CALL NO. 301

CONTRACT ID. 121325

HANCOCK COUNTY

FED/STATE PROJECT NUMBER JL03 046 0060 008-010

DESCRIPTION LEWISPORT-HAWESVILLE ROAD (US 60)

WORK TYPE GRADE & DRAIN WITH INCIDENTAL SURF

PRIMARY COMPLETION DATE 12/1/2012

LETTING DATE: June 15, 2012

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME June 15, 2012. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

ROAD PLANS

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

TABLE OF CONTENTS

PART I

SCOPE OF WORK

CONTRACT ID - 121325 ADMINISTRATIVE DISTRICT - 02

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - HANCOCK PCN - DE04600601225
JL03 046 0060 008-010
LEWISPORT-HAWESVILLE ROAD (US 60) WIDEN US 60 TO 4 LANES NEAR HAWESVILLE TO LEWISPORT, A DISTANCE OF 0.72 MILES. GRADE & DRAIN WITH INCIDENTAL SURF. SYP NO. 02-00125.00.
GEOGRAPHIC COORDINATES LATITUDE 37^54'50" LONGITUDE 86^47'06"

COMPLETION DATE(S):
COMPLETION DATE - December 01, 2012
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/contract)

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.

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.

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)

10/18/2011

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

Reciprocal preference to be given by public agencies to resident bidders

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

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 PROVISION FOR WASTE AND BORROW SITES

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

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

Right-of-Way Certification Form

Revised 2/22/11

☐ Federal Funded
☑ State Funded
☑ Original
☐ Re-Certification

This form must be completed and submitted to FHWA with the PS&E package for federal-aid funded Interstate, Appalachia, and Major projects. This form shall also be submitted to FHWA for all federal-aid projects that fall under Conditions No. 2 or 3 outlined elsewhere in this form. When Condition No. 2 or 3 apply, KYTC shall resubmit this ROW Certification prior to construction contract Award. For all other federal-aid projects, this form shall be completed and retained in the KYTC project file.

Date: May 9, 2012

Project Name: US 60 Widening
Letting Date:
Project #: JL03 046 0060 007-010
County: Hancock
Item #: 02-125.00
Federal #:

Description of Project: Reconstruction of WB US 60 between MP 7.7 and MP 9.1.

Projects that require NO new or additional right-of-way acquisitions and/or relocations

■ The proposed transportation improvement will be built within the existing rights-of -way and there are no properties to be acquired, individuals, families, and businesses ("relocatees") to be relocated, or improvements to be removed as a part of this project.

Projects that require new or additional right-of-way acquisitions and/or relocations

☐ Per 23 CFR 635.309, the KYTC hereby certify that all relocatees have been relocated to decent, safe, and sanitary housing or that KYTC has made available to relocatees adequate replacement housing in accordance with the provisions of the current FHWA directive(s) covering the administration of the Highway Relocation Assistance Program and that at least one of the following three conditions has been met. (Check those that apply.)

☐ **Condition 1.** All necessary rights-of-way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Fair market value has been paid or deposited with the court.

☐ **Condition 2.** Although all necessary rights-of-way have not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Trial or appeal of some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Fair market value has been paid or deposited with the court for most parcels. Fair market value for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract. (See note 1 below.)

Note 1: The KYTC shall re-submit a right-of-way certification form for this project prior to AWARD of **all** Federal-Aid construction contracts. Award must not to be made until after KYTC has obtained full legal possession and fair market value for all parcels has been paid or deposited with the court and FHWA has concurred in the re-submitted right-of-way certification.

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:	Jennifer K. Cox Printed Name	 Signature	Right-of-Way Supervisor
Approved:	DAVID L. ORR Printed Name	5/9/12 Signature	KYTC, Director of ROW &Utilities
Approved:	 Printed Name	 Signature	FHWA, ROW Officer (when applicable)

Right-of-Way Certification Form

Revised 2/22/11

Date: May 9, 2012

Project Name: US 60 Widening
Project #: JL03 046 0060 007-010
Item #: 2-125.00
Letting Date: _____

County: Hancock
Federal #: _____

This project has 0 total number of parcels to be acquired, and 0 total number of individuals or families to be relocated, as well as 0 total number of businesses to be relocated.

_____ Parcels where acquired by a signed fee simple deed and fair market value has been paid

_____ Parcels have been acquired by IOJ through condemnation and fair market value has been deposited with the court

_____ Parcels have not been acquired at this time (*explain below for each parcel*)

_____ Parcels have been acquired or have a "right of entry" but fair market value has not been paid or has not been deposited with the court *(explain below for each parcel)*

_____ Relocatees have not been relocated from parcels ____, ____, ____, ____, ____, ____, and ____ *(explain below for each parcel)*

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

There are 0 billboards and/or 0 cemeteries involved on this project.

There are 0 water or monitoring wells on parcels ____, ____, ____, ____, and ____. 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

UTILITY NOTES TO BE INCLUDED IN THE PROPOSAL
SPECIAL NOTES FOR UTILITY CLEARANCE
IMPACT ON CONSTRUCTION

Hancock County
Project No. FD52 046 846950 01U
US 60
Item No. 2-125.00

The following is a list of utility companies involved on this project. Contractor is advised to use caution and call **BUD** prior to beginning work.

City of Lewisport Gas – The City of Lewisport Gas has elected to relocate their facilities as part of the roadway contract. There are no other known utilities on this project.

PROTECTION OF UTILITIES

The location of utilities provided in the contract documents has been furnished by the facility owners and/or by reviewing record drawings and may not be accurate. It will be the roadway contractor's responsibility to locate utilities before excavating by calling the various utility owners and by examining any supplemental information supplied by the cabinet. If necessary, the roadway contractor shall determine the exact location and elevation of utilities by hand digging to expose utilities before excavating in the area of a utility. The cost of repair and any other associated costs for any damage to utilities caused by the roadway contractor's operations shall be borne by the roadway contractor.

The contractor is advised to contact the **BUD one-call system at 1-800-752-6007** at least two working days prior to excavating. Contractor should be aware that owners of underground facilities are not required to be members of the BUD one-call system. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the project area.

Pipeline Construction Specifications

Prepared for and submitted to

City of Lewisport, Ky

For

US Highway 60 Relocation/Widening and Relocation of Natural Gas Main

Submitted by

Energy Management & Services Company®

May 21, 2012

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Pipeline Construction Specifications**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Pipeline Construction Specifications**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

0019 Foreign Pipeline and Utility Crossings

0020 Painting Above Ground Piping & Equipment

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Scope of Work and Bid Items**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. SCOPE OF WORK

1.1 The scope of work consists of excavating, welding, placing the gas main pipe or service pipe in the trench and backfilling of the gas main pipe or service, or boring the gas main pipe or service pipe, at the locations shown on the gas plans contained in the roadway construction plans. The Contractor shall provide all pipe, pipe fittings, valves, pipe bedding, backfill, gravel or any other materials necessary for a completed project. The Contractor shall be responsible for all testing, tie-ins to the existing mains, purging and energizing the gas main and service piping. City of Lewisport will provide personnel to assist the Contractor in the tie-in, purging and energizing operations. City of Lewisport, or their agent, will inspect the installation by the Contractor. All work shall be performed in accordance with the specifications that follow this section.

1.2 Where the word “Engineer” appears in these specifications, it shall be understood the “Engineer” is the Kentucky Department of Highways Resident Engineer or his designated representative and City of Lewisport’ Engineer or his designated representative jointly. All decisions made by the Department with regard to the gas main construction shall be agreeable to City of Lewisport and vice versa.

2. DESCRIPTION OF BID ITEMS

2.1 4 - inch Steel Gas Main

Install 4 - inch steel gas main including all gas piping materials, labor, transporting, right-of-way clearing and preparation, temporary fencing, trenching, stringing, welding, lowering into ditch, pipe bedding material, street and driveway restoration materials, backfill, and clean-up, including all other above and below ground facilities not set out as a bid item in this proposal, necessary for a completed gas main in accordance with the plans and specifications. Item is paid by linear foot (LF) of pipe installed. (See 2.3 for 4” Steel Weld End Ball Valve Installation.)

2.2 4” Tie-ins to Existing Steel Main

Install two 4” line stopper fitting tie-ins of new steel gas piping to existing steel gas mains. Contractor shall furnish all gas piping materials, drilling and stopping machine with gate valve, and all accessories necessary for stopping off and connecting new mains to existing, and all other items not set out in this section, necessary for a complete gas main tie-in in accordance with the plans and specifications. The Contractor shall present a tie-in plan to the Engineer or their representative five days prior to beginning tie-ins. Item is paid on lump sum (LS) basis for all tie-ins.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Scope of Work and Bid Items**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

2.3 4" Steel Weld End Ball Valve Installation

Install 4" steel weld end ball valve in new steel line. Contractor shall furnish all materials and accessories necessary for the valve installation in accordance with the plans and specifications. Item is paid on lump sum (LS) basis.

2.4 Pressure Test of 4" Steel Piping

All 4" steel gas piping shall be tested with water to 450 p.s.i.g. for each steel segment and held at this pressure for 8 hours. See Section entitled "Cleaning and Testing" in the specifications for details of debris removal, test procedure and records. Item is paid on lump sum (LS) basis for all 4" gas main testing.

2.5 Cap, Purge & Abandon 4" Steel Main Segments

One existing 4" steel gas main segment to be abandoned in place will be capped and purged with nitrogen. Item is paid on lump sum (LS) basis.

2.6 1 - inch Steel Service Line (Reconnection)

Install two 1 - inch steel service lines including all gas piping materials, labor, transporting, right-of-way clearing and preparation, temporary fencing, trenching, stringing, joining, lowering into ditch, pipe bedding material, street and driveway restoration materials, tracer wire installation, 1" service tee installation to all Steel main, testing service line and service tee, tie-in to existing service line, backfill, and clean-up, including all other above and below ground facilities not set out as a bid item in this proposal, necessary for a completed gas service line in accordance with the plans and specifications. Horizontal separation from the existing service shall be a minimum of 12 - inches". Item is paid by linear foot (LF) of pipe installed.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: General**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The Pipeline Construction Specifications are intended to cover the various operations incidental to pipeline construction in a general manner and to outline briefly the kind, character and quality of work required.

2. When during construction performed under these general specifications conflict in any minor detail with drawings, plans, etc., issued by City of Lewisport for any specific construction or omit instructions for any specific detail, any such question shall be decided by the authorized representative of City of Lewisport.

3. All codes and standards referenced in these specifications shall be the edition current and in force at the time of construction.

4. ALCOHOL AND DRUG SCREENING

4.1 Contractor shall provide Company written documentation that all Contractor employees and/or Sub-Contractor employees that are subject to the requirements of the Federal Department of Transportation (DOT), 49 CFR Parts 40 and 199 are included in a drug screening program that meets the Department of Transportation regulations or the rules and regulations of any other agencies having such jurisdiction. Contractor agrees to allow Company, upon reasonable notice, access to the Contractor's premises for the purpose of examining such records as needed to determine if the Contractor is in compliance with the DOT rules and regulations.

4.2 Contractor shall submit to Company a copy of its Drug & Alcohol Program with the Bid Documents.

5. OPERATOR QUALIFICATIONS

5.1 The Contractor must submit a copy of its Operator Qualification Plan to the Company along with a list of qualified employees. The Contractor shall use only qualified employees when performing covered tasks.

6. BUY AMERICAN REQUIREMENTS

6.1 To the extent applicable to this agreement, the Company shall comply with the Buy America requirements (as specified in 23 U.S.C. 313 and 23 CFR 635.410) if the utility work uses any amount of Federal Aid Highway Program (FAHP) funding. The Company is not required to change its existing standards for materials as long as the Buy America requirements are met. Buy America requirements take precedence over regulations pertaining to the accommodation or relocation of the Company's facilities (as specified in 23 CFR 645) on contracts or agreements involving FAHP funding and over regulations which allow the ***Company*** to furnish materials from company stock (as specified in 23 CFR 645.117(e)). Company stock materials that do not meet Buy

	ENGINEERING STANDARDS			
Category: ENG	**Subject: General**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

America requirements may not be permanently incorporated into an FAHP funded project. The ***Company*** must provide a definitive statement that all products, permanently incorporated into the project are covered under the Buy America requirements. This requirement is fulfilled via proper signature and submission of the statement of charges form. In some circumstances, a waiver of the Buy America requirements may be granted by the Federal Highway Administration, to be determined on a project-by-project basis. If the accommodation or relocation of the ***Company's*** facilities uses only State or local funding, the Buy America requirements do not apply.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Suggested Procedures for Pipeline Construction**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. STEEL PIPE

1.1 General

This suggested procedure should apply to the installation of steel gas main pipeline segments and in accordance with the corresponding plan drawings. The approximate sequence of operations should be:

1.1.1 Install mains & services.

1.1.2 Install linestoppers.

1.1.3 Connect new main to existing main at stopple fitting and at existing main.

1.1.4 Test new main, services & stopple fittings.

1.1.5 Energize new main line – gas should remain on old main via bypass stopper.

1.1.6 Tie-in new services to existing services.

1.1.7 Tap new main at service connections.

1.1.8 Energize new services & purge.

1.1.9 Purge, cap & abandon existing main.

1.2 Proposed 4” Steel Gas

1.2.1 The existing 4” steel gas main shall remain in service until the new segment by-pass (bottom-out) line stopper is installed (see Detail 1, Dwg. No. 54291003). The proposed U.S. Highway 60 relocation should be in-service or other temporary diversion route should be in-place prior to beginning construction on the proposed 4” steel line segment between Hwy. Sta. 528+55, 12’ Lt. and 565+89, 34’ Lt., due to very limited equipment and trenching work area, off the existing traffic corridor. The new line segment should be tested, connected, purged and pressurized with natural gas before the existing segment is blown down, cut and capped for abandonment.

1.2.2 Once gas is flowing on the remainder of project, shutdown of the existing 4” paralleling U.S. 60 must be coordinated with City of Lewisport Gas Department and their industrial customers.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Surveys**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. City of Lewisport or its authorized representative shall survey the centerline of the pipeline route, unless otherwise specified, and shall mark the same appropriately.

2. Contractor shall lay the pipeline along the route as surveyed and marked. If this route parallels City of Lewisport' existing pipeline, Contractor shall take particular care not to damage it.

