulations of the United States Department of Transportation 23 CFR 635.112 (h), hereby notifies all bidders that failure by a bidder to comply with all applicable sections of the current Kentucky Standard Specifications, including, but not limited to the following, may result in a bid not being considered responsive and thus not eligible to be considered for award:

102.02 Current Capacity Rating 102.10 Delivery of Proposals

102.08 Irregular Proposals 102.14 Disqualification of Bidders

102.09 Proposal Guaranty

CIVIL RIGHTS ACT OF 1964

The Kentucky Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Federal Department of Transportation (49 C.F.R., Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin.

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SECOND TIER SUBCONTRACTS

Second Tier subcontracts on federally assisted projects shall be permitted. However, in the case of DBE's, second tier subcontracts will only be permitted where the other subcontractor is also a DBE. All second tier subcontracts shall have the consent of both the Contractor and the Engineer.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

It is the policy of the Kentucky Transportation Cabinet ("the Cabinet") that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The contractor will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the contractor to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

DBE GOAL

The Disadvantaged Business Enterprise (DBE) goal established for this contract, as listed on the front page of the proposal, is the percentage of the total value of the contract.

The contractor shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in a least the percent of the contract as set forth above as goals for this contract.

OBLIGATION OF CONTRACTORS

Each contractor prequalified to perform work on Cabinet projects shall designate and make known to the Cabinet a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

If a formal goal has not been designated for the contract, all contractors are encouraged to consider DBEs for subcontract work as well as for the supply of material and services needed to perform this work.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

CERTIFICATION OF CONTRACT GOAL

Contractors shall include the following certification in bids for projects for which a DBE goal has been established. BIDS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

"The bidder certifies that it has secured participation by Disadvantaged Business Enterprises ("DBE") in the amount of _____ percent of the total value of this contract and that the DBE participation is in compliance with the requirements of 49 CFR 26 and the policies of the Kentucky Transportation Cabinet pertaining to the DBE Program."

The certification statement is located in the electronic bid file. All contractors must certify their DBE participation on that page. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted.

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/Subcontractor Request*, form TC 63-35 DBE, within 10 days of the letting. This is necessary before the Awards Committee will review and make a recommendation. The project will not be considered for award prior to submission and approval of the apparent low bidder's DBE Plan/Subcontractor Request.

The DBE Participation Plan shall include the following:

- Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
- Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;
- The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows; a) If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to

- the public, maintain an inventory and own and operate distribution equipment; and
- The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.
- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, the DBE's certificate of insurance, and an affidavit for bidders, offerors, and contractors from the DBE to the Division of Construction Procurement. The affidavit can be found on the Construction Procurement website. If the DBE is a supplier of materials for the project, a signed purchase order and an affidavit for bidders, offerors, and contractors must be submitted to the Division of Construction Procurement.

Changes to DBE Participation Plans must be approved by the Cabinet. The Cabinet may consider extenuating circumstances including, but not limited to, changes in the nature or scope of the project, the inability or unwillingness of a DBE to perform the work in accordance with the bid, and/or other circumstances beyond the control of the prime contractor.

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the

office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Cabinet considers in judging good faith efforts. This documentation may include written subcontractors' quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The Good Faith Effort Package shall include, but may not be limited to information showing evidence of the following:

- Whether the bidder attended any pre-bid meetings that were scheduled by the Cabinet to inform DBEs of subcontracting opportunities;
- Whether the bidder provided solicitations through all reasonable and available means;
- Whether the bidder provided written notice to all DBEs listed in the DBE directory at the time of the letting who are prequalified in the areas of work that the bidder will be subcontracting;
- Whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
- Whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise perform these work items with its own forces;
- Whether the bidder provided interested DBEs with adequate and timely information about the plans, specifications, and requirements of the contract;
- Whether the bidder negotiated in good faith with interested DBEs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached;
- Whether quotations were received from interested DBE firms but were rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy DBE goals;
- Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be subcontracted includes potential DBE participation;
- Whether the bidder made any efforts and/or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the

work requirements of the bid proposal; and

Any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include DBE participation.

FAILURE TO MEET GOOD FAITH REQUIREMENT

Where the apparent lowest responsive bidder fails to submit sufficient participation by DBE firms to meet the contract goal and upon a determination by the Good Faith Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the bidder will be offered the opportunity to meet in person for administrative reconsideration. The bidder will be notified of the Committee's decision within 24 hours of its decision. The bidder will have 24 hours to request reconsideration of the Committee's decision. The reconsideration meeting will be held within two days of the receipt of a request by the bidder for reconsideration.

The request for reconsideration will be heard by the Office of the Secretary. The bidder will have the opportunity to present written documentation or argument concerning the issue of whether it met the goal or made an adequate good faith effort. The bidder will receive a written decision on the reconsideration explaining the basis for the finding that the bidder did or did not meet the goal or made adequate Good Faith efforts to do so.

The result of the reconsideration process is not administratively appealable to the Cabinet or to the United States Department of Transportation.

The Cabinet reserves the right to award the contract to the next lowest responsive bidder or to rebid the contract in the event that the contract is not awarded to the low bidder as the result of a failure to meet the good faith requirement.

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

Failure by the prime contractor to fulfill the DBE requirements of a project under contract or to demonstrate good faith efforts to meet the goal constitutes a breach of contract. When this occurs, the Cabinet will hold the prime contractor accountable, as would be the case with all other contract provisions. Therefore, the contractor's failure to carry our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

- Disallow credit toward the DBE goal;
- Withholding progress payments;
- Withholding payment to the prime in an amount equal to the unmet portion of the contract goal; and/or
- Termination of the contract.

PROMPT PAYMENT

The prime contractor will be required to pay the DBE within seven (7) working days after he or she has received payment from the Kentucky Transportation Cabinet for work performed or materials furnished.

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to submit certified reports on monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These reports must be submitted within 14 days of payment made to the DBE contractor.

Payment information that needs to be reported includes date the payment is sent to the DBE, check number, Contract ID, amount of payment and the check date. Before Final Payment is made on this contract, the Prime Contractor will certify that all payments were made to the DBE subcontractor and/or DBE suppliers.

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at: http://transportation.ky.gov/Construction/Pages/Subcontracts.aspx

The prime contractor should notify the KYTC Office of Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact is Melvin Bynes and the telephone number is (502) 564-3601.

Photocopied payments and completed form to be submitted to: Office of Civil Rights and Small Business Development 6 Floor West 200 Mero Street Frankfort, KY 40622

DEFAULT OR DECERTIFICATION OF THE DBE

If the DBE subcontractor or supplier is decertified or defaults in the performance of its work, and the overall goal cannot be credited for the uncompleted work, the prime contractor may utilize a substitute DBE or elect to fulfill the DBE goal with another DBE on a different work item. If after exerting good faith effort in accordance with the Cabinet's Good Faith Effort policies and procedures, the prime contractor is unable to replace the DBE, then the unmet portion of the goal may be waived at the discretion of the Cabinet.

06/20/2014

NICHOLAS COUNTY STP BRO 5215(014)

Contract ID: 141068 Page 17 of 171

ASPHALT MIXTURE

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

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

DGA BASE FOR SHOULDERS

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

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

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

OPTION A

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

SPECIAL NOTE

For Tree Removal

Nicholas County KY 32 Bridge Replacement over Scrubgrass Creek & TTI RR Item No. 9-1074.00

All trees to be removed during construction shall be fallen between October 15, 2014 and March 31, 2015, inclusive.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone: (502) 564-7250.

SPECIAL NOTE FOR GUARDRAIL END TREATMENT TYPE 1

Contrary to KYTC Standard Drawing RBR-020-05 the guardrail end treatment ET-Plus manufactured by Trinity Industries will not be permitted as an option for bid item "Guardrail End Treatment Type 1".

Special Note for Bridge Demolition, Renovation and Asbestos Abatement

If the project includes any bridge demolition or renovation, the successful bidder is required to notify Kentucky Division for Air Quality (KDAQ) via filing of form (DEP 7036) a minimum of 10 days prior to commencement of any bridge demolition or renovation work.

Any available information regarding possible asbestos containing materials (ACM) on or within bridges to be affected by the project has been included in the bid documents. These are to be included with the Contractor's notification filed with the KDAQ. If not included in the bid documents, the Department will provide that information to the successful bidder for inclusion in the KDAQ notice as soon as possible. If there are no documents stating otherwise, the bidders should assume there are no asbestos containing materials that will in any way affect the work.

SPECIAL NOTE

KY Division of Air Quality Bridge Demolition Notification

Nicholas County Replace Bridge on KY 32 over Scrubgrass Creek & TTI RR Item No. 9-1074.00

Please be advised that it will be the responsibility of the selected roadway contractor to submit the 10-Day Notice of Intent for Demolition to the Kentucky Division of Air Quality. The attached Asbestos Inspection Report should accompany the submittal.

If there are any questions regarding this note, please contact David Waldner, Director, Division of Environmental Analysis, TCOB, 200 Mero Street, Frankfort, KY 40622, Phone: (502) 564-7250.



Steven L. Beshear Governor

Frankfort, Kentucky 40622 www.transportation.ky.gov/

Michael W. Hancock, P.E. Secretary

Memorandum

To:

Karen Mynhier

CC:

Tony Vinegar

From: O'Dail Lawson

Environmental Scientist II

Division of Environmental Analysis

Date: 9/16/2014

Re:

Asbestos Inspection Report for Nicholas 9-1074

This report is prepared to accompany the 10-Day NOI for Demolition to the Division of Air Quality. Please include all pages with submittal.

Project and Structure Information

Project # Nicholas 9-1074

Bridge # 091B00008N

<u>Description</u>: The concrete samples collected were negative for asbestos. The joint cushion material was point counted below 1% ACM. No abatement necessary.

Inspection Date: September 4, 2014

Results

The results revealed that there is no ACM abatement required at this time.



An Equal Opportunity Employer M/F/D

MRS, INC.

MRS, Inc. Analytical Laboratory Division

332 West Broadway, Suite 613 Louisville, Kentucky 40202

(502) 495-1212 Fax: (502) 491-7111

BULK SAMPLE ASBESTOS ANALYSIS

Analysis N#	2409108 A	Address:	Nicholas County	
Client Name:	күтс		Item # 9 -1074 091 B00008N	
Sampled By:	O'Dail Lawson			

EL				%	FIBROUS	ASBESTOS		% N	ON-ASBES	TOS FIBE	RS
Number	Color	Layered	Fibrous	Chrysotile	Amosite	crocidolite	Others	Cellulose	Fiberglass	Syn. Fiber	Other/Mat.
N-1	Gray	Yes	No				None				100%
N-2	Gray	Yes	No				None				100%
N-3	Gray	Yes	No				None				100%
N-4	Gray	Yes	No				None				100%
N-5	Black	Yes	No	3%	(To Be	Point Cou	inted)	22%			75%
N-6	Black	Yes	No				None				100%
N-7	Gray	Yes	No				None				100%
				-					-		
									*		
					_						
		<u> </u>									
									1		-
				1							

Methodolo	gy : EP	A Method 600/R-93-116	
Date Analy:	zed :		
Analyst	:	Winterford Mensah	Reviewed By: Turney
			Signature

The test relates only to the items tested. This report does not represent endorsement by NVLAP or any agency of the U.S Government, Partial Reproduction of any part of this report is strictly prohibited. Samples shall be retained for (30) days.

AIHA # 102459

AJHA #1 02459

MRS, INC.

MRS, Inc. Analytical Laboratory Division

332 West Broadway, Suite 613 Louisville, Kentucky 40202

(502) 495-1212 Fax: (502) 491-7111

Client:	KY Transportation Cabinet	Project No:	2109108 B
Address:	200 Mero Street	Sample ID:	N - 5
	Frankfort, KY	Sampled:	4-Sep-14
	40601	Received:	9-Sep-14
		Analyzed:	10-Sep-14 - Point Count -
	Attention O'Dail Lawson		

	Bulk Sample Analysis	
Sampled by:	O'Dail Lawson	
Facility/Location:	Nicholas County / 9 - 1074 091 B00008N	
Field Description:	Joint Cushion Paper	
Laboratory Descriptio	n:	
	Black Material	
; [
Asbestos Materials:		
	Chrysotile = 2/400 = 0.50 % (< 1 %) Samp	ple Is Negative
Non-asbestos Fibrous	Materials & Matrix Materials:	
	Cellulose	6.25 %
	Binders	93.25 %
	·	-
	was analyzed for asbestos content follow	
	/116). The test relates only to the items to	-
represent	endorsement by NVLAP or any agency of	the U.S. Government.
Analyst: Wint	terford Mensah Reviewed By:	
Analystvilli	neviewed by.	Signature Signature

AIHA #102459

1

AIHA #102459

/

AIHA #102459

Page 1

KYTC COC.xlsx

Chain of Custody Record Kentucky Transportation Cabinet

200 Mero Street, 5th Floor West Frankfort, Kentucky 40622 (502) 564-7250 fax (502) 564-5655

KENTUCKY IRANSPORTA CABINET

	Section 11 City	1.112.24		TOWNED A NICHARY	V.V. TID A NICHONDET A CHICAN C'A DINICH						
	U Dali Lawson O dali, lawson w ky, you	Cilent information	ormanon	NI KANSLOKI	ATION CABINET						
	KYTC	Results Code:	ode:	1 04	WOOD ALL DOOD ON		•				
Address:	200 Mero Street	ND = Non	ND = None Detected	5	i nonnoni						
	Frankfort KY	FTD=FI	ter Tamperi	FTD = Filter Tampering or Damaged							
Phone:	502-782-5020 Fax: $502-564-5655 N/A = Not Applicable$	N/A = No	Applicable	΄ Φ							
PO#:			: !		Sumplers (signature):	::					
Project or	Project or Subject Reference	9 . CTL								10	
		110									П
		Coll	Collected		139		Matrix	Color	Cont.		
Sample ID	Sample ID Sample Description	Date	Time		Analysis Requested		•		Туре	Preservative	
12	Approach Curb	h-h-6	51:21	Asberry bulk	N/B sibe	of Strucm	Consta Gran	Gran		N/A	
なる	Span Curb	_									
N-3	Win War						7				
7-2	Tolar Commens						Neapring				
S-5	John Cushing PApor						Taviz	Bhch			
2-5 B	Paine Chips	-}	>	7			DAINT	>			
7	Aburment Consult	>)	->	N		Conda	Soca			
								, ,		i	- 1
Relinquished By:	ıd By:		Date/Time:								
Received By:	" History Messel	_0	Date/Fime;	9E% 1							
Relinquished By:	d By:		Date/Fime:								
Received at Lah By:	Lub By:		Date/Time:								
											7





SPECIAL NOTES FOR PROTECTION OF RAILROAD INTEREST

Transkentucky Transportation Railroad, Inc.

I. AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER:

- A. The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks.
- B. The authorized representative of the State, hereinafter referred to as the Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.

II. NOTICE OF STARTING WORK:

- A. The Contractor shall not commence any work on Railroad rights of way until he has complied with the following conditions:
 - 1. Given the Railroad written notice, with copy to the Engineer who has been designated to be in charge of the work, at least ten (10) days in advance of the date he proposes to begin work on Railroad rights of way. If flagging service is required, such notice shall be submitted at least thirty (30) days in advance of the date scheduled to commence work. The Railroad's Contact information is on the Summary Sheet.
 - 2. Obtain written authorization from the Railroad to begin work on Railroad rights of way, such authorization to include an outline of specific conditions with which he must comply.
 - 3. Obtain written approval from the Railroad of Railroad Protective Insurance Liability coverage as required by paragraph 14 herein.
 - 4. Furnish a schedule for all work within the Railroad rights of way as required by paragraph 7, B, 1.
- B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who

are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.

III. INTERFERENCE WITH RAILROAD OPERATIONS:

- A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights of way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service (watchman) shall be deferred by the Contractor until the flagging protection required by the Railroad is available at the job site.
- B. Whenever work within Railroad rights of way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.
- C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Engineer, such provisions are insufficient, either may require or provide such provisions, as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost and/or time to the Railroad or the State.

IV. TRACK CLEARANCES

- A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. However, before undertaking any work within Railroad rights of way, or before placing any obstruction over any track, the Contractor shall:
 - 1. Notify the Railroad's representative <u>at least 72 hours in advance</u> of the work.
 - 2. Receive assurance from the Railroad's representative that arrangements have been made for flagging service as necessary.
 - 3. Receive permission from the Railroad's representative to proceed with the work.
 - 4. Ascertain that the Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.

V. CONSTRUCTION PROCEDURES

A. General:

- 1. Construction work on Railroad property shall be:
 - a) Subject to the inspection and approval of the Railroad.
 - b) In accord with the Railroad's written outline of specific conditions.
 - c) In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.
 - d) In accord with all Special Notes, Summaries, and Addendums.
- 2. The Railroad requires a submission of construction procedure that meets the requirements of these Special Notes and attachments. The Railroad's submittal review period is thirty (30) days. Resubmissions will be reviewed within 2 weeks.

B. Excavation and shoring:

- 1. The sub grade of an operated track shall be <u>maintained with edge of berm</u> at least 10'0" from centerline of track and not more than 24 inches <u>below top of rail</u>. Contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained.
- 2. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles, or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The procedure for doing such work, including need of and plans for shoring, shall first be submitted with the stamp of an Engineer in the State of Kentucky and approved by the Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.
- 3. The Contractor shall submit a detailed procedure for the installing of sheeting/shoring adjacent to Railroad Tracks.
- 4. Shoring protection shall be provided when excavating adjacent to an active track or railroad facility or as determined by the Railroad. Shoring will be provided in accordance with AREMA *Manual for Railway Engineering* Chapter 8, part 28; except as noted below.

- 5. Shoring may not be required if all of the following conditions are satisfied:
 - a. Excavation does not encroach upon a 1½ horizontal: 1 vertical theoretical slope line starting 1'-6" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone).
 - b. Track is on level ground or in a cut section and on stable soil.
 - c. Excavation does not adversely impact the stability of a Railroad facility (i.e. signal bungalow, drainage facility, undergrade bridge, building, etc.)
 - d. Shoring is not required by any governing construction code.
- 6. When the track is on an embankment, excavating the toe of the embankment without shoring may affect the stability of the embankment. Therefore, excavation of the embankment toe without shoring will not be permitted.
- 7. Trench boxes are prohibited for use on Railroad property within the theoretical live load influence zone.
- 8. The required protection is the cofferdam type that completely encloses the excavation. Where dictated by conditions, partial cofferdams with opened sides away from the track may be used. Cofferdams shall be constructed using steel piling, or when approved by the engineer, steel soldier piles with timber lagging. Wales and struts shall be provided and designed as needed. The following shall be considered when designing cofferdams:
 - a. Shoring shall be designed to resist a vertical lice load surcharge of 1,880 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, 8'6" wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in AREMA *Manual for Railway Engineering*, Chapter 8, Part 20.
 - b. Allowable stresses in materials shall be in accordance with AREMA *Manual for Railway Engineering*, Chapter 7, 8, and 15.
 - c. A construction procedure for temporary shoring shall be shown on the drawing.
 - d. All shoring systems on or adjacent to Railroad right-of-way shall be equipped with railings or other approved fall protection.

- e. A minimum horizontal clearance of 10'-0" from centerline of the track to face of nearest point of shoring shall be maintained provided a 12'-0" roadbed is maintained with a temporary walkway and handrail system.
- 9. The Contractor shall submit the following drawings and calculations (all shall be signed/sealed by a Professional Engineer) for the Railroad's review and approval.
 - a. Six (6) sets of detailed drawings of the shoring systems showing sizes of all structural members, details of connections, and distances from centerline of track to face of shoring. Drawing shall show a section showing height of shoring and track elevation in relation to bottom of excavation.
 - b. Six (6) sets of calculations of the shoring design. The drawings and calculations shall be prepared by a Licensed Professional Engineer and shall bear the Engineer's seal and signature. Shoring plans shall be approved by the Railroad's construction engineering and inspection representative.
 - c. For sheeting and shoring within 18'-0" of the centerline of the track, the live load influence zone, and in sloes, the Contractor shall use interlocked steel sheeting (sheet pile).
 - d. Sheet pile installed in slopes or within 18'-0" of the centerline shall <u>not</u> be removed.
 - e. Sheet pile shall be cut off a minimum of 3'-0" below the finished grade, ditch line invert, or as directed by the Engineer. The ground shall be backfilled and compacted immediately after sheet pile is cut off.
 - f. A procedure for cutting off the sheet pile and restoring the embankment shall be submitted to the Engineer for review and acceptance.

C. Demolition Procedure:

- 1. Railroad tracks and other railroad property, including signals, structures, and other facilities, must be protected from damage during the procedure. No crane or equipment may be set on the rails or track structure and no material may be dropped on Railroad property.
- 2. The Contractor is required to submit a plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.
- 3. Crane rating sheets showing cranes to be adequate for <u>150% of the actual</u> <u>weight of the pick.</u> A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.
- 4. Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. If possible, field measurements shall be taken with a Railroad representative present.
- 5. A data sheet must be submitted listing the types, size, and arrangements of all rigging and connection equipment. The safe working load capacity of all rigging and connecting equipment shall be 150% above the calculated weight of the pick.
- 6. A complete procedure is to be submitted, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.
- 7. All erection or demolition plans, procedures, data sheets, etc. submitted must be prepared, signed and sealed by a Registered Professional Engineer.
- 8. The Railroad's representative must be present at the site during the entire demolition and erection procedure period.
- 9. All procedures, plans and calculations shall first be approved by the Engineer and the Railroad Engineer, but such approval does not relieve the Contractor from liability.
- 10. Loads shall not be supported while any trains are passing if that piece of equipment has the capacity to <u>foul a 50' envelope</u>.

- 11. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
- 12. Existing, obsolete, bridge piers shall be removed to a minimum of 3'-0" below the finished grade, final ditch line invert, or as directed by the Engineer.
- 13. A minimum quantity of 25 tons of Railroad approved track ballast may be required to be furnished and stockpiled on site by the Contractor, or as directed by the Engineer.
- 14. On-track or ground debris shields such as crane mats are prohibited.
- 15. Overhead Demolition Debris Shield Shall be installed prior to the demolition of a bridge deck or other relevant portions of the superstructure.
 - a. The demolition debris shield shall be erected from the underside of the bridge over the track area to catch all falling debris.
 - b. The Contractor shall include the demolition debris shield installation/removal means and methods as part of the proposed Controlled Demolition procedure submission.
 - c. The demolition debris shield shall provide 23'-0" minimum vertical clearance if the existing clearance is less than 23'-0" as approved by the Railroad. Horizontal clearance to the centerline of the track should not be reduced unless approved by the Engineer.
 - d. The vertical clearance ATR (above top of rail) is measured from the top of rail to the lowest point on the overhead shielding system measured within a distance of 6'-0" out from each side of the track centerline.
 - e. The demolition debris shield design and supporting calculations, all signed/sealed by a Professional Engineer, shall be submitted for review and acceptance.
 - f. The demolition debris shield shall have a **minimum** design load of 50 pounds per square foot **plus** the weight of the equipment, debris, personnel, and other loads to be carried.
 - g. The Contractor shall include the proposed bridge deck removal procedure in its demolition means and methods and shall verify that the size and quantity of the demolition debris generated by the procedure does not exceed the shield design loads.

