



CALL NO. 204

CONTRACT ID. 221337

GRAVES - HICKMAN - FULTON COUNTIES

FED/STATE PROJECT NUMBER NHPP 0011 (038)

DESCRIPTION JULLIAN CARROLL PURCHASE PARKWAY (PW 9003)

WORK TYPE GRADE, DRAIN & SURFACE WITH BRIDGE

PRIMARY COMPLETION DATE 11/1/2024

LETTING DATE: August 18,2022

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME August 18,2022. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 14.50%

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

TABLE OF CONTENTS

PART I	SCOPE OF WORK <ul style="list-style-type: none">• PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES• CONTRACT NOTES• FEDERAL CONTRACT NOTES• NATIONAL HIGHWAY• ASPHALT MIXTURE• DGA BASE• DGA BASE FOR SHOULDERS• INCIDENTAL SURFACING• FUEL AND ASPHALT PAY ADJUSTMENT• ASPHALT PAVEMENT RIDE QUALITY CAT A• COMPACTION OPTION A• MATERIAL TRANSFER VEHICLE (MTV)• SPECIAL NOTE(S) APPLICABLE TO PROJECT• TREE REMOVAL• PIPELINE INSPECTION• NON-TRACKING TACK COAT• EXPERIMENTAL KYCT AND HAMBURG TESTING• RIGHT OF WAY CERTIFICATION• UTILITY IMPACT & RAIL CERTIFICATION NOTES• WATER QUALITY CERTIFICATION• KPDES STORM WATER PERMIT, BMP AND ENOI• PERMIT(S)• MATERIAL SUMMARY
PART II	SPECIFICATIONS AND STANDARD DRAWINGS <ul style="list-style-type: none">• SPECIFICATIONS REFERENCE• SUPPLEMENTAL SPECIFICATION• [SN-11I] PORTABLE CHANGEABLE SIGNS• [SN-11F] TURF REINFORCEMENT MAT• [SN-11M] BARCODE LABEL ON PERMANENT SIGNS• [SN-11N] LONGITUDINAL PAVEMENT JOINT ADHESIVE
PART III	EMPLOYMENT, WAGE AND RECORD REQUIREMENTS <ul style="list-style-type: none">• FEDERAL-AID CONSTRUCTION CONTRACTS - FHWA 1273• NONDISCRIMINATION OF EMPLOYEES• EXECUTIVE BRANCH CODE OF ETHICS• PROJECT WAGE RATES LOCALITY 1 / FEDERAL• NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO FULTON• NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO GRAVES• NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EEO HICKMAN
PART IV	INSURANCE
PART V	BID ITEMS

PART I

SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 01

CONTRACT ID - 221337

NHPP 0011 (038)

COUNTY - FULTON, GRAVES, HICKMAN

PCN - DE12190032237

NHPP 0011 (038)

PURCHASE PARKWAY (PW 9003) RECONSTRUCT PARKWAY FROM SOUTH OF US51 INTERCHANGE TO
CARDINAL ROAD NEAR MAYFIELD, A DISTANCE OF 019.20 MILES.BRIDGE WITH GRADE & DRAIN SYP NO.
01-00026.00.

GEOGRAPHIC COORDINATES LATITUDE 36:37:16.00 LONGITUDE 88:46:45.00
ADT 10,600

COUNTY - GRAVES

PCN - DE04290032237

NHPP 0011 (038)

JULLIAN CARROLL PURCHASE PARKWAY (PW 9003) RECONSTRUCT THE WINGO (KY 339) INTERCHANGE, A
DISTANCE OF 0.99 MILES.ASPHALT PAVEMENT & ROADWAY REHAB SYP NO. 01-00026.01.

GEOGRAPHIC COORDINATES LATITUDE 36:38:45.00 LONGITUDE 88:45:12.00
ADT 10,600

COMPLETION DATE(S):

COMPLETED BY 11/01/2024 APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

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

BID SUBMITTAL

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

JOINT VENTURE BIDDING

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

UNDERGROUND FACILITY DAMAGE PROTECTION

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

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

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

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

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

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

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

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

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

HARDWOOD REMOVAL RESTRICTIONS

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

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

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

ACCESS TO RECORDS

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

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

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

April 30, 2018

FEDERAL CONTRACT NOTES

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

- | | |
|--------------------------------|--|
| 102.02 Current Rating | 102.08 Preparation and Delivery of Proposals |
| 102.13 Irregular Bid Proposals | 102.14 Disqualification of Bidders |
| 102.09 Proposal Guaranty | |

CIVIL RIGHTS ACT OF 1964

The Kentucky Transportation Cabinet, Department of Highways, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, disability, income- level, or Limited English Proficiency (LEP) in consideration for an award.

NOTICE TO ALL BIDDERS

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

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

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

SECOND TIER SUBCONTRACTS

Second tier subcontracts are acceptable per Section 108.01 of the Standard Specifications for Road and Bridge Construction. Sub-Contractors fulfilling a disadvantaged business enterprise goal on a project may enter into a 2nd tier subcontract with a Non-DBE Subcontractor. However, in this instance, none of the work subcontracted to the Non-DBE Contractor will count toward fulfilling the established Disadvantaged Goal for the project.

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

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

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

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

DBE GOAL

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

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

OBLIGATION OF CONTRACTORS

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

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

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

CERTIFICATION OF CONTRACT GOAL

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

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

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

DBE PARTICIPATION PLAN

Lowest responsive bidders must submit the *DBE Plan/ Subcontractor Request*, form TC 14-35 DBE, within **5** days of the letting. This is necessary before the Awards Committee will review and make a recommendation. **The project will not be considered for award prior to submission and approval of the apparent low bidder’s DBE Plan/Subcontractor Request.**

The DBE Participation Plan shall include the following:

1. Name and address of DBE Subcontractor(s) and/or supplier(s) intended to be used in the proposed project;
2. Description of the work each is to perform including the work item, unit, quantity, unit price and total amount of the work to be performed by the individual DBE. The Proposal Line Number, Category Number, and the Project Line Number can be found in the “material listing” on the Construction Procurement website under the specific letting;
3. The dollar value of each proposed DBE subcontract and the percentage of total project contract value this represents. DBE participation may be counted as follows;
 - a. If DBE suppliers and manufactures assume actual and contractual responsibility, the dollar value of materials to be furnished will be counted toward the goal as follows:
 - The entire expenditure paid to a DBE manufacturer;
 - 60 percent of expenditures to DBE suppliers that are not manufacturers provided the supplier is a regular dealer in the product involved. A regular dealer must be engaged in, as its principal business and in its own name, the sale of products to the public, maintain an inventory and own and operate distribution equipment; and
 - The amount of fees or commissions charged by the DBE firms for a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, supplies, delivery of materials and supplies or for furnishing bonds, or insurance, providing such fees or commissions are determined to be reasonable and customary.

- b) The dollar value of services provided by DBEs such as quality control testing, equipment repair and maintenance, engineering, staking, etc.;
- c) The dollar value of joint ventures. DBE credit for joint ventures will be limited to the dollar amount of the work actually performed by the DBE in the joint venture;
- 4. Written and signed documentation of the bidder's commitment to use a DBE contractor whose participation is being utilized to meet the DBE goal; and
- 5. Written and signed confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment.

UPON AWARD AND BEFORE A WORK ORDER WILL BE ISSUED

Contractors must submit the signed subcontract between the contractor and the DBE contractor, along with the DBE's certificate of insurance. If the DBE is a supplier of materials for the project, a signed purchase order must be submitted to the Division of Construction Procurement.

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

CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set (hard copy along with an electronic copy) of this information must be received in the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

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

FAILURE TO MEET GOOD FAITH REQUIREMENT

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

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

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

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

SANCTIONS FOR FAILURE TO MEET DBE REQUIREMENTS OF THE PROJECT

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

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

PROMPT PAYMENT

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

CONTRACTOR REPORTING

All contractors must keep detailed records and provide reports to the Cabinet on their progress in meeting the DBE requirement on any highway contract. These records may include, but shall not be limited to payroll, lease agreements, cancelled payroll checks, executed subcontracting agreements, etc. Prime contractors will be required to complete and submit a **signed and notarized** Affidavit of Subcontractor Payment (TC 18-7) and copies of checks for any monies paid to each DBE subcontractor or supplier utilized to meet a DBE goal. These documents must be completed and signed within 7 days of being paid by the Cabinet.

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

***** IMPORTANT *****

Please mail the original, signed and completed TC (18-7) Affidavit of Subcontractor Payment form and all copies of checks for payments listed above to the following address:

Office for Civil Rights and Small Business Development
6th Floor West 200 Mero Street
Frankfort, KY 40622

The prime contractor should notify the KYTC Office for Civil Rights and Small Business Development seven (7) days prior to DBE contractors commencing work on the project. The contact in this office is Mr. Melvin Byne. Mr. Byne's current contact information is email address – melvin.bynes2@ky.gov and the telephone number is (502) 564-3601.

DEFAULT OR DECERTIFICATION OF THE DBE

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

PROHIBITION ON TELECOMMUNICATIONS EQUIPMENT OR SERVICES

In accordance with the FY 2019 National Defense Authorization Act (NDAA), 2 CFR 200.216, and 2 CFR 200.471, Federal agencies are prohibited, after August 13, 2020, from obligating or expending financial assistance to obtain certain telecommunications and video surveillance services and equipment from specific producers. As a result of these regulations, contractors and subcontractors are prohibited, on projects with federal funding participation, from providing telecommunication or video surveillance equipment, services, or systems produced by:

- Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities)
- Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities)

Revised: 5/3/2022

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC – CARGO
PREFERENCE ACT (CPA).**

(REV 12-17-15) (1-16)

SECTION 7 is expanded by the following new Article:

102.10 Cargo Preference Act – Use of United States-flag vessels.

Pursuant to Title 46CFR Part 381, the Contractor agrees

- To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

NATIONAL HIGHWAY

Be advised this project is on the NATIONAL HIGHWAY SYSTEM.

ASPHALT MIXTURE

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

DGA BASE

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

DGA BASE FOR SHOULDERS

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

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

INCIDENTAL SURFACING

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

FUEL AND ASPHALT PAY ADJUSTMENT

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

ASPHALT PAVEMENT RIDE QUALITY CATEGORY A

The Department will apply Pavement Rideability Requirements on this project in accordance with Section 410, Category A.

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.

MATERIAL TRANSFER VEHICLE (MTV)

Provide and use a MTV in accordance with Sections 403.02.10 and 403.03.05.

SPECIAL NOTE

For Establishing Pollinator Plots

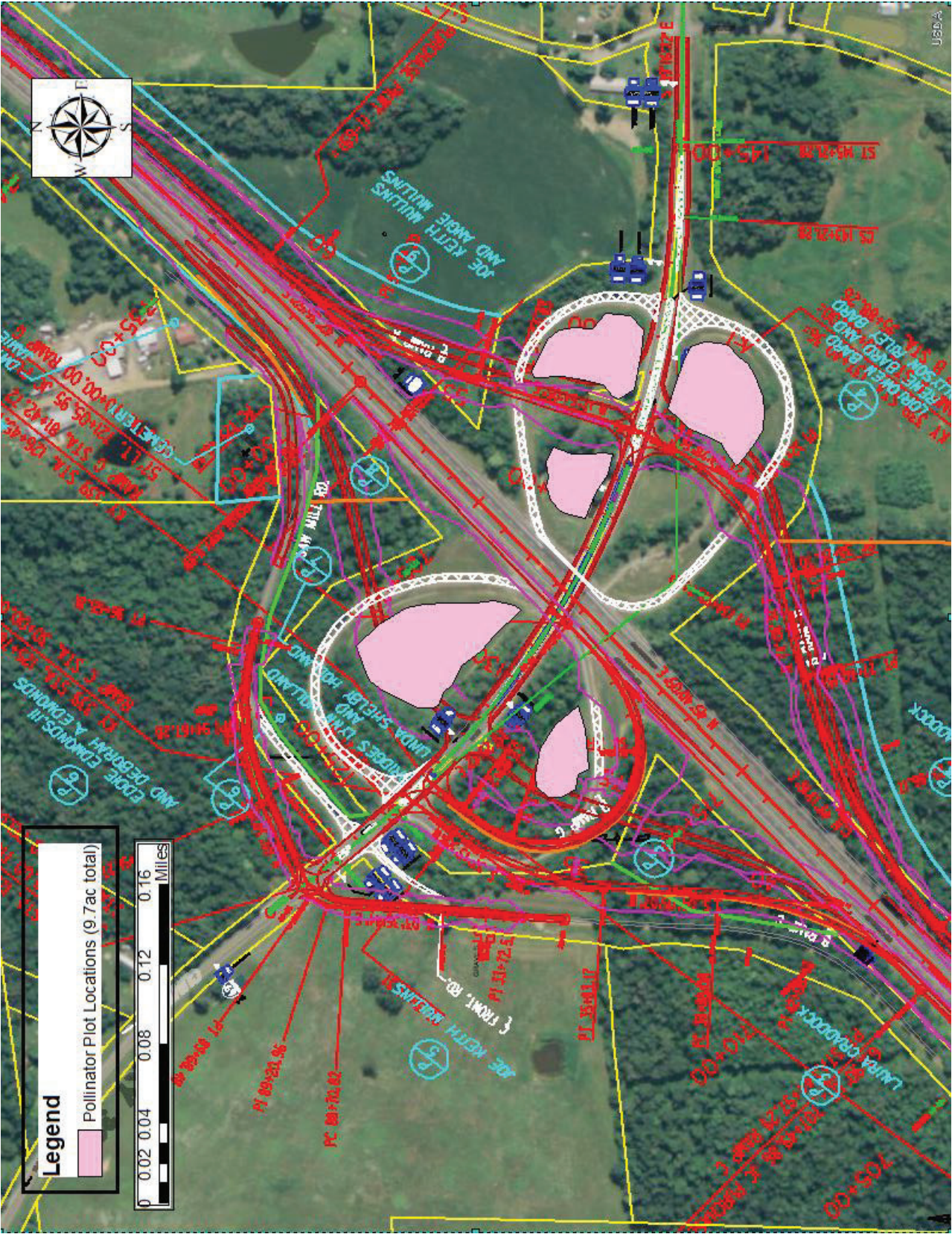
Fulton/Graves/Hickman County

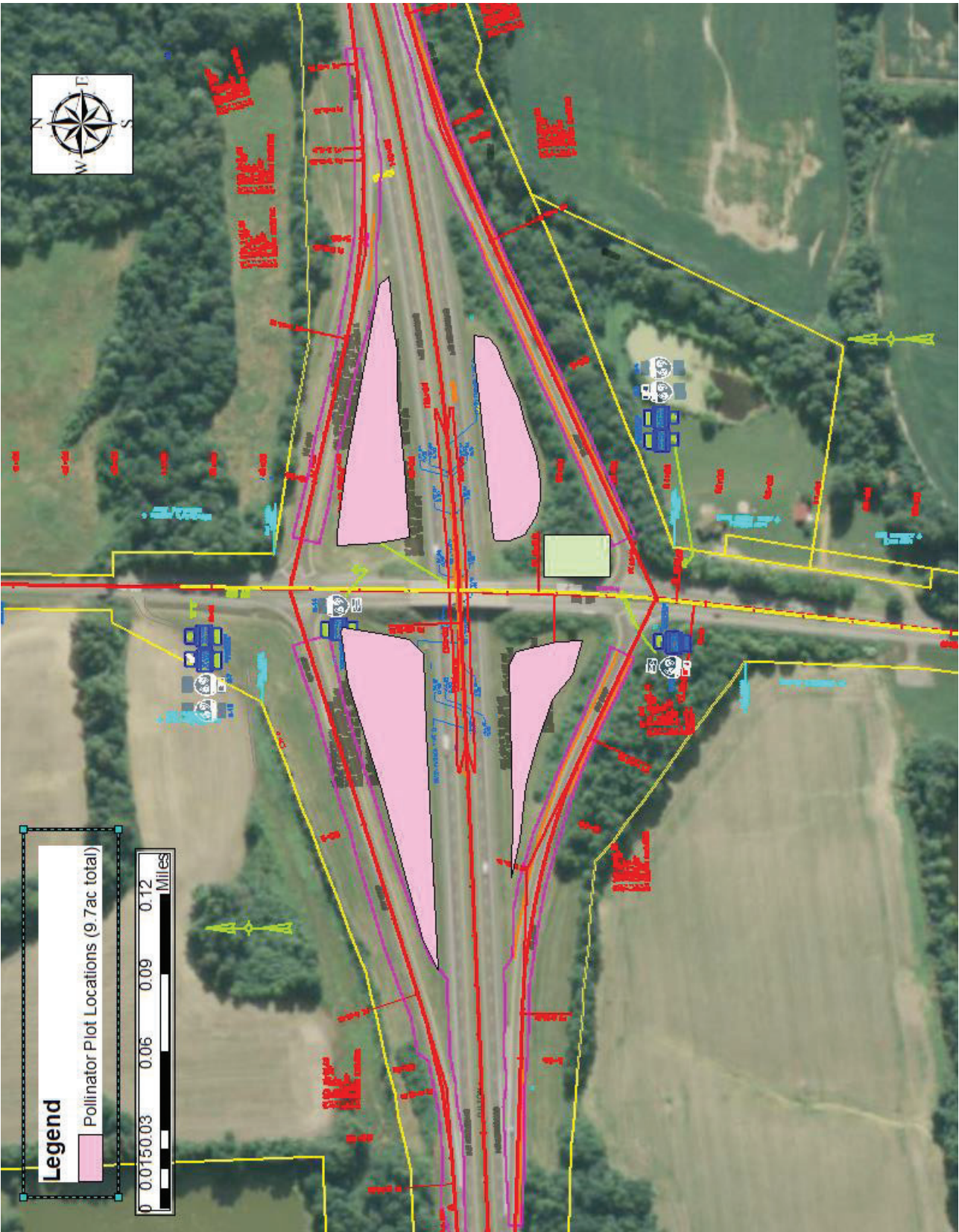
**IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51
INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD INCLUDING THE KY-339
INTERCHANGE IN WINGO, KY.**

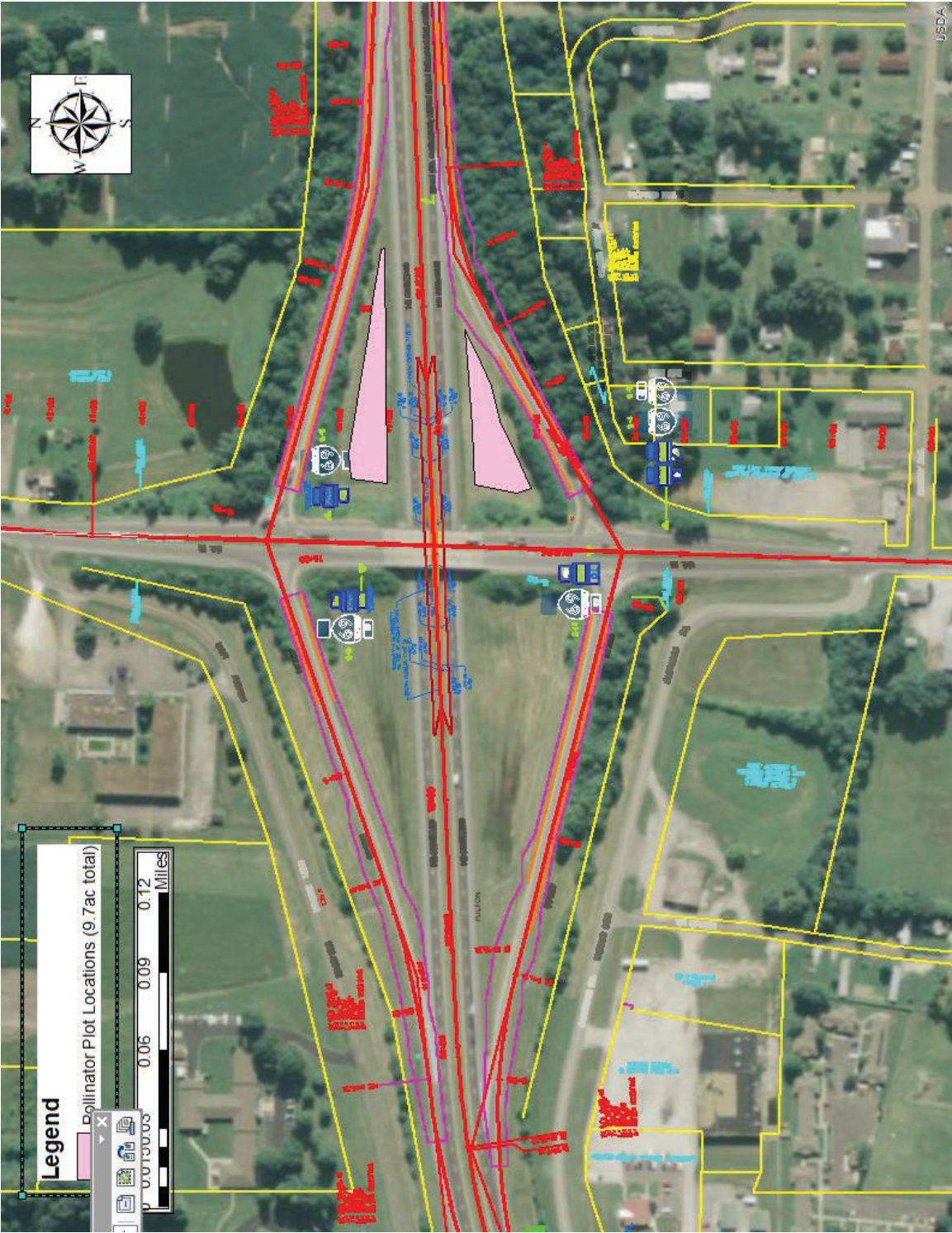
Item No. 01-26

Ground disturbance within areas designated for future pollinator plot development (see attached images) will be limited to tree removal, ground preparation, and temporary seeding with annual seed species as required. Soil compaction shall be minimized to the maximum extent practicable. The future pollinator plot areas are designated within project plans. Staging of equipment is also prohibited in areas designated for pollinator plots. No tree or vegetation removal shall take place on the southeast quadrant of the KY307/I69 interchange.

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







SPECIAL NOTE

**For Construction Activities for the
Protection of Federally Endangered Relic Darter**

**Fulton, Hickman, Graves Counties
IMPROVE THE PURCHASE PARKWAY FROM
SOUTHWEST OF THE US-51 INTERCHANGE TO
CARDINAL ROAD NEAR MAYFIELD INCLUDING THE
KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR
IMPROVEMENT)
Item No. 01-26**

ALL WORK REQUIRED WITHIN STREAMBEDS WILL TAKE PLACE WHEN THE
STREAMBEDS ARE DRY. MOVING WATER OR STANDING POOLS WILL NOT
BE AFFECTED IN ANY STREAMBED. NO EFFECTS TO THE WATERS OF THE
BAYOU DE CHIEN.

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

SPECIAL NOTE

For Construction Activities for the Protection of Federally Endangered Relic Darter

Fulton, Hickman, Graves Counties IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51 INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD INCLUDING THE KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR IMPROVEMENT) Item No. 01-26

CONSTRUCTION OF A BRIDGE BARRIER RETROFIT, NEW GUARDRAIL AND CRASH CUSHION WILL BE CONSTRUCTION ON THE BRIDGE OVER THE BAYOU DE CHIEN. WORK OVER THE BAYOU DE CHIEN WILL BE LOCALIZED TO THE BRIDGE. BMPS WILL BE CONSTRUCTED WHERE NECESSARY TO PREVENT RUNOFF INTO THE RIVER. NO EFFECTS TO THE WATERS OF THE BAYOU DE CHIEN.

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

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

1-26.00

TABLE OF CONTENTS

TABLE OF CONTENTS 2

Section 1: PROJECT DESCRIPTION 2

Section 2: SITE PREPARATION 6

Section 3: ADVANCED GROUNDING SYSTEM 7

Section 4: POLE BASE 8

Section 5: POLE WITH LOWERING DEVICE 9

Section 6: WEB CAMERA ASSEMBLY (CCTV)17

Section 7: RACK MOUNT UPS.....18

Section 8: COMMUNICATIONS CABLE.....19

Section 9: CONDUIT..... 20

Section 10: ELECTRICAL SERVICE21

Section 11: MODEL 334 AND 336 ENCLOSURES21

Section 12: JUNCTION BOX..... 28

Section 13: SURGE DEVICES 29

Section 14: TRENCHING AND BACKFILLING 32

Section 15: Vented Rodent Barrier Detail..... 32

Section 16: GLOSSARY..... 33

Section 1: PROJECT DESCRIPTION

GENERAL

This project includes furnishing and installing Cameras along I-69 for comprehensive camera coverage in the project area to allow monitoring throughout the project area in addition to providing insight into traffic volumes at the interchanges with I-69. This equipment will expand the traffic monitoring and advisory capabilities of the District, KYTC TOC and TRIMARC.

This ITS Project complies with the requirements of 23 CFR 940. The ITS work to be performed is referenced in the current Kentucky 2009 Statewide ITS Architecture at Appendix C-4,5 and C-4 (Traffic Incident Management System ATMS08, and Traffic Information

Dissemination ATMS06), and in the Updated Section 5 and Appendix B of the 2009 Addendum to the Original Kentucky ITS Business Plan.

EQUIPMENT AND MATERIALS

All equipment and materials shall be new, free of defects and damage.

SPECIFICATIONS AND WORKMANSHIP

Unless otherwise specified, all work shall conform to the following:

- Kentucky Standard Specifications for Road and Bridge Construction, latest edition.
- FHWA, Manual on Uniform Traffic Control Devices, latest edition.
- National Electrical Code, latest edition.
- National Electric Safety Code, latest edition.
- KYTC Department of Highways Standard Drawings, current editions.
- KYTC Department of Highways Sepia Drawings, current editions.
- International Municipal Signal Association (IMSA) Specification No. 51-7, current edition.
- AASHTO, Roadside Design Guide, latest edition.
- AASHTO, Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, latest edition.

All work shall be performed in a neat and professional manner. The Contractor shall remove debris and trash from work areas during construction. The Contractor shall restore areas to original condition and clean up all debris after construction.

DAMAGE TO EXISTING FACILITIES

The Contractor shall be responsible for locating all underground utilities prior to excavation. The contractor shall repair damage caused to any public or private facilities at his expense. Utilities include but are not limited to telephone, power, water, gas, fiber optic cable, underground vaults, roadway lighting wiring, traffic signal wiring, and roadway drainage systems.

MATERIALS LIST

The contractor shall provide an equipment list in Microsoft Excel format to the Engineer containing the following information:

- Type of equipment
- Field location
- Make
- Model
- Serial number
- Date of purchase
- Manufacturer contact information

- Equipment vendor contact information (if different)
- Date of Installation
- Date warranty expires

This list shall be provided to the Division of Traffic Operations prior to burn-in testing.

WARRANTY

The Contractor shall provide a copy of all equipment warranty information to the Division of Traffic Operations. A warranty of 2 years from the date of official project completion and acceptance is required for all equipment with the extra stipulation that the warranty period for the DMS/VMS equipment be warranted for 5 years.

The Contractor shall provide documentation from the manufacturer that ownership of the warranty is transferred to the following:

Kentucky Transportation Cabinet
Division of Traffic Operations
200 Mero Street
Frankfort, KY 40622

TESTING

The Contractor shall demonstrate proper functioning of all devices at the field cabinets.

A 30-day equipment burn-in test will begin after each device is demonstrated to be operational at the field site and remote operation has been integrated and is fully operational. If a device fails during the 30 burn-in day test the Contractor shall repair or replace the device and demonstrate that the device is functioning at the field cabinet and a new 30-day burn-in test will begin for that device. Each device will be accepted after it has successfully completed its 30-day test. The 30-day burn-in test will be conducted by TOC personnel (in Frankfort and/or TRIMARC in Louisville) from the operations center and consist of operational control of PTZ and video of the remote camera location and DMS/VMS control to activate and deactivate messages.

SHOP DRAWINGS

All items that are used on this project shall have shop drawings sent to Engineer, who will contact Division of Traffic Operations for approval. All items shall be approved before purchase of said items.

AS-BUILT DRAWINGS

The Contractor, at the completion of the project, shall submit as-built drawings. As-built drawings shall be submitted in electronic format such as .pdf, .tiff, .dgn or other standard image format acceptable to the Engineer. As-built drawings may be scanned from marked up field plans or drawn in MicroStation. As-built drawings shall be scanned at a resolution that will allow them to be clearly legible on a computer display. As-built drawings shall include the exact location of all above ground equipment, underground conduit, wire, sensors and other equipment. Drawings shall indicate any changes to the design including changes to the numbers of conductors, wire gage, splices, additional conduit, etc. Conduit locations shall be drawn to scale or shall be dimensioned and referenced to permanent roadway features.

Turns in conduit shall be referenced so that the conduit paths may be derived from the as-built drawings. Existing underground utilities shall be indicated on the drawings. Two copies of the drawings shall be submitted. One copy of the drawings shall be submitted to the Engineer. One copy of the drawings shall be submitted to the KYTC Division of Traffic Operations Design Services Branch, Ted.Swansegar@ky.gov and one copy to Todd.Hood@peraton.com with one copy delivered to the local District Office Engineer in Charge of the Project. The Contractor shall correct any drawings that are deemed unacceptable to the Engineer. As-built drawings shall be delivered prior to burn-in testing.

COORDINATION

SYSTEM COMPATIBILITY

The Contractor is responsible for coordinating with KYTC/TRIMARC to insure equipment compatibility and to complete integration of equipment into the KYTC/TRIMARC project.

COMMUNICATIONS

Camera shall communicate with the control center over the new ethernet IP connection (coordinated with KYTC/TRIMARC). The Contractor shall be responsible for furnishing and installing all conduits, junction boxes and communication cables installed on Kentucky right-of-way as specified in the plans. The Contractor shall be responsible for the installation and correct operation of all communications systems located in the field cabinet to the field devices. Testing of the Contractor's work will be performed both locally at the cabinet and remotely at the TRIMARC Traffic Operations Center. TRIMARC personnel will assist with any troubleshooting necessary to resolve problems with the communication equipment.

EQUIPMENT LIST

The contractor shall provide an equipment list in Microsoft Excel format to the Engineer containing the following information:

- Type of equipment
- Field location
- Make
- Model
- Serial number
- Date of purchase
- Manufacturer contact information
- Equipment vendor contact information (if different)
- Date of Installation
- Date warranty expires

This list shall be provided to the KYTC Division of Traffic Operations and TRIMARC Systems Administrator prior to burn-in testing. See below for TRIMARC Info:

Mr. Todd Hood

TRIMARC Systems Administrator
901 W. Main St.
Louisville, KY 40202
Phone: 502-587-6624
Office: 502-290-7201
Email: Todd.Hood@peraton.com

Kentucky Transportation Cabinet
Division of Traffic Operations Attn: Ted Swansegar
200 Mero Street
Frankfort, KY 40622
Ted.Swansegar@ky.gov

TESTING

The contractor shall demonstrate proper functioning of all devices at the field communications demarcation point. After each device can be successfully operated at the field communications demarcation point the devices will be integrated into the TRIMARC Traffic Operations Center. A 30 day equipment burn-in test will begin after each device is integrated and can be remotely controlled from the operations centers. The Contractor is responsible for repairing or replacing defective equipment during the period between the field test and the start of the 30 day burn-in test.

