**CALL NO. 106**

**CONTRACT ID. 111048**

**FAYETTE COUNTY**

**FED/STATE PROJECT NUMBER STPM 3003(250)**

**DESCRIPTION NEWTOWN PIKE EXTENSION (KY 922)**

**WORK TYPE SOUND BARRIER WALL**

**PRIMARY COMPLETION DATE 180 CALENDAR DAYS**

**LETTING DATE: October 21, 2011**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME October 21, 2011. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

**ROAD PLANS**

**DBE CERTIFICATION REQUIRED - 0%**

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

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# PART I

# SCOPE OF WORK

CONTRACT ID - 111048 ADMINISTRATIVE DISTRICT - 07

PROJECT(S) IDENTIFICATION AND DESCRIPTION:

COUNTY - FAYETTE PCN - DE03409221148
STPM 3003(250)
NEWTOWN PIKE EXTENSION (KY 922) CONSTRUCT NEWTOWN PIKE EXTENSION NOISE BARRIER WALL AT NORFOLK SOUTHERN RAILROAD YARD. SOUND BARRIER WALL. SYP NO. 07-00593.11.
GEOGRAPHIC COORDINATES LATITUDE 38^02'00" LONGITUDE 84^30'00"

COMPLETION DATE(S):
180 CALENDAR DAYS
APPLIES TO ENTIRE CONTRACT

# CONTRACT NOTES

## PROPOSAL ADDENDA

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

## BID SUBMITTAL

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

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

## JOINT VENTURE BIDDING

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

## UNDERGROUND FACILITY DAMAGE PROTECTION

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

## 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 .

## ACCESS TO RECORDS

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

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

## 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.

09/30/2011

# FEDERAL CONTRACT NOTES

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

102.02 Current Capacity Rating 102.10 Delivery of Proposals
102.08 Irregular Proposals 102.14 Disqualification of Bidders
102.09 Proposal Guaranty

## CIVIL RIGHTS ACT OF 1964

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

## NOTICE TO ALL BIDDERS

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

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

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

## FHWA 1273

Contrary to Paragraph VI of FHWA 1273, contractors on National Highway System (NHS) projects of $1 million or more are no longer required to submit Form FHWA-47.

## SECOND TIER SUBCONTRACTS

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

**DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

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

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

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

**DBE GOAL**

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

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

**OBLIGATION OF CONTRACTORS**

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

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

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

**CERTIFICATION OF CONTRACT GOAL**

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

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

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

**DBE PARTICIPATION PLAN**

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

The DBE Participation Plan shall include the following:

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 Project Code Number (PCN), Category Number, and the Project Line Number can be found in the "material listing" on the Construction Procurement website under the specific letting;

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

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

## CONSIDERATION OF GOOD FAITH EFFORTS REQUESTS

If the DBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the DBE contract goal, the apparent lowest responsive bidder must submit a Good Faith Effort Package to satisfy the Cabinet that sufficient good faith efforts were made to meet the contract goals prior to submission of the bid. Efforts to increase the goal after bid submission will not be considered in justifying the good faith effort, unless the contractor can show that the proposed DBE was solicited prior to the letting date. DBEs utilized in achieving the DBE goal must be certified and prequalified for the work items at the time the bid is submitted. One complete set and nine (9) copies of this information must be received in the office of the Division of Contract Procurement no later than 12:00 noon of the tenth calendar day after receipt of notification that they are the apparent low bidder.

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

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

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 certainly whether they were interested. If a reasonable amount of DBEs within the targeted districts do not provide an intent to quote or no DBEs are prequalified in the subcontracted areas, the bidder must notify the DBE Liaison in the Office of Minority Affairs to give notification of the bidder's inability to get DBE quotes;
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 our the DBE contract requirements shall constitute a breach of contract and as such the Cabinet reserves the right to exercise all administrative remedies at its disposal including, but not limited to the following:

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

**PROMPT PAYMENT**

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

**CONTRACTOR REPORTING**

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

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

The Prime Contractor should supply the payment information at the time the DBE is compensated for their work. Form to use is located at:
http://transportation.ky.gov/construction/forms/DBEcheck.xls

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

**DEFAULT OR DECERTIFICATION OF THE DBE**

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

09/14/11

KYTC
DBE Payments

updated 2/28/08

| Prime Contractor | Cont-ID |
|---|---|
| | |
| **DBE Contractor** | **CHECK #** |
| | |
| **PAYMENT DATE** | **Amount of Payment** |
| | |

**Use the section below to show multiple payments using the same check**

| Cont-ID | Amount | Cont-ID | Amount |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Comments:**

attach copy of check here

Mail to:
Office of Civil Rights and Small Business Development
200 Mero Street
6th Floor West TCOB
Frankfort, KY 40622

to be Submitted within 7 days of receipt of payment from KYTC

# SPECIAL NOTE FOR NON-DESTRUCTIVE TESTING OF DRILLED SHAFTS

## Fayette County
## Item No. 7-593.11
## Noise Barrier Wall at Norfolk Southern RR Yard - Drawing No. 26505

## 1.0 DESCRIPTION

Crosshole Sonic Logging (CSL) is a nondestructive method to test the integrity of drilled shafts. The Contractor will be responsible for supplying all equipment and materials necessary to perform this testing, and obtaining the services of a CSL Testing Firm using personnel experienced with CSL testing and approved by the Engineer to perform the testing.

1.1 The CSL tests must either be performed by or under the supervision of a responsible licensed professional engineer with:

- a minimum of three (3) years experience performing CSL tests, and
- experience performing CSL tests on a minimum of three (3) past projects with a scope and complexity similar to this project including a minimum of 60 drilled shafts in the past three (3) years.

If the responsible professional engineer does not perform the testing, then the responsible field technician who does perform the testing must meet the same experience requirements.

1.2 Preliminary Submittal - At least 21 calendar days before beginning drilled shaft construction, submit a technical proposal prepared by the CSL Testing Firm that documents the personnel's experience and addresses the testing procedures. Experience documentation should include resumes, references, certifications, project lists, experience descriptions and details, etc. Within 10 working days, the Engineer will review the proposal and report to the Contractor whether the CSL Testing Firm and personnel are approved and the proposal is acceptable.

1.3 The Contractor will be responsible for providing:

a. access tubes which will be used for CSL testing of the drilled shafts;
b. watertight shoes, watertight caps, and non-shrink grout;
c. suitable working space and access to every shaft;
d. a reliable 600 watt (minimum) generator; and
e. any other equipment or materials necessary to accomplish the testing.

Table 1 - Minimum Number of Access Tubes and CSL Logs

| Shaft Diameter (inches) | Number of Tubes | Diagonal Logs | Perimeter Logs |
|---|---|---|---|
| 30 to 36 | 3 | NA | 3 |
| 42 to 54 | 4 | 2 | 4 |
| 60 to 78 | 6 | 3 | 6 |
| 84 to 96 | 8 | 4 | 8 |

## 2.0 MATERIALS

2.1 Supply the number of access tubes shown in the plans or in Table 1. Provide access tubes meeting the requirements below. The Engineer will accept access tubes based on visual inspection and certification that the steel pipe meets the requirements below:

a. 1.5 to 2.0 inch ID schedule 40 steel pipe conforming to ASTM A 53, Grade A or B, Type E, F, or S;
b. contains round, regular internal diameters free of defects or obstructions, including any at pipe joints;
c. capable of permitting the free, unobstructed passage of a 1.4 inch diameter source and receiver probes; and
d. watertight and free from corrosion with clean internal and external faces to ensure passage of the probes and a good bond between the concrete and the tubes.

2.2 Provide watertight shoes on the bottom and removable watertight caps on the top of the tubes.

2.3 Provide non-shrink grout to fill the access tubes and any cored holes at the completion of the CSL tests. Use grout conforming to Section 601.03.03 of the Standard Specifications.

## 3.0 CONSTRUCTION

3.1 Access Tube Installation

a. Install access tubes equally spaced around the perimeter of each of the drilled shafts.
b. Securely attach the tubes to the longitudinal reinforcement. Wire-tie the tubes a minimum of every 3 feet so they will stay in position during placement of rebar and concrete. Place the tubes so they will be parallel with each other and as near to vertical as possible in the finished shaft. Even moderate bending of the tubes will result in large regional variations in the data.
c. Place the tubes from 6 inches above the shaft tip to at least 3 feet above the top of shaft and at least 2 feet above ground level or top of casing. Under no circumstances may the tubes be allowed to come to rest on the bottom of the excavation.
d. Ensure that any joints in the tubes are watertight.
e. During placement of the reinforcement cage, exercise care so that the tubes will not be damaged to the extent that would prevent a 1.4-inch diameter probe from passing through them.
f. After placing the reinforcing cage and before beginning concrete placement, fill the tubes with clean potable water and cap or seal the tube tops to keep debris out of the tubes. Replace the watertight caps immediately after filling the tubes with water.
g. Before placing concrete, investigate at least one tube per shaft to make sure that there are no bends, crimps, obstructions or other impediments to the free passage of the testing probes.
h. During removal of the caps from the tubes, exercise care so as not to apply excess torque, hammering, or other stresses which could break the bond between the tubes and concrete.

i. After concrete placement and before the beginning of CSL testing, inspect the access tubes and report any access tubes that the 1.4-inch diameter test probe cannot pass through to the Engineer. The Engineer will make an evaluation to determine if the CSL testing can be successfully performed without the tube(s); the Engineer may require the contractor to, at its own expense, replace one or more tubes with 2-inch diameter holes cored through the concrete for the entire length of the shaft, excluding the bottom 6 inches. Unless directed otherwise by the Engineer, locate core holes approximately 6 inches inside the reinforcement such that it does not damage the reinforcement. For each core hole drilled, record a log with descriptions of inclusions and voids in the cored holes and submit a copy of the log to the Engineer. Preserve the cores, identify as to location and make available for inspection by the Engineer.

3.2 Grouting - After completion of the CSL testing and evaluation of results, and only after being directed to do so by the Engineer, remove the water from the access tubes and any cored holes, completely fill the tubes and holes with approved grout. After grouting, cut the tubes flush with the tops of the drilled shafts.

## 4.0 TESTING AND REPORTING

The Engineer may elect to reduce the amount of testing and will pay only for the authorized quantities.

4.1 Testing

a. Perform CSL testing according to ASTM D6760, “Integrity Testing of Concrete Deep Foundations by Ultrasonic Crosshole Testing”.
b. Provide access to the top of the shaft for testing personnel and equipment.
c. Perform CSL testing in accordance with generally accepted CSL Testing methods.
d. Obtain the minimum number of CSL logs shown in Table 1 unless otherwise directed by the Engineer.
e. Perform CSL testing on all completed shafts designated for testing by the Engineer, after the shaft concrete has cured at least 48 hours. Additional curing time may be necessary, depending on the concrete admixtures that are used.

4.2 Test Reports - Submit a test report prepared by the CSL Testing Firm and signed by the responsible professional engineer which, at a minimum, contains:

a. Pier No., Plan Shaft No., Station, Offset, and Top of Shaft Elevation;
b. Schematic showing a plan view of the access tube locations;
c. CSL logs presented for each tube pair tested with any defect zones indicated on the logs and discussed in the report as appropriate;
d. Analyses of initial pulse arrival time versus depth or velocity versus depth if requested by the Engineer; and
e. Analyses of pulse energy/amplitude versus depth.

4.3 Independent Comparison Tests - Consultants acting on behalf of the Department may perform independent comparison tests on the shafts tested by the Contractor's CSL Testing Firm.

## 5.0 EVALUATION OF TEST RESULTS

5.1 Allow direct communication between the CSL Testing Firm and the Department.

5.2 The Engineer will evaluate the CSL test results in the test report to determine whether or not the drilled shaft integrity is acceptable. Within 5 working days after receiving a test report, the Engineer will report to the Contractor whether the construction is acceptable or additional analyses are needed.

5.3 The Engineer will not require the Contractor to wait for CSL testing and evaluation to continue drilled shaft construction. However, if the CSL tests indicate that the integrity of any drilled shaft is questionable, the Engineer may direct the Contractor to suspend drilled shaft operations until the problem is resolved.

5.4 Continue with construction of the structure above the drilled shafts only after receiving written approval to do so, based on evaluation of the CSL test results.

5.5 If the CSL records are complex or inconclusive, the Engineer may require additional testing (such as Angled CSL, Crosshole Tomography, Singlehole Sonic Logging, or Sonic Echo/Impulse Response, etc.) or concrete cores to sample the concrete in question to verify shaft conditions. If core samples are needed, obtain cores with a minimum diameter of 2 inches, unless directed otherwise by the Engineer. Unless directed otherwise by the Engineer, locate core holes approximately 6 inches inside the reinforcement such that they do not damage the reinforcement. For each core hole drilled, record a log with descriptions of inclusions and voids in the cored holes and submit a copy of the log to the Engineer. Place the cores in crates properly marked showing the shaft depth at each interval of core recovery. Transport the cores and logs to the Geotechnical Branch in Frankfort for inspection and testing. Grout the core holes in accordance with Section 3.2 above.

5.6 If the additional testing or evaluation of cores indicate that concrete for any drilled shaft on which additional testing or coring was required is acceptable, the Department will pay for the additional testing and concrete coring and grouting on a cost plus basis. If the additional testing or evaluations of cores indicate that the concrete for any drilled shaft concrete is unacceptable, the additional testing and concrete coring and grouting will be at the expense of the Contractor.

5.7 If defects are found, the original structural designer will perform structural analyses, at the expense of the Contractor, based on the design criteria established for the structure to assess the effects of the defects on the structural performance of the drilled shaft. If the results of the analyses indicate that there is conclusive evidence that the defects will result in inadequate or unsafe performance under the design loads, as defined by the design criteria for the structure, the Engineer will reject the shaft.

5.8 If any shaft is rejected, provide a plan for remedial action to the Engineer for approval. Any modifications to the foundation shafts and/or other substructure elements caused by the remedial action will require calculations and working drawings by the original structural designer, at the expense of the Contractor. Begin remediation operations only after receiving approval from the Engineer for the proposed remediation. All remedial action will be at no cost to the Department and with no extension of contract time.

## 6.0 METHOD OF MEASUREMENT

The Department will pay for the authorized and accepted quantities of “CSL Testing ” at the contract unit price per each shaft tested. This will constitute full compensation for all costs associated with mobilizing the CSL Testing Firm, providing access for testing personnel, including travel to the site and per diem, equipment, performing the CSL Testing in a single shaft, and reporting the results to the Engineer.

The CSL access tubing shall be incidental to the drilled shaft bid items.
The Department will pay for additional testing and concrete coring required to investigate shafts with complex or inconclusive CSL records on a cost plus basis, if evaluation of the additional testing or cores indicates that concrete for that drilled shaft is acceptable. This will constitute full compensation for all costs and delays associated with performing additional tests, obtaining and delivering concrete cores to the Division of Materials, and grouting core holes.

## 7.0 PAYMENT

The Department will pay for the completed and accepted quantities under the following:

| **Pay Item** | **Pay Unit** |
|---|---|
| CSL Testing | Each |

The Department will consider payment as full compensation for all work required under this Special Note.

# Special Note For:
# Erosion Prevention and Sediment Control

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009 or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2008 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2008 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer's inspections shall be performed a minimum of once per month and within seven days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the contractor unless improvements to the BMP's are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.

Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying "good engineering practices" as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

**Payment:** Payment will be at the contract unit price for K.P.D.E.S Permit & Temporary Erosion Control: Lump Sum.

# SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS

# NORFOLK SOUTHERN RAILWAY COMPANY

**1. AUTHORITY OF RAILROAD ENGINEER AND DEPARTMENT ENGINEER:**

**The authorized representative of the Railroad Company, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic of his Company including the adequacy of the foundations and structures supporting the Railroad tracks.**

**The authorized representative of the Department, hereinafter referred to as the Department Engineer, shall have authority over all other matters as prescribed herein and in the Project Specifications.**

**2. NOTICE OF STARTING WORK:**

**A. The Department's Prime contractor shall not commence any work on railroad rights-of-way until he has complied with the following conditions:**

**1. Given the Railroad written notice, with copy to the Department Engineer who has been designated to be in charge of the work, at least ten days in advance of the date he proposes to begin work on Railroad rights-of-way.**

**Office of Chief Engineer**
**Bridges & Structures**
**Norfolk Southern Corporation**
**1200 Peachtree Street NE**
**Internal Box #142**
**Atlanta, Georgia 30309**

**2. Obtained written approval from the Railroad of Railroad Protective Liability Insurance coverage as required by paragraph 14 herein. It should be noted that Railroad Company does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad Company must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for Railroad Company to review.**

**3. Obtained Railroad's Flagging Services as required by paragraph 7 herein.**

**4. Obtained written authorization from the Railroad to begin work on Railroad rights-of-way, such authorization to include an outline of specific conditions with which he must comply.**

**5. Furnished a schedule for all work within the Railroad rights-of-way as required by paragraph 7,B,1.**

**B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.**

**3. <u>INTERFERENCE WITH RAILROAD OPERATIONS:</u>**

**A. The Contractor shall so arrange and conduct his work that there will be no interference with Railroad operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad Company or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad Company. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging service or inspection service shall be deferred by the Contractor until the flagging service or inspection service required by the Railroad is available at the job site.**

**B. Whenever work within Railroad rights-of-way is of such a nature that impediment to Railroad operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct his operations so that such impediment is reduced to the absolute minimum.**

**C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in his absence, the Railroad's Division Engineer, such provisions is insufficient, either may require or provide such provisions as he deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Department.**

**4. <u>TRACK CLEARANCES:</u>**

**A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. However, before undertaking any work within Railroad right-of-way, or before placing any obstruction over any track, the Contractor shall:**

1. **Notify the Railroad's representative at least 72 hours in advance of the work.**

2. **Receive assurance from the Railroad's representative that arrangements have been made for flagging service as may be necessary.**

3. **Receive permission from the Railroad's representative to proceed with the work.**

4. **Ascertain that the Department Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.**

## 5. CONSTRUCTION PROCEDURES:

### A. General:

**Construction work and operations by the Contractor on Railroad property shall be:**

1. **Subject to the inspection and approval of the Railroad.**

2. **In accord with the Railroad's written outline of specific conditions.**

3. **In accord with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.**

4. **In accord with these Special Provisions.**

### B. Excavation:

**The subgrade of an operated track shall be maintained with edge of berm at least 14'-0" from centerline of track and not more than 24- inches below top of rail. Contractor will not be required to make existing section meet this specification if substandard, in which case existing section will be maintained.**

**Additionally, the Railroad Engineer may require installation of orange construction safety fencing for protection of the work area.**

**C. Excavation for Structures:**

**The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. All plans and calculations for shoring shall be prepared and signed by a Registered Professional Engineer. The Registered Professional Engineer will be responsible for the accuracy for all controlling dimensions as well as the selection of soil design values which will accurately reflect the actual field conditions. The procedure for doing such work, including need of and plans and calculations for shoring, shall first be approved by the Department Engineer and the Railroad Engineer, but such approval shall not relieve the Contractor from liability.**

**Additionally, walkway with handrail protection may be required as noted in paragraph 11 herein. .**

**D. Demolition, Erection, Hoisting**

1. **Railroad tracks and other railroad property must be protected from damage during the procedure.**

2. **The Contractor is required to submit a plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.**

3. **Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.**

4. **Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and calculations.**

5. **A data sheet must be submitted listing the types, size, and arrangements of all rigging and connection equipment.**

**6. A complete procedure is to be submitted, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.**

**7. All erection or demolition plans, procedures, data sheets, etc. submitted must be prepared, signed and sealed by a Registered Professional Engineer.**

**8. The Railroad Engineer or his designated representative must be present at the site during the entire demolition and erection procedure period.**

**9. All procedures, plans and calculations shall first be approved by the Department Engineer and the Railroad Engineer, but such approval does not relieve the Contractor from liability.**

**E. <u>Blasting:</u>**

**1. The Contractor shall obtain advance approval of the Railroad Engineer and the Department Engineer for use of explosives on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:**

**(a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.**

**(b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way radios.**

**(c) No blasting shall be done without the presence of the Railroad Engineer or his authorized representative. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B) will be required to arrange for the presence of an authorized Railroad representative and such flagging as the Railroad may require.**

**(d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the**

**Railway's authorized representative. If his actions result in delay of trains, the Contractor shall bear the entire cost thereof.**

**2. The Railroad representative will:**

**(a) Determine approximate location of trains and advise the Contractor the appropriate amount of time available for the blasting operation and clean up.**

**(b) Have the authority to order discontinuance of blasting if, in his opinion, blasting is too hazardous or is not in accord with these special provisions.**

**F. <u>Maintenance of Railroad Facilities:</u>**

**1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from his operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.**

**2. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.**

**G. <u>Storage of Materials and Equipment:</u>**

**Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad Company without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad Company will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.**

**All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save Railroad, and any associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.**

**H. Cleanup:**

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

**6. DAMAGES:**

**A. The Contractor shall assume all liability for any and all damages to his work, employees, servants, equipment and materials caused by Railroad traffic.**

**B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.**

**7. FLAGGING SERVICES:**

**A. Requirements:**

**Flagging services will not be provided until the contractor's insurance has been reviewed & approved by the Railroad.**

**Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are or are likely to be, working on the Railroad's right-of-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging.**

**Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, a flagman or flagmen may be required full time until the project has been completed.**

**B. Scheduling and Notification:**

**1. The Contractor's work requiring railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of 50 hours per week. The Contractor shall receive Railroad approval of work schedules requiring a flagman's presence in excess of 40 hours per week.**

**2. Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the Department, and the Railroad's authorized representative. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.**

**3. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, it shall be confirmed in writing with copy to the Engineer. If flagging is required, no work shall be undertaken until the flagman, or flagmen are present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days notice before flagging service may be discontinued and responsibility for payment stopped.**

**4. If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Department or Railroad.**

**C. Payment:**

**1. The Department will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction.**

**2. The estimated cost of flagging is current rate per day based on a 10-hour work day. This cost includes the base pay for the flagman, overhead, and includes a per diem charge for travel expenses, meals and lodging. The charge to the Department by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required.**

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

**4. Railroad work involved in preparing and handling bills will also be charged to the Department. Charges to the Department by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Flagging costs are subject to change. *The above estimates of flagging costs are provided for information only and are not binding in any way.***

**D. Verification:**

**1. Railroad's flagman will electronically enter flagging time via Railroad's electronic billing system. Any complaints concerning flagging must be resolved in a timely manner. If need for flagging is questioned, please contact Railroad's System Engineer Public Improvements (404) 529-1641. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Highway Engineer. Address all written correspondence to:**

**Office of Chief Engineer**
**Bridges & Structures**
**Norfolk Southern Corporation**
**1200 Peachtree Street NE,**
**Internal Box 142**
**Atlanta, Georgia 30309**

**Attn:**
**System Engineer**
**Public Improvements**

**2. The Railroad flagman assigned to the project will be responsible for notifying the Department Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Department Engineer will document such notification in the project records. When requested, the Department Engineer will also sign the flagman's diary showing daily time spent and activity at the project site.**

**8. <u>HAUL ACROSS RAILROAD:</u>**

**A. Where the plans show or imply that materials of any nature must be hauled across a Railroad, unless the plans clearly show that the Department has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad. The Contractor will be required to bear all costs incidental to such crossings whether services are performed by his own forces or by Railroad personnel.**

**B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad Company unless specific authority for its installation, maintenance, necessary watching and flagging thereof and removal, until a temporary private crossing agreement has been executed between the Contractor and Railroad. The approval process for an agreement normally takes 90-days.**

**9. <u>WORK FOR THE BENEFIT OF THE CONTRACTOR:</u>**

**A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in**

**the force account agreement between the Department and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Department and/or the Railroad.**

**B. Should the Contractor desire any changes in addition to the above, then he shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.**

**10. <u>COOPERATION AND DELAYS:</u>**

**A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging his schedule he shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.**

**B. No charge or claim of the Contractor against either the Department or the Railroad Company will be allowed for hindrance or delay on account of railway traffic; any work done by the Railway Company or other delay incident to or necessary for safe maintenance of railway traffic or for any delays due to compliance with these special provisions.**

**11. <u>TRAINMAN'S WALKWAYS:</u>**

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

**12. <u>GUIDELINES FOR PERSONNEL ON RAILROAD RIGHT-OF-WAY:</u>**

**A. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Wearing of safety boots is strongly recommended. In the vicinity of at-grade crossings, it is strongly recommended that reflective vests be worn.**

**B.** **No one is allowed within 25' of the centerline of track without specific authorization from the flagman.**

**C.** **All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.**

**D.** **No one is allowed to cross tracks without specific authorization from the flagman.**

**E.** **All welders and cutting torches working within 25' of track must stop when train is passing.**

**F.** **No steel tape or chain will be allowed to cross or touch rails without permission.**

**13.** **<u>GUIDELINES EQUIPMENT ON RAILROAD RIGHT-OF-WAY:</u>**

**A.** **No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from railroad official and flagman.**

**B.** **No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.**

**C.** **All employees will stay with their machines when crane or boom equipment is pointed toward track.**

**D.** **All cranes and boom equipment under load will stop work while train is passing (including pile driving).**

**E.** **Swinging loads must be secured to prevent movement while train is passing.**

**F.** **No loads will be suspended above a moving train.**

**G.** **No equipment will be allowed within 25' of centerline of track without specific authorization of the flagman.**

**H.** **Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.**

**I.** **No equipment or load movement within 25' or above a standing train or railroad equipment without specific authorization of the flagman.**

**J.** **All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the**

**flagman if the flagman views the operation to be dangerous to the passing train.**

**K. All equipment, loads and cables are prohibited from touching rails.**

**L. While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.**

**M. No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.**

**N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.**

**O. All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.**

**14. <u>INSURANCE:</u>**

**A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:**

**1. Commercial General Liability Insurance having a combined single limit of not less than $2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse, and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.**

**2. Railroad Protective Liability Insurance having a combined single limit of not less than $2,000,000 each occurrence and $6,000,000 in the aggregate applying separately to each annual period. If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of $5,000,000 each occurrence and $10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.**

**The standards for the Railroad Protective Liability Insurance are as follows:**

**a. The insurer must be rated A- or better by A.M. Best Company, Inc.**

**b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability Insurance Form Numbers:**

**c.**

**(1) CG 00 35 01 96 and CG 28 31 10 93; or**
**(2) CG 00 35 07 98 and CG 28 31 07 98; or**
**(3) CG 00 35 10 01; or**
**(4) CG 00 35 12 04.**

**d. The named insured shall read:**

**Norfolk Southern Railway Company**
**Three Commercial Place**
**Norfolk, Virginia 23510-2191**
**Attn: Risk Management**

**e. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Department project and contract identification numbers.**

**f. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. NOTE: Do not include any references to milepost on the insurance policy.**

**g. The name and address of the prime contractor must appear on the Declarations.**

**h. The name and address of the Department must be identified on the Declarations as the "Involved Governmental Authority or Other Contracting Party."**

**i. Other endorsements/forms that will be accepted are:**

**(1) Broad Form Nuclear Exclusion – Form IL 00 21**
**(2) 30-day Advance Notice of Non-renewal or cancellation**
**(3) Required State Cancellation Endorsement**
**(4) Quick Reference or Index Form CL/IL 240**

**j. Endorsements/forms that are <u>NOT</u> acceptable are:**

**(1) Any Pollution Exclusion Endorsement except CG 28 31**
**(2) Any Punitive or Exemplary Damages Exclusion**
**(3) Known injury or Damage Exclusion form CG 00 59**
**(4) Any Common Policy Conditions form**
**(5) Any other endorsement/form not specifically authorized in item no. 2.h above.**

**B. If any part of the work is sublet, similar insurance, and evidence thereof as specified in A.1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.**

**C. Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Department at the address below for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be issued to the Railroad and the Department at the addresses below, and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Department. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.**

| **<u>DEPARTMENT:</u>** | **<u>RAILROAD:</u>** |
|---|---|
| | **Risk Management**<br>**Norfolk Southern Railway Company**<br>**Three Commercial Place**<br>**Norfolk, Virginia 23510-2191** |

**D. The insurance required herein shall in no way serve to limit the liability of Department or its Contractors under the terms of this agreement.**

**15. FAILURE TO COMPLY:**

**In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:**

**A. The Railroad Engineer may require that the Contractor vacate Railroad property.**

**B. The Engineer may withhold all monies due the Contractor on monthly statements.**

**Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Engineer.**

**16. PAYMENT FOR COST OF COMPLIANCE:**

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

**Office of Chief Engineer**
**Bridges & Structures**
**Norfolk Southern Corporation**
**1200 Peachtree Street, N. E.**
**Internal Box 142**
**Atlanta, GA 30309**

**Date:**
**File:**
**Milepost:**

# Right-of-Way Certification Form

*Revised 2/22/11*

☑ Federal Funded ☑ Original

☐ State Funded ☐ Re-Certification

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

Date: August 25, 2011

Project Name: Newtown Pike Extension
Letting Date: October 21, 2011
Project #: 034 7229
County: Fayett
Item #: 7-593.11
Federal #: STP 3003(250)

Description of Project: SOUND BARRIER WALL ALONG THE RAILROAD YARD FROM VERSAILLES RD TO BROADWAY

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

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

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

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

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

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

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

# Right-of-Way Certification Form

*Revised 2/22/11*

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

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

Approved: JEFF RAY (Printed Name) _____ (Signature) Right-of-Way Supervisor

Approved: Keith McDonald (Printed Name) _____ (Signature) 9/6/11 KYTC, Director of ROW &Utilities

Approved: _____ (Printed Name) _____ (Signature) FHWA, ROW Officer (when applicable)

# Right-of-Way Certification Form

*Revised 2/22/11*

Date: August 25, 2011

Project Name: Newtown Pike Extension
Project #: 034 7229
Item #: 7-593.11
Letting Date: October 21, 2011

County: Fayette
Federal #: STP 3003(250)

This project has 1 total number of parcels to be acquired, and 0 total number of individuals or families to be relocated, as well as 0 total number of businesses to be relocated.

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

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

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

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

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

| Parcel # | Name/Station | Explanation for delayed acquisition, delayed relocation, or delayed payment of fair market value | Proposed date of payment or of relocation |
|---|---|---|---|
| 100 | Cincinnati Souther Railway | Changes required in r/w limits as requested by railroad | |
| | | Offers have made, still under review | |
| | | | |
| | | | |
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There are 0 billboards and/or 0 cemeteries involved on this project.

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

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

# PART II

# SPECIFICATIONS AND STANDARD DRAWINGS

## SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to the *Standard Specifications for Road and Bridge Construction, Edition of 2004,* and *Standard Drawings, Edition of 2000* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2008* and *Standard Drawings, Edition of 2003 with the 2008 Revision.*

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 101.02 Abbreviations.<br>Insert the following abbreviation and text into the section:<br><br>KEPSC Kentucky Erosion Prevention and Sediment Control |
| **SUBSECTION:**<br>**REVISION:** | 101.03 Definitions.<br>Replace the definition for Specifications – *Special Provisions* with the following:<br><br>Additions and revisions to the Standard and Supplemental Specifications covering conditions peculiar to an individual project. |
| **SUBSECTION:**<br>**REVISION:** | 102.03 Contents of the Bid Proposal Form.<br>Replace the first sentence of the first paragraph with the following:<br>The Bid Proposal form will be available on the Department internet website (http://transportation.ky.gov/contract/).<br><br>Delete the second paragraph.<br><br>Delete the last paragraph. |
| **SUBSECTION:**<br>**REVISION:** | 102.04 Issuance of Bid Proposal Form.<br>Replace Heading with the following:<br><br>102.04 Bidder Registration.<br><br>Replace the first sentence of the first paragraph with the following:<br><br>The Department reserves the right to disqualify or refuse to place a bidder on the eligible bidder's list for a project for any of the following reasons:<br><br>Replace the last sentence of the subsection with the following:<br><br>The Department will resume placing the bidder on the eligible bidder's list for projects after the bidder improves his operations to the satisfaction of the State Highway Engineer. |
| **SUBSECTION:**<br>**REVISION:** | 102.06 Examination of Plans, Specifications, Special Provisions, Special Notes, and Site of Work.<br>Replace the first paragraph with the following:<br><br>Examine the site of the proposed work, the Bid Proposal, Plans, specifications, contract forms, and bulletins and addendums posted to the Department's website and the Bid Express Bidding Service Website before submitting the Bid Proposal. The Department considers the submission of a Bid Proposal prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the Contract. |
| **SUBSECTION:**<br>**REVISION:** | 102.07.01 General.<br>Replace the first sentence with the following:<br><br>Submit the Bid Proposal on forms furnished on the Bid Express Bidding Service website (www.bidx.com).<br><br>Replace the first sentence of the third paragraph with the following:<br><br>Bid proposals submitted shall use an eligible Digital ID issued by Bid Express. |