3. Contractor shall be responsible for the preservation of all property corner monuments, stakes, benchmarks, and markers. Costs of replacing property corner monuments, stakes, benchmarks and markers destroyed or disturbed by Contractor shall be borne by Contractor.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Clearing and Preparing Right-of-Way**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The right-of-way shall be cleared of trees, brush, and other obstructions to permit the efficient use of machinery and equipment for construction of the pipeline. Large or valuable trees may be saved provided that they will not interfere with construction operation or maintenance of the pipeline. Tree stumps shall be cut or removed as necessary to permit grading and ditching and to provide adequate clearance for mechanical equipment and automotive vehicles. Tree stumps adjacent to roads and other areas of public view shall be cut close to the ground or removed.

The method of clearing rights-of-way should take into account matters of soil stability, protection of natural vegetation, and the protection of adjacent resources.

2. All brush, stumps, unusable timber, etc. shall be removed from the right-of-way and promptly disposed of.

3. Temporary roads or entrances used for construction shall be so constructed to provide proper drainage and to minimize soil erosion.

4. Extreme care shall be exercised in conducting the right-of-way clearing operations so as to avoid damage or injury to adjacent property. Trees and shrubs not cleared shall not be unnecessarily damaged during construction.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Trenching**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The trench for the pipe shall be excavated to a width not less than six (6) inches nor more than twelve (12) inches in excess of the outside diameter of the pipe and to a depth that, shall provide not less than thirty six (36) inches depth of cover over the top of pipe in normal soil or twenty four (24) inches in consolidated rock, unless otherwise specified in the plans.

2. Consolidated rock is all natural ledge formations and boulders that require mechanical means for breaking up prior to removal from the trench. Rock that is removed by means of backhoe or rock trenching equipment shall not be considered consolidated rock. Rock excavation shall be measured in cubic yards. If top soil or sand padding is used the rock excavation shall be determined by multiplying the trench width for that particular diameter pipe times the average depth from the top of the rock ledge to four (4) inches below the bottom of the pipe, or to the bottom of the rock ledge if it does not extend to four (4) inches below the pipe, then multiplying by the length of the rock removed. If rock shield is used the rock excavation shall be determined by multiplying the trench width for that particular diameter pipe times the average depth from the top of the rock ledge to the bottom of the trench, or to the bottom of the rock ledge if it does not extend to the bottom of the trench, then multiplying by the length of the rock removed. The width of trench for each diameter pipe shall be as follows:

¾" and 1" Pipe 8 inches (0.67 Feet)
2" and 3" Pipe 10 inches (0.83 Feet)
4" Pipe 12 inches (1.33 Feet)
6" Pipe 18 inches (1.50 Feet)

3. It shall be the responsibility of the Contractor to determine the location and elevation of existing subsurface utilities or underground improvements in advance of trenching. All subsurface or aboveground damage to such facilities must be repaired immediately at the Contractor's expense.

4. Due care shall be taken in excavating the trench, not to damage existing pipelines or other underground installations. The trench shall be excavated by hand when, in the opinion of City of Lewisport' authorized representative, machine excavation could cause damage to pipelines or other underground installations.

5. There shall be a minimum clearance of 12 inches between the pipeline being laid and any other pipeline or underground structure. Where these clearances cannot be attained, other suitable precaution to protect the piping shall be taken, such as the installation of protective material, installation of casing, etc.

6. Where lawns, cultivated shrubs, trees, orchards, or valuable growing timber are encountered on the right-of-way, special construction procedures may be required to eliminate or minimize damage or injury thereto.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Trenching**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

7. Where the trench is excavated throughout fields under cultivation, across lanes or driveways, or where the trench is open cut through roads, temporary facilities shall be constructed to permit the safe crossing of vehicles, equipment and persons from one side of the trench to the other.

8. All buried pipelines installed where deep plowing or grading operations are anticipated or where the area is subject to erosion, shall be provided with additional cover to prevent damage to the pipeline.

9. The bottom of the trench shall be on undisturbed earth and shall provide a uniform support for the pipe. Padding of the trench with 4" soft earth is required unless otherwise directed by City of Lewisport' authorized representative. The depth of the trench through rock shall be sufficient to allow for a minimum of 4 inches of earth padding, or rock shield and still maintain the specified cover.

10. When the nature of the terrain is such as to require a drainage ditch to drain a section of the trench where water may lie, City of Lewisport' authorized representative shall designate the location and the Contractor shall excavate such drainage ditch.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Blasting (NOT PERMITTED)**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Contractor shall be familiar with blasting and use of explosives and agrees that it is relying upon no statement, representation, or advice of City of Lewisport in regard to the propriety or manner of such use.

2. All drilling and blasting shall be done in a cautious manner and suitable precautions shall be taken to avoid injury or damage to persons, livestock, or other property. In no event shall explosives be used where their use will endanger existing facilities.

3. Blasting operations shall be conducted by personnel thoroughly familiar with such work. Where governmental authorities require licensed "shooters" and blasting permits, such requirements shall be observed. Matting or spoil dirt covering shall be used when necessary to prevent damage to adjacent facilities or property. The use of ammonium nitrate is prohibited.

4. Contractor shall be responsible for all damage resulting from the use of explosives on or off the right-of-way. Contractor is not allowed off of construction right-of-way. Contractor's responsibility shall apply without regard to negligence, due care, or lack thereof.

5. Explosives shall be stored in a locked magazine in accordance with requirements of the U.S. Bureau of Alcohol, Tobacco and Firearms, 27 CFR Part 181. Detonating caps shall not be stored with explosives, but shall be stored in a separate place in accordance with 27 CFR Part 181. Explosives shall not be primed or fused until immediately before use.

6. Blasting should not be done within or near stream channels without prior consultation with Federal and State conservation authorities having jurisdiction to determine what protective measures should be taken to minimize damage to fish and other aquatic life.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Transporting, Unloading, Hauling, and Stringing**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Pipe shall be shipped only in accordance with the requirements of Title 49, Code of Federal Regulations, Part 192.

2. In truck shipments, coated steel pipe shall be supported on bolsters suitably padded to prevent coating damage. All chains, cables, or other equipment used for fastening the loads shall be sufficiently padded to prevent damage.

3. Upon arrival of pipe and other materials at points of delivery, such material shall be promptly unloaded from the delivery vehicles and hauled to a designated warehouse or pipe yard, or to the right-of-way. The unloading and handling of all materials shall be accomplished in a careful workmanlike manner by the use of adequate equipment and labor.

4. Care shall be exercised in all loading, unloading, hauling, and stringing operations, so as to avoid damage to the joints, pipe ends and coating. Cranes, side booms, gin poles or other suitable equipment, if available, shall be used in loading or unloading pipe. Buffers or other suitable means of protection shall be used where suitable unloading equipment is not available. In no event shall pipe be thrown or dropped from the delivery vehicle.

5. Coated pipe shall be handled so as to protect the coating. Coated pipe shall not be run down skidways from delivery vehicles or permitted to ram other pipe sections but shall be lifted from delivery vehicles only with padded handling devices, by cranes or other suitable equipment and placed on padded truck bolsters or stockpiles.

6. Coated pipe shall be handled only with equipment that will prevent damage to the coating. Bare cables, chains, hooks, metal bars, narrow skids and other nonpadded devices shall not be permitted to come in contact with the coating.

7. City of Lewisport may inspect the pipe during removal of the pipe from the original carrier.

8. Pipe shall be strung upon the right-of-way with due consideration to topographic conditions in connection with lining up, welding, fusing, directional drill and highway crossings where multiple lengths and special handling may be required.

In general, the pipe shall be strung end to end on the right-of-way, but in some cases may be placed in piles for welding or coating.

9. Valves, casing and other durable materials may be hauled and strung on the right-of-way provided such practice shall not result in their loss or damage. Small materials or materials easily lost or damaged shall be stored at convenient points in designated warehouses.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Bending and Laying Steel Pipe**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The method employed in making pipe bends in the field shall be subject to the approval of City of Lewisport' authorized representative.

2. City of Lewisport' authorized representative may require that pipe bends be set in the trench in advance of the laying crew, to test the bend radii and the grading of the trench.

3. All field bends made with or without the use of bending machine shall be made without heating and the completed bend shall not impair the serviceability of the pipeline. Each bend must have a smooth contour and be free from buckling, cracks, wall thinning, or any other mechanical damage.

   The difference between the maximum and minimum diameters (i.e., out-of-roundness) shall not exceed 2.5% of the nominal diameter in all sizes.

   The completed bend shall conform to and match the grading of the bottom profile of the completed trench.

   The Contractor shall determine the optimum bend procedure for the pipe provided. City of Lewisport' shall not be responsible for any variation in bending characteristics that may be encountered.

4. For pipe with a longitudinal weld, the weld shall be located as near as practicable to the neutral axis of the bend. For side bends, the neutral axis shall be at the top of the pipe.

   The minimum tangent distance between the start/end of the bend as measured along the longitudinal axis to the pipe end shall be at least 1-1/2 pipe diameters.

   Where bending of pipe with a circumferential weld is required, no increment of the bend shall be made within 2-1/2 feet of the weld. If, in the opinion of City of Lewisport' representative, excessive distortion is evident in the weld area, a radiograph of the weld shall be required at the Contractor's expense.

   The bending procedure shall be designed to prevent distortion of the pipe ends.

5. Bending procedures and equipment shall not cause damage to external and/or internal coatings. If, in the opinion of City of Lewisport' representative, coating protection is required, padded bending dies for bending machines shall be furnished at no additional cost.

6. Miter bends shall not be permitted.

7. When bending machines with internally expanded mandrels are used, care shall be exercised to assure that the pipe diameter is not increased.

   For 10-inch nominal and smaller pipe, field bending may be done by machine, bending block or other City of Lewisport' approved method.

8. Each bend shall be inspected by Contractor and City of Lewisport' representative to assure compliance with the above requirements.

The Contractor at no expense to City of Lewisport' shall replace unacceptable bends. Contractor shall also be responsible for the repair of replacement of coatings damaged by the bending process.

The City of Lewisport' representative will determine the acceptability of bends.

The City of Lewisport' representative in consultation with appropriate City of Lewisport' Engineering personnel may approve deviations from these requirements.

9. Each length of pipe and each other component must be visually inspected at the site of installation after bending to ensure that it has not sustained any visually determinable damage that could impair its serviceability. Any imperfection or damage that impairs the serviceability of a length of steel pipe must be repaired or removed. Repairs shall be consistent with the following:

9.1 Each imperfection or damage that impairs the serviceability of a length of steel pipe must be repaired or removed. If a repair is made by grinding, the remaining wall thickness must at least be equal to either:

9.1.1 The minimum thickness required by tolerances in the specification to which the pipe was manufactured; or

9.1.2 The nominal wall thickness required for the design pressure of the pipeline.

9.2 Each of the following dents must be removed from steel pipe to be operated at a pressure that produces a hoop stress of 20 percent, or more, of SMYS:

9.2.1 A dent that contains a stress concentrator such as a scratch, gouge, groove or arc burn;

9.2.2 A dent that affects the longitudinal weld or a circumferential weld; and

9.3 A gouge, groove or dent may not be repaired by insert patching or by pounding out.

9.4 Each gouge, groove or dent that is removed from a length of pipe must be removed by cutting out the damaged portion as a cylinder.

10. The interior of all pipe joints shall be carefully examined for the presence of foreign matter before they are lined up for welding. All such matter shall be removed by swabbing or other means.

11. On pipe containing a longitudinal weld, the seam on adjacent pipe lengths shall normally be in the top quarter. The seams should not be in line. Seams should be directed away from adjacent facilities such as buildings, electric power lines, etc.

12. The open end or ends of the line shall be securely closed at the end of each day's work to prevent the entrance of small animals or the introduction of foreign matter of any kind and shall not be reopened until work is resumed at that point.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Welding**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Welding shall be in accordance with the following codes:

1.1 API Standard 1104, Latest Edition, Standard for Welding Pipelines and Related Facilities.

1.2 Code of Federal Regulations, Title 49, Part 192, Latest Edition, Transportation of Natural and other Gas by pipeline: Minimum Federal Safety Standards.

1.3 ANSI/ASME B31.8, Gas Transmission and Distribution Piping Systems.

1.4 Any other applicable local or State codes.

2. Welding on ASME Section VIII Code stamped vessels will not be permitted.

3. Prior to commencement of welder qualification tests or production welding, Contractor shall submit to City of Lewisport the welding procedure intended for use in construction of the pipeline and related facilities. The procedures shall be qualified in advance of start of construction with sufficient time for laboratory testing of weld. The Contractor will supply the pipe and will pay for laboratory testing of procedure welds.

City of Lewisport reserves the right to accept or reject, at any time, in whole or in part, any or all welding procedures which, in the City of Lewisport' opinion, will not produce or which are not producing acceptable welds. In the event such circumstances occur, regardless of the status of the Work, Contractor shall not continue with welding until the unacceptable procedures are remedied to City of Lewisport' satisfaction at Contractor's expense. Acceptance or approval by City of Lewisport of the welding specifications or procedures used by Contractor shall not in any manner or to any degree alter Contractor's responsibility for producing sound and acceptable welds.

Procedures shall cover the diameters, wall thickness and grades of pipe and fittings to be used. Specified wall thickness and diameter groups listed for Welder Qualifications of API Standard 1104 shall be considered essential variables for the welding procedure.

4. Welders shall be qualified in accordance with API Standard 1104. City of Lewisport' designated representative shall witness all welder qualification tests. Each welder shall be qualified for the type and method of welding which he will perform. No welder shall do any phase of welding for which he has not been qualified. A welder who has made a successful procedure qualification test is automatically qualified in that procedure.

After City of Lewisport has determined that the welder has passed all weld test requirements, Contractor shall issue an identification number to that welder and each weld made by that welder shall be so identified. The number of each welder participating in the weld shall identify any weld worked by more than one welder. City of Lewisport will record the number and name of each welder. If a welder leaves the job, his number shall not be reassigned.

The Contractor will furnish pipe for welder qualification tests. Contractor shall be responsible for cutting pipe nipples for such tests. Weld test specimens may be submitted to an independent testing laboratory for analysis and paid for by the Contractor or tested on-site by the Contractor. Contractor shall prepare the pipe nipples for testing, furnish all tools, destructive weld testing equipment, labor, services and welding materials necessary to conduct the tests.

5. Lewisport may have one production weld from each welder cut from the line to test each welder's work. The cost of such welds shall be borne by Contractor. City of Lewisport may have additional welds cut for further tests. If additional welds pass destructive testing under API Standard 1104, City of Lewisport will pay Contractor, for each acceptable weld. Contractor shall bear the costs for unacceptable welds that do not pass destructive testing under API Standard 1104. If a test weld fails, the welder may not be permitted to continue welding in the scope of work. If two or more welders participated in making a weld that failed, the Contractor and City of Lewisport shall determine which welder or welders are responsible for the defective work.