The 30 day burn-in test will be conducted by TRIMARC from the operations center and consist of operational control of PTZ and video of the remote camera location.

If a device fails during the 30 burn-in day test, TRIMARC personnel will test the device at the field cabinet. If the device cannot be operated at the field cabinet the Contractor shall repair or replace the device and a new 30-day burn-in test will begin for that device.

The project will be accepted after all devices have completed their 30-day test successfully, acceptable as-built drawings and warranty information have been received.

Section 2: SITE PREPARATION

DESCRIPTION

Site Preparation shall be performed in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Site Preparation shall include all materials required to access and protect the work area.

INSTALLATION

The Contractor shall coordinate with the Engineer prior to performing any site preparation work. This item includes excavation, guardrail removal, guardrail replacement, temporary ditch crossings, temporary barriers and clearing of debris and foliage. Salvaged materials may be used at the discretion of the Engineer. Site preparation shall be one per VMS sign location and WEB/CCTV camera location. There shall not be site preparation for locations that have web cameras installed on existing signal poles and existing highmast.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Site Preparation will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 3: ADVANCED GROUNDING SYSTEM

DESCRIPTION

Furnish and install Advanced Grounding System in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Unless otherwise specified, the grounding system provided will be as shown in “Advanced Grounding System Details”. Minimum ground resistance reading needs to be 10 ohms or less as tested via the 3 point fall of potential test method.

If the installation of the advanced grounding system is not possible due to physical constraints of the location or other extenuating factors, the TRIMARC Systems Engineer or Traffic Engineer may allow for a standard ground installation. The standard installation would be with ground wiring consisting of solid bare copper #4 AWG and securely connected inside enclosures with #4 AWG copper clamp connectors. Nuts and washers securing the wire are not acceptable. All grounding shall meet the National Electric Code. Ground wires shall be exothermically welded to the ground rods. Ground rod clamps are not acceptable. The following devices shall be grounded to an array of two or three, 10’ X 1” copper coated steel ground rods:

- Model 334/336 Enclosures (two ground rods required)
- Camera Poles (three ground rods required)
- Side-mounted VMS(two ground rods required)
- Service Locations(two ground rods required)

All ground rods in arrays shall have a minimum of 6’ separation.

The resistance to ground shall be less than 10 Ohms as measured with an AEMC clamp on ground resistance meter or equivalent. The Contractor shall leave all exothermic welds

exposed for inspection by the TRIMARC Systems Engineer or Traffic Engineer before backfilling.

INSTALLATION

All grounding shall be according to standards shown on “Advanced Grounding System Details”. If contractor needs help with installation, they can contact Alltec Corporation for further assistance at 800-203-2658.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Advanced Grounding System will be measured for payment per each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 4: POLE BASE

DESCRIPTION

Furnish and install Pole Base in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Pole Base includes concrete, anchor bolts, reinforcing steel, and conduit within base. The Contractor shall submit to material testing at the discretion of the Engineer.

INSTALLATION

The Contractor shall stake all proposed pole base locations and obtain approval before excavation. The Traffic Engineer (District 1) will approve locations for pole bases in their districts. Any poles bases in Bullitt shall be approved by the TRIMARC representative. The Contractor shall have utilities marked in the field prior to requesting approval. The Contractor shall allow two weeks to schedule the location approval. KYTC/TRIMARC approval of field device location does not relieve the contractor from his responsibility to avoid utilities and repair any damage to buried infrastructure. The Contractor shall grade and re-seed all disturbed areas and restore the area to the satisfaction of the Engineer. Poles located behind guardrail shall have a minimum 5’ spacing from edge of pole to face of guardrail. Otherwise, poles shall be located as according to the plans sheets or a minimum of 30’ from all driving lanes. This item includes all excavation including any special equipment required to install the base in rock. This item shall include a vented rodent barrier furnished and installed by the contractor. See Vented rodent barrier detail.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Pole Base/Pole Base-High Mast will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted

quantities. The Department will consider payment as full compensation for all work required under this section.

Section 5: POLE WITH LOWERING DEVICE

General Description

The camera lowering system shall be designed to support, lower and raise an Ethernet fed IP CCTV Camera, housing, and PTZ mechanism without damage or causing degradation of camera operations. The camera lowering system and the pole are interdependent; and thus, must be considered a single unit or system. The lowering system shall consist of a pole, adjustable plate mounted pole top tenon, tenon adapter for lowering device attachment to the pole top tenon, suspension contact unit, divided support arm, pole top junction box, conduit mount adapter, camera junction box, external mounted stabilization weights, and a permanently mounted winch on the interior of the pole. The divided support arm and receiver brackets shall be designed to self-align the contact unit with the pole center line during installation and ensure the contact unit cannot twist under high wind conditions. For maximum arm strength, round support arms are not acceptable. The camera-lowering device shall withstand wind forces of 100mph with a 30 percent gust factor using a 1.65 safety factor. The lowering device manufacturer, upon request, shall furnish independent laboratory testing documents certifying the device's adherence to the stated wind force criteria utilizing, as a minimum effective projected area, the actual EPA or an EPA greater than that of the camera system to be attached. The camera lowering system to be furnished shall be the product of manufacturers with a minimum of 5 years of experience in the successful manufacturing of camera lowering systems. The camera lowering device shall be the [MG]² Model CLDMG2-HYPIP6(2)-XXX(ST)-PERM or pre-bid approved equal. (The requirements for submitting alternative devices for approval prior to the bid opening date are found in the project documents.)

The lowering device manufacturer shall furnish an authorized factory representative to oversee the installation contractor's assembly and testing of the first lowering system onto the pole assembly for each project. The manufacturer shall furnish the applicable DOT engineer documentation certifying that the installation contractor has been instructed on the installation, operation, maintenance and safety features of the lowering device for the particular project. Thereafter, the contractor shall be responsible for providing applicable maintenance personnel "on site" operational instructions.

Suspension Contact Unit and Contact Block

The suspension contact unit shall have a minimum load capacity of 600 lbs. with a 4 to 1 safety factor. There shall be a locking mechanism between the fixed and moveable components of the lowering device. The movable assembly shall have a minimum of 2 latches. This latching mechanism shall securely hold the device and its mounted equipment. The latching mechanism shall operate by alternately raising and lowering the assembly using the winch and lowering cable. When latched, all weight shall be removed from the lowering

cable. The fixed unit shall have a heavy duty cast tracking guide and means to allow latching in the same position each time. The contact unit housing shall be weatherproof with a gasket provided to seal the interior from dust and moisture. The entire unit shall have a minimum temperature rating of -40 degrees F to +190 degrees F (-40C to 90C).

The prefabricated components of the lift unit support system shall be designed to preclude the lifting cable from contacting the network and/or power cabling of the CCTV or any other device mounted upon the pole. The lowering device manufacturer shall provide a conduit mount adapter for housing the stainless steel lowering cable. This adapter shall have an interface to allow the connection of a contractor provided 1.25 inch PVC conduit and be located just below the cable stop block at the back of the lowering device. The Contractor shall supply internal conduit in the pole as directed by the Camera Lowering Device (CLD) provider. The only cable permitted to move within the pole or lowering device during lowering or raising operations shall be the stainless steel lowering cable. All other cables must remain stable and secure during lowering and raising operations.

ETHERNET CONTACT BLOCK

The CLD must be properly equipped with a multiple contact connector designed and tested specifically for Ethernet devices or equipment utilizing Gigabit communications with or without POE. The Contact Connectors shall be designed for extreme environmental outdoor use per the technical requirements in the specifications and plans. Each Lowering Device shall be equipped with TWO distinct Shielded Ethernet contact connector blocks providing TWO separate individual Ethernet feeds regardless of whether one or two Ethernet devices is mounted upon the CLD. In the instance where only one Ethernet device being mounted, a second completed installed and readied Ethernet feed shall remain available for future equipment or as a back-up to the initial Ethernet feed.

Each Ethernet contact block shall consist of a female and male half. For environmental durability, the female and male socket contact halves shall be made of an outdoor rated thermosetting synthetic rubber. The female barrel contacts and the male pin contacts shall be permanently and integrally encased in this rubber material to ensure optimum protection against moisture and the environment. For optimum weatherproofing, each male pin shall be self-wiping with a shoulder or "O" ring at the base of each male contact so that it will recess into the female block, thereby giving a rain-tight seal to each individual contact when mated. Further, the wire leads from both the male and female rubber contact blocks shall be permanently and integrally molded in the overall synthetic rubber contact block body.

For optimum electrical conductivity and durability, all signal carrying male pin and female socket/barrel contacts shall be copper alloy and Gold plated per ASTM B-488. To ensure pins are not easily bent, the Male contact sizing shall be a minimum of 0.09 inches O.D., while the female contacts shall be at least 0.09 inches I.D. at the contact area. All contacts shall be a minimum of 0.09 inches in diameter at the contact area. Each individual female barrel contact shall have a sleeve which prevents foreign particles from entering the contact area as well as preclude the possibility of the tines of the female contact from opening beyond allowable limits and ensure a snug fit around the respective male pins. The contact

block shall have a spring loaded design that provides constant pressure on the contact block enabling consistent electrical and data performance during moderate shaking conditions.

For proper and complete performance, each Ethernet/IP Male-Female connector shall be equipped with a total of (14) specifically designed contacts. Nine (9) of the (14) male contacts shall be silver soldered to Cat6a High Flex Shielded Industrial Ethernet Cable and end terminated with a RJ45 (shielded) male connector, and Five (5) of the (14) male contacts shall be silver soldered to (5) individual #18/1 UL lead wires – bare and numbered 1-5, which may be used for additional camera/equipment requirements including but not limited to power, alarms or grounds. Nine (9) of the (14) female contacts shall be silver soldered to Cat6a High Flex Shielded Industrial Ethernet Cable and end terminated with a 10Gbps rated M12 8-position, shielded connector which will interface and provide a minimum IP65 rated connection with the Ethernet cable fed from the pole (or ground mounted) equipment cabinet. Five (5) of the (14) female contacts shall be silver soldered to (5) individual #18/1 UL lead wires – bare and numbered 1-5, which may be used for additional camera/equipment requirements including but not limited to power, alarms or grounds. These leads shall be factory or field terminated with an applicable AMP type circular connector as an interface with the applicable wire leads on the cable fed from the pole (or ground mounted) equipment cabinet. The installation of the M12 and AMP connector shall either be done at the CLD factory or in the field by the installation contractor. All connections and terminations must have field verifiable continuity prior to each pole's erection. All cable jackets shall be outdoor rated. All silver soldering shall be per IPC J STD-001E. Each individual contact shall be rated for up to 600v and 7A but de-rated according to the wire used in the application.

Each Ethernet connector block must be tested & verified for Ethernet Data Transmission speeds of up to 1000Base-T (1 GigaBit per Second). If requested, a copy of the verified connector test report showing 1000Base-T compliance shall be provided.

CAMERA JUNCTION BOX

The camera junction box is essential for providing both a mounting location for the CCTV as well as an interface compartment for wire leads from the lowering device to the CCTV or applicable switches or surge suppression modules. The camera junction box shall be of two piece clamshell design with one removable hinge side and one latch side with single toggle bolt to facilitate easy access. The general shape of the box shall be cylindrical to minimize the effective projected area. The Camera Junction Box shall be cast aluminum with stabilizing weights on the outside of the box to increase room on the interior. The box shall be capable of having up to 40 pounds of stabilizing weights. The bottom of the Camera Junction Box shall be drilled and tapped with a 1-1/2" NPT/Female thread to accept industry standard dome housings and be able to be modified to accept a wide variety of other camera mountings. The junction box shall be gasketed to prevent water intrusion. The bottom of the box shall incorporate a screened and vented hole to allow airflow and reduce internal condensation.

LOWERING WINCH

The camera lowering device (CLD) shall be operated by use of a permanently mounted winch. This winch shall be securely bolted on the interior of the pole as designed and shown on the plans. The winch shall operate by use of an included manual hand crank. The winch shall have the ability to operate (raise and lower but not latch) electrically by use of additional equipment noted in the provisions. The winch shall be designed to spool the required amount of stainless steel lowering cable to lower and raise the CCTV camera and shall be accessed and operated through the handhole approximately 30-36 inches from ground level. This handhole shall be sized according to the requirements of the lowering device provider. The winch and stainless steel cable shall support the load during lowering/raising operations. The winch assembly shall include an integrated automatic braking system that prevents freewheeling when loaded and shall have a reduction gear to reduce the manual effort required to operate the lifting handle to raise and lower a capacity load. The lowering winch shall be made of durable and corrosion resistant materials or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment. The unit shall have a Thern model winch with a 2.85 to 1 gear ratio.

(e.1) Electrical Operation of the CLD Winch

If required, a quantity (as designated by the provisions and plans) of Electric Drill Assemblies & Custom Clutch Adapters can be provided to interface with the standard permanently mounted winch.

One complete set of Electric Drill Assembly & Custom Clutch Adapter is not required for EACH Pole, but rather a certain quantity shall be required per project and noted on the plans or otherwise herein. All Electrical Drill Assemblies shall be a CLD Manufacturer authorized LOW RPM, Variable Speed, Reversible, 1/2 inch chuck, Corded Electric Drill. Each Drill shall be provided with an attachable factory tensioned adjustable clutch adapter which will serve as the attachment mechanism of the drill to the winch. The clutch adapter will be factory tensioned to prohibit over-torquing of the winch during the electric operation. All Electric drill assemblies and clutch adapters shall be delivered to the applicable DOT engineer upon project completion.

MATERIALS

All pulleys for the camera lowering device shall have sealed, self-lubricated bearings, oil tight bronze bearings, or sintered- oil impregnated, bronze bushings. The lowering cable shall be a minimum 1/8-inch diameter stainless steel aircraft cable with a minimum breaking strength of 1740 pounds with (7) strands of 19 wire each.

The fixed and lowerable portion of the contact block and the individual contacts shall be protected from exposure to the weather by both a gasket on the bottom side of the bell housing enclosure as well as the "O" ring shoulders at the base of each male contact pin.

The interface and locking components shall be made of stainless steel and/or aluminum. All external components of the lowering device shall be made of corrosion resistant materials, powder coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment.

In the event the mounted camera is a non-dome or otherwise not centrally weight balanced and plumb, the Camera Manufacturer shall provide weights and /or counterweights and/or brackets as necessary to assure that the alignment of pins and connectors are plumb when tethered on the cable to allow the camera to be raised and locked into position without binding.

The Camera Manufacturer or integrator shall provide any alternate power/signal connectors and weatherproof interface couplers for attachment to the 1-5 bare leads and Ethernet cable in the pole top and/or camera junction boxes in a manner acceptable to the project engineer.

The Camera Manufacturer, camera supplier or integrator shall provide appropriate length (Per camera location) of outdoor rated Ethernet cable and any additional power/signal cables in one continuous run from the respective equipment cabinet to the pole top junction box of each lowering device pole.

The contractor shall demonstrate to the Engineer the proper and repeated operation of the lowering device. Proper camera operation and electrical connections shall be verified after each lowering/raising cycle.

CAMERA LOWERING SYSTEM POLE

DESIGN: Design shall be in accordance with the 2013 edition of AASHTO "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals including all addendums. Minimum Loading requirements shall be based on an isotach wind velocity for the area of installation according to the current AASHTO isotach wind chart. PE Stamped Calculations and detailed drawings for each height pole shall be submitted demonstrating compliance with the AASHTO specifications and any additional performance requirements herein.

Loading shall be based on:

- basic wind speed of 90 mph
- 30 percent gust factor / 1.65 safety factor
- design life/recurrence interval of 50 years
- fatigue category I.

- a total mounted weight of 130 LBS. and an Effective Projected Area (EPA) of 3.0ft² for the CLD & Camera

To avoid vortex shedding, the steel pole members shall have a taper of 0.14 in/ft. All structures shall be designed to natural wind gust conditions. The yearly mean wind speed for natural wind gusts will be assumed to be 11.2 per hour. Design for galloping and truck induced gust fatigue is not required for these structures.

Poles up to 50' in length shall be one-piece construction. Poles greater than 50' in length shall be of two-piece construction. Poles shall conform to ASTM A595, Grade A minimum yield strength of 55 ksi, or ASTM A572 minimum yield strength of 65 ksi. Pole, base plate, and all associated hardware shall be galvanized per ASTM A123 or A153. Poles greater than 50' in length shall be of multi-piece slip-fit construction. The shaft shall be round or 16 sided with a four inch corner radius and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Longitudinal seam welds within 6 inches of complete penetration pole to base plate welds shall be complete penetration welds. The shaft shall be hot dip galvanized per the requirements of the contract documents. The interior diameter of any top shaft at the point of Tenon attachment, regardless of pole height, shall be at least 5.5 inches to accommodate lowering device requirements. The interior diameter of the pole at the location of the permanent winch must be satisfactory to allow the installation, operation and maintenance of the winch. The winch shall be equipped with a winch mount plate or shelf for the permanent attachment of the winch mechanism.

The pole top deflection shall not exceed one inch in a 30-mph (non-gust) wind. The calculations shall include a pole, base plate, and anchor bolt analysis. The pole detail analysis shall be analyzed at the pole base, at 5-ft. pole intervals, and at each slip joint splice.

A detail analysis of the pole shall be submitted. The detailed analysis shall include, but not be limited to, the following calculations:

1. Provide Group I, II, III, IV load combinations as listed in Table 3-1 Group Load Combinations in AASTHO.
2. Provide dimensions and weights for all attachments. This includes areas used for wind, ice and fatigue loads, drag coefficients, projected areas, velocity pressures and wind force for each segment.
3. For Group Loads II, III, and IV, which have wind loads, provide calculations for each controlling "worst case" wind direction that controls any aspect of the design (anchor bolts, pole sizing, ect.)
4. Anchor Bolts shall be designed for the orientation that would provide the maximum stress on any individual bolt.
5. Provide all structural properties for poles, anchor bolts and base plates. This includes the poles diameter, thickness, section modulus, moment of inertia, and cross sectional area.

6. Calculations for each member shall include loads, section properties, member forces (axial, shear and bending), member deflections (angular and linear), member stresses (actual and allowable), and the combined stress ratio (CSR).
7. Fatigue calculations should be shown for all fatigue related connections. Provide the corresponding detail, stress category and example from Table 11-2 in AASHTO.
8. In fatigue calculations, the effective throat thickness of a complete joint penetration groove weld shall be the thickness of the thinner part joined per AISC J2.1a.

Each pole shall be equipped with a permanently affixed label/tag - 6 feet from the bottom of the base plate on the outside with the following information:

manufacturer

height

minimum stringing tension at yield

order number, and

maximum deflection rate.

ALL detailed calculations shall be stamped & certified by current licensed Professional Engineer.

FABRICATOR: The Fabricator shall be certified under Category I, "Conventional Steel Structures" as set forth by the American Institute of Steel Construction Quality Certification Program. Proof of this certification will be required prior to bid opening to ensure that the fabricator has the personnel, organization, experience, procedures, knowledge, equipment, capability and commitment to fabricate quality pole structures.

WELDING: All welding shall be in accordance with Sections 1 through 8 of the American Welding Society (AWS) D1.1 Structural Welding Code. Tackers and welders shall be qualified in accordance with the code. Tube longitudinal seam welds shall be free of cracks and excessive undercut, performed with automatic processes, and be visually inspected. Longitudinal welds suspected to contain defects shall be magnetic particle inspected. All circumferential butt-welded pole and arm splices shall be ultrasonically or radiographically inspected.

MATERIAL CERTIFICATIONS: All materials and products shall be manufactured in the United States of America, and comply with ASTM or AASHTO specifications. Mill certifications shall be supplied as proof of compliance with specifications.

HAND HOLE for PERMANENT WINCH: The hand hole opening shall be reinforced with a minimum 2-inch wide hot rolled steel rim and be of a size that allows proper and safe installation, operation and maintenance of the permanent winch. Unless otherwise noted on

the plans, the bottom lip of the handhole shall be located on the shaft between 30"-36" from the baseplate. The handhole shall have a HINGED and Gasketed cover plate. The hinge shall provide adjustability to insure a weather-tight fit for the cover. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection.

POLE TOP TENON: The pole shall have a custom plate mounted adjustable tenon that allows the field modification of the arm/camera orientation up to 360 degrees. With this design, the DOT engineer can make slight orientation modifications to the camera mount to allow optimum viewing in case of future road development, change in terrain or a change in the viewing needs priority. The tenon shall have mounting holes and slot as required by the CLD manufacturer for the mounting of the camera-lowering system. The tenon shall be of dimensions necessary to facilitate camera lowering device component installation. The CLD mounting slot shall be parallel to the pole centerline for mounting the lowering device. There shall be a mounting slot for each required camera lowering device. Unless otherwise noted, when DUAL mount lowering devices, the mounting slots shall be 180 degrees apart.

CABLE SUPPORTS / Electrical Cable Guides and Parking Stand (Eyebolts): Top and bottom electrical cable guides shall be located within the pole aligned with each other as referenced in the drawings. One cable guide-strain relief ring shall be positioned 2 inches below the winch operation handhole and the other shall be positioned 1 inch directly below the top of tenon. A parking stand ring shall be welded directly to the center and inner portion of the upper handhole frame. Note drawings for applicable details.

BASE PLATE: Provide base plates that conform to ASTM A36 for grade 36 or ASTM 572 for grade 50.

Ensure transverse plates have a thickness ≥ 2 inches. Provide a base plate for the vertical pole that fits inside a 48 in diameter concrete base. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration butt weld with backup bar. Plates shall be hot dip galvanized per the requirements of the contract documents.

ANCHOR BOLTS: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications. Use anchor bolts that conform to the requirement of ASTM F 1554 grade 55 for hooked smooth bars or grade 105 for headed. Anchor bolts shall conform to AASHTO M 314 grade 55. Anchor bolts and all associated hardware shall be fully galvanized per ASTM A 153. . Each anchor bolt shall be supplied with two hex nuts and two flat washers. The strength of the nuts shall equal or exceed the proof load of the bolts. For anchor bolt design, pole forces shall be positioned in such a manner to maximize the force on any individual anchor bolt regardless of the actual anchor bolt orientation with the pole. There shall be two steel templates (one can be used for the headed part of the anchor bolt when designed in this manner) provided per pole. Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galvanized (ASTM A 153). Anchor bolt lengths should be based on NCHRP Report 494 Section

2.4.5.5 using #8 bars for the foundation reinforcing steel. The headed anchor bolt assembly shall be contained within 26.5 inch diameter. Minimum edge distance for bolt holes shall follow Table J3.4 of AISC Steel Construction Manual. NCHRP Report 494:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_494.pdf

NCHRP Report 469:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_469-a.pdf

INSTALLATION POLE

POLE

Pole shall be installed in the correct orientation and plumb. Pole shall be grounded in accordance with the plans and specifications. Damaged galvanizing shall be repaired with a paint approved by the Engineer. The pole shall have a 3' L x 3' W x 4" D concrete pad installed for each door. Concrete for the pad is incidental to the cabinets. The Contractor shall grade and re-seed all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each pole for rodent control.

Pole shall be installed in the correct orientation and plumb. The anchor bolt orientation may be critical to provide the correct orientation. Authorized personnel shall be consulted to ensure the proper alignment of the anchor bolts and also consulted on the positioning of the lowering device arm. Pole shall be grounded in accordance with the plans and specifications found in this document and the project drawings. Damaged galvanizing shall be repaired with a paint or "cold galvanization" approved by the Engineer.

MEASUREMENT AND BASIS OF PAYMENT

Pole with Lowering Device will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 6: WEB CAMERA ASSEMBLY (CCTV)

DESCRIPTION

Furnish and install Web Camera Assembly in accordance with the plans, specifications and Standard Drawings.

MATERIALS

The Web Camera Assembly shall be an Axis Network Dome Model P5655-E or approved equivalent. This item shall include the color camera, zoom lenses, environmental enclosure, pan/tilt unit, housing, dome, parapet mount, and all mounting hardware, power cable, connections, and incidentals necessary to complete the work.

Proposed alternates shall be commercially available. The Contractor shall identify an installed site where the proposed alternate Web Camera Assembly has been operating for a period of at least one year in a similar climate region.

INSTALLATION

Web Camera Assembly shall be installed on a steel strain pole as specified in the plans and in accordance with the manufacturer’s instructions. Installation shall comply with all warranty provisions and warranty contract maintenance services. Installation shall comply with all local, state, and federal building, electrical and construction codes, and Motorola R-56 requirements. All wiring access to the Web Camera Assembly shall be through watertight fittings. Wiring access points shall be on the side or underneath components; no exposed top access is permitted. The Web Camera Assembly shall be installed so that the assembly is located on the side of the pole closest to the roadway when the camera is in its fixed position at the top of the pole. The contractor is responsible to verified all functions of the web camera through a laptop interface.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Web Camera Assembly will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 7: RACK MOUNT UPS

DESCRIPTION

Furnish and install Uninterruptible Power Supply in accordance with the plans, specifications and Standard Drawings.

MATERIALS

The Uninterruptible Power Supply shall be provided emergency power to the load when the input power sources fails. The Uninterruptible Power Supply shall be APC UPS 1500VA USB RM 2U (networkable card AP9630) or approved equal. The Uninterruptible Power Supply shall be networkable and have the following technical specifications:

- Output Power Capacity: 980 Watts/ 1440 VA
- Nominal Output/Input voltage: 120 Volts
- Efficiency at Full Load: 95%
- Waveform Type: Sine Wave
- Output/Input Connections: (6) NEMA 5-15R
- Battery Type: Maintenance-free sealed Lead-Acid Battery with suspended electrolyte:leakproof

Interface Ports: DB-9 Rs 232, USB
Surge Energy Rating: 459 Joules
Filtering: Meets UL 1449
Mounting: shall be able to mount in 19” rack
Operating Environment: 0-40 degrees Celsius
Regulatory Approvals: CSA, FCC Part 15 Class A, UL 1778
Warranty: At least 3 year for repair or replace

Network card shall have the following:

Protocols: HTTP, HTTPS, IPv4, SMTP, SNMP v1, SNMP v3, SSH V1, SSH V2, SSL, TCP/IP, Telnet
Network Interface Connections: RJ-45 10/100 Base-T
Regulatory Approvals: AS/NZS 3548 (C-Tick) Class A, EN 55022 Class A, En 55024, FCC Part 15 Class A, GOST, ICES-003, VCCI Class A
Warranty: At least 3 year for repair or replace

INSTALLATION

Uninterruptible Power Supply shall be installed in 334/336 Cabinet as specified in the plans sheets. It shall be securely mounted the 19” frame which is included in supplied 334/336 cabinet. All cables, rack Mounting Brackets, Rack Mounting support rails shall be incidental to the item.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Uninterruptible Power Supply will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 8: COMMUNICATIONS CABLE

DESCRIPTION

Furnish and install Communications Cable in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Communications cable shall be General Cable GenSpeed 5000 CAT 5e Outside Plant Cable 8 wire PN: 5136100 or approved equal. The cable shall meet or exceed the following specifications:

Performance:

- ANSI/TIA/EIA 568B (Category 5e)
- MIL-C-24640A Water Penetration

- Propagation Delay: 583 ns @ 100 MHz
- Return Loss @ 100 MHz: 20.1 DB
- Frequency Range: 1-350 MHz

Physical characteristics:

- Nominal Outside Diameter: 0.230 in
- Insulation Type: Polyolefin
- Maximum Pulling Tension: 25 lbs
- Maximum DC Resistance: 9.38 Ohms/100m
- Mutual Capacitance @ 1kHz: 17 pF/100m
- Operating Temperature: -45° C to 80° C

All connectors, terminators, fittings, etc. shall be incidental to the cost of installing the Communications Cable and no separate payment will be made.

INSTALLATION

The Contractor shall install all cable and wire splice-free from the controller/service location to each cabinet, VMS sign, or CCTV camera the cable or wire is feeding. The Contractor shall not use excessive force when pulling wire through duct. The Contractor shall replace all wire damaged during installation. The Contractor shall submit to material testing at the discretion of the Engineer.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Communications Cable will be measured for payment per unit linear foot The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

**Section 9:
CONDUIT**

DESCRIPTION

Furnish and install Conduit in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Conduit shall be rigid steel, schedule 80 PVC, or flexible, non-metallic conduit as specified. This item includes fittings, connectors, clamps, caps and other materials necessary for proper installation. The Contractor shall submit to material testing at the discretion of the Engineer.

INSTALLATION

All conduit installed above ground or below ground under pavement shall be rigid steel. All conduits installed below ground, not under pavement shall be PVC. Flexible, non-metallic conduit shall be used as required and shall be incidental to the project. Unused conduits shall be capped on both ends. Conduit containing wire or cable shall be sealed with a piece of

steel wool and capped off with duct seal putty. All conduits shall be accessible inside junction boxes. All conduits shall have bushings included. If rigid steel conduit, the bushings shall be bonded together with other similar types of conduits.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Rigid Steel and PVC Conduit will be measured for payment per unit linear foot. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section. A direct measurement will not be made for flexible, non-metallic conduit. All flexible, non-metallic conduits shall be incidental to the project.

Section 10:

ELECTRICAL SERVICE

DESCRIPTION

Furnish and install Electrical Service in accordance with the plans, specifications and Standard Drawings.

MATERIALS

The Contractor shall coordinate with the local power company to determine the exact materials for the service. This includes but is not limited to conduit, meter base, stainless steel disconnect, fused cutout, ground rod, wire, 35 foot wood pole, 2 anchors, connectors, fittings and all associated hardware required to construct the service.

The Contractor shall coordinate with the local power company (coordinate with TRIMARC representative) for the exact location of the service. This item also includes all electrical inspection and other fees required to provide electrical service.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Electrical Service will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 11:

MODEL 334 AND 336 ENCLOSURES

DESCRIPTION

Furnish and install Enclosure in accordance with the plans, specifications and Standard Drawings.

MATERIALS

The two types of enclosures are Model 336 (36" H x 24" W x 22" D) and Model 334 (66" H x 24" W x 30" D). All enclosures shall be NEMA 3R rated/UL Listed. All components in the cabinet shall be designed according to the NEC 2017/UL Listed. The enclosures shall include:

all mounting accessories, access doors (minimum of two doors), ventilation, locking system, handles, door stops, rack assembly, light(s), shelves, drawer, and all required peripherals per the requirements of the contract documents and per the equipment submitted by the Contractor. **The contractor shall provide a cabinet, wiring, and all components that are approved as an assembly. This approved assembly shall be incidental to this item. Verification that the cabinet, wiring, and all components are an approved assembly shall be submitted to Central Office Traffic Operations. This shall be stamped by an electrical engineer that it is in compliance with the NEC 2017. The cabinet shall be UL508A.**

This item includes all excavation and any special equipment required to install the enclosure on a pole for a Model 336 enclosure or construct the concrete base for a Model 334 enclosure.

The Contractor shall provide a terminal facility harness by means of mating "MS" type connectors for interconnections of the field equipment specified. All cabinets of the same type shall be identical in size, shape and quality. In addition, the cabinets shall be equipped internally as specified herein and as required to suit the specific equipment specified on the plans.

Cabinets shall be of welded construction, using 0.125" minimum thickness 5052H32 or equivalent sheet aluminum. The equipment design shall utilize the latest available techniques, minimum number of different parts, subassemblies, circuits, cards and/or modules to maximize standardization and commonality.