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 102.07.02 Computer Bidding.<br>Replace the first paragraph with the following:<br><br>Subsequent to registering for a specific project, use the Department's Expedite Bidding Program on the internet website of the Department of Highways, Division of Construction Procurement (http://transportation.ky.gov/contract/). Download the bid file from the Bid Express Bidding Service Website to prepare a Bid Proposal for submission to the Department. Submit Bid Proposal electronically through Bid Express Bidding Service.<br><br>Delete the second and third paragraph. |
| **SUBSECTION:**<br>**REVISION:** | 102.08 Irregular Bid Proposals.<br>Delete the following from the first paragraph: 4) fails to submit a disk created from the Highway Bid Program.<br><br>Replace the second paragraph with the following:<br>The Department will consider Bid Proposals irregular and may reject them for the following reasons:<br><br>1) when there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the Bid Proposal incomplete, indefinite, or ambiguous as to its meaning; or<br>2) when the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a Contract pursuant to an award; or<br>3) any failure to comply with the provisions of Subsection 102.07; or<br>4) Bid Proposals in which the Department determines that the prices are unbalanced; or when the sum of the total amount of the Bid Proposal under consideration exceeds the bidder's Current Capacity Rating. |
| **SUBSECTION:**<br>**REVISION:** | 102.09 Bid Proposal Guaranty.<br>Insert the following after the first sentence:<br><br>Bid Proposals must have a bid proposal guaranty in the amount indicated in the bid proposal form accompany the submittal. A guaranty in the form of a paper bid bond, cashier's check, or certified check in an amount no less than the amount indicated on the submitted electronic bid is required when the electronic bid bond was not utilized with the Bid Express Bidding Service. Paper bid bonds must be delivered to the Division of Construction Procurement prior to the time of the letting. |
| **SUBSECTION:**<br>**REVISION:** | 102.10 Delivery of Bid Proposals.<br>Replace paragraph with the following:<br><br>Submit all Bid Proposals prior to the time specified in the Notice to Contractors. All bids shall be submitted electronically using Bid Express Bidding Services. Electronically submitted bids must be done in accordance with the requirements of the Bid Express Bidding Service. |
| **SUBSECTION:**<br>**REVISION:** | 102.11 Withdrawal or Revision of Bid Proposals.<br>Replace the paragraph with the following:<br><br>Bid Proposals can be withdrawn in accordance the requirements of the Bid Express Bidding Service prior to the time of the Letting. |

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 102.13 Public Opening of Bid Proposals.<br>Replace Heading with the following:<br>102.13 Public Announcement of Bid Proposals.<br><br>Replace the paragraph with the following:<br>The Department will publicly announce all Bid Proposals at the time indicated in the Notice to Contractors. |
| **SUBSECTION:**<br>**REVISION:** | 103.02 Award of Contract.<br>Replace the first sentence of the third paragraph with the following:<br><br>The Department will normally award the Contract within 10 working days after the date of receiving Bid Proposals unless the Department deems it best to hold the Bid Proposals of any or all bidders for a period not to exceed 60 calendar days for final disposition of award. |
| **SUBSECTION:**<br>**REVISION:** | 105.02 Plans and Working Drawings.<br>Insert the following after the fourth paragraph:<br><br>Submit electrical shop drawings, design data, and descriptive literature for materials in electronic format to the Division of Traffic Operations for approval. Drawings and literature shall be submitted for lighting and signal components. Notify the Engineer when submitting information to the Division of Traffic Operations. Do not begin work until shop drawings are approved.<br><br>Submit shop drawings for traffic counting equipment and materials in electronic format to the Engineer or the Division of Planning. Notify the Engineer when submitting information directly to the Division of Planning. Do not begin work until shop drawings are reviewed and approved. |
| **SUBSECTION:**<br>**REVISION:** | 105.03 Record Plans.<br>Replace the section with the following:<br><br>Record Plans are those reproductions of the original Plans on which the accepted Bid Proposal was based and, and signed by a duly authorized representative of the Department. The Department will make these plans available for inspection in the Central Office at least 24 hours prior to the time of opening bids and up to the time of letting of a project or projects. The quantities appearing on the Record Plans are the same as those on which Bid Proposals are received. The Department will use these Record Plans as the controlling plans in the prosecution of the Contract. The Department will not make any changes on Record Plans subsequent to their issue unless done so by an approved contract modification. The Department will make 2 sets of Record Plans for each project, and will maintain one on file in the Central Office and one of file in the District Office. The Department will furnish the Contractor with the following: 1 full size, 2 half size and an electronic file copy of the Record Plans at the Pre-Construction conference. |

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 105.12 Final Inspection and Acceptance of Work.<br>Insert the following paragraphs after the first paragraph:<br><br>Notify the Engineer when all electrical items are complete. A notice of the electrical work completion shall be made in writing to the Contractor. Electrical items will be inspected when the electrical work is complete and are not subject to waiting until the project as a whole has been completed. The Engineer will notify the Division of Traffic Operations within 3 days that all electrical items are complete and ready for a final inspection. A final inspection will be completed within 90 days after the Engineer notifies the Division of Traffic Operations of the electrical work completion.<br>Energize all electrical items prior to notifying the Engineer that all electrical items are complete. Electrical items must remain operational until the Division of Traffic Operations has inspected and accepted the electrical portion of the project. Payment for the electrical service is the responsibility of the Contractor from the time the electrical items are energized until the Division of Traffic Operations has accepted the work.<br>Complete all corrective work within 90 calendar days of receiving the original electrical inspection report. Notify the Engineer when all corrective work is complete. The Engineer will notify the Division of Traffic Operations that the corrective work has been completed and the project is ready for a follow-up inspection. Upon re-inspection, if additional corrective work is required, complete within the same 90 calendar day allowance. The Department will not include time between completion of the corrective work and the follow up electrical inspection(s). The 90 calendar day allowance is cumulative regardless of the number of follow-up electrical inspections required.<br>The Department will assume responsibility for the electrical service on a project once the Division of Traffic Operations gives final acceptance of the electrical items on the project. The Department will also assume routine maintenance of those items. Any damage done to accepted electrical work items by other Contractors shall be the responsibility of the Prime Contractor. The Department will not be responsible for repairing damage done by other contractors during the construction of the remaining project.<br>Failure to complete the electrical corrective work within the 90 calendar day allowance will result in penalties assessed to the project. Penalties will be assessed at ½ the rate of liquidated damages established for the contract.<br><br>Replace the following in the second sentence of the second paragraph:<br><br>Replace Section 213 with Section 212.<br><br>Delete the fifth paragraph from the section. |
| **SUBSECTION:**<br>**REVISION:** | 105.13 Claim Resolution Process.<br>Replace the last sentence of the 3. Bullet with the following:<br><br>If the Contractor did not submit an as-bid schedule at the Pre-Construction Meeting or a written narrative in accordance with Subsection 108.02, the Cabinet will not consider the claim for delay.<br><br>Delete the last paragraph from the section. |

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(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 106.04 Buy America Requirement.<br>Replace the section with the following:<br><br>**106.04 Buy America Requirement.** Follow the "Buy America" provisions as required by Title 23 Code of Federal Regulations § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:<br>• Coating,<br>• Galvanizing,<br>• Painting, and<br>• Other coating that protects or enhances the value of steel or iron products.<br><br>The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:<br>• Pig iron,<br>• Processed, pelletized, and reduced iron ore material, or<br>• Processed alloys.<br><br>The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.<br><br>Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.<br><br>Use foreign materials only under the following conditions:<br><br>1) When the materials are not permanently incorporated into the project; or<br>2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or $2,500.00, whichever is greater.<br><br>The Contractor shall submit to the Engineer the origin and value of any foreign material used. |
| **SUBSECTION:**<br>**REVISION:** | 106.10 Field Welder Certification Requirements.<br>Insert the following sentence before the first sentence of the first paragraph:<br><br>All field welding must be performed by a certified welder unless otherwise noted. |
| **SUBSECTION:**<br>**REVISION:** | 108.02 Progress Schedule.<br>Insert the following prior to the first paragraph:<br><br>Specification 108.02 applies to all Cabinet projects except the following project types:<br>• Right of Way Mowing and/or Litter Removal<br>• Waterborne Paint Striping<br>• Projects that contain Special Provision 82<br>• Projects that contain the Special Note for CPM Scheduling<br><br>Insert the following paragraph after paragraph two:<br><br>Working without the submittal of a Written Narrative is violation of this specification and additionally voids the Contractor's right to delay claims.<br><br>Insert the following paragraph after paragraph six:<br><br>The submittal of bar chart or Critical Path Method schedule does not relieve the Contractor's requirement to submit a Written Narrative schedule. |

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| | Insert the following at the beginning of the first paragraph of A) Written Narrative.:<br><br>Submit the Written Narrative Schedule using form TC 63-50 available at the Division of Construction's website (http://www.transportation.ky.gov/construction/ResCenter/ResCenter.htm).<br><br>Replace Part A) Written Narrative 1. And 2. with the following:<br><br>1. Provide a description that includes how the Contractor will sequence and stage the work, how the Contractor plans to maintain and control traffic being specific and detailed, and what equipment and crew sizes are planned to execute the work.<br>2. Provide a list of project milestones including, if applicable, winter shut-downs, holidays, or special events. The Contractor shall describe how these milestones and other dates effect the prosecution of the work. Also, include start date and completion date milestones for the contract, each project if the contract entails multiple projects, each phase of work, site of work, or segment of work as divided in the project plans, proposal, or as subdivided by the Contractor. |
| **SUBSECTION:**<br>**REVISION:** | 109.07.01 Liquid Asphalt.<br>Add the following to the Adjustable Contract Items:<br>• Stone Matrix Asphalt for Base<br>• Stone Matrix Asphalt for Surface |
| **SUBSECTION:**<br>**REVISION:** | 110.01 Mobilization.<br>Replace paragraph three with the following:<br><br>Do not bid an amount for Mobilization that exceeds 5 percent of the sum of the total amounts bid for all items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposals that are in excess of this amount down to 5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for Mobilization is less than 5 percent, or the Department will award the Contract for the adjusted bid amount of 5 percent when the amount bid for Mobilization is greater than 5 percent. If any errors in unit bid prices for other Contract items in a Contractor's Bid Proposal are discovered after bid opening and such errors reduce the total amount bid for all other items, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives, so that the percent bid for Mobilization is larger than 5 percent, the Department will adjust the amount bid for Mobilization to 5 percent of the sum of the corrected total bid amounts. |
| **SUBSECTION:**<br>**REVISION:** | 110.02 Demobilization.<br>Replace the third paragraph with the following:<br><br>Bid an amount for Demobilization that is a minimum of $1,000 or 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. The Department will automatically adjust any Bid Proposal that is less than this amount up to $1,000 or 1.5 percent to compare Bid Proposals and award the Contract. The Department will award a Contract for the actual amount bid when the amount bid for demobilization exceeds 1.5 percent, or the Department will award the Contract for the adjusted bid amount when the amount bid for demobilization is less than the minimum of $1,000 or less than 1.5 percent of the sum of the total amounts bid for all other items in the Bid Proposal, excluding Mobilization, Demobilization, and contingent amounts established for adjustments and incentives. |
| **SUBSECTION:**<br>**REVISION:** | 110.04 Payment.<br>Insert the following paragraph following the demobilization payment schedule (4th paragraph):<br><br>The Department will withhold an amount equal to $1,000 for demobilization, regardless of the schedule listed above. The $1,000 withheld for demobilization will be paid when the final estimate is paid. |

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

(Effective with the July15, 2011 Letting)

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| **SUBSECTION:**<br>**REVISION:** | 112.03.01 General Traffic Control.<br>Replace paragraph three with the following:<br><br>All flaggers shall be trained in current MUTCD flagging procedures. Proof of training must be available for review at the Department's request. Flagging credentials must be current within the last 5 years. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 112.03.11 Temporary Pavement Markings.<br>B) Placement and Removal of Temporary Striping.<br>Replace the 2nd sentence of the first paragraph with the following:<br><br>On interstates and parkways, and other roadways approved by the State Highway Engineer, install pavement striping that is 6 inches in width. |
| **SUBSECTION:**<br>**REVISION:** | 112.03.12 Project Traffic Coordinator (PTC).<br>Add the following at the end of the subsection:<br><br>After October 1, 2008 the Department will require the PTC to have successfully completed the applicable qualification courses. Personnel that have not successfully completed the applicable courses by that date will not be considered qualified. Prior to October 1, 2008, conform to Subsection 108.06 A) and ensure the designated PTC has sufficient skill and experience to properly perform the task. |
| **SUBSECTION:**<br>**REVISION:** | 112.03.15 Non-Compliance of Maintain and Control of Traffic.<br>Add the following section:<br><br>**112.03.15 Non-Compliance of Maintain and Control of Traffic.** It is the Contractor's responsibility to conform to the traffic control requirements in the TCP, Proposal, plan sheets, specifications, and the Manual on Uniform Traffic Control Devices.<br><br>Unless specified elsewhere in the contract, a penalty will be assessed in the event of non-compliance with Maintain and Control of Traffic requirements. These penalties will be assessed when the Contractor fails to correct a situation or condition of non-compliance with the contract traffic control requirements after being notified by the Engineer. The calculation of accrued penalties for non-compliance will be based upon the date/time of notification by the Engineer.<br><br>The amount of the penalty assessed for non-compliance will be determined based upon the work zone duration, as defined by the MUTCD, and will be the greatest of the different calculation methods indicated below:<br><br>A) Long-term stationary work that occupies a location more than 3 days.<br><br>Correct the non-compliant issue within 24 hours from initial notification by the Engineer. If the issue is not corrected within 24 hours from the initial notification, a penalty for non-compliance will be assessed on a daily basis beginning from the initial notification of non-compliance. The Contractor will be assessed a $1,000 daily penalty or the amount equal to the contract liquidated damages in Section 108.09, whichever of the 2 is greater. The penalty for non-compliance will escalate as follows for continued non-compliance after the initial notification.<br><br>3 Days after Notification<br>$1,500 daily penalty or 1.5 times the contract liquidated damages daily charge rate in Section 108.09, whichever is greater.<br><br>7 Days after Notification<br>$2,000 daily penalty or double the contract liquidated damages daily charge rate in Section 108.09, whichever is greater. |

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| | B) Intermediate-term stationary work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.<br><br>Correct the non-compliant issue within 4 hours from initial notification by the Engineer. If the issue is not corrected within 4 hours from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at $200 per hour.<br><br>C) Short-term stationary is work that occupies a location for more than 1 hour within a single 24-hour period.<br><br>Correct the non-compliant issue within 1 hour from initial notification by the Engineer. If the issue is not corrected within 1 hour from notification, a penalty for non-compliance will be assessed on an hourly basis beginning from the initial notification of non-compliance. The penalty for non-compliance will be assessed at $200 per hour.<br><br>If the Contractor remains in violation of the Maintain and Control of Traffic requirements, or if the Department determines it to be in the public's interest, work will be suspended in accordance with Section 108.08 until the deficiencies are corrected. The Department reserves the right to correct deficiencies by any means available and charge the Contractor for labor, equipment, and material costs incurred in emergency situations. |
| **SUBSECTION:**<br>**REVISION:** | 206.03.02 Embankment<br>Replace the last paragraph with the following:<br><br>When rock roadbed is specified, construct the upper 2 feet of the embankment according to Subsection 204.03.09 A). |
| **SUBSECTION:**<br>**REVISION:** | 213.03.03 Inspection and Maintenance.<br>Replace the last sentence of the second paragraph with the following:<br><br>Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7 calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event.<br><br>Insert the following paragraph after the second paragraph:<br><br>When the Contractor is required to obtain the KPDES permit, it is their responsibility to ensure compliance with the inspection and maintenance requirements of the permit. The Engineer will perform verification inspections a minimum of once per month and within 7 days of a ½ inch or greater rainfall event. The Engineer will document these inspections using Form TC 63-61 A. The Engineer will provide copies of the inspection only when improvements to the BMP's are required. Verification inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit. Initiate corrective action within 24 hours of any noted deficiency and complete the work within 7calendar days of receipt of the report. The Contractor shall make a concentrated effort to complete any corrective action required prior to the next predicted rainfall event. |