6. Welding shall only be accomplished using qualified welders and approved process and procedure.

7. The internal and external surfaces of each pipe shall be machine buffed a minimum length of three-quarters (3/4) inch from the welding edge to remove all rust, scale, dirt or other foreign materials before placing in alignment for welding. Grinding shall not be used for this purpose.

8. All bevels shall be buffed or wire brush cleaned to a bright finish just prior to welding. High points in the bead and scale, oxide, slag or other impurities shall be thoroughly removed from each bead and groove before the succeeding pass is made.

9. Adjoining lengths of pipe shall be accurately aligned and spaced by the use of an alignment clamp approved by City of Lewisport. Under no circumstances will mitered pipe welds be allowed. When an internal lineup clamp is used, it shall not be released until the root bead is at least 80 percent completed. When utilizing an internal lineup clamp, a minimum clamp pressure of 45 psi shall be maintained. When an external lineup clamp is used, the root bead shall be made in equal segments, equally spaced around the circumference with a cumulative length of not less than 50 percent of the pipe circumference before the clamp is released.

The alignment of abutting ends of longitudinal seam pipe, except in bend section, shall be so as to stagger the longitudinal seams a minimum of forty degrees with each seam being in opposite forty-five degree segments from the top of the pipe.

10. The maximum high-low offset between surfaces of adjoining pipes of equal nominal wall thickness shall be one-sixteenth inch. Where the difference in the nominal wall thickness of adjoining pipe to fitting exceeds 3/32-inch, Contractor shall taper bore the inside of the thicker

wall to a maximum angle of 30 degrees and not greater than 1/16-inch high-low offset. Contractor shall furnish the internal tapering machine, subject to City of Lewisport' approval, and perform all work necessary to internally taper the ends.

11. Contractor shall ensure that arcing does not occur between the ground leads of the welding machines and the pipe or fittings. Striking the arc on the pipe or fittings at any point other than the welding groove shall not be permitted. All arc burns on the pipe shall be removed from the pipeline by removing a cylinder of pipe at no additional expense to City of Lewisport.

12. In the case of cold, rainy, or stormy weather, Contractor shall provide protection for the welders at their work and shall protect the welds from sudden variations in temperature until welds are thoroughly cool. Welding shall not be carried on when, in the judgment of City of Lewisport, the weather is unsuitable for welding operations.

13. Preheating shall be accomplished by a method acceptable to City of Lewisport and shall cover a band at least 4 inches wide on each side of the weld. A minimum temperature of 200^{o}F shall be maintained during welding and shall be checked by use of temperature indicating crayons. The following conditions shall require preheat:

13.1 When the ambient or pipe temperature is 40^{o}F or below.

13.2 On all repair welds except for recapping or backwelding. Repair welds shall be preheated in the area of repair extending a minimum of 3 inches beyond the ends of the repair cavity.

13.3 When, for any reason, it is necessary for specific welding procedure and material combinations to alleviate existing conditions that would limit the welding technique or adversely affect the quality of the weld.

13.4 When, for any reason, pipe is wet or damp.

14. Movement of the pipe during welding of the root bead shall be prohibited and no two successive weld beads shall be started at the same location.
The second bead (hot pass) shall be made immediately after the root bead pass has been completed and thoroughly cleaned.

Before the day's work is complete, hot passes shall be added to all root beads. Welded joints, which have been connected by the root bead only from the end of one day's work to the beginning of the next, will not be accepted.

15. When welding valves into the line, gate, globe, and check valves shall be in the closed position and ball valves shall be in the open position. Temperature limits for welding adjacent to valves

or other temperature sensitive components shall not exceed the temperature limits of those components.

16. Welded sections of pipe shall not be rolled, hoisted off skids or dollies until the welds are thoroughly cool.

17. All welds shall be marked on the top quarter of pipe by each welder according to numbers assigned to the welders by Contractor, and Contractor shall furnish City of Lewisport with a record of all numbers assigned. Steel die stamping for identification of welding or any other purpose will not be allowed, nor will hammering, jacking, gouging, arc burning, or other damage inflicting actions be allowed. City of Lewisport shall approve the method of marking.

18. The open ends of the line shall be securely closed and the ends of all pipes raised and placed on skids above ditch at the end of each day's work and shall not be reopened until the work recommences. A suitable cover of about the same diameter as the pipe shall be placed over the open ends of tie-in sections, or both ends of long sections. Contractor shall remove any obstructions, which may occur in the line at its expense and to the satisfaction and approval of City of Lewisport. The pipeline must be delivered to City of Lewisport entirely free of water, dirt, obstructions and any other foreign substances.

19. Contractor shall daily collect, rebevel, clean, haul ahead, and place in the pipeline all usable pup joints ten (10) feet or more in length. No pup joint shall be installed in the pipeline that is less than three (3) feet in length.

20. City of Lewisport will have the welds inspected by a radiographic inspection firm, if deemed necessary, and the Contractor's operations shall be so conducted as to allow for this type of inspection. City of Lewisport will make every effort to avoid any delays to Contractor's operation; however, City of Lewisport will not compensate Contractor for any time lost due to the performance of this type of inspection.

The Contractor shall cooperate fully with the radiographic inspection firm's personnel to ensure timely and adequate inspection of the welds. The Contractor shall furnish tow equipment and tow the inspection firm's equipment, if required, at no cost to City of Lewisport or inspection firm.

21. Test welds shall be tested in any of the following manners:

21.1 By performing nondestructive testing inspection in accordance with Section 6, "Standards of Acceptability Nondestructive Testing" API Standard 1104. If radiographic inspection indicates that a weld does not meet the requirement and there is any controversy, that portion or section of weld may be cut and tested destructively.

21.2 By cutting out and preparing test specimens and performing tests in accordance with the procedures as specified in Section 3, "Welder Qualifications", API Standard 1104.

22. Unless specifically waived by City of Lewisport on an individual weld basis, the initial repair or replacement of unacceptable welds shall be completed within three working days after such respective production welds are made. Welds that are not acceptable shall be removed or repaired at Contractor's expenses.

23. Weld repair procedures shall be qualified in the same manner and at the same time the production welding procedure is qualified.

24. If nondestructive testing indicates a weld to be defective, Contractor, at no additional cost to City of Lewisport, shall cut from the pipeline a cylinder of pipe containing such weld and have it replaced with good pipe or, at Contractor's option, shall have such weld repaired, provided the following limits are applicable:

24.1 Air-arc gouging and flame gouging shall not be used to remove defects except for certain defects in fabrication welds that shall be performed under the direction of City of Lewisport or Vendor's Representative.

24.2 An area covering four (4) inches on each side of the repair shall be preheated to a minimum of 200Deg F, and maintained during welding.

24.3 All repair cavities shall be a minimum of two (2) inches in length.

24.4 The number of repairs in any given area of the weld will be at the discretion of City of Lewisport.

24.5 Repair of cracks or arc burns shall not be permitted.

24.6 A torch cut window at least 1" x 1" shall be made in the top of the pipe in the weld area of any weld that is to be cut from the pipeline as a cylinder.

24.7 All repaired areas shall be radiographed and inspected by the same means previously used. City of Lewisport may reinspect all of a weld containing a repair in the same manner as it is allowed to inspect any production weld.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Coating and Wrapping**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. GENERAL

1.1 This specification shall apply to the materials, surface preparation, yard applied coating, field application and inspection of the coating system for corrosion protection. This specification also covers the coating of field joints and fabricated assemblies and the repair of the yard applied coating.

1.2 Pipe and/or fittings that extend above ground shall be coated to a point 12 inches above ground level.

2. FIELD JOINTS

2.1 The field joint coating sleeve shall be a one-piece heat shrinkable wrap around sleeve. Sleeve shall be composed 30 mils of polyolefin backing coated with 55 mils of mastic, Raychem, Canusa, or equal. The sleeve width shall cover the entire exposed joint length, plus an overlap of approximately 2.5 inches of the pipe coating on either side. Cold applied tape may be used as an alternate. If used, the pipe shall be coated at least three (3) inches onto the native coating with a primer compatible with the tape used. The tape shall be properly applied in either a spiral or cigarette wrap with a minimum of one half 1/2" overlap and extending a minimum of two (2) inches onto the native coating.

2.2 The field joint surface to be coated shall be free from moisture, dust, dirt, oil, grease, weld spatter, slag, or other contaminants, which might interfere with the coating or adhesion of the coating to the pipe or adjacent coating.

2.3 Weld slag shall be removed by chipping or wire brushing.

2.4 Oil or grease shall be removed by wiping with clean rags saturated with a suitable, oil-free safety solvent.

2.5 Dirt shall be removed by brushing, wiping, or by washing with clean, salt-free water.

2.6 Heat shrink wrap shall be applied with hot air, not open flame.

3. HOLIDAY DETECTION

3.1 The Contractor shall furnish high voltage electric holiday detectors of a type approved by City of Lewisport. These detectors shall operate at a voltage designated by City of Lewisport and which is sufficient to provide a spark that will span a gap equal to or greater than the coating thickness. Contractor shall provide to City of Lewisport a calibration certificate on each holiday detector being used.

Detector shall be set at 100 volts per mil thickness of coating.

3.2 City of Lewisport has the unrestricted right to inspect the coating system at any time prior to backfilling, and any previous inspection by City of Lewisport does not in any manner relieve the Contractor from any liability of repairing all defective coatings that may develop prior to backfilling.

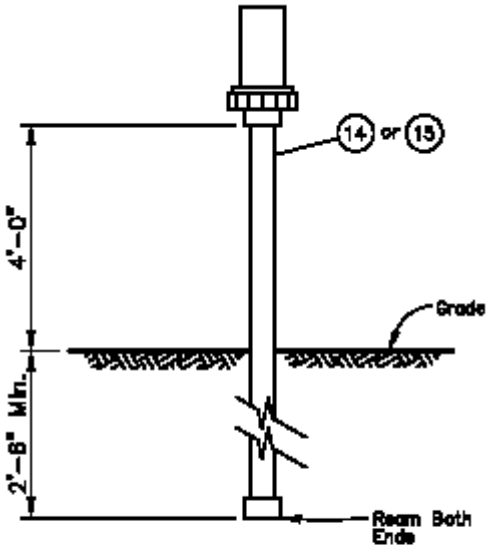
3.3 All refuge or waste materials from coating operations will be removed from the right-of-way immediately following coating operations and will not be left for cleanup.

4. REPAIRS

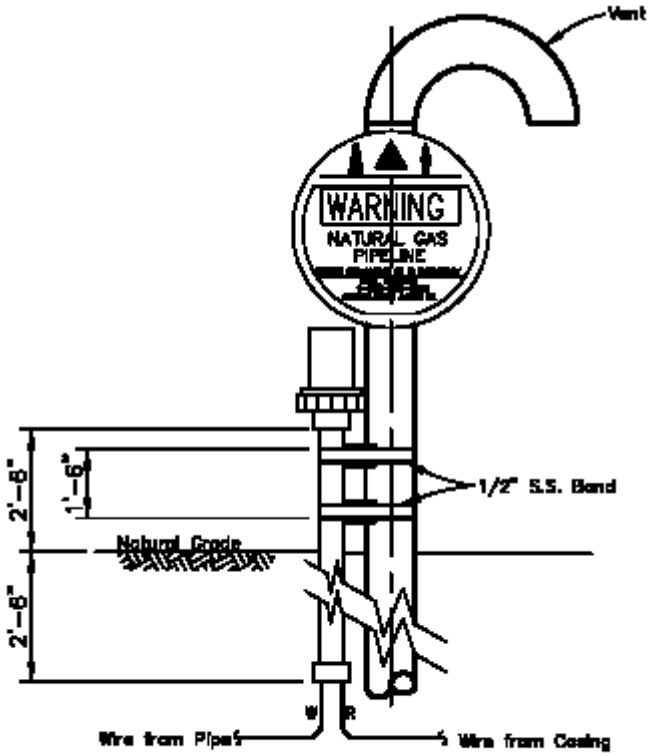
4.1 Fusion bond epoxy coating pinhole type holidays may be patched using the patch stick method, tape as specified in Section C-1 or with a two part, 100% solids, liquid epoxy compound specified by the manufacturer.

4.2 Large areas of damaged fusion bond epoxy coating are to be repaired using a two part, 100% solids, liquid epoxy compound specified by the manufacturer or tape as specified in Section C-1.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Station Assembly (Metal Type)**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**



TEST FIXTURE CONDUIT ASSEMBLY

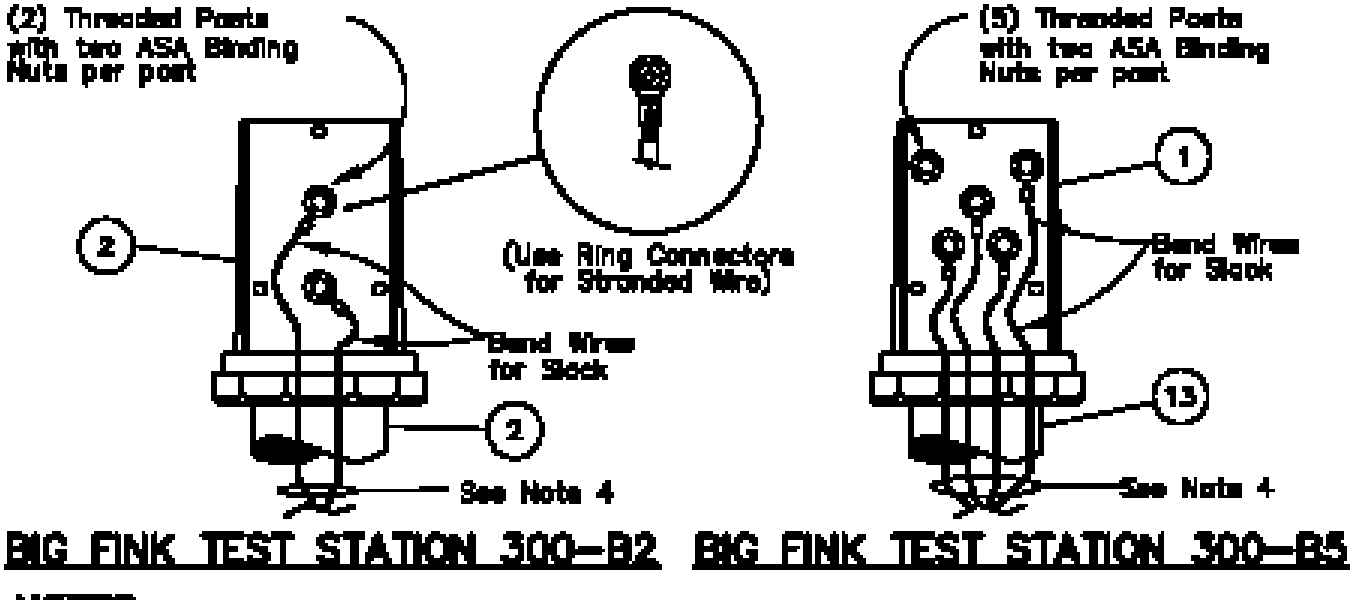


VENT OR PIPE MARKER

Notes:

1. Contractor to furnish and install all material.
2. Complete unit may be purchased assembled from Porter Co., San Antonio, Texas, or Ace Special Ties, Odessa, Texas
3. All test stations to be located at the right of way fence. All test station wiring to be encased in conduit.
4. See Engineering Standard ENG-6652 for Bill of Material.
5. See applicable cathodic protection details on DWG.NO.54295601.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Station Assembly (Metal Type)**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**



BIG FINK TEST STATION 300-B2 BIG FINK TEST STATION 300-B5

Notes:

1) Little Fink Test Station unit will be installed at all test stations where only three (3) or less wire connections are needed. Bing Fink unit to be used at all other locations.