Cabinets shall be provided with fully wired back and side panels with all necessary terminal boards, wiring harnesses, connectors and attachment hardware. All equipment shall be shelf or 19" rack mounted. Terminals and panel facilities shall be installed on the lower portion of the cabinet walls below all shelves.

Each field cabinet shall, at a minimum, be supplied with the following:

- Fan and Thermostat
- Left Side Power Distribution Panel
- Air Filter
- Adjustable Shelves (1-4 as needed for equipment submitted by the Contractor)
- Back Panel
- Right Side Panel
- Locking System
- Ground Bus (2)
- Terminal Blocks
- Duplex power outlet (weather resist)
- Surge Protector (See spec in surge section)
- Drawer that slides out for supporting a laptop computer
- All necessary installation and mounting hardware

All external screws, nuts and locking washers shall be stainless steel; no self-tapping screws are permitted unless specifically approved by the Engineer. All screws, nuts and locking washers used internally shall be manufactured from corrosion resistant materials.

All parts of the cabinet shall be cleaned, smoothed and free from flaws, cracks, dents and other imperfections. The cabinet shall be rigidly constructed to provide vibration free operation of the field equipment when installed. The cabinets shall be dust and rain tight and capable of maintaining a dry internal condition when subject to rain and wind gusts.

All components shall be made of corrosion resistant materials such as plastic, stainless steel, aluminum or brass; or shall be treated with corrosion resistance such as cadmium plating or galvanizing. All materials shall be resistant to fungus growth and moisture deterioration.

Individual cabinet components shall be pre-assembled upon installation in the cabinet such that the components can be easily replaced in the field. Modules of unlike function shall be mechanically keyed to prevent insertion into the wrong socket or connector.

Panels shall be designed to mount in the cabinet on mounting studs. It shall not be necessary to remove the panel to replace any panel-mounted equipment. The panels shall be capable of supporting specified equipment mounted on the panel. A lower input termination panel shall be provided to terminate all input field wires.

Electronic components shall meet the requirements contained herein and shall, at a minimum, comply with EIA Specifications. No component shall be of such design, fabrication, nomenclature or other identification as to preclude the purchase of said component from a wholesale electronics distributor or from the component manufacturer.

Components shall be down-rated by 50 percent with regard to ambient temperature, applied voltage, and power dissipation. All circuits shall be designed for reliability and maximum performance.

The design life of all components, under continuous operating conditions in their circuit application, shall be a minimum of ten years.

Each component shall meet all of its specified performance requirements when the input power is AC, 60 Hz, single phase, 120 volts +/- 20 volts. The equipment shall be designed such that the failure of a particular piece of equipment will not cause the failure of any other.

The cabinets shall be furnished with a power distribution panel mounted on the lower left hand inside wall when facing the front of the cabinet. This panel shall include a 115 VAC, convenience, dual outlet with integral ground fault interrupt protected by a circuit breaker. The left panel shall have:

- Circuit Breaker(s)
- Radio Interference Suppressor
- Power Cable Input and Junction Terminals

Circuit breakers shall be approved and listed by UL. Each cabinet shall have, at a minimum, a circuit breaker to protect the lamp, vent fan, and dual outlet. In addition, a properly rated equipment circuit breaker(s) shall be provided for the equipment shown on the plans. At each cabinet that houses VMS control equipment, a 220 VAC circuit breaker, sized to suit the cables that provide power to the VMS pixels shall be furnished and installed. Breakers shall have a minimum interrupt capacity of 50 amperes.

Each cabinet shall be equipped with a radio interference suppressor installed at the circuit breaker. The suppressor shall provide a minimum attenuation of 50 dB over a frequency range

of 200 kHz to 75 MHz. The suppressor shall be hermetically sealed in a case filled with a suitable insulation compound.

The suppressor terminals shall be nickel-plated, with brass studs of sufficient external length to provide space for connection of two appropriately sized conductors and shall be mounted such that the terminals cannot be turned in the case. The suppressors shall be designed for operation at the proper current ampere rating as determined by the Contractor per the equipment specified on the plans and shall be approved by UL and EIA.

Power distribution blocks suitable for use as a power feed and junction points shall be furnished and installed for two and three wire circuits. The line side of each circuit shall be capable of handling the specified number of and size of all wires.

Each cabinet shall include a fully wired equipment panel mounted on the lower rear inside of the wall of the cabinet. The back panel shall be utilized to distribute and properly interconnect all cabinet wiring related to the specific equipment. Each piece of equipment specified shall have its cable harness properly connected at terminal boards on the back panel. All functions available at the equipment connector shall be carried in the connector cable harness to a terminal board point on the back panel.

Wiring shall be provided for the equipment specified. All cabinet wiring, where connected to terminal strips, switches, radio interference suppressor, etc., shall be identified by the use of insulated pre-printed sleeving (wire markers) slipped over the wire before attachment of the lug or terminating the connection. The wire markers shall have a text label with sufficient detail so that a translating sheet is not required.

All wires shall be cut to the proper length before assembly. No wires shall be doubled back to take up slack. Wires shall be neatly secured with nylon lacing or cable ties. Cables shall be secured with nylon cable clamps.

The grounded side of the electric service shall be carried throughout the cabinet to the ground bus without a break.

All electrical connections in the cabinet shall have sufficient clearance between each terminal and the cabinet to prevent a leakage path or physical contact under stress. Where these distances cannot be maintained, barriers must be provided. All equipment grounds shall run directly and independently to the ground bus. The lay of the interconnect cable between the components must be such that when the door is closed, it does not press against the cables or force the cables against the various components inside the cabinet. Sufficient length of cable harnesses shall be provided to easily reach the electronic equipment placed anywhere on the shelves.

All wiring containing line voltage AC shall be routed and bundled separately and/or shielded from all low voltage (i.e. control) circuits. All conductors and live terminals or parts, which could be hazardous to maintenance personnel, shall be covered with suitable insulating materials.

All conductors used in the cabinet wiring shall be 22 AWG or larger with a minimum of 19 strands. The insulation shall have a minimum thickness of 10 MILS. All wiring containing line voltage shall be 14 AWG or larger.

The AC+, AC-, and equipment ground wiring shall be electrically isolated from the other by an insulation resistance of at least 10 Megohms when measured at 250 VAC. Return and equipment grounding wiring shall be color-coded white and green respectively.

Terminal blocks located on the panels shall be accessible such that it shall not be necessary to remove the electronic equipment from the cabinet to make a connection or perform an inspection.

Terminal blocks shall be two-position, multiple-pole, and barrier type. Shorting bars, along with integral marking strip, shall be provided. Terminal blocks shall be arranged such that they do not impede the entrance, training, or connection of incoming field conductors. All terminals shall be identified by legends permanently attached to the terminal blocks. Not more than three conductors shall be brought to any one terminal screw. No electrically live parts shall extend beyond the protection afforded by the barriers. All terminal blocks shall be located below the shelves.

AC terminal blocks shall be Underwriter's Laboratory approved for 600 volts AC minimum and shall be suitable for outdoor use. Terminals used for field connections or interwiring connections shall secure conductors by means of a nickel or cadmium plated brass binder head screw.

All connections to and from the electronic equipment shall terminate at an interwiring block. These blocks shall act as intermediate connection points for all electronic equipment inputs and outputs.

A varistor shall be installed across the thermostat used to control the fan to act as a surge and transient noise suppressor. The varistor shall be GE VI5OLAIOA, Stetron 250NRO7-1, Siemens SIOK150, or approved equal.

MOUNTING

Model 336 cabinets shall be pole mounted or mounted to an existing concrete wall as specified. Model 334 cabinets shall be mounted on a poured concrete base or on existing concrete surfaces as specified. All holes drilled into existing concrete surfaces shall penetrate the concrete no more than 4 inches unless otherwise approved by the Engineer. Bolts inserted into any concrete surface shall be properly secured and epoxied, per manufacturer's recommendations. Prefabricated fiberglass bases used in lieu of poured concrete bases must be approved by the Engineer. Cabinet installation shall conform to the details shown. All cabinets shall be furnished with stainless steel mounting plates, nuts, bolts, washers and all other necessary hardware to mount the cabinet as shown or described.

DOORS

All cabinets shall be provided with doors in the front and back. Doors shall have secure gaskets to prevent the entrance of dust and moisture. Doors shall be sized to encompass the full area of the cabinet opening. Doors shall be provided with two stop positions to hold the door open at 90 degrees and 135 degrees. The stops shall hold the door securely open until released manually.

The front door shall be hinged on the right-hand side by means of three butt hinges with 1/4" minimum stainless steel hinge pins.

VENTILATION

Cabinets shall be furnished with louvers properly designed to provide natural ventilation to the interior. The louver area shall be of sufficient size to permit the free flow of air corresponding to the rated capacity of the associated cabinet fan. A pleated media fiber filter shall be provided and shall cover all louvers.

Cabinets shall be furnished with an electric, thermostatically-controlled ventilation fan or fans mounted in the cabinet. The fan(s) shall have a rated capacity of at least 200 cubic feet per minute. The fan and cabinet ventilation louvers shall be located with respect to each other so as to direct the bulk of the air flow throughout the entire cabinet and, in particular, over the field equipment units. The thermostat shall be adjustable to turn on between 90 degrees and 120 degrees Fahrenheit.

LOCKING SYSTEM

Each door shall be furnished with a 3-point positive locking system. The lock for the door shall be a self-locking, heavy-duty, five-pin tumbler cylinder rim type. The handles shall be made of stainless steel and shall be provided with a padlock feature. Locks shall be keyed identically to Corbin #2. Two keys shall be provided for each cabinet.

LIGHT

A fluorescent light shall be provided in front for all cabinets and also in the back for Model 334 cabinets. A panel mounted 40-Watt weatherproof incandescent lamp with an on-off switch shall be positioned to provide light to the face of the equipment installed in the cabinet.

SHELF/DRAWER/RACK

A removable 19" EIA rack shall be provided for mounting sub-assemblies in Model 334 cabinet. Adjustable shelves shall be provided to hold the equipment. Vertical shelf adjustment intervals shall be 2" maximum. The shelves shall be positioned from the top of the cabinet in accordance with the actual equipment configuration of the particular cabinet. All devices/sub-assemblies shall be mounted on the rack if possible. Otherwise, they shall be placed on the shelves.

A sliding drawer shall be provided in each cabinet. The drawer shall be installed below the shelves in a suitable position for placement of a laptop computer. The drawer shall have a nominal depth of 1" and a hinged lid.

LABELING

The letters "KYTC ITS" shall be permanently displayed along the top of each door on the outside of each cabinet. The letters shall be a minimum of 1" tall. The letters shall be die-cut or engraved into the metal before galvanizing and shall be readable after galvanizing. All excess galvanizing shall be brushed off. The location and description of the label must be shown on the shop plan submittal for the cabinets. Stenciling with paint or other markers is not permitted. If required information is placed on a steel plate, the plate must match the surface profile of the cabinet. The plate must then be welded completely around the plate before galvanizing.

SPECIAL NOTE FOR THE DISCONNECT/Cabinet:

Only connect one side of the 120 volt in the disconnect at the camera only location. The other side of the 120 Volt shall still be install in meter, but not feed down to the disconnect.

Furnish a shock hazard warning sticker on

Disconnect with the following information:

Voltage (120 volt)

Glove class (0)

Limited approach boundary (42 in)

Restricted approach boundary (contact)
See nfpa 70e for additional ppe required

QUALITY ASSURANCE PROVISIONS

The following water spray test shall be performed on each empty cabinet: Water shall be sprayed from a point directly overhead at an angle of 60° from the vertical axis of the cabinet. This procedure shall be repeated for each of eight equally spaced positions around the cabinet for a period of not less than five minutes in each position. The water shall be sprayed using a domestic type-sprinkling nozzle at a rate of not less than one gallon per minute per square foot of the cabinet's surface area. The cabinet shall then be inspected for leakage. Evidence of water leakage shall be cause for rejection.

A manufacturer's certification of successful completion of the water spray test and that the cabinet conforms to these specifications shall be the basis of acceptance of the cabinet. Separate submission of test cabinets shall not be required.

MAINTENANCE

All components and assemblies shall be clearly identified with name, model number, serial number and any other pertinent information required to facilitate equipment maintenance.

All equipment shall be designed for ease of installation and maintenance. Location, accessibility, serviceability and features that will lead to simplified maintenance shall be a prime consideration. All component parts shall be readily accessible for inspection and maintenance. The only tools and test instruments required by maintenance personnel shall be simple hand tools and basic meters.

After the wiring is complete, all conduit penetrations into the cabinets shall be sealed in such a manner as to prevent rodents and insects from entering the cabinet. The conduit sealants and insect traps used shall be approved by the Engineer prior to installation.

DOCUMENTATION

Each field cabinet shall be supplied with three copies of the final cabinet wiring diagram. One copy shall be placed in a clear plastic envelope and left in the cabinet drawer. Two sets of Mylar plans shall be delivered to the Engineer.

INSTALLATION

Model 334/336 enclosure shall be installed in accordance with the plans and specifications. The Contractor shall stake all proposed enclosure locations and shall obtain approval of staked locations before excavation. A representative from the KYTC Division of Traffic Operations, Design Services Branch or the Traffic Engineer, District 1, TRIMARC representatives will approve locations for all field devices. The Contractor shall have all utilities marked in the field prior to requesting approval. The Contractor shall allow two weeks to schedule this location approval with KYTC. KYTC approval of field device locations does not relieve the contractor from his responsibility to repair any damage incurred during construction. Enclosures located behind guardrail shall have minimum 5 foot spacing from edge of pole to face of guardrail. Otherwise, enclosures shall be located as specified on the plan sheets or a minimum of 30' from all driving lanes. All materials shall be installed in a neat and professional manner. All pole mount cabinets shall be mounted approximately 42" from the ground. All 336 pole mounted cabinets shall a 3' L x3' W x4" D concrete pad install for each door. Concrete for the pad is incidental to the cabinets. The Contractor shall grade and re-seed all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each cabinet for rodent control.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Model 334/336 Enclosure will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 12: JUNCTION BOX

DESCRIPTION

Furnish and install Junction Box in accordance with the plans, specifications and Standard Drawings.

MATERIALS

Junction box shall meet or exceed ANSI/SCTE 77-2002, tier 15. Junction box covers shall be marked "ITS." Covers shall be attached with a minimum of two 3/8" stainless steel hex bolts.

INSTALLATION

Where required, junction box shall be oriented such that the dimensions comply with the NEC. Junction boxes used as pull boxes along a conduit run shall be spaced at a maximum of 250'. Junction boxes shall not be placed in ditch lines or in areas where standing water may accumulate. Junction box covers shall be flush with the finished surface. The Contractor shall restore all disturbed areas to the satisfaction of the Engineer. This item includes the furnishing and installing of Fastrac bait bag in each junction box for rodent control.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Junction Box will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 13:

SURGE DEVICES

DESCRIPTION

Furnish and install video surge device, data surge device, power surge device, and RF surge device in accordance with the plans, specifications and Standard Drawings.

MATERIALS

GENERAL

Each surge device shall be compatible with the equipment it is protecting. Each surge device shall include cables, connectors, power supplies, and all incidentals required for operation.

VIDEO SIGNAL COAX CONDUCTOR SURGE DEVICE

Video Signal Coax Conductor Surge Device shall be EDCO CX12-BNC-Y or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 12 volts when subjected to a 3 kA, 8x20 microsecond wave
- Have a peak surge current of 20kA with 8x20 microsecond wave
- Have BNC connectors
- Pass signals from DC to 80 MHz with less than 3 dB insertion losses
- Be UL 497B listed

DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device shall be for RS 422 and RS 485 Communication conductors shall be EDCO PC642C-015 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 12 volts when subjected to a 1 kA 8x20 microsecond wave

- Have a peak surge current per wire of 10 kA with 8x20 microsecond wave
- Have a maximum inline resistance of 6 ohms
- Have a maximum attenuation of -3db at 50MHz

RS 232 COMMUNICATION DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device for RS 232 Communication conductors shall be EDCO PC642C-015 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 30 volts when subjected to a 1 kA 8x20 microsecond wave
- Have a peak surge current per wire of 3kA with 8x20 microsecond wave
- Have a maximum inline resistance of 6 ohms
- Have a maximum attenuation of -3 db at 0.5 MHz

100 BASE-T AND 10 BASE-T COMMUNICATION DATA SIGNAL CONDUCTOR SURGE DEVICE

Data Signal Conductor Surge Device for 100BaseT and 10BaseT Communication conductors shall be EDCO LCDP-30 or approved equal. This surge protector shall:

- Have a clamping voltage response time of less than one nanosecond
- Have a maximum clamping voltage of 30 volts when subjected to a 0.5 kA 8x20 microsecond wave
- Have a peak surge current per wire shall be 1kA with 8x20 microsecond wave
- Have a maximum attenuation shall be -3db at 100 MHz
- Have a N.E.X.T. worst pair of better than -40 db at 100 MHz
- Have a maximum attenuation of -3db at 0.5 MHz

POWER CONDUCTOR SURGE DEVICE

Conductor Surge Device for power carrying conductors shall be UL Listed Commercial rated. This surge protector shall meet or exceed the following specifications:

- Nominal Line Voltage 120 V
- Peak Current 20,000 Amps
- Clamp Voltage 280 volt typical @ 20kA
- Response time <5ns
- Continuous Service Current 10 Amps max. 120 VAC, 60 Hz

RF ANTENNA COAX CONDUCTOR SURGE DEVICE

RF Antenna Coax Conductor Surge Devices shall meet all manufacturer recommendations for the particular use of the radio antenna coax conductors.

INSTALLATION

The Contractor shall supply surge devices in model 334/336 enclosures, VMS signs, on poles, and on sign trusses as specified on layout sheets. Surge devices shall be located in said equipment such that they are easily accessible for maintenance activities.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Surge Device will be measured for payment per unit each. The Department will make payment for complete, functioning, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 14: TRENCHING AND BACKFILLING

DESCRIPTION

Trenching and Backfilling shall be performed in accordance with the plans, specifications and Standard Drawings.

MATERIALS

All trenches shall be marked with underground utility warning tape.

INSTALLATION

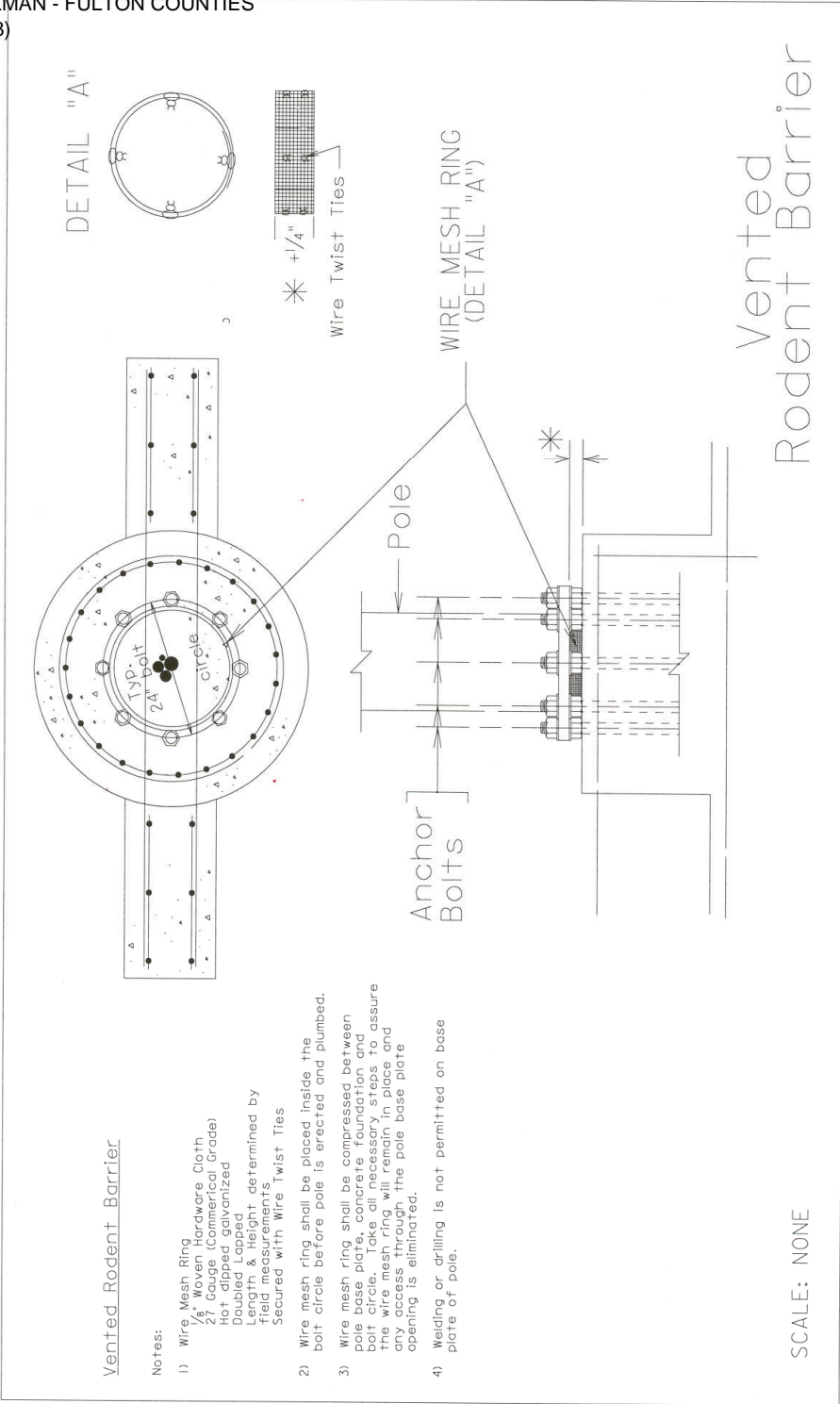
The Contractor shall be responsible for locating all underground utilities prior to excavation. The Contractor shall excavate the trench, place warning tape above the conduit, backfill the trench and restore all disturbed areas to the satisfaction of the Engineer. Backfill material shall be placed and compacted in lifts of 9 inches or less.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Trenching and Backfilling will be measured for payment per unit linear foot. The Department will make payment for complete, inspected, and accepted quantities. The Department will consider payment as full compensation for all work required under this section.

Section 15: Vented Rodent Barrier Detail

Vented rodent barrier – Prior to erecting tubular structures and poles on concrete foundations formed with conduit sweeps, a double lapped ring barrier of standard commercial grade 27 gauge hot dipped galvanized 1/8 inch woven wire mesh shall be placed inside the foundations bolt circle. The height of the wire mesh ring barrier shall be from the concrete foundation to the top of the leveling nuts and washers plus 1/4 inch. The Contractor shall take all necessary steps to assure the wire mesh ring will remain in place to eliminate any access through the base plate opening of the tubular structure or pole when erected and plumbed. The Contractor shall not weld or drill to the base plate of the pole. Optional vented rodent barrier designs and materials may be used when approved by the Engineer and at no additional cost to the Department.



Section 16: GLOSSARY

- The following acronyms, abbreviations, and definitions shall govern this specification:
- AASHTO – American Association of State Highway and Transportation Officials
 - ABS - Acrylonitrile Butadiene Styrene
 - AC – Alternating Current
 - AlInGaP – Aluminum Indium Gallium Phosphide (refers to the chemical composition of an LED).

- ANSI – American National Standards Institute
- ASCII – American Standard Code for Information Interchange
- ASN.1 – Abstract Syntax Notation 1
- ASTM – American Society for Testing and Materials
- AWG - American Wire Gauge
- AWS – American Welding Society
- BCD – Binary Coded Decimal
- B frames – Bi-directional Predicted Frames
- BGP – Border Gateway Protocol
- Bin – Group of LEDs categorized and sorted by intensity or color. Each bin has upper and lower intensity or color specifications and contains only LEDs that are measured to be within that range. LED manufacturers sort LEDs into bins to ensure consistent intensity and color properties.
- BOOTP – Bootstrap Protocol
- CALTRANS – California Department of Transportation
- CAN – Control Area Network
- CCTV – Closed Circuit Television
- CDPD – Cellular Digital Packet Data
- CLI – Command Line Interface
- CNC – Computer Network Control
- Control Computer – A desktop or laptop computer used in conjunction with VMS control software to communicate with VMS sign controllers. The control computer can instruct a VMS sign controller to program and control the VMS, monitor VMS status, and run VMS diagnostic tests. A control computer can be used for remote control of one of more VMS, as well as for local control of a single VMS
- DC – Direct Current
- DHCP – Dynamic Host Configuration Protocol
- DMS – Dynamic Message Sign. Synonymous and interchangeable with Variable Message Sign (VMS). An industry term that applies to various types of variable or changeable message sign technology
- DVI-D – Digital Visual Interface - Digital
- EIA – Electronic Industries Association
- ELFEXT – Equal Level Far End Crosstalk
- EPA – Effective Projected Area
- FCC – Federal Communications Commission
- FDA – Food and Drug Administration
- Font – The style and shape of alphanumeric characters that are displayed on the VMS matrix to create messages viewed by motorists and travelers
- Frame – see *Page*
- FSORS – Full, Standardized Object Range Support – an NTCIP term. See the NTCIP standards for additional information.
- GUI – Graphical User Interface
- HDPE – High Density Polyethylene

- HHR – Half Horizontal Resolution
- HTTP – Hypertext Transfer Protocol
- IEEE – Institute of Electrical and Electronic Engineers
- I frames – Intra-frames
- IC – Integrated Circuit
- IGMP
- InGaAlP – Indium Gallium Aluminum Phosphide
- I/O – Input/Output
- IP – Internet Protocol – in transceivers
- IRE – Institute of Radio Engineers
- ISO – International Organization for Standardization
- ITE – Institute of Transportation Engineers
- ITS – Intelligent Transportation System
- Kbps – Kilobits per second
- KYTC – Kentucky Transportation Cabinet – May also be referred to as the or The Department in this document.
- LAN – Local Area Network
- LCD – Liquid Crystal Display
- LED – Light Emitting Diode
- MDPE – Medium Density Polyethylene
- Message – Information displayed on the VMS for the purpose of visually communicating with motorists. A VMS message can consist of one or more pages of data that are displayed consecutively
- MIB – Management Information Base
- Module – Assembly consisting of a two-dimensional LED pixel array, pixel drive circuitry, and mounting hardware. Modules are installed in the display adjacent to each other to form the display matrix.
- MTBF – Mean Time Between Failures
- MPEG – Moving Picture Experts Group
- NEC – National Electrical Code
- NEMA – National Electrical Manufacturers Association
- NESC – National Electrical Safety Code
- NEXT – Near End Crosstalk
- NCHRP – National Cooperative Highway Research Program
- NRZ – Non Return to Zero
- NRZI – Non Return to Zero Inverted
- NTCIP – National Transportation Communications for ITS Protocol
- NTSC - National Transmission Standards Committee
- Object – An NTCIP term referring to an element of data in an NTCIP-compatible device that can be manipulated to control or monitor the device.
- OER – Octet Encoding Rules
- OSHA – Occupational Safety and Health Administration

- OTDR – Optical Time Domain Reflectometer
- Page – An NTCIP term referring to the data that is displayed on the VMS display matrix at a given moment in time. Also referred to as a frame.
- P frames – Forward Predicted Frames
- PCB – Printed Circuit Board
- Pixel – Picture element. The smallest changeable (programmable) portion of a VMS display matrix
- PMPP – Point to Multi-Point Protocol
- PPP – Point to Point Protocol
- PSELFEXT – Power Sum Equal Level Far End Cross Talk
- PSNEXT – Power Sum Near End Crosstalk
- PTZ – Pan/Tilt/Zoom
- PVC – Polyvinyl Chloride
- PWM – Pulse Width Modulation
- QSIF – Quarter Source Input Format
- RAM – Random Access Memory
- RARP – Reverse Address Resolution Protocol
- RGB – Red-Green-Blue
- Schedule – A set of data that determines the time and date when a VMS sign controller will cause a stored message to be displayed on the VMS
- SDRAM – Synchronous Dynamic Random Access Memory
- SIF – Source Input Format
- SNMP – Simple Network Management Protocol
- STMP – Simple Transportation Management Framework
- Stroke – Refers to the vertical and horizontal width of the lines and curves of a display font. Single stroke denotes character segments that are one pixel wide. Double stroke denotes character segments that are two pixels wide.
- TFTP – Trivial File Transfer Protocol
- TIA - Telecommunications Industry Association
- TMA – Truck Mounted Attenuator
- TOC – Traffic Operations Center
- UL – Underwriters Laboratories
- UPS – Uninterruptible Power Supply
- USB – Universal Serial Bus
- VLAN – Virtual Local Area Network
- VMS – Variable Message Sign. Synonymous with DMS. A type of VMS that is fully programmable such that the content of its messages are fully changeable remotely and electronically.
- VMS Controller – A stand-alone computer that is located at a VMS site, which controls up to 8 VMS or LCS units. A sign controller receives commands from and sends information to a control computer
- WAN – Wide Area Network
- WYSIWYG – What You See Is What You Get. More specifically, what you see on

the VMS control computer monitor is a scaled representation of how a message will appear when it is being displayed on the VMS. Similarly, after a pixel diagnostic test routine has been run, what you see on the control computer monitor is a scaled representation of the functional status of each pixel in the VMS display matrix.

SPECIAL NOTE

For Tree Removal

**Fulton/Graves/Hickman County
IMPROVE THE PURCHASE PARKWAY FROM
SOUTHWEST OF THE US-51 INTERCHANGE TO
CARDINAL ROAD NEAR MAYFIELD INCLUDING THE
KY-339 INTERCHANGE IN WINGO, KY.
Item No. 01-26**

**NO CLEARING OF TREES 5 INCHES OR GREATER (DIAMETER BREAST
HEIGHT) FROM JUNE 1 THROUGH JULY 31.**

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

SPECIAL NOTE FOR PIPELINE INSPECTION

1.0 DESCRIPTION. The Department will perform visual inspections on all pipe on the project. A video inspection will be required on projects having more than 250 linear feet of storm sewer and/or culvert pipe and on routes with an ADT of greater than 1,000 vehicles. Conduct video inspections on all pipe located under the roadway and 50 percent of the remaining pipe not under the roadway. Storm sewer runs and outfall pipes not under the roadway take precedence over rural entrance pipes. Contractors performing this item of work must be prequalified with the Department in the work type J51 (Video Pipe Inspection and Cleaning). Deflection testing shall be completed using a mandrel in accordance with the procedure outlined below or by physical measurement for pipes greater than 36 inches in diameter. Mandrel testing for deflection must be completed prior to the video inspection testing. Unless otherwise noted, Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

2.0 VIDEO INSPECTION. Ensure pipe is clear of water, debris or obstructions. Complete the video inspection and any necessary measurement prior to placing the final surface over any pipe. When paving will not be delayed, take measurements 30 days or more after the completion of earthwork to within 1 foot of the finished subgrade. Notify the Engineer a minimum of 24 hours in advance of inspection and notify the Engineer immediately if distresses or locations of improper installation are logged.

2.1 INSPECTION FOR DEFECTS AND DISTRESSES

A) Begin at the outlet end and proceed through to the inlet at a speed less than or equal to 30 ft/minute. Remove blockages that will prohibit a continuous operation.

B) Document locations of all observed defects and distresses including but not limited to: cracking, spalling, slabbing, exposed reinforcing steel, sags, joint offsets, joint separations, deflections, improper joints/connections, blockages, leaks, rips, tears, buckling, deviation from line and grade, damaged coatings/paved inverts, and other anomalies not consistent with a properly installed pipe.