# Supplemental Specifications to The Standard Specifications for Road and Bridge Construction, 2008 Edition

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| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 213.03.05 Temporary Control Measures.<br>E) Temporary Seeding and Protection.<br>Replace the first paragraph with the following:<br><br>Apply an Annual Rye seed mix at a rate of 100 pounds per acre during the months of March through August. In addition to the Annual Rye, add 10 pounds of German Foxtail-Millet (Setaria italica), when performing temporary seeding during the months of June through August. During the months of September through February, apply Winter Wheat or Rye Grain at a rate of 100 pounds per acre. Obtain the Engineer's approval prior to the application of the seed mixture. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 213.03.05 Temporary Control Measures.<br>F) Temporary Mulch.<br>Replace the last sentence with the following:<br><br>Place temporary mulch to an approximate 2-inch loose depth (2 tons per acre) and anchor it into the soil by mechanically crimping it into the soil surface or applying tackifier to provide a protective cover. Regardless of the anchoring method used, ensure the protective cover holds until disturbance is required or permanent controls are in installed. |
| **SUBSECTION:**<br>**REVISION:** | 303.05 Payment.<br>Replace the second paragraph of the section with the following:<br><br>The Department will make payment for Drainage Blanket-Type II (ATDB) according to the Lot Pay Adjustment Schedule for Specialty Mixtures in Section 402. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 401.02.04 Special Requirements for Dryer Drum Plants.<br>F) Production Quality Control.<br>Replace the first sentence with the following:<br><br>Stop mixing operations immediately if, at any time, a failure of the automatic electronic weighing system of the aggregate feed, asphalt binder feed, or water injection system control occurs. |
| **SUBSECTION:**<br>**REVISION:** | 401.02.04 Special Requirements for Dryer Drum Plants.<br>Add the following:<br><br>Part G) **Water Injection System.** Provided each system has prior approval as specified in Subsection 402.01.01, the Department will allow the use of water injection systems for purposes of foaming the asphalt binder and lowering the mixture temperature for production of Warm Mix Asphalt (WMA).<br>Ensure the equipment for water injection meets the following requirements:<br>1) Injection equipment computer controls are automatically coupled to the plants controls (manual operation is not permitted);<br>2) Injection equipment has variable controls that introduce water ratios based on production rates of mixtures;<br>3) Injects water into the flow of asphalt binder prior to contacting the aggregate;<br>4) Provides alarms on the water injection system that operate when the flow of water is interrupted or deviates from the prescribed water rate. |
| **SUBSECTION:**<br>**REVISION:** | 401.03.01 Preparation of Mixtures.<br>Replace the last sentence of the second paragraph with the following:<br><br>Do not use asphalt binder while it is foaming in a storage tank. |

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**SUBSECTION:** 401.03.01 Preparation of Mixtures.
**REVISION:** Replace the third paragraph and Mixing and Laying Temperature table with the following:

Maintain the temperature of the component materials and asphalt mixture within the ranges listed in the following table:

| MIXING AND LAYING TEMPERATURES (ºF) | | | |
|---|---|---|---|
| Material | | Minimum | Maximum |
| Aggregates | | 240 | 330 |
| Aggregates used with Recycled Asphalt Pavement (RAP) | | 240 | — |
| Asphalt Binders | PG 64-22 | 230 | 330 |
| | PG 76-22 | 285 | 350 |
| Asphalt Mixtures at Plant (Measured in Truck) | PG 64-22 HMA | 250 | 330 |
| | PG 76-22 HMA | 310 | 350 |
| | PG 64-22 WMA | 230 | 275 |
| | PG 76-22 WMA | 250 | 300 |
| Asphalt Mixtures at Project (Measured in Truck When Discharging) | PG 64-22 HMA | 230 | 330 |
| | PG 76-22 HMA | 300 | 350 |
| | PG 64-22 WMA | 210 | 275 |
| | PG 76-22 WMA | 240 | 300 |

**SUBSECTION:** 402.01 Description.
**REVISION:** Replace the paragraph with the following:

Provide the process control and acceptance testing of all classes and types of asphalt mixtures which may be furnished either as hot mix asphalt (HMA) or warm mix asphalt (WMA) produced with water injection systems.

**SUBSECTION** 402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.
**REVISION:** Add the following subsection:

402.01.01 Warm Mix Asphalt (WMA) Evaluation and Approval.
The Department will evaluate trial production of WMA by use of a water injection system provided the system is installed according to the manufacturer's requirements and satisfies the requirements of Section 401. Evaluation will include production and placement of WMA to demonstrate adequate mixture quality including volumetric properties and density by Option A as specified in Subsection 402.03.02 D). Do not place WMA for evaluation on Department projects. Provided production and placement operations satisfy the applicable quality levels, the Department will approve WMA production on Department projects using the water injection system as installed on the specific asphalt mixing plant evaluated.

**SUBSECTION:** 402.05.02 Asphalt Mixtures and Mixtures With RAP.
**REVISION:** Replace Subsection Title as below:

402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.

**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**REVISION:** Replace the paragraph with the following:

The Department will pay for the mixture at the Contract unit bid price and apply a Lot Pay Adjustment for each lot placed based on the degree of compliance with the specified tolerances. Using the appropriate Lot Pay Adjustment Schedule, the Department will assign a pay value for the applicable properties within each sublot and average the sublot pay values to determine the pay value for a given property for each lot. The Department will apply the Lot Pay Adjustment for each lot to a defined unit price of $50.00 per ton. The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

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**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**PART:** C) Conventional and RAP Mixtures Placed on Shoulders.
**REVISION:** Replace Title and Text with the following:

C) HMA, WMA and RAP Mixtures Placed on Shoulders or Placed as Asphalt Pavement Wedge.

1) Placed monolithically with the Mainline – Width of 4 feet or less. The Department will pay as mainline mixture.
2) Placed monolithically with the Mainline – Width of greater than 4 feet. The Department will pay as mainline mixture but use 1.00 for the Lane and Joint Density Pay Value for shoulder or Asphalt Pavement Wedge quantities.
3) Placed Separately. The Department will use 1.00 for the Lane and Joint Density Pay Value.

**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**PART:** D) Conventional and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.
**REVISION:** Replace the title with the following:
D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge.

Delete the following:
D) HMA, WMA, and RAP Mixtures Placed Monolithically as Asphalt Pavement Wedge. The Department will pay as mainline mixture but use a 1.00 pay value for all properties.

**SUBSECTION:** 402.05.02 Asphalt Mixtures for Temporary Pavement.
**PART:** E) Asphalt Mixtures for Temporary Pavement.
**REVISION:** Replace E) Asphalt Mixtures for Temporary Pavement with the following:

D) Asphalt Mixtures for Temporary Pavement.

**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**PART:** Lot Pay Adjustment Schedule, Compaction Option A, Base and Binder Mixtures
**TABLES:** VMA
**REVISION:** Replace the VMA table with the following:

| VMA | |
|---|---|
| Pay Value | Deviation From Minimum |
| 1.00 | ≥ min. VMA |
| 0.95 | 0.1-0.5 below min. |
| 0.90 | 0.6-1 0 below min. |
| (1) | > 1.0 below min. |

**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**PART:** Lot Pay Adjustment Schedule, Compaction Option A, Surface Mixtures
**TABLES:** VMA
**REVISION:** Replace the VMA table with the following:

| VMA | |
|---|---|
| Pay Value | Deviation From Minimum |
| 1.00 | ≥ min. VMA |
| 0.95 | 0.1-0.5 below min. |
| 0.90 | 0.6-1.0 below min. |
| (1) | > 1.0 below min. |

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**SUBSECTION:** 402.05.02 Asphalt Mixtures, HMA and WMA, Including Mixtures With RAP.
**PART:** Lot Pay Adjustment Schedule, Compaction Option B Mixtures
**TABLE:** VMA
**REVISION:** Replace the VMA table with the following:

| VMA | |
|---|---|
| Pay Value | Deviation From Minimum |
| 1.00 | ≥min. VMA |
| 0.95 | 0 1-0.5 bel w min. |
| 0.9 | 0.6-1.0 below min. |
| (2) | > 1.0 below min. |

**SUBSECTION:** 403.03.03 Preparation of Mixture.
**PART:** C) Mix Design Criteria.
**NUMBER:** 1) Preliminary Mix Design.
**REVISION:** Replace the last two sentences of the paragraph and table with the following:

Complete the volumetric mix design at the appropriate number of gyrations as given in the table below for the number of 20-year ESAL's. The Department will define the relationship between ESAL classes, as given in the bid items for Superpave mixtures, and 20-year ESAL ranges as follows:

| | | Number of Gyrations | | |
|---|---|---|---|---|
| **Class** | **ESAL's (millions)** | $N_{initial}$ | $N_{design}$ | $N_{max}$ |
| 2 | < 3.0 | 6 | 50 | 75 |
| 3 | 3.0 to < 30.0 | 7 | 75 | 115 |
| 4 | ≥ 30.0 | 8 | 100 | 160 |

**SUBSECTION:** 403.03.09 Leveling and Wedging, and Scratch Course.
**PART:** A) Leveling and Wedging.
**REVISION:** Replace the first sentence of the first paragraph with the following:

Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.

**SUBSECTION:** 403.03.09 Leveling and Wedging, and Scratch Course.
**PART:** B) Scratch Course.
**REVISION:** Replace the second sentence of the first paragraph with the following:

Conform to the gradation requirements (control points) of AASHTO M 323 for base, binder, or surface as the Engineer directs.

**SUBSECTION:** 407.01 DESCRIPTION.
**REVISION:** Replace the first sentence of the paragraph with the following:

Construct a pavement wedge composed of a hot-mixed or warm-mixed asphalt mixture.

**SUBSECTION:** 409.01 DESCRIPTION.
**REVISION:** Replace the first sentence of the paragraph with the following:

Use reclaimed asphalt pavement (RAP) from Department projects or other approved sources in hot mix asphalt (HMA) or warm mix asphalt (WMA) provided mixture requirements are satisfied.

**SUBSECTION:** 410.01 DESCRIPTION.
**REVISION:** Delete the second sentence of the paragraph.

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**SUBSECTION:** 410.03.01 Corrective Work.
**REVISION:** Replace the last sentence of the paragraph with the following:

Provide a final surface comparable to the adjacent pavement that does not require corrective work in respect to texture, appearance, and skid resistance.

**SUBSECTION:** 410.03.02 Ride Quality.
**PART:** B) Requirements.
**NUMBER:** 1) Category A.
**REVISION:** Replace the last sentence of the first paragraph with the following:

At the Department's discretion, a pay deduction of $1200 per 0.1-lane-mile section may be applied in lieu of corrective work.

**SUBSECTION:** 410.03.02 Ride Quality.
**PART:** B) Requirements.
**NUMBER:** 2) Category B.
**REVISION:** Replace the second and third sentence of the first paragraph with the following:

When the IRI is greater than 90 for a 0.1-mile section, perform corrective work, or remove and replace the pavement to achieve the specified IRI. At the Department's discretion, a pay deduction of $750 per 0.1-lane-mile section may be applied in lieu of corrective work.

**SUBSECTION:** 410.05 PAYMENT.
**REVISION:** Add the following sentence to the end of the first paragraph:

The sum of the pay value adjustments for ride quality shall not exceed $0 for the project as a whole.

**SUBSECTION:** 413.05.02 CL3 SMA BASE 1.00D PG76-22.
**REVISION:** Insert the following sentence between the first and second sentence of the first paragraph:

The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

**SUBSECTION:** 413.05.02 CL3 SMA BASE 1.00D PG 76-22.
**TABLE:** JOINT DENSITY TABLE
**REVISION:** Replace the joint density table with the following:

| LANE DENSITY | |
|---|---|
| Pay Value | Test Result (%) |
| 1.05 | 95.0-96.5 |
| 1.00 | 93.0-94.9 |
| 0.95 | 92.0-92.9 or 96.6-97.0 |
| 0.90 | 91.0-91.9 or 97.1-97.5 |
| *(1)* | < 91.0 or > 97.5 |

**SUBSECTION:** 413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.
**REVISION:** Insert the following sentence between the first and second sentence of the first paragraph:

The Department will calculate the Lot Pay Adjustment using all possible incentives and disincentives but will not allow the overall pay value for a lot to exceed 1.00.

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**SUBSECTION:** 413.05.03 CL3 SMA SURF 0.50A PG76-22 and CL3 SMA SURF 0.38A PG76-22.
**TABLE:** JOINT DENSITY TABLE
**REVISION:** Replace the joint density table with the following:

| DENSITY | | |
|---|---|---|
| Pay Value | Lane Density Test Result (%) | Joint Density Test Result (%) |
| 1.05 | 95.0-96.5 | 92.0-96.0 |
| 1.00 | 93.0-94.9 | 90.0-91.9 |
| 0.95 | 92.0-92.9 or 96.6-97.0 | 89.0-89.9 or 96.1-96.5 |
| 0.90 | 91.0-91.9 or 97.1-97.5 | 88.0-88.9 or 96.6-97.0 |
| 0.75 | ---- | < 88.0 or > 97.0 |
| *(1)* | < 91.0 or > 97.5 | ---- |

**SUBSECTION:** 501.05.02 Ride Quality.
**REVISION:** Add the following sentence to the end of the first paragraph:

The sum of the pay value adjustments for the ride quality shall not exceed $0 for the project as a whole.

**SUBSECTION:** 505.03.04 Detectable Warnings.
**REVISION:** Replace the first sentence with the following:

Install detectable warning pavers at all sidewalk ramps and on all commercial entrances according to the Standard Drawings.

**SUBSECTION:** 505.04.04 Detectable Warnings.
**REVISION:** Replace the paragraph with the following:

The Department will measure the quantity in square feet. All retrofit applications for maintenance projects will require the removal of existing sidewalks to meet the requirements of the standard drawings applicable to the project. The cost associated with the removal of the existing sidewalk will be incidental to the detectable warnings bid item or incidental to the bid item for the construction of the concrete sidewalk unless otherwise noted.

**SUBSECTION:** 505.05 PAYMENT.
**REVISION:** Add the following to the bid item table:

| Code | Pay Item | Pay Unit |
|---|---|---|
| 23158ES505 | Detectable Warnings | Square Foot |

**SUBSECTION:** 509.01 DESCRIPTION.
**REVISION:** Replace the second paragraph with the following:

The Department may allow the use of similar units that conform to the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 (TL-3) requirements and the typical features depicted by the Standard Drawings. Obtain the Engineers approval prior to use. Ensure the barrier wall shape, length, material, drain slot dimensions and locations typical features are met and the reported maximum deflection is 3 feet or less from the NCHRP 350 TL-3 for Test 3 – 11 (pickup truck impacting at 60 mph at a 25-degree angle.)

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| **SUBSECTION:**<br>**REVISION:** | 601.03.02 Concrete Producer Responsibilities.<br>Replace the first sentence with the following:<br><br>Obtain the concrete from producers that are in compliance with KM 64-323 and on the Department's List of Approved Materials.<br><br>Add the following to the first paragraph:<br><br>If a concrete plant becomes unqualified during a project and there are no other qualified plants in the region, the Department will provide qualified personnel to witness and ensure the producer follows the required specifications. The Department will assess the Contractor a $100 per hour charge for this service. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.02 Concrete Producer Responsibilities.<br>B) Certified Personnel.<br>Replace the second sentence with the following:<br><br>Ensure that the concrete technicians are certified as ACI Level I (Level I) and KRMCA Level II (Level II). |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.02 Concrete Producer Responsibilities.<br>C) Quality Control.<br>Replace the second sentence with the following:<br><br>Ensure that the Level II concrete technician is present when work is in progress and is responsible for inspecting trucks, batch weight calculations, monitoring batching, making mixture adjustments, reviewing the slump, air content, unit weight, temperature, and aggregate tests, all to provide conforming concrete to the project. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.02 Concrete Producer Responsibilities.<br>D) Producer Testing.<br>Replace with the following:<br><br>When producing for state work, have a Qualified Concrete Aggregate Technician or KYTC Qualified Aggregate Technician perform, at a minimum, weekly gradations and minus 200 wash tests and daily moisture contents of coarse and fine aggregate (Fine aggregates will not require a minus 200 wash test). Using the daily moisture contents, adjust the approved mix design accordingly prior to production. Ensure that the Level II concrete technician is present when work is in progress and is responsible for inspecting trucks, batch weight calculations, monitoring batching, making mixture adjustments, reviewing the slump, air content, unit weight, temperature, and aggregate tests, all to provide conforming concrete to the project. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.02 Concrete Producer Responsibilities.<br>E) Trip Tickets.<br>Replace the second sentence with the following:<br><br>Include on the trip ticket the Sample ID for the approved mix design and a statement certifying that the data on the ticket is correct and that the mixture conforms to the mix design. |
| **SUBSECTION:**<br>**PART:**<br>**NUMBER:**<br>**REVISION:** | 601.03.03 Proportioning and Requirements.<br>C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures<br>2) Mineral Admixtures.<br>Replace the second sentence with the following:<br><br>Reduction of the total cement content by a combination of mineral admixtures will be allowed, up to a maximum of 40 percent. |