- h. The contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Engineer.
- 16. Vertical Demolition Shield This type of shield may be required for substructure removals in close proximity to track and other facilities, as determined by the Engineer.
 - a. Prior to commencing the demolition activity, the Contractor shall install a ballast protection system consisting of geotextile to keep the railroad ballast from becoming fouled with construction or demolition debris and fines. The geotextile ballast protection system shall be installed and maintained by the Contractor for the project duration in accordance with the attached plan, or with additional measures as directed by the Engineer.
 - b. The Contractor shall submit detailed plans, with detailed calculations, prepared and submitted by a Professional Engineer of the protection shield and ballast protection systems for approval prior to the start of demolition.
 - c. Blasting will not be permitted to demolish a structure over or within Railroad right-of-way.
- 17. The Controlled Demolition procedure must be approved by the Engineer prior to undertaking work on the project.
- 18. The Contractor shall provide timely communication to the Engineer when scheduling the demolition related work so that the Engineer may be present during the entire demolition procedure.
- 19. At any time during demolition activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

D. <u>Erection Procedure:</u>

The Contractor shall submit a detailed procedure for performing erection on/about Railroad property.

1. The Contractor shall submit six (6) copies of the detailed procedure for erection of the proposed structures over or adjacent to the tracks or right-of-way. This procedure shall include a plan showing the locations of cranes, horizontally and vertically, operating radii, with staging locations shown, including beam placement on ground or truck unloading staging plan. Plan should also include the location of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions should be shown. No crane or equipment may be set on the rails or track structure.

2. Also included with this submittal the following information:

- a. As-Built Bridge Seat Elevations All as-built bridge seats and top of rail elevations shall be furnished to the Engineer for review and verification at least 30 days in advance of construction or erection, to ensure that minimum vertical clearances as approved in the plans will be achieved.
- b. Computations showing weight of picks must be submitted. Computations shall be made from plans of the structure beams being erected and those plans or sections thereof shall also be included in the submittal; the weight shall include the weight of concrete or other materials including lifting rigging.
- c. Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted. Safety factors that may have been "built in" to the crane charts are not to be considered when determining the 150% Factor of Safety.
- d. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment. All specific components proposed for use shall be clearly identified and highlighted in the submitted documents. The safe working load capacity of the connecting equipment shall be 150% above the calculated weight of the pick.
- e. A complete written procedure is to be included that describes the sequence of events, indicating the order of lifts and any repositioning or rehitching of the crane or cranes.

- f. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical sub tasks (i.e., performing aerial splices, installing temporary bracing, etc.) shall be furnished so that the potential impact(s) to Railroad operations may be assessed and eliminated or minimized.
- g. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
- h. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail will be required to be installed in a track where a temporary bent is located within twelve (12) feet from the centerline of that track.
- 3. The proposed Erection procedure must be approved by the Engineer prior to undertaking work on the project.
- 4. The Contractor shall provide timely communication to the Engineer when scheduling the erection related work so that the Engineer may be present during the entire erection procedure.
- 5. At any time during construction activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

E. Blasting:

- 1. The Contractor shall obtain advance approval of the Railroad Engineer and the Engineer for use of explosive on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:
 - a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.

- b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- c) No blasting shall be done without the presence of an authorized representative of the Railroad. At least 10 days advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B above) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.
- d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.
- e) Explosives shall not be stored on Railroad Property.
- f) At any time during the blasting activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions, or other circumstance which may create a potential hazard to rail operations or Railroad facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. The Railroad shall not be responsible for any additional costs or time claims associated with such revisions.

2. The Railroad representative will:

- a) Determine the approximate location of trains and advise the Contractor the approximate amount of time available for the blasting operation and clean-up.
- b) Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these Special Notes.

F. Track Monitoring:

The Contractor shall submit for Railroad review and approval, a detailed track monitoring program to detect both horizontal and vertical movement of the track and roadbed, a minimum of 30-days in advance of start of work.

- 1. For the installation of temporary or permanent shoring systems, including but not limited to soldier piles and lagging, and interlocked steel sheeting on or adjacent to the Railroad's right-of-way, the contractor may be required to submit a detailed track monitoring program for the Railroad's approval prior to performing any work near the Railroad's right-of-way.
- 2. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. The Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.
- 3. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Engineer for analysis.
- 4. If any movement has occurred as determined by the Engineer, the Railroad will be immediately notified. The Railroad, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, have the excavated area immediately backfilled and/or determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including monitoring of corrective action of the contractor will be at project expense.

G. Maintenance of Railroad Facilities:

- 1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) berm or temporary ditches; (3) sediment basin; (4) aggregate checks; and (5) channel lining. The Contractor will promptly repair eroded areas with Railroad rights of way and to repair any other damage to the property of the Railroad or its tenants at the Contractor's expense.
- 2. All maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.
- 3. A work train may be required to clean out ditches and possibly load material deposited on the track during construction. Unless the material accumulates to the level as to impact the movement of trains, the work train can be scheduled near the completion of the project.

H. Storage of Materials and Equipment:

- 1. Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights of way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.
- 2. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

I. Cleanup:

1. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights of way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights of way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

VI. DAMAGES:

- A. The Contractor shall assume all liability for any and all damages to his/her work, employees, equipment and materials caused by Railroad traffic.
- B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

VII. FLAGGING SERVICES:

A. When Required:

- 1. Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.
- 2. Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are likely to be working on the Railroad's rights of way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging. If any work element (workers, equipment, tools, scaffolding, etc.) may exist or fall within 12-feet laterally from the end of ties, or 22-feet from the bottom of a bridge to the top of the rail, a flagman is necessary.
- 3. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three- (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required until the project has been completed.

B. Scheduling and Notification:

- 1. Not later than the time that approval is initially requested to begin work on Railroad rights of way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad rights of way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.
- 2. The Contractor will be required to give the Railroad representative <u>at least</u> <u>10 working days of advance written notice</u> of intent to begin work within Railroad rights of way. If it is necessary for the Railroad to advertise a flagging job for bid, it <u>may take up to 90-days to obtain service</u>. Once begun, when work is suspended at any time for any reason, the Contractor will be required to give the Railroad representative <u>at least 3 working days of notice</u> before resuming work on Railroad rights of way. Such notice shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such

notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen, is present at the job site. It **may take up to 30 days to obtain flagging initially** from the Railroad. When flagging begins the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and may not be able to be called for on a spot basis. If flagging becomes unnecessary and is suspended, it **may take up to 10 days to again obtain flagging services** from the Railroad. Due to labor agreements, it is necessary to give **5 working days notice before flagging service may be discontinued** and responsibility for payment stopped.

- 3. If, after the flagman is assigned to the project site, emergencies arise which require the flagman's presence elsewhere, and then the Contractor shall delay work on Railroad rights of way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.
- 4. Since flagging may be required only when trains or maintenance equipment is moving through the work area, it is important for the Contractor to keep in close contact with the Railroad's Representative.
- 5. When demobilizing, the Contractor shall contact the flagman to avoid unnecessary flagging charges. This communication shall be documented.

C. Payment:

- 1. The Cabinet will be responsible for paying the Railroad directly for any and all costs of flagging, which may be required to accomplish the construction.
- 2. The estimated cost of flagging is listed on the Summary Sheet. The charge to the Cabinet by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.
- 3. Railroad work involved in preparing and handling bills will also be charged to the Cabinet. Charges to the Cabinet by the Railroad shall be in accordance with applicable provisions of 23 CRF 140, Subpart I and 23 CRF 646, Subpart B. Flagging costs are subject to change. The above estimates of flagging cost are provided for information only and are not binding in any way.

D. Verification:

- 1. The Contractor and Department will review and sign the Railroad flagman's time sheet, attesting that the flagman was present during the time recorded. Flagman may be removed by Railroad if form is not signed. If flagman is removed, the Contractor will not be allowed to re-enter the Railroad rights of way until the issue is resolved. Any complaints concerning flagman or flagmen must be resolved in a timely manner. If need for flagman or flagmen is questioned, please contact the Railroad's Representative listed on the Project Summary Sheet. All verbal complaints must be confirmed in writing by the Contractor within 5 working days with copy to the Highway Engineer. All written correspondence should be addressed to the Railroad's Representative listed on the Project Summary Sheet.
- 2. The Railroad flagman assigned to the project will be responsible for notifying the Project Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Project Engineer will document such notification in the project records. When requested, the Project Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.

VIII. HAUL ACROSS RAILROAD:

- A. Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the State has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental, including flagging, to such crossings whether services are performed by his own forces or by Railroad personnel.
- B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for is installation, maintenance, necessary watching and flagging thereof and removal, all at the expense of the Contractor, is first obtained from the Railroad Engineer. The approval process for an agreement normally takes 90-days.

IX. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the State and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the State and/or the Railroad.
- B. Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

X. COOPERATION AND DELAYS:

- A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.
- B. Train schedules cannot be provided to the Contractor. It is the Contractor's responsibility to contact the Railroad in order to arrange "Track Time." This "Track Time" will be an agreed upon prearranged time period that the Railroad will, without undue burden, schedule no train traffic to facilitate the Contractor's work on or near Railroad right-of-way. This track time must be arranged at least 48 hours prior to the date of need.
- C. No charge or claims of the Contractor against either the Department or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of Railroad traffic or for any delays due to compliance with these Special Notes.
- D. The Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- E. The Railroad does not assume any responsibility for work performed by others in connection with the Project. No claims of the Contractor against the Railroad for any inconvenience, delay, or additional cost incurred by the Contractor on account of operations by others shall be filed.

XI. TRAINMAN'S WALKWAYS:

A. Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's protective service is provided shall be removed before the close of each day. If there is any excavation near the walkway, a handrail, with 10'-0'' minimum clearance from centerline of track, shall be placed.

XII. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHTS OF WAY:

- A. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots cinched with straps which fit snugly about the ankle are adequate. Safety boots are strongly recommended.
- B. No one is allowed within <u>25' of the centerline of the track</u> without specific authorization from the flagman.
- C. All persons working near track when train is passing are to look out for dragging bands, chains and protruding or shifting cargo.
- D. No one is allowed to cross tracks without specific authorization from the flagman.
- E. All welders and cutting torches working within 25' of track must stop when train is passing.
- F. No steel tape or chain will be allowed to cross or touch rails without permission.

XIII. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHTS OF WAY:

- A. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.
- B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.
- C. All employees will stay with their machines when crane or boom equipment is pointed toward track.
- D. All cranes and boom equipment under load will stop work while a train is passing (including pile driving).

- *E.* Swinging loads must be secured to prevent movement while train is passing.
- F. No loads will be suspended above a moving train.
- G. No equipment will be allowed within <u>25' of centerline of track</u> without specific authorization of the flagman.
- H. Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.
- I. No equipment or load movement within 25' or above a standing train or other equipment without specific authorization of the flagman.
- J. All operating equipment within <u>25' of track must halt operations when a train is</u> <u>passing</u>. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.
- *K.* All equipment, loads and cables are prohibited from touching rails.
- L. While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.
- M. No equipment or materials will be parked or stored on Railroad's property unless specific permission is granted from the Railroad Engineer.
- N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it can not be moved by unauthorized persons.
- O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

XIV. INSURANCE:

- A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the following kinds:
 - 1. Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured.
 - 2. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against the Railroad and its affiliates.

- 3. Commercial automobile liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name the Railroad as an additional insured.
- 4. Railroad protective liability insurance with limits of not less than \$5,000,000 combined single limite for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
 - a. The Railroad Protective Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance – Insurance Services Office (ISO) Form CG 00 35.
 - b. The Railroad must be the named insured on the Railroad Protective Insurance Policy
 - c. Name and Address of the Contractor must be shown on the Declarations page.
 - d. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.
 - e. Authorized endorsements must include the Pollution Exclusion Amendment CG 28 31, unless using form CG 00 35 version 96 and later.
 - f. Authorized endorsements may include:
 - (i). Broad form Nuclear Exclusion IL 00 21
 - (ii). 30-day Advance Notices of Non-renewal or cancellation
 - (iii). Required State Cancellation Endorsement
 - (iv). Quick Reference or Index CL/IL 240
 - g. Authorized endorsements may not include:
 - (i). A Pollution Exclusion Endorsement except CG 28 31
 - (ii). A Punitive or Exemplary Damages Exclusion
 - (iii). A "Common Policy Conditions" Endorsement
 - (iv). And endorsement that is not named in Section 4 (e) or (f) above.
 - (v). Poloicies that contain any type of deductible

- 5. All insurance companies must be A. M. Best rated A- and Class VII or better.
- 6. Such additional or different insurance as the Railroad may require.

B. Additional Terms:

- 1. Contractor must submit the original Railroad Protective Liability policy, Certificates of Insurance, and all notices and correspondence regarding the insurance policy to the contact listed on the Project Summary Sheet.
- 2. The Contractor may not begin work on the Project until it has received the Railroad's written approval or the required insurance.
- *C. Insurance policies shall follow the requirements of 23 CRF 646 Subpart A.*
- D. Evidence of insurance as required above shall be furnished to the address shown on the attached Summary Sheet for review by the Department and transmittal to the Railroad.
- E. If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the Prime Contractor shall be provided by or in behalf of the subcontractor to cover his operations. Endorsements to the Prime Contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.
- F. All insurance herein before specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the rights of way of the Railroad as evidenced by the formal acceptance by the Department. Insuring Companies may cancel insurance by permission of the Department and Railroad or on thirty (30) days written notice to the Department and Railroad Insurance Contacts as listed on the Project Summary Sheet.

XV. FAILURE TO COMPLY:

- A. These Special Notes are supplemental and amendatory to the current edition of the Kentucky Department of Highways' Standard Specifications for Road and Bridge Construction and amendments thereof, and where in conflict therewith, these Special Notes shall govern.
- B. In the event the Contractor violates or fails to comply with any of the requirements of these Special Notes:
 - 1. The Railroad Engineer may require that the Contractor vacate Railroad property.
 - 2. The Engineer may withhold any and all monies due the Contractor on pay estimates.
 - 3. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.

XVI. PAYMENT FOR COST OF COMPLIANCE:

A. No separate payment will be made for any extra cost incurred on account of compliance with these Special Notes. All such cost shall be included in prices bid for other items of the work as specified in the payment items.



Kentucky Transportation Cabinet Division of Right of Way & Utilities

TC 69-008

08/2010 Page 1 of 2

Contract ID: 141068 Page 49 of 171

SUMMARY FOR KYTC PROJECTS THAT INVOLVE A RAILROAD

Date: 9/16/2014 (enter using M/d/yyyy format)

This project actively involves the below listed railroad company. This Project Summary provides an abbreviated listing of project specific railroad data. The detailed needs of the specified railroad company are included in the Special Notes for Protection of Railroad Interest in the proposal package. By submitting a bid, the contractor attests that they have dutifully considered and accepted the provisions as defined in both documents.

County:	<u>Nicholas</u>				
Federal Num	ber: <u>BRO 521</u>	BRO 5215(012); BRO 5215(013)			
State Numbe	r: <u>FD52 09</u>	FD52 091 84689 01U			
Route:	KY 32				
Project Desci	ription: <u>Replace</u>	Bridge on KY 32 over TTI I	RR and Scrubgrass Creek		
Item Numbe	r: <u>09-1074</u>	1.00	Highway Milepost:		
GENERAL RAIL INFOR	RMATION (The belo	ow sections must be provided	by Railroad Company)		
Rail Compan	•	TTI RR	, , , , , ,		
AAR-DOT# (ii	i annii anhia).	353 943 <u>J</u>			
וון מוסט-אאא	applicable):	<u> </u>	Railroad Milepost:		
Train Count (Train Count (6pm to 6am)		<u>4</u>	
•		(2)	: 0 Train Count (24 hr total):	<u>4</u>	
Train Count (6am to 6pm): <u>4</u>	Train Count (6pm to 6am) Maximum Train S	: 0 Train Count (24 hr total):		
Train Count (6am to 6pm): 4	Train Count (6pm to 6am) Maximum Train S	: 0 Train Count (24 hr total): ipeed: 25 mph		
Train Count ((This inform	6am to 6pm): 4 nation is necessary to	Train Count (6pm to 6am) Maximum Train 5 acquire the necessary insure	: 0 Train Count (24 hr total): ipeed: 25 mph	(vi)	
Train Count ((This inform	6am to 6pm): 4 nation is necessary to	Train Count (6pm to 6am) Maximum Train 5 acquire the necessary insure	: <u>0</u> Train Count (24 hr total): ipeed: <u>25</u> mph ances when working with Railroad Right of Wo	(vi)	
Train Count ((This inform INSURANCE REQUIRE The named in	6am to 6pm): 4 nation is necessary to	Train Count (6pm to 6am) Maximum Train 5 acquire the necessary insure of the work and designation	: <u>0</u> Train Count (24 hr total): ipeed: <u>25</u> mph ances when working with Railroad Right of Wo	(vi)	
Train Count ((This inform INSURANCE REQUIRE The named in follows:	fam to 6pm): 4 nation is necessary to EMENTS nsured, description Named Insured:	Train Count (6pm to 6am) Maximum Train 5 acquire the necessary insure of the work and designation	: <u>0</u> Train Count (24 hr total): ipeed: <u>25</u> mph ances when working with Railroad Right of Wo	cy are as	
Train Count ((This inform INSURANCE REQUIRE The named in follows: (a)	fam to 6pm): 4 nation is necessary to EMENTS nsured, description Named Insured: The project description	Train Count (6pm to 6am) Maximum Train 5 acquire the necessary insure of the work and designation TTI RR cription should be as indicated	: <u>0</u> Train Count (24 hr total): ipeed: <u>25</u> mph ances when working with Railroad Right of Wood on of the job site to be shown on the Police	cy are as	

Flagging will be paid by KYTC to TTI.

Hourly Rate:

\$0.00 per hour based on a 0 hour day effective as of the date of this document.

Work by a flagman in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 1/2 times the appropriate rate. Work by a flagman in excess of 12 hours per day will result in overtime pay at 2 times the appropriate rate. If work is performed on a holiday, the flagging rate is 2 ½ times the normal rate.

Forecasted Rate Increases:

Rates will increase to \$0.00 per hour based on a 0 hour day effective _____ (enter using M/d/yyyy format).

RAILROAD CONTACTS

(to be provided by Railroad Company)

General Railroad Contact:

Russel Rogers

Transkentucky Transportation Railroad, Inc.

205 Winchester Street

Paris, KY 40361

(Phone) 859-987-1589

(Email) RRogers@TTIRailroad.com

Regional Representative (Roadmaster):

TTI Flagging Services

Transkentucky Transportation Railroad, Inc.

Paris, KY

(Phone) 859-987-1589

(Email)

Insurance contact:

Russel Rogers

Transkentucky Transportation Railroad, Inc.

205 Winchester Street

Paris, KY 40361

(Phone) <u>859-987-1589</u>

(Email) RRogers@TTIRailroad.com

Railroad Designer Contact:

Contractor or In-House Employee? In-House

Russel Rogers

Transkentucky Transportation Railroad, Inc.

205 Winchester Street

Paris, KY 40361

(Phone) <u>859-987-1589</u>

(Email) RRogers@TTIRailroad.com

Railroad Construction Contact:

Contractor or In-House Employee? In-House

Russel Rogers

<u>Transkentucky Transportation Railroad</u>, Inc.

205 Winchester Street

Paris, KY 40361

(Phone) 859-987-1589

(Email) RRogers@TTIRailroad.com

KENTUCKY TRANSPORTATION CABINET CONTACTS

(to be provided by KYTC)

KYTC Railroad Coordinator:

Allen Rust, PE Div. of Right of Way & Utilities **Kentucky Transportation Cabinet** 200 Mero Street, 5th Floor East Frankfort, Kentucky 40622 (Phone) 502-782-4950 (Email) allen.rust@ky.gov

KYTC Construction Procurement Director:

Diana Radcliffe, Director Div. of Construction Procurement Kentucky Transportation Cabinet 200 Mero Street, 3rd Floor West Frankfort, Kentucky 40622 (Phone) 502-564-3500 (Email) Diana.radcliffe@ky.gov

KYTC Construction Director:

Ryan Griffith, Director Div. of Construction **Kentucky Transportation Cabinet** 200 Mero Street, 3rd Floor West Frankfort, Kentucky 40622 (Phone) 502-564-4780 (Email) ryan.griffith@ky.gov



The project specific information provided herein is valid as of the date indicated. However, the specific information may be subject to change due to the normal business operations of all parties. The terms and conditions defined here, and in the bid proposal in its entirety, are inclusive and constant.

	Right-of-Way Cer	tifica	tion	Form	Revised 2/22/11
√ Fed	deral Funded	V	Origina	ıl	
Sta	ate Funded		Re-Cer	tification	
interstate, Appalach projects that fall und apply, KYTC shall re	completed and submitted to FHWA with the hia, and Major projects. This form shall als der Conditions No. 2 or 3 outlined elsewhe esubmit this ROW Certification prior to con , this form shall be completed and retained	so be sul ere in this estruction	bmitted s form. n contr	to FHWA for <u>all</u> federal-a When Condition No. 2 or act Award. For all other	aid r 3
Date: Septembe	r 24, 2014				
Project Name:	KY 32 over Scrubgrass	Letti	ng Date	e:	
Project #:	FD52 091 8468901R	Cour	_	Nicholas	
Item #:	09-1074.00	Fede	eral #:	STP BRO 5215 (012)	
Description of P	Project: Replace bridge on KY 32 over	er TTI 8	& Scru	ıbgrass Creek	
Projects that re	equire NO new or additional right	-of-way	y acqu	uisitions and/or relo	 cations
properties to improvement impr	ed transportation improvement will be built of be built of be acquired, individuals, families, and built of this project. Equire new or additional right-of-versions.	usinesse way ac	s ("relo quisit	icalees") to be relocated,	or
sanitary hou accordance	R 635.309, the KYTC hereby certify that all using or that KYTC has made available to with the provisions of the current FHWA cassistance Program and that at least one apply.)	relocate: directive(es ade (s) cove	quate replacement housir ering the administration of	ng in f the Highway
been ac court bu right-of- possess	ion 1. All necessary rights-of-way, including legal and physical posses at legal possession has been obtained. The way, but all occupants have vacated the last on and the rights to remove, salvage, or a value has been paid or deposited with the	ssion. T nere may ands and demolish	rial or a be soo d impro	appeal of cases may be p me improvements remain vements, and KYTC has	ending in ing on the physical
to use a appeal obeen obvecated improve market	ion 2. Although all necessary rights-of-wall rights-of-way required for the proper exe of some parcels may be pending in court a ptained, but right of entry has been obtained, and KYTC has physical possession and ements. Fair market value has been paid value for all pending parcels will be paid oction contract. (See note 1 below.)	ecution of and on of ed, the of right to r or depos	of the po ther pa ccupan remove sited wi	roject has been acquired. rcels full legal possession its of all lands and improve, salvage, or demolish all ith the court for most pare	Trial or has not ements have els. Fair
্ of a full i	te 1: The KYTC shall re-submit a right-of- ill Federal-Aid construction contracts. Awa legal possession and fair market value for I FHWA has concurred in the re-submitted	ard must all parce	t not to els has	be made until after KYTC been paid or deposited w	has obtained

Right-of-Way Certification Form

Revised 2/22/11

Condition 3. The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. However, all remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. The KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary rights-of-way will not be fully acquired, and/or some occupants will not be relocated, and/or the fair market value will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction. A full explanation and reason for this request, including identification of each such parcel and dates on which acquisitions, payments, and relocations will be completed, is attached to this certification form for FHWA concurrence. (See note 2.)