C) During the video inspection provide a continuous 360 degree pan of every pipe joint.

D) Identify and measure all cracks greater than 0.1" and joint separations greater than 0.5".

E) Video Inspections are conducted from junction to junction which defines a pipe run. A junction is defined as a headwall, drop box inlet, curb box inlet, manhole, buried junction, or other structure that disturbs the continuity of the pipe. Multiple pipe inspections may be conducted from a single set up location, but each pipe run must be on a separate video file and all locations are to be referenced from nearest junction relative to that pipe run.

F) Record and submit all data on the TC 64-765 and TC 64-766 forms.

3.0 MANDREL TESTING. Mandrel testing will be used for deflection testing. For use on Corrugated Metal Pipe, High Density Polyethylene Pipe, and Polyvinyl Chloride Pipe, use a mandrel device with an odd number of legs (9 minimum) having a length not less than the outside diameter of the mandrel. The diameter of the mandrel at any point shall not be less than the diameter specified in Section 3.6. Mandrels can be a fixed size or a variable size.

3.1 Use a proving ring or other method recommended by the mandrel manufacturer to verify mandrel diameter prior to inspection. Provide verification documentation for each size mandrel to the Engineer.

3.2 All deflection measurements are to be based off of the AASHTO Nominal Diameters. Refer to the chart in section 3.6.

3.3 Begin by using a mandrel set to the 5.0% deflection limit. Place the mandrel in the inlet end of the pipe and pull through to the outlet end. If resistance is met prior to completing the entire run, record the maximum distance achieved from the inlet side, then remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.

3.4 If no resistance is met at 5.0% then the inspection is complete. If resistance occurred at 5.0% then repeat 3.1 and 3.2 with the mandrel set to the 10.0% deflection limit. If the deflection of entire pipe run cannot be verified with the mandrel then immediately notify the Engineer.

3.5 Care must be taken when using a mandrel in all pipe material types and lining/coating scenarios. Pipe damaged during the mandrel inspection will be video inspected to determine the extent of the damage. If the damaged pipe was video inspected prior to mandrel inspection then a new video inspection is warranted and supersedes the first video inspection. Immediately notify the Engineer of any damages incurred during the mandrel inspection and submit a revised video inspection report.

3.6 AASHTO Nominal Diameters and Maximum Deflection Limits.

Base Pipe Diameter	AASHTO Nominal Diameter	Max. Deflection Limit	
		5.0%	10.0%
(inches)	(inches)	(inches)	
15	14.76	14.02	13.28
18	17.72	16.83	15.95
24	23.62	22.44	21.26
30	29.53	28.05	26.58
36	35.43	33.66	31.89
42	41.34	39.27	37.21
48	47.24	44.88	42.52
54	53.15	50.49	47.84
60	59.06	56.11	53.15

4.0 PHYSICAL MEASUREMENT OF PIPE DEFLECTION. Alternate method for deflection testing when there is available access or the pipe is greater than 36 inches in diameter, as per 4.1. Use a contact or non-contact distance instrument. A leveling device is recommended for establishing or verifying vertical and horizontal control.

4.1 Physical measurements may be taken after installation and compared to the AASHTO Nominal Diameter of the pipe as per Section 3.6. When this method is used, determine the smallest interior diameter of the pipe as measured through the center point of the pipe (D2). All measurements are to be taken from the inside crest of the corrugation. Take the D2 measurements at the most deflected portion of the pipe run in question and at intervals no greater than ten (10) feet through the run. Calculate the deflection as follows:

$$\% \text{ Deflection} = [(AASHTO \text{ Nominal Diameter} - D2) / AASHTO \text{ Nominal Diameter}] \times 100\%$$

Note: The Engineer may require that preset monitoring points be established in the culvert prior to backfilling. For these points the pre-installation measured diameter (D1) is measured and recorded. Deflection may then be calculated from the following formula:

$$\% \text{ Deflection} = [(D1 - D2) / D1] (100\%)$$

4.2 Record and submit all data.

5.0 DEDUCTION SCHEDULE. All pipe deductions shall be handled in accordance with the tables shown below.

FLEXIBLE PIPE DEFLECTION	
Amount of Deflection (%)	Payment
0.0 to 5.0	100% of the Unit Bid Price
5.1 to 9.9	50% of the Unit Bid Price ⁽¹⁾
10 or greater	Remove and Replace ⁽²⁾

⁽¹⁾ Provide Structural Analysis for HDPE and metal pipe. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price. ⁽²⁾ The Department may allow the pipe to remain in place with no pay to the Contractor in instances where it is in the best interest to the public and where the structural analysis demonstrates that the pipe should function adequately.

RIGID PIPE REMEDIATION TABLE PIPE	
Crack Width (inches)	Payment
≤ 0.1	100% of the Unit Bid Price
Greater than 0.1	Remediate or Replace ⁽¹⁾

(1) Provide the Department in writing a method for repairing the observed cracking. Do not begin work until the method has been approved.

6.0 PAYMENT. The Department will measure the quantity in linear feet of pipe to inspect. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24814EC	Pipeline Inspection	Linear Foot
10065NS	Pipe Deflection Deduction	Dollars

SPECIAL NOTE FOR NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can “break” within 15 minutes under conditions listed in 3.2.
2. MATERIALS, EQUIPMENT, AND PERSONNEL.

- 2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.
- 2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 – 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue ¹ , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

- ¹ Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.
- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

- 3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

- 3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 °F. After the initial heating, between 170 – 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.
- 3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.
- 3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.
4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20 – 100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 – 0.94	0.90 – 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24970EC	Asphalt Material for Tack Non-Tracking	Ton

Revised: May 23, 2022

SPECIAL NOTE FOR EXPERIMENTAL KYCT AND HAMBURG TESTING

1.0 General

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

2.0 Equipment

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

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

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

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

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

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

3.0 Testing Requirements

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

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

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

3.2.2 Number of Specimens and Conditioning. Fabricate specimens in accordance with the Kentucky Method for KYCT Index Testing. Contrary to the method, for field specimens, fabricate a minimum of 3 and up to 6 test specimens. The specimens shall be compacted at the temperature in accordance with KM 64-411. KYCT mix design specimens shall be short-term conditioned uncovered for four hours at compaction temperature in accordance with KM 64-411. Contrary to the Kentucky Method, plant produced bituminous material shall be short-term conditioned immediately after sampling for two hours uncovered in the oven at compaction temperature in accordance with KM 64-411. Additionally, fabricated specimens shall be allowed to cool in air (fan is permissible) for 30 minutes +/- 5 minutes and conditioned in a 77 °F water bath for 30 minutes +/- 5 minutes. To ensure confidence and reliability of the test results provided by KYCT testing and Hamburg testing, reheating of the asphalt mixture is prohibited.

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

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

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

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

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

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

4.0 Data

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

5.0 Payment

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

June 15th, 2022



KENTUCKY TRANSPORTATION CABINET
Department of Highways
DIVISION OF RIGHT OF WAY & UTILITIES

RIGHT OF WAY CERTIFICATION

TC 62-226
Rev. 01/2016
Page 1 of 1

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
01-0026.00	Fulton	12F0 FD52 038 8883201R	NHPP 0011 (038)
PROJECT DESCRIPTION			
Reconstruction of the KY 339 Interchange.			
<input type="checkbox"/> No Additional Right of Way Required			
Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.			
<input checked="" type="checkbox"/> Condition # 1 (Additional Right of Way Required and Cleared)			
All necessary right 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. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.			
<input type="checkbox"/> Condition # 2 (Additional Right of Way Required with Exception)			
The right of way has 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. 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. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract			
<input type="checkbox"/> Condition # 3 (Additional Right of Way Required with Exception)			
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation 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.			
Total Number of Parcels on Project	12	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired			
Signed Deed	12		
Condemnation			
Signed ROE			
Notes/ Comments (Use Additional Sheet if necessary)			
LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	Greg L. Morgan
Signature		Signature	Greg L. Morgan
Date		Date	Digitally signed by Greg L. Morgan Date: 2022.04.12 13:31:00 -05'00'
Right of Way Director		FHWA	
Printed Name		Printed Name	
Signature	Digitally signed by Kelly R. Divine Date: 2022.04.13 08:05:05 -05'00'	Signature	No Signature Required as per FHWA-KYTC Current Stewardship Agreement
Date		Date	



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF RIGHT OF WAY & UTILITIES

TC 62-226

Rev. 01/2016

Page 1 of 1

RIGHT OF WAY CERTIFICATION

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION	
ITEM #		COUNTY		PROJECT # (STATE)	PROJECT # (FEDERAL)
01-0026.01		GRAVES		12F0 FD52 042 8883201R	NHPP 0011 (038)
PROJECT DESCRIPTION					
RECONSTRUCT INTERCHANGE ON KY 339 AND PURCHASE PARKWAY.					
<input type="checkbox"/>	No Additional Right of Way Required				
Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.					
<input checked="" type="checkbox"/>	Condition # 1 (Additional Right of Way Required and Cleared)				
All necessary right 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. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.					
<input type="checkbox"/>	Condition # 2 (Additional Right of Way Required with Exception)				
The right of way has 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. 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. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract					
<input type="checkbox"/>	Condition # 3 (Additional Right of Way Required with Exception)				
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation 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.					
Total Number of Parcels on Project		5	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION	
Number of Parcels That Have Been Acquired					
Signed Deed		5			
Condemnation					
Signed ROE					
Notes/ Comments (Text is limited. Use additional sheet if necessary.)					
LPA RW Project Manager			Right of Way Supervisor		
Printed Name				Printed Name	
Signature				Greg L. Morgan	
Date				Greg L. Morgan	
				Digitally signed by Greg L. Morgan Date: 2022.07.01 09:50:09 -05'00'	
Right of Way Director			FHWA		
Printed Name				Printed Name	
Signature		Kelly Divine		No Signature Required as per FHWA-KYTC Current Stewardship Agreement	
Date		Digitally signed by Kelly Divine Date: 2022.07.01 17:25:44 -05'00'		Signature	
				Date	

UTILITIES AND RAIL CERTIFICATION NOTE

Fulton , Hickman, GravesCounty
ONHPP0011038
FD52 038 8883201U
IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51 INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD INCLUDING THE KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR IMPROVEMENT) (2022CCR)
ITEM NUMBER: 01-26.00

PROJECT NOTES ON UTILITIES

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

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor’s responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor’s responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

UTILITIES AND RAIL CERTIFICATION NOTE

Fulton , Hickman, GravesCounty
ONHPP0011038
FD52 038 8883201U
IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51 INTERCHANGE TO CARDINAL
ROAD NEAR MAYFIELD INCLUDING THE KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR
IMPROVEMENT) (2022CCR)
ITEM NUMBER: 01-26.00

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

- Atmos Energy Corporation - Natural Gas
- AT&T - Communication
- Graves County Water District - Water
- City of Fulton - Water
- West Kentucky RECC - Electric
- Fulton Electric - Electric
- West Kentucky & Tennessee Telecommunications Coop - Communication
- Charter Communications Holdings, LLC dba Spectrum - CATV

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

- AT&T – Relocate copper and fiber along the west side of the interchange.
- WKRECC – Relocate one pole on Sawmill Dr.
- WK&T – Relocate fiber along the southwest side of the interchange, and bore under Parkway to eliminate overhead crossing south of interchange.

UTILITIES AND RAIL CERTIFICATION NOTE

Fulton , Hickman, GravesCounty

ONHPP0011038

FD52 038 8883201U

IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51 INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD INCLUDING THE KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR IMPROVEMENT) (2022CCR)

ITEM NUMBER: 01-26.00

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

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☒ No Rail Involvement ☐ Rail Involved ☐ Rail Adjacent

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
AT&T - Communication	810 Kentucky Avenue Paducah KY 42003	Alan Shelby	2704445048	as7168@att.com
Atmos Energy Corporation - Natural Gas	3034 Parker Street Paducah Ky 42003	Eddie Tucker	2704437235	ed.tucker@atmosenergy.com
Charter Communications Holdings, LLC dba Spectrum - CATV	906 South 12th Street Murray KY 42071	James Adams	2709785307	james.r.adams1@charter.com
City of Fulton - Water	200 Nolan Avenue Fulton KY 42041	Billy "Bubba" Nelms	2704722434	fultonpwwdir@live.com
Fulton Electric - Electric	501 Walnut Street Fulton KY 42041	David Moss	2704721362	fultonelectric@bellsouth.net

UTILITIES AND RAIL CERTIFICATION NOTE

Fulton , Hickman, GravesCounty
ONHPP0011038
FD52 038 8883201U
IMPROVE THE PURCHASE PARKWAY FROM SOUTHWEST OF THE US-51 INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD INCLUDING THE KY-339 INTERCHANGE IN WINGO, KY. (I-69 CORRIDOR IMPROVEMENT) (2022CCR)
ITEM NUMBER: 01-26.00

Graves County Water District - Water	C/O MEWS Mayfield Ky 42066	Kevin Leonard	2702474661	kleonard@mewsbb.com
West Kentucky & Tennessee Telecommunications Coop - Communication	WK&T Mayfield KY 42066	Tim Merrick	2707051816	tmerrick.wk@wk.net
West Kentucky RECC - Electric	1218 West Broadway Mayfield KY 42006	Milton Jones	2707051295	mjones@wkrecc.com

UTILITIES AND RAIL CERTIFICATION NOTE

Graves County
ONHPP0011038
FD52 038 8883201U
RECONSTRUCT THE INTERCHANGE AT KY 339 AND THE PURCHASE PARKWAY, Exit 14, WINGO
ITEM NUMBER: 01-26.01

PROJECT NOTES ON UTILITIES

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

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor’s responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor’s responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

UTILITIES AND RAIL CERTIFICATION NOTE

Graves County
ONHPP0011038
FD52 038 8883201U
RECONSTRUCT THE INTERCHANGE AT KY 339 AND THE PURCHASE PARKWAY, Exit 14, WINGO
ITEM NUMBER: 01-26.01

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

- Atmos Energy Corporation - Natural Gas
- AT&T - Communication
- Graves County Water District - Water
- City of Fulton - Water
- West Kentucky RECC - Electric
- Fulton Electric - Electric
- West Kentucky & Tennessee Telecommunications Coop - Communication
- Charter Communications Holdings, LLC dba Spectrum - CATV

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

Not Applicable

THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

Not Applicable

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

Not Applicable

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

☒ No Rail Involvement ☐ Rail Involved ☐ Rail Adjacent

UTILITIES AND RAIL CERTIFICATION NOTE

Graves County
ONHPP0011038
FD52 038 8883201U
RECONSTRUCT THE INTERCHANGE AT KY 339 AND THE PURCHASE PARKWAY, Exit 14, WINGO
ITEM NUMBER: 01-26.01

AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
AT&T - Communication	810 Kentucky Avenue Paducah KY 42003	Alan Shelby	2704445048	as7168@att.com
Atmos Energy Corporation - Natural Gas	3034 Parker Street Paducah Ky 42003	Eddie Tucker	2704437235	ed.tucker@atmosenergy.com
Charter Communications Holdings, LLC dba Spectrum - CATV	906 South 12th Street Murray KY 42071	James Adams	2709785307	james.r.adams1@charter.com
City of Fulton - Water	200 Nolan Avenue Fulton KY 42041	Billy "Bubba" Nelms	2704722434	fultonpwwdir@live.com
Fulton Electric - Electric	501 Walnut Street Fulton KY 42041	David Moss	2704721362	fultonelectric@bellsouth.net
Graves County Water District - Water	C/O MEWS Mayfield Ky 42066	Kevin Leonard	2702474661	kleonard@mewsbb.com
West Kentucky & Tennessee Telecommunications Coop - Communication	WK&T Mayfield KY 42066	Tim Merrick	2707051816	tmerrick.wk@wk.net
West Kentucky RECC - Electric	1218 West Broadway Mayfield KY 42006	Milton Jones	2707051295	mjones@wkrecc.com



ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

June 24, 2022

Danny Peake
Kentucky Transportation Cabinet (KYTC)
200 Mero St
Frankfort, KY 40622

Re: §401 Water Quality Certification
I-69 - Graves Co
I-69 Corridor Improvements
WQC No: WQC2022-063-1
AI No.: 172531; Activity ID: APE20220001
KYTC Item No.: 1-26.00
USACE ID No.: LRL-2006-259
UTs to Mayfield, Obion, Cane, Bayou de Chien, &
Harris Fork Creeks
Graves County, Kentucky

Dear Mr. Peake:

Pursuant to Section 401 of the Clean Water Act (CWA) and 40 CFR 121.7(c), the Commonwealth of Kentucky certifies it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 303, 304, 306, and 307 of the CWA, will not be violated by the above referenced project provided that the U.S. Army Corps of Engineers authorizes the activity under a federal license or permit, and the attached conditions are met.

Other permits from the Division of Water may be required for this activity. Projects that disturb one acre or more of land or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land require a Kentucky Pollution Discharge Elimination System (KPDES) Stormwater Permit; contact the Surface Water Permits Branch (502-564-3410 or SWPBSupport@ky.gov). A Groundwater Protection Plan is required if activities listed in Section 2(2) of 401 KAR 5:037 are conducted. A Water Withdrawal Application is required for activities proposing raw water withdrawals of 10,000 gallons per day or more; contact the Watershed Management Branch (502-564-3410).

All future correspondence on this project must reference AI No. **172531**. **The attached document is your official Water Quality Certification; please read it carefully.** Please contact Wesley Harrod by phone at 502-782-6589 or email at Wesley.Harrod@ky.gov if you have any questions.

Sincerely,



Samantha Vogeler, Supervisor
Water Quality Certification Section
Kentucky Division of Water

SV:WH

Attachment

cc: Adam Michels, KYTC: Frankfort (via email: adam.michels@ky.gov)
Andrew Logsdon, KYTC: Frankfort (via email: Andrew.Logsdon@ky.gov)
Dave Harmon, KYTC: Frankfort (via email: Dave.Harmon@ky.gov)
Norma Condra, USACE: Louisville District (via email: Norma.C.Condra@usace.army.mil)
Steve Rice, HMB Professional Engineers (via email: srice@hmbpe.com)
Lee Andrews, USFWS: Frankfort (via email: kentuckyes@fws.gov)
Rhonda Lamb, Four Rivers Basin Coordinator (via email: rlamb@murraystate.edu)
Shannon McLeary, Paducah Regional Office (via email: Shannon.McLeary@ky.gov)

KTC Water Quality Certification
I-69 - Graves Co
Facility Requirements
Permit Number: WQC2022-063-1
Activity ID No.:APE20220001

ACTV0000000001 (AI 172531 I-69 Corridor Improvements) Roadway Improvements:

Submittal/Action Requirements:

Condition No.	Condition
S-1	<p>Prior to any construction activity, Kentucky Transportation Cabinet (KYTC) shall submit to the Water Quality Section Project Manager a copy of the receipt of purchase of 2,749 stream Adjusted Mitigation Units (AMUs) from an approved mitigation bank OR purchase of 3,299 stream Adjusted Mitigation Units (AMUs) from an approved Kentucky in-lieu fee (ILF) program fund. Credits must be purchased prior to impacts. Mitigation banks and ILF programs are considered approved as defined in the April 10, 2008 Final Rule, 40 CFR Part 230: Compensatory Mitigation for Losses of Aquatic Resources. This condition is necessary to allow impacts to occur. Compensatory mitigation is the method to approve impacts and entire losses of a water resource. The Division can approve impacts and loss based on the confidence that the resource will be replaced and not result in a net loss of aquatic resources. Compensatory mitigation is the method of compliance for the Commonwealth's water quality standards. [33 CFR 332, 40 CFR 230, 401 KAR 10:031 Section 2(1)(a)]</p> <p>KYTC shall submit monthly photographs and a narrative discussion documenting the status of the approved stream work to the Water Quality Certification Project Manager or Supervisor. Electronic submissions are acceptable.</p> <p>This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment to afford more effective and efficient control practices, to identify changes and conditions in ecological systems, and to warn of emergency conditions. submit report(s) : Due monthly, by the 15th of the month. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]</p>
S-2	<p>KYTC shall notify the Water Quality Certification Project Manager or Supervisor of the scheduled start of construction activities at least two weeks before the start of construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]</p>
S-3	<p>KYTC shall notify the Water Quality Certification Project Manager or Supervisor of substantial completion of construction no later than two weeks post-construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]</p>
S-4	<p>KYTC shall notify the Water Quality Certification Project Manager or Supervisor of substantial completion of construction no later than two weeks post-construction. This condition is necessary for the Division of Water to be informed of the ongoing activity for the purposes of site visits to ensure implementation of Kentucky Regulatory Statutes and Administrative Regulations; the Division will monitor the environment, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]</p>

KTC Water Quality Certification
I-69 - Graves Co
Facility Requirements
Permit Number: WQC2022-063-1
Activity ID No.:APE20220001

ACTV0000000001 (AI 172531 I-69 Corridor Improvements) Roadway Improvements:

Submittal/Action Requirements:

Condition No.	Condition
S-5	KYTC shall submit as-built drawings within 90 days after substantial completion of construction to the Water Quality Certification Section Project Manager or Supervisor. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]

Narrative Requirements:

Condition No.	Condition
T-1	The work approved by this certification shall be limited to 36.621111/-88.779167: -Purchase Parkway (I-69) roadway improvements. -901 linear feet of impacts to ephemeral streams. -3,334 linear feet of impacts to intermittent streams. This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]
T-2	All work performed under this certification shall adhere to the design and specifications set forth in the following document(s): -Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification received on 03/22/2022. -Pre-file Meeting Request received on 04/29/2022. -Certification Request received on 04/29/2022. -Revised Permit Application - I-69 Conversion.pdf -RE Notice of Deficiency #2.msg -RE Notice of Deficiency #2b.msg -RE Notice of Deficiency #2c.msg This condition is necessary to confirm activities approved by this certification. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]

KTC Water Quality Certification
I-69 - Graves Co
Facility Requirements
Permit Number: WQC2022-063-1
Activity ID No.:APE20220001

ACTV0000000001 (AI 172531 I-69 Corridor Improvements) Roadway Improvements:

Narrative Requirements:

Condition No.	Condition
T-3	KYTC is responsible for preventing degradation of waters of the Commonwealth from soil erosion. An erosion and sediment control plan must be designed, implemented, and maintained in effective operating condition at all times during construction. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-4	No in-stream operations or activities shall be conducted during fish spawning season (April 1 through June 30), due to the potential impacts of increased sediment load and associated water quality and designated aquatic habitat impacts. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 4(1)(c,h), KRS 224.10-100, KRS 224.70-110]
T-5	Heavy equipment (e.g. bulldozers, backhoes, draglines, etc.), if required for this project, should not be used or operated within the stream channel. In those instances where such instream work is unavoidable, then it shall be performed in such a manner and duration as to minimize re-suspension of sediments and disturbance to the channel, banks, or riparian vegetation. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-6	Erosion and sediment 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. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-7	Remove all sediment and erosion control measures after re-vegetation has become well-established. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-8	Any fill or riprap shall be of a composition that shall not cause violations of water quality standards by adversely affecting the biological, chemical, or physical properties of waters of the Commonwealth. If riprap is used, it shall be of a weight and size that bank stress or slump conditions shall not occur. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]

KTC Water Quality Certification
I-69 - Graves Co
Facility Requirements
Permit Number: WQC2022-063-1
Activity ID No.:APE20220001

ACTV0000000001 (AI 172531 I-69 Corridor Improvements) Roadway Improvements:

Narrative Requirements:

Condition No.	Condition
T-9	Sediment and erosion control measures (e.g., check-dams, silt fencing, or hay bales) shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, placement shall not be conducted in such a manner that may cause instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control measures shall be removed and the natural grade restored prior to withdrawal from the site. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-10	Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse. This condition is necessary to prevent water pollution as prohibited by statute. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-11	To the maximum extent practicable, all in-stream work under this certification shall be performed during low flow. This condition is necessary to prevent and minimize objectionable deposits and pollution and protect the use of the stream. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-12	Removal of existing riparian vegetation shall be restricted to the minimum necessary for project construction. This condition is necessary to minimize negative effects to the environment, protect the use of the stream, and protect aquatic resources. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-13	Should stream pollution, wetland impairment, and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling 800/564-2380. This condition is necessary to monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 10:031 Section 2(1)(a), KRS 224.10-100, KRS 224.70-110]
T-14	This Water Quality Certification expires on June 24, 2027. This condition is necessary for the issuance of the certification. [KRS 224.10-100, KRS 224.16-050(2), KRS 224.70-110]

KTC Water Quality Certification
I-69 - Graves Co
Facility Requirements
Permit Number: WQC2022-063-1
Activity ID No.:APE20220001

ACTV0000000001 (AI 172531 I-69 Corridor Improvements) Roadway Improvements:

Narrative Requirements:

Condition No.	Condition
T-15	Other permits from the Division of Water may be required for this activity. If this activity occurs within a floodplain, a Permit to Construct Across or Along a Stream may be required. Please contact the Floodplain Management Section Supervisor (502-564-3410) for more information prior to construction. If the project will disturb one acre or more of land, or is part of a larger common plan of development or sale that will ultimately disturb one acre or more of land, a Kentucky Pollution Discharge Elimination System (KPDES) Stormwater Permit shall be required. Please contact the Surface Water Permits Branch (502-564-3410 or SWPBSupport@ky.gov) for more information. A Groundwater Protection Plan is required if any of the activities listed in Section 2(2) of 401 KAR 5:037 are conducted. A Water Withdrawal Application is required for any activities proposing raw water withdrawals of 10,000 gallons per day or more. For technical assistance contact the Watershed Management Branch at 502-564-3410 or visit eec.ky.gov. This condition is necessary for confirm authorized impacts, the appropriate responsible party, monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [KRS 224.10-100, KRS 224.16-050(2), KRS 224.70-110]
T-16	If there is a transfer or conveyance of the project site during the approved activity, the KYTC shall submit written notice to the Water Quality Certification Section Project Manager or Supervisor of the transfer or conveyance of the project site at least 60 days prior to the transfer or conveyance of the project site. The notification shall include the WQC number; the Agency Interest (AI) No.; the name, mailing address, email address, and telephone number of the current owner; the name, mailing address, and telephone number of the prospective transferee; the proposed effective date of transfer/conveyance; and a copy of the documentation evidencing the transfer/conveyance. Failure to comply with this condition does not negate the validity or enforceability of this certification. This condition is necessary for confirm authorized impacts, the appropriate responsible party, monitor the aquatic resources, minimize impact to aquatic resources, protect the use and designation of resources, allow more effective and efficient control practices, identify changes and conditions in ecological systems as a result of activities, and to warn of emergency conditions. [401 KAR 10:030 Section 1, 401 KAR 9:010 Section 1(a)(2), KRS 224.10-100, KRS 224.70-110]
T-17	This Water Quality Certification expires five years from the date of issuance on the associated cover letter. [KRS 224.10-100, KRS 224.70-110]

KYTC BMP Plan for Project CID 01 – 26.00



Kentucky Transportation Cabinet

Highway District 1

And

_____ (2), Construction

Kentucky Pollutant Discharge Elimination System

Permit KYR10

Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

**Reconstruct elements of Jackson Purchase
Parkway to meet Interstate standards**

Fulton, Hickman, Graves County, KY

Project: PCN ##-####

KPDES BMP Plan Page 1 of 14

KYTC BMP Plan for Project CID 01 – 26.00

Project information

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

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

Phone number: (2)
Contact: (2)
Contractors agent responsible for compliance with the KPDES permit requirements (3):
- 4. Project Control Number (2)
- 5. Route (Address) Jackson Purchase Parkway, Wingo KY 42088
- 6. Latitude/Longitude (project mid-point) 36^37'16"N, 88^46'45"W
- 7. County (project mid-point) - Graves
- 8. Project start date (date work will begin): (2)
- 9. Projected completion date: (2)

KYTC BMP Plan for Project CID 01 – 26.00

A. Site description:

1. Nature of Construction Activity (from letting project description) – Reconstruct elements of the Purchase Parkway from MP 1 to MP 20, including grade, drain, bridge rail rehab, guardrail, overpass bridge pier protection, signing, lighting, slope repairs and surfacing.
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved 18,690 CY
4. Estimate of total project area (acres) 14.29 acres
5. Estimate of area to be disturbed (acres) 14.29 acres
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.
7. Data describing existing soil condition - The geologic mapping indicates that alluvial soils consisting of sand, silt, sandy gravel, and cherty rubble are present at the site.
8. Data describing existing discharge water quality (if any) (1) & (2)
9. Receiving water name – Bayou de Chien, Brush Creek, Obion Creek, Opossum Creek,
10. TMDLs and Pollutants of Concern in Receiving Waters: (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.

KYTC BMP Plan for Project CID 01 – 26.00

12. Potential sources of pollutants:

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

B. Sediment and Erosion Control Measures:

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

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

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.

KYTC BMP Plan for Project CID 01 – 26.00

- 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

KYTC BMP Plan for Project CID 01 – 26.00

- 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 : Channel Lining

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 Section 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.

KYTC BMP Plan for Project CID 01 – 26.00

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:**

KYTC BMP Plan for Project CID 01 – 26.00

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:

KYTC BMP Plan for Project CID 01 – 26.00

- 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 contact 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. (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

KYTC BMP Plan for Project CID 01 – 26.00

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 successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- 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 50 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.

KYTC BMP Plan for Project CID 01 – 26.00

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;

KYTC BMP Plan for Project CID 01 – 26.00

_____ 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.)

Contractor and Resident Engineer Plan certification

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 name² signature

(3) Signed _____ title _____,
 Typed or printed name¹ _____ 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.

SPECIAL NOTE

Filing of eNOI for KPDES Construction Stormwater Permit

County: Fulton, Hickman,
Graves

Route: Purchase
Parkway

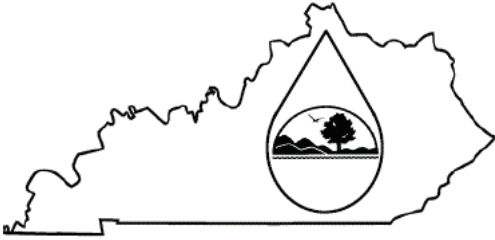
Item No.: 1-26.00

KDOW Submittal ID:

Project Description: Reconstruct elements of Purchase Parkway

A Notice of Intent for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the “Building Contractor” and it will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control as well as meeting the requirements of the KYR10 permit and the KDOW.