2) Contractor to furnish and install all material.

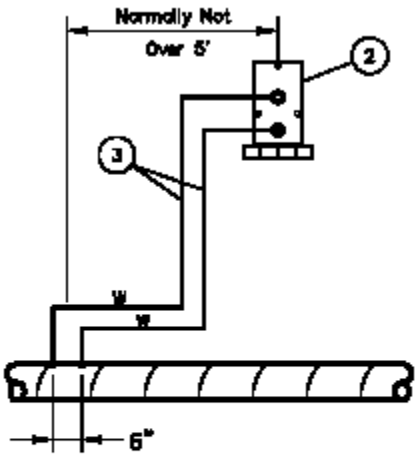
3) Complete unit may be purchased assembled from: Cott Mfg., Los Angeles, CA

4) See Engineering Standard 6652 for Bill of Material.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Stations by Type**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

GENERAL NOTES:

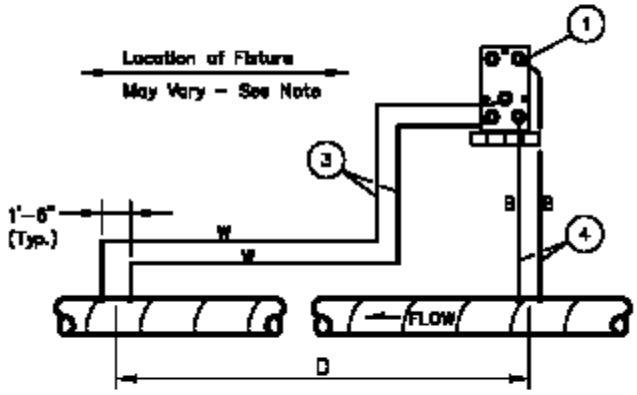
1. For lead wire connection instructions, see Engineering Standard ENG-6660.
2. For details of tap types "A" through 'F', see Engineering Standard ENG-6650.
3. For details of tap type "G" see Engineering Standard ENG-4736.
4. For Bill of Material see ENG-6652.



TYPE CT-1
2-WIRE P/S VOLTAGE

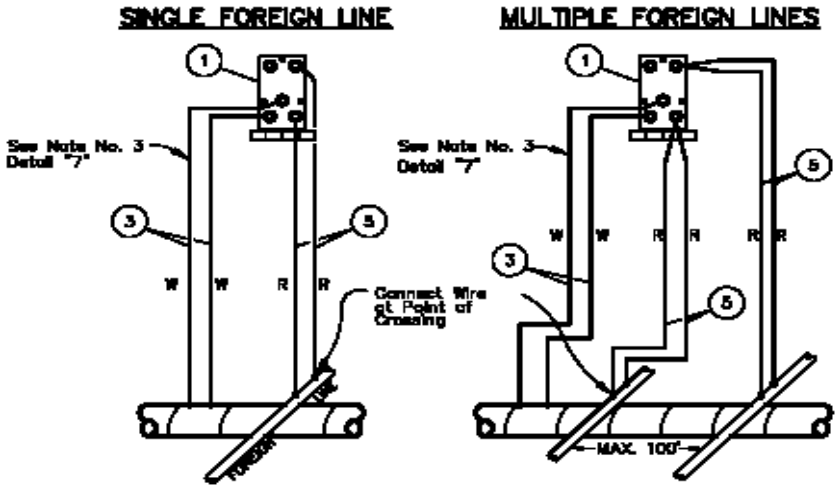
NOTE:
Number of wires for proper identification. Test fixture may be close to either pair or any point in between.

D = 35' min. for 6" and smaller pipe
D = 75' min. for 8" through 12" pipe
D = 100' min. for 14" through 24" Pipe
D = 120' min. for pipe over 24"



TYPE CT-2
4-WIRE IR DROP

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Stations by Type**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

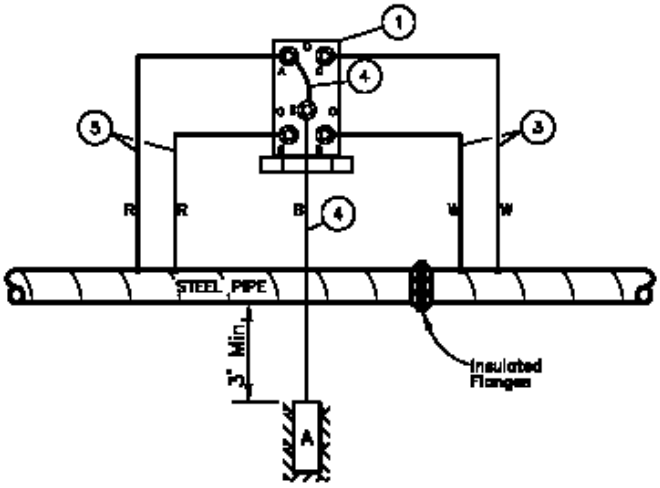


TYPE CT-3
FOREIGN PIPELINES

NOTE:

1.) Copper strap must always be connected through "A" and "E".

2.) Test wires connected to line with use on thermite materials. A minimum of six inches separation is required between connections

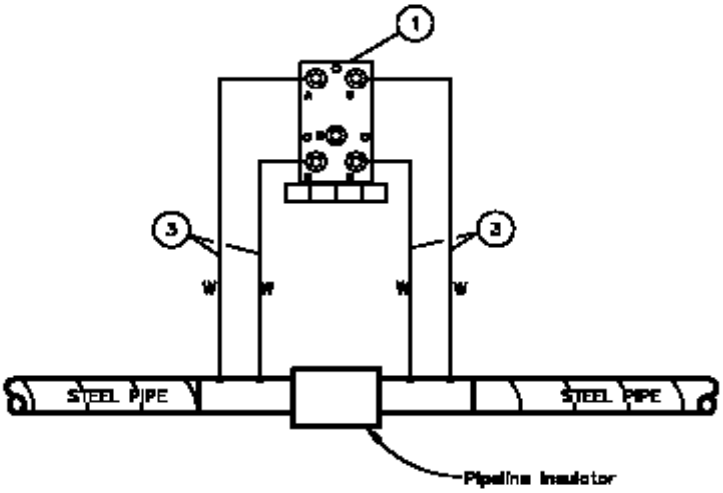


TYPE CT-4
INSULATED FLANGE TEST POINT

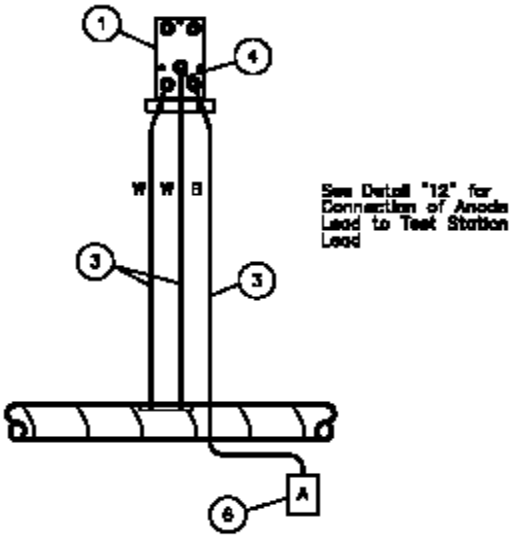
	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Stations by Type**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

NOTES:

Test wires connected to line with the use of thermite materials. A minimum of six inches separation is required between connections.

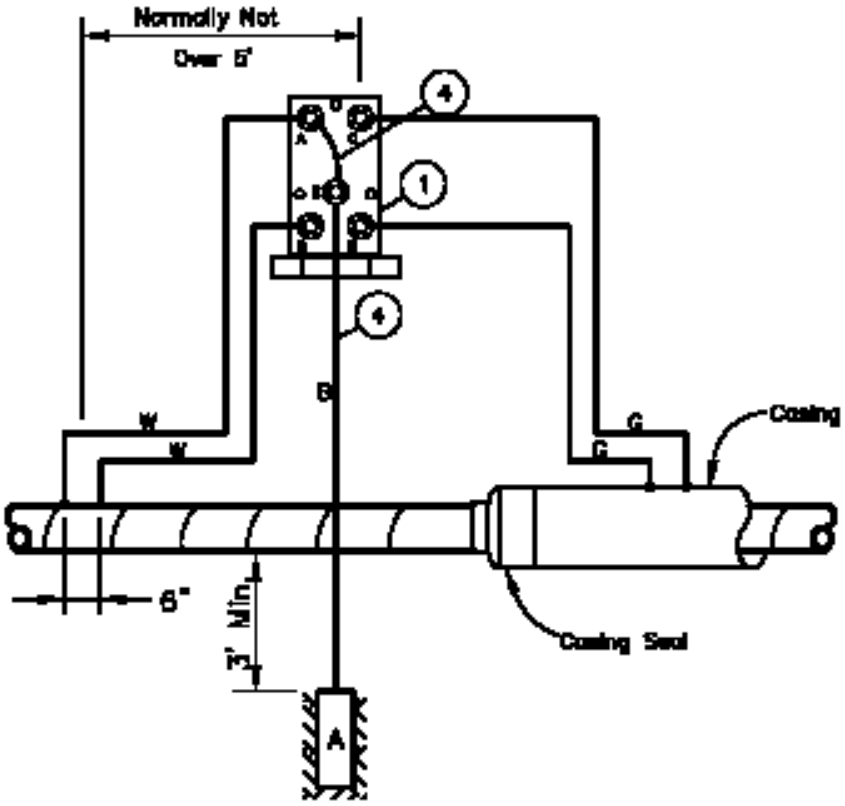


PIPELINE INSULATOR



TYPE CT-A
TEST STATION WITH ANODES

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Stations by Type**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**



TYPE CT-B
CASING DETAIL

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Typical Cathodic Protection Test Station Bill of Rights**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

Typical Cathodic Protection Test Station
Bill of Material

1	Test Station, 5 wire, COTT Bing Fink 300-B5, Yellow Test Head, 6 ft. White post w/anchor
2	Test Station, 2 wire, COTT Bing Fink 300-B2, Yellow Test Head, 6 ft. White post w/anchor (not required)
3	Wire, #10 AWG, Solid Copper, TW/THW Insulation, White
4	Wire, #10 AWG, Solid Copper, TW/THW Insulation, Black
5	Wire, #10 AWG, Solid Copper, TW/THW Insulation, Red (not required)
6	Anode, 17 lb., Prepackaged, Hi-Potential, Magnesium, w/10' of #10 Solid TW Lead Wire
7	Split Bolt, Copper, Burndy KS15 or equal
8	Tubing, Heat Shrink, 3/4" x 3", Canusa CFE or Equal
9	Cadweld Cover, Royston Handy-Cap or equal
10	Compression Crimpet, Burndy YC8C8 or equal (not required)
11	Anode Splice Encapsulation Kit, Raychem ASE or equal (not required)
12	Wire, #8 Solid Copper, TW/THW Insulation, Black
13	Ring Connector
14	Pipe, 3" plastic, Schedule 80 PVC, cut to fit
15	Pipe, 1-1/2" plastic, Schedule 80 PVC, cut to fit

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Attachment of Conductors to Pipelines**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. SCOPE

This standard provides installation instructions for attachment of conductors to pipe and is applicable to all types of conductor attachments including but not limited to test leads, anode leads, grounding cables and rectifier negative electrodes.

2. GENERAL

2.1 Conductors shall not be attached to butt-weld fittings.

2.2 If more than one conductor connection is required at a location, the connections shall be staggered along a line in the longitudinal direction and spaced a minimum of four (4) inches apart.

2.3 Steel patches shall not be electric arc welded onto the pipe for the purpose of connecting conductors, due to the possibility of excess heat and stress being applied to the pipe.

2.4 If the conductor diameter is too large for effective connection by thermit welding using a charge no greater than 15 grams or by soldering, a stranded conductor should be used and fanned or separated at the end such that an effective connection can be made in accordance with this standard. Solder lugs or multiple thermit welds may be used as necessary.

2.5 The attachment method specified in Section 3 of this standard shall be considered an electrical connection only. A method acceptable to the Company's representative shall be used to secure the conductor so as to avoid undue mechanical stress on the electrical connection. An acceptable method is to loop the conductor around the pipe, securing it using a half-hitch type knot.

3. ATTACHMENT METHOD

3.1 For pipe having nominal wall thickness of 0.218" or less, conductors shall be attached by silver soldering.

3.2 For pipe having nominal wall thickness greater than 0.218", conductors shall be attached by either silver soldering or thermit welding.

4. SOLDERING PROCEDURE

4.1 Remove pipe coating in an area 3" to 4" square at point of attachment and file the pipe to a bright, clean surface.

4.2 Strip the conductor insulation back approximately 3" to provide sufficient bonding surface area.

4.3 Use only 2% silver / 98% tin solder material (e.g., Eutec 157-1/8" silver solder, Welco 5 or All-State 430) with the appropriate flux (e.g., Eutector 157, Welco 5 or Duzall).

4.4 Stir flux thoroughly and apply a thin coat to the areas to be soldered.

4.5 "Tin" the pipe and the conductor to be soldered.