Note 2: The KYTC may request authorization on this basis only in unique and unusual circumstances. Proceeding to bid letting shall be the exception and never become the rule. In all cases, the KYTC shall make extraordinary efforts to expedite completion of the acquisition, payment for all affected parcels, and the relocation of all relocatees prior to AWARD of all Federal-Aid construction contracts or force account construction.

Approved:

Danny Mineer

Printed Name

Signature

Right-of-Way Supervisor

Approved:

Dean M Loy Printed Name

Signature

KYTC, Director of ROW &Utilities

No Signature Required

Approved:

as per FHWA - KYTC 2013 Stewardship Agreement

_FHWA, ROW Officer (when applicable)

Printed Name

Page 2

		Ri	ight-of-Way	Certi	fication	Form	Revised 2/22/11
Date: Se	eptemb	er 24, 2014					
Project Project Item #: Letting		FD52 091 84 09-1074.00	er Scrubgrass 68901R	<u> </u>	County: Federal #:	Nicholas STP BRO 5215 (012))
This project be relocate	t has 9 d, as we	total numbe	er of parcels to be a Il number of busines	cquired, a	and 1 tote relocated.	al number of individuals	or families to
9	Parcels	where acquired	d by a signed fee si	mple dee	d and fair ma	rket value has been paid	i
n/a	Parcels with the		quired by IOJ throug	jh conden	nnation and fa	air market value has bee	n deposited
n/a	Parcels	have not been	acquired at this tim	e (explaii	n below for ea	ach parcel)	
na/	Parcels been de	have been acq	quired or have a "rig e court <i>(explain bel</i> e	ht of entr	y" but fair ma ch parcel)	rket value has not been (paid or has not
n/a		ees have not be below for each		parcels _		,,, a	ind

Parcel #	Name/Station	Explanation for delayed acquisition, delayed relocation, or delayed payment of fair market value	Proposed date of payment or of relocation
			·
<u> </u>			

There are $\underline{0}$ billboards and/or $\underline{0}$ cemeteries involved on this project.

There are $\underline{0}$ water or monitoring wells on parcels $\underline{}$, $\underline{}$, and $\underline{}$. All have been acquired and are the responsibility of the project contractor to close/cap.

Form Effective Date: April 1, 2006 Last Revised: February 22, 2011

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

NICHOLAS COUNTY
STP BRO 5215(014) FD52 091 0032 013-014
Bridge Replacement on KY 32 over TTI Railroad
ITEM 9-1074.00

GENERAL PROJECT NOTE ON UTILITY PROTECTION

The waterline relocation will be let with roadway contract.

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

N/A

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

<u>Fleming- Mason Energy</u> – Their facilities relocation has been completed.

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

AT&T- Relocation of their facilities will be completed by December 31, 2014.

The Department will consider submission of a bid as the Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of (Utility Company(s) Name). Working days will not be charged for those days on which work on (Utility Company(s) Name) facilities is delayed, as provided in the current edition of the KY Standard Specifications for Road and Bridge Construction. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to the project, the KYTC Resident Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor. .

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

SHARPSBURG WATER DISTRICT –Their facilities will be let with the roadway contract.

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

NICHOLAS COUNTY
STP BRO 5215(014) FD52 091 0032 013-014
Bridge Replacement on KY 32 over TTI Railroad
ITEM 9-1074.00

SPECIAL CAUTION NOTE - PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs.

The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be

SPECIAL NOTES FOR UTILITY CLEARANCE IMPACT ON CONSTRUCTION

NICHOLAS COUNTY STP BRO 5215(014) FD52 091 0032 013-014 Bridge Replacement on KY 32 over TTI Railroad ITEM 9-1074.00

inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

BEFORE YOU DIG

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

AREA UTILITIES CONTACT LIST

Utility Company/Agency	Contact Name	Contact Information
AT&T	Jack Salyers	502-741-8374
Fleming – Mason Energy	Brandon Hunt	606-845-2661
Sharpsburg Water District	George Purvis	606-274-2861

Technical Specifications

for

KY 32 Over Scrubgrass Creek and TTI Railroad
Water Line Relocation
FD52 091 0032 013-014
Item No. 9-1074.00

Nicholas County, Kentucky

Sharpsburg Water District

December 2013

Prepared by:

HDR Engineering, Inc. 2517 Sir Barton Way Lexington, Kentucky 40509 (859) 223-3755



KY 32 OVER SCRUBGRASS CREEK AND TTI RAILROAD - WATER LINE RELOCATION SHARPSBURG WATER DISTRICT

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
BIDDING RE	QUIREMENTS, CONTRACT FORMS AND CONDITIONS OF TH	IE CONTRACT –
DIVISION 1 -	GENERAL REQUIREMENTS	
01565	EROSION AND SEDIMENT CONTROL	1 - 2
DIVISION 2 -	SITE WORK	
02225 02610 02630 02640 02660 02675	EXCAVATING, BACKFILLING, AND COMPACTING FOR UTILITIES WATER PIPE AND FITTINGS	
DIVIDIONO 3	TINOGOT TO - NOT OGED	

END OF TABLE OF CONTENTS

CON0050283/122713

SECTION 01565 EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. The Contractor shall do all Work and take all measures necessary to control soil erosion resulting from construction operations, shall prevent the flow of sediment from the construction site, and shall contain construction materials (including excavation and backfill) within his protected working area so as to prevent damage to the adjacent wetlands or water courses.
- B. The Contractor shall not employ any construction method that violates a rule, regulation, guideline or procedure established by Federal, State or local agencies having jurisdiction over the environmental effects of construction.
- C. Pollutants such as chemicals, fuels, lubricants, bitumen, raw sewage and other harmful waste shall not be discharged into or alongside of any body of water or into natural or man-made channels leading thereto.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Silt checks shall be constructed of No. 1 coarse aggregate as defined by the Kentucky Department of Highways. Filter fabric for sediment traps shall be of suitable materials acceptable to the Engineer. Bales may be hay or straw, and shall be reasonably clean and free of noxious weeds and deleterious materials.

PART 3 - EXECUTION

3.1 METHODS OF CONSTRUCTION

- A. The Contractor shall use any of the acceptable methods necessary to control soil erosion and prevent the flow of sediment to the maximum extent possible. These methods shall include, but not be limited to, the use of silt fences, water diversion structures, temporary revegetation, diversion ditches and settling basins.
- B. Construction operations shall be restricted to the areas of work indicated on the Drawings and to the area which must be entered for the construction of temporary or permanent facilities. The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and fill operations and to direct the Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of the wetlands and adjacent watercourses. Such work may involve the construction of temporary berms, dikes, dams, sediment basins, slope drains, and use of temporary mulches, mats, or other control devices or methods as necessary to control erosion.
- C. Excavated soil material shall not be placed adjacent to the wetlands or watercourses in a manner that will cause it to be washed away by high water or runoff. Earth berms or diversions shall be constructed to intercept and divert runoff water away from critical areas. Diversion outlets shall be stable or shall be stabilized by means acceptable to the Engineer. If for any reason construction materials are washed away during the course of construction, the Contractor shall remove those materials from the fouled areas as directed by the Engineer.

- D. For Work within easements or rights-of-way, all materials used in construction such as excavation, backfill, roadway, and pipe bedding and equipment shall be kept within the limits of these easements or rights-of-way.
- E. The Contractor shall not pump silt-laden water from trenches or other excavation into the wetlands, or adjacent watercourses. Instead, silt-laden water from his excavations shall be discharged into sediment traps to ensure that only sediment-free water is returned to the watercourses. Damage to vegetation by excessive watering or silt accumulation in the discharge area shall be avoided.
- F. Prohibited construction procedures include, but are not limited to the following:
 - Dumping of spoil material into any streams, wetlands, surface waters, or unspecified locations.
 - Indiscriminate, arbitrary, or capricious operation of equipment in wetlands or surface waters.
 - 3. Pumping of silt-laden water from trenches or excavations into surface waters, or wetlands.
 - 4. Damaging vegetation adjacent to or outside of the construction area limits.
 - 5. Disposal of trees, brush, debris, paints, chemicals, asphalt products, concrete curing compounds, fuels, lubricants, insecticides, washwater from concrete trucks or hydroseeders, or any other pollutant in wetlands, surface waters, or unspecified locations.
 - 6. Permanent or unauthorized alteration of the flow line of any stream.
 - 7. Open burning of debris from the construction work.
- G. Any temporary working roadways required shall be clean fill approved by the Engineer. In the event fill is used, the Contractor shall take every precaution to prevent the fill from mixing with native materials of the site. All such foreign fill materials shall be removed from the site following construction.

3.2 EROSION CHECKS

- A. The Contractor shall remove silt and sediment from the site as it accumulates at erosion checks and repair damaged checks during construction.
- B. The Contractor shall remove all erosion control materials from the site as soon as potential for erosion has been eliminated and when approved by the Engineer. Reseed area where silt has been removed.

END OF SECTION

SECTION 02225

EXCAVATING, BACKFILLING, AND COMPACTING FOR UTILITIES

PART 1 - GENERAL

1.1 WORK INCLUDED

A. The Contractor shall make excavations in such widths and depths as will give suitable room for laying pipe to the lines, grades and elevations, furnish, place and compact all backfill materials specified herein or denoted on the Drawings. The materials, equipment, labor, etc., required herein are to be considered as part of the requirements and costs for installing the various pipes, structures and other items they are incidental to.

1.2 RELATED WORK

A. Section 02610 - Water Pipe and Fittings.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Crushed stone material shall conform with the requirements of the applicable sections of the Kentucky Transportation Cabinet, Department of Highways Standard Specifications and shall consist of clean, hard, and durable particles or fragments, free from dirt, vegetation or objectionable materials.
- B. Two classes of crushed stone material are used in this Section. The type of material in each class is as follows:
 - 1. Class I No. 9 Aggregate.
 - 2. Class II Dense Graded Aggregate (DGA).

PART 3 - EXECUTION

3.1 EXCAVATION OF TRENCHES

- A. Unless otherwise directed by the Engineer, trenches are to be excavated in open cuts.
 - 1. Where pipe is to be laid in gravel bedding or concrete cradle, the trench may be excavated by machinery to, or just below, the designated subgrade, provided that the material remaining at the bottom of the trench is no more than slightly disturbed.
 - 2. Where pipe is to be laid directly on the trench bottom, the lower part of trenches in earth shall not be excavated to subgrade by machinery. However, just before the pipe is to be placed, the last of the material to be excavated shall be removed by means of hand tools to form a flat or shaped bottom, true to grade, so that the pipe will have a uniform and continuous bearing and support on firm and undisturbed material between joints except for limited areas where the use of pipe slings may have disturbed the bottom.
- B. Trenches shall be sufficient width to provide working space on each side of the pipe and to permit proper backfilling around the pipe.
 - The Contractor shall remove only as much of any existing pavement as is necessary for the
 prosecution of the Work. The pavement shall be cut with pneumatic tools, without extra
 compensation to the Contractor, to prevent damage to the remaining road surface. Where
 pavement is removed in large pieces, it shall be disposed of before proceeding with the
 excavation.

- C. All excavated materials shall be placed a safe distance back from the edge of the trench.
- D. Unless specifically directed otherwise by the Engineer, not more than 500 feet of trench shall be opened ahead of the pipe laying work of any one crew, and not more than 500 feet of open ditch shall be left behind the pipe laying work of any one crew. Watchmen or barricades, lanterns and other such signs and signals as may be necessary to warn the public of the dangers in connection with open trenches, excavations and other obstructions, shall be provided by and at the expense of the Contractor.
- E. Trench excavation shall include the removal of earth, rock, or other materials encountered in the excavating to the depth and extent shown or indicated on the Drawings.

3.2 WATER PIPE BEDDING

- A. Piping for water mains shall be supported as follows:
 - 1. The trench bottom for water main piping shall be stable, continuous, relatively smooth and free of frozen material, clodded dirt, foreign material and rock or granular material larger than 1/2 inch in diameter. The foundation for water main piping shall be prepared so that the entire load of the backfill on top of the pipe will be carried uniformly on the barrel of the pipe. Any uneven areas in the trench bottom shall be shaved-off or filled-in with Class I granular bedding. When the trench is made through rock, the bottom shall be lowered to provide 6 inches of clearance around the pipe. Class I granular bedding shall be used to bring the trench bottom to grade.
- B. After each pipe has been brought to grade, aligned, and placed in final position, earth material for water main piping in areas not subject to vehicular traffic and Class I material for water mains in paved areas, shall be deposited and densified under the pipe haunches and on each side of the pipe up to the spring line of the pipe to prevent lateral displacement and hold the pipe in proper position during subsequent pipe jointing, bedding, and backfilling operations.
- C. In wet, yielding and mucky locations where pipe is in danger of sinking below grade or floating out of grade or line, or where backfill materials are of such a fluid nature that such movements of pipe might take place during the placing of the backfill, the pipe must be weighted or secured permanently in place by such means as will prove effective.
- D. Where an unstable (i.e., water, mud, etc.) trench bottom is encountered, stabilization of the trench bottom is required. This is to be accomplished by undercutting the trench depth and replacing to grade with a foundation of crushed stone aggregate.
- E. The depth of the foundation is dependent upon the severity of the trench bottom. The size of stone aggregate used in the foundation will be determined by the condition of the unstable material. Once the trench bottom has been stabilized, the required Class I bedding material can be placed.
- F. It should be noted that no pipe shall be laid on solid or blasted rock.
- G. Pipe bedding as required in Paragraphs A, B, C, and D of this Section is **not** considered a separate pay item.

3.3 WATER PIPE BACKFILLING

- A. Initial Backfill:
 - 1. This backfill is defined as that material which is placed over the pipe from the spring line to a point 6 inches above the top of the pipe. For water main piping in areas not subject to vehicular traffic, initial backfill material shall be earth material free of rocks, acceptable to the Engineer or Class I material when a condition exists mentioned in Paragraph A, 3. below. For water main piping in paved areas, initial backfill shall be Class I material.
 - 2. Material used, whether earth or Class I, in the initial backfilling is **not** a separate pay item. Payment for the material is included in the unit price per linear foot of water main.

3. In areas where large quantities of rock are excavated and the available excavated earth in the immediate vicinity is insufficient for placing the required amount of backfill over the top of the pipe as set forth in Paragraph A.1, the Contractor shall either haul in earth or order Class I material for backfilling over the pipe. Neither the hauling and placement of earth nor the ordering and placement of Class I material to fulfill the backfill requirements set forth herein is considered a separate pay item.

B. Final Backfill:

- 1. There are two cases where the method of final backfilling varies. The various cases and their trench situations are as follows:
 - Case I Areas not subject to vehicular traffic.
 - b. Case II Paved areas including streets, drives, parking areas, and walks.
- 2. In all cases, walking or working on the completed pipelines, except as may be necessary in backfilling, will not be permitted until the trench has been backfilled to a point 6 inches above the top of the pipe. The method of final backfilling for each of the above cases is as follows:
 - a. Case I The trench shall be backfilled from a point 6 inches above the top of the pipe to a point 12 inches below the surface of the ground with earth material free from large rock (greater than 6 inches in the longest dimension), acceptable to the Engineer. The remainder of the trench shall be backfilled with topsoil reasonably free of any rocks.
 - b. Case II The trench shall be backfilled from a point 6 inches above the top of the pipe to the subgrade of the existing pavement surface with flowable fill per the Kentucky Department of Highways (KDOH) specifications. The remaining backfill shall be as follows:
 - c. For gravel surfaces Class II (dense graded aggregate) material mechanically tamped to maximum possible compaction. The trench may be left with a slight mound if permitted by the Engineer.
 - d. For bituminous and concrete surfaces Bituminous and concrete pavement sections as detailed on the Drawings and meeting KDOH surface restoration requirements.
- 3. Earth and Class I material used in final backfill is not a separate pay item. Payment shall be included in the price of water main.
- 4. Class II material used in final backfill shall be included in the unit price of the pipe.
- C. A sufficient amount of Class II material shall be stockpiled to insure immediate replacement by the Contractor of any settled areas. No extra payment will be made for the filling in of settled or washed areas by the Contractor.
- D. Excavated materials from trenches, in excess of quantity required for trench backfill, shall be disposed of by the Contractor. It shall be the responsibility of the Contractor to obtain location or permits for its disposal, unless specific waste areas have been designated on the Drawings or noted in these Specifications. The cost of disposal of excess excavated materials, as set forth herein, no additional compensation being allowed for hauling or overhaul.

3.4 PLACEMENT OF IDENTIFICATION TAPE

- A. Detectable underground marking tape shall be placed over all utility lines. Care shall be taken to insure that the buried marking tape is not broken when installed and shall be Lineguard brand encased aluminum foil, Type III. The identification tape is manufactured by Lineguard, Inc., P.O. Box 426, Wheaton, IL 60187.
- B. The identification tape shall bear the printed identification of the utility line below it, such as "Caution Buried Below". Tape shall be reverse printed; surface printing will not be acceptable. The tape shall be visible in all types and colors of soil and provide maximum color contrast to the soil. The tape shall meet the APWA color code, and shall be 2 inches in width. Colors are: yellow gas, green sewer, red electric, blue water, orange telephone, brown force main.

C. The tape shall be the last material installed in the trench so as to be first out. The tape shall be buried 4 to 6 inches below top of grade. After trench backfilling, the tape shall be placed in the backfill and allowed to settle into place with the backfill. The tape may be plowed in after final settlement, installed with a tool during the trench backfilling process, unrolled before final restoration or installed in any other way acceptable to the Owner or Engineer.

3.5 PLACEMENT OF LOCATION WIRE

- A. Detectable underground location wire shall be placed above all non-metallic water mains and force mains. Care shall be taken to insure that the buried wire is not broken.
- B. The location wire shall be no smaller than #10 AWG solid copper-coated steel wire with minimum 550 lb. tensile strength or #12 AWG stranded wire, either copper-coated steel or solid copper with minimum 300 lb. tensile strength; each with HDPE insulating jacket. Wire requirements are based on electrical resistance per 1000 foot length. Copper-coated steel wire is preferred to reduce the likelihood of vandalism theft.
- C. The location wire shall be continuous from valve box to valve box and shall be terminated (unconnected) with a wire nut and enough "loose" wire to extend 24 inches outside the valve box.

END OF SECTION

SECTION 02610

WATER PIPE AND FITTINGS

PART 1 - GENERAL

1.1 WORK INCLUDED

A. The Contractor shall furnish all labor, material, and equipment necessary to install water main piping together with all appurtenances as shown and detailed on the Drawings and specified herein.

1.2 RELATED WORK

- A. Section 02225 Excavating, Backfilling and Compacting for Utilities.
- B. Section 02640 Water Valves and Gates.
- C. Section 02675 Disinfection of Potable Water Pipe.

PART 2 - PRODUCTS

2.1 POLYVINYL CHLORIDE (PVC) WATER PIPE - C.I. PIPE SIZE

- A. This pipe shall meet the requirements of AWWA C900-07 for Polyvinyl Chloride (PVC) Pressure Pipe. The pipe shall be made from quality PVC resin, compounded to provide physical and mechanical properties that equal or exceed cell Class 12454 as defined in ASTM D1784, with cast iron pipe equivalent ODs. Pipe shall meet the requirements of DR18 with a maximum working pressure of 235 psi. The gaskets for the PVC pipe joint shall conform to ASTM F477.
- B. Provisions must be made for expansion and contraction at each joint with a rubber ring. The bell shall consist of an integral wall section with a solid cross-section rubber ring which meets the laboratory performance of ASTM D3139. The bell section shall be designed to be at least as strong as the pipe wall.
- C. Standard laying lengths shall be 20 feet ± for all sizes. At least 85 percent of the total footage of pipe of any class and size shall be furnished in standard lengths, the remaining 15% in random lengths. Random lengths shall not be less than 10 feet long. Each standard and random length of pipe shall be tested to four times the class pressure of the pipe for a minimum of 5 seconds. The integral bell shall be tested with the pipe.
- D. Fittings for all lines 4 inches in diameter or larger shall be ductile iron and in accordance with AWWA C153 and have a body thickness and radii of curvature conforming to ANSI A21.10 or ANSI A21.53 for compact fittings. Cement mortar lining and seal coating shall be in accordance with ANSI/AWWA C104/A21.4. Bituminous outside coating shall be in accordance with ANSI/AWWA C110/A21.10. All fittings shall be rated at 250 psi water working pressure plus water hammer and be ductile cast-iron grade 70-50-05 per ASTM Specification A339.
- E. Restrained joints for ductile iron fittings on PVC pipe shall be EBAA Iron Megalug Series 2000 PV or equivalent.

2.2 CPVC PIPE MADE TO COPPER TUBE SIZE (CTS)

A. CPVC pipe for domestic water service lines shall be schedule 40, SDR 13.5 copper tube size (CTS) pipe meeting the requirements of NSF 8225 and the long term hydrostatic strength requirements of ASTM D 2846.

PART 3 - EXECUTION

3.1 LAYING DEPTHS

A. In general, water mains shall be laid with a minimum cover of 36 inches, except as otherwise indicated on the Drawings.