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



KENTUCKY POLLUTION DISCHARGE
ELIMINATION SYSTEM (KPDES)

Notice of Intent (NOI) for coverage of Storm Water Discharge
Associated with Construction Activities Under the KPDES Storm
Water General Permit KYR100000

Click here for Instructions
(Controls/KPDES_FormKYR10_Instructions.htm)

Click here to obtain information and a copy of the KPDES General Permit.
(<http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf>)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field

Reason for Submittal:(*) Application for New Permit Coverage		Agency Interest ID: Agency Interest ID		Permit Number:(✓) KPDES Permit Number	
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓) 					
ELIGIBILITY: Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.					
EXCLUSIONS: The following are excluded from coverage under this general permit: 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan; 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation; 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.					
SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)					
Company Name:(✓) Kentucky Transportation Cabinet		First Name:(✓) Kyle		M.I.: M	Last Name:(✓) Poat
Mailing Address:(*) 5501 KY Dam Road		City:(*) Paducah		State:(*) Kentucky	Zip:(*) 42003
eMail Address:(*) kyle.poat@ky.gov		Business Phone:(*) 270-898-2431		Alternate Phone: 270-994-1910	
SECTION II -- GENERAL SITE LOCATION INFORMATION					
Project Name:(*) Upgrade Purchase Parkway to I-69		Status of Owner/Operator(*) State Government		SIC Code(*) 1611 Highway and Street Cons	
Company Name:(✓) Kentucky Transportation Cabinet		First Name:(✓) Kyle		M.I.: M	Last Name:(✓) Poat
Site Physical Address:(*) KY 339 and Purchase Parkway					
City:(*) Wingo		State:(*) Kentucky		Zip:(*) 42088	
County:(*) Graves	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal) 36.64583		Longitude(decimal degrees)(*) 88.75333		
SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION					
Project Description:(*) Upgrade Purchase Parkway to Interstate Standards to convert to I-69					
a. For single projects provide the following information					

Total Number of Acres in Project:(√) <div>82.79</div>		Total Number of Acres Disturbed:(√) <div>82.79</div>	
Anticipated Start Date:(√) <div>10/1/2022</div>		Anticipated Completion Date:(√) <div>11/1/2024</div>	
b. For common plans of development provide the following information			
Total Number of Acres in Project:(√) <div># Acre(s)</div>		Total Number of Acres Disturbed:(√) <div># Acre(s)</div>	
Number of individual lots in development, if applicable:(√) <div># lot(s)</div>		Number of lots in development:(√) <div># lot(s)</div>	
Total acreage of lots intended to be developed:(√) <div>Project Acres</div>		Number of acres intended to be disturbed at any one time:(√) <div>Disturbed Acres</div>	
Anticipated Start Date:(√) <div></div>		Anticipated Completion Date:(√) <div></div>	
List Building Contractor(s) at the time of Application:(*)			
<div><div>+ Company Name</div><div></div></div>			
SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED ?			
Discharge Point(s):			
<div><div>+ Unnamed Tributary? Latitude Longitude Receiving Water Name</div><div></div></div>			
SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED ?			
Name of MS4: <div></div>			
Date of application/notification to the MS4 for construction site permit coverage: <div>Date</div>		Discharge Point(s):(*)	
		<div><div>+ Latitude Longitude</div><div></div></div>	
SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?			
Will the project require construction activities in a water body or the riparian zone?: (*)		<div></div>	
If Yes, describe scope of activity: (√)		<div>describe scope of activity</div>	
Is a Clean Water Act 404 permit required?:(*)		<div></div>	

Is a Clean Water Act 401 Water Quality Certification required?:(*)		<div></div>	
SECTION VII -- NOI PREPARER INFORMATION			
First Name:(*) <div>First Name</div>	M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>	Company Name:(*) <div>Company Name</div>
Mailing Address:(*) <div>Mailing Address</div>	City:(*) <div>City</div>	State:(*) <div></div>	Zip:(*) <div>Zip</div>
eMail Address:(*) <div>eMail Address</div>		Business Phone:(*) <div>Phone</div>	Alternate Phone: <div>Phone</div>
SECTION VIII -- ATTACHMENTS			
Facility Location Map:(*)		<div>Upload file</div>	
Supplemental Information:		<div>Upload file</div>	
SECTION IX -- CERTIFICATION			
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 gather and evaluate 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 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.			
Signature:(*) <div>Signature</div>		Title:(*) <div>Title</div>	
First Name:(*) <div>First Name</div>	M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>	
eMail Address:(*) <div>eMail Address</div>	Business Phone:(*) <div>Phone</div>	Alternate Phone: <div>Phone</div>	Signature Date:(*) <div>Date</div>
<div><div>Click to Save Values for Future Retrieval</div><div>Click to Submit to EEC</div></div>			

KYTC BMP Plan for Project CID 01 – 26.01



Kentucky Transportation Cabinet

Highway District 1

And

_____ (2), Construction

Kentucky Pollutant Discharge Elimination System

Permit KYR10

Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

Reconstruct KY 339 Interchange on Jackson

Purchase Parkway at Wingo (Exit 14)

Graves County, KY

Project: PCN ##-####

KPDES BMP Plan Page 1 of 14

KYTC BMP Plan for Project CID 01 – 26.01

Project information

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

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

Phone number: (2)
Contact: (2)
Contractors agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number (2)
5. Route (Address) KY 339, Wingo KY 42088
6. Latitude/Longitude (project mid-point) 36^38'45"N, 88^45'12"W
7. County (project mid-point) - Graves
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KYTC BMP Plan for Project CID 01 – 26.01

A. Site description:

1. Nature of Construction Activity (from letting project description) – Reconstruct the Interchange on KY 339 at the Purchase Parkway at Wingo
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved 103,473 CY
4. Estimate of total project area (acres) 68.5 acres
5. Estimate of area to be disturbed (acres) 68.5 acres
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.
7. Data describing existing soil condition - The geologic mapping indicates that alluvial soils consisting of sand, silt, sandy gravel, and cherty rubble are present at the site.
8. Data describing existing discharge water quality (if any) (1) & (2)
9. Receiving water name – Cane Creek
10. TMDLs and Pollutants of Concern in Receiving Waters: (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:

KYTC BMP Plan for Project CID 01 – 26.01

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

B. Sediment and Erosion Control Measures:

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

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

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants.

KYTC BMP Plan for Project CID 01 – 26.01

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

KYTC BMP Plan for Project CID 01 – 26.01

- 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 : Channel Lining

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 Section 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.

KYTC BMP Plan for Project CID 01 – 26.01

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:**

KYTC BMP Plan for Project CID 01 – 26.01

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:

KYTC BMP Plan for Project CID 01 – 26.01

- 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 contact 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. (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

KYTC BMP Plan for Project CID 01 – 26.01

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 successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- 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 50 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.

KYTC BMP Plan for Project CID 01 – 26.01

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;

KYTC BMP Plan for Project CID 01 – 26.01

_____ 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.)

Contractor and Resident Engineer Plan certification

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 name² signature

(3) Signed _____ title _____, _____
 Typed or printed name¹ _____ 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.

SPECIAL NOTE

Filing of eNOI for KPDES Construction Stormwater Permit

County: Graves

Route: KY 339/JPP

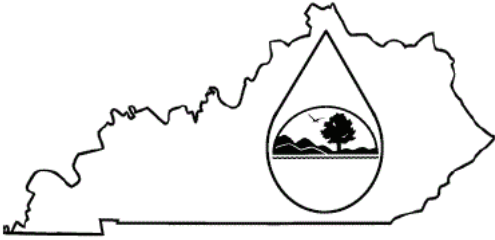
Item No.: 1-26.01

KDOW Submittal ID:

Project Description: Reconstruct KY 339 Interchange at Wingo

A Notice of Intent for obtaining coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) has been drafted, copy of which is attached. Upon award, the Contractor will be identified in Section III of the form as the “Building Contractor” and it will be submitted for approval to the Kentucky Division of Water. The Contractor shall be responsible for advancing the work in a manner that is compliant with all applicable and appropriate KYTC specifications for sediment and erosion control as well as meeting the requirements of the KYR10 permit and the KDOW.

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



KENTUCKY POLLUTION DISCHARGE
ELIMINATION SYSTEM (KPDES)
Notice of Intent (NOI) for coverage of Storm Water Discharge
Associated with Construction Activities Under the KPDES Storm
Water General Permit KYR100000

Click here for Instructions
(Controls/KPDES_FormKYR10_Instructions.htm)

Click here to obtain information and a copy of the KPDES General Permit.
(http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an
optionally required field

Reason for Submittal:(*) Application for New Permit Coverage		Agency Interest ID: Agency Interest ID		Permit Number:(✓) KPDES Permit Number	
If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓) 					
ELIGIBILITY: Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.					
EXCLUSIONS: The following are excluded from coverage under this general permit: 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan; 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation; 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.					
SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)					
Company Name:(✓) Kentucky Transportation Cabinet		First Name:(✓) Kyle		M.I.: M	Last Name:(✓) Poat
Mailing Address:(*) 5501 KY Dam Road		City:(*) Paducah		State:(*) Kentucky	Zip:(*) 42003
eMail Address:(*) kyle.poat@ky.gov		Business Phone:(*) 270-898-2431		Alternate Phone: 270-994-1910	
SECTION II -- GENERAL SITE LOCATION INFORMATION					
Project Name:(*) Upgrade Purchase Parkway to I-69		Status of Owner/Operator(*) State Government		SIC Code(*) 1611 Highway and Street Cons	
Company Name:(✓) Kentucky Transportation Cabinet		First Name:(✓) Kyle		M.I.: M	Last Name:(✓) Poat
Site Physical Address:(*) KY 339 and Purchase Parkway					
City:(*) Wingo		State:(*) Kentucky		Zip:(*) 42088	
County:(*) Graves	Latitude(decimal degrees)(*)DMS to DD Converter (https://www.fcc.gov/media/radio/dms-decimal) 36.64583		Longitude(decimal degrees)(*) 88.75333		
SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION					
Project Description:(*) Upgrade Purchase Parkway to Interstate Standards to convert to I-69					
a. For single projects provide the following information					

Total Number of Acres in Project:(√) 82.79		Total Number of Acres Disturbed:(√) 82.79	
Anticipated Start Date:(√) 10/1/2022		Anticipated Completion Date:(√) 11/1/2024	
b. For common plans of development provide the following information			
Total Number of Acres in Project:(√) # Acre(s)		Total Number of Acres Disturbed:(√) # Acre(s)	
Number of individual lots in development, if applicable:(√) # lot(s)		Number of lots in development:(√) # lot(s)	
Total acreage of lots intended to be developed:(√) Project Acres		Number of acres intended to be disturbed at any one time:(√) Disturbed Acres	
Anticipated Start Date:(√) 		Anticipated Completion Date:(√) 	
List Building Contractor(s) at the time of Application:(*)			
<div><div>+</div><div>Company Name</div><div></div></div>			
SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED ?			
Discharge Point(s):			
<div><div>+</div><div><div>Unnamed Tributary?</div><div>Latitude</div><div>Longitude</div><div>Receiving Water Name</div><div></div></div></div>			
SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED ?			
Name of MS4: 			
Date of application/notification to the MS4 for construction site permit coverage: Date		Discharge Point(s):(*)	
		<div><div>+</div><div><div>Latitude</div><div>Longitude</div><div></div></div></div>	
SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?			
Will the project require construction activities in a water body or the riparian zone?: (*)			
If Yes, describe scope of activity: (√)		describe scope of activity	
Is a Clean Water Act 404 permit required?:(*)			

Is a Clean Water Act 401 Water Quality Certification required?:(*)		<div></div>	
SECTION VII -- NOI PREPARER INFORMATION			
First Name:(*) <div>First Name</div>	M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>	Company Name:(*) <div>Company Name</div>
Mailing Address:(*) <div>Mailing Address</div>	City:(*) <div>City</div>	State:(*) <div></div>	Zip:(*) <div>Zip</div>
eMail Address:(*) <div>eMail Address</div>	Business Phone:(*) <div>Phone</div>		Alternate Phone: <div>Phone</div>
SECTION VIII -- ATTACHMENTS			
Facility Location Map:(*)		<div>Upload file</div>	
Supplemental Information:		<div>Upload file</div>	
SECTION IX -- CERTIFICATION			
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 gather and evaluate 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 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.			
Signature:(*) <div>Signature</div>		Title:(*) <div>Title</div>	
First Name:(*) <div>First Name</div>	M.I.: <div>MI</div>	Last Name:(*) <div>Last Name</div>	
eMail Address:(*) <div>eMail Address</div>	Business Phone:(*) <div>Phone</div>	Alternate Phone: <div>Phone</div>	Signature Date:(*) <div>Date</div>
<div>Click to Save Values for Future Retrieval</div> <div>Click to Submit to EEC</div>			

SPECIAL NOTE

Pending U.S. Army Corps of Engineers 404 Permit KYTC Item #: 1-26

The contractor should be aware that for this project a Clean Water Act 404 permit has been submitted to the U.S. Army Corps of Engineers (USACE) and approval is currently pending. No work shall occur in a Water of the United States (stream or wetland) until the USACE 404 permit has been approved and secured. It is anticipated the permit will be secured within 60 days of award.

MATERIAL SUMMARY

CONTRACT ID: 221337

NHPP 0011 (038)

DE04290032237

JULLIAN CARROLL PURCHASE PARKWAY (PW 9003) RECONSTRUCT THE WINGO (KY 339) INTERCHANGE ASPHALT PAVEMENT & ROADWAY REHAB, A DISTANCE OF .99 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00003	CRUSHED STONE BASE	28,448.00	TON
0010	00005	GEOGRID REINFORCEMENT FOR SUBGRADE	42,304.00	SQYD
0015	00100	ASPHALT SEAL AGGREGATE	126.00	TON
0020	00103	ASPHALT SEAL COAT	15.00	TON
0025	00212	CL2 ASPH BASE 1.00D PG64-22	2,581.00	TON
0030	00214	CL3 ASPH BASE 1.00D PG64-22	3,026.00	TON
0035	00216	CL3 ASPH BASE 1.00D PG76-22	3,152.00	TON
0040	00309	CL2 ASPH SURF 0.50D PG64-22	2,590.00	TON
0045	00332	CL3 ASPH SURF 0.50A PG76-22	3,309.00	TON
0050	02602	FABRIC-GEOTEXTILE CLASS 1	42,304.00	SQYD
0055	02676	MOBILIZATION FOR MILL & TEXT - - GRAVES 1-26.01	1.00	LS
0060	02677	ASPHALT PAVE MILLING & TEXTURING	3,167.00	TON
0065	20071EC	JOINT ADHESIVE	16,118.00	LF
0070	20362ES403	SHOULDER RUMBLE STRIPS-SAWED	29,944.00	LF
0075	20550ND	SAWCUT PAVEMENT	6,058.00	LF
0080	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	13.60	TON
0085	01015	INSPECT & CERTIFY EDGE DRAIN SYSTEM - - GRAVES 1-26.01	1.00	LS
0090	01310	REMOVE PIPE	40.00	LF
0095	01825	ISLAND CURB AND GUTTER	50.00	LF
0100	01903	REMOVE CONCRETE ROLL CURB	8,331.00	LF
0105	01958	CONC MEDIAN BARRIER TYPE 12C1 TL3	157.00	LF
0110	01959	CONC MEDIAN BARRIER TYPE 12C2 TL3	615.00	LF
0115	01970	CONC MEDIAN BARRIER TYPE 12C TL3	20.00	LF
0120	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	30.00	EACH
0125	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	6.00	EACH
0130	01985	DELINEATOR FOR BARRIER - YELLOW	20.00	EACH
0135	02014	BARRICADE-TYPE III	2.00	EACH
0140	02091	REMOVE PAVEMENT	8,806.00	SQYD
0145	02159	TEMP DITCH	6,778.00	LF
0150	02160	CLEAN TEMP DITCH	3,389.00	LF
0155	02165	REMOVE PAVED DITCH	1,740.00	SQYD
0160	02220	FLOWABLE FILL	13.70	CUYD
0165	02230	EMBANKMENT IN PLACE	103,473.00	CUYD
0170	02262	FENCE-WOVEN WIRE TYPE 1	5,346.00	LF
0175	02265	REMOVE FENCE	3,585.00	LF
0180	02351	GUARDRAIL-STEEL W BEAM-S FACE	3,689.00	LF
0185	02359	GUARDRAIL CONNECTOR TO CONC MED BARR	3.00	EACH
0190	02367	GUARDRAIL END TREATMENT TYPE 1	7.00	EACH
0195	02369	GUARDRAIL END TREATMENT TYPE 2A	8.00	EACH
0200	02381	REMOVE GUARDRAIL	8,269.00	LF
0205	02396	REMOVE GUARDRAIL END TREATMENT	3.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0210	02429	RIGHT-OF-WAY MONUMENT TYPE 1	20.00	EACH
0215	02432	WITNESS POST	20.00	EACH
0220	02483	CHANNEL LINING CLASS II	1,289.00	TON
0225	02484	CHANNEL LINING CLASS III	493.00	TON
0230	02545	CLEARING AND GRUBBING - 68.5 ACRES/ GRAVES 1-26.01	1.00	LS
0235	02555	CONCRETE-CLASS B	8.99	CUYD
0240	02562	TEMPORARY SIGNS	1,011.00	SQFT
0245	02585	EDGE KEY	42.00	LF
0250	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	1,905.00	SQYD
0255	02650	MAINTAIN & CONTROL TRAFFIC - - GRAVES 1-26.01	1.00	LS
0260	02653	LANE CLOSURE	3.00	EACH
0265	02671	PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH
0270	02701	TEMP SILT FENCE	6,778.00	LF
0275	02703	SILT TRAP TYPE A	68.00	EACH
0280	02704	SILT TRAP TYPE B	68.00	EACH
0285	02705	SILT TRAP TYPE C	68.00	EACH
0290	02706	CLEAN SILT TRAP TYPE A	68.00	EACH
0295	02707	CLEAN SILT TRAP TYPE B	68.00	EACH
0300	02708	CLEAN SILT TRAP TYPE C	68.00	EACH
0305	02720	SIDEWALK-4 IN CONCRETE	38.00	SQYD
0310	02726	STAKING - - GRAVES 1-26.01	1.00	LS
0315	02775	ARROW PANEL	2.00	EACH
0320	03171	CONCRETE BARRIER WALL TYPE 9T	15,000.00	LF
0325	04940	REMOVE LIGHTING - -- GRAVES 1-26.01	1.00	LS
0330	05950	EROSION CONTROL BLANKET	7,810.00	SQYD
0335	05952	TEMP MULCH	221,905.00	SQYD
0340	05953	TEMP SEEDING AND PROTECTION	165,601.00	SQYD
0345	05963	INITIAL FERTILIZER	10.00	TON
0350	05964	MAINTENANCE FERTILIZER	17.10	TON
0355	05985	SEEDING AND PROTECTION	331,201.00	SQYD
0360	05992	AGRICULTURAL LIMESTONE	205.30	TON
0365	06401	FLEXIBLE DELINEATOR POST-M/W	103.00	EACH
0370	06404	FLEXIBLE DELINEATOR POST-M/Y	80.00	EACH
0375	06511	PAVE STRIPING-TEMP PAINT-6 IN	17,400.00	LF
0380	06514	PAVE STRIPING-PERM PAINT-4 IN	9,669.00	LF
0385	06542	PAVE STRIPING-THERMO-6 IN W	14,782.00	LF
0390	06543	PAVE STRIPING-THERMO-6 IN Y	13,135.00	LF
0395	06546	PAVE STRIPING-THERMO-12 IN W	1,912.00	LF
0400	06567	PAVE MARKING-THERMO STOP BAR-12IN	144.00	LF
0405	06592	PAVEMENT MARKER TYPE V-B W/R	50.00	EACH
0410	08100	CONCRETE-CLASS A	7.02	CUYD
0415	08150	STEEL REINFORCEMENT	386.00	LB
0420	08904	CRASH CUSHION TY VI CLASS C	2.00	EACH
0425	10020NS	FUEL ADJUSTMENT	70,287.00	DOLL
0430	10030NS	ASPHALT ADJUSTMENT	54,242.00	DOLL
0435	20318ES508	RELOCATE CONC BARRIER WALL	13,400.00	LF
0440	20738NS112	TEMP CRASH CUSHION	8.00	EACH
0445	21289ED	LONGITUDINAL EDGE KEY	7,471.00	LF
0450	23274EN11F	TURF REINFORCEMENT MAT 1	50.00	SQYD

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0455	23322EC	AGGREGATE SIZE NO. 57	33.00	CUYD
0460	23839EC	REMOVE CONCRETE MEDIAN	490.00	SQYD
0465	24489EC	INLAID PAVEMENT MARKER	1,753.00	EACH
0470	24679ED	PAVE MARK THERMO CHEVRON	359.00	SQFT
0475	24814EC	PIPELINE INSPECTION	1,291.00	LF
0480	00078	CRUSHED AGGREGATE SIZE NO 2	9.00	TON
0485	00462	CULVERT PIPE-18 IN	357.00	LF
0490	00464	CULVERT PIPE-24 IN	237.00	LF
0495	00466	CULVERT PIPE-30 IN	108.00	LF
0500	00468	CULVERT PIPE-36 IN	356.00	LF
0505	00470	CULVERT PIPE-48 IN	165.00	LF
0510	00471	CULVERT PIPE-54 IN	55.00	LF
0515	00521	STORM SEWER PIPE-15 IN	71.00	LF
0520	00522	STORM SEWER PIPE-18 IN	107.00	LF
0525	00528	STORM SEWER PIPE-36 IN	56.00	LF
0530	01000	PERFORATED PIPE-4 IN	3,435.00	LF
0535	01010	NON-PERFORATED PIPE-4 IN	352.00	LF
0540	01020	PERF PIPE HEADWALL TY 1-4 IN	6.00	EACH
0545	01028	PERF PIPE HEADWALL TY 3-4 IN	1.00	EACH
0550	01032	PERF PIPE HEADWALL TY 4-4 IN	2.00	EACH
0555	01204	PIPE CULVERT HEADWALL-18 IN	5.00	EACH
0560	01208	PIPE CULVERT HEADWALL-24 IN	2.00	EACH
0565	01210	PIPE CULVERT HEADWALL-30 IN	2.00	EACH
0570	01212	PIPE CULVERT HEADWALL-36 IN	4.00	EACH
0575	01216	PIPE CULVERT HEADWALL-48 IN	2.00	EACH
0580	01440	SLOPED BOX INLET-OUTLET TYPE 1	2.00	EACH
0585	01451	S & F BOX INLET-OUTLET-24 IN	3.00	EACH
0590	01453	S & F BOX INLET-OUTLET-36 IN	1.00	EACH
0595	01456	CURB BOX INLET TYPE A	2.00	EACH
0600	01490	DROP BOX INLET TYPE 1	2.00	EACH
0605	01493	DROP BOX INLET TYPE 2	1.00	EACH
0610	01499	DROP BOX INLET TYPE 4	1.00	EACH
0615	01511	DROP BOX INLET TYPE 5D	1.00	EACH
0620	01650	JUNCTION BOX	2.00	EACH
0625	01767	MANHOLE TYPE C	1.00	EACH
0630	23610NC	CORED HOLE DRAINAGE BOX CON	4.00	EACH
0635	24026EC	PIPE CULVERT HEADWALL-54 IN	1.00	EACH
0640	02568	MOBILIZATION	1.00	LS
0645	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 221337

NHPP 0011 (038)

DE12190032237

PURCHASE PARKWAY (PW 9003) RECONSTRUCT PARKWAY FROM SOUTH OF US51 INTERCHANGE TO CARDINAL ROAD NEAR MAYFIELD BRIDGE WITH GRADE & DRAIN, A DISTANCE OF 19.2 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0650	00003	CRUSHED STONE BASE	21,590.00	TON

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0655	00071	CRUSHED AGGREGATE SIZE NO 57	374.00	TON
0660	00078	CRUSHED AGGREGATE SIZE NO 2	5,183.00	TON
0665	00100	ASPHALT SEAL AGGREGATE	868.00	TON
0670	00103	ASPHALT SEAL COAT	105.00	TON
0675	00212	CL2 ASPH BASE 1.00D PG64-22	2,994.00	TON
0680	00214	CL3 ASPH BASE 1.00D PG64-22	88.00	TON
0685	00216	CL3 ASPH BASE 1.00D PG76-22	124.00	TON
0690	00301	CL2 ASPH SURF 0.38D PG64-22	395.00	TON
0695	00309	CL2 ASPH SURF 0.50D PG64-22	1,086.00	TON
0700	00326	CL3 ASPH SURF 0.50B PG76-22	1,337.00	TON
0705	00461	CULVERT PIPE-15 IN	256.00	LF
0710	00521	STORM SEWER PIPE-15 IN	191.00	LF
0715	00522	STORM SEWER PIPE-18 IN	4.00	LF
0720	01310	REMOVE PIPE	263.00	LF
0725	01505	DROP BOX INLET TYPE 5B	1.00	EACH
0730	01511	DROP BOX INLET TYPE 5D	1.00	EACH
0735	01585	REMOVE DROP BOX INLET	2.00	EACH
0740	01634	CAP CURB BOX INLET	1.00	EACH
0745	01650	JUNCTION BOX	2.00	EACH
0750	01691	FLUME INLET TYPE 2	9.00	EACH
0755	01705	REMOVE CURB & GUTTER BOX INLET	12.00	EACH
0760	01877	SPECIAL HEADER CURB	818.00	LF
0765	01903	REMOVE CONCRETE ROLL CURB	15,088.00	LF
0770	01955	CONC MEDIAN BARRIER TYPE 12C1	300.00	LF
0775	01970	CONC MEDIAN BARRIER TYPE 12C TL3	40.00	LF
0780	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	195.00	EACH
0785	01983	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	51.00	EACH
0790	01985	DELINEATOR FOR BARRIER - YELLOW	12.00	EACH
0795	02003	RELOCATE TEMP CONC BARRIER	14,908.00	LF
0800	02014	BARRICADE-TYPE III	8.00	EACH
0805	02159	TEMP DITCH	4,833.00	LF
0810	02160	CLEAN TEMP DITCH	2,417.00	LF
0815	02200	ROADWAY EXCAVATION	15,790.00	CUYD
0820	02242	WATER	126.00	MGAL
0825	02351	GUARDRAIL-STEEL W BEAM-S FACE	20,389.50	LF
0830	02352	GUARDRAIL-STEEL W BEAM-D FACE	275.00	LF
0835	02360	GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH
0840	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH
0845	02365	CRASH CUSHION TYPE IX-A	2.00	EACH
0850	02367	GUARDRAIL END TREATMENT TYPE 1	17.00	EACH
0855	02369	GUARDRAIL END TREATMENT TYPE 2A	11.00	EACH
0860	02381	REMOVE GUARDRAIL	20,878.00	LF
0865	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	4.00	EACH
0870	02396	REMOVE GUARDRAIL END TREATMENT	16.00	EACH
0875	02483	CHANNEL LINING CLASS II	219.00	TON
0880	02545	CLEARING AND GRUBBING - - FULTON	1.00	LS
0885	02562	TEMPORARY SIGNS	608.00	SQFT
0890	02602	FABRIC-GEOTEXTILE CLASS 1	5,513.00	SQYD
0895	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	251.00	SQYD

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0900	02625	REMOVE HEADWALL	11.00	EACH
0905	02650	MAINTAIN & CONTROL TRAFFIC - - FULTON	1.00	LS
0910	02653	LANE CLOSURE	7.00	EACH
0915	02671	PORTABLE CHANGEABLE MESSAGE SIGN	6.00	EACH
0920	02676	MOBILIZATION FOR MILL & TEXT - - FULTON	1.00	LS
0925	02677	ASPHALT PAVE MILLING & TEXTURING	1,222.00	TON
0930	02690	SAFELOADING	3.00	CUYD
0935	02696	SHOULDER RUMBLE STRIPS	20,492.00	LF
0940	02701	TEMP SILT FENCE	5,876.00	LF
0945	02703	SILT TRAP TYPE A	12.00	EACH
0950	02704	SILT TRAP TYPE B	12.00	EACH
0955	02705	SILT TRAP TYPE C	12.00	EACH
0960	02706	CLEAN SILT TRAP TYPE A	36.00	EACH
0965	02707	CLEAN SILT TRAP TYPE B	36.00	EACH
0970	02708	CLEAN SILT TRAP TYPE C	36.00	EACH
0975	02709	CLEAN TEMP SILT FENCE	3,129.00	LF
0980	02720	SIDEWALK-4 IN CONCRETE	335.00	SQYD
0985	02726	STAKING - - FULTON	1.00	LS
0990	02775	ARROW PANEL	6.00	EACH
0995	03171	CONCRETE BARRIER WALL TYPE 9T	14,908.00	LF
1000	04935	TEMP SIGNAL - - FULTON	1.00	LS
1005	05950	EROSION CONTROL BLANKET	2,047.00	SQYD
1010	05952	TEMP MULCH	40,692.00	SQYD
1015	05953	TEMP SEEDING AND PROTECTION	26,501.00	SQYD
1020	05963	INITIAL FERTILIZER	4.00	TON
1025	05964	MAINTENANCE FERTILIZER	7.00	TON
1030	05985	SEEDING AND PROTECTION	54,998.00	SQYD
1035	05992	AGRICULTURAL LIMESTONE	40.00	TON
1040	06401	FLEXIBLE DELINEATOR POST-M/W	204.00	EACH
1045	06404	FLEXIBLE DELINEATOR POST-M/Y	139.00	EACH
1050	06511	PAVE STRIPING-TEMP PAINT-6 IN	17,126.00	LF
1055	06542	PAVE STRIPING-THERMO-6 IN W	9,856.00	LF
1060	06543	PAVE STRIPING-THERMO-6 IN Y	10,276.00	LF
1065	06546	PAVE STRIPING-THERMO-12 IN W	2,346.00	LF
1070	06567	PAVE MARKING-THERMO STOP BAR-12IN	160.00	LF
1075	06592	PAVEMENT MARKER TYPE V-B W/R	58.00	EACH
1080	06613	INLAID PAVEMENT MARKER-B W/R	380.00	EACH
1085	08100	CONCRETE-CLASS A	14.00	CUYD
1090	08150	STEEL REINFORCEMENT	652.00	LB
1095	08904	CRASH CUSHION TY VI CLASS C	4.00	EACH
1100	10020NS	FUEL ADJUSTMENT	22,420.00	DOLL
1105	10030NS	ASPHALT ADJUSTMENT	30,581.00	DOLL
1110	20521NS719	REMOVE BRIDGE END CONNECTOR	8.00	EACH
1115	20550ND	SAWCUT PAVEMENT	9,152.00	LF
1120	20738NS112	TEMP CRASH CUSHION	4.00	EACH
1125	21288ND	CONCRETE MEDIAN BARRIER TYPE 12C2-50 IN	1,296.00	LF
1130	21289ED	LONGITUDINAL EDGE KEY	19,701.00	LF
1135	24814EC	PIPELINE INSPECTION	215.00	LF
1140	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	9.00	TON
1145	40074	ASPHALT LEVELING AND WEDGING	128.00	TON