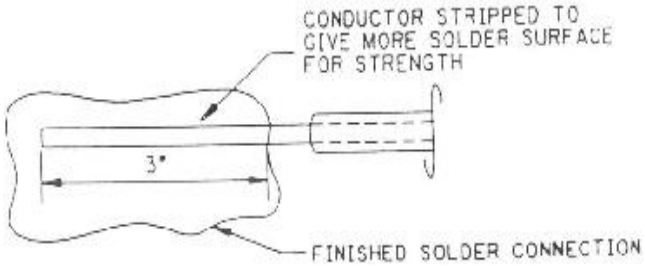
4.6 Heat the pipe and melt a solder puddle sufficient in size to attach approximately 3" of the end of the conductor. See Figure 1. Heating of the pipe shall be limited to only that required to puddle the solder; excess heat is detrimental to the pipe and the soldering process.

4.7 Position the tinned conductor with approximately 3" in the solder puddle and hold steady until solder cools and sets.

4.8 Test for adequate bond strength by lightly tapping the connection with a hammer.

4.9 It is important to then neutralize the acid flux with a base solution. The most readily available base is common baking soda. Make a watery paste with the baking soda and potable water. Apply the paste to the area wetted by the flux and then rinse with clean water to remove the neutralizing solution.

4.10 Clean and coat the connection per Section 6 of this standard.



5. THERMIT WELD PROCEDURE

5.1 All thermit weld charges shall be limited to 15 grains.

5.2 Remove pipe coating in 3" to 4" square area at point of attachment and file the pipe to a bright, clean surface. Mechanical deformation of the pipe surface to create an anchor pattern for the weld attachment is prohibited.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Attachment of Conductors to Pipelines**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

5.3 Strip the conductor insulation back as required to assure proper length of clean conductor to fit in mold as shown in Figure 2.

5.4 For cathodic test lead wire, install crimped copper sleeve as shown in Figure 2.

5.5 Place mold over cleaned pipe surface and insert the conductor through the mold cavity. See Figure 2.

5.6 Cover the tap hole with the steel disk.

5.7 Dump the cartridge into the crucible tapping the bottom of the cartridge to assure that all of the starting power is emptied.

5.8 Hold the thermit welder unit firmly to prevent leakage and ignite the starting powder with a flint gun. Immediately pull the flint gun away to avoid fouling.

5.9 Hold the thermit welder unit in place at least ten seconds while the molten weld metal solidifies.

5.10 Test bond strength by lightly tapping the connection with a hammer.

5.11 Clean and coat the connection per Section 6 of this standard.

5.12 Clean slag from the thermit welder mold before making the next weld.

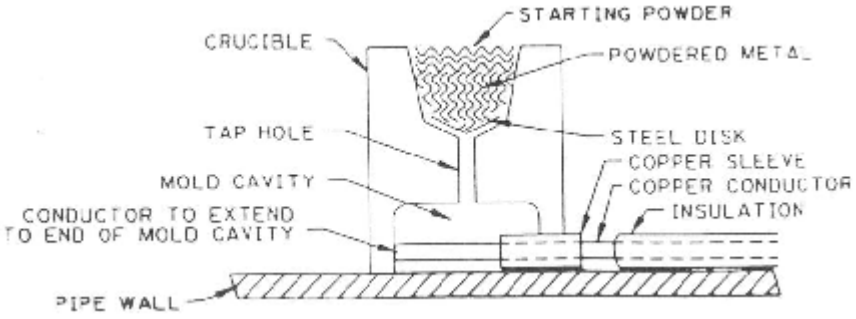


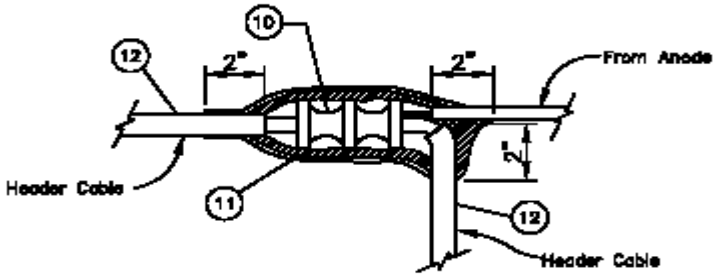
Figure 2: Thermit Weld Installation

6. PROTECTION OF COMPLETE CONNECTION

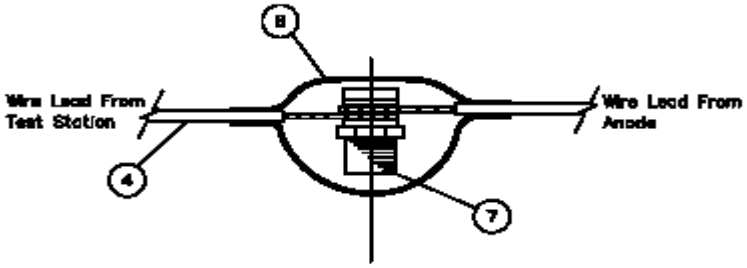
6.1 Clean the solder or thermit weld area and the exposed pipe surface.

6.2 Install a plastic thermit weld cap (or equivalent) filled with an approved cold applied mastic. Push plastic cap down over the weld area extruding mastic out around all the edges to ensure a complete seal. See Figure 3.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cathodic Protection – Attachment of Conductors to Pipelines**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

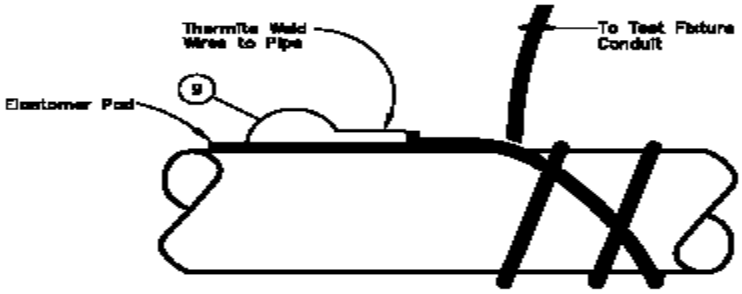


ANODE LEAD TO HEADER CABLE



ANODE LEAD TO TEST STATION LEAD

TYPICAL SPLICE CONNECTION



NOTE:
Field coat after attaching wires per project coating specifications.

TYPICAL TEST WIRE CONNECTION TO PIPE

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Lowering of Pipe**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The number and location of slack loops, if required, shall be as designated by City of Lewisport' authorized representative.

2. In lowering the pipe into the trench, side bends and sag bends shall be lowered first wherever possible and weighted if necessary to serve as anchorage. Side bends shall be placed to bear against the outside wall of the trench. Sag bends shall bear firmly against the bottom of the trench, and overbends shall have a minimum space of 4 to 8 inches between bottom of the pipe and bottom of the trench, it being the intent to lower the pipe in such a manner that a maximum amount of pipe shall be in the trench. Loose ends shall be left at any overbend if required to permit the sag bend to be lowered and anchored before making the cut and tie in weld.

3. If the pipe is cradled-in, it shall be done in such a manner as to secure proper slack and not injure the pipe coating.

   If the coated pipe is cradled-in during hot weather, it may be necessary to cool the pipe by the use of a wetting agent. During hot weather, pipe should be lowered in during the early morning hours.

4. Where rock is encountered, soil shall be used to pack the bottom of the ditch to protect coated pipe from damage unless rock shield is used, in which case it shall be applied to the pipe prior to the lowering in operation. If rock shield is applied only to the top half of the pipe, the bottom of the ditch shall be padded with a minimum of 4 inches of earth, and shielding may be applied after the pipe has been lowered into the ditch prior to the backfilling operation. Unless rock shield is used, the pipe shall be bedded on 4 inches of soil padding.

5. Coated steel pipe shall at all times be handled with equipment that will not damage the coating. Wide padded skids that are designed to prevent damage to the coating shall be used. Bare metal cables, chains, hooks, metal bars, and skids shall not be permitted to come in contact with the coating. The pipe shall be lowered in such a manner as to prevent damage to the coating from abrasions, scuffing or cracking.

6. At all locations where the pipe's protective coating is damaged, the damaged area shall be recoated. Gouges, grooves, and notches in the pipe shall be repaired or replaced in accordance with these specifications. The damaged area shall be recoated.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Backfilling**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Backfilling shall follow the laying and lowering of the pipe as closely as possible and shall be done so that no excavated material remains scattered on adjoining ground. Soil that has been excavated during construction and not used should be evenly filled back onto the cleared area or removed from the site. The soil should be graded to conform to the terrain of the adjacent land and vegetation planted and fertilized, where appropriate.

2. The trench shall be backfilled above ground level and backfill shall be heaped over the center of the trench to a height, which will insure complete filling of the trench after settlement.

3. Where the right-of-way has been graded or leveled off to facilitate the operation of trenching machines or other equipment, the backfill shall be completed so that the original contour of the ground will be restored unless otherwise directed.

4. Trench breakers, or ditch line breakers, are barriers constructed in the trench on sloping terrain to control runoff from channeling along the buried pipeline and eroding supporting soil. Specifications for installation of trench breakers are as follows:

4.1 Trench breakers will be used wherever the pipeline trench traverses slopes greater than 5% and in areas where seeps and springs are found;

4.2 Trench breakers will be installed prior to backfilling;

4.3 Trench breakers may consist of sandbags or earth-filled sacks (sack breakers) placed in the trench, or synthetic foam barriers sprayed in place. If sack breakers are used, topsoil will not be used to fill the sacks;

4.4 Typical spacing for trench breakers is as follows:

Slope	Spacing (feet)
<5	None
5 - 10	100 - 150
11 - 15	80 - 100
16 - 20	70 - 80
21 - 30	50 - 70
>30	25 - 50

Actual spacing is dependent on site-specific drainage conditions.

5. The backfilling shall be done so that the protective coating of steel pipe, the polyethylene pipe, and fittings or other appurtenances shall not be damaged.

6. Any backfilling omitted because of installation of breakers, farm taps, service taps, tie-in connections, cathodic protection test stations, drips, concrete foundations, concrete blocks,

concrete gate boxes, etc. shall be completed after such installations have been made and approved.

7. All backfill shall be earth compacted to 95% density or flowable fill. No granular backfill is permitted except for pipe bedding purposes and protective cover up to 12" above the top of pipe. When granular material is used it shall be sand or Class I Sand.

8. Excavated rocks whose largest dimension is not larger than 4 inches may be returned to the trench. Rocks returned to the pipe trench shall be prevented from contacting the pipe by the use of rock shield or earth padding. Rock shield shall have a minimum thickness of 3/16 inch. Rocks in the trench shall have a dirt cover of not less than 12 inches through cultivated field or fields suitable for cultivation. When rock shield is not used, the coated pipe shall be protected by earth padding of not less than 4 inches around the entire pipe circumference. No barrels, cans, drums, stumps, rubbish, waste or refuse shall be placed in the trench.

9. Highway and road bores shall be installed in accordance with the highway and/or road crossing permits. As a minimum, the backfill material of open-cut driveway or road crossings shall be so placed or compacted to prevent settling.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Clean Up**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Clean-up work shall follow completion of the backfill closely, so that it shall be finished as soon as possible after completion of the pipeline.

2. As construction work is completed, the right-of-way and surrounding ground shall be cleaned of all extra materials, rubbish and debris remaining from the work and the premises shall be left in a neat and presentable condition.

3. In cultivated and improved land, rock rakes or other suitable equipment shall be used as required to remove all shot rock, skids and other rubbish that might interfere with cultivation.

4. Barrels, cans, drums, rubbish, refuse or other waste materials shall be disposed of only in accordance with applicable state and local laws and regulations. Oil and oily wastes shall be disposed of in accordance with applicable state and federal laws and regulations. Stumps, rocks and earth materials may be disposed of on adjacent property only with written permission from the affected property owner.

5. Waterways or diversion terraces shall be constructed across the right-of-way on sloping ground to prevent erosion. Diversion terraces are normally constructed with a bulldozer or motor grader. Using the blade, the diversion terrace is cut cross-slope with a gradient of 3% to 5%. After the initial cut, the downslope berm is compacted with a bulldozer track. Following compaction, a hand shovel is used to clear obstructions from the channel formed up slope of the berm to ensure unimpeded flow of runoff. It is very important that water does not collect behind and erode through the berm.

Specifications for installing and maintaining diversion terraces are described below. The actual spacing and configuration may vary based on field conditions, including degree of slope, soil characteristics, runoff area, cores slopes, existing drainage patterns, and location of suitable outlasts, as well as land use, access, and other special landowner requirements.

5.1 General guidelines for spacing of temporary diversion terraces (USDA 1985) are as follows:

Slope	Spacing (feet)
>35	25
20 - 35	50
10 - 20	75
5 - 10	100
<5	125

5.2 Berms should be broad and gradual and have a break of sufficient width to permit traffic to move through them safely.

5.3 Berms shall be maintained and repaired as conditions require; and

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Clean Up**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

5.4 Diversion terraces should divert water to a well-vegetated area. If such an area is not available, a silt fence or straw bale filter will be required at the diversion terrace outlet.

6. All waterways, ditches, and drains shall be cleaned out and restored to their original condition prior to the completion of construction.

7. After all rock and rubbish has been removed and the grading completed, the right-of-way shall be smoothed to present a finished and workmanlike appearance. Immediately thereafter areas designated shall be fertilized, seeded and conditioned.

Upon abandonment, any temporary roads or entrances used for construction should be stabilized without undue delay.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Speeding and Mulching**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

Included in general highway Contractor's scope of work.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Cleaning and Testing**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. STEEL PIPE

1.1 A test medium of water shall be used for testing of the newly constructed steel pipe.

1.2 The Contractor shall provide all labor, equipment, material, and services to perform the complete pressure testing, including but not limited to furnishing all fill, test and dewatering fittings, manifold piping, valves, high pressure hose, pressure and temperature recorders, dead weight testers, temperature and pressure gauges, squeegees, brush pigs, swabs, sizing plates, charts and all other test apparatus as may be required by City of Lewisport. Dead weight testers, temperature and pressure recorders shall be in first class condition and shall have been certified for accuracy within the past two months.

1.3 Contractor shall supply fill equipment consisting of, but not limited to, the following:

1.3.1 A high volume pump(s) capable of filling the pipeline with water at a sufficient rate to prevent the inclusion of air in the test section.

1.3.2 A flow meter sized to accommodate the maximum flow rate and volumes required for filling the test sections and to meter the test water in the disposal line.

1.3.3 A flow meter sized to accommodate the maximum flow rate and volumes required for filling the test sections and to meter the test water in the disposal line.

1.3.4 Strainers/filters for use in the water supply line intake having a 100 mesh screen/cartridge to prevent pumping foreign materials into the pipeline.

1.3.5 Chemical injection pumps capable of injecting, specified quantities of inhibitor, biocide, and/or oxygen scavenger into the fill line, if required.