3.2 PIPE LAYING

- A. Slip Jointed and Heat-Fusion Welded Pipe:
 - All pipe shall be laid with ends abutting and true to the lines and grades indicated on the plans. Pipe shall be fitted and matched so that when laid in the Work, it will provide a smooth and uniform invert. Supporting of pipe shall be as set out in Section 02225 and in no case shall the supporting of pipe on blocks be permitted.
 - 2. Before each piece of pipe is lowered into the trench, it shall be thoroughly swabbed out to insure it being clean. Any piece of pipe or fitting which is known to be defective shall not be laid or placed in the lines. If any defective pipe or fittings shall be discovered after the pipe is laid, it shall be removed and replaced with a satisfactory pipe or fitting without additional charge. In case a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth end at right angles to the longitudinal axis of the pipe. Bevel can be made with hand or power tools.
 - 3. The interior of the pipe, as the Work progresses, shall be cleaned of dirt, jointing materials, and superfluous materials of every description. When laying of pipe is stopped for any reason, the exposed end of such pipe shall be closed with a plywood plug fitted so as to exclude earth or other material and precautions taken to prevent floatation of pipe by runoff into trench.
 - 4. Anchorage of Bends:
 - a. At all tees, plugs, caps and bends of 11-1/4 degrees and over, and at reducers or in fittings where changes in pipe diameter occur, movement shall be prevented by using suitable harness, thrust blocks or ballast. Thrust blocks shall be as shown on the Drawings, with sufficient volumes of concrete being provided; however, care shall be taken to leave weep holes unobstructed and allow for future tightening of all nearby joints. Unless otherwise directed by the Engineer, thrust blocks shall be placed so that pipe and fitting joints will be accessible for repair.
 - b. Bridles, harness or pipe ballasting shall meet with the approval of the Engineer. Steel rods and clamps shall be galvanized or otherwise rust-proofed or painted.
 - c. No extra pay shall be allowed for work on proper anchorage of pipe, fittings or other appurtenances. Such items shall be included in the price bid for the supported item.
 - 5. No backfilling (except for securing pipe in place) over pipe will be allowed until the Engineer has the opportunity to make an inspection of the joints, alignment and grade in the section laid, but such inspection shall not relieve the Contractor of further liability in case of defective joints, misalignment caused by backfilling and other such deficiencies that are noted later.
 - 6. All joint surfaces shall be cleaned immediately before jointing the pipe. The joint shall be lubricated in accordance with the pipe manufacturer's recommendations. Each pipe unit shall then be carefully pushed into place without damage to pipe or gasket. All pipe shall be provided with home marks to insure proper gasket seating. Details of gasket installation and joint assembly shall follow the manufacturer's direction for the joint type and material of the pipe. The resulting joints shall be watertight and flexible.

3.3 TESTING OF WATER PIPE

A. The completed work shall comply with the provisions listed herein, or similar requirements which will insure equal or better results. Suitable test plugs, water pump or other equipment and apparatus, and all labor required to properly conduct the tests shall be furnished by the Contractor at no expense to the Owner.

- B. Water main piping shall be pressure tested to 250 percent of the normal system operating pressure or to 100 percent of the rated working pressure of the pipe, whichever is less. At no time shall the test pressure exceed 100 percent of the pipe's rated working pressure. A pipe section shall be accepted if the test pressure does not fall more than 5 psi during the minimum 2-hour test period. The pipe shall be tested for allowable leakage according to AWWA C-600 or C-605, as applicable, concurrently with the pressure test.
- C. Where practicable, pipelines shall be tested between line valves or plugs in lengths of not more than 6,000 feet. Testing shall proceed from the source of water toward the termination of the line. The line shall be tested upon the completion of the first 6,000 feet. After the completion of two (2) consecutive tests without failure, the Contractor, at his option and with the Engineer's approval, may discontinue testing until the system is complete.
- D. All pipe, fittings and other materials found to be defective under test shall be removed and replaced at the Contractor's expense.
- E. Before applying the specified test pressure, air shall be expelled completely from the pipe, valves and hydrants. If permanent air vents are not located at high points within the test section, the Contractor shall install corporation cocks at such points so that the air can be expelled as the line is filled with water.
- F. All piping shall be tested for leakage at a pressure no less than that specified for the pressure test. The leakage shall be defined as the quantity of water that must be supplied to the tested section to maintain pressure within 5 psi of the specified test pressure after the air in the pipeline has been expelled and the pipe has been filled with water. The leakage shall be less than an allowable amount determined by the following equation:

$$L = \frac{SD (P)^2}{133,200}$$

Where: L = allowable leakage (gallons/hour)

S = length of pipe tested, in feet

D = nominal diameter of pipe (inches)

P = test pressure (psig)

- G. Should the sections under test fail to meet the requirements, the Contractor shall do all work of locating and repairing the leaks and retesting as the Engineer may require without additional compensation. All visible leaks are to be repaired regardless of the amount of leakage.
- H. If in the judgment of the Engineer, it is impracticable to follow the foregoing procedures for any reason, modifications in the procedures shall be made as required and as acceptable to the Engineer, but in any event, the Contractor shall be responsible for the ultimate tightness of the line within the above test requirements.

3.4 PLACEMENT OF IDENTIFICATION TAPE

A. Detectable underground marking tape shall be placed over all water mains as specified in Section 02225.

3.5 PLACEMENT OF LOCATION WIRE

 Detectable underground location wire shall be placed above all non-metallic water main as specified in Section 02225.

END OF SECTION

SECTION 02630 ENCASEMENT PIPE

PART 1 - GENERAL

1.1 WORK INCLUDED

A. The Contractor shall furnish all labor, material, and equipment necessary to install encasement pipe together with all appurtenances as shown and detailed on the Drawings and specified herein.

1.2 RELATED WORK

- A. Section 02225 Excavating, Backfilling and Compacting for Utilities.
- B. Section 02610 Water Pipe and Fittings.

PART 2 - PRODUCTS

2.1 STEEL PIPE

- A. Steel seamless pipe shall be new Grade B steel material, with a minimum yield of 35,000 psi and a wall thickness as shown below unless otherwise required by a permitting authority. The material shall conform to the chemical and mechanical requirements of the latest revision of ASTM A139 "Electric-Fusion (ARC) Welded Steel Pipe (NPS 4 and Over)," unless otherwise stated herein.
- B. The minimum wall thickness shall be in accordance with the following table:

Steel Casing Pipe Wall Thickness

Casing Diameter (inches)	(Minimum Wall Thickness Under Railroads (inches)	Minimum Wall Thickness All Other Uses (inches)
16 and under	0.250	0.250
18	0.281	0.250
20 and 22	0.312	0.281
24	0.344	0.312
26	0.375	0.344
28	0.406	0.375
30	0.438	0.406
32	0.469	0.438
34 and 36	0.500	0.469
38	0.531	0.500
40	0.563	0.531
42	0.594	0.563
44 and 46	0.625	0.594
48	0.656	0.625
50	0.688	0.656
52	0.719	0.688
54	0.750	0.719

Casing Diameter (inches)	(Minimum Wall Thickness Under Railroads (inches)	Minimum Wall Thickness All Other Uses (inches)
56 and 58	0.781	0.750
60	0.813	0.781
62	0.844	0.813
64	0.875	0.844
66 and 68	0.906	0.875
70	0.938	0.906
72	0.938	0.938

- C. Welds of the steel casing pipe shall be solid butt-welds with a smooth non-obstructing joint inside and conform to all specifications as required by American Welding Society (AWS). The casing pipe shall be installed without bends. All welders and welding operators shall be qualified as prescribed by AWS requirements.
- D. The wall thickness at any point shall be within 12.5% inches of the nominal metal thickness specified.
- E. Hydrostatic testing shall not be necessary.
- F. A protective coating shall be applied to each length of pipe. Following an SSPC SP-7 "Brush-Off Blast Cleaning" surface preparation, 3 (dry) mils of Tnemec-Primer 10-99 (red), or Porter International Primer 260FD (red), or an equivalent thickness of an approved equivalent paint shall be applied in the manner recommended by the respective paint manufacturer.
- G. Each length of pipe shall be legibly marked, stating: manufacturer, diameter, wall thickness and primer.
- H. Precaution shall be taken to avoid deforming the pipe and damaging the primer during shipping.

2.2 CARRIER PIPE SPACERS

- A. Carrier pipes installed inside encasement pipes shall be centered throughout the length of encasement pipe. Centering shall be accomplished by the installation of polyethylene pipeline spacers attached to the carrier pipe in such manner as to prevent the dislodgement of the spacers as the carrier pipe is pulled or pushed through the encasement pipe. Spacers shall be of such dimensions to provide: full supportive load capacity of the pipe and contents; of such thickness to allow installation and/or removal of the pipe; and to allow no greater than ½ inch movement of the carrier pipe within the cover pipe after carrier pipe is installed.
- B. Spacers shall be located immediately behind each bell and at a maximum spacing distance as follows:

Carrier Pipe Diameter (inches)	Maximum Spacing (feet)
2 - 2-1/2	4
3 - 8	7
10 - 26	10
28	9
30	8
32	7
34	6
36 - 38	5.5
40 - 44	5
46 - 48	4

C. The materials and spacing to be used shall be accepted by the Engineer prior to installation. The polyethylene pipeline spacers shall be manufactured by Pipeline Seal and Insulator, Inc. (PSI), Raci Spacers, Inc., or equivalent. Installation shall be in accordance with manufacturer's recommendations.

2.3 ENCASEMENT PIPE END SEALS

After installation of the carrier pipe within the encasement pipe, the ends of the casing shall be sealed with either a wraparound or a pull-on casing end seals fabricated of minimum 1/8-inch thick neoprene rubber. The seals shall be attached to the encasement pipe and the carrier pipe by 304 stainless steel band clamps not less than 1/2-inch wide. The casing end seals shall be as manufactured by Advance Products & Systems, Inc., or approved equivalent.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Where shown on the Drawings, the Contractor shall install encasement pipe. Install encasement pipe to maintain alignment, grade and the circular shape of the encasement pipe. The encasement pipe shall be straight and true in alignment; and any significant deviation from line or grade, in the opinion of the Engineer or permitting authority, shall be sufficient cause for disapproving or rejecting the installation.
- B. Two methods of installation are designated, the open-cut method and the boring method.
 - 1. The open-cut method shall consist of placing the encasement pipe in the excavated trench, then installing the carrier pipe inside the encasement pipe. Excavation, bedding and backfilling shall be in accordance with Section 02225.
 - 2. The boring and jacking method consists of pushing or jacking the encasement pipe into the subsurface material as an auger cuts out the material or after the auger has completed the bore. Where designated on the drawings, crossings beneath state maintained roads, railroads, or other surfaces not to be disturbed, shall be installed by boring and jacking of steel casing pipe followed by installation of the carrier pipe within the casing pipe. The Contractor shall provide a jacking pit, bore through the earth, and/or rock, jack the casing pipe into proper line and grade and then install the carrier pipe within the casing pipe. The approach trench shall be large enough to accommodate one section of casing pipe, the jacks and blocking. The Contractor shall furnish and use adequate equipment to maintain the line and grade.
- C. The carrier pipe shall be ductile iron, polyvinyl chloride, or polyethylene pipe as designated on the Drawings. The carrier pipe shall be installed using pipe spacers as described in this Section. Carrier pipe will not be permitted to rest on bells or couplings.
- D. Following installation of the carrier pipe, the ends of the encasement pipe shall be sealed with products of the type described in this Section.

3.2 DAMAGE

A. The cost of repairing damage to the highway or railroad which is caused by a boring and jacking installation shall be borne by the Contractor.

END OF SECTION

SECTION 02640 WATER VALVES AND GATES

PART 1 - GENERAL

1.1 WORK INCLUDED

A. The Contractor shall furnish all labor, material, and equipment necessary to install valves together with all appurtenances as shown and detailed on the Drawings and specified herein.

1.2 RELATED WORK

- A. Section 02225 Excavating, Backfilling and Compacting for Utilities.
- B. Section 02610 Water Pipe and Fittings.

1.3 SUBMITTALS

- A. Complete shop drawings of all valves and appurtenances shall be submitted to the Engineer.
- B. The manufacturer shall furnish the Engineer two (2) copies of an affidavit stating that the valve and all materials used in its construction conform to the applicable requirements of the latest revision of the applicable AWWA Standard, and that all tests specified therein have been performed and that all test requirements have been met.
- C. The Engineer shall be furnished two (2) copies of an affidavit that the "Valve Protection Testing" has been done and that all test requirements have been met.
- D. The Engineer shall be furnished with two (2) copies of an affidavit that inspection, testing and rejection are in accordance with the latest revision of the applicable AWWA Standard.

PART 2 - PRODUCTS

2.1 GATE VALVES

- A. All gate valves shall be of the resilient seat type in accordance with the latest revision of AWWA C509 Standard. The valve body, bonnet and gate castings shall be ductile iron or cast iron. The valve shall have a non-rising stem (NRS), fully bronze mounted or stainless steel with o-ring seals. Valve body and bonnet, inside and out, shall be fully coated with fusion bonded epoxy coating in accordance with AWWA C550 Standard. Valves shall have a rated working pressure of 200 psi.
- B. Gate valves for buried service shall be furnished with mechanical joint end connections, unless otherwise shown on the Drawings or specified herein. The end connection shall be suitable to receive ductile iron or PVC pipe.
- C. Gate valves for meter pits, pump stations, or other installations as shown on the Drawings shall be furnished with flanged joint and connections, outside screw and yoke and handwheel operator. The gate valve shall have the direction of opening east on the rim of the handwheel and provided with chain and lock.
- D. All gate valves shall have the name or monogram of the manufacturer, the year the valve casting was made, the size of the valve, and the working pressure cast on the body of the valve.

- E. Buried service gate valves shall be provided with a 2-inch square operating nut and shall be opened by turning to the left (counterclockwise).
- F. Buried service gate valves shall be installed in a vertical position with valve box as detailed on the Drawings. They shall be set vertically and properly adjusted so that the cover will be in the same plane as the finished surface of the ground or street.
- G. Valves shall be those manufactured by Mueller, M & H Valve Company, American or approved equivalent.

2.2 VALVE BOXES

- A. Each buried stop and valve shall be provided with a suitable valve box. Boxes shall be of the adjustable, telescoping, heavy-pattern type with the lower part of cast iron and the upper part of steel or cast iron. They shall be so designed and constructed as to prevent the direct transmission of traffic loads to the pipe or valve.
- B. The upper or sliding section of the box shall be provided with a flange having sufficient bearing area to prevent undue settlement. The lower section of the box shall be designed to enclose the operating nut and stuffing box of the valve and rest on the valve bonnet.
- C. The boxes shall be adjustable through at least 6 inches vertically without reduction of the lap between sections to less than 4 inches.
- D. The inside diameter of boxes for valves shall be at least 4-1/2 inches, and the lengths shall be as necessary for the depths of the valves or stops with which the boxes are to be used.
- E. Covers for valves shall be close fitting and substantially dirt-tight.
- F. The top of the cover shall be flush with the top of the box rim. An arrow and the word OPEN to indicate the direction of turning to open the valve shall be cast in the top of the valve covers.

2.3 FIBERGLASS LINE MARKER FOR BURIED VALVES

A. General:

- 1. Design: The continuous fiberglass reinforced composite line marker shall be a single piece marker capable of simple, permanent installation by one person using a manual driving tool. The marker, upon proper installation, shall resist displacement from wind and vehicle impact forces. The marker shall be of a constant flat "T" cross-sectional design with reinforcing support ribs incorporated longitudinally along each edge to provide sheeting protection and structural rigidity. The bottom end of the marker shall be pointed for ease of ground penetration.
- 2. Material: The marker shall be constructed of a durable, UV resistant, continuous glass fiber and marble reinforced, thermosetting composite material which is resistant to impact, ozone, and hydrocarbons within a service temperature range of -40° F to +140° F.
- Workmanship: The marker shall exhibit good workmanship and shall be free of burns, discoloration, cracks, bulges or other objectionable marks which would adversely affect the marker's performance or serviceability.
- 4. Marking: Each marker shall be permanently marked "Water Line Below." The letters shall be a minimum of 2 inches in height. A black line shall be stamped horizontally across the front of the marker near the bottom to indicate proper burial depth as shown in the standard detail. The marker shall be a CRM-375 as manufactured by Carsonite International, or approved equivalent.

B. Physical and Mechanical Requirements:

- Dimensions: The marker shall conform to the shape and overall dimensions shown in the standard detail.
- 2. Mechanical Properties: The marker shall have the minimum mechanical properties as follows:

Property	ASTM Test Method	Minimum Value
Ultimate Tensile Strength	D-638	50,000 psi
Ultimate Compressive Strength	D-638	45,000 psi
Specific Gravity	D-792	1.7
Weight % Glass Reinforcement	D-2584	50%
Barcol Hardness	D-2583	47

- 3. Color Fastness: The marker shall be pigmented throughout the entire cross-section so as to produce a uniform color which is an integral part of the material. Ultraviolet resistant materials shall be incorporated in the construction to inhibit fading or cracking of the delineator upon field exposure.
- 4. Vehicle Impact Resistance: The marker shall be capable of self-erecting and remain functional after being subjected to a series of ten head on impacts by a typical passenger sedan at 35 miles per hour. The marker shall retain a minimum of 60 percent of its sheeting.

C. Reflectors:

- The reflector shall be of impact resistant, pressure sensitive retro-reflective sheeting which shall be subject to approval by the Engineer. The sheeting shall be of appropriate color to meet MUTCD requirements.
- 2. Mounting: The retro-reflective sheeting shall consist of a minimum of a 3-inch wide strip placed a maximum of 2 inches from the top of the post unless otherwise specified.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Valves shall be installed as nearly as possible in the positions indicated on the Drawings consistent with conveniences of operating the handwheel or wrench. All valves shall be carefully erected and supported in their respective positions free from all distortion and strain on appurtenances during handling and installation.
- B. All material shall be carefully inspected for defects in workmanship and material, all debris and foreign material cleaned out of valve openings and seats, all operating mechanisms operated to check their proper functioning, and all nuts and bolts checked for tightness.
- C. Valves and other equipment which do not operate easily or are otherwise defective shall be repaired or replaced at the Contractor's expense.
- D. Valves shall not be installed with stems below the horizontal.
- E. Valves shall be set plumb and supported adequately in conformance with the instructions of the manufacturer. Valves mounted on the face of concrete shall be shimmed vertically and grouted in place. Valves in the control piping shall be installed so as to be easily accessible.
- F. Valves shall be provided with extension stems where required for convenience of operation. Extension stems shall be provided for valves installed underground and elsewhere so that the operating wrench does not exceed 6 feet in length.

3.2 PAINTING

A. Valves shall be factory primed and fully coated, inside and out, with fusion bonded epoxy in accordance with the latest revision of AWWA C550 Standard.

END OF SECTION 02640

SECTION 02660 DOMESTIC WATER DISTRIBUTION CONNECTIONS

PART 1 - GENERAL

1.1 INCLUDED

A. The Contractor shall furnish all labor and equipment necessary to install water service piping together with tapping saddle and corporation stop as shown and detailed on the Drawings and specified herein.

1.2 RELATED WORK

- A. Section 02225 Excavating, Backfilling and Compacting for Utilities.
- B. Section 02610 Water Pipe and Fittings.
- C. Section 02640 Water Valves and Gates.
- D. Section 02675 Disinfection of Potable Water Pipe.

PART 2 - PRODUCTS

2.1 SADDLES

A. Saddles shall be brass for PVC pipe equal to the Ford S70 Series or Mueller H13000 Series.

2.2 CORPORATION STOP

- A. Corporation stops to be used with copper pipe (or CPVC service pipe in copper pipe sizes) with compression type connections, where connected into PVC pipe, shall be the same, except with compression type outlet connections. Stops shall be Mueller Model H15008, Ford F-1000, or equal.
- Corporation stops shall be factory tested to 150 psi to be compatible with the pipes in which they are installed.

2.3 WATER METERS

- A. The potable water flow shall be monitored by a disc or piston type positive displacement meter. The flow shall be totalized at the meter body.
- B. Characteristics are as follows:

Size: 5/8 inch x 3/4 inch

Flow Range: 3/4 inch - 2 to 30 gallons per minute (GPM)

Maximum Pressure Loss: 5/8 inch - 10.8 psi @ 20 GPM

Register Type: Straight reading, hermetically sealed, magnetic drive

Registration: 5/8 inch - 10 gallons or 1 cubic feet

Capacity: 5/8 inch - 1,000,000 gallons or 100,000 cubic feet

Maximum Operation Pressure 150 psi

Connection: As shown on the Drawings

Main Case: Bronze

Measuring Chamber: Bronze
Piston: Hard rubber

Strainer: Stainless steel or copper

Trim/Bolts: Stainless steel

Accuracy: Within 1.5 percent of through-put

Maximum Continuing Flow Rate: 5/8 inch - 10 GPM

C. Meters shall Badger Model 25 or approved equivalent.

2.4 METER COPPER SETTERS

A. Meter setters shall be iron meter yoke, riser type, vertical inlet and outlet for copper pipe. They shall be 5/8-inch x 3/4-inch single or tandem Ford, Mueller or equal. A 90 degree angle valve shall be located at top of setter on suction side of meter. They shall be 5/8-inch x 3/4-inch single or tandem Ford VBHH172-7W-3344 with dual check, Mueller 132404-2-67-7 with dual check, or equivalent. The dual check valves must be manufactured in the setter in a vertical position so that access to the valves is from the top. A master lock No. 1, Model #2085 shall be provided with each setter. The key shall match Owner's existing key.

2.5 METER BOX

- A. Meter box shall be a polyvinyl chloride (PVC) or polyethylene (PE) box 18 inches in diameter x 36 inches deep (inside dimensions) and include a <u>cast iron hinged reader lid</u>. The box shall be able to withstand 1,200 pounds compression. The box shall be used for both single and tandem setters.
- B. The meter box shall be equivalent to the MS Meter Box by Mid-States Plastics. The cast iron lid shall be equivalent to the 18-inch meter box cover, as manufactured by Sigma and shall read "Water Meter" on top of the lid.

2.6 PRESSURE REDUCING VALVE (PRV)

A. Pressure reducing valves for water service shall be single seated for dead-end or continuous service. Size 3/4-inch shall have bronze bodies with screwed ends. The cup packing and valve seat shall be of high grade leather; the diaphragm of nylon-inserted neoprene. The valves shall be equivalent to Zurn #600.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. All service connections shall be installed in the locations shown, rigidly supported.
- B. After installation, all service connections shall be tested at least one hour at the working pressure corresponding to the class of pipe, unless a different test pressure is specified. If any joint proves to be defective, it shall be repaired to the satisfaction of the Engineer.
- C. All materials shall be carefully inspected for defects in workmanship and materials; all debris and foreign material cleaned out of valve openings, etc.; all operating mechanisms operated to check their proper functioning, and all fittings checked for tightness. All materials which do not operate easily, or are otherwise defective, shall be repaired or replaced at no additional cost to the Owner.

3.2 INSPECTION AND TESTING

A. All service connections shall be tested to demonstrate their conformance with the specified operational capabilities and any deficiencies shall be corrected, device replaced or otherwise made acceptable to the Engineer.

END OF SECTION

SECTION 02675 DISINFECTION OF POTABLE WATER PIPE

PART 1 - GENERAL

1.1 WORK INCLUDED

A. The Contractor shall furnish all labor, material and water necessary to disinfect the potable water pipe as shown on the Drawings and specified herein.