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1150	00001	DGA BASE	113.00	TON
1155	00003	CRUSHED STONE BASE	5,471.00	TON
1160	00071	CRUSHED AGGREGATE SIZE NO 57	568.00	TON
1165	00078	CRUSHED AGGREGATE SIZE NO 2	10,624.00	TON
1170	00100	ASPHALT SEAL AGGREGATE	90.00	TON
1175	00103	ASPHALT SEAL COAT	12.00	TON
1180	00212	CL2 ASPH BASE 1.00D PG64-22	1,314.00	TON
1185	00301	CL2 ASPH SURF 0.38D PG64-22	591.00	TON
1190	00309	CL2 ASPH SURF 0.50D PG64-22	49.00	TON
1195	00461	CULVERT PIPE-15 IN	620.00	LF
1200	00462	CULVERT PIPE-18 IN	219.00	LF
1205	00521	STORM SEWER PIPE-15 IN	120.00	LF
1210	01310	REMOVE PIPE	12.00	LF
1215	01480	CURB BOX INLET TYPE B	6.00	EACH
1220	01505	DROP BOX INLET TYPE 5B	4.00	EACH
1225	01585	REMOVE DROP BOX INLET	10.00	EACH
1230	01650	JUNCTION BOX	4.00	EACH
1235	01691	FLUME INLET TYPE 2	12.00	EACH
1240	01877	SPECIAL HEADER CURB	2,435.00	LF
1245	01955	CONC MEDIAN BARRIER TYPE 12C1	600.00	LF
1250	01970	CONC MEDIAN BARRIER TYPE 12C TL3	80.00	LF
1255	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	209.00	EACH
1260	01985	DELINEATOR FOR BARRIER - YELLOW	24.00	EACH
1265	02003	RELOCATE TEMP CONC BARRIER	8,000.00	LF
1270	02014	BARRICADE-TYPE III	8.00	EACH
1275	02200	ROADWAY EXCAVATION	5,672.00	CUYD
1280	02242	WATER	124.00	MGAL
1285	02351	GUARDRAIL-STEEL W BEAM-S FACE	18,783.00	LF
1290	02360	GUARDRAIL TERMINAL SECTION NO 1	2.00	EACH
1295	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	12.00	EACH
1300	02367	GUARDRAIL END TREATMENT TYPE 1	26.00	EACH
1305	02369	GUARDRAIL END TREATMENT TYPE 2A	26.00	EACH
1310	02381	REMOVE GUARDRAIL	19,845.00	LF
1315	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	12.00	EACH
1320	02396	REMOVE GUARDRAIL END TREATMENT	103.00	EACH
1325	02483	CHANNEL LINING CLASS II	109.00	TON
1330	02484	CHANNEL LINING CLASS III	70.00	TON
1335	02545	CLEARING AND GRUBBING - - HICKMAN	1.00	LS
1340	02555	CONCRETE-CLASS B	4.00	CUYD
1345	02562	TEMPORARY SIGNS	640.00	SQFT
1350	02585	EDGE KEY	310.00	LF
1355	02602	FABRIC-GEOTEXTILE CLASS 1	10,950.00	SQYD
1360	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	1,038.00	SQYD
1365	02625	REMOVE HEADWALL	6.00	EACH
1370	02650	MAINTAIN & CONTROL TRAFFIC - - HICKMAN	1.00	LS
1375	02653	LANE CLOSURE	10.00	EACH
1380	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
1385	02676	MOBILIZATION FOR MILL & TEXT - - HICKMAN	1.00	LS
1390	02677	ASPHALT PAVE MILLING & TEXTURING	130.00	TON

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1395	02690	SAFELOADING	4.00	CUYD
1400	02696	SHOULDER RUMBLE STRIPS	5,918.00	LF
1405	02701	TEMP SILT FENCE	3,020.00	LF
1410	02703	SILT TRAP TYPE A	6.00	EACH
1415	02704	SILT TRAP TYPE B	4.00	EACH
1420	02705	SILT TRAP TYPE C	4.00	EACH
1425	02706	CLEAN SILT TRAP TYPE A	12.00	EACH
1430	02707	CLEAN SILT TRAP TYPE B	12.00	EACH
1435	02708	CLEAN SILT TRAP TYPE C	12.00	EACH
1440	02709	CLEAN TEMP SILT FENCE	9,060.00	LF
1445	02720	SIDEWALK-4 IN CONCRETE	699.00	SQYD
1450	02726	STAKING - - HICKMAN	1.00	LS
1455	02775	ARROW PANEL	10.00	EACH
1460	03171	CONCRETE BARRIER WALL TYPE 9T	8,000.00	LF
1465	04935	TEMP SIGNAL - - HICKMAN	1.00	LS
1470	05952	TEMP MULCH	10,654.00	SQYD
1475	05953	TEMP SEEDING AND PROTECTION	10,654.00	SQYD
1480	05963	INITIAL FERTILIZER	3.00	TON
1485	05964	MAINTENANCE FERTILIZER	3.00	TON
1490	05985	SEEDING AND PROTECTION	4,695.00	SQYD
1495	05992	AGRICULTURAL LIMESTONE	9.00	TON
1500	06543	PAVE STRIPING-THERMO-6 IN Y	5,918.00	LF
1505	08100	CONCRETE-CLASS A	28.00	CUYD
1510	08150	STEEL REINFORCEMENT	1,364.00	LB
1515	08904	CRASH CUSHION TY VI CLASS C	8.00	EACH
1520	10020NS	FUEL ADJUSTMENT	7,533.00	DOLL
1525	10030NS	ASPHALT ADJUSTMENT	9,602.00	DOLL
1530	20550ND	SAWCUT PAVEMENT	594.00	LF
1535	20738NS112	TEMP CRASH CUSHION	8.00	EACH
1540	21288ND	CONCRETE MEDIAN BARRIER TYPE 12C2-50 IN	2,376.00	LF
1545	21289ED	LONGITUDINAL EDGE KEY	6,240.00	LF
1550	21600EN	SHEET PILING	1,232.00	LF
1555	24814EC	PIPELINE INSPECTION	970.00	LF
1560	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	2.00	TON
1565	40047	SODDING	92.00	SQYD
1570	00001	DGA BASE	253.00	TON
1575	00003	CRUSHED STONE BASE	13,030.00	TON
1580	00071	CRUSHED AGGREGATE SIZE NO 57	1,185.00	TON
1585	00078	CRUSHED AGGREGATE SIZE NO 2	15,325.00	TON
1590	00100	ASPHALT SEAL AGGREGATE	218.00	TON
1595	00103	ASPHALT SEAL COAT	28.00	TON
1600	00212	CL2 ASPH BASE 1.00D PG64-22	3,638.00	TON
1605	00301	CL2 ASPH SURF 0.38D PG64-22	1,388.00	TON
1610	00309	CL2 ASPH SURF 0.50D PG64-22	411.00	TON
1615	00332	CL3 ASPH SURF 0.50A PG76-22	5,360.00	TON
1620	00440	ENTRANCE PIPE-15 IN	42.00	LF
1625	00461	CULVERT PIPE-15 IN	801.00	LF
1630	00462	CULVERT PIPE-18 IN	299.00	LF
1635	00474	CULVERT PIPE-72 IN	44.00	LF
1640	00521	STORM SEWER PIPE-15 IN	379.00	LF

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1645	00522	STORM SEWER PIPE-18 IN	240.00	LF
1650	01202	PIPE CULVERT HEADWALL-15 IN	4.00	EACH
1655	01310	REMOVE PIPE	87.00	LF
1660	01480	CURB BOX INLET TYPE B	10.00	EACH
1665	01505	DROP BOX INLET TYPE 5B	4.00	EACH
1670	01511	DROP BOX INLET TYPE 5D	2.00	EACH
1675	01517	DROP BOX INLET TYPE 5F	1.00	EACH
1680	01585	REMOVE DROP BOX INLET	28.00	EACH
1685	01650	JUNCTION BOX	7.00	EACH
1690	01655	REMOVE JUNCTION BOX	1.00	EACH
1695	01690	FLUME INLET TYPE 1	4.00	EACH
1700	01691	FLUME INLET TYPE 2	66.00	EACH
1705	01877	SPECIAL HEADER CURB	18,944.00	LF
1710	01955	CONC MEDIAN BARRIER TYPE 12C1	900.00	LF
1715	01970	CONC MEDIAN BARRIER TYPE 12C TL3	120.00	LF
1720	01982	DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	523.00	EACH
1725	01985	DELINEATOR FOR BARRIER - YELLOW	37.00	EACH
1730	02003	RELOCATE TEMP CONC BARRIER	12,000.00	LF
1735	02014	BARRICADE-TYPE III	12.00	EACH
1740	02200	ROADWAY EXCAVATION	7,988.00	CUYD
1745	02242	WATER	126.00	MGAL
1750	02351	GUARDRAIL-STEEL W BEAM-S FACE	46,437.00	LF
1755	02352	GUARDRAIL-STEEL W BEAM-D FACE	1,100.00	LF
1760	02360	GUARDRAIL TERMINAL SECTION NO 1	13.00	EACH
1765	02363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	46.00	EACH
1770	02365	CRASH CUSHION TYPE IX-A	8.00	EACH
1775	02367	GUARDRAIL END TREATMENT TYPE 1	52.00	EACH
1780	02369	GUARDRAIL END TREATMENT TYPE 2A	51.00	EACH
1785	02381	REMOVE GUARDRAIL	49,164.00	LF
1790	02387	GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	46.00	EACH
1795	02396	REMOVE GUARDRAIL END TREATMENT	103.00	EACH
1800	02483	CHANNEL LINING CLASS II	327.00	TON
1805	02484	CHANNEL LINING CLASS III	321.00	TON
1810	02545	CLEARING AND GRUBBING - - GRAVES	1.00	LS
1815	02555	CONCRETE-CLASS B	24.00	CUYD
1820	02562	TEMPORARY SIGNS	960.00	SQFT
1825	02602	FABRIC-GEOTEXTILE CLASS 1	16,402.00	SQYD
1830	02607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	1,784.00	SQYD
1835	02625	REMOVE HEADWALL	13.00	EACH
1840	02650	MAINTAIN & CONTROL TRAFFIC - - GRAVES	1.00	LS
1845	02653	LANE CLOSURE	15.00	EACH
1850	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH
1855	02676	MOBILIZATION FOR MILL & TEXT - - GRAVES	1.00	LS
1860	02677	ASPHALT PAVE MILLING & TEXTURING	1,096.00	TON
1865	02690	SAFELOADING	14.00	CUYD
1870	02696	SHOULDER RUMBLE STRIPS	8,880.00	LF
1875	02701	TEMP SILT FENCE	4,181.00	LF
1880	02703	SILT TRAP TYPE A	7.00	EACH
1885	02704	SILT TRAP TYPE B	6.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
1890	02705	SILT TRAP TYPE C	6.00	EACH
1895	02706	CLEAN SILT TRAP TYPE A	18.00	EACH
1900	02707	CLEAN SILT TRAP TYPE B	18.00	EACH
1905	02708	CLEAN SILT TRAP TYPE C	18.00	EACH
1910	02709	CLEAN TEMP SILT FENCE	12,543.00	LF
1915	02720	SIDEWALK-4 IN CONCRETE	1,300.00	SQYD
1920	02726	STAKING - - GRAVES	1.00	LS
1925	02775	ARROW PANEL	14.00	EACH
1930	03171	CONCRETE BARRIER WALL TYPE 9T	12,000.00	LF
1935	04935	TEMP SIGNAL - - GRAVES	1.00	LS
1940	05950	EROSION CONTROL BLANKET	3,651.00	SQYD
1945	05952	TEMP MULCH	15,507.00	SQYD
1950	05953	TEMP SEEDING AND PROTECTION	15,507.00	SQYD
1955	05963	INITIAL FERTILIZER	5.00	TON
1960	05964	MAINTENANCE FERTILIZER	5.00	TON
1965	05985	SEEDING AND PROTECTION	8,275.00	SQYD
1970	05992	AGRICULTURAL LIMESTONE	15.00	TON
1975	06543	PAVE STRIPING-THERMO-6 IN Y	8,880.00	LF
1980	08100	CONCRETE-CLASS A	42.00	CUYD
1985	08150	STEEL REINFORCEMENT	2,248.00	LB
1990	08904	CRASH CUSHION TY VI CLASS C	12.00	EACH
1995	10020NS	FUEL ADJUSTMENT	7,533.00	DOLL
2000	10030NS	ASPHALT ADJUSTMENT	9,602.00	DOLL
2005	20465EC	CLEAN CULVERT - - GRAVES	1.00	LS
2010	20521NS719	REMOVE BRIDGE END CONNECTOR	32.00	EACH
2015	20550ND	SAWCUT PAVEMENT	1,689.00	LF
2020	20738NS112	TEMP CRASH CUSHION	12.00	EACH
2025	21288ND	CONCRETE MEDIAN BARRIER TYPE 12C2-50 IN	4,276.00	LF
2030	21289ED	LONGITUDINAL EDGE KEY	8,040.00	LF
2035	21600EN	SHEET PILING	3,301.00	LF
2040	23274EN11F	TURF REINFORCEMENT MAT 1	2.00	SQYD
2045	23804EC	CONC MED BARRIER BOX INLET-TY 12A1	1.00	EACH
2050	23976EC	CONC MED BARR BOX INLET TY 12A2-50(MOD)	1.00	EACH
2055	24814EC	PIPELINE INSPECTION	1,769.00	LF
2060	24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING	4.00	TON
2065	08435	JACK & SUPPORT BRIDGE SPAN - (038B00055 NB & SB)	1.00	LS
2070	08504	EPOXY SAND SLURRY	219.60	SQYD
2075	08510	REM EPOXY BIT FOREIGN OVERLAY	1,797.00	SQYD
2080	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2085	08534	CONCRETE OVERLAY-LATEX	62.40	CUYD
2090	08549	BLAST CLEANING	2,016.00	SQYD
2095	21969NN	BEARING REPLACEMENT	40.00	EACH
2100	22146EN	CONCRETE PATCHING REPAIR	280.00	SQFT
2105	23032EN	BRIDGE BARRIER RETROFIT	2,155.50	LF
2110	23378EC	CONCRETE SEALING	10,303.20	SQFT
2115	23386EC	JOINT SEAL REPLACEMENT	266.80	LF
2120	24094EC	PARTIAL DEPTH PATCHING	40.30	CUYD
2125	24981EC	BRIDGE CLEANING - 038B00055 NB & SB	1.00	LS
2130	08435	JACK & SUPPORT BRIDGE SPAN - (042B00170 NB & SB)	1.00	LS
2135	21969NN	BEARING REPLACEMENT	16.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
2140	22146EN	CONCRETE PATCHING REPAIR	80.00	SQFT
2145	23032EN	BRIDGE BARRIER RETROFIT	1,329.60	LF
2150	23378EC	CONCRETE SEALING	6,607.80	SQFT
2155	23386EC	JOINT SEAL REPLACEMENT	127.80	LF
2160	24094EC	PARTIAL DEPTH PATCHING	24.40	CUYD
2165	24981EC	BRIDGE CLEANING - 042B00170 NB & SB	1.00	LS
2170	03298	EXPAN JOINT REPLACE 4 IN	76.00	LF
2175	03299	ARMORED EDGE FOR CONCRETE	76.00	LF
2180	08435	JACK & SUPPORT BRIDGE SPAN - (042B00173 NB & SB)	1.00	LS
2185	08504	EPOXY SAND SLURRY	51.80	SQYD
2190	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2195	08534	CONCRETE OVERLAY-LATEX	18.60	CUYD
2200	08549	BLAST CLEANING	588.00	SQYD
2205	08551	MACHINE PREP OF SLAB	537.00	SQYD
2210	21969NN	BEARING REPLACEMENT	20.00	EACH
2215	22146EN	CONCRETE PATCHING REPAIR	80.00	SQFT
2220	23032EN	BRIDGE BARRIER RETROFIT	597.40	LF
2225	23378EC	CONCRETE SEALING	2,664.00	SQFT
2230	23386EC	JOINT SEAL REPLACEMENT	76.00	LF
2235	24094EC	PARTIAL DEPTH PATCHING	12.60	CUYD
2240	24981EC	BRIDGE CLEANING - 042B00173 NB & SB	1.00	LS
2245	08435	JACK & SUPPORT BRIDGE SPAN - (042B00176 NB & SB)	1.00	LS
2250	21969NN	BEARING REPLACEMENT	20.00	EACH
2255	22146EN	CONCRETE PATCHING REPAIR	80.00	SQFT
2260	23032EN	BRIDGE BARRIER RETROFIT	933.60	LF
2265	23378EC	CONCRETE SEALING	4,163.40	SQFT
2270	23386EC	JOINT SEAL REPLACEMENT	152.00	LF
2275	24094EC	PARTIAL DEPTH PATCHING	20.80	CUYD
2280	24981EC	BRIDGE CLEANING - 042B00176 NB & SB	1.00	LS
2285	08435	JACK & SUPPORT BRIDGE SPAN - (042B00177 NB & SB)	1.00	LS
2290	21969NN	BEARING REPLACEMENT	20.00	EACH
2295	22146EN	CONCRETE PATCHING REPAIR	80.00	SQFT
2300	23032EN	BRIDGE BARRIER RETROFIT	945.00	LF
2305	23378EC	CONCRETE SEALING	4,213.80	SQFT
2310	23386EC	JOINT SEAL REPLACEMENT	215.00	LF
2315	24094EC	PARTIAL DEPTH PATCHING	22.30	CUYD
2320	24981EC	BRIDGE CLEANING - 042B00177 NB & SB	1.00	LS
2325	03298	EXPAN JOINT REPLACE 4 IN	148.40	LF
2330	03299	ARMORED EDGE FOR CONCRETE	124.40	LF
2335	08504	EPOXY SAND SLURRY	149.80	SQYD
2340	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2345	08534	CONCRETE OVERLAY-LATEX	48.40	CUYD
2350	08549	BLAST CLEANING	1,542.00	SQYD
2355	08551	MACHINE PREP OF SLAB	1,393.00	SQYD
2360	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2365	24094EC	PARTIAL DEPTH PATCHING	26.10	CUYD
2370	24522EC	REPAIR - ALUMINUM RAILING	1.00	LS
2375	24522EC	REPAIR - EROSION AT ABUTMENTS	1.00	LS
2380	24981EC	BRIDGE CLEANING - 038B00012	1.00	LS
2385	03298	EXPAN JOINT REPLACE 4 IN	100.20	LF

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
2390	08526	CONC CLASS M FULL DEPTH PATCH	2.00	CUYD
2395	22146EN	CONCRETE PATCHING REPAIR	8.00	SQFT
2400	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2405	24094EC	PARTIAL DEPTH PATCHING	9.80	CUYD
2410	24981EC	BRIDGE CLEANING - 038B00015	1.00	LS
2415	03298	EXPAN JOINT REPLACE 4 IN	60.00	LF
2420	08526	CONC CLASS M FULL DEPTH PATCH	2.00	CUYD
2425	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2430	24094EC	PARTIAL DEPTH PATCHING	8.10	CUYD
2435	24981EC	BRIDGE CLEANING - 053B00068	1.00	LS
2440	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2445	24094EC	PARTIAL DEPTH PATCHING	8.20	CUYD
2450	24981EC	BRIDGE CLEANING - 053B00050	1.00	LS
2455	03298	EXPAN JOINT REPLACE 4 IN	52.60	LF
2460	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2465	24094EC	PARTIAL DEPTH PATCHING	7.00	CUYD
2470	24981EC	BRIDGE CLEANING - 053B00056	1.00	LS
2475	03298	EXPAN JOINT REPLACE 4 IN	71.00	LF
2480	03299	ARMORED EDGE FOR CONCRETE	71.00	LF
2485	08504	EPOXY SAND SLURRY	196.80	SQYD
2490	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2495	08534	CONCRETE OVERLAY-LATEX	26.70	CUYD
2500	08549	BLAST CLEANING	965.00	SQYD
2505	08551	MACHINE PREP OF SLAB	769.00	SQYD
2510	22146EN	CONCRETE PATCHING REPAIR	75.00	SQFT
2515	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2520	24094EC	PARTIAL DEPTH PATCHING	13.30	CUYD
2525	24981EC	BRIDGE CLEANING - 053B00102	1.00	LS
2530	03298	EXPAN JOINT REPLACE 4 IN	55.00	LF
2535	03299	ARMORED EDGE FOR CONCRETE	55.00	LF
2540	08504	EPOXY SAND SLURRY	155.70	SQYD
2545	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2550	08534	CONCRETE OVERLAY-LATEX	21.10	CUYD
2555	08549	BLAST CLEANING	763.00	SQYD
2560	08551	MACHINE PREP OF SLAB	607.00	SQYD
2565	22146EN	CONCRETE PATCHING REPAIR	12.00	SQFT
2570	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2575	24094EC	PARTIAL DEPTH PATCHING	8.40	CUYD
2580	24981EC	BRIDGE CLEANING - 042B00171	1.00	LS
2585	03298	EXPAN JOINT REPLACE 4 IN	63.50	LF
2590	22146EN	CONCRETE PATCHING REPAIR	5.00	SQFT
2595	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2600	24094EC	PARTIAL DEPTH PATCHING	8.20	CUYD
2605	03298	EXPAN JOINT REPLACE 4 IN	58.80	LF
2610	03299	ARMORED EDGE FOR CONCRETE	58.80	LF
2615	22146EN	CONCRETE PATCHING REPAIR	64.00	SQFT
2620	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2625	24094EC	PARTIAL DEPTH PATCHING	9.10	CUYD
2630	03298	EXPAN JOINT REPLACE 4 IN	52.90	LF
2635	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
2640	24094EC	PARTIAL DEPTH PATCHING	6.90	CUYD
2645	24981EC	BRIDGE CLEANING - 042B00175	1.00	LS
2650	03298	EXPAN JOINT REPLACE 4 IN	64.80	LF
2655	03299	ARMORED EDGE FOR CONCRETE	64.80	LF
2660	08504	EPOXY SAND SLURRY	170.40	SQYD
2665	08526	CONC CLASS M FULL DEPTH PATCH	5.00	CUYD
2670	08534	CONCRETE OVERLAY-LATEX	24.80	CUYD
2675	08549	BLAST CLEANING	886.00	SQYD
2680	08551	MACHINE PREP OF SLAB	716.00	SQYD
2685	22146EN	CONCRETE PATCHING REPAIR	20.00	SQFT
2690	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2695	24094EC	PARTIAL DEPTH PATCHING	9.90	CUYD
2700	03298	EXPAN JOINT REPLACE 4 IN	54.40	LF
2705	23949EC	BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS
2710	24094EC	PARTIAL DEPTH PATCHING	7.30	CUYD
2715	24981EC	BRIDGE CLEANING - 042B00128	1.00	LS
2720	06400	GMSS GALV STEEL TYPE A	395.00	LB
2725	06405	SBM ALUMINUM PANEL SIGNS	1,862.00	SQFT
2730	06406	SBM ALUM SHEET SIGNS .080 IN	253.00	SQFT
2735	06407	SBM ALUM SHEET SIGNS .125 IN	457.00	SQFT
2740	06410	STEEL POST TYPE 1	610.00	LF
2745	06411	STEEL POST TYPE 2	40.00	LF
2750	06451	REMOVE SIGN SUPPORT BEAM	12.00	EACH
2755	06490	CLASS A CONCRETE FOR SIGNS	37.00	CUYD
2760	20419ND	ROADWAY CROSS SECTION	6.00	EACH
2765	21373ND	REMOVE SIGN	35.00	EACH
2770	21596ND	GMSS TYPE D	22.00	EACH
2775	24631EC	BARCODE SIGN INVENTORY	122.00	EACH
2780	06400	GMSS GALV STEEL TYPE A	144.00	LB
2785	06405	SBM ALUMINUM PANEL SIGNS	448.00	SQFT
2790	06406	SBM ALUM SHEET SIGNS .080 IN	20.00	SQFT
2795	06411	STEEL POST TYPE 2	100.00	LF
2800	06451	REMOVE SIGN SUPPORT BEAM	4.00	EACH
2805	06490	CLASS A CONCRETE FOR SIGNS	11.00	CUYD
2810	20419ND	ROADWAY CROSS SECTION	2.00	EACH
2815	21373ND	REMOVE SIGN	12.00	EACH
2820	24631EC	BARCODE SIGN INVENTORY	10.00	EACH
2825	06400	GMSS GALV STEEL TYPE A	347.00	LB
2830	06405	SBM ALUMINUM PANEL SIGNS	1,528.00	SQFT
2835	06406	SBM ALUM SHEET SIGNS .080 IN	470.00	SQFT
2840	06407	SBM ALUM SHEET SIGNS .125 IN	192.00	SQFT
2845	06410	STEEL POST TYPE 1	180.00	LF
2850	06411	STEEL POST TYPE 2	240.00	LF
2855	06451	REMOVE SIGN SUPPORT BEAM	12.00	EACH
2860	06490	CLASS A CONCRETE FOR SIGNS	33.00	CUYD
2865	20418ED	REMOVE & RELOCATE SIGNS	2.00	EACH
2870	20419ND	ROADWAY CROSS SECTION	6.00	EACH
2875	21373ND	REMOVE SIGN	35.00	EACH
2880	21596ND	GMSS TYPE D	12.00	EACH
2885	24631EC	BARCODE SIGN INVENTORY	124.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
2890	04714	POLE 120 FT MTG HT HIGH MAST	2.00	EACH
2895	04797	CONDUIT-3 IN	946.00	LF
2900	04800	MARKER	7.00	EACH
2905	04820	TRENCHING AND BACKFILLING	3,719.00	LF
2910	04940	REMOVE LIGHTING - KY307	1.00	LS
2915	04940	REMOVE LIGHTING - US51	1.00	LS
2920	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	7.00	EACH
2925	20410ED	MAINTAIN LIGHTING - KY307	1.00	LS
2930	20410ED	MAINTAIN LIGHTING - US51	1.00	LS
2935	21543EN	BORE AND JACK CONDUIT	946.00	LF
2940	23161EN	POLE BASE-HIGH MAST	36.00	CUYD
2945	24749EC	HIGH MAST LED LUMINAIRE	77.00	EACH
2950	24851EC	CABLE-NO. 10/3C DUCTED	4,380.00	LF
2955	04714	POLE 120 FT MTG HT HIGH MAST	9.00	EACH
2960	04761	LIGHTING CONTROL EQUIPMENT	1.00	EACH
2965	04797	CONDUIT-3 IN	1,136.00	LF
2970	04800	MARKER	20.00	EACH
2975	04820	TRENCHING AND BACKFILLING	6,812.00	LF
2980	04940	REMOVE LIGHTING - KY339	1.00	LS
2985	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	4.00	EACH
2990	20392NS835	ELECTRICAL JUNCTION BOX TYPE C	8.00	EACH
2995	20410ED	MAINTAIN LIGHTING - KY339	1.00	LS
3000	21543EN	BORE AND JACK CONDUIT	1,136.00	LF
3005	23161EN	POLE BASE-HIGH MAST	84.80	CUYD
3010	24749EC	HIGH MAST LED LUMINAIRE	52.00	EACH
3015	24851EC	CABLE-NO. 10/3C DUCTED	13,564.00	LF
3020	04797	CONDUIT-3 IN	120.00	LF
3025	04820	TRENCHING AND BACKFILLING	1,140.00	LF
3030	20257NC	SITE PREPARATION - KY307	1.00	LS
3035	20257NC	SITE PREPARATION - US51	1.00	LS
3040	21058ND	WINCH LOWERING TOOL	2.00	EACH
3045	21066ND	MODEL 336 ENCLOSURE	2.00	EACH
3050	21071ND	DATA SURGE DEVICE	2.00	EACH
3055	21079ND	TRANSFORMER 480/120	2.00	EACH
3060	21489ND	RACK MOUNTED UPS	2.00	EACH
3065	21543EN	BORE AND JACK CONDUIT	120.00	LF
3070	22403NN	WEB CAMERA ASSEMBLY	2.00	EACH
3075	23150NN	COMMUNICATION CABLE	120.00	LF
3080	23151NN	POLE WITH LOWERING DEVICE	2.00	EACH
3085	23157EN	TRAFFIC SIGNAL POLE BASE	10.00	CUYD
3090	23944EC	ADVANCED GROUNDING SYSTEM	2.00	EACH
3095	24851EC	CABLE-NO. 10/3C DUCTED	1,260.00	LF
3100	04797	CONDUIT-3 IN	135.00	LF
3105	04800	MARKER	1.00	EACH
3110	04820	TRENCHING AND BACKFILLING	675.00	LF
3115	20257NC	SITE PREPARATION - KY339	1.00	LS
3120	20391NS835	ELECTRICAL JUNCTION BOX TYPE A	2.00	EACH
3125	21058ND	WINCH LOWERING TOOL	1.00	EACH
3130	21066ND	MODEL 336 ENCLOSURE	1.00	EACH
3135	21071ND	DATA SURGE DEVICE	1.00	EACH

MATERIAL SUMMARY

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
3140	21079ND	TRANSFORMER 480/120	1.00	EACH
3145	21489ND	RACK MOUNTED UPS	1.00	EACH
3150	21543EN	BORE AND JACK CONDUIT	135.00	LF
3155	22403NN	WEB CAMERA ASSEMBLY	1.00	EACH
3160	23150NN	COMMUNICATION CABLE	60.00	LF
3165	23151NN	POLE WITH LOWERING DEVICE	1.00	EACH
3170	23157EN	TRAFFIC SIGNAL POLE BASE	5.00	CUYD
3175	23944EC	ADVANCED GROUNDING SYSTEM	1.00	EACH
3180	24851EC	CABLE-NO. 10/3C DUCTED	810.00	LF
3185	02568	MOBILIZATION	1.00	LS
3190	02569	DEMOBILIZATION	1.00	LS

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

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

SUPPLEMENTAL SPECIFICATIONS

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

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

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

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

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

2.0 MATERIALS.

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

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

2.2 Sign and Controls. All signs must:

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

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

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

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

2.3 Power.

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

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

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

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

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

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

11
the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

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

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

Effective June 15, 2012

SPECIAL NOTE FOR TURF REINFORCING MAT

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

2.0 MATERIALS.

2.1 Turf Reinforcement Mat (TRM). Use a Turf Reinforcement Mat defined as permanent rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh and/or other elements, processed into a three-dimensional matrix of sufficient thickness and from the Department's List of Approved Materials. Mats must be 100% UV stabilized materials. For TRMs containing degradable components, all physical property values must be obtained on the non-degradable portion of the matting exclusively. Ensure product labels clearly show the manufacturer or supplier name, style name, and roll number. Ensure labeling, shipment and storage follows ASTM D-4873. The Department will require manufacturer to provide TRMs that are machine constructed web of mechanically or melt bonded nondegradable fibers entangled to form a three dimensional matrix. The Department will require all long term performance property values in table below to be based on non degradable portion of the matting alone. Approved methods include polymer welding, thermal or polymer fusion, or placement of fibers between two high strength biaxially oriented nets mechanically bound by parallel stitching with polyolefin thread. Ensure that mats designated in the plans as Type 4 mats, are not to be manufactured from discontinuous or loosely held together by stitching or glued netting or composites. Type 4 mats shall be composed of geosynthetic matrix that exhibits a very high interlock and reinforcement capacities with both soil and root systems and with high tensile modulus. The Department will require manufacturer to use materials chemically and biologically inert to the natural soil environments conditions. Ensure the blanket is smolder resistant without the use of chemical additives. When stored, maintain the protective wrapping and elevate the mats off the ground to protect them from damage. The Department will not specify these materials for use in heavily acidic coal seam areas or other areas with soil problems that would severally limit vegetation growth.

- A) Dimensions. Ensure TRMs are furnished in strips with a minimum width of 4 feet and length of 50 feet.
- B) Weight. Ensure that all mat types have a minimum mass per unit area of 7 ounces per square yard according to ASTM D 6566.
- C) Performance Testing: The Department will require AASHTO's NTPEP index testing. The Department will also require the manufacturer to perform internal MARV testing at a Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP) accredited laboratory for tensile strength, tensile elongation, mass per unit area, and thickness once every 24,000 yds of production or whatever rate is required to ensure 97.7% confidence under ASTM D4439& 4354. The Department will require Full scale testing for slope and channel applications shear stress shall be done under ASTM D 6459, ASTM D 6460-07 procedures.

2.2 Classifications

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

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

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

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

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

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

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

2.3 Quality Assurance Sampling, Testing, and Acceptance

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

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

2.4 Fasteners. When the mat manufacturer does not specify a specific fastener, use steel wire U-shaped staples with a minimum diameter of 0.09 inches (11 gauge), a minimum width of one inch and a minimum length of 12 inches. Use a heavier gauge when working in rocky or clay soils and longer lengths in sandy soils as directed by Engineer or Manufacturer’s Representative. Provide staples with colored tops when requested by the Engineer.