1.3.6 Test headers capable of launching/receiving multiple runs of pigs and possessing connections for required instrumentation and monitoring equipment.

1.3.7 Cleaning, filling, and dewatering pigs with new cups and brushes after each run.

1.4 Contractor shall furnish test equipment consisting of, but not limited to, the following:

1.4.1 A variable speed, positive displacement pump capable of pressuring the line to a minimum of 100 psi in excess of the maximum specified test pressure. The pump shall be capable of maintaining a constant and uniform pressurization rate. The pump shall be equipped with either a solenoid-type stroke counter or

meter to measure the amount of test liquid added during pressurization. If a meter is used, it shall have an accuracy of one percent and sensitivity of 0.1 percent of the estimated volume of liquid required to produce the maximum test pressure.

1.4.2 Bourdon pressure gauges with 6-inch minimum diameter, suitable pressure increments, and a pressure rating capable of measuring the full range of specified test pressures.

1.4.3 Certified dead weight balance with individual weights required for measuring up to the specified test pressures in maximum increments of 0.1 psi. Dead weights shall be identified and traceable through a serial number permanently affixed to the balance.

1.4.4 Pressure recorders covering a minimum 24-hour range and possessing either a 10-inch minimum diameter chart size or an 8-inch minimum chart width for strip recorders. Pressure recorders shall be dead weight tested and calibrated prior to each test.

1.4.5 Temperature recorders covering a minimum 24 hour range and capable of measuring temperatures from 32^{o}F to 125^{o}F. Temperature recorders shall have either a 10-inch minimum diameter charts or an 8-inch minimum chart widths for strip recorders

1.5 The Contractor shall furnish and inject Methanol or other City of Lewisport approved chemical additives if required by City of Lewisport. Contractor is responsible for recovering and disposing of chemicals used in accordance with applicable environmental regulations.

1.6 The Contractor shall develop his plan for testing for review by City of Lewisport, in accordance with this specification.

1.7 Upon completion of the line or a substantial part, the line shall be cleaned and tested in accordance with this section. Contractor shall give City of Lewisport two (2) days notice prior to testing all sections of the pipeline in order that Company can make proper notification to other parties.

1.8 Contractor shall install test manifolds at points designated by City of Lewisport. All welds made in the installation of the manifolds shall be in accordance with API Standard 1104 Specifications, however, radiographic inspection may not be required for these specified welds

1.9 The test section ditch shall be backfilled throughout its entire length except at valve settings and necessary bell holes, as approved by City of Lewisport' Representative.

1.10 All mainline valves shall be placed in the full open position so that the valve seats and gate segments are not subjected to the test pressure. All check valves shall be secured in the full open position.

1.11 All vents and other connections shall be opened as required to eliminate air from the lines during filling operations.

1.12 Contractor shall supply and install all instrument lines required for test. All lines shall be either high-pressure tubing or hose.

1.13 After all pretest operations are completed, Contractor shall install the water filter unit on the fill pump discharge line. Contractor shall install a pressure dial gauge on the fill pump discharge for observing the heads encountered during pressurizing. This gauge shall not be used for accumulation of data, but the highest pressure obtained during the filling operation shall be noted on the record.

2. CLEANING

2.1 Steel Pipe

2.1.1 Brush type cleaning pigs shall be run through the pipeline in advance of the hydrotest. All pigs shall be run using compressed air supplied by an air compressor having a rated capacity of not less than 600 standard cubic feet per minute at a discharge pressure of not less than 100 pounds per square inch.

2.1.2 Contractor shall furnish and run brush type pigs, or two combinations of brush and abrasive foam pigs, in such number and combination as to effectively clean the interior of the pipeline. The cleaning process shall remove dirt, mill scale, slag, rust, and other like materials from the pipe wall.

2.1.3 The pipe shall be considered to be sufficiently cleaned when, in the opinion of City of Lewisport, additional cleaning will not remove significant additional material from the pipeline. This condition will be achieved when the following procedures and results are obtained:

a. Each cleaning pig shall be run at an average speed between two to five miles per hour. The travel speed shall be regulated by restricting airflow into, and from, the pipe section.

b. When the cleaning pig is received in the trap, the blowdown valve shall be closed and the line pressurized to not less than 100 psi. With the pipeline valves closed and the trap isolated, the trap shall be blown down and the pig removed. The block valve shall be fully opened to allow rapid depressurization of the pipeline.

c. In the event entrained dirt or other solids are visible during the blowdown procedure or following the pig runs, then the cleaning procedure shall be repeated.

3. LINE FILL AND TEST

3.1 Steel Pipe

The pipeline shall be filled with water taken from a point designated by the City of Lewisport. If necessary, the water shall be filtered to prevent introduction of mud, silt, sand, and debris into the pipeline. As a minimum, the test shall be as follows:

3.1.1 The minimum test pressure shall be 450 psig for all 4" piping, held for a period of 8 hours.

3.1.2 The following general procedure shall govern the test:

a. When the line is filled and pressurization begins, a log record shall be maintained which accurately shows the pressure/volume relationship. Water volume shall be measured by use of a positive displacement meter or by a stroke counter on the pump. Pressure shall be measured with an indicating pressure gauge readable in pressure increments not exceeding 10 pounds per square inch and accurate to plus or minus 0.2 percent of full scale.

b. The official pressure (strength) test shall not begin until the fill water temperature reaches near equilibrium temperature with the surroundings. The test may begin when the pressure measured with a dead weight tester does not vary more than plus or minus 2 pounds per square inch during the hour immediately preceding commencement of the test.

c. The following listed instruments shall be used to monitor and measure hydrostatic test data:

Dead weight tester capable of accurately measuring in one pound per square inch increments. The instrument shall be in good condition and shall have been certified for accuracy within the past six months.

Recording pressure gauge with circular chart graduated in maximum 10 pounds per square inch increments. This pressure gauge shall be calibrated against the dead weight tester and shall be accurate to within plus or minus 5 pounds at the test pressure.

Temperature recorders to monitor the pipeline internal temperature and ambient temperature. The recorder chart shall be divided into maximum one degree Fahrenheit increments.

d. The official test shall not commence until authorized by City of Lewisport and shall be continued or terminated as prescribed by City of Lewisport.

e. The test pressure shall be measured each thirty minutes using the dead weight tester. Measurement data, including pressure, pipeline temperature, ambient temperature and observations shall be recorded on acceptable forms approved by City of Lewisport.

f. The test shall not be considered successfully concluded should an unexplained appreciable pressure loss be indicated by the recorded test data.

g. Should pressure deviations indicate that a leak exists then the Contractor should check all possible sources of leaks by checking all valves, instrument lines, exposed piping, and test equipment. Should no leaks be found then an underground leak is indicated.

At this point Contractor shall furnish labor and equipment to locate and repair the leak and failure. After repairs are made Contractor shall refill and restore the pressure to that point at which it failed and a leak was detected.

h. In the event a continuous decrease in pressure is observed, Contractor shall re-pressure the section to the specified test pressure after an elapse of two hours. If a continuation of pressure loss is observed within the next two-hour period, a leak is evident. Therefore, the Contractor shall discontinue the testing until the leak has been located and subsequent repair(s) made. If the pressure stabilizes, Contractor shall re-pressure to specified test pressure and proceed with the test program. Contractor shall not permit the pressure during the test to increase in excess of 50 psig above the test pressure.

4. REMOVAL OF WATER AND DRYING (STEEL PIPE)

4.1 Identify Hydrostatic water shall be removed from the pipeline at a time and in a manner acceptable to City of Lewisport. Contractor will determine the requirements of City of Lewisport and Agency having jurisdiction over the disposal of test water and shall perform the necessary treatment of the water, which may include adjustment of pH value, temperature, aerating, injection of chemicals, filtering or any other treatment of the water.

4.2 As a minimum, the water will be displaced with air using a brush cleaning pig followed by a four-cup squeegee pig.

4.3 Upon completion of the hydrostatic test of the pipeline, the Contractor shall dry the pipeline to City of Lewisport' satisfaction.

5. RECORDS

5.1 Steel Pipe

Contractor shall keep an accurate report of all data obtained. All reports shall reflect the following:

5.1.1 Tests shall be numbered by test sections (1,2,3, etc., for each pipeline spread), and by test, if more than one test is run on a given section or spread.

5.1.2 Company Name.

5.1.3 Description of the starting point of the test section by survey station and alignment sheet number.

5.1.4 Description of the terminal point of the test section by survey station and alignment sheet number.

5.1.5 Date and time the test starts.

5.1.6 Date and time the test ends.

5.1.7 Test Pressures read every 30 minutes. Ambient temperatures read every 30 minutes.

5.1.8 Dead Weight readings at 30-minute intervals.

5.1.9 Test Medium.

5.1.10 Test medium temperatures read every 30 minutes.

5.1.11 Certification of Contractor.

5.1.12 Certification of City of Lewisport.

5.1.13 Explanation of any discontinuities in pressure on any chart.

5.1.14 Continuous pressure and temperature recording charts for each test or tests on each test section.

5.1.15 Should a leak occur in any test section, then, in addition to the above information, the following will be furnished:

a. Location of the leak by survey station and alignment sheet number.
b. Pressure at the time the leak was detected (furnish chart).
c. Date and time leak was detected.
d. Date and time leak was found.
e. Date and time leak was repaired.
f. Cause of leak (split seam, crack in plate or other, etc.).

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Highway and Road Crossings**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. The construction of highway and road crossings shall, in addition to all other requirements, comply with the specifications and requirements of the permit issued by the governmental agency having jurisdiction and shall be accomplished in a manner satisfactory to the authorized representatives of such agency.

2. For bored road crossings without casing, the carrier pipe shall be coated in accordance with the specifications. Necessary dummy pipe shall be placed at the leading end of the boring operation. The face end of this dummy pipe can be built up to be approximately one-half inch to three-fourths inch larger in diameter than the carrier pipe. The carrier pipe shall be installed simultaneously with the removal of the dummy pipe.

3. The bored crossing without casing should be installed before the trenching and bending operations arrive at the crossing. When boring, the cutting head shall not extend beyond the leading end of the carrier pipe more than six inches.

4. Where casing is required at road crossings the installation shall be as shown on the construction drawings and crossing permit.

5. The casing shall have an even slope from end to end. In the event more than one joint of casing pipe is required, the casing pipe must be joined by complete welds to insure a leak tight casing throughout the entire length.

6. Prior to the installation of the pipeline in casing, spacers shall be attached to the pipe as indicated on the construction drawings.

7. The space between the pipeline and casing shall be sealed at the ends. Casing seal installations shall be inspected prior to backfill.

8. Casing vents shall be installed as indicated on the construction drawings and such installation shall prevent water from entering the pipeline.

9. The casing shall be checked for electrical shorts both prior to backfill and after cleanup of the area. Should the casing and carrier pipe be shorted (electrically connected), such conditions shall be corrected. Casing installation shall not be considered completed until all electrical shorts are eliminated.

10. The carrier pipe shall be supported by bags of earth or other suitable means where it exits from the casing on both ends and for a sufficient distance to prevent the carrier pipe from deflecting and breaking the casing seal.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Highway and Road Crossings**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

11. In all work performed on highway rights-of-way, traffic control devices shall be installed and maintained as required for the protection of the traveling public in accordance with all existing state and local requirements.

12. The Contractor will repair damaged road, street, and sidewalk surfaces where damage was necessary for construction. All paved, graveled, or otherwise improved surfaces shall be replaced to conform to adjacent undisturbed areas to equal to or better condition. Gravel, dirt, or oil-surfaced roads shall be repaired and replaced to original condition.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Foreign Pipeline and Utility Crossings**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. Contractor shall locate, stake, and flag all foreign pipeline and utility crossings. Utmost caution shall be observed in approaching and crossing foreign pipelines and utilities. Any conditions imposed by the operators of the foreign pipeline shall be complied with. Contractor shall be responsible and bear the cost of any damage to foreign pipelines.

2. The existence and location of other utilities shown on drawings are NOT guaranteed. City of Lewisport assumes no responsibility for the complete accuracy of such indicated locations. It shall be the duty of the Contractor to investigate and verify in the field the existence and location of other utilities and to make minor relocations of the facilities being installed, without extra cost when considered necessary and upon approval of City of Lewisport.

3. Contractor shall notify the appropriate operating representative of the foreign pipelines and utilities to be crossed, preferably two working days before any trenching is begun on the right-of-way of the foreign pipeline.

4. Contractor may be required by some foreign pipeline or utility operators to hand trench across their entire right-of-way.

5. Bond wires shall be attached to foreign pipelines per standard drawing to the satisfaction of both the foreign pipeline owner and City of Lewisport.

	ENGINEERING STANDARDS			
Category: ENG	**Subject: Painting Above Ground Piping & Equipment**	**PROJ-5429**	**Date: 05.21.12**	**REV: 3**

1. All piping, valves, and unpainted equipment shall be abrasive blasted in accordance with SSPC-SP6 (commercial blast) and primed with a two-part epoxy primer to a minimum dry film thickness of 3.0 mils. The topcoat will be two-part epoxy paint. Finished coat including primer, middle coat, and topcoat shall be a minimum 8.0 mils thickness. City of Lewisport will supply topcoat color specifications.

2. Certain items shall not be painted and shall be masked or removed to protect them during abrasive blasting and painting. Items to be protected during blasting and not painted include: instruments and gauges; glass, stainless steel and brass items; galvanized items, name plates, components which have been finish painted by the component manufacturer; or delicate items which may be damaged by abrasive blasting.

3. Contractor shall submit manufacturer's technical literature for the proposed coating materials for approval by City of Lewisport prior to any painting.

Kentucky Transportation Cabinet

Highway District 2 (1)

And

_____(2), Construction

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

Groundwater protection plan

For Highway Construction Activities

For

Reconstruction of WB US 60 Between MP 7.7 and 9.1

Project: PCN ## -

KyTC BMP Plan for Project PCN ## - ####

Project information

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

1. Owner – Kentucky Transportation Cabinet, District 2

2. Resident Engineer: Kevin Collignon(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) : US 60

6. Latitude/Longitude (project mid-point) dd/mm/ss, dd/mm/ss:

   Lat: 37/54/50, Long: 86/47/06

7. County (project mid-point): Hancock

8. Project start date (date work will begin): (2)

9. Projected completion date: (2)

KyTC BMP Plan for Project PCN ## - ####

A. Site description:

1. Nature of Construction Activity (from letting project description): **Reconstruction of WB US 60 between MP 7.7 and 9.1** (1)

2. Order of major soil disturbing activities (2) and (3)

3. Projected volume of material to be moved : 23991 C. Y.(1)

4. Estimate of total project area (acres) : 24 acres(1)

5. Estimate of area to be disturbed (acres) : 15.8 acres(1)

6. 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. Craig Wyatt, Hopkinsville Construction Office

7. Data describing existing soil condition: See Geotech report if available(1) & (2)

8. Data describing existing discharge water quality (if any): N/A (1) & (2)

9. Receiving water name: Lead Creek (1)

10. TMDLs and Pollutants of Concern in Receiving Waters: N/A(1 DEA)

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. <u>All DDA’s will have adequate BMP’s in place before being disturbed.</u>

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 : Seeding and Protection, Erosion Control Blanket, Grassed Waterways (1)

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 job
- 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 required (1)

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. (1)

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.)