1.2 RELATED WORK

- A. Section 02225 Excavating, Backfilling and Compacting for Utilities.
- B. Section 02610 Water Pipe and Fittings.
- C. Section 02640 Water Valves and Gates
- D. Section 02660 Domestic Water Distribution Connections

PART 2 - PART 2 - PRODUCTS (NOT USED)

PART 3 - PART 3 - EXECUTION

3.1 DISINFECTION OF WATER LINES

- A. Sterilization of pipe line shall be in accordance with the American Water Works Association Specification C651-05 using liquid chlorine. The pipe line shall be disinfected by using a 50 mg/l chlorine solution for a contact period of 24 hours. At the end of the 24 hour retention period, the required residual shall be 25 ppm. Pipes shall be thoroughly flushed upon meeting the chlorine residual requirements.
- B. Before the pipes are placed in service, samples of the water must be taken by the Contractor and submitted to the public health agency for testing. No pipes shall be placed in service until the samples have been approved by the agency. The Contractor shall bear all the cost of sampling, testing, and postage.
- C. Sampling locations shall be approved by the Engineer and the public health agency having jurisdiction.
- D. A satisfactory report for the section(s) under test must be submitted to the owner and the Engineer before authorizing domestic consumption of the water.
- E. Sterilization procedures shall be continued until approved samples have been obtained.

END OF SECTION

October 9, 2014

Operations Division Regulatory Branch (South) ID No. LRL-2014-455

Mr. Adam Michels Kentucky Transportation Cabinet 200 Mero Street Frankfort, Kentucky 40601

Dear Mr. Michels:

This is in response to your request for authorization to replace the KY-32 bridge and approaches, with minor channel improvements and bank stabilization along the Scrubgrass Creek and TTI Railroad in Nicholas County, Kentucky. The information supplied by you was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

Your project is considered a discharge of backfill or bedding material for a road crossing. The project is authorized under the provisions of 33 CFR 330 A Nationwide Permit (NWP) No. 14, Linear Transportation Projects, as published in the Federal Register February 21, 2012. Under the provisions of this authorization, you must comply with the enclosed Terms and General Conditions for Nationwide Permit No. 14.

You must also comply with the enclosed Water Quality Certification (WQC) Conditions for Nationwide Permit No. 14 dated March 19, 2012, issued by the Kentucky Division of Water. Once you obtain your certification, or if no application was required, you may proceed with the project without further contact or verification from us.

This decision is valid until March 18, 2017. The enclosed Compliance Certification should be signed and returned when the project is completed. If your project is not completed by this date or if your project is modified, you must contact us for another permit determination in accordance with the rules and regulations in effect at that time. Please note that we also perform periodic inspections to ensure compliance with our permit conditions and applicable Federal laws. A copy of this letter is being sent to the KDOW (see enclosure for address).

If you have any questions, please contact this office by writing to the above address, ATTN: CELRL-OP-FS, or by calling me at 502-315-6683. All correspondence pertaining to this matter should refer to our ID No. LRL-2014-455.

Sincerely,

ORIGINAL SIGNED

Todd E. Hagman Biologist South Section Regulatory Branch

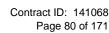
Enclosures

Hagman/OP-FS/rb/NWP-14/NWP14.docx

RECORD COPY

ADDRESS FOR COORDINATING AGENCY

Mr. Peter Goodman
Acting Director
Kentucky Energy & Environment Cabinet
Division of Water
200 Fair Oaks, 4th Floor
Frankfort, KY 40601



Nationwide Permit Conditions

US Army Corps of Engineers。 Louisville District

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- Navigation. (a) No activity may cause more than a minimal adverse effect on vigation.
- (b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US.
- (c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.
 - 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g. through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. Migratory Bird Breeding Areas. Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
 - Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
 - Suitable Material. No activity may use unsuitable material (e.g., trash, debris, tobodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
 - Fills Within 100-Year Floodplains. The activity must comply with applicable FEMAapproved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high

- tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.
- 13. <u>Removal of Temporary Fills</u>. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
 - 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
 - 15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).
 - 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
 - (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.
- applicant has identified listed species or critical habitat that might be affected or is in the vicinity of name(s) of the endangered or threatened species that might be affected by the proposed work or engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed provided notification the proposed activities will have "no effect" on listed species or critical habitat that utilize the designated critical habitat that might be affected by the proposed work. The district vicinity of the project, or if the project is located in designated critical habitat, and shall not begin the project, and has so notified the Corps, the applicant shall not begin work until the Corps has district engineer if any listed species or designated critical habitat might be affected or is in the work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed or until Section 7 consultation has been completed. If the non-Federal applicant has not heard (c) Non-federal permittees must submit a pre-construction notification (PCN) to the species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal endangered or threatened species or designated critical habitat, the PCN must include the back from the Corps within 45 days, the applicant must still wait for notification from Corps.
 - (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

NICHOLAS COUNTY STP BRO 5215(014) Contract ID: 141068 Page 81 of 171

- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at http://www.fws.gov.or http://www.fws.gov/ipac_and_http://www.noaa.gov/fisheries.html_respectively.
- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.
 - 20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- by the proposed work or include a vicinity map indicating the location of the historic properties or and field survey. Based on the information submitted and these efforts, the district engineer shall activity may have the potential to cause effects and notified the Corps, the non-Federal applicant properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may activities, the pre-construction notification must state which historic properties may be affected (c) Non-federal permittees must submit a pre-construction notification to the district National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction include background research, consultation, oral history interviews, sample field investigation, shall not begin the activity until notified by the district engineer either that the activity has no the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the National Register of Historic Places, including previously unidentified properties. For such potential to cause effects or that consultation under Section 106 of the NHPA is complete. notifications, district engineers will comply with the current procedures for addressing the engineer if the authorized activity may have the potential to cause effects to any historic
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
 - (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who,

with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

- 21. <u>Discovery of Previously Unknown Remains and Artifacts.</u> If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.
 - 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
 - (a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38,
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
 - (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
 - (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
 - (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

NICHOLAS COUNTY STP BRO 5215(014) Contract ID: 141068 Page 82 of 171

- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
 - (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
 - (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
 - (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer (f) Compensatory mitigation plans for projects in or near streams or other open waters appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality will normally include a requirement for the restoration or establishment, maintenance, and legal side of the stream, but the district engineer may require slightly wider riparian areas to address area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each may waive or reduce the requirement to provide wetland compensatory mitigation for wetland documented water quality or habitat loss concerns. If it is not possible to establish a riparian establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the osses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has

been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

- 25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
 - 26. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management
 - requirements.

 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.
- 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Tidiisielee)	
(Date)	

- 30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permitteeresponsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
 - (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
 - (c) The signature of the permittee certifying the completion of the work and mitigation.

NICHOLAS COUNTY STP BRO 5215(014) Contract ID: 141068 Page 83 of 171

- 31. <u>Pre-Construction Notification (PCN)</u>. (a) <u>Timing</u>. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a PCN as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
 - (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(f)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittees's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
 - (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

 (1) Name, address and telephone numbers of the prospective permittee;
 - (2) Location of the proposed project;
- diverse environmental effects the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the US expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
 - (4) The PCN must include a delineation of wetlands, other special aquatic sites, and waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
 - (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
 - (c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
 - (d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the PCN notification. The district engineer will fully where there is an unacceptable hazard to life or a significant loss of property or economic hardship (2) For all NWP activities that require PCN notification and result in the loss of greater than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and site-specific comments. The comments must explain why the agency believes the adverse effects 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer transmitted to telephone or fax the district engineer notice that they intend to provide substantive, activity's compliance with the terms and conditions of the NWPs, including the need for mitigation activity are minimal. The district engineer will provide no response to the resource agency, except will occur. The district engineer will consider any comments received to decide whether the NWP as provided below. The district engineer will indicate in the administrative record associated with (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the each PCN notification that the resource agencies' concerns were considered. For NWP 37, the exception of NWP 37, these agencies will have 10 calendar days from the date the material is emergency watershed protection and rehabilitation activity may proceed immediately in cases consider agency comments received within the specified time frame concerning the proposed to ensure the net adverse environmental effects to the aquatic environment of the proposed
- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act
 - Stevens Fishery Conservation and Management Act.

 (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

- District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- approvals, or authorizations required by law.

2. NWPs do not obviate the need to obtain other federal, state, or local permits.

- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project.

Terms for Nationwide Permit No. 14 <u>Linear Transportation Projects</u>

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

THE STATE OF THE S

STEVEN L. BESHEAR GOVERNOR LEONARD K. PETERS SECRETARY

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

September 30, 2014

David Waldner, Director Kentucky Transportation Cabinet 200 Mero Street, 5th Floor Frankfort, KY 406022

Re: Water Quality Certification #2014-057-1

KY 32 Myers Road Bridge - Nicolas Co

AI No.: 122944

Activity ID: APE20140001 Nicholas County, Kentucky

Dear Mr. Waldner:

Pursuant to Section 401 of the Clean Water Act (CWA), the Commonwealth of Kentucky certifies it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 303, 304, 306, and 307 of the CWA, will not be violated by the above referenced project provided that the U.S. Army Corps of Engineers authorizes the activity under 33 CFR part 330, and the attached conditions are met.

All future correspondence on this project must reference AI No. 122944. The attached document is your official Water Quality Certification; please read it carefully. If you should have any questions concerning the conditions of this water quality certification, please contact James Bicknell of my staff by calling (502) 564-3410.

Sincerely,

Adam Jackson, SupervisorWater Quality Certification Section

Kentucky Division of Water

AJ:JB Attachment

cc: Lee Anne Devine, USACE: Louisville District

Adam Michels, KYTC DEA



KTC Water Quality Certification

KY 32 Myers Road Bridge - Nicolas Co Facility Requirements Permit Number: WQC#2014-057-1 Activity ID No.: APE20140001 Page 1 of 2

ACTV0000000001 (KYTC 9-1074) Bridge Replacement:

Submittal/Action Requirements:

Condition	
No.	Condition
S-1	The Kentucky Transportation Cabinet (KYTC) must notify the Division: Due prior to any construction activity. Notify the Water Quality Certification (WQC) Section of the Kentucky Division of Water (KDOW) at (502) 564-3410 at least two weeks prior to construction. [Clean Water Act]
S-2	The KYTC must notify the Division: Due when construction is complete. Notify the WQC Section of the KDOW at (502) 564-3410 no later than two weeks post construction. [Clean Water Act]

Narrative Requirements:

Condition No.	Condition
T-1	The work approved by this certification shall be limited to: - the relocation of an intermittent stream resulting in the loss of 208 linear feet of an unnamed tributary to Scrubgrass Creek the impact of 54 linear feet to Scrubgrass Creek to accomodate bridge abutment construction. [Clean Water Act]
T-2	All work performed under this certification shall adhere to the design and specifications set forth in the application package titled "KY32 Myers Rd Bridge 9-1074 Application" received by the KDOW on June 16, 2014. [Clean Water Act]
T-3	The KYTC is responsible for preventing degradation of waters of the Commonwealth from soil erosion. An erosion and sedimentation control plan must be designed, implemented, and maintained in effective operating condition at all times during construction. [Clean Water Act]
T-4	The Division of Water reserves the right to modify or revoke this certification should it be determined that the activity is in noncompliance with any condition set forth in this certification. [Clean Water Act]
T-5	If construction does not commence within two years of the date of this letter, this certification will become void. A letter requesting a renewal should be submitted. [Clean Water Act]

KTC Water Quality Certification

KY 32 Myers Road Bridge - Nicolas Co Facility Requirements Permit Number: WQC#2014-057-1 Activity ID No.: APE20140001

Page 2 of 2

ACTV00000000001 (continued):

Narrative Requirements:

Condition No.	Condition
T-6	Other permits from the Division of Water may be required for this activity. If this activity occurs within a floodplain, a Permit to Construct Across or Along a Stream may be required. Please contact Todd Powers (502-564-3410) for more information. If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) stormwater permit shall be required from the Surface Water Permits Branch. This permit requires the development of a Stormwater Pollution Prevention Plan (SWPP). The SWPPP must include erosion prevention and sediment control measures. Contact: Surface Water Permits Branch (SWPB) Support (502-564-3410 or SWPBSupport@ky.gov). [Clean Water Act]

Dredging work shall not be conducted during the fish spawning season, April 15th through June 15th. [Clean Water Act]

T-8 Check dams are not allowed within the stream channel. [Clean Water Act]

T-7

Remove all sediment and erosion control measures after re-vegetation has become well-established. [Clean Water Act] **L**-9



STEPHEN L.
BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET

LEONARD K PETERS
SECRETARY

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

200 FAIR CARS LANE

FRANKFORT, KENTUCKY 40801

WWW.Kentlucky.gov

ATTENTION APPLICANT

If your project involves one or more of the following activities, you may need more than one permit from the Kentucky Division of Water.

*building in a floodplain *road culvert in a stream

*streambank stabilization *stream cleanout

*utility line crossing a stream

*construction sites an acre or more

• If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) stormwater permit shall be required from the Operational Permits Section. This permit requires the creation of an erosion control plan.

Contact Allen Ingram.

• Projects that involve filling in the floodplain will require a stream construction permit from the Floodplain Management Section.

Contact Todd Powers.

 Projects that involve work <u>IN</u> a stream, such as bank stabilization, road culverts, utility line crossings, and stream alteration will require a stream construction permit <u>and</u> a Water Quality Certification from the Water Quality Certification Section.

Contact Barbara Scott.

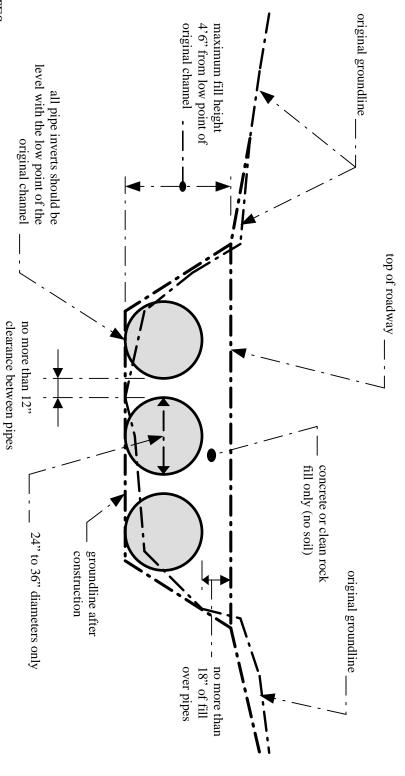
All three contacts listed above can be reached at 502/564-3410. A complete listing of environmental programs administered by the Kentucky Department for Environmental Protection is available from Pete Goodman by calling 502/564-3410.



GENERAL CONDITIONS FOR WATER QUALITY CERTIFICATION

- 1. The Kentucky Division of Water may require submission of a formal application for an Individual Certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 2. Nationwide permits issued by the U.S. Army Corps of Engineers for projects in Outstanding State Resource Waters, Cold Water Aquatic Habitats, and Exceptional Waters as defined by 401 KAR 10:026 shall require individual water quality certifications.
- 3. Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur.
- 4. Sediment and erosion control measures (e.g., check-dams, silt fencing, or hay bales) shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, placement shall not be conducted in such a manner that may cause instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control measures shall be removed and the natural grade restored prior to withdrawal from the site.
- 5. Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- 6. To the maximum extent practicable, all in-stream work under this certification shall be performed during low flow.
- 7. Heavy equipment (e.g. bulldozers, backhoes, draglines, etc.), if required for this project, should not be used or operated within the stream channel. In those instances where such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize re-suspension of sediments and disturbance to the channel, banks, or riparian vegetation.
- 8. If there are water supply intakes located downstream that may be affected by increased turbidity, the permittee shall notify the operator when work will be performed.
- 9. Removal of existing riparian vegetation should be restricted to the minimum necessary for project construction.
- 10. Should stream pollution, wetland impairment, and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380.

ATTACHMENT 1



OIES:

- . This is a conceptual drawing. The number and size of pipes and other details will vary depending on specific site conditions.
- of excess, unconsolidated materials thus excavated must be outside of the floodplain and (2) the finished surface of the completed road crushed stone, or other stable road construction materials. This may only be done, however, with the following provisions: (1) the disposal The pipes and backfill must be contained within the stream channel as shown above. During the construction of the approaches and access may be no more than three inches (3") above the pre-construction surface of the floodplain at any point beyond the top of banks. roadway across the floodplain, unstable and unconsolidated materials unsuitable for roadways may be excavated and replaced with riprap,

LOW-WATER CROSSING

STANDARD DRAWING
Not to Scale



Kentucky Transportation Cabinet

Highway District _9_

And

(2)	,	Construction
-----	---	--------------

Kentucky Pollutant Discharge Elimination System Permit KYR10 Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Nicholas County
Replace Bridge on KY 32 (MP 13.896) over TTI RR
& Scrubgrass Creek; 4.2 miles Northeast of KY
1455 Junction

Project: PCN ## - ####; KYTC Item No. 9-1074.00

KPDES BMP Plan Page 1 of 15

Project information

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

- 1. Owner Kentucky Transportation Cabinet, District _9_
- 2. Resident Engineer: (2)
- 3. Contractor name: (2)

Address: (2)

Phone number: (2)

Contact: (2)

Contractors agent responsible for compliance with the KPDES permit requirements (3):

- 4. Project Control Number (2)
- 5. Route (Address) KY 32
- 6. Latitude/Longitude (project mid-point) 38/20/29.885; -83/57/49.423
- 7. County (project mid-point) *Nicholas*
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

A. Site description:

- 1. Nature of Construction Activity (from letting project description) Replace Bridge on KY 32 (MP 13.896) over TTI RR & Scrubgrass Creek; 4.2 miles Northeast of the KY 1455 Junction
- 2. Order of major soil disturbing activities (2) and (3)
- 3. Projected volume of material to be moved *44250 cubic yards*
- 4. Estimate of total project area (acres) 8 acres
- 5. Estimate of area to be disturbed (acres) 7.192 acres
- Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
- 7. Data describing existing soil condition The Geotech Report stated that some of the soil horizons and slopes on the project are subject to erosion. Necessary procedures in accordance with Sections 212 & 213 of the current Standard Specifications shall be followed on construction. & (2)
- 8. Data describing existing discharge water quality (if any) **None known.** & (2)
- 9. Receiving water name Scrubgrass Creek
- 10. TMDLs and Pollutants of Concern in Receiving Waters: Scrubgrass Creek is on the KY Division of Water's 303(d) list of impaired waters with the use of Warm Water Aquatic Habitat nonsupported. The pollutant and suspected sources are unknown.
- 11. Site map Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and

resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.

12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.

- 3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - ➤ Construction Access This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.
 - ➤ Clearing and Grubbing The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved
 - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - Brush and/or other barriers to slow and/or divert runoff.
 - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
 - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
 - Non-standard or innovative methods.
 - Cut & Fill and placement of drainage structures The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
 - Profile and X-Section in place The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.

- Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
- Additional Channel Lining and/or Erosion Control Blanket.
- Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
- Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) A final BMP Plan will result from modifications during this phase of construction. Probably changes include:
 - Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection
 - Placing Sod
 - Planting trees and/or shrubs where they are included in the project
- ➢ BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are: None planned.

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.

2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there any hazardous wastes being generated at the

project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the iob
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

Hazardous Products:

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

Petroleum Products:

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

> Fertilizers:

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

> Paints:

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

Concrete Truck Washout:

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

> Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. **None.**

E. Maintenance

- 1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
- Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. None planned.

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have received KyTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
- > Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- ➤ Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- > Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.

- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 70 percent of the design capacity and at the end of the job.
- ➤ Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- ➤ Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- ➤ Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

2. (e) land treatment or land disposal of a pollutant;
2. (f) Storing,, or related handling of hazardous waste, solid waste or special waste,, in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);
2. (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;
2. (j) Storing or related handling of road oils, dust suppressants,, at a central location;
2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);
2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);
Or, check the following only if there are no qualifying activities
There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.
The contractor is responsible for the preparation of a plan that addresses the
401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information:
- (b) Activities that require a groundwater protection plan have been identified above:
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of

- employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)

Contract ID: 141068 Page 104 of 171

KyTC BMP Plan for Project PCN ## - ####; KYTC Item No. 9-1074.00

Contractor and Resident Engineer Plan certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Resident Engineer and Contractor Certification:

(2) Resident Engine	er signature	
Signed Typed or	title printed name ²	signature
(3) Signed	title inted name ¹	,signature

- 1. Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 200 Fair Oaks Lane, Frankfort Kentucky 40601. Reference the Project Control Number (PCN), KYTC Item No., and KPDES number when one has been issued.
- 2. KyTC note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601. Reference the Project Control Number (PCN), KYTC Item No., and KPDES number when one has been issued.

Sub-Contractor Certification

Subcontractor

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

	Name: Address: Address:			
	Phone:			
The pa	rt of BMP plan this sub	contractor is responsit	ole to implement	is:
Kentuc dischai dischai	y under penalty of law ky Pollutant Discharge rges, the BMP plan tha rged as a result of stor ement of non-storm wa	Elimination System port has been developed mevents associated with the second s	ermit that authori to manage the q with the construc	zes the storm water quality of water to be tion site activity and
Signed	Typed or printed name	title,		
	ryped or printed name	2	signa	ature

1. Sub Contractor Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, Surface Water Permits Branch, Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky 40601. Reference the Project Control Number (PCN), KYTC Item No., and KPDES number when one has been issued.



STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS SECRETARY

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

July 10, 2014

Karen Mynhier KYTC Item No. 9-1074.00 822 Elizaville Ave Flemingsburg, KY 41041

Re: KYR10 Coverage Acknowledgment

KPDES No.: KYR10I500 KYTC Item No. 9-1074.00 Permit Type: Construction

AI ID: 123085

Nicholas County, Kentucky

Dear Karen Mynhier:

The discharges associated with the Notice of Intent you submitted have been approved for coverage under the "Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10)" permit. This coverage becomes effective the date of this correspondence and will remain effective until the general permit expires or the Division of Water revokes coverage. During this period of coverage all discharges shall comply with the conditions of the applicable general permit. A copy of the general permit the operator is now covered by can be found on our website: http://water.ky.gov.

Any questions concerning the general permit and its requirements should be directed to me at (502) 564-3410.

Facility Site: -83.963729, 38.341635

Sincerely,

Shawn HokansonSurface Water Permits Branch
Division of Water



PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

Subsection:	102.15 Process Agent.						
	Replace the 1st paragraph with the following:						
	Every corporation doing business with the Department shall submit evidence of compliance with						
	KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-						
	220, and file with the Department the name and address of the process agent upon whom process						
	may be served.						
Subsection:	105.13 Claims Resolution Process.						
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer						
	available through the forms library and are forms generated within the AASHTO SiteManager						
	software.						
Subsection:	108.03 Preconstruction Conference.						
Revision:	Replace 8) Staking with the following:						
	8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the						
	Commonwealth of Kentucky.						
Subsection:	109.07.02 Fuel.						
Revision:	Revise item Crushed Aggregate Used for Embankment Stabilization to the following:						
	Crushed Aggregate						
	Used for Stabilization of Unsuitable Materials						
	Used for Embankment Stabilization						
	Delete the following item from the table.						
	Crushed Sandstone Base (Cement Treated)						
Subsection:	110.02 Demobilization.						
Revision:	Replace the first part of the first sentence of the second paragraph with the following:						
	Perform all work and operations necessary to accomplish final clean-up as specified in the first						
	paragraph of Subsection 105.12;						
Subsection:	112.03.12 Project Traffic Coordinator (PTC).						
Revision:	Replace the last paragraph of this subsection with the following:						
	Ensure the designated PTC has sufficient skill and experience to properly perform the task						
	assigned and has successfully completed the qualification courses.						
	112.04.18 Diversions (By-Pass Detours).						
Revision:	Insert the following sentence after the 2nd sentence of this subsection.						
	The Department will not measure temporary drainage structures for payment when the contract						
	documents provide the required drainage opening that must be maintained with the diversion.						
	The temporary drainage structures shall be incidental to the construction of the diversion. If the						
	contract documents fail to provide the required drainage opening needed for the diversion, the						
	cost of the temporary drainage structure will be handled as extra work in accordance with section						
	109.04.						
	201.03.01 Contractor Staking.						
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the						
	general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth						
	of Kentucky.						