3.0 CONSTRUCTION. When requested by the Engineer, provide a Manufacturer’s Representative on-site to oversee and approve the initial installation of the mat. When requested by the Engineer, provide a letter from the Manufacturer approving the installation. When there is a conflict between the Department’s criteria and the Manufacturer’s criteria, construct using the more restrictive. The Engineer and Manufacturer’s Representative must approve all alternate installation methods prior to execution. Construct according to the Manufacturer’s recommendations and the following as minimum installation technique:

3.1 Site Preparation. Grade areas to be treated with matting and compact. Remove large rocks, soil clods, vegetation, roots, and other sharp objects that could keep the mat from intimate contact with subgrade. Prepare seedbed by loosening the top 2 to 3 inch of soil.

3.2 Installation. Install mats according to Standard Drawing Sepias “Turf Mat Channel Installation” and “Turf Mat Slope Installation.” Install mats at the specified elevation and alignment. Anchor the mats with staples with a minimum length of 12 inches. Use longer anchors for installations in sandy, loose, or wet soils as directed by the Engineer or Manufacturer’s Representative. The mat should be in direct contact with the soil surface.

4.0 MEASUREMENT. The Department will measure the quantity of Turf Reinforcement Mat by the square yard of surface covered. The Department will not measure preparation of the bed, providing a Manufacturer’s Representative, topsoil, or seeding for payment and will consider them incidental to the Turf Reinforcement Mat. The Department will not measure any reworking of slopes or channels for payment as it is considered corrective work and incidental to the Turf Reinforcement Mat. Seeding and protection will be an incidental item.

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

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

June 15, 2012

SPECIAL NOTE FOR BARCODE LABEL ON PERMANENT SIGNS

1.0 DESCRIPTION. Install barcode label on sheeting signs. Section references herein are to the Department’s Standard Specifications for Road and Bridge Construction, current edition.

2.0 MATERIALS. The Department will provide the Contractor with a 2 inch x 1 inch foil barcode label for each permanent sheeting sign. A unique number will be assigned to each barcode label.

The Contractor shall contact the Operations and Pavement Management Branch in the Division of Maintenance at (502) 564-4556 to obtain the barcode labels.

3.0 CONSTRUCTION. Apply foil barcode label in the lower right quadrant of the sign back. Signs where the bottom edge is not parallel to the ground, the lowest corner of the sign shall serve as the location to place the barcode label. The barcode label shall be placed no less than one-inch and no more than three inches from any edge of the sign. The barcode must be placed so that the sign post does not cover the barcode label.

Barcodes shall be applied in an indoor setting with a minimum air temperature of 50°F or higher. Prior to application of the barcode label, the back of the sign must be clean and free of dust, oil, etc. If the sign is not clean, an alcohol swab shall be used to clean the area. The area must be allowed to dry prior to placement of the barcode label.

Data for each sign shall include the barcode number, MUTCD reference number, sheeting manufacturer, sheeting type, manufacture date, color of primary reflective surface, installation date, latitude and longitude using the North American Datum of 1983 (NAD83) or the State Plane Coordinates using an x and y ordinate of the installed location.

Data should be provided electronically on the TC 71-229 Sign Details Information and TC 71-230 Sign Assembly Information forms. The Contractor may choose to present the data in a different format provided that the information submitted to the Department is equivalent to the information required on the Department TC forms. The forms must be submitted in electronic format regardless of which type of form is used. The Department will not accept PDF or handwritten forms. These completed forms must be submitted to the Department prior to final inspection of the signs. The Department will not issue formal acceptance for the project until the TC 71-229 and TC-230 electronic forms are completed for all signs and sign assemblies on the project.

4.0 MEASUREMENT. The Department will measure all work required for the installation of the barcode label and all work associated with completion and submission of the sign inventory data (TC 71-229 and TC 71-230).

The installation of the permanent sign will be measured in accordance to Section 715.

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

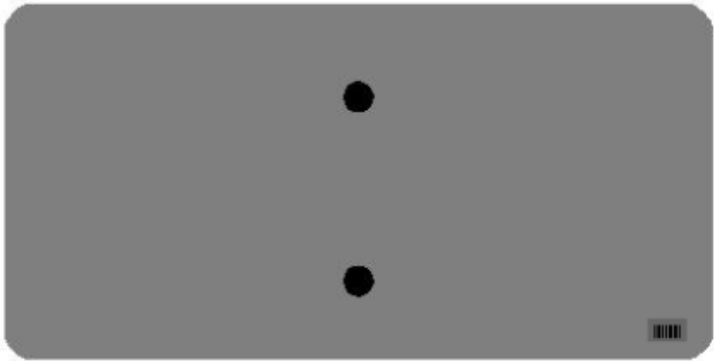
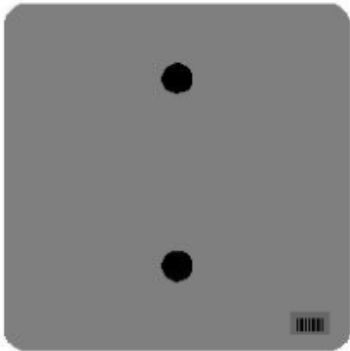
<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24631EC	Barcode Sign Inventory	Each

The Department will not make payment for this item until all barcodes are installed and sign inventory is complete on every permanent sign installed on the project. The Department will make payment for installation of the permanent sign in accordance to Section 715. The Department will consider payment as full compensation for all work required under this special note.

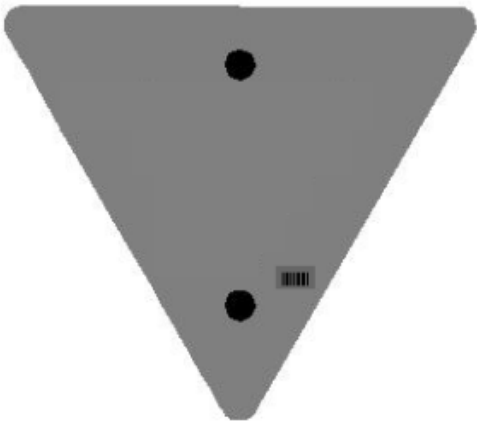
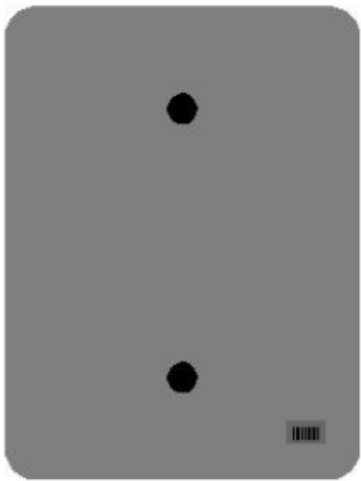
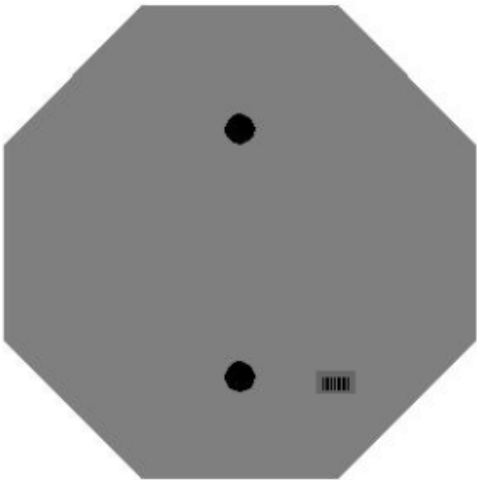
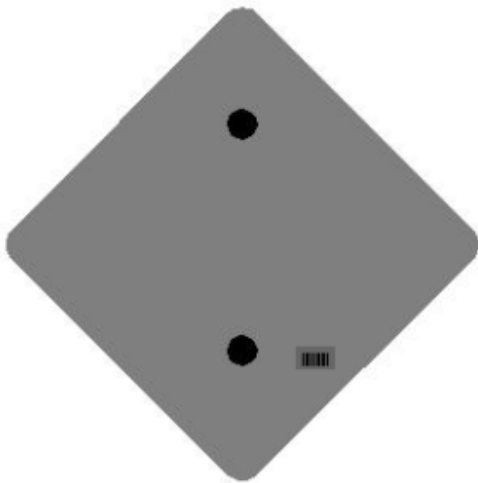
One Sign Post



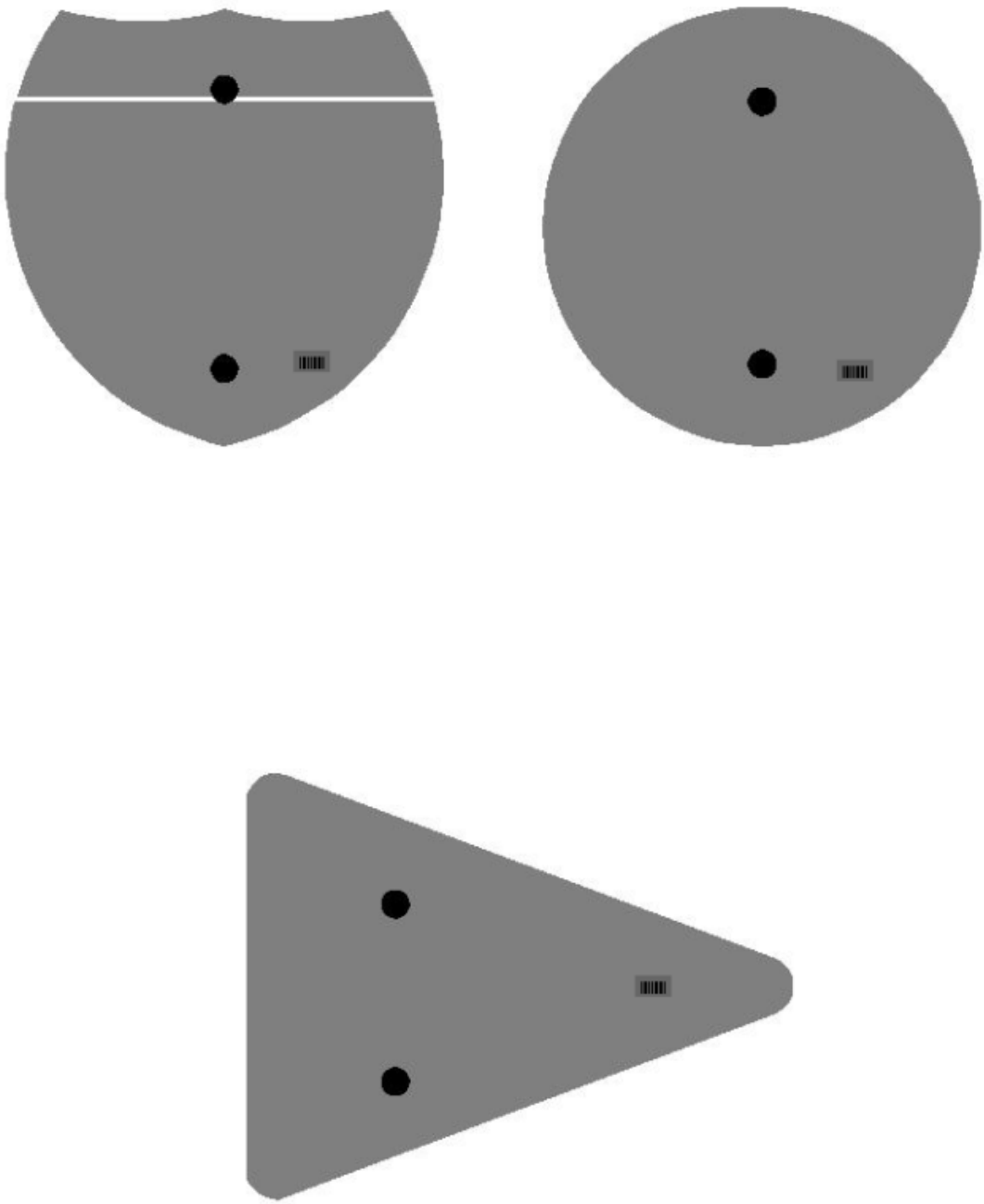
↑
2" Wide Post



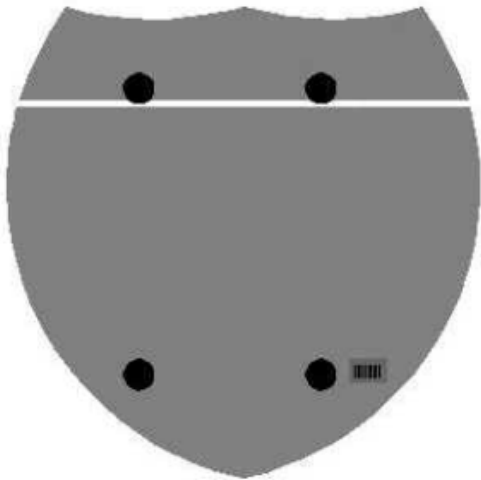
One Sign Post



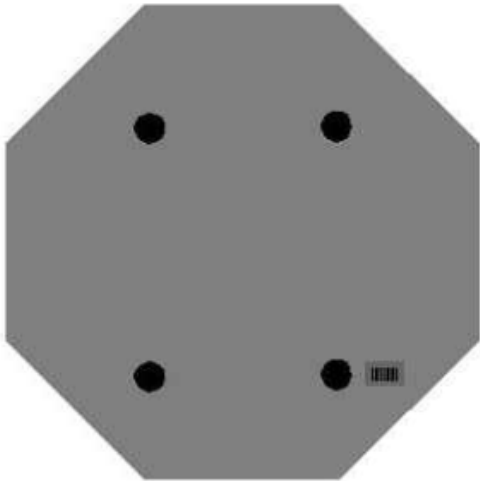
One Sign Post



Double Sign Post

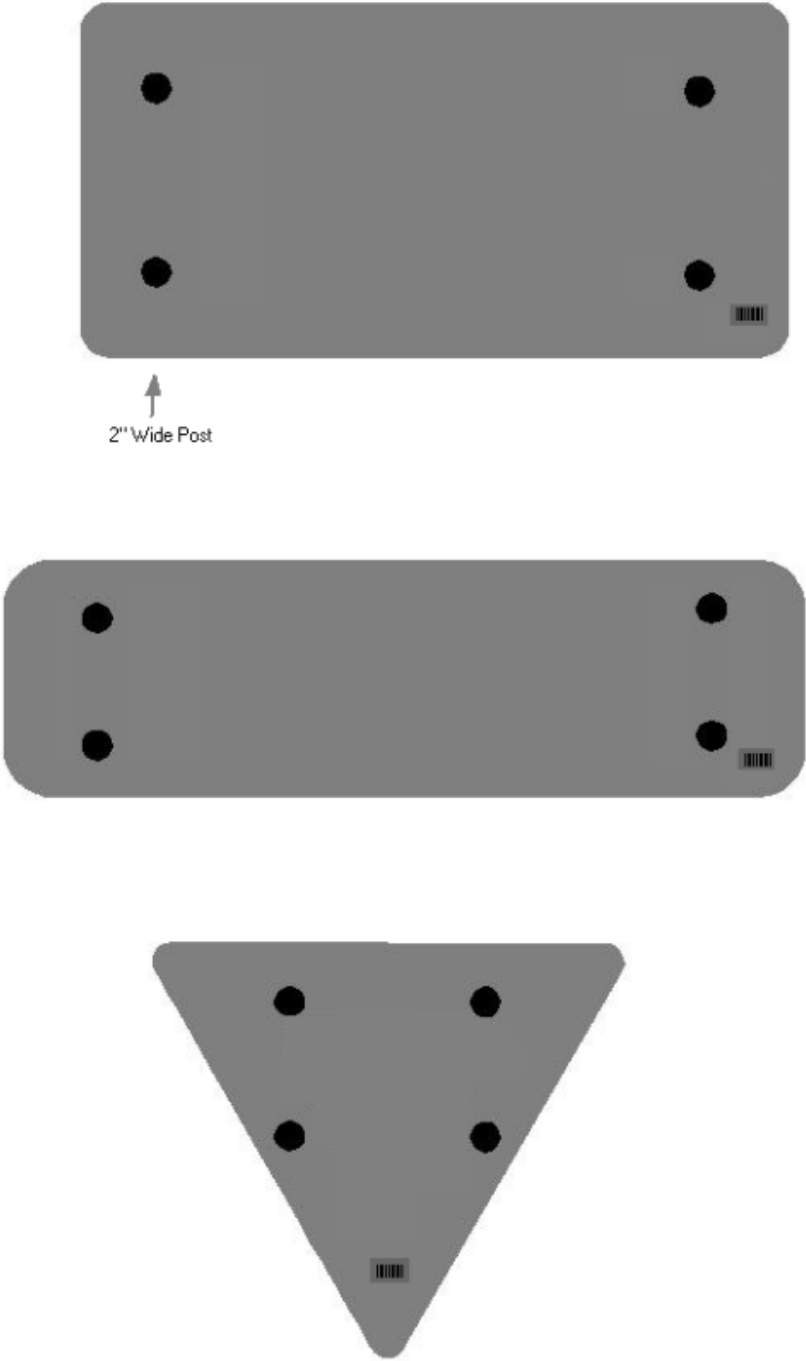


Interstate
Shield



48" Stop

2 Post Signs



SPECIAL NOTE FOR LONGITUDINAL PAVEMENT JOINT ADHESIVE

1. DESCRIPTION. This specification covers the requirements and practices for applying an asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement. Apply the adhesive to the face of longitudinal joint between driving lanes for the first lane paved. Then, place and compact the adjacent lane against the treated face to produce a strong, durable, waterproof longitudinal joint.
2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Joint Adhesive. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide an adhesive conforming to the following requirements:

Property	Specification	Test Procedure
Viscosity, 400 ° F (Pa·s)	4.0 – 10.0	ASTM D 4402
Cone Penetration, 77 ° F	60 – 100	ASTM D 5329
Flow, 140 ° F (mm)	5.0 max.	ASTM D 5329
Resilience, 77 ° F (%)	30 min.	ASTM D 5329
Ductility, 77 ° F (cm)	30.0 min.	ASTM D 113
Ductility, 39 ° F (cm)	30.0 min.	ASTM D 113
Tensile Adhesion, 77 ° F (%)	500 min.	ASTM D 5329, Type II
Softening Point, ° F	171 min.	AASHTO T 53
Asphalt Compatibility	Pass	ASTM D 5329

Ensure the temperature of the pavement joint adhesive is between 380 and 410 °F when the material is extruded in a 0.125-inch-thick band over the entire face of the longitudinal joint.

2.2. Equipment.

2.2.1 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with any needed agitation and recirculating systems.

2.2.2 Applicator System. Provide a pressure-feed-wand applicator system with an applicator shoe attached.

2.3 Personnel. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air.

11N

Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face.

3.2 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40 ° F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the cold joint. Apply the adhesive in a continuous band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Ensure the edge of the extruded adhesive material is flush with the surface of the pavement. Then, place and compact the adjacent lane against the joint face. Remove any excessive material extruded from the joint after compaction (a small line of material may remain).

3.3 Pavement Joint Adhesive Certification. Furnish the joint adhesive's certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a random sample of pavement joint adhesive from each manufacturer's lot of material. Extrude two 5 lb. samples of the heated material and forward the sample to the Division of Materials for testing. Reynolds oven bags, turkey size, placed inside small cardboard boxes or cement cylinder molds have been found suitable. Ensure the product temperature is 400°F or below at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of Pavement Joint Adhesive in linear feet. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of Pavement Joint Adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the Pavement Joint Adhesive.
5. PAYMENT. The Department will pay for the Pavement Joint Adhesive at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

11N

Pavement Joint Adhesive Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Joint Adhesive Referenced in Subsection 2.1.1						
Viscosity, 400 ° F (Pa•s)			3.0-3.4	2.5-2.9	2.0-2.4	≤1.9
ASTM D 3236	4.0-10.0	3.5-10.5	10.6-11.0	11.1-11.5	11.6-12.0	≥ 12.1
Cone Penetration, 77 ° F			54-56	51-53	48-50	≤ 47
ASTM D 5329	60-100	57-103	104-106	107-109	110-112	≥ 113
Flow, 140 ° F (mm) ASTM D 5329	≤ 5.0	≤ 5.5	5.6-6.0	6.1-6.5	6.6-7.0	≥ 7.1
Resilience, 77 ° F (%) ASTM D 5329	≥ 30	≥ 28	26-27	24-25	22-23	≤ 21
Tensile Adhesion, 77 ° F (%) ASTM D 5329	≥ 500	≥ 490	480-489	470-479	460-469	≤ 459
Softening Point, ° F AASHTO T 53	≥ 171	≥ 169	166-168	163-165	160-162	≤ 159
Ductility, 77 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9
Ductility, 39 ° F (cm) ASTM D 113	≥ 30.0	≥ 29.0	28.0-28.9	27.0-27.9	26.0-26.9	≤ 25.9

Code
20071EC

Pay Item
Joint Adhesive

Pay Unit
Linear Foot

May 7, 2014

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

FHWA-1273 -- Revised July 5, 2022

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

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

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

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

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages; and/or
 - (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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

1. Minimum wages (29 CFR 5.5)

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding (29 CFR 5.5)

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics,

including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records (29 CFR 5.5)

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees (29 CFR 5.5)

a. Apprentices (programs of the USDOL).

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

Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

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

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

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

b. Trainees (programs of the USDOL).

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

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

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the

corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

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

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

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor

set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility (29 CFR 5.5)

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1 of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 of this section. 29 CFR 5.5.

* \$27 as of January 23, 2019 (See 84 FR 213-01, 218) as may be adjusted annually by the Department of Labor; pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990).

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section. 29 CFR 5.5.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or

equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

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

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance

with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

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

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.326.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders

or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.326.

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

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant

who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

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

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is

submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(b) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(c) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier

subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

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

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

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

**KENTUCKY TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS**

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

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

**KRS CHAPTER 344
EFFECTIVE JUNE 16, 1972**

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

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

Standard Title VI/Non-Discrimination Assurances

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration** to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration** may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration** may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Standard Title VI/Non-Discrimination Statutes and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

EXECUTIVE BRANCH CODE OF ETHICS

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

KRS 11A.040 (7) provides:

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

KRS 11A.040 (9) states:

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

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

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

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

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

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

"General Decision Number: KY20220040 06/10/2022

Superseded General Decision Number: KY20210040

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).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	01/14/2022
2	02/11/2022
3	02/18/2022
4	02/25/2022
5	05/06/2022
6	06/10/2022

BRIN0004-002 06/01/2021

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.....	\$ 30.50	15.16
Butler, Edmonson, Hopkins, Muhlenberg, and Ohio Counties.....	\$ 26.80	12.38
Daviess, Hancock, Henderson, McLean, Union, and Webster Counties.....	\$ 29.57	14.75

BRTN0004-005 06/01/2021

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

	Rates	Fringes
BRICKLAYER.....	\$ 29.75	14.75

CARP0357-002 04/01/2022

	Rates	Fringes
CARPENTER.....	\$ 30.84	22.15
DIVER.....	\$ 46.64	22.15
PILEDRIVERMAN.....	\$ 31.09	22.15

ELEC0369-006 05/31/2021

BUTLER, EDMONSON, LOGAN, TODD & WARREN COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 33.85	18.72

ELEC0429-001 01/01/2020

ALLEN & SIMPSON COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 27.72	13.48

ELEC0816-002 06/01/2021		

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.....	\$ 34.48	26.5%+7.25
Cable spicers receive \$.25 per hour additional.		

ELEC1701-003 06/01/2021		

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

	Rates	Fringes
ELECTRICIAN.....	\$ 33.30	28.8%+\$7.25
Cable spicers receive \$.25 per hour additional.		

ELEC1925-002 01/01/2022		

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

	Rates	Fringes
CABLE SPLICER.....	\$ 26.85	14.81
ELECTRICIAN.....	\$ 26.35	14.79

ENGI0181-017 07/01/2021		

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 34.80	17.85
GROUP 2.....	\$ 31.94	17.85
GROUP 3.....	\$ 32.39	17.85
GROUP 4.....	\$ 31.62	17.85

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 Concrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points;& Whirley Oiler

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

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

CRANES - with booms 150 ft. & Over (Including JIB), and where the length of the boom in combination with the length of the piling 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 06/01/2022

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
IRONWORKER		
Structural; Ornamental;		
Reinforcing; Precast		
Concrete Erectors.....	\$ 31.79	24.30

IRON0103-004 08/01/2021

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:.....	\$ 30.00	25.29

IRON0492-003 05/01/2021

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:.....	\$ 30.35	15.36

IRON0782-006 08/01/2021

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.....	\$ 30.83	25.52
All Other Work.....	\$ 29.24	23.22

LAB00189-005 07/01/2021

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

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.51	16.22
GROUP 2.....	\$ 23.76	16.22
GROUP 3.....	\$ 23.81	16.22
GROUP 4.....	\$ 24.41	16.22

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; Bushhammer; 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

LAB00189-006 07/01/2021

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

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 23.51	16.22
GROUP 2.....	\$ 23.76	16.22
GROUP 3.....	\$ 23.81	16.22
GROUP 4.....	\$ 24.41	16.22

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; Bushhammer; 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

LAB00561-001 07/01/2021

CRITTENDEN, HENDERSON, UNION & WEBSTER COUNTIES

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 24.01	16.60
GROUP 2.....	\$ 24.26	16.60
GROUP 3.....	\$ 24.31	16.60
GROUP 4.....	\$ 24.91	16.60

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; Bushhammer; 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

PAIN0032-002 09/01/2020

BALLARD COUNTY

	Rates	Fringes
Painters:		
Bridges.....	\$ 35.01	17.93
All Other Work.....	\$ 32.71	17.93
Spray, Blast, Steam, High & Hazardous (Including Lead Abatement) and All Epoxy - \$1.00 Premium		

PAIN0118-003 06/01/2014

EDMONSON COUNTY:

	Rates	Fringes
Painters:		
Brush & Roller.....	\$ 18.50	11.97
Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning.....	\$ 19.50	11.97

PAIN0156-006 04/01/2022

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

	Rates	Fringes
Painters:		
BRIDGES		
GROUP 1.....	\$ 28.45	18.98
GROUP 3.....	\$ 29.45	18.98
GROUP 4.....	\$ 30.70	18.98
ALL OTHER WORK:		
GROUP 1.....	\$ 27.30	18.98
GROUP 2.....	\$ 27.55	18.98
GROUP 3.....	\$ 28.30	18.98
GROUP 4.....	\$ 29.55	18.98

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

PAIN0500-002 06/01/2020

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

	Rates	Fringes
Painters:		
Bridges.....	\$ 27.75	15.10
All Other Work.....	\$ 21.50	15.10

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 07/01/2021

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

	Rates	Fringes
Plumber; Steamfitter.....	\$ 37.16	19.03

PLUM0502-004 08/01/2021

ALLEN, BUTLER, EDMONSON, SIMPSON & WARREN

	Rates	Fringes
Plumber; Steamfitter.....	\$ 38.07	20.78

PLUM0633-002 07/01/2021		

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

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 33.17	19.30

TEAM0089-003 04/01/2020		

ALLEN, BUTLER, EDMONSON, LOGAN, SIMPSON & WARREN COUNTIES

	Rates	Fringes
Truck drivers:		
Zone 1:		
Group 1.....	\$ 20.82	23.49
Group 2.....	\$ 21.00	23.49
Group 3.....	\$ 21.08	23.49
Group 4.....	\$ 21.10	23.49

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

TEAM0215-003 04/01/2020		

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

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 22.45	23.49
Group 2.....	\$ 22.68	23.49
Group 3.....	\$ 22.75	23.49
Group 4.....	\$ 22.76	23.49

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; Low Boy; 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

TEAM0236-001 04/01/2020

BALLARD, CALDWELL, CALLOWAY, CARLISLE, CHRISTIAN, CRITTENDEN, FULTON, GRAVES, HICKMAN, LIVINGSTON, LYON, MARSHALL, MCCracken,TODD & TRIGG COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 20.82	23.49
Group 2.....	\$ 21.00	23.49
Group 3.....	\$ 21.00	23.49
Group 4.....	\$ 21.00	23.49
Group 5.....	\$ 21.08	23.49

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; Drivers 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

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

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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 a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010

08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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 National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

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

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

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

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

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

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

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

Washington, DC 20210

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

=====

END OF GENERAL DECISIO"

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

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 to an employee at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek. Wage violations or questions should be directed to the designated Engineer or the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