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| **SUBSECTION:**<br>**PART:**<br>**NUMBER:**<br>**LETTER:**<br>**REVISION:** | 601.03.03 Proportioning and Requirements.<br>C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures<br>2) Mineral Admixtures.<br>a) Fly Ash.<br>Delete the last sentence of the third paragraph. |
| **SUBSECTION:**<br>**PART:**<br>**NUMBER:**<br>**LETTER:**<br>**REVISION:** | 601.03.03 Proportioning and Requirements.<br>C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures<br>2) Mineral Admixtures.<br>b) Ground Granulated Blast Furnace Slag (GGBF Slag).<br>Delete the second sentence of the third paragraph. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.03 Proportioning and Requirements.<br>E) Measuring.<br>Add the following sentence:<br><br>Conform to the individual ingredient material batching tolerances in Appendix A. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 601.03.09 Placing Concrete.<br>A) General.<br>Replace the last sentence of the fourth paragraph with the following:<br><br>Do not use aluminum or aluminum alloy troughs, pipes, or chutes that have surface damage or for lengths greater than 20 feet.<br><br>Replace the second sentence of the fifth paragraph with the following:<br><br>When pumping, equip the delivery pipe with a nozzle, having a minimum of 2 right angles, at the discharge end. Alternate nozzles or restriction devices may be allowed with prior approval by the Engineer. |
| **SUBSECTION:**<br>**REVISION:** | 605.02.05 Forms.<br>Delete the last sentence. |
| **SUBSECTION:**<br>**REVISION:** | 605.03.04 Tack Welding.<br>Replace with the following:<br><br>The Department does not allow tack welding. |
| **SUBSECTION:**<br>**REVISION:** | 606.02.11 Coarse Aggregate.<br>Replace with the following:<br><br>Conform to Section 805, size No. 8 or 9-M. |
| **SUBSECTION:**<br>**PART:**<br>**REVISION:** | 609.03.04 Expansion and Fixed Joints.<br>D) Preformed Neoprene Joint Seals.<br>Replace the last sentence of paragraph seven with the following:<br><br>Field splices will not be allowed during partial width construction. It is Contractor's responsibility to determine and install the length of seal required for the joint to barrier wall as per the standard drawing. |
| **SUBSECTION:**<br>**REVISION:** | 609.03.09 Finish with Burlap Drag.<br>Delete the entire section. |
| **SUBSECTION:**<br>**REVISION:** | 609.04.06 Joint Sealing.<br>Replace Subsection 601.04 with the following:<br><br>Subsection 606.04.08. |

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| **SUBSECTION:**<br>**REVISION:** | 609.05 Payment.<br>Replace the Pay Unit for Joint Sealing with the following:<br><br>See Subsection 606.05. |
| **SUBSECTION:**<br>**REVISION:** | 701.03.06 Initial Backfill.<br>Replace the first sentence of the last paragraph with the following:<br><br>When the Contract specifies, perform quality control testing to verify compaction according to KM 64-512. |
| **SUBSECTION:**<br>**REVISION:** | 701.03.08 Testing of Pipe.<br>Replace and rename the subsection with the following:<br><br>**701.03.08 Inspection of Pipe.** The engineer will visually inspect all pipe. The Department will require camera/video inspection on a minimum of 50 percent of the linear feet of all installed pipe structures. Conduct camera/video inspection according to KM 64-114. The pipe to be installed under pavement will be selected first. If the total linear feet of pipe under pavement is less than 50 percent of the linear feet of all pipe installed, the Engineer will randomly select installations from the remaining pipe structures on the project to provide for the minimum inspection requirement. The pipe will be selected in complete runs (junction-junction or headwall-headwall) until the total linear feet of pipe to be inspected is at least 50 percent of the total linear feet of all installed pipe on the project.<br>Unless the Engineer directs otherwise, schedule the inspections no sooner than 30 days after completing the installation and completion of earthwork to within 1 foot of the finished subgrade. When final surfacing conflicts with the 30-day minimum, conduct the inspections prior to placement of the final surface. The contractor must ensure that all pipe are free and clear of any debris so that a complete inspection is possible.<br>Notify the Engineer immediately if distresses or locations of improper installation are discovered. When camera testing shows distresses or improper installation in the installed pipe, the Engineer may require additional sections to be tested. Provide the video and report to the Engineer when testing is complete in accordance with KM 64-114.<br>Pipes that exhibit distress or signs of improper installation may necessitate repair or removal as the Engineer directs. These signs include, but are not limited to: deflection, cracking, joint separation, sagging or other interior damage. If corrugated metal or thermoplastic pipes exceed the deflection and installation thresholds indicated in the table below, provide the Department with an evaluation of each location conducted by a Professional Engineer addressing the severity of the deflection, structural integrity, environmental conditions, design service life, and an evaluation of the factor of safety using Section 12, "Buried Structures and Tunnel Liners," of the AASHTO LRFD Bridge Design Specifications. Based on the evaluation, the Department may allow the pipe to remain in place at a reduced unit price as shown in the table below. Provide 5 business days for the Department to review the evaluation. When the pipe shows deflection of 10 percent or greater, remove and replace the pipe. When the camera/video or laser inspection results are called into question, the Department may require direct measurements or mandrel testing.<br>The Cabinet may elect to conduct Quality Assurance verifications of any pipe inspections. |
| **SUBSECTION:**<br>**REVISION:** | 701.04.07 Testing.<br>Replace and rename the subsection with the following:<br><br>**701.04.07 Pipeline Video Inspection.** The Department will measure the quantity in linear feet along the pipe invert of the structure inspected. When inspection above the specified 50 percent is performed due to a disagreement or suspicion of additional distresses and the Department is found in error, the Department will measure the quantity as Extra Work according to Subsection 104.03. However, if additional distresses or non-conformance is found, the Department will not measure the additional inspection for payment. |

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**SUBSECTION:** 701.05 PAYMENT.
**REVISION:** Add the following pay item to the list of pay items:

| Code | Pay Item | Pay Unit |
|---|---|---|
| 23131ER701 | Pipeline Video Inspection | Linear Foot |

**SUBSECTION:** 701.05 PAYMENT
**TABLE:** PIPE DEFLECTION DETERMINED BY CAMERA TESTING
**REVISION:** Replace this table with the following table and note:

| 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 |

*(1) Provide Structural Analysis as indicated above. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price.*

**SUBSECTION:** 701.05 PAYMENT
**TABLE:** PIPE DEFLECTION DETERMINED BY MANDREL TESTING
**REVISION:** Delete this table.

**SUBSECTION:** 713.02.01 Paint.
**REVISION:** Replace with the following:

Conform to Section 842 and Section 846.

**SUBSECTION:** 713.03 CONSTRUCTION.
**REVISION:** Replace the first sentence of the second paragraph with the following:

On interstates and parkways, and other routes approved by the State Highway Engineer, install pavement striping that is 6 inches in width.

**SUBSECTION:** 713.03.03 Paint Application.
**REVISION:** Replace the second paragraph with the following table:

| Material | Paint Application Rate | Glass Beads Application Rate |
|---|---|---|
| 4 inch waterborne paint | Min. of 16.5 gallons/mile | Min. of 6 pounds/gallon |
| 6 inch waterborne paint | Min. of 24.8 gallons/mile | Min. of 6 pounds/gallon |
| 6 inch durable waterborne paint | Min. of 36 gallons/mile | Min. of 6 pounds/gallon |

**SUBSECTION:** 713.03.04 Marking Removal.
**REVISION:** Replace the last sentence of the paragraph with the following:

Vacuum all marking material and removal debris concurrently with the marking removal operation.

**SUBSECTION:** 713.05 PAYMENT.
**REVISION:** Insert the following codes and pay items below the Pavement Striping – Permanent Paint:

| Code | Pay Item | Pay Unit |
|---|---|---|
| 24189ER | Durable Waterborne Marking – 6 IN W | Linear Foot |
| 24190ER | Durable Waterborne Marking – 6 IN Y | Linear Foot |
| 24191ER | Durable Waterborne Marking – 12 IN W | Linear Foot |

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| **SUBSECTION:**<br>**REVISION:** | 714.03 CONSTRUCTION.<br>Insert the following paragraph at the end of the third paragraph:<br><br>Use Type I Tape for markings on bridge decks, JPC pavement and JPC intersections. Thermoplastic should only be used for markings on asphalt pavement. |
| **SUBSECTION:**<br>**REVISION:** | 714.03.07 Marking Removal.<br>Replace the third sentence of the paragraph with the following:<br><br>Vacuum all marking material and removal debris concurrently with the marking removal operation. |
| **SUBSECTION:**<br>**REVISION:** | 716.01 DESCRIPTION.<br>Insert the following after the first sentence:<br><br>Energize lighting as soon as it is fully functional and ready for inspection. Ensure that lighting remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work. |
| **SUBSECTION:**<br>**REVISION:** | 716.02.01 Roadway Lighting Materials.<br>Replace the last two sentences of the paragraph with the following:<br><br>Submit for material approval an electronic file of descriptive literature, drawings, and any requested design data to the Division of Traffic Operations. Do not begin work until shop drawings are approved. Notify the Engineer when submitting any information to the Division of Traffic Operations. Do not make substitutions for approved materials without written permission as described above. |
| **SECTION:**<br>**REVISION:** | 717 – THERMOPLASTIC INTERSECTION MARKINGS.<br>Replace the section name with the following:<br><br>INTERSECTION MARKINGS. |
| **SUBSECTION:**<br>**REVISION:** | 717.01 DESCRIPTION:<br>Replace the paragraph with the following:<br><br>Furnish and install thermoplastic or Type I tape intersection markings (Stop Bars, Crosswalks, Turn Arrows, etc.) Thermoplastic markings may be installed by either a machine applied, screed extrusion process or by applying preformed thermoplastic intersection marking material. |
| **SUBSECTION:**<br>**REVISION:** | 717.02 MATERIALS AND EQUIPMENT.<br>Insert the following subsection:<br><br>717.02.06 Type I Tape. Conform to Section 836. |
| **SUBSECTION:**<br>**REVISION:** | 717.03.03 Application.<br>Insert the following part to the subsection:<br><br>B) Type I Tape Intersection Markings. Apply according to the manufacturer's recommendations. Cut all tape at pavement joints when applied to concrete surfaces. |

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**SUBSECTION:** 717.03.05 Proving Period.
**PART:** A) Requirements.
**REVISION:** Insert the following to this section:

2) Type I Tape. During the proving period, ensure that the pavement marking material shows no signs of failure due to blistering, excessive cracking, bleeding, staining, discoloration, oil content of the pavement materials, drippings, chipping, spalling, poor adhesion to the pavement, loss of retroreflectivity, vehicular damage, and normal wear. Type I Tape is manufactured off site and warranted by the manufacturer to meet certain retroreflective requirements. As long as the material is adequately bonded to the surface and shows no signs of failure due to the other items listed in Subsection 714.03.06 A) 1), retroreflectivity readings will not be required. In the absence of readings, the Department will accept tape based on a nighttime visual observation.

**SUBSECTION:** 717.03.06 Marking Removal.
**REVISION:** Replace the third sentence of the paragraph with the following:

Vacuum all marking material and removal debris concurrently with the marking removal operation.

**SUBSECTION:** 717.05 PAYMENT.
**REVISION:** Insert the following bid item codes:

| Code | Pay Unit | Pay Item |
|---|---|---|
| 06563 | Pave Marking – R/R X Bucks 16 IN | Linear Foot |
| 20782NS714 | Pave Marking Thermo – Bike | Each |
| 23251ES717, 23264ES717 | Pave Mark TY I Tape X-Walk, Size | Linear Foot |
| 23252ES717, 23265ES717 | Pave Mark TY I Tape Stop Bar, Size | Linear Foot |
| 23253ES717 | Pave Mark TY I Tape Cross Hatch | Square Foot |
| 23254ES717 | Pave Mark TY I Tape Dotted Lane Extension | Linear Foot |
| 23255ES717 | Pave Mark TY I Tape Arrow, Type | Each |
| 23268ES717-23270ES717 | | |
| 23256ES717 | Pave Mark TY I Tape- ONLY | Each |
| 23257ES717 | Pave Mark TY I Tape- SCHOOL | Each |
| 23266ES717 | Pave Mark TY 1 Tape R/R X Bucks-16 IN | Linear Foot |
| 23267ES717 | Pave Mark TY 1 Tape-Bike | Each |

**SUBSECTION:** 725.02.02 Type VI Class C & CT.
**REVISION:** Replace bullet 2) with the following:

2) The SCI100GM System as developed by SCI Products, Inc. of St. Charles, Illinois. For all miscellaneous metal work conform to ASTM A 36 and galvanize according to ASTM A 123. For the SCI100GM fender panels conform to AASHTO 180. Galvanize the SCI100GM fender panels and SCI100GM -beam connectors after fabrication according to ASTM A 123.

**SUBSECTION:** 725.02.04 Type VII Class C.
**REVISION:** Replace bullet 2) with the following:

2) The SCI100GM System as developed by SCI Products, Inc. of St. Charles, Illinois. For all miscellaneous metal work conform to ASTM A 36 and galvanize according to ASTM A 123. For the SCI100GM fender panels conform to AASHTO 180. Galvanize the SCI100GM fender panels and SCI100GM-beam connectors after fabrication according to ASTM A 123.

**SUBSECTION:** 801.01 REQUIREMENTS.
**REVISION:** Delete the fourth sentence of the first paragraph and add the following to the second paragraph.

When supplying cement with a $SO_3$ content above the value in table I of ASTM C 150, include supportive ASTM C 1038 14-day expansion test data for the supplied $SO_3$ content on the certification.

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| | |
|---|---|
| **SUBSECTION:**<br>**REVISION:** | 805.01 GENERAL.<br>Replace the second paragraph with the following:<br><br>The Department's List of Approved Materials includes the Aggregate Source List, the list of Class A and Class B Polish-Resistant Aggregate Sources, and the Concrete Restriction List. |
| **SUBSECTION:**<br>**REVISION:** | 805.04 CONCRETE.<br>Delete footnote (1) The permissible lightweight particle content of gravel coarse aggregate for reinforced concrete box culvert sections, concrete pipe, pipe arches, or for use only in concrete that will be permanently protected from freezing by 2 feet or more of cover is 10.0 percent. |
| **SUBSECTION:**<br>**REVISION:** | 805.04 CONCRETE.<br>Replace the "AASHTO T 160" reference in first sentence of the third paragraph with "KM 64-629" |
| **SUBSECTION:**<br>**TABLE:**<br>**PART:**<br>**REVISION:** | 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.<br>AGGREGATE SIZE USE<br>Cement Concrete Structures and Incidental Construction<br>Replace "9-M for Waterproofing Overlays" with "8 or 9-M for Waterproofing Overlays" |

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**SUBSECTION:** 805.15 GRADATION ACCEPTANCE OF NON-SPECIFICATION COARSE AGGREGATE.
**REVISION:** Replace the "SIZES OF COARSE AGGREGATES" table in with the following:

**SIZES OF COARSE AGGREGATES**

| | Sieve | AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS) PERCENTAGE BY WEIGHT | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aggregate Size | Nominal [3] Maximum Aggregate Size | 4 inch | 3 1/2 inch | 3 inch | 2 1/2 inch | 2 inch | 1 1/2 inch | 1 inch | 3/4 inch | 1/2 inch | 3/8 inch | No. 4 | No. 8 | No. 16 | No. 30 | No. 100 | No. 200 |
| 1 | 3 ½ inch | 100 | 90-100 | | 25-60 | | 0-15 | | 0-5 | | | | | | | | |
| 2 | 2 ½ inch | | | 100 | 90-100 | 35-70 | 0-15 | | 0-5 | | | | | | | | |
| 23 | 2 inch | | | 100 | | 40-90 | | 0-15 | | 0-5 | | | | | | | |
| 3 | 2 inch | | | | 100 | 90-100 | 35-70 | 0-15 | | 0-5 | | | | | | | |
| 357 | 2 inch | | | | 100 | 95-100 | | 35-70 | | 10-30 | | 0-5 | | | | | |
| 4 | 1 ½ inch | | | | | 100 | 90-100 | 20-55 | 0-15 | | 0-5 | | | | | | |
| 467 | 1 ½ inch | | | | | 100 | 95-100 | | 35-70 | | 10-30 | 0-5 | | | | | |
| 5 | 1 inch | | | | | | 100 | 90-100 | 20-55 | 0-10 | 0-5 | | | | | | |
| 57 | 1 inch | | | | | | 100 | 95-100 | | 25-60 | | 0-10 | 0-5 | | | | |
| 610 | 1 inch | | | | | | 100 | 85-100 | | 40-75 | | 15-40 | | | | | |
| 67 | 3/4 inch | | | | | | | 100 | 90-100 | | 20-55 | 0-10 | 0-5 | | | | |
| 68 | 3/4 inch | | | | | | | 100 | 90-100 | | 30-65 | 5-25 | 0-10 | 0-5 | | | |
| 710 | 3/4 inch | | | | | | | 100 | 80-100 | | 30-75 | 0-30 | | | | | |
| 78 | 1/2 inch | | | | | | | | 100 | 90-100 | 40-75 | 5-25 | 0-10 | 0-5 | | | |
| 8 | 3/8 inch | | | | | | | | | 100 | 85-100 | 10-30 | 0-10 | 0-5 | | | |
| 9-M | 3/8 inch | | | | | | | | | 100 | 75-100 | 0-25 | 0-5 | | | | |
| 10[2] | No. 4 | | | | | | | | | | 100 | 85-100 | | | | 10-30 | |
| 11[2] | No. 4 | | | | | | | | | | 100 | 40-90 | 10-40 | | | 0-5 | |
| DENSE GRADED AGGREGATE [1] | 3/4 inch | | | | | | | 100 | 70-100 | | 50-80 | 30-65 | | | 10-40 | | 4-13 |
| CRUSHED STONE BASE [1] | 1 ½ inch | | | | 100 | | 90-100 | | 60-95 | | 30-70 | 15-55 | | | 5-20 | | 0-8 |

(1) *Gradation performed by wet sieve KM 64-620 or AASHTO T 11/T 27.*
(2) *Sizes shown for convenience and are not to be considered as coarse aggregates.*
(3) *Nominal Maximum Size is the largest sieve on the gradation table for an aggregate size on which any material may be retained.*

Note: The Department will allow blending of same source/same type aggregate when precise procedures are used such as cold feed, belt, or equivalent and combining of sizes or types of aggregate using the weigh hopper at concrete plants or controlled feed belts at the pugmill to obtain designated sizes.