Subsection	201.04.01 Contractor Staking.				
	Replace the last sentence of the paragraph with the following: Complete the general layout of				
Kevision.	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the				
	Commonwealth of Kentucky.				
Subsections	206.04.01 Embankment-in-Place.				
	Replace the fourth paragraph with the following: The Department will not measure suitable				
Kevision.	excavation included in the original plans that is disposed of for payment and will consider it				
Cubaatian	incidental to Embankment-in-Place. 208.02.01 Cement.				
Revision:	Replace paragraph with the following:				
	Select Type I or Type II cement conforming to Section 801. Use the same type cement				
Cl4:	throughout the work.				
	208.03.06 Curing and Protection.				
Revision:	Replace the fourth paragraph with the following:				
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured				
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day				
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below				
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)				
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit				
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department				
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the				
	Department at least 3 day notice of the request for a shortened curing period. The Department				
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish				
	cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened				
	curing time is requested. The Department will test cores using an unconfined compression test.				
	Roadbed cores must achieve a minimum strength requirement of 80 psi.				
	208.03.06 Curing and Protection.				
Revision:	Replace paragraph eight with the following:				
	At no expense to the Department, repair any damage to the subgrade caused by freezing.				
	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Revision:	Revise Seed Mix Type I to the mixture shown below:				
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)				
	35% Hard Fescue (Festuca (Festuca longifolia)				
	10% Ryegrass, Perennial (Lolium perenne)				
	5% White Dutch Clover (Trifolium repens)				
	212.03.03 Permanent Seeding and Protection.				
Part:	A) Seed Mixtures for Permanent Seeding.				
Number:					
Revision:	Replace the paragraph with the following:				
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed				
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course				
	replace the crown vetch with Kentucky 31 Tall Fescue.				

Contract ID: 141068 Page 111 of 171

G 1	212.22.22.7			
	212.03.03 Permanent Seeding and Protection. A) Seed Mixtures for Permanent Seeding			
Part:	A) Seed Mixtures for Permanent Seeding.			
Number:	[3]			
Revision:	Replace the paragraph with the following:			
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to			
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to			
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	B) Procedures for Permanent Seeding.			
Revision:	Delete the first sentence of the section.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	B) Procedures for Permanent Seeding.			
Revision:	Replace the second and third sentence of the section with the following:			
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of			
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural			
	limestone to the seedbed when the Engineer determines it is needed. When required, place			
	agricultural limestone at a rate of 3 tons per acre.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	D) Top Dressing.			
Revision:	Change the title of part to D) Fertilizer.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	D) Fertilizer.			
Revision:	Replace the first paragraph with the following:			
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use			
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the			
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10			
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000			
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply			
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional			
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of			
	an excessive application of fertilizer at no cost to the Department.			
Subsection:	212.03.03 Permanent Seeding and Protection.			
Part:	D) Fertilizer.			
Revision:	Delete the second paragraph.			
Subsection:	212.04.04 Agricultural Limestone.			
Revision:	Replace the entire section with the following:			
	The Department will measure the quantity of agricultural limestone in tons.			
Subsection:	212.04.05 Fertilizer.			
Revision:	Replace the entire section with the following:			
	The Department will measure fertilizer used in the seeding or sodding operations for payment.			
	The Department will measure the quantity by tons.			
-				

Contract ID: 141068 Page 112 of 171

Subsection: 212.05 PAYMENT. Revision: Delete the following item code: Code Pay Item Pay Unit 05966 Topdressing Fertilizer Ton Subsection: 212.05 PAYMENT. Revision: Add the following pay items: Code Pay Item Pay Unit 05963 Initial Fertilizer Ton 05964 20-10-10 Fertilizer Ton						
Code Pay Item Pay Unit 05966 Topdressing Fertilizer Ton Subsection: 212.05 PAYMENT. Revision: Add the following pay items: Code Pay Item Pay Unit 05963 Initial Fertilizer Ton						
D5966 Topdressing Fertilizer Ton						
Subsection: 212.05 PAYMENT. Revision: Add the following pay items: Code Pay Item Pay Unit 05963 Initial Fertilizer Ton						
Revision: Add the following pay items: Code Pay Item Pay Unit 05963 Initial Fertilizer Ton						
CodePay ItemPay Unit05963Initial FertilizerTon						
05963 Initial Fertilizer Ton						
05964 20-10-10 Fertilizer Ton						
I TOUTO AUTIO TOTALINIZOL TOLI						
05992 Agricultural Limestone Ton						
Subsection: 213.03.02 Progress Requirements.						
Revision: Replace the last sentence of the third paragraph with the following:						
Additionally, the Department will apply a penalty equal to the liquidated damages when	all					
aspects of the work are not coordinated in an acceptable manner within 7 calendar days a	ıfter					
written notification.						
Subsection: 213.03.05 Temporary Control Measures.						
Part: E) Temporary Seeding and Protection.						
Revision: Delete the second sentence of the first paragraph.						
l ' -	304.02.01 Physical Properties.					
	Required Geogrid Properties					
	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.					
	402.03.02 Contractor Quality Control and Department Acceptance.					
	B) Sampling.					
	Replace the second sentence with the following:					
	The Department will determine when to obtain the quality control samples using the random-					
	number feature of the mix design submittal and approval spreadsheet. The Department will					
	randomly determine when to obtain the verification samples required in Subsections 402.03.03					
Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.					
Part: D) Testing Responsibilities.						
Number: 3) VMA.						
Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 wor	Add the following paragraph below Number 3) VMA: Retain the AV/VMA specimens and one additional corresponding G. sample for 5 working					
days for mixture verification testing by the Department. For Specialty Mixtures, retain a						
sample for 5 working days for mixture verification testing by the Department. When the						
Department's test results do not verify that the Contractor's quality control test results are						
the acceptable tolerances according to Subsection 402.03.03, retain the samples and spec	-					
from the affected sublot(s) for the duration of the project.						
Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.						
Part: D) Testing Responsibilities.						
Number: 4) Density.						
Revision: Replace the second sentence of the Option A paragraph with the following:						
Perform coring by the end of the following work day.						

Contract ID: 141068 Page 113 of 171

Supplemental Specifications to the Standard Specifications for Road and Bridge Construction, 2012 Edition Effective with the August 22, 2014 Letting

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

Number: 5) Gradation.

Revision: Delete the second paragraph.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

Part: H) Unsatisfactory Work.
Number: 1) Based on Lab Data.

Revision: Replace the second paragraph with the following:

When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according

to Subsection 402.03.05.

Subsection: 402.03.03 Verification.

Revision: Replace the first paragraph with the following:

402.03.03 Mixture Verification. For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

Subsection:

402.03.03 Verification.

Part:

A) Evaluation of Sublot(s) Verified by Department.

Revision:

Replace the third sentence of the second paragraph with the following:

When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

Subsection:

402.03.03 Verification.

Part:

B) Evaluation of Sublots Not Verified by Department.

Revision:

Replace the third sentence of the first paragraph with the following:

When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.

Contract ID: 141068 Page 114 of 171

Subsection:	402.03.03 Verification.						
Part:	B) Evaluation of Sublots Not Verified by Department.						
Revision:	Replace the third sentence of the second paragraph with the following:						
	When the F -test or t -test indicates that the Contractor's data and Department's data are possibly						
	not from the same population, the Department will investigate the cause for the difference						
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems						
	appropriate.						
Subsection:	402.03.03 Verification.						
Part:	C) Test Data Patterns.						
Revision:	Replace the second sentence with the following:						
	When patterns indicate substantial differences between the verified and non-verified sublots, the						
	Department will perform further comparative testing according to subsection 402.03.05.						
Subsection:	402.03 CONSTRUCTION.						
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.						
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the						
	Department will obtain an additional verification sample at random using the Asphalt Mixture						
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and						
	Department's laboratory testing equipment and technicians. The Department will obtain a						
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it						
	according to AASHTO R 47. The Department will retain one split portion of the sample and						
	provide the other portion to the Contractor. At a later time convenient to both parties, the						
	Department and Contractor will simultaneously reheat the sample to the specified compaction						
	temperature and test the mixture for AV and VMA using separate laboratory equipment						
	according to the corresponding procedures given in Subsection 402.03.02. The Department will						
	evaluate the differences in test results between the two laboratories. When the difference						
	between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate						
	and resolve the discrepancy according to Subsection 402.03.05.						
Subsection:	402.03.04 Dispute Resolution.						
Revision:	Change the subsection number to 402.03.05.						
Subsection:	402.05 PAYMENT.						
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures						
Table:	AC						
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.						
Revision:	Replace the first sentence with the following:						
	In addition to the equipment specified above, provide a MTV with the following minimum						
	characteristics:						
Subsection:	412.02.09 Material Transfer Vehicle (MTV).						
Revision:	Replace the paragraph with the following:						
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.						

Contract ID: 141068 Page 115 of 171

Subsection:	412.03.07 Placement and Compaction.						
	Replace the first paragraph with the following:						
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps						
ļ	and/or shoulders unless specified in the contract. When the Engineer determines the use of the						
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that						
ļ	portion of pavement by a letter documenting the waiver.						
Subsection:	412.04 MEASUREMENT.						
	Add the following subsection:						
120 (131011)	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for						
ļ	payment and will consider its use incidental to the asphalt mixture.						
	501.03.19 Surface Tolerances and Testing Surface.						
	B) Ride Quality.						
Revision:	Add the following to the end of the first paragraph:						
	The Department will specify if the ride quality requirements are Category A or Category B when						
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when						
	the Department fails to classify which ride quality requirement will apply to the Contract.						
Subsection:	603.03.06 Cofferdams.						
Revision:	Replace the seventh sentence of paragraph one with the following:						
ļ	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of						
ļ	Kentucky.						
Subsection:	605.03.04 Tack Welding.						
Revision:	Insert the subsection and the following:						
	605.03.04 Tack Welding. The Department does not allow tack welding.						
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.						
Part:	A) Existing Bridges and New Structures.						
Number:	1) Prewetting and Grout-Bond Coat.						
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge						
	decks prepared by hydrodemolition.						
	609.03 Construction.						
Revision:	Replace Subsection 609.03.01 with the following:						
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast						
ļ	concrete release the temporary erection supports under the bridge and swing the span free on its						
ļ	supports.						
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam						
	is placed in the final location and prior to placing steel reinforcement. At locations where lift						
	loops are cut, paint the top of the beam with galvanized or epoxy paint.						
	611.03.02 Precast Unit Construction.						
Revision:	Replace the first sentence of the subsection with the following:						
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for						
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with						
	KY Table 1 (Precast Culvert KYHL-93 Design Table) , and Section 605 with the following						
	exceptions and additions:						

Subsections	613.03.01 Design.						
Number:	2)						
	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD						
Revision:	Bridge Design Specifications"						
G 1 4	<u> </u>						
	615.06.02						
Revision:	Add the following sentence to the end of the subsection.						
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled inch.						
	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.						
	Replace the reference of 6.6 in the section to 615.06.06.						
	615.06.04 Placement of Reinforcement for Precast Endwalls.						
	Replace the reference of 6.7 in the section to 615.06.07.						
	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.						
Revision:	Replace the subsection with the following:						
	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be						
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall						
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO						
	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall						
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO						
	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured						
	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,						
	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section						
	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded						
	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires						
	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing						
	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to						
	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be						
	not more than 16 inches.						
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.						
	Replace the subsection with the following:						
	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for						
	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of						
	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design						
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the						
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012						
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the						
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-						
	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.						
	content of the wife fuelle sheet shall not be less than 2 mones of more than 6 mones.						

Contract ID: 141068 Page 117 of 171

Subsection:	615.08.01 Type of Test Specimen.						
Revision:	Replace the subsection with the following:						
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the						
	first batch of concrete. Acceptable start-up results are required for production of the first unit.						
	After the first unit has been established, random acceptance testing is performed daily for each						
	50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and temperature						
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is						
	performed.						
Subsection:	615.08.02 Compression Testing.						
Revision:	Delete the second sentence.						
Subsection:	615.08.04 Acceptability of Core Tests.						
Revision:	Delete the entire subsection.						
Subsection:	615.12 Inspection.						
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the						
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the						
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting						
	from transport to the jobsite.						
Subsection:	716.02.02 Paint.						
Revision:	Replace sentence with the following: Conform to Section 821.						
Subsection:	716.03 CONSTRUCTION.						
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural						
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
	716.03.02 Lighting Standard Installation.						
Revision:	Replace the second sentence with the following:						
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum						
	of four feet from the front face of the guardrail to the front face of the pole base.						
	716.03.02 Lighting Standard Installation.						
Part:	A) Conventional Installation.						
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is						
	positioned on the side away from on-coming traffic.						
	716.03.02 Lighting Standard Installation.						
Part:	A) Conventional Installation.						
Number:	1) Breakaway Installation and Requirements.						
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of						
	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,						
Cubaction	and Traffic Signals, 2013-6th Edition with current interims.						
	716.03.02 Lighting Standard Installation.						
Part:	B) High Mast Installation						
Revision: Subsection:	Replace the first sentence with the following: Install each high mast pole as noted on plans.						
	716.03.02 Lighting Standard Installation. B) High Most Installation						
Part: Number:	B) High Mast Installation						
Revision:	2) Concrete Base Installation Modification of Chart and succeeding paragraphs within this section:						
MENISIOII:	paragraphs within this section.						

Drilled Shaft Depth Data							
		3:1 0	round	2:1 (Fround	1.5:1	Ground
Level Ground		Sl	ope	Sl	ope	Slo	pe ⁽²⁾
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft

Steel Requirements Vertical Bars Ties or Spiral Spacing or Size Total Size Pitch #4 #10 16

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and onehalf closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection: 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

Revision:

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

Subsection:	716.03.03 Trenching.				
Part:	B) Trenching of Conduit for Non-Highmast Cables.				
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for				
	either situation listed previously, obtain the Engineer's approval and maintain the required				
	conduit depths coming into the junction boxes. No payment for additional junction boxes for				
	greater depths will be allowed.				
Subsection:	716.03.10 Junction Boxes.				
Revision:	Replace subsection title with the following: Electrical Junction Box.				
Subsection:	716.04.07 Pole with Secondary Control Equipment.				
Revision:	Replace the paragraph with the following:				
	The Department will measure the quantity as each individual unit furnished and installed. The				
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any				
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them				
	incidental to this item of work. The Department will also not measure furnishing and installing				
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused				
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,				
	ground rods, and ground wires and will consider them incidental to this item of work.				
Subsection:	716.04.08 Lighting Control Equipment.				
Revision:	Replace the paragraph with the following:				
	The Department will measure the quantity as each individual unit furnished and installed. The				
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,				
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item				
	of work. The Department will also not measure furnishing and installing electrical service				
	conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,				
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground				
	rods, and ground wires and will consider them incidental to this item of work.				
Subsection:	716.04.09 Luminaire.				
Revision:	Replace the first sentence with the following:				
	The Department will measure the quantity as each individual unit furnished and installed.				
	716.04.10 Fused Connector Kits.				
Revision:	Replace the first sentence with the following:				
	The Department will measure the quantity as each individual unit furnished and installed.				
	716.04.13 Junction Box.				
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.				
	716.04.13 Junction Box.				
Part:	A) Junction Electrical.				
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.				
Subsection:	716.04.14 Trenching and Backfilling.				
Revision:	Replace the second sentence with the following:				
	The Department will not measure excavation, backfilling, underground utility warning tape (if				
	required), the restoration of disturbed areas to original condition, and will consider them				
	incidental to this item of work.				

	716.04.18 Remo						
Revision:	1 -	Replace the paragraph with the following:					
	The Department will measure the quantity as a lump sum for the removal of lighting equipment.						
	The Department will not measure the disposal of all equipment and materials off the project by						
	the contractor. The Department also will not measure the transportation of the materials and will						
		ncidental to this item of work.					
		and Jack Conduit.					
Revision:		agraph with the following: The Department will measure the quantity in linear					
		shall include all work necessary for boring and installing conduit under an					
		y. Construction methods shall be in accordance with Sections 706.03.02,					
	paragraphs 1, 2,						
Subsection:	716.05 PAYME	NT.					
Revision:	-	4810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>					
	<u>Unit</u> with the fol	llowing:					
	<u>Code</u>	Pay Item Pay Unit					
	04810	Electrical Junction Box Each					
	04811	Electrical Junction Box Type B Each					
	20391NS835	Electrical Junction Box Type A Each					
	20392NS835	Electrical Junction Box Type C Each					
	723.02.02 Paint.						
Revision:		e with the following: Conform to Section 821.					
	723.03 CONSTI						
Revision:	_ ·) with the following: 5) AASHTO Standard Specifications for Structural					
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
		and Bases Installation.					
Revision:	Replace the first sentence with the following:						
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum						
	of four feet from the front face of the guardrail to the front face of the pole base.						
Subsection:		and Bases Installation.					
Part:	· ·	and Mastarm Poles Installation					
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section						
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions						
G. L 41	encountered during drilling and slope condition at the site. Refer to the design chart below:						
	723.03.02 Poles and Bases Installation.						
Part:	B) Pedestal or Pedestal Post Installation.						
Revision:		th sentence of the paragraph with the following: For breakaway supports,					
		ion 12 of the AASHTO Standard Specifications for Structural Supports for					
	Highway Signs,	Luminaires, and Traffic Signals, 2013-6th Edition with current interims.					

Subsection	723.03.03 Trenching.					
	A) Under Roadway.					
	Add the following after the second sentence: If depths greater than 24 inches are necessary,					
	obtain the Engineer's approval and maintain ether required conduit depths coming into the					
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.					
•						
Subsection:	723.03.11 Wiring Installation.					
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of					
-	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.					
Subsection:	723.03.12 Loop Installation.					
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of					
	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.					
Subsection:	723.04.02 Junction Box.					
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.					
Subsection:	723.04.03 Trenching and Backfilling.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to					
	original condition, and will consider them incidental to this item of work.					
Subsection:	723.04.10 Signal Pedestal.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling,					
1	restoring disturbed areas, or other necessary hardware and will consider them incidental to this					
-	item of work.					
Subsection:	723.04.15 Loop Saw Slot and Fill.					
Revision:	Replace the second sentence with the following: The Department will not measure sawing,					
•	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider					
1	them incidental to this item of work.					
Subsection:	723.04.16 Pedestrian Detector.					
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each					
-	individual unit furnished, installed and connected to pole/pedestal. The Department will not					
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for					
	sign and will consider them incidental to this item of work.					
Subsection:	723.04.18 Signal Controller- Type 170.					
Revision:	Replace the second sentence with the following: The Department will not measure constructing					
1	the concrete base or mounting the cabinet to the pole, connecting the signal and detectors,					
•	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service					
	electrical inspection fees and will consider them incidental to this item of work. The Department					
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian					
<u> </u>	isolators, load switches, model 400 modem card; furnishing and installing electrical service					
[·	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground					
	wires and will consider them incidental to this item of work.					

Subsection:	723.04.20 Install Signal Controller - Type 170.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each						
	individual unit installed. The Department will not measure constructing the concrete base or						
	mounting the cabinet to the pole, connecting the signal and detectors, and excavation,						
	backfilling, restoration, any necessary pole mounting hardware, electric service, or electrical						
	inspection fees and will consider them incidental to this item of work. The Department will also						
	not measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model						
	400 modem card; furnishing and installing electrical service conductors, specified conduits,						
	anchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them						
	incidental to this item of work.						
Subsection:	723.04.22 Remove Signal Equipment.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity as a lump						
	sum removal of signal equipment. The Department will not measure the return of control						
	equipment and signal heads to the Department of Highways as directed by the District Traffic						
	Engineer. The Department also will not measure the transportation of materials of the disposal						
	of all other equipment and materials off the project by the contractor and will consider them						
	incidental to this item of work.						
Subsection:	723.04.28 Install Pedestrian Detector Audible.						
Revision:	Replace the second sentence with the following: The Department will not measure installing sign						
	R10-3e (with arrow) and will consider it incidental to this item of work.						
Subsection:	723.04.29 Audible Pedestrian Detector.						
Revision:	Replace the second sentence with the following: The Department will not measure furnishing						
	and installing the sign R10-3e (with arrow) and will consider it incidental to this item of work.						
Subsection:	723.04.30 Bore and Jack Conduit.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linear						
	feet. This item shall include all work necessary for boring and installing conduit under an						
	existing roadway. Construction methods shall be in accordance with Sections 706.03.02,						
	paragraphs 1, 2, and 4.						
Subsection:	723.04.31 Install Pedestrian Detector.						
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each						
	individual unit installed and connected to pole/pedestal. The Department will not measure						
	installing sign R 10-3e (with arrow) and will consider it incidental to this item of work.						
Subsection:	723.04.32 Install Mast Arm Pole.						
Revision:	Replace the second sentence with the following: The Department will not measure arms, signal						
	mounting brackets, anchor bolts, or any other necessary hardware and will consider them						
	incidental to this item of work.						
Subsection:	723.04.33 Pedestal Post.						
Revision:	Replace the second sentence with the following: The Department will not measure excavation,						
	concrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,						
	restoration, or any other necessary hardware and will consider them incidental to this item of						
	work.						

NICHOLAS COUNTY STP BRO 5215(014)

T	Teaching and an arrangement of the control of the c					
	723.04.36 Traffic Signal Pole Base.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	reinforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or					
	restoration and will consider them incidental to this item of work.					
Subsection:	723.04.37 Install Signal Pedestal.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire, backfilling, restoration, or any other necessary hardware and will consider them incidental to this item of work.					
Subsection:	723.04.38 Install Pedestal Post.					
Revision:	Replace the second sentence with the following: The Department will not measure excava	ition.				
110 (151011)	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground w					
	backfilling, restoration, or any other necessary hardware and will consider them incidental					
	item of work.	100 11110				
Subsection:						
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under Code, Pay Item, and F	o_{av}				
Te vision.	Unit with the following:	<u> </u>				
	Sint will the following.					
	Code Pay Item Pay Unit					
	04810 Electrical Junction Box Each					
	04811 Electrical Junction Box Type B Each					
	20391NS835 Electrical Junction Box Type A Each					
	· -					
Cubactions	20392NS835 Electrical Junction Box Type C Each 804.01.02 Crushed Sand.					
Revision:	Delete last sentence of the section.					
	804.01.06 Slag.					
Revision:	Add subsection and following sentence.					
	Provide blast furnace slag sand where permitted. The Department will allow steel slag san	id only				
	in asphalt surface applications.					
	804.04 Asphalt Mixtures.					
Revision:	1					
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of fill					
	necessary, to meet gradation requirements. The Department will allow any combination of natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved					
	cold feeds at the plant. The Engineer may allow other fine aggregates.					
	1					
Revision:	Replace the second sentence of the paragraph with the following:					
	Additionally, the material must have a minimum solubility of 99.0 percent when tested ac	_				
	to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a J	NR				
	(nonrecoverable creep compliance) between 0.1 and 0.5, when tested according to AASH'	TO TP				
	70.					
	170.					