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

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
5.2%	6.9%

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

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

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

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

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

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

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
5.2%	6.9%

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

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

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

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

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

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

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE	GOALS FOR FEMALE PARTICIPATION IN EACH TRADE
5.2%	6.9%

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

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

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

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

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

PART IV

INSURANCE

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

PART V

BID ITEMS

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	28,448.00	TON		\$	
0020	00005		GEOGRID REINFORCEMENT FOR SUBGRADE	42,304.00	SQYD		\$	
0030	00100		ASPHALT SEAL AGGREGATE	126.00	TON		\$	
0040	00103		ASPHALT SEAL COAT	15.00	TON		\$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	2,581.00	TON		\$	
0060	00214		CL3 ASPH BASE 1.00D PG64-22	3,026.00	TON		\$	
0070	00216		CL3 ASPH BASE 1.00D PG76-22	3,152.00	TON		\$	
0080	00309		CL2 ASPH SURF 0.50D PG64-22	2,590.00	TON		\$	
0090	00332		CL3 ASPH SURF 0.50A PG76-22	3,309.00	TON		\$	
0100	02602		FABRIC-GEOTEXTILE CLASS 1	42,304.00	SQYD		\$	
0110	02676		MOBILIZATION FOR MILL & TEXT - GRAVES 1-26.01	1.00	LS		\$	
0120	02677		ASPHALT PAVE MILLING & TEXTURING	3,167.00	TON		\$	
0130	20071EC		JOINT ADHESIVE	16,118.00	LF		\$	
0140	20362ES403		SHOULDER RUMBLE STRIPS-SAWED	29,944.00	LF		\$	
0150	20550ND		SAWCUT PAVEMENT	6,058.00	LF		\$	
0160	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	13.60	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0170	00001		DGA BASE	366.00	TON		\$	
0180	00003		CRUSHED STONE BASE	40,091.00	TON		\$	
0190	00071		CRUSHED AGGREGATE SIZE NO 57	2,127.00	TON		\$	
0200	00078		CRUSHED AGGREGATE SIZE NO 2	31,132.00	TON		\$	
0210	00100		ASPHALT SEAL AGGREGATE	1,176.00	TON		\$	
0220	00103		ASPHALT SEAL COAT	145.00	TON		\$	
0230	00212		CL2 ASPH BASE 1.00D PG64-22	7,946.00	TON		\$	
0240	00214		CL3 ASPH BASE 1.00D PG64-22	88.00	TON		\$	
0250	00216		CL3 ASPH BASE 1.00D PG76-22	124.00	TON		\$	
0260	00301		CL2 ASPH SURF 0.38D PG64-22	2,374.00	TON		\$	
0270	00309		CL2 ASPH SURF 0.50D PG64-22	1,546.00	TON		\$	
0280	00326		CL3 ASPH SURF 0.50B PG76-22	1,337.00	TON		\$	
0290	00332		CL3 ASPH SURF 0.50A PG76-22	5,360.00	TON		\$	
0300	00440		ENTRANCE PIPE-15 IN	42.00	LF		\$	
0310	00461		CULVERT PIPE-15 IN	1,677.00	LF		\$	
0320	00462		CULVERT PIPE-18 IN	518.00	LF		\$	
0330	00474		CULVERT PIPE-72 IN	44.00	LF		\$	
0340	00521		STORM SEWER PIPE-15 IN	690.00	LF		\$	
0350	00522		STORM SEWER PIPE-18 IN	244.00	LF		\$	
0360	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM - GRAVES 1-26.01	1.00	LS		\$	
0370	01202		PIPE CULVERT HEADWALL-15 IN	4.00	EACH		\$	
0380	01310		REMOVE PIPE	402.00	LF		\$	
0390	01480		CURB BOX INLET TYPE B	16.00	EACH		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0400	01505		DROP BOX INLET TYPE 5B	9.00	EACH		\$	
0410	01511		DROP BOX INLET TYPE 5D	3.00	EACH		\$	
0420	01517		DROP BOX INLET TYPE 5F	1.00	EACH		\$	
0430	01585		REMOVE DROP BOX INLET	40.00	EACH		\$	
0440	01634		CAP CURB BOX INLET	1.00	EACH		\$	
0450	01650		JUNCTION BOX	13.00	EACH		\$	
0460	01655		REMOVE JUNCTION BOX	1.00	EACH		\$	
0470	01690		FLUME INLET TYPE 1	4.00	EACH		\$	
0480	01691		FLUME INLET TYPE 2	87.00	EACH		\$	
0490	01705		REMOVE CURB & GUTTER BOX INLET	12.00	EACH		\$	
0500	01825		ISLAND CURB AND GUTTER	50.00	LF		\$	
0510	01877		SPECIAL HEADER CURB	22,197.00	LF		\$	
0520	01903		REMOVE CONCRETE ROLL CURB	23,419.00	LF		\$	
0530	01955		CONC MEDIAN BARRIER TYPE 12C1	1,800.00	LF		\$	
0540	01958		CONC MEDIAN BARRIER TYPE 12C1 TL3	157.00	LF		\$	
0550	01959		CONC MEDIAN BARRIER TYPE 12C2 TL3	615.00	LF		\$	
0560	01970		CONC MEDIAN BARRIER TYPE 12C TL3	260.00	LF		\$	
0570	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	957.00	EACH		\$	
0580	01983		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	57.00	EACH		\$	
0590	01985		DELINEATOR FOR BARRIER - YELLOW	93.00	EACH		\$	
0600	02003		RELOCATE TEMP CONC BARRIER	34,908.00	LF		\$	
0610	02014		BARRICADE-TYPE III	30.00	EACH		\$	
0620	02091		REMOVE PAVEMENT	8,806.00	SQYD		\$	
0630	02159		TEMP DITCH	11,611.00	LF		\$	
0640	02160		CLEAN TEMP DITCH	5,806.00	LF		\$	
0650	02165		REMOVE PAVED DITCH	1,740.00	SQYD		\$	
0660	02200		ROADWAY EXCAVATION	29,450.00	CUYD		\$	
0670	02220		FLOWABLE FILL	13.70	CUYD		\$	
0680	02230		EMBANKMENT IN PLACE	103,473.00	CUYD		\$	
0690	02242		WATER	376.00	MGAL		\$	
0700	02262		FENCE-WOVEN WIRE TYPE 1	5,346.00	LF		\$	
0710	02265		REMOVE FENCE	3,585.00	LF		\$	
0720	02351		GUARDRAIL-STEEL W BEAM-S FACE	89,298.50	LF		\$	
0730	02352		GUARDRAIL-STEEL W BEAM-D FACE	1,375.00	LF		\$	
0740	02359		GUARDRAIL CONNECTOR TO CONC MED BARR	3.00	EACH		\$	
0750	02360		GUARDRAIL TERMINAL SECTION NO 1	17.00	EACH		\$	
0760	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	62.00	EACH		\$	
0770	02365		CRASH CUSHION TYPE IX-A	10.00	EACH		\$	
0780	02367		GUARDRAIL END TREATMENT TYPE 1	102.00	EACH		\$	
0790	02369		GUARDRAIL END TREATMENT TYPE 2A	96.00	EACH		\$	
0800	02381		REMOVE GUARDRAIL	98,156.00	LF		\$	
0810	02387		GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	62.00	EACH		\$	
0820	02396		REMOVE GUARDRAIL END TREATMENT	225.00	EACH		\$	
0830	02429		RIGHT-OF-WAY MONUMENT TYPE 1	20.00	EACH		\$	
0840	02432		WITNESS POST	20.00	EACH		\$	
0850	02483		CHANNEL LINING CLASS II	1,944.00	TON		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0860	02484		CHANNEL LINING CLASS III	884.00	TON		\$	
0870	02545		CLEARING AND GRUBBING - FULTON	1.00	LS		\$	
0880	02545		CLEARING AND GRUBBING - GRAVES	1.00	LS		\$	
0890	02545		CLEARING AND GRUBBING - HICKMAN	1.00	LS		\$	
0900	02545		CLEARING AND GRUBBING 68.5 ACRES/ GRAVES 1-26.01	1.00	LS		\$	
0910	02555		CONCRETE-CLASS B	36.99	CUYD		\$	
0920	02562		TEMPORARY SIGNS	3,219.00	SQFT		\$	
0930	02585		EDGE KEY	352.00	LF		\$	
0940	02602		FABRIC-GEOTEXTILE CLASS 1	32,865.00	SQYD		\$	
0950	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	4,978.00	SQYD	\$2.00	\$	\$9,956.00
0960	02625		REMOVE HEADWALL	30.00	EACH		\$	
0970	02650		MAINTAIN & CONTROL TRAFFIC - FULTON	1.00	LS		\$	
0980	02650		MAINTAIN & CONTROL TRAFFIC - GRAVES	1.00	LS		\$	
0990	02650		MAINTAIN & CONTROL TRAFFIC - GRAVES 1-26.01	1.00	LS		\$	
1000	02650		MAINTAIN & CONTROL TRAFFIC - HICKMAN	1.00	LS		\$	
1010	02653		LANE CLOSURE	35.00	EACH		\$	
1020	02671		PORTABLE CHANGEABLE MESSAGE SIGN	16.00	EACH		\$	
1030	02676		MOBILIZATION FOR MILL & TEXT - FULTON	1.00	LS		\$	
1040	02676		MOBILIZATION FOR MILL & TEXT - GRAVES	1.00	LS		\$	
1050	02676		MOBILIZATION FOR MILL & TEXT - HICKMAN	1.00	LS		\$	
1060	02677		ASPHALT PAVE MILLING & TEXTURING	2,448.00	TON		\$	
1070	02690		SAFELOADING	21.00	CUYD		\$	
1080	02696		SHOULDER RUMBLE STRIPS	35,290.00	LF		\$	
1090	02701		TEMP SILT FENCE	19,855.00	LF		\$	
1100	02703		SILT TRAP TYPE A	93.00	EACH		\$	
1110	02704		SILT TRAP TYPE B	90.00	EACH		\$	
1120	02705		SILT TRAP TYPE C	90.00	EACH		\$	
1130	02706		CLEAN SILT TRAP TYPE A	134.00	EACH		\$	
1140	02707		CLEAN SILT TRAP TYPE B	134.00	EACH		\$	
1150	02708		CLEAN SILT TRAP TYPE C	134.00	EACH		\$	
1160	02709		CLEAN TEMP SILT FENCE	24,732.00	LF		\$	
1170	02720		SIDEWALK-4 IN CONCRETE	2,372.00	SQYD		\$	
1180	02726		STAKING - FULTON	1.00	LS		\$	
1190	02726		STAKING - GRAVES	1.00	LS		\$	
1200	02726		STAKING - GRAVES 1-26.01	1.00	LS		\$	
1210	02726		STAKING - HICKMAN	1.00	LS		\$	
1220	02775		ARROW PANEL	32.00	EACH		\$	
1230	03171		CONCRETE BARRIER WALL TYPE 9T	49,908.00	LF		\$	

221337

PROPOSAL BID ITEMS

Page 4 of 12

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1240	04935		TEMP SIGNAL - FULTON	1.00	LS		\$	
1250	04935		TEMP SIGNAL - GRAVES	1.00	LS		\$	
1260	04935		TEMP SIGNAL - HICKMAN	1.00	LS		\$	
1270	04940		REMOVE LIGHTING -- GRAVES 1-26.01	1.00	LS		\$	
1280	05950		EROSION CONTROL BLANKET	13,508.00	SQYD		\$	
1290	05952		TEMP MULCH	288,758.00	SQYD		\$	
1300	05953		TEMP SEEDING AND PROTECTION	218,263.00	SQYD		\$	
1310	05963		INITIAL FERTILIZER	22.00	TON		\$	
1320	05964		MAINTENANCE FERTILIZER	32.10	TON		\$	
1330	05985		SEEDING AND PROTECTION	399,169.00	SQYD		\$	
1340	05992		AGRICULTURAL LIMESTONE	269.30	TON		\$	
1350	06401		FLEXIBLE DELINEATOR POST-M/W	307.00	EACH		\$	
1360	06404		FLEXIBLE DELINEATOR POST-M/Y	219.00	EACH		\$	
1370	06511		PAVE STRIPING-TEMP PAINT-6 IN	34,526.00	LF		\$	
1380	06514		PAVE STRIPING-PERM PAINT-4 IN	9,669.00	LF		\$	
1390	06542		PAVE STRIPING-THERMO-6 IN W	24,638.00	LF		\$	
1400	06543		PAVE STRIPING-THERMO-6 IN Y	38,209.00	LF		\$	
1410	06546		PAVE STRIPING-THERMO-12 IN W	4,258.00	LF		\$	
1420	06567		PAVE MARKING-THERMO STOP BAR-12IN	304.00	LF		\$	
1430	06592		PAVEMENT MARKER TYPE V-B W/R	108.00	EACH		\$	
1440	06613		INLAID PAVEMENT MARKER-B W/R	380.00	EACH		\$	
1450	08100		CONCRETE-CLASS A	91.02	CUYD		\$	
1460	08150		STEEL REINFORCEMENT	4,650.00	LB		\$	
1470	08904		CRASH CUSHION TY VI CLASS C	26.00	EACH		\$	
1480	10020NS		FUEL ADJUSTMENT	107,773.00	DOLL	\$1.00	\$	\$107,773.00
1490	10030NS		ASPHALT ADJUSTMENT	104,027.00	DOLL	\$1.00	\$	\$104,027.00
1500	20318ES508		RELOCATE CONC BARRIER WALL	13,400.00	LF		\$	
1510	20465EC		CLEAN CULVERT - GRAVES	1.00	LS		\$	
1520	20521NS719		REMOVE BRIDGE END CONNECTOR	40.00	EACH		\$	
1530	20550ND		SAWCUT PAVEMENT	11,435.00	LF		\$	
1540	20738NS112		TEMP CRASH CUSHION	32.00	EACH		\$	
1550	21288ND		CONCRETE MEDIAN BARRIER TYPE 12C2-50 IN	7,948.00	LF		\$	
1560	21289ED		LONGITUDINAL EDGE KEY	41,452.00	LF		\$	
1570	21600EN		SHEET PILING	4,533.00	LF		\$	
1580	23274EN11F		TURF REINFORCEMENT MAT 1	52.00	SQYD		\$	
1590	23322EC		AGGREGATE SIZE NO. 57	33.00	CUYD		\$	
1600	23804EC		CONC MED BARRIER BOX INLET-TY 12A1	1.00	EACH		\$	
1610	23839EC		REMOVE CONCRETE MEDIAN	490.00	SQYD		\$	
1620	23976EC		CONC MED BARR BOX INLET TY 12A2-50 (MOD)	1.00	EACH		\$	
1630	24489EC		INLAID PAVEMENT MARKER	1,753.00	EACH		\$	
1640	24679ED		PAVE MARK THERMO CHEVRON	359.00	SQFT		\$	
1650	24814EC		PIPELINE INSPECTION	4,245.00	LF		\$	
1660	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	15.00	TON		\$	
1670	40047		SODDING	92.00	SQYD		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1680	40074		ASPHALT LEVELING AND WEDGING	128.00	TON		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1690	00078		CRUSHED AGGREGATE SIZE NO 2	9.00	TON		\$	
1700	00462		CULVERT PIPE-18 IN	357.00	LF		\$	
1710	00464		CULVERT PIPE-24 IN	237.00	LF		\$	
1720	00466		CULVERT PIPE-30 IN	108.00	LF		\$	
1730	00468		CULVERT PIPE-36 IN	356.00	LF		\$	
1740	00470		CULVERT PIPE-48 IN	165.00	LF		\$	
1750	00471		CULVERT PIPE-54 IN	55.00	LF		\$	
1760	00521		STORM SEWER PIPE-15 IN	71.00	LF		\$	
1770	00522		STORM SEWER PIPE-18 IN	107.00	LF		\$	
1780	00528		STORM SEWER PIPE-36 IN	56.00	LF		\$	
1790	01000		PERFORATED PIPE-4 IN	3,435.00	LF		\$	
1800	01010		NON-PERFORATED PIPE-4 IN	352.00	LF		\$	
1810	01020		PERF PIPE HEADWALL TY 1-4 IN	6.00	EACH		\$	
1820	01028		PERF PIPE HEADWALL TY 3-4 IN	1.00	EACH		\$	
1830	01032		PERF PIPE HEADWALL TY 4-4 IN	2.00	EACH		\$	
1840	01204		PIPE CULVERT HEADWALL-18 IN	5.00	EACH		\$	
1850	01208		PIPE CULVERT HEADWALL-24 IN	2.00	EACH		\$	
1860	01210		PIPE CULVERT HEADWALL-30 IN	2.00	EACH		\$	
1870	01212		PIPE CULVERT HEADWALL-36 IN	4.00	EACH		\$	
1880	01216		PIPE CULVERT HEADWALL-48 IN	2.00	EACH		\$	
1890	01440		SLOPED BOX INLET-OUTLET TYPE 1	2.00	EACH		\$	
1900	01451		S & F BOX INLET-OUTLET-24 IN	3.00	EACH		\$	
1910	01453		S & F BOX INLET-OUTLET-36 IN	1.00	EACH		\$	
1920	01456		CURB BOX INLET TYPE A	2.00	EACH		\$	
1930	01490		DROP BOX INLET TYPE 1	2.00	EACH		\$	
1940	01493		DROP BOX INLET TYPE 2	1.00	EACH		\$	
1950	01499		DROP BOX INLET TYPE 4	1.00	EACH		\$	
1960	01511		DROP BOX INLET TYPE 5D	1.00	EACH		\$	
1970	01650		JUNCTION BOX	2.00	EACH		\$	
1980	01767		MANHOLE TYPE C	1.00	EACH		\$	
1990	23610NC		CORED HOLE DRAINAGE BOX CON	4.00	EACH		\$	
2000	24026EC		PIPE CULVERT HEADWALL-54 IN	1.00	EACH		\$	

Section: 0004 - BRIDGE - I69 OVER CN RR - 038B00055

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2010	08435		JACK & SUPPORT BRIDGE SPAN (038B00055 NB & SB)	1.00	LS		\$	
2020	08504		EPOXY SAND SLURRY	219.60	SQYD		\$	
2030	08510		REM EPOXY BIT FOREIGN OVERLAY	1,797.00	SQYD		\$	
2040	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
2050	08534		CONCRETE OVERLAY-LATEX	62.40	CUYD		\$	

221337

PROPOSAL BID ITEMS

Page 6 of 12

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2060	08549		BLAST CLEANING	2,016.00	SQYD		\$	
2070	21969NN		BEARING REPLACEMENT	40.00	EACH		\$	
2080	22146EN		CONCRETE PATCHING REPAIR	280.00	SQFT		\$	
2090	23032EN		BRIDGE BARRIER RETROFIT	2,155.50	LF		\$	
2100	23378EC		CONCRETE SEALING	10,303.20	SQFT		\$	
2110	23386EC		JOINT SEAL REPLACEMENT	266.80	LF		\$	
2120	24094EC		PARTIAL DEPTH PATCHING	40.30	CUYD		\$	
2130	24981EC		BRIDGE CLEANING 038B00055 NB & SB	1.00	LS		\$	

Section: 0005 - BRIDGE - I69 OVER BAYOU DE CHEIN - 042B00170

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2140	08435		JACK & SUPPORT BRIDGE SPAN (042B00170 NB & SB)	1.00	LS		\$	
2150	21969NN		BEARING REPLACEMENT	16.00	EACH		\$	
2160	22146EN		CONCRETE PATCHING REPAIR	80.00	SQFT		\$	
2170	23032EN		BRIDGE BARRIER RETROFIT	1,329.60	LF		\$	
2180	23378EC		CONCRETE SEALING	6,607.80	SQFT		\$	
2190	23386EC		JOINT SEAL REPLACEMENT	127.80	LF		\$	
2200	24094EC		PARTIAL DEPTH PATCHING	24.40	CUYD		\$	
2210	24981EC		BRIDGE CLEANING 042B00170 NB & SB	1.00	LS		\$	

Section: 0006 - BRIDGE - I69 OVER BRUSH CREEK - 042B00173

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2220	03298		EXPAN JOINT REPLACE 4 IN	76.00	LF		\$	
2230	03299		ARMORED EDGE FOR CONCRETE	76.00	LF		\$	
2240	08435		JACK & SUPPORT BRIDGE SPAN (042B00173 NB & SB)	1.00	LS		\$	
2250	08504		EPOXY SAND SLURRY	51.80	SQYD		\$	
2260	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
2270	08534		CONCRETE OVERLAY-LATEX	18.60	CUYD		\$	
2280	08549		BLAST CLEANING	588.00	SQYD		\$	
2290	08551		MACHINE PREP OF SLAB	537.00	SQYD		\$	
2300	21969NN		BEARING REPLACEMENT	20.00	EACH		\$	
2310	22146EN		CONCRETE PATCHING REPAIR	80.00	SQFT		\$	
2320	23032EN		BRIDGE BARRIER RETROFIT	597.40	LF		\$	
2330	23378EC		CONCRETE SEALING	2,664.00	SQFT		\$	
2340	23386EC		JOINT SEAL REPLACEMENT	76.00	LF		\$	
2350	24094EC		PARTIAL DEPTH PATCHING	12.60	CUYD		\$	
2360	24981EC		BRIDGE CLEANING 042B00173 NB & SB	1.00	LS		\$	

Section: 0007 - BRIDGE - I69 OVER OBION CREEK - 042B00176

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2370	08435		JACK & SUPPORT BRIDGE SPAN (042B00176 NB & SB)	1.00	LS		\$	
2380	21969NN		BEARING REPLACEMENT	20.00	EACH		\$	
2390	22146EN		CONCRETE PATCHING REPAIR	80.00	SQFT		\$	
2400	23032EN		BRIDGE BARRIER RETROFIT	933.60	LF		\$	
2410	23378EC		CONCRETE SEALING	4,163.40	SQFT		\$	
2420	23386EC		JOINT SEAL REPLACEMENT	152.00	LF		\$	
2430	24094EC		PARTIAL DEPTH PATCHING	20.80	CUYD		\$	
2440	24981EC		BRIDGE CLEANING 042B00176 NB & SB	1.00	LS		\$	

Section: 0008 - BRIDGE - I69 OVER OPOSSUM - 042B00177

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2450	08435		JACK & SUPPORT BRIDGE SPAN (042B00177 NB & SB)	1.00	LS		\$	
2460	21969NN		BEARING REPLACEMENT	20.00	EACH		\$	
2470	22146EN		CONCRETE PATCHING REPAIR	80.00	SQFT		\$	
2480	23032EN		BRIDGE BARRIER RETROFIT	945.00	LF		\$	
2490	23378EC		CONCRETE SEALING	4,213.80	SQFT		\$	
2500	23386EC		JOINT SEAL REPLACEMENT	215.00	LF		\$	
2510	24094EC		PARTIAL DEPTH PATCHING	22.30	CUYD		\$	
2520	24981EC		BRIDGE CLEANING 042B00177 NB & SB	1.00	LS		\$	

Section: 0009 - BRIDGE - US51 OVER I69 - 038B00012

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2530	03298		EXPAN JOINT REPLACE 4 IN	148.40	LF		\$	
2540	03299		ARMORED EDGE FOR CONCRETE	124.40	LF		\$	
2550	08504		EPOXY SAND SLURRY	149.80	SQYD		\$	
2560	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
2570	08534		CONCRETE OVERLAY-LATEX	48.40	CUYD		\$	
2580	08549		BLAST CLEANING	1,542.00	SQYD		\$	
2590	08551		MACHINE PREP OF SLAB	1,393.00	SQYD		\$	
2600	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2610	24094EC		PARTIAL DEPTH PATCHING	26.10	CUYD		\$	
2620	24522EC		REPAIR ALUMINUM RAILING	1.00	LS		\$	
2630	24522EC		REPAIR EROSION AT ABUTMENTS	1.00	LS		\$	
2640	24981EC		BRIDGE CLEANING 038B00012	1.00	LS		\$	

Section: 0010 - BRIDGE - KY307 OVER I69 - 038B00015

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
------	----------	-----	-------------	----------	------	-----------	----	--------

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2650	03298		EXPAN JOINT REPLACE 4 IN	100.20	LF		\$	
2660	08526		CONC CLASS M FULL DEPTH PATCH	2.00	CUYD		\$	
2670	22146EN		CONCRETE PATCHING REPAIR	8.00	SQFT		\$	
2680	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2690	24094EC		PARTIAL DEPTH PATCHING	9.80	CUYD		\$	
2700	24981EC		BRIDGE CLEANING 038B00015	1.00	LS		\$	

Section: 0011 - BRIDGE - KY2569 OVER HOLLAND - 053B00068

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2710	03298		EXPAN JOINT REPLACE 4 IN	60.00	LF		\$	
2720	08526		CONC CLASS M FULL DEPTH PATCH	2.00	CUYD		\$	
2730	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2740	24094EC		PARTIAL DEPTH PATCHING	8.10	CUYD		\$	
2750	24981EC		BRIDGE CLEANING 053B00068	1.00	LS		\$	

Section: 0012 - BRIDGE - KY94 OVER I69 - 053B00050

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2760	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2770	24094EC		PARTIAL DEPTH PATCHING	8.20	CUYD		\$	
2780	24981EC		BRIDGE CLEANING 053B00050	1.00	LS		\$	

Section: 0013 - BRIDGE - KY1529 OVER I69 - 053B00056

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2790	03298		EXPAN JOINT REPLACE 4 IN	52.60	LF		\$	
2800	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2810	24094EC		PARTIAL DEPTH PATCHING	7.00	CUYD		\$	
2820	24981EC		BRIDGE CLEANING 053B00056	1.00	LS		\$	

Section: 0014 - BRIDGE - KY1283 OVER I69 - 053B00102

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2830	03298		EXPAN JOINT REPLACE 4 IN	71.00	LF		\$	
2840	03299		ARMORED EDGE FOR CONCRETE	71.00	LF		\$	
2850	08504		EPOXY SAND SLURRY	196.80	SQYD		\$	
2860	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
2870	08534		CONCRETE OVERLAY-LATEX	26.70	CUYD		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2880	08549		BLAST CLEANING	965.00	SQYD		\$	
2890	08551		MACHINE PREP OF SLAB	769.00	SQYD		\$	
2900	22146EN		CONCRETE PATCHING REPAIR	75.00	SQFT		\$	
2910	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
2920	24094EC		PARTIAL DEPTH PATCHING	13.30	CUYD		\$	
2930	24981EC		BRIDGE CLEANING 053B00102	1.00	LS		\$	

Section: 0015 - BRIDGE - KY 1763 OVER I69 - 042B00171

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2940	03298		EXPAN JOINT REPLACE 4 IN	55.00	LF		\$	
2950	03299		ARMORED EDGE FOR CONCRETE	55.00	LF		\$	
2960	08504		EPOXY SAND SLURRY	155.70	SQYD		\$	
2970	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
2980	08534		CONCRETE OVERLAY-LATEX	21.10	CUYD		\$	
2990	08549		BLAST CLEANING	763.00	SQYD		\$	
3000	08551		MACHINE PREP OF SLAB	607.00	SQYD		\$	
3010	22146EN		CONCRETE PATCHING REPAIR	12.00	SQFT		\$	
3020	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3030	24094EC		PARTIAL DEPTH PATCHING	8.40	CUYD		\$	
3040	24981EC		BRIDGE CLEANING 042B00171	1.00	LS		\$	

Section: 0016 - BRIDGE - GRISSOM RD OVER I69 - 042B000172

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3050	03298		EXPAN JOINT REPLACE 4 IN	63.50	LF		\$	
3060	22146EN		CONCRETE PATCHING REPAIR	5.00	SQFT		\$	
3070	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3080	24094EC		PARTIAL DEPTH PATCHING	8.20	CUYD		\$	

Section: 0017 - BRIDGE - KY944 OVER I69 - 042B00180

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3090	03298		EXPAN JOINT REPLACE 4 IN	58.80	LF		\$	
3100	03299		ARMORED EDGE FOR CONCRETE	58.80	LF		\$	
3110	22146EN		CONCRETE PATCHING REPAIR	64.00	SQFT		\$	
3120	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3130	24094EC		PARTIAL DEPTH PATCHING	9.10	CUYD		\$	

Section: 0018 - BRIDGE - TATER/LATER HILL RD OVER I69 - 042B00175

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3140	03298		EXPAN JOINT REPLACE 4 IN	52.90	LF		\$	
3150	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3160	24094EC		PARTIAL DEPTH PATCHING	6.90	CUYD		\$	
3170	24981EC		BRIDGE CLEANING 042B00175	1.00	LS		\$	

Section: 0019 - BRIDGE - KY58 OVER I69 - 042B00096

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3180	03298		EXPAN JOINT REPLACE 4 IN	64.80	LF		\$	
3190	03299		ARMORED EDGE FOR CONCRETE	64.80	LF		\$	
3200	08504		EPOXY SAND SLURRY	170.40	SQYD		\$	
3210	08526		CONC CLASS M FULL DEPTH PATCH	5.00	CUYD		\$	
3220	08534		CONCRETE OVERLAY-LATEX	24.80	CUYD		\$	
3230	08549		BLAST CLEANING	886.00	SQYD		\$	
3240	08551		MACHINE PREP OF SLAB	716.00	SQYD		\$	
3250	22146EN		CONCRETE PATCHING REPAIR	20.00	SQFT		\$	
3260	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3270	24094EC		PARTIAL DEPTH PATCHING	9.90	CUYD		\$	

Section: 0020 - BRIDGE - KY1748BW OVER I69 - 042B00128

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3280	03298		EXPAN JOINT REPLACE 4 IN	54.40	LF		\$	
3290	23949EC		BRIDGE CLEANING & PREVENTIVE MAINTENANCE	1.00	LS		\$	
3300	24094EC		PARTIAL DEPTH PATCHING	7.30	CUYD		\$	
3310	24981EC		BRIDGE CLEANING 042B00128	1.00	LS		\$	

Section: 0021 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3320	06400		GMSS GALV STEEL TYPE A	886.00	LB		\$	
3330	06405		SBM ALUMINUM PANEL SIGNS	3,838.00	SQFT		\$	
3340	06406		SBM ALUM SHEET SIGNS .080 IN	743.00	SQFT		\$	
3350	06407		SBM ALUM SHEET SIGNS .125 IN	649.00	SQFT		\$	
3360	06410		STEEL POST TYPE 1	790.00	LF		\$	
3370	06411		STEEL POST TYPE 2	380.00	LF		\$	
3380	06451		REMOVE SIGN SUPPORT BEAM	28.00	EACH		\$	
3390	06490		CLASS A CONCRETE FOR SIGNS	81.00	CUYD		\$	
3400	20418ED		REMOVE & RELOCATE SIGNS	2.00	EACH		\$	
3410	20419ND		ROADWAY CROSS SECTION	14.00	EACH		\$	
3420	21373ND		REMOVE SIGN	82.00	EACH		\$	
3430	21596ND		GMSS TYPE D	34.00	EACH		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3440	24631EC		BARCODE SIGN INVENTORY	256.00	EACH		\$	

Section: 0022 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3450	04714		POLE 120 FT MTG HT HIGH MAST	11.00	EACH		\$	
3460	04761		LIGHTING CONTROL EQUIPMENT	1.00	EACH		\$	
3470	04797		CONDUIT-3 IN	2,082.00	LF		\$	
3480	04800		MARKER	27.00	EACH		\$	
3490	04820		TRENCHING AND BACKFILLING	10,531.00	LF		\$	
3500	04940		REMOVE LIGHTING KY307	1.00	LS		\$	
3510	04940		REMOVE LIGHTING KY339	1.00	LS		\$	
3520	04940		REMOVE LIGHTING US51	1.00	LS		\$	
3530	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	11.00	EACH		\$	
3540	20392NS835		ELECTRICAL JUNCTION BOX TYPE C	8.00	EACH		\$	
3550	20410ED		MAINTAIN LIGHTING KY307	1.00	LS		\$	
3560	20410ED		MAINTAIN LIGHTING KY339	1.00	LS		\$	
3570	20410ED		MAINTAIN LIGHTING US51	1.00	LS		\$	
3580	21543EN		BORE AND JACK CONDUIT	2,082.00	LF		\$	
3590	23161EN		POLE BASE-HIGH MAST	120.80	CUYD		\$	
3600	24749EC		HIGH MAST LED LUMINAIRE	129.00	EACH		\$	
3610	24851EC		CABLE-NO. 10/3C DUCTED	17,944.00	LF		\$	

Section: 0023 - INTELLIGENT TRANSPORTATION SYSTEMS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3620	04797		CONDUIT-3 IN	255.00	LF		\$	
3630	04800		MARKER	1.00	EACH		\$	
3640	04820		TRENCHING AND BACKFILLING	1,815.00	LF		\$	
3650	20257NC		SITE PREPARATION KY307	1.00	LS		\$	
3660	20257NC		SITE PREPARATION KY339	1.00	LS		\$	
3670	20257NC		SITE PREPARATION US51	1.00	LS		\$	
3680	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	2.00	EACH		\$	
3690	21058ND		WINCH LOWERING TOOL	3.00	EACH		\$	
3700	21066ND		MODEL 336 ENCLOSURE	3.00	EACH		\$	
3710	21071ND		DATA SURGE DEVICE	3.00	EACH		\$	
3720	21079ND		TRANSFORMER 480/120	3.00	EACH		\$	
3730	21489ND		RACK MOUNTED UPS	3.00	EACH		\$	
3740	21543EN		BORE AND JACK CONDUIT	255.00	LF		\$	
3750	22403NN		WEB CAMERA ASSEMBLY	3.00	EACH		\$	

Report Date 7/26/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3760	23150NN		COMMUNICATION CABLE	180.00	LF		\$	
3770	23151NN		POLE WITH LOWERING DEVICE	3.00	EACH		\$	
3780	23157EN		TRAFFIC SIGNAL POLE BASE	15.00	CUYD		\$	
3790	23944EC		ADVANCED GROUNDING SYSTEM	3.00	EACH		\$	
3800	24851EC		CABLE-NO. 10/3C DUCTED	2,070.00	LF		\$	

Section: 0024 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
3810	02568		MOBILIZATION	1.00	LS		\$	
3820	02569		DEMOBILIZATION	1.00	LS		\$	