KyTC BMP Plan for Project PCN ## -

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 Engineer signature

Signed _____title_____, _____
Typed or printed name[2] signature

(3) Signed _____title_____, _____
Typed or printed 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, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) 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, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Project Control Number (PCN) and KPDES number when one has been issued.

Sub-Contractor Certification

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

Subcontractor

Name:
Address:
Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed _____title_____, _____
Typed or printed name[1] signature

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, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Project Control Number (PCN) and KPDES number when one has been issued.

SPECIAL NOTE

KPDES Stormwater Permit
eNOI Process

Hancock County
Item No. 2-125.00

Effective August 1, 2009, the Kentucky Division of Water implemented a new process for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10). Notices of Intent should be submitted electronically using their form (eNOI) which is located at the following link:
https://dep.gateway.ky.gov/eForms/default.aspx?FormID=7**.**

The eNOI for this project has been initiated by the District 2 KYTC Project Development Branch and can be retrieved for completion using the following transaction ID number:

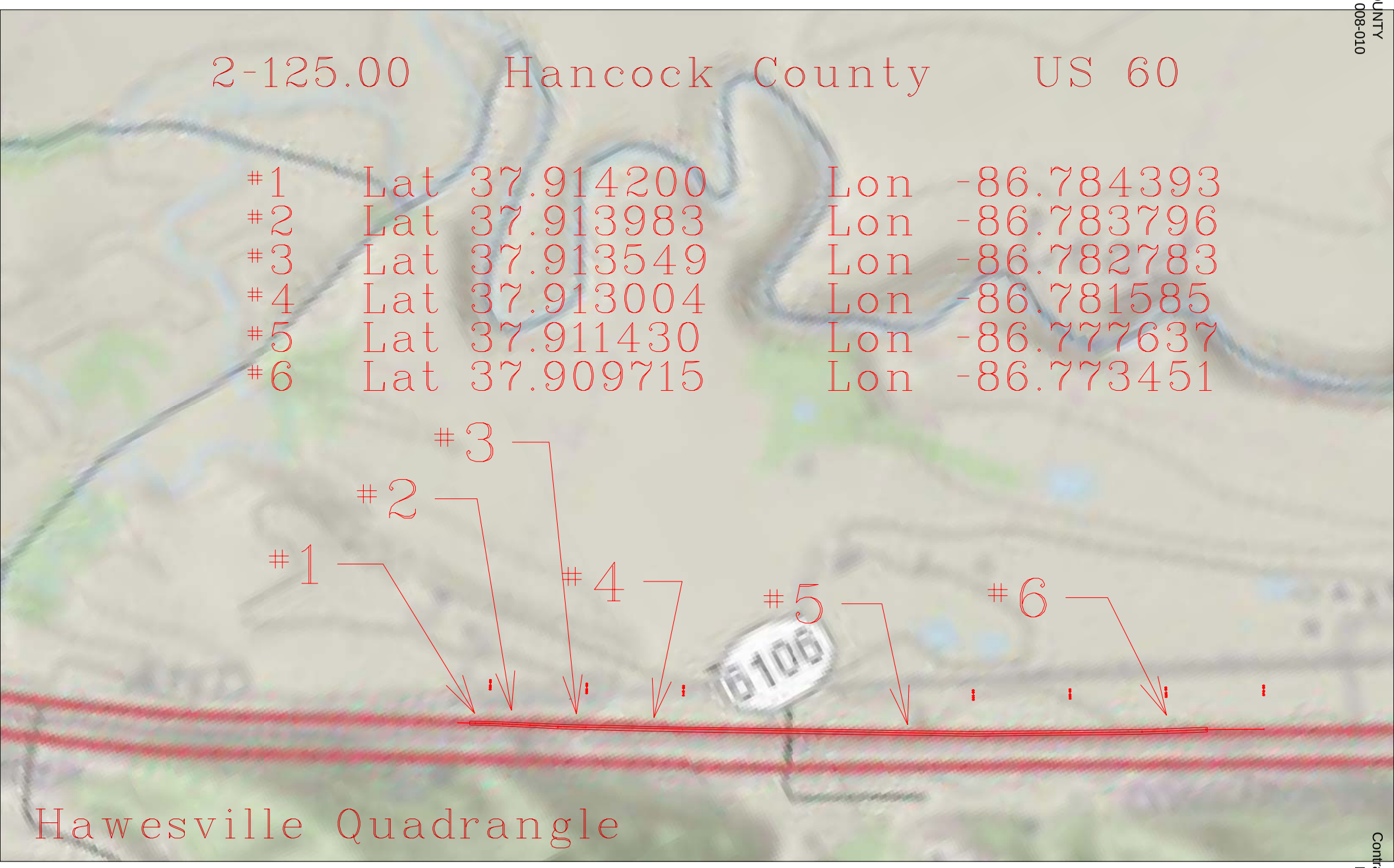
5bd52308-e2bd-4ce4-89f0-c5b295054cc0

Please be advised that the eNOI will be completed and submitted by District 2 personnel at some time after the project is let to construction and that no earth-disturbing activities can occur on the project until an official approval is obtained from the Kentucky Division of Water.

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.

2-125.00 Hancock County US 60

#1	Lat	37.914200	Lon	-86.784393
#2	Lat	37.913983	Lon	-86.783796
#3	Lat	37.913549	Lon	-86.782783
#4	Lat	37.913004	Lon	-86.781585
#5	Lat	37.911430	Lon	-86.777637
#6	Lat	37.909715	Lon	-86.773451



NOTICE

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS
KENTUCKY DIVISION OF WATER

NATIONWIDE PERMIT AUTHORIZATION
AND
GENERAL WATER QUALITY CERTIFICATION

PROJECT: Item No. 2-125.00
US 60 Widening
Hancock County, Kentucky

The Section 404 and 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 14 "Linear Transportation Projects" and by a Kentucky Division of Water "General Water Quality Certification". Specifically all stream impacts are below 300' and less than 0.10 acres, no channel relocations exceed 100', and no special aquatic sites will be impacted. Proposed impacts include:

> **Station 551+22:** Extend an existing 8' x 3' Reinforced Box Culvert measuring 27' long, by adding to the existing culvert on either side of the road. The additional length, including the new culvert and inlet and outlet channel work, measures 132 feet in total, impacting approximately 132 feet of **perennial** stream (UT to Lead Creek). The impacted area is **0.012** acres. The drainage area at the culvert pipe is **approximately 66 acres.** LOCATION: -86.777800 37.911121 Decimal Degrees

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval and Water Quality Certification in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, District Permit Coordinator, for office records and for informational purposes.

US Army Corps of Engineers.

Nationwide Permit
No. 14, Linear Transportation Projects

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.

a. 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.

b. 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.

c. 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.

d. 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).

Valid from March 19, 2012 through March 18, 2017

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States 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 United States. No claim shall be made against the United States 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 United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. 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.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, 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 pre-construction 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).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. 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 United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. 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, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. 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.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer 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, and shall not begin 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 endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been 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.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(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 U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States 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 U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service'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 U.S. Fish and Wildlife Service 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.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or 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 National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing 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 include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall 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 activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(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 such assistance despite 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 or 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 permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. 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 a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. 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 United States 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, 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. Mitigation. 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 United States 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.

(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 United States, 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 United States, 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.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal 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 or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or 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 appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based 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 may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(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 United States 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. Coastal Zone Management. 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 U.S. EPA 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 United States 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 United States 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."

_____
(Transferee)

_____
(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 permittee-responsible 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.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (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. The request must specify the information needed 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

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective 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 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(g)) 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 permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee'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;

(3) A description of 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 United States 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 other 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 United States. Furthermore, 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 Pre-Construction 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) Agency Coordination: (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.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction 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 (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects 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 pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(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.

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

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, 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. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant’s submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

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.

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

General Certification--Nationwide Permit # 14
Linear Transportation Projects

This General Certification is issued March 19, 2012, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.

2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.

3. The activity will impact less than 1/2 acre of wetland/marsh.

4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.

General Certification--Nationwide Permit # 14
Linear Transportation Projects
Page 2

5. For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.

6. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).

7. 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.

8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.

9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:

    - 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 (401 KAR 10:031 Section 2 and KRS 224.70-100).
    - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., 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, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
    - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
    - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
    - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

General Certification--Nationwide Permit # 14
Linear Transportation Projects
Page 2

- 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 in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional 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 KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

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.*

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

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

I. APPLICATION

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

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

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

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY
GENERAL ASSEMBLY TO PREVENT
DISCRIMINATION IN EMPLOYMENT
KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972

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

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (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 or 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.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.

2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.

2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.

3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.

9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

11. 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 laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such work-week unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. 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. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.

12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

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.

Kentucky Equal Employment Opportunity Act of 1978

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

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

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

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

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

General Decision Number: KY120127 05/25/2012 KY127

Superseded General Decision Number: KY20100214

State: Kentucky

Construction Type: Highway

Counties: Allen, Ballard, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Hancock, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren and Webster 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).

Modification Number	Publication Date
0	01/06/2012
1	01/13/2012
2	02/10/2012
3	05/18/2012
4	05/25/2012

BRIN0004-002 06/01/2011

BALLARD, BUTLER, CALDWELL, CARLISLE, CRITTENDEN, DAVIESS, EDMONSON, FULTON, GRAVES, HANCOCK, HENDERSON, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, MCLEAN, MUHLENBERG, OHIO, UNION, and WEBSTER COUNTIES

	Rates	Fringes
BRICKLAYER		
Ballard, Caldwell, Carlisle, Crittenden, Fulton, Graves, Hickman, Livingston, Lyon, Marshall, and McCracken Counties	$ 24.11	10.30
Butler, Edmonson, Hopkins, Muhlenberg, and Ohio Counties	$ 24.61	10.22
Daviess, Hancock, Henderson, McLean, Union, and Webster Counties	$ 28.47	12.78

BRTN0004-005 05/01/2009

ALLEN, CALLOWAY, CHRISTIAN, LOGAN, SIMPSON, TODD, TRIGG, and WARREN COUNTIES

	Rates	Fringes
BRICKLAYER	$ 24.52	1.83

CARP0357-002 07/01/2011

	Rates	Fringes
CARPENTER	$ 25.95	13.22
Diver	$ 39.30	13.22
PILEDRIVERMAN	$ 26.20	13.22

ELEC0369-006 06/01/2011

BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 29.27	13.33

ELEC0429-001 02/01/2010

ALLEN & SIMPSON COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 21.85	10.35

ELEC0816-002 06/01/2011

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON (Except a 5 mile radius of City Hall in Fulton), GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 29.47	25.5%+5.35

Cable spicers receive $.25 per hour additional.

ELEC1701-003 06/01/2011

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, UNION & WEBSTER COUNTIES:

	Rates	Fringes
ELECTRICIAN	$ 29.02	13.44

Cable spicers receive $.25 per hour additional.

ELEC1925-002 01/01/2012

FULTON COUNTY (Up to a 5 mile radius of City Hall in Fulton):

	Rates	Fringes
CABLE SPLICER	$ 25.00	10.27

ELECTRICIAN.....$ 25.00 10.43

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* ENGI0181-017 07/01/2011

	Rates	Fringes
Operating Engineer:		
GROUP 1	$ 26.50	13.00
GROUP 2	$ 24.08	13.00
GROUP 3	$ 24.46	13.00
GROUP 4	$ 23.82	13.00

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; 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 equals or exceeds 150 ft. - $1.00 above 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.

IRON0070-005 06/01/2011

BUTLER COUNTY (Eastern eighth, including the Townships of Decker, Lee & Tilford);
EDMONSON COUNTY (Northern three-fourths, including the Townships of Asphalt, Bee Spring, Brownsville, Grassland, Huff, Kyrock, Lindseyville, Mammoth Cave, Ollie, Prosperity, Rhoda, Sunfish & Sweden)

	Rates	Fringes
Ironworkers:		
Structural; Ornamental; Reinforcing; Precast Concrete Erectors	$ 25.77	18.28

IRON0103-004 04/01/2011

DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, OHIO, UNION & WEBSTER COUNTIES
BUTLER COUNTY (Townships of Aberdeen, Bancock, Casey, Dexterville, Dunbar, Elfie, Gilstrap, Huntsville, Logansport, Monford, Morgantown, Provo, Rochester, South Hill & Welchs Creek);
CALDWELL COUNTY (Northeastern third, including the Township of Creswell);
CHRISTIAN COUNTY (Northern third, including the Townships of Apex, Crofton, Kelly, Mannington & Wynns);
CRITTENDEN COUNTY (Northeastern half, including the Townships of Grove, Mattoon, Repton, Shady Grove & Tribune);
MUHLENBERG COUNTY (Townships of Bavier, Beech Creek Junction, Benton, Brennen, Browder, Central City, Cleaton, Depoy, Drakesboro, Eunis, Graham, Hillside, Luzerne, Lynn City, Martwick, McNary, Millport, Moorman, Nelson, Paradise, Powderly, South Carrollton, Tarina & Weir)

	Rates	Fringes
Ironworkers:	$ 28.25	14.475

IRON0492-003 05/01/2009

ALLEN, LOGAN, SIMPSON, TODD & WARREN COUNTIES
BUTLER COUNTY (Southern third, including the Townships of Boston, Berrys Lick, Dimple, Jetson, Quality, Sharer, Sugar Grove & Woodbury);

CHRISTIAN COUNTY (Eastern two-thirds, including the Townships of Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);
EDMONSON COUNTY (Southern fourth, including the Townships of Chalybeate & Rocky Hill);
MUHLENBERG COUNTY (Southern eighth, including the Townships of Dunnior, Penrod & Rosewood)