Contract ID: 141068 Page 124 of 171

Subsection:	806.03.01 General Requirements.						
	PG Binder Requirements and Price Adjustment Schedule						
	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table						
	with the following:						
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay 100% P						
	MSCR recovery, $\%^{(3)}$ 60 Min. ≥58 56 55 54 <53						
	(AASHTO TP 70)						
	806.03.01 General Requirements.						
	PG Binder Requirements and Price Adjustment Schedule						
Superscript:	(3)						
Revision:	Replace (3) with the following:						
	Perform testing at 64°C.						
Subsection:	813.04 Gray Iron Castings.						
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".						
Subsection:	813.09.02 High Strength Steel Bolts, Nuts, and Washers.						
Number:	A) Bolts.						
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:						
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as						
	applicable.						
Subsection:	814.04.02 Timber Guardrail Posts.						
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
Revision:	Replace the first sentence of the fourth paragraph with the following:						
	Use any of the species of wood for round or square posts covered under AWPA U1.						
	814.04.02 Timber Guardrail Posts.						
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
	Delete the second sentence of the fourth paragraph.						
	814.05.02 Composite Plastic.						
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks						
	conforming to this section and assure blocks are from a manufacturer included on the						
	Department's List of Approved Materials.						
Cl	2) Delete the last paragraph of the subsection.						
	816.07.02 Wood Posts and Braces.						
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph 4.1".						
Subsection:							
	816.07.02 Wood Posts and Braces.						
	Delete the second sentence of the first paragraph. 818.07 Preservative Treatment.						
	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".						
IVEA121011:	1 11 St paragraph, replace an references to AWFA C14 with AWFA C1, Section A.						

Subsection:	834.14 Lighting Poles.						
Revision:	Replace the first sentence with the following: Lighting pole design shall be in accordance with						
	loading and allowable stress requirements of the AASHTO Standard Specifications for Structural						
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims, with the exception of the following: The Cabinet will waive the requirement stated in						
	the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast poles (only).						
	The minimum diameter at the base of the pole shall be 22 inches for high mast poles (only).						
Subsection	834.14.03 High Mast Poles.						
Revision:	Remove the second and fourth sentence from the first paragraph.						
Subsection	834.14.03 High Mast Poles.						
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are						
	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.						
	834.14.03 High Mast Poles.						
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595						
	grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield						
	strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a						
	constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential						
	welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are						
	telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and						
	the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the						
	inside diameter of the exposed end of the female section. Use longitudinal seam welds as						
	commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the						
	transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with						
	a telescopic welded joint or a full penetration groove weld with backup bar.						
	The handhole cover shall be removable from the handhole frame. One the frame side opposite						
	the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard						
	padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing						
	stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch						
	thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently						
	secured to the handhole frame to insure weather-tight protection. The hinge shall be						
	manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for						
	the cover. The minimum clear distance between the transverse plate and the bottom opening of						
	the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at						
	least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM						
	A123 (fabricated products) or ASTM A 153 (hardware items).						
Subsection:	834.16 ANCHOR BOLTS.						
Revision:	Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall						
	follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.						

Subsections							
Subsection.	834.17.01 Conventional.						
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on						
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture						
	by providing the first two numbers of the wattage.						
Subsection:	834.21.01 Waterproof Enclosures.						
Revision:	Replace the last five sentences in the second paragraph with the following sentences:						
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean						
	metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin						
	traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and						
	utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the						
	top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex						
	receptacle in the enclosure with a separate 20 amp breaker.						
Subsection:	835.07 Traffic Poles.						
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall						
	thickness shall be calculated in accordance with the AASHTO Standard Specifications for						
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with						
	current interims.						
Subsection:	835.07 Traffic Poles.						
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates						
	have a thickness ≥ 2 inches.						
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall						
	not be less than 16.25 inches.						
Subsection:	835.07 Traffic Poles.						
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole						
	forces shall be positioned in such a manner to maximize the force on any individual anchor bolt						
	regardless of the actual anchor bolt orientation with the pole.						
Subsection:	835.07 Traffic Poles.						
Revision:	Replace the first and second sentence of the sixth paragraph with the following:						
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable						
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the						
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.						
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the						
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The						
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and						
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure						
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to						
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance						
	between the transverse plate and the bottom opening of the handhole shall not be less than the						
	diameter of the bottom tube but needs to be at least 12 inches.						

	835.07 Traffic Poles.						
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and						
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of						
	Kentucky.						
	*Replace the third sentence of the last paragraph with the following: All tables referenced in						
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway						
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.						
Subsection:	835.07.01 Steel Strain Poles.						
Revision:	Replace the second sentence of the second paragraph with the following:						
	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonw	vealth					
	of Kentucky.						
Subsection:	835.07.01 Steel Strain Poles.						
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations sh						
	be shown for all fatigue related connections. Provide the corresponding detail, stress catego	ry					
	and example from table 11.9.3.1-1.						
Subsection:	835.07.02 Mast Arm Poles.						
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis						
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.						
Subsection:	835.07.02 Mast Arm Poles.						
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should						
	be shown for all fatigue related connections. Provide the corresponding detail, stress category						
	and example from table 11.9.3.1-1.						
Subsection:	835.07.03 Anchor Bolts.						
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be						
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.						
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized						
	(ASTM A 153).						
	835.16.05 Optical Units.						
Revision:	Replace the 3rd paragraph with the following:						
	The list of certified products can be found on the following website: http://www.intertek.co	m.					
	835.19.01 Pedestrian Detector Body.						
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum						
C14:	rectangular housing that is compatible with the pedestrian detector.						
	843.01.01 Geotextile Fabric.						
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING						
Revision:	Add the following to the chart:						
	Property Minimum Value ⁽¹⁾ Test Method	_					
	CBR Puncture (lbs) 494 ASTM D6241						
	Permittivity (1/s) 0.7 ASTM D4491						

Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS				
Revision:	Add the following to the chart:				
	Property Minimum Value ⁽¹⁾ Test Method				
	CBR Puncture (lbs)	210	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabrio	2.			
Table:	TYPE III FABRIC GEOTE STABILIZATION	EXTILES FOR SUBGRADE OR EMBANKM	IENT		
Revision:	Add the following to the ch	art:			
	Property	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	370	ASTM D6241		
	Permittivity (1/s)	0.05	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND				
	PAVEMENT EDGE DRAI				
Revision:	Add the following to the ch				
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	309	ASTM D6241		
	Permittivity (1/s)	0.5	ASTM D4491		
Subsection:	843.01.01 Geotextile Fabric.				
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC				
Revision:	Make the following changes to the chart:				
	<u>Property</u>	Minimum Value ⁽¹⁾	Test Method		
	CBR Puncture (lbs)	618	ASTM D6241		
	Grab Strength (lbs)	700	ASTM D4632		
	Apparent Opening Size	U.S. #40 ⁽³⁾	ASTM D4751		
	(3) Maximum average roll value.				

SPECIAL NOTE FOR TURF REINFORCING MAT

1.0 DESCRIPTION. Install turf reinforcement mat at locations specified in the Contract or as the Engineer directs. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

2.0 MATERIALS.

- 2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.
 - A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
 - B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
 - C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

2.2 Classifications

The basis for selection of the type of mat required will be based on the long term shear stress level of the mat of the channel in question or the degree of slope to protect and will be designated in the contract. The Type 4 mats are to be used at structural backfills protecting critical

structures, utility cuts, areas where vehicles may be expected to traverse the mat, channels with large heavy drift, and where higher factors of safety, very steep slopes and/or durability concerns are needed as determined by project team and designer and will be specified in the plans by designer.

Turf Reinforcement Matting					
Properties ¹	Type 1	Type 2	Type 3	Type 4	Test Method
Minimum tensile Strength	125	150	175	3000 by 1500	ASTM D6818 ²
lbs/ft					
UV stability (minimum %	80	80	80	90	ASTM D4355 ³
tensile retention)					(1000-hr exposure)
Minimum thickness (inches)	0.25	0.25	0.25	0.40	ASTM D6525
Slopes applications	2H:1V	1.5H:1V	1H:1V or	1 H: 1V or	
	or flatter	or flatter	flatter	greater	
Shear stress lbs/ft ²	6.0^{4}	8.0^{4}	10.0^{4}	12.0 ⁴	ASTM D6459
Channel applications					ASTM D6460-07

¹ For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting alone.

2.3 Quality Assurance Sampling, Testing, and Acceptance

- A) Provide TRM listed on the Department's List of Approved Materials. Prior to inclusion on the LAM, the manufacturer of TRM must meet the physical and performance criteria as outlined in the specification and submit a Letter Certifying compliance of the product under the above ASTM testing procedures and including a copy of report from Full Scale Independent Hydraulics Facility that Fully Vegetated Shear Stress meets shear stress requirements tested under D6459 and D6460-07.
- B) Contractors will provide a Letter of Certification from Manufacturer stating the product name, manufacturer, and that the product MARV product unit testing results meets Department criteria. Provide Letters once per project and for each product.
- C) Acceptance shall be in accordance with ASTM D-4759 based on testing performed by a Geosynthetic Accreditation Institute Laboratory Accreditation Program (GAI-LAP) accredited laboratory using Procedure A of ASTM D-4354.

²Minimum Average Roll Values for tensile strength of sample material machine direction.

³Tensile Strength percentage retained after stated 1000 hr duration of exposure under ASTM D4355 testing. Based on nondegradable components exclusively.

⁴Maximum permissible shear design values based on short-term (0.5 hr) vegetated data obtained by full scale flume testing ASTM D6459, D6460-07. Based on nondegradable components exclusively. Testing will be done at Independent Hydraulics Facility such as Colorado State University hydraulics laboratory, Utah State University hydraulics laboratory, Texas Transportation Institute (TTI) hydraulics and erosion control laboratory.

Current mats meeting the above criteria are shown on the Department's List of Approved Materials.

- **2.4 Fasteners.** When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer's Representative. Provide staples with colored tops when requested by the Engineer.
- **3.0 CONSTRUCTION.** When requested by the Engineer, provide a Manufacturer's Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department's criteria and the Manufacturer's criteria, construct using the more restrictive. The Engineer and Manufacturer's Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer's recommendations and the following as minimum installation technique:
- **3.1 Site Preparation.** Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.
- **3.2 Installation.** Install mats according to Standard Drawing Sepias "Turf Mat Channel Installation" and "Turf Mat Slope Installation." Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer's Representative. The mat should be in direct contact with the soil surface.
- **4.0 MEASUREMENT.** The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer's Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.
- **5.0 PAYMENT.** The Department will make payment for the completed and accepted quantities under the following:

Code	Pay Item	Pay Unit
23274EN11F	Turf Reinforcement Mat 1	Square Yard
23275EN11F	Turf Reinforcement Mat 2	Square Yard
23276EN11F	Turf Reinforcement Mat 3	Square Yard
23277EN11F	Turf Reinforcement Mat 4	Square Yard

SPECIAL PROVISION FOR EMBANKMENT AT BRIDGE END BENT STRUCTURES

This Special Provision will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Construct a soil, granular, or rock embankment with granular or cohesive pile core and place structure granular backfill, as the Plans require. Construct the embankment according to the requirements of this Special Provision, the Plans, Standard Drawing RGX 100 and 105, and the 2012 Standard Specifications.

2.0 MATERIALS.

- **2.1 Granular Embankment.** Conform to Subsection 805.10. When Granular Embankment materials are erodible or unstable according to Subsection 805.03.04, use the Special Construction Methods found in 3.2 of the Special Provision.
- **2.2 Rock Embankment.** Provide durable rock from roadway excavation that consists principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.
- **2.3 Granular Pile Core.** Select a gradation of durable rock to facilitate pile driving that conforms to Subsection 805.11. If granular pile core material hinders pile driving operations, take appropriate means necessary to reach the required pile tip elevation, at no expense to the Department.
- **2.4** Cohesive Pile Core. Conform to Section 206 of the Standard Specifications and use soil with at least 50 percent passing a No. 4 sieve having a minimum Plasticity Index (PI) of 10. In addition, keep the cohesive pile core free of boulders, larger than 6 inches in any dimension, or any other obstructions, which would interfere with drilling operations. If cohesive pile core material interferes with drilling operations, take appropriate means necessary to maintain excavation stability, at no expense to the Department.
 - 2.5 Structure Granular Backfill. Conform to Subsection 805.11
- **2.6 Geotextile Fabric.** Conform to Type I or Type IV in Section 214 and 843 as required in the plans.

3.0 CONSTRUCTION.

3.1 General. Construct roadway embankments at end bents according to Section 206 and in accordance with the Special Provision, the Plans, and Standard Drawings for the full embankment section. In some instances, granular or rock embankment will be required for embankment construction for stability purposes, but this special provision does not prevent the use of soil when appropriate. Refer to the plans for specific details regarding material requirements for embankment construction.

Place and compact granular or cohesive pile core, soil, granular or rock embankment, and structure granular backfill according to the applicable density requirements for the project. When constructing granular or rock embankments, use granular pile core for driven pile foundations and use cohesive pile core for pre-drilled pile or drilled shaft foundations. Place geotextile fabric, Type IV between cohesive pile core and structure

69

granular backfill and granular or rock embankment.

When granular or rock embankment is required for embankment construction, conform to the general requirements of Subsection 206.03.02 B). In addition, place the material in no greater than 2-foot lifts and compact with a vibrating smooth wheel roller capable of producing a minimum centrifugal force of 15 tons. Apply these requirements to the full width of the embankment for a distance of half the embankment height or 50 feet, whichever is greater, as shown on Standard Drawing RGX-105.

When using granular pile core, install 8-inch perforated underdrain pipe at or near the elevation of the original ground in the approximate locations depicted on the standard drawing, and as the Engineer directs, to ensure positive drainage of the embankment. Wrap the perforated pipe with a fabric of a type recommended by the pipe manufacturer.

After constructing the embankment, excavate for the end bent cap, drive piling or install shafts, place the mortar bed, construct the end bent, and complete the embankment to finish grade according to the construction sequence shown on the Plans or Standard Drawings and as specified hereinafter.

Certain projects may require widening of existing embankments and the removal of substructures. Construct embankment according to the plans. Substructure removal shall be completed according to the plans and Section 203. Excavation may be required at the existing embankment in order to place the structure granular backfill as shown in the Standard Drawings.

After piles are driven or shafts installed (see design drawings), slope the bottom of the excavation towards the ends of the trench as noted on the plans for drainage. Using a separate pour, place concrete mortar, or any class concrete, to provide a base for forming and placing the cap. Place side forms for the end bent after the mortar has set sufficiently to support workmen and forms without being disturbed.

Install 4-inch perforated pipe in accordance with the plans and Standard Drawings. In the event slope protection extends above the elevation of the perforated pipe, extend the pipe through the slope protection.

After placing the end bent cap and removing adjacent forms, fill the excavation with structure granular backfill material to the level of the berm prior to placing beams for the bridge. For soil embankments, place Type IV geotextile fabric between embankment material and structure granular backfill. After completing the end bent backwall, or after completing the span end wall, place the structure granular backfill to subgrade elevation. If the original excavation is enlarged, fill the entire volume with compacted structure granular backfill at no expense to the Department. Do not place backfill before removing adjacent form work. Place structure granular backfill material in trench ditches at the ends of the excavation. Place Geotextile Fabric, Type IV over the surface of structure granular backfill prior to placing aggregate base course.

Tamp the backfill with hand tampers, pneumatic tampers, or other means the Engineer approves. Thoroughly compact the backfill under the overhanging portions of the structure to ensure that the backfill is in intimate contact with the sides of the structure.

Do not apply seeding, sodding, or other vegetation to the exposed granular embankment.

3.2 Special Construction Methods. Erodible or unstable materials may erode even when protected by riprap or channel lining; use the special construction method described below when using these materials.

Use fine aggregates or friable sandstone granular embankment at "dry land" structures only. Do not use them at stream crossings or locations subject to flood waters. For erodible or unstable materials having 50 percent or more passing the No. 4 sieve, protect with geotextile fabric. Extend the fabric from the original ground to the top of slope over the entire area of the embankment slopes on each side of, and in front of, the

end bent. Cover the fabric with at least 12 inches of non-erodible material.

For erodible or unstable materials having less than 50 percent passing a No. 4 sieve, cover with at least 12 inches of non-erodible material.

Where erodible or unstable granular embankment will be protected by riprap or channel lining, place geotextile fabric between the embankment and the specified slope protection.

4.0 MEASUREMENT.

4.1 Granular Embankment. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment any Granular Embankment that is not called for in the plans.

The Department will not measure for payment any special construction caused by using erodible or unstable materials and will consider it incidental to the Granular Embankment regardless of whether the erodible or unstable material was specified or permitted.

- **4.2 Rock Embankment.** The Department will not measure for payment any rock embankment and will consider it incidental to roadway excavation or embankment in place, as applicable. Rock embankments will be constructed using granular embankment on projects where there is no available rock present within the excavation limits of the project.
- **4.3 Granular Pile Core.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure for payment furnishing and placing 8-inch perforated underdrain pipe and will consider it incidental to the Granular pile core. The Department will not measure for payment any granular pile core that is necessary because the contractor elects to use granular or rock embankment when it is not specified in the plans.
- **4.4 Cohesive Pile Core**. The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204.
- **4.5 Structure Granular Backfill.** The Department will measure the quantity in cubic yards using the plan quantity, increased or decreased by authorized adjustments as specified in Section 204. The Department will not measure any additional material required for backfill outside the limits shown on the Plans and Standard Drawings for payment and will consider it incidental to the work.

The Department will not measure structure excavation at the end bent or an existing embankment for payment and will consider it incidental to Structure Granular Backfill.

The Department will not measure for payment the 4-inch perforated underdrain pipe and will consider it incidental to the Structure Granular Backfill.

- **4.6 Geotextile Fabric.** The Department will measure the quantities as specified in Section 214. The Department will not measure the quantity of fabric used for separating granular or rock embankment and cohesive pile core and will consider it incidental to cohesive pile core.
 - **4.7 End Bent.** The Department will measure the quantities according to the

69

Contract. The Department will not measure furnishing and placing the 2-inch mortar or concrete bed for payment and will consider it incidental to the end bent construction.

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

Code	Pay Item	Pay Unit
02223	Granular Embankment	Cubic Yards
20209EP69	Granular Pile Core	Cubic Yards
20210EP69	Cohesive Pile Core	Cubic Yards
02231	Structure Granular Backfill	Cubic Yards
02596, 02599	Geotextile Fabric, Type	See Section 214

The Department will consider payment as full compensation for all work required in this provision.

June 15, 2012

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

T h i s p r o v i s i o n i s applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. "First Tier Covered
 Transactions" refers to any covered transaction between a
 grantee or subgrantee of Federal funds and a participant (such
 as the prime or general contract). "Lower Tier Covered
 Transactions" refers to any covered transaction under a First
 Tier Covered Transaction (such as subcontracts). "First Tier
 Participant" refers to the participant who has entered into a
 covered transaction with a grantee or subgrantee of Federal
 funds (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180 and 1200. You may contact the person to
 which this proposal is submitted for assistance in obtaining a
 copy of those regulations. "First Tier Covered Transactions"
 refers to any covered transaction between a grantee or
 subgrantee of Federal funds and a participant (such as the
 prime or general contract). "Lower Tier Covered Transactions"
 refers to any covered transaction under a First Tier Covered
 Transaction (such as subcontracts). "First Tier Participant"
 refers to the participant who has entered into a covered
 transaction with a grantee or subgrantee of Federal funds
 (such as the prime or general contractor). "Lower Tier
 Participant" refers any participant who has entered into a
 covered transaction with a First Tier Participant or other Lower
 Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

KENTUCKY TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

EMPLOYMENT REQUIREMENTS RELATING TO NONDISCRIMINATION OF EMPLOYEES (APPLICABLE TO FEDERAL-AID SYSTEM CONTRACTS)

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT

KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). 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, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin 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 (between forty and seventy), 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: 12-3-92

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during 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, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved 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.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

General Decision Number: KY140100 10/24/2014 KY100

Superseded General Decision Number: KY20130100

State: Kentucky

Construction Type: Highway

Counties: Anderson, Bath, Bourbon, Boyd, Boyle, Bracken, Breckinridge, Bullitt, Carroll, Carter, Clark, Elliott, Fayette, Fleming, Franklin, Gallatin, Grant, Grayson, Greenup, Hardin, Harrison, Henry, Jefferson, Jessamine, Larue, Lewis, Madison, Marion, Mason, Meade, Mercer, Montgomery, Nelson, Nicholas, Oldham, Owen, Robertson, Rowan, Scott, Shelby, Spencer, Trimble, Washington and Woodford Counties in Kentucky.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Number	Publication	Date
	01/03/2014	
	02/14/2014	
	04/18/2014	
	05/09/2014	
	05/23/2014	
	06/06/2014	
	06/27/2014	
	07/04/2014	
	07/18/2014	
	07/25/2014	
	08/22/2014	
	10/24/2014	
	Number	01/03/2014 02/14/2014 04/18/2014 05/09/2014 05/23/2014 06/06/2014 06/27/2014 07/04/2014 07/18/2014 07/25/2014 08/22/2014

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

	Rates	Fringes
BRICKLAYER	\$ 24.11	10.07

^{*} BRKY0001-005 06/01/2014

BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, & TRIMBLE COUNTIES:

	Rates	Fringes
BRICKLAYER	.\$ 25.37	10.50
BRKY0002-006 06/01/2011		

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

	Rates	Fringes
BRICKLAYER	\$ 26.57	10.26
* BRKY0007-004 06/01/2014		
BOYD, CARTER, ELLIOT, FLEMING, GR.	EENUP, I	LEWIS & ROWAN COUNTIES:
	Rates	Fringes
BRICKLAYER	\$ 30.57	17.94
BRKY0017-004 06/01/2009		
ANDERSON, BATH, BOURBON, BOYLE, C. HARRISON, JESSAMINE, MADISON, MEROWEN, SCOTT, WASHINGTON & WOODFOR.	CER, MON	NTGOMERY, NICHOLAS,
	Rates	Fringes
BRICKLAYER	\$ 24.11	9.97
CARP0064-001 04/01/2014		
	Rates	Fringes
CARPENTER Diver PILEDRIVERMAN	\$ 41.63	14.96 14.96 14.96
ELEC0212-008 06/02/2014		
BRACKEN, GALLATIN and GRANT COUNT	IES	
	Rates	Fringes
ELECTRICIAN	\$ 26.74	16.45
ELEC0212-014 07/01/2013		
BRACKEN, GALLATIN & GRANT COUNTIE	s:	
	Rates	Fringes
Sound & Communication Technician	•	9.51
ELEC0317-012 05/28/2014		
BOYD, CARTER, ELLIOT & ROWAN COUN	TIES:	
	Rates	Fringes
ELECTRICIAN Cable Splicer Electrician		18.13 21.45
ELEC0369-007 05/29/2013		