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**SUBSECTION:** 805.16 SAMPLING AND TESTING.
**REVISION:** Replace the "AASHTO T 160" method with the "KM 64-629" method for the Concrete Beam Expansion Test.

Replace the "ASTM D 3042" method with the "KM 64-625" method for Insoluble Residue.

**SUBSECTION:** 810.04.01 Coating Requirements.
**REVISION:** Replace the "Subsection 806.07" references with "Subsection 806.06"

**SUBSECTION:** 810.06.01 Polyvinyl Chloride (PVC) Pipe.
**PART:** B) Culvert and Entrance Pipe.
**REVISION:** Replace the title with the following:

B) Culvert Pipe, Storm Sewer, and Entrance Pipe.

**SUBSECTION:** 823.02 LIQUID MEMBRANE FORMING COMPOUNDS.
**REVISION:** Add the following:

Effective July 1, 2011, to remain on or be added to the Department's approved list, products must have completed testing or been submitted for testing through the National Transportation Product Evaluation Program (NTPEP) for Concrete Curing Compounds.

**SUBSECTION:** 837.03 APPROVAL.
**REVISION:** Replace the last sentence with the following:

The Department will sample and evaluate for approval each lot of thermoplastic material delivered for use per contract prior to installation of the thermoplastic material. Do not allow the installation of thermoplastic material until it has been approved by the Division of Materials. Allow the Department a minimum of 10 working days to evaluate and approve thermoplastic material.

**SUBSECTION:** 837.03.01 Composition.
**REVISION:** COMPOSITION Table:

Replace

| | | |
|---|---|---|
| Lead Chromate | 0.0 max. | 4.0 min. |

with

| | |
|---|---|
| Heavy Metals Content | Comply with 40 CFR 261 |

**SUBSECTION:** 842.02 APPROVAL.
**TABLE:** PAINT COMPOSITION
**REVISION:** Revise the following in the table:

Replace the 2.0ΔE* values in the table with 4.0ΔE* for both Yellow and White Paint on both the Daytime and Nighttime Color Spectrophotometer.

**SECTION:** DIVISION 800 MATERIAL DETAILS
**REVISION:** Add the following section in Division 800

**SECTION 846 – DURABLE WATERBORNE PAINT**

**846.01 DESCRIPTION.** This section covers quick-drying durable waterborne pavement striping paint for permanent applications. The paint shall be ready-mixed, one-component, 100% acrylic waterborne striping paint suitable for application on such traffic-bearing surfaces as Portland cement concrete, bituminous cement concrete, asphalt, tar, and previously painted areas of these surfaces.

**846.02 Approval.** Select materials that conform to the composition requirements below. Provide independent analysis data and certification for each formulation stating the total concentration of each heavy metal present, the test method used for each determination, and compliance to 40 CFR 261 for leachable heavy metals content. Submit initial samples for approval before beginning striping

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operations. The initial sample may be sent from the manufacture of the paint. The Department will randomly sample and evaluate the paint each week that the striping operations are in progress.

The non-volatile portion of the vehicle shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis. The acrylic resin used shall be a 100% cross-linking acrylic as evidenced by infrared peaks at wavelengths 1568, 1624, and 1672 cm-1 with intensities equal to those produced by an acrylic resin known to be 100% cross-linking.

| PAINT COMPOSITION | | |
|---|---|---|
| Property and Test Method | Yellow | White |
| Daytime Color (CIELAB) Spectrophotometer using illuminant D65 at 45º illumination and 0º viewing with a 2º observer | L* 81.76<br>a* 19.79<br>b* 89.89<br>Maximum allowa le variation 4.0ΔE* | L* 93.51<br>a* -1.01<br>b* 0.70<br>Maximum allowable variation 4.0ΔE* |
| Nighttime Color (CIELAB) Spectrophotometer using illuminant A at 45º illumination and 0º viewing with a 2º observer | L* 86.90<br>a* 24.80<br>b* 95.45<br>Maximum allowable variation 4.0ΔE* | L* 93.45<br>a* -0.79<br>b* 0.43<br>Maximum allowable variation 4.0ΔE* |
| Heavy Metals Content | Comply with 40 CFR 261 | Comply with 40 CFR 261 |
| Titanium Dioxide ASTM D 4764 | NA | 10% by weight of pigment min. |
| VOC ASTM D 2369 and D 4017 | 1.25 lb/gal max. | 1.25 l /gal ma . |
| Contrast Ratio (at 15 mils wft) | 0.97 | 0.99 |

**846.02.01 Manufacturers Certification.** Provide a certification of analysis for each lot of traffic paint produced stating conformance to the requirements of this section. Report the formulation identification, traffic paint trade name, color, date of manufacturer, total quantity of lot produced, actual quantity of traffic paint represented, sampling method utilized to obtain the samples, and data for each sample tested to represent each lot produced.

**846.03 ACCEPTANCE PROCEDURES FOR NON-SPECIFICATION DURABLE WATERBORNE PAVEMENT STRIPING PAINT.** When non-specification paint is inadvertently incorporated into the work the Department will accept the material with a reduction in pay. The percentage deduction is cumulative based on its compositional properties, but will not exceed 60 percent. The Department will calculate the payment reduction on the unit bid price for the routes where the non-specification paint was used.

| DURABLE WATERBORNE PAVEMENT STRIPING PAINT REDUCTION SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| Non-conforming Property | Resin | Color | Contrast | $TiO_2$ | VOC | Heavy Metals Content |
| Reduction Rate | 60% | 10% | 10% | 10% | 60% | 60% |

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| | |
|---|---|
| **APPENDIX A:** | TABLUATION OF CONSTRUCTION TOLERANCES. |
| **PART:** | 601.03.03 |
| **REVISION:** | Replace with the following:<br><br>Concrete accuracy of individual ingredient material for each batch.<br>± 2.0% for aggregates<br>± 1.0% for water<br>± 1.0% for cement in batches of 4 cubic yards or greater<br>± 1.0% for total cementitious materials in batches of 4 cubic yards or greater<br>0.0% to + 4.0% for cement in batches less than 4 cubic yards<br>0.0% to + 4.0% for total cementitious materials in batches less than 4 cubic yards<br>± 3.0% for admixtures |
| **APPENDIX A:** | TABLUATION OF CONSTRUCTION TOLERANCES. |
| **PART:** | 601.03.03 C) 2) |
| **REVISION:** | Delete |

6J

## SPECIAL NOTE FOR NON-EPOXY ADHESIVES

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** As an alternate to Type IV epoxy, as specified in Subsection 826.01.02, the Department may allow other structural adhesives for doweling deformed reinforcing bars into hardened concrete providing the requirements herein are met.

**2.0 MATERIALS.** Furnish an adhesive material from the Department's List of Approved Materials. Submit one cartridge of each component per project to the Engineer for infrared analysis.

**3.0 CONSTRUCTION.** Do not use the material until the Engineer verifies, by visual inspection, that the material is from the List of Approved Materials.

**3.1 Field Installation.** Follow the following installation criteria:

1) Drill a dowel hole that is no more than 1/8 inch larger in diameter than the bar.
2) Ensure the dowel hole is dry and free of all drill and coring dust.
3) Place the adhesive in the dowel hole according to the manufacturer's instructions.
4) Insert the bar to the bottom of the hole and twist 1/4 turn. An excess amount of adhesive must be clearly visible as an extruded ring of material surrounding the reinforcing bar at the surface of the concrete.

**3.2 Job Site Testing.** Contact the Division of Materials in advance of the installation date to set up a testing schedule. After installation of the first 50 reinforcing bars, the Department will randomly select 5 and proof load according to the following table with zero slippage.

| REBAR SIZE (#) | 10 | 13 | 16 | 19 | 22 |
|---|---|---|---|---|---|
| PROOF LOAD (lbs) | 7,000 | 12,000 | 19,000 | 27,000 | 36,000 |

If any of the bars fail in bond, either revise the installation procedure, if applicable, or provide another adhesive that is capable of passing this test. The Engineer may require additional job site testing.

**4.0 MEASUREMENT AND PAYMENT.** The Department will not measure the adhesive or its application for payment and will consider it incidental to the reinforcing bars.

January 1, 2008

11C

## SPECIAL NOTE FOR DRILLED SHAFTS

**1.0 DESCRIPTION.** Furnish all equipment, materials and labor necessary for constructing reinforced concrete drilled shafts in cylindrically excavated holes according to the details shown on the plans or as the Engineer directs. Construct the shaft to the lines and dimensions shown on the plans, or as the Engineer directs.

**2.0 MATERIALS.**

**2.1 Concrete.** Use Class A Modified concrete unless otherwise shown on the plans. The slump at the time of placement shall be 6.5 to 9.5 inches, the coarse aggregate shall be size 67, 68, 78, 8 or 9M, and the water/cementitious material ratio shall not exceed 0.45. Include water reducing and retarding admixtures. Type F high range water reducers used in combination with retarding admixtures or Type G high range water reducers fully meeting trial batch requirements are permitted and Class F fly ash is permitted in conformance with Section 601. Design the mix such that the concrete slump exceeds 4 inches at 4 hours after batching. If the estimated concrete transport, plus time to complete placement, exceeds 4 hours, design the concrete to have a slump that exceeds 4 inches or more for the greater time after batching.

Perform trial batches prior to beginning drilled shaft construction in order to demonstrate the adequacy of the proposed concrete mix. Demonstrate that the mix to be used will meet the requirements for temperature, slump, air content, water/cementitious material ratio, and compressive strength. Use the ingredients, proportions and equipment (including batching, mixing, and delivery) to be used on the project. Make at least 2 independent consecutive trial batches of 3 cubic yards each using the same mix proportions and meeting all specification requirements for mix design approval. Submit a report containing these results for slump, air content, water/cement ratio, temperature, and compressive strength and mix proportions for each trial batch to the Engineer for review and approval. Failure to demonstrate the adequacy of the concrete mix, methods, or equipment to the Engineer is cause for the Engineer to require appropriate alterations in concrete mix, equipment, and/or method by the Contractor to eliminate unsatisfactory results. Perform additional trial batches required to demonstrate the adequacy of the concrete mix, method, or equipment.

**2.2 Steel Reinforcement.** Provide Grade 60 deformed bars conforming to Section 811 of the Standard Specifications. Rail steel is permitted for straight bars only. Place according to Section 602 of the Standard Specifications, this Special Note, and the plans. Use non-corrosive centering devices and feet to maintain the specified reinforcement clearances.

**2.3 Casings.** Provide casing meeting the requirements of AASHTO M270 Grade 36 steel unless otherwise specified. Ensure casing is smooth, clean, watertight, true and straight, and of ample strength to withstand handling, installation, and extraction stresses and the pressure of both concrete and the surrounding earth materials. Ensure the outside diameter of casing is not less than the specified diameter of shaft.

Use only continuous casings. Cut off the casing at the prescribed elevation and trim to within tolerances prior to acceptance. Extend casing into the Rock Disintegration Zone (RDZ), or rock, a sufficient distance to stabilize the shaft excavation against collapse, excessive deformation, and/or flow of water if required and/or shown on the plans.

Install from the work platform continuous casing meeting the design thickness requirements, but not less than 3/8 inch, to the elevations shown on the plans. When drilled shafts are located in open water areas, extend casings above the water elevation to the plan tip elevation to protect the shaft concrete from water action during concrete placement and

curing. If temporary surface casings are used, extend each casing up to the work platform. Remove all temporary surface casing prior to final acceptance unless otherwise permitted by the Central Office Construction Engineer.

Ensure casing splices have full penetration butt welds conforming to the current edition of AWS D1.1 with no exterior or interior splice plates and produce true and straight casing.

**2.4 Slurry.** When slurry is to be used for installation of the Drilled Shaft, submit a detailed plan for its use and disposal. The plan should include, but not be limited to the following:

1) Material properties
2) Mixing requirements and procedures
3) Testing requirements
4) Placement procedures
5) Disposal techniques

Obtain the Central Office Division of Construction's approval for the slurry use and disposal plan before installing drilled shafts.

**2.5 Tremies.** Provide tremies of sufficient length, weight, and diameter to discharge concrete at the shaft base elevation. Ensure the tremie diameter is least 6 times the maximum size coarse aggregate to be used in the concrete mix and no less than 10 inches. Provide adequate wall thickness to prevent crimping or sharp bends that restrict concrete placement. Support tremies used for depositing concrete in a dry drilled shaft excavation so that the free fall of the concrete does not cause the shaft excavation to cave or slough. Maintain a clean and smooth tremie surface to permit both flow of concrete and unimpeded withdrawal during concrete placement. Do not allow any aluminum parts to contact the concrete. Construct tremies used to deposit concrete for wet excavations so that they are watertight and will readily discharge concrete.

**2.6 Concrete Pumps.** Provide pump lines with a minimum diameter of 5 inches and watertight joints.

**2.7 Drop Chutes.** Do not use aluminum drop chutes.

## 3.0 CONSTRUCTION.

### 3.1 Preconstruction.

**3.1.1 Prequalification.** The Department will require prequalification by the Division of Construction Procurement before accepting a bid for the construction of Drilled Shafts.

**3.1.2 Pre-Bid Inspection.** Inspect both the project site and all subsurface information, including any soil or rock samples, prior to submitting a bid. Contact the Geotechnical Branch (502-564-2374) to schedule a viewing of the subsurface information. Failure to inspect the project site and view the subsurface information will result in the forfeiture of the right to file a claim based on site conditions and may result in disqualification from the project.

**3.1.3 Drilled Shaft Installation Plan.** Upon request, the Department will review a Drilled Shaft Installation Plan. Submit the plan no later than 45 calendar

days prior to constructing drilled shafts. Items covered in this plan should include, but not be limited to the following:

1) Name and experience record of jobsite drilled shaft superintendent and foremen in charge of drilled shaft operations for each shift.
2) List and size of proposed equipment including cranes, drills, augers, bailing buckets, final cleaning equipment, desanding equipment, slurry pumps, core sampling equipment, tremies or concrete pumps, casings, etc.
3) Details of overall construction operation sequence and the sequence of shaft construction in the bents or groups.
4) Details of shaft excavation methods including methods to over-ream or roughen shaft walls, if necessary.
5) Details of slurry when the use of slurry is anticipated. Include methods to mix, circulate, and desand the proposed slurry. Provide details of proposed testing, test methods, sampling methods, and test equipment.
6) Details of proposed methods to clean shaft and inside of casing after initial excavation.
7) Details of reinforcement handling, lifting, and placement including support and method to center in shaft. Also include rebar cage support during concrete placement and temporary casing removal.
8) Details of concrete placement including procedures for concrete tremie or pump. Include initial placement, raising during placement, and overfilling of the shaft to expel contaminated concrete.
9) Required submittals including shop drawings and concrete design mixes.
10) Other information shown in the plans or requested by the Engineer.
11) Special considerations for wet construction.
12) Details of environmental control procedures to protect the environment from discharge of excavation spoil, slurry (natural and mineral), and concrete overpour.

The Division of Construction will review the submitted procedure and provide comments and recommendations. The Contractor is responsible for satisfactory construction and ultimate performance of the Drilled Shaft.

**3.2 General Construction.** Construct drilled shafts as indicated in the plans or described in this Special Note by either the dry or wet method. When the plans describe a particular method of construction, use this method unless the Engineer permits otherwise. When the plans do not describe a particular method, propose a method on the basis of its suitability to the site conditions.

When necessary, set temporary removable surface casing. Use surface casing of sufficient length to prevent caving of the surface soils and to aid in maintaining shaft position and alignment. Predrilling with slurry and/or over-reaming to the outside diameter of the casing may be required to install the surface casing at some sites.

Provide equipment capable of constructing shafts to the deepest shaft depth shown in the plans plus 15 feet, 20 percent greater than the longest shaft (measured from the ground or water surface to the tip of the shaft), or 3 times the shaft diameter, whichever is greater. Blasting excavation methods are not permitted.

Use permanent casing unless otherwise noted in the Contract. Place casing as shown on the plans before beginning excavation. If full penetration cannot be attained, the Engineer may direct that excavation through the casing be accomplished and the casing advanced until

reaching the plan tip elevation. In some cases, over-reaming to the outside diameter of the casing may be required before placing the casing. Cut off the casing at the prescribed elevation and leave the remainder of the casing in place. Do not use vibratory hammers for casing installation within 50 feet of shafts that have been completed less than 24 hours.

**3.2.1 Dry Construction Method.** Use the dry construction method only at sites where the ground water table and soil conditions (generally stiff to hard clays or rock above the water table) make it feasible to construct the shaft in a relatively dry excavation and where the sides and bottom of the shaft are stable and may be visually inspected by the Engineer prior to placing the concrete. The dry construction method consists of drilling the shaft excavation, removing accumulated seepage water and loose material from the excavation, and placing the shaft concrete in a relatively dry excavation.

**3.2.2 Wet Construction Method.** Use the wet construction method at all sites where it is impractical to excavate by the dry method. The wet construction method consists of drilling the shaft excavation below the water table, keeping the shaft filled with water (including natural slurry formed during the drilling process) or slurry as defined in part 2.4 of this Special Note, desanding and cleaning the slurry as required, final cleaning of the excavation by means of a bailing bucket, air lift, submersible pump or other approved devices and placing the shaft concrete (with a tremie or concrete pump beginning at the shaft bottom) which displaces the water or slurry as concrete is placed.

Where drilled shafts are located in open water areas, construct the shafts by the wet method using casings extending from above water elevation to the plan casing tip elevation to protect the shaft concrete from water action during placement and curing. Install the casing in a manner that will produce a positive seal at the bottom of the casing.

**3.3 Slurry.** When the Contractor elects to use slurry, adjust construction operations so that the slurry is in contact with the bottom 5 feet of the shaft for less than 4 hours unless the Engineer approves otherwise. If the 4-hour limit is exceeded, over-ream the bottom 5 feet of shaft.

**3.4 Cleaning.** Over-reaming, cleaning, or wire brushing the sidewalls of the shaft excavation and permanent casings may be necessary to remove the depth of softening or to remove excessive slurry cake buildup as indicated by sidewall samples or other test methods employed by the Engineer. Over-ream around the perimeter of the excavation a minimum depth of 1/2 inch and maximum depth of 3 inches.

**3.5 Subsurface Exploration.** Take subsurface exploration borings when shown on the plans or as the Engineer directs to determine the character of the material that the shaft extends through and the material directly below the shaft excavation. Complete subsurface exploration borings prior to beginning excavation for any drilled shaft in a group. Extend subsurface exploration borings a minimum depth of 3 shaft diameters but not less than 10 feet below the bottom of the anticipated tip of drilled shaft excavation as shown on the plans. For subsurface exploration borings in soil use thin-wall tube samples and perform standard penetration tests according to the Department's Geotechnical Manual. When shafts extend into rock, soil samples are not required unless otherwise specified. Perform rock core drilling according to the Department's Geotechnical Manual. When the Engineer directs, perform additional subsurface exploration borings prior to and/or during the course of the drilled shaft excavations. Measure soil samples and/or rock cores and visually identify and describe them

on the subsurface log. Subsurface exploration borings must be performed by contractors/consultants on the Geotechnical Branch's approved list.

The Engineer will be on-site during the subsurface exploration process to evaluate the soil and/or rock core samples. The Engineer will determine the need to extend the borings to depths greater than the depths previously specified. Handle, label, identify, and store soil and/or rock samples according to the Department's Geotechnical Manual and deliver them with the subsurface logs to the Engineer within 24-hours of completing the borings.

The Engineer will inspect the soil samples and/or cores and determine the final depth of required excavation (final drilled shaft tip elevation) based on evaluation of the material's suitability. The Engineer will establish the final tip elevations for shaft locations, other than those for which subsurface exploration borings have been performed, based on the results of the subsurface exploration. Within 15 calendar days after completion of the subsurface exploration borings, the Engineer will notify the contractor of the final tip elevations for shaft locations.

**3.6 Excavations.** The plans indicate the expected depths, the top of shaft elevations, and the estimated bottom of shaft elevations between which the drilled shaft are to be constructed. Drilled shafts may be extended deeper when the Engineer determines that the material encountered while drilling the shaft excavation is unsuitable and/or is not the same as anticipated in the design of the drilled shaft. Drilled shafts may be shortened when the Engineer determines the material encountered is better than that anticipated.

Begin drilled shaft excavation the excavation, excavation inspection, reinforcement placement, and concrete placement can be completed as one continuous operation. Do not construct new shafts within 24 hours adjacent to recently completed shafts if the center-to-center spacing is less than 3 shaft diameters.

Dispose of excavated material removed from the shaft according to the Standard Specifications or the contract documents.

Do not allow workmen to enter the shaft excavation for any reason unless both a suitable casing has been installed and adequate safety equipment and procedures have been provided to the workmen entering the excavation. Recommended Procedures for the Entry of Drilled Shaft Foundation Excavations, prepared by ADSC: The International Association of Foundation Drilling provides guideline recommendations for down-hole entry of drilled excavations.

**3.7 Obstructions.** Remove subsurface obstructions at drilled shaft locations. Such obstructions may include man-made materials such as old concrete foundations or natural materials such as boulders. Blasting is not permitted.

**3.8 Inspections of Excavations.** Provide equipment for checking the dimensions and alignment of each shaft excavation. Determine the dimensions and alignment of the shaft excavation under the observation and direction of the Engineer. Provide equipment necessary to verify shaft cleanliness for the method of inspection selected by the Engineer.

Measure final shaft depths with a weighted tape or other approved methods after final cleaning. Ensure the base of each shaft has less than ½ inch of sediment at the time of concrete placement. For dry excavations, do not allow the depth of water to exceed 3 inches for tremie or pump methods of concrete placement. Verify shaft cleanliness to the Engineer using direct visual inspection or other method the Engineers determines acceptable. Video camera or underwater inspection procedures may be used if specified in the plans. Inspect the side surfaces of rock sockets to ensure they are rough and of such condition to ensure bond between the shaft concrete and the rock. Calipers, bent rods, or other devices may be used to inspect the diameter and roughness of rock sockets. When the Engineer directs, mechanically roughen surfaces found to be smooth.

**3.9 Reinforcing Steel Cage Fabrication and Placement.** Assemble the reinforcing steel cage, consisting of longitudinal bars, ties, spirals, cage stiffener bars, spacers, centering devices, and other necessary appurtenances and place as a prefabricated unit immediately after the shaft excavation is inspected and accepted, and just prior to concrete placement.

Tie the reinforcing steel with 100 percent double-wire ties and provide support so that it will remain within allowable tolerances for position. Locate splices as shown on the plans. Splice no more than 50 percent of the longitudinal reinforcing within 2-lap splice lengths of any location or within 3 feet of the splice location if approved mechanical connectors are used. All splices are to be in accordance with plan details. Use bands, temporary cross ties, etc. as required to provide a reinforcement cage of sufficient rigidity to prevent racking, permanent deformations, etc. during installation.

Use concrete centering devices or other approved non-corrosive centering devices at sufficient intervals along the length of the reinforcement cage to ensure concentric spacing for the entire cage length. As a minimum, provide a set of non-corrosive centering devices at intervals not exceeding 5 feet throughout the length of the shaft. When the size of the longitudinal reinforcement exceeds one inch in diameter the minimum spacing may be increased to 10 feet. As a minimum, provide a set of centering devices within 2 feet of the top and 2 feet of the bottom of the shaft. In addition provide one set of centering devices 2 feet above and 2 feet below each change in shaft diameter. Provide feet (bottom supports) at the bottom of the shaft on vertical bars. As a minimum, provide non-corrosive centering devices at 60 degree intervals around the circumference of the shaft to maintain the required reinforcement clearances. Ensure the centering devices maintain the specified annular clearance between the outside of the reinforcing cage and the side of the excavated hole or casing.

Concrete centering devices and feet will be constructed of concrete equal in quality and durability to the concrete specified for the shaft. Use epoxy coated centering devices fabricated from reinforcing steel. Use feet (bottom supports) of adequate size and number to assure the rebar cage is the proper distance above the bottom as determined by part 3.11 3) of this Special Note. The feet are not intended to support the weight of the cage. In the event that the shaft has been excavated below the anticipated tip elevation, extend the reinforcing cage at the tip (low) end by lap splices, mechanical connectors, or welded splices conforming to the Standard Specifications. In this instance, splices need not be staggered and 100 percent of the reinforcing bars may be spliced at a given location. The bottom 12 inches of the shaft may not be reinforced when below plan tip elevation.

During concrete placement, support the reinforcing cage at or near the top of shaft such that the concrete feet are positioned approximately one inch above the bottom of shaft excavation. Not sooner than 24 hours after the completion of concrete placement, remove temporary supports. Provide the needed equipment, including extra cranes if necessary, to provide this cage support.

Prior to placing the reinforcement cage, demonstrate to the satisfaction of the Engineer that the fabrication and handling methods to be used will result in a reinforcing cage placed in the proper position, with the proper clearances, and without permanent bending, squashing, or racking of the reinforcement cage. During this demonstration bring the cage to an upright position, lower into a shaft excavation, and support as if for concrete placement.

Check the elevation of the top of the reinforcing cage before and after the concrete is placed. If the reinforcing cage is not maintained within the specified tolerances, correct to the satisfaction of the Engineer. Do not construct additional shafts until the contractor has modified his reinforcing cage support to obtain the required tolerances.

**3.10 Concrete Placement.** Place concrete according to the applicable portions of the Standard Specifications and with the requirements set forth herein. Do not apply the

provisions of the Special Note 6U for Structural Mass Concrete.

Place concrete as soon as practical after reinforcing steel placement but no later than 4 hours after completion of the shaft excavation. Place concrete continuously from the bottom to above the top elevation of the shaft. For shafts that extend above ground or water surface, place concrete continuously after the shaft is full until good quality concrete is evident at the top of the shaft. Form any portion of the shaft above ground with a removable form or other approved method to the dimensions shown on the plans.

For shafts constructed in the wet with the top of the shaft below the water surface and below top of casing, place concrete to approximately one shaft diameter but no less than 2 feet above the top of shaft elevation. Remove contaminated concrete and deleterious material, as determined by the Engineer, accumulated above the top of shaft elevation immediately after completing concrete placement. Deleterious material and contaminated concrete may be airlifted under a head of water or slurry provided that the head is maintained at or near the exterior water surface elevation. Carefully remove any concrete remaining above plan top of shaft after curing and excess casing removal.

Place concrete either by free fall, through a tremie, or concrete pump. Use the free fall placement method in dry holes only. The maximum height of free fall placement is 20 feet. Do not allow concrete placed by free fall to contact either the reinforcing cage or hole sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

Place concrete in the shaft in one continuous operation. Maintain a minimum slump of 4 inches or more throughout the placement for 4 hours after batching. Adjust approved admixtures in the concrete mix for the conditions encountered on the job so that the concrete remains in a workable plastic state throughout the placement. Perform slump loss tests to demonstrate that the concrete will maintain a 4-inch or greater slump for a period of time equal to the estimated transport plus the 2-hour placement time, but not less than 4 hours.

When the Engineer determines the concrete placement methods and/or equipment during construction of any technique and/or production shafts to be inadequate, make appropriate alterations to eliminate unsatisfactory results.

Drilled shafts not meeting the concrete placement requirements of this Special Note or contract plans are unacceptable. Correct all unacceptable completed shafts to the satisfaction of the Engineer.

**3.10.1 Tremie Placement.** Tremies may be used for concrete placement in either wet or dry holes. Extend the tremie to the shaft base elevation before starting underwater placement. Valves, bottom plates, or plugs may be used only if concrete discharge can begin approximately 2 inches above the excavation bottom. Remove plugs from the excavation unless otherwise approved by the Engineer. Maintain tremie discharge at or near the bottom of excavation as long as practical during concrete placement. Immerse tremie discharge end as deep as practical in the concrete but not less than 10 feet.

If at any time during the concrete pour the tremie line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete surface, the entire drilled shaft is considered defective. In such case, remove the reinforcing cage and concrete, complete any necessary sidewall cleaning or over-reaming as directed by the Engineer, and repour the shaft.

**3.10.2 Pumped Concrete.** Concrete pumps and lines may be used for concrete placement in either wet or dry excavations. Do not begin concrete placement until the pump line discharge orifice is at the shaft base elevation.

For wet excavations, use a plug or similar device to separate the concrete from the fluid in the hole until pumping begins. Remove the plug unless otherwise approved by the engineer.

Ensure the discharge orifice remains at least 10 feet below the surface of the fluid concrete. When lifting the pump line during concrete placement, reduce the line pressure until the orifice has been repositioned at a higher level in the excavation.

If at any time during the concrete pour the pump line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete level, the Department will consider the shaft defective. In such case, remove the reinforcing cage and concrete, complete any necessary sidewall cleaning or over-reaming as the Engineer directs, and repour the shaft.

**3.10.3 Drop Chutes.** Drop chutes may be used to direct placement of free fall concrete in excavations where the maximum depth of water does not exceed one inch. Do not use the free fall method of placement in wet excavations. Concrete may be placed through either a hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. Reduce the height of free fall and/or reduce the rate of concrete flow into the excavation if the concrete placement causes the shaft excavation to cave or slough, or if the concrete strikes the reinforcing cage or sidewall. When the Engineer determines free fall placement cannot be accomplished satisfactorily, use either tremie or pumping to accomplish the pour.

**3.11 Construction Tolerances.** The following construction tolerances apply to drilled shafts unless otherwise stated in the contract document:

1) Construct drilled shaft within 3 inches of plan position in the horizontal plane at the top of the shaft.
2) Do not vary the vertical alignment of a shaft excavation from the plan alignment by more than 1/4 inch per foot of depth or 6 inches total.
3) Maintain the top of the reinforcing steel cage no more than 6 inches above and no more than 3 inches below plan position.
4) All casing diameters shown on the plans refer to O.D. (outside diameter) dimensions. The casing dimensions are subject to American Pipe Institute tolerances applicable to regular steel pipe. A casing larger in diameter than shown in the plans may be used, at no additional cost, with prior approval by the Department.
5) Maintain the top of shaft concrete within ± 3 inches from the plan top of shaft elevation, measured after excess shaft concrete has been removed.
6) Design excavation equipment and methods so that the completed shaft excavation will have a planar bottom. Maintain the cutting edges of excavation equipment normal to the vertical axis of the equipment within a tolerance of ± 3/8 inch per foot of diameter. The tip elevation of the shaft has a tolerance of ± 6 inches from final shaft tip elevation unless otherwise specified in the plans.

Drilled shaft excavations and completed shafts not constructed within the required tolerances are unacceptable. Correct all unacceptable shaft excavations and completed shafts to the satisfaction of the Engineer. When a shaft excavation is completed with unacceptable tolerances, present corrective measures designed by a registered Professional Engineer for approval.

## 4.0 MEASUREMENT.

**4.1 Drilled Shafts.** The Department will not measure for payment any trial batches

required to demonstrate the adequacy of the concrete mix, method, or equipment; additional technique shafts required to demonstrate the adequacy of concrete placement methods or equipment; concrete required to fill an oversized casing or oversized excavation; obstruction removal; over-reaming or sidewall cleaning; inspection work or inspection equipment; materials or work necessary, including engineering analyses and redesign, to alter unacceptable work methods or to complete corrections for unacceptable work; and will consider them incidental to the Drilled Shaft.

**4.1.1 Drilled Shaft, Common.** The Department will measure the length, in linear feet, of drilled shaft above the top of rock elevation shown on the plans. The Department will consider this quantity Drilled Shaft, Common regardless of the character of material actually encountered.

**4.1.2 Drilled Shafts, Solid Rock.** The Department will measure the length, in linear feet, of drilled shaft below the top of rock elevation shown on plans. The Department will consider this quantity Drilled Shafts, Solid Rock regardless of the character of material actually encountered during excavation.

**4.3 Rock Coring and Rock Sounding.** The Department will measure subsurface exploration borings shown on the plans, as specified in part 3.5 of this Special Note, and as the Engineer directs, in linear feet to the nearest 0.1-foot. The Department will not measure over-reaming or subsurface exploration performed deeper than the elevations indicated on the plans, unless directed by the Engineer, for payment and will consider it incidental to this item of work. Additionally, the Department will consider all mobilization, equipment, labor, thin wall tube samples, rock cores, standard penetration tests, incidental items, and operations necessary to complete the boring operations incidental to this item or work.

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

| Code | Pay Item | Pay Unit |
|---|---|---|
| ----- | Drilled Shaft, Diameter*, Common | Linear Foot |
| ----- | Drilled Shaft, Diameter*, Solid Rock | Linear Foot |
| 20745ED | Rock Sounding | Linear Foot |
| 20746ED | Rock Coring | Linear Foot |

* *See Plan Sheets for sizes of shafts.*

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

January 1, 2008

# PART III

# EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

# REQUIRED CONTRACT PROVISIONS
# FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

## I. GENERAL

1. 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.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

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

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

## II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

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

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

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

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

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

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

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

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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

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

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

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

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly takecorrective 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 his 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 his avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA 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 minority and women referrals within thetime limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin,

age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

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

(1) The number 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;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

## III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

## IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. **General:**

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

b. 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.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. **Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. **Payment of Fringe Benefits:**

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

4. **Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:**

a. Apprentices:

(1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level ofprogress, expressed as a percentage of the journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) 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 DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wagedetermination for the classification of work actually performed.

5. **Apprentices and Trainees (Programs of the U.S. DOT):**

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

6. **Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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 SHA contracting officer 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.

7. **Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. **Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. **Withholding for Unpaid Wages and Liquidated Damages:**

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

## V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. **Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. **Payrolls and Payroll Records:**

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such 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 the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. 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 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

## VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than $1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## VII. SUBLETTING OR ASSIGNING THE CONTRACT

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 State. 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).

a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.

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 on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

## VIII. SAFETY: ACCIDENT PREVENTION

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

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

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. 333).

## IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

### NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

*Shall be fined not more that $10,000 or imprisoned not more than 5 years or both."*

## X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $100,000 or more.)

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

## XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. **Instructions for Certification - Primary Covered Transactions:**

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary 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 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 primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

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

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

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

g. The prospective primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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.

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.

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement 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;

c. 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 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

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

* * * * *

2. **Instructions for Certification - Lower Tier Covered Transactions:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

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

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

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

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

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

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

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

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

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

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

* * * * *

## XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

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

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

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

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

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she 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.

# KENTUCKY TRANSPORTATION CABINET
# DEPARTMENT OF HIGHWAYS

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

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

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

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

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

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

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

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

REVISED: 12-3-92

# EXECUTIVE BRANCH CODE OF ETHICS

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

> KRS 11A.040 (6) provides:
>
> No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.
>
> KRS 11A.040 (8) states:
>
> A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:
>
> a) The date of leaving office or termination of employment; or
> b) The date the term of office expires to which the public servant was elected.

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

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

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

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

General Decision Number: KY100211 09/23/2011 KY211

State: Kentucky

Construction Type: Highway

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

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

| Modification Number | Publication Date |
|---|---|
| 0 | 10/22/2010 |
| 1 | 11/05/2010 |
| 2 | 12/03/2010 |
| 3 | 12/17/2010 |
| 4 | 12/31/2010 |
| 5 | 01/28/2011 |
| 6 | 03/25/2011 |
| 7 | 05/06/2011 |
| 8 | 06/03/2011 |
| 9 | 07/01/2011 |
| 10 | 07/22/2011 |
| 11 | 07/29/2011 |
| 12 | 08/12/2011 |
| 13 | 08/26/2011 |
| 14 | 09/16/2011 |
| 15 | 09/23/2011 |

BRIN0004-003 06/01/2011

BRECKENRIDGE COUNTY

| | Rates | Fringes |
|---|---|---|
| BRICKLAYER | $ 24.11 | 10.07 |

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BRKY0001-005 06/01/2011

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

| | Rates | Fringes |
|---|---|---|
| BRICKLAYER | $ 24.11 | 10.07 |

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BRKY0002-006 06/01/2011

BRACKEN, GALLATIN, GRANT, MASON & ROBERTSON COUNTIES:

| | Rates | Fringes |
|---|---|---|
| BRICKLAYER | $ 26.57 | 10.26 |

BRKY0007-004 06/01/2011

BOYD, CARTER, ELLIOT, FLEMING, GREENUP, LEWIS & ROWAN COUNTIES:

| | Rates | Fringes |
|---|---|---|
| BRICKLAYER | $ 28.29 | 16.80 |

BRKY0017-004 06/01/2009

ANDERSON, BATH, BOURBON, BOYLE, CLARK, FAYETTE, FRANKLIN, HARRISON, JESSAMINE, MADISON, MERCER, MONTGOMERY, NICHOLAS, OWEN, SCOTT, WASHINGTON & WOODFORD COUNTIES:

| | Rates | Fringes |
|---|---|---|
| BRICKLAYER | $ 24.11 | 9.97 |

CARP0064-001 07/01/2011

| | Rates | Fringes |
|---|---|---|
| CARPENTER | $ 25.95 | 13.26 |
| Diver | $ 39.30 | 13.26 |
| PILEDRIVERMAN | $ 26.20 | 13.26 |

ELEC0212-008 05/31/2011

BRACKEN, GALLATIN and GRANT COUNTIES

| | Rates | Fringes |
|---|---|---|
| ELECTRICIAN | $ 26.11 | 14.94 |

ELEC0212-014 06/27/2011

BRACKEN, GALLATIN & GRANT COUNTIES:

| | Rates | Fringes |
|---|---|---|
| Sound & Communication Technician | $ 21.55 | 8.46 |

ELEC0317-012 06/01/2010

BOYD, CARTER, ELLIOT & ROWAN COUNTIES:

| | Rates | Fringes |
|---|---|---|
| Electricians: | | |
| Cable Splicer | $ 32.68 | 18.13 |
| Electrician | $ 31.87 | 19.58 |

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ELEC0369-007 05/26/2010

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

| | Rates | Fringes |
|---|---|---|
| ELECTRICIAN | $ 29.27 | 13.08 |

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ELEC0575-002 05/31/2010

FLEMING, GREENUP, LEWIS & MASON COUNTIES:

| | Rates | Fringes |
|---|---|---|
| ELECTRICIAN | $ 30.69 | 12.48 |

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ENGI0181-018 07/01/2011

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

OPERATING ENGINEER CLASSIFICATIONS

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

GROUP 2 - Air Compressor (Over 900 cu. ft. per min.); Bituminous Mixer; Boom Type Tamping Machine; Bull Float;

Concrete Mixer (Under 21 cu. ft.); Dredge Engineer; Electric Vibrator; Compactor/Self-Propelled Compactor; Elevator (One Drum or Buck Hoist); Elevator (When used to Hoist Building Material); Finish Machine; Firemen & Hoist (One Drum); Flexplane; Forklift (Regardless of Lift Height); Form Grader; Joint Sealing Machine; Outboard Motor Boat; Power Sweeper (Riding Type); Roller (Rock); Ross Carrier; Skid Mounted or Trailer Mounted Conrete Pump; Skid Steer Machine with all Attachments; Switchman or Brakeman; Throttle Valve Person; Tractair & Road Widening Trencher; Tractor (50 H.P. or Over); Truck Crane Oiler; Tugger; Welding Machine; Well Points; & Whirley Oiler

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

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

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

EMPLOYEES ASSIGNED TO WORK BELOW GROUND LEVEL ARE TO BE PAID 10%
ABOVE BASIC WAGE RATE. THIS DOES NOT APPLY TO OPEN CUT WORK.

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* IRON0044-009 06/01/2011

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

| | Rates | Fringes |
|---|---|---|
| IRONWORKER | | |
| Fence Erector | $ 22.92 | 17.20 |
| Structural | $ 25.50 | 17.20 |

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IRON0070-006 06/01/2011

ANDERSON, BOYLE, BRECKINRIDGE, BULLITT, FAYETTE, FRANKLIN, GRAYSON, HARDIN, HENRY, JEFFERSON, JESSAMINE, LARUE, MADISON, MARION, MEADE, MERCER, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE, WASHINGTON & WOODFORD
BOURBON (Southern two-thirds, including Townships of Austerlity, Centerville, Clintonville, Elizabeth, Hutchison, Littlerock, North Middletown & Paris);
CARROLL (Western two-thirds, including Townships of Carrollton, Easterday, English, Locust, Louis, Prestonville & Worthville);
CLARK (Western two-thirds, including Townships of Becknerville, Flanagan, Ford, Pine Grove, Winchester & Wyandotte);
OWEN (Eastern eighth, including Townships of Glenmary, Gratz, Monterey, Perry Park & Tacketts Mill);
SCOTT (Southern third, including Townships of Georgetown, Great Crossing, Newtown, Stampling Ground & Woodlake);

| | Rates | Fringes |
|---|---|---|
| IRONWORKER | $ 25.77 | 18.28 |

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IRON0372-006 06/26/2011

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

| | Rates | Fringes |
|---|---|---|
| IRONWORKER, REINFORCING | | |

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     Beyond 30-mile radius of
     Hamilton County, Ohio
     Courthouse..................$ 26.75            17.40
     Up to & including 30-mile
     radius of Hamilton County,
     Ohio Courthouse.............$ 26.50            17.40
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 IRON0769-007 06/01/2011

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


                                  Rates          Fringes

IRONWORKER.......................$ 30.96            18.07
     ZONE 1......................$ 29.59            18.07
     ZONE 2......................$ 31.36            18.07
     ZONE 3......................$ 32.96            18.07

  ZONE 1 - Up to 10 mi. radius of union hall, Ashland, Ky.,
  1643 Greenup Avenue
 ZONE 2 - 10 to 50 mi. radius of union hall;
 ZONE 3 - 50 mi. radius and beyond
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 LABO0189-003 07/01/2010

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


                                  Rates          Fringes

Laborers:
     GROUP 1.....................$ 20.61            10.35
     GROUP 2.....................$ 20.86            10.35
     GROUP 3.....................$ 20.91            10.35
     GROUP 4.....................$ 21.51            10.35

LABORERS CLASSIFICATIONS

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

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

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

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

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LABO0189-008 07/01/2010

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

| | Rates | Fringes |
|---|---|---|
| Laborers: | | |
| GROUP 1 | $ 20.91 | 10.05 |
| GROUP 2 | $ 21.16 | 10.05 |
| GROUP 3 | $ 21.21 | 10.05 |
| GROUP 4 | $ 21.81 | 10.05 |

LABORERS CLASSIFICATIONS

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

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

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

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

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LABO0189-009 07/01/2010

BRECKINRIDGE & GRAYSON COUNTIES

| | Rates | Fringes |
|---|---|---|
| Laborers: | | |
| GROUP 1 | $ 21.16 | 9.80 |
| GROUP 2 | $ 21.41 | 9.80 |
| GROUP 3 | $ 21.46 | 9.80 |
| GROUP 4 | $ 22.06 | 9.80 |

LABORERS CLASSIFICATIONS

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

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

Joint Machine; Pipelayer; Plastic Pipe Fusion; Power Driven Georgia Buggy & Wheel Barrow; Power Post Hole Digger; Precast Manhole Setter; Walk-Behind Tamper; Walk-Behind Trencher; Sand Blaster; Concrete Chipper; Surface Grinder; Vibrator Operator; Wagon Driller

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

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

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PAIN0012-005 06/11/2005

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

| | Rates | Fringes |
|---|---|---|
| PAINTER | | |
| Bridge/Equipment Tender and/or Containment Builder | $ 18.90 | 5.90 |
| Brush & Roller | $ 21.30 | 5.90 |
| Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement | $ 22.30 | 5.90 |
| Sandblasting & Waterblasting | $ 22.05 | 5.90 |
| Spray | $ 21.80 | 5.90 |

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PAIN0012-017 05/02/2011

BRACKEN, GALLATIN, GRANT, MASON & OWEN COUNTIES:

| | Rates | Fringes |
|---|---|---|
| PAINTER (Heavy & Highway Bridges - Guardrails - Lightpoles - Striping) | | |
| Bridge Equipment Tender and Containment Builder | $ 20.27 | 8.10 |
| Brush & Roller | $ 23.85 | 8.10 |
| Elevated Tanks; Steeplejack Work; Bridge & Lead Abatement | $ 23.85 | 8.10 |
| Sandblasting & Water Blasting | $ 24.60 | 8.10 |
| Spray | $ 24.35 | 8.10 |

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PAIN0118-004 05/01/2010

ANDERSON, BRECKINRIDGE, BULLITT, CARROLL, GRAYSON, HARDIN,

HENRY, JEFFERSON, LARUE, MARION, MEADE, NELSON, OLDHAM, SHELBY, SPENCER, TRIMBLE & WASHINGTON COUNTIES:

| | Rates | Fringes |
|---|---|---|
| PAINTER | | |
| Brush & Roller | $ 18.50 | 10.30 |
| Spray, Sandblast, Power Tools, Waterblast & Steam Cleaning | $ 19.50 | 10.30 |

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PAIN1072-003 12/01/2010

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

| | Rates | Fringes |
|---|---|---|
| Painters: | | |
| Bridges; Locks; Dams; Tension Towers & Energized Substations | $ 29.03 | 11.90 |
| Power Generating Facilities | $ 25.79 | 11.90 |

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PLUM0248-003 06/01/2011

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

| | Rates | Fringes |
|---|---|---|
| Plumber and Steamfitter | $ 32.00 | 16.24 |

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PLUM0392-007 09/01/2011

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

| | Rates | Fringes |
|---|---|---|
| Plumbers and Pipefitters | $ 29.30 | 15.74 |

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PLUM0502-003 08/01/2011

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

| | Rates | Fringes |
|---|---|---|
| PLUMBER | $ 31.00 | 16.13 |

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SUKY2010-160 10/08/2001

| | Rates | Fringes |
|---|---|---|
| Truck drivers: | | |
| GROUP 1 | $ 16.57 | 7.34 |

GROUP 2.....$ 16.68 7.34
GROUP 3.....$ 16.86 7.34
GROUP 4.....$ 16.96 7.34

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Mobile Batch Truck Tender

GROUP 2 - Greaser; Tire Changer; & Mechanic Tender

GROUP 3 - Single Axle Dump; Flatbed; Semi-trailer or Pole Trailer when used to pull building materials and equipment; Tandem Axle Dump; Distributor; Mixer; & Truck Mechanic

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

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

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

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

END OF GENERAL DECISION

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

These rates are listed pursuant to the Kentucky Determination No. CR-11-III- HWY dated August 04, 2011

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

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

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

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

**TO: EMPLOYERS/EMPLOYEES**

**PREVAILING WAGE SCHEDULE:**

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

**OVERTIME:**

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

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

# 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 |
|---|---|
| 10.8% | 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 Fayette County.

# PART IV

# INSURANCE

# INSURANCE

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

1) Commercial General Liability-Occurrence form – not less than $2,000,000 General aggregate, $2,000,000 Products & Completed Aggregate, $1,000,000 Personal & Advertising, $1,000,000 each occurrence.

2) Automobile Liability- $1,000,000 per accident

3) Employers Liability:

   a) $100,000 Each Accident Bodily Injury
   b) $500,000 Policy limit Bodily Injury by Disease
   c) $100,000 Each Employee Bodily Injury by Disease

4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
   a) "policy contains no deductible clauses."
   b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."

5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

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

# PART V

# BID ITEMS

CONTRACT ID: 111048
COUNTY: FAYETTE
PROPOSAL: STPM 3003(250)

PAGE: 1
LETTING: 10/21/11
CALL NO: 106

| LINE NO | ITEM | DESCRIPTION | APPROXIMATE UNIT QUANTITY | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| | SECTION 0001 | NOISE BARRIER WALL | | | |
| 0010 | 00461 | CULVERT PIPE-15 IN | 112.000 LF | | |
| 0020 | 02230 | EMBANKMENT IN PLACE | 15,735.000 CUYD | | |
| 0030 | 02483 | CHANNEL LINING CLASS II | 10.500 TON | | |
| 0040 | 02545 | CLEARING AND GRUBBING 2.6 ACRES | ( 1.00) LS | | |
| 0050 | 02726 | STAKING | ( 1.00) LS | | |
| 0060 | 02998 | MASONRY COATING | 5,720.000 SQYD | | |
| 0070 | 05950 | EROSION CONTROL BLANKET | 12,832.000 SQYD | | |
| 0080 | 08100 | CONCRETE-CLASS A | 4.500 CUYD | | |
| 0090 | 08150 | STEEL REINFORCEMENT | 42.000 LB | | |
| 0100 | 20745ED | ROCK SOUNDINGS | 346.000 LF | | |
| 0110 | 20746ED | ROCK CORINGS | 899.000 LF | | |
| 0120 | 21321NC | CSL TESTING (4 TUBES) | 14.000 EACH | | |
| 0130 | 21590EN | SOUND BARRIER WALL | 51,484.000 SQFT | | |
| 0140 | 23143ED | KPDES PERMIT AND TEMP EROSION CONTROL | ( 1.00) LS | | |
| 0150 | 23583EC | DRILLED SHAFT-48 IN-COMMON | 688.000 LF | | |
| 0160 | 23584EC | DRILLED SHAFT-42 IN-ROCK | 589.000 LF | | |
| | SECTION 0002 | MOB AND DEMOB | | | |
| 0170 | 02568 | MOBILIZATION (NO MORE THAN 5%) | LUMP | | |
| 0180 | 02569 | DEMOBILIZATION (AT LEAST 1.5%) | LUMP | | |
| | | TOTAL BID | | | |