	Rates	Fringes
Ironworkers:	$ 22.50	9.60

IRON0782-006 05/01/2011

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES
CALDWELL COUNTY (Southwestern two-thirds, including the Townships of Cedar Bluff, Cider, Claxton, Cobb, Crowtown, Dulaney, Farmersville, Fredonia, McGowan, Otter Pond & Princeton);
CHRISTIAN COUNTY (Western third, Excluding the Townships of Apex, Crofton, Kelly, Mannington, Wynns, Bennettstown, Casky, Herndon, Hopkinsville, Howell, Masonville, Pembroke & Thompsonville);
CRITTENDEN COUNTY (Southwestern half, including the Townships of Crayne, Dycusburg, Frances, Marion, Mexico, Midway, Sheridan & Told)

	Rates	Fringes
Ironworkers:		
Projects with a total contract cost of $20,000,000.00 or above	$ 26.00	17.42
All Other Work	$ 24.66	16.29

LABO0189-005 07/01/2011

BALLARD, CALLOWAY, CARLISLE, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL & MCCRACKEN COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 20.38	11.28
GROUP 2	$ 20.63	11.28
GROUP 3	$ 20.68	11.28
GROUP 4	$ 21.28	11.28

LABORER 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; Blaster; 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

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LABO0189-006 07/01/2011

ALLEN, BUTLER, CALDWELL, CHRISTIAN, DAVIESS, EDMONSON, HANCOCK, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, SIMPSON, TODD, TRIGG & WARREN COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 21.51	10.15
GROUP 2	$ 21.76	10.15
GROUP 3	$ 21.81	10.15
GROUP 4	$ 22.41	10.15

LABORER 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; Blaster; 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

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LABO0561-001 07/01/2011

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1	$ 20.61	11.05
GROUP 2	$ 20.86	11.05
GROUP 3	$ 20.91	11.05
GROUP 4	$ 21.51	11.05

LABORER 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; Blaster; 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

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PAIN0032-002 05/01/2012

BALLARD COUNTY

	Rates	Fringes
Painters:		
Bridges	$ 30.56	14.20
All Other Work	$ 28.26	14.20

Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - $1.00 Premium

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PAIN0118-003 05/01/2010

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller	$ 18.50	10.30
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning	$ 19.50	10.30

PAIN0156-006 04/01/2010

DAVIESS, HANCOCK, HENDERSON, MCLEAN, OHIO, UNION & WEBSTER COUNTIES

	Rates	Fringes
Painters:		
BRIDGES		
GROUP 1	$ 25.60	10.05
GROUP 2	$ 25.85	10.05
GROUP 3	$ 26.60	10.05
GROUP 4	$ 27.60	10.05
ALL OTHER WORK:		
GROUP 1	$ 25.60	11.30

GROUP 2	$ 25.85	11.30
GROUP 3	$ 26.60	11.30
GROUP 4	$ 27.60	11.30

PAINTER CLASSIFICATIONS

GROUP 1 - Brush & Roller

GROUP 2 - Plasterers

GROUP 3 - Spray; Sandblast; Power Tools; Waterblast; Steamcleaning; Brush & Roller of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

GROUP 4 - Spray of Mastics, Creosotes, Kwinch Koate & Coal Tar Epoxy

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PAIN0456-003 07/01/2011

ALLEN, BUTLER, LOGAN, MUHLENBERG, SIMPSON, TODD & WARREN COUNTIES:

	Rates	Fringes
Painters:		
BRIDGES		
Brush & Roller	$ 22.55	9.65
Spray; Sandblast; Power Tools; Waterblast & Steam Cleaning	$ 23.55	9.65
ALL OTHER WORK		
Brush & Roller	$ 17.55	9.65
Spray; Sandblast; Power Tools; Waterblast & Steam Cleaning	$ 18.55	9.65

ALL OTHER WORK - HIGH TIME PAY
Over 35 feet (up to 100 feet) - $1.00 above base wage
100 feet and over - $2.00 above base wage

DURING SPRAY PAINTING AND SANDBLASTING OPERATIONS, POT TENDERS SHALL RECEIVE THE SAME WAGE RATES AS THE SPRAY PAINTER OR NOZZLE OPERATOR

PAIN0500-002 07/01/2011

CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, HOPKINS, LIVINGSTON, LYON, MARSHALL, MCCRACKEN & TRIGG COUNTIES:

	Rates	Fringes
Painters:		
Bridges	$ 25.25	11.55
All Other Work	$ 19.00	11.55

Waterblasting units with 3500 PSI and above - $.50 premium
Spraypainting and all abrasive blasting - $1.00 premium

Work 40 ft. and above ground level - $1.00 premium

PLUM0184-002 07/01/2011

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN and TRIGG COUNTIES

	Rates	Fringes
Plumber; Steamfitter	$ 31.45	13.99

PLUM0502-004 08/01/2011

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes
Plumber; Steamfitter	$ 31.00	16.13

PLUM0633-002 07/01/2011

DAVIESS, HANCOCK, HENDERSON, HOPKINS, LOGAN, MCLEAN, MUHLENBERG, OHIO, TODD, UNION & WEBSTER COUNTIES:

	Rates	Fringes
PLUMBER/PIPEFITTER	$ 29.22	12.65

TEAM0089-003 03/27/2011

Zone 1: ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON, & WARREN COUNTIES
Zone 2: BALLARD, CALLOWAY, CALDWELL, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCRACKEN, TODD, & TRIGG COUNTIES
Zone 3: DAVIESS, HANCOCK, HENDERSON, HOPKINS, MCLEAN, MUHLENBERG, OHIO, & WEBSTER COUNTIES

	Rates	Fringes
Truck drivers:		
ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES:		
Group 1	$ 19.04	12.02
Group 2	$ 19.37	12.02
Group 3	$ 19.44	12.02
Group 4	$ 19.45	12.02
Group 5	$ 19.50	12.02
Zone 1:		
Group 1	$ 19.38	7.30+A
Group 2	$ 19.56	7.30+A
Group 3	$ 19.64	7.30+A
Group 4	$ 19.66	7.30+A
Zone 2:		
Group 1	$ 26.09	A

Group 2	$ 27.32	A
Group 3	$ 26.89	A
Group 4	$ 27.40	A
Group 5	$ 27.39	A
Zone 3:		
Group 1	$ 20.93	7.30+A
Group 2	$ 21.16	7.30+A
Group 3	$ 21.23	7.30+A
Group 4	$ 21.24	7.30+A

A - $246.70 per week

TRUCK DRIVER CLASSIFICATIONS FOR ZONE 1:

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic; Single Axle Dump; Flat Bed; All Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 3 - Mixer All Types

GROUP 4 - Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker; Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle

TRUCK DRIVER CLASSIFICATIONS FOR ZONE 2:

GROUP 1 - Greaser; Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump; Flat Bed; all Terrain Vehicles when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors

GROUP 4 - Euclid and Other Heavy Earth Moving Equipment; Low Boy; Articulator Cat; Five Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier

GROUP 5 - Mixer All Types

TRUCK DRIVER CLASSIFICATIONS FOR ZONE 3:

GROUP 1 - Greaser, Tire Changer

GROUP 2 - Truck Mechanic

GROUP 3 - Single Axle Dump; Flat Bed; all Terrain Vehicle when used to haul materials; Semi Trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Driver of Distributors; Mixer All Types

GROUP 4 - Euclid and Other Heavy Earth moving Equipment;

Lowboy; Articulator Cat; 5 Axle Vehicle; Winch and A-Frame when used in transporting materials; Ross Carrier; Fork Lift when used to transport building materials; Driver on Pavement Breaker

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

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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 rate.

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 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.

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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-11-I-HWY dated August 04, 2011.

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.

Ryan Griffith, Director
Division of Construction Procurement
Frankfort, Kentucky 40622

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

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 121325 PAGE: 1
COUNTY: HANCOCK LETTING: 06/15/12
PROPOSAL: JL03 046 0060 008-010 CALL NO: 301

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
	SECTION 0001	PAVING			
0010	00003	CRUSHED STONE BASE	3,653.000 TON		
0020	00190	LEVELING & WEDGING PG64-22	1,390.000 TON		
0030	00212	CL2 ASPH BASE 1.00D PG64-22	340.000 TON		
0040	00214	CL3 ASPH BASE 1.00D PG64-22	2,682.000 TON		
0050	00307	CL2 ASPH SURF 0.38B PG64-22	334.000 TON		
0060	00358	ASPHALT CURING SEAL	16.000 TON		
0070	00388	CL3 ASPH SURF 0.38B PG64-22	855.000 TON		
0080	02676	MOBILIZATION FOR MILL & TEXT	(1.00) LS		
0090	02677	ASPHALT PAVE MILLING & TEXTURING	45.000 TON		
0100	02702	SAND FOR BLOTTER	39.000 TON		
	SECTION 0002	ROADWAY			
0110	00078	CRUSHED AGGREGATE SIZE NO 2	1,865.000 TON		
0120	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM	(1.00) LS		
0130	02159	TEMP DITCH	1,904.000 LF		
0140	02160	CLEAN TEMP DITCH	1,904.000 LF		
0150	02200	ROADWAY EXCAVATION	19,821.000 CUYD		
0160	02242	WATER	720.000 MGAL		
0170	02483	CHANNEL LINING CLASS II	163.000 TON		
0180	02545	CLEARING AND GRUBBING (15.8 ACRES)	(1.00) LS		
0190	02562	SIGNS	137.000 SQFT		

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 121325 PAGE: 2
COUNTY: HANCOCK LETTING: 06/15/12
PROPOSAL: JL03 046 0060 008-010 CALL NO: 301

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0200	02596	FABRIC-GEOTEXTILE TYPE I	4,656.000 SQYD		
0210	02599	FABRIC-GEOTEXTILE TYPE IV	4,900.000 SQYD		
0220	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	1,959.000 SQYD	2.00	3,918.00
0230	02650	MAINTAIN & CONTROL TRAFFIC	(1.00) LS		
0240	02671	PORTABLE CHANGEABLE MESSAGE SIGN	1.000 EACH		
0250	02690	SAFELOADING	3.000 CUYD		
0260	02701	TEMP SILT FENCE	1,904.000 LF		
0270	02703	SILT TRAP TYPE A	1.000 EACH		
0280	02704	SILT TRAP TYPE B	16.000 EACH		
0290	02705	SILT TRAP TYPE C	8.000 EACH		
0300	02706	CLEAN SILT TRAP TYPE A	1.000 EACH		
0310	02707	CLEAN SILT TRAP TYPE B	32.000 EACH		
0320	02708	CLEAN SILT TRAP TYPE C	16.000 EACH		
0330	02709	CLEAN TEMP SILT FENCE	1,904.000 LF		
0340	02726	STAKING	(1.00) LS		
0350	02775	ARROW PANEL	1.000 EACH		
0360	05950	EROSION CONTROL BLANKET	7,462.000 SQYD		
0370	05952	TEMP MULCH	60,772.000 SQYD		
0380	05953	TEMP SEEDING AND PROTECTION	6,077.000 SQYD		
0390	05966	TOPDRESSING FERTILIZER	4.000 TON		
0400	05985	SEEDING AND PROTECTION	60,772.000 SQYD		

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 121325 PAGE: 3
COUNTY: HANCOCK LETTING: 06/15/12
PROPOSAL: JL03 046 0060 008-010 CALL NO: 301

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0410	06510	PAVE STRIPING-TEMP PAINT-4 IN (WHITE)	10,848.000 LF		
0420	06510	PAVE STRIPING-TEMP PAINT-4 IN (YELLOW)	8,014.000 LF		
0430	06514	PAVE STRIPING-PERM PAINT-4 IN (WHITE)	4,530.000 LF		
0440	06514	PAVE STRIPING-PERM PAINT-4 IN (YELLOW)	3,692.000 LF		
0450	06592	PAVEMENT MARKER TYPE V-B W/R	48.000 EACH		
0460	10020NS	FUEL ADJUSTMENT	10,347.000 DOLL	1.00	10,347.00
0470	10030NS	ASPHALT ADJUSTMENT	13,494.000 DOLL	1.00	13,494.00
0480	21289ED	LONGITUDINAL EDGE KEY	3,807.000 LF		
0490	23131ER701	PIPELINE VIDEO INSPECTION	581.000 LF		
	SECTION 0003	DRAINAGE			
0500	00078	CRUSHED AGGREGATE SIZE NO 2	12.000 TON		
0510	00462	CULVERT PIPE-18 IN	216.000 LF		
0520	00464	CULVERT PIPE-24 IN	76.000 LF		
0530	00466	CULVERT PIPE-30 IN	66.000 LF		
0540	00491	CULVERT PIPE-18 IN EQUIV	144.000 LF		
0550	00492	CULVERT PIPE-24 IN EQUIV	95.000 LF		
0560	01000	PERFORATED PIPE-4 IN	3,780.000 LF		
0570	01010	NON-PERFORATED PIPE-4 IN	143.000 LF		
0580	01032	PERF PIPE HEADWALL TY 4-4 IN	12.000 EACH		
0590	01310	REMOVE PIPE	100.000 LF		
0600	01450	S & F BOX INLET-OUTLET-18 IN	6.000 EACH		

KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS
FRANKFORT, KY 40622

CONTRACT ID: 121325 PAGE: 4
COUNTY: HANCOCK LETTING: 06/15/12
PROPOSAL: JL03 046 0060 008-010 CALL NO: 301

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0610	01451	S & F BOX INLET-OUTLET-24 IN	4.000 EACH		
0620	01452	S & F BOX INLET-OUTLET-30 IN	8.000 EACH		
0630	02625	REMOVE HEADWALL	4.000 EACH		
0640	08100	CONCRETE-CLASS A	5.650 CUYD		
	SECTION 0004	BRIDGE			
0650	02403	REMOVE CONCRETE MASONRY	16.000 CUYD		
0660	08003	FOUNDATION PREPARATION	(1.00) LS		
0670	08100	CONCRETE-CLASS A	65.800 CUYD		
0680	08150	STEEL REINFORCEMENT	6,870.000 LB		
	SECTION 0005	UTILITY			
0690	03404	GAS LINE-4 IN (STEEL)	3,761.000 LF		
0700	03464	TIE-IN 4 IN (EXISTING STEEL GAS LINE)	2.000 EACH		
0710	03494	VALVE-4 IN (STEEL GAS LINE)	1.000 EACH		
0720	22093NN	TIE IN TO GAS LINE (1 INCH)	2.000 EACH		
0730	24516EC	NON DESTRUCTIVE TESTING (GAS LINE)	(1.00) LS		
0740	24517EC	PRESSURE TEST GAS LINE (4 INCH STEEL)	1.000 EACH		
0750	24518EC	CAP AND ABANDON (4 INCH STEEL GAS LINE)	2.000 EACH		
	SECTION 0006	DEMOBILIZATION			
0760	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			