ANDERSON, BATH, BOURBON, BOYLE, BRECKINRIDGE, BULLITT, CARROLL, CLARK, FAYETTE, FRAONKLIN, GRAYSON, HARDIN, HARRISON, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, MONTGOMERY, NELSON, NICHOLAS, OLDHAM, OWEN, ROBERTSON, SCOTT, SHELBY, SPENCER, TRIMBLE, WASHINGTON, & WOODFORD COUNTIES:

	Rates	Fringes
ELECTRICIAN		14.37
ELEC0575-002 06/02/2014		
FLEMING, GREENUP, LEWIS & MASON	N COUNTIES:	
	Rates	Fringes
ELECTRICIAN	•	14.21
ENGI0181-018 07/01/2014		
	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	\$ 28.85	14.15
GROUP 2	\$ 26.24	14.15
GROUP 3	\$ 26.65	14.15
GROUP 4	\$ 25.95	14.15

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - A-Frame Winch Truck; Auto Patrol; Backfiller; Batcher Plant; Bituminous Paver; Bituminous Transfer Machine; Boom Cat; Bulldozer; Mechanic; Cableway; Carry-All Scoop; Carry Deck Crane; Central Compressor Plant; Cherry Picker; Clamshell; Concrete Mixer (21 cu. ft. or Over); Concrete Paver; Truck-Mounted Concrete Pump; Core Drill; Crane; Crusher Plant; Derrick; Derrick Boat; Ditching & Trenching Machine; Dragline; Dredge Operator; Dredge Engineer; Elevating Grader & Loaders; Grade-All; Gurries; Heavy Equipment Robotics Operator/Mechanic; High Lift; Hoe-Type Machine; Hoist (Two or More Drums); Hoisting Engine (Two or More Drums); Horizontal Directional Drill Operator; Hydrocrane; Hyster; KeCal Loader; LeTourneau; Locomotive; Mechanic; Mechanically Operated Laser Screed; Mechanic Welder; Mucking Machine; Motor Scraper; Orangepeel Bucket; Overhead Crane; Piledriver; Power Blade; Pumpcrete; Push Dozer; Rock Spreader, attached to equipment; Rotary Drill; Roller (Bituminous); Rough Terrain Crane; Scarifier; Scoopmobile; Shovel; Side Boom; Subgrader; Tailboom; Telescoping Type Forklift; Tow or Push Boat; Tower Crane (French, German & other types); Tractor Shovel; Truck Crane; Tunnel Mining Machines, including Moles, Shields or similar types of Tunnel Mining Equipment

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float; Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor;

Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

GROUP 3 - All Off Road Material Handling Equipment, including Articulating Dump Trucks; Greaser on Grease Facilities servicing Heavy Equipment

GROUP 4 - Bituminous Distributor; Burlap & Curing Machine; Cement Gun; Concrete Saw; Conveyor; Deckhand Oiler; Grout Pump; Hydraulic Post Driver; Hydro Seeder; Mud Jack; Oiler; Paving Joint Machine; Power Form Handling Equipment; Pump; Roller (Earth); Steerman; Tamping Machine; Tractor (Under 50 H.P.); & Vibrator

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling leads equals or exceeds 150 ft. - \$1.00 over Group 1 rate

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%

ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

TDOMO044 000 06 /01 /0012

IRON0044-009 06/01/2013

BRACKEN, GALLATIN, GRANT, HARRISON, ROBERTSON, BOURBON (Northern third, including Townships of Jackson, Millersburg, Ruddel Mills & Shawhan); CARROLL (Eastern third, including the Township of Ghent); FLEMING (Western part, excluding Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington); NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills); OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley); SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall)

Rates Fringes

IRONWORKER

 Fence Erector
 \$ 22.50
 18.40

 Structural
 \$ 24.80
 18.40

IRON0070-006 06/01/2014

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD

BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);

CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville); CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte); OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);

SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

Rates Fringes

IRONWORKER.....\$ 26.97 19.75

IRON0372-006 06/01/2013

Plains,

BRACKEN, GALLATIN, GRANT, HARRISON and ROBERTSON
BOURBON (Northern third, including Townships of Jackson,
Millersburg, Ruddel Mills & Shawhan);
CARROLL (Eastern third, including the Township of Ghent);
FLEMING (Western part, Excluding Townships of Beechburg, Colfax,
Elizaville, Flemingsburg, Flemingsburg Junction, Foxport,
Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills,
Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar

Ringos Mills, Tilton & Wallingford);

MASON (Western two-thirds, including Townships of Dover, Lewisburg, Mays Lick, Maysville, Minerva, Moranburg, Murphysville, Ripley, Sardis, Shannon, South Ripley & Washington);

NICHOLAS (Townships of Barefoot, Barterville, Carlisle, Ellisville, Headquarters, Henryville, Morningglory, Myers & Oakland Mills);

OWEN (Townships of Beechwood, Bromley, Fairbanks, Holbrook, Jonesville, Long Ridge, Lusby's Mill, New, New Columbus, New Liberty, Owenton, Poplar Grove, Rockdale, Sanders, Teresita & Wheatley);

SCOTT (Northern two-thirds, including Townships of Biddle, Davis, Delaplain, Elmville, Longlick, Muddy Ford, Oxford, Rogers Gap, Sadieville, Skinnersburg & Stonewall) COUNTIES

Rates Fringes

IRONWORKER, REINFORCING......\$ 26.47 19.30

IRON0769-007 12/01/2012

BATH, BOYD, CARTER, ELLIOTT, GREENUP, LEWIS, MONTGOMERY & ROWAN CLARK (Eastern third, including townships of Bloomingdale, Hunt, Indian Fields, Kiddville, Loglick, Rightangele & Thomson); FLEMING (Townships of Beechburg, Colfax, Elizaville, Flemingsburg, Flemingsburg Junction, Foxport, Grange City, Hillsboro, Hilltop, Mount Carmel, Muses Mills, Nepton, Pecksridge, Plummers Landing, Plummers Mill, Poplar Plains, Ringos Mills, Tilton & Wallingford); MASON (Eastern third, including Townships of Helena, Marshall, Orangeburg, Plumville & Springdale); NICHOLAS (Eastern eighth, including the Township of Moorefield Sprout)

	Rates	Fringes
IRONWORKER	\$ 32.54	20.18

LABO0189-003 07/01/2014

BATH, BOURBON, BOYD, BOYLE, BRACKEN, CARTER, CLARK, ELLIOTT, FAYETTE, FLEMING, FRANKLIN, GALLATIN, GRANT, GREENUP, HARRISON, JESSAMINE, LEWIS, MADISON, MASON, MERCER, MONTGOMERY, NICHOLAS, OWEN, ROBERTSON, ROWAN, SCOTT, & WOOLFORD COUNTIES

	I	Rates	Fringes
Laborers:			
GROUP	1\$	21.80	11.96
GROUP	2\$	22.05	11.96
GROUP	3\$	22.10	11.96
GROUP	4\$	22.70	11.96

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;

Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-008 07/01/2014

ANDERSON, BULLITT, CARROLL, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

	F	Rates	Fringes
Laborers:			
GROUP	1\$	22.71	11.05
GROUP	2\$	22.96	11.05
GROUP	3\$	23.01	11.05
GROUP	4\$	23.61	11.05

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

LABO0189-009 07/01/2014

BRECKINRIDGE & GRAYSON COUNTIES

	F	Rates	Fringes
Laborers:			
GROUP	1\$	22.66	11.10
GROUP	2\$	22.91	11.10
GROUP	3\$	22.96	11.10
GROUP	4\$	23.56	11.10

LABORERS CLASSIFICATIONS

GROUP 1 - Aging & Curing of Concrete; Asbestos Abatement Worker; Asphalt Plant; Asphalt; Batch Truck Dump; Carpenter Tender; Cement Mason Tender; Cleaning of Machines; Concrete; Demolition; Dredging; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste - Level D; Flagperson; Grade Checker; Hand Digging & Hand Back Filling; Highway Marker Placer; Landscaping, Mesh Handler & Placer; Puddler; Railroad; Rip-rap & Grouter; Right-of-Way; Sign, Guard Rail & Fence Installer; Signal Person; Sound Barrier Installer; Storm & Sanitary Sewer; Swamper; Truck Spotter & Dumper; Wrecking of Concrete Forms; General Cleanup

GROUP 2 - Batter Board Man (Sanitary & Storm Sewer);
Brickmason Tender; Mortar Mixer Operator; Scaffold Builder;
Burner & Welder; Bushammer; Chain Saw Operator; Concrete
Saw Operator; Deckhand Scow Man; Dry Cement Handler;
Environmental - Nuclear, Radiation, Toxic & Hazardous Waste
- Level C; Forklift Operator for Masonary; Form Setter;
Green Concrete Cutting; Hand Operated Grouter & Grinder
Machine Operator; Jackhammer; Pavement Breaker; Paving
Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven
Georgia Buggy & Wheel Barrow; Power Post Hole Digger;
Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind
Trencher; Sand Blaster; Concrete Chipper; Surface Grinder;
Vibrator Operator; Wagon Driller

GROUP 3 - Asphalt Luteman & Raker; Gunnite Nozzleman; Gunnite Operator & Mixer; Grout Pump Operator; Side Rail Setter; Rail Paved Ditches; Screw Operator; Tunnel (Free Air); Water Blaster

GROUP 4 - Caisson Worker (Free Air); Cement Finisher; Environmental - Nuclear, Radiation, Toxic & Hazardous Waste

- Levels A & B; Miner & Driller (Free Air); Tunnel Blaster; & Tunnel Mucker (Free Air); Directional & Horizontal Boring; Air Track Drillers (All Types); Powdermen & Blasters; Troxler & Concrete Tester if Laborer is Utilized

PAIN0012-005 06/11/2005

BATH, BOURBON, BOYLE, CLARK, FAYETTE, FLEMING, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, ROBERTSON, SCOTT & WOODFORD COUNTIES:

	Rates	Fringes
PAINTER Bridge/Equipment Tender		
and/or Containment Builder\$		5.90
Brush & Roller\$ Elevated Tanks; Steeplejack Work; Bridge &	21.30	5.90
Lead Abatement\$ Sandblasting &	22.30	5.90
Waterblasting\$		5.90
Spray\$	21.80	5.90

PAIN0012-017 05/01/2014

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

	Rates	Fringes
PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping) Bridge Equipment Tender		
<pre>and Containment Builder\$ Brush & Roller\$ Elevated Tanks;</pre>		8.71 8.71
Steeplejack Work; Bridge & Lead Abatement\$	24 30	8.71
Sandblasting & Water		
Blasting\$ Spray\$		8.71 8.71

PAIN0118-004 06/01/2014

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES:

	Rates	Fringes
PAINTER		
Brush & Roller	\$ 18.50	12.02
Spray, Sandblast, Power		
Tools, Waterblast & Steam		
Cleaning	\$ 19.00	12.02

PAIN1072-003 12/01/2013

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS and ROWAN COUNTIES

Rates Fringes

Painters:

Bridges; Locks; Dams;

Tension Towers & Energized

Substations......\$ 31.03 15.10

Power Generating Facilities.\$ 27.79 15.10

PLUM0248-003 06/01/2014

BOYD, CARTER, ELLIOTT, GREENUP, LEWIS & ROWAN COUNTIES:

Rates Fringes

Plumber and Steamfitter.....\$ 33.00 18.95

PLUM0392-007 06/01/2014

BRACKEN, CARROLL (Eastern Half), GALLATIN, GRANT, MASON, OWEN & ROBERTSON COUNTIES:

Rates Fringes

Plumbers and Pipefitters.....\$ 29.80 17.79

PLUM0502-003 08/01/2013

BRECKINRIDGE, BULLITT, CARROLL (Western Half), FRANKLIN (Western three-fourths), GRAYSON, HARDIN, HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES

Rates Fringes

PLUMBER.....\$ 32.00 17.17

SUKY2010-160 10/08/2001

Rates Fringes

Truck drivers:

GROUP 1......\$ 16.57 7.34

GROUP 2.....\$ 16.68 7.34

GROUP 3.....\$ 16.86 7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 4.....\$ 16.96

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment;

7.34

Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

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

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

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

These rates are listed pursuant to the Kentucky Determination No. CR-14-III- HWY dated July 14, 2014.

No laborer, workman or mechanic shall be paid at a rate less than that of a Journeyman except those classified as bona fide apprentices.

Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contractor shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the number of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wages. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Diana Castle Radcliffe, P.E. Director, Division of Construction Procurement Frankfort, Kentucky 40622

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Executive Order 11246)

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY	GOALS FOR FEMALE
PARTICIPATION	PARTICIPATION IN
IN EACH TRADE	EACH TRADE
7.0%	6.9%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4, 3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. The notification shall be mailed to:

Evelyn Teague, Regional Director Office of Federal Contract Compliance Programs 61 Forsyth Street, SW, Suite 7B75 Atlanta, Georgia 30303-8609

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is Nicholas County.

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

141068

PROPOSAL BID ITEMS

Report Date 10/29/14

Page 1 of 3
ate 10/29/14

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FΡ	AMOUNT
0010	00001		DGA BASE	5,154.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	64.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	8.00	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	91.00	TON		\$	
0050	00221		CL2 ASPH BASE 0.75D PG64-22	3,563.00	TON		\$	
0060	00301		CL2 ASPH SURF 0.38D PG64-22	1,012.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC F	PAMOUNT
0070	00078	CRUSHED AGGREGATE SIZE NO 2	1,110.00	TON	\$	
0800	01000	PERFORATED PIPE-4 IN	70.00	LF	\$	
0090	01010	NON-PERFORATED PIPE-4 IN	30.00	LF	\$	
0100	01020	PERF PIPE HEADWALL TY 1-4 IN	2.00	EACH	\$	
0110	01890	ISLAND HEADER CURB TYPE 1	125.00	LF	\$	
0120	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	58.00	EACH	\$	
0130	01990	DELINEATOR FOR BARRIER WALL-B/W	14.00	EACH	\$	
0140	02014	BARRICADE-TYPE III	6.00	EACH	\$	
0150	02091	REMOVE PAVEMENT	758.00	SQYD	\$	
0160	02159	TEMP DITCH	1,525.00	LF	\$	
0170	02160	CLEAN TEMP DITCH	3,050.00	LF	\$	
0180	02200	ROADWAY EXCAVATION	44,733.00	CUYD	\$	
0190	02242	WATER	1,000.00	MGAL	\$	
0200	02351	GUARDRAIL-STEEL W BEAM-S FACE	2,687.50	LF	\$	
0210	02360	GUARDRAIL TERMINAL SECTION NO 1	10.00	EACH	\$	
0220	02363	GUARDRAIL CONNECTOR TO BRIDGE END	4.00	EACH	\$	
0230	02367	GUARDRAIL END TREATMENT TYPE 1	1.00	EACH	\$	
0240	02371	GUARDRAIL END TREATMENT TYPE 7	2.00	EACH	\$	
0250	02381	REMOVE GUARDRAIL	575.00	LF	\$	
0260	02391	GUARDRAIL END TREATMENT TYPE 4A	1.00	EACH	\$	
0270	02397	TEMP GUARDRAIL	875.00	LF	\$	
0280	02429	RIGHT-OF-WAY MONUMENT TYPE 1	39.00	EACH	\$	
0290	02432	WITNESS POST	14.00	EACH	\$	
0300	02484	CHANNEL LINING CLASS III	607.00	TON	\$	
0310	02545	CLEARING AND GRUBBING	1.00	LS	\$	
0320	02562	TEMPORARY SIGNS	131.00	SQFT	\$	
0330	02585	EDGE KEY	68.00	LF	\$	
0340	02599	FABRIC-GEOTEXTILE TYPE IV	7,083.00	SQYD	\$	
0350	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	-	SQYD	\$2.00 \$	\$500.0
0360	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS	\$	
0370	02701	TEMP SILT FENCE	1,525.00	LF	\$	
0380	02703	SILT TRAP TYPE A		EACH	-	
0390	02704	SILT TRAP TYPE B		EACH		
0400	02705	SILT TRAP TYPE C		EACH		
0410	02706	CLEAN SILT TRAP TYPE A		EACH		

141068

PROPOSAL BID ITEMS

Report Date 10/29/14

Page 2 of 3

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	02707		CLEAN SILT TRAP TYPE B	24.00	EACH		\$	
0430	02708		CLEAN SILT TRAP TYPE C	24.00	EACH		\$	
0440	02709		CLEAN TEMP SILT FENCE	3,050.00	LF		\$	
0450	02726		STAKING	1.00	LS		\$	
0460	02731		REMOVE STRUCTURE	1.00	LS		\$	
0470	04933		TEMP SIGNAL 2 PHASE	2.00	EACH		\$	
0480	05950		EROSION CONTROL BLANKET	14,974.00	SQYD		\$	
0490	05952		TEMP MULCH	38,720.00	SQYD		\$	
0500	05953		TEMP SEEDING AND PROTECTION	38,720.00	SQYD		\$	
0510	05963		INITIAL FERTILIZER	1.00	TON		\$	
0520	05964		20-10-10 FERTILIZER	2.00	TON		\$	
0530	05985		SEEDING AND PROTECTION	19,779.00	SQYD		\$	
0540	05992		AGRICULTURAL LIMESTONE	12.00	TON		\$	
0550	06510		PAVE STRIPING-TEMP PAINT-4 IN	10,000.00	LF		\$	
0560	06514		PAVE STRIPING-PERM PAINT-4 IN	36,700.00	LF		\$	
0570	06530		PAVE STRIPING REMOVAL-4 IN	2,000.00	LF		\$	
0580	06549		PAVE STRIPING-TEMP REM TAPE-B	500.00	LF		\$	
0590	06551		PAVE STRIPING-TEMP REM TAPE-Y	1,000.00	LF		\$	
0600	10020NS		FUEL ADJUSTMENT	18,418.00	DOLL	\$1.00	\$	\$18,418.00
0610	10030NS		ASPHALT ADJUSTMENT	11,241.00	DOLL	\$1.00	\$	\$11,241.00
0620	20209EP69		GRANULAR PILE CORE	682.00	CUYD		\$	
0630	23055N		REMOVE CISTERN	1.00	LS		\$	
0640	23274EN11F		TURF REINFORCEMENT MAT 1	1,386.00	SQYD		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0650	00440		ENTRANCE PIPE-15 IN	24.00	LF		\$	
0660	00462		CULVERT PIPE-18 IN	133.00	LF		\$	
0670	00981		SLOTTED DRAIN PIPE-15 IN	16.00	LF		\$	
0680	01204		PIPE CULVERT HEADWALL-18 IN	2.00	EACH		\$	
0690	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		\$	
0700	01496		DROP BOX INLET TYPE 3	1.00	EACH		\$	

Section: 0004 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0710	02231		STRUCTURE GRANULAR BACKFILL	229.00	CUYD		\$	
0720	02555		CONCRETE-CLASS B	29.60	CUYD		\$	
0730	02998		MASONRY COATING	875.00	SQYD		\$	
0740	03299		ARMORED EDGE FOR CONCRETE	83.50	LF		\$	
0750	08001		STRUCTURE EXCAVATION-COMMON	297.00	CUYD		\$	
0760	08002		STRUCTURE EXCAV-SOLID ROCK	472.00	CUYD		\$	
0770	08019		CYCLOPEAN STONE RIP RAP	822.00	TON		\$	
0780	08020		CRUSHED AGGREGATE SLOPE PROT	131.00	TON		\$	
0790	08033		TEST PILES	68.00	LF		\$	
0800	08046		PILES-STEEL HP12X53	205.00	LF		\$	

Contract ID: 141068 Page 171 of 171

141068 PROPOSAL BID ITEMS

Report Date 10/29/14

Page 3 of 3

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FΡ	AMOUNT
0810	08094		PILE POINTS-12 IN	9.00	EACH		\$	
0820	08100		CONCRETE-CLASS A	454.60	CUYD		\$	
0830	08104		CONCRETE-CLASS AA	474.90	CUYD		\$	
0840	08150		STEEL REINFORCEMENT	89,188.00	LB		\$	
0850	08151		STEEL REINFORCEMENT-EPOXY COATED	113,179.00	LB		\$	
0860	08160		STRUCTURAL STEEL 1550 LBS	1.00	LS		\$	
0870	08636		PRECAST PC I BEAM TYPE 5	1,474.70	LF		\$	
0880	21532ED		RAIL SYSTEM TYPE III	747.80	LF		\$	

Section: 0005 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0890	01082		STEEL ENCASEMENT PIPE-BORE&JACK-16 IN	118.00	LF		\$	
0900	01085		STEEL ENCASEMENT PIPE-OPEN CUT-16 IN	118.00	LF		\$	
0910	03379		PVC PIPE-3/4 IN	214.00	LF		\$	
0920	03385		PVC PIPE-6 IN	1,255.00	LF		\$	
0930	03437		RECONNECT SERVICE	3.00	EACH		\$	
0940	03526		GATE VALVE-6 IN	2.00	EACH		\$	
0950	03545		BEND 22.50 DEG 6 IN	5.00	EACH		\$	
0960	03554		BEND 45 DEG 6 IN	2.00	EACH		\$	
0970	03560		BEND 90 DEG 6 IN	2.00	EACH		\$	
0980	20056NN		REDUCER	2.00	EACH		\$	
0990	20097ES601		CONCRETE CAP	60.00	LF		\$	
1000	20951ND		TAPPING SLEEVE AND VALVE-6IN X 6 IN	4.00	EACH		\$	
1010	21558EC		SERVICE LINE - 1 IN	90.00	LF		\$	
1020	22004ND		RECONNECT HYDRANT	1.00	EACH		\$	
1030	22082NN		AIR RELEASE VALVE ASSEMBLY	1.00	EACH		\$	
1040	23308EC		WATER METER WITH BOX	2.00	EACH		\$	
1050	23310EC		VALVE BOX 4 1/2"	4.00	EACH		\$	
1060	23504EC		CONNECT TO WATER METER	2.00	EACH		\$	
1070	23705EC		CUT-CAP AND BLOCK-6 IN	4.00	EACH		\$	
1080	23741EC		TEE-6 X 6 IN	1.00	EACH		\$	
1090	24441EC		GRAVEL REPLACEMENT DRIVEWAYS	70.00	LF		\$	
1100	40030		TEMPORARY SILT FENCE	1,580.00	LF		\$	

Section: 0006 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1110	02568		MOBILIZATION	1.00	LS		\$	
1120	02569		DEMOBILIZATION	1.00	LS		